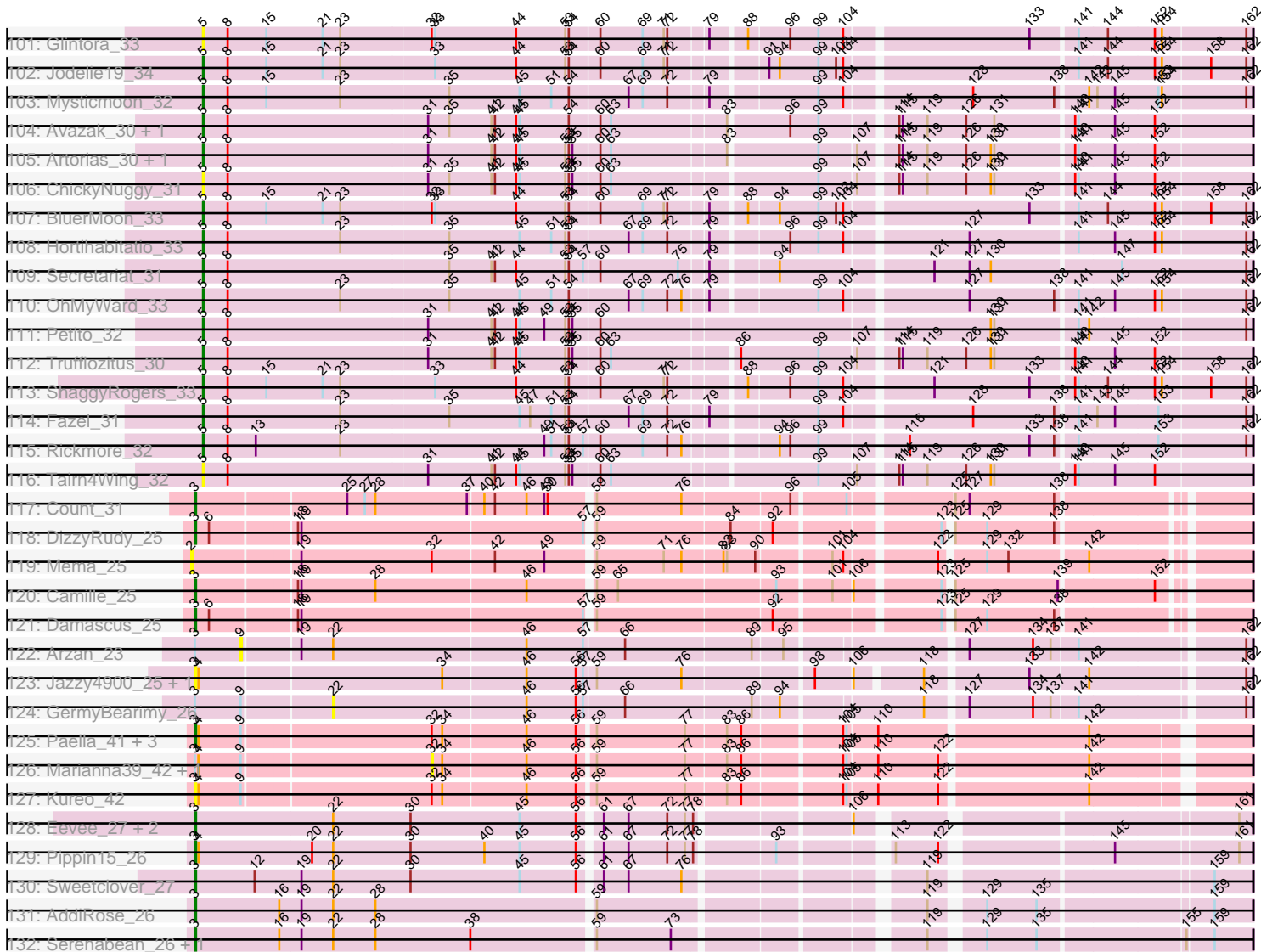


Pham 306094



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 306094 Report

This analysis was run 06/27/26 on database version 652.

Pham number 306094 has 261 members, 51 are drafts.

Phages represented in each track:

- Track 1 : Elsa_23, Circum_23, BenitoAntonio_23, Bowling_23, Arcadia_23, Dynamite_22, NapoleonB_22, Nason_23, Stardom_21, JEGGS_22, Mudcat_22
- Track 2 : Xenomorph_21
- Track 3 : Benllo_21, GoCrazy_21, KeaneyLin_21, Hankly_21
- Track 4 : Mooshroom_22, Kardesai_21, Cheesy_23
- Track 5 : YoshiYama_22
- Track 6 : Correa_22
- Track 7 : Tribby_23
- Track 8 : Heisenberger_22
- Track 9 : Nivinsha_27, AreFloNak_27, Breylor17_28
- Track 10 : CastorTray_29, Trustiboi_28
- Track 11 : MiniBagel_27, Dinallo_28, CapnMurica_27, Tenno_28
- Track 12 : Hemma_24
- Track 13 : Synopsis_26, Gordon_27, ScienceWizSam_29, Tatanka_27
- Track 14 : Niktson_27, ElephantMan_27
- Track 15 : Issa_27, LucySwiss_27, DevitoJr_27, Nightmare_28
- Track 16 : Brunswick_27, Teacup_27
- Track 17 : Westerlin_28
- Track 18 : Acai_27
- Track 19 : Darby_27
- Track 20 : LilHuddy_28
- Track 21 : Tokki_28, Bouchard_28, Phaby_28
- Track 22 : Shepard_28
- Track 23 : Tipton_28
- Track 24 : Chlochlo_28
- Track 25 : Giantsbane_28
- Track 26 : Ingrid_27, Loretta_27
- Track 27 : Anandi_28
- Track 28 : MediumFry_25
- Track 29 : Caterpillar_25
- Track 30 : Makai_27
- Track 31 : Truckee_26
- Track 32 : TrixiePhattel_27
- Track 33 : Leathea_27
- Track 34 : Biscute_28, Barbonzobean_30, Muglass_29
- Track 35 : BlackHoleSun_28

- Track 36 : Altjira_26, Stardrop_27, Argan_26, Mardi_28, PoeMe_28, KevinMinion_27, Phaila_26, Zeina_27, Tenney120_27, GantcherGoblin_26
- Track 37 : Navi1117_27
- Track 38 : Lewando_30
- Track 39 : Renaldo_32
- Track 40 : Kinny_29
- Track 41 : BarbieDoll_30
- Track 42 : Uzumaki_27
- Track 43 : Zippen_27
- Track 44 : Inked_29
- Track 45 : Linda_24, Spain_23, ProfFrink_24, Stayer_24, StarLord_24, Raunak_24, Boog_24, BronxBay_24, Shiba_24, MrAaronian_24, Jeremy4pt0_24, DoctorPepper_24, Michelle_24, HerbBucket_23, Sloopyjoe_24, Egad_24, Djungelskog_24
- Track 46 : Salk_24
- Track 47 : Natasha_24, RustyBoy_24
- Track 48 : Onestar_24
- Track 49 : Sporto_25
- Track 50 : Powelldog_25
- Track 51 : Sprinkle_24
- Track 52 : Espio_24, FrodoSwaggins_24, DrGrey_24
- Track 53 : Indigenous_24, Maya_24, Meibysrarus_24, Hoshi_24, HazuAndZazu_24, Jaylociraptor_24, CherryBlossom_24, Esketit_24, Spectropatronm_24, IceWarrior_24
- Track 54 : FidgetOrca_24
- Track 55 : TaidaOne_24, TonyStarch_24, TieDye_23, OlympicHelado_24
- Track 56 : Namu_24, Rima_24
- Track 57 : Popy_24
- Track 58 : Soshi_24
- Track 59 : Madamato_24
- Track 60 : GirlPower_23
- Track 61 : Annihilus_20, Moozy_20
- Track 62 : Bilo_20
- Track 63 : PherryCruz_19, Sangak_20, GoblinVoyage_20, Doxi13_20, RavenPuff_19
- Track 64 : HotFries_19
- Track 65 : Monse_20
- Track 66 : RosaAsantewaa_20
- Track 67 : Scap1_20
- Track 68 : Ditters_20
- Track 69 : SheRa_20
- Track 70 : LibertyBell_22
- Track 71 : Thiqqums_22, SendItCS_21, FromIndy_23, CricKo_22, Miek_22, Regigigas_23, Rainydai_22
- Track 72 : Bing_25
- Track 73 : Wigberry_24
- Track 74 : Kardashian_23
- Track 75 : ClubPenguin_23
- Track 76 : Pepy6_036
- Track 77 : POCO6_037
- Track 78 : PerroGrande22_40
- Track 79 : Figliar_33, Aflac_33
- Track 80 : ArtetaBall_34, Madvan_33, CWormy_33, Untouchable_33, Nadmeg_34
- Track 81 : JulesRay_30, Dancer_30, Football_31, Bugg_31

- Track 82 : Conley_31
- Track 83 : Schwartz33_34
- Track 84 : Phepper_33
- Track 85 : Blanky_33, Mossy_34
- Track 86 : Perkunas_32, SweetCrkHerbs_32, Talon44_31
- Track 87 : AlainaMarie_33, EndAve_33
- Track 88 : BetterYeti_33, Gusicorn_33, PestoPenguin_36, Aloe25_36
- Track 89 : Runhaar_33, Burley_33, Vardy_33
- Track 90 : Zeph_34, Hydrus_34, Kenosha_33, Crocheter_33
- Track 91 : Luthien_34
- Track 92 : Eddiemania_34
- Track 93 : Chikenjars_33
- Track 94 : Duffington_33
- Track 95 : TenaciousP_34, Tonaltzin_35, MajinBuu_33, OlgasClover_33
- Track 96 : Nithya_33, Citrus_32
- Track 97 : Pherobrine_32
- Track 98 : Arataki_32, Demure_32, Dialga_34
- Track 99 : Gill_30, Odesza_30, Capybara_30, Roney_30
- Track 100 : Gravy_30, Tanis_30, Kerry_30, NoPickles_30, Magel_31
- Track 101 : Glintora_33
- Track 102 : Jodelie19_34
- Track 103 : Mysticmoon_32
- Track 104 : Avazak_30, Captrips_30
- Track 105 : Artorias_30, FortCran_30
- Track 106 : ChickyNuggy_31
- Track 107 : BluerMoon_33
- Track 108 : Hortihabitatio_33
- Track 109 : Secretariat_31
- Track 110 : OhMyWard_33
- Track 111 : Petito_32
- Track 112 : Trufflozitus_30
- Track 113 : ShaggyRogers_33
- Track 114 : Fazel_31
- Track 115 : Rickmore_32
- Track 116 : Tairn4Wing_32
- Track 117 : Count_31
- Track 118 : DizzyRudy_25
- Track 119 : Mema_25
- Track 120 : Camille_25
- Track 121 : Damascus_25
- Track 122 : Arzan_23
- Track 123 : Jazzy4900_25, Sunny4976_24
- Track 124 : GermyBearimy_26
- Track 125 : Paella_41, Qui_41, JeNeSaisPas_40, Elver_41
- Track 126 : Marianna39_42, Gandionco_42
- Track 127 : Kureo_42
- Track 128 : Eevee_27, Yotsuba_27, JoyLin_27
- Track 129 : Pippin15_26
- Track 130 : Sweetclover_27
- Track 131 : AddiRose_26
- Track 132 : Serenabean_26, Daddyjeff_26

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

The start number called the most often in the published annotations is 3, it was called in 151 of the 210 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai_27, AddiRose_26, Altjira_26, Anandi_28, Annihilus_20, Arcadia_23, AreFloNak_27, Argan_26, Barbonzobean_30, BenitoAntonio_23, Benllo_21, Bilo_20, Bing_25, Biscute_28, BlackHoleSun_28, Boog_24, Bouchard_28, Bowling_23, Breylor17_28, BronxBay_24, Brunswick_27, Camille_25, CapnMurica_27, CastorTray_29, Caterpillar_25, Cheesy_23, CherryBlossom_24, Chlochlo_28, Circum_23, ClubPenguin_23, Correa_22, Count_31, CricKo_22, Daddyjeff_26, Damascus_25, Darby_27, DevitoJr_27, Dinallo_28, Ditters_20, DizzyRudy_25, Djungelskog_24, DoctorPepper_24, Doxi13_20, DrGrey_24, Dynamite_22, Eevee_27, Egad_24, ElephantMan_27, Elsa_23, Elver_41, Esketit_24, Espio_24, FidgetOrca_24, FrodoSwaggins_24, FromIndy_23, GantcherGoblin_26, Giantsbane_28, GirlPower_23, GoCrazy_21, GoblinVoyage_20, Gordon_27, Hankly_21, HazuAndZazu_24, Heisenberger_22, HerbBucket_23, Hoshi_24, HotFries_19, IceWarrior_24, Indigenous_24, Ingrid_27, Inked_29, Issa_27, JEGGS_22, Jaylociraptor_24, Jazzy4900_25, JeNeSaisPas_40, Jeremy4pt0_24, JoyLin_27, Kardashian_23, Kardesai_21, KeaneyLin_21, KevinMinion_27, Kinny_29, Kureo_42, Leatheia_27, Lewando_30, LibertyBell_22, LilHuddy_28, Linda_24, Loretta_27, LucySwiss_27, Madamato_24, Makai_27, Mardi_28, Maya_24, MediumFry_25, Meibysrarus_24, Michelle_24, Miek_22, MiniBagel_27, Monse_20, Mooshroom_22, Moozy_20, MrAaronian_24, Mudcat_22, Muglass_29, Namu_24, NapoleonB_22, Nason_23, Natasha_24, Navi1117_27, Nightmare_28, Niktson_27, Nivinsha_27, OlympicHelado_24, Onestar_24, Paella_41, Phaby_28, Phaila_26, PherryCruz_19, Pippin15_26, PoeMe_28, Powelldog_25, ProfFrink_24, Qui_41, Rainydai_22, Raunak_24, RavenPuff_19, Regigigas_23, Rima_24, RosaAsantewaa_20, RustyBoy_24, Salk_24, Sangak_20, Scap1_20, ScienceWizSam_29, SendItCS_21, Serenabean_26, SheRa_20, Shepard_28, Shiba_24, Sloopyjoe_24, Soshi_24, Spain_23, Spectropatronm_24, Sporto_25, StarLord_24, Stardom_21, Stardrop_27, Stayer_24, Sunny4976_24, Sweetclover_27, Synopsis_26, TaidaOne_24, Tatanka_27, Teacup_27, Tenney120_27, Tenno_28, Thiqqums_22, TieDye_23, Tipton_28, Tokki_28, TonyStarch_24, Tribby_23, TrixiePhattel_27, Truckee_26, Trustiboi_28, Uzumaki_27, Westerlin_28, Wigberry_24, Xenomorph_21, YoshiYama_22, Yotsuba_27, Zeina_27, Zippen_27,

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

- Arzan_23, BarbieDoll_30, Gandionco_42, GermyBearimy_26, Hemma_24, Marianna39_42, Popy_24, Renaldo_32, Sprinkle_24,

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

- Aflac_33, AlainaMarie_33, Aloe25_36, Arataki_32, ArtetaBall_34, Artorias_30, Avazak_30, BetterYeti_33, Blanky_33, BluerMoon_33, Bugg_31, Burley_33, CWormy_33, Captrips_30, Copybara_30, ChickyNuggy_31, Chikenjars_33, Citrus_32, Conley_31, Crocheter_33, Dancer_30, Demure_32, Dialga_34, Duffington_33, Eddiemania_34, EndAve_33, Fazel_31, Figliar_33, Football_31, FortCran_30, Gill_30, Glintora_33, Gravy_30, Gusicorn_33, Hortihabitatio_33, Hydrus_34, Jodelie19_34, JulesRay_30, Kenosha_33, Kerry_30, Luthien_34, Madvan_33, Magel_31, MajinBuu_33, Mema_25, Mossy_34, Mysticmoon_32, Nadmeg_34, Nithya_33, NoPickles_30, Odesza_30, OhMyWard_33,

OlgasClover_33, Pepy6_036, Perkunas_32, PerroGrande22_40, PestoPenguin_36, Petite_32, Phepper_33, Pherobrine_32, Poco6_037, Rickmore_32, Roney_30, Runhaar_33, Schwartz33_34, Secretariat_31, ShaggyRogers_33, SweetCrkHerbs_32, Tairn4Wing_32, Talon44_31, Tanis_30, TenaciousP_34, Tonaltzin_35, Trufflozitus_30, Untouchable_33, Vardy_33, Zeph_34,

Summary by start number:

Start 2:

- Found in 1 of 261 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mema_25 (EL),

Start 3:

- Found in 184 of 261 (70.5%) of genes in pham
- Manual Annotations of this start: 151 of 210
- Called 95.1% of time when present
- Phage (with cluster) where this start called: Acai_27 (AU1), AddiRose_26 (JA), Altjira_26 (AU6), Anandi_28 (AU4), Annihilus_20 (BI2), Arcadia_23 (AM), AreFloNak_27 (AU1), Argan_26 (AU6), Barbonzobean_30 (AU6), BenitoAntonio_23 (AM), Benllo_21 (AM), Bilo_20 (BI2), Bing_25 (BI5), Biscute_28 (AU6), BlackHoleSun_28 (AU6), Boog_24 (AW), Bouchard_28 (AU2), Bowling_23 (AM), Breylor17_28 (AU1), BronxBay_24 (AW), Brunswick_27 (AU1), Camille_25 (EL), CapnMurica_27 (AU1), CastorTray_29 (AU1), Caterpillar_25 (AU4), Cheesy_23 (AM), CherryBlossom_24 (BI1), Chlochlo_28 (AU2), Circum_23 (AM), ClubPenguin_23 (BI7), Correa_22 (AM), Count_31 (EL), CricKo_22 (BI4), Daddyjeff_26 (JA), Damascus_25 (EL), Darby_27 (AU1), DevitoJr_27 (AU1), Dinallo_28 (AU1), Ditters_20 (BI2), DizzyRudy_25 (EL), Djungelskog_24 (AW), DoctorPepper_24 (AW), Doxi13_20 (BI2), DrGrey_24 (BI1), Dynamite_22 (AM), Eevee_27 (JA), Egad_24 (AW), ElephantMan_27 (AU1), Elsa_23 (AM), Elver_41 (FK), Esketit_24 (BI1), Espio_24 (BI1), FidgetOrca_24 (BI1), FrodoSwaggins_24 (BI1), FromIndy_23 (BI4), GantcherGoblin_26 (AU6), Giantsbane_28 (AU2), GirlPower_23 (BI1), GoCrazy_21 (AM), GoblinVoyage_20 (BI2), Gordon_27 (AU1), Hankly_21 (AM), HazuAndZazu_24 (BI1), Heisenberger_22 (AM), HerbBucket_23 (AW), Hoshi_24 (BI1), HotFries_19 (BI2), IceWarrior_24 (BI1), Indigenous_24 (BI1), Ingrid_27 (AU3), Inked_29 (AU7), Issa_27 (AU1), JEGGS_22 (AM), Jaylociraptor_24 (BI1), Jazzy4900_25 (FI), JeNeSaisPas_40 (FK), Jeremy4pt0_24 (AW), JoyLin_27 (JA), Kardashian_23 (BI6), Kardesai_21 (AM), KeaneyLin_21 (AM), KevinMinion_27 (AU6), Kinny_29 (AU6), Kureo_42 (FK), Leathea_27 (AU6), Lewando_30 (AU6), LibertyBell_22 (BI3), LilHuddy_28 (AU2), Linda_24 (AW), Loretta_27 (AU3), LucySwiss_27 (AU1), Madamato_24 (BI1), Makai_27 (AU5), Mardi_28 (AU6), Maya_24 (BI1), MediumFry_25 (AU4), Meibysrarus_24 (BI1), Michelle_24 (AW), Miek_22 (BI4), MiniBagel_27 (AU1), Monse_20 (BI2), Mooshroom_22 (AM), Moozy_20 (BI2), MrAaronian_24 (AW), Mudcat_22 (AM), Muglass_29 (AU6), Namu_24 (BI1), NapoleonB_22 (AM), Nason_23 (AM), Natasha_24 (AW), Navi1117_27 (AU6), Nightmare_28 (AU1), Niktson_27 (AU1), Nivinsha_27 (AU1), OlympicHelado_24 (BI1), Onestar_24 (AW), Paella_41 (FK), Phaby_28 (AU2), Phaila_26 (AU6), PherryCruz_19 (BI2), Pippin15_26 (JA), PoeMe_28 (AU6), PowellDog_25 (AW), ProfFrink_24 (AW), Qui_41 (FK), Rainydai_22 (BI4), Raunak_24 (AW), RavenPuff_19 (BI2), Regigigas_23 (BI4), Rima_24 (BI1), RosaAsantewaa_20 (BI2), RustyBoy_24 (AW), Salk_24 (AW), Sangak_20 (BI2), Scap1_20 (BI2), ScienceWizSam_29 (AU1), SendtCS_21 (BI4), Serenabean_26 (JA), SheRa_20 (BI2), Shepard_28 (AU2),

Shiba_24 (AW), Sloopyjoe_24 (AW), Soshi_24 (BI1), Spain_23 (AW), Spectropatronm_24 (BI1), Sporto_25 (AW), StarLord_24 (AW), Stardom_21 (AM), Stardrop_27 (AU6), Stayer_24 (AW), Sunny4976_24 (FI), Sweetclover_27 (JA), Synopsis_26 (AU1), TaidaOne_24 (BI1), Tatanka_27 (AU1), Teacup_27 (AU1), Tenney120_27 (AU6), Tenno_28 (AU1), Thiqqums_22 (BI4), TieDye_23 (BI1), Tipton_28 (AU2), Tokki_28 (AU2), TonyStarch_24 (BI1), Tribby_23 (AM), TrixiePhattel_27 (AU6), Truckee_26 (AU5), Trustiboi_28 (AU1), Uzumaki_27 (AU6), Westerlin_28 (AU1), Wigberry_24 (BI5), Xenomorph_21 (AM), YoshiYama_22 (AM), Yotsuba_27 (JA), Zeina_27 (AU6), Zippen_27 (AU7),

Start 5:

- Found in 76 of 261 (29.1%) of genes in pham
- Manual Annotations of this start: 58 of 210
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aflac_33 (DJ), AlainaMarie_33 (DJ), Aloe25_36 (DJ), Arataki_32 (DJ), ArtetaBall_34 (DJ), Artorias_30 (DJ), Avazak_30 (DJ), BetterYeti_33 (DJ), Blanky_33 (DJ), BluerMoon_33 (DJ), Bugg_31 (DJ), Burley_33 (DJ), CWormy_33 (DJ), Captrips_30 (DJ), Capybara_30 (DJ), ChickyNuggy_31 (DJ), Chikenjars_33 (DJ), Citrus_32 (DJ), Conley_31 (DJ), Crocheter_33 (DJ), Dancer_30 (DJ), Demure_32 (DJ), Dialga_34 (DJ), Duffington_33 (DJ), Eddiemania_34 (DJ), EndAve_33 (DJ), Fazel_31 (DJ), Figliar_33 (DJ), Football_31 (DJ), FortCran_30 (DJ), Gill_30 (DJ), Glintora_33 (DJ), Gravy_30 (DJ), Gusicorn_33 (DJ), Hortihabitatio_33 (DJ), Hydrus_34 (DJ), Jodelie19_34 (DJ), JulesRay_30 (DJ), Kenosha_33 (DJ), Kerry_30 (DJ), Luthien_34 (DJ), Madvan_33 (DJ), Magel_31 (DJ), MajinBuu_33 (DJ), Mossy_34 (DJ), Mysticmoon_32 (DJ), Nadmeg_34 (DJ), Nithya_33 (DJ), NoPickles_30 (DJ), Odesza_30 (DJ), OhMyWard_33 (DJ), OlgasClover_33 (DJ), Pepy6_036 (CC), Perkunus_32 (DJ), PerroGrande22_40 (CC), PestoPenguin_36 (DJ), Petito_32 (DJ), Phepper_33 (DJ), Pherobrine_32 (DJ), Poco6_037 (CC), Rickmore_32 (DJ), Roney_30 (DJ), Runhaar_33 (DJ), Schwartz33_34 (DJ), Secretariat_31 (DJ), ShaggyRogers_33 (DJ), SweetCrkHerbs_32 (DJ), Tairn4Wing_32 (DJ), Talon44_31 (DJ), Tanis_30 (DJ), TenaciousP_34 (DJ), Tonaltzin_35 (DJ), Trufflozitus_30 (DJ), Untouchable_33 (DJ), Vardy_33 (DJ), Zeph_34 (DJ),

Start 6:

- Found in 42 of 261 (16.1%) of genes in pham
- Manual Annotations of this start: 1 of 210
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Popy_24 (BI1), Sprinkle_24 (AW),

Start 9:

- Found in 31 of 261 (11.9%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Arzan_23 (FI),

Start 10:

- Found in 47 of 261 (18.0%) of genes in pham
- No Manual Annotations of this start.
- Called 2.1% of time when present
- Phage (with cluster) where this start called: Hemma_24 (AU1),

Start 17:

- Found in 21 of 261 (8.0%) of genes in pham
- No Manual Annotations of this start.
- Called 9.5% of time when present
- Phage (with cluster) where this start called: BarbieDoll_30 (AU6), Renaldo_32 (AU6),

Start 22:

- Found in 42 of 261 (16.1%) of genes in pham
- No Manual Annotations of this start.
- Called 2.4% of time when present
- Phage (with cluster) where this start called: GermyBearimy_26 (FI),

Start 32:

- Found in 16 of 261 (6.1%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Gandionco_42 (FK), Marianna39_42 (FK),

Summary by clusters:

There are 22 clusters represented in this pham: DJ, FI, FK, JA, AU1, AU3, AU2, AU5, AU4, AU7, AU6, EL, CC, AM, AW, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:

- Start number 3 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster AU1:

- Start number 3 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 3 was manually annotated 8 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 3 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 3 was manually annotated 3 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 3 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 3 was manually annotated 14 times for cluster AU6.

Info for manual annotations of cluster AU7:

- Start number 3 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 3 was manually annotated 19 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 3 was manually annotated 23 times for cluster BI1.

- Start number 6 was manually annotated 1 time for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 3 was manually annotated 13 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 3 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 3 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 3 was manually annotated 2 times for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 3 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 3 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:

- Start number 5 was manually annotated 58 times for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 3 was manually annotated 4 times for cluster EL.

Info for manual annotations of cluster FK:

- Start number 3 was manually annotated 3 times for cluster FK.

Info for manual annotations of cluster JA:

- Start number 3 was manually annotated 8 times for cluster JA.

Gene Information:

Gene: Acai_27 Start: 24692, Stop: 25510, Start Num: 3

Candidate Starts for Acai_27:

(Start: 3 @24692 has 151 MA's), (10, 24734), (14, 24746), (18, 24770), (33, 24887), (36, 24905), (43, 24947), (46, 24959), (70, 25055), (104, 25208), (140, 25379), (142, 25391), (152, 25445),

Gene: AddiRose_26 Start: 23143, Stop: 23970, Start Num: 3

Candidate Starts for AddiRose_26:

(Start: 3 @23143 has 151 MA's), (16, 23215), (19, 23233), (22, 23260), (28, 23296), (59, 23476), (119, 23722), (129, 23758), (135, 23800), (159, 23938),

Gene: Aflac_33 Start: 28623, Stop: 29474, Start Num: 5

Candidate Starts for Aflac_33:

(Start: 5 @28623 has 58 MA's), (8, 28644), (15, 28677), (21, 28725), (23, 28740), (44, 28887), (53, 28929), (54, 28932), (60, 28956), (69, 28992), (71, 29010), (72, 29013), (79, 29043), (94, 29094), (99, 29127), (102, 29142), (104, 29148), (141, 29331), (144, 29355), (152, 29394), (154, 29400), (158,

29439), (162, 29469),

Gene: AlainaMarie_33 Start: 28607, Stop: 29458, Start Num: 5

Candidate Starts for AlainaMarie_33:

(Start: 5 @28607 has 58 MA's), (8, 28628), (15, 28661), (21, 28709), (23, 28724), (32, 28799), (33, 28802), (44, 28871), (53, 28913), (54, 28916), (60, 28940), (69, 28976), (71, 28994), (72, 28997), (76, 29009), (88, 29054), (94, 29078), (99, 29111), (104, 29132), (121, 29198), (133, 29279), (141, 29315), (144, 29339), (152, 29378), (154, 29384), (162, 29453),

Gene: Aloe25_36 Start: 28397, Stop: 29248, Start Num: 5

Candidate Starts for Aloe25_36:

(Start: 5 @28397 has 58 MA's), (8, 28418), (15, 28451), (21, 28499), (23, 28514), (33, 28592), (44, 28661), (53, 28703), (54, 28706), (60, 28730), (71, 28784), (72, 28787), (88, 28844), (96, 28877), (99, 28901), (104, 28922), (121, 28988), (133, 29069), (140, 29102), (141, 29105), (144, 29129), (152, 29168), (154, 29174), (162, 29243),

Gene: Altjira_26 Start: 24317, Stop: 25153, Start Num: 3

Candidate Starts for Altjira_26:

(Start: 3 @24317 has 151 MA's), (9, 24356), (17, 24386), (18, 24395), (35, 24524), (46, 24587), (51, 24608), (65, 24656), (69, 24677), (74, 24704), (121, 24908), (122, 24911), (137, 24998), (152, 25082), (154, 25088), (159, 25121),

Gene: Anandi_28 Start: 25248, Stop: 26066, Start Num: 3

Candidate Starts for Anandi_28:

(Start: 3 @25248 has 151 MA's), (10, 25290), (18, 25326), (26, 25371), (33, 25443), (41, 25485), (43, 25503), (46, 25515), (59, 25566), (69, 25605), (70, 25611), (76, 25638), (81, 25665), (104, 25764), (129, 25866), (141, 25938), (152, 26001),

Gene: Annihilus_20 Start: 18728, Stop: 19555, Start Num: 3

Candidate Starts for Annihilus_20:

(Start: 3 @18728 has 151 MA's), (22, 18836), (28, 18872), (40, 18965), (46, 19001), (53, 19034), (59, 19052), (62, 19061), (65, 19070), (76, 19124), (77, 19127), (97, 19217), (106, 19256), (122, 19319), (127, 19340), (129, 19355),

Gene: Arataki_32 Start: 27716, Stop: 28567, Start Num: 5

Candidate Starts for Arataki_32:

(Start: 5 @27716 has 58 MA's), (8, 27737), (15, 27770), (21, 27818), (23, 27833), (33, 27911), (44, 27980), (53, 28022), (54, 28025), (60, 28049), (63, 28058), (69, 28085), (76, 28118), (79, 28136), (88, 28163), (96, 28196), (99, 28220), (104, 28241), (121, 28307), (141, 28424), (143, 28439), (152, 28487), (154, 28493), (162, 28562),

Gene: Arcadia_23 Start: 22148, Stop: 22999, Start Num: 3

Candidate Starts for Arcadia_23:

(Start: 3 @22148 has 151 MA's), (26, 22280), (34, 22358), (73, 22553), (74, 22556), (84, 22601), (94, 22631), (119, 22739), (122, 22745), (144, 22880), (145, 22886), (147, 22892), (151, 22916), (154, 22925), (156, 22955), (159, 22967), (161, 22988),

Gene: AreFloNak_27 Start: 24653, Stop: 25471, Start Num: 3

Candidate Starts for AreFloNak_27:

(Start: 3 @24653 has 151 MA's), (Start: 6 @24665 has 1 MA's), (10, 24695), (14, 24707), (18, 24731), (33, 24848), (36, 24866), (43, 24908), (46, 24920), (70, 25016), (104, 25169), (129, 25271), (140, 25340), (142, 25352), (152, 25406),

Gene: Argan_26 Start: 23584, Stop: 24420, Start Num: 3

Candidate Starts for Argan_26:

(Start: 3 @23584 has 151 MA's), (9, 23623), (17, 23653), (18, 23662), (35, 23791), (46, 23854), (51, 23875), (65, 23923), (69, 23944), (74, 23971), (121, 24175), (122, 24178), (137, 24265), (152, 24349), (154, 24355), (159, 24388),

Gene: ArtetaBall_34 Start: 28750, Stop: 29601, Start Num: 5

Candidate Starts for ArtetaBall_34:

(Start: 5 @28750 has 58 MA's), (8, 28771), (15, 28804), (21, 28852), (23, 28867), (33, 28945), (44, 29014), (53, 29056), (54, 29059), (60, 29083), (69, 29119), (71, 29137), (72, 29140), (79, 29170), (96, 29230), (99, 29254), (104, 29275), (116, 29320), (141, 29458), (144, 29482), (154, 29527), (162, 29596),

Gene: Artorias_30 Start: 25604, Stop: 26458, Start Num: 5

Candidate Starts for Artorias_30:

(Start: 5 @25604 has 58 MA's), (8, 25625), (31, 25793), (41, 25847), (42, 25850), (44, 25868), (45, 25871), (53, 25910), (54, 25913), (55, 25916), (60, 25937), (63, 25946), (83, 26039), (99, 26111), (107, 26141), (114, 26168), (115, 26171), (119, 26192), (126, 26225), (130, 26246), (131, 26249), (140, 26312), (141, 26315), (145, 26345), (152, 26378),

Gene: Arzan_23 Start: 22341, Stop: 23144, Start Num: 9

Candidate Starts for Arzan_23:

(Start: 3 @22302 has 151 MA's), (9, 22341), (19, 22383), (22, 22410), (46, 22572), (57, 22620), (66, 22653), (89, 22758), (95, 22782), (127, 22920), (134, 22974), (137, 22989), (141, 23010), (162, 23139),

Gene: Avazak_30 Start: 25611, Stop: 26465, Start Num: 5

Candidate Starts for Avazak_30:

(Start: 5 @25611 has 58 MA's), (8, 25632), (31, 25800), (35, 25818), (41, 25854), (42, 25857), (44, 25875), (45, 25878), (54, 25920), (60, 25944), (63, 25953), (83, 26046), (96, 26094), (99, 26118), (114, 26175), (115, 26178), (119, 26199), (126, 26232), (131, 26256), (140, 26319), (141, 26322), (145, 26352), (152, 26385),

Gene: BarbieDoll_30 Start: 25632, Stop: 26396, Start Num: 17

Candidate Starts for BarbieDoll_30:

(Start: 3 @25563 has 151 MA's), (10, 25605), (17, 25632), (18, 25641), (46, 25833), (59, 25884), (65, 25902), (69, 25923), (70, 25929), (108, 26097), (119, 26145), (122, 26154), (129, 26187), (130, 26190), (148, 26301), (152, 26325), (154, 26331),

Gene: Barbonzobean_30 Start: 25158, Stop: 25991, Start Num: 3

Candidate Starts for Barbonzobean_30:

(Start: 3 @25158 has 151 MA's), (9, 25197), (10, 25200), (17, 25227), (18, 25236), (46, 25428), (64, 25494), (65, 25497), (69, 25518), (108, 25692), (119, 25740), (122, 25749), (129, 25782), (130, 25785), (148, 25896), (152, 25920), (154, 25926),

Gene: BenitoAntonio_23 Start: 21764, Stop: 22615, Start Num: 3

Candidate Starts for BenitoAntonio_23:

(Start: 3 @21764 has 151 MA's), (26, 21896), (34, 21974), (73, 22169), (74, 22172), (84, 22217), (94, 22247), (119, 22355), (122, 22361), (144, 22496), (145, 22502), (147, 22508), (151, 22532), (154, 22541), (156, 22571), (159, 22583), (161, 22604),

Gene: Benllo_21 Start: 22048, Stop: 22899, Start Num: 3

Candidate Starts for Benllo_21:

(Start: 3 @22048 has 151 MA's), (4, 22051), (26, 22180), (34, 22258), (72, 22450), (73, 22453), (74, 22456), (94, 22531), (102, 22573), (117, 22627), (119, 22639), (122, 22645), (132, 22702), (141, 22756), (142, 22765), (145, 22786), (156, 22855), (158, 22864), (159, 22867), (161, 22888),

Gene: BetterYeti_33 Start: 28397, Stop: 29248, Start Num: 5

Candidate Starts for BetterYeti_33:

(Start: 5 @28397 has 58 MA's), (8, 28418), (15, 28451), (21, 28499), (23, 28514), (33, 28592), (44, 28661), (53, 28703), (54, 28706), (60, 28730), (71, 28784), (72, 28787), (88, 28844), (96, 28877), (99, 28901), (104, 28922), (121, 28988), (133, 29069), (140, 29102), (141, 29105), (144, 29129), (152, 29168), (154, 29174), (162, 29243),

Gene: Bilo_20 Start: 19219, Stop: 20046, Start Num: 3

Candidate Starts for Bilo_20:

(Start: 3 @19219 has 151 MA's), (22, 19327), (28, 19363), (40, 19456), (46, 19492), (53, 19525), (58, 19537), (59, 19543), (62, 19552), (65, 19561), (72, 19603), (76, 19615), (77, 19618), (97, 19708), (106, 19747), (122, 19810), (127, 19831), (129, 19846), (147, 19954),

Gene: Bing_25 Start: 21496, Stop: 22320, Start Num: 3

Candidate Starts for Bing_25:

(Start: 3 @21496 has 151 MA's), (13, 21544), (19, 21577), (26, 21619), (46, 21766), (50, 21784), (62, 21826), (65, 21835), (72, 21877), (77, 21892), (101, 22006), (104, 22015), (113, 22048), (127, 22105), (156, 22276), (157, 22282),

Gene: Biscute_28 Start: 25209, Stop: 26042, Start Num: 3

Candidate Starts for Biscute_28:

(Start: 3 @25209 has 151 MA's), (9, 25248), (10, 25251), (17, 25278), (18, 25287), (46, 25479), (64, 25545), (65, 25548), (69, 25569), (108, 25743), (119, 25791), (122, 25800), (129, 25833), (130, 25836), (148, 25947), (152, 25971), (154, 25977),

Gene: BlackHoleSun_28 Start: 23234, Stop: 24067, Start Num: 3

Candidate Starts for BlackHoleSun_28:

(Start: 3 @23234 has 151 MA's), (18, 23312), (42, 23477), (46, 23504), (51, 23525), (59, 23555), (64, 23570), (69, 23594), (70, 23600), (119, 23816), (122, 23825), (130, 23861), (152, 23996),

Gene: Blanky_33 Start: 29590, Stop: 30441, Start Num: 5

Candidate Starts for Blanky_33:

(Start: 5 @29590 has 58 MA's), (8, 29611), (15, 29644), (23, 29707), (35, 29797), (45, 29857), (51, 29884), (54, 29899), (67, 29947), (69, 29959), (72, 29980), (79, 30010), (99, 30094), (104, 30115), (127, 30211), (138, 30283), (141, 30298), (145, 30328), (152, 30361), (154, 30367), (162, 30436),

Gene: BluerMoon_33 Start: 28620, Stop: 29471, Start Num: 5

Candidate Starts for BluerMoon_33:

(Start: 5 @28620 has 58 MA's), (8, 28641), (15, 28674), (21, 28722), (23, 28737), (32, 28812), (33, 28815), (44, 28884), (53, 28926), (54, 28929), (60, 28953), (69, 28989), (71, 29007), (72, 29010), (79, 29040), (88, 29067), (94, 29091), (99, 29124), (102, 29139), (104, 29145), (133, 29292), (141, 29328), (144, 29352), (152, 29391), (154, 29397), (158, 29436), (162, 29466),

Gene: Boog_24 Start: 21791, Stop: 22609, Start Num: 3

Candidate Starts for Boog_24:

(Start: 3 @21791 has 151 MA's), (21, 21890), (25, 21911), (26, 21914), (28, 21935), (33, 21986), (35, 21998), (36, 22004), (46, 22058), (53, 22091), (67, 22136), (76, 22181), (103, 22304), (104, 22307), (111, 22334), (141, 22481), (152, 22544),

Gene: Bouchard_28 Start: 24829, Stop: 25647, Start Num: 3

Candidate Starts for Bouchard_28:

(Start: 3 @24829 has 151 MA's), (10, 24871), (18, 24907), (33, 25024), (36, 25042), (37, 25048), (43, 25084), (46, 25096), (59, 25147), (64, 25162), (77, 25222), (122, 25414), (140, 25516), (152, 25582),

Gene: Bowling_23 Start: 21862, Stop: 22713, Start Num: 3

Candidate Starts for Bowling_23:

(Start: 3 @21862 has 151 MA's), (26, 21994), (34, 22072), (73, 22267), (74, 22270), (84, 22315), (94, 22345), (119, 22453), (122, 22459), (144, 22594), (145, 22600), (147, 22606), (151, 22630), (154, 22639), (156, 22669), (159, 22681), (161, 22702),

Gene: Breylor17_28 Start: 25259, Stop: 26077, Start Num: 3

Candidate Starts for Breylor17_28:

(Start: 3 @25259 has 151 MA's), (Start: 6 @25271 has 1 MA's), (10, 25301), (14, 25313), (18, 25337), (33, 25454), (36, 25472), (43, 25514), (46, 25526), (70, 25622), (104, 25775), (129, 25877), (140, 25946), (142, 25958), (152, 26012),

Gene: BronxBay_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for BronxBay_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Brunswick_27 Start: 24725, Stop: 25543, Start Num: 3

Candidate Starts for Brunswick_27:

(Start: 3 @24725 has 151 MA's), (10, 24767), (14, 24779), (18, 24803), (33, 24920), (36, 24938), (43, 24980), (46, 24992), (70, 25088), (104, 25241), (129, 25343), (140, 25412), (142, 25424), (152, 25478),

Gene: Bugg_31 Start: 25647, Stop: 26501, Start Num: 5

Candidate Starts for Bugg_31:

(Start: 5 @25647 has 58 MA's), (8, 25668), (31, 25836), (41, 25890), (42, 25893), (45, 25914), (53, 25953), (54, 25956), (55, 25959), (60, 25980), (99, 26154), (107, 26184), (114, 26211), (115, 26214), (119, 26235), (126, 26268), (140, 26355), (141, 26358), (145, 26388), (152, 26421),

Gene: Burley_33 Start: 28358, Stop: 29209, Start Num: 5

Candidate Starts for Burley_33:

(Start: 5 @28358 has 58 MA's), (8, 28379), (15, 28412), (21, 28460), (23, 28475), (33, 28553), (44, 28622), (53, 28664), (54, 28667), (60, 28691), (69, 28727), (71, 28745), (72, 28748), (79, 28778), (96, 28838), (99, 28862), (104, 28883), (116, 28928), (141, 29066), (144, 29090), (152, 29129), (153, 29132), (154, 29135), (162, 29204),

Gene: CWormy_33 Start: 28058, Stop: 28909, Start Num: 5

Candidate Starts for CWormy_33:

(Start: 5 @28058 has 58 MA's), (8, 28079), (15, 28112), (21, 28160), (23, 28175), (33, 28253), (44, 28322), (53, 28364), (54, 28367), (60, 28391), (69, 28427), (71, 28445), (72, 28448), (79, 28478), (96, 28538), (99, 28562), (104, 28583), (116, 28628), (141, 28766), (144, 28790), (154, 28835), (162, 28904),

Gene: Camille_25 Start: 20447, Stop: 21268, Start Num: 3

Candidate Starts for Camille_25:

(Start: 3 @20447 has 151 MA's), (18, 20525), (19, 20528), (28, 20591), (46, 20717), (59, 20768), (65, 20786), (93, 20915), (101, 20957), (106, 20972), (123, 21038), (125, 21041), (139, 21128), (152,

21203),

Gene: CapnMurica_27 Start: 25814, Stop: 26632, Start Num: 3

Candidate Starts for CapnMurica_27:

(Start: 3 @25814 has 151 MA's), (10, 25856), (14, 25868), (18, 25892), (33, 26009), (36, 26027), (37, 26033), (43, 26069), (46, 26081), (70, 26177), (104, 26330), (128, 26420), (140, 26501), (142, 26513), (152, 26567),

Gene: Captrips_30 Start: 25640, Stop: 26494, Start Num: 5

Candidate Starts for Captrips_30:

(Start: 5 @25640 has 58 MA's), (8, 25661), (31, 25829), (35, 25847), (41, 25883), (42, 25886), (44, 25904), (45, 25907), (54, 25949), (60, 25973), (63, 25982), (83, 26075), (96, 26123), (99, 26147), (114, 26204), (115, 26207), (119, 26228), (126, 26261), (131, 26285), (140, 26348), (141, 26351), (145, 26381), (152, 26414),

Gene: Capybara_30 Start: 25715, Stop: 26569, Start Num: 5

Candidate Starts for Capybara_30:

(Start: 5 @25715 has 58 MA's), (8, 25736), (31, 25904), (41, 25958), (42, 25961), (44, 25979), (45, 25982), (53, 26021), (54, 26024), (55, 26027), (60, 26048), (63, 26057), (96, 26198), (99, 26222), (107, 26252), (114, 26279), (115, 26282), (119, 26303), (126, 26336), (131, 26360), (140, 26423), (141, 26426), (145, 26456), (152, 26489),

Gene: CastorTray_29 Start: 25117, Stop: 25935, Start Num: 3

Candidate Starts for CastorTray_29:

(Start: 3 @25117 has 151 MA's), (Start: 6 @25129 has 1 MA's), (10, 25159), (11, 25162), (14, 25171), (18, 25195), (33, 25312), (36, 25330), (43, 25372), (46, 25384), (70, 25480), (104, 25633), (129, 25735), (140, 25804), (142, 25816), (152, 25870),

Gene: Caterpillar_25 Start: 23897, Stop: 24715, Start Num: 3

Candidate Starts for Caterpillar_25:

(Start: 3 @23897 has 151 MA's), (4, 23900), (18, 23975), (22, 24005), (26, 24020), (33, 24092), (36, 24110), (43, 24152), (46, 24164), (59, 24215), (70, 24260), (81, 24314), (88, 24341), (109, 24431), (122, 24482), (129, 24515), (140, 24584), (152, 24650),

Gene: Cheesy_23 Start: 21863, Stop: 22714, Start Num: 3

Candidate Starts for Cheesy_23:

(Start: 3 @21863 has 151 MA's), (4, 21866), (26, 21995), (34, 22073), (72, 22265), (73, 22268), (74, 22271), (94, 22346), (95, 22349), (102, 22388), (117, 22442), (119, 22454), (122, 22460), (132, 22517), (141, 22571), (142, 22580), (145, 22601), (156, 22670), (158, 22679), (159, 22682), (161, 22703),

Gene: CherryBlossom_24 Start: 21638, Stop: 22462, Start Num: 3

Candidate Starts for CherryBlossom_24:

(Start: 3 @21638 has 151 MA's), (Start: 6 @21650 has 1 MA's), (22, 21746), (26, 21761), (28, 21782), (46, 21908), (48, 21917), (72, 22019), (77, 22034), (109, 22175), (152, 22397), (159, 22430), (162, 22457),

Gene: ChickyNuggy_31 Start: 25352, Stop: 26206, Start Num: 5

Candidate Starts for ChickyNuggy_31:

(Start: 5 @25352 has 58 MA's), (8, 25373), (31, 25541), (35, 25559), (41, 25595), (42, 25598), (44, 25616), (45, 25619), (53, 25658), (54, 25661), (55, 25664), (60, 25685), (63, 25694), (99, 25859), (107, 25889), (114, 25916), (115, 25919), (119, 25940), (126, 25973), (130, 25994), (131, 25997), (140, 26060), (141, 26063), (145, 26093), (152, 26126),

Gene: Chikenjars_33 Start: 28610, Stop: 29461, Start Num: 5

Candidate Starts for Chikenjars_33:

(Start: 5 @28610 has 58 MA's), (8, 28631), (15, 28664), (21, 28712), (23, 28727), (32, 28802), (33, 28805), (44, 28874), (53, 28916), (54, 28919), (60, 28943), (69, 28979), (71, 28997), (72, 29000), (79, 29030), (88, 29057), (94, 29081), (99, 29114), (104, 29135), (133, 29282), (141, 29318), (144, 29342), (152, 29381), (154, 29387), (162, 29456),

Gene: Chlochlo_28 Start: 24868, Stop: 25686, Start Num: 3

Candidate Starts for Chlochlo_28:

(Start: 3 @24868 has 151 MA's), (7, 24889), (18, 24946), (22, 24976), (36, 25081), (37, 25087), (43, 25123), (46, 25135), (59, 25186), (64, 25201), (77, 25261), (81, 25285), (104, 25384), (122, 25453), (129, 25486), (140, 25555), (152, 25621),

Gene: Circum_23 Start: 21870, Stop: 22721, Start Num: 3

Candidate Starts for Circum_23:

(Start: 3 @21870 has 151 MA's), (26, 22002), (34, 22080), (73, 22275), (74, 22278), (84, 22323), (94, 22353), (119, 22461), (122, 22467), (144, 22602), (145, 22608), (147, 22614), (151, 22638), (154, 22647), (156, 22677), (159, 22689), (161, 22710),

Gene: Citrus_32 Start: 28614, Stop: 29465, Start Num: 5

Candidate Starts for Citrus_32:

(Start: 5 @28614 has 58 MA's), (8, 28635), (15, 28668), (21, 28716), (23, 28731), (32, 28806), (33, 28809), (44, 28878), (53, 28920), (54, 28923), (60, 28947), (69, 28983), (71, 29001), (72, 29004), (88, 29061), (94, 29085), (99, 29118), (104, 29139), (121, 29205), (133, 29286), (141, 29322), (144, 29346), (152, 29385), (154, 29391), (162, 29460),

Gene: ClubPenguin_23 Start: 21222, Stop: 22046, Start Num: 3

Candidate Starts for ClubPenguin_23:

(Start: 3 @21222 has 151 MA's), (Start: 6 @21234 has 1 MA's), (22, 21330), (29, 21375), (40, 21456), (46, 21492), (49, 21507), (64, 21558), (72, 21603), (77, 21618), (88, 21672), (101, 21735), (109, 21762), (129, 21846), (162, 22041),

Gene: Conley_31 Start: 26684, Stop: 27535, Start Num: 5

Candidate Starts for Conley_31:

(Start: 5 @26684 has 58 MA's), (8, 26705), (31, 26873), (41, 26927), (42, 26930), (44, 26948), (45, 26951), (47, 26960), (53, 26990), (54, 26993), (55, 26996), (60, 27017), (63, 27026), (75, 27083), (93, 27152), (96, 27164), (99, 27188), (114, 27245), (115, 27248), (119, 27269), (121, 27275), (124, 27284), (126, 27302), (138, 27377), (140, 27389), (141, 27392), (145, 27422), (150, 27446), (152, 27455), (162, 27530),

Gene: Correa_22 Start: 21378, Stop: 22229, Start Num: 3

Candidate Starts for Correa_22:

(Start: 3 @21378 has 151 MA's), (4, 21381), (26, 21510), (34, 21588), (73, 21783), (94, 21861), (102, 21903), (117, 21957), (119, 21969), (122, 21975), (129, 22014), (141, 22086), (142, 22095), (145, 22116), (156, 22185), (158, 22194), (159, 22197), (161, 22218),

Gene: Count_31 Start: 27657, Stop: 28484, Start Num: 3

Candidate Starts for Count_31:

(Start: 3 @27657 has 151 MA's), (25, 27777), (27, 27792), (28, 27801), (37, 27879), (40, 27891), (42, 27900), (46, 27927), (49, 27942), (50, 27945), (59, 27978), (76, 28050), (96, 28137), (105, 28179), (125, 28257), (127, 28269), (138, 28341),

Gene: CricKo_22 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for CricKo_22:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: Crocheter_33 Start: 28750, Stop: 29601, Start Num: 5

Candidate Starts for Crocheter_33:

(Start: 5 @28750 has 58 MA's), (8, 28771), (15, 28804), (21, 28852), (23, 28867), (33, 28945), (44, 29014), (53, 29056), (54, 29059), (60, 29083), (69, 29119), (71, 29137), (72, 29140), (79, 29170), (96, 29230), (99, 29254), (104, 29275), (116, 29320), (141, 29458), (144, 29482), (152, 29521), (154, 29527), (162, 29596),

Gene: Daddyjeff_26 Start: 23115, Stop: 23942, Start Num: 3

Candidate Starts for Daddyjeff_26:

(Start: 3 @23115 has 151 MA's), (16, 23187), (19, 23205), (22, 23232), (28, 23268), (38, 23349), (59, 23448), (73, 23511), (119, 23694), (129, 23730), (135, 23772), (155, 23889), (159, 23910),

Gene: Damascus_25 Start: 21129, Stop: 21950, Start Num: 3

Candidate Starts for Damascus_25:

(Start: 3 @21129 has 151 MA's), (Start: 6 @21141 has 1 MA's), (18, 21207), (19, 21210), (57, 21447), (59, 21450), (92, 21594), (123, 21720), (125, 21723), (129, 21750), (138, 21807),

Gene: Dancer_30 Start: 25340, Stop: 26194, Start Num: 5

Candidate Starts for Dancer_30:

(Start: 5 @25340 has 58 MA's), (8, 25361), (31, 25529), (41, 25583), (42, 25586), (45, 25607), (53, 25646), (54, 25649), (55, 25652), (60, 25673), (99, 25847), (107, 25877), (114, 25904), (115, 25907), (119, 25928), (126, 25961), (140, 26048), (141, 26051), (145, 26081), (152, 26114),

Gene: Darby_27 Start: 24563, Stop: 25381, Start Num: 3

Candidate Starts for Darby_27:

(Start: 3 @24563 has 151 MA's), (Start: 6 @24575 has 1 MA's), (10, 24605), (11, 24608), (14, 24617), (18, 24641), (33, 24758), (36, 24776), (43, 24818), (46, 24830), (70, 24926), (76, 24953), (77, 24956), (104, 25079), (129, 25181), (140, 25250), (142, 25262), (152, 25316),

Gene: Demure_32 Start: 27716, Stop: 28567, Start Num: 5

Candidate Starts for Demure_32:

(Start: 5 @27716 has 58 MA's), (8, 27737), (15, 27770), (21, 27818), (23, 27833), (33, 27911), (44, 27980), (53, 28022), (54, 28025), (60, 28049), (63, 28058), (69, 28085), (76, 28118), (79, 28136), (88, 28163), (96, 28196), (99, 28220), (104, 28241), (121, 28307), (141, 28424), (143, 28439), (152, 28487), (154, 28493), (162, 28562),

Gene: DevitoJr_27 Start: 24734, Stop: 25552, Start Num: 3

Candidate Starts for DevitoJr_27:

(Start: 3 @24734 has 151 MA's), (10, 24776), (11, 24779), (14, 24788), (18, 24812), (33, 24929), (36, 24947), (43, 24989), (46, 25001), (70, 25097), (104, 25250), (129, 25352), (140, 25421), (142, 25433), (152, 25487),

Gene: Dialga_34 Start: 28772, Stop: 29623, Start Num: 5

Candidate Starts for Dialga_34:

(Start: 5 @28772 has 58 MA's), (8, 28793), (15, 28826), (21, 28874), (23, 28889), (33, 28967), (44, 29036), (53, 29078), (54, 29081), (60, 29105), (63, 29114), (69, 29141), (76, 29174), (79, 29192), (88, 29219), (96, 29252), (99, 29276), (104, 29297), (121, 29363), (141, 29480), (143, 29495), (152,

29543), (154, 29549), (162, 29618),

Gene: Dinallo_28 Start: 25802, Stop: 26620, Start Num: 3

Candidate Starts for Dinallo_28:

(Start: 3 @25802 has 151 MA's), (10, 25844), (14, 25856), (18, 25880), (33, 25997), (36, 26015), (37, 26021), (43, 26057), (46, 26069), (70, 26165), (104, 26318), (128, 26408), (140, 26489), (142, 26501), (152, 26555),

Gene: Ditters_20 Start: 19185, Stop: 20009, Start Num: 3

Candidate Starts for Ditters_20:

(Start: 3 @19185 has 151 MA's), (28, 19329), (46, 19455), (53, 19488), (59, 19506), (62, 19515), (65, 19524), (69, 19545), (76, 19578), (77, 19581), (106, 19710), (113, 19737), (127, 19794), (129, 19809), (140, 19878), (152, 19944),

Gene: DizzyRudy_25 Start: 21058, Stop: 21879, Start Num: 3

Candidate Starts for DizzyRudy_25:

(Start: 3 @21058 has 151 MA's), (Start: 6 @21070 has 1 MA's), (18, 21136), (19, 21139), (57, 21376), (59, 21379), (84, 21490), (92, 21523), (123, 21649), (125, 21652), (129, 21679), (138, 21736),

Gene: Djungelskog_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Djungelskog_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: DoctorPepper_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for DoctorPepper_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Doxi13_20 Start: 18700, Stop: 19527, Start Num: 3

Candidate Starts for Doxi13_20:

(Start: 3 @18700 has 151 MA's), (22, 18808), (28, 18844), (40, 18937), (46, 18973), (53, 19006), (58, 19018), (59, 19024), (62, 19033), (65, 19042), (72, 19084), (76, 19096), (77, 19099), (97, 19189), (106, 19228), (122, 19291), (127, 19312), (129, 19327),

Gene: DrGrey_24 Start: 22131, Stop: 22958, Start Num: 3

Candidate Starts for DrGrey_24:

(Start: 3 @22131 has 151 MA's), (Start: 6 @22143 has 1 MA's), (26, 22254), (28, 22275), (46, 22401), (48, 22410), (72, 22512), (77, 22527), (101, 22644), (104, 22653), (127, 22743), (147, 22866), (152, 22893), (159, 22926), (162, 22953),

Gene: Duffington_33 Start: 28598, Stop: 29449, Start Num: 5

Candidate Starts for Duffington_33:

(Start: 5 @28598 has 58 MA's), (8, 28619), (15, 28652), (21, 28700), (23, 28715), (33, 28793), (44, 28862), (53, 28904), (54, 28907), (60, 28931), (69, 28967), (71, 28985), (72, 28988), (91, 29060), (94, 29069), (99, 29102), (102, 29117), (104, 29123), (141, 29306), (144, 29330), (152, 29369), (154, 29375), (162, 29444),

Gene: Dynamite_22 Start: 21671, Stop: 22522, Start Num: 3

Candidate Starts for Dynamite_22:

(Start: 3 @21671 has 151 MA's), (26, 21803), (34, 21881), (73, 22076), (74, 22079), (84, 22124), (94, 22154), (119, 22262), (122, 22268), (144, 22403), (145, 22409), (147, 22415), (151, 22439), (154, 22448), (156, 22478), (159, 22490), (161, 22511),

Gene: Eddiemania_34 Start: 29259, Stop: 30110, Start Num: 5

Candidate Starts for Eddiemania_34:

(Start: 5 @29259 has 58 MA's), (8, 29280), (15, 29313), (21, 29361), (23, 29376), (33, 29454), (44, 29523), (51, 29553), (53, 29565), (54, 29568), (60, 29592), (69, 29628), (71, 29646), (72, 29649), (75, 29658), (96, 29739), (99, 29763), (104, 29784), (116, 29829), (141, 29967), (144, 29991), (152, 30030), (154, 30036), (162, 30105),

Gene: Eevee_27 Start: 25155, Stop: 25982, Start Num: 3

Candidate Starts for Eevee_27:

(Start: 3 @25155 has 151 MA's), (22, 25272), (30, 25338), (45, 25431), (56, 25479), (61, 25494), (67, 25515), (72, 25548), (77, 25563), (78, 25569), (106, 25686), (161, 25971),

Gene: Egad_24 Start: 21791, Stop: 22609, Start Num: 3

Candidate Starts for Egad_24:

(Start: 3 @21791 has 151 MA's), (21, 21890), (25, 21911), (26, 21914), (28, 21935), (33, 21986), (35, 21998), (36, 22004), (46, 22058), (53, 22091), (67, 22136), (76, 22181), (103, 22304), (104, 22307), (111, 22334), (141, 22481), (152, 22544),

Gene: ElephantMan_27 Start: 25265, Stop: 26083, Start Num: 3

Candidate Starts for ElephantMan_27:

(Start: 3 @25265 has 151 MA's), (10, 25307), (11, 25310), (14, 25319), (18, 25343), (33, 25460), (36, 25478), (43, 25520), (46, 25532), (70, 25628), (76, 25655), (104, 25781), (129, 25883), (140, 25952), (142, 25964), (152, 26018),

Gene: Elsa_23 Start: 22148, Stop: 22999, Start Num: 3

Candidate Starts for Elsa_23:

(Start: 3 @22148 has 151 MA's), (26, 22280), (34, 22358), (73, 22553), (74, 22556), (84, 22601), (94, 22631), (119, 22739), (122, 22745), (144, 22880), (145, 22886), (147, 22892), (151, 22916), (154, 22925), (156, 22955), (159, 22967), (161, 22988),

Gene: Elver_41 Start: 33769, Stop: 34608, Start Num: 3

Candidate Starts for Elver_41:

(Start: 3 @33769 has 151 MA's), (4, 33772), (9, 33808), (32, 33961), (34, 33970), (46, 34039), (56, 34081), (59, 34093), (77, 34168), (83, 34201), (86, 34213), (104, 34291), (105, 34294), (110, 34318), (142, 34489),

Gene: EndAve_33 Start: 28610, Stop: 29461, Start Num: 5

Candidate Starts for EndAve_33:

(Start: 5 @28610 has 58 MA's), (8, 28631), (15, 28664), (21, 28712), (23, 28727), (32, 28802), (33, 28805), (44, 28874), (53, 28916), (54, 28919), (60, 28943), (69, 28979), (71, 28997), (72, 29000), (76, 29012), (88, 29057), (94, 29081), (99, 29114), (104, 29135), (121, 29201), (133, 29282), (141, 29318), (144, 29342), (152, 29381), (154, 29387), (162, 29456),

Gene: Esketit_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Esketit_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Espio_24 Start: 22132, Stop: 22959, Start Num: 3

Candidate Starts for Espio_24:

(Start: 3 @22132 has 151 MA's), (Start: 6 @22144 has 1 MA's), (26, 22255), (28, 22276), (46, 22402), (48, 22411), (72, 22513), (77, 22528), (101, 22645), (104, 22654), (127, 22744), (147, 22867), (152, 22894), (159, 22927), (162, 22954),

Gene: Fazel_31 Start: 27635, Stop: 28486, Start Num: 5

Candidate Starts for Fazel_31:

(Start: 5 @27635 has 58 MA's), (8, 27656), (23, 27752), (35, 27842), (45, 27902), (47, 27911), (51, 27929), (53, 27941), (54, 27944), (67, 27992), (69, 28004), (72, 28025), (79, 28055), (99, 28139), (104, 28160), (128, 28259), (138, 28328), (141, 28343), (143, 28358), (145, 28373), (153, 28409), (162, 28481),

Gene: FidgetOrca_24 Start: 21627, Stop: 22451, Start Num: 3

Candidate Starts for FidgetOrca_24:

(Start: 3 @21627 has 151 MA's), (Start: 6 @21639 has 1 MA's), (22, 21735), (26, 21750), (28, 21771), (46, 21897), (48, 21906), (72, 22008), (77, 22023), (88, 22074), (109, 22164), (152, 22386), (159, 22419), (162, 22446),

Gene: Figliar_33 Start: 28608, Stop: 29459, Start Num: 5

Candidate Starts for Figliar_33:

(Start: 5 @28608 has 58 MA's), (8, 28629), (15, 28662), (21, 28710), (23, 28725), (44, 28872), (53, 28914), (54, 28917), (60, 28941), (69, 28977), (71, 28995), (72, 28998), (79, 29028), (94, 29079), (99, 29112), (102, 29127), (104, 29133), (141, 29316), (144, 29340), (152, 29379), (154, 29385), (158, 29424), (162, 29454),

Gene: Football_31 Start: 25352, Stop: 26206, Start Num: 5

Candidate Starts for Football_31:

(Start: 5 @25352 has 58 MA's), (8, 25373), (31, 25541), (41, 25595), (42, 25598), (45, 25619), (53, 25658), (54, 25661), (55, 25664), (60, 25685), (99, 25859), (107, 25889), (114, 25916), (115, 25919), (119, 25940), (126, 25973), (140, 26060), (141, 26063), (145, 26093), (152, 26126),

Gene: FortCran_30 Start: 25604, Stop: 26458, Start Num: 5

Candidate Starts for FortCran_30:

(Start: 5 @25604 has 58 MA's), (8, 25625), (31, 25793), (41, 25847), (42, 25850), (44, 25868), (45, 25871), (53, 25910), (54, 25913), (55, 25916), (60, 25937), (63, 25946), (83, 26039), (99, 26111), (107, 26141), (114, 26168), (115, 26171), (119, 26192), (126, 26225), (130, 26246), (131, 26249), (140, 26312), (141, 26315), (145, 26345), (152, 26378),

Gene: FrodoSwaggins_24 Start: 22131, Stop: 22958, Start Num: 3

Candidate Starts for FrodoSwaggins_24:

(Start: 3 @22131 has 151 MA's), (Start: 6 @22143 has 1 MA's), (26, 22254), (28, 22275), (46, 22401), (48, 22410), (72, 22512), (77, 22527), (101, 22644), (104, 22653), (127, 22743), (147, 22866), (152, 22893), (159, 22926), (162, 22953),

Gene: FromIndy_23 Start: 20521, Stop: 21351, Start Num: 3

Candidate Starts for FromIndy_23:

(Start: 3 @20521 has 151 MA's), (21, 20620), (39, 20746), (45, 20785), (46, 20791), (64, 20857), (77, 20917), (85, 20962), (90, 20977), (94, 20998), (103, 21043), (106, 21052), (127, 21136), (140, 21220), (159, 21319),

Gene: Gandionco_42 Start: 34483, Stop: 35130, Start Num: 32

Candidate Starts for Gandionco_42:

(Start: 3 @34291 has 151 MA's), (4, 34294), (9, 34330), (32, 34483), (34, 34492), (46, 34561), (56, 34603), (59, 34615), (77, 34690), (83, 34723), (86, 34735), (104, 34813), (105, 34816), (110, 34840), (122, 34891), (142, 35011),

Gene: GantcherGoblin_26 Start: 23623, Stop: 24459, Start Num: 3

Candidate Starts for GantcherGoblin_26:

(Start: 3 @23623 has 151 MA's), (9, 23662), (17, 23692), (18, 23701), (35, 23830), (46, 23893), (51, 23914), (65, 23962), (69, 23983), (74, 24010), (121, 24214), (122, 24217), (137, 24304), (152, 24388), (154, 24394), (159, 24427),

Gene: GermyBearimy_26 Start: 22841, Stop: 23575, Start Num: 22

Candidate Starts for GermyBearimy_26:

(Start: 3 @22733 has 151 MA's), (9, 22772), (22, 22841), (46, 23003), (56, 23045), (57, 23051), (66, 23084), (89, 23189), (94, 23210), (118, 23321), (127, 23351), (134, 23405), (137, 23420), (141, 23441), (162, 23570),

Gene: Giantsbane_28 Start: 23728, Stop: 24546, Start Num: 3

Candidate Starts for Giantsbane_28:

(Start: 3 @23728 has 151 MA's), (Start: 6 @23740 has 1 MA's), (10, 23770), (18, 23806), (33, 23923), (36, 23941), (37, 23947), (40, 23959), (43, 23983), (46, 23995), (65, 24064), (70, 24091), (77, 24121), (112, 24274), (122, 24313), (140, 24415), (152, 24481),

Gene: Gill_30 Start: 25727, Stop: 26581, Start Num: 5

Candidate Starts for Gill_30:

(Start: 5 @25727 has 58 MA's), (8, 25748), (31, 25916), (41, 25970), (42, 25973), (44, 25991), (45, 25994), (53, 26033), (54, 26036), (55, 26039), (60, 26060), (63, 26069), (96, 26210), (99, 26234), (107, 26264), (114, 26291), (115, 26294), (119, 26315), (126, 26348), (131, 26372), (140, 26435), (141, 26438), (145, 26468), (152, 26501),

Gene: GirlPower_23 Start: 23105, Stop: 23929, Start Num: 3

Candidate Starts for GirlPower_23:

(Start: 3 @23105 has 151 MA's), (Start: 6 @23117 has 1 MA's), (22, 23213), (26, 23228), (28, 23249), (46, 23375), (48, 23384), (72, 23486), (77, 23501), (109, 23642), (135, 23771), (147, 23837), (152, 23864), (159, 23897), (162, 23924),

Gene: Glintora_33 Start: 28557, Stop: 29408, Start Num: 5

Candidate Starts for Glintora_33:

(Start: 5 @28557 has 58 MA's), (8, 28578), (15, 28611), (21, 28659), (23, 28674), (32, 28749), (33, 28752), (44, 28821), (53, 28863), (54, 28866), (60, 28890), (69, 28926), (71, 28944), (72, 28947), (79, 28977), (88, 29004), (96, 29037), (99, 29061), (104, 29082), (133, 29229), (141, 29265), (144, 29289), (152, 29328), (154, 29334), (162, 29403),

Gene: GoCrazy_21 Start: 21671, Stop: 22522, Start Num: 3

Candidate Starts for GoCrazy_21:

(Start: 3 @21671 has 151 MA's), (4, 21674), (26, 21803), (34, 21881), (72, 22073), (73, 22076), (74, 22079), (94, 22154), (102, 22196), (117, 22250), (119, 22262), (122, 22268), (132, 22325), (141, 22379), (142, 22388), (145, 22409), (156, 22478), (158, 22487), (159, 22490), (161, 22511),

Gene: GoblinVoyage_20 Start: 18700, Stop: 19527, Start Num: 3

Candidate Starts for GoblinVoyage_20:

(Start: 3 @18700 has 151 MA's), (22, 18808), (28, 18844), (40, 18937), (46, 18973), (53, 19006), (58, 19018), (59, 19024), (62, 19033), (65, 19042), (72, 19084), (76, 19096), (77, 19099), (97, 19189), (106, 19228), (122, 19291), (127, 19312), (129, 19327),

Gene: Gordon_27 Start: 25839, Stop: 26657, Start Num: 3

Candidate Starts for Gordon_27:

(Start: 3 @25839 has 151 MA's), (Start: 6 @25851 has 1 MA's), (10, 25881), (14, 25893), (18, 25917), (33, 26034), (36, 26052), (43, 26094), (46, 26106), (70, 26202), (76, 26229), (77, 26232), (104, 26355), (129, 26457), (140, 26526), (142, 26538), (152, 26592),

Gene: Gravy_30 Start: 25727, Stop: 26581, Start Num: 5

Candidate Starts for Gravy_30:

(Start: 5 @25727 has 58 MA's), (8, 25748), (31, 25916), (41, 25970), (42, 25973), (44, 25991), (45, 25994), (53, 26033), (54, 26036), (55, 26039), (60, 26060), (63, 26069), (96, 26210), (99, 26234), (107, 26264), (114, 26291), (115, 26294), (119, 26315), (126, 26348), (131, 26372), (138, 26423), (140, 26435), (141, 26438), (145, 26468), (152, 26501),

Gene: Gusicorn_33 Start: 28397, Stop: 29248, Start Num: 5

Candidate Starts for Gusicorn_33:

(Start: 5 @28397 has 58 MA's), (8, 28418), (15, 28451), (21, 28499), (23, 28514), (33, 28592), (44, 28661), (53, 28703), (54, 28706), (60, 28730), (71, 28784), (72, 28787), (88, 28844), (96, 28877), (99, 28901), (104, 28922), (121, 28988), (133, 29069), (140, 29102), (141, 29105), (144, 29129), (152, 29168), (154, 29174), (162, 29243),

Gene: Hankly_21 Start: 20893, Stop: 21744, Start Num: 3

Candidate Starts for Hankly_21:

(Start: 3 @20893 has 151 MA's), (4, 20896), (26, 21025), (34, 21103), (72, 21295), (73, 21298), (74, 21301), (94, 21376), (102, 21418), (117, 21472), (119, 21484), (122, 21490), (132, 21547), (141, 21601), (142, 21610), (145, 21631), (156, 21700), (158, 21709), (159, 21712), (161, 21733),

Gene: HazuAndZazu_24 Start: 22138, Stop: 22962, Start Num: 3

Candidate Starts for HazuAndZazu_24:

(Start: 3 @22138 has 151 MA's), (Start: 6 @22150 has 1 MA's), (22, 22246), (26, 22261), (28, 22282), (46, 22408), (48, 22417), (72, 22519), (77, 22534), (109, 22675), (152, 22897), (159, 22930), (162, 22957),

Gene: Heisenberger_22 Start: 21541, Stop: 22392, Start Num: 3

Candidate Starts for Heisenberger_22:

(Start: 3 @21541 has 151 MA's), (26, 21673), (34, 21751), (68, 21913), (73, 21946), (74, 21949), (84, 21994), (94, 22024), (119, 22132), (122, 22138), (144, 22273), (145, 22279), (147, 22285), (151, 22309), (154, 22318), (156, 22348), (159, 22360), (161, 22381),

Gene: Hemma_24 Start: 21215, Stop: 21991, Start Num: 10

Candidate Starts for Hemma_24:

(Start: 3 @21173 has 151 MA's), (4, 21176), (10, 21215), (18, 21251), (33, 21368), (36, 21386), (43, 21428), (46, 21440), (65, 21509), (70, 21536), (76, 21563), (82, 21596), (85, 21608), (104, 21689), (109, 21707), (141, 21863),

Gene: HerbBucket_23 Start: 21791, Stop: 22609, Start Num: 3

Candidate Starts for HerbBucket_23:

(Start: 3 @21791 has 151 MA's), (21, 21890), (25, 21911), (26, 21914), (28, 21935), (33, 21986), (35, 21998), (36, 22004), (46, 22058), (53, 22091), (67, 22136), (76, 22181), (103, 22304), (104, 22307), (111, 22334), (141, 22481), (152, 22544),

Gene: Hortihabitatio_33 Start: 28027, Stop: 28878, Start Num: 5

Candidate Starts for Hortihabitatio_33:

(Start: 5 @28027 has 58 MA's), (8, 28048), (23, 28144), (35, 28234), (45, 28294), (51, 28321), (53, 28333), (54, 28336), (67, 28384), (69, 28396), (72, 28417), (79, 28447), (96, 28507), (99, 28531), (104, 28552), (127, 28648), (141, 28735), (145, 28765), (152, 28798), (154, 28804), (162, 28873),

Gene: Hoshi_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Hoshi_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: HotFries_19 Start: 18698, Stop: 19525, Start Num: 3

Candidate Starts for HotFries_19:

(Start: 3 @18698 has 151 MA's), (22, 18806), (28, 18842), (40, 18935), (42, 18944), (46, 18971), (53, 19004), (59, 19022), (62, 19031), (65, 19040), (76, 19094), (77, 19097), (97, 19187), (106, 19226), (122, 19289), (127, 19310), (129, 19325),

Gene: Hydrus_34 Start: 29125, Stop: 29976, Start Num: 5

Candidate Starts for Hydrus_34:

(Start: 5 @29125 has 58 MA's), (8, 29146), (15, 29179), (21, 29227), (23, 29242), (33, 29320), (44, 29389), (53, 29431), (54, 29434), (60, 29458), (69, 29494), (71, 29512), (72, 29515), (79, 29545), (96, 29605), (99, 29629), (104, 29650), (116, 29695), (141, 29833), (144, 29857), (152, 29896), (154, 29902), (162, 29971),

Gene: IceWarrior_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for IceWarrior_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Indigenous_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Indigenous_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Ingrid_27 Start: 24453, Stop: 25271, Start Num: 3

Candidate Starts for Ingrid_27:

(Start: 3 @24453 has 151 MA's), (4, 24456), (10, 24495), (18, 24531), (33, 24648), (36, 24666), (37, 24672), (43, 24708), (46, 24720), (65, 24789), (82, 24876), (85, 24888), (95, 24924), (104, 24969), (105, 24972), (109, 24987), (115, 25008), (122, 25038), (129, 25071), (130, 25074), (132, 25089), (135, 25113),

Gene: Inked_29 Start: 25464, Stop: 26288, Start Num: 3

Candidate Starts for Inked_29:

(Start: 3 @25464 has 151 MA's), (9, 25503), (11, 25509), (25, 25584), (36, 25677), (43, 25719), (46, 25731), (59, 25782), (70, 25827), (81, 25881), (96, 25941), (98, 25962), (104, 25986), (122, 26055), (129, 26088), (152, 26223),

Gene: Issa_27 Start: 24543, Stop: 25361, Start Num: 3

Candidate Starts for Issa_27:

(Start: 3 @24543 has 151 MA's), (10, 24585), (11, 24588), (14, 24597), (18, 24621), (33, 24738), (36, 24756), (43, 24798), (46, 24810), (70, 24906), (104, 25059), (129, 25161), (140, 25230), (142, 25242), (152, 25296),

Gene: JEGGS_22 Start: 21595, Stop: 22446, Start Num: 3

Candidate Starts for JEGGS_22:

(Start: 3 @21595 has 151 MA's), (26, 21727), (34, 21805), (73, 22000), (74, 22003), (84, 22048), (94, 22078), (119, 22186), (122, 22192), (144, 22327), (145, 22333), (147, 22339), (151, 22363), (154, 22372), (156, 22402), (159, 22414), (161, 22435),

Gene: Jaylociraptor_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Jaylociraptor_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Jazzy4900_25 Start: 23560, Stop: 24396, Start Num: 3

Candidate Starts for Jazzy4900_25:

(Start: 3 @23560 has 151 MA's), (4, 23563), (34, 23761), (46, 23830), (56, 23872), (57, 23878), (59, 23887), (76, 23959), (98, 24061), (106, 24091), (118, 24142), (133, 24223), (142, 24271), (162, 24391),

Gene: JeNeSaisPas_40 Start: 34304, Stop: 35143, Start Num: 3

Candidate Starts for JeNeSaisPas_40:

(Start: 3 @34304 has 151 MA's), (4, 34307), (9, 34343), (32, 34496), (34, 34505), (46, 34574), (56, 34616), (59, 34628), (77, 34703), (83, 34736), (86, 34748), (104, 34826), (105, 34829), (110, 34853), (142, 35024),

Gene: Jeremy4pt0_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Jeremy4pt0_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Jodelie19_34 Start: 30047, Stop: 30898, Start Num: 5

Candidate Starts for Jodelie19_34:

(Start: 5 @30047 has 58 MA's), (8, 30068), (15, 30101), (21, 30149), (23, 30164), (33, 30242), (44, 30311), (53, 30353), (54, 30356), (60, 30380), (69, 30416), (71, 30434), (72, 30437), (91, 30509), (94, 30518), (99, 30551), (102, 30566), (104, 30572), (141, 30755), (144, 30779), (152, 30818), (154, 30824), (158, 30863), (162, 30893),

Gene: JoyLin_27 Start: 25146, Stop: 25973, Start Num: 3

Candidate Starts for JoyLin_27:

(Start: 3 @25146 has 151 MA's), (22, 25263), (30, 25329), (45, 25422), (56, 25470), (61, 25485), (67, 25506), (72, 25539), (77, 25554), (78, 25560), (106, 25677), (161, 25962),

Gene: JulesRay_30 Start: 25634, Stop: 26488, Start Num: 5

Candidate Starts for JulesRay_30:

(Start: 5 @25634 has 58 MA's), (8, 25655), (31, 25823), (41, 25877), (42, 25880), (45, 25901), (53, 25940), (54, 25943), (55, 25946), (60, 25967), (99, 26141), (107, 26171), (114, 26198), (115, 26201), (119, 26222), (126, 26255), (140, 26342), (141, 26345), (145, 26375), (152, 26408),

Gene: Kardashian_23 Start: 21569, Stop: 22402, Start Num: 3

Candidate Starts for Kardashian_23:

(Start: 3 @21569 has 151 MA's), (46, 21842), (52, 21872), (62, 21902), (72, 21953), (84, 22004), (85, 22010), (88, 22019), (94, 22043), (100, 22079), (101, 22082), (106, 22100), (119, 22154), (136,

22244), (162, 22397),

Gene: Kardesai_21 Start: 21274, Stop: 22125, Start Num: 3

Candidate Starts for Kardesai_21:

(Start: 3 @21274 has 151 MA's), (4, 21277), (26, 21406), (34, 21484), (72, 21676), (73, 21679), (74, 21682), (94, 21757), (95, 21760), (102, 21799), (117, 21853), (119, 21865), (122, 21871), (132, 21928), (141, 21982), (142, 21991), (145, 22012), (156, 22081), (158, 22090), (159, 22093), (161, 22114),

Gene: KeaneyLin_21 Start: 21671, Stop: 22522, Start Num: 3

Candidate Starts for KeaneyLin_21:

(Start: 3 @21671 has 151 MA's), (4, 21674), (26, 21803), (34, 21881), (72, 22073), (73, 22076), (74, 22079), (94, 22154), (102, 22196), (117, 22250), (119, 22262), (122, 22268), (132, 22325), (141, 22379), (142, 22388), (145, 22409), (156, 22478), (158, 22487), (159, 22490), (161, 22511),

Gene: Kenosha_33 Start: 29160, Stop: 30011, Start Num: 5

Candidate Starts for Kenosha_33:

(Start: 5 @29160 has 58 MA's), (8, 29181), (15, 29214), (21, 29262), (23, 29277), (33, 29355), (44, 29424), (53, 29466), (54, 29469), (60, 29493), (69, 29529), (71, 29547), (72, 29550), (79, 29580), (96, 29640), (99, 29664), (104, 29685), (116, 29730), (141, 29868), (144, 29892), (152, 29931), (154, 29937), (162, 30006),

Gene: Kerry_30 Start: 25727, Stop: 26581, Start Num: 5

Candidate Starts for Kerry_30:

(Start: 5 @25727 has 58 MA's), (8, 25748), (31, 25916), (41, 25970), (42, 25973), (44, 25991), (45, 25994), (53, 26033), (54, 26036), (55, 26039), (60, 26060), (63, 26069), (96, 26210), (99, 26234), (107, 26264), (114, 26291), (115, 26294), (119, 26315), (126, 26348), (131, 26372), (138, 26423), (140, 26435), (141, 26438), (145, 26468), (152, 26501),

Gene: KevinMinion_27 Start: 24717, Stop: 25553, Start Num: 3

Candidate Starts for KevinMinion_27:

(Start: 3 @24717 has 151 MA's), (9, 24756), (17, 24786), (18, 24795), (35, 24924), (46, 24987), (51, 25008), (65, 25056), (69, 25077), (74, 25104), (121, 25308), (122, 25311), (137, 25398), (152, 25482), (154, 25488), (159, 25521),

Gene: Kinny_29 Start: 25476, Stop: 26309, Start Num: 3

Candidate Starts for Kinny_29:

(1, 25347), (Start: 3 @25476 has 151 MA's), (9, 25515), (10, 25518), (17, 25545), (18, 25554), (46, 25746), (64, 25812), (65, 25815), (69, 25836), (70, 25842), (108, 26010), (119, 26058), (122, 26067), (129, 26100), (130, 26103), (148, 26214), (152, 26238), (154, 26244),

Gene: Kureo_42 Start: 33114, Stop: 33953, Start Num: 3

Candidate Starts for Kureo_42:

(Start: 3 @33114 has 151 MA's), (4, 33117), (9, 33153), (32, 33306), (34, 33315), (46, 33384), (56, 33426), (59, 33438), (77, 33513), (83, 33546), (86, 33558), (104, 33636), (105, 33639), (110, 33663), (122, 33714), (142, 33834),

Gene: Leathea_27 Start: 23520, Stop: 24353, Start Num: 3

Candidate Starts for Leathea_27:

(Start: 3 @23520 has 151 MA's), (9, 23559), (10, 23562), (17, 23589), (18, 23598), (46, 23790), (64, 23856), (65, 23859), (69, 23880), (70, 23886), (71, 23898), (129, 24144), (130, 24147), (152, 24282), (154, 24288),

Gene: Lewando_30 Start: 25545, Stop: 26378, Start Num: 3

Candidate Starts for Lewando_30:

(Start: 3 @25545 has 151 MA's), (10, 25587), (17, 25614), (18, 25623), (46, 25815), (59, 25866), (64, 25881), (65, 25884), (69, 25905), (70, 25911), (108, 26079), (119, 26127), (122, 26136), (129, 26169), (130, 26172), (148, 26283), (152, 26307), (154, 26313),

Gene: LibertyBell_22 Start: 20467, Stop: 21306, Start Num: 3

Candidate Starts for LibertyBell_22:

(Start: 3 @20467 has 151 MA's), (Start: 6 @20479 has 1 MA's), (14, 20521), (18, 20545), (21, 20566), (22, 20575), (46, 20737), (69, 20836), (80, 20893), (94, 20947), (113, 21028), (122, 21064), (127, 21085), (129, 21100), (148, 21211), (149, 21220), (152, 21235), (160, 21283),

Gene: LilHuddy_28 Start: 24911, Stop: 25729, Start Num: 3

Candidate Starts for LilHuddy_28:

(Start: 3 @24911 has 151 MA's), (10, 24953), (18, 24989), (33, 25106), (36, 25124), (37, 25130), (43, 25166), (46, 25178), (59, 25229), (77, 25304), (122, 25496), (140, 25598), (152, 25664),

Gene: Linda_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Linda_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Loretta_27 Start: 24453, Stop: 25271, Start Num: 3

Candidate Starts for Loretta_27:

(Start: 3 @24453 has 151 MA's), (4, 24456), (10, 24495), (18, 24531), (33, 24648), (36, 24666), (37, 24672), (43, 24708), (46, 24720), (65, 24789), (82, 24876), (85, 24888), (95, 24924), (104, 24969), (105, 24972), (109, 24987), (115, 25008), (122, 25038), (129, 25071), (130, 25074), (132, 25089), (135, 25113),

Gene: LucySwiss_27 Start: 24568, Stop: 25386, Start Num: 3

Candidate Starts for LucySwiss_27:

(Start: 3 @24568 has 151 MA's), (10, 24610), (11, 24613), (14, 24622), (18, 24646), (33, 24763), (36, 24781), (43, 24823), (46, 24835), (70, 24931), (104, 25084), (129, 25186), (140, 25255), (142, 25267), (152, 25321),

Gene: Luthien_34 Start: 28608, Stop: 29459, Start Num: 5

Candidate Starts for Luthien_34:

(Start: 5 @28608 has 58 MA's), (8, 28629), (15, 28662), (21, 28710), (23, 28725), (32, 28800), (33, 28803), (44, 28872), (53, 28914), (54, 28917), (60, 28941), (69, 28977), (71, 28995), (72, 28998), (88, 29055), (94, 29079), (99, 29112), (104, 29133), (121, 29199), (133, 29280), (141, 29316), (144, 29340), (152, 29379), (153, 29382), (154, 29385), (162, 29454),

Gene: Madamoto_24 Start: 21597, Stop: 22421, Start Num: 3

Candidate Starts for Madamoto_24:

(Start: 3 @21597 has 151 MA's), (Start: 6 @21609 has 1 MA's), (22, 21705), (25, 21717), (26, 21720), (28, 21741), (46, 21867), (72, 21978), (77, 21993), (109, 22134), (147, 22329), (152, 22356), (159, 22389), (162, 22416),

Gene: Madvan_33 Start: 28392, Stop: 29243, Start Num: 5

Candidate Starts for Madvan_33:

(Start: 5 @28392 has 58 MA's), (8, 28413), (15, 28446), (21, 28494), (23, 28509), (33, 28587), (44, 28656), (53, 28698), (54, 28701), (60, 28725), (69, 28761), (71, 28779), (72, 28782), (79, 28812), (96,

28872), (99, 28896), (104, 28917), (116, 28962), (141, 29100), (144, 29124), (154, 29169), (162, 29238),

Gene: Magel_31 Start: 25635, Stop: 26489, Start Num: 5

Candidate Starts for Magel_31:

(Start: 5 @25635 has 58 MA's), (8, 25656), (31, 25824), (41, 25878), (42, 25881), (44, 25899), (45, 25902), (53, 25941), (54, 25944), (55, 25947), (60, 25968), (63, 25977), (96, 26118), (99, 26142), (107, 26172), (114, 26199), (115, 26202), (119, 26223), (126, 26256), (131, 26280), (138, 26331), (140, 26343), (141, 26346), (145, 26376), (152, 26409),

Gene: MajinBuu_33 Start: 28618, Stop: 29469, Start Num: 5

Candidate Starts for MajinBuu_33:

(Start: 5 @28618 has 58 MA's), (8, 28639), (15, 28672), (21, 28720), (23, 28735), (33, 28813), (44, 28882), (53, 28924), (54, 28927), (60, 28951), (69, 28987), (71, 29005), (72, 29008), (79, 29038), (94, 29089), (99, 29122), (102, 29137), (104, 29143), (141, 29326), (144, 29350), (152, 29389), (154, 29395), (158, 29434), (162, 29464),

Gene: Makai_27 Start: 24700, Stop: 25518, Start Num: 3

Candidate Starts for Makai_27:

(Start: 3 @24700 has 151 MA's), (Start: 6 @24712 has 1 MA's), (10, 24742), (18, 24778), (19, 24781), (33, 24895), (36, 24913), (43, 24955), (46, 24967), (77, 25093), (91, 25159), (122, 25285), (130, 25321), (140, 25387),

Gene: Mardi_28 Start: 24151, Stop: 24987, Start Num: 3

Candidate Starts for Mardi_28:

(Start: 3 @24151 has 151 MA's), (9, 24190), (17, 24220), (18, 24229), (35, 24358), (46, 24421), (51, 24442), (65, 24490), (69, 24511), (74, 24538), (121, 24742), (122, 24745), (137, 24832), (152, 24916), (154, 24922), (159, 24955),

Gene: Marianna39_42 Start: 34483, Stop: 35130, Start Num: 32

Candidate Starts for Marianna39_42:

(Start: 3 @34291 has 151 MA's), (4, 34294), (9, 34330), (32, 34483), (34, 34492), (46, 34561), (56, 34603), (59, 34615), (77, 34690), (83, 34723), (86, 34735), (104, 34813), (105, 34816), (110, 34840), (122, 34891), (142, 35011),

Gene: Maya_24 Start: 21635, Stop: 22459, Start Num: 3

Candidate Starts for Maya_24:

(Start: 3 @21635 has 151 MA's), (Start: 6 @21647 has 1 MA's), (22, 21743), (26, 21758), (28, 21779), (46, 21905), (48, 21914), (72, 22016), (77, 22031), (109, 22172), (152, 22394), (159, 22427), (162, 22454),

Gene: MediumFry_25 Start: 23899, Stop: 24717, Start Num: 3

Candidate Starts for MediumFry_25:

(Start: 3 @23899 has 151 MA's), (4, 23902), (18, 23977), (22, 24007), (26, 24022), (33, 24094), (36, 24112), (43, 24154), (46, 24166), (59, 24217), (70, 24262), (88, 24343), (109, 24433), (122, 24484), (129, 24517), (140, 24586), (152, 24652),

Gene: Meibysrarus_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Meibysrarus_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Mema_25 Start: 23341, Stop: 24165, Start Num: 2

Candidate Starts for Mema_25:

(2, 23341), (19, 23425), (32, 23536), (42, 23587), (49, 23629), (59, 23665), (71, 23722), (76, 23737), (82, 23770), (83, 23773), (90, 23797), (101, 23854), (104, 23863), (122, 23932), (129, 23965), (132, 23983), (142, 24046),

Gene: Michelle_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Michelle_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Miek_22 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for Miek_22:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: MiniBagel_27 Start: 25793, Stop: 26611, Start Num: 3

Candidate Starts for MiniBagel_27:

(Start: 3 @25793 has 151 MA's), (10, 25835), (14, 25847), (18, 25871), (33, 25988), (36, 26006), (37, 26012), (43, 26048), (46, 26060), (70, 26156), (104, 26309), (128, 26399), (140, 26480), (142, 26492), (152, 26546),

Gene: Monse_20 Start: 18727, Stop: 19551, Start Num: 3

Candidate Starts for Monse_20:

(Start: 3 @18727 has 151 MA's), (28, 18871), (46, 18997), (53, 19030), (59, 19048), (62, 19057), (65, 19066), (76, 19120), (77, 19123), (85, 19165), (109, 19264), (113, 19279), (127, 19336), (140, 19420), (152, 19486),

Gene: Mooshroom_22 Start: 21274, Stop: 22125, Start Num: 3

Candidate Starts for Mooshroom_22:

(Start: 3 @21274 has 151 MA's), (4, 21277), (26, 21406), (34, 21484), (72, 21676), (73, 21679), (74, 21682), (94, 21757), (95, 21760), (102, 21799), (117, 21853), (119, 21865), (122, 21871), (132, 21928), (141, 21982), (142, 21991), (145, 22012), (156, 22081), (158, 22090), (159, 22093), (161, 22114),

Gene: Moozy_20 Start: 18715, Stop: 19542, Start Num: 3

Candidate Starts for Moozy_20:

(Start: 3 @18715 has 151 MA's), (22, 18823), (28, 18859), (40, 18952), (46, 18988), (53, 19021), (59, 19039), (62, 19048), (65, 19057), (76, 19111), (77, 19114), (97, 19204), (106, 19243), (122, 19306), (127, 19327), (129, 19342),

Gene: Mossy_34 Start: 29805, Stop: 30656, Start Num: 5

Candidate Starts for Mossy_34:

(Start: 5 @29805 has 58 MA's), (8, 29826), (15, 29859), (23, 29922), (35, 30012), (45, 30072), (51, 30099), (54, 30114), (67, 30162), (69, 30174), (72, 30195), (79, 30225), (99, 30309), (104, 30330), (127, 30426), (138, 30498), (141, 30513), (145, 30543), (152, 30576), (154, 30582), (162, 30651),

Gene: MrAaronian_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for MrAaronian_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306),

(111, 22333), (141, 22480), (152, 22543),

Gene: Mudcat_22 Start: 23572, Stop: 24423, Start Num: 3

Candidate Starts for Mudcat_22:

(Start: 3 @23572 has 151 MA's), (26, 23704), (34, 23782), (73, 23977), (74, 23980), (84, 24025), (94, 24055), (119, 24163), (122, 24169), (144, 24304), (145, 24310), (147, 24316), (151, 24340), (154, 24349), (156, 24379), (159, 24391), (161, 24412),

Gene: Muglass_29 Start: 25113, Stop: 25946, Start Num: 3

Candidate Starts for Muglass_29:

(Start: 3 @25113 has 151 MA's), (9, 25152), (10, 25155), (17, 25182), (18, 25191), (46, 25383), (64, 25449), (65, 25452), (69, 25473), (108, 25647), (119, 25695), (122, 25704), (129, 25737), (130, 25740), (148, 25851), (152, 25875), (154, 25881),

Gene: Mysticmoon_32 Start: 28426, Stop: 29277, Start Num: 5

Candidate Starts for Mysticmoon_32:

(Start: 5 @28426 has 58 MA's), (8, 28447), (15, 28480), (23, 28543), (35, 28633), (45, 28693), (51, 28720), (54, 28735), (67, 28783), (69, 28795), (72, 28816), (79, 28846), (99, 28930), (104, 28951), (128, 29050), (138, 29119), (142, 29143), (143, 29149), (145, 29164), (153, 29200), (154, 29203), (162, 29272),

Gene: Nadmeg_34 Start: 29823, Stop: 30674, Start Num: 5

Candidate Starts for Nadmeg_34:

(Start: 5 @29823 has 58 MA's), (8, 29844), (15, 29877), (21, 29925), (23, 29940), (33, 30018), (44, 30087), (53, 30129), (54, 30132), (60, 30156), (69, 30192), (71, 30210), (72, 30213), (79, 30243), (96, 30303), (99, 30327), (104, 30348), (116, 30393), (141, 30531), (144, 30555), (154, 30600), (162, 30669),

Gene: Namo_24 Start: 21627, Stop: 22451, Start Num: 3

Candidate Starts for Namo_24:

(Start: 3 @21627 has 151 MA's), (Start: 6 @21639 has 1 MA's), (22, 21735), (26, 21750), (28, 21771), (46, 21897), (48, 21906), (72, 22008), (77, 22023), (152, 22386), (159, 22419), (162, 22446),

Gene: NapoleonB_22 Start: 21671, Stop: 22522, Start Num: 3

Candidate Starts for NapoleonB_22:

(Start: 3 @21671 has 151 MA's), (26, 21803), (34, 21881), (73, 22076), (74, 22079), (84, 22124), (94, 22154), (119, 22262), (122, 22268), (144, 22403), (145, 22409), (147, 22415), (151, 22439), (154, 22448), (156, 22478), (159, 22490), (161, 22511),

Gene: Nason_23 Start: 22148, Stop: 22999, Start Num: 3

Candidate Starts for Nason_23:

(Start: 3 @22148 has 151 MA's), (26, 22280), (34, 22358), (73, 22553), (74, 22556), (84, 22601), (94, 22631), (119, 22739), (122, 22745), (144, 22880), (145, 22886), (147, 22892), (151, 22916), (154, 22925), (156, 22955), (159, 22967), (161, 22988),

Gene: Natasha_24 Start: 21195, Stop: 22016, Start Num: 3

Candidate Starts for Natasha_24:

(Start: 3 @21195 has 151 MA's), (9, 21234), (10, 21237), (11, 21240), (14, 21249), (21, 21294), (25, 21315), (28, 21339), (46, 21465), (51, 21486), (59, 21516), (76, 21588), (90, 21648), (119, 21774), (121, 21780),

Gene: Navi1117_27 Start: 23790, Stop: 24626, Start Num: 3

Candidate Starts for Navi1117_27:

(Start: 3 @23790 has 151 MA's), (9, 23829), (17, 23859), (18, 23868), (35, 23997), (46, 24060), (51, 24081), (65, 24129), (69, 24150), (74, 24177), (121, 24381), (122, 24384), (137, 24471), (152, 24555), (154, 24561),

Gene: Nightmare_28 Start: 25103, Stop: 25921, Start Num: 3

Candidate Starts for Nightmare_28:

(Start: 3 @25103 has 151 MA's), (10, 25145), (11, 25148), (14, 25157), (18, 25181), (33, 25298), (36, 25316), (43, 25358), (46, 25370), (70, 25466), (104, 25619), (129, 25721), (140, 25790), (142, 25802), (152, 25856),

Gene: Niktson_27 Start: 25265, Stop: 26083, Start Num: 3

Candidate Starts for Niktson_27:

(Start: 3 @25265 has 151 MA's), (10, 25307), (11, 25310), (14, 25319), (18, 25343), (33, 25460), (36, 25478), (43, 25520), (46, 25532), (70, 25628), (76, 25655), (104, 25781), (129, 25883), (140, 25952), (142, 25964), (152, 26018),

Gene: Nithya_33 Start: 28607, Stop: 29458, Start Num: 5

Candidate Starts for Nithya_33:

(Start: 5 @28607 has 58 MA's), (8, 28628), (15, 28661), (21, 28709), (23, 28724), (32, 28799), (33, 28802), (44, 28871), (53, 28913), (54, 28916), (60, 28940), (69, 28976), (71, 28994), (72, 28997), (88, 29054), (94, 29078), (99, 29111), (104, 29132), (121, 29198), (133, 29279), (141, 29315), (144, 29339), (152, 29378), (154, 29384), (162, 29453),

Gene: Nivinsha_27 Start: 24653, Stop: 25471, Start Num: 3

Candidate Starts for Nivinsha_27:

(Start: 3 @24653 has 151 MA's), (Start: 6 @24665 has 1 MA's), (10, 24695), (14, 24707), (18, 24731), (33, 24848), (36, 24866), (43, 24908), (46, 24920), (70, 25016), (104, 25169), (129, 25271), (140, 25340), (142, 25352), (152, 25406),

Gene: NoPickles_30 Start: 25359, Stop: 26213, Start Num: 5

Candidate Starts for NoPickles_30:

(Start: 5 @25359 has 58 MA's), (8, 25380), (31, 25548), (41, 25602), (42, 25605), (44, 25623), (45, 25626), (53, 25665), (54, 25668), (55, 25671), (60, 25692), (63, 25701), (96, 25842), (99, 25866), (107, 25896), (114, 25923), (115, 25926), (119, 25947), (126, 25980), (131, 26004), (138, 26055), (140, 26067), (141, 26070), (145, 26100), (152, 26133),

Gene: Odesza_30 Start: 25727, Stop: 26581, Start Num: 5

Candidate Starts for Odesza_30:

(Start: 5 @25727 has 58 MA's), (8, 25748), (31, 25916), (41, 25970), (42, 25973), (44, 25991), (45, 25994), (53, 26033), (54, 26036), (55, 26039), (60, 26060), (63, 26069), (96, 26210), (99, 26234), (107, 26264), (114, 26291), (115, 26294), (119, 26315), (126, 26348), (131, 26372), (140, 26435), (141, 26438), (145, 26468), (152, 26501),

Gene: OhMyWard_33 Start: 29145, Stop: 29996, Start Num: 5

Candidate Starts for OhMyWard_33:

(Start: 5 @29145 has 58 MA's), (8, 29166), (23, 29262), (35, 29352), (45, 29412), (51, 29439), (54, 29454), (67, 29502), (69, 29514), (72, 29535), (76, 29547), (79, 29565), (99, 29649), (104, 29670), (127, 29766), (138, 29838), (141, 29853), (145, 29883), (152, 29916), (154, 29922), (162, 29991),

Gene: OlgasClover_33 Start: 29331, Stop: 30182, Start Num: 5

Candidate Starts for OlgasClover_33:

(Start: 5 @29331 has 58 MA's), (8, 29352), (15, 29385), (21, 29433), (23, 29448), (33, 29526), (44, 29595), (53, 29637), (54, 29640), (60, 29664), (69, 29700), (71, 29718), (72, 29721), (79, 29751), (94,

29802), (99, 29835), (102, 29850), (104, 29856), (141, 30039), (144, 30063), (152, 30102), (154, 30108), (158, 30147), (162, 30177),

Gene: OlympicHelado_24 Start: 21627, Stop: 22451, Start Num: 3

Candidate Starts for OlympicHelado_24:

(Start: 3 @21627 has 151 MA's), (Start: 6 @21639 has 1 MA's), (21, 21726), (26, 21750), (28, 21771), (46, 21897), (72, 22008), (77, 22023), (152, 22386), (159, 22419), (162, 22446),

Gene: Onestar_24 Start: 21576, Stop: 22394, Start Num: 3

Candidate Starts for Onestar_24:

(Start: 3 @21576 has 151 MA's), (14, 21630), (22, 21684), (34, 21777), (35, 21783), (36, 21789), (46, 21843), (56, 21885), (59, 21894), (67, 21921), (76, 21966), (104, 22092), (111, 22119), (119, 22152), (122, 22161), (147, 22302), (162, 22389),

Gene: Paella_41 Start: 33771, Stop: 34610, Start Num: 3

Candidate Starts for Paella_41:

(Start: 3 @33771 has 151 MA's), (4, 33774), (9, 33810), (32, 33963), (34, 33972), (46, 34041), (56, 34083), (59, 34095), (77, 34170), (83, 34203), (86, 34215), (104, 34293), (105, 34296), (110, 34320), (142, 34491),

Gene: Pepy6_036 Start: 35866, Stop: 36693, Start Num: 5

Candidate Starts for Pepy6_036:

(Start: 5 @35866 has 58 MA's), (8, 35887), (45, 36133), (47, 36142), (51, 36160), (63, 36208), (119, 36451), (133, 36520), (135, 36526), (139, 36544), (140, 36553), (146, 36589), (147, 36592), (162, 36688),

Gene: Perkunas_32 Start: 26126, Stop: 26977, Start Num: 5

Candidate Starts for Perkunas_32:

(Start: 5 @26126 has 58 MA's), (8, 26147), (31, 26315), (41, 26369), (42, 26372), (44, 26390), (45, 26393), (47, 26402), (51, 26420), (53, 26432), (54, 26435), (55, 26438), (60, 26459), (63, 26468), (74, 26522), (75, 26525), (93, 26594), (96, 26606), (99, 26630), (115, 26690), (119, 26711), (121, 26717), (124, 26726), (126, 26744), (130, 26765), (140, 26831), (141, 26834), (152, 26897),

Gene: PerroGrande22_40 Start: 37219, Stop: 38046, Start Num: 5

Candidate Starts for PerroGrande22_40:

(Start: 5 @37219 has 58 MA's), (8, 37240), (45, 37486), (47, 37495), (63, 37561), (67, 37576), (71, 37606), (119, 37804), (133, 37873), (135, 37879), (139, 37897), (147, 37945), (151, 37969), (162, 38041),

Gene: PestoPenguin_36 Start: 28397, Stop: 29248, Start Num: 5

Candidate Starts for PestoPenguin_36:

(Start: 5 @28397 has 58 MA's), (8, 28418), (15, 28451), (21, 28499), (23, 28514), (33, 28592), (44, 28661), (53, 28703), (54, 28706), (60, 28730), (71, 28784), (72, 28787), (88, 28844), (96, 28877), (99, 28901), (104, 28922), (121, 28988), (133, 29069), (140, 29102), (141, 29105), (144, 29129), (152, 29168), (154, 29174), (162, 29243),

Gene: Petito_32 Start: 26881, Stop: 27741, Start Num: 5

Candidate Starts for Petito_32:

(Start: 5 @26881 has 58 MA's), (8, 26902), (31, 27070), (41, 27124), (42, 27127), (44, 27145), (45, 27148), (49, 27169), (53, 27187), (54, 27190), (55, 27193), (60, 27214), (130, 27529), (131, 27532), (141, 27598), (142, 27607), (162, 27736),

Gene: Phaby_28 Start: 24840, Stop: 25658, Start Num: 3

Candidate Starts for Phaby_28:

(Start: 3 @24840 has 151 MA's), (10, 24882), (18, 24918), (33, 25035), (36, 25053), (37, 25059), (43, 25095), (46, 25107), (59, 25158), (64, 25173), (77, 25233), (122, 25425), (140, 25527), (152, 25593),

Gene: Phaila_26 Start: 23201, Stop: 24037, Start Num: 3

Candidate Starts for Phaila_26:

(Start: 3 @23201 has 151 MA's), (9, 23240), (17, 23270), (18, 23279), (35, 23408), (46, 23471), (51, 23492), (65, 23540), (69, 23561), (74, 23588), (121, 23792), (122, 23795), (137, 23882), (152, 23966), (154, 23972), (159, 24005),

Gene: Phepper_33 Start: 28390, Stop: 29241, Start Num: 5

Candidate Starts for Phepper_33:

(Start: 5 @28390 has 58 MA's), (8, 28411), (15, 28444), (21, 28492), (23, 28507), (33, 28585), (44, 28654), (53, 28696), (54, 28699), (60, 28723), (69, 28759), (71, 28777), (72, 28780), (76, 28792), (79, 28810), (96, 28870), (99, 28894), (104, 28915), (116, 28960), (120, 28978), (141, 29098), (144, 29122), (152, 29161), (154, 29167), (162, 29236),

Gene: Pherobrine_32 Start: 28424, Stop: 29275, Start Num: 5

Candidate Starts for Pherobrine_32:

(Start: 5 @28424 has 58 MA's), (8, 28445), (15, 28478), (23, 28541), (35, 28631), (45, 28691), (51, 28718), (54, 28733), (67, 28781), (69, 28793), (72, 28814), (79, 28844), (99, 28928), (104, 28949), (128, 29048), (138, 29117), (142, 29141), (143, 29147), (145, 29162), (153, 29198), (162, 29270),

Gene: PherryCruz_19 Start: 18700, Stop: 19527, Start Num: 3

Candidate Starts for PherryCruz_19:

(Start: 3 @18700 has 151 MA's), (22, 18808), (28, 18844), (40, 18937), (46, 18973), (53, 19006), (58, 19018), (59, 19024), (62, 19033), (65, 19042), (72, 19084), (76, 19096), (77, 19099), (97, 19189), (106, 19228), (122, 19291), (127, 19312), (129, 19327),

Gene: Pippin15_26 Start: 22794, Stop: 23621, Start Num: 3

Candidate Starts for Pippin15_26:

(Start: 3 @22794 has 151 MA's), (4, 22797), (20, 22893), (22, 22911), (30, 22977), (40, 23040), (45, 23070), (56, 23118), (61, 23133), (67, 23154), (72, 23187), (77, 23202), (78, 23208), (93, 23268), (113, 23346), (122, 23382), (145, 23511), (161, 23610),

Gene: Poco6_037 Start: 37888, Stop: 38715, Start Num: 5

Candidate Starts for Poco6_037:

(Start: 5 @37888 has 58 MA's), (8, 37909), (47, 38164), (54, 38197), (63, 38230), (67, 38245), (71, 38275), (119, 38473), (133, 38542), (135, 38548), (147, 38614), (151, 38638), (162, 38710),

Gene: PoeMe_28 Start: 24479, Stop: 25315, Start Num: 3

Candidate Starts for PoeMe_28:

(Start: 3 @24479 has 151 MA's), (9, 24518), (17, 24548), (18, 24557), (35, 24686), (46, 24749), (51, 24770), (65, 24818), (69, 24839), (74, 24866), (121, 25070), (122, 25073), (137, 25160), (152, 25244), (154, 25250), (159, 25283),

Gene: Popy_24 Start: 22143, Stop: 22958, Start Num: 6

Candidate Starts for Popy_24:

(Start: 3 @22131 has 151 MA's), (Start: 6 @22143 has 1 MA's), (26, 22254), (28, 22275), (46, 22401), (48, 22410), (72, 22512), (77, 22527), (101, 22644), (104, 22653), (127, 22743), (147, 22866), (152, 22893), (159, 22926), (162, 22953),

Gene: Powelldog_25 Start: 21514, Stop: 22332, Start Num: 3

Candidate Starts for Powelldog_25:

(Start: 3 @21514 has 151 MA's), (4, 21517), (15, 21571), (18, 21592), (20, 21604), (21, 21613), (36, 21727), (43, 21769), (46, 21781), (62, 21841), (65, 21850), (72, 21892), (95, 21985), (122, 22099), (129, 22132), (130, 22135), (152, 22267),

Gene: ProfFrink_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for ProfFrink_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Qui_41 Start: 33771, Stop: 34610, Start Num: 3

Candidate Starts for Qui_41:

(Start: 3 @33771 has 151 MA's), (4, 33774), (9, 33810), (32, 33963), (34, 33972), (46, 34041), (56, 34083), (59, 34095), (77, 34170), (83, 34203), (86, 34215), (104, 34293), (105, 34296), (110, 34320), (142, 34491),

Gene: Rainydai_22 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for Rainydai_22:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: Raunak_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Raunak_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: RavenPuff_19 Start: 18700, Stop: 19527, Start Num: 3

Candidate Starts for RavenPuff_19:

(Start: 3 @18700 has 151 MA's), (22, 18808), (28, 18844), (40, 18937), (46, 18973), (53, 19006), (58, 19018), (59, 19024), (62, 19033), (65, 19042), (72, 19084), (76, 19096), (77, 19099), (97, 19189), (106, 19228), (122, 19291), (127, 19312), (129, 19327),

Gene: Regigigas_23 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for Regigigas_23:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: Renaldo_32 Start: 25623, Stop: 26387, Start Num: 17

Candidate Starts for Renaldo_32:

(1, 25425), (Start: 3 @25554 has 151 MA's), (9, 25593), (10, 25596), (17, 25623), (18, 25632), (46, 25824), (59, 25875), (64, 25890), (65, 25893), (69, 25914), (70, 25920), (108, 26088), (119, 26136), (122, 26145), (129, 26178), (130, 26181), (148, 26292), (152, 26316), (154, 26322),

Gene: Rickmore_32 Start: 27041, Stop: 27892, Start Num: 5

Candidate Starts for Rickmore_32:

(Start: 5 @27041 has 58 MA's), (8, 27062), (13, 27086), (23, 27158), (49, 27329), (51, 27335), (53, 27347), (54, 27350), (57, 27362), (60, 27374), (69, 27410), (72, 27431), (76, 27443), (94, 27512), (96, 27521), (99, 27545), (116, 27611), (133, 27713), (138, 27734), (141, 27749), (153, 27815), (162, 27887),

Gene: Rima_24 Start: 21627, Stop: 22451, Start Num: 3

Candidate Starts for Rima_24:

(Start: 3 @21627 has 151 MA's), (Start: 6 @21639 has 1 MA's), (22, 21735), (26, 21750), (28, 21771), (46, 21897), (48, 21906), (72, 22008), (77, 22023), (152, 22386), (159, 22419), (162, 22446),

Gene: Roney_30 Start: 25727, Stop: 26581, Start Num: 5

Candidate Starts for Roney_30:

(Start: 5 @25727 has 58 MA's), (8, 25748), (31, 25916), (41, 25970), (42, 25973), (44, 25991), (45, 25994), (53, 26033), (54, 26036), (55, 26039), (60, 26060), (63, 26069), (96, 26210), (99, 26234), (107, 26264), (114, 26291), (115, 26294), (119, 26315), (126, 26348), (131, 26372), (140, 26435), (141, 26438), (145, 26468), (152, 26501),

Gene: RosaAsantewaa_20 Start: 18511, Stop: 19335, Start Num: 3

Candidate Starts for RosaAsantewaa_20:

(Start: 3 @18511 has 151 MA's), (19, 18592), (26, 18634), (42, 18754), (46, 18781), (58, 18826), (59, 18832), (72, 18892), (77, 18907), (82, 18937), (84, 18943), (85, 18949), (103, 19027), (118, 19087), (127, 19120), (129, 19135), (140, 19204), (148, 19246),

Gene: Runhaar_33 Start: 28393, Stop: 29244, Start Num: 5

Candidate Starts for Runhaar_33:

(Start: 5 @28393 has 58 MA's), (8, 28414), (15, 28447), (21, 28495), (23, 28510), (33, 28588), (44, 28657), (53, 28699), (54, 28702), (60, 28726), (69, 28762), (71, 28780), (72, 28783), (79, 28813), (96, 28873), (99, 28897), (104, 28918), (116, 28963), (141, 29101), (144, 29125), (152, 29164), (153, 29167), (154, 29170), (162, 29239),

Gene: RustyBoy_24 Start: 21177, Stop: 21998, Start Num: 3

Candidate Starts for RustyBoy_24:

(Start: 3 @21177 has 151 MA's), (9, 21216), (10, 21219), (11, 21222), (14, 21231), (21, 21276), (25, 21297), (28, 21321), (46, 21447), (51, 21468), (59, 21498), (76, 21570), (90, 21630), (119, 21756), (121, 21762),

Gene: Salk_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Salk_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Sangak_20 Start: 18701, Stop: 19528, Start Num: 3

Candidate Starts for Sangak_20:

(Start: 3 @18701 has 151 MA's), (22, 18809), (28, 18845), (40, 18938), (46, 18974), (53, 19007), (58, 19019), (59, 19025), (62, 19034), (65, 19043), (72, 19085), (76, 19097), (77, 19100), (97, 19190), (106, 19229), (122, 19292), (127, 19313), (129, 19328),

Gene: Scap1_20 Start: 18655, Stop: 19479, Start Num: 3

Candidate Starts for Scap1_20:

(Start: 3 @18655 has 151 MA's), (28, 18799), (46, 18925), (53, 18958), (59, 18976), (65, 18994), (76, 19048), (77, 19051), (106, 19180), (113, 19207), (127, 19264), (129, 19279), (140, 19348), (152, 19414),

Gene: Schwartz33_34 Start: 28724, Stop: 29578, Start Num: 5

Candidate Starts for Schwartz33_34:

(Start: 5 @28724 has 58 MA's), (8, 28745), (23, 28841), (35, 28931), (41, 28967), (44, 28988), (49, 29012), (54, 29033), (60, 29057), (71, 29111), (72, 29114), (74, 29120), (79, 29144), (87, 29168), (109, 29267), (127, 29345), (130, 29363), (133, 29396), (141, 29432), (143, 29447), (145, 29462), (162, 29573),

Gene: ScienceWizSam_29 Start: 25054, Stop: 25872, Start Num: 3

Candidate Starts for ScienceWizSam_29:

(Start: 3 @25054 has 151 MA's), (Start: 6 @25066 has 1 MA's), (10, 25096), (14, 25108), (18, 25132), (33, 25249), (36, 25267), (43, 25309), (46, 25321), (70, 25417), (76, 25444), (77, 25447), (104, 25570), (129, 25672), (140, 25741), (142, 25753), (152, 25807),

Gene: Secretariat_31 Start: 27455, Stop: 28309, Start Num: 5

Candidate Starts for Secretariat_31:

(Start: 5 @27455 has 58 MA's), (8, 27476), (35, 27662), (41, 27698), (42, 27701), (44, 27719), (53, 27761), (54, 27764), (57, 27776), (60, 27788), (75, 27854), (79, 27875), (94, 27926), (121, 28046), (127, 28076), (130, 28094), (147, 28199), (162, 28304),

Gene: SendItCS_21 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for SendItCS_21:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: Serenabean_26 Start: 23144, Stop: 23971, Start Num: 3

Candidate Starts for Serenabean_26:

(Start: 3 @23144 has 151 MA's), (16, 23216), (19, 23234), (22, 23261), (28, 23297), (38, 23378), (59, 23477), (73, 23540), (119, 23723), (129, 23759), (135, 23801), (155, 23918), (159, 23939),

Gene: ShaggyRogers_33 Start: 28396, Stop: 29247, Start Num: 5

Candidate Starts for ShaggyRogers_33:

(Start: 5 @28396 has 58 MA's), (8, 28417), (15, 28450), (21, 28498), (23, 28513), (33, 28591), (44, 28660), (53, 28702), (54, 28705), (60, 28729), (71, 28783), (72, 28786), (88, 28843), (96, 28876), (99, 28900), (104, 28921), (121, 28987), (133, 29068), (140, 29101), (141, 29104), (144, 29128), (152, 29167), (154, 29173), (158, 29212), (162, 29242),

Gene: SheRa_20 Start: 18699, Stop: 19526, Start Num: 3

Candidate Starts for SheRa_20:

(Start: 3 @18699 has 151 MA's), (22, 18807), (28, 18843), (40, 18936), (42, 18945), (46, 18972), (53, 19005), (59, 19023), (62, 19032), (65, 19041), (76, 19095), (77, 19098), (97, 19188), (106, 19227), (119, 19281), (122, 19290), (127, 19311), (129, 19326),

Gene: Shepard_28 Start: 24908, Stop: 25726, Start Num: 3

Candidate Starts for Shepard_28:

(Start: 3 @24908 has 151 MA's), (10, 24950), (18, 24986), (33, 25103), (36, 25121), (37, 25127), (43, 25163), (44, 25166), (46, 25175), (59, 25226), (64, 25241), (77, 25301), (122, 25493), (140, 25595), (152, 25661),

Gene: Shiba_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Shiba_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Sloopyjoe_24 Start: 21791, Stop: 22609, Start Num: 3

Candidate Starts for Sloopyjoe_24:

(Start: 3 @21791 has 151 MA's), (21, 21890), (25, 21911), (26, 21914), (28, 21935), (33, 21986), (35, 21998), (36, 22004), (46, 22058), (53, 22091), (67, 22136), (76, 22181), (103, 22304), (104, 22307), (111, 22334), (141, 22481), (152, 22544),

Gene: Soshi_24 Start: 22140, Stop: 22964, Start Num: 3

Candidate Starts for Soshi_24:

(Start: 3 @22140 has 151 MA's), (Start: 6 @22152 has 1 MA's), (22, 22248), (26, 22263), (28, 22284), (46, 22410), (48, 22419), (72, 22521), (77, 22536), (88, 22587), (127, 22749), (147, 22872), (152, 22899), (159, 22932), (162, 22959),

Gene: Spain_23 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Spain_23:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Spectropatronm_24 Start: 21621, Stop: 22445, Start Num: 3

Candidate Starts for Spectropatronm_24:

(Start: 3 @21621 has 151 MA's), (Start: 6 @21633 has 1 MA's), (22, 21729), (26, 21744), (28, 21765), (46, 21891), (48, 21900), (72, 22002), (77, 22017), (109, 22158), (152, 22380), (159, 22413), (162, 22440),

Gene: Sporto_25 Start: 23001, Stop: 23819, Start Num: 3

Candidate Starts for Sporto_25:

(Start: 3 @23001 has 151 MA's), (14, 23055), (21, 23100), (25, 23121), (26, 23124), (28, 23145), (33, 23196), (35, 23208), (36, 23214), (42, 23241), (46, 23268), (53, 23301), (59, 23319), (67, 23346), (88, 23445), (98, 23493), (104, 23517), (111, 23544), (122, 23586), (152, 23754),

Gene: Sprinkle_24 Start: 21917, Stop: 22726, Start Num: 6

Candidate Starts for Sprinkle_24:

(Start: 3 @21905 has 151 MA's), (Start: 6 @21917 has 1 MA's), (21, 22004), (24, 22022), (28, 22049), (34, 22106), (35, 22112), (46, 22175), (51, 22196), (59, 22226), (76, 22298), (106, 22430), (122, 22493), (130, 22529), (162, 22721),

Gene: StarLord_24 Start: 21791, Stop: 22609, Start Num: 3

Candidate Starts for StarLord_24:

(Start: 3 @21791 has 151 MA's), (21, 21890), (25, 21911), (26, 21914), (28, 21935), (33, 21986), (35, 21998), (36, 22004), (46, 22058), (53, 22091), (67, 22136), (76, 22181), (103, 22304), (104, 22307), (111, 22334), (141, 22481), (152, 22544),

Gene: Stardom_21 Start: 21130, Stop: 21981, Start Num: 3

Candidate Starts for Stardom_21:

(Start: 3 @21130 has 151 MA's), (26, 21262), (34, 21340), (73, 21535), (74, 21538), (84, 21583), (94, 21613), (119, 21721), (122, 21727), (144, 21862), (145, 21868), (147, 21874), (151, 21898), (154, 21907), (156, 21937), (159, 21949), (161, 21970),

Gene: Stardrop_27 Start: 24175, Stop: 25011, Start Num: 3

Candidate Starts for Stardrop_27:

(Start: 3 @24175 has 151 MA's), (9, 24214), (17, 24244), (18, 24253), (35, 24382), (46, 24445), (51, 24466), (65, 24514), (69, 24535), (74, 24562), (121, 24766), (122, 24769), (137, 24856), (152, 24940), (154, 24946), (159, 24979),

Gene: Stayer_24 Start: 21790, Stop: 22608, Start Num: 3

Candidate Starts for Stayer_24:

(Start: 3 @21790 has 151 MA's), (21, 21889), (25, 21910), (26, 21913), (28, 21934), (33, 21985), (35, 21997), (36, 22003), (46, 22057), (53, 22090), (67, 22135), (76, 22180), (103, 22303), (104, 22306), (111, 22333), (141, 22480), (152, 22543),

Gene: Sunny4976_24 Start: 23560, Stop: 24396, Start Num: 3

Candidate Starts for Sunny4976_24:

(Start: 3 @23560 has 151 MA's), (4, 23563), (34, 23761), (46, 23830), (56, 23872), (57, 23878), (59, 23887), (76, 23959), (98, 24061), (106, 24091), (118, 24142), (133, 24223), (142, 24271), (162, 24391),

Gene: SweetCrkHerbs_32 Start: 25799, Stop: 26650, Start Num: 5

Candidate Starts for SweetCrkHerbs_32:

(Start: 5 @25799 has 58 MA's), (8, 25820), (31, 25988), (41, 26042), (42, 26045), (44, 26063), (45, 26066), (47, 26075), (51, 26093), (53, 26105), (54, 26108), (55, 26111), (60, 26132), (63, 26141), (74, 26195), (75, 26198), (93, 26267), (96, 26279), (99, 26303), (115, 26363), (119, 26384), (121, 26390), (124, 26399), (126, 26417), (130, 26438), (140, 26504), (141, 26507), (152, 26570),

Gene: Sweetclover_27 Start: 22585, Stop: 23412, Start Num: 3

Candidate Starts for Sweetclover_27:

(Start: 3 @22585 has 151 MA's), (12, 22636), (19, 22675), (22, 22702), (30, 22768), (45, 22861), (56, 22909), (61, 22924), (67, 22945), (76, 22990), (119, 23164), (159, 23380),

Gene: Synopsis_26 Start: 24717, Stop: 25535, Start Num: 3

Candidate Starts for Synopsis_26:

(Start: 3 @24717 has 151 MA's), (Start: 6 @24729 has 1 MA's), (10, 24759), (14, 24771), (18, 24795), (33, 24912), (36, 24930), (43, 24972), (46, 24984), (70, 25080), (76, 25107), (77, 25110), (104, 25233), (129, 25335), (140, 25404), (142, 25416), (152, 25470),

Gene: TaidaOne_24 Start: 22269, Stop: 23093, Start Num: 3

Candidate Starts for TaidaOne_24:

(Start: 3 @22269 has 151 MA's), (Start: 6 @22281 has 1 MA's), (21, 22368), (26, 22392), (28, 22413), (46, 22539), (72, 22650), (77, 22665), (152, 23028), (159, 23061), (162, 23088),

Gene: Tairn4Wing_32 Start: 25632, Stop: 26486, Start Num: 5

Candidate Starts for Tairn4Wing_32:

(Start: 5 @25632 has 58 MA's), (8, 25653), (31, 25821), (41, 25875), (42, 25878), (44, 25896), (45, 25899), (53, 25938), (54, 25941), (55, 25944), (60, 25965), (63, 25974), (99, 26139), (107, 26169), (114, 26196), (115, 26199), (119, 26220), (126, 26253), (130, 26274), (131, 26277), (140, 26340), (141, 26343), (145, 26373), (152, 26406),

Gene: Talon44_31 Start: 25799, Stop: 26650, Start Num: 5

Candidate Starts for Talon44_31:

(Start: 5 @25799 has 58 MA's), (8, 25820), (31, 25988), (41, 26042), (42, 26045), (44, 26063), (45, 26066), (47, 26075), (51, 26093), (53, 26105), (54, 26108), (55, 26111), (60, 26132), (63, 26141), (74, 26195), (75, 26198), (93, 26267), (96, 26279), (99, 26303), (115, 26363), (119, 26384), (121, 26390), (124, 26399), (126, 26417), (130, 26438), (140, 26504), (141, 26507), (152, 26570),

Gene: Tanis_30 Start: 25577, Stop: 26431, Start Num: 5

Candidate Starts for Tanis_30:

(Start: 5 @25577 has 58 MA's), (8, 25598), (31, 25766), (41, 25820), (42, 25823), (44, 25841), (45, 25844), (53, 25883), (54, 25886), (55, 25889), (60, 25910), (63, 25919), (96, 26060), (99, 26084), (107, 26114), (114, 26141), (115, 26144), (119, 26165), (126, 26198), (131, 26222), (138, 26273), (140, 26285), (141, 26288), (145, 26318), (152, 26351),

Gene: Tatanka_27 Start: 25201, Stop: 26019, Start Num: 3

Candidate Starts for Tatanka_27:

(Start: 3 @25201 has 151 MA's), (Start: 6 @25213 has 1 MA's), (10, 25243), (14, 25255), (18, 25279), (33, 25396), (36, 25414), (43, 25456), (46, 25468), (70, 25564), (76, 25591), (77, 25594), (104, 25717), (129, 25819), (140, 25888), (142, 25900), (152, 25954),

Gene: Teacup_27 Start: 24573, Stop: 25391, Start Num: 3

Candidate Starts for Teacup_27:

(Start: 3 @24573 has 151 MA's), (10, 24615), (14, 24627), (18, 24651), (33, 24768), (36, 24786), (43, 24828), (46, 24840), (70, 24936), (104, 25089), (129, 25191), (140, 25260), (142, 25272), (152, 25326),

Gene: TenaciousP_34 Start: 30047, Stop: 30898, Start Num: 5

Candidate Starts for TenaciousP_34:

(Start: 5 @30047 has 58 MA's), (8, 30068), (15, 30101), (21, 30149), (23, 30164), (33, 30242), (44, 30311), (53, 30353), (54, 30356), (60, 30380), (69, 30416), (71, 30434), (72, 30437), (79, 30467), (94, 30518), (99, 30551), (102, 30566), (104, 30572), (141, 30755), (144, 30779), (152, 30818), (154, 30824), (158, 30863), (162, 30893),

Gene: Tenney120_27 Start: 23912, Stop: 24748, Start Num: 3

Candidate Starts for Tenney120_27:

(Start: 3 @23912 has 151 MA's), (9, 23951), (17, 23981), (18, 23990), (35, 24119), (46, 24182), (51, 24203), (65, 24251), (69, 24272), (74, 24299), (121, 24503), (122, 24506), (137, 24593), (152, 24677), (154, 24683), (159, 24716),

Gene: Tenno_28 Start: 25802, Stop: 26620, Start Num: 3

Candidate Starts for Tenno_28:

(Start: 3 @25802 has 151 MA's), (10, 25844), (14, 25856), (18, 25880), (33, 25997), (36, 26015), (37, 26021), (43, 26057), (46, 26069), (70, 26165), (104, 26318), (128, 26408), (140, 26489), (142, 26501), (152, 26555),

Gene: Thiqqums_22 Start: 20533, Stop: 21363, Start Num: 3

Candidate Starts for Thiqqums_22:

(Start: 3 @20533 has 151 MA's), (21, 20632), (39, 20758), (45, 20797), (46, 20803), (64, 20869), (77, 20929), (85, 20974), (90, 20989), (94, 21010), (103, 21055), (106, 21064), (127, 21148), (140, 21232), (159, 21331),

Gene: TieDye_23 Start: 21313, Stop: 22137, Start Num: 3

Candidate Starts for TieDye_23:

(Start: 3 @21313 has 151 MA's), (Start: 6 @21325 has 1 MA's), (21, 21412), (26, 21436), (28, 21457), (46, 21583), (72, 21694), (77, 21709), (152, 22072), (159, 22105), (162, 22132),

Gene: Tipton_28 Start: 24904, Stop: 25722, Start Num: 3

Candidate Starts for Tipton_28:

(Start: 3 @24904 has 151 MA's), (7, 24925), (10, 24946), (18, 24982), (36, 25117), (37, 25123), (43, 25159), (46, 25171), (59, 25222), (64, 25237), (77, 25297), (81, 25321), (104, 25420), (122, 25489), (129, 25522), (140, 25591), (152, 25657),

Gene: Tokki_28 Start: 24856, Stop: 25674, Start Num: 3

Candidate Starts for Tokki_28:

(Start: 3 @24856 has 151 MA's), (10, 24898), (18, 24934), (33, 25051), (36, 25069), (37, 25075), (43, 25111), (46, 25123), (59, 25174), (64, 25189), (77, 25249), (122, 25441), (140, 25543), (152, 25609),

Gene: Tonaltzin_35 Start: 28617, Stop: 29468, Start Num: 5

Candidate Starts for Tonaltzin_35:

(Start: 5 @28617 has 58 MA's), (8, 28638), (15, 28671), (21, 28719), (23, 28734), (33, 28812), (44, 28881), (53, 28923), (54, 28926), (60, 28950), (69, 28986), (71, 29004), (72, 29007), (79, 29037), (94, 29088), (99, 29121), (102, 29136), (104, 29142), (141, 29325), (144, 29349), (152, 29388), (154, 29394), (158, 29433), (162, 29463),

Gene: TonyStarch_24 Start: 21627, Stop: 22451, Start Num: 3

Candidate Starts for TonyStarch_24:

(Start: 3 @21627 has 151 MA's), (Start: 6 @21639 has 1 MA's), (21, 21726), (26, 21750), (28, 21771), (46, 21897), (72, 22008), (77, 22023), (152, 22386), (159, 22419), (162, 22446),

Gene: Tribby_23 Start: 21863, Stop: 22714, Start Num: 3

Candidate Starts for Tribby_23:

(Start: 3 @21863 has 151 MA's), (26, 21995), (34, 22073), (73, 22268), (74, 22271), (84, 22316), (94, 22346), (119, 22454), (122, 22460), (144, 22595), (145, 22601), (147, 22607), (151, 22631), (156, 22670), (159, 22682), (161, 22703),

Gene: TrixiePhattel_27 Start: 23747, Stop: 24583, Start Num: 3

Candidate Starts for TrixiePhattel_27:

(Start: 3 @23747 has 151 MA's), (9, 23786), (17, 23816), (18, 23825), (35, 23954), (42, 23990), (46, 24017), (51, 24038), (59, 24068), (65, 24086), (69, 24107), (121, 24338), (122, 24341), (137, 24428), (152, 24512), (154, 24518),

Gene: Truckee_26 Start: 24745, Stop: 25563, Start Num: 3

Candidate Starts for Truckee_26:

(Start: 3 @24745 has 151 MA's), (Start: 6 @24757 has 1 MA's), (10, 24787), (18, 24823), (19, 24826), (33, 24940), (36, 24958), (43, 25000), (46, 25012), (77, 25138), (91, 25204), (122, 25330), (129, 25363), (140, 25432), (152, 25498),

Gene: Trufflozitus_30 Start: 25633, Stop: 26487, Start Num: 5

Candidate Starts for Trufflozitus_30:

(Start: 5 @25633 has 58 MA's), (8, 25654), (31, 25822), (41, 25876), (42, 25879), (44, 25897), (45, 25900), (53, 25939), (54, 25942), (55, 25945), (60, 25966), (63, 25975), (86, 26074), (99, 26140), (107, 26170), (114, 26197), (115, 26200), (119, 26221), (126, 26254), (130, 26275), (131, 26278), (140, 26341), (141, 26344), (145, 26374), (152, 26407),

Gene: Trustiboi_28 Start: 25270, Stop: 26088, Start Num: 3

Candidate Starts for Trustiboi_28:

(Start: 3 @25270 has 151 MA's), (Start: 6 @25282 has 1 MA's), (10, 25312), (11, 25315), (14, 25324), (18, 25348), (33, 25465), (36, 25483), (43, 25525), (46, 25537), (70, 25633), (104, 25786), (129, 25888), (140, 25957), (142, 25969), (152, 26023),

Gene: Untouchable_33 Start: 28749, Stop: 29600, Start Num: 5

Candidate Starts for Untouchable_33:

(Start: 5 @28749 has 58 MA's), (8, 28770), (15, 28803), (21, 28851), (23, 28866), (33, 28944), (44, 29013), (53, 29055), (54, 29058), (60, 29082), (69, 29118), (71, 29136), (72, 29139), (79, 29169), (96, 29229), (99, 29253), (104, 29274), (116, 29319), (141, 29457), (144, 29481), (154, 29526), (162,

29595),

Gene: Uzumaki_27 Start: 24442, Stop: 25278, Start Num: 3

Candidate Starts for Uzumaki_27:

(Start: 3 @24442 has 151 MA's), (9, 24481), (17, 24511), (35, 24649), (46, 24712), (51, 24733), (65, 24781), (69, 24802), (74, 24829), (121, 25033), (122, 25036), (137, 25123), (152, 25207), (154, 25213), (159, 25246),

Gene: Vardy_33 Start: 28358, Stop: 29209, Start Num: 5

Candidate Starts for Vardy_33:

(Start: 5 @28358 has 58 MA's), (8, 28379), (15, 28412), (21, 28460), (23, 28475), (33, 28553), (44, 28622), (53, 28664), (54, 28667), (60, 28691), (69, 28727), (71, 28745), (72, 28748), (79, 28778), (96, 28838), (99, 28862), (104, 28883), (116, 28928), (141, 29066), (144, 29090), (152, 29129), (153, 29132), (154, 29135), (162, 29204),

Gene: Westerlin_28 Start: 26382, Stop: 27200, Start Num: 3

Candidate Starts for Westerlin_28:

(Start: 3 @26382 has 151 MA's), (10, 26424), (14, 26436), (18, 26460), (26, 26505), (33, 26577), (36, 26595), (43, 26637), (46, 26649), (70, 26745), (104, 26898), (129, 27000), (135, 27042), (140, 27069), (142, 27081), (152, 27135),

Gene: Wigberry_24 Start: 21045, Stop: 21869, Start Num: 3

Candidate Starts for Wigberry_24:

(Start: 3 @21045 has 151 MA's), (19, 21126), (26, 21168), (46, 21315), (50, 21333), (72, 21426), (77, 21441), (100, 21552), (111, 21591), (127, 21654), (157, 21831),

Gene: Xenomorph_21 Start: 21881, Stop: 22732, Start Num: 3

Candidate Starts for Xenomorph_21:

(Start: 3 @21881 has 151 MA's), (4, 21884), (26, 22013), (34, 22091), (72, 22283), (73, 22286), (94, 22364), (102, 22406), (119, 22472), (122, 22478), (129, 22517), (141, 22589), (142, 22598), (145, 22619), (156, 22688), (158, 22697), (159, 22700), (161, 22721),

Gene: YoshiYama_22 Start: 21912, Stop: 22763, Start Num: 3

Candidate Starts for YoshiYama_22:

(Start: 3 @21912 has 151 MA's), (26, 22044), (34, 22122), (73, 22317), (74, 22320), (84, 22365), (94, 22395), (122, 22509), (130, 22551), (144, 22644), (145, 22650), (147, 22656), (156, 22719), (159, 22731), (161, 22752),

Gene: Yotsuba_27 Start: 25155, Stop: 25982, Start Num: 3

Candidate Starts for Yotsuba_27:

(Start: 3 @25155 has 151 MA's), (22, 25272), (30, 25338), (45, 25431), (56, 25479), (61, 25494), (67, 25515), (72, 25548), (77, 25563), (78, 25569), (106, 25686), (161, 25971),

Gene: Zeina_27 Start: 23823, Stop: 24659, Start Num: 3

Candidate Starts for Zeina_27:

(Start: 3 @23823 has 151 MA's), (9, 23862), (17, 23892), (18, 23901), (35, 24030), (46, 24093), (51, 24114), (65, 24162), (69, 24183), (74, 24210), (121, 24414), (122, 24417), (137, 24504), (152, 24588), (154, 24594), (159, 24627),

Gene: Zeph_34 Start: 29107, Stop: 29958, Start Num: 5

Candidate Starts for Zeph_34:

(Start: 5 @29107 has 58 MA's), (8, 29128), (15, 29161), (21, 29209), (23, 29224), (33, 29302), (44, 29371), (53, 29413), (54, 29416), (60, 29440), (69, 29476), (71, 29494), (72, 29497), (79, 29527), (96,

29587), (99, 29611), (104, 29632), (116, 29677), (141, 29815), (144, 29839), (152, 29878), (154, 29884), (162, 29953),

Gene: Zippen_27 Start: 25049, Stop: 25867, Start Num: 3

Candidate Starts for Zippen_27:

(Start: 3 @25049 has 151 MA's), (4, 25052), (11, 25094), (18, 25127), (28, 25193), (33, 25244), (36, 25262), (43, 25304), (46, 25316), (59, 25367), (70, 25412), (76, 25439), (95, 25520), (122, 25634), (129, 25667), (152, 25802),