

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 197848 Report

This analysis was run 01/18/25 on database version 583.

Pham number 197848 has 215 members, 49 are drafts.

Phages represented in each track:

- Track 1 : Xenomorph_20
- Track 2 : Benllo_20
- Track 3 : Mooshroom_21, Kardesai_20, Hankly_20
- Track 4 : Elsa_22, Arcadia_22, Nason_22
- Track 5 : BenitoAntonio_22
- Track 6 : KeaneyLin_20, GoCrazy_20
- Track 7 : Circum_22
- Track 8 : Bowling_21, Dynamite_21, NapoleonB_21
- Track 9 : Correa_21
- Track 10 : Tribby_22
- Track 11 : Cheesy_22
- Track 12 : JEGGS_21
- Track 13 : Mudcat_21
- Track 14 : Heisenberger_21
- Track 15 : Inked_28
- Track 16 : Brunswick_26
- Track 17 : Gordon_26
- Track 18 : CastorTray_28
- Track 19 : Synopsis_25
- Track 20 : LucySwiss_26, Nightmare_27
- Track 21 : Niktson_26, ElephantMan_26
- Track 22 : AreFloNak_26, Nivinsha_26
- Track 23 : Issa_26
- Track 24 : Tatanka_26
- Track 25 : Teacup_26
- Track 26 : CapnMurica_26
- Track 27 : ScienceWizSam_28
- Track 28 : Acai_26
- Track 29 : Trustiboi_27
- Track 30 : MiniBagel_26
- Track 31 : Breylor17_27
- Track 32 : Tenno_27
- Track 33 : DevitoJr_26
- Track 34 : Darby_26
- Track 35 : Tokki_27
- Track 36 : LilHuddy_27
- Track 37 : Bouchard_27

- Track 38 : Chlochlo_27
- Track 39 : Shepard_27
- Track 40 : Phaby_27
- Track 41 : Giantsbane_27
- Track 42 : Zippen_26
- Track 43 : Ingrid_26, Loretta_26
- Track 44 : MediumFry_24
- Track 45 : Caterpillar_24
- Track 46 : Makai_26, Truckee_25
- Track 47 : TrixiePhattel_27
- Track 48 : Argan_25
- Track 49 : Navi1117_27
- Track 50 : KevinMinion_26
- Track 51 : Renaldo_31
- Track 52 : Phaila_25
- Track 53 : BarbieDoll_29
- Track 54 : Kinny_29
- Track 55 : Zeina_26
- Track 56 : Leathea_26
- Track 57 : Tenney120_27
- Track 58 : Uzumaki_26
- Track 59 : GantcherGoblin_25
- Track 60 : Lewando_29
- Track 61 : Biscute_30
- Track 62 : Natasha_22
- Track 63 : Egad_23
- Track 64 : ProfFrink_23, MrAaronian_23, Djungelskog_23
- Track 65 : Stayer_23, BronxBay_23
- Track 66 : Sporto_24
- Track 67 : StarLord_23, Sloopyjoe_23
- Track 68 : RustyBoy_22
- Track 69 : Salk_23, Linda_23
- Track 70 : Raunak_23
- Track 71 : Boog_22
- Track 72 : PowellDog_24
- Track 73 : Shiba_23
- Track 74 : DoctorPepper_23
- Track 75 : Michelle_23
- Track 76 : CherryBlossom_23
- Track 77 : Jaylociraptor_23, Indigenous_23
- Track 78 : Maya_23
- Track 79 : FrodoSwaggins_23, Popy_23
- Track 80 : Meibysrarus_23
- Track 81 : Hoshi_23, Esketit_23
- Track 82 : HazuAndZazu_23
- Track 83 : TaidaOne_23
- Track 84 : Namu_23, Rima_23
- Track 85 : TonyStarch_23
- Track 86 : DrGrey_23
- Track 87 : GirlPower_22
- Track 88 : Spectropatronm_23
- Track 89 : Soshi_23
- Track 90 : TieDye_22

- Track 91 : OlympicHelado_23
- Track 92 : IceWarrior_23
- Track 93 : Madamoto_23
- Track 94 : FidgetOrca_23
- Track 95 : PherryCruz_18, RavenPuff_18
- Track 96 : RosaAsantewaa_19
- Track 97 : Bilo_19
- Track 98 : SheRa_19
- Track 99 : Scap1_19
- Track 100 : Annihilus_19
- Track 101 : HotFries_18
- Track 102 : GoblinVoyage_19
- Track 103 : Moozy_19
- Track 104 : Doxi13_19
- Track 105 : LibertyBell_21
- Track 106 : Thiqqums_21, Miek_21, SendItCS_20, CrickKo_21, Rainydai_21, Regigigas_22
- Track 107 : FromIndy_22
- Track 108 : Bing_24
- Track 109 : Kardashian_22
- Track 110 : ClubPenguin_22
- Track 111 : Pepy6_035
- Track 112 : Poco6_036
- Track 113 : Figliar_32
- Track 114 : FortCran_29, Artorias_29
- Track 115 : JulesRay_31
- Track 116 : Madvan_32
- Track 117 : Vardy_32
- Track 118 : Phepper_32
- Track 119 : Schwartz33_33
- Track 120 : Perkunas_31, Talon44_31
- Track 121 : AlainaMarie_32, EndAve_32
- Track 122 : Kerry_29, Odesza_29, Gill_29, Tanis_29, Gravy_29
- Track 123 : Runhaar_32, Burley_32
- Track 124 : Zeph_33
- Track 125 : BetterYeti_34, Gusicorn_35
- Track 126 : Dancer_31
- Track 127 : Rickmore_31
- Track 128 : Chickenjars_32
- Track 129 : Duffington_32
- Track 130 : Hydrus_33
- Track 131 : TenaciousP_33, Jodelie19_33
- Track 132 : Nithya_32
- Track 133 : Kenosha_32
- Track 134 : Pherobrine_31
- Track 135 : Citrus_31
- Track 136 : Avazak_29
- Track 137 : Capybara_29
- Track 138 : Demure_31
- Track 139 : Crocheter_32
- Track 140 : Mysticmoon_32
- Track 141 : Fazel_30
- Track 142 : Conley_30

- Track 143 : BluerMoon_35
- Track 144 : Hortihabitatio_33
- Track 145 : Petite_31
- Track 146 : Secretariat_30
- Track 147 : Captrips_29
- Track 148 : Eddiemania_33
- Track 149 : ShaggyRogers_35
- Track 150 : Mossy_33
- Track 151 : OlgasClover_32
- Track 152 : NoPickles_29
- Track 153 : MajinBuu_33
- Track 154 : Untouchable_32
- Track 155 : Arataki_30
- Track 156 : Aflac_32
- Track 157 : Roney_29
- Track 158 : Nadmeg_33
- Track 159 : OhMyWard_32
- Track 160 : Magel_30
- Track 161 : Damascus_24
- Track 162 : DizzyRudy_24
- Track 163 : Count_30
- Track 164 : Camille_24
- Track 165 : Arzan_22
- Track 166 : Jazzy4900_24, Sunny4976_23
- Track 167 : Elver_39, Paella_40, Qui_40
- Track 168 : Gandionco_41
- Track 169 : Eevee_26
- Track 170 : Pippin15_25
- Track 171 : Yotsuba_26
- Track 172 : AddiRose_25
- Track 173 : Serenabean_25
- Track 174 : Daddyjeff_25
- Track 175 : JoyLin_26

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 17, it was called in 129 of the 166 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai_26, AddiRose_25, Aflac_32, AlainaMarie_32, Annihilus_19, Arataki_30, Arcadia_22, AreFloNak_26, Argan_25, Artorias_29, Avazak_29, BenitoAntonio_22, Benllo_20, BetterYeti_34, Bilo_19, Biscute_30, BluerMoon_35, Bouchard_27, Bowling_21, Breylor17_27, BronxBay_23, Brunswick_26, Burley_32, Camille_24, CapnMurica_26, Captrips_29, Copybara_29, CastorTray_28, Caterpillar_24, Cheesy_22, Chikenjars_32, Chlochlo_27, Circum_22, Citrus_31, Conley_30, Correa_21, Count_30, Crocheter_32, Daddyjeff_25, Damascus_24, Dancer_31, Darby_26, Demure_31, DevitoJr_26, DizzyRudy_24, Djungelskog_23, DoctorPepper_23, Doxi13_19, Duffington_32, Dynamite_21, Eddiemania_33, Eevee_26, ElephantMan_26, Elsa_22, Elver_39, EndAve_32, Fazel_30, Figliar_32,

FortCran_29, GantcherGoblin_25, Giantsbane_27, Gill_29, GoCrazy_20, GoblinVoyage_19, Gordon_26, Gravy_29, Gusicorn_35, Hankly_20, Heisenberger_21, Hortihabitatio_33, HotFries_18, Hydrus_33, Ingrid_26, Inked_28, Issa_26, JEGGS_21, Jodelie19_33, JoyLin_26, JulesRay_31, Kardesai_20, KeaneyLin_20, Kenosha_32, Kerry_29, Kinny_29, Leathea_26, Lewando_29, LilHuddy_27, Linda_23, Loretta_26, LucySwiss_26, Madvan_32, MajinBuu_33, Makai_26, MediumFry_24, Michelle_23, MiniBagel_26, Mooshroom_21, Mossy_33, MrAaronian_23, Mudcat_21, Mysticmoon_32, Nadmeg_33, NapoleonB_21, Nason_22, Navi1117_27, Nightmare_27, Niktson_26, Nithya_32, Nivinsha_26, NoPickles_29, Odesza_29, OhMyWard_32, OlgasClover_32, Paella_40, Pepy6_035, Perunas_31, Petite_31, Phaby_27, Phaila_25, Phepper_32, Pherobrine_31, PherryCruz_18, Pippin15_25, Poco6_036, PowellDog_24, ProfFrink_23, Qui_40, RavenPuff_18, Rickmore_31, Roney_29, RosaAsantewaa_19, Runhaar_32, RustyBoy_22, Salk_23, Schwartz33_33, ScienceWizSam_28, Secretariat_30, Serenabean_25, ShaggyRogers_35, SheRa_19, Shepard_27, SloopJoe_23, Sporto_24, StarLord_23, Stayer_23, Synopsis_25, Talon44_31, Tanis_29, Tatanka_26, Teacup_26, TenaciousP_33, Tenney120_27, Tenno_27, Tokki_27, Tribby_22, Truckee_25, Trustiboi_27, Untouchable_32, Uzumaki_26, Vardy_32, Xenomorph_20, Zeina_26, Zeph_33, Zippen_26,

Genes that have the "Most Annotated" start but do not call it:

- BarbieDoll_29, Boog_22, Egad_23, Gandionco_41, KevinMinion_26, Moozy_19, Natasha_22, Raunak_23, Renaldo_31, Scap1_19, Shiba_23, TrixiePhattel_27, Yotsuba_26,

Genes that do not have the "Most Annotated" start:

- Arzan_22, Bing_24, CherryBlossom_23, ClubPenguin_22, CricKo_21, DrGrey_23, Esketit_23, FidgetOrca_23, FrodoSwaggins_23, FromIndy_22, GirlPower_22, HazuAndZazu_23, Hoshi_23, IceWarrior_23, Indigenous_23, Jaylociraptor_23, Jazzy4900_24, Kardashian_22, LibertyBell_21, Madamoto_23, Magel_30, Maya_23, Meibysrarus_23, Miek_21, Namu_23, OlympicHelado_23, Popy_23, Rainydai_21, Regigigas_22, Rima_23, SendItCS_20, Soshi_23, Spectropatronm_23, Sunny4976_23, TaidaOne_23, Thiqqums_21, TieDye_22, TonyStarch_23,

Summary by start number:

Start 2:

- Found in 33 of 215 (15.3%) of genes in pham
- Manual Annotations of this start: 30 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bing_24 (BI5), CherryBlossom_23 (BI1), CricKo_21 (BI4), DrGrey_23 (BI1), Esketit_23 (BI1), FidgetOrca_23 (BI1), FrodoSwaggins_23 (BI1), FromIndy_22 (BI4), GirlPower_22 (BI1), HazuAndZazu_23 (BI1), Hoshi_23 (BI1), IceWarrior_23 (BI1), Indigenous_23 (BI1), Jaylociraptor_23 (BI1), Kardashian_22 (BI6), LibertyBell_21 (BI3), Madamoto_23 (BI1), Maya_23 (BI1), Meibysrarus_23 (BI1), Miek_21 (BI4), Namu_23 (BI1), OlympicHelado_23 (BI1), Popy_23 (BI1), Rainydai_21 (BI4), Regigigas_22 (BI4), Rima_23 (BI1), SendItCS_20 (BI4), Soshi_23 (BI1), Spectropatronm_23 (BI1), TaidaOne_23 (BI1), Thiqqums_21 (BI4), TieDye_22 (BI1), TonyStarch_23 (BI1),

Start 4:

- Found in 4 of 215 (1.9%) of genes in pham
- No Manual Annotations of this start.

- Called 75.0% of time when present
- Phage (with cluster) where this start called: Arzan_22 (FI), Jazzy4900_24 (FI), Sunny4976_23 (FI),

Start 14:

- Found in 1 of 215 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClubPenguin_22 (BI7),

Start 16:

- Found in 108 of 215 (50.2%) of genes in pham
- Manual Annotations of this start: 2 of 166
- Called 3.7% of time when present
- Phage (with cluster) where this start called: BarbieDoll_29 (AU6), Moozy_19 (BI2), Natasha_22 (AW), Scap1_19 (BI2),

Start 17:

- Found in 177 of 215 (82.3%) of genes in pham
- Manual Annotations of this start: 129 of 166
- Called 92.7% of time when present
- Phage (with cluster) where this start called: Acai_26 (AU1), AddiRose_25 (JA), Aflac_32 (DJ), AlainaMarie_32 (DJ), Annihilus_19 (BI2), Arataki_30 (DJ), Arcadia_22 (AM), AreFloNak_26 (AU1), Argan_25 (AU6), Artorias_29 (DJ), Avazak_29 (DJ), BenitoAntonio_22 (AM), Benllo_20 (AM), BetterYeti_34 (DJ), Bilo_19 (BI2), Biscute_30 (AU6), BluerMoon_35 (DJ), Bouchard_27 (AU2), Bowling_21 (AM), Breylor17_27 (AU1), BronxBay_23 (AW), Brunswick_26 (AU1), Burley_32 (DJ), Camille_24 (EL), CapnMurica_26 (AU1), Captrips_29 (DJ), Capybara_29 (DJ), CastorTray_28 (AU1), Caterpillar_24 (AU4), Cheesy_22 (AM), Chikenjars_32 (DJ), Chlochlo_27 (AU2), Circum_22 (AM), Citrus_31 (DJ), Conley_30 (DJ), Correa_21 (AM), Count_30 (EL), Crocheter_32 (DJ), Daddyjeff_25 (JA), Damascus_24 (EL), Dancer_31 (DJ), Darby_26 (AU1), Demure_31 (DJ), DevitoJr_26 (AU1), DizzyRudy_24 (EL), Djungelskog_23 (AW), DoctorPepper_23 (AW), Doxi13_19 (BI2), Duffington_32 (DJ), Dynamite_21 (AM), Eddiemania_33 (DJ), Eevee_26 (JA), ElephantMan_26 (AU1), Elsa_22 (AM), Elver_39 (FK), EndAve_32 (DJ), Fazel_30 (DJ), Figliar_32 (DJ), FortCran_29 (DJ), GantcherGoblin_25 (AU6), Giantsbane_27 (AU2), Gill_29 (DJ), GoCrazy_20 (AM), GoblinVoyage_19 (BI2), Gordon_26 (AU1), Gravy_29 (DJ), Gusicorn_35 (DJ), Hankly_20 (AM), Heisenberger_21 (AM), Hortihabitatio_33 (DJ), HotFries_18 (BI2), Hydrus_33 (DJ), Ingrid_26 (AU3), Inked_28 (AU), Issa_26 (AU1), JEGGS_21 (AM), Jodelie19_33 (DJ), JoyLin_26 (JA), JulesRay_31 (DJ), Kardesai_20 (AM), KeaneyLin_20 (AM), Kenosha_32 (DJ), Kerry_29 (DJ), Kinny_29 (AU6), Leathea_26 (AU6), Lewando_29 (AU6), LilHuddy_27 (AU2), Linda_23 (AW), Loretta_26 (AU3), LucySwiss_26 (AU1), Madvan_32 (DJ), MajinBuu_33 (DJ), Makai_26 (AU5), MediumFry_24 (AU4), Michelle_23 (AW), MiniBage1_26 (AU1), Mooshroom_21 (AM), Mossy_33 (DJ), MrAaronian_23 (AW), Mudcat_21 (AM), Mysticmoon_32 (DJ), Nadmeg_33 (DJ), NapoleonB_21 (AM), Nason_22 (AM), Navi1117_27 (AU6), Nightmare_27 (AU1), Niktson_26 (AU1), Nithya_32 (DJ), Nivinsha_26 (AU1), NoPickles_29 (DJ), Odesza_29 (DJ), OhMyWard_32 (DJ), OlgasClover_32 (DJ), Paella_40 (FK), Pepy6_035 (CC), Perkunas_31 (DJ), Petito_31 (DJ), Phaby_27 (AU2), Phaila_25 (AU6), Phepper_32 (DJ), Pherobrine_31 (DJ), PherryCruz_18 (BI2), Pippin15_25 (JA), Poco6_036 (CC), Powelldog_24 (AW), ProfFrink_23 (AW), Qui_40 (FK), RavenPuff_18 (BI2), Rickmore_31 (DJ), Roney_29 (DJ), RosaAsantewaa_19 (BI2), Runhaar_32 (DJ),

RustyBoy_22 (AW), Salk_23 (AW), Schwartz33_33 (DJ), ScienceWizSam_28 (AU1), Secretariat_30 (DJ), Serenabean_25 (JA), ShaggyRogers_35 (DJ), SheRa_19 (BI2), Shepard_27 (AU2), Sloopyjoe_23 (AW), Sporto_24 (AW), StarLord_23 (AW), Stayer_23 (AW), Synopsis_25 (AU1), Talon44_31 (DJ), Tanis_29 (DJ), Tatanka_26 (AU1), Teacup_26 (AU1), TenaciousP_33 (DJ), Tenney120_27 (AU6), Tenno_27 (AU1), Tokki_27 (AU2), Tribby_22 (AM), Truckee_25 (AU5), Trustiboi_27 (AU1), Untouchable_32 (DJ), Uzumaki_26 (AU6), Vardy_32 (DJ), Xenomorph_20 (AM), Zeina_26 (AU6), Zeph_33 (DJ), Zippen_26 (AU3),

Start 20:

- Found in 177 of 215 (82.3%) of genes in pham
- Manual Annotations of this start: 3 of 166
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Boog_22 (AW), Egad_23 (AW), Gandionco_41 (FK), Raunak_23 (AW), Shiba_23 (AW), Yotsuba_26 (JA),

Start 29:

- Found in 11 of 215 (5.1%) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: KevinMinion_26 (AU6),

Start 32:

- Found in 39 of 215 (18.1%) of genes in pham
- No Manual Annotations of this start.
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Renaldo_31 (AU6),

Start 47:

- Found in 109 of 215 (50.7%) of genes in pham
- No Manual Annotations of this start.
- Called 0.9% of time when present
- Phage (with cluster) where this start called: TrixiePhattel_27 (AU6),

Start 208:

- Found in 25 of 215 (11.6%) of genes in pham
- Manual Annotations of this start: 1 of 166
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Magel_30 (DJ),

Summary by clusters:

There are 22 clusters represented in this pham: DJ, FI, FK, JA, AU1, AU3, AU2, AU5, AU4, AU6, EL, CC, AM, AU, AW, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:

- Start number 17 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AU:

- Start number 17 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 17 was manually annotated 17 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 17 was manually annotated 5 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 17 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 17 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 17 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 17 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 17 was manually annotated 12 times for cluster AW.
- Start number 20 was manually annotated 2 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 2 was manually annotated 22 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 16 was manually annotated 2 times for cluster BI2.
- Start number 17 was manually annotated 9 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 2 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 2 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 2 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 2 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 14 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:

- Start number 17 was manually annotated 43 times for cluster DJ.
- Start number 208 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 17 was manually annotated 4 times for cluster EL.

Info for manual annotations of cluster FK:

- Start number 17 was manually annotated 2 times for cluster FK.

Info for manual annotations of cluster JA:

- Start number 17 was manually annotated 6 times for cluster JA.
- Start number 20 was manually annotated 1 time for cluster JA.

Gene Information:

Gene: Acai_26 Start: 20116, Stop: 24702, Start Num: 17

Candidate Starts for Acai_26:

(Start: 16 @20095 has 2 MA's), (Start: 17 @20116 has 129 MA's), (Start: 20 @20146 has 3 MA's), (28, 20200), (32, 20221), (37, 20257), (47, 20335), (57, 20395), (63, 20419), (65, 20431), (68, 20461), (71, 20512), (75, 20542), (76, 20584), (77, 20602), (81, 20644), (83, 20674), (85, 20719), (86, 20731), (93, 20785), (96, 20800), (98, 20812), (102, 20833), (115, 20926), (118, 20959), (121, 20974), (127, 21022), (146, 21193), (161, 21307), (162, 21310), (168, 21358), (188, 21472), (195, 21496), (198, 21511), (202, 21523), (216, 21598), (234, 21691), (239, 21706), (240, 21712), (245, 21730), (261, 21802), (278, 21868), (301, 21970), (303, 21976), (313, 22009), (314, 22012), (321, 22039), (337, 22153), (345, 22210), (347, 22222), (360, 22276), (363, 22285), (364, 22288), (369, 22309), (378, 22354), (384, 22375), (400, 22471), (407, 22492), (414, 22513), (417, 22531), (418, 22534), (429, 22585), (434, 22615), (436, 22630), (438, 22642), (467, 22762), (471, 22792), (491, 22870), (494, 22885), (497, 22894), (499, 22906), (504, 22927), (507, 22936), (515, 22981), (516, 22984), (517, 22993), (524, 23014), (531, 23044), (536, 23056), (542, 23077), (544, 23083), (549, 23104), (557, 23128), (558, 23137), (568, 23191), (574, 23206), (577, 23215), (589, 23254), (592, 23266), (594, 23272), (602, 23296), (604, 23305), (624, 23380), (625, 23383), (629, 23401), (646, 23467), (649, 23476), (661, 23530), (662, 23533), (693, 23659), (694, 23662), (700, 23683), (708, 23716), (710, 23725), (723, 23785), (728, 23806), (734, 23839), (742, 23872), (750, 23929), (759, 23989), (764, 24013), (776, 24091), (777, 24103), (794, 24229), (800, 24271), (809, 24319), (817, 24352), (821, 24364), (824, 24370), (827, 24391), (829, 24394), (830, 24400), (835, 24439), (841, 24466), (846, 24493), (882, 24652), (888, 24679),

Gene: AddiRose_25 Start: 18536, Stop: 23140, Start Num: 17

Candidate Starts for AddiRose_25:

(Start: 17 @18536 has 129 MA's), (Start: 20 @18569 has 3 MA's), (41, 18692), (43, 18716), (54, 18806), (58, 18824), (62, 18836), (68, 18881), (72, 18938), (76, 19004), (81, 19064), (89, 19175), (93, 19205), (96, 19220), (114, 19343), (115, 19346), (117, 19367), (121, 19394), (128, 19451), (135, 19541), (145, 19610), (147, 19625), (149, 19646), (152, 19667), (175, 19808), (179, 19829), (182, 19850), (191, 19904), (228, 20093), (324, 20480), (337, 20606), (341, 20636), (363, 20738), (366, 20750), (375, 20789), (414, 20966), (418, 20987), (423, 21011), (424, 21014), (432, 21050), (458, 21179), (473, 21251), (476, 21272), (481, 21290), (490, 21323), (494, 21341), (499, 21362), (501, 21368), (504, 21383), (512, 21422), (520, 21458), (527, 21482), (529, 21491), (533, 21506), (545, 21548), (557, 21590), (558, 21599), (561, 21626), (562, 21629), (569, 21656), (574, 21668), (577, 21677), (595, 21737), (604, 21767), (612, 21794), (652, 21950), (664, 22001), (672, 22037), (682, 22076), (687, 22103), (691, 22115), (696, 22133), (702, 22154), (709, 22181), (714, 22199), (723, 22247), (732, 22289), (757, 22433), (761, 22457), (763, 22466), (764, 22475), (769, 22508), (776, 22553), (783, 22607), (790, 22679), (795, 22703), (804, 22757), (807, 22772), (809, 22781), (811, 22793), (813, 22802), (817, 22814), (820, 22823), (835, 22901), (837, 22904), (854, 22976), (887, 23129),

Gene: Aflac_32 Start: 23512, Stop: 28626, Start Num: 17

Candidate Starts for Aflac_32:

(Start: 17 @23512 has 129 MA's), (Start: 20 @23542 has 3 MA's), (25, 23587), (47, 23731), (58, 23797), (68, 23857), (69, 23878), (76, 23980), (84, 24106), (87, 24142), (93, 24181), (102, 24229),

(107, 24271), (113, 24343), (118, 24391), (132, 24517), (140, 24592), (141, 24604), (146, 24625), (158, 24730), (159, 24733), (202, 24955), (214, 25021), (231, 25111), (241, 25147), (255, 25198), (262, 25246), (265, 25258), (295, 25402), (303, 25441), (310, 25468), (337, 25630), (343, 25678), (346, 25693), (347, 25699), (353, 25717), (364, 25765), (378, 25831), (390, 25882), (391, 25894), (394, 25912), (406, 25966), (418, 26011), (422, 26032), (425, 26041), (429, 26062), (433, 26083), (443, 26137), (444, 26140), (446, 26149), (452, 26170), (454, 26182), (459, 26203), (461, 26209), (465, 26227), (471, 26263), (477, 26293), (490, 26341), (494, 26353), (496, 26359), (497, 26362), (499, 26374), (500, 26377), (505, 26398), (512, 26434), (525, 26488), (526, 26491), (534, 26512), (538, 26524), (539, 26527), (551, 26575), (556, 26590), (557, 26593), (558, 26602), (560, 26623), (566, 26650), (567, 26653), (573, 26677), (577, 26689), (582, 26710), (584, 26722), (586, 26731), (590, 26743), (598, 26770), (608, 26803), (610, 26809), (615, 26827), (628, 26881), (632, 26896), (650, 26965), (676, 27076), (705, 27187), (717, 27232), (734, 27322), (757, 27466), (768, 27529), (771, 27556), (781, 27628), (784, 27640), (785, 27649), (789, 27703), (794, 27724), (795, 27736), (831, 27898), (845, 27985), (850, 28003), (859, 28033), (866, 28051), (867, 28054), (870, 28066), (876, 28093), (892, 28204), (898, 28267), (900, 28279), (908, 28327), (916, 28381), (920, 28408), (937, 28522), (947, 28612),

Gene: AlainaMarie_32 Start: 23499, Stop: 28610, Start Num: 17

Candidate Starts for AlainaMarie_32:

(Start: 17 @23499 has 129 MA's), (Start: 20 @23529 has 3 MA's), (25, 23574), (47, 23718), (58, 23784), (68, 23844), (69, 23865), (76, 23967), (83, 24057), (84, 24093), (87, 24129), (93, 24168), (102, 24216), (107, 24258), (113, 24330), (118, 24378), (132, 24504), (140, 24579), (141, 24591), (146, 24612), (158, 24717), (159, 24720), (202, 24942), (214, 25008), (215, 25011), (228, 25080), (231, 25098), (255, 25185), (267, 25254), (288, 25356), (289, 25359), (295, 25386), (303, 25425), (310, 25452), (337, 25614), (343, 25662), (347, 25683), (353, 25701), (355, 25716), (364, 25749), (378, 25815), (389, 25863), (390, 25866), (393, 25887), (394, 25896), (406, 25950), (418, 25995), (422, 26016), (425, 26025), (432, 26058), (433, 26067), (436, 26091), (443, 26121), (444, 26124), (446, 26133), (449, 26145), (452, 26154), (454, 26166), (459, 26187), (461, 26193), (471, 26247), (477, 26277), (490, 26325), (494, 26337), (496, 26343), (497, 26346), (500, 26361), (505, 26382), (512, 26418), (525, 26472), (526, 26475), (529, 26487), (534, 26496), (538, 26508), (539, 26511), (542, 26526), (549, 26553), (551, 26559), (556, 26574), (557, 26577), (558, 26586), (559, 26601), (560, 26607), (564, 26622), (566, 26634), (567, 26637), (577, 26673), (582, 26694), (584, 26706), (586, 26715), (590, 26727), (598, 26754), (605, 26778), (608, 26787), (610, 26793), (615, 26811), (632, 26880), (650, 26949), (686, 27105), (734, 27306), (757, 27450), (768, 27513), (771, 27540), (781, 27612), (784, 27624), (785, 27633), (789, 27687), (794, 27708), (795, 27720), (831, 27882), (845, 27969), (850, 27987), (859, 28017), (866, 28035), (867, 28038), (870, 28050), (876, 28077), (892, 28188), (900, 28263), (908, 28311), (916, 28365), (920, 28392), (937, 28506), (947, 28596),

Gene: Annihilus_19 Start: 13516, Stop: 18744, Start Num: 17

Candidate Starts for Annihilus_19:

(Start: 16 @13495 has 2 MA's), (Start: 17 @13516 has 129 MA's), (Start: 20 @13546 has 3 MA's), (40, 13648), (43, 13699), (58, 13807), (76, 13990), (84, 14116), (87, 14152), (93, 14191), (107, 14281), (149, 14668), (172, 14818), (177, 14842), (188, 14914), (238, 15145), (261, 15223), (264, 15241), (265, 15244), (275, 15277), (300, 15385), (320, 15445), (337, 15526), (347, 15595), (360, 15649), (381, 15736), (382, 15739), (384, 15748), (402, 15850), (415, 15886), (418, 15904), (429, 15955), (450, 16057), (453, 16069), (456, 16084), (470, 16153), (471, 16162), (477, 16192), (489, 16237), (496, 16258), (503, 16288), (506, 16300), (507, 16303), (511, 16324), (512, 16333), (520, 16369), (529, 16402), (554, 16486), (561, 16531), (562, 16534), (563, 16537), (577, 16582), (586, 16612), (600, 16657), (604, 16672), (614, 16705), (619, 16726), (621, 16735), (623, 16744), (629, 16768), (630, 16771), (633, 16780), (637, 16801), (640, 16813), (648, 16840), (657, 16879), (662, 16900), (670, 16936), (672, 16942), (706, 17074), (708, 17083), (710, 17092), (713, 17101), (714, 17104), (717, 17116), (718, 17119), (719, 17128), (721, 17137), (740, 17230), (747, 17284), (764, 17392), (767, 17407), (772, 17446), (774, 17461), (793, 17605), (839, 17839), (856, 17914), (904, 18193),

(905, 18196), (909, 18217), (914, 18265), (916, 18271), (932, 18379), (938, 18424), (941, 18451), (949, 18553), (960, 18706),

Gene: Arataki_30 Start: 22605, Stop: 27719, Start Num: 17

Candidate Starts for Arataki_30:

(Start: 17 @22605 has 129 MA's), (Start: 20 @22635 has 3 MA's), (25, 22680), (47, 22824), (53, 22869), (54, 22872), (57, 22884), (58, 22890), (68, 22950), (69, 22971), (76, 23073), (78, 23109), (84, 23199), (93, 23274), (98, 23301), (102, 23322), (105, 23346), (107, 23364), (118, 23484), (134, 23640), (140, 23685), (146, 23718), (158, 23823), (159, 23826), (169, 23892), (172, 23901), (198, 24036), (214, 24114), (231, 24204), (255, 24291), (262, 24339), (278, 24414), (295, 24495), (303, 24534), (310, 24561), (334, 24702), (337, 24723), (346, 24786), (347, 24792), (353, 24810), (354, 24816), (364, 24858), (367, 24870), (369, 24879), (378, 24924), (388, 24966), (390, 24975), (391, 24987), (393, 24996), (394, 25005), (406, 25059), (418, 25104), (422, 25125), (425, 25134), (430, 25158), (431, 25161), (432, 25167), (443, 25230), (444, 25233), (446, 25242), (449, 25254), (451, 25260), (452, 25263), (454, 25275), (459, 25296), (461, 25302), (462, 25305), (467, 25326), (471, 25356), (474, 25371), (477, 25386), (490, 25434), (494, 25446), (496, 25452), (497, 25455), (499, 25467), (500, 25470), (512, 25527), (525, 25581), (534, 25605), (538, 25617), (539, 25620), (550, 25665), (551, 25668), (556, 25683), (557, 25686), (558, 25695), (559, 25710), (560, 25716), (561, 25722), (566, 25743), (567, 25746), (571, 25758), (574, 25773), (577, 25782), (582, 25803), (584, 25815), (590, 25836), (598, 25863), (608, 25896), (610, 25902), (615, 25920), (622, 25950), (632, 25989), (650, 26058), (679, 26181), (697, 26250), (717, 26325), (734, 26415), (757, 26559), (768, 26622), (778, 26688), (781, 26721), (784, 26733), (789, 26796), (794, 26817), (795, 26829), (799, 26850), (831, 26991), (845, 27078), (850, 27096), (859, 27126), (866, 27144), (867, 27147), (870, 27159), (876, 27186), (892, 27297), (900, 27372), (911, 27441), (916, 27474), (919, 27498), (937, 27615), (947, 27705),

Gene: Arcadia_22 Start: 17670, Stop: 22148, Start Num: 17

Candidate Starts for Arcadia_22:

(Start: 16 @17649 has 2 MA's), (Start: 17 @17670 has 129 MA's), (Start: 20 @17700 has 3 MA's), (23, 17733), (28, 17754), (65, 17985), (68, 18015), (75, 18096), (76, 18138), (77, 18156), (81, 18198), (86, 18285), (93, 18339), (96, 18354), (102, 18387), (115, 18480), (121, 18528), (123, 18543), (128, 18585), (132, 18639), (140, 18714), (146, 18747), (159, 18855), (169, 18921), (177, 18954), (179, 18963), (180, 18966), (182, 18984), (243, 19266), (251, 19290), (257, 19320), (299, 19479), (314, 19539), (337, 19668), (343, 19716), (355, 19770), (358, 19782), (360, 19791), (363, 19800), (369, 19824), (378, 19869), (384, 19890), (396, 19965), (404, 19998), (414, 20028), (418, 20049), (422, 20070), (434, 20130), (435, 20136), (443, 20175), (444, 20178), (448, 20193), (462, 20256), (467, 20277), (471, 20307), (477, 20337), (482, 20355), (494, 20403), (500, 20427), (504, 20445), (507, 20454), (508, 20463), (510, 20469), (513, 20490), (520, 20520), (529, 20553), (530, 20559), (531, 20562), (536, 20574), (542, 20595), (557, 20646), (558, 20655), (562, 20685), (564, 20691), (574, 20724), (577, 20733), (586, 20763), (589, 20772), (592, 20784), (604, 20823), (612, 20850), (614, 20856), (615, 20859), (618, 20874), (625, 20901), (629, 20919), (633, 20931), (641, 20967), (667, 21069), (682, 21132), (690, 21168), (691, 21171), (693, 21177), (697, 21192), (702, 21210), (708, 21234), (712, 21249), (713, 21252), (718, 21270), (723, 21303), (728, 21324), (740, 21381), (747, 21435), (749, 21444), (758, 21498), (773, 21525), (776, 21543), (782, 21591), (783, 21597), (790, 21669), (804, 21747), (807, 21762), (815, 21801), (824, 21825), (835, 21894), (840, 21915), (865, 22008), (889, 22137),

Gene: AreFloNak_26 Start: 20074, Stop: 24663, Start Num: 17

Candidate Starts for AreFloNak_26:

(Start: 16 @20053 has 2 MA's), (Start: 17 @20074 has 129 MA's), (Start: 20 @20104 has 3 MA's), (28, 20158), (32, 20179), (37, 20215), (47, 20293), (57, 20353), (63, 20377), (65, 20389), (68, 20419), (71, 20470), (75, 20500), (76, 20542), (77, 20560), (81, 20602), (83, 20632), (85, 20677), (86, 20689), (93, 20743), (96, 20758), (98, 20770), (102, 20791), (115, 20884), (118, 20917), (121, 20932), (127,

20980), (146, 21151), (161, 21265), (162, 21268), (188, 21430), (195, 21454), (198, 21469), (202, 21481), (216, 21556), (234, 21649), (239, 21664), (240, 21670), (245, 21688), (261, 21760), (273, 21811), (278, 21826), (284, 21856), (301, 21928), (303, 21934), (313, 21967), (314, 21970), (321, 21997), (337, 22111), (345, 22168), (347, 22180), (360, 22234), (363, 22243), (364, 22246), (369, 22267), (378, 22312), (384, 22333), (391, 22375), (394, 22393), (407, 22450), (414, 22471), (418, 22492), (434, 22573), (436, 22588), (437, 22591), (443, 22618), (444, 22621), (456, 22672), (471, 22750), (474, 22765), (475, 22768), (479, 22786), (480, 22792), (482, 22798), (485, 22807), (494, 22843), (497, 22852), (504, 22885), (515, 22939), (516, 22942), (520, 22960), (524, 22972), (531, 23002), (536, 23017), (540, 23026), (542, 23038), (547, 23059), (558, 23098), (569, 23155), (574, 23167), (577, 23176), (589, 23215), (592, 23227), (602, 23257), (604, 23266), (615, 23302), (624, 23341), (625, 23344), (629, 23362), (631, 23368), (646, 23428), (649, 23437), (661, 23491), (662, 23494), (665, 23503), (693, 23620), (694, 23623), (700, 23644), (708, 23677), (709, 23680), (710, 23686), (713, 23695), (719, 23722), (728, 23767), (742, 23833), (748, 23884), (750, 23890), (759, 23950), (773, 24034), (776, 24052), (777, 24064), (799, 24223), (800, 24232), (809, 24280), (817, 24313), (821, 24325), (824, 24331), (827, 24352), (829, 24355), (830, 24361), (835, 24400), (841, 24427), (882, 24613), (888, 24640),

Gene: Argan_25 Start: 18963, Stop: 23600, Start Num: 17

Candidate Starts for Argan_25:

(Start: 16 @18942 has 2 MA's), (Start: 17 @18963 has 129 MA's), (Start: 20 @18993 has 3 MA's), (28, 19047), (29, 19056), (58, 19326), (59, 19329), (68, 19386), (69, 19407), (75, 19467), (76, 19509), (81, 19569), (85, 19644), (93, 19710), (96, 19725), (102, 19758), (106, 19797), (107, 19800), (113, 19836), (115, 19851), (121, 19899), (141, 20097), (152, 20172), (159, 20226), (162, 20235), (170, 20295), (180, 20337), (188, 20397), (189, 20403), (192, 20412), (197, 20427), (198, 20436), (219, 20535), (220, 20547), (223, 20568), (296, 20853), (310, 20913), (314, 20922), (337, 21063), (343, 21111), (344, 21117), (348, 21135), (351, 21141), (360, 21186), (363, 21195), (369, 21219), (373, 21237), (383, 21282), (384, 21285), (387, 21294), (396, 21360), (407, 21402), (411, 21414), (414, 21423), (418, 21444), (429, 21495), (434, 21525), (436, 21540), (446, 21582), (451, 21600), (461, 21648), (462, 21651), (472, 21708), (499, 21816), (502, 21825), (512, 21876), (520, 21912), (529, 21945), (531, 21954), (536, 21966), (542, 21987), (549, 22014), (557, 22038), (558, 22047), (574, 22116), (575, 22119), (576, 22122), (577, 22125), (586, 22155), (592, 22176), (599, 22197), (604, 22215), (607, 22224), (612, 22242), (627, 22302), (635, 22335), (638, 22350), (640, 22356), (641, 22359), (654, 22404), (661, 22440), (662, 22443), (664, 22449), (667, 22461), (668, 22464), (696, 22581), (697, 22584), (702, 22602), (711, 22638), (721, 22680), (725, 22704), (740, 22773), (747, 22827), (750, 22839), (769, 22956), (776, 23001), (801, 23184), (804, 23205), (809, 23229), (824, 23280), (835, 23349), (836, 23352), (840, 23367),

Gene: Artorias_29 Start: 20505, Stop: 25607, Start Num: 17

Candidate Starts for Artorias_29:

(Start: 17 @20505 has 129 MA's), (Start: 20 @20535 has 3 MA's), (42, 20673), (46, 20718), (47, 20724), (49, 20733), (50, 20748), (53, 20769), (58, 20790), (65, 20820), (68, 20850), (69, 20871), (76, 20973), (81, 21033), (85, 21108), (86, 21120), (89, 21144), (93, 21174), (96, 21189), (102, 21222), (107, 21264), (112, 21315), (119, 21369), (120, 21372), (130, 21471), (133, 21495), (146, 21591), (158, 21696), (159, 21699), (170, 21768), (172, 21774), (173, 21780), (Start: 208 @21957 has 1 MA's), (219, 22008), (228, 22059), (241, 22113), (242, 22116), (295, 22368), (296, 22371), (311, 22446), (323, 22503), (335, 22587), (337, 22596), (349, 22671), (353, 22683), (355, 22698), (356, 22701), (361, 22722), (373, 22770), (378, 22797), (384, 22818), (387, 22827), (390, 22848), (391, 22860), (393, 22869), (394, 22878), (406, 22932), (407, 22935), (414, 22956), (422, 22998), (428, 23025), (431, 23034), (433, 23049), (434, 23058), (436, 23073), (438, 23085), (441, 23094), (449, 23127), (452, 23136), (470, 23220), (471, 23229), (474, 23244), (475, 23247), (479, 23265), (490, 23307), (497, 23328), (500, 23343), (502, 23349), (510, 23385), (512, 23400), (526, 23457), (529, 23469), (534, 23478), (538, 23490), (541, 23502), (542, 23508), (547, 23529), (551, 23541), (557, 23559), (558, 23568), (559, 23583), (560, 23589), (563, 23601), (573, 23643), (574, 23646), (577, 23655),

(582, 23676), (584, 23688), (598, 23736), (601, 23745), (608, 23769), (610, 23775), (615, 23793), (616, 23802), (622, 23823), (639, 23892), (644, 23910), (650, 23931), (691, 24102), (705, 24153), (736, 24297), (747, 24366), (757, 24432), (766, 24483), (784, 24606), (789, 24669), (797, 24717), (799, 24723), (800, 24732), (809, 24780), (826, 24852), (838, 24912), (842, 24933), (843, 24936), (851, 24987), (853, 24996), (859, 25014), (867, 25035), (870, 25047), (883, 25140), (892, 25185), (900, 25260), (902, 25278), (906, 25299), (919, 25386), (936, 25497), (947, 25593),

Gene: Arzan_22 Start: 17242, Stop: 22302, Start Num: 4

Candidate Starts for Arzan_22:

(4, 17242), (5, 17272), (8, 17326), (11, 17347), (29, 17554), (30, 17560), (31, 17563), (47, 17683), (52, 17716), (58, 17749), (66, 17788), (69, 17830), (74, 17881), (76, 17932), (84, 18058), (86, 18079), (93, 18133), (99, 18163), (115, 18265), (117, 18286), (122, 18322), (127, 18361), (140, 18499), (146, 18532), (154, 18604), (156, 18625), (158, 18637), (159, 18640), (167, 18691), (174, 18724), (180, 18751), (182, 18769), (198, 18850), (207, 18949), (211, 18985), (217, 19021), (222, 19066), (243, 19171), (268, 19306), (297, 19468), (298, 19471), (308, 19531), (317, 19594), (318, 19600), (332, 19714), (337, 19768), (341, 19798), (348, 19840), (352, 19852), (362, 19897), (363, 19900), (365, 19909), (369, 19924), (378, 19969), (384, 19990), (387, 19999), (393, 20041), (414, 20128), (422, 20170), (436, 20245), (446, 20287), (459, 20347), (467, 20377), (482, 20455), (485, 20464), (492, 20494), (499, 20524), (520, 20620), (528, 20647), (529, 20653), (531, 20662), (536, 20674), (537, 20677), (542, 20695), (547, 20716), (557, 20746), (558, 20755), (569, 20812), (571, 20818), (577, 20833), (582, 20848), (589, 20872), (591, 20878), (599, 20905), (601, 20911), (604, 20923), (625, 21001), (627, 21010), (636, 21049), (637, 21052), (644, 21079), (652, 21106), (657, 21130), (670, 21187), (672, 21193), (673, 21202), (695, 21283), (710, 21343), (712, 21349), (713, 21352), (721, 21388), (723, 21403), (763, 21622), (776, 21709), (786, 21778), (799, 21880), (801, 21892), (804, 21913), (813, 21958), (819, 21976), (824, 21991), (830, 22021), (835, 22060), (886, 22276),

Gene: Avazak_29 Start: 20512, Stop: 25614, Start Num: 17

Candidate Starts for Avazak_29:

(Start: 17 @20512 has 129 MA's), (Start: 20 @20542 has 3 MA's), (42, 20680), (46, 20725), (47, 20731), (49, 20740), (50, 20755), (53, 20776), (58, 20797), (65, 20827), (68, 20857), (69, 20878), (76, 20980), (81, 21040), (85, 21115), (86, 21127), (89, 21151), (93, 21181), (96, 21196), (102, 21229), (107, 21271), (112, 21322), (119, 21376), (120, 21379), (130, 21478), (133, 21502), (138, 21538), (146, 21598), (158, 21703), (159, 21706), (170, 21775), (172, 21781), (173, 21787), (Start: 208 @21964 has 1 MA's), (219, 22015), (228, 22066), (241, 22120), (242, 22123), (269, 22255), (278, 22294), (295, 22375), (296, 22378), (311, 22453), (323, 22510), (335, 22594), (337, 22603), (349, 22678), (353, 22690), (355, 22705), (356, 22708), (361, 22729), (373, 22777), (378, 22804), (384, 22825), (387, 22834), (390, 22855), (391, 22867), (393, 22876), (394, 22885), (407, 22942), (414, 22963), (418, 22984), (422, 23005), (428, 23032), (431, 23041), (433, 23056), (434, 23065), (436, 23080), (438, 23092), (441, 23101), (449, 23134), (452, 23143), (470, 23227), (471, 23236), (474, 23251), (479, 23272), (490, 23314), (497, 23335), (500, 23350), (510, 23392), (512, 23407), (526, 23464), (529, 23476), (534, 23485), (538, 23497), (541, 23509), (542, 23515), (547, 23536), (551, 23548), (554, 23557), (557, 23566), (558, 23575), (559, 23590), (560, 23596), (563, 23608), (569, 23632), (573, 23650), (577, 23662), (582, 23683), (584, 23695), (598, 23743), (601, 23752), (608, 23776), (610, 23782), (611, 23785), (615, 23800), (616, 23809), (617, 23812), (622, 23830), (639, 23899), (650, 23938), (691, 24109), (705, 24160), (736, 24304), (747, 24373), (757, 24439), (766, 24490), (784, 24613), (789, 24676), (797, 24724), (799, 24730), (800, 24739), (809, 24787), (826, 24859), (838, 24919), (842, 24940), (843, 24943), (851, 24994), (853, 25003), (859, 25021), (867, 25042), (870, 25054), (883, 25147), (892, 25192), (900, 25267), (902, 25285), (906, 25306), (919, 25393), (936, 25504), (947, 25600),

Gene: BarbieDoll_29 Start: 20909, Stop: 25573, Start Num: 16

Candidate Starts for BarbieDoll_29:

(Start: 16 @20909 has 2 MA's), (Start: 17 @20930 has 129 MA's), (Start: 20 @20960 has 3 MA's), (28, 21014), (32, 21035), (37, 21071), (47, 21239), (57, 21299), (68, 21365), (69, 21386), (76, 21488), (77, 21506), (81, 21548), (85, 21623), (86, 21635), (93, 21689), (96, 21704), (102, 21737), (113, 21815), (115, 21830), (126, 21920), (132, 21989), (146, 22097), (152, 22151), (158, 22202), (159, 22205), (170, 22274), (180, 22316), (188, 22376), (189, 22382), (192, 22391), (197, 22406), (198, 22415), (214, 22493), (219, 22514), (220, 22526), (223, 22547), (277, 22754), (282, 22778), (296, 22832), (314, 22901), (337, 23042), (348, 23114), (351, 23120), (360, 23165), (362, 23171), (363, 23174), (369, 23198), (373, 23216), (384, 23264), (387, 23273), (407, 23381), (414, 23402), (418, 23423), (428, 23471), (434, 23504), (436, 23519), (451, 23579), (474, 23696), (499, 23795), (500, 23798), (512, 23855), (515, 23870), (517, 23882), (520, 23891), (529, 23924), (531, 23933), (536, 23945), (557, 24017), (558, 24026), (566, 24074), (574, 24095), (576, 24101), (577, 24104), (595, 24164), (604, 24194), (607, 24203), (629, 24290), (630, 24293), (631, 24296), (635, 24314), (638, 24329), (643, 24344), (646, 24356), (654, 24383), (661, 24419), (662, 24422), (664, 24428), (667, 24440), (679, 24494), (687, 24530), (697, 24563), (702, 24581), (708, 24605), (709, 24608), (715, 24629), (730, 24710), (737, 24740), (740, 24752), (747, 24806), (750, 24818), (769, 24935), (776, 24980), (786, 25049), (804, 25184), (809, 25208), (821, 25253), (824, 25259), (832, 25298), (835, 25328), (840, 25346),

Gene: BenitoAntonio_22 Start: 17286, Stop: 21764, Start Num: 17

Candidate Starts for BenitoAntonio_22:

(Start: 16 @17265 has 2 MA's), (Start: 17 @17286 has 129 MA's), (Start: 20 @17316 has 3 MA's), (23, 17349), (28, 17370), (65, 17601), (68, 17631), (75, 17712), (76, 17754), (77, 17772), (81, 17814), (86, 17901), (93, 17955), (96, 17970), (102, 18003), (113, 18081), (115, 18096), (121, 18144), (128, 18201), (132, 18255), (133, 18267), (140, 18330), (146, 18363), (159, 18471), (169, 18537), (177, 18570), (179, 18579), (182, 18600), (243, 18882), (256, 18927), (257, 18936), (299, 19095), (305, 19128), (314, 19155), (337, 19284), (350, 19362), (360, 19407), (363, 19416), (366, 19428), (369, 19440), (375, 19467), (378, 19485), (384, 19506), (396, 19581), (400, 19602), (401, 19605), (404, 19614), (414, 19644), (422, 19686), (434, 19746), (435, 19752), (436, 19761), (444, 19794), (447, 19806), (448, 19809), (460, 19866), (462, 19872), (467, 19893), (471, 19923), (477, 19953), (482, 19971), (494, 20019), (500, 20043), (504, 20061), (507, 20070), (510, 20085), (513, 20106), (520, 20136), (529, 20169), (530, 20175), (531, 20178), (536, 20190), (542, 20211), (557, 20262), (558, 20271), (562, 20301), (564, 20307), (574, 20340), (577, 20349), (586, 20379), (589, 20388), (592, 20400), (604, 20439), (612, 20466), (614, 20472), (615, 20475), (625, 20517), (633, 20547), (641, 20583), (667, 20685), (682, 20748), (690, 20784), (691, 20787), (693, 20793), (697, 20808), (702, 20826), (708, 20850), (712, 20865), (713, 20868), (718, 20886), (723, 20919), (728, 20940), (740, 20997), (747, 21051), (749, 21060), (758, 21114), (773, 21141), (776, 21159), (782, 21207), (783, 21213), (790, 21285), (804, 21363), (807, 21378), (815, 21417), (824, 21441), (835, 21510), (840, 21531), (865, 21624), (889, 21753),

Gene: Benllo_20 Start: 17570, Stop: 22048, Start Num: 17

Candidate Starts for Benllo_20:

(Start: 16 @17549 has 2 MA's), (Start: 17 @17570 has 129 MA's), (Start: 20 @17600 has 3 MA's), (23, 17633), (28, 17654), (65, 17885), (68, 17915), (75, 17996), (76, 18038), (77, 18056), (81, 18098), (86, 18185), (93, 18239), (96, 18254), (102, 18287), (113, 18365), (115, 18380), (121, 18428), (123, 18443), (128, 18485), (136, 18581), (140, 18614), (146, 18647), (159, 18755), (169, 18821), (177, 18854), (179, 18863), (180, 18866), (182, 18884), (243, 19166), (251, 19190), (257, 19220), (299, 19379), (314, 19439), (337, 19568), (343, 19616), (350, 19646), (355, 19670), (358, 19682), (360, 19691), (363, 19700), (369, 19724), (378, 19769), (384, 19790), (396, 19865), (404, 19898), (414, 19928), (418, 19949), (422, 19970), (434, 20030), (435, 20036), (443, 20075), (448, 20093), (467, 20177), (471, 20207), (477, 20237), (482, 20255), (494, 20303), (500, 20327), (504, 20345), (507, 20354), (508, 20363), (510, 20369), (513, 20390), (520, 20420), (529, 20453), (530, 20459), (534, 20468), (542, 20495), (549, 20522), (558, 20555), (561, 20582), (563, 20588), (570, 20615), (577, 20633), (586, 20663), (589, 20672), (592, 20684), (594, 20690), (595, 20693), (599, 20705), (604,

20723), (612, 20750), (614, 20756), (631, 20825), (637, 20852), (641, 20867), (667, 20969), (690, 21068), (691, 21071), (693, 21077), (697, 21092), (702, 21110), (712, 21149), (713, 21152), (718, 21170), (723, 21203), (728, 21224), (740, 21281), (747, 21335), (749, 21344), (758, 21398), (773, 21425), (776, 21443), (782, 21491), (783, 21497), (790, 21569), (804, 21647), (811, 21683), (815, 21701), (824, 21725), (829, 21749), (835, 21794), (840, 21815), (889, 22037),

Gene: BetterYeti_34 Start: 23289, Stop: 28400, Start Num: 17

Candidate Starts for BetterYeti_34:

(Start: 17 @23289 has 129 MA's), (Start: 20 @23319 has 3 MA's), (25, 23364), (47, 23508), (58, 23574), (68, 23634), (69, 23655), (76, 23757), (84, 23883), (87, 23919), (93, 23958), (98, 23985), (102, 24006), (107, 24048), (118, 24168), (130, 24282), (132, 24294), (140, 24369), (146, 24402), (158, 24507), (159, 24510), (228, 24870), (231, 24888), (267, 25044), (288, 25146), (289, 25149), (295, 25176), (303, 25215), (310, 25242), (314, 25263), (319, 25287), (337, 25404), (346, 25467), (347, 25473), (353, 25491), (354, 25497), (360, 25527), (367, 25551), (378, 25605), (385, 25629), (389, 25653), (390, 25656), (393, 25677), (394, 25686), (403, 25731), (406, 25740), (418, 25785), (422, 25806), (425, 25815), (426, 25821), (429, 25836), (431, 25842), (433, 25857), (443, 25911), (444, 25914), (446, 25923), (449, 25935), (452, 25944), (454, 25956), (459, 25977), (461, 25983), (467, 26007), (471, 26037), (474, 26052), (490, 26115), (494, 26127), (496, 26133), (497, 26136), (499, 26148), (500, 26151), (512, 26208), (525, 26262), (526, 26265), (534, 26286), (538, 26298), (539, 26301), (551, 26349), (556, 26364), (557, 26367), (558, 26376), (559, 26391), (560, 26397), (566, 26424), (567, 26427), (569, 26433), (577, 26463), (582, 26484), (584, 26496), (586, 26505), (590, 26517), (598, 26544), (608, 26577), (610, 26583), (615, 26601), (622, 26631), (650, 26739), (671, 26829), (676, 26850), (705, 26961), (717, 27006), (728, 27063), (734, 27096), (757, 27240), (768, 27303), (778, 27369), (781, 27402), (784, 27414), (789, 27477), (794, 27498), (795, 27510), (799, 27531), (831, 27672), (845, 27759), (850, 27777), (859, 27807), (866, 27825), (867, 27828), (869, 27834), (870, 27840), (876, 27867), (892, 27978), (898, 28041), (900, 28053), (911, 28122), (916, 28155), (919, 28179), (937, 28296), (947, 28386),

Gene: Bilo_19 Start: 14007, Stop: 19235, Start Num: 17

Candidate Starts for Bilo_19:

(Start: 16 @13986 has 2 MA's), (Start: 17 @14007 has 129 MA's), (Start: 20 @14037 has 3 MA's), (43, 14190), (57, 14292), (58, 14298), (76, 14481), (82, 14562), (84, 14607), (87, 14643), (93, 14682), (100, 14715), (105, 14754), (107, 14772), (149, 15159), (172, 15309), (177, 15333), (188, 15405), (238, 15636), (256, 15684), (261, 15714), (264, 15732), (275, 15768), (337, 16017), (347, 16086), (363, 16149), (369, 16173), (382, 16230), (384, 16239), (391, 16281), (402, 16341), (404, 16347), (406, 16353), (415, 16377), (425, 16425), (450, 16548), (461, 16599), (470, 16644), (471, 16653), (477, 16683), (489, 16728), (496, 16749), (506, 16791), (507, 16794), (511, 16815), (512, 16824), (520, 16860), (529, 16893), (561, 17022), (563, 17028), (564, 17031), (577, 17073), (586, 17103), (600, 17148), (604, 17163), (614, 17196), (619, 17217), (621, 17226), (623, 17235), (629, 17259), (630, 17262), (637, 17292), (646, 17325), (657, 17370), (662, 17391), (672, 17433), (675, 17448), (692, 17514), (696, 17529), (710, 17583), (713, 17592), (714, 17595), (717, 17607), (718, 17610), (721, 17628), (747, 17775), (764, 17883), (767, 17898), (793, 18096), (839, 18330), (856, 18405), (897, 18642), (904, 18684), (905, 18687), (909, 18708), (914, 18756), (916, 18762), (932, 18870), (941, 18942), (949, 19044), (960, 19197),

Gene: Bing_24 Start: 16028, Stop: 21496, Start Num: 2

Candidate Starts for Bing_24:

(1, 16007), (Start: 2 @16028 has 30 MA's), (3, 16058), (6, 16133), (12, 16214), (13, 16217), (33, 16385), (57, 16571), (68, 16637), (76, 16760), (82, 16841), (84, 16886), (90, 16946), (93, 16961), (102, 17009), (107, 17051), (128, 17243), (133, 17309), (149, 17438), (161, 17519), (162, 17522), (172, 17588), (235, 17906), (240, 17924), (256, 17963), (264, 18011), (266, 18020), (275, 18047), (286, 18098), (295, 18131), (299, 18143), (301, 18161), (310, 18194), (313, 18200), (314, 18203), (337, 18293), (345, 18350), (347, 18362), (363, 18425), (381, 18503), (382, 18506), (384, 18515), (407,

18632), (415, 18653), (433, 18743), (450, 18824), (461, 18875), (470, 18920), (471, 18929), (488, 19001), (498, 19034), (504, 19061), (506, 19067), (509, 19082), (512, 19100), (520, 19136), (553, 19250), (557, 19262), (561, 19298), (563, 19304), (566, 19319), (577, 19349), (600, 19424), (604, 19439), (609, 19454), (612, 19466), (614, 19472), (617, 19487), (621, 19502), (627, 19526), (640, 19580), (641, 19583), (646, 19601), (652, 19622), (660, 19661), (665, 19676), (672, 19709), (692, 19790), (706, 19841), (710, 19859), (713, 19868), (721, 19904), (740, 19997), (759, 20135), (764, 20159), (765, 20162), (770, 20207), (793, 20372), (845, 20645), (901, 20948), (905, 20963), (909, 20984), (916, 21038), (924, 21089),

Gene: Biscute_30 Start: 20578, Stop: 25209, Start Num: 17

Candidate Starts for Biscute_30:

(Start: 16 @20557 has 2 MA's), (Start: 17 @20578 has 129 MA's), (Start: 20 @20608 has 3 MA's), (28, 20662), (32, 20683), (37, 20719), (47, 20887), (57, 20947), (68, 21013), (69, 21034), (76, 21136), (77, 21154), (81, 21196), (86, 21283), (93, 21337), (96, 21352), (102, 21385), (113, 21463), (115, 21478), (126, 21568), (132, 21637), (141, 21724), (146, 21745), (152, 21799), (158, 21850), (159, 21853), (170, 21922), (180, 21964), (188, 22024), (189, 22030), (192, 22039), (197, 22054), (198, 22063), (219, 22162), (220, 22174), (223, 22195), (277, 22402), (282, 22426), (296, 22480), (314, 22549), (335, 22678), (337, 22687), (351, 22765), (360, 22810), (362, 22816), (363, 22819), (369, 22843), (373, 22861), (384, 22909), (387, 22918), (391, 22951), (407, 23026), (414, 23047), (418, 23068), (422, 23089), (428, 23116), (434, 23149), (436, 23164), (451, 23224), (474, 23341), (499, 23440), (500, 23443), (512, 23500), (517, 23527), (520, 23536), (529, 23569), (531, 23578), (536, 23590), (542, 23611), (547, 23632), (549, 23638), (558, 23671), (562, 23701), (577, 23749), (586, 23779), (595, 23809), (604, 23839), (607, 23848), (629, 23935), (630, 23938), (631, 23941), (635, 23959), (638, 23974), (643, 23989), (654, 24028), (660, 24061), (662, 24067), (664, 24073), (667, 24085), (679, 24139), (687, 24175), (696, 24205), (697, 24208), (702, 24226), (708, 24250), (709, 24253), (730, 24355), (737, 24385), (740, 24397), (750, 24463), (769, 24580), (776, 24625), (804, 24829), (809, 24853), (821, 24898), (824, 24904), (832, 24943), (835, 24973), (840, 24991),

Gene: BluerMoon_35 Start: 23509, Stop: 28623, Start Num: 17

Candidate Starts for BluerMoon_35:

(Start: 17 @23509 has 129 MA's), (Start: 20 @23539 has 3 MA's), (25, 23584), (47, 23728), (57, 23788), (58, 23794), (68, 23854), (69, 23875), (76, 23977), (84, 24103), (87, 24139), (93, 24178), (102, 24226), (107, 24268), (113, 24340), (118, 24388), (132, 24514), (140, 24589), (141, 24601), (146, 24622), (158, 24727), (159, 24730), (202, 24952), (214, 25018), (231, 25108), (241, 25144), (255, 25195), (262, 25243), (265, 25255), (295, 25399), (303, 25438), (310, 25465), (337, 25627), (343, 25675), (347, 25696), (353, 25714), (364, 25762), (378, 25828), (390, 25879), (391, 25891), (394, 25909), (406, 25963), (418, 26008), (422, 26029), (425, 26038), (429, 26059), (433, 26080), (443, 26134), (444, 26137), (446, 26146), (452, 26167), (454, 26179), (459, 26200), (461, 26206), (465, 26224), (471, 26260), (477, 26290), (490, 26338), (494, 26350), (496, 26356), (497, 26359), (499, 26371), (500, 26374), (505, 26395), (512, 26431), (525, 26485), (526, 26488), (534, 26509), (538, 26521), (539, 26524), (551, 26572), (556, 26587), (557, 26590), (558, 26599), (560, 26620), (566, 26647), (567, 26650), (573, 26674), (577, 26686), (582, 26707), (584, 26719), (586, 26728), (590, 26740), (598, 26767), (608, 26800), (610, 26806), (615, 26824), (628, 26878), (632, 26893), (650, 26962), (676, 27073), (705, 27184), (717, 27229), (734, 27319), (755, 27442), (757, 27463), (768, 27526), (771, 27553), (781, 27625), (784, 27637), (785, 27646), (789, 27700), (794, 27721), (795, 27733), (799, 27754), (831, 27895), (845, 27982), (850, 28000), (859, 28030), (866, 28048), (867, 28051), (870, 28063), (876, 28090), (892, 28201), (900, 28276), (916, 28378), (920, 28405), (937, 28519), (947, 28609),

Gene: Boog_22 Start: 17271, Stop: 21791, Start Num: 20

Candidate Starts for Boog_22:

(Start: 16 @17220 has 2 MA's), (Start: 17 @17241 has 129 MA's), (Start: 20 @17271 has 3 MA's), (23, 17304), (47, 17460), (63, 17544), (65, 17556), (68, 17586), (75, 17667), (76, 17709), (77, 17727), (81,

17769), (83, 17799), (85, 17844), (86, 17856), (93, 17910), (96, 17925), (102, 17958), (109, 18021), (115, 18051), (118, 18084), (121, 18099), (127, 18147), (141, 18297), (146, 18318), (159, 18426), (162, 18435), (168, 18483), (204, 18660), (225, 18774), (237, 18825), (240, 18837), (258, 18918), (278, 19002), (281, 19020), (293, 19065), (303, 19110), (304, 19113), (305, 19119), (316, 19152), (337, 19263), (347, 19332), (348, 19335), (358, 19377), (360, 19386), (363, 19395), (371, 19425), (378, 19464), (380, 19470), (384, 19485), (391, 19527), (414, 19623), (418, 19644), (423, 19668), (434, 19725), (436, 19740), (443, 19770), (446, 19782), (453, 19809), (456, 19824), (467, 19872), (471, 19902), (474, 19917), (482, 19950), (484, 19956), (494, 19995), (497, 20004), (499, 20016), (504, 20037), (517, 20103), (520, 20112), (529, 20145), (530, 20151), (531, 20154), (536, 20166), (537, 20169), (543, 20190), (548, 20211), (558, 20247), (566, 20295), (577, 20325), (604, 20415), (620, 20472), (631, 20517), (635, 20535), (642, 20562), (644, 20571), (646, 20577), (660, 20637), (664, 20649), (667, 20661), (679, 20715), (689, 20757), (691, 20763), (693, 20769), (703, 20805), (709, 20829), (710, 20835), (712, 20841), (713, 20844), (723, 20895), (726, 20907), (732, 20937), (733, 20946), (756, 21078), (769, 21156), (776, 21201), (779, 21234), (787, 21291), (800, 21381), (804, 21405), (809, 21429), (811, 21441), (813, 21450), (817, 21462), (821, 21474), (832, 21519), (835, 21549), (840, 21567), (847, 21606), (873, 21684),

Gene: Bouchard_27 Start: 20253, Stop: 24839, Start Num: 17

Candidate Starts for Bouchard_27:

(Start: 16 @20232 has 2 MA's), (Start: 17 @20253 has 129 MA's), (Start: 20 @20283 has 3 MA's), (28, 20337), (65, 20568), (68, 20598), (75, 20679), (76, 20721), (77, 20739), (81, 20781), (86, 20868), (93, 20922), (96, 20937), (97, 20943), (102, 20970), (113, 21048), (115, 21063), (118, 21096), (121, 21111), (122, 21120), (125, 21147), (127, 21159), (131, 21213), (141, 21309), (146, 21330), (159, 21438), (162, 21447), (169, 21504), (171, 21510), (197, 21639), (202, 21660), (204, 21672), (256, 21909), (278, 22005), (301, 22107), (303, 22113), (314, 22149), (337, 22293), (345, 22350), (355, 22395), (360, 22416), (363, 22425), (364, 22428), (369, 22449), (384, 22515), (386, 22521), (394, 22575), (407, 22632), (414, 22653), (417, 22671), (418, 22674), (422, 22695), (424, 22701), (429, 22725), (436, 22770), (438, 22782), (464, 22893), (467, 22902), (469, 22914), (471, 22932), (485, 22989), (494, 23025), (495, 23028), (497, 23034), (499, 23046), (500, 23049), (504, 23067), (507, 23076), (517, 23133), (531, 23184), (535, 23196), (543, 23220), (544, 23223), (557, 23268), (558, 23277), (574, 23346), (577, 23355), (589, 23394), (592, 23406), (604, 23445), (631, 23547), (636, 23571), (637, 23574), (646, 23607), (647, 23610), (648, 23613), (649, 23616), (661, 23670), (662, 23673), (668, 23694), (691, 23793), (700, 23823), (703, 23835), (706, 23847), (710, 23865), (713, 23874), (714, 23877), (744, 24033), (750, 24069), (776, 24231), (777, 24243), (783, 24285), (794, 24369), (804, 24435), (809, 24459), (824, 24510), (835, 24579), (836, 24582), (841, 24606), (882, 24789),

Gene: Bowling_21 Start: 17384, Stop: 21862, Start Num: 17

Candidate Starts for Bowling_21:

(Start: 16 @17363 has 2 MA's), (Start: 17 @17384 has 129 MA's), (Start: 20 @17414 has 3 MA's), (23, 17447), (28, 17468), (65, 17699), (68, 17729), (69, 17750), (75, 17810), (76, 17852), (77, 17870), (81, 17912), (86, 17999), (93, 18053), (96, 18068), (102, 18101), (115, 18194), (121, 18242), (123, 18257), (128, 18299), (132, 18353), (140, 18428), (146, 18461), (159, 18569), (169, 18635), (177, 18668), (179, 18677), (180, 18680), (182, 18698), (243, 18980), (251, 19004), (257, 19034), (299, 19193), (314, 19253), (337, 19382), (350, 19460), (357, 19490), (360, 19505), (363, 19514), (369, 19538), (375, 19565), (378, 19583), (384, 19604), (396, 19679), (400, 19700), (404, 19712), (414, 19742), (422, 19784), (434, 19844), (435, 19850), (443, 19889), (462, 19970), (467, 19991), (471, 20021), (477, 20051), (482, 20069), (494, 20117), (500, 20141), (504, 20159), (507, 20168), (508, 20177), (510, 20183), (513, 20204), (520, 20234), (529, 20267), (530, 20273), (531, 20276), (536, 20288), (542, 20309), (557, 20360), (558, 20369), (562, 20399), (564, 20405), (574, 20438), (577, 20447), (586, 20477), (589, 20486), (592, 20498), (599, 20519), (604, 20537), (612, 20564), (614, 20570), (615, 20573), (618, 20588), (625, 20615), (629, 20633), (633, 20645), (641, 20681), (667, 20783), (682, 20846), (690, 20882), (691, 20885), (693, 20891), (697, 20906), (702, 20924), (712, 20963),

(713, 20966), (718, 20984), (723, 21017), (728, 21038), (740, 21095), (747, 21149), (749, 21158), (758, 21212), (773, 21239), (776, 21257), (782, 21305), (783, 21311), (790, 21383), (804, 21461), (807, 21476), (815, 21515), (824, 21539), (835, 21608), (840, 21629), (865, 21722), (889, 21851),

Gene: Breylor17_27 Start: 20680, Stop: 25269, Start Num: 17

Candidate Starts for Breylor17_27:

(Start: 16 @20659 has 2 MA's), (Start: 17 @20680 has 129 MA's), (Start: 20 @20710 has 3 MA's), (28, 20764), (32, 20785), (37, 20821), (47, 20899), (57, 20959), (63, 20983), (65, 20995), (68, 21025), (71, 21076), (75, 21106), (76, 21148), (77, 21166), (81, 21208), (83, 21238), (85, 21283), (86, 21295), (93, 21349), (96, 21364), (98, 21376), (102, 21397), (115, 21490), (118, 21523), (121, 21538), (127, 21586), (141, 21736), (146, 21757), (161, 21871), (162, 21874), (168, 21922), (188, 22036), (195, 22060), (198, 22075), (202, 22087), (234, 22255), (239, 22270), (240, 22276), (245, 22294), (261, 22366), (273, 22417), (278, 22432), (284, 22462), (301, 22534), (303, 22540), (313, 22573), (314, 22576), (321, 22603), (337, 22717), (345, 22774), (347, 22786), (360, 22840), (363, 22849), (364, 22852), (369, 22873), (378, 22918), (384, 22939), (391, 22981), (394, 22999), (407, 23056), (414, 23077), (418, 23098), (434, 23179), (436, 23194), (437, 23197), (444, 23227), (456, 23278), (471, 23356), (474, 23371), (475, 23374), (479, 23392), (480, 23398), (482, 23404), (485, 23413), (494, 23449), (497, 23458), (504, 23491), (515, 23545), (516, 23548), (520, 23566), (524, 23578), (531, 23608), (536, 23623), (540, 23632), (542, 23644), (547, 23665), (558, 23704), (569, 23761), (574, 23773), (577, 23782), (589, 23821), (592, 23833), (602, 23863), (604, 23872), (615, 23908), (624, 23947), (625, 23950), (631, 23974), (636, 23998), (646, 24034), (649, 24043), (655, 24064), (661, 24097), (662, 24100), (693, 24226), (694, 24229), (700, 24250), (708, 24283), (709, 24286), (710, 24292), (713, 24301), (719, 24328), (728, 24373), (742, 24439), (748, 24490), (750, 24496), (759, 24556), (764, 24580), (773, 24640), (776, 24658), (777, 24670), (783, 24712), (799, 24829), (800, 24838), (809, 24886), (817, 24919), (821, 24931), (824, 24937), (827, 24958), (829, 24961), (830, 24967), (835, 25006), (841, 25033), (882, 25219), (888, 25246),

Gene: BronxBay_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for BronxBay_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (238, 18827), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Brunswick_26 Start: 20146, Stop: 24735, Start Num: 17

Candidate Starts for Brunswick_26:

(Start: 16 @20125 has 2 MA's), (Start: 17 @20146 has 129 MA's), (Start: 20 @20176 has 3 MA's), (28, 20230), (32, 20251), (37, 20287), (47, 20365), (57, 20425), (63, 20449), (65, 20461), (68, 20491), (71, 20542), (75, 20572), (76, 20614), (77, 20632), (81, 20674), (83, 20704), (85, 20749), (86, 20761), (93,

20815), (96, 20830), (98, 20842), (102, 20863), (115, 20956), (118, 20989), (121, 21004), (127, 21052), (141, 21202), (146, 21223), (159, 21331), (161, 21337), (162, 21340), (168, 21388), (188, 21502), (195, 21526), (198, 21541), (202, 21553), (216, 21628), (223, 21673), (234, 21721), (239, 21736), (240, 21742), (245, 21760), (261, 21832), (270, 21874), (273, 21883), (284, 21928), (301, 22000), (303, 22006), (313, 22039), (314, 22042), (321, 22069), (337, 22183), (345, 22240), (347, 22252), (360, 22306), (363, 22315), (364, 22318), (369, 22339), (378, 22384), (384, 22405), (405, 22516), (407, 22522), (414, 22543), (417, 22561), (418, 22564), (422, 22585), (434, 22645), (436, 22660), (437, 22663), (443, 22690), (444, 22693), (451, 22720), (471, 22822), (474, 22837), (475, 22840), (479, 22858), (480, 22864), (481, 22867), (485, 22879), (494, 22915), (497, 22924), (504, 22957), (515, 23011), (516, 23014), (520, 23032), (524, 23044), (531, 23074), (536, 23089), (540, 23098), (542, 23110), (558, 23170), (567, 23221), (569, 23227), (574, 23239), (577, 23248), (589, 23287), (592, 23299), (596, 23311), (602, 23329), (604, 23338), (624, 23413), (625, 23416), (629, 23434), (646, 23500), (648, 23506), (649, 23509), (661, 23563), (662, 23566), (693, 23692), (694, 23695), (700, 23716), (708, 23749), (710, 23758), (728, 23839), (734, 23872), (742, 23905), (750, 23962), (759, 24022), (764, 24046), (776, 24124), (777, 24136), (794, 24262), (800, 24304), (809, 24352), (817, 24385), (821, 24397), (824, 24403), (827, 24424), (829, 24427), (830, 24433), (835, 24472), (841, 24499), (846, 24526), (882, 24685), (888, 24712),

Gene: Burley_32 Start: 23250, Stop: 28361, Start Num: 17

Candidate Starts for Burley_32:

(Start: 17 @23250 has 129 MA's), (Start: 20 @23280 has 3 MA's), (25, 23325), (32, 23355), (47, 23469), (58, 23535), (68, 23595), (69, 23616), (76, 23718), (84, 23844), (87, 23880), (93, 23919), (98, 23946), (102, 23967), (107, 24009), (116, 24108), (118, 24129), (132, 24255), (140, 24330), (141, 24342), (146, 24363), (158, 24468), (159, 24471), (228, 24831), (255, 24936), (267, 25005), (272, 25026), (288, 25107), (289, 25110), (295, 25137), (303, 25176), (310, 25203), (337, 25365), (343, 25413), (347, 25434), (353, 25452), (364, 25500), (367, 25512), (378, 25566), (390, 25617), (391, 25629), (393, 25638), (394, 25647), (406, 25701), (418, 25746), (421, 25761), (422, 25767), (425, 25776), (426, 25782), (430, 25800), (431, 25803), (432, 25809), (433, 25818), (443, 25872), (444, 25875), (446, 25884), (451, 25902), (452, 25905), (454, 25917), (459, 25938), (461, 25944), (462, 25947), (467, 25968), (471, 25998), (474, 26013), (482, 26046), (486, 26061), (490, 26076), (494, 26088), (496, 26094), (497, 26097), (499, 26109), (500, 26112), (512, 26169), (525, 26223), (526, 26226), (534, 26247), (538, 26259), (539, 26262), (551, 26310), (556, 26325), (557, 26328), (558, 26337), (560, 26358), (566, 26385), (567, 26388), (573, 26412), (577, 26424), (582, 26445), (584, 26457), (590, 26478), (598, 26505), (608, 26538), (610, 26544), (615, 26562), (622, 26592), (632, 26631), (676, 26811), (679, 26823), (697, 26892), (734, 27057), (755, 27180), (757, 27201), (778, 27330), (781, 27363), (784, 27375), (789, 27438), (794, 27459), (795, 27471), (797, 27486), (809, 27549), (831, 27633), (845, 27720), (850, 27738), (859, 27768), (866, 27786), (867, 27789), (869, 27795), (870, 27801), (876, 27828), (892, 27939), (900, 28014), (902, 28032), (916, 28116), (919, 28140), (937, 28257), (947, 28347),

Gene: Camille_24 Start: 16246, Stop: 20454, Start Num: 17

Candidate Starts for Camille_24:

(Start: 16 @16225 has 2 MA's), (Start: 17 @16246 has 129 MA's), (19, 16258), (Start: 20 @16279 has 3 MA's), (42, 16417), (44, 16438), (54, 16516), (58, 16534), (68, 16594), (76, 16717), (81, 16777), (89, 16888), (92, 16912), (93, 16918), (96, 16933), (102, 16966), (109, 17029), (114, 17056), (115, 17059), (117, 17080), (118, 17092), (123, 17122), (147, 17338), (151, 17374), (160, 17437), (163, 17446), (172, 17509), (182, 17563), (185, 17587), (204, 17668), (209, 17698), (226, 17788), (253, 17836), (280, 17917), (284, 17938), (310, 18043), (315, 18055), (328, 18085), (335, 18154), (337, 18163), (347, 18232), (348, 18235), (360, 18286), (363, 18295), (369, 18319), (371, 18325), (372, 18328), (374, 18340), (377, 18358), (378, 18364), (384, 18385), (388, 18406), (390, 18415), (391, 18427), (393, 18436), (400, 18481), (407, 18502), (416, 18532), (425, 18574), (427, 18586), (432, 18607), (434, 18625), (440, 18655), (450, 18694), (459, 18733), (466, 18760), (470, 18784), (485, 18850), (520, 18871), (542, 18901), (564, 18997), (574, 19030), (577, 19039), (580, 19054), (581, 19057),

(592, 19096), (593, 19099), (594, 19102), (600, 19120), (604, 19135), (614, 19168), (624, 19210), (625, 19213), (635, 19255), (642, 19282), (646, 19297), (655, 19327), (663, 19366), (669, 19390), (671, 19402), (672, 19405), (681, 19441), (682, 19444), (690, 19480), (705, 19534), (712, 19561), (714, 19567), (727, 19633), (729, 19645), (730, 19651), (739, 19690), (742, 19702), (744, 19723), (758, 19810), (776, 19855), (783, 19909), (789, 19975), (792, 19987), (795, 20005), (804, 20059), (807, 20074), (809, 20083), (813, 20104), (817, 20116), (819, 20122), (834, 20194), (849, 20263), (860, 20299), (865, 20314), (884, 20419), (888, 20434),

Gene: CapnMurica_26 Start: 21235, Stop: 25824, Start Num: 17

Candidate Starts for CapnMurica_26:

(Start: 16 @21214 has 2 MA's), (Start: 17 @21235 has 129 MA's), (Start: 20 @21265 has 3 MA's), (28, 21319), (32, 21340), (37, 21376), (57, 21514), (65, 21550), (68, 21580), (76, 21703), (77, 21721), (81, 21763), (88, 21871), (93, 21904), (96, 21919), (102, 21952), (113, 22030), (115, 22045), (117, 22066), (118, 22078), (122, 22102), (128, 22150), (136, 22246), (140, 22279), (146, 22312), (155, 22396), (159, 22420), (162, 22429), (202, 22642), (209, 22684), (216, 22717), (234, 22810), (239, 22825), (240, 22831), (245, 22849), (247, 22858), (256, 22891), (257, 22900), (273, 22972), (284, 23017), (301, 23089), (303, 23095), (313, 23128), (314, 23131), (321, 23158), (337, 23272), (345, 23329), (347, 23341), (360, 23395), (363, 23404), (364, 23407), (369, 23428), (378, 23473), (384, 23494), (405, 23605), (407, 23611), (414, 23632), (417, 23650), (418, 23653), (422, 23674), (434, 23734), (436, 23749), (437, 23752), (443, 23779), (444, 23782), (451, 23809), (469, 23893), (471, 23911), (474, 23926), (475, 23929), (479, 23947), (480, 23953), (481, 23956), (485, 23968), (486, 23974), (494, 24004), (497, 24013), (504, 24046), (515, 24100), (516, 24103), (520, 24121), (531, 24163), (536, 24178), (540, 24187), (542, 24199), (558, 24259), (569, 24316), (574, 24328), (577, 24337), (589, 24376), (592, 24388), (594, 24394), (598, 24406), (602, 24418), (604, 24427), (624, 24502), (625, 24505), (629, 24523), (646, 24589), (649, 24598), (661, 24652), (662, 24655), (693, 24781), (700, 24805), (708, 24838), (710, 24847), (715, 24862), (719, 24883), (728, 24928), (742, 24994), (750, 25051), (759, 25111), (772, 25189), (776, 25213), (777, 25225), (794, 25351), (800, 25393), (809, 25441), (817, 25474), (821, 25486), (824, 25492), (827, 25513), (829, 25516), (830, 25522), (835, 25561), (841, 25588), (882, 25774),

Gene: Captrips_29 Start: 20541, Stop: 25643, Start Num: 17

Candidate Starts for Captrips_29:

(Start: 17 @20541 has 129 MA's), (Start: 20 @20571 has 3 MA's), (42, 20709), (46, 20754), (47, 20760), (49, 20769), (50, 20784), (53, 20805), (58, 20826), (65, 20856), (68, 20886), (69, 20907), (76, 21009), (81, 21069), (85, 21144), (86, 21156), (89, 21180), (93, 21210), (96, 21225), (102, 21258), (107, 21300), (112, 21351), (119, 21405), (120, 21408), (130, 21507), (133, 21531), (146, 21627), (158, 21732), (159, 21735), (170, 21804), (172, 21810), (173, 21816), (Start: 208 @21993 has 1 MA's), (219, 22044), (228, 22095), (241, 22149), (242, 22152), (278, 22323), (295, 22404), (296, 22407), (311, 22482), (323, 22539), (335, 22623), (337, 22632), (346, 22695), (347, 22701), (349, 22707), (353, 22719), (355, 22734), (356, 22737), (361, 22758), (373, 22806), (378, 22833), (384, 22854), (387, 22863), (390, 22884), (391, 22896), (393, 22905), (394, 22914), (406, 22968), (407, 22971), (414, 22992), (422, 23034), (431, 23070), (433, 23085), (434, 23094), (436, 23109), (438, 23121), (441, 23130), (449, 23163), (452, 23172), (470, 23256), (471, 23265), (474, 23280), (475, 23283), (479, 23301), (490, 23343), (497, 23364), (500, 23379), (510, 23421), (512, 23436), (526, 23493), (529, 23505), (534, 23514), (538, 23526), (541, 23538), (542, 23544), (547, 23565), (551, 23577), (557, 23595), (558, 23604), (559, 23619), (560, 23625), (563, 23637), (573, 23679), (574, 23682), (577, 23691), (582, 23712), (584, 23724), (598, 23772), (601, 23781), (608, 23805), (610, 23811), (615, 23829), (616, 23838), (622, 23859), (639, 23928), (650, 23967), (691, 24138), (705, 24189), (736, 24333), (757, 24468), (766, 24519), (784, 24642), (789, 24705), (797, 24753), (799, 24759), (800, 24768), (809, 24816), (826, 24888), (838, 24948), (842, 24969), (843, 24972), (851, 25023), (853, 25032), (859, 25050), (867, 25071), (870, 25083), (883, 25176), (892, 25221), (900, 25296), (902, 25314), (906, 25335), (919, 25422), (936, 25533), (947, 25629),

Gene: Capybara_29 Start: 20616, Stop: 25718, Start Num: 17

Candidate Starts for Capybara_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (42, 20784), (46, 20829), (47, 20835), (49, 20844), (50, 20859), (53, 20880), (58, 20901), (65, 20931), (68, 20961), (69, 20982), (76, 21084), (81, 21144), (85, 21219), (86, 21231), (89, 21255), (93, 21285), (96, 21300), (102, 21333), (107, 21375), (112, 21426), (119, 21480), (120, 21483), (130, 21582), (133, 21606), (146, 21702), (158, 21807), (159, 21810), (170, 21879), (172, 21885), (173, 21891), (Start: 208 @22068 has 1 MA's), (219, 22119), (228, 22170), (241, 22224), (242, 22227), (269, 22359), (291, 22461), (295, 22479), (296, 22482), (311, 22557), (323, 22614), (335, 22698), (337, 22707), (353, 22794), (361, 22833), (373, 22881), (378, 22908), (384, 22929), (387, 22938), (390, 22959), (391, 22971), (393, 22980), (394, 22989), (398, 23016), (406, 23043), (407, 23046), (414, 23067), (422, 23109), (428, 23136), (431, 23145), (433, 23160), (434, 23169), (436, 23184), (438, 23196), (441, 23205), (444, 23217), (449, 23238), (452, 23247), (470, 23331), (471, 23340), (474, 23355), (475, 23358), (479, 23376), (482, 23388), (483, 23391), (490, 23418), (497, 23439), (500, 23454), (510, 23496), (512, 23511), (526, 23568), (529, 23580), (534, 23589), (538, 23601), (541, 23613), (542, 23619), (547, 23640), (551, 23652), (557, 23670), (558, 23679), (559, 23694), (560, 23700), (563, 23712), (573, 23754), (574, 23757), (577, 23766), (582, 23787), (584, 23799), (598, 23847), (601, 23856), (608, 23880), (610, 23886), (615, 23904), (616, 23913), (622, 23934), (639, 24003), (644, 24021), (645, 24024), (650, 24042), (680, 24168), (691, 24213), (705, 24264), (736, 24408), (757, 24543), (766, 24594), (778, 24672), (784, 24717), (789, 24780), (793, 24798), (797, 24828), (799, 24834), (809, 24891), (826, 24963), (838, 25023), (842, 25044), (843, 25047), (851, 25098), (853, 25107), (867, 25146), (870, 25158), (883, 25251), (892, 25296), (900, 25371), (906, 25410), (911, 25440), (919, 25497), (936, 25608), (947, 25704),

Gene: CastorTray_28 Start: 20538, Stop: 25127, Start Num: 17

Candidate Starts for CastorTray_28:

(Start: 16 @20517 has 2 MA's), (Start: 17 @20538 has 129 MA's), (Start: 20 @20568 has 3 MA's), (28, 20622), (32, 20643), (37, 20679), (47, 20757), (57, 20817), (63, 20841), (65, 20853), (68, 20883), (71, 20934), (75, 20964), (76, 21006), (77, 21024), (81, 21066), (83, 21096), (85, 21141), (86, 21153), (93, 21207), (96, 21222), (98, 21234), (102, 21255), (115, 21348), (118, 21381), (121, 21396), (127, 21444), (141, 21594), (146, 21615), (161, 21729), (162, 21732), (188, 21894), (195, 21918), (198, 21933), (202, 21945), (234, 22113), (239, 22128), (240, 22134), (245, 22152), (261, 22224), (273, 22275), (278, 22290), (284, 22320), (301, 22392), (303, 22398), (313, 22431), (314, 22434), (321, 22461), (337, 22575), (345, 22632), (347, 22644), (360, 22698), (363, 22707), (364, 22710), (369, 22731), (378, 22776), (384, 22797), (391, 22839), (394, 22857), (407, 22914), (414, 22935), (418, 22956), (434, 23037), (436, 23052), (437, 23055), (443, 23082), (444, 23085), (456, 23136), (471, 23214), (474, 23229), (475, 23232), (479, 23250), (480, 23256), (482, 23262), (485, 23271), (494, 23307), (495, 23310), (497, 23316), (498, 23322), (504, 23349), (515, 23403), (516, 23406), (520, 23424), (524, 23436), (531, 23466), (536, 23481), (540, 23490), (542, 23502), (547, 23523), (558, 23562), (569, 23619), (574, 23631), (577, 23640), (589, 23679), (592, 23691), (602, 23721), (604, 23730), (615, 23766), (624, 23805), (625, 23808), (629, 23826), (631, 23832), (646, 23892), (647, 23895), (649, 23901), (655, 23922), (661, 23955), (662, 23958), (693, 24084), (694, 24087), (700, 24108), (708, 24141), (709, 24144), (710, 24150), (713, 24159), (719, 24186), (725, 24219), (728, 24231), (742, 24297), (748, 24348), (750, 24354), (759, 24414), (764, 24438), (773, 24498), (776, 24516), (777, 24528), (783, 24570), (799, 24687), (800, 24696), (809, 24744), (817, 24777), (821, 24789), (824, 24795), (827, 24816), (829, 24819), (830, 24825), (835, 24864), (841, 24891), (882, 25077), (888, 25104),

Gene: Caterpillar_24 Start: 19324, Stop: 23907, Start Num: 17

Candidate Starts for Caterpillar_24:

(Start: 16 @19303 has 2 MA's), (Start: 17 @19324 has 129 MA's), (Start: 20 @19354 has 3 MA's), (28, 19408), (37, 19465), (44, 19513), (65, 19639), (68, 19669), (75, 19750), (76, 19792), (77, 19810), (81, 19852), (83, 19882), (85, 19927), (86, 19939), (93, 19993), (96, 20008), (97, 20014), (102, 20041),

(109, 20104), (113, 20119), (115, 20134), (118, 20167), (121, 20182), (122, 20191), (127, 20230), (136, 20335), (146, 20401), (153, 20470), (159, 20509), (162, 20518), (170, 20578), (171, 20581), (195, 20704), (196, 20707), (204, 20743), (238, 20911), (240, 20920), (246, 20941), (256, 20974), (278, 21070), (290, 21124), (301, 21172), (303, 21178), (304, 21181), (314, 21214), (337, 21361), (355, 21463), (360, 21484), (363, 21493), (364, 21496), (369, 21517), (384, 21583), (396, 21658), (399, 21673), (405, 21694), (407, 21700), (414, 21721), (418, 21742), (422, 21763), (434, 21823), (436, 21838), (437, 21841), (442, 21865), (447, 21883), (463, 21955), (471, 22000), (474, 22015), (475, 22018), (479, 22036), (480, 22042), (482, 22048), (494, 22093), (497, 22102), (500, 22117), (504, 22135), (509, 22156), (515, 22189), (516, 22192), (520, 22210), (536, 22267), (540, 22276), (542, 22288), (547, 22309), (549, 22315), (550, 22318), (557, 22339), (558, 22348), (567, 22399), (569, 22405), (574, 22417), (577, 22426), (587, 22459), (604, 22516), (623, 22588), (624, 22591), (625, 22594), (629, 22612), (631, 22618), (636, 22642), (646, 22678), (648, 22684), (652, 22699), (660, 22738), (672, 22786), (682, 22825), (700, 22894), (710, 22936), (713, 22945), (742, 23083), (743, 23092), (744, 23104), (749, 23137), (750, 23140), (769, 23257), (772, 23278), (777, 23314), (783, 23356), (790, 23428), (809, 23530), (821, 23575), (824, 23581), (835, 23650), (841, 23677), (882, 23857), (885, 23866),

Gene: Cheesy_22 Start: 17385, Stop: 21863, Start Num: 17

Candidate Starts for Cheesy_22:

(Start: 16 @17364 has 2 MA's), (Start: 17 @17385 has 129 MA's), (Start: 20 @17415 has 3 MA's), (23, 17448), (28, 17469), (65, 17700), (68, 17730), (75, 17811), (76, 17853), (77, 17871), (81, 17913), (86, 18000), (93, 18054), (96, 18069), (102, 18102), (113, 18180), (115, 18195), (121, 18243), (128, 18300), (132, 18354), (136, 18396), (140, 18429), (146, 18462), (159, 18570), (169, 18636), (177, 18669), (179, 18678), (180, 18681), (182, 18699), (243, 18981), (251, 19005), (257, 19035), (299, 19194), (305, 19227), (314, 19254), (337, 19383), (350, 19461), (360, 19506), (363, 19515), (366, 19527), (369, 19539), (375, 19566), (378, 19584), (384, 19605), (396, 19680), (400, 19701), (401, 19704), (404, 19713), (414, 19743), (418, 19764), (422, 19785), (434, 19845), (435, 19851), (443, 19890), (444, 19893), (448, 19908), (462, 19971), (467, 19992), (471, 20022), (477, 20052), (482, 20070), (494, 20118), (500, 20142), (504, 20160), (507, 20169), (508, 20178), (510, 20184), (513, 20205), (520, 20235), (529, 20268), (530, 20274), (531, 20277), (536, 20289), (542, 20310), (557, 20361), (558, 20370), (562, 20400), (564, 20406), (574, 20439), (577, 20448), (586, 20478), (589, 20487), (592, 20499), (604, 20538), (612, 20565), (614, 20571), (615, 20574), (618, 20589), (625, 20616), (633, 20646), (641, 20682), (667, 20784), (682, 20847), (690, 20883), (691, 20886), (697, 20907), (702, 20925), (712, 20964), (714, 20970), (718, 20985), (722, 21006), (723, 21018), (747, 21150), (749, 21159), (758, 21213), (773, 21240), (776, 21258), (782, 21306), (783, 21312), (790, 21384), (804, 21462), (811, 21498), (815, 21516), (824, 21540), (829, 21564), (835, 21609), (840, 21630), (889, 21852),

Gene: CherryBlossom_23 Start: 16177, Stop: 21663, Start Num: 2

Candidate Starts for CherryBlossom_23:

(1, 16156), (Start: 2 @16177 has 30 MA's), (3, 16207), (12, 16351), (40, 16561), (51, 16681), (58, 16720), (65, 16750), (67, 16774), (68, 16780), (69, 16801), (70, 16816), (76, 16903), (83, 16993), (84, 17029), (85, 17038), (87, 17065), (93, 17104), (94, 17113), (98, 17131), (102, 17152), (107, 17194), (108, 17203), (118, 17311), (129, 17416), (140, 17512), (149, 17578), (172, 17728), (186, 17812), (190, 17833), (202, 17875), (227, 18010), (262, 18142), (264, 18151), (275, 18187), (277, 18196), (286, 18238), (295, 18271), (334, 18424), (337, 18445), (346, 18508), (347, 18514), (349, 18520), (355, 18547), (360, 18568), (362, 18574), (363, 18577), (369, 18601), (378, 18646), (381, 18655), (382, 18658), (384, 18667), (396, 18742), (402, 18769), (407, 18784), (408, 18787), (415, 18805), (418, 18823), (422, 18844), (433, 18895), (446, 18961), (450, 18976), (469, 19063), (471, 19081), (476, 19108), (501, 19198), (502, 19201), (511, 19243), (512, 19252), (520, 19288), (525, 19306), (526, 19309), (542, 19363), (543, 19366), (557, 19414), (561, 19450), (563, 19456), (568, 19477), (577, 19501), (586, 19531), (604, 19591), (614, 19624), (615, 19627), (618, 19642), (627, 19678), (637, 19720), (640, 19732), (641, 19735), (655, 19783), (660, 19813), (665, 19828), (672, 19861),

(675, 19876), (691, 19939), (712, 20017), (713, 20020), (721, 20056), (733, 20122), (748, 20209), (749, 20212), (764, 20311), (770, 20359), (772, 20365), (793, 20524), (845, 20797), (876, 20899), (894, 21022), (905, 21115), (909, 21136), (914, 21184), (916, 21190), (917, 21196), (924, 21241), (939, 21349), (941, 21370), (946, 21418), (952, 21505), (959, 21607), (960, 21616),

Gene: Chikenjars_32 Start: 23502, Stop: 28613, Start Num: 17

Candidate Starts for Chikenjars_32:

(Start: 17 @23502 has 129 MA's), (Start: 20 @23532 has 3 MA's), (25, 23577), (47, 23721), (58, 23787), (68, 23847), (69, 23868), (76, 23970), (83, 24060), (84, 24096), (87, 24132), (93, 24171), (102, 24219), (107, 24261), (113, 24333), (118, 24381), (132, 24507), (140, 24582), (146, 24615), (158, 24720), (159, 24723), (202, 24945), (214, 25011), (215, 25014), (228, 25083), (255, 25188), (267, 25257), (288, 25359), (289, 25362), (295, 25389), (303, 25428), (310, 25455), (337, 25617), (343, 25665), (347, 25686), (353, 25704), (364, 25752), (378, 25818), (386, 25845), (387, 25848), (389, 25866), (390, 25869), (393, 25890), (394, 25899), (403, 25944), (406, 25953), (418, 25998), (422, 26019), (425, 26028), (432, 26061), (433, 26070), (436, 26094), (443, 26124), (444, 26127), (446, 26136), (449, 26148), (452, 26157), (454, 26169), (459, 26190), (461, 26196), (471, 26250), (490, 26328), (494, 26340), (496, 26346), (497, 26349), (500, 26364), (505, 26385), (512, 26421), (525, 26475), (526, 26478), (529, 26490), (534, 26499), (538, 26511), (539, 26514), (542, 26529), (549, 26556), (551, 26562), (556, 26577), (557, 26580), (558, 26589), (559, 26604), (560, 26610), (564, 26625), (566, 26637), (567, 26640), (573, 26664), (577, 26676), (582, 26697), (584, 26709), (586, 26718), (590, 26730), (598, 26757), (605, 26781), (608, 26790), (610, 26796), (615, 26814), (632, 26883), (650, 26952), (686, 27108), (734, 27309), (757, 27453), (768, 27516), (771, 27543), (781, 27615), (784, 27627), (785, 27636), (789, 27690), (794, 27711), (795, 27723), (831, 27885), (845, 27972), (850, 27990), (859, 28020), (866, 28038), (867, 28041), (870, 28053), (876, 28080), (892, 28191), (900, 28266), (908, 28314), (916, 28368), (920, 28395), (937, 28509), (947, 28599),

Gene: Chlochlo_27 Start: 20283, Stop: 24878, Start Num: 17

Candidate Starts for Chlochlo_27:

(Start: 16 @20262 has 2 MA's), (Start: 17 @20283 has 129 MA's), (Start: 20 @20313 has 3 MA's), (28, 20367), (65, 20598), (68, 20628), (75, 20709), (76, 20751), (77, 20769), (81, 20811), (86, 20898), (93, 20952), (96, 20967), (97, 20973), (102, 21000), (113, 21078), (115, 21093), (118, 21126), (121, 21141), (122, 21150), (125, 21177), (127, 21189), (131, 21243), (141, 21339), (146, 21360), (162, 21477), (169, 21534), (171, 21540), (182, 21597), (197, 21669), (204, 21702), (206, 21705), (256, 21939), (277, 22032), (278, 22035), (281, 22053), (301, 22137), (303, 22143), (314, 22179), (337, 22326), (344, 22380), (345, 22383), (360, 22449), (363, 22458), (364, 22461), (369, 22482), (375, 22509), (384, 22548), (385, 22551), (407, 22665), (414, 22686), (417, 22704), (418, 22707), (436, 22803), (438, 22815), (467, 22935), (471, 22965), (474, 22980), (485, 23022), (491, 23043), (494, 23058), (497, 23067), (499, 23079), (504, 23100), (515, 23154), (520, 23175), (529, 23208), (530, 23214), (531, 23217), (537, 23235), (538, 23238), (542, 23256), (557, 23307), (558, 23316), (568, 23370), (577, 23394), (587, 23427), (604, 23484), (623, 23556), (624, 23559), (629, 23580), (635, 23604), (637, 23613), (646, 23646), (647, 23649), (649, 23655), (659, 23700), (660, 23706), (672, 23754), (700, 23862), (710, 23904), (713, 23913), (744, 24072), (747, 24096), (749, 24105), (756, 24147), (759, 24168), (763, 24183), (776, 24270), (777, 24282), (783, 24324), (794, 24408), (804, 24474), (809, 24498), (821, 24543), (824, 24549), (835, 24618), (836, 24621), (841, 24645), (882, 24828),

Gene: Circum_22 Start: 17392, Stop: 21870, Start Num: 17

Candidate Starts for Circum_22:

(Start: 16 @17371 has 2 MA's), (Start: 17 @17392 has 129 MA's), (Start: 20 @17422 has 3 MA's), (23, 17455), (28, 17476), (65, 17707), (68, 17737), (75, 17818), (76, 17860), (77, 17878), (81, 17920), (86, 18007), (93, 18061), (96, 18076), (102, 18109), (113, 18187), (115, 18202), (121, 18250), (128, 18307), (132, 18361), (136, 18403), (140, 18436), (146, 18469), (159, 18577), (169, 18643), (177, 18676), (179, 18685), (180, 18688), (182, 18706), (243, 18988), (251, 19012), (257, 19042), (299,

19201), (314, 19261), (337, 19390), (343, 19438), (355, 19492), (358, 19504), (360, 19513), (363, 19522), (369, 19546), (378, 19591), (384, 19612), (396, 19687), (404, 19720), (414, 19750), (422, 19792), (434, 19852), (435, 19858), (443, 19897), (448, 19915), (462, 19978), (467, 19999), (471, 20029), (477, 20059), (482, 20077), (494, 20125), (500, 20149), (504, 20167), (507, 20176), (508, 20185), (510, 20191), (513, 20212), (520, 20242), (529, 20275), (530, 20281), (531, 20284), (536, 20296), (542, 20317), (557, 20368), (558, 20377), (562, 20407), (564, 20413), (574, 20446), (577, 20455), (586, 20485), (589, 20494), (592, 20506), (604, 20545), (612, 20572), (614, 20578), (615, 20581), (618, 20596), (625, 20623), (629, 20641), (633, 20653), (641, 20689), (667, 20791), (690, 20890), (691, 20893), (693, 20899), (697, 20914), (702, 20932), (708, 20956), (712, 20971), (713, 20974), (718, 20992), (723, 21025), (728, 21046), (752, 21178), (758, 21220), (776, 21265), (777, 21277), (783, 21319), (790, 21391), (800, 21445), (804, 21469), (809, 21493), (811, 21505), (815, 21523), (829, 21571), (835, 21616), (840, 21637), (865, 21730), (889, 21859),

Gene: Citrus_31 Start: 23506, Stop: 28617, Start Num: 17

Candidate Starts for Citrus_31:

(Start: 17 @23506 has 129 MA's), (Start: 20 @23536 has 3 MA's), (25, 23581), (47, 23725), (58, 23791), (68, 23851), (69, 23872), (76, 23974), (83, 24064), (84, 24100), (87, 24136), (93, 24175), (102, 24223), (107, 24265), (118, 24385), (132, 24511), (140, 24586), (141, 24598), (146, 24619), (158, 24724), (159, 24727), (202, 24949), (214, 25015), (215, 25018), (228, 25087), (255, 25192), (267, 25261), (272, 25282), (288, 25363), (289, 25366), (295, 25393), (303, 25432), (310, 25459), (337, 25621), (343, 25669), (347, 25690), (353, 25708), (364, 25756), (378, 25822), (386, 25849), (387, 25852), (389, 25870), (390, 25873), (393, 25894), (394, 25903), (406, 25957), (418, 26002), (422, 26023), (425, 26032), (432, 26065), (433, 26074), (436, 26098), (443, 26128), (444, 26131), (446, 26140), (449, 26152), (452, 26161), (454, 26173), (459, 26194), (461, 26200), (471, 26254), (477, 26284), (490, 26332), (494, 26344), (496, 26350), (497, 26353), (500, 26368), (505, 26389), (512, 26425), (525, 26479), (529, 26494), (534, 26503), (538, 26515), (539, 26518), (542, 26533), (549, 26560), (551, 26566), (556, 26581), (557, 26584), (558, 26593), (559, 26608), (560, 26614), (564, 26629), (566, 26641), (567, 26644), (577, 26680), (582, 26701), (584, 26713), (586, 26722), (590, 26734), (598, 26761), (605, 26785), (608, 26794), (610, 26800), (615, 26818), (632, 26887), (650, 26956), (686, 27112), (734, 27313), (757, 27457), (768, 27520), (771, 27547), (781, 27619), (784, 27631), (785, 27640), (789, 27694), (794, 27715), (795, 27727), (831, 27889), (845, 27976), (850, 27994), (859, 28024), (866, 28042), (867, 28045), (870, 28057), (876, 28084), (892, 28195), (900, 28270), (908, 28318), (916, 28372), (920, 28399), (937, 28513), (947, 28603),

Gene: ClubPenguin_22 Start: 15929, Stop: 21244, Start Num: 14

Candidate Starts for ClubPenguin_22:

(12, 15908), (Start: 14 @15929 has 1 MA's), (15, 15959), (43, 16181), (45, 16202), (76, 16472), (83, 16562), (84, 16598), (93, 16673), (102, 16721), (104, 16730), (107, 16763), (149, 17150), (150, 17153), (161, 17231), (177, 17324), (186, 17384), (197, 17426), (259, 17696), (273, 17756), (287, 17813), (314, 17915), (337, 18023), (360, 18146), (363, 18155), (378, 18224), (381, 18233), (382, 18236), (393, 18296), (407, 18362), (411, 18374), (415, 18383), (418, 18401), (422, 18422), (439, 18512), (461, 18605), (470, 18650), (471, 18659), (477, 18689), (487, 18728), (488, 18731), (499, 18770), (506, 18797), (511, 18821), (512, 18830), (519, 18863), (520, 18866), (524, 18878), (529, 18899), (541, 18935), (545, 18950), (561, 19028), (566, 19049), (568, 19055), (574, 19070), (577, 19079), (604, 19169), (614, 19202), (626, 19253), (629, 19265), (640, 19310), (672, 19439), (682, 19478), (690, 19514), (696, 19535), (706, 19571), (710, 19589), (713, 19598), (721, 19634), (723, 19649), (724, 19655), (733, 19700), (756, 19844), (763, 19880), (764, 19889), (779, 20003), (790, 20096), (805, 20180), (868, 20447), (877, 20501), (891, 20582), (899, 20663), (905, 20696), (909, 20717), (915, 20768), (922, 20807), (924, 20822), (931, 20870), (932, 20879), (933, 20891), (941, 20951), (946, 20999), (948, 21023), (950, 21068),

Gene: Conley_30 Start: 21600, Stop: 26687, Start Num: 17

Candidate Starts for Conley_30:

(Start: 17 @21600 has 129 MA's), (Start: 20 @21630 has 3 MA's), (42, 21768), (50, 21843), (53, 21864), (58, 21885), (65, 21915), (68, 21945), (69, 21966), (76, 22068), (81, 22128), (85, 22203), (86, 22215), (89, 22239), (93, 22269), (96, 22284), (102, 22317), (103, 22323), (107, 22359), (112, 22410), (119, 22464), (120, 22467), (130, 22566), (146, 22686), (152, 22740), (155, 22770), (158, 22791), (159, 22794), (170, 22863), (172, 22869), (Start: 208 @23052 has 1 MA's), (230, 23160), (231, 23172), (234, 23184), (241, 23208), (246, 23226), (295, 23463), (296, 23466), (303, 23502), (311, 23541), (314, 23550), (323, 23598), (335, 23682), (337, 23691), (346, 23754), (347, 23760), (349, 23766), (353, 23778), (356, 23796), (367, 23838), (373, 23865), (378, 23892), (384, 23913), (387, 23922), (390, 23943), (391, 23955), (392, 23961), (393, 23964), (394, 23973), (407, 24030), (414, 24051), (422, 24093), (428, 24120), (430, 24126), (433, 24144), (434, 24153), (436, 24168), (438, 24180), (441, 24189), (449, 24222), (452, 24231), (470, 24315), (471, 24324), (474, 24339), (479, 24360), (490, 24402), (494, 24414), (497, 24423), (500, 24438), (510, 24480), (512, 24495), (526, 24552), (529, 24564), (534, 24573), (538, 24585), (541, 24597), (542, 24603), (547, 24624), (551, 24636), (554, 24645), (557, 24654), (558, 24663), (559, 24678), (560, 24684), (563, 24696), (566, 24711), (569, 24720), (573, 24738), (582, 24771), (584, 24783), (598, 24831), (601, 24840), (608, 24864), (610, 24870), (615, 24888), (616, 24897), (617, 24900), (622, 24918), (639, 24987), (650, 25026), (674, 25131), (675, 25134), (676, 25137), (691, 25197), (717, 25293), (719, 25305), (728, 25350), (736, 25392), (757, 25527), (781, 25689), (789, 25764), (799, 25818), (803, 25839), (826, 25947), (838, 26007), (845, 26046), (850, 26064), (851, 26067), (859, 26094), (862, 26100), (867, 26115), (869, 26121), (870, 26127), (874, 26145), (875, 26148), (890, 26253), (892, 26265), (900, 26340), (902, 26358), (906, 26379), (909, 26391), (919, 26466), (928, 26526), (944, 26622), (947, 26673),

Gene: Correa_21 Start: 16900, Stop: 21378, Start Num: 17

Candidate Starts for Correa_21:

(Start: 16 @16879 has 2 MA's), (Start: 17 @16900 has 129 MA's), (Start: 20 @16930 has 3 MA's), (23, 16963), (28, 16984), (65, 17215), (68, 17245), (75, 17326), (76, 17368), (77, 17386), (81, 17428), (86, 17515), (93, 17569), (96, 17584), (102, 17617), (115, 17710), (121, 17758), (123, 17773), (128, 17815), (132, 17869), (140, 17944), (146, 17977), (159, 18085), (169, 18151), (177, 18184), (179, 18193), (180, 18196), (182, 18214), (243, 18496), (251, 18520), (257, 18550), (299, 18709), (314, 18769), (337, 18898), (350, 18976), (357, 19006), (360, 19021), (363, 19030), (369, 19054), (375, 19081), (378, 19099), (384, 19120), (396, 19195), (400, 19216), (404, 19228), (414, 19258), (422, 19300), (434, 19360), (435, 19366), (443, 19405), (447, 19420), (448, 19423), (460, 19480), (462, 19486), (467, 19507), (471, 19537), (477, 19567), (482, 19585), (494, 19633), (500, 19657), (504, 19675), (507, 19684), (510, 19699), (513, 19720), (520, 19750), (529, 19783), (530, 19789), (531, 19792), (536, 19804), (542, 19825), (557, 19876), (558, 19885), (562, 19915), (564, 19921), (574, 19954), (577, 19963), (586, 19993), (589, 20002), (592, 20014), (598, 20032), (604, 20053), (612, 20080), (614, 20086), (615, 20089), (618, 20104), (625, 20131), (633, 20161), (641, 20197), (667, 20299), (682, 20362), (690, 20398), (691, 20401), (697, 20422), (702, 20440), (712, 20479), (714, 20485), (718, 20500), (722, 20521), (723, 20533), (747, 20665), (758, 20728), (773, 20755), (776, 20773), (782, 20821), (783, 20827), (790, 20899), (804, 20977), (811, 21013), (815, 21031), (825, 21064), (829, 21079), (835, 21124), (889, 21367),

Gene: Count_30 Start: 23420, Stop: 27673, Start Num: 17

Candidate Starts for Count_30:

(Start: 16 @23399 has 2 MA's), (Start: 17 @23420 has 129 MA's), (Start: 20 @23453 has 3 MA's), (36, 23555), (54, 23690), (59, 23711), (68, 23768), (76, 23891), (81, 23951), (89, 24062), (92, 24086), (93, 24092), (96, 24107), (102, 24140), (103, 24146), (115, 24233), (117, 24254), (118, 24266), (121, 24281), (140, 24467), (147, 24512), (160, 24611), (163, 24620), (182, 24737), (185, 24761), (192, 24794), (252, 25007), (299, 25166), (301, 25184), (325, 25268), (330, 25310), (347, 25433), (348, 25436), (360, 25487), (363, 25496), (368, 25517), (381, 25574), (388, 25607), (390, 25616), (393, 25637), (394, 25646), (400, 25682), (407, 25703), (416, 25733), (422, 25766), (424, 25772), (427, 25787), (432, 25808), (434, 25826), (441, 25862), (444, 25874), (446, 25883), (449, 25895), (459, 25934), (463, 25949), (464, 25955), (469, 25976), (471, 25994), (482, 26042), (485, 26051), (517,

26063), (520, 26072), (542, 26114), (543, 26117), (557, 26165), (558, 26174), (561, 26201), (574, 26243), (577, 26252), (588, 26294), (594, 26315), (600, 26333), (602, 26339), (604, 26348), (614, 26381), (615, 26384), (641, 26492), (642, 26495), (646, 26510), (648, 26516), (663, 26579), (667, 26594), (672, 26618), (681, 26654), (682, 26657), (690, 26693), (697, 26717), (698, 26720), (704, 26744), (705, 26747), (723, 26828), (732, 26870), (752, 26981), (758, 27023), (776, 27068), (788, 27182), (791, 27200), (807, 27290), (821, 27344), (835, 27419), (884, 27632),

Gene: CricKo_21 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for CricKo_21:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214), (943, 20265), (951, 20388), (957, 20427),

Gene: Crocheter_32 Start: 23642, Stop: 28753, Start Num: 17

Candidate Starts for Crocheter_32:

(Start: 17 @23642 has 129 MA's), (Start: 20 @23672 has 3 MA's), (25, 23717), (47, 23861), (57, 23921), (58, 23927), (68, 23987), (69, 24008), (76, 24110), (84, 24236), (87, 24272), (93, 24311), (98, 24338), (102, 24359), (107, 24401), (113, 24473), (118, 24521), (132, 24647), (140, 24722), (141, 24734), (146, 24755), (158, 24860), (159, 24863), (179, 24971), (228, 25223), (255, 25328), (267, 25397), (272, 25418), (288, 25499), (289, 25502), (295, 25529), (303, 25568), (310, 25595), (334, 25736), (337, 25757), (346, 25820), (347, 25826), (353, 25844), (354, 25850), (364, 25892), (367, 25904), (369, 25913), (378, 25958), (388, 26000), (390, 26009), (391, 26021), (393, 26030), (394, 26039), (418, 26138), (422, 26159), (425, 26168), (430, 26192), (431, 26195), (443, 26264), (444, 26267), (446, 26276), (451, 26294), (452, 26297), (454, 26309), (459, 26330), (461, 26336), (462, 26339), (467, 26360), (471, 26390), (474, 26405), (477, 26420), (490, 26468), (494, 26480), (496, 26486), (497, 26489), (499, 26501), (500, 26504), (512, 26561), (525, 26615), (534, 26639), (538, 26651), (539, 26654), (550, 26699), (551, 26702), (556, 26717), (557, 26720), (558, 26729), (559, 26744), (560, 26750), (561, 26756), (566, 26777), (567, 26780), (571, 26792), (574, 26807), (577, 26816), (582, 26837), (584, 26849), (590, 26870), (598, 26897), (608, 26930), (610, 26936), (615, 26954), (622, 26984), (632, 27023), (650, 27092), (676, 27203), (679, 27215), (697, 27284), (717, 27359), (734, 27449), (757, 27593), (768, 27656), (778, 27722), (781, 27755), (784, 27767), (789, 27830), (794, 27851), (795, 27863), (799, 27884), (809, 27941), (831, 28025), (845, 28112), (850, 28130), (859, 28160), (866, 28178), (867, 28181), (869, 28187), (870, 28193), (876, 28220), (892, 28331), (900, 28406), (911, 28475), (916, 28508), (919, 28532), (937, 28649), (947, 28739),

Gene: Daddyjeff_25 Start: 18508, Stop: 23112, Start Num: 17

Candidate Starts for Daddyjeff_25:

(Start: 17 @18508 has 129 MA's), (Start: 20 @18541 has 3 MA's), (33, 18616), (41, 18664), (43, 18688), (54, 18778), (58, 18796), (62, 18808), (68, 18853), (76, 18976), (81, 19036), (89, 19147), (93, 19177), (96, 19192), (102, 19225), (106, 19264), (114, 19315), (115, 19318), (117, 19339), (118, 19351), (128, 19423), (135, 19513), (145, 19582), (147, 19597), (149, 19618), (152, 19639), (175,

19780), (179, 19801), (182, 19822), (191, 19876), (219, 20014), (228, 20065), (239, 20110), (313, 20416), (320, 20434), (337, 20578), (341, 20608), (360, 20701), (362, 20707), (363, 20710), (366, 20722), (375, 20761), (392, 20848), (414, 20938), (418, 20959), (424, 20986), (432, 21022), (458, 21151), (473, 21223), (476, 21244), (481, 21262), (490, 21295), (494, 21313), (499, 21334), (500, 21337), (512, 21394), (514, 21406), (520, 21430), (522, 21436), (529, 21463), (545, 21520), (557, 21562), (558, 21571), (561, 21598), (562, 21601), (569, 21628), (574, 21640), (577, 21649), (580, 21658), (600, 21724), (604, 21739), (612, 21766), (652, 21922), (664, 21973), (672, 22009), (682, 22048), (687, 22075), (691, 22087), (696, 22105), (702, 22126), (709, 22153), (714, 22171), (723, 22219), (737, 22285), (757, 22405), (761, 22429), (763, 22438), (769, 22480), (776, 22525), (783, 22579), (790, 22651), (795, 22675), (804, 22729), (807, 22744), (809, 22753), (811, 22765), (813, 22774), (817, 22786), (820, 22795), (835, 22873), (837, 22876), (854, 22948), (887, 23101),

Gene: Damascus_24 Start: 16928, Stop: 21136, Start Num: 17

Candidate Starts for Damascus_24:

(Start: 16 @16907 has 2 MA's), (Start: 17 @16928 has 129 MA's), (Start: 20 @16961 has 3 MA's), (44, 17120), (54, 17198), (68, 17276), (76, 17399), (81, 17459), (89, 17570), (92, 17594), (93, 17600), (96, 17615), (102, 17648), (114, 17738), (115, 17741), (117, 17762), (118, 17774), (132, 17900), (147, 18020), (155, 18092), (159, 18116), (180, 18227), (192, 18302), (209, 18380), (227, 18473), (254, 18518), (277, 18587), (293, 18653), (299, 18674), (328, 18767), (335, 18836), (337, 18845), (347, 18914), (360, 18968), (363, 18977), (367, 18992), (369, 19001), (372, 19010), (377, 19040), (378, 19046), (384, 19067), (388, 19088), (391, 19109), (393, 19118), (394, 19127), (398, 19154), (400, 19163), (407, 19184), (408, 19187), (412, 19199), (434, 19307), (438, 19334), (444, 19355), (448, 19370), (455, 19397), (456, 19400), (459, 19415), (464, 19436), (469, 19457), (471, 19475), (485, 19532), (517, 19544), (518, 19547), (520, 19553), (542, 19583), (558, 19643), (562, 19673), (574, 19712), (577, 19721), (583, 19751), (592, 19778), (593, 19781), (594, 19784), (604, 19817), (614, 19850), (625, 19895), (635, 19937), (646, 19979), (647, 19982), (648, 19985), (663, 20048), (672, 20087), (681, 20123), (682, 20126), (690, 20162), (724, 20303), (752, 20450), (758, 20492), (776, 20537), (783, 20591), (794, 20675), (800, 20717), (801, 20720), (813, 20786), (817, 20798), (824, 20816), (834, 20876), (849, 20945), (860, 20981), (872, 21020), (888, 21116),

Gene: Dancer_31 Start: 20241, Stop: 25343, Start Num: 17

Candidate Starts for Dancer_31:

(Start: 17 @20241 has 129 MA's), (Start: 20 @20271 has 3 MA's), (42, 20409), (47, 20460), (49, 20469), (50, 20484), (53, 20505), (58, 20526), (65, 20556), (68, 20586), (69, 20607), (76, 20709), (81, 20769), (85, 20844), (86, 20856), (89, 20880), (93, 20910), (96, 20925), (102, 20958), (107, 21000), (112, 21051), (119, 21105), (120, 21108), (130, 21207), (133, 21231), (146, 21327), (155, 21411), (158, 21432), (159, 21435), (170, 21504), (172, 21510), (173, 21516), (Start: 208 @21693 has 1 MA's), (219, 21744), (228, 21795), (241, 21849), (242, 21852), (269, 21984), (278, 22023), (295, 22104), (296, 22107), (311, 22182), (323, 22239), (335, 22323), (337, 22332), (347, 22401), (349, 22407), (353, 22419), (355, 22434), (356, 22437), (361, 22458), (373, 22506), (378, 22533), (384, 22554), (387, 22563), (390, 22584), (391, 22596), (393, 22605), (394, 22614), (406, 22668), (407, 22671), (414, 22692), (422, 22734), (431, 22770), (433, 22785), (434, 22794), (436, 22809), (438, 22821), (441, 22830), (449, 22863), (452, 22872), (470, 22956), (471, 22965), (474, 22980), (479, 23001), (490, 23043), (497, 23064), (500, 23079), (502, 23085), (510, 23121), (512, 23136), (526, 23193), (529, 23205), (534, 23214), (538, 23226), (541, 23238), (542, 23244), (547, 23265), (551, 23277), (557, 23295), (558, 23304), (559, 23319), (560, 23325), (563, 23337), (573, 23379), (574, 23382), (577, 23391), (582, 23412), (584, 23424), (598, 23472), (601, 23481), (608, 23505), (610, 23511), (615, 23529), (616, 23538), (639, 23628), (644, 23646), (645, 23649), (650, 23667), (691, 23838), (705, 23889), (736, 24033), (747, 24102), (757, 24168), (766, 24219), (784, 24342), (789, 24405), (797, 24453), (799, 24459), (800, 24468), (809, 24516), (826, 24588), (838, 24648), (842, 24669), (843, 24672), (851, 24723), (853, 24732), (859, 24750), (867, 24771), (870, 24783), (883, 24876), (892, 24921), (900, 24996), (902, 25014), (906, 25035), (919, 25122), (936, 25233), (947, 25329),

Gene: Darby_26 Start: 19984, Stop: 24573, Start Num: 17

Candidate Starts for Darby_26:

(Start: 16 @19963 has 2 MA's), (Start: 17 @19984 has 129 MA's), (Start: 20 @20014 has 3 MA's), (28, 20068), (32, 20089), (37, 20125), (47, 20203), (57, 20263), (63, 20287), (65, 20299), (68, 20329), (71, 20380), (75, 20410), (76, 20452), (77, 20470), (81, 20512), (83, 20542), (85, 20587), (86, 20599), (93, 20653), (96, 20668), (98, 20680), (102, 20701), (115, 20794), (118, 20827), (121, 20842), (127, 20890), (141, 21040), (146, 21061), (148, 21082), (161, 21175), (162, 21178), (168, 21226), (188, 21340), (195, 21364), (202, 21391), (216, 21466), (234, 21559), (239, 21574), (240, 21580), (245, 21598), (261, 21670), (273, 21721), (278, 21736), (284, 21766), (301, 21838), (303, 21844), (307, 21862), (313, 21877), (314, 21880), (321, 21907), (337, 22021), (345, 22078), (347, 22090), (360, 22144), (363, 22153), (364, 22156), (369, 22177), (378, 22222), (384, 22243), (391, 22285), (394, 22303), (407, 22360), (414, 22381), (418, 22402), (434, 22483), (436, 22498), (437, 22501), (443, 22528), (444, 22531), (456, 22582), (471, 22660), (474, 22675), (475, 22678), (479, 22696), (480, 22702), (482, 22708), (485, 22717), (494, 22753), (497, 22762), (504, 22795), (515, 22849), (516, 22852), (520, 22870), (524, 22882), (531, 22912), (536, 22927), (540, 22936), (542, 22948), (547, 22969), (558, 23008), (569, 23065), (574, 23077), (577, 23086), (589, 23125), (592, 23137), (602, 23167), (604, 23176), (624, 23251), (629, 23272), (631, 23278), (646, 23338), (649, 23347), (661, 23401), (662, 23404), (693, 23530), (694, 23533), (700, 23554), (708, 23587), (709, 23590), (710, 23596), (713, 23605), (719, 23632), (728, 23677), (742, 23743), (748, 23794), (750, 23800), (759, 23860), (764, 23884), (773, 23944), (776, 23962), (777, 23974), (783, 24016), (799, 24133), (800, 24142), (809, 24190), (817, 24223), (821, 24235), (824, 24241), (827, 24262), (829, 24265), (830, 24271), (835, 24310), (841, 24337), (882, 24523), (888, 24550),

Gene: Demure_31 Start: 22605, Stop: 27719, Start Num: 17

Candidate Starts for Demure_31:

(Start: 17 @22605 has 129 MA's), (Start: 20 @22635 has 3 MA's), (25, 22680), (47, 22824), (53, 22869), (54, 22872), (57, 22884), (58, 22890), (68, 22950), (69, 22971), (76, 23073), (78, 23109), (84, 23199), (93, 23274), (98, 23301), (102, 23322), (105, 23346), (107, 23364), (118, 23484), (134, 23640), (140, 23685), (146, 23718), (158, 23823), (159, 23826), (169, 23892), (172, 23901), (198, 24036), (214, 24114), (231, 24204), (255, 24291), (262, 24339), (278, 24414), (295, 24495), (303, 24534), (310, 24561), (334, 24702), (337, 24723), (346, 24786), (347, 24792), (353, 24810), (354, 24816), (364, 24858), (367, 24870), (369, 24879), (378, 24924), (388, 24966), (390, 24975), (391, 24987), (393, 24996), (394, 25005), (406, 25059), (418, 25104), (422, 25125), (425, 25134), (430, 25158), (431, 25161), (432, 25167), (443, 25230), (444, 25233), (446, 25242), (449, 25254), (451, 25260), (452, 25263), (454, 25275), (459, 25296), (461, 25302), (462, 25305), (467, 25326), (471, 25356), (474, 25371), (477, 25386), (490, 25434), (494, 25446), (496, 25452), (497, 25455), (499, 25467), (500, 25470), (512, 25527), (525, 25581), (534, 25605), (538, 25617), (539, 25620), (550, 25665), (551, 25668), (556, 25683), (557, 25686), (558, 25695), (559, 25710), (560, 25716), (561, 25722), (566, 25743), (567, 25746), (571, 25758), (574, 25773), (577, 25782), (582, 25803), (584, 25815), (590, 25836), (598, 25863), (608, 25896), (610, 25902), (615, 25920), (622, 25950), (632, 25989), (650, 26058), (697, 26250), (717, 26325), (734, 26415), (757, 26559), (768, 26622), (778, 26688), (781, 26721), (784, 26733), (789, 26796), (794, 26817), (795, 26829), (799, 26850), (831, 26991), (845, 27078), (850, 27096), (859, 27126), (866, 27144), (867, 27147), (870, 27159), (876, 27186), (892, 27297), (900, 27372), (911, 27441), (916, 27474), (919, 27498), (937, 27615), (947, 27705),

Gene: DevitoJr_26 Start: 20152, Stop: 24744, Start Num: 17

Candidate Starts for DevitoJr_26:

(Start: 16 @20131 has 2 MA's), (Start: 17 @20152 has 129 MA's), (Start: 20 @20182 has 3 MA's), (28, 20236), (32, 20257), (37, 20293), (47, 20371), (57, 20431), (63, 20455), (65, 20467), (68, 20497), (71, 20548), (75, 20578), (76, 20620), (77, 20638), (81, 20680), (83, 20710), (85, 20755), (86, 20767), (93, 20821), (96, 20836), (98, 20848), (102, 20869), (115, 20962), (118, 20995), (121, 21010), (127, 21058), (146, 21229), (161, 21343), (162, 21346), (168, 21394), (188, 21508), (195, 21532), (198,

21547), (234, 21727), (239, 21742), (240, 21748), (245, 21766), (261, 21838), (278, 21904), (301, 22006), (303, 22012), (313, 22045), (314, 22048), (321, 22075), (337, 22192), (345, 22249), (347, 22261), (360, 22315), (363, 22324), (364, 22327), (369, 22348), (378, 22393), (384, 22414), (405, 22525), (407, 22531), (414, 22552), (417, 22570), (422, 22594), (434, 22654), (436, 22669), (437, 22672), (443, 22699), (444, 22702), (471, 22831), (474, 22846), (475, 22849), (479, 22867), (480, 22873), (481, 22876), (485, 22888), (494, 22924), (497, 22933), (504, 22966), (515, 23020), (516, 23023), (520, 23041), (524, 23053), (531, 23083), (536, 23098), (540, 23107), (542, 23119), (558, 23179), (569, 23236), (574, 23248), (577, 23257), (589, 23296), (592, 23308), (602, 23338), (604, 23347), (624, 23422), (625, 23425), (629, 23443), (646, 23509), (648, 23515), (649, 23518), (661, 23572), (662, 23575), (693, 23701), (694, 23704), (700, 23725), (708, 23758), (710, 23767), (728, 23848), (734, 23881), (742, 23914), (750, 23971), (759, 24031), (764, 24055), (776, 24133), (777, 24145), (794, 24271), (800, 24313), (809, 24361), (817, 24394), (821, 24406), (824, 24412), (827, 24433), (829, 24436), (830, 24442), (835, 24481), (841, 24508), (882, 24694), (888, 24721),

Gene: DizzyRudy_24 Start: 16857, Stop: 21065, Start Num: 17

Candidate Starts for DizzyRudy_24:

(Start: 16 @16836 has 2 MA's), (Start: 17 @16857 has 129 MA's), (Start: 20 @16890 has 3 MA's), (44, 17049), (68, 17205), (76, 17328), (81, 17388), (89, 17499), (92, 17523), (93, 17529), (96, 17544), (102, 17577), (114, 17667), (115, 17670), (117, 17691), (118, 17703), (132, 17829), (147, 17949), (155, 18021), (159, 18045), (180, 18156), (192, 18231), (209, 18309), (215, 18336), (227, 18402), (277, 18516), (293, 18582), (299, 18603), (328, 18696), (335, 18765), (337, 18774), (347, 18843), (360, 18897), (363, 18906), (367, 18921), (369, 18930), (372, 18939), (377, 18969), (378, 18975), (384, 18996), (388, 19017), (391, 19038), (393, 19047), (394, 19056), (398, 19083), (400, 19092), (407, 19113), (408, 19116), (412, 19128), (434, 19236), (438, 19263), (444, 19284), (456, 19329), (459, 19344), (464, 19365), (469, 19386), (471, 19404), (485, 19461), (517, 19473), (518, 19476), (520, 19482), (542, 19512), (558, 19572), (562, 19602), (574, 19641), (577, 19650), (583, 19680), (592, 19707), (593, 19710), (594, 19713), (604, 19746), (614, 19779), (623, 19818), (625, 19824), (635, 19866), (642, 19893), (646, 19908), (647, 19911), (648, 19914), (663, 19977), (666, 19986), (672, 20016), (681, 20052), (682, 20055), (690, 20091), (724, 20232), (752, 20379), (758, 20421), (776, 20466), (783, 20520), (794, 20604), (800, 20646), (801, 20649), (813, 20715), (817, 20727), (824, 20745), (834, 20805), (849, 20874), (860, 20910), (872, 20949), (888, 21045),

Gene: Djungelskog_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for Djungelskog_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: DoctorPepper_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for DoctorPepper_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (610, 20432), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (687, 20750), (689, 20756), (691, 20762), (693, 20768), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605), (873, 21683),

Gene: Doxi13_19 Start: 13488, Stop: 18716, Start Num: 17

Candidate Starts for Doxi13_19:

(Start: 16 @13467 has 2 MA's), (Start: 17 @13488 has 129 MA's), (Start: 20 @13518 has 3 MA's), (40, 13620), (43, 13671), (58, 13779), (76, 13962), (84, 14088), (87, 14124), (93, 14163), (107, 14253), (149, 14640), (172, 14790), (177, 14814), (188, 14886), (238, 15117), (261, 15195), (264, 15213), (265, 15216), (275, 15249), (300, 15357), (320, 15417), (337, 15498), (347, 15567), (360, 15621), (381, 15708), (382, 15711), (402, 15822), (415, 15858), (418, 15876), (429, 15927), (450, 16029), (453, 16041), (456, 16056), (470, 16125), (471, 16134), (477, 16164), (489, 16209), (496, 16230), (503, 16260), (506, 16272), (507, 16275), (511, 16296), (512, 16305), (520, 16341), (529, 16374), (553, 16455), (554, 16458), (561, 16503), (562, 16506), (563, 16509), (577, 16554), (586, 16584), (600, 16629), (604, 16644), (614, 16677), (619, 16698), (621, 16707), (623, 16716), (629, 16740), (630, 16743), (657, 16851), (668, 16893), (670, 16908), (672, 16914), (692, 16995), (706, 17046), (708, 17055), (710, 17064), (713, 17073), (714, 17076), (717, 17088), (718, 17091), (719, 17100), (721, 17109), (725, 17133), (740, 17202), (747, 17256), (764, 17364), (767, 17379), (772, 17418), (793, 17577), (839, 17811), (856, 17886), (868, 17919), (897, 18123), (904, 18165), (905, 18168), (909, 18189), (914, 18237), (916, 18243), (932, 18351), (941, 18423), (949, 18525), (960, 18678),

Gene: DrGrey_23 Start: 16676, Stop: 22156, Start Num: 2

Candidate Starts for DrGrey_23:

(1, 16655), (Start: 2 @16676 has 30 MA's), (3, 16706), (12, 16850), (15, 16901), (22, 16985), (40, 17060), (50, 17177), (51, 17180), (57, 17213), (65, 17249), (68, 17279), (76, 17402), (84, 17528), (87, 17564), (93, 17603), (95, 17615), (102, 17651), (107, 17693), (128, 17885), (133, 17951), (141, 18026), (146, 18047), (149, 18080), (157, 18143), (158, 18152), (172, 18230), (202, 18377), (226, 18509), (240, 18566), (262, 18644), (264, 18653), (266, 18662), (275, 18689), (293, 18764), (295, 18773), (312, 18839), (313, 18842), (329, 18881), (337, 18935), (347, 19004), (360, 19058), (369, 19091), (378, 19136), (381, 19145), (384, 19157), (396, 19232), (398, 19244), (410, 19283), (415, 19295), (422, 19334), (429, 19364), (432, 19376), (439, 19424), (450, 19466), (460, 19514), (471, 19571), (502, 19691), (511, 19733), (512, 19742), (520, 19778), (525, 19796), (526, 19799), (529, 19811), (542, 19853), (543, 19856), (557, 19904), (561, 19940), (563, 19946), (568, 19967), (577, 19991), (604, 20081), (614, 20114), (618, 20132), (621, 20144), (623, 20153), (637, 20210), (640, 20222), (641, 20225), (646, 20243), (660, 20303), (665, 20318), (672, 20351), (675, 20366), (694, 20438), (706, 20483), (710, 20501), (713, 20510), (721, 20546), (724, 20567), (725, 20570), (756,

20756), (759, 20777), (761, 20783), (764, 20801), (765, 20804), (767, 20816), (770, 20849), (772, 20855), (790, 21005), (793, 21014), (845, 21287), (876, 21389), (905, 21605), (909, 21626), (914, 21674), (916, 21680), (917, 21686), (924, 21731), (941, 21860), (946, 21908), (959, 22100), (960, 22109),

Gene: Duffington_32 Start: 23487, Stop: 28601, Start Num: 17

Candidate Starts for Duffington_32:

(Start: 17 @23487 has 129 MA's), (Start: 20 @23517 has 3 MA's), (25, 23562), (47, 23706), (58, 23772), (68, 23832), (69, 23853), (76, 23955), (84, 24081), (87, 24117), (93, 24156), (102, 24204), (107, 24246), (113, 24318), (118, 24366), (132, 24492), (140, 24567), (141, 24579), (146, 24600), (158, 24705), (159, 24708), (202, 24930), (214, 24996), (231, 25086), (241, 25122), (255, 25173), (262, 25221), (265, 25233), (295, 25377), (303, 25416), (310, 25443), (337, 25605), (343, 25653), (346, 25668), (347, 25674), (353, 25692), (364, 25740), (378, 25806), (390, 25857), (391, 25869), (394, 25887), (406, 25941), (418, 25986), (422, 26007), (425, 26016), (429, 26037), (433, 26058), (443, 26112), (444, 26115), (446, 26124), (452, 26145), (454, 26157), (459, 26178), (461, 26184), (465, 26202), (471, 26238), (477, 26268), (490, 26316), (494, 26328), (496, 26334), (497, 26337), (499, 26349), (500, 26352), (505, 26373), (512, 26409), (525, 26463), (526, 26466), (534, 26487), (538, 26499), (539, 26502), (551, 26550), (556, 26565), (557, 26568), (558, 26577), (560, 26598), (566, 26625), (567, 26628), (573, 26652), (577, 26664), (582, 26685), (584, 26697), (586, 26706), (590, 26718), (598, 26745), (608, 26778), (610, 26784), (615, 26802), (632, 26871), (650, 26940), (676, 27051), (705, 27162), (717, 27207), (734, 27297), (757, 27441), (768, 27504), (771, 27531), (781, 27603), (784, 27615), (785, 27624), (789, 27678), (794, 27699), (795, 27711), (831, 27873), (845, 27960), (850, 27978), (859, 28008), (866, 28026), (867, 28029), (870, 28041), (876, 28068), (892, 28179), (900, 28254), (908, 28302), (916, 28356), (920, 28383), (937, 28497), (947, 28587),

Gene: Dynamite_21 Start: 17193, Stop: 21671, Start Num: 17

Candidate Starts for Dynamite_21:

(Start: 16 @17172 has 2 MA's), (Start: 17 @17193 has 129 MA's), (Start: 20 @17223 has 3 MA's), (23, 17256), (28, 17277), (65, 17508), (68, 17538), (69, 17559), (75, 17619), (76, 17661), (77, 17679), (81, 17721), (86, 17808), (93, 17862), (96, 17877), (102, 17910), (115, 18003), (121, 18051), (123, 18066), (128, 18108), (132, 18162), (140, 18237), (146, 18270), (159, 18378), (169, 18444), (177, 18477), (179, 18486), (180, 18489), (182, 18507), (243, 18789), (251, 18813), (257, 18843), (299, 19002), (314, 19062), (337, 19191), (350, 19269), (357, 19299), (360, 19314), (363, 19323), (369, 19347), (375, 19374), (378, 19392), (384, 19413), (396, 19488), (400, 19509), (404, 19521), (414, 19551), (422, 19593), (434, 19653), (435, 19659), (443, 19698), (462, 19779), (467, 19800), (471, 19830), (477, 19860), (482, 19878), (494, 19926), (500, 19950), (504, 19968), (507, 19977), (508, 19986), (510, 19992), (513, 20013), (520, 20043), (529, 20076), (530, 20082), (531, 20085), (536, 20097), (542, 20118), (557, 20169), (558, 20178), (562, 20208), (564, 20214), (574, 20247), (577, 20256), (586, 20286), (589, 20295), (592, 20307), (599, 20328), (604, 20346), (612, 20373), (614, 20379), (615, 20382), (618, 20397), (625, 20424), (629, 20442), (633, 20454), (641, 20490), (667, 20592), (682, 20655), (690, 20691), (691, 20694), (693, 20700), (697, 20715), (702, 20733), (712, 20772), (713, 20775), (718, 20793), (723, 20826), (728, 20847), (740, 20904), (747, 20958), (749, 20967), (758, 21021), (773, 21048), (776, 21066), (782, 21114), (783, 21120), (790, 21192), (804, 21270), (807, 21285), (815, 21324), (824, 21348), (835, 21417), (840, 21438), (865, 21531), (889, 21660),

Gene: Eddiemania_33 Start: 24148, Stop: 29262, Start Num: 17

Candidate Starts for Eddiemania_33:

(Start: 17 @24148 has 129 MA's), (Start: 20 @24178 has 3 MA's), (25, 24223), (47, 24367), (58, 24433), (68, 24493), (69, 24514), (76, 24616), (84, 24742), (87, 24778), (93, 24817), (98, 24844), (102, 24865), (107, 24907), (118, 25027), (140, 25228), (141, 25240), (146, 25261), (155, 25345), (158, 25366), (159, 25369), (179, 25477), (198, 25579), (231, 25747), (241, 25783), (255, 25834), (262, 25882), (295, 26038), (303, 26077), (307, 26095), (310, 26104), (337, 26266), (346, 26329), (347, 26335), (353, 26353), (354, 26359), (364, 26401), (378, 26467), (390, 26518), (391, 26530), (394,

26548), (406, 26602), (418, 26647), (422, 26668), (425, 26677), (429, 26698), (432, 26710), (433, 26719), (436, 26743), (443, 26773), (444, 26776), (446, 26785), (451, 26803), (452, 26806), (454, 26818), (459, 26839), (461, 26845), (462, 26848), (465, 26863), (467, 26869), (471, 26899), (474, 26914), (477, 26929), (489, 26974), (490, 26977), (494, 26989), (496, 26995), (497, 26998), (499, 27010), (500, 27013), (504, 27031), (512, 27070), (525, 27124), (534, 27148), (538, 27160), (539, 27163), (551, 27211), (556, 27226), (557, 27229), (558, 27238), (559, 27253), (560, 27259), (566, 27286), (567, 27289), (571, 27301), (574, 27316), (577, 27325), (582, 27346), (584, 27358), (590, 27379), (598, 27406), (608, 27439), (610, 27445), (615, 27463), (622, 27493), (632, 27532), (679, 27724), (697, 27793), (734, 27958), (757, 28102), (768, 28165), (778, 28231), (781, 28264), (784, 28276), (789, 28339), (794, 28360), (795, 28372), (797, 28387), (809, 28450), (831, 28534), (845, 28621), (850, 28639), (859, 28669), (866, 28687), (869, 28696), (870, 28702), (876, 28729), (892, 28840), (900, 28915), (911, 28984), (916, 29017), (919, 29041), (937, 29158), (947, 29248),

Gene: Eevee_26 Start: 20575, Stop: 25152, Start Num: 17

Candidate Starts for Eevee_26:

(Start: 17 @20575 has 129 MA's), (Start: 20 @20608 has 3 MA's), (43, 20755), (54, 20845), (55, 20848), (76, 21043), (84, 21169), (93, 21244), (102, 21292), (107, 21334), (118, 21454), (131, 21571), (141, 21667), (172, 21871), (175, 21883), (187, 21964), (215, 22099), (233, 22192), (249, 22255), (260, 22294), (276, 22357), (280, 22372), (331, 22576), (337, 22627), (353, 22714), (359, 22744), (362, 22756), (363, 22759), (366, 22771), (369, 22783), (375, 22810), (385, 22852), (392, 22897), (411, 22978), (413, 22984), (418, 23008), (420, 23014), (433, 23080), (438, 23116), (445, 23140), (453, 23173), (458, 23200), (460, 23209), (464, 23227), (469, 23248), (474, 23281), (480, 23308), (481, 23311), (494, 23362), (502, 23392), (504, 23404), (520, 23479), (526, 23500), (528, 23506), (532, 23521), (557, 23605), (558, 23614), (561, 23641), (577, 23692), (588, 23728), (604, 23782), (625, 23860), (648, 23950), (656, 23980), (664, 24016), (672, 24052), (682, 24091), (696, 24148), (702, 24169), (708, 24193), (709, 24196), (712, 24208), (714, 24214), (732, 24304), (738, 24334), (739, 24337), (740, 24340), (748, 24400), (752, 24415), (760, 24469), (776, 24568), (789, 24688), (790, 24694), (810, 24796), (812, 24808), (814, 24817), (835, 24913), (837, 24916), (887, 25141),

Gene: Egad_23 Start: 17271, Stop: 21791, Start Num: 20

Candidate Starts for Egad_23:

(Start: 16 @17220 has 2 MA's), (Start: 17 @17241 has 129 MA's), (Start: 20 @17271 has 3 MA's), (23, 17304), (47, 17460), (63, 17544), (65, 17556), (68, 17586), (75, 17667), (76, 17709), (77, 17727), (81, 17769), (83, 17799), (85, 17844), (86, 17856), (93, 17910), (96, 17925), (102, 17958), (109, 18021), (115, 18051), (118, 18084), (121, 18099), (127, 18147), (141, 18297), (146, 18318), (159, 18426), (162, 18435), (168, 18483), (204, 18660), (225, 18774), (237, 18825), (240, 18837), (258, 18918), (278, 19002), (281, 19020), (293, 19065), (303, 19110), (304, 19113), (305, 19119), (316, 19152), (337, 19263), (347, 19332), (348, 19335), (358, 19377), (360, 19386), (363, 19395), (371, 19425), (378, 19464), (380, 19470), (384, 19485), (391, 19527), (414, 19623), (418, 19644), (419, 19647), (423, 19668), (434, 19725), (436, 19740), (443, 19770), (446, 19782), (453, 19809), (456, 19824), (467, 19872), (471, 19902), (474, 19917), (482, 19950), (484, 19956), (494, 19995), (497, 20004), (499, 20016), (504, 20037), (517, 20103), (520, 20112), (529, 20145), (530, 20151), (531, 20154), (536, 20166), (537, 20169), (543, 20190), (548, 20211), (558, 20247), (566, 20295), (577, 20325), (604, 20415), (620, 20472), (631, 20517), (635, 20535), (642, 20562), (644, 20571), (646, 20577), (660, 20637), (664, 20649), (667, 20661), (679, 20715), (687, 20751), (689, 20757), (691, 20763), (693, 20769), (703, 20805), (709, 20829), (710, 20835), (712, 20841), (713, 20844), (723, 20895), (726, 20907), (733, 20946), (756, 21078), (763, 21114), (769, 21156), (776, 21201), (787, 21291), (800, 21381), (804, 21405), (809, 21429), (811, 21441), (813, 21450), (817, 21462), (821, 21474), (832, 21519), (835, 21549), (840, 21567), (847, 21606),

Gene: ElephantMan_26 Start: 20686, Stop: 25275, Start Num: 17

Candidate Starts for ElephantMan_26:

(Start: 16 @20665 has 2 MA's), (Start: 17 @20686 has 129 MA's), (Start: 20 @20716 has 3 MA's), (28, 20770), (32, 20791), (37, 20827), (47, 20905), (57, 20965), (63, 20989), (65, 21001), (68, 21031), (75, 21112), (76, 21154), (77, 21172), (81, 21214), (83, 21244), (85, 21289), (86, 21301), (93, 21355), (96, 21370), (98, 21382), (102, 21403), (115, 21496), (118, 21529), (121, 21544), (127, 21592), (141, 21742), (146, 21763), (159, 21871), (161, 21877), (162, 21880), (168, 21928), (188, 22042), (195, 22066), (198, 22081), (202, 22093), (216, 22168), (223, 22213), (234, 22261), (239, 22276), (240, 22282), (245, 22300), (261, 22372), (270, 22414), (273, 22423), (284, 22468), (301, 22540), (303, 22546), (313, 22579), (314, 22582), (321, 22609), (337, 22723), (343, 22771), (345, 22780), (347, 22792), (360, 22846), (363, 22855), (364, 22858), (369, 22879), (378, 22924), (384, 22945), (405, 23056), (407, 23062), (414, 23083), (417, 23101), (418, 23104), (422, 23125), (434, 23185), (436, 23200), (437, 23203), (443, 23230), (444, 23233), (471, 23362), (474, 23377), (475, 23380), (479, 23398), (480, 23404), (485, 23419), (494, 23455), (497, 23464), (504, 23497), (515, 23551), (516, 23554), (520, 23572), (524, 23584), (531, 23614), (536, 23629), (540, 23638), (542, 23650), (558, 23710), (567, 23761), (569, 23767), (574, 23779), (577, 23788), (589, 23827), (592, 23839), (596, 23851), (602, 23869), (604, 23878), (624, 23953), (625, 23956), (629, 23974), (646, 24040), (648, 24046), (649, 24049), (661, 24103), (662, 24106), (693, 24232), (694, 24235), (700, 24256), (708, 24289), (710, 24298), (728, 24379), (734, 24412), (742, 24445), (750, 24502), (759, 24562), (764, 24586), (776, 24664), (777, 24676), (794, 24802), (800, 24844), (809, 24892), (817, 24925), (821, 24937), (824, 24943), (827, 24964), (829, 24967), (835, 25012), (841, 25039), (846, 25066), (847, 25069), (882, 25225), (888, 25252),

Gene: Elsa_22 Start: 17670, Stop: 22148, Start Num: 17

Candidate Starts for Elsa_22:

(Start: 16 @17649 has 2 MA's), (Start: 17 @17670 has 129 MA's), (Start: 20 @17700 has 3 MA's), (23, 17733), (28, 17754), (65, 17985), (68, 18015), (75, 18096), (76, 18138), (77, 18156), (81, 18198), (86, 18285), (93, 18339), (96, 18354), (102, 18387), (115, 18480), (121, 18528), (123, 18543), (128, 18585), (132, 18639), (140, 18714), (146, 18747), (159, 18855), (169, 18921), (177, 18954), (179, 18963), (180, 18966), (182, 18984), (243, 19266), (251, 19290), (257, 19320), (299, 19479), (314, 19539), (337, 19668), (343, 19716), (355, 19770), (358, 19782), (360, 19791), (363, 19800), (369, 19824), (378, 19869), (384, 19890), (396, 19965), (404, 19998), (414, 20028), (418, 20049), (422, 20070), (434, 20130), (435, 20136), (443, 20175), (444, 20178), (448, 20193), (462, 20256), (467, 20277), (471, 20307), (477, 20337), (482, 20355), (494, 20403), (500, 20427), (504, 20445), (507, 20454), (508, 20463), (510, 20469), (513, 20490), (520, 20520), (529, 20553), (530, 20559), (531, 20562), (536, 20574), (542, 20595), (557, 20646), (558, 20655), (562, 20685), (564, 20691), (574, 20724), (577, 20733), (586, 20763), (589, 20772), (592, 20784), (604, 20823), (612, 20850), (614, 20856), (615, 20859), (618, 20874), (625, 20901), (629, 20919), (633, 20931), (641, 20967), (667, 21069), (682, 21132), (690, 21168), (691, 21171), (693, 21177), (697, 21192), (702, 21210), (708, 21234), (712, 21249), (713, 21252), (718, 21270), (723, 21303), (728, 21324), (740, 21381), (747, 21435), (749, 21444), (758, 21498), (773, 21525), (776, 21543), (782, 21591), (783, 21597), (790, 21669), (804, 21747), (807, 21762), (815, 21801), (824, 21825), (835, 21894), (840, 21915), (865, 22008), (889, 22137),

Gene: Elver_39 Start: 29219, Stop: 33769, Start Num: 17

Candidate Starts for Elver_39:

(Start: 17 @29219 has 129 MA's), (Start: 20 @29249 has 3 MA's), (32, 29324), (37, 29360), (47, 29438), (76, 29687), (84, 29813), (89, 29858), (90, 29873), (93, 29888), (98, 29915), (102, 29936), (105, 29960), (107, 29978), (118, 30095), (124, 30140), (127, 30158), (139, 30281), (141, 30308), (144, 30320), (147, 30341), (177, 30536), (192, 30623), (194, 30629), (205, 30671), (213, 30722), (225, 30785), (248, 30860), (250, 30869), (285, 30989), (305, 31067), (309, 31076), (337, 31244), (351, 31322), (360, 31367), (363, 31376), (369, 31400), (378, 31445), (384, 31466), (400, 31562), (411, 31595), (418, 31625), (434, 31706), (436, 31721), (437, 31724), (456, 31805), (462, 31832), (471, 31883), (476, 31910), (482, 31931), (483, 31934), (494, 31976), (515, 32072), (520, 32093), (524, 32105), (529, 32126), (531, 32135), (536, 32147), (547, 32189), (557, 32219), (558, 32228),

(566, 32276), (567, 32279), (574, 32297), (577, 32306), (592, 32357), (595, 32366), (604, 32396), (615, 32432), (621, 32459), (641, 32540), (642, 32543), (662, 32624), (666, 32636), (672, 32666), (675, 32681), (678, 32690), (682, 32705), (691, 32744), (702, 32783), (706, 32798), (708, 32807), (711, 32819), (714, 32828), (715, 32831), (723, 32876), (724, 32882), (736, 32939), (740, 32954), (744, 32984), (759, 33080), (769, 33137), (776, 33182), (786, 33251), (795, 33332), (799, 33353), (804, 33386), (813, 33431), (816, 33440), (821, 33455), (824, 33461), (835, 33530), (840, 33548), (852, 33599),

Gene: EndAve_32 Start: 23502, Stop: 28613, Start Num: 17

Candidate Starts for EndAve_32:

(Start: 17 @23502 has 129 MA's), (Start: 20 @23532 has 3 MA's), (25, 23577), (47, 23721), (58, 23787), (68, 23847), (69, 23868), (76, 23970), (83, 24060), (84, 24096), (87, 24132), (93, 24171), (102, 24219), (107, 24261), (113, 24333), (118, 24381), (132, 24507), (140, 24582), (141, 24594), (146, 24615), (158, 24720), (159, 24723), (202, 24945), (214, 25011), (215, 25014), (228, 25083), (231, 25101), (255, 25188), (267, 25257), (288, 25359), (289, 25362), (295, 25389), (303, 25428), (310, 25455), (337, 25617), (343, 25665), (347, 25686), (353, 25704), (355, 25719), (364, 25752), (378, 25818), (389, 25866), (390, 25869), (393, 25890), (394, 25899), (406, 25953), (418, 25998), (422, 26019), (425, 26028), (432, 26061), (433, 26070), (436, 26094), (443, 26124), (444, 26127), (446, 26136), (449, 26148), (452, 26157), (454, 26169), (459, 26190), (461, 26196), (471, 26250), (477, 26280), (490, 26328), (494, 26340), (496, 26346), (497, 26349), (500, 26364), (505, 26385), (512, 26421), (525, 26475), (526, 26478), (529, 26490), (534, 26499), (538, 26511), (539, 26514), (542, 26529), (549, 26556), (551, 26562), (556, 26577), (557, 26580), (558, 26589), (559, 26604), (560, 26610), (564, 26625), (566, 26637), (567, 26640), (577, 26676), (582, 26697), (584, 26709), (586, 26718), (590, 26730), (598, 26757), (605, 26781), (608, 26790), (610, 26796), (615, 26814), (632, 26883), (650, 26952), (686, 27108), (734, 27309), (757, 27453), (768, 27516), (771, 27543), (781, 27615), (784, 27627), (785, 27636), (789, 27690), (794, 27711), (795, 27723), (831, 27885), (845, 27972), (850, 27990), (859, 28020), (866, 28038), (867, 28041), (870, 28053), (876, 28080), (892, 28191), (900, 28266), (908, 28314), (916, 28368), (920, 28395), (937, 28509), (947, 28599),

Gene: Esketit_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Esketit_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (240, 18047), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (301, 18284), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Fazel_30 Start: 22536, Stop: 27638, Start Num: 17

Candidate Starts for Fazel_30:

(Start: 17 @22536 has 129 MA's), (Start: 20 @22566 has 3 MA's), (25, 22611), (46, 22749), (47, 22755), (58, 22821), (65, 22851), (76, 23016), (81, 23076), (86, 23163), (89, 23187), (93, 23217), (96, 23232), (102, 23265), (112, 23358), (132, 23526), (146, 23634), (147, 23646), (153, 23703), (158, 23739), (159, 23742), (170, 23811), (172, 23817), (Start: 208 @24000 has 1 MA's), (209, 24006), (228, 24102), (231, 24120), (267, 24276), (293, 24402), (295, 24411), (337, 24642), (338, 24648), (347, 24711), (353, 24729), (358, 24756), (363, 24774), (378, 24843), (385, 24867), (387, 24873), (390, 24894), (392, 24912), (393, 24915), (406, 24978), (418, 25023), (422, 25044), (428, 25071), (434, 25104), (438, 25131), (443, 25149), (444, 25152), (446, 25161), (449, 25173), (451, 25179), (452, 25182), (454, 25194), (465, 25239), (474, 25290), (482, 25323), (487, 25344), (490, 25353), (494, 25365), (497, 25374), (500, 25389), (502, 25395), (503, 25401), (505, 25410), (508, 25425), (509, 25428), (511, 25437), (512, 25446), (520, 25482), (526, 25503), (534, 25524), (542, 25554), (546, 25569), (547, 25575), (555, 25599), (557, 25605), (558, 25614), (559, 25629), (560, 25635), (569, 25671), (573, 25689), (577, 25701), (582, 25722), (584, 25734), (590, 25755), (591, 25758), (598, 25782), (601, 25791), (608, 25815), (610, 25821), (615, 25839), (616, 25848), (617, 25851), (639, 25938), (648, 25968), (697, 26169), (717, 26244), (728, 26301), (734, 26334), (755, 26457), (781, 26640), (784, 26652), (785, 26661), (789, 26715), (797, 26763), (806, 26814), (820, 26865), (825, 26886), (833, 26934), (838, 26958), (845, 26997), (850, 27015), (866, 27063), (867, 27066), (870, 27078), (892, 27216), (900, 27291), (920, 27420), (926, 27468), (937, 27534), (944, 27573), (947, 27624),

Gene: FidgetOrca_23 Start: 16166, Stop: 21652, Start Num: 2

Candidate Starts for FidgetOrca_23:

(1, 16145), (Start: 2 @16166 has 30 MA's), (3, 16196), (12, 16340), (40, 16550), (51, 16670), (58, 16709), (65, 16739), (67, 16763), (68, 16769), (69, 16790), (70, 16805), (76, 16892), (83, 16982), (84, 17018), (85, 17027), (87, 17054), (93, 17093), (94, 17102), (98, 17120), (102, 17141), (107, 17183), (108, 17192), (118, 17300), (129, 17405), (140, 17501), (149, 17567), (172, 17717), (186, 17801), (190, 17822), (202, 17864), (227, 17999), (262, 18131), (264, 18140), (275, 18176), (277, 18185), (286, 18227), (295, 18260), (334, 18413), (337, 18434), (346, 18497), (347, 18503), (349, 18509), (355, 18536), (360, 18557), (362, 18563), (363, 18566), (369, 18590), (378, 18635), (381, 18644), (382, 18647), (384, 18656), (396, 18731), (402, 18758), (407, 18773), (408, 18776), (415, 18794), (418, 18812), (422, 18833), (433, 18884), (450, 18965), (469, 19052), (471, 19070), (476, 19097), (502, 19190), (511, 19232), (512, 19241), (520, 19277), (525, 19295), (526, 19298), (542, 19352), (557, 19403), (561, 19439), (563, 19445), (568, 19466), (577, 19490), (586, 19520), (604, 19580), (614, 19613), (615, 19616), (618, 19631), (627, 19667), (637, 19709), (640, 19721), (641, 19724), (655, 19772), (660, 19802), (665, 19817), (672, 19850), (675, 19865), (691, 19928), (712, 20006), (721, 20045), (733, 20111), (748, 20198), (749, 20201), (764, 20300), (770, 20348), (772, 20354), (793, 20513), (845, 20786), (876, 20888), (894, 21011), (905, 21104), (909, 21125), (914, 21173), (916, 21179), (917, 21185), (924, 21230), (939, 21338), (941, 21359), (946, 21407), (952, 21494), (959, 21596), (960, 21605),

Gene: Figliar_32 Start: 23512, Stop: 28611, Start Num: 17

Candidate Starts for Figliar_32:

(Start: 17 @23512 has 129 MA's), (Start: 20 @23542 has 3 MA's), (25, 23587), (46, 23725), (47, 23731), (56, 23785), (58, 23797), (61, 23809), (65, 23827), (76, 23992), (81, 24052), (86, 24139), (89, 24163), (93, 24193), (96, 24208), (102, 24241), (112, 24334), (132, 24502), (146, 24610), (147, 24622), (149, 24643), (153, 24679), (158, 24715), (159, 24718), (170, 24787), (172, 24793), (186, 24877), (202, 24940), (Start: 208 @24976 has 1 MA's), (215, 25009), (230, 25084), (231, 25096), (241, 25132), (255, 25183), (262, 25231), (265, 25243), (295, 25387), (303, 25426), (310, 25453), (337, 25615), (343, 25663), (347, 25684), (353, 25702), (364, 25750), (378, 25816), (390, 25867), (391, 25879), (394, 25897), (406, 25951), (418, 25996), (422, 26017), (425, 26026), (428, 26044), (429, 26047), (433, 26068), (443, 26122), (444, 26125), (446, 26134), (452, 26155), (454, 26167), (459, 26188), (461, 26194), (465, 26212), (471, 26248), (477, 26278), (490, 26326), (494, 26338), (496, 26344), (497, 26347), (499, 26359), (500, 26362), (505, 26383), (512, 26419), (525, 26473), (526,

26476), (534, 26497), (538, 26509), (539, 26512), (551, 26560), (556, 26575), (557, 26578), (558, 26587), (560, 26608), (566, 26635), (567, 26638), (573, 26662), (577, 26674), (582, 26695), (584, 26707), (586, 26716), (590, 26728), (598, 26755), (608, 26788), (610, 26794), (615, 26812), (628, 26866), (632, 26881), (650, 26950), (676, 27061), (705, 27172), (717, 27217), (734, 27307), (757, 27451), (768, 27514), (771, 27541), (781, 27613), (784, 27625), (785, 27634), (789, 27688), (794, 27709), (795, 27721), (831, 27883), (845, 27970), (850, 27988), (859, 28018), (866, 28036), (867, 28039), (870, 28051), (876, 28078), (892, 28189), (898, 28252), (900, 28264), (908, 28312), (916, 28366), (920, 28393), (937, 28507), (947, 28597),

Gene: FortCran_29 Start: 20505, Stop: 25607, Start Num: 17

Candidate Starts for FortCran_29:

(Start: 17 @20505 has 129 MA's), (Start: 20 @20535 has 3 MA's), (42, 20673), (46, 20718), (47, 20724), (49, 20733), (50, 20748), (53, 20769), (58, 20790), (65, 20820), (68, 20850), (69, 20871), (76, 20973), (81, 21033), (85, 21108), (86, 21120), (89, 21144), (93, 21174), (96, 21189), (102, 21222), (107, 21264), (112, 21315), (119, 21369), (120, 21372), (130, 21471), (133, 21495), (146, 21591), (158, 21696), (159, 21699), (170, 21768), (172, 21774), (173, 21780), (Start: 208 @21957 has 1 MA's), (219, 22008), (228, 22059), (241, 22113), (242, 22116), (295, 22368), (296, 22371), (311, 22446), (323, 22503), (335, 22587), (337, 22596), (349, 22671), (353, 22683), (355, 22698), (356, 22701), (361, 22722), (373, 22770), (378, 22797), (384, 22818), (387, 22827), (390, 22848), (391, 22860), (393, 22869), (394, 22878), (406, 22932), (407, 22935), (414, 22956), (422, 22998), (428, 23025), (431, 23034), (433, 23049), (434, 23058), (436, 23073), (438, 23085), (441, 23094), (449, 23127), (452, 23136), (470, 23220), (471, 23229), (474, 23244), (475, 23247), (479, 23265), (490, 23307), (497, 23328), (500, 23343), (502, 23349), (510, 23385), (512, 23400), (526, 23457), (529, 23469), (534, 23478), (538, 23490), (541, 23502), (542, 23508), (547, 23529), (551, 23541), (557, 23559), (558, 23568), (559, 23583), (560, 23589), (563, 23601), (573, 23643), (574, 23646), (577, 23655), (582, 23676), (584, 23688), (598, 23736), (601, 23745), (608, 23769), (610, 23775), (615, 23793), (616, 23802), (622, 23823), (639, 23892), (644, 23910), (650, 23931), (691, 24102), (705, 24153), (736, 24297), (747, 24366), (757, 24432), (766, 24483), (784, 24606), (789, 24669), (797, 24717), (799, 24723), (800, 24732), (809, 24780), (826, 24852), (838, 24912), (842, 24933), (843, 24936), (851, 24987), (853, 24996), (859, 25014), (867, 25035), (870, 25047), (883, 25140), (892, 25185), (900, 25260), (902, 25278), (906, 25299), (919, 25386), (936, 25497), (947, 25593),

Gene: FrodoSwaggins_23 Start: 16676, Stop: 22156, Start Num: 2

Candidate Starts for FrodoSwaggins_23:

(1, 16655), (Start: 2 @16676 has 30 MA's), (3, 16706), (12, 16850), (15, 16901), (22, 16985), (40, 17060), (50, 17177), (51, 17180), (57, 17213), (65, 17249), (68, 17279), (76, 17402), (84, 17528), (87, 17564), (93, 17603), (95, 17615), (102, 17651), (107, 17693), (128, 17885), (133, 17951), (141, 18026), (146, 18047), (149, 18080), (157, 18143), (158, 18152), (172, 18230), (202, 18377), (226, 18509), (240, 18566), (262, 18644), (264, 18653), (266, 18662), (275, 18689), (293, 18764), (295, 18773), (312, 18839), (313, 18842), (329, 18881), (337, 18935), (347, 19004), (360, 19058), (369, 19091), (378, 19136), (381, 19145), (384, 19157), (396, 19232), (410, 19283), (415, 19295), (422, 19334), (429, 19364), (432, 19376), (439, 19424), (450, 19466), (460, 19514), (471, 19571), (502, 19691), (511, 19733), (512, 19742), (520, 19778), (525, 19796), (526, 19799), (529, 19811), (542, 19853), (543, 19856), (557, 19904), (561, 19940), (563, 19946), (568, 19967), (577, 19991), (604, 20081), (614, 20114), (618, 20132), (621, 20144), (623, 20153), (637, 20210), (640, 20222), (641, 20225), (646, 20243), (660, 20303), (665, 20318), (672, 20351), (675, 20366), (694, 20438), (706, 20483), (710, 20501), (713, 20510), (721, 20546), (724, 20567), (725, 20570), (756, 20756), (759, 20777), (761, 20783), (764, 20801), (765, 20804), (767, 20816), (770, 20849), (772, 20855), (790, 21005), (793, 21014), (845, 21287), (876, 21389), (905, 21605), (909, 21626), (914, 21674), (916, 21680), (917, 21686), (924, 21731), (941, 21860), (946, 21908), (959, 22100), (960, 22109),

Gene: FromIndy_22 Start: 15060, Stop: 20537, Start Num: 2

Candidate Starts for FromIndy_22:

(Start: 2 @15060 has 30 MA's), (3, 15090), (5, 15144), (7, 15171), (9, 15201), (10, 15204), (12, 15234), (76, 15786), (84, 15912), (93, 15987), (101, 16029), (107, 16077), (114, 16161), (128, 16269), (146, 16431), (149, 16464), (158, 16536), (172, 16614), (202, 16761), (275, 17073), (277, 17082), (294, 17145), (310, 17208), (337, 17319), (342, 17361), (347, 17388), (351, 17397), (363, 17451), (369, 17475), (382, 17532), (384, 17541), (403, 17646), (406, 17655), (415, 17679), (432, 17760), (450, 17850), (461, 17901), (469, 17937), (471, 17955), (477, 17985), (487, 18024), (488, 18027), (499, 18066), (507, 18096), (511, 18117), (512, 18126), (519, 18159), (520, 18162), (526, 18183), (545, 18246), (561, 18324), (563, 18330), (574, 18366), (575, 18369), (576, 18372), (577, 18375), (592, 18426), (595, 18435), (598, 18444), (604, 18465), (613, 18495), (614, 18498), (629, 18561), (630, 18564), (631, 18567), (641, 18609), (646, 18627), (655, 18657), (665, 18702), (672, 18735), (690, 18810), (692, 18816), (701, 18846), (706, 18867), (713, 18894), (717, 18909), (721, 18930), (725, 18954), (739, 19020), (745, 19062), (748, 19083), (753, 19107), (764, 19185), (770, 19233), (793, 19398), (839, 19632), (858, 19713), (871, 19758), (880, 19803), (905, 19989), (909, 20010), (910, 20022), (916, 20064), (924, 20115), (931, 20163), (935, 20202), (943, 20253), (951, 20376), (957, 20415),

Gene: Gandionco_41 Start: 29771, Stop: 34291, Start Num: 20

Candidate Starts for Gandionco_41:

(Start: 17 @29741 has 129 MA's), (Start: 20 @29771 has 3 MA's), (32, 29846), (37, 29882), (47, 29960), (75, 30167), (76, 30209), (84, 30335), (89, 30380), (90, 30395), (93, 30410), (98, 30437), (102, 30458), (105, 30482), (107, 30500), (118, 30617), (124, 30662), (127, 30680), (139, 30803), (141, 30830), (144, 30842), (147, 30863), (177, 31058), (192, 31145), (194, 31151), (205, 31193), (213, 31244), (248, 31382), (250, 31391), (285, 31511), (305, 31589), (309, 31598), (337, 31766), (351, 31844), (360, 31889), (363, 31898), (369, 31922), (378, 31967), (379, 31970), (384, 31988), (400, 32084), (411, 32117), (418, 32147), (424, 32174), (434, 32228), (436, 32243), (437, 32246), (456, 32327), (462, 32354), (471, 32405), (476, 32432), (482, 32453), (483, 32456), (494, 32498), (515, 32594), (520, 32615), (524, 32627), (529, 32648), (531, 32657), (536, 32669), (547, 32711), (557, 32741), (558, 32750), (566, 32798), (567, 32801), (574, 32819), (577, 32828), (592, 32879), (595, 32888), (604, 32918), (615, 32954), (641, 33062), (642, 33065), (662, 33146), (666, 33158), (672, 33188), (675, 33203), (682, 33227), (691, 33266), (702, 33305), (706, 33320), (708, 33329), (711, 33341), (714, 33350), (715, 33353), (723, 33398), (724, 33404), (736, 33461), (740, 33476), (744, 33506), (759, 33602), (769, 33659), (776, 33704), (786, 33773), (795, 33854), (799, 33875), (804, 33908), (813, 33953), (816, 33962), (821, 33977), (824, 33983), (835, 34052), (840, 34070), (852, 34121),

Gene: GantcherGoblin_25 Start: 19002, Stop: 23639, Start Num: 17

Candidate Starts for GantcherGoblin_25:

(Start: 16 @18981 has 2 MA's), (Start: 17 @19002 has 129 MA's), (Start: 20 @19032 has 3 MA's), (28, 19086), (29, 19095), (58, 19365), (59, 19368), (68, 19425), (69, 19446), (75, 19506), (76, 19548), (81, 19608), (86, 19695), (90, 19734), (93, 19749), (96, 19764), (102, 19797), (106, 19836), (107, 19839), (113, 19875), (115, 19890), (121, 19938), (158, 20262), (162, 20274), (170, 20334), (180, 20376), (188, 20436), (189, 20442), (192, 20451), (197, 20466), (198, 20475), (219, 20574), (220, 20586), (221, 20595), (223, 20607), (296, 20892), (310, 20952), (314, 20961), (337, 21102), (343, 21150), (348, 21174), (351, 21180), (360, 21225), (363, 21234), (369, 21258), (373, 21276), (383, 21321), (384, 21324), (387, 21333), (396, 21399), (407, 21441), (411, 21453), (414, 21462), (418, 21483), (429, 21534), (434, 21564), (436, 21579), (446, 21621), (451, 21639), (461, 21687), (462, 21690), (472, 21747), (478, 21774), (499, 21855), (502, 21864), (512, 21915), (520, 21951), (529, 21984), (531, 21993), (536, 22005), (544, 22032), (549, 22053), (557, 22077), (558, 22086), (574, 22155), (575, 22158), (576, 22161), (577, 22164), (586, 22194), (592, 22215), (599, 22236), (604, 22254), (607, 22263), (612, 22281), (627, 22341), (635, 22374), (638, 22389), (640, 22395), (641, 22398), (654, 22443), (660, 22476), (661, 22479), (662, 22482), (667, 22500), (696, 22620), (697, 22623), (702, 22641), (711, 22677), (721, 22719), (725, 22743), (740, 22812), (747, 22866), (750, 22878), (769, 22995), (776, 23040), (782, 23088), (801, 23223), (804, 23244), (809, 23268), (824, 23319),

(835, 23388), (840, 23406),

Gene: Giantsbane_27 Start: 19149, Stop: 23738, Start Num: 17

Candidate Starts for Giantsbane_27:

(Start: 16 @19128 has 2 MA's), (Start: 17 @19149 has 129 MA's), (Start: 20 @19179 has 3 MA's), (28, 19233), (37, 19290), (57, 19428), (65, 19464), (68, 19494), (75, 19575), (76, 19617), (77, 19635), (81, 19677), (86, 19764), (93, 19818), (96, 19833), (97, 19839), (102, 19866), (113, 19944), (115, 19959), (118, 19992), (121, 20007), (122, 20016), (125, 20043), (127, 20055), (131, 20109), (146, 20226), (159, 20334), (162, 20343), (169, 20400), (171, 20406), (193, 20523), (197, 20535), (202, 20556), (204, 20568), (209, 20598), (223, 20676), (240, 20745), (256, 20805), (278, 20901), (290, 20955), (301, 21003), (303, 21009), (314, 21045), (337, 21189), (339, 21201), (345, 21246), (347, 21258), (360, 21312), (363, 21321), (364, 21324), (369, 21345), (384, 21411), (395, 21477), (396, 21486), (397, 21489), (398, 21498), (405, 21522), (407, 21528), (414, 21549), (417, 21567), (418, 21570), (422, 21591), (434, 21651), (436, 21666), (437, 21669), (442, 21693), (443, 21696), (444, 21699), (453, 21735), (471, 21828), (474, 21843), (475, 21846), (479, 21864), (480, 21870), (485, 21885), (494, 21921), (497, 21930), (504, 21963), (515, 22017), (516, 22020), (520, 22038), (536, 22095), (540, 22104), (542, 22116), (547, 22137), (549, 22143), (550, 22146), (558, 22176), (569, 22233), (574, 22245), (576, 22251), (577, 22254), (604, 22344), (615, 22380), (631, 22446), (636, 22470), (637, 22473), (646, 22506), (647, 22509), (648, 22512), (649, 22515), (661, 22569), (662, 22572), (691, 22692), (700, 22722), (703, 22734), (710, 22764), (713, 22773), (715, 22779), (733, 22875), (744, 22932), (750, 22968), (760, 23031), (776, 23130), (777, 23142), (790, 23256), (809, 23358), (821, 23403), (824, 23409), (829, 23433), (832, 23448), (835, 23478), (841, 23505), (846, 23532), (863, 23577),

Gene: Gill_29 Start: 20616, Stop: 25730, Start Num: 17

Candidate Starts for Gill_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (43, 20793), (46, 20829), (47, 20835), (53, 20880), (58, 20901), (65, 20931), (76, 21096), (81, 21156), (85, 21231), (89, 21267), (90, 21282), (93, 21297), (96, 21312), (102, 21345), (112, 21438), (119, 21492), (120, 21495), (146, 21714), (158, 21819), (159, 21822), (170, 21891), (172, 21897), (Start: 208 @22080 has 1 MA's), (219, 22131), (228, 22182), (241, 22236), (242, 22239), (269, 22371), (291, 22473), (295, 22491), (296, 22494), (311, 22569), (323, 22626), (335, 22710), (337, 22719), (353, 22806), (361, 22845), (373, 22893), (378, 22920), (384, 22941), (387, 22950), (390, 22971), (391, 22983), (393, 22992), (394, 23001), (398, 23028), (406, 23055), (407, 23058), (414, 23079), (422, 23121), (428, 23148), (431, 23157), (433, 23172), (434, 23181), (436, 23196), (438, 23208), (441, 23217), (444, 23229), (449, 23250), (452, 23259), (470, 23343), (471, 23352), (474, 23367), (475, 23370), (479, 23388), (482, 23400), (483, 23403), (490, 23430), (497, 23451), (500, 23466), (510, 23508), (512, 23523), (526, 23580), (529, 23592), (534, 23601), (538, 23613), (541, 23625), (542, 23631), (547, 23652), (551, 23664), (557, 23682), (558, 23691), (559, 23706), (560, 23712), (563, 23724), (573, 23766), (574, 23769), (577, 23778), (582, 23799), (584, 23811), (598, 23859), (601, 23868), (608, 23892), (610, 23898), (615, 23916), (616, 23925), (622, 23946), (639, 24015), (644, 24033), (645, 24036), (650, 24054), (680, 24180), (691, 24225), (705, 24276), (736, 24420), (757, 24555), (766, 24606), (778, 24684), (784, 24729), (789, 24792), (793, 24810), (797, 24840), (799, 24846), (809, 24903), (826, 24975), (838, 25035), (842, 25056), (843, 25059), (851, 25110), (853, 25119), (867, 25158), (870, 25170), (883, 25263), (892, 25308), (900, 25383), (906, 25422), (911, 25452), (919, 25509), (936, 25620), (947, 25716),

Gene: GirlPower_22 Start: 17641, Stop: 23130, Start Num: 2

Candidate Starts for GirlPower_22:

(1, 17620), (Start: 2 @17641 has 30 MA's), (3, 17671), (12, 17815), (32, 17983), (47, 18118), (58, 18184), (65, 18214), (68, 18244), (76, 18367), (82, 18448), (83, 18457), (84, 18493), (93, 18568), (98, 18595), (101, 18610), (102, 18616), (107, 18658), (110, 18709), (128, 18847), (149, 19042), (161, 19123), (172, 19192), (190, 19297), (203, 19342), (240, 19528), (264, 19615), (275, 19651), (277,

19660), (334, 19888), (337, 19909), (346, 19972), (347, 19978), (349, 19984), (360, 20032), (362, 20038), (363, 20041), (369, 20065), (378, 20110), (381, 20119), (382, 20122), (387, 20140), (406, 20245), (415, 20269), (430, 20341), (433, 20359), (450, 20440), (471, 20545), (502, 20665), (511, 20707), (512, 20716), (520, 20752), (526, 20773), (543, 20830), (557, 20878), (561, 20914), (568, 20941), (577, 20965), (586, 20995), (604, 21055), (614, 21088), (618, 21106), (623, 21127), (633, 21163), (637, 21184), (640, 21196), (641, 21199), (646, 21217), (648, 21223), (660, 21277), (665, 21292), (672, 21325), (675, 21340), (691, 21403), (712, 21481), (713, 21484), (721, 21520), (733, 21586), (738, 21607), (748, 21673), (751, 21685), (764, 21775), (770, 21823), (790, 21979), (793, 21988), (861, 22309), (880, 22393), (905, 22579), (909, 22600), (912, 22624), (914, 22648), (916, 22654), (917, 22660), (924, 22705), (939, 22813), (946, 22882), (952, 22969), (959, 23074), (960, 23083),

Gene: GoCrazy_20 Start: 17193, Stop: 21671, Start Num: 17

Candidate Starts for GoCrazy_20:

(Start: 16 @17172 has 2 MA's), (Start: 17 @17193 has 129 MA's), (Start: 20 @17223 has 3 MA's), (28, 17277), (37, 17334), (65, 17508), (68, 17538), (75, 17619), (76, 17661), (77, 17679), (81, 17721), (86, 17808), (93, 17862), (96, 17877), (102, 17910), (113, 17988), (115, 18003), (121, 18051), (128, 18108), (136, 18204), (140, 18237), (146, 18270), (159, 18378), (169, 18444), (177, 18477), (179, 18486), (180, 18489), (182, 18507), (243, 18789), (251, 18813), (257, 18843), (299, 19002), (314, 19062), (337, 19191), (343, 19239), (350, 19269), (355, 19293), (358, 19305), (360, 19314), (363, 19323), (369, 19347), (378, 19392), (384, 19413), (396, 19488), (400, 19509), (401, 19512), (404, 19521), (414, 19551), (422, 19593), (434, 19653), (435, 19659), (436, 19668), (444, 19701), (447, 19713), (448, 19716), (462, 19779), (467, 19800), (471, 19830), (477, 19860), (482, 19878), (494, 19926), (500, 19950), (504, 19968), (507, 19977), (513, 20013), (520, 20043), (529, 20076), (530, 20082), (531, 20085), (536, 20097), (542, 20118), (557, 20169), (558, 20178), (564, 20214), (574, 20247), (577, 20256), (586, 20286), (589, 20295), (592, 20307), (604, 20346), (612, 20373), (614, 20379), (615, 20382), (618, 20397), (625, 20424), (633, 20454), (641, 20490), (667, 20592), (682, 20655), (690, 20691), (697, 20715), (702, 20733), (712, 20772), (714, 20778), (718, 20793), (722, 20814), (723, 20826), (747, 20958), (758, 21021), (773, 21048), (776, 21066), (782, 21114), (783, 21120), (790, 21192), (804, 21270), (811, 21306), (815, 21324), (824, 21348), (829, 21372), (835, 21417), (840, 21438), (889, 21660),

Gene: GoblinVoyage_19 Start: 13488, Stop: 18716, Start Num: 17

Candidate Starts for GoblinVoyage_19:

(Start: 16 @13467 has 2 MA's), (Start: 17 @13488 has 129 MA's), (Start: 20 @13518 has 3 MA's), (40, 13620), (43, 13671), (58, 13779), (76, 13962), (84, 14088), (87, 14124), (93, 14163), (107, 14253), (149, 14640), (172, 14790), (177, 14814), (188, 14886), (238, 15117), (261, 15195), (264, 15213), (265, 15216), (275, 15249), (300, 15357), (320, 15417), (337, 15498), (347, 15567), (360, 15621), (381, 15708), (382, 15711), (402, 15822), (415, 15858), (418, 15876), (429, 15927), (450, 16029), (453, 16041), (456, 16056), (470, 16125), (471, 16134), (477, 16164), (489, 16209), (496, 16230), (503, 16260), (506, 16272), (507, 16275), (511, 16296), (512, 16305), (520, 16341), (529, 16374), (554, 16458), (561, 16503), (562, 16506), (563, 16509), (577, 16554), (586, 16584), (600, 16629), (604, 16644), (614, 16677), (619, 16698), (621, 16707), (623, 16716), (629, 16740), (630, 16743), (657, 16851), (668, 16893), (670, 16908), (672, 16914), (692, 16995), (706, 17046), (708, 17055), (709, 17058), (710, 17064), (713, 17073), (714, 17076), (717, 17088), (718, 17091), (719, 17100), (721, 17109), (725, 17133), (740, 17202), (747, 17256), (764, 17364), (767, 17379), (772, 17418), (793, 17577), (839, 17811), (856, 17886), (868, 17919), (897, 18123), (904, 18165), (905, 18168), (909, 18189), (914, 18237), (916, 18243), (932, 18351), (941, 18423), (949, 18525), (960, 18678),

Gene: Gordon_26 Start: 21257, Stop: 25849, Start Num: 17

Candidate Starts for Gordon_26:

(Start: 16 @21236 has 2 MA's), (Start: 17 @21257 has 129 MA's), (Start: 20 @21287 has 3 MA's), (28, 21341), (37, 21398), (47, 21476), (57, 21536), (65, 21572), (68, 21602), (76, 21725), (77, 21743), (81,

21785), (93, 21926), (96, 21941), (102, 21974), (113, 22052), (115, 22067), (117, 22088), (118, 22100), (122, 22124), (128, 22172), (136, 22268), (140, 22301), (146, 22334), (151, 22382), (159, 22442), (162, 22451), (168, 22499), (184, 22580), (188, 22613), (195, 22637), (198, 22652), (202, 22664), (234, 22832), (240, 22853), (245, 22871), (256, 22913), (261, 22943), (273, 22994), (278, 23009), (284, 23039), (301, 23111), (303, 23117), (313, 23150), (314, 23153), (337, 23297), (345, 23354), (347, 23366), (360, 23420), (363, 23429), (364, 23432), (369, 23453), (378, 23498), (384, 23519), (391, 23561), (394, 23579), (407, 23636), (414, 23657), (418, 23678), (422, 23699), (434, 23759), (436, 23774), (437, 23777), (443, 23804), (444, 23807), (456, 23858), (471, 23936), (474, 23951), (475, 23954), (479, 23972), (480, 23978), (481, 23981), (482, 23984), (485, 23993), (494, 24029), (497, 24038), (504, 24071), (515, 24125), (516, 24128), (520, 24146), (524, 24158), (531, 24188), (536, 24203), (540, 24212), (542, 24224), (547, 24245), (558, 24284), (569, 24341), (574, 24353), (577, 24362), (589, 24401), (592, 24413), (602, 24443), (604, 24452), (615, 24488), (624, 24527), (625, 24530), (629, 24548), (631, 24554), (646, 24614), (649, 24623), (661, 24677), (662, 24680), (693, 24806), (694, 24809), (700, 24830), (709, 24866), (710, 24872), (713, 24881), (719, 24908), (725, 24941), (728, 24953), (742, 25019), (750, 25076), (759, 25136), (764, 25160), (776, 25238), (777, 25250), (794, 25376), (799, 25409), (800, 25418), (809, 25466), (817, 25499), (821, 25511), (824, 25517), (827, 25538), (829, 25541), (830, 25547), (835, 25586), (841, 25613), (882, 25799), (888, 25826),

Gene: Gravy_29 Start: 20616, Stop: 25730, Start Num: 17

Candidate Starts for Gravy_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (43, 20793), (46, 20829), (47, 20835), (53, 20880), (58, 20901), (65, 20931), (76, 21096), (81, 21156), (85, 21231), (89, 21267), (90, 21282), (93, 21297), (96, 21312), (102, 21345), (112, 21438), (119, 21492), (120, 21495), (146, 21714), (158, 21819), (159, 21822), (170, 21891), (172, 21897), (Start: 208 @22080 has 1 MA's), (219, 22131), (228, 22182), (241, 22236), (242, 22239), (269, 22371), (291, 22473), (295, 22491), (296, 22494), (311, 22569), (323, 22626), (335, 22710), (337, 22719), (353, 22806), (361, 22845), (373, 22893), (378, 22920), (384, 22941), (387, 22950), (390, 22971), (391, 22983), (393, 22992), (394, 23001), (398, 23028), (406, 23055), (407, 23058), (414, 23079), (422, 23121), (428, 23148), (431, 23157), (433, 23172), (434, 23181), (436, 23196), (438, 23208), (441, 23217), (444, 23229), (449, 23250), (452, 23259), (470, 23343), (471, 23352), (474, 23367), (475, 23370), (479, 23388), (482, 23400), (483, 23403), (490, 23430), (497, 23451), (500, 23466), (510, 23508), (512, 23523), (526, 23580), (529, 23592), (534, 23601), (538, 23613), (541, 23625), (542, 23631), (547, 23652), (551, 23664), (557, 23682), (558, 23691), (559, 23706), (560, 23712), (563, 23724), (573, 23766), (574, 23769), (577, 23778), (582, 23799), (584, 23811), (598, 23859), (601, 23868), (608, 23892), (610, 23898), (615, 23916), (616, 23925), (622, 23946), (639, 24015), (644, 24033), (645, 24036), (650, 24054), (680, 24180), (691, 24225), (705, 24276), (736, 24420), (757, 24555), (766, 24606), (778, 24684), (784, 24729), (789, 24792), (793, 24810), (797, 24840), (799, 24846), (809, 24903), (826, 24975), (838, 25035), (842, 25056), (843, 25059), (851, 25110), (853, 25119), (867, 25158), (870, 25170), (883, 25263), (892, 25308), (900, 25383), (906, 25422), (911, 25452), (919, 25509), (936, 25620), (947, 25716),

Gene: Gusicorn_35 Start: 23289, Stop: 28400, Start Num: 17

Candidate Starts for Gusicorn_35:

(Start: 17 @23289 has 129 MA's), (Start: 20 @23319 has 3 MA's), (25, 23364), (47, 23508), (58, 23574), (68, 23634), (69, 23655), (76, 23757), (84, 23883), (87, 23919), (93, 23958), (98, 23985), (102, 24006), (107, 24048), (118, 24168), (130, 24282), (132, 24294), (140, 24369), (146, 24402), (158, 24507), (159, 24510), (228, 24870), (231, 24888), (267, 25044), (288, 25146), (289, 25149), (295, 25176), (303, 25215), (310, 25242), (314, 25263), (319, 25287), (337, 25404), (346, 25467), (347, 25473), (353, 25491), (354, 25497), (360, 25527), (367, 25551), (378, 25605), (385, 25629), (389, 25653), (390, 25656), (393, 25677), (394, 25686), (403, 25731), (406, 25740), (418, 25785), (422, 25806), (425, 25815), (426, 25821), (429, 25836), (431, 25842), (433, 25857), (443, 25911), (444, 25914), (446, 25923), (449, 25935), (452, 25944), (454, 25956), (459, 25977), (461, 25983), (467,

26007), (471, 26037), (474, 26052), (490, 26115), (494, 26127), (496, 26133), (497, 26136), (499, 26148), (500, 26151), (512, 26208), (525, 26262), (526, 26265), (534, 26286), (538, 26298), (539, 26301), (551, 26349), (556, 26364), (557, 26367), (558, 26376), (559, 26391), (560, 26397), (566, 26424), (567, 26427), (569, 26433), (577, 26463), (582, 26484), (584, 26496), (586, 26505), (590, 26517), (598, 26544), (608, 26577), (610, 26583), (615, 26601), (622, 26631), (650, 26739), (671, 26829), (676, 26850), (705, 26961), (717, 27006), (728, 27063), (734, 27096), (757, 27240), (768, 27303), (778, 27369), (781, 27402), (784, 27414), (789, 27477), (794, 27498), (795, 27510), (799, 27531), (831, 27672), (845, 27759), (850, 27777), (859, 27807), (866, 27825), (867, 27828), (869, 27834), (870, 27840), (876, 27867), (892, 27978), (898, 28041), (900, 28053), (911, 28122), (916, 28155), (919, 28179), (937, 28296), (947, 28386),

Gene: Hankly_20 Start: 16415, Stop: 20893, Start Num: 17

Candidate Starts for Hankly_20:

(Start: 16 @16394 has 2 MA's), (Start: 17 @16415 has 129 MA's), (Start: 20 @16445 has 3 MA's), (28, 16499), (37, 16556), (65, 16730), (68, 16760), (75, 16841), (76, 16883), (77, 16901), (81, 16943), (86, 17030), (90, 17069), (93, 17084), (96, 17099), (102, 17132), (113, 17210), (115, 17225), (121, 17273), (123, 17288), (128, 17330), (136, 17426), (140, 17459), (146, 17492), (159, 17600), (169, 17666), (177, 17699), (179, 17708), (180, 17711), (182, 17729), (243, 18011), (251, 18035), (257, 18065), (299, 18224), (314, 18284), (337, 18413), (343, 18461), (350, 18491), (355, 18515), (358, 18527), (360, 18536), (363, 18545), (369, 18569), (378, 18614), (384, 18635), (396, 18710), (404, 18743), (414, 18773), (418, 18794), (422, 18815), (434, 18875), (435, 18881), (443, 18920), (448, 18938), (467, 19022), (471, 19052), (477, 19082), (482, 19100), (494, 19148), (500, 19172), (504, 19190), (507, 19199), (508, 19208), (510, 19214), (513, 19235), (520, 19265), (529, 19298), (530, 19304), (534, 19313), (542, 19340), (549, 19367), (558, 19400), (561, 19427), (563, 19433), (570, 19460), (577, 19478), (586, 19508), (589, 19517), (592, 19529), (594, 19535), (595, 19538), (599, 19550), (604, 19568), (612, 19595), (614, 19601), (631, 19670), (637, 19697), (641, 19712), (667, 19814), (690, 19913), (691, 19916), (693, 19922), (697, 19937), (702, 19955), (712, 19994), (713, 19997), (718, 20015), (723, 20048), (728, 20069), (740, 20126), (747, 20180), (758, 20243), (773, 20270), (776, 20288), (782, 20336), (783, 20342), (790, 20414), (804, 20492), (807, 20507), (815, 20546), (824, 20570), (829, 20594), (835, 20639), (840, 20660), (889, 20882),

Gene: HazuAndZazu_23 Start: 16677, Stop: 22163, Start Num: 2

Candidate Starts for HazuAndZazu_23:

(1, 16656), (Start: 2 @16677 has 30 MA's), (3, 16707), (12, 16851), (40, 17061), (50, 17178), (51, 17181), (57, 17214), (65, 17250), (68, 17280), (76, 17403), (84, 17529), (93, 17604), (102, 17652), (107, 17694), (128, 17883), (149, 18078), (158, 18150), (172, 18228), (190, 18333), (202, 18375), (227, 18510), (262, 18642), (264, 18651), (275, 18687), (286, 18738), (295, 18771), (334, 18924), (337, 18945), (346, 19008), (347, 19014), (349, 19020), (355, 19047), (360, 19068), (363, 19077), (369, 19101), (378, 19146), (381, 19155), (382, 19158), (384, 19167), (396, 19242), (402, 19269), (407, 19284), (408, 19287), (415, 19305), (418, 19323), (422, 19344), (433, 19395), (446, 19461), (450, 19476), (469, 19563), (471, 19581), (476, 19608), (501, 19698), (502, 19701), (511, 19743), (512, 19752), (520, 19788), (525, 19806), (526, 19809), (542, 19863), (543, 19866), (557, 19914), (561, 19950), (568, 19977), (577, 20001), (586, 20031), (604, 20091), (614, 20124), (615, 20127), (618, 20142), (621, 20154), (627, 20178), (637, 20220), (640, 20232), (641, 20235), (655, 20283), (660, 20313), (665, 20328), (672, 20361), (675, 20376), (691, 20439), (712, 20517), (713, 20520), (721, 20556), (733, 20622), (748, 20709), (749, 20712), (764, 20811), (770, 20859), (772, 20865), (793, 21024), (845, 21297), (856, 21333), (876, 21399), (894, 21522), (905, 21615), (909, 21636), (914, 21684), (916, 21690), (917, 21696), (924, 21741), (939, 21849), (941, 21870), (946, 21918), (952, 22005), (959, 22107), (960, 22116),

Gene: Heisenberger_21 Start: 17063, Stop: 21541, Start Num: 17

Candidate Starts for Heisenberger_21:

(Start: 16 @17042 has 2 MA's), (Start: 17 @17063 has 129 MA's), (Start: 20 @17093 has 3 MA's), (23, 17126), (28, 17147), (65, 17378), (68, 17408), (75, 17489), (76, 17531), (77, 17549), (81, 17591), (86, 17678), (93, 17732), (96, 17747), (102, 17780), (113, 17858), (115, 17873), (121, 17921), (128, 17978), (132, 18032), (136, 18074), (137, 18077), (140, 18107), (146, 18140), (159, 18248), (169, 18314), (177, 18347), (179, 18356), (180, 18359), (182, 18377), (243, 18659), (251, 18683), (257, 18713), (299, 18872), (314, 18932), (337, 19061), (343, 19109), (350, 19139), (358, 19175), (360, 19184), (363, 19193), (369, 19217), (378, 19262), (384, 19283), (396, 19358), (404, 19391), (414, 19421), (418, 19442), (422, 19463), (434, 19523), (435, 19529), (443, 19568), (444, 19571), (448, 19586), (462, 19649), (467, 19670), (471, 19700), (477, 19730), (482, 19748), (494, 19796), (500, 19820), (504, 19838), (507, 19847), (508, 19856), (510, 19862), (513, 19883), (520, 19913), (529, 19946), (530, 19952), (531, 19955), (536, 19967), (542, 19988), (557, 20039), (558, 20048), (562, 20078), (564, 20084), (574, 20117), (577, 20126), (586, 20156), (589, 20165), (592, 20177), (604, 20216), (612, 20243), (614, 20249), (615, 20252), (618, 20267), (625, 20294), (629, 20312), (633, 20324), (641, 20360), (667, 20462), (682, 20525), (690, 20561), (691, 20564), (693, 20570), (697, 20585), (702, 20603), (708, 20627), (712, 20642), (713, 20645), (718, 20663), (723, 20696), (728, 20717), (740, 20774), (747, 20828), (749, 20837), (758, 20891), (773, 20918), (776, 20936), (782, 20984), (783, 20990), (790, 21062), (804, 21140), (807, 21155), (815, 21194), (824, 21218), (835, 21287), (840, 21308), (889, 21530),

Gene: Hortihabitatio_33 Start: 22913, Stop: 28030, Start Num: 17

Candidate Starts for Hortihabitatio_33:

(Start: 17 @22913 has 129 MA's), (Start: 20 @22943 has 3 MA's), (25, 22988), (47, 23132), (49, 23141), (57, 23192), (58, 23198), (66, 23237), (68, 23258), (69, 23279), (76, 23381), (84, 23507), (87, 23543), (93, 23582), (102, 23630), (107, 23672), (113, 23744), (118, 23792), (132, 23918), (136, 23960), (140, 23993), (146, 24026), (150, 24062), (155, 24110), (158, 24131), (159, 24134), (212, 24410), (228, 24494), (293, 24794), (295, 24803), (300, 24833), (314, 24890), (337, 25034), (338, 25040), (347, 25103), (353, 25121), (355, 25136), (363, 25166), (378, 25235), (385, 25259), (387, 25265), (388, 25277), (390, 25286), (391, 25298), (393, 25307), (400, 25352), (406, 25370), (418, 25415), (422, 25436), (428, 25463), (433, 25487), (434, 25496), (436, 25511), (441, 25532), (444, 25544), (446, 25553), (449, 25565), (452, 25574), (457, 25592), (459, 25607), (462, 25616), (467, 25637), (471, 25667), (487, 25736), (490, 25745), (494, 25757), (496, 25763), (497, 25766), (500, 25781), (503, 25793), (508, 25817), (510, 25823), (512, 25838), (517, 25865), (524, 25886), (526, 25895), (534, 25916), (542, 25946), (549, 25973), (550, 25976), (557, 25997), (560, 26027), (561, 26033), (566, 26054), (567, 26057), (569, 26063), (577, 26093), (582, 26114), (584, 26126), (590, 26147), (598, 26174), (601, 26183), (608, 26207), (610, 26213), (611, 26216), (615, 26231), (616, 26240), (617, 26243), (622, 26261), (631, 26297), (639, 26330), (642, 26339), (648, 26360), (650, 26369), (679, 26492), (683, 26504), (691, 26540), (697, 26561), (710, 26612), (734, 26726), (747, 26804), (755, 26849), (781, 27032), (784, 27044), (789, 27107), (791, 27119), (794, 27128), (795, 27140), (799, 27161), (806, 27206), (838, 27350), (845, 27389), (859, 27437), (866, 27455), (867, 27458), (870, 27470), (892, 27608), (898, 27671), (900, 27683), (902, 27701), (911, 27752), (920, 27812), (926, 27860), (944, 27965), (947, 28016),

Gene: Hoshi_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Hoshi_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (240, 18047), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (301, 18284), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064),

(476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: HotFries_18 Start: 13486, Stop: 18714, Start Num: 17

Candidate Starts for HotFries_18:

(Start: 16 @13465 has 2 MA's), (Start: 17 @13486 has 129 MA's), (Start: 20 @13516 has 3 MA's), (40, 13618), (43, 13669), (58, 13777), (76, 13960), (84, 14086), (87, 14122), (93, 14161), (107, 14251), (149, 14638), (172, 14788), (177, 14812), (188, 14884), (238, 15115), (261, 15193), (264, 15211), (265, 15214), (275, 15247), (300, 15355), (320, 15415), (337, 15496), (347, 15565), (360, 15619), (366, 15640), (381, 15706), (382, 15709), (402, 15820), (415, 15856), (418, 15874), (429, 15925), (450, 16027), (453, 16039), (456, 16054), (470, 16123), (471, 16132), (477, 16162), (496, 16228), (503, 16258), (506, 16270), (507, 16273), (511, 16294), (512, 16303), (520, 16339), (529, 16372), (554, 16456), (561, 16501), (562, 16504), (563, 16507), (577, 16552), (586, 16582), (600, 16627), (604, 16642), (614, 16675), (619, 16696), (621, 16705), (623, 16714), (629, 16738), (630, 16741), (637, 16771), (640, 16783), (657, 16849), (662, 16870), (668, 16891), (670, 16906), (672, 16912), (706, 17044), (708, 17053), (710, 17062), (713, 17071), (714, 17074), (717, 17086), (718, 17089), (719, 17098), (721, 17107), (740, 17200), (747, 17254), (764, 17362), (767, 17377), (772, 17416), (793, 17575), (839, 17809), (856, 17884), (904, 18163), (905, 18166), (909, 18187), (914, 18235), (916, 18241), (932, 18349), (941, 18421), (945, 18460), (946, 18469), (949, 18523), (960, 18676),

Gene: Hydrus_33 Start: 24017, Stop: 29128, Start Num: 17

Candidate Starts for Hydrus_33:

(Start: 17 @24017 has 129 MA's), (Start: 20 @24047 has 3 MA's), (25, 24092), (47, 24236), (57, 24296), (58, 24302), (68, 24362), (69, 24383), (76, 24485), (84, 24611), (87, 24647), (93, 24686), (102, 24734), (107, 24776), (113, 24848), (118, 24896), (132, 25022), (140, 25097), (141, 25109), (146, 25130), (154, 25202), (158, 25235), (159, 25238), (179, 25346), (228, 25598), (255, 25703), (267, 25772), (272, 25793), (288, 25874), (289, 25877), (295, 25904), (303, 25943), (310, 25970), (334, 26111), (337, 26132), (346, 26195), (347, 26201), (353, 26219), (354, 26225), (364, 26267), (367, 26279), (369, 26288), (378, 26333), (388, 26375), (390, 26384), (391, 26396), (393, 26405), (394, 26414), (418, 26513), (422, 26534), (425, 26543), (430, 26567), (431, 26570), (443, 26639), (444, 26642), (446, 26651), (451, 26669), (452, 26672), (454, 26684), (459, 26705), (461, 26711), (462, 26714), (467, 26735), (471, 26765), (474, 26780), (477, 26795), (490, 26843), (494, 26855), (496, 26861), (497, 26864), (499, 26876), (500, 26879), (512, 26936), (525, 26990), (534, 27014), (538, 27026), (539, 27029), (550, 27074), (551, 27077), (556, 27092), (557, 27095), (558, 27104), (559, 27119), (560, 27125), (561, 27131), (566, 27152), (567, 27155), (571, 27167), (574, 27182), (577, 27191), (582, 27212), (584, 27224), (590, 27245), (598, 27272), (608, 27305), (610, 27311), (615, 27329), (622, 27359), (632, 27398), (650, 27467), (676, 27578), (679, 27590), (697, 27659), (717, 27734), (734, 27824), (757, 27968), (768, 28031), (778, 28097), (781, 28130), (784, 28142), (789, 28205), (794, 28226), (795, 28238), (799, 28259), (809, 28316), (831, 28400), (845, 28487), (850, 28505), (859, 28535), (866, 28553), (867, 28556), (869, 28562), (870, 28568), (876, 28595), (892, 28706), (900, 28781), (911, 28850), (916, 28883), (919, 28907), (937, 29024), (947, 29114),

Gene: IceWarrior_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for IceWarrior_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (50, 16661), (65, 16733), (68, 16763), (76, 16886), (84, 17012), (93, 17087), (102, 17135), (107, 17177), (128, 17366),

(149, 17561), (158, 17633), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (240, 18047), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (301, 18284), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Indigenous_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Indigenous_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (262, 18125), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Ingrid_26 Start: 19877, Stop: 24463, Start Num: 17

Candidate Starts for Ingrid_26:

(Start: 16 @19856 has 2 MA's), (Start: 17 @19877 has 129 MA's), (Start: 20 @19907 has 3 MA's), (28, 19961), (37, 20018), (44, 20066), (57, 20156), (65, 20192), (68, 20222), (76, 20345), (81, 20405), (85, 20480), (93, 20546), (96, 20561), (102, 20594), (113, 20672), (115, 20687), (117, 20708), (118, 20720), (124, 20765), (128, 20792), (131, 20837), (136, 20888), (140, 20921), (146, 20954), (162, 21071), (168, 21119), (169, 21128), (191, 21245), (195, 21257), (196, 21260), (239, 21467), (256, 21527), (278, 21623), (290, 21677), (301, 21725), (303, 21731), (314, 21767), (337, 21911), (345, 21968), (347, 21980), (360, 22034), (363, 22043), (364, 22046), (369, 22067), (370, 22070), (379, 22115), (384, 22133), (396, 22208), (397, 22211), (399, 22223), (407, 22250), (414, 22271), (417, 22289), (418, 22292), (422, 22313), (434, 22373), (436, 22388), (437, 22391), (442, 22415), (443, 22418), (444, 22421), (451, 22448), (456, 22472), (458, 22484), (471, 22550), (474, 22565), (475, 22568), (479, 22586), (480, 22592), (481, 22595), (482, 22598), (494, 22643), (495, 22646), (497, 22652), (499, 22664), (504, 22685), (515, 22739), (516, 22742), (523, 22769), (530, 22799), (536, 22817), (540, 22826), (542, 22838), (547, 22859), (557, 22889), (558, 22898), (566, 22946), (569, 22955), (571, 22961), (577, 22976), (579, 22982), (586, 23006), (589, 23015), (602, 23057), (604, 23066), (615, 23102), (625, 23144), (629, 23162), (631, 23168), (636, 23192), (646, 23228), (660,

23288), (672, 23336), (673, 23345), (682, 23375), (700, 23444), (710, 23486), (713, 23495), (743, 23642), (744, 23654), (750, 23690), (763, 23765), (769, 23807), (776, 23852), (777, 23864), (783, 23906), (804, 24056), (809, 24080), (821, 24125), (823, 24128), (824, 24131), (829, 24155), (832, 24170), (835, 24200), (841, 24227), (885, 24422), (888, 24440),

Gene: Inked_28 Start: 20894, Stop: 25474, Start Num: 17

Candidate Starts for Inked_28:

(Start: 16 @20873 has 2 MA's), (Start: 17 @20894 has 129 MA's), (Start: 20 @20924 has 3 MA's), (37, 21035), (57, 21173), (65, 21209), (68, 21239), (76, 21362), (77, 21380), (81, 21422), (93, 21563), (96, 21578), (102, 21611), (113, 21689), (115, 21704), (117, 21725), (118, 21737), (128, 21809), (140, 21938), (146, 21971), (159, 22079), (162, 22088), (175, 22166), (180, 22190), (199, 22292), (204, 22313), (216, 22376), (241, 22493), (256, 22544), (261, 22574), (278, 22640), (301, 22742), (303, 22748), (306, 22763), (307, 22766), (314, 22784), (337, 22928), (344, 22982), (345, 22985), (355, 23030), (363, 23060), (364, 23063), (369, 23084), (370, 23087), (384, 23150), (386, 23156), (395, 23216), (396, 23225), (399, 23240), (407, 23267), (409, 23273), (414, 23288), (418, 23309), (422, 23330), (434, 23390), (436, 23405), (437, 23408), (442, 23432), (443, 23435), (444, 23438), (456, 23489), (463, 23522), (471, 23567), (474, 23582), (475, 23585), (480, 23609), (482, 23615), (485, 23624), (494, 23660), (497, 23669), (504, 23702), (515, 23756), (516, 23759), (520, 23777), (531, 23819), (534, 23828), (536, 23834), (540, 23843), (542, 23855), (543, 23858), (546, 23870), (547, 23876), (549, 23882), (550, 23885), (558, 23915), (568, 23969), (569, 23972), (576, 23990), (577, 23993), (578, 23996), (586, 24023), (587, 24026), (604, 24083), (615, 24119), (623, 24155), (624, 24158), (625, 24161), (631, 24185), (632, 24188), (636, 24209), (647, 24248), (648, 24251), (660, 24305), (672, 24353), (673, 24362), (700, 24461), (710, 24503), (712, 24509), (713, 24512), (721, 24548), (742, 24650), (744, 24671), (750, 24707), (756, 24746), (769, 24824), (777, 24881), (809, 25097), (821, 25142), (835, 25217), (864, 25316), (882, 25424), (888, 25451),

Gene: Issa_26 Start: 19961, Stop: 24553, Start Num: 17

Candidate Starts for Issa_26:

(Start: 16 @19940 has 2 MA's), (Start: 17 @19961 has 129 MA's), (Start: 20 @19991 has 3 MA's), (28, 20045), (32, 20066), (37, 20102), (47, 20180), (57, 20240), (63, 20264), (65, 20276), (68, 20306), (71, 20357), (75, 20387), (76, 20429), (77, 20447), (81, 20489), (83, 20519), (85, 20564), (86, 20576), (93, 20630), (96, 20645), (98, 20657), (102, 20678), (115, 20771), (118, 20804), (121, 20819), (127, 20867), (146, 21038), (161, 21152), (162, 21155), (168, 21203), (188, 21317), (195, 21341), (198, 21356), (234, 21536), (239, 21551), (240, 21557), (245, 21575), (261, 21647), (278, 21713), (301, 21815), (303, 21821), (313, 21854), (314, 21857), (321, 21884), (337, 22001), (345, 22058), (347, 22070), (360, 22124), (363, 22133), (364, 22136), (369, 22157), (384, 22223), (405, 22334), (407, 22340), (414, 22361), (417, 22379), (422, 22403), (434, 22463), (436, 22478), (437, 22481), (443, 22508), (444, 22511), (471, 22640), (474, 22655), (475, 22658), (479, 22676), (480, 22682), (481, 22685), (485, 22697), (494, 22733), (497, 22742), (504, 22775), (515, 22829), (516, 22832), (520, 22850), (524, 22862), (531, 22892), (536, 22907), (540, 22916), (542, 22928), (558, 22988), (569, 23045), (574, 23057), (577, 23066), (589, 23105), (592, 23117), (602, 23147), (604, 23156), (624, 23231), (625, 23234), (629, 23252), (646, 23318), (648, 23324), (649, 23327), (661, 23381), (662, 23384), (693, 23510), (694, 23513), (700, 23534), (708, 23567), (710, 23576), (728, 23657), (734, 23690), (742, 23723), (750, 23780), (759, 23840), (764, 23864), (776, 23942), (777, 23954), (794, 24080), (800, 24122), (809, 24170), (817, 24203), (821, 24215), (824, 24221), (827, 24242), (829, 24245), (830, 24251), (835, 24290), (841, 24317), (882, 24503), (888, 24530),

Gene: JEGGS_21 Start: 17117, Stop: 21595, Start Num: 17

Candidate Starts for JEGGS_21:

(Start: 16 @17096 has 2 MA's), (Start: 17 @17117 has 129 MA's), (Start: 20 @17147 has 3 MA's), (23, 17180), (28, 17201), (47, 17336), (49, 17345), (54, 17384), (65, 17432), (68, 17462), (75, 17543), (76, 17585), (77, 17603), (81, 17645), (86, 17732), (93, 17786), (96, 17801), (102, 17834), (113, 17912), (115, 17927), (121, 17975), (128, 18032), (132, 18086), (136, 18128), (140, 18161), (146, 18194),

(159, 18302), (169, 18368), (177, 18401), (179, 18410), (180, 18413), (182, 18431), (243, 18713), (251, 18737), (257, 18767), (299, 18926), (314, 18986), (337, 19115), (343, 19163), (350, 19193), (358, 19229), (360, 19238), (363, 19247), (369, 19271), (378, 19316), (384, 19337), (396, 19412), (404, 19445), (414, 19475), (418, 19496), (422, 19517), (434, 19577), (435, 19583), (443, 19622), (444, 19625), (448, 19640), (462, 19703), (467, 19724), (471, 19754), (477, 19784), (482, 19802), (494, 19850), (500, 19874), (504, 19892), (507, 19901), (508, 19910), (510, 19916), (513, 19937), (520, 19967), (529, 20000), (530, 20006), (531, 20009), (536, 20021), (542, 20042), (557, 20093), (558, 20102), (562, 20132), (564, 20138), (574, 20171), (577, 20180), (586, 20210), (589, 20219), (592, 20231), (604, 20270), (612, 20297), (614, 20303), (615, 20306), (618, 20321), (625, 20348), (629, 20366), (633, 20378), (641, 20414), (667, 20516), (682, 20579), (690, 20615), (691, 20618), (693, 20624), (697, 20639), (702, 20657), (708, 20681), (712, 20696), (713, 20699), (718, 20717), (723, 20750), (728, 20771), (740, 20828), (747, 20882), (749, 20891), (758, 20945), (773, 20972), (776, 20990), (782, 21038), (783, 21044), (790, 21116), (804, 21194), (807, 21209), (815, 21248), (824, 21272), (835, 21341), (840, 21362), (865, 21455), (889, 21584),

Gene: Jaylociraptor_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Jaylociraptor_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (262, 18125), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Jazzy4900_24 Start: 18500, Stop: 23560, Start Num: 4

Candidate Starts for Jazzy4900_24:

(4, 18500), (5, 18530), (8, 18584), (11, 18605), (29, 18812), (31, 18821), (32, 18824), (47, 18941), (52, 18974), (58, 19007), (66, 19046), (69, 19088), (76, 19190), (78, 19226), (83, 19280), (84, 19316), (86, 19337), (93, 19391), (115, 19523), (116, 19535), (117, 19544), (122, 19580), (140, 19757), (146, 19790), (154, 19862), (158, 19895), (159, 19898), (174, 19982), (207, 20207), (211, 20243), (214, 20267), (217, 20279), (236, 20405), (271, 20573), (297, 20726), (298, 20729), (317, 20852), (318, 20858), (327, 20909), (332, 20972), (337, 21026), (341, 21056), (355, 21128), (363, 21158), (365, 21167), (369, 21182), (378, 21227), (384, 21248), (386, 21254), (393, 21299), (414, 21386), (422, 21428), (436, 21503), (453, 21572), (467, 21635), (471, 21665), (482, 21713), (485, 21722), (499, 21782), (520, 21878), (529, 21911), (531, 21920), (536, 21932), (537, 21935), (542, 21953), (547, 21974), (557, 22004), (558, 22013), (561, 22040), (569, 22070), (577, 22091), (591, 22136), (599, 22163), (604, 22181), (625, 22259), (636, 22307), (637, 22310), (647, 22346), (657, 22388), (665, 22418), (666, 22421), (670, 22445), (672, 22451), (673, 22460), (695, 22541), (708, 22592), (713, 22610), (720, 22643), (721, 22646), (733, 22712), (747, 22793), (769, 22922), (776, 22967), (787, 23057), (799, 23138), (800, 23147), (804, 23171), (813, 23216), (819, 23234), (824, 23249), (835, 23318), (865, 23429),

Gene: Jodelie19_33 Start: 24936, Stop: 30050, Start Num: 17

Candidate Starts for Jodelie19_33:

(Start: 17 @24936 has 129 MA's), (Start: 20 @24966 has 3 MA's), (25, 25011), (47, 25155), (58, 25221), (68, 25281), (69, 25302), (76, 25404), (84, 25530), (87, 25566), (93, 25605), (102, 25653), (107, 25695), (113, 25767), (118, 25815), (132, 25941), (140, 26016), (141, 26028), (146, 26049), (158, 26154), (159, 26157), (202, 26379), (214, 26445), (231, 26535), (241, 26571), (255, 26622), (262, 26670), (265, 26682), (295, 26826), (303, 26865), (310, 26892), (337, 27054), (343, 27102), (346, 27117), (347, 27123), (353, 27141), (364, 27189), (378, 27255), (390, 27306), (391, 27318), (394, 27336), (406, 27390), (418, 27435), (422, 27456), (425, 27465), (429, 27486), (433, 27507), (443, 27561), (444, 27564), (446, 27573), (452, 27594), (454, 27606), (459, 27627), (461, 27633), (465, 27651), (471, 27687), (477, 27717), (490, 27765), (494, 27777), (496, 27783), (497, 27786), (499, 27798), (500, 27801), (505, 27822), (512, 27858), (525, 27912), (526, 27915), (529, 27927), (534, 27936), (538, 27948), (539, 27951), (551, 27999), (556, 28014), (557, 28017), (558, 28026), (560, 28047), (566, 28074), (567, 28077), (573, 28101), (577, 28113), (582, 28134), (584, 28146), (586, 28155), (590, 28167), (598, 28194), (601, 28203), (608, 28227), (610, 28233), (615, 28251), (628, 28305), (632, 28320), (650, 28389), (676, 28500), (705, 28611), (717, 28656), (734, 28746), (755, 28869), (757, 28890), (768, 28953), (771, 28980), (781, 29052), (784, 29064), (785, 29073), (789, 29127), (794, 29148), (795, 29160), (831, 29322), (845, 29409), (850, 29427), (859, 29457), (866, 29475), (867, 29478), (870, 29490), (876, 29517), (892, 29628), (900, 29703), (908, 29751), (916, 29805), (920, 29832), (937, 29946), (947, 30036),

Gene: JoyLin_26 Start: 20566, Stop: 25143, Start Num: 17

Candidate Starts for JoyLin_26:

(Start: 17 @20566 has 129 MA's), (Start: 20 @20599 has 3 MA's), (43, 20746), (54, 20836), (55, 20839), (76, 21034), (84, 21160), (93, 21235), (102, 21283), (107, 21325), (118, 21445), (131, 21562), (141, 21658), (172, 21862), (175, 21874), (187, 21955), (215, 22090), (233, 22183), (249, 22246), (260, 22285), (276, 22348), (280, 22363), (331, 22567), (337, 22618), (353, 22705), (359, 22735), (362, 22747), (363, 22750), (366, 22762), (369, 22774), (375, 22801), (385, 22843), (392, 22888), (411, 22969), (413, 22975), (418, 22999), (420, 23005), (433, 23071), (438, 23107), (445, 23131), (453, 23164), (458, 23191), (460, 23200), (464, 23218), (469, 23239), (474, 23272), (480, 23299), (481, 23302), (494, 23353), (502, 23383), (504, 23395), (520, 23470), (526, 23491), (528, 23497), (532, 23512), (557, 23596), (558, 23605), (561, 23632), (577, 23683), (588, 23719), (604, 23773), (625, 23851), (648, 23941), (656, 23971), (664, 24007), (672, 24043), (682, 24082), (696, 24139), (702, 24160), (708, 24184), (709, 24187), (712, 24199), (714, 24205), (732, 24295), (738, 24325), (739, 24328), (740, 24331), (748, 24391), (752, 24406), (756, 24436), (760, 24460), (776, 24559), (789, 24679), (790, 24685), (810, 24787), (812, 24799), (814, 24808), (835, 24904), (837, 24907), (887, 25132),

Gene: JulesRay_31 Start: 20535, Stop: 25637, Start Num: 17

Candidate Starts for JulesRay_31:

(Start: 17 @20535 has 129 MA's), (Start: 20 @20565 has 3 MA's), (42, 20703), (47, 20754), (49, 20763), (50, 20778), (53, 20799), (58, 20820), (65, 20850), (68, 20880), (69, 20901), (76, 21003), (81, 21063), (85, 21138), (86, 21150), (89, 21174), (93, 21204), (96, 21219), (102, 21252), (107, 21294), (112, 21345), (119, 21399), (120, 21402), (130, 21501), (133, 21525), (146, 21621), (155, 21705), (158, 21726), (159, 21729), (170, 21798), (172, 21804), (173, 21810), (Start: 208 @21987 has 1 MA's), (219, 22038), (228, 22089), (241, 22143), (242, 22146), (269, 22278), (278, 22317), (295, 22398), (296, 22401), (311, 22476), (323, 22533), (335, 22617), (337, 22626), (347, 22695), (349, 22701), (353, 22713), (355, 22728), (356, 22731), (361, 22752), (373, 22800), (378, 22827), (384, 22848), (387, 22857), (390, 22878), (391, 22890), (393, 22899), (394, 22908), (406, 22962), (407, 22965), (414, 22986), (422, 23028), (431, 23064), (433, 23079), (434, 23088), (436, 23103), (438, 23115), (441, 23124), (449, 23157), (452, 23166), (470, 23250), (471, 23259), (474, 23274), (479, 23295), (490, 23337), (497, 23358), (500, 23373), (502, 23379), (510, 23415), (512, 23430), (526, 23487),

(529, 23499), (534, 23508), (538, 23520), (541, 23532), (542, 23538), (547, 23559), (551, 23571), (557, 23589), (558, 23598), (559, 23613), (560, 23619), (563, 23631), (573, 23673), (574, 23676), (577, 23685), (582, 23706), (584, 23718), (598, 23766), (601, 23775), (608, 23799), (610, 23805), (615, 23823), (616, 23832), (639, 23922), (644, 23940), (645, 23943), (650, 23961), (691, 24132), (705, 24183), (736, 24327), (757, 24462), (766, 24513), (784, 24636), (789, 24699), (797, 24747), (799, 24753), (800, 24762), (809, 24810), (826, 24882), (838, 24942), (842, 24963), (843, 24966), (851, 25017), (853, 25026), (859, 25044), (867, 25065), (870, 25077), (883, 25170), (892, 25215), (900, 25290), (902, 25308), (906, 25329), (919, 25416), (936, 25527), (947, 25623),

Gene: Kardashian_22 Start: 16096, Stop: 21585, Start Num: 2

Candidate Starts for Kardashian_22:

(1, 16075), (Start: 2 @16096 has 30 MA's), (3, 16126), (12, 16270), (18, 16354), (22, 16405), (51, 16612), (65, 16681), (76, 16834), (78, 16870), (84, 16960), (93, 17035), (102, 17083), (107, 17125), (128, 17317), (133, 17383), (149, 17512), (161, 17593), (172, 17662), (187, 17755), (204, 17818), (Start: 208 @17845 has 1 MA's), (232, 17968), (264, 18085), (265, 18088), (267, 18097), (287, 18175), (295, 18205), (314, 18277), (326, 18292), (337, 18367), (346, 18430), (347, 18436), (351, 18445), (363, 18499), (381, 18577), (382, 18580), (402, 18691), (415, 18727), (418, 18745), (433, 18817), (439, 18856), (450, 18898), (461, 18949), (470, 18994), (487, 19072), (504, 19135), (506, 19141), (511, 19165), (512, 19174), (519, 19207), (520, 19210), (561, 19372), (562, 19375), (563, 19378), (566, 19393), (574, 19414), (577, 19423), (595, 19483), (600, 19498), (604, 19513), (614, 19546), (616, 19558), (619, 19567), (630, 19612), (633, 19621), (640, 19654), (641, 19657), (646, 19675), (672, 19783), (692, 19864), (694, 19870), (706, 19915), (713, 19942), (719, 19969), (721, 19978), (733, 20044), (748, 20131), (749, 20134), (754, 20167), (764, 20233), (770, 20281), (772, 20287), (777, 20323), (793, 20446), (839, 20680), (871, 20806), (885, 20893), (896, 20974), (898, 20995), (905, 21037), (909, 21058), (916, 21112), (924, 21163), (931, 21211), (938, 21265), (940, 21280), (955, 21454),

Gene: Kardesai_20 Start: 16796, Stop: 21274, Start Num: 17

Candidate Starts for Kardesai_20:

(Start: 16 @16775 has 2 MA's), (Start: 17 @16796 has 129 MA's), (Start: 20 @16826 has 3 MA's), (28, 16880), (37, 16937), (65, 17111), (68, 17141), (75, 17222), (76, 17264), (77, 17282), (81, 17324), (86, 17411), (90, 17450), (93, 17465), (96, 17480), (102, 17513), (113, 17591), (115, 17606), (121, 17654), (123, 17669), (128, 17711), (136, 17807), (140, 17840), (146, 17873), (159, 17981), (169, 18047), (177, 18080), (179, 18089), (180, 18092), (182, 18110), (243, 18392), (251, 18416), (257, 18446), (299, 18605), (314, 18665), (337, 18794), (343, 18842), (350, 18872), (355, 18896), (358, 18908), (360, 18917), (363, 18926), (369, 18950), (378, 18995), (384, 19016), (396, 19091), (404, 19124), (414, 19154), (418, 19175), (422, 19196), (434, 19256), (435, 19262), (443, 19301), (448, 19319), (467, 19403), (471, 19433), (477, 19463), (482, 19481), (494, 19529), (500, 19553), (504, 19571), (507, 19580), (508, 19589), (510, 19595), (513, 19616), (520, 19646), (529, 19679), (530, 19685), (534, 19694), (542, 19721), (549, 19748), (558, 19781), (561, 19808), (563, 19814), (570, 19841), (577, 19859), (586, 19889), (589, 19898), (592, 19910), (594, 19916), (595, 19919), (599, 19931), (604, 19949), (612, 19976), (614, 19982), (631, 20051), (637, 20078), (641, 20093), (667, 20195), (690, 20294), (691, 20297), (693, 20303), (697, 20318), (702, 20336), (712, 20375), (713, 20378), (718, 20396), (723, 20429), (728, 20450), (740, 20507), (747, 20561), (758, 20624), (773, 20651), (776, 20669), (782, 20717), (783, 20723), (790, 20795), (804, 20873), (807, 20888), (815, 20927), (824, 20951), (829, 20975), (835, 21020), (840, 21041), (889, 21263),

Gene: KeaneyLin_20 Start: 17193, Stop: 21671, Start Num: 17

Candidate Starts for KeaneyLin_20:

(Start: 16 @17172 has 2 MA's), (Start: 17 @17193 has 129 MA's), (Start: 20 @17223 has 3 MA's), (28, 17277), (37, 17334), (65, 17508), (68, 17538), (75, 17619), (76, 17661), (77, 17679), (81, 17721), (86, 17808), (93, 17862), (96, 17877), (102, 17910), (113, 17988), (115, 18003), (121, 18051), (128, 18108), (136, 18204), (140, 18237), (146, 18270), (159, 18378), (169, 18444), (177, 18477), (179,

18486), (180, 18489), (182, 18507), (243, 18789), (251, 18813), (257, 18843), (299, 19002), (314, 19062), (337, 19191), (343, 19239), (350, 19269), (355, 19293), (358, 19305), (360, 19314), (363, 19323), (369, 19347), (378, 19392), (384, 19413), (396, 19488), (400, 19509), (401, 19512), (404, 19521), (414, 19551), (422, 19593), (434, 19653), (435, 19659), (436, 19668), (444, 19701), (447, 19713), (448, 19716), (462, 19779), (467, 19800), (471, 19830), (477, 19860), (482, 19878), (494, 19926), (500, 19950), (504, 19968), (507, 19977), (513, 20013), (520, 20043), (529, 20076), (530, 20082), (531, 20085), (536, 20097), (542, 20118), (557, 20169), (558, 20178), (564, 20214), (574, 20247), (577, 20256), (586, 20286), (589, 20295), (592, 20307), (604, 20346), (612, 20373), (614, 20379), (615, 20382), (618, 20397), (625, 20424), (633, 20454), (641, 20490), (667, 20592), (682, 20655), (690, 20691), (697, 20715), (702, 20733), (712, 20772), (714, 20778), (718, 20793), (722, 20814), (723, 20826), (747, 20958), (758, 21021), (773, 21048), (776, 21066), (782, 21114), (783, 21120), (790, 21192), (804, 21270), (811, 21306), (815, 21324), (824, 21348), (829, 21372), (835, 21417), (840, 21438), (889, 21660),

Gene: Kenosha_32 Start: 24052, Stop: 29163, Start Num: 17

Candidate Starts for Kenosha_32:

(Start: 17 @24052 has 129 MA's), (Start: 20 @24082 has 3 MA's), (25, 24127), (47, 24271), (57, 24331), (58, 24337), (68, 24397), (69, 24418), (76, 24520), (83, 24610), (84, 24646), (87, 24682), (93, 24721), (98, 24748), (102, 24769), (107, 24811), (113, 24883), (118, 24931), (132, 25057), (140, 25132), (141, 25144), (146, 25165), (158, 25270), (159, 25273), (179, 25381), (228, 25633), (255, 25738), (267, 25807), (272, 25828), (288, 25909), (289, 25912), (295, 25939), (303, 25978), (310, 26005), (334, 26146), (337, 26167), (346, 26230), (347, 26236), (353, 26254), (354, 26260), (364, 26302), (367, 26314), (369, 26323), (378, 26368), (390, 26419), (391, 26431), (393, 26440), (394, 26449), (418, 26548), (422, 26569), (425, 26578), (430, 26602), (431, 26605), (432, 26611), (443, 26674), (444, 26677), (446, 26686), (449, 26698), (451, 26704), (452, 26707), (454, 26719), (459, 26740), (461, 26746), (462, 26749), (467, 26770), (471, 26800), (474, 26815), (477, 26830), (490, 26878), (494, 26890), (496, 26896), (497, 26899), (499, 26911), (500, 26914), (512, 26971), (525, 27025), (526, 27028), (534, 27049), (538, 27061), (539, 27064), (550, 27109), (551, 27112), (556, 27127), (557, 27130), (558, 27139), (559, 27154), (560, 27160), (561, 27166), (566, 27187), (567, 27190), (571, 27202), (574, 27217), (577, 27226), (582, 27247), (584, 27259), (590, 27280), (598, 27307), (608, 27340), (610, 27346), (615, 27364), (622, 27394), (632, 27433), (679, 27625), (697, 27694), (717, 27769), (734, 27859), (757, 28003), (778, 28132), (781, 28165), (784, 28177), (785, 28186), (789, 28240), (794, 28261), (795, 28273), (797, 28288), (809, 28351), (831, 28435), (845, 28522), (850, 28540), (851, 28543), (859, 28570), (866, 28588), (867, 28591), (869, 28597), (870, 28603), (876, 28630), (892, 28741), (900, 28816), (911, 28885), (916, 28918), (919, 28942), (937, 29059), (947, 29149),

Gene: Kerry_29 Start: 20616, Stop: 25730, Start Num: 17

Candidate Starts for Kerry_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (43, 20793), (46, 20829), (47, 20835), (53, 20880), (58, 20901), (65, 20931), (76, 21096), (81, 21156), (85, 21231), (89, 21267), (90, 21282), (93, 21297), (96, 21312), (102, 21345), (112, 21438), (119, 21492), (120, 21495), (146, 21714), (158, 21819), (159, 21822), (170, 21891), (172, 21897), (Start: 208 @22080 has 1 MA's), (219, 22131), (228, 22182), (241, 22236), (242, 22239), (269, 22371), (291, 22473), (295, 22491), (296, 22494), (311, 22569), (323, 22626), (335, 22710), (337, 22719), (353, 22806), (361, 22845), (373, 22893), (378, 22920), (384, 22941), (387, 22950), (390, 22971), (391, 22983), (393, 22992), (394, 23001), (398, 23028), (406, 23055), (407, 23058), (414, 23079), (422, 23121), (428, 23148), (431, 23157), (433, 23172), (434, 23181), (436, 23196), (438, 23208), (441, 23217), (444, 23229), (449, 23250), (452, 23259), (470, 23343), (471, 23352), (474, 23367), (475, 23370), (479, 23388), (482, 23400), (483, 23403), (490, 23430), (497, 23451), (500, 23466), (510, 23508), (512, 23523), (526, 23580), (529, 23592), (534, 23601), (538, 23613), (541, 23625), (542, 23631), (547, 23652), (551, 23664), (557, 23682), (558, 23691), (559, 23706), (560, 23712), (563, 23724), (573, 23766), (574, 23769), (577, 23778), (582, 23799), (584, 23811), (598, 23859), (601, 23868), (608, 23892), (610,

23898), (615, 23916), (616, 23925), (622, 23946), (639, 24015), (644, 24033), (645, 24036), (650, 24054), (680, 24180), (691, 24225), (705, 24276), (736, 24420), (757, 24555), (766, 24606), (778, 24684), (784, 24729), (789, 24792), (793, 24810), (797, 24840), (799, 24846), (809, 24903), (826, 24975), (838, 25035), (842, 25056), (843, 25059), (851, 25110), (853, 25119), (867, 25158), (870, 25170), (883, 25263), (892, 25308), (900, 25383), (906, 25422), (911, 25452), (919, 25509), (936, 25620), (947, 25716),

Gene: KevinMinion_26 Start: 20189, Stop: 24733, Start Num: 29

Candidate Starts for KevinMinion_26:

(Start: 16 @20075 has 2 MA's), (Start: 17 @20096 has 129 MA's), (Start: 20 @20126 has 3 MA's), (28, 20180), (29, 20189), (58, 20459), (59, 20462), (68, 20519), (69, 20540), (75, 20600), (76, 20642), (81, 20702), (86, 20789), (90, 20828), (93, 20843), (96, 20858), (102, 20891), (106, 20930), (107, 20933), (113, 20969), (115, 20984), (121, 21032), (158, 21356), (162, 21368), (170, 21428), (180, 21470), (188, 21530), (189, 21536), (192, 21545), (197, 21560), (198, 21569), (219, 21668), (220, 21680), (221, 21689), (223, 21701), (296, 21986), (310, 22046), (314, 22055), (337, 22196), (343, 22244), (348, 22268), (351, 22274), (360, 22319), (363, 22328), (369, 22352), (373, 22370), (383, 22415), (384, 22418), (387, 22427), (396, 22493), (407, 22535), (411, 22547), (414, 22556), (418, 22577), (429, 22628), (434, 22658), (436, 22673), (446, 22715), (451, 22733), (461, 22781), (462, 22784), (472, 22841), (499, 22949), (502, 22958), (512, 23009), (520, 23045), (529, 23078), (531, 23087), (536, 23099), (542, 23120), (544, 23126), (549, 23147), (557, 23171), (558, 23180), (574, 23249), (575, 23252), (576, 23255), (577, 23258), (586, 23288), (592, 23309), (599, 23330), (604, 23348), (607, 23357), (612, 23375), (627, 23435), (635, 23468), (638, 23483), (640, 23489), (641, 23492), (654, 23537), (660, 23570), (662, 23576), (667, 23594), (696, 23714), (697, 23717), (702, 23735), (721, 23813), (725, 23837), (740, 23906), (747, 23960), (769, 24089), (776, 24134), (801, 24317), (804, 24338), (809, 24362), (824, 24413), (835, 24482), (840, 24500),

Gene: Kinny_29 Start: 20843, Stop: 25486, Start Num: 17

Candidate Starts for Kinny_29:

(Start: 16 @20822 has 2 MA's), (Start: 17 @20843 has 129 MA's), (Start: 20 @20873 has 3 MA's), (28, 20927), (32, 20948), (37, 20984), (47, 21152), (57, 21212), (68, 21278), (69, 21299), (76, 21401), (77, 21419), (81, 21461), (85, 21536), (86, 21548), (93, 21602), (96, 21617), (102, 21650), (113, 21728), (115, 21743), (126, 21833), (132, 21902), (146, 22010), (152, 22064), (158, 22115), (159, 22118), (170, 22187), (180, 22229), (188, 22289), (189, 22295), (192, 22304), (197, 22319), (198, 22328), (219, 22427), (220, 22439), (223, 22460), (277, 22667), (282, 22691), (296, 22745), (314, 22814), (337, 22955), (348, 23027), (351, 23033), (360, 23078), (362, 23084), (363, 23087), (369, 23111), (373, 23129), (384, 23177), (387, 23186), (407, 23294), (414, 23315), (418, 23336), (428, 23384), (434, 23417), (436, 23432), (441, 23453), (451, 23492), (474, 23609), (499, 23708), (500, 23711), (512, 23768), (517, 23795), (520, 23804), (529, 23837), (531, 23846), (536, 23858), (557, 23930), (558, 23939), (566, 23987), (574, 24008), (576, 24014), (577, 24017), (595, 24077), (604, 24107), (607, 24116), (629, 24203), (630, 24206), (631, 24209), (635, 24227), (643, 24257), (654, 24296), (660, 24329), (661, 24332), (662, 24335), (664, 24341), (667, 24353), (679, 24407), (687, 24443), (697, 24476), (702, 24494), (708, 24518), (709, 24521), (730, 24623), (737, 24653), (740, 24665), (747, 24719), (750, 24731), (769, 24848), (776, 24893), (786, 24962), (804, 25097), (809, 25121), (821, 25166), (824, 25172), (832, 25211), (835, 25241),

Gene: Leathea_26 Start: 18979, Stop: 23520, Start Num: 17

Candidate Starts for Leathea_26:

(Start: 16 @18958 has 2 MA's), (Start: 17 @18979 has 129 MA's), (Start: 20 @19009 has 3 MA's), (28, 19063), (47, 19198), (63, 19282), (68, 19324), (75, 19405), (76, 19447), (81, 19507), (85, 19582), (90, 19633), (93, 19648), (96, 19663), (102, 19696), (105, 19720), (113, 19774), (115, 19789), (121, 19837), (132, 19948), (141, 20035), (146, 20056), (159, 20164), (170, 20233), (180, 20275), (188, 20335), (189, 20341), (192, 20350), (198, 20374), (219, 20473), (220, 20485), (223, 20506), (296, 20791), (314, 20860), (337, 20998), (339, 21010), (351, 21076), (355, 21100), (360, 21121), (362,

21127), (363, 21130), (369, 21154), (373, 21172), (384, 21220), (387, 21229), (391, 21262), (411, 21349), (414, 21358), (418, 21379), (434, 21460), (461, 21583), (462, 21586), (463, 21592), (466, 21604), (467, 21607), (499, 21751), (500, 21754), (512, 21811), (520, 21847), (529, 21880), (531, 21889), (536, 21901), (549, 21949), (557, 21973), (558, 21982), (566, 22030), (574, 22051), (577, 22060), (594, 22117), (595, 22120), (599, 22132), (604, 22150), (627, 22237), (629, 22246), (630, 22249), (631, 22252), (635, 22270), (654, 22339), (660, 22372), (661, 22375), (664, 22384), (667, 22396), (687, 22486), (697, 22519), (702, 22537), (704, 22546), (708, 22561), (709, 22564), (740, 22708), (747, 22762), (750, 22774), (756, 22813), (769, 22891), (776, 22936), (800, 23116), (804, 23140), (809, 23164), (821, 23209), (824, 23215), (832, 23254), (835, 23284), (853, 23362), (855, 23371), (878, 23452),

Gene: Lewando_29 Start: 20912, Stop: 25555, Start Num: 17

Candidate Starts for Lewando_29:

(Start: 16 @20891 has 2 MA's), (Start: 17 @20912 has 129 MA's), (Start: 20 @20942 has 3 MA's), (28, 20996), (32, 21017), (37, 21053), (47, 21221), (49, 21230), (57, 21281), (68, 21347), (69, 21368), (76, 21470), (77, 21488), (81, 21530), (85, 21605), (86, 21617), (93, 21671), (96, 21686), (102, 21719), (113, 21797), (115, 21812), (126, 21902), (132, 21971), (146, 22079), (152, 22133), (159, 22187), (170, 22256), (180, 22298), (188, 22358), (189, 22364), (192, 22373), (197, 22388), (198, 22397), (219, 22496), (220, 22508), (223, 22529), (277, 22736), (282, 22760), (296, 22814), (314, 22883), (337, 23024), (348, 23096), (351, 23102), (360, 23147), (362, 23153), (363, 23156), (369, 23180), (373, 23198), (383, 23243), (384, 23246), (386, 23252), (387, 23255), (391, 23288), (394, 23306), (407, 23363), (414, 23384), (418, 23405), (428, 23453), (434, 23486), (436, 23501), (451, 23561), (463, 23618), (474, 23678), (499, 23777), (500, 23780), (512, 23837), (517, 23864), (520, 23873), (529, 23906), (531, 23915), (536, 23927), (542, 23948), (557, 23999), (558, 24008), (566, 24056), (574, 24077), (576, 24083), (577, 24086), (595, 24146), (604, 24176), (607, 24185), (629, 24272), (630, 24275), (631, 24278), (635, 24296), (638, 24311), (643, 24326), (654, 24365), (660, 24398), (661, 24401), (662, 24404), (664, 24410), (667, 24422), (697, 24545), (702, 24563), (725, 24665), (740, 24734), (747, 24788), (769, 24917), (776, 24962), (786, 25031), (804, 25166), (809, 25190), (821, 25235), (824, 25241), (832, 25280), (835, 25310), (840, 25328),

Gene: LibertyBell_21 Start: 14934, Stop: 20459, Start Num: 2

Candidate Starts for LibertyBell_21:

(1, 14913), (Start: 2 @14934 has 30 MA's), (3, 14964), (4, 14988), (26, 15264), (33, 15306), (34, 15309), (38, 15339), (58, 15552), (76, 15735), (84, 15861), (87, 15897), (93, 15936), (100, 15969), (102, 15984), (107, 16026), (128, 16218), (129, 16251), (146, 16380), (172, 16563), (173, 16569), (187, 16656), (204, 16719), (231, 16866), (240, 16899), (261, 16968), (267, 16998), (275, 17022), (295, 17106), (299, 17118), (314, 17178), (330, 17214), (337, 17268), (347, 17337), (362, 17397), (363, 17400), (378, 17469), (382, 17481), (411, 17619), (415, 17628), (418, 17646), (450, 17799), (474, 17919), (479, 17940), (482, 17952), (487, 17973), (488, 17976), (499, 18015), (506, 18042), (509, 18057), (511, 18066), (512, 18075), (519, 18108), (520, 18111), (545, 18195), (561, 18273), (562, 18276), (563, 18279), (566, 18294), (571, 18309), (574, 18315), (575, 18318), (577, 18324), (595, 18384), (600, 18399), (604, 18414), (614, 18447), (618, 18465), (629, 18510), (630, 18513), (637, 18543), (640, 18555), (641, 18558), (646, 18576), (665, 18651), (672, 18684), (682, 18723), (690, 18759), (696, 18780), (707, 18822), (711, 18837), (714, 18846), (717, 18858), (719, 18870), (721, 18879), (723, 18894), (728, 18915), (764, 19134), (793, 19347), (839, 19581), (871, 19707), (893, 19836), (903, 19932), (905, 19938), (909, 19959), (924, 20064), (929, 20103), (932, 20121), (938, 20166), (944, 20211), (950, 20307),

Gene: LilHuddy_27 Start: 20332, Stop: 24921, Start Num: 17

Candidate Starts for LilHuddy_27:

(Start: 16 @20311 has 2 MA's), (Start: 17 @20332 has 129 MA's), (Start: 20 @20362 has 3 MA's), (28, 20416), (57, 20611), (63, 20635), (65, 20647), (68, 20677), (75, 20758), (76, 20800), (77, 20818), (81, 20860), (83, 20890), (85, 20935), (86, 20947), (93, 21001), (96, 21016), (97, 21022), (102, 21049),

(109, 21112), (113, 21127), (115, 21142), (118, 21175), (121, 21190), (127, 21238), (136, 21343), (146, 21409), (153, 21478), (159, 21517), (162, 21526), (166, 21541), (169, 21583), (170, 21586), (181, 21637), (204, 21751), (215, 21808), (229, 21880), (238, 21919), (245, 21946), (256, 21988), (278, 22084), (301, 22186), (303, 22192), (314, 22228), (337, 22375), (339, 22387), (344, 22429), (345, 22432), (355, 22477), (360, 22498), (363, 22507), (364, 22510), (369, 22531), (384, 22597), (385, 22600), (407, 22714), (414, 22735), (417, 22753), (418, 22756), (436, 22852), (438, 22864), (467, 22984), (471, 23014), (485, 23071), (494, 23107), (497, 23116), (499, 23128), (504, 23149), (507, 23158), (518, 23218), (528, 23251), (530, 23263), (531, 23266), (535, 23278), (544, 23305), (547, 23320), (549, 23326), (550, 23329), (557, 23350), (558, 23359), (574, 23428), (577, 23437), (589, 23476), (604, 23527), (631, 23629), (636, 23653), (637, 23656), (646, 23689), (647, 23692), (648, 23695), (649, 23698), (661, 23752), (662, 23755), (668, 23776), (691, 23875), (700, 23905), (703, 23917), (706, 23929), (710, 23947), (713, 23956), (714, 23959), (744, 24115), (747, 24139), (749, 24148), (759, 24211), (763, 24226), (776, 24313), (777, 24325), (783, 24367), (794, 24451), (804, 24517), (809, 24541), (821, 24586), (823, 24589), (824, 24592), (835, 24661), (836, 24664), (841, 24688), (882, 24871),

Gene: Linda_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for Linda_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (687, 20750), (689, 20756), (691, 20762), (693, 20768), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605), (873, 21683),

Gene: Loretta_26 Start: 19877, Stop: 24463, Start Num: 17

Candidate Starts for Loretta_26:

(Start: 16 @19856 has 2 MA's), (Start: 17 @19877 has 129 MA's), (Start: 20 @19907 has 3 MA's), (28, 19961), (37, 20018), (44, 20066), (57, 20156), (65, 20192), (68, 20222), (76, 20345), (81, 20405), (85, 20480), (93, 20546), (96, 20561), (102, 20594), (113, 20672), (115, 20687), (117, 20708), (118, 20720), (124, 20765), (128, 20792), (131, 20837), (136, 20888), (140, 20921), (146, 20954), (162, 21071), (168, 21119), (169, 21128), (191, 21245), (195, 21257), (196, 21260), (239, 21467), (256, 21527), (278, 21623), (290, 21677), (301, 21725), (303, 21731), (314, 21767), (337, 21911), (345, 21968), (347, 21980), (360, 22034), (363, 22043), (364, 22046), (369, 22067), (370, 22070), (379, 22115), (384, 22133), (396, 22208), (397, 22211), (399, 22223), (407, 22250), (414, 22271), (417, 22289), (418, 22292), (422, 22313), (434, 22373), (436, 22388), (437, 22391), (442, 22415), (443, 22418), (444, 22421), (451, 22448), (456, 22472), (458, 22484), (471, 22550), (474, 22565), (475, 22568), (479, 22586), (480, 22592), (481, 22595), (482, 22598), (494, 22643), (495, 22646), (497, 22652), (499, 22664), (504, 22685), (515, 22739), (516, 22742), (523, 22769), (530, 22799), (536, 22817), (540, 22826), (542, 22838), (547, 22859), (557, 22889), (558, 22898), (566, 22946), (569, 22955), (571, 22961), (577, 22976), (579, 22982), (586, 23006), (589, 23015), (602, 23057), (604,

23066), (615, 23102), (625, 23144), (629, 23162), (631, 23168), (636, 23192), (646, 23228), (660, 23288), (672, 23336), (673, 23345), (682, 23375), (700, 23444), (710, 23486), (713, 23495), (743, 23642), (744, 23654), (750, 23690), (763, 23765), (769, 23807), (776, 23852), (777, 23864), (783, 23906), (804, 24056), (809, 24080), (821, 24125), (823, 24128), (824, 24131), (829, 24155), (832, 24170), (835, 24200), (841, 24227), (885, 24422), (888, 24440),

Gene: LucySwiss_26 Start: 19986, Stop: 24578, Start Num: 17

Candidate Starts for LucySwiss_26:

(Start: 16 @19965 has 2 MA's), (Start: 17 @19986 has 129 MA's), (Start: 20 @20016 has 3 MA's), (28, 20070), (32, 20091), (37, 20127), (47, 20205), (57, 20265), (63, 20289), (65, 20301), (68, 20331), (71, 20382), (75, 20412), (76, 20454), (77, 20472), (81, 20514), (83, 20544), (85, 20589), (86, 20601), (93, 20655), (96, 20670), (98, 20682), (102, 20703), (115, 20796), (118, 20829), (121, 20844), (127, 20892), (146, 21063), (161, 21177), (162, 21180), (168, 21228), (188, 21342), (195, 21366), (234, 21561), (239, 21576), (240, 21582), (245, 21600), (261, 21672), (278, 21738), (301, 21840), (303, 21846), (313, 21879), (314, 21882), (321, 21909), (337, 22026), (345, 22083), (347, 22095), (360, 22149), (363, 22158), (364, 22161), (369, 22182), (378, 22227), (384, 22248), (405, 22359), (407, 22365), (414, 22386), (417, 22404), (422, 22428), (434, 22488), (436, 22503), (437, 22506), (443, 22533), (444, 22536), (471, 22665), (474, 22680), (475, 22683), (479, 22701), (480, 22707), (481, 22710), (485, 22722), (494, 22758), (497, 22767), (504, 22800), (515, 22854), (516, 22857), (520, 22875), (524, 22887), (531, 22917), (536, 22932), (540, 22941), (542, 22953), (558, 23013), (569, 23070), (574, 23082), (577, 23091), (589, 23130), (592, 23142), (602, 23172), (604, 23181), (624, 23256), (625, 23259), (629, 23277), (646, 23343), (648, 23349), (649, 23352), (661, 23406), (662, 23409), (693, 23535), (694, 23538), (700, 23559), (708, 23592), (710, 23601), (728, 23682), (734, 23715), (742, 23748), (750, 23805), (759, 23865), (764, 23889), (776, 23967), (777, 23979), (794, 24105), (800, 24147), (809, 24195), (817, 24228), (821, 24240), (824, 24246), (827, 24267), (829, 24270), (830, 24276), (835, 24315), (841, 24342), (882, 24528), (888, 24555),

Gene: Madamoto_23 Start: 16133, Stop: 21622, Start Num: 2

Candidate Starts for Madamoto_23:

(1, 16112), (Start: 2 @16133 has 30 MA's), (3, 16163), (12, 16307), (21, 16433), (40, 16517), (47, 16610), (49, 16619), (58, 16676), (65, 16706), (68, 16736), (69, 16757), (76, 16859), (84, 16985), (93, 17060), (102, 17108), (107, 17150), (128, 17339), (149, 17534), (156, 17594), (157, 17597), (162, 17618), (172, 17684), (202, 17831), (227, 17966), (264, 18107), (275, 18143), (277, 18152), (286, 18194), (295, 18227), (299, 18239), (310, 18290), (334, 18383), (337, 18404), (347, 18473), (349, 18479), (360, 18527), (363, 18536), (369, 18560), (378, 18605), (381, 18614), (382, 18617), (384, 18626), (402, 18728), (407, 18743), (415, 18764), (422, 18803), (424, 18809), (450, 18935), (461, 18986), (471, 19040), (487, 19109), (488, 19112), (500, 19154), (506, 19178), (511, 19202), (512, 19211), (520, 19247), (526, 19268), (557, 19373), (561, 19409), (563, 19415), (577, 19460), (604, 19550), (609, 19565), (614, 19583), (621, 19613), (625, 19628), (627, 19637), (633, 19658), (637, 19679), (640, 19691), (646, 19712), (665, 19787), (672, 19820), (691, 19898), (706, 19952), (710, 19970), (713, 19979), (721, 20015), (724, 20036), (756, 20225), (764, 20270), (793, 20483), (845, 20756), (905, 21074), (909, 21095), (914, 21143), (916, 21149), (917, 21155), (924, 21200), (931, 21248), (939, 21308), (943, 21338), (946, 21377), (959, 21566), (960, 21575),

Gene: Madvan_32 Start: 23284, Stop: 28395, Start Num: 17

Candidate Starts for Madvan_32:

(Start: 17 @23284 has 129 MA's), (Start: 20 @23314 has 3 MA's), (25, 23359), (47, 23503), (57, 23563), (58, 23569), (68, 23629), (69, 23650), (76, 23752), (83, 23842), (84, 23878), (87, 23914), (93, 23953), (98, 23980), (102, 24001), (107, 24043), (118, 24163), (132, 24289), (140, 24364), (141, 24376), (146, 24397), (154, 24469), (158, 24502), (159, 24505), (179, 24613), (228, 24865), (255, 24970), (267, 25039), (288, 25141), (289, 25144), (295, 25171), (303, 25210), (310, 25237), (337, 25399), (343, 25447), (347, 25468), (353, 25486), (364, 25534), (367, 25546), (378, 25600), (390, 25651), (391, 25663), (393, 25672), (394, 25681), (406, 25735), (418, 25780), (421, 25795), (422,

25801), (425, 25810), (426, 25816), (430, 25834), (431, 25837), (432, 25843), (433, 25852), (443, 25906), (444, 25909), (446, 25918), (451, 25936), (452, 25939), (454, 25951), (459, 25972), (461, 25978), (462, 25981), (467, 26002), (471, 26032), (474, 26047), (482, 26080), (490, 26110), (494, 26122), (496, 26128), (497, 26131), (499, 26143), (500, 26146), (512, 26203), (525, 26257), (526, 26260), (534, 26281), (538, 26293), (539, 26296), (550, 26341), (551, 26344), (556, 26359), (557, 26362), (558, 26371), (559, 26386), (560, 26392), (561, 26398), (566, 26419), (567, 26422), (571, 26434), (574, 26449), (577, 26458), (582, 26479), (584, 26491), (590, 26512), (598, 26539), (608, 26572), (610, 26578), (615, 26596), (622, 26626), (632, 26665), (650, 26734), (697, 26926), (717, 27001), (734, 27091), (757, 27235), (768, 27298), (778, 27364), (781, 27397), (784, 27409), (789, 27472), (794, 27493), (795, 27505), (799, 27526), (809, 27583), (831, 27667), (845, 27754), (850, 27772), (859, 27802), (866, 27820), (867, 27823), (869, 27829), (870, 27835), (876, 27862), (892, 27973), (900, 28048), (911, 28117), (916, 28150), (919, 28174), (937, 28291), (947, 28381),

Gene: Magel_30 Start: 21988, Stop: 25638, Start Num: 208

Candidate Starts for Magel_30:

(Start: 208 @21988 has 1 MA's), (219, 22039), (228, 22090), (241, 22144), (242, 22147), (269, 22279), (291, 22381), (295, 22399), (296, 22402), (311, 22477), (323, 22534), (335, 22618), (337, 22627), (353, 22714), (361, 22753), (373, 22801), (378, 22828), (384, 22849), (387, 22858), (390, 22879), (391, 22891), (393, 22900), (394, 22909), (398, 22936), (406, 22963), (407, 22966), (414, 22987), (422, 23029), (428, 23056), (431, 23065), (433, 23080), (434, 23089), (436, 23104), (438, 23116), (441, 23125), (444, 23137), (449, 23158), (452, 23167), (470, 23251), (471, 23260), (474, 23275), (475, 23278), (479, 23296), (482, 23308), (483, 23311), (490, 23338), (497, 23359), (500, 23374), (510, 23416), (512, 23431), (526, 23488), (529, 23500), (534, 23509), (538, 23521), (541, 23533), (542, 23539), (547, 23560), (551, 23572), (557, 23590), (558, 23599), (559, 23614), (560, 23620), (563, 23632), (573, 23674), (574, 23677), (577, 23686), (582, 23707), (584, 23719), (598, 23767), (601, 23776), (608, 23800), (610, 23806), (615, 23824), (616, 23833), (622, 23854), (639, 23923), (644, 23941), (645, 23944), (650, 23962), (680, 24088), (691, 24133), (705, 24184), (736, 24328), (757, 24463), (766, 24514), (778, 24592), (784, 24637), (789, 24700), (793, 24718), (797, 24748), (799, 24754), (809, 24811), (826, 24883), (838, 24943), (842, 24964), (843, 24967), (851, 25018), (853, 25027), (867, 25066), (870, 25078), (883, 25171), (892, 25216), (900, 25291), (906, 25330), (911, 25360), (919, 25417), (936, 25528), (947, 25624),

Gene: MajinBuu_33 Start: 23507, Stop: 28621, Start Num: 17

Candidate Starts for MajinBuu_33:

(Start: 17 @23507 has 129 MA's), (Start: 20 @23537 has 3 MA's), (25, 23582), (47, 23726), (58, 23792), (68, 23852), (69, 23873), (76, 23975), (84, 24101), (87, 24137), (93, 24176), (102, 24224), (107, 24266), (113, 24338), (118, 24386), (132, 24512), (140, 24587), (141, 24599), (146, 24620), (158, 24725), (159, 24728), (202, 24950), (214, 25016), (231, 25106), (241, 25142), (255, 25193), (262, 25241), (265, 25253), (295, 25397), (303, 25436), (310, 25463), (337, 25625), (343, 25673), (346, 25688), (347, 25694), (353, 25712), (364, 25760), (378, 25826), (390, 25877), (391, 25889), (394, 25907), (406, 25961), (418, 26006), (422, 26027), (425, 26036), (429, 26057), (433, 26078), (443, 26132), (444, 26135), (446, 26144), (452, 26165), (454, 26177), (459, 26198), (461, 26204), (465, 26222), (471, 26258), (477, 26288), (490, 26336), (494, 26348), (496, 26354), (497, 26357), (499, 26369), (500, 26372), (505, 26393), (512, 26429), (525, 26483), (526, 26486), (534, 26507), (538, 26519), (539, 26522), (551, 26570), (556, 26585), (557, 26588), (558, 26597), (560, 26618), (566, 26645), (567, 26648), (573, 26672), (577, 26684), (582, 26705), (584, 26717), (586, 26726), (590, 26738), (598, 26765), (601, 26774), (608, 26798), (610, 26804), (615, 26822), (628, 26876), (632, 26891), (650, 26960), (665, 27020), (676, 27071), (705, 27182), (717, 27227), (734, 27317), (755, 27440), (757, 27461), (768, 27524), (771, 27551), (781, 27623), (784, 27635), (785, 27644), (789, 27698), (794, 27719), (795, 27731), (831, 27893), (845, 27980), (850, 27998), (859, 28028), (866, 28046), (867, 28049), (870, 28061), (876, 28088), (892, 28199), (900, 28274), (908, 28322), (916, 28376), (920, 28403), (937, 28517), (947, 28607),

Gene: Makai_26 Start: 20118, Stop: 24710, Start Num: 17

Candidate Starts for Makai_26:

(Start: 16 @20097 has 2 MA's), (Start: 17 @20118 has 129 MA's), (Start: 20 @20148 has 3 MA's), (28, 20202), (37, 20259), (47, 20337), (57, 20397), (63, 20421), (68, 20463), (76, 20586), (77, 20604), (81, 20646), (85, 20721), (86, 20733), (90, 20772), (93, 20787), (96, 20802), (102, 20835), (113, 20913), (115, 20928), (124, 21006), (132, 21087), (146, 21195), (162, 21312), (164, 21318), (186, 21462), (187, 21471), (204, 21537), (256, 21774), (267, 21834), (277, 21867), (278, 21870), (301, 21972), (303, 21978), (314, 22014), (337, 22158), (343, 22206), (344, 22212), (345, 22215), (355, 22260), (360, 22281), (363, 22290), (364, 22293), (369, 22314), (370, 22317), (384, 22380), (385, 22383), (407, 22497), (414, 22518), (417, 22536), (418, 22539), (429, 22590), (434, 22620), (436, 22635), (438, 22647), (464, 22758), (467, 22767), (471, 22797), (493, 22887), (494, 22890), (497, 22899), (499, 22911), (504, 22932), (508, 22950), (515, 22986), (520, 23007), (529, 23040), (545, 23097), (557, 23139), (558, 23148), (566, 23196), (574, 23217), (577, 23226), (586, 23256), (604, 23316), (615, 23352), (623, 23388), (635, 23436), (647, 23481), (649, 23487), (655, 23508), (660, 23538), (672, 23586), (682, 23625), (683, 23628), (710, 23736), (713, 23745), (720, 23778), (738, 23868), (746, 23916), (759, 24000), (776, 24102), (777, 24114), (783, 24156), (799, 24273), (800, 24282), (809, 24330), (821, 24375), (824, 24381), (835, 24450), (841, 24477), (882, 24660),

Gene: Maya_23 Start: 16174, Stop: 21660, Start Num: 2

Candidate Starts for Maya_23:

(1, 16153), (Start: 2 @16174 has 30 MA's), (3, 16204), (12, 16348), (40, 16558), (51, 16678), (58, 16717), (65, 16747), (67, 16771), (68, 16777), (69, 16798), (70, 16813), (76, 16900), (83, 16990), (84, 17026), (85, 17035), (87, 17062), (93, 17101), (94, 17110), (98, 17128), (102, 17149), (107, 17191), (108, 17200), (118, 17308), (129, 17413), (140, 17509), (149, 17575), (172, 17725), (186, 17809), (190, 17830), (202, 17872), (227, 18007), (262, 18139), (264, 18148), (275, 18184), (277, 18193), (286, 18235), (295, 18268), (301, 18298), (334, 18421), (337, 18442), (346, 18505), (347, 18511), (349, 18517), (355, 18544), (360, 18565), (362, 18571), (363, 18574), (369, 18598), (378, 18643), (381, 18652), (382, 18655), (384, 18664), (396, 18739), (402, 18766), (408, 18784), (415, 18802), (418, 18820), (422, 18841), (433, 18892), (446, 18958), (450, 18973), (469, 19060), (471, 19078), (476, 19105), (502, 19198), (511, 19240), (512, 19249), (520, 19285), (521, 19288), (525, 19303), (526, 19306), (529, 19318), (542, 19360), (543, 19363), (557, 19411), (561, 19447), (563, 19453), (568, 19474), (577, 19498), (586, 19528), (604, 19588), (614, 19621), (615, 19624), (618, 19639), (621, 19651), (627, 19675), (637, 19717), (640, 19729), (641, 19732), (655, 19780), (660, 19810), (665, 19825), (672, 19858), (675, 19873), (691, 19936), (710, 20008), (712, 20014), (713, 20017), (721, 20053), (733, 20119), (748, 20206), (749, 20209), (764, 20308), (770, 20356), (772, 20362), (793, 20521), (845, 20794), (856, 20830), (876, 20896), (894, 21019), (905, 21112), (909, 21133), (914, 21181), (916, 21187), (917, 21193), (924, 21238), (939, 21346), (941, 21367), (946, 21415), (952, 21502), (959, 21604), (960, 21613),

Gene: MediumFry_24 Start: 19326, Stop: 23909, Start Num: 17

Candidate Starts for MediumFry_24:

(Start: 16 @19305 has 2 MA's), (Start: 17 @19326 has 129 MA's), (Start: 20 @19356 has 3 MA's), (28, 19410), (37, 19467), (44, 19515), (65, 19641), (68, 19671), (75, 19752), (76, 19794), (77, 19812), (81, 19854), (83, 19884), (85, 19929), (86, 19941), (93, 19995), (96, 20010), (97, 20016), (102, 20043), (109, 20106), (113, 20121), (115, 20136), (118, 20169), (121, 20184), (122, 20193), (127, 20232), (136, 20337), (153, 20472), (159, 20511), (162, 20520), (165, 20529), (170, 20580), (171, 20583), (195, 20706), (196, 20709), (204, 20745), (240, 20922), (246, 20943), (256, 20976), (278, 21072), (290, 21126), (301, 21174), (303, 21180), (314, 21216), (337, 21363), (355, 21465), (360, 21486), (363, 21495), (364, 21498), (369, 21519), (370, 21522), (384, 21585), (396, 21660), (399, 21675), (405, 21696), (407, 21702), (414, 21723), (418, 21744), (422, 21765), (434, 21825), (436, 21840), (437, 21843), (442, 21867), (443, 21870), (471, 22002), (474, 22017), (475, 22020), (479, 22038), (480, 22044), (482, 22050), (494, 22095), (495, 22098), (497, 22104), (500, 22119), (504, 22137), (509, 22158), (515, 22191), (516, 22194), (520, 22212), (536, 22269), (540, 22278), (542, 22290),

(547, 22311), (549, 22317), (550, 22320), (557, 22341), (558, 22350), (567, 22401), (569, 22407), (574, 22419), (577, 22428), (587, 22461), (604, 22518), (623, 22590), (624, 22593), (625, 22596), (629, 22614), (631, 22620), (636, 22644), (646, 22680), (648, 22686), (652, 22701), (660, 22740), (672, 22788), (682, 22827), (691, 22866), (700, 22896), (710, 22938), (713, 22947), (742, 23085), (743, 23094), (744, 23106), (750, 23142), (769, 23259), (772, 23280), (777, 23316), (783, 23358), (790, 23430), (809, 23532), (821, 23577), (824, 23583), (835, 23652), (841, 23679), (882, 23859), (885, 23868),

Gene: Meibysrarus_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Meibysrarus_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (202, 17858), (227, 17993), (240, 18047), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (301, 18284), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (446, 18944), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (521, 19274), (525, 19289), (526, 19292), (529, 19304), (542, 19346), (543, 19349), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (621, 19637), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (710, 19994), (712, 20000), (713, 20003), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Michelle_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for Michelle_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (238, 18827), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (386, 19490), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Miek_21 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for Miek_21:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214), (943, 20265), (951, 20388), (957, 20427),

Gene: MiniBagel_26 Start: 21214, Stop: 25803, Start Num: 17

Candidate Starts for MiniBagel_26:

(Start: 16 @21193 has 2 MA's), (Start: 17 @21214 has 129 MA's), (Start: 20 @21244 has 3 MA's), (28, 21298), (32, 21319), (37, 21355), (57, 21493), (65, 21529), (68, 21559), (76, 21682), (77, 21700), (81, 21742), (88, 21850), (93, 21883), (96, 21898), (102, 21931), (113, 22009), (115, 22024), (117, 22045), (118, 22057), (122, 22081), (128, 22129), (136, 22225), (140, 22258), (146, 22291), (155, 22375), (162, 22408), (202, 22621), (216, 22696), (234, 22789), (239, 22804), (240, 22810), (245, 22828), (247, 22837), (256, 22870), (257, 22879), (273, 22951), (284, 22996), (301, 23068), (303, 23074), (313, 23107), (314, 23110), (321, 23137), (337, 23251), (345, 23308), (347, 23320), (360, 23374), (363, 23383), (364, 23386), (369, 23407), (378, 23452), (384, 23473), (405, 23584), (407, 23590), (414, 23611), (417, 23629), (422, 23653), (434, 23713), (436, 23728), (437, 23731), (443, 23758), (444, 23761), (451, 23788), (469, 23872), (471, 23890), (474, 23905), (475, 23908), (479, 23926), (480, 23932), (481, 23935), (485, 23947), (486, 23953), (494, 23983), (497, 23992), (504, 24025), (515, 24079), (516, 24082), (520, 24100), (531, 24142), (536, 24157), (540, 24166), (542, 24178), (558, 24238), (569, 24295), (574, 24307), (577, 24316), (589, 24355), (592, 24367), (594, 24373), (598, 24385), (602, 24397), (604, 24406), (624, 24481), (625, 24484), (629, 24502), (646, 24568), (649, 24577), (661, 24631), (662, 24634), (700, 24784), (708, 24817), (710, 24826), (715, 24841), (719, 24862), (728, 24907), (734, 24940), (742, 24973), (750, 25030), (759, 25090), (772, 25168), (776, 25192), (777, 25204), (794, 25330), (800, 25372), (809, 25420), (817, 25453), (821, 25465), (824, 25471), (827, 25492), (829, 25495), (830, 25501), (835, 25540), (841, 25567), (882, 25753), (888, 25780),

Gene: Mooshroom_21 Start: 16796, Stop: 21274, Start Num: 17

Candidate Starts for Mooshroom_21:

(Start: 16 @16775 has 2 MA's), (Start: 17 @16796 has 129 MA's), (Start: 20 @16826 has 3 MA's), (28, 16880), (37, 16937), (65, 17111), (68, 17141), (75, 17222), (76, 17264), (77, 17282), (81, 17324), (86, 17411), (90, 17450), (93, 17465), (96, 17480), (102, 17513), (113, 17591), (115, 17606), (121, 17654), (123, 17669), (128, 17711), (136, 17807), (140, 17840), (146, 17873), (159, 17981), (169, 18047), (177, 18080), (179, 18089), (180, 18092), (182, 18110), (243, 18392), (251, 18416), (257, 18446), (299, 18605), (314, 18665), (337, 18794), (343, 18842), (350, 18872), (355, 18896), (358, 18908), (360, 18917), (363, 18926), (369, 18950), (378, 18995), (384, 19016), (396, 19091), (404, 19124), (414, 19154), (418, 19175), (422, 19196), (434, 19256), (435, 19262), (443, 19301), (448, 19319), (467, 19403), (471, 19433), (477, 19463), (482, 19481), (494, 19529), (500, 19553), (504, 19571), (507, 19580), (508, 19589), (510, 19595), (513, 19616), (520, 19646), (529, 19679), (530, 19685), (534, 19694), (542, 19721), (549, 19748), (558, 19781), (561, 19808), (563, 19814), (570, 19841), (577, 19859), (586, 19889), (589, 19898), (592, 19910), (594, 19916), (595, 19919), (599, 19931), (604, 19949), (612, 19976), (614, 19982), (631, 20051), (637, 20078), (641, 20093), (667, 20195),

(690, 20294), (691, 20297), (693, 20303), (697, 20318), (702, 20336), (712, 20375), (713, 20378), (718, 20396), (723, 20429), (728, 20450), (740, 20507), (747, 20561), (758, 20624), (773, 20651), (776, 20669), (782, 20717), (783, 20723), (790, 20795), (804, 20873), (807, 20888), (815, 20927), (824, 20951), (829, 20975), (835, 21020), (840, 21041), (889, 21263),

Gene: Moozy_19 Start: 13482, Stop: 18731, Start Num: 16

Candidate Starts for Moozy_19:

(Start: 16 @13482 has 2 MA's), (Start: 17 @13503 has 129 MA's), (Start: 20 @13533 has 3 MA's), (40, 13635), (43, 13686), (58, 13794), (76, 13977), (84, 14103), (87, 14139), (93, 14178), (107, 14268), (149, 14655), (172, 14805), (177, 14829), (188, 14901), (238, 15132), (261, 15210), (264, 15228), (265, 15231), (275, 15264), (300, 15372), (320, 15432), (337, 15513), (347, 15582), (360, 15636), (381, 15723), (382, 15726), (384, 15735), (402, 15837), (415, 15873), (418, 15891), (429, 15942), (450, 16044), (453, 16056), (456, 16071), (470, 16140), (471, 16149), (477, 16179), (489, 16224), (496, 16245), (503, 16275), (506, 16287), (507, 16290), (511, 16311), (512, 16320), (520, 16356), (529, 16389), (554, 16473), (561, 16518), (562, 16521), (563, 16524), (577, 16569), (586, 16599), (600, 16644), (604, 16659), (614, 16692), (619, 16713), (621, 16722), (623, 16731), (629, 16755), (630, 16758), (633, 16767), (637, 16788), (640, 16800), (648, 16827), (657, 16866), (662, 16887), (670, 16923), (672, 16929), (706, 17061), (708, 17070), (710, 17079), (713, 17088), (714, 17091), (717, 17103), (718, 17106), (719, 17115), (721, 17124), (740, 17217), (747, 17271), (764, 17379), (767, 17394), (772, 17433), (793, 17592), (839, 17826), (856, 17901), (904, 18180), (905, 18183), (909, 18204), (914, 18252), (916, 18258), (932, 18366), (938, 18411), (941, 18438), (949, 18540), (960, 18693),

Gene: Mossy_33 Start: 24706, Stop: 29808, Start Num: 17

Candidate Starts for Mossy_33:

(Start: 17 @24706 has 129 MA's), (Start: 20 @24736 has 3 MA's), (25, 24781), (46, 24919), (47, 24925), (58, 24991), (65, 25021), (76, 25186), (81, 25246), (86, 25333), (89, 25357), (93, 25387), (96, 25402), (102, 25435), (112, 25528), (132, 25696), (146, 25804), (147, 25816), (153, 25873), (158, 25909), (159, 25912), (170, 25981), (172, 25987), (Start: 208 @26170 has 1 MA's), (209, 26176), (228, 26272), (231, 26290), (267, 26446), (293, 26572), (295, 26581), (334, 26791), (337, 26812), (338, 26818), (347, 26881), (353, 26899), (358, 26926), (363, 26944), (378, 27013), (385, 27037), (387, 27043), (390, 27064), (393, 27085), (406, 27148), (418, 27193), (422, 27214), (428, 27241), (430, 27247), (433, 27265), (434, 27274), (438, 27301), (443, 27319), (444, 27322), (446, 27331), (449, 27343), (451, 27349), (452, 27352), (454, 27364), (474, 27460), (482, 27493), (487, 27514), (489, 27520), (490, 27523), (494, 27535), (497, 27544), (500, 27559), (502, 27565), (503, 27571), (505, 27580), (508, 27595), (509, 27598), (512, 27616), (520, 27652), (526, 27673), (534, 27694), (542, 27724), (546, 27739), (547, 27745), (550, 27754), (552, 27760), (555, 27769), (557, 27775), (558, 27784), (559, 27799), (560, 27805), (565, 27829), (569, 27841), (577, 27871), (582, 27892), (584, 27904), (590, 27925), (591, 27928), (598, 27952), (601, 27961), (608, 27985), (610, 27991), (615, 28009), (616, 28018), (617, 28021), (631, 28075), (639, 28108), (676, 28258), (679, 28270), (683, 28282), (691, 28318), (697, 28339), (717, 28414), (747, 28582), (753, 28612), (756, 28645), (771, 28738), (781, 28810), (784, 28822), (785, 28831), (789, 28885), (797, 28933), (809, 28996), (824, 29047), (831, 29080), (845, 29167), (850, 29185), (859, 29215), (867, 29236), (869, 29242), (870, 29248), (876, 29275), (879, 29302), (892, 29386), (898, 29449), (900, 29461), (918, 29572), (920, 29590), (926, 29638), (947, 29794),

Gene: MrAaronian_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for MrAaronian_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836),

(258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Mudcat_21 Start: 19094, Stop: 23572, Start Num: 17

Candidate Starts for Mudcat_21:

(Start: 16 @19073 has 2 MA's), (Start: 17 @19094 has 129 MA's), (Start: 20 @19124 has 3 MA's), (23, 19157), (28, 19178), (65, 19409), (68, 19439), (75, 19520), (76, 19562), (77, 19580), (81, 19622), (86, 19709), (93, 19763), (96, 19778), (102, 19811), (113, 19889), (115, 19904), (121, 19952), (123, 19967), (128, 20009), (132, 20063), (136, 20105), (137, 20108), (140, 20138), (146, 20171), (159, 20279), (169, 20345), (177, 20378), (179, 20387), (180, 20390), (182, 20408), (243, 20690), (251, 20714), (257, 20744), (299, 20903), (305, 20936), (314, 20963), (337, 21092), (350, 21170), (360, 21215), (363, 21224), (366, 21236), (369, 21248), (375, 21275), (378, 21293), (384, 21314), (396, 21389), (400, 21410), (401, 21413), (404, 21422), (414, 21452), (418, 21473), (422, 21494), (434, 21554), (435, 21560), (443, 21599), (444, 21602), (448, 21617), (462, 21680), (467, 21701), (471, 21731), (477, 21761), (482, 21779), (494, 21827), (500, 21851), (504, 21869), (507, 21878), (508, 21887), (510, 21893), (513, 21914), (520, 21944), (529, 21977), (530, 21983), (531, 21986), (536, 21998), (542, 22019), (557, 22070), (558, 22079), (562, 22109), (564, 22115), (574, 22148), (577, 22157), (586, 22187), (589, 22196), (592, 22208), (604, 22247), (612, 22274), (614, 22280), (615, 22283), (618, 22298), (625, 22325), (629, 22343), (633, 22355), (641, 22391), (667, 22493), (682, 22556), (690, 22592), (691, 22595), (693, 22601), (697, 22616), (702, 22634), (708, 22658), (712, 22673), (713, 22676), (718, 22694), (723, 22727), (728, 22748), (740, 22805), (747, 22859), (749, 22868), (758, 22922), (773, 22949), (776, 22967), (782, 23015), (783, 23021), (790, 23093), (804, 23171), (807, 23186), (815, 23225), (824, 23249), (835, 23318), (840, 23339), (889, 23561),

Gene: Mysticmoon_32 Start: 23315, Stop: 28429, Start Num: 17

Candidate Starts for Mysticmoon_32:

(Start: 17 @23315 has 129 MA's), (Start: 20 @23345 has 3 MA's), (25, 23390), (47, 23534), (57, 23594), (58, 23600), (66, 23639), (68, 23660), (69, 23681), (76, 23783), (84, 23909), (87, 23945), (93, 23984), (98, 24011), (102, 24032), (107, 24074), (118, 24194), (140, 24395), (146, 24428), (149, 24461), (155, 24512), (158, 24533), (159, 24536), (172, 24611), (198, 24746), (212, 24812), (215, 24827), (228, 24896), (231, 24914), (240, 24947), (246, 24968), (248, 24977), (255, 25001), (267, 25070), (272, 25091), (278, 25124), (279, 25127), (293, 25196), (295, 25205), (314, 25292), (327, 25352), (333, 25403), (337, 25436), (338, 25442), (347, 25505), (353, 25523), (363, 25568), (378, 25637), (385, 25661), (387, 25667), (390, 25688), (394, 25718), (406, 25772), (407, 25775), (421, 25832), (422, 25838), (430, 25871), (433, 25889), (434, 25898), (436, 25913), (438, 25925), (443, 25943), (444, 25946), (446, 25955), (449, 25967), (451, 25973), (452, 25976), (459, 26009), (464, 26030), (471, 26069), (482, 26117), (486, 26132), (487, 26138), (490, 26147), (494, 26159), (497, 26168), (499, 26180), (500, 26183), (501, 26186), (502, 26189), (503, 26195), (505, 26204), (517, 26267), (524, 26288), (526, 26297), (534, 26318), (547, 26369), (555, 26393), (557, 26399), (559, 26423), (560, 26429), (566, 26456), (567, 26459), (577, 26495), (582, 26516), (584, 26528), (586, 26537), (590, 26549), (598, 26576), (601, 26585), (608, 26609), (610, 26615), (615, 26633), (622, 26663), (632, 26702), (639, 26732), (648, 26762), (679, 26894), (697, 26963), (734, 27128), (755,

27251), (781, 27434), (784, 27446), (785, 27455), (789, 27509), (797, 27557), (820, 27659), (825, 27680), (833, 27728), (845, 27791), (850, 27809), (866, 27857), (867, 27860), (870, 27872), (876, 27899), (892, 28010), (900, 28085), (916, 28187), (920, 28214), (921, 28217), (937, 28325), (944, 28364), (947, 28415),

Gene: Nadmeg_33 Start: 24715, Stop: 29826, Start Num: 17

Candidate Starts for Nadmeg_33:

(Start: 17 @24715 has 129 MA's), (Start: 20 @24745 has 3 MA's), (25, 24790), (47, 24934), (57, 24994), (58, 25000), (68, 25060), (69, 25081), (76, 25183), (83, 25273), (84, 25309), (87, 25345), (93, 25384), (98, 25411), (102, 25432), (107, 25474), (113, 25546), (118, 25594), (132, 25720), (140, 25795), (141, 25807), (146, 25828), (158, 25933), (159, 25936), (179, 26044), (228, 26296), (255, 26401), (267, 26470), (272, 26491), (288, 26572), (289, 26575), (295, 26602), (303, 26641), (310, 26668), (334, 26809), (337, 26830), (346, 26893), (347, 26899), (353, 26917), (354, 26923), (364, 26965), (369, 26986), (378, 27031), (390, 27082), (391, 27094), (393, 27103), (394, 27112), (418, 27211), (422, 27232), (425, 27241), (430, 27265), (431, 27268), (432, 27274), (443, 27337), (444, 27340), (446, 27349), (451, 27367), (452, 27370), (454, 27382), (459, 27403), (461, 27409), (462, 27412), (467, 27433), (471, 27463), (474, 27478), (477, 27493), (490, 27541), (494, 27553), (496, 27559), (497, 27562), (499, 27574), (500, 27577), (512, 27634), (525, 27688), (534, 27712), (538, 27724), (539, 27727), (550, 27772), (551, 27775), (556, 27790), (557, 27793), (558, 27802), (559, 27817), (560, 27823), (561, 27829), (566, 27850), (567, 27853), (571, 27865), (574, 27880), (577, 27889), (582, 27910), (584, 27922), (590, 27943), (598, 27970), (608, 28003), (610, 28009), (615, 28027), (622, 28057), (632, 28096), (697, 28357), (717, 28432), (734, 28522), (757, 28666), (768, 28729), (778, 28795), (781, 28828), (784, 28840), (789, 28903), (794, 28924), (795, 28936), (799, 28957), (809, 29014), (831, 29098), (845, 29185), (850, 29203), (859, 29233), (866, 29251), (867, 29254), (869, 29260), (870, 29266), (876, 29293), (892, 29404), (900, 29479), (911, 29548), (916, 29581), (919, 29605), (937, 29722), (947, 29812),

Gene: Namo_23 Start: 16166, Stop: 21652, Start Num: 2

Candidate Starts for Namo_23:

(1, 16145), (Start: 2 @16166 has 30 MA's), (3, 16196), (12, 16340), (40, 16550), (50, 16667), (65, 16739), (68, 16769), (76, 16892), (84, 17018), (93, 17093), (102, 17141), (107, 17183), (128, 17372), (149, 17567), (158, 17639), (172, 17717), (190, 17822), (202, 17864), (227, 17999), (240, 18053), (264, 18140), (275, 18176), (277, 18185), (286, 18227), (295, 18260), (301, 18290), (334, 18413), (337, 18434), (346, 18497), (347, 18503), (349, 18509), (355, 18536), (360, 18557), (362, 18563), (363, 18566), (369, 18590), (378, 18635), (381, 18644), (382, 18647), (384, 18656), (396, 18731), (402, 18758), (408, 18776), (415, 18794), (418, 18812), (422, 18833), (433, 18884), (446, 18950), (450, 18965), (469, 19052), (471, 19070), (476, 19097), (501, 19187), (502, 19190), (511, 19232), (512, 19241), (520, 19277), (525, 19295), (526, 19298), (542, 19352), (543, 19355), (557, 19403), (561, 19439), (563, 19445), (568, 19466), (577, 19490), (586, 19520), (604, 19580), (614, 19613), (615, 19616), (618, 19631), (627, 19667), (637, 19709), (640, 19721), (641, 19724), (655, 19772), (660, 19802), (665, 19817), (672, 19850), (675, 19865), (691, 19928), (712, 20006), (713, 20009), (721, 20045), (733, 20111), (748, 20198), (749, 20201), (764, 20300), (770, 20348), (772, 20354), (793, 20513), (845, 20786), (856, 20822), (876, 20888), (894, 21011), (898, 21062), (905, 21104), (909, 21125), (914, 21173), (916, 21179), (917, 21185), (924, 21230), (939, 21338), (941, 21359), (946, 21407), (952, 21494), (959, 21596), (960, 21605),

Gene: NapoleonB_21 Start: 17193, Stop: 21671, Start Num: 17

Candidate Starts for NapoleonB_21:

(Start: 16 @17172 has 2 MA's), (Start: 17 @17193 has 129 MA's), (Start: 20 @17223 has 3 MA's), (23, 17256), (28, 17277), (65, 17508), (68, 17538), (69, 17559), (75, 17619), (76, 17661), (77, 17679), (81, 17721), (86, 17808), (93, 17862), (96, 17877), (102, 17910), (115, 18003), (121, 18051), (123, 18066), (128, 18108), (132, 18162), (140, 18237), (146, 18270), (159, 18378), (169, 18444), (177, 18477), (179, 18486), (180, 18489), (182, 18507), (243, 18789), (251, 18813), (257, 18843), (299, 19002),

(314, 19062), (337, 19191), (350, 19269), (357, 19299), (360, 19314), (363, 19323), (369, 19347), (375, 19374), (378, 19392), (384, 19413), (396, 19488), (400, 19509), (404, 19521), (414, 19551), (422, 19593), (434, 19653), (435, 19659), (443, 19698), (462, 19779), (467, 19800), (471, 19830), (477, 19860), (482, 19878), (494, 19926), (500, 19950), (504, 19968), (507, 19977), (508, 19986), (510, 19992), (513, 20013), (520, 20043), (529, 20076), (530, 20082), (531, 20085), (536, 20097), (542, 20118), (557, 20169), (558, 20178), (562, 20208), (564, 20214), (574, 20247), (577, 20256), (586, 20286), (589, 20295), (592, 20307), (599, 20328), (604, 20346), (612, 20373), (614, 20379), (615, 20382), (618, 20397), (625, 20424), (629, 20442), (633, 20454), (641, 20490), (667, 20592), (682, 20655), (690, 20691), (691, 20694), (693, 20700), (697, 20715), (702, 20733), (712, 20772), (713, 20775), (718, 20793), (723, 20826), (728, 20847), (740, 20904), (747, 20958), (749, 20967), (758, 21021), (773, 21048), (776, 21066), (782, 21114), (783, 21120), (790, 21192), (804, 21270), (807, 21285), (815, 21324), (824, 21348), (835, 21417), (840, 21438), (865, 21531), (889, 21660),

Gene: Nason_22 Start: 17670, Stop: 22148, Start Num: 17

Candidate Starts for Nason_22:

(Start: 16 @17649 has 2 MA's), (Start: 17 @17670 has 129 MA's), (Start: 20 @17700 has 3 MA's), (23, 17733), (28, 17754), (65, 17985), (68, 18015), (75, 18096), (76, 18138), (77, 18156), (81, 18198), (86, 18285), (93, 18339), (96, 18354), (102, 18387), (115, 18480), (121, 18528), (123, 18543), (128, 18585), (132, 18639), (140, 18714), (146, 18747), (159, 18855), (169, 18921), (177, 18954), (179, 18963), (180, 18966), (182, 18984), (243, 19266), (251, 19290), (257, 19320), (299, 19479), (314, 19539), (337, 19668), (343, 19716), (355, 19770), (358, 19782), (360, 19791), (363, 19800), (369, 19824), (378, 19869), (384, 19890), (396, 19965), (404, 19998), (414, 20028), (418, 20049), (422, 20070), (434, 20130), (435, 20136), (443, 20175), (444, 20178), (448, 20193), (462, 20256), (467, 20277), (471, 20307), (477, 20337), (482, 20355), (494, 20403), (500, 20427), (504, 20445), (507, 20454), (508, 20463), (510, 20469), (513, 20490), (520, 20520), (529, 20553), (530, 20559), (531, 20562), (536, 20574), (542, 20595), (557, 20646), (558, 20655), (562, 20685), (564, 20691), (574, 20724), (577, 20733), (586, 20763), (589, 20772), (592, 20784), (604, 20823), (612, 20850), (614, 20856), (615, 20859), (618, 20874), (625, 20901), (629, 20919), (633, 20931), (641, 20967), (667, 21069), (682, 21132), (690, 21168), (691, 21171), (693, 21177), (697, 21192), (702, 21210), (708, 21234), (712, 21249), (713, 21252), (718, 21270), (723, 21303), (728, 21324), (740, 21381), (747, 21435), (749, 21444), (758, 21498), (773, 21525), (776, 21543), (782, 21591), (783, 21597), (790, 21669), (804, 21747), (807, 21762), (815, 21801), (824, 21825), (835, 21894), (840, 21915), (865, 22008), (889, 22137),

Gene: Natasha_22 Start: 16630, Stop: 21195, Start Num: 16

Candidate Starts for Natasha_22:

(Start: 16 @16630 has 2 MA's), (Start: 17 @16651 has 129 MA's), (Start: 20 @16681 has 3 MA's), (61, 16948), (65, 16966), (68, 16996), (75, 17077), (76, 17119), (77, 17137), (81, 17179), (83, 17209), (85, 17254), (86, 17266), (93, 17320), (96, 17335), (97, 17341), (102, 17368), (109, 17431), (113, 17446), (115, 17461), (118, 17494), (121, 17509), (122, 17518), (127, 17557), (132, 17620), (140, 17695), (147, 17740), (149, 17761), (153, 17797), (159, 17836), (161, 17842), (170, 17905), (172, 17911), (192, 18022), (264, 18343), (278, 18391), (286, 18430), (293, 18454), (300, 18490), (301, 18493), (303, 18499), (314, 18535), (334, 18649), (337, 18670), (344, 18724), (353, 18757), (362, 18799), (363, 18802), (369, 18826), (376, 18862), (378, 18871), (381, 18880), (384, 18892), (393, 18943), (400, 18988), (407, 19009), (414, 19030), (418, 19051), (423, 19075), (432, 19114), (434, 19132), (436, 19147), (441, 19168), (451, 19207), (456, 19231), (467, 19279), (471, 19309), (474, 19324), (482, 19357), (484, 19363), (494, 19402), (499, 19423), (504, 19444), (507, 19453), (525, 19537), (529, 19552), (531, 19561), (536, 19573), (542, 19594), (557, 19645), (558, 19654), (574, 19723), (577, 19732), (586, 19762), (587, 19765), (600, 19807), (604, 19822), (618, 19873), (623, 19894), (636, 19948), (646, 19984), (647, 19987), (660, 20044), (661, 20047), (668, 20071), (677, 20113), (685, 20152), (687, 20158), (693, 20176), (695, 20182), (716, 20263), (723, 20302), (728, 20323), (731, 20341), (740, 20380), (742, 20389), (756, 20485), (759, 20506), (769, 20563), (776, 20608), (777, 20620), (779, 20641), (787, 20698), (789, 20728), (807, 20827), (824, 20887), (830, 20917),

(835, 20956), (840, 20974),

Gene: Navi1117_27 Start: 19247, Stop: 23806, Start Num: 17

Candidate Starts for Navi1117_27:

(Start: 16 @19226 has 2 MA's), (Start: 17 @19247 has 129 MA's), (Start: 20 @19277 has 3 MA's), (28, 19331), (32, 19352), (58, 19532), (59, 19535), (68, 19592), (69, 19613), (75, 19673), (76, 19715), (81, 19775), (85, 19850), (93, 19916), (96, 19931), (102, 19964), (106, 20003), (107, 20006), (113, 20042), (115, 20057), (121, 20105), (152, 20378), (159, 20432), (162, 20441), (170, 20501), (180, 20543), (188, 20603), (189, 20609), (192, 20618), (197, 20633), (198, 20642), (219, 20741), (220, 20753), (221, 20762), (223, 20774), (296, 21059), (310, 21119), (314, 21128), (335, 21260), (337, 21269), (343, 21317), (344, 21323), (348, 21341), (351, 21347), (355, 21371), (360, 21392), (363, 21401), (369, 21425), (373, 21443), (381, 21479), (383, 21488), (384, 21491), (387, 21500), (403, 21596), (407, 21608), (411, 21620), (414, 21629), (418, 21650), (422, 21671), (428, 21698), (434, 21731), (458, 21842), (461, 21854), (462, 21857), (473, 21914), (499, 22022), (508, 22061), (512, 22082), (517, 22109), (520, 22118), (529, 22151), (531, 22160), (536, 22172), (542, 22193), (549, 22220), (557, 22244), (558, 22253), (574, 22322), (575, 22325), (576, 22328), (577, 22331), (586, 22361), (592, 22382), (599, 22403), (602, 22412), (604, 22421), (612, 22448), (635, 22541), (638, 22556), (641, 22565), (647, 22586), (654, 22610), (660, 22643), (661, 22646), (662, 22649), (667, 22667), (697, 22790), (702, 22808), (715, 22856), (724, 22907), (740, 22979), (750, 23045), (763, 23120), (769, 23162), (776, 23207), (782, 23255), (801, 23390), (804, 23411), (809, 23435), (824, 23486), (835, 23555), (840, 23573),

Gene: Nightmare_27 Start: 20521, Stop: 25113, Start Num: 17

Candidate Starts for Nightmare_27:

(Start: 16 @20500 has 2 MA's), (Start: 17 @20521 has 129 MA's), (Start: 20 @20551 has 3 MA's), (28, 20605), (32, 20626), (37, 20662), (47, 20740), (57, 20800), (63, 20824), (65, 20836), (68, 20866), (71, 20917), (75, 20947), (76, 20989), (77, 21007), (81, 21049), (83, 21079), (85, 21124), (86, 21136), (93, 21190), (96, 21205), (98, 21217), (102, 21238), (115, 21331), (118, 21364), (121, 21379), (127, 21427), (146, 21598), (161, 21712), (162, 21715), (168, 21763), (188, 21877), (195, 21901), (234, 22096), (239, 22111), (240, 22117), (245, 22135), (261, 22207), (278, 22273), (301, 22375), (303, 22381), (313, 22414), (314, 22417), (321, 22444), (337, 22561), (345, 22618), (347, 22630), (360, 22684), (363, 22693), (364, 22696), (369, 22717), (378, 22762), (384, 22783), (405, 22894), (407, 22900), (414, 22921), (417, 22939), (422, 22963), (434, 23023), (436, 23038), (437, 23041), (443, 23068), (444, 23071), (471, 23200), (474, 23215), (475, 23218), (479, 23236), (480, 23242), (481, 23245), (485, 23257), (494, 23293), (497, 23302), (504, 23335), (515, 23389), (516, 23392), (520, 23410), (524, 23422), (531, 23452), (536, 23467), (540, 23476), (542, 23488), (558, 23548), (569, 23605), (574, 23617), (577, 23626), (589, 23665), (592, 23677), (602, 23707), (604, 23716), (624, 23791), (625, 23794), (629, 23812), (646, 23878), (648, 23884), (649, 23887), (661, 23941), (662, 23944), (693, 24070), (694, 24073), (700, 24094), (708, 24127), (710, 24136), (728, 24217), (734, 24250), (742, 24283), (750, 24340), (759, 24400), (764, 24424), (776, 24502), (777, 24514), (794, 24640), (800, 24682), (809, 24730), (817, 24763), (821, 24775), (824, 24781), (827, 24802), (829, 24805), (830, 24811), (835, 24850), (841, 24877), (882, 25063), (888, 25090),

Gene: Niktson_26 Start: 20686, Stop: 25275, Start Num: 17

Candidate Starts for Niktson_26:

(Start: 16 @20665 has 2 MA's), (Start: 17 @20686 has 129 MA's), (Start: 20 @20716 has 3 MA's), (28, 20770), (32, 20791), (37, 20827), (47, 20905), (57, 20965), (63, 20989), (65, 21001), (68, 21031), (75, 21112), (76, 21154), (77, 21172), (81, 21214), (83, 21244), (85, 21289), (86, 21301), (93, 21355), (96, 21370), (98, 21382), (102, 21403), (115, 21496), (118, 21529), (121, 21544), (127, 21592), (141, 21742), (146, 21763), (159, 21871), (161, 21877), (162, 21880), (168, 21928), (188, 22042), (195, 22066), (198, 22081), (202, 22093), (216, 22168), (223, 22213), (234, 22261), (239, 22276), (240, 22282), (245, 22300), (261, 22372), (270, 22414), (273, 22423), (284, 22468), (301, 22540), (303, 22546), (313, 22579), (314, 22582), (321, 22609), (337, 22723), (343, 22771), (345, 22780), (347,

22792), (360, 22846), (363, 22855), (364, 22858), (369, 22879), (378, 22924), (384, 22945), (405, 23056), (407, 23062), (414, 23083), (417, 23101), (418, 23104), (422, 23125), (434, 23185), (436, 23200), (437, 23203), (443, 23230), (444, 23233), (471, 23362), (474, 23377), (475, 23380), (479, 23398), (480, 23404), (485, 23419), (494, 23455), (497, 23464), (504, 23497), (515, 23551), (516, 23554), (520, 23572), (524, 23584), (531, 23614), (536, 23629), (540, 23638), (542, 23650), (558, 23710), (567, 23761), (569, 23767), (574, 23779), (577, 23788), (589, 23827), (592, 23839), (596, 23851), (602, 23869), (604, 23878), (624, 23953), (625, 23956), (629, 23974), (646, 24040), (648, 24046), (649, 24049), (661, 24103), (662, 24106), (693, 24232), (694, 24235), (700, 24256), (708, 24289), (710, 24298), (728, 24379), (734, 24412), (742, 24445), (750, 24502), (759, 24562), (764, 24586), (776, 24664), (777, 24676), (794, 24802), (800, 24844), (809, 24892), (817, 24925), (821, 24937), (824, 24943), (827, 24964), (829, 24967), (835, 25012), (841, 25039), (846, 25066), (847, 25069), (882, 25225), (888, 25252),

Gene: Nithya_32 Start: 23499, Stop: 28610, Start Num: 17

Candidate Starts for Nithya_32:

(Start: 17 @23499 has 129 MA's), (Start: 20 @23529 has 3 MA's), (25, 23574), (47, 23718), (58, 23784), (68, 23844), (69, 23865), (76, 23967), (83, 24057), (84, 24093), (87, 24129), (93, 24168), (102, 24216), (107, 24258), (113, 24330), (118, 24378), (132, 24504), (140, 24579), (141, 24591), (146, 24612), (158, 24717), (159, 24720), (202, 24942), (214, 25008), (215, 25011), (228, 25080), (255, 25185), (267, 25254), (288, 25356), (289, 25359), (295, 25386), (303, 25425), (310, 25452), (337, 25614), (343, 25662), (347, 25683), (353, 25701), (364, 25749), (378, 25815), (386, 25842), (387, 25845), (389, 25863), (390, 25866), (393, 25887), (394, 25896), (406, 25950), (418, 25995), (422, 26016), (425, 26025), (432, 26058), (433, 26067), (436, 26091), (443, 26121), (444, 26124), (446, 26133), (449, 26145), (452, 26154), (454, 26166), (459, 26187), (461, 26193), (471, 26247), (490, 26325), (494, 26337), (496, 26343), (497, 26346), (500, 26361), (505, 26382), (512, 26418), (525, 26472), (526, 26475), (529, 26487), (534, 26496), (538, 26508), (539, 26511), (542, 26526), (549, 26553), (551, 26559), (556, 26574), (557, 26577), (558, 26586), (559, 26601), (560, 26607), (564, 26622), (566, 26634), (567, 26637), (577, 26673), (582, 26694), (584, 26706), (586, 26715), (590, 26727), (598, 26754), (605, 26778), (608, 26787), (610, 26793), (615, 26811), (632, 26880), (650, 26949), (686, 27105), (734, 27306), (757, 27450), (768, 27513), (771, 27540), (781, 27612), (784, 27624), (785, 27633), (789, 27687), (794, 27708), (795, 27720), (831, 27882), (845, 27969), (850, 27987), (859, 28017), (866, 28035), (867, 28038), (870, 28050), (876, 28077), (892, 28188), (900, 28263), (908, 28311), (916, 28365), (920, 28392), (937, 28506), (947, 28596),

Gene: Nivinsha_26 Start: 20074, Stop: 24663, Start Num: 17

Candidate Starts for Nivinsha_26:

(Start: 16 @20053 has 2 MA's), (Start: 17 @20074 has 129 MA's), (Start: 20 @20104 has 3 MA's), (28, 20158), (32, 20179), (37, 20215), (47, 20293), (57, 20353), (63, 20377), (65, 20389), (68, 20419), (71, 20470), (75, 20500), (76, 20542), (77, 20560), (81, 20602), (83, 20632), (85, 20677), (86, 20689), (93, 20743), (96, 20758), (98, 20770), (102, 20791), (115, 20884), (118, 20917), (121, 20932), (127, 20980), (146, 21151), (161, 21265), (162, 21268), (188, 21430), (195, 21454), (198, 21469), (202, 21481), (216, 21556), (234, 21649), (239, 21664), (240, 21670), (245, 21688), (261, 21760), (273, 21811), (278, 21826), (284, 21856), (301, 21928), (303, 21934), (313, 21967), (314, 21970), (321, 21997), (337, 22111), (345, 22168), (347, 22180), (360, 22234), (363, 22243), (364, 22246), (369, 22267), (378, 22312), (384, 22333), (391, 22375), (394, 22393), (407, 22450), (414, 22471), (418, 22492), (434, 22573), (436, 22588), (437, 22591), (443, 22618), (444, 22621), (456, 22672), (471, 22750), (474, 22765), (475, 22768), (479, 22786), (480, 22792), (482, 22798), (485, 22807), (494, 22843), (497, 22852), (504, 22885), (515, 22939), (516, 22942), (520, 22960), (524, 22972), (531, 23002), (536, 23017), (540, 23026), (542, 23038), (547, 23059), (558, 23098), (569, 23155), (574, 23167), (577, 23176), (589, 23215), (592, 23227), (602, 23257), (604, 23266), (615, 23302), (624, 23341), (625, 23344), (629, 23362), (631, 23368), (646, 23428), (649, 23437), (661, 23491), (662, 23494), (665, 23503), (693, 23620), (694, 23623), (700, 23644), (708, 23677), (709, 23680), (710, 23686), (713, 23695), (719, 23722), (728, 23767), (742, 23833), (748, 23884), (750, 23890), (759,

23950), (773, 24034), (776, 24052), (777, 24064), (799, 24223), (800, 24232), (809, 24280), (817, 24313), (821, 24325), (824, 24331), (827, 24352), (829, 24355), (830, 24361), (835, 24400), (841, 24427), (882, 24613), (888, 24640),

Gene: NoPickles_29 Start: 20260, Stop: 25362, Start Num: 17

Candidate Starts for NoPickles_29:

(Start: 17 @20260 has 129 MA's), (Start: 20 @20290 has 3 MA's), (42, 20428), (46, 20473), (47, 20479), (49, 20488), (50, 20503), (53, 20524), (58, 20545), (65, 20575), (68, 20605), (69, 20626), (76, 20728), (81, 20788), (85, 20863), (86, 20875), (89, 20899), (93, 20929), (96, 20944), (102, 20977), (107, 21019), (112, 21070), (119, 21124), (120, 21127), (130, 21226), (133, 21250), (146, 21346), (158, 21451), (159, 21454), (170, 21523), (172, 21529), (173, 21535), (Start: 208 @21712 has 1 MA's), (219, 21763), (228, 21814), (241, 21868), (242, 21871), (278, 22042), (295, 22123), (296, 22126), (311, 22201), (323, 22258), (335, 22342), (337, 22351), (346, 22414), (347, 22420), (349, 22426), (353, 22438), (355, 22453), (356, 22456), (361, 22477), (373, 22525), (378, 22552), (384, 22573), (387, 22582), (390, 22603), (391, 22615), (393, 22624), (394, 22633), (398, 22660), (406, 22687), (407, 22690), (414, 22711), (422, 22753), (428, 22780), (431, 22789), (433, 22804), (434, 22813), (436, 22828), (438, 22840), (441, 22849), (444, 22861), (449, 22882), (452, 22891), (470, 22975), (471, 22984), (474, 22999), (475, 23002), (479, 23020), (482, 23032), (483, 23035), (490, 23062), (497, 23083), (500, 23098), (510, 23140), (512, 23155), (526, 23212), (529, 23224), (534, 23233), (538, 23245), (541, 23257), (542, 23263), (547, 23284), (551, 23296), (557, 23314), (558, 23323), (559, 23338), (560, 23344), (563, 23356), (573, 23398), (574, 23401), (577, 23410), (582, 23431), (584, 23443), (598, 23491), (601, 23500), (608, 23524), (610, 23530), (615, 23548), (616, 23557), (622, 23578), (639, 23647), (644, 23665), (645, 23668), (650, 23686), (680, 23812), (691, 23857), (705, 23908), (736, 24052), (757, 24187), (766, 24238), (778, 24316), (784, 24361), (789, 24424), (793, 24442), (797, 24472), (799, 24478), (809, 24535), (826, 24607), (838, 24667), (842, 24688), (843, 24691), (851, 24742), (853, 24751), (867, 24790), (870, 24802), (883, 24895), (892, 24940), (900, 25015), (906, 25054), (911, 25084), (919, 25141), (936, 25252), (947, 25348),

Gene: Odesza_29 Start: 20616, Stop: 25730, Start Num: 17

Candidate Starts for Odesza_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (43, 20793), (46, 20829), (47, 20835), (53, 20880), (58, 20901), (65, 20931), (76, 21096), (81, 21156), (85, 21231), (89, 21267), (90, 21282), (93, 21297), (96, 21312), (102, 21345), (112, 21438), (119, 21492), (120, 21495), (146, 21714), (158, 21819), (159, 21822), (170, 21891), (172, 21897), (Start: 208 @22080 has 1 MA's), (219, 22131), (228, 22182), (241, 22236), (242, 22239), (269, 22371), (291, 22473), (295, 22491), (296, 22494), (311, 22569), (323, 22626), (335, 22710), (337, 22719), (353, 22806), (361, 22845), (373, 22893), (378, 22920), (384, 22941), (387, 22950), (390, 22971), (391, 22983), (393, 22992), (394, 23001), (398, 23028), (406, 23055), (407, 23058), (414, 23079), (422, 23121), (428, 23148), (431, 23157), (433, 23172), (434, 23181), (436, 23196), (438, 23208), (441, 23217), (444, 23229), (449, 23250), (452, 23259), (470, 23343), (471, 23352), (474, 23367), (475, 23370), (479, 23388), (482, 23400), (483, 23403), (490, 23430), (497, 23451), (500, 23466), (510, 23508), (512, 23523), (526, 23580), (529, 23592), (534, 23601), (538, 23613), (541, 23625), (542, 23631), (547, 23652), (551, 23664), (557, 23682), (558, 23691), (559, 23706), (560, 23712), (563, 23724), (573, 23766), (574, 23769), (577, 23778), (582, 23799), (584, 23811), (598, 23859), (601, 23868), (608, 23892), (610, 23898), (615, 23916), (616, 23925), (622, 23946), (639, 24015), (644, 24033), (645, 24036), (650, 24054), (680, 24180), (691, 24225), (705, 24276), (736, 24420), (757, 24555), (766, 24606), (778, 24684), (784, 24729), (789, 24792), (793, 24810), (797, 24840), (799, 24846), (809, 24903), (826, 24975), (838, 25035), (842, 25056), (843, 25059), (851, 25110), (853, 25119), (867, 25158), (870, 25170), (883, 25263), (892, 25308), (900, 25383), (906, 25422), (911, 25452), (919, 25509), (936, 25620), (947, 25716),

Gene: OhMyWard_32 Start: 24046, Stop: 29148, Start Num: 17

Candidate Starts for OhMyWard_32:

(Start: 17 @24046 has 129 MA's), (Start: 20 @24076 has 3 MA's), (25, 24121), (46, 24259), (47, 24265), (58, 24331), (65, 24361), (76, 24526), (81, 24586), (86, 24673), (89, 24697), (93, 24727), (96, 24742), (102, 24775), (112, 24868), (132, 25036), (146, 25144), (147, 25156), (153, 25213), (158, 25249), (159, 25252), (162, 25261), (170, 25321), (172, 25327), (Start: 208 @25510 has 1 MA's), (209, 25516), (228, 25612), (231, 25630), (267, 25786), (293, 25912), (295, 25921), (337, 26152), (338, 26158), (347, 26221), (353, 26239), (358, 26266), (363, 26284), (378, 26353), (385, 26377), (387, 26383), (390, 26404), (392, 26422), (393, 26425), (406, 26488), (418, 26533), (422, 26554), (428, 26581), (434, 26614), (438, 26641), (443, 26659), (444, 26662), (446, 26671), (451, 26689), (452, 26692), (454, 26704), (474, 26800), (482, 26833), (487, 26854), (490, 26863), (494, 26875), (497, 26884), (500, 26899), (502, 26905), (503, 26911), (505, 26920), (508, 26935), (509, 26938), (511, 26947), (512, 26956), (520, 26992), (526, 27013), (534, 27034), (542, 27064), (546, 27079), (547, 27085), (555, 27109), (557, 27115), (558, 27124), (559, 27139), (560, 27145), (569, 27181), (573, 27199), (577, 27211), (582, 27232), (584, 27244), (590, 27265), (591, 27268), (598, 27292), (601, 27301), (608, 27325), (610, 27331), (615, 27349), (616, 27358), (617, 27361), (639, 27448), (648, 27478), (679, 27610), (697, 27679), (734, 27844), (753, 27952), (756, 27985), (771, 28078), (781, 28150), (784, 28162), (785, 28171), (789, 28225), (797, 28273), (809, 28336), (824, 28387), (831, 28420), (845, 28507), (850, 28525), (859, 28555), (867, 28576), (869, 28582), (870, 28588), (876, 28615), (879, 28642), (892, 28726), (898, 28789), (900, 28801), (918, 28912), (920, 28930), (926, 28978), (947, 29134),

Gene: OlgasClover_32 Start: 24235, Stop: 29334, Start Num: 17
Candidate Starts for OlgasClover_32:

(Start: 17 @24235 has 129 MA's), (Start: 20 @24265 has 3 MA's), (25, 24310), (46, 24448), (47, 24454), (56, 24508), (58, 24520), (61, 24532), (65, 24550), (76, 24715), (81, 24775), (86, 24862), (89, 24886), (93, 24916), (96, 24931), (102, 24964), (112, 25057), (132, 25225), (146, 25333), (147, 25345), (153, 25402), (158, 25438), (159, 25441), (170, 25510), (172, 25516), (186, 25600), (202, 25663), (Start: 208 @25699 has 1 MA's), (215, 25732), (230, 25807), (231, 25819), (241, 25855), (255, 25906), (262, 25954), (265, 25966), (295, 26110), (303, 26149), (310, 26176), (337, 26338), (343, 26386), (347, 26407), (353, 26425), (364, 26473), (378, 26539), (390, 26590), (391, 26602), (394, 26620), (406, 26674), (418, 26719), (422, 26740), (425, 26749), (429, 26770), (432, 26782), (433, 26791), (443, 26845), (444, 26848), (446, 26857), (452, 26878), (454, 26890), (459, 26911), (461, 26917), (465, 26935), (471, 26971), (477, 27001), (490, 27049), (494, 27061), (496, 27067), (497, 27070), (499, 27082), (500, 27085), (505, 27106), (512, 27142), (525, 27196), (526, 27199), (534, 27220), (538, 27232), (539, 27235), (551, 27283), (556, 27298), (557, 27301), (558, 27310), (560, 27331), (566, 27358), (567, 27361), (573, 27385), (577, 27397), (582, 27418), (584, 27430), (586, 27439), (590, 27451), (598, 27478), (608, 27511), (610, 27517), (615, 27535), (617, 27547), (628, 27589), (632, 27604), (650, 27673), (676, 27784), (705, 27895), (717, 27940), (734, 28030), (757, 28174), (768, 28237), (771, 28264), (781, 28336), (784, 28348), (785, 28357), (789, 28411), (794, 28432), (795, 28444), (831, 28606), (845, 28693), (850, 28711), (859, 28741), (866, 28759), (867, 28762), (870, 28774), (876, 28801), (892, 28912), (900, 28987), (908, 29035), (916, 29089), (920, 29116), (937, 29230), (947, 29320),

Gene: OlympicHelado_23 Start: 16166, Stop: 21652, Start Num: 2
Candidate Starts for OlympicHelado_23:

(1, 16145), (Start: 2 @16166 has 30 MA's), (3, 16196), (12, 16340), (40, 16550), (50, 16667), (65, 16739), (68, 16769), (76, 16892), (84, 17018), (93, 17093), (102, 17141), (107, 17183), (128, 17372), (149, 17567), (158, 17639), (172, 17717), (186, 17801), (190, 17822), (202, 17864), (227, 17999), (240, 18053), (264, 18140), (275, 18176), (277, 18185), (286, 18227), (295, 18260), (301, 18290), (334, 18413), (337, 18434), (346, 18497), (347, 18503), (349, 18509), (355, 18536), (360, 18557), (362, 18563), (363, 18566), (369, 18590), (378, 18635), (381, 18644), (382, 18647), (396, 18731), (402, 18758), (407, 18773), (408, 18776), (415, 18794), (418, 18812), (422, 18833), (433, 18884), (446, 18950), (450, 18965), (469, 19052), (471, 19070), (476, 19097), (502, 19190), (511, 19232), (512, 19241), (520, 19277), (525, 19295), (526, 19298), (529, 19310), (542, 19352), (543, 19355),

(557, 19403), (561, 19439), (563, 19445), (568, 19466), (577, 19490), (586, 19520), (604, 19580), (614, 19613), (615, 19616), (618, 19631), (627, 19667), (637, 19709), (640, 19721), (641, 19724), (655, 19772), (660, 19802), (665, 19817), (672, 19850), (675, 19865), (691, 19928), (711, 20003), (712, 20006), (713, 20009), (721, 20045), (733, 20111), (748, 20198), (749, 20201), (764, 20300), (770, 20348), (772, 20354), (790, 20504), (793, 20513), (845, 20786), (894, 21011), (905, 21104), (909, 21125), (912, 21149), (914, 21173), (916, 21179), (917, 21185), (924, 21230), (939, 21338), (946, 21407), (952, 21494), (959, 21596), (960, 21605),

Gene: Paella_40 Start: 29221, Stop: 33771, Start Num: 17

Candidate Starts for Paella_40:

(Start: 17 @29221 has 129 MA's), (Start: 20 @29251 has 3 MA's), (32, 29326), (37, 29362), (47, 29440), (76, 29689), (84, 29815), (89, 29860), (90, 29875), (93, 29890), (98, 29917), (102, 29938), (105, 29962), (107, 29980), (118, 30097), (124, 30142), (127, 30160), (139, 30283), (141, 30310), (144, 30322), (147, 30343), (177, 30538), (192, 30625), (194, 30631), (205, 30673), (213, 30724), (225, 30787), (248, 30862), (250, 30871), (285, 30991), (305, 31069), (309, 31078), (337, 31246), (351, 31324), (360, 31369), (363, 31378), (369, 31402), (378, 31447), (384, 31468), (400, 31564), (411, 31597), (418, 31627), (434, 31708), (436, 31723), (437, 31726), (456, 31807), (462, 31834), (471, 31885), (476, 31912), (482, 31933), (483, 31936), (494, 31978), (515, 32074), (520, 32095), (524, 32107), (529, 32128), (531, 32137), (536, 32149), (547, 32191), (557, 32221), (558, 32230), (566, 32278), (567, 32281), (574, 32299), (577, 32308), (592, 32359), (595, 32368), (604, 32398), (615, 32434), (621, 32461), (641, 32542), (642, 32545), (662, 32626), (666, 32638), (672, 32668), (675, 32683), (678, 32692), (682, 32707), (691, 32746), (702, 32785), (706, 32800), (708, 32809), (711, 32821), (714, 32830), (715, 32833), (723, 32878), (724, 32884), (736, 32941), (740, 32956), (744, 32986), (759, 33082), (769, 33139), (776, 33184), (786, 33253), (795, 33334), (799, 33355), (804, 33388), (813, 33433), (816, 33442), (821, 33457), (824, 33463), (835, 33532), (840, 33550), (852, 33601),

Gene: Pepy6_035 Start: 30017, Stop: 35869, Start Num: 17

Candidate Starts for Pepy6_035:

(Start: 16 @29996 has 2 MA's), (Start: 17 @30017 has 129 MA's), (Start: 20 @30047 has 3 MA's), (25, 30092), (28, 30101), (32, 30122), (42, 30185), (47, 30236), (68, 30362), (69, 30383), (75, 30443), (76, 30485), (81, 30545), (89, 30656), (93, 30686), (96, 30701), (102, 30734), (107, 30776), (112, 30827), (119, 30881), (120, 30884), (123, 30899), (147, 31115), (154, 31175), (156, 31196), (162, 31220), (202, 31433), (Start: 208 @31469 has 1 MA's), (227, 31568), (283, 31826), (295, 31877), (303, 31916), (304, 31919), (313, 31961), (315, 31967), (322, 32012), (328, 32033), (334, 32087), (337, 32108), (358, 32222), (365, 32249), (369, 32264), (372, 32273), (376, 32300), (384, 32330), (385, 32333), (387, 32339), (392, 32378), (394, 32390), (403, 32435), (404, 32438), (418, 32489), (422, 32510), (425, 32519), (429, 32540), (434, 32570), (438, 32597), (441, 32606), (442, 32612), (452, 32648), (454, 32660), (464, 32702), (465, 32705), (468, 32717), (470, 32732), (476, 32768), (480, 32783), (490, 32819), (494, 32831), (501, 32858), (511, 32903), (512, 32912), (515, 32927), (524, 32960), (526, 32969), (528, 32975), (534, 32990), (543, 33023), (549, 33047), (554, 33062), (558, 33080), (564, 33116), (572, 33152), (574, 33158), (582, 33188), (584, 33200), (585, 33206), (590, 33221), (597, 33245), (601, 33257), (603, 33263), (605, 33272), (606, 33275), (622, 33335), (628, 33359), (648, 33434), (670, 33530), (735, 33806), (740, 33824), (741, 33830), (744, 33854), (753, 33908), (769, 34016), (773, 34043), (775, 34058), (780, 34112), (797, 34238), (808, 34298), (867, 34586), (907, 34850), (913, 34898), (928, 35000), (933, 35033), (945, 35132), (946, 35141), (953, 35246), (956, 35264), (958, 35300), (959, 35345), (963, 35627), (964, 35660), (965, 35855),

Gene: Perkunas_31 Start: 21027, Stop: 26129, Start Num: 17

Candidate Starts for Perkunas_31:

(Start: 17 @21027 has 129 MA's), (Start: 20 @21057 has 3 MA's), (42, 21195), (46, 21240), (53, 21291), (57, 21306), (58, 21312), (65, 21342), (68, 21372), (69, 21393), (76, 21495), (81, 21555), (89, 21666), (93, 21696), (96, 21711), (102, 21744), (107, 21786), (112, 21837), (119, 21891), (120,

21894), (130, 21993), (146, 22113), (158, 22218), (159, 22221), (170, 22290), (172, 22296), (198, 22431), (241, 22635), (242, 22638), (291, 22872), (295, 22890), (303, 22929), (310, 22956), (311, 22968), (314, 22977), (335, 23109), (337, 23118), (349, 23193), (353, 23205), (354, 23211), (373, 23292), (377, 23313), (378, 23319), (384, 23340), (387, 23349), (390, 23370), (391, 23382), (393, 23391), (394, 23400), (398, 23427), (406, 23454), (407, 23457), (414, 23478), (422, 23520), (430, 23553), (431, 23556), (433, 23571), (434, 23580), (438, 23607), (441, 23616), (444, 23628), (449, 23649), (452, 23658), (459, 23691), (470, 23742), (471, 23751), (474, 23766), (479, 23787), (483, 23802), (489, 23826), (490, 23829), (494, 23841), (496, 23847), (497, 23850), (510, 23907), (512, 23922), (526, 23979), (529, 23991), (534, 24000), (538, 24012), (541, 24024), (542, 24030), (550, 24060), (551, 24063), (554, 24072), (557, 24081), (558, 24090), (559, 24105), (560, 24111), (563, 24123), (573, 24165), (577, 24177), (582, 24198), (584, 24210), (601, 24267), (608, 24291), (610, 24297), (611, 24300), (615, 24315), (617, 24327), (622, 24345), (639, 24414), (645, 24435), (667, 24522), (691, 24624), (696, 24642), (723, 24756), (728, 24777), (736, 24819), (757, 24954), (784, 25128), (789, 25191), (793, 25209), (797, 25239), (799, 25245), (803, 25266), (826, 25374), (838, 25434), (842, 25455), (843, 25458), (851, 25509), (853, 25518), (859, 25536), (867, 25557), (870, 25569), (883, 25662), (892, 25707), (898, 25770), (900, 25782), (906, 25821), (911, 25851), (916, 25884), (919, 25908), (928, 25968), (947, 26115),

Gene: Petito_31 Start: 21794, Stop: 26884, Start Num: 17

Candidate Starts for Petito_31:

(Start: 17 @21794 has 129 MA's), (Start: 20 @21824 has 3 MA's), (42, 21962), (46, 22007), (47, 22013), (50, 22037), (53, 22058), (58, 22079), (65, 22109), (68, 22139), (69, 22160), (76, 22262), (81, 22322), (85, 22397), (86, 22409), (89, 22433), (93, 22463), (96, 22478), (102, 22511), (103, 22517), (107, 22553), (112, 22604), (119, 22658), (120, 22661), (130, 22760), (133, 22784), (146, 22880), (152, 22934), (155, 22964), (158, 22985), (159, 22988), (170, 23057), (172, 23063), (202, 23210), (Start: 208 @23246 has 1 MA's), (214, 23276), (228, 23348), (234, 23378), (241, 23402), (295, 23657), (311, 23735), (314, 23744), (323, 23792), (335, 23876), (337, 23885), (346, 23948), (353, 23972), (356, 23990), (361, 24011), (373, 24059), (378, 24086), (387, 24116), (390, 24137), (391, 24149), (393, 24158), (394, 24167), (406, 24221), (407, 24224), (414, 24245), (422, 24287), (428, 24314), (431, 24323), (433, 24338), (434, 24347), (436, 24362), (438, 24374), (441, 24383), (444, 24395), (449, 24416), (452, 24425), (465, 24482), (470, 24509), (471, 24518), (474, 24533), (475, 24536), (479, 24554), (490, 24596), (494, 24608), (497, 24617), (500, 24632), (510, 24674), (512, 24689), (526, 24746), (529, 24758), (534, 24767), (538, 24779), (541, 24791), (542, 24797), (547, 24818), (551, 24830), (554, 24839), (557, 24848), (558, 24857), (559, 24872), (560, 24878), (563, 24890), (569, 24914), (573, 24932), (577, 24944), (582, 24965), (584, 24977), (598, 25025), (601, 25034), (608, 25058), (610, 25064), (611, 25067), (615, 25082), (616, 25091), (617, 25094), (622, 25112), (639, 25181), (645, 25202), (665, 25280), (679, 25343), (684, 25364), (693, 25397), (719, 25499), (728, 25544), (736, 25586), (747, 25655), (757, 25721), (769, 25793), (781, 25883), (789, 25958), (799, 26012), (803, 26033), (809, 26069), (820, 26108), (824, 26120), (826, 26141), (843, 26225), (850, 26258), (859, 26288), (862, 26294), (867, 26309), (870, 26321), (890, 26447), (892, 26459), (900, 26534), (902, 26552), (906, 26573), (909, 26585), (919, 26660), (920, 26663), (947, 26870),

Gene: Phaby_27 Start: 20255, Stop: 24850, Start Num: 17

Candidate Starts for Phaby_27:

(Start: 16 @20234 has 2 MA's), (Start: 17 @20255 has 129 MA's), (Start: 20 @20285 has 3 MA's), (28, 20339), (65, 20570), (68, 20600), (75, 20681), (76, 20723), (77, 20741), (81, 20783), (86, 20870), (93, 20924), (96, 20939), (97, 20945), (102, 20972), (113, 21050), (115, 21065), (118, 21098), (121, 21113), (122, 21122), (125, 21149), (127, 21161), (131, 21215), (141, 21311), (146, 21332), (162, 21449), (169, 21506), (171, 21512), (182, 21569), (197, 21641), (204, 21674), (206, 21677), (256, 21911), (277, 22004), (278, 22007), (301, 22109), (303, 22115), (314, 22151), (337, 22298), (344, 22352), (345, 22355), (360, 22421), (363, 22430), (364, 22433), (369, 22454), (375, 22481), (384, 22520), (385, 22523), (407, 22637), (414, 22658), (417, 22676), (418, 22679), (436, 22775), (438, 22787), (467, 22907), (471, 22937), (474, 22952), (485, 22994), (491, 23015), (494, 23030), (497,

23039), (499, 23051), (504, 23072), (515, 23126), (520, 23147), (529, 23180), (530, 23186), (531, 23189), (537, 23207), (538, 23210), (542, 23228), (557, 23279), (558, 23288), (568, 23342), (577, 23366), (587, 23399), (594, 23423), (604, 23456), (623, 23528), (624, 23531), (629, 23552), (635, 23576), (637, 23585), (646, 23618), (647, 23621), (649, 23627), (659, 23672), (660, 23678), (672, 23726), (700, 23834), (710, 23876), (713, 23885), (744, 24044), (747, 24068), (749, 24077), (756, 24119), (759, 24140), (763, 24155), (776, 24242), (777, 24254), (783, 24296), (794, 24380), (804, 24446), (809, 24470), (821, 24515), (824, 24521), (835, 24590), (836, 24593), (841, 24617), (882, 24800),

Gene: Phaila_25 Start: 18580, Stop: 23217, Start Num: 17

Candidate Starts for Phaila_25:

(Start: 16 @18559 has 2 MA's), (Start: 17 @18580 has 129 MA's), (Start: 20 @18610 has 3 MA's), (28, 18664), (29, 18673), (58, 18943), (59, 18946), (68, 19003), (69, 19024), (75, 19084), (76, 19126), (81, 19186), (90, 19312), (93, 19327), (96, 19342), (102, 19375), (106, 19414), (107, 19417), (113, 19453), (115, 19468), (121, 19516), (152, 19789), (159, 19843), (162, 19852), (170, 19912), (180, 19954), (188, 20014), (189, 20020), (192, 20029), (197, 20044), (198, 20053), (219, 20152), (220, 20164), (221, 20173), (223, 20185), (296, 20470), (310, 20530), (314, 20539), (337, 20680), (343, 20728), (344, 20734), (351, 20758), (360, 20803), (363, 20812), (369, 20836), (373, 20854), (383, 20899), (384, 20902), (387, 20911), (396, 20977), (407, 21019), (411, 21031), (414, 21040), (418, 21061), (429, 21112), (434, 21142), (436, 21157), (446, 21199), (451, 21217), (461, 21265), (462, 21268), (472, 21325), (499, 21433), (502, 21442), (512, 21493), (515, 21508), (520, 21529), (529, 21562), (531, 21571), (536, 21583), (542, 21604), (544, 21610), (549, 21631), (557, 21655), (558, 21664), (574, 21733), (575, 21736), (576, 21739), (577, 21742), (586, 21772), (592, 21793), (599, 21814), (604, 21832), (607, 21841), (612, 21859), (627, 21919), (629, 21928), (635, 21952), (638, 21967), (640, 21973), (641, 21976), (654, 22021), (660, 22054), (661, 22057), (662, 22060), (667, 22078), (696, 22198), (697, 22201), (702, 22219), (721, 22297), (724, 22318), (740, 22390), (747, 22444), (750, 22456), (769, 22573), (776, 22618), (801, 22801), (804, 22822), (809, 22846), (824, 22897), (835, 22966), (840, 22984),

Gene: Phepper_32 Start: 23282, Stop: 28393, Start Num: 17

Candidate Starts for Phepper_32:

(Start: 17 @23282 has 129 MA's), (Start: 20 @23312 has 3 MA's), (25, 23357), (47, 23501), (58, 23567), (68, 23627), (69, 23648), (76, 23750), (84, 23876), (87, 23912), (93, 23951), (98, 23978), (102, 23999), (107, 24041), (118, 24161), (132, 24287), (140, 24362), (146, 24395), (158, 24500), (159, 24503), (228, 24863), (255, 24968), (267, 25037), (272, 25058), (288, 25139), (289, 25142), (295, 25169), (303, 25208), (310, 25235), (337, 25397), (343, 25445), (347, 25466), (353, 25484), (364, 25532), (367, 25544), (378, 25598), (390, 25649), (391, 25661), (393, 25670), (394, 25679), (406, 25733), (418, 25778), (421, 25793), (422, 25799), (425, 25808), (426, 25814), (430, 25832), (431, 25835), (432, 25841), (433, 25850), (443, 25904), (444, 25907), (446, 25916), (451, 25934), (452, 25937), (454, 25949), (459, 25970), (461, 25976), (462, 25979), (467, 26000), (471, 26030), (474, 26045), (482, 26078), (486, 26093), (490, 26108), (494, 26120), (496, 26126), (497, 26129), (499, 26141), (500, 26144), (512, 26201), (525, 26255), (526, 26258), (534, 26279), (538, 26291), (539, 26294), (551, 26342), (556, 26357), (557, 26360), (558, 26369), (560, 26390), (566, 26417), (567, 26420), (573, 26444), (577, 26456), (582, 26477), (584, 26489), (590, 26510), (598, 26537), (608, 26570), (610, 26576), (615, 26594), (622, 26624), (632, 26663), (676, 26843), (679, 26855), (697, 26924), (734, 27089), (755, 27212), (757, 27233), (778, 27362), (781, 27395), (784, 27407), (789, 27470), (794, 27491), (795, 27503), (797, 27518), (809, 27581), (831, 27665), (845, 27752), (850, 27770), (859, 27800), (866, 27818), (867, 27821), (869, 27827), (870, 27833), (876, 27860), (892, 27971), (900, 28046), (902, 28064), (916, 28148), (919, 28172), (937, 28289), (947, 28379),

Gene: Pherobrine_31 Start: 23313, Stop: 28427, Start Num: 17

Candidate Starts for Pherobrine_31:

(Start: 17 @23313 has 129 MA's), (Start: 20 @23343 has 3 MA's), (25, 23388), (47, 23532), (57, 23592), (58, 23598), (66, 23637), (68, 23658), (69, 23679), (76, 23781), (78, 23817), (84, 23907), (87, 23943), (93, 23982), (98, 24009), (102, 24030), (107, 24072), (118, 24192), (140, 24393), (146, 24426), (149, 24459), (155, 24510), (158, 24531), (159, 24534), (172, 24609), (198, 24744), (212, 24810), (215, 24825), (228, 24894), (231, 24912), (240, 24945), (246, 24966), (248, 24975), (255, 24999), (267, 25068), (272, 25089), (278, 25122), (279, 25125), (293, 25194), (295, 25203), (314, 25290), (327, 25350), (333, 25401), (337, 25434), (338, 25440), (347, 25503), (353, 25521), (363, 25566), (378, 25635), (385, 25659), (387, 25665), (390, 25686), (394, 25716), (406, 25770), (407, 25773), (421, 25830), (422, 25836), (430, 25869), (433, 25887), (434, 25896), (436, 25911), (438, 25923), (443, 25941), (444, 25944), (446, 25953), (449, 25965), (451, 25971), (452, 25974), (459, 26007), (464, 26028), (471, 26067), (482, 26115), (486, 26130), (487, 26136), (490, 26145), (494, 26157), (497, 26166), (499, 26178), (500, 26181), (501, 26184), (502, 26187), (503, 26193), (505, 26202), (517, 26265), (524, 26286), (526, 26295), (534, 26316), (547, 26367), (549, 26373), (550, 26376), (555, 26391), (557, 26397), (559, 26421), (560, 26427), (566, 26454), (567, 26457), (577, 26493), (582, 26514), (584, 26526), (586, 26535), (590, 26547), (598, 26574), (601, 26583), (608, 26607), (610, 26613), (615, 26631), (622, 26661), (632, 26700), (639, 26730), (648, 26760), (679, 26892), (697, 26961), (734, 27126), (753, 27234), (756, 27267), (771, 27360), (781, 27432), (784, 27444), (789, 27507), (797, 27555), (820, 27657), (825, 27678), (831, 27702), (833, 27726), (845, 27789), (850, 27807), (866, 27855), (867, 27858), (870, 27870), (876, 27897), (892, 28008), (900, 28083), (916, 28185), (920, 28212), (921, 28215), (937, 28323), (944, 28362), (947, 28413),

Gene: PherryCruz_18 Start: 13488, Stop: 18716, Start Num: 17

Candidate Starts for PherryCruz_18:

(Start: 16 @13467 has 2 MA's), (Start: 17 @13488 has 129 MA's), (Start: 20 @13518 has 3 MA's), (40, 13620), (43, 13671), (58, 13779), (76, 13962), (84, 14088), (87, 14124), (93, 14163), (107, 14253), (149, 14640), (172, 14790), (177, 14814), (188, 14886), (238, 15117), (261, 15195), (264, 15213), (265, 15216), (275, 15249), (300, 15357), (320, 15417), (337, 15498), (346, 15561), (347, 15567), (360, 15621), (366, 15642), (381, 15708), (382, 15711), (402, 15822), (415, 15858), (418, 15876), (429, 15927), (450, 16029), (453, 16041), (456, 16056), (470, 16125), (471, 16134), (477, 16164), (489, 16209), (496, 16230), (503, 16260), (506, 16272), (507, 16275), (511, 16296), (512, 16305), (520, 16341), (529, 16374), (553, 16455), (554, 16458), (561, 16503), (562, 16506), (563, 16509), (577, 16554), (586, 16584), (600, 16629), (604, 16644), (614, 16677), (619, 16698), (621, 16707), (623, 16716), (629, 16740), (630, 16743), (633, 16752), (637, 16773), (640, 16785), (648, 16812), (657, 16851), (662, 16872), (668, 16893), (670, 16908), (672, 16914), (706, 17046), (708, 17055), (710, 17064), (713, 17073), (714, 17076), (717, 17088), (718, 17091), (719, 17100), (721, 17109), (740, 17202), (747, 17256), (764, 17364), (767, 17379), (793, 17577), (839, 17811), (856, 17886), (904, 18165), (905, 18168), (909, 18189), (914, 18237), (916, 18243), (932, 18351), (941, 18423), (949, 18525), (960, 18678),

Gene: Pippin15_25 Start: 18211, Stop: 22791, Start Num: 17

Candidate Starts for Pippin15_25:

(Start: 17 @18211 has 129 MA's), (Start: 20 @18244 has 3 MA's), (43, 18391), (55, 18484), (76, 18679), (78, 18715), (84, 18805), (102, 18928), (107, 18970), (118, 19090), (151, 19372), (155, 19408), (162, 19441), (172, 19507), (200, 19654), (215, 19735), (233, 19828), (265, 19954), (280, 20008), (337, 20260), (362, 20389), (363, 20392), (366, 20404), (375, 20443), (388, 20503), (391, 20524), (404, 20590), (407, 20599), (418, 20641), (420, 20647), (422, 20662), (427, 20683), (447, 20782), (458, 20833), (464, 20860), (469, 20881), (471, 20899), (479, 20935), (484, 20953), (494, 20995), (500, 21019), (501, 21022), (504, 21037), (507, 21046), (520, 21115), (526, 21136), (529, 21148), (532, 21157), (536, 21169), (543, 21193), (557, 21241), (574, 21319), (577, 21328), (599, 21400), (602, 21409), (604, 21418), (623, 21490), (634, 21532), (640, 21559), (653, 21604), (663, 21649), (664, 21652), (672, 21688), (682, 21727), (688, 21757), (702, 21805), (714, 21850), (725, 21907), (744, 22006), (745, 22015), (749, 22039), (754, 22060), (769, 22159), (776, 22204), (802, 22390), (810, 22432), (812, 22444), (818, 22465), (822, 22477), (835, 22552), (837, 22555), (840,

22570), (871, 22681), (887, 22780),

Gene: Poco6_036 Start: 32036, Stop: 37891, Start Num: 17

Candidate Starts for Poco6_036:

(Start: 17 @32036 has 129 MA's), (Start: 20 @32066 has 3 MA's), (25, 32111), (28, 32120), (32, 32141), (42, 32204), (47, 32255), (50, 32279), (68, 32381), (69, 32402), (76, 32519), (81, 32579), (89, 32690), (93, 32720), (96, 32735), (102, 32768), (112, 32861), (120, 32909), (142, 33110), (147, 33140), (172, 33311), (188, 33407), (Start: 208 @33494 has 1 MA's), (283, 33851), (295, 33902), (303, 33941), (313, 33986), (322, 34037), (328, 34058), (334, 34112), (337, 34133), (345, 34190), (358, 34247), (365, 34274), (369, 34289), (372, 34298), (376, 34325), (384, 34355), (385, 34358), (387, 34364), (394, 34415), (404, 34463), (418, 34514), (422, 34535), (425, 34544), (429, 34565), (433, 34586), (442, 34637), (444, 34643), (449, 34664), (452, 34673), (454, 34685), (458, 34700), (464, 34727), (465, 34730), (470, 34757), (486, 34829), (490, 34844), (494, 34856), (501, 34883), (511, 34928), (512, 34937), (524, 34985), (526, 34994), (534, 35015), (543, 35048), (547, 35066), (549, 35072), (554, 35087), (555, 35090), (556, 35093), (558, 35105), (572, 35177), (574, 35183), (582, 35213), (584, 35225), (585, 35231), (588, 35240), (590, 35246), (597, 35270), (601, 35282), (603, 35288), (622, 35360), (628, 35384), (645, 35450), (648, 35459), (665, 35528), (670, 35555), (735, 35831), (740, 35849), (744, 35879), (749, 35912), (753, 35933), (769, 36041), (773, 36068), (780, 36137), (784, 36152), (848, 36542), (907, 36872), (913, 36920), (928, 37022), (946, 37163), (953, 37268), (958, 37322), (959, 37367), (961, 37433), (962, 37532), (963, 37649), (964, 37682), (965, 37877),

Gene: Popy_23 Start: 16676, Stop: 22156, Start Num: 2

Candidate Starts for Popy_23:

(1, 16655), (Start: 2 @16676 has 30 MA's), (3, 16706), (12, 16850), (15, 16901), (22, 16985), (40, 17060), (50, 17177), (51, 17180), (57, 17213), (65, 17249), (68, 17279), (76, 17402), (84, 17528), (87, 17564), (93, 17603), (95, 17615), (102, 17651), (107, 17693), (128, 17885), (133, 17951), (141, 18026), (146, 18047), (149, 18080), (157, 18143), (158, 18152), (172, 18230), (202, 18377), (226, 18509), (240, 18566), (262, 18644), (264, 18653), (266, 18662), (275, 18689), (293, 18764), (295, 18773), (312, 18839), (313, 18842), (329, 18881), (337, 18935), (347, 19004), (360, 19058), (369, 19091), (378, 19136), (381, 19145), (384, 19157), (396, 19232), (410, 19283), (415, 19295), (422, 19334), (429, 19364), (432, 19376), (439, 19424), (450, 19466), (460, 19514), (471, 19571), (502, 19691), (511, 19733), (512, 19742), (520, 19778), (525, 19796), (526, 19799), (529, 19811), (542, 19853), (543, 19856), (557, 19904), (561, 19940), (563, 19946), (568, 19967), (577, 19991), (604, 20081), (614, 20114), (618, 20132), (621, 20144), (623, 20153), (637, 20210), (640, 20222), (641, 20225), (646, 20243), (660, 20303), (665, 20318), (672, 20351), (675, 20366), (694, 20438), (706, 20483), (710, 20501), (713, 20510), (721, 20546), (724, 20567), (725, 20570), (756, 20756), (759, 20777), (761, 20783), (764, 20801), (765, 20804), (767, 20816), (770, 20849), (772, 20855), (790, 21005), (793, 21014), (845, 21287), (876, 21389), (905, 21605), (909, 21626), (914, 21674), (916, 21680), (917, 21686), (924, 21731), (941, 21860), (946, 21908), (959, 22100), (960, 22109),

Gene: Powelldog_24 Start: 17004, Stop: 21530, Start Num: 17

Candidate Starts for Powelldog_24:

(Start: 16 @16983 has 2 MA's), (Start: 17 @17004 has 129 MA's), (Start: 20 @17034 has 3 MA's), (27, 17085), (29, 17097), (37, 17145), (43, 17181), (48, 17229), (57, 17283), (58, 17289), (76, 17472), (77, 17490), (80, 17526), (81, 17532), (86, 17619), (88, 17640), (93, 17673), (96, 17688), (99, 17703), (102, 17721), (113, 17799), (115, 17814), (118, 17847), (121, 17862), (127, 17910), (130, 17961), (132, 17973), (141, 18060), (143, 18069), (144, 18072), (147, 18093), (152, 18135), (155, 18165), (159, 18189), (170, 18258), (177, 18288), (178, 18291), (183, 18318), (186, 18348), (198, 18399), (259, 18669), (270, 18720), (292, 18804), (296, 18819), (306, 18867), (321, 18915), (337, 18996), (345, 19053), (348, 19068), (352, 19080), (359, 19113), (360, 19119), (363, 19128), (369, 19152), (373, 19170), (378, 19197), (384, 19218), (387, 19227), (389, 19245), (393, 19269), (396, 19293), (414, 19356), (416, 19365), (434, 19458), (448, 19521), (451, 19533), (458, 19569), (471, 19635), (495,

19731), (499, 19749), (504, 19770), (509, 19791), (512, 19809), (515, 19824), (517, 19836), (520, 19845), (524, 19857), (529, 19878), (531, 19887), (536, 19899), (540, 19908), (545, 19929), (550, 19950), (557, 19971), (558, 19980), (563, 20013), (574, 20049), (576, 20055), (577, 20058), (586, 20088), (597, 20124), (598, 20127), (599, 20130), (604, 20148), (621, 20211), (625, 20226), (628, 20238), (631, 20250), (632, 20253), (636, 20274), (637, 20277), (640, 20289), (644, 20304), (646, 20310), (652, 20331), (664, 20382), (668, 20397), (670, 20412), (678, 20442), (690, 20493), (694, 20505), (696, 20514), (709, 20562), (718, 20595), (723, 20628), (724, 20634), (725, 20637), (733, 20679), (748, 20766), (760, 20835), (772, 20910), (776, 20934), (777, 20946), (790, 21060), (797, 21099), (817, 21195), (821, 21207), (824, 21213), (865, 21387), (881, 21459),

Gene: ProfFrink_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for ProfFrink_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Qui_40 Start: 29221, Stop: 33771, Start Num: 17

Candidate Starts for Qui_40:

(Start: 17 @29221 has 129 MA's), (Start: 20 @29251 has 3 MA's), (32, 29326), (37, 29362), (47, 29440), (76, 29689), (84, 29815), (89, 29860), (90, 29875), (93, 29890), (98, 29917), (102, 29938), (105, 29962), (107, 29980), (118, 30097), (124, 30142), (127, 30160), (139, 30283), (141, 30310), (144, 30322), (147, 30343), (177, 30538), (192, 30625), (194, 30631), (205, 30673), (213, 30724), (225, 30787), (248, 30862), (250, 30871), (285, 30991), (305, 31069), (309, 31078), (337, 31246), (351, 31324), (360, 31369), (363, 31378), (369, 31402), (378, 31447), (384, 31468), (400, 31564), (411, 31597), (418, 31627), (434, 31708), (436, 31723), (437, 31726), (456, 31807), (462, 31834), (471, 31885), (476, 31912), (482, 31933), (483, 31936), (494, 31978), (515, 32074), (520, 32095), (524, 32107), (529, 32128), (531, 32137), (536, 32149), (547, 32191), (557, 32221), (558, 32230), (566, 32278), (567, 32281), (574, 32299), (577, 32308), (592, 32359), (595, 32368), (604, 32398), (615, 32434), (621, 32461), (641, 32542), (642, 32545), (662, 32626), (666, 32638), (672, 32668), (675, 32683), (678, 32692), (682, 32707), (691, 32746), (702, 32785), (706, 32800), (708, 32809), (711, 32821), (714, 32830), (715, 32833), (723, 32878), (724, 32884), (736, 32941), (740, 32956), (744, 32986), (759, 33082), (769, 33139), (776, 33184), (786, 33253), (795, 33334), (799, 33355), (804, 33388), (813, 33433), (816, 33442), (821, 33457), (824, 33463), (835, 33532), (840, 33550), (852, 33601),

Gene: Rainydai_21 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for Rainydai_21:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214), (943, 20265), (951, 20388), (957, 20427),

Gene: Raunak_23 Start: 17270, Stop: 21790, Start Num: 20

Candidate Starts for Raunak_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (351, 19340), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (664, 20648), (667, 20660), (679, 20714), (687, 20750), (691, 20762), (693, 20768), (703, 20804), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605), (873, 21683),

Gene: RavenPuff_18 Start: 13488, Stop: 18716, Start Num: 17

Candidate Starts for RavenPuff_18:

(Start: 16 @13467 has 2 MA's), (Start: 17 @13488 has 129 MA's), (Start: 20 @13518 has 3 MA's), (40, 13620), (43, 13671), (58, 13779), (76, 13962), (84, 14088), (87, 14124), (93, 14163), (107, 14253), (149, 14640), (172, 14790), (177, 14814), (188, 14886), (238, 15117), (261, 15195), (264, 15213), (265, 15216), (275, 15249), (300, 15357), (320, 15417), (337, 15498), (346, 15561), (347, 15567), (360, 15621), (366, 15642), (381, 15708), (382, 15711), (402, 15822), (415, 15858), (418, 15876), (429, 15927), (450, 16029), (453, 16041), (456, 16056), (470, 16125), (471, 16134), (477, 16164), (489, 16209), (496, 16230), (503, 16260), (506, 16272), (507, 16275), (511, 16296), (512, 16305), (520, 16341), (529, 16374), (553, 16455), (554, 16458), (561, 16503), (562, 16506), (563, 16509), (577, 16554), (586, 16584), (600, 16629), (604, 16644), (614, 16677), (619, 16698), (621, 16707), (623, 16716), (629, 16740), (630, 16743), (633, 16752), (637, 16773), (640, 16785), (648, 16812), (657, 16851), (662, 16872), (668, 16893), (670, 16908), (672, 16914), (706, 17046), (708, 17055), (710, 17064), (713, 17073), (714, 17076), (717, 17088), (718, 17091), (719, 17100), (721, 17109), (740, 17202), (747, 17256), (764, 17364), (767, 17379), (793, 17577), (839, 17811), (856, 17886), (904, 18165), (905, 18168), (909, 18189), (914, 18237), (916, 18243), (932, 18351), (941, 18423),

(949, 18525), (960, 18678),

Gene: Regigigas_22 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for Regigigas_22:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214), (943, 20265), (951, 20388), (957, 20427),

Gene: Renaldo_31 Start: 21026, Stop: 25564, Start Num: 32

Candidate Starts for Renaldo_31:

(Start: 16 @20900 has 2 MA's), (Start: 17 @20921 has 129 MA's), (Start: 20 @20951 has 3 MA's), (28, 21005), (32, 21026), (37, 21062), (47, 21230), (57, 21290), (68, 21356), (69, 21377), (76, 21479), (77, 21497), (81, 21539), (85, 21614), (86, 21626), (93, 21680), (96, 21695), (102, 21728), (113, 21806), (115, 21821), (126, 21911), (132, 21980), (152, 22142), (159, 22196), (170, 22265), (180, 22307), (188, 22367), (189, 22373), (192, 22382), (197, 22397), (198, 22406), (219, 22505), (220, 22517), (223, 22538), (277, 22745), (282, 22769), (296, 22823), (314, 22892), (337, 23033), (348, 23105), (351, 23111), (360, 23156), (362, 23162), (363, 23165), (369, 23189), (373, 23207), (383, 23252), (384, 23255), (386, 23261), (387, 23264), (391, 23297), (394, 23315), (407, 23372), (414, 23393), (418, 23414), (428, 23462), (434, 23495), (436, 23510), (451, 23570), (499, 23786), (500, 23789), (512, 23846), (515, 23861), (517, 23873), (520, 23882), (529, 23915), (531, 23924), (536, 23936), (542, 23957), (557, 24008), (558, 24017), (566, 24065), (574, 24086), (576, 24092), (577, 24095), (595, 24155), (604, 24185), (607, 24194), (629, 24281), (630, 24284), (631, 24287), (635, 24305), (638, 24320), (643, 24335), (654, 24374), (660, 24407), (661, 24410), (662, 24413), (664, 24419), (667, 24431), (697, 24554), (702, 24572), (725, 24674), (740, 24743), (747, 24797), (769, 24926), (776, 24971), (786, 25040), (804, 25175), (809, 25199), (821, 25244), (824, 25250), (832, 25289), (835, 25319),

Gene: Rickmore_31 Start: 21933, Stop: 27044, Start Num: 17

Candidate Starts for Rickmore_31:

(Start: 17 @21933 has 129 MA's), (Start: 20 @21963 has 3 MA's), (25, 22008), (47, 22152), (57, 22212), (58, 22218), (68, 22278), (69, 22299), (76, 22401), (83, 22491), (84, 22527), (87, 22563), (93, 22602), (95, 22614), (102, 22650), (107, 22692), (113, 22764), (118, 22812), (132, 22938), (136, 22980), (140, 23013), (141, 23025), (146, 23046), (158, 23151), (159, 23154), (202, 23376), (212, 23430), (262, 23667), (264, 23676), (272, 23709), (274, 23721), (288, 23790), (289, 23793), (295, 23820), (310, 23886), (337, 24048), (343, 24096), (346, 24111), (347, 24117), (351, 24126), (353, 24135), (378, 24249), (390, 24300), (391, 24312), (393, 24321), (394, 24330), (398, 24357), (418, 24429), (422, 24450), (425, 24459), (431, 24486), (433, 24501), (434, 24510), (443, 24555), (444, 24558), (452, 24588), (454, 24600), (460, 24624), (464, 24642), (465, 24645), (470, 24672), (471, 24681), (475, 24699), (482, 24729), (490, 24759), (494, 24771), (496, 24777), (497, 24780), (500, 24795), (502, 24801), (512, 24852), (525, 24906), (529, 24921), (534, 24930), (538, 24942), (539, 24945), (541, 24954), (550, 24990), (551, 24993), (556, 25008), (557, 25011), (558, 25020), (560,

25041), (566, 25068), (567, 25071), (574, 25098), (577, 25107), (582, 25128), (584, 25140), (590, 25161), (598, 25188), (608, 25221), (610, 25227), (615, 25245), (617, 25257), (622, 25275), (645, 25365), (650, 25383), (651, 25386), (694, 25563), (703, 25596), (734, 25740), (736, 25749), (755, 25863), (757, 25884), (771, 25974), (781, 26046), (784, 26058), (785, 26067), (789, 26121), (794, 26142), (797, 26169), (799, 26175), (809, 26232), (821, 26274), (845, 26403), (850, 26421), (859, 26451), (867, 26472), (870, 26484), (892, 26622), (900, 26697), (916, 26799), (919, 26823), (920, 26826), (930, 26892), (937, 26940), (947, 27030),

Gene: Rima_23 Start: 16166, Stop: 21652, Start Num: 2

Candidate Starts for Rima_23:

(1, 16145), (Start: 2 @16166 has 30 MA's), (3, 16196), (12, 16340), (40, 16550), (50, 16667), (65, 16739), (68, 16769), (76, 16892), (84, 17018), (93, 17093), (102, 17141), (107, 17183), (128, 17372), (149, 17567), (158, 17639), (172, 17717), (190, 17822), (202, 17864), (227, 17999), (240, 18053), (264, 18140), (275, 18176), (277, 18185), (286, 18227), (295, 18260), (301, 18290), (334, 18413), (337, 18434), (346, 18497), (347, 18503), (349, 18509), (355, 18536), (360, 18557), (362, 18563), (363, 18566), (369, 18590), (378, 18635), (381, 18644), (382, 18647), (384, 18656), (396, 18731), (402, 18758), (408, 18776), (415, 18794), (418, 18812), (422, 18833), (433, 18884), (446, 18950), (450, 18965), (469, 19052), (471, 19070), (476, 19097), (501, 19187), (502, 19190), (511, 19232), (512, 19241), (520, 19277), (525, 19295), (526, 19298), (542, 19352), (543, 19355), (557, 19403), (561, 19439), (563, 19445), (568, 19466), (577, 19490), (586, 19520), (604, 19580), (614, 19613), (615, 19616), (618, 19631), (627, 19667), (637, 19709), (640, 19721), (641, 19724), (655, 19772), (660, 19802), (665, 19817), (672, 19850), (675, 19865), (691, 19928), (712, 20006), (713, 20009), (721, 20045), (733, 20111), (748, 20198), (749, 20201), (764, 20300), (770, 20348), (772, 20354), (793, 20513), (845, 20786), (856, 20822), (876, 20888), (894, 21011), (898, 21062), (905, 21104), (909, 21125), (914, 21173), (916, 21179), (917, 21185), (924, 21230), (939, 21338), (941, 21359), (946, 21407), (952, 21494), (959, 21596), (960, 21605),

Gene: Roney_29 Start: 20616, Stop: 25730, Start Num: 17

Candidate Starts for Roney_29:

(Start: 17 @20616 has 129 MA's), (Start: 20 @20646 has 3 MA's), (43, 20793), (46, 20829), (47, 20835), (53, 20880), (58, 20901), (65, 20931), (76, 21096), (81, 21156), (85, 21231), (89, 21267), (90, 21282), (93, 21297), (96, 21312), (102, 21345), (112, 21438), (119, 21492), (120, 21495), (146, 21714), (158, 21819), (159, 21822), (170, 21891), (172, 21897), (Start: 208 @22080 has 1 MA's), (219, 22131), (228, 22182), (241, 22236), (242, 22239), (269, 22371), (291, 22473), (295, 22491), (296, 22494), (311, 22569), (323, 22626), (335, 22710), (337, 22719), (353, 22806), (361, 22845), (373, 22893), (378, 22920), (384, 22941), (387, 22950), (390, 22971), (391, 22983), (393, 22992), (394, 23001), (398, 23028), (406, 23055), (407, 23058), (414, 23079), (422, 23121), (428, 23148), (431, 23157), (433, 23172), (434, 23181), (436, 23196), (438, 23208), (441, 23217), (444, 23229), (449, 23250), (452, 23259), (470, 23343), (471, 23352), (474, 23367), (475, 23370), (479, 23388), (482, 23400), (483, 23403), (490, 23430), (497, 23451), (500, 23466), (504, 23484), (510, 23508), (512, 23523), (526, 23580), (529, 23592), (534, 23601), (538, 23613), (541, 23625), (542, 23631), (547, 23652), (551, 23664), (557, 23682), (558, 23691), (559, 23706), (560, 23712), (563, 23724), (573, 23766), (574, 23769), (577, 23778), (582, 23799), (584, 23811), (598, 23859), (601, 23868), (608, 23892), (610, 23898), (615, 23916), (616, 23925), (622, 23946), (639, 24015), (644, 24033), (645, 24036), (650, 24054), (680, 24180), (691, 24225), (705, 24276), (736, 24420), (757, 24555), (766, 24606), (778, 24684), (784, 24729), (789, 24792), (793, 24810), (797, 24840), (799, 24846), (809, 24903), (826, 24975), (838, 25035), (842, 25056), (843, 25059), (851, 25110), (853, 25119), (867, 25158), (870, 25170), (883, 25263), (892, 25308), (900, 25383), (906, 25422), (911, 25452), (919, 25509), (936, 25620), (947, 25716),

Gene: RosaAsantewaa_19 Start: 13292, Stop: 18511, Start Num: 17

Candidate Starts for RosaAsantewaa_19:

(Start: 16 @13271 has 2 MA's), (Start: 17 @13292 has 129 MA's), (Start: 20 @13322 has 3 MA's), (35, 13397), (39, 13403), (49, 13526), (73, 13703), (76, 13766), (84, 13892), (93, 13967), (100, 14000), (102, 14015), (107, 14057), (128, 14249), (131, 14294), (141, 14390), (149, 14444), (172, 14594), (187, 14687), (204, 14750), (262, 15008), (295, 15137), (312, 15203), (314, 15209), (331, 15257), (337, 15308), (343, 15356), (347, 15377), (363, 15440), (369, 15464), (378, 15509), (381, 15518), (404, 15638), (407, 15647), (415, 15668), (422, 15707), (441, 15803), (447, 15827), (450, 15839), (461, 15890), (470, 15935), (488, 16016), (499, 16055), (500, 16058), (504, 16076), (506, 16082), (507, 16085), (511, 16106), (512, 16115), (518, 16145), (520, 16151), (524, 16163), (561, 16313), (563, 16319), (577, 16364), (604, 16454), (606, 16460), (614, 16487), (630, 16553), (646, 16616), (664, 16688), (672, 16724), (675, 16739), (687, 16790), (710, 16874), (713, 16883), (717, 16898), (721, 16919), (722, 16922), (724, 16940), (739, 17009), (764, 17174), (768, 17198), (793, 17387), (828, 17558), (839, 17621), (856, 17696), (880, 17792), (905, 17978), (909, 17999), (916, 18053), (923, 18095), (925, 18116), (927, 18137), (933, 18173), (934, 18182), (935, 18191), (941, 18233), (948, 18305), (954, 18392),

Gene: Runhaar_32 Start: 23285, Stop: 28396, Start Num: 17

Candidate Starts for Runhaar_32:

(Start: 17 @23285 has 129 MA's), (Start: 20 @23315 has 3 MA's), (25, 23360), (32, 23390), (47, 23504), (58, 23570), (68, 23630), (69, 23651), (76, 23753), (84, 23879), (87, 23915), (93, 23954), (98, 23981), (102, 24002), (107, 24044), (116, 24143), (118, 24164), (132, 24290), (140, 24365), (141, 24377), (146, 24398), (158, 24503), (159, 24506), (228, 24866), (255, 24971), (267, 25040), (272, 25061), (288, 25142), (289, 25145), (295, 25172), (303, 25211), (310, 25238), (337, 25400), (343, 25448), (347, 25469), (353, 25487), (364, 25535), (367, 25547), (378, 25601), (390, 25652), (391, 25664), (393, 25673), (394, 25682), (406, 25736), (418, 25781), (421, 25796), (422, 25802), (425, 25811), (426, 25817), (430, 25835), (431, 25838), (432, 25844), (433, 25853), (443, 25907), (444, 25910), (446, 25919), (451, 25937), (452, 25940), (454, 25952), (459, 25973), (461, 25979), (462, 25982), (467, 26003), (471, 26033), (474, 26048), (482, 26081), (486, 26096), (490, 26111), (494, 26123), (496, 26129), (497, 26132), (499, 26144), (500, 26147), (512, 26204), (525, 26258), (526, 26261), (534, 26282), (538, 26294), (539, 26297), (551, 26345), (556, 26360), (557, 26363), (558, 26372), (560, 26393), (566, 26420), (567, 26423), (573, 26447), (577, 26459), (582, 26480), (584, 26492), (590, 26513), (598, 26540), (608, 26573), (610, 26579), (615, 26597), (622, 26627), (632, 26666), (676, 26846), (679, 26858), (697, 26927), (734, 27092), (755, 27215), (757, 27236), (778, 27365), (781, 27398), (784, 27410), (789, 27473), (794, 27494), (795, 27506), (797, 27521), (809, 27584), (831, 27668), (845, 27755), (850, 27773), (859, 27803), (866, 27821), (867, 27824), (869, 27830), (870, 27836), (876, 27863), (892, 27974), (900, 28049), (902, 28067), (916, 28151), (919, 28175), (937, 28292), (947, 28382),

Gene: RustyBoy_22 Start: 16633, Stop: 21177, Start Num: 17

Candidate Starts for RustyBoy_22:

(Start: 16 @16612 has 2 MA's), (Start: 17 @16633 has 129 MA's), (Start: 20 @16663 has 3 MA's), (61, 16930), (65, 16948), (68, 16978), (75, 17059), (76, 17101), (77, 17119), (81, 17161), (83, 17191), (85, 17236), (86, 17248), (93, 17302), (96, 17317), (97, 17323), (102, 17350), (109, 17413), (113, 17428), (115, 17443), (118, 17476), (121, 17491), (122, 17500), (127, 17539), (132, 17602), (140, 17677), (147, 17722), (149, 17743), (153, 17779), (159, 17818), (161, 17824), (170, 17887), (172, 17893), (192, 18004), (259, 18298), (264, 18325), (278, 18373), (284, 18403), (286, 18412), (293, 18436), (300, 18472), (301, 18475), (303, 18481), (314, 18517), (334, 18631), (337, 18652), (344, 18706), (353, 18739), (362, 18781), (363, 18784), (369, 18808), (376, 18844), (378, 18853), (381, 18862), (384, 18874), (391, 18916), (393, 18925), (400, 18970), (407, 18991), (414, 19012), (418, 19033), (423, 19057), (432, 19096), (434, 19114), (436, 19129), (441, 19150), (451, 19189), (456, 19213), (467, 19261), (471, 19291), (474, 19306), (482, 19339), (484, 19345), (494, 19384), (499, 19405), (504, 19426), (507, 19435), (525, 19519), (529, 19534), (531, 19543), (536, 19555), (542, 19576), (557, 19627), (558, 19636), (574, 19705), (577, 19714), (586, 19744), (587, 19747), (600, 19789), (604, 19804), (618, 19855), (623, 19876), (636, 19930), (646, 19966), (647, 19969), (660, 20026),

(661, 20029), (668, 20053), (677, 20095), (685, 20134), (687, 20140), (693, 20158), (695, 20164), (716, 20245), (723, 20284), (728, 20305), (731, 20323), (740, 20362), (742, 20371), (756, 20467), (759, 20488), (769, 20545), (776, 20590), (777, 20602), (779, 20623), (787, 20680), (789, 20710), (807, 20809), (824, 20869), (835, 20938), (840, 20956),

Gene: Salk_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for Salk_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (687, 20750), (689, 20756), (691, 20762), (693, 20768), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605), (873, 21683),

Gene: Scap1_19 Start: 13425, Stop: 18671, Start Num: 16

Candidate Starts for Scap1_19:

(Start: 16 @13425 has 2 MA's), (Start: 17 @13446 has 129 MA's), (Start: 20 @13476 has 3 MA's), (43, 13629), (53, 13716), (58, 13737), (63, 13755), (71, 13848), (76, 13920), (84, 14046), (87, 14082), (93, 14121), (95, 14133), (105, 14193), (107, 14211), (131, 14448), (149, 14598), (172, 14748), (177, 14772), (201, 14889), (238, 15075), (256, 15123), (264, 15171), (275, 15207), (277, 15216), (312, 15357), (314, 15363), (337, 15456), (347, 15525), (363, 15588), (367, 15603), (369, 15612), (370, 15615), (382, 15669), (391, 15720), (408, 15798), (415, 15816), (432, 15897), (450, 15987), (461, 16038), (470, 16083), (471, 16092), (477, 16122), (489, 16167), (496, 16188), (499, 16203), (506, 16230), (507, 16233), (511, 16254), (512, 16263), (520, 16299), (561, 16461), (563, 16467), (574, 16503), (577, 16512), (586, 16542), (592, 16563), (594, 16569), (598, 16581), (600, 16587), (604, 16602), (614, 16635), (619, 16656), (621, 16665), (623, 16674), (630, 16701), (637, 16731), (640, 16743), (641, 16746), (665, 16839), (672, 16872), (675, 16887), (708, 17013), (710, 17022), (713, 17031), (714, 17034), (717, 17046), (721, 17067), (722, 17070), (743, 17178), (761, 17304), (764, 17322), (793, 17535), (798, 17565), (814, 17652), (844, 17796), (868, 17877), (882, 17973), (905, 18126), (909, 18147), (920, 18231), (927, 18285), (931, 18300), (939, 18360), (941, 18381), (942, 18384), (945, 18420), (948, 18453), (960, 18633),

Gene: Schwartz33_33 Start: 23640, Stop: 28727, Start Num: 17

Candidate Starts for Schwartz33_33:

(Start: 17 @23640 has 129 MA's), (18, 23646), (Start: 20 @23670 has 3 MA's), (43, 23817), (50, 23883), (53, 23904), (58, 23925), (65, 23955), (68, 23985), (69, 24006), (76, 24108), (81, 24168), (85, 24243), (89, 24279), (93, 24309), (96, 24324), (102, 24357), (112, 24450), (119, 24504), (120, 24507), (140, 24693), (146, 24726), (155, 24810), (158, 24831), (159, 24834), (170, 24903), (172, 24909), (173, 24915), (196, 25032), (198, 25044), (204, 25068), (214, 25122), (215, 25125), (224, 25179), (231, 25212), (295, 25503), (310, 25569), (322, 25635), (335, 25722), (336, 25728), (337, 25731), (346, 25794), (347, 25800), (353, 25818), (367, 25878), (378, 25932), (387, 25962), (391, 25995),

(393, 26004), (394, 26013), (406, 26067), (408, 26073), (418, 26112), (422, 26133), (425, 26142), (430, 26166), (431, 26169), (432, 26175), (433, 26184), (436, 26208), (443, 26238), (444, 26241), (445, 26244), (452, 26271), (464, 26325), (471, 26364), (479, 26400), (490, 26442), (496, 26460), (497, 26463), (499, 26475), (500, 26478), (502, 26484), (505, 26499), (508, 26514), (512, 26535), (517, 26562), (526, 26592), (534, 26613), (547, 26664), (557, 26694), (558, 26703), (568, 26757), (577, 26790), (582, 26811), (584, 26823), (590, 26844), (598, 26871), (608, 26904), (610, 26910), (615, 26928), (616, 26937), (617, 26940), (639, 27027), (650, 27066), (651, 27069), (661, 27114), (679, 27189), (694, 27246), (699, 27264), (736, 27432), (741, 27453), (755, 27546), (769, 27639), (775, 27681), (781, 27729), (784, 27741), (789, 27804), (791, 27816), (795, 27837), (797, 27852), (799, 27858), (831, 27999), (847, 28095), (850, 28104), (866, 28152), (867, 28155), (870, 28167), (892, 28305), (900, 28380), (919, 28506), (947, 28713),

Gene: ScienceWizSam_28 Start: 20475, Stop: 25064, Start Num: 17

Candidate Starts for ScienceWizSam_28:

(Start: 16 @20454 has 2 MA's), (Start: 17 @20475 has 129 MA's), (Start: 20 @20505 has 3 MA's), (28, 20559), (32, 20580), (37, 20616), (47, 20694), (57, 20754), (63, 20778), (65, 20790), (68, 20820), (71, 20871), (75, 20901), (76, 20943), (77, 20961), (81, 21003), (83, 21033), (85, 21078), (86, 21090), (93, 21144), (96, 21159), (98, 21171), (102, 21192), (115, 21285), (118, 21318), (121, 21333), (127, 21381), (132, 21444), (146, 21552), (161, 21666), (162, 21669), (168, 21717), (188, 21831), (195, 21855), (198, 21870), (202, 21882), (234, 22050), (239, 22065), (240, 22071), (245, 22089), (261, 22161), (273, 22212), (278, 22227), (284, 22257), (301, 22329), (303, 22335), (307, 22353), (313, 22368), (314, 22371), (321, 22398), (337, 22512), (345, 22569), (347, 22581), (360, 22635), (363, 22644), (364, 22647), (369, 22668), (378, 22713), (384, 22734), (391, 22776), (394, 22794), (407, 22851), (414, 22872), (418, 22893), (434, 22974), (436, 22989), (437, 22992), (443, 23019), (444, 23022), (456, 23073), (471, 23151), (474, 23166), (475, 23169), (479, 23187), (480, 23193), (482, 23199), (485, 23208), (494, 23244), (495, 23247), (497, 23253), (498, 23259), (504, 23286), (515, 23340), (516, 23343), (520, 23361), (524, 23373), (531, 23403), (536, 23418), (540, 23427), (542, 23439), (547, 23460), (558, 23499), (569, 23556), (574, 23568), (577, 23577), (589, 23616), (592, 23628), (602, 23658), (604, 23667), (624, 23742), (625, 23745), (629, 23763), (631, 23769), (646, 23829), (647, 23832), (649, 23838), (655, 23859), (661, 23892), (662, 23895), (693, 24021), (694, 24024), (700, 24045), (708, 24078), (709, 24081), (710, 24087), (713, 24096), (719, 24123), (728, 24168), (742, 24234), (748, 24285), (750, 24291), (759, 24351), (764, 24375), (773, 24435), (776, 24453), (777, 24465), (799, 24624), (800, 24633), (809, 24681), (817, 24714), (821, 24726), (824, 24732), (827, 24753), (829, 24756), (830, 24762), (835, 24801), (841, 24828), (882, 25014), (888, 25041),

Gene: Secretariat_30 Start: 22365, Stop: 27458, Start Num: 17

Candidate Starts for Secretariat_30:

(Start: 17 @22365 has 129 MA's), (Start: 20 @22395 has 3 MA's), (24, 22434), (43, 22542), (47, 22584), (60, 22659), (64, 22677), (68, 22710), (75, 22803), (76, 22845), (81, 22905), (89, 23016), (93, 23046), (96, 23061), (102, 23094), (105, 23118), (111, 23184), (112, 23187), (119, 23241), (120, 23244), (123, 23259), (155, 23547), (158, 23568), (170, 23640), (215, 23862), (224, 23916), (230, 23937), (231, 23949), (251, 24024), (263, 24087), (272, 24126), (274, 24138), (278, 24159), (291, 24222), (295, 24240), (296, 24243), (302, 24276), (327, 24384), (333, 24435), (334, 24447), (335, 24459), (337, 24468), (347, 24537), (349, 24543), (353, 24555), (358, 24582), (364, 24603), (378, 24669), (385, 24693), (387, 24699), (391, 24732), (393, 24741), (394, 24750), (406, 24804), (418, 24849), (422, 24870), (425, 24879), (431, 24906), (433, 24921), (436, 24945), (443, 24975), (444, 24978), (449, 24999), (451, 25005), (452, 25008), (459, 25041), (471, 25101), (487, 25170), (490, 25179), (494, 25191), (496, 25197), (497, 25200), (498, 25206), (505, 25236), (509, 25254), (511, 25263), (512, 25272), (517, 25299), (524, 25320), (526, 25329), (538, 25362), (550, 25410), (557, 25431), (558, 25440), (559, 25455), (560, 25461), (577, 25527), (582, 25548), (584, 25560), (590, 25581), (598, 25608), (601, 25617), (603, 25623), (604, 25629), (610, 25647), (615, 25665), (622, 25695), (644, 25782), (648, 25794), (654, 25815), (655, 25818), (658, 25836), (690, 25971), (693,

25980), (694, 25983), (747, 26238), (750, 26250), (755, 26283), (768, 26367), (781, 26466), (789, 26541), (791, 26553), (794, 26562), (799, 26595), (806, 26640), (845, 26823), (850, 26841), (857, 26865), (867, 26892), (869, 26898), (870, 26904), (892, 27042), (895, 27081), (900, 27117), (902, 27135), (919, 27237), (947, 27444),

Gene: SendItCS_20 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for SendItCS_20:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214), (943, 20265), (951, 20388), (957, 20427),

Gene: Serenabean_25 Start: 18537, Stop: 23141, Start Num: 17

Candidate Starts for Serenabean_25:

(Start: 17 @18537 has 129 MA's), (Start: 20 @18570 has 3 MA's), (33, 18645), (41, 18693), (43, 18717), (54, 18807), (58, 18825), (62, 18837), (68, 18882), (72, 18939), (76, 19005), (81, 19065), (89, 19176), (93, 19206), (96, 19221), (114, 19344), (115, 19347), (117, 19368), (121, 19395), (128, 19452), (131, 19497), (135, 19542), (145, 19611), (147, 19626), (149, 19647), (152, 19668), (175, 19809), (179, 19830), (182, 19851), (191, 19905), (219, 20043), (228, 20094), (239, 20139), (313, 20445), (320, 20463), (337, 20607), (341, 20637), (360, 20730), (362, 20736), (363, 20739), (366, 20751), (375, 20790), (380, 20814), (392, 20877), (414, 20967), (418, 20988), (424, 21015), (432, 21051), (458, 21180), (476, 21273), (481, 21291), (490, 21324), (494, 21342), (499, 21363), (501, 21369), (504, 21384), (512, 21423), (520, 21459), (522, 21465), (529, 21492), (545, 21549), (557, 21591), (558, 21600), (561, 21627), (562, 21630), (569, 21657), (574, 21669), (577, 21678), (580, 21687), (595, 21738), (596, 21741), (604, 21768), (612, 21795), (652, 21951), (664, 22002), (672, 22038), (682, 22077), (687, 22104), (691, 22116), (696, 22134), (702, 22155), (709, 22182), (714, 22200), (723, 22248), (737, 22314), (757, 22434), (761, 22458), (763, 22467), (764, 22476), (769, 22509), (776, 22554), (783, 22608), (804, 22758), (809, 22782), (811, 22794), (813, 22803), (820, 22824), (835, 22902), (837, 22905), (854, 22977), (887, 23130),

Gene: ShaggyRogers_35 Start: 23288, Stop: 28399, Start Num: 17

Candidate Starts for ShaggyRogers_35:

(Start: 17 @23288 has 129 MA's), (Start: 20 @23318 has 3 MA's), (25, 23363), (47, 23507), (57, 23567), (58, 23573), (68, 23633), (69, 23654), (76, 23756), (84, 23882), (87, 23918), (93, 23957), (98, 23984), (102, 24005), (107, 24047), (118, 24167), (130, 24281), (132, 24293), (140, 24368), (141, 24380), (146, 24401), (158, 24506), (159, 24509), (228, 24869), (231, 24887), (267, 25043), (288, 25145), (289, 25148), (295, 25175), (303, 25214), (310, 25241), (314, 25262), (337, 25403), (346, 25466), (347, 25472), (353, 25490), (354, 25496), (364, 25538), (367, 25550), (378, 25604), (385, 25628), (388, 25646), (390, 25655), (391, 25667), (393, 25676), (394, 25685), (403, 25730), (406, 25739), (418, 25784), (422, 25805), (425, 25814), (431, 25841), (433, 25856), (443, 25910), (444, 25913), (446, 25922), (449, 25934), (452, 25943), (454, 25955), (459, 25976), (461, 25982), (467, 26006), (471, 26036), (474, 26051), (490, 26114), (494, 26126), (496, 26132), (497, 26135), (499,

26147), (500, 26150), (512, 26207), (525, 26261), (526, 26264), (534, 26285), (538, 26297), (539, 26300), (551, 26348), (556, 26363), (557, 26366), (558, 26375), (559, 26390), (560, 26396), (566, 26423), (567, 26426), (577, 26462), (582, 26483), (584, 26495), (586, 26504), (590, 26516), (598, 26543), (608, 26576), (610, 26582), (615, 26600), (622, 26630), (650, 26738), (676, 26849), (705, 26960), (717, 27005), (728, 27062), (734, 27095), (757, 27239), (768, 27302), (778, 27368), (781, 27401), (784, 27413), (789, 27476), (794, 27497), (795, 27509), (799, 27530), (831, 27671), (845, 27758), (850, 27776), (859, 27806), (866, 27824), (867, 27827), (869, 27833), (870, 27839), (876, 27866), (892, 27977), (898, 28040), (900, 28052), (911, 28121), (916, 28154), (919, 28178), (937, 28295), (947, 28385),

Gene: SheRa_19 Start: 13487, Stop: 18715, Start Num: 17

Candidate Starts for SheRa_19:

(Start: 16 @13466 has 2 MA's), (Start: 17 @13487 has 129 MA's), (Start: 20 @13517 has 3 MA's), (40, 13619), (43, 13670), (58, 13778), (76, 13961), (84, 14087), (87, 14123), (93, 14162), (107, 14252), (149, 14639), (172, 14789), (177, 14813), (188, 14885), (238, 15116), (261, 15194), (264, 15212), (265, 15215), (275, 15248), (300, 15356), (320, 15416), (337, 15497), (347, 15566), (360, 15620), (366, 15641), (381, 15707), (382, 15710), (402, 15821), (415, 15857), (418, 15875), (429, 15926), (450, 16028), (453, 16040), (456, 16055), (470, 16124), (471, 16133), (477, 16163), (496, 16229), (503, 16259), (506, 16271), (507, 16274), (511, 16295), (512, 16304), (520, 16340), (521, 16343), (529, 16373), (554, 16457), (561, 16502), (562, 16505), (563, 16508), (577, 16553), (586, 16583), (600, 16628), (604, 16643), (614, 16676), (619, 16697), (621, 16706), (623, 16715), (629, 16739), (630, 16742), (637, 16772), (640, 16784), (657, 16850), (662, 16871), (668, 16892), (670, 16907), (672, 16913), (706, 17045), (708, 17054), (710, 17063), (713, 17072), (714, 17075), (717, 17087), (718, 17090), (719, 17099), (721, 17108), (740, 17201), (747, 17255), (764, 17363), (767, 17378), (772, 17417), (793, 17576), (839, 17810), (856, 17885), (904, 18164), (905, 18167), (909, 18188), (914, 18236), (916, 18242), (932, 18350), (941, 18422), (945, 18461), (946, 18470), (949, 18524), (960, 18677),

Gene: Shepard_27 Start: 20329, Stop: 24918, Start Num: 17

Candidate Starts for Shepard_27:

(Start: 16 @20308 has 2 MA's), (Start: 17 @20329 has 129 MA's), (Start: 20 @20359 has 3 MA's), (28, 20413), (57, 20608), (63, 20632), (65, 20644), (68, 20674), (75, 20755), (76, 20797), (77, 20815), (81, 20857), (83, 20887), (85, 20932), (86, 20944), (93, 20998), (96, 21013), (97, 21019), (102, 21046), (109, 21109), (113, 21124), (115, 21139), (118, 21172), (121, 21187), (127, 21235), (136, 21340), (146, 21406), (153, 21475), (159, 21514), (162, 21523), (166, 21538), (169, 21580), (170, 21583), (181, 21634), (204, 21748), (215, 21805), (229, 21877), (238, 21916), (245, 21943), (256, 21985), (278, 22081), (301, 22183), (303, 22189), (314, 22225), (337, 22372), (339, 22384), (344, 22426), (345, 22429), (355, 22474), (360, 22495), (363, 22504), (364, 22507), (369, 22528), (384, 22594), (385, 22597), (407, 22711), (414, 22732), (417, 22750), (418, 22753), (436, 22849), (438, 22861), (467, 22981), (471, 23011), (485, 23068), (494, 23104), (497, 23113), (499, 23125), (504, 23146), (507, 23155), (518, 23215), (528, 23248), (530, 23260), (531, 23263), (535, 23275), (544, 23302), (547, 23317), (549, 23323), (550, 23326), (557, 23347), (558, 23356), (574, 23425), (577, 23434), (589, 23473), (604, 23524), (620, 23581), (631, 23626), (636, 23650), (637, 23653), (646, 23686), (647, 23689), (648, 23692), (649, 23695), (661, 23749), (662, 23752), (668, 23773), (691, 23872), (700, 23902), (703, 23914), (706, 23926), (710, 23944), (713, 23953), (714, 23956), (744, 24112), (747, 24136), (749, 24145), (759, 24208), (763, 24223), (776, 24310), (777, 24322), (783, 24364), (794, 24448), (804, 24514), (809, 24538), (821, 24583), (823, 24586), (824, 24589), (835, 24658), (836, 24661), (841, 24685), (882, 24868),

Gene: Shiba_23 Start: 17270, Stop: 21790, Start Num: 20

Candidate Starts for Shiba_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81,

17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (238, 18827), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Sloopyjoe_23 Start: 17241, Stop: 21791, Start Num: 17

Candidate Starts for Sloopyjoe_23:

(Start: 16 @17220 has 2 MA's), (Start: 17 @17241 has 129 MA's), (Start: 20 @17271 has 3 MA's), (23, 17304), (47, 17460), (63, 17544), (65, 17556), (68, 17586), (75, 17667), (76, 17709), (77, 17727), (81, 17769), (83, 17799), (85, 17844), (86, 17856), (93, 17910), (96, 17925), (102, 17958), (109, 18021), (115, 18051), (118, 18084), (121, 18099), (127, 18147), (141, 18297), (146, 18318), (159, 18426), (162, 18435), (168, 18483), (194, 18618), (204, 18660), (225, 18774), (237, 18825), (240, 18837), (258, 18918), (278, 19002), (281, 19020), (293, 19065), (303, 19110), (304, 19113), (305, 19119), (316, 19152), (337, 19263), (347, 19332), (348, 19335), (358, 19377), (360, 19386), (363, 19395), (371, 19425), (378, 19464), (380, 19470), (384, 19485), (391, 19527), (414, 19623), (418, 19644), (419, 19647), (423, 19668), (434, 19725), (436, 19740), (443, 19770), (446, 19782), (453, 19809), (456, 19824), (467, 19872), (471, 19902), (474, 19917), (482, 19950), (484, 19956), (494, 19995), (497, 20004), (499, 20016), (504, 20037), (517, 20103), (520, 20112), (529, 20145), (530, 20151), (531, 20154), (536, 20166), (537, 20169), (543, 20190), (548, 20211), (558, 20247), (566, 20295), (577, 20325), (604, 20415), (620, 20472), (631, 20517), (635, 20535), (642, 20562), (644, 20571), (646, 20577), (660, 20637), (664, 20649), (667, 20661), (679, 20715), (689, 20757), (691, 20763), (693, 20769), (702, 20802), (703, 20805), (709, 20829), (710, 20835), (712, 20841), (713, 20844), (723, 20895), (726, 20907), (733, 20946), (756, 21078), (763, 21114), (769, 21156), (776, 21201), (787, 21291), (800, 21381), (804, 21405), (809, 21429), (811, 21441), (813, 21450), (817, 21462), (821, 21474), (832, 21519), (835, 21549), (840, 21567), (847, 21606), (873, 21684),

Gene: Soshi_23 Start: 16685, Stop: 22165, Start Num: 2

Candidate Starts for Soshi_23:

(1, 16664), (Start: 2 @16685 has 30 MA's), (3, 16715), (12, 16859), (22, 16994), (40, 17069), (50, 17186), (51, 17189), (57, 17222), (65, 17258), (68, 17288), (74, 17360), (76, 17411), (84, 17537), (87, 17573), (93, 17612), (95, 17624), (102, 17660), (107, 17702), (128, 17894), (133, 17960), (141, 18035), (146, 18056), (149, 18089), (157, 18152), (158, 18161), (172, 18239), (202, 18386), (226, 18518), (240, 18575), (262, 18653), (264, 18662), (266, 18671), (275, 18698), (293, 18773), (295, 18782), (312, 18848), (313, 18851), (329, 18890), (337, 18944), (347, 19013), (360, 19067), (369, 19100), (378, 19145), (381, 19154), (384, 19166), (396, 19241), (398, 19253), (410, 19292), (415, 19304), (422, 19343), (429, 19373), (439, 19433), (450, 19475), (460, 19523), (461, 19526), (471, 19580), (502, 19700), (511, 19742), (512, 19751), (520, 19787), (526, 19808), (529, 19820), (542, 19862), (543, 19865), (547, 19883), (557, 19913), (561, 19949), (563, 19955), (568, 19976), (577, 20000), (586, 20030), (604, 20090), (614, 20123), (618, 20141), (621, 20153), (623, 20162), (637, 20219), (640, 20231), (641, 20234), (646, 20252), (655, 20282), (660, 20312), (672, 20360), (675, 20375), (694, 20447), (706, 20492), (710, 20510), (713, 20519), (721, 20555), (724, 20576), (725,

20579), (756, 20765), (759, 20786), (761, 20792), (764, 20810), (767, 20825), (770, 20858), (772, 20864), (790, 21014), (793, 21023), (845, 21296), (847, 21305), (894, 21521), (905, 21614), (909, 21635), (914, 21683), (916, 21689), (917, 21695), (924, 21740), (946, 21917), (959, 22109), (960, 22118),

Gene: Spectropatronm_23 Start: 16160, Stop: 21646, Start Num: 2

Candidate Starts for Spectropatronm_23:

(1, 16139), (Start: 2 @16160 has 30 MA's), (3, 16190), (12, 16334), (40, 16544), (51, 16664), (58, 16703), (65, 16733), (67, 16757), (68, 16763), (69, 16784), (70, 16799), (76, 16886), (83, 16976), (84, 17012), (85, 17021), (87, 17048), (93, 17087), (94, 17096), (98, 17114), (102, 17135), (107, 17177), (108, 17186), (118, 17294), (129, 17399), (140, 17495), (149, 17561), (172, 17711), (186, 17795), (190, 17816), (202, 17858), (227, 17993), (262, 18125), (264, 18134), (275, 18170), (277, 18179), (286, 18221), (295, 18254), (334, 18407), (337, 18428), (346, 18491), (347, 18497), (349, 18503), (355, 18530), (360, 18551), (362, 18557), (363, 18560), (369, 18584), (378, 18629), (381, 18638), (382, 18641), (384, 18650), (396, 18725), (402, 18752), (407, 18767), (408, 18770), (415, 18788), (418, 18806), (422, 18827), (433, 18878), (450, 18959), (469, 19046), (471, 19064), (476, 19091), (502, 19184), (511, 19226), (512, 19235), (520, 19271), (525, 19289), (526, 19292), (542, 19346), (557, 19397), (561, 19433), (563, 19439), (568, 19460), (577, 19484), (586, 19514), (604, 19574), (614, 19607), (615, 19610), (618, 19625), (627, 19661), (637, 19703), (640, 19715), (641, 19718), (655, 19766), (660, 19796), (665, 19811), (672, 19844), (675, 19859), (691, 19922), (712, 20000), (721, 20039), (733, 20105), (748, 20192), (749, 20195), (764, 20294), (770, 20342), (772, 20348), (793, 20507), (845, 20780), (856, 20816), (876, 20882), (894, 21005), (905, 21098), (909, 21119), (914, 21167), (916, 21173), (917, 21179), (924, 21224), (939, 21332), (941, 21353), (946, 21401), (952, 21488), (959, 21590), (960, 21599),

Gene: Sporto_24 Start: 18451, Stop: 23001, Start Num: 17

Candidate Starts for Sporto_24:

(Start: 16 @18430 has 2 MA's), (Start: 17 @18451 has 129 MA's), (Start: 20 @18481 has 3 MA's), (28, 18535), (43, 18628), (49, 18679), (51, 18697), (65, 18766), (68, 18796), (75, 18877), (76, 18919), (77, 18937), (81, 18979), (83, 19009), (85, 19054), (86, 19066), (93, 19120), (96, 19135), (97, 19141), (102, 19168), (109, 19231), (113, 19246), (115, 19261), (118, 19294), (121, 19309), (127, 19357), (132, 19420), (141, 19507), (143, 19516), (153, 19597), (154, 19600), (155, 19612), (159, 19636), (162, 19645), (167, 19687), (170, 19705), (192, 19822), (256, 20095), (278, 20191), (281, 20209), (293, 20254), (303, 20299), (314, 20335), (334, 20449), (337, 20470), (339, 20482), (340, 20497), (360, 20593), (363, 20602), (367, 20617), (369, 20626), (375, 20653), (379, 20674), (381, 20680), (384, 20692), (394, 20752), (396, 20767), (414, 20830), (418, 20851), (423, 20875), (434, 20932), (436, 20947), (437, 20950), (444, 20980), (446, 20989), (453, 21016), (456, 21031), (469, 21091), (471, 21109), (474, 21124), (482, 21157), (484, 21163), (494, 21202), (497, 21211), (499, 21223), (504, 21244), (509, 21265), (517, 21310), (520, 21319), (529, 21352), (530, 21358), (531, 21361), (536, 21373), (542, 21394), (545, 21403), (554, 21436), (558, 21454), (564, 21490), (566, 21502), (574, 21523), (577, 21532), (581, 21544), (592, 21583), (604, 21622), (615, 21658), (619, 21676), (631, 21724), (638, 21757), (642, 21769), (646, 21784), (660, 21844), (667, 21868), (678, 21916), (679, 21922), (685, 21952), (696, 21988), (709, 22036), (710, 22042), (712, 22048), (713, 22051), (723, 22102), (732, 22144), (740, 22180), (742, 22189), (744, 22210), (769, 22363), (776, 22408), (787, 22498), (795, 22558), (800, 22588), (809, 22636), (811, 22648), (821, 22681), (829, 22711), (847, 22816), (858, 22852), (889, 22990),

Gene: StarLord_23 Start: 17241, Stop: 21791, Start Num: 17

Candidate Starts for StarLord_23:

(Start: 16 @17220 has 2 MA's), (Start: 17 @17241 has 129 MA's), (Start: 20 @17271 has 3 MA's), (23, 17304), (47, 17460), (63, 17544), (65, 17556), (68, 17586), (75, 17667), (76, 17709), (77, 17727), (81, 17769), (83, 17799), (85, 17844), (86, 17856), (93, 17910), (96, 17925), (102, 17958), (109, 18021), (115, 18051), (118, 18084), (121, 18099), (127, 18147), (141, 18297), (146, 18318), (159, 18426),

(162, 18435), (168, 18483), (194, 18618), (204, 18660), (225, 18774), (237, 18825), (240, 18837), (258, 18918), (278, 19002), (281, 19020), (293, 19065), (303, 19110), (304, 19113), (305, 19119), (316, 19152), (337, 19263), (347, 19332), (348, 19335), (358, 19377), (360, 19386), (363, 19395), (371, 19425), (378, 19464), (380, 19470), (384, 19485), (391, 19527), (414, 19623), (418, 19644), (419, 19647), (423, 19668), (434, 19725), (436, 19740), (443, 19770), (446, 19782), (453, 19809), (456, 19824), (467, 19872), (471, 19902), (474, 19917), (482, 19950), (484, 19956), (494, 19995), (497, 20004), (499, 20016), (504, 20037), (517, 20103), (520, 20112), (529, 20145), (530, 20151), (531, 20154), (536, 20166), (537, 20169), (543, 20190), (548, 20211), (558, 20247), (566, 20295), (577, 20325), (604, 20415), (620, 20472), (631, 20517), (635, 20535), (642, 20562), (644, 20571), (646, 20577), (660, 20637), (664, 20649), (667, 20661), (679, 20715), (689, 20757), (691, 20763), (693, 20769), (702, 20802), (703, 20805), (709, 20829), (710, 20835), (712, 20841), (713, 20844), (723, 20895), (726, 20907), (733, 20946), (756, 21078), (763, 21114), (769, 21156), (776, 21201), (787, 21291), (800, 21381), (804, 21405), (809, 21429), (811, 21441), (813, 21450), (817, 21462), (821, 21474), (832, 21519), (835, 21549), (840, 21567), (847, 21606), (873, 21684),

Gene: Stayer_23 Start: 17240, Stop: 21790, Start Num: 17

Candidate Starts for Stayer_23:

(Start: 16 @17219 has 2 MA's), (Start: 17 @17240 has 129 MA's), (Start: 20 @17270 has 3 MA's), (23, 17303), (47, 17459), (63, 17543), (65, 17555), (68, 17585), (75, 17666), (76, 17708), (77, 17726), (81, 17768), (83, 17798), (85, 17843), (86, 17855), (93, 17909), (96, 17924), (102, 17957), (109, 18020), (115, 18050), (118, 18083), (121, 18098), (127, 18146), (141, 18296), (146, 18317), (159, 18425), (162, 18434), (168, 18482), (194, 18617), (204, 18659), (225, 18773), (237, 18824), (238, 18827), (240, 18836), (258, 18917), (278, 19001), (281, 19019), (293, 19064), (303, 19109), (304, 19112), (305, 19118), (316, 19151), (337, 19262), (347, 19331), (348, 19334), (358, 19376), (360, 19385), (363, 19394), (371, 19424), (378, 19463), (380, 19469), (384, 19484), (391, 19526), (414, 19622), (418, 19643), (419, 19646), (423, 19667), (434, 19724), (436, 19739), (443, 19769), (446, 19781), (453, 19808), (456, 19823), (467, 19871), (471, 19901), (474, 19916), (482, 19949), (484, 19955), (494, 19994), (497, 20003), (499, 20015), (504, 20036), (517, 20102), (520, 20111), (529, 20144), (530, 20150), (531, 20153), (536, 20165), (537, 20168), (543, 20189), (548, 20210), (558, 20246), (566, 20294), (577, 20324), (604, 20414), (620, 20471), (631, 20516), (635, 20534), (642, 20561), (644, 20570), (646, 20576), (660, 20636), (664, 20648), (667, 20660), (679, 20714), (689, 20756), (691, 20762), (693, 20768), (702, 20801), (703, 20804), (709, 20828), (710, 20834), (712, 20840), (713, 20843), (723, 20894), (726, 20906), (733, 20945), (756, 21077), (763, 21113), (769, 21155), (776, 21200), (787, 21290), (800, 21380), (804, 21404), (809, 21428), (811, 21440), (813, 21449), (817, 21461), (821, 21473), (832, 21518), (835, 21548), (840, 21566), (847, 21605),

Gene: Sunny4976_23 Start: 18500, Stop: 23560, Start Num: 4

Candidate Starts for Sunny4976_23:

(4, 18500), (5, 18530), (8, 18584), (11, 18605), (29, 18812), (31, 18821), (32, 18824), (47, 18941), (52, 18974), (58, 19007), (66, 19046), (69, 19088), (76, 19190), (78, 19226), (83, 19280), (84, 19316), (86, 19337), (93, 19391), (115, 19523), (116, 19535), (117, 19544), (122, 19580), (140, 19757), (146, 19790), (154, 19862), (158, 19895), (159, 19898), (174, 19982), (207, 20207), (211, 20243), (214, 20267), (217, 20279), (236, 20405), (271, 20573), (297, 20726), (298, 20729), (317, 20852), (318, 20858), (327, 20909), (332, 20972), (337, 21026), (341, 21056), (355, 21128), (363, 21158), (365, 21167), (369, 21182), (378, 21227), (384, 21248), (386, 21254), (393, 21299), (414, 21386), (422, 21428), (436, 21503), (453, 21572), (467, 21635), (471, 21665), (482, 21713), (485, 21722), (499, 21782), (520, 21878), (529, 21911), (531, 21920), (536, 21932), (537, 21935), (542, 21953), (547, 21974), (557, 22004), (558, 22013), (561, 22040), (569, 22070), (577, 22091), (591, 22136), (599, 22163), (604, 22181), (625, 22259), (636, 22307), (637, 22310), (647, 22346), (657, 22388), (665, 22418), (666, 22421), (670, 22445), (672, 22451), (673, 22460), (695, 22541), (708, 22592), (713, 22610), (720, 22643), (721, 22646), (733, 22712), (747, 22793), (769, 22922), (776, 22967), (787, 23057), (799, 23138), (800, 23147), (804, 23171), (813, 23216), (819, 23234), (824, 23249), (835, 23318), (865, 23429),

Gene: Synopsis_25 Start: 20138, Stop: 24727, Start Num: 17

Candidate Starts for Synopsis_25:

(Start: 16 @20117 has 2 MA's), (Start: 17 @20138 has 129 MA's), (Start: 20 @20168 has 3 MA's), (28, 20222), (32, 20243), (37, 20279), (47, 20357), (57, 20417), (63, 20441), (65, 20453), (68, 20483), (71, 20534), (75, 20564), (76, 20606), (77, 20624), (81, 20666), (83, 20696), (85, 20741), (86, 20753), (93, 20807), (96, 20822), (98, 20834), (102, 20855), (115, 20948), (118, 20981), (121, 20996), (127, 21044), (141, 21194), (146, 21215), (161, 21329), (162, 21332), (168, 21380), (188, 21494), (195, 21518), (198, 21533), (202, 21545), (234, 21713), (239, 21728), (240, 21734), (245, 21752), (261, 21824), (273, 21875), (278, 21890), (284, 21920), (301, 21992), (303, 21998), (313, 22031), (314, 22034), (321, 22061), (337, 22175), (345, 22232), (347, 22244), (360, 22298), (363, 22307), (364, 22310), (369, 22331), (378, 22376), (384, 22397), (394, 22457), (407, 22514), (414, 22535), (418, 22556), (434, 22637), (436, 22652), (437, 22655), (443, 22682), (444, 22685), (456, 22736), (471, 22814), (474, 22829), (475, 22832), (479, 22850), (480, 22856), (482, 22862), (485, 22871), (494, 22907), (497, 22916), (504, 22949), (515, 23003), (516, 23006), (520, 23024), (524, 23036), (531, 23066), (536, 23081), (540, 23090), (542, 23102), (547, 23123), (558, 23162), (569, 23219), (574, 23231), (577, 23240), (589, 23279), (592, 23291), (602, 23321), (604, 23330), (615, 23366), (624, 23405), (625, 23408), (629, 23426), (631, 23432), (646, 23492), (649, 23501), (655, 23522), (661, 23555), (662, 23558), (665, 23567), (693, 23684), (694, 23687), (700, 23708), (708, 23741), (709, 23744), (710, 23750), (713, 23759), (719, 23786), (728, 23831), (742, 23897), (748, 23948), (750, 23954), (759, 24014), (764, 24038), (773, 24098), (776, 24116), (777, 24128), (799, 24287), (800, 24296), (809, 24344), (817, 24377), (821, 24389), (824, 24395), (827, 24416), (829, 24419), (830, 24425), (835, 24464), (841, 24491), (882, 24677), (888, 24704),

Gene: TaidaOne_23 Start: 16808, Stop: 22294, Start Num: 2

Candidate Starts for TaidaOne_23:

(1, 16787), (Start: 2 @16808 has 30 MA's), (3, 16838), (12, 16982), (40, 17192), (50, 17309), (65, 17381), (68, 17411), (76, 17534), (84, 17660), (93, 17735), (102, 17783), (107, 17825), (128, 18014), (149, 18209), (158, 18281), (172, 18359), (190, 18464), (202, 18506), (227, 18641), (262, 18773), (264, 18782), (275, 18818), (277, 18827), (286, 18869), (295, 18902), (301, 18932), (334, 19055), (337, 19076), (346, 19139), (347, 19145), (349, 19151), (355, 19178), (360, 19199), (362, 19205), (363, 19208), (369, 19232), (378, 19277), (381, 19286), (382, 19289), (396, 19373), (402, 19400), (407, 19415), (408, 19418), (415, 19436), (418, 19454), (422, 19475), (433, 19526), (446, 19592), (450, 19607), (469, 19694), (471, 19712), (476, 19739), (502, 19832), (511, 19874), (512, 19883), (520, 19919), (525, 19937), (526, 19940), (529, 19952), (542, 19994), (543, 19997), (557, 20045), (561, 20081), (563, 20087), (568, 20108), (577, 20132), (586, 20162), (604, 20222), (614, 20255), (615, 20258), (618, 20273), (621, 20285), (627, 20309), (637, 20351), (640, 20363), (641, 20366), (655, 20414), (660, 20444), (665, 20459), (672, 20492), (675, 20507), (691, 20570), (710, 20642), (712, 20648), (713, 20651), (721, 20687), (733, 20753), (748, 20840), (749, 20843), (764, 20942), (770, 20990), (772, 20996), (790, 21146), (793, 21155), (845, 21428), (894, 21653), (905, 21746), (909, 21767), (912, 21791), (914, 21815), (916, 21821), (917, 21827), (924, 21872), (939, 21980), (946, 22049), (952, 22136), (959, 22238), (960, 22247),

Gene: Talon44_31 Start: 20700, Stop: 25802, Start Num: 17

Candidate Starts for Talon44_31:

(Start: 17 @20700 has 129 MA's), (Start: 20 @20730 has 3 MA's), (42, 20868), (46, 20913), (53, 20964), (57, 20979), (58, 20985), (65, 21015), (68, 21045), (69, 21066), (76, 21168), (81, 21228), (89, 21339), (93, 21369), (96, 21384), (102, 21417), (107, 21459), (112, 21510), (119, 21564), (120, 21567), (130, 21666), (146, 21786), (158, 21891), (159, 21894), (170, 21963), (172, 21969), (198, 22104), (241, 22308), (242, 22311), (291, 22545), (295, 22563), (303, 22602), (310, 22629), (311, 22641), (314, 22650), (335, 22782), (337, 22791), (349, 22866), (353, 22878), (354, 22884), (373, 22965), (377, 22986), (378, 22992), (384, 23013), (387, 23022), (390, 23043), (391, 23055), (393, 23064), (394, 23073), (398, 23100), (406, 23127), (407, 23130), (414, 23151), (422, 23193), (430,

23226), (431, 23229), (433, 23244), (434, 23253), (438, 23280), (441, 23289), (444, 23301), (449, 23322), (452, 23331), (459, 23364), (470, 23415), (471, 23424), (474, 23439), (479, 23460), (483, 23475), (489, 23499), (490, 23502), (494, 23514), (496, 23520), (497, 23523), (510, 23580), (512, 23595), (526, 23652), (529, 23664), (534, 23673), (538, 23685), (541, 23697), (542, 23703), (550, 23733), (551, 23736), (554, 23745), (557, 23754), (558, 23763), (559, 23778), (560, 23784), (563, 23796), (573, 23838), (577, 23850), (582, 23871), (584, 23883), (601, 23940), (608, 23964), (610, 23970), (611, 23973), (615, 23988), (617, 24000), (622, 24018), (639, 24087), (645, 24108), (667, 24195), (691, 24297), (696, 24315), (723, 24429), (728, 24450), (736, 24492), (757, 24627), (784, 24801), (789, 24864), (793, 24882), (797, 24912), (799, 24918), (803, 24939), (826, 25047), (838, 25107), (842, 25128), (843, 25131), (851, 25182), (853, 25191), (859, 25209), (867, 25230), (870, 25242), (883, 25335), (892, 25380), (898, 25443), (900, 25455), (906, 25494), (911, 25524), (916, 25557), (919, 25581), (928, 25641), (947, 25788),

Gene: Tanis_29 Start: 20466, Stop: 25580, Start Num: 17

Candidate Starts for Tanis_29:

(Start: 17 @20466 has 129 MA's), (Start: 20 @20496 has 3 MA's), (43, 20643), (46, 20679), (47, 20685), (53, 20730), (58, 20751), (65, 20781), (76, 20946), (81, 21006), (85, 21081), (89, 21117), (90, 21132), (93, 21147), (96, 21162), (102, 21195), (112, 21288), (119, 21342), (120, 21345), (146, 21564), (158, 21669), (159, 21672), (170, 21741), (172, 21747), (Start: 208 @21930 has 1 MA's), (219, 21981), (228, 22032), (241, 22086), (242, 22089), (269, 22221), (291, 22323), (295, 22341), (296, 22344), (311, 22419), (323, 22476), (335, 22560), (337, 22569), (353, 22656), (361, 22695), (373, 22743), (378, 22770), (384, 22791), (387, 22800), (390, 22821), (391, 22833), (393, 22842), (394, 22851), (398, 22878), (406, 22905), (407, 22908), (414, 22929), (422, 22971), (428, 22998), (431, 23007), (433, 23022), (434, 23031), (436, 23046), (438, 23058), (441, 23067), (444, 23079), (449, 23100), (452, 23109), (470, 23193), (471, 23202), (474, 23217), (475, 23220), (479, 23238), (482, 23250), (483, 23253), (490, 23280), (497, 23301), (500, 23316), (510, 23358), (512, 23373), (526, 23430), (529, 23442), (534, 23451), (538, 23463), (541, 23475), (542, 23481), (547, 23502), (551, 23514), (557, 23532), (558, 23541), (559, 23556), (560, 23562), (563, 23574), (573, 23616), (574, 23619), (577, 23628), (582, 23649), (584, 23661), (598, 23709), (601, 23718), (608, 23742), (610, 23748), (615, 23766), (616, 23775), (622, 23796), (639, 23865), (644, 23883), (645, 23886), (650, 23904), (680, 24030), (691, 24075), (705, 24126), (736, 24270), (757, 24405), (766, 24456), (778, 24534), (784, 24579), (789, 24642), (793, 24660), (797, 24690), (799, 24696), (809, 24753), (826, 24825), (838, 24885), (842, 24906), (843, 24909), (851, 24960), (853, 24969), (867, 25008), (870, 25020), (883, 25113), (892, 25158), (900, 25233), (906, 25272), (911, 25302), (919, 25359), (936, 25470), (947, 25566),

Gene: Tatanka_26 Start: 20622, Stop: 25211, Start Num: 17

Candidate Starts for Tatanka_26:

(Start: 16 @20601 has 2 MA's), (Start: 17 @20622 has 129 MA's), (Start: 20 @20652 has 3 MA's), (28, 20706), (32, 20727), (37, 20763), (47, 20841), (57, 20901), (63, 20925), (65, 20937), (68, 20967), (71, 21018), (75, 21048), (76, 21090), (77, 21108), (81, 21150), (83, 21180), (85, 21225), (86, 21237), (93, 21291), (96, 21306), (98, 21318), (102, 21339), (115, 21432), (118, 21465), (121, 21480), (127, 21528), (141, 21678), (146, 21699), (161, 21813), (162, 21816), (168, 21864), (188, 21978), (195, 22002), (198, 22017), (202, 22029), (234, 22197), (239, 22212), (240, 22218), (245, 22236), (261, 22308), (273, 22359), (278, 22374), (284, 22404), (301, 22476), (303, 22482), (307, 22500), (313, 22515), (314, 22518), (321, 22545), (337, 22659), (345, 22716), (347, 22728), (360, 22782), (363, 22791), (364, 22794), (369, 22815), (378, 22860), (384, 22881), (407, 22998), (414, 23019), (418, 23040), (422, 23061), (434, 23121), (436, 23136), (437, 23139), (443, 23166), (444, 23169), (469, 23280), (471, 23298), (474, 23313), (475, 23316), (479, 23334), (480, 23340), (481, 23343), (485, 23355), (494, 23391), (497, 23400), (504, 23433), (515, 23487), (516, 23490), (520, 23508), (524, 23520), (531, 23550), (536, 23565), (540, 23574), (542, 23586), (558, 23646), (567, 23697), (569, 23703), (574, 23715), (577, 23724), (589, 23763), (592, 23775), (602, 23805), (604, 23814), (624, 23889), (625, 23892), (629, 23910), (646, 23976), (648, 23982), (649, 23985), (661, 24039), (662,

24042), (693, 24168), (694, 24171), (700, 24192), (708, 24225), (710, 24234), (728, 24315), (734, 24348), (742, 24381), (750, 24438), (759, 24498), (776, 24600), (777, 24612), (799, 24771), (800, 24780), (809, 24828), (817, 24861), (821, 24873), (824, 24879), (827, 24900), (829, 24903), (830, 24909), (835, 24948), (841, 24975), (882, 25161), (888, 25188),

Gene: Teacup_26 Start: 19991, Stop: 24583, Start Num: 17

Candidate Starts for Teacup_26:

(Start: 16 @19970 has 2 MA's), (Start: 17 @19991 has 129 MA's), (Start: 20 @20021 has 3 MA's), (28, 20075), (32, 20096), (37, 20132), (57, 20270), (65, 20306), (68, 20336), (76, 20459), (77, 20477), (81, 20519), (88, 20627), (93, 20660), (96, 20675), (102, 20708), (109, 20771), (113, 20786), (115, 20801), (117, 20822), (118, 20834), (128, 20906), (131, 20951), (136, 21002), (140, 21035), (146, 21068), (151, 21116), (162, 21185), (168, 21233), (188, 21347), (195, 21371), (202, 21398), (216, 21473), (234, 21566), (239, 21581), (240, 21587), (245, 21605), (256, 21647), (273, 21728), (284, 21773), (301, 21845), (303, 21851), (313, 21884), (314, 21887), (321, 21914), (337, 22031), (345, 22088), (347, 22100), (360, 22154), (363, 22163), (364, 22166), (369, 22187), (378, 22232), (384, 22253), (407, 22370), (414, 22391), (417, 22409), (418, 22412), (422, 22433), (434, 22493), (436, 22508), (437, 22511), (443, 22538), (444, 22541), (471, 22670), (474, 22685), (475, 22688), (479, 22706), (480, 22712), (481, 22715), (485, 22727), (494, 22763), (497, 22772), (504, 22805), (515, 22859), (516, 22862), (520, 22880), (524, 22892), (531, 22922), (536, 22937), (540, 22946), (542, 22958), (558, 23018), (567, 23069), (569, 23075), (574, 23087), (577, 23096), (589, 23135), (592, 23147), (594, 23153), (596, 23159), (602, 23177), (604, 23186), (624, 23261), (625, 23264), (629, 23282), (646, 23348), (648, 23354), (649, 23357), (660, 23408), (693, 23540), (694, 23543), (700, 23564), (708, 23597), (710, 23606), (728, 23687), (734, 23720), (742, 23753), (750, 23810), (759, 23870), (764, 23894), (776, 23972), (777, 23984), (794, 24110), (800, 24152), (809, 24200), (817, 24233), (821, 24245), (824, 24251), (827, 24272), (829, 24275), (830, 24281), (835, 24320), (841, 24347), (846, 24374), (882, 24533), (888, 24560),

Gene: TenaciousP_33 Start: 24936, Stop: 30050, Start Num: 17

Candidate Starts for TenaciousP_33:

(Start: 17 @24936 has 129 MA's), (Start: 20 @24966 has 3 MA's), (25, 25011), (47, 25155), (58, 25221), (68, 25281), (69, 25302), (76, 25404), (84, 25530), (87, 25566), (93, 25605), (102, 25653), (107, 25695), (113, 25767), (118, 25815), (132, 25941), (140, 26016), (141, 26028), (146, 26049), (158, 26154), (159, 26157), (202, 26379), (214, 26445), (231, 26535), (241, 26571), (255, 26622), (262, 26670), (265, 26682), (295, 26826), (303, 26865), (310, 26892), (337, 27054), (343, 27102), (346, 27117), (347, 27123), (353, 27141), (364, 27189), (378, 27255), (390, 27306), (391, 27318), (394, 27336), (406, 27390), (418, 27435), (422, 27456), (425, 27465), (429, 27486), (433, 27507), (443, 27561), (444, 27564), (446, 27573), (452, 27594), (454, 27606), (459, 27627), (461, 27633), (465, 27651), (471, 27687), (477, 27717), (490, 27765), (494, 27777), (496, 27783), (497, 27786), (499, 27798), (500, 27801), (505, 27822), (512, 27858), (525, 27912), (526, 27915), (529, 27927), (534, 27936), (538, 27948), (539, 27951), (551, 27999), (556, 28014), (557, 28017), (558, 28026), (560, 28047), (566, 28074), (567, 28077), (573, 28101), (577, 28113), (582, 28134), (584, 28146), (586, 28155), (590, 28167), (598, 28194), (601, 28203), (608, 28227), (610, 28233), (615, 28251), (628, 28305), (632, 28320), (650, 28389), (676, 28500), (705, 28611), (717, 28656), (734, 28746), (755, 28869), (757, 28890), (768, 28953), (771, 28980), (781, 29052), (784, 29064), (785, 29073), (789, 29127), (794, 29148), (795, 29160), (831, 29322), (845, 29409), (850, 29427), (859, 29457), (866, 29475), (867, 29478), (870, 29490), (876, 29517), (892, 29628), (900, 29703), (908, 29751), (916, 29805), (920, 29832), (937, 29946), (947, 30036),

Gene: Tenney120_27 Start: 19291, Stop: 23928, Start Num: 17

Candidate Starts for Tenney120_27:

(Start: 16 @19270 has 2 MA's), (Start: 17 @19291 has 129 MA's), (Start: 20 @19321 has 3 MA's), (28, 19375), (29, 19384), (58, 19654), (59, 19657), (68, 19714), (69, 19735), (75, 19795), (76, 19837), (81, 19897), (86, 19984), (90, 20023), (93, 20038), (96, 20053), (102, 20086), (106, 20125), (107, 20128),

(113, 20164), (115, 20179), (121, 20227), (158, 20551), (162, 20563), (170, 20623), (180, 20665), (188, 20725), (189, 20731), (192, 20740), (197, 20755), (198, 20764), (219, 20863), (220, 20875), (221, 20884), (223, 20896), (296, 21181), (310, 21241), (314, 21250), (337, 21391), (343, 21439), (348, 21463), (351, 21469), (360, 21514), (363, 21523), (369, 21547), (373, 21565), (383, 21610), (384, 21613), (387, 21622), (396, 21688), (407, 21730), (411, 21742), (414, 21751), (418, 21772), (429, 21823), (434, 21853), (436, 21868), (446, 21910), (451, 21928), (461, 21976), (462, 21979), (472, 22036), (478, 22063), (499, 22144), (502, 22153), (512, 22204), (520, 22240), (529, 22273), (531, 22282), (536, 22294), (544, 22321), (549, 22342), (557, 22366), (558, 22375), (574, 22444), (575, 22447), (576, 22450), (577, 22453), (586, 22483), (592, 22504), (599, 22525), (604, 22543), (607, 22552), (612, 22570), (627, 22630), (635, 22663), (638, 22678), (640, 22684), (641, 22687), (654, 22732), (660, 22765), (661, 22768), (662, 22771), (667, 22789), (696, 22909), (697, 22912), (702, 22930), (721, 23008), (724, 23029), (740, 23101), (747, 23155), (750, 23167), (769, 23284), (776, 23329), (782, 23377), (801, 23512), (804, 23533), (809, 23557), (824, 23608), (835, 23677), (840, 23695),

Gene: Tenno_27 Start: 21223, Stop: 25812, Start Num: 17

Candidate Starts for Tenno_27:

(Start: 16 @21202 has 2 MA's), (Start: 17 @21223 has 129 MA's), (Start: 20 @21253 has 3 MA's), (28, 21307), (32, 21328), (37, 21364), (57, 21502), (65, 21538), (68, 21568), (76, 21691), (77, 21709), (81, 21751), (88, 21859), (93, 21892), (96, 21907), (102, 21940), (113, 22018), (115, 22033), (117, 22054), (118, 22066), (122, 22090), (128, 22138), (136, 22234), (140, 22267), (146, 22300), (155, 22384), (159, 22408), (162, 22417), (194, 22600), (202, 22630), (216, 22705), (218, 22711), (234, 22798), (239, 22813), (240, 22819), (245, 22837), (247, 22846), (256, 22879), (257, 22888), (273, 22960), (284, 23005), (301, 23077), (303, 23083), (313, 23116), (314, 23119), (321, 23146), (337, 23260), (345, 23317), (347, 23329), (360, 23383), (363, 23392), (364, 23395), (369, 23416), (378, 23461), (384, 23482), (405, 23593), (407, 23599), (414, 23620), (417, 23638), (422, 23662), (434, 23722), (436, 23737), (437, 23740), (443, 23767), (444, 23770), (451, 23797), (469, 23881), (471, 23899), (474, 23914), (475, 23917), (479, 23935), (480, 23941), (481, 23944), (485, 23956), (486, 23962), (494, 23992), (497, 24001), (504, 24034), (515, 24088), (516, 24091), (520, 24109), (531, 24151), (536, 24166), (540, 24175), (542, 24187), (558, 24247), (569, 24304), (574, 24316), (577, 24325), (589, 24364), (592, 24376), (594, 24382), (598, 24394), (602, 24406), (604, 24415), (624, 24490), (625, 24493), (629, 24511), (646, 24577), (649, 24586), (661, 24640), (662, 24643), (693, 24769), (700, 24793), (708, 24826), (710, 24835), (715, 24850), (719, 24871), (728, 24916), (734, 24949), (742, 24982), (750, 25039), (759, 25099), (772, 25177), (776, 25201), (777, 25213), (794, 25339), (800, 25381), (809, 25429), (817, 25462), (821, 25474), (824, 25480), (827, 25501), (829, 25504), (830, 25510), (835, 25549), (841, 25576), (882, 25762), (888, 25789),

Gene: Thiqqums_21 Start: 15072, Stop: 20549, Start Num: 2

Candidate Starts for Thiqqums_21:

(Start: 2 @15072 has 30 MA's), (3, 15102), (7, 15183), (9, 15213), (10, 15216), (12, 15246), (76, 15798), (84, 15924), (91, 15987), (93, 15999), (101, 16041), (107, 16089), (114, 16173), (128, 16281), (146, 16443), (149, 16476), (158, 16548), (172, 16626), (202, 16773), (275, 17085), (277, 17094), (294, 17157), (337, 17331), (342, 17373), (347, 17400), (351, 17409), (363, 17463), (369, 17487), (382, 17544), (403, 17658), (415, 17691), (422, 17730), (432, 17772), (433, 17781), (438, 17817), (450, 17862), (461, 17913), (469, 17949), (471, 17967), (477, 17997), (487, 18036), (488, 18039), (499, 18078), (500, 18081), (507, 18108), (511, 18129), (512, 18138), (519, 18171), (520, 18174), (526, 18195), (545, 18258), (561, 18336), (563, 18342), (574, 18378), (575, 18381), (576, 18384), (577, 18387), (595, 18447), (598, 18456), (604, 18477), (613, 18507), (614, 18510), (629, 18573), (630, 18576), (631, 18579), (641, 18621), (646, 18639), (655, 18669), (665, 18714), (667, 18723), (672, 18747), (690, 18822), (692, 18828), (706, 18879), (713, 18906), (717, 18921), (719, 18933), (721, 18942), (725, 18966), (739, 19032), (748, 19095), (753, 19119), (764, 19197), (770, 19245), (777, 19287), (793, 19410), (814, 19527), (839, 19644), (858, 19725), (871, 19770), (880, 19815), (905, 20001), (909, 20022), (910, 20034), (916, 20076), (924, 20127), (931, 20175), (935, 20214),

(943, 20265), (951, 20388), (957, 20427),

Gene: TieDye_22 Start: 15852, Stop: 21338, Start Num: 2

Candidate Starts for TieDye_22:

(1, 15831), (Start: 2 @15852 has 30 MA's), (3, 15882), (12, 16026), (40, 16236), (51, 16356), (58, 16395), (65, 16425), (67, 16449), (68, 16455), (69, 16476), (70, 16491), (76, 16578), (79, 16620), (83, 16668), (84, 16704), (85, 16713), (87, 16740), (93, 16779), (94, 16788), (102, 16827), (104, 16836), (107, 16869), (108, 16878), (118, 16986), (129, 17091), (140, 17187), (149, 17253), (172, 17403), (186, 17487), (190, 17508), (202, 17550), (227, 17685), (240, 17739), (264, 17826), (275, 17862), (277, 17871), (286, 17913), (295, 17946), (301, 17976), (334, 18099), (337, 18120), (346, 18183), (347, 18189), (349, 18195), (355, 18222), (360, 18243), (362, 18249), (363, 18252), (369, 18276), (378, 18321), (381, 18330), (382, 18333), (396, 18417), (402, 18444), (407, 18459), (408, 18462), (415, 18480), (418, 18498), (422, 18519), (433, 18570), (446, 18636), (450, 18651), (469, 18738), (471, 18756), (476, 18783), (502, 18876), (511, 18918), (512, 18927), (520, 18963), (525, 18981), (526, 18984), (529, 18996), (542, 19038), (543, 19041), (557, 19089), (561, 19125), (563, 19131), (568, 19152), (577, 19176), (586, 19206), (604, 19266), (614, 19299), (615, 19302), (618, 19317), (621, 19329), (627, 19353), (637, 19395), (640, 19407), (641, 19410), (655, 19458), (660, 19488), (665, 19503), (672, 19536), (675, 19551), (691, 19614), (710, 19686), (712, 19692), (713, 19695), (721, 19731), (733, 19797), (748, 19884), (749, 19887), (764, 19986), (770, 20034), (772, 20040), (790, 20190), (793, 20199), (845, 20472), (894, 20697), (905, 20790), (909, 20811), (912, 20835), (914, 20859), (916, 20865), (917, 20871), (924, 20916), (939, 21024), (946, 21093), (952, 21180), (959, 21282), (960, 21291),

Gene: Tokki_27 Start: 20280, Stop: 24866, Start Num: 17

Candidate Starts for Tokki_27:

(Start: 16 @20259 has 2 MA's), (Start: 17 @20280 has 129 MA's), (Start: 20 @20310 has 3 MA's), (28, 20364), (65, 20595), (68, 20625), (75, 20706), (76, 20748), (77, 20766), (81, 20808), (86, 20895), (93, 20949), (96, 20964), (97, 20970), (102, 20997), (113, 21075), (115, 21090), (118, 21123), (121, 21138), (122, 21147), (125, 21174), (127, 21186), (131, 21240), (146, 21357), (161, 21471), (162, 21474), (169, 21531), (171, 21537), (197, 21666), (204, 21699), (256, 21936), (278, 22032), (301, 22134), (303, 22140), (314, 22176), (337, 22320), (344, 22374), (345, 22377), (360, 22443), (363, 22452), (364, 22455), (369, 22476), (384, 22542), (386, 22548), (394, 22602), (407, 22659), (414, 22680), (417, 22698), (418, 22701), (422, 22722), (424, 22728), (429, 22752), (436, 22797), (438, 22809), (464, 22920), (467, 22929), (469, 22941), (471, 22959), (485, 23016), (494, 23052), (495, 23055), (497, 23061), (499, 23073), (500, 23076), (504, 23094), (507, 23103), (517, 23160), (531, 23211), (535, 23223), (543, 23247), (544, 23250), (557, 23295), (558, 23304), (574, 23373), (577, 23382), (589, 23421), (592, 23433), (604, 23472), (631, 23574), (636, 23598), (637, 23601), (646, 23634), (647, 23637), (648, 23640), (649, 23643), (661, 23697), (662, 23700), (668, 23721), (691, 23820), (700, 23850), (703, 23862), (706, 23874), (710, 23892), (713, 23901), (714, 23904), (744, 24060), (747, 24084), (749, 24093), (759, 24156), (763, 24171), (776, 24258), (777, 24270), (783, 24312), (794, 24396), (804, 24462), (809, 24486), (821, 24531), (824, 24537), (835, 24606), (836, 24609), (841, 24633), (882, 24816),

Gene: TonyStarch_23 Start: 16166, Stop: 21652, Start Num: 2

Candidate Starts for TonyStarch_23:

(1, 16145), (Start: 2 @16166 has 30 MA's), (3, 16196), (12, 16340), (40, 16550), (50, 16667), (65, 16739), (68, 16769), (76, 16892), (84, 17018), (93, 17093), (102, 17141), (107, 17183), (128, 17372), (149, 17567), (158, 17639), (172, 17717), (186, 17801), (202, 17864), (227, 17999), (240, 18053), (264, 18140), (275, 18176), (277, 18185), (286, 18227), (295, 18260), (301, 18290), (334, 18413), (337, 18434), (346, 18497), (347, 18503), (349, 18509), (355, 18536), (360, 18557), (362, 18563), (363, 18566), (369, 18590), (378, 18635), (381, 18644), (382, 18647), (384, 18656), (396, 18731), (402, 18758), (408, 18776), (415, 18794), (418, 18812), (422, 18833), (433, 18884), (446, 18950), (450, 18965), (469, 19052), (471, 19070), (476, 19097), (502, 19190), (511, 19232), (512, 19241),

(520, 19277), (521, 19280), (525, 19295), (526, 19298), (529, 19310), (542, 19352), (543, 19355), (557, 19403), (561, 19439), (563, 19445), (568, 19466), (577, 19490), (586, 19520), (604, 19580), (614, 19613), (615, 19616), (618, 19631), (621, 19643), (627, 19667), (637, 19709), (640, 19721), (641, 19724), (655, 19772), (660, 19802), (665, 19817), (672, 19850), (675, 19865), (691, 19928), (710, 20000), (712, 20006), (713, 20009), (721, 20045), (733, 20111), (748, 20198), (749, 20201), (764, 20300), (770, 20348), (772, 20354), (793, 20513), (845, 20786), (856, 20822), (876, 20888), (894, 21011), (905, 21104), (909, 21125), (914, 21173), (916, 21179), (917, 21185), (924, 21230), (939, 21338), (941, 21359), (946, 21407), (952, 21494), (959, 21596), (960, 21605),

Gene: Tribby_22 Start: 17385, Stop: 21863, Start Num: 17

Candidate Starts for Tribby_22:

(Start: 16 @17364 has 2 MA's), (Start: 17 @17385 has 129 MA's), (Start: 20 @17415 has 3 MA's), (23, 17448), (28, 17469), (65, 17700), (68, 17730), (75, 17811), (76, 17853), (77, 17871), (81, 17913), (86, 18000), (93, 18054), (96, 18069), (102, 18102), (113, 18180), (115, 18195), (121, 18243), (123, 18258), (128, 18300), (132, 18354), (140, 18429), (146, 18462), (159, 18570), (169, 18636), (177, 18669), (179, 18678), (180, 18681), (182, 18699), (243, 18981), (251, 19005), (257, 19035), (262, 19065), (299, 19194), (314, 19254), (337, 19383), (350, 19461), (358, 19497), (360, 19506), (363, 19515), (369, 19539), (375, 19566), (378, 19584), (384, 19605), (396, 19680), (404, 19713), (414, 19743), (422, 19785), (434, 19845), (435, 19851), (443, 19890), (444, 19893), (448, 19908), (462, 19971), (467, 19992), (471, 20022), (477, 20052), (482, 20070), (494, 20118), (500, 20142), (504, 20160), (507, 20169), (510, 20184), (513, 20205), (520, 20235), (529, 20268), (530, 20274), (531, 20277), (536, 20289), (542, 20310), (557, 20361), (558, 20370), (562, 20400), (564, 20406), (574, 20439), (577, 20448), (586, 20478), (592, 20499), (604, 20538), (612, 20565), (614, 20571), (615, 20574), (618, 20589), (625, 20616), (633, 20646), (641, 20682), (667, 20784), (677, 20829), (690, 20883), (691, 20886), (693, 20892), (702, 20925), (712, 20964), (714, 20970), (718, 20985), (723, 21018), (747, 21150), (758, 21213), (773, 21240), (776, 21258), (782, 21306), (783, 21312), (790, 21384), (804, 21462), (811, 21498), (815, 21516), (824, 21540), (829, 21564), (835, 21609), (840, 21630), (889, 21852),

Gene: TrixiePhattel_27 Start: 19423, Stop: 23763, Start Num: 47

Candidate Starts for TrixiePhattel_27:

(Start: 16 @19183 has 2 MA's), (Start: 17 @19204 has 129 MA's), (Start: 20 @19234 has 3 MA's), (28, 19288), (32, 19309), (45, 19402), (47, 19423), (58, 19489), (59, 19492), (68, 19549), (69, 19570), (75, 19630), (76, 19672), (81, 19732), (90, 19858), (93, 19873), (96, 19888), (102, 19921), (113, 19999), (115, 20014), (121, 20062), (136, 20215), (141, 20260), (146, 20281), (149, 20314), (159, 20389), (162, 20398), (167, 20440), (170, 20458), (180, 20500), (188, 20560), (189, 20566), (192, 20575), (197, 20590), (198, 20599), (219, 20698), (220, 20710), (221, 20719), (223, 20731), (296, 21016), (310, 21076), (314, 21085), (334, 21205), (337, 21226), (348, 21298), (351, 21304), (360, 21349), (363, 21358), (369, 21382), (373, 21400), (384, 21448), (387, 21457), (399, 21538), (407, 21565), (411, 21577), (414, 21586), (418, 21607), (434, 21688), (458, 21799), (461, 21811), (462, 21814), (478, 21898), (481, 21910), (499, 21979), (508, 22018), (512, 22039), (520, 22075), (529, 22108), (531, 22117), (536, 22129), (537, 22132), (557, 22201), (558, 22210), (562, 22240), (574, 22279), (577, 22288), (586, 22318), (592, 22339), (604, 22378), (627, 22465), (631, 22480), (635, 22498), (638, 22513), (641, 22522), (643, 22528), (654, 22567), (660, 22600), (661, 22603), (667, 22624), (668, 22627), (687, 22714), (696, 22744), (697, 22747), (702, 22765), (708, 22789), (714, 22810), (724, 22864), (725, 22867), (740, 22936), (747, 22990), (769, 23119), (776, 23164), (800, 23344), (804, 23368), (809, 23392), (821, 23437), (824, 23443), (832, 23482), (835, 23512), (840, 23530), (875, 23650),

Gene: Truckee_25 Start: 20163, Stop: 24755, Start Num: 17

Candidate Starts for Truckee_25:

(Start: 16 @20142 has 2 MA's), (Start: 17 @20163 has 129 MA's), (Start: 20 @20193 has 3 MA's), (28, 20247), (37, 20304), (47, 20382), (57, 20442), (63, 20466), (68, 20508), (76, 20631), (77, 20649), (81,

20691), (85, 20766), (86, 20778), (90, 20817), (93, 20832), (96, 20847), (102, 20880), (113, 20958), (115, 20973), (124, 21051), (132, 21132), (146, 21240), (162, 21357), (164, 21363), (186, 21507), (187, 21516), (204, 21582), (256, 21819), (267, 21879), (277, 21912), (278, 21915), (301, 22017), (303, 22023), (314, 22059), (337, 22203), (343, 22251), (344, 22257), (345, 22260), (355, 22305), (360, 22326), (363, 22335), (364, 22338), (369, 22359), (370, 22362), (384, 22425), (385, 22428), (407, 22542), (414, 22563), (417, 22581), (418, 22584), (429, 22635), (434, 22665), (436, 22680), (438, 22692), (464, 22803), (467, 22812), (471, 22842), (493, 22932), (494, 22935), (497, 22944), (499, 22956), (504, 22977), (508, 22995), (515, 23031), (520, 23052), (529, 23085), (545, 23142), (557, 23184), (558, 23193), (566, 23241), (574, 23262), (577, 23271), (586, 23301), (604, 23361), (615, 23397), (623, 23433), (635, 23481), (647, 23526), (649, 23532), (655, 23553), (660, 23583), (672, 23631), (682, 23670), (683, 23673), (710, 23781), (713, 23790), (720, 23823), (738, 23913), (746, 23961), (759, 24045), (776, 24147), (777, 24159), (783, 24201), (799, 24318), (800, 24327), (809, 24375), (821, 24420), (824, 24426), (835, 24495), (841, 24522), (882, 24705),

Gene: Trustiboi_27 Start: 20688, Stop: 25280, Start Num: 17

Candidate Starts for Trustiboi_27:

(Start: 16 @20667 has 2 MA's), (Start: 17 @20688 has 129 MA's), (Start: 20 @20718 has 3 MA's), (28, 20772), (32, 20793), (37, 20829), (47, 20907), (57, 20967), (63, 20991), (65, 21003), (68, 21033), (71, 21084), (75, 21114), (76, 21156), (77, 21174), (81, 21216), (83, 21246), (85, 21291), (86, 21303), (93, 21357), (96, 21372), (98, 21384), (102, 21405), (115, 21498), (118, 21531), (121, 21546), (127, 21594), (141, 21744), (146, 21765), (161, 21879), (162, 21882), (188, 22044), (195, 22068), (198, 22083), (202, 22095), (234, 22263), (239, 22278), (240, 22284), (245, 22302), (261, 22374), (273, 22425), (278, 22440), (284, 22470), (301, 22542), (303, 22548), (313, 22581), (314, 22584), (337, 22728), (343, 22776), (345, 22785), (347, 22797), (360, 22851), (363, 22860), (364, 22863), (369, 22884), (378, 22929), (384, 22950), (391, 22992), (394, 23010), (407, 23067), (414, 23088), (418, 23109), (434, 23190), (436, 23205), (437, 23208), (443, 23235), (456, 23289), (471, 23367), (474, 23382), (475, 23385), (479, 23403), (480, 23409), (482, 23415), (485, 23424), (494, 23460), (497, 23469), (504, 23502), (515, 23556), (516, 23559), (520, 23577), (524, 23589), (531, 23619), (536, 23634), (540, 23643), (542, 23655), (547, 23676), (558, 23715), (569, 23772), (574, 23784), (577, 23793), (589, 23832), (592, 23844), (602, 23874), (604, 23883), (615, 23919), (624, 23958), (625, 23961), (629, 23979), (631, 23985), (646, 24045), (649, 24054), (661, 24108), (662, 24111), (665, 24120), (693, 24237), (694, 24240), (700, 24261), (708, 24294), (709, 24297), (710, 24303), (713, 24312), (719, 24339), (742, 24450), (748, 24501), (750, 24507), (759, 24567), (764, 24591), (773, 24651), (776, 24669), (777, 24681), (799, 24840), (800, 24849), (809, 24897), (817, 24930), (821, 24942), (824, 24948), (827, 24969), (829, 24972), (830, 24978), (835, 25017), (841, 25044), (882, 25230), (888, 25257),

Gene: Untouchable_32 Start: 23641, Stop: 28752, Start Num: 17

Candidate Starts for Untouchable_32:

(Start: 17 @23641 has 129 MA's), (Start: 20 @23671 has 3 MA's), (25, 23716), (47, 23860), (57, 23920), (58, 23926), (68, 23986), (69, 24007), (76, 24109), (84, 24235), (87, 24271), (93, 24310), (98, 24337), (102, 24358), (107, 24400), (113, 24472), (118, 24520), (132, 24646), (140, 24721), (141, 24733), (146, 24754), (158, 24859), (159, 24862), (179, 24970), (228, 25222), (255, 25327), (267, 25396), (272, 25417), (288, 25498), (289, 25501), (295, 25528), (303, 25567), (310, 25594), (334, 25735), (337, 25756), (346, 25819), (347, 25825), (353, 25843), (354, 25849), (364, 25891), (367, 25903), (369, 25912), (378, 25957), (388, 25999), (390, 26008), (391, 26020), (393, 26029), (394, 26038), (418, 26137), (422, 26158), (425, 26167), (430, 26191), (431, 26194), (443, 26263), (444, 26266), (446, 26275), (451, 26293), (452, 26296), (454, 26308), (459, 26329), (461, 26335), (462, 26338), (467, 26359), (471, 26389), (474, 26404), (477, 26419), (490, 26467), (494, 26479), (496, 26485), (497, 26488), (499, 26500), (500, 26503), (512, 26560), (525, 26614), (534, 26638), (538, 26650), (539, 26653), (550, 26698), (551, 26701), (556, 26716), (557, 26719), (558, 26728), (559, 26743), (560, 26749), (561, 26755), (566, 26776), (567, 26779), (571, 26791), (574, 26806), (577, 26815), (582, 26836), (584, 26848), (590, 26869), (598, 26896), (608, 26929), (610, 26935), (615,

26953), (622, 26983), (632, 27022), (650, 27091), (676, 27202), (679, 27214), (697, 27283), (717, 27358), (734, 27448), (757, 27592), (762, 27616), (778, 27721), (781, 27754), (784, 27766), (789, 27829), (794, 27850), (795, 27862), (799, 27883), (809, 27940), (831, 28024), (845, 28111), (850, 28129), (859, 28159), (866, 28177), (867, 28180), (869, 28186), (870, 28192), (876, 28219), (892, 28330), (900, 28405), (911, 28474), (916, 28507), (919, 28531), (937, 28648), (947, 28738),

Gene: Uzumaki_26 Start: 19821, Stop: 24458, Start Num: 17

Candidate Starts for Uzumaki_26:

(Start: 16 @19800 has 2 MA's), (Start: 17 @19821 has 129 MA's), (Start: 20 @19851 has 3 MA's), (28, 19905), (29, 19914), (58, 20184), (59, 20187), (68, 20244), (69, 20265), (75, 20325), (76, 20367), (81, 20427), (86, 20514), (90, 20553), (93, 20568), (96, 20583), (102, 20616), (106, 20655), (107, 20658), (113, 20694), (115, 20709), (121, 20757), (158, 21081), (162, 21093), (170, 21153), (176, 21174), (180, 21195), (188, 21255), (189, 21261), (192, 21270), (197, 21285), (198, 21294), (219, 21393), (220, 21405), (221, 21414), (223, 21426), (296, 21711), (310, 21771), (314, 21780), (337, 21921), (343, 21969), (344, 21975), (348, 21993), (351, 21999), (360, 22044), (363, 22053), (369, 22077), (373, 22095), (383, 22140), (384, 22143), (387, 22152), (396, 22218), (407, 22260), (414, 22281), (418, 22302), (429, 22353), (434, 22383), (436, 22398), (446, 22440), (451, 22458), (461, 22506), (462, 22509), (472, 22566), (499, 22674), (502, 22683), (512, 22734), (515, 22749), (520, 22770), (529, 22803), (531, 22812), (536, 22824), (542, 22845), (544, 22851), (549, 22872), (557, 22896), (558, 22905), (574, 22974), (575, 22977), (576, 22980), (577, 22983), (586, 23013), (592, 23034), (599, 23055), (604, 23073), (607, 23082), (612, 23100), (627, 23160), (635, 23193), (638, 23208), (640, 23214), (641, 23217), (654, 23262), (661, 23298), (662, 23301), (664, 23307), (667, 23319), (668, 23322), (696, 23439), (697, 23442), (702, 23460), (711, 23496), (721, 23538), (725, 23562), (740, 23631), (747, 23685), (750, 23697), (769, 23814), (776, 23859), (782, 23907), (801, 24042), (804, 24063), (809, 24087), (824, 24138), (835, 24207), (836, 24210), (840, 24225),

Gene: Vardy_32 Start: 23250, Stop: 28361, Start Num: 17

Candidate Starts for Vardy_32:

(Start: 17 @23250 has 129 MA's), (Start: 20 @23280 has 3 MA's), (25, 23325), (47, 23469), (58, 23535), (68, 23595), (69, 23616), (76, 23718), (84, 23844), (87, 23880), (93, 23919), (98, 23946), (102, 23967), (107, 24009), (116, 24108), (118, 24129), (132, 24255), (140, 24330), (141, 24342), (146, 24363), (158, 24468), (159, 24471), (228, 24831), (255, 24936), (267, 25005), (272, 25026), (288, 25107), (289, 25110), (295, 25137), (303, 25176), (310, 25203), (337, 25365), (343, 25413), (347, 25434), (353, 25452), (364, 25500), (367, 25512), (378, 25566), (390, 25617), (391, 25629), (393, 25638), (394, 25647), (406, 25701), (418, 25746), (421, 25761), (422, 25767), (425, 25776), (426, 25782), (430, 25800), (431, 25803), (432, 25809), (433, 25818), (443, 25872), (444, 25875), (446, 25884), (451, 25902), (452, 25905), (454, 25917), (459, 25938), (461, 25944), (462, 25947), (467, 25968), (471, 25998), (474, 26013), (482, 26046), (486, 26061), (490, 26076), (494, 26088), (496, 26094), (497, 26097), (499, 26109), (500, 26112), (512, 26169), (525, 26223), (526, 26226), (534, 26247), (538, 26259), (539, 26262), (551, 26310), (556, 26325), (557, 26328), (558, 26337), (560, 26358), (566, 26385), (567, 26388), (573, 26412), (577, 26424), (582, 26445), (584, 26457), (590, 26478), (598, 26505), (608, 26538), (610, 26544), (615, 26562), (622, 26592), (632, 26631), (676, 26811), (679, 26823), (697, 26892), (734, 27057), (755, 27180), (757, 27201), (778, 27330), (781, 27363), (784, 27375), (789, 27438), (794, 27459), (795, 27471), (797, 27486), (809, 27549), (831, 27633), (845, 27720), (850, 27738), (859, 27768), (866, 27786), (867, 27789), (869, 27795), (870, 27801), (876, 27828), (892, 27939), (900, 28014), (902, 28032), (916, 28116), (919, 28140), (937, 28257), (947, 28347),

Gene: Xenomorph_20 Start: 17403, Stop: 21881, Start Num: 17

Candidate Starts for Xenomorph_20:

(Start: 16 @17382 has 2 MA's), (Start: 17 @17403 has 129 MA's), (Start: 20 @17433 has 3 MA's), (23, 17466), (28, 17487), (47, 17622), (49, 17631), (65, 17718), (68, 17748), (76, 17871), (77, 17889), (81, 17931), (86, 18018), (90, 18057), (93, 18072), (96, 18087), (102, 18120), (113, 18198), (115, 18213),

(121, 18261), (123, 18276), (128, 18318), (130, 18360), (132, 18372), (136, 18414), (140, 18447), (146, 18480), (159, 18588), (169, 18654), (177, 18687), (179, 18696), (180, 18699), (182, 18717), (187, 18756), (243, 18999), (257, 19053), (299, 19212), (305, 19245), (314, 19272), (337, 19401), (350, 19479), (360, 19524), (362, 19530), (363, 19533), (366, 19545), (369, 19557), (375, 19584), (378, 19602), (384, 19623), (396, 19698), (400, 19719), (401, 19722), (404, 19731), (414, 19761), (422, 19803), (423, 19806), (434, 19863), (435, 19869), (436, 19878), (444, 19911), (447, 19923), (448, 19926), (460, 19983), (462, 19989), (467, 20010), (471, 20040), (477, 20070), (482, 20088), (494, 20136), (500, 20160), (504, 20178), (507, 20187), (510, 20202), (513, 20223), (520, 20253), (529, 20286), (530, 20292), (531, 20295), (536, 20307), (542, 20328), (557, 20379), (558, 20388), (562, 20418), (564, 20424), (574, 20457), (577, 20466), (586, 20496), (589, 20505), (592, 20517), (598, 20535), (604, 20556), (612, 20583), (614, 20589), (615, 20592), (618, 20607), (625, 20634), (633, 20664), (641, 20700), (667, 20802), (682, 20865), (690, 20901), (691, 20904), (697, 20925), (702, 20943), (712, 20982), (714, 20988), (718, 21003), (722, 21024), (723, 21036), (747, 21168), (758, 21231), (773, 21258), (776, 21276), (782, 21324), (783, 21330), (790, 21402), (804, 21480), (811, 21516), (815, 21534), (824, 21558), (829, 21582), (835, 21627), (840, 21648), (889, 21870),

Gene: Yotsuba_26 Start: 20608, Stop: 25152, Start Num: 20

Candidate Starts for Yotsuba_26:

(Start: 17 @20575 has 129 MA's), (Start: 20 @20608 has 3 MA's), (43, 20755), (54, 20845), (55, 20848), (76, 21043), (84, 21169), (93, 21244), (102, 21292), (107, 21334), (118, 21454), (131, 21571), (141, 21667), (172, 21871), (175, 21883), (187, 21964), (215, 22099), (233, 22192), (249, 22255), (260, 22294), (276, 22357), (280, 22372), (331, 22576), (337, 22627), (353, 22714), (359, 22744), (362, 22756), (363, 22759), (366, 22771), (369, 22783), (375, 22810), (385, 22852), (392, 22897), (411, 22978), (413, 22984), (418, 23008), (420, 23014), (433, 23080), (438, 23116), (445, 23140), (453, 23173), (458, 23200), (460, 23209), (464, 23227), (469, 23248), (474, 23281), (480, 23308), (481, 23311), (494, 23362), (502, 23392), (504, 23404), (520, 23479), (526, 23500), (528, 23506), (532, 23521), (557, 23605), (558, 23614), (561, 23641), (577, 23692), (588, 23728), (604, 23782), (625, 23860), (648, 23950), (656, 23980), (664, 24016), (672, 24052), (682, 24091), (696, 24148), (702, 24169), (708, 24193), (709, 24196), (712, 24208), (714, 24214), (732, 24304), (738, 24334), (739, 24337), (740, 24340), (748, 24400), (752, 24415), (760, 24469), (776, 24568), (789, 24688), (790, 24694), (810, 24796), (812, 24808), (814, 24817), (835, 24913), (837, 24916), (887, 25141),

Gene: Zeina_26 Start: 19202, Stop: 23839, Start Num: 17

Candidate Starts for Zeina_26:

(Start: 16 @19181 has 2 MA's), (Start: 17 @19202 has 129 MA's), (Start: 20 @19232 has 3 MA's), (28, 19286), (29, 19295), (58, 19565), (59, 19568), (68, 19625), (69, 19646), (75, 19706), (76, 19748), (81, 19808), (85, 19883), (93, 19949), (96, 19964), (102, 19997), (106, 20036), (107, 20039), (113, 20075), (115, 20090), (121, 20138), (152, 20411), (159, 20465), (162, 20474), (170, 20534), (180, 20576), (188, 20636), (189, 20642), (192, 20651), (197, 20666), (198, 20675), (219, 20774), (220, 20786), (221, 20795), (223, 20807), (296, 21092), (310, 21152), (314, 21161), (337, 21302), (343, 21350), (348, 21374), (351, 21380), (360, 21425), (363, 21434), (369, 21458), (373, 21476), (383, 21521), (384, 21524), (387, 21533), (396, 21599), (407, 21641), (411, 21653), (414, 21662), (418, 21683), (429, 21734), (434, 21764), (436, 21779), (446, 21821), (451, 21839), (461, 21887), (462, 21890), (478, 21974), (499, 22055), (502, 22064), (512, 22115), (520, 22151), (529, 22184), (531, 22193), (536, 22205), (542, 22226), (544, 22232), (549, 22253), (557, 22277), (558, 22286), (561, 22313), (574, 22355), (575, 22358), (576, 22361), (577, 22364), (592, 22415), (599, 22436), (604, 22454), (612, 22481), (631, 22556), (635, 22574), (641, 22598), (654, 22643), (660, 22676), (661, 22679), (662, 22682), (667, 22700), (696, 22820), (697, 22823), (702, 22841), (721, 22919), (725, 22943), (740, 23012), (747, 23066), (763, 23153), (769, 23195), (776, 23240), (782, 23288), (801, 23423), (804, 23444), (809, 23468), (824, 23519), (835, 23588), (840, 23606),

Gene: Zeph_33 Start: 23999, Stop: 29110, Start Num: 17

Candidate Starts for Zeph_33:

(Start: 17 @23999 has 129 MA's), (Start: 20 @24029 has 3 MA's), (25, 24074), (47, 24218), (57, 24278), (58, 24284), (68, 24344), (69, 24365), (76, 24467), (84, 24593), (87, 24629), (93, 24668), (102, 24716), (107, 24758), (113, 24830), (118, 24878), (132, 25004), (140, 25079), (141, 25091), (146, 25112), (154, 25184), (158, 25217), (159, 25220), (179, 25328), (228, 25580), (255, 25685), (267, 25754), (272, 25775), (288, 25856), (289, 25859), (295, 25886), (303, 25925), (310, 25952), (334, 26093), (337, 26114), (346, 26177), (347, 26183), (353, 26201), (354, 26207), (364, 26249), (367, 26261), (369, 26270), (378, 26315), (388, 26357), (390, 26366), (391, 26378), (393, 26387), (394, 26396), (418, 26495), (422, 26516), (425, 26525), (430, 26549), (431, 26552), (443, 26621), (444, 26624), (446, 26633), (451, 26651), (452, 26654), (454, 26666), (459, 26687), (461, 26693), (462, 26696), (467, 26717), (471, 26747), (474, 26762), (477, 26777), (490, 26825), (494, 26837), (496, 26843), (497, 26846), (499, 26858), (500, 26861), (512, 26918), (525, 26972), (534, 26996), (538, 27008), (539, 27011), (550, 27056), (551, 27059), (556, 27074), (557, 27077), (558, 27086), (559, 27101), (560, 27107), (561, 27113), (566, 27134), (567, 27137), (571, 27149), (574, 27164), (577, 27173), (582, 27194), (584, 27206), (590, 27227), (598, 27254), (608, 27287), (610, 27293), (615, 27311), (622, 27341), (632, 27380), (650, 27449), (697, 27641), (717, 27716), (734, 27806), (757, 27950), (768, 28013), (778, 28079), (781, 28112), (784, 28124), (789, 28187), (794, 28208), (795, 28220), (799, 28241), (809, 28298), (831, 28382), (845, 28469), (850, 28487), (859, 28517), (866, 28535), (867, 28538), (869, 28544), (870, 28550), (876, 28577), (892, 28688), (900, 28763), (916, 28865), (919, 28889), (937, 29006), (947, 29096),

Gene: Zippen_26 Start: 20476, Stop: 25059, Start Num: 17

Candidate Starts for Zippen_26:

(Start: 16 @20455 has 2 MA's), (Start: 17 @20476 has 129 MA's), (Start: 20 @20506 has 3 MA's), (37, 20617), (44, 20665), (47, 20695), (57, 20755), (63, 20779), (65, 20791), (68, 20821), (76, 20944), (77, 20962), (81, 21004), (88, 21112), (93, 21145), (96, 21160), (102, 21193), (113, 21271), (115, 21286), (117, 21307), (118, 21319), (128, 21391), (140, 21520), (146, 21553), (159, 21661), (162, 21670), (180, 21772), (202, 21883), (204, 21895), (210, 21928), (216, 21958), (234, 22051), (244, 22084), (256, 22126), (278, 22222), (301, 22324), (303, 22330), (306, 22345), (314, 22366), (337, 22510), (342, 22552), (344, 22564), (345, 22567), (360, 22633), (363, 22642), (364, 22645), (369, 22666), (370, 22669), (384, 22732), (386, 22738), (396, 22807), (399, 22822), (407, 22849), (409, 22855), (414, 22870), (417, 22888), (418, 22891), (422, 22912), (434, 22972), (436, 22987), (437, 22990), (442, 23014), (443, 23017), (444, 23020), (471, 23149), (474, 23164), (475, 23167), (479, 23185), (480, 23191), (482, 23197), (485, 23206), (494, 23242), (495, 23245), (497, 23251), (504, 23284), (515, 23338), (516, 23341), (520, 23359), (531, 23401), (536, 23416), (540, 23425), (542, 23437), (543, 23440), (546, 23452), (547, 23458), (549, 23464), (550, 23467), (558, 23497), (568, 23551), (569, 23554), (576, 23572), (577, 23575), (578, 23578), (590, 23617), (604, 23665), (623, 23737), (624, 23740), (625, 23743), (631, 23767), (632, 23770), (636, 23791), (647, 23830), (648, 23833), (660, 23887), (672, 23935), (700, 24043), (710, 24085), (712, 24091), (713, 24094), (721, 24130), (742, 24232), (744, 24253), (750, 24289), (756, 24328), (759, 24349), (769, 24406), (777, 24463), (796, 24607), (804, 24655), (809, 24679), (817, 24712), (821, 24724), (824, 24730), (829, 24754), (835, 24799), (841, 24826), (882, 25009), (889, 25039),