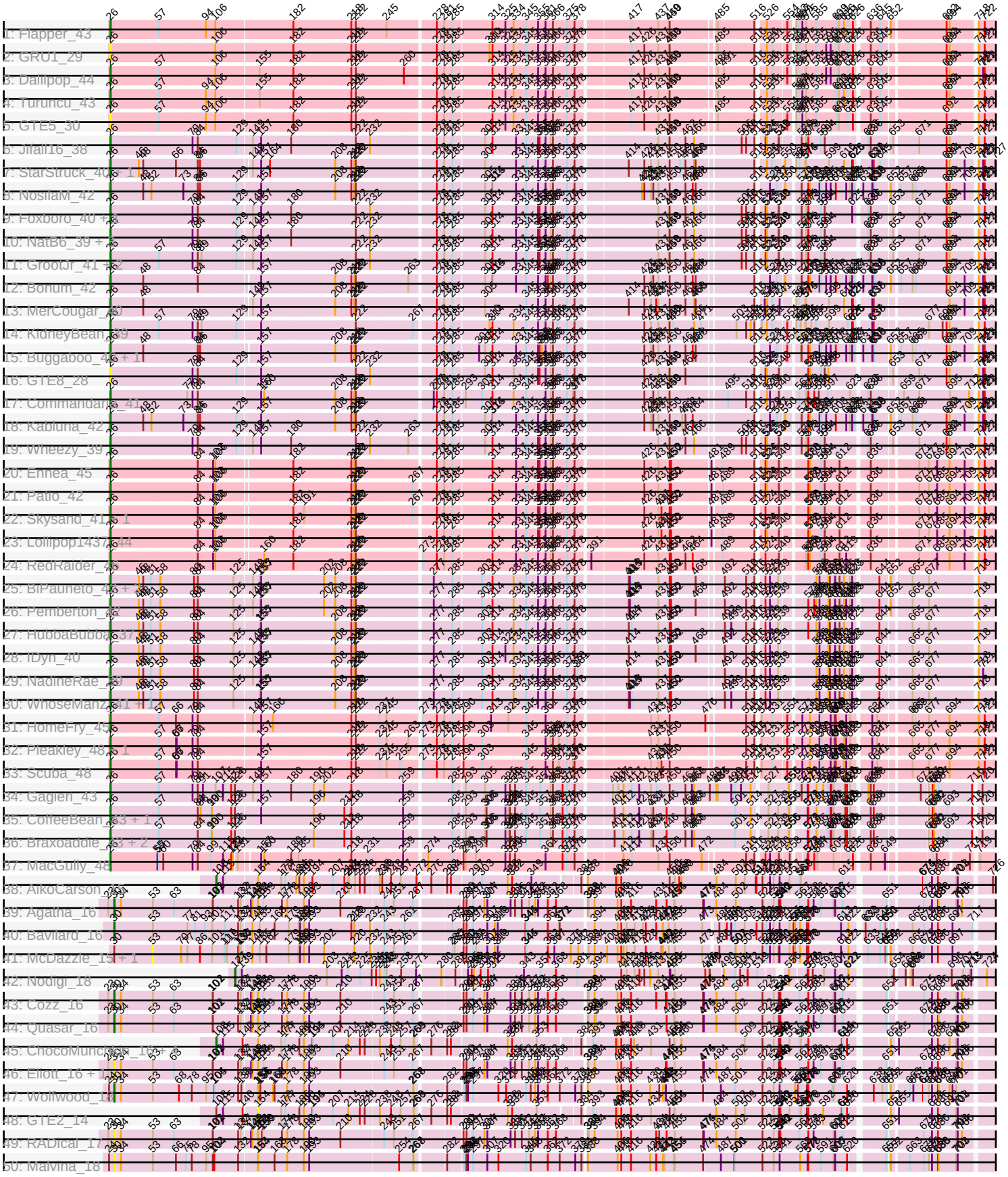
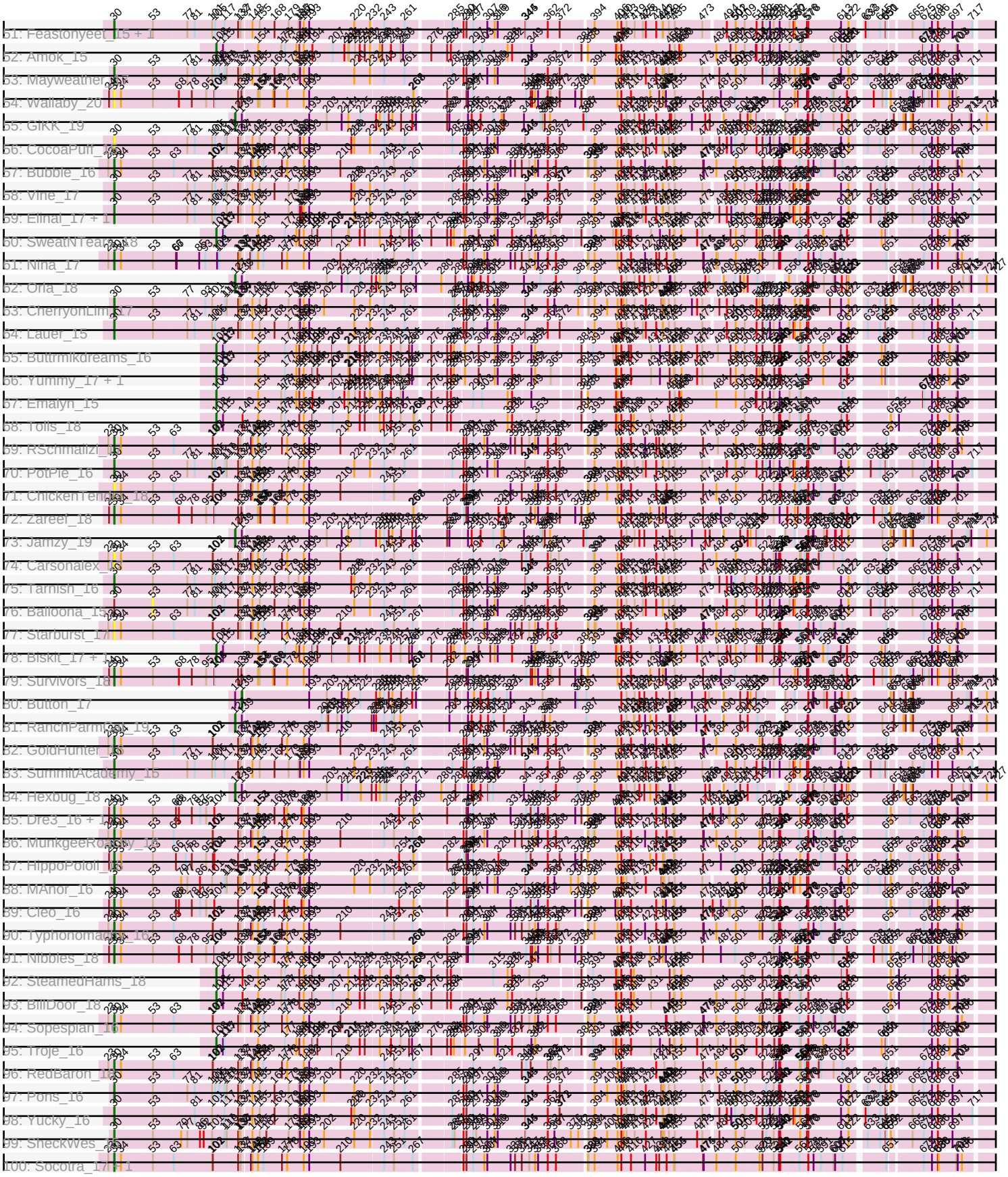
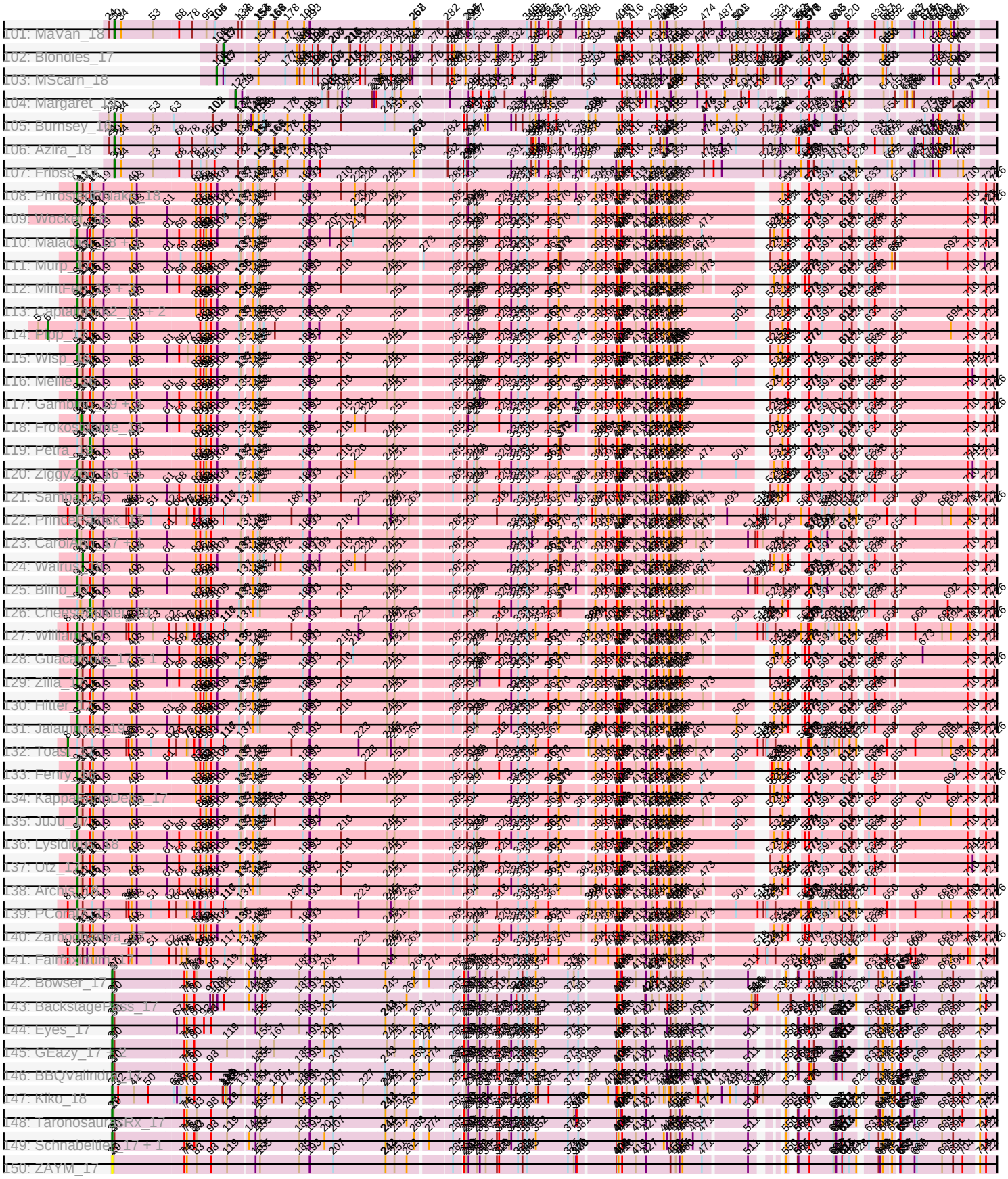
Zoomed Pham 347240



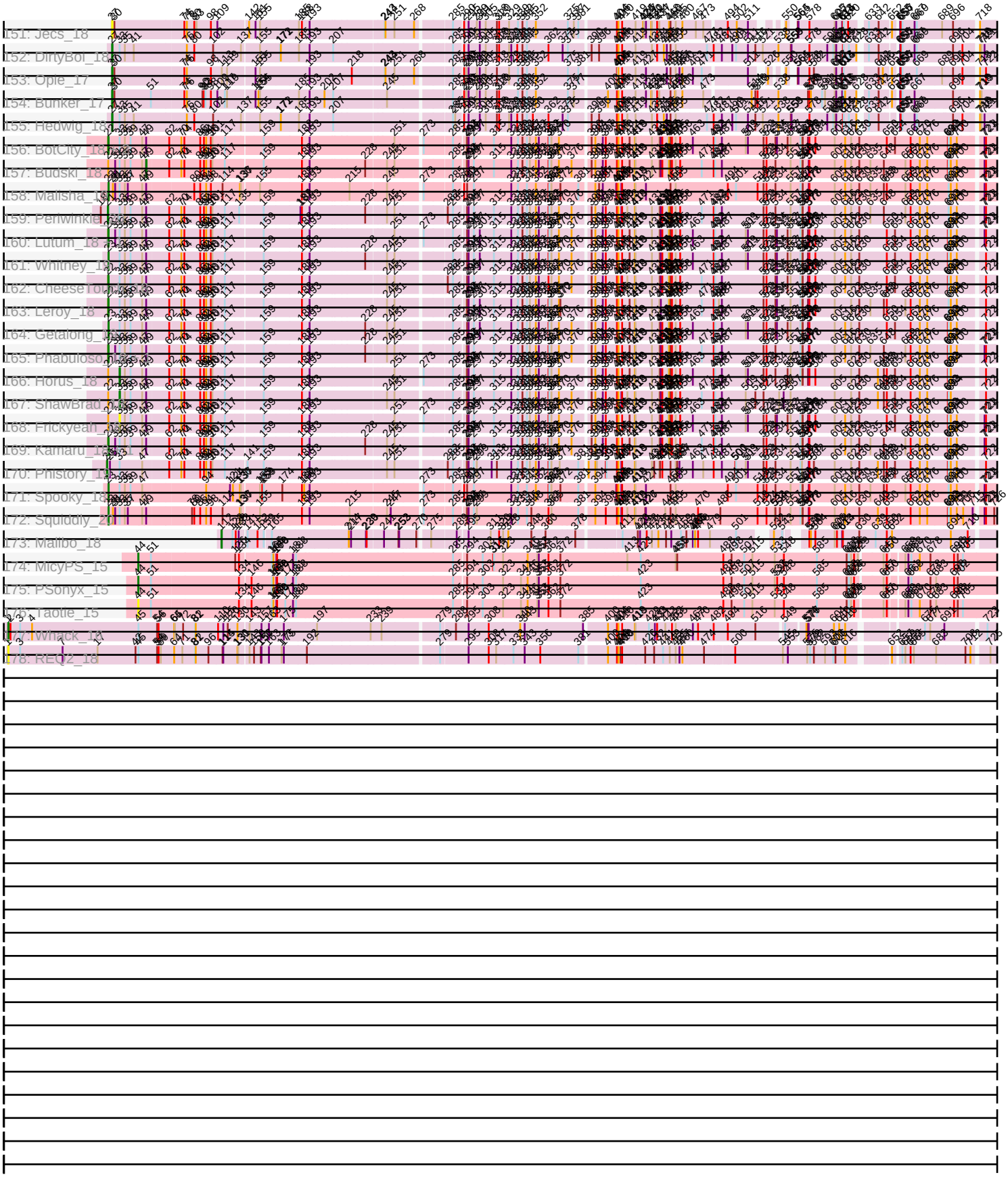
Zoomed Pham 347240



Zoomed Pham 347240



Zoomed Pham 347240



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 347240 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347240 has 226 members, 26 are drafts.

Phages represented in each track:
- Track 1 : Flapper_43
- Track 2 : GRU1_29
- Track 3 : Dalilpop_44
- Track 4 : Turuncu_43
- Track 5 : GTE5_30
- Track 6 : Jifall16_38
- Track 7 : StarStruck_40, Outis_40
- Track 8 : NosilaM_42
- Track 9 : Foxboro_40, Tracker_39
- Track 10 : NatB6_39, Kurt_39, Phomeo_38, Emianna_39
- Track 11 : GrootJr_41, Arti_39, NovumRegina_39
- Track 12 : Bonum_42
- Track 13 : MerCougar_40
- Track 14 : KidneyBean_39
- Track 15 : Buggaboo_40, SuperSulley_40
- Track 16 : GTE8_28
- Track 17 : Commandaria_41
- Track 18 : Kabluna_42
- Track 19 : Wheezy_39
- Track 20 : Ennea_45
- Track 21 : Patio_42
- Track 22 : Skysand_41, Float294_41
- Track 23 : Lollipop1437_44
- Track 24 : RedRaider_46
- Track 25 : BiPauneto_42, Yndexa_41, Sukkupi_41
- Track 26 : Pemberton_42
- Track 27 : HubbaBubba_37
- Track 28 : IDyn_40
- Track 29 : NadineRae_39
- Track 30 : WhoseManz_41, Marietta_41
- Track 31 : HomeFry_45
- Track 32 : Pleakley_48, Fury_48
- Track 33 : Scuba_48
- Track 34 : Gagieri_43
- Track 35 : CoffeeBean_43, Maselop_43
- Track 36 : Braxoaddie_43, Polyyuki_43, Apiary_43
- Track 37 : MacGully_48

• Track 38 : AikoCarson_15
• Track 39 : Agatha_16
• Track 40 : Bavilard_16
• Track 41 : McDazzle_15, ElJefes_15
• Track 42 : Nodigi_18
• Track 43 : Cozz_16
• Track 44 : Quasar_16
• Track 45 : ChocoMunchkin_16, CaramelLatte_16, AndPeggy_15, Yarn_15, CanesSauce_16
• Track 46 : Eliott_16, PsychoKiller_16
• Track 47 : Wolfwood_18
• Track 48 : GTE2_14
• Track 49 : RADical_17
• Track 50 : Malvina_18
• Track 51 : Feastonyeet_15, BigChungus_15
• Track 52 : Amok_15
• Track 53 : Mayweather_17
• Track 54 : Wallaby_20
• Track 55 : GiKK_19
• Track 56 : CocoaPuff_15
• Track 57 : Bubble_16
• Track 58 : Vine_17
• Track 59 : Elinal_17, KayGee_16
• Track 60 : SweatNTears_18
• Track 61 : Nina_17
• Track 62 : Orla_18
• Track 63 : CherryonLim_17
• Track 64 : Lauer_15
• Track 65 : Buttrmlkdreams_16
• Track 66 : Yummy_17, Horseradish_17
• Track 67 : Emalyn_15
• Track 68 : Tolls_18
• Track 69 : RSchmailzl_17
• Track 70 : PotPie_16
• Track 71 : ChickenTender_18
• Track 72 : Zareef_18
• Track 73 : Jamzy_19
• Track 74 : Carsonalex_17
• Track 75 : Tarnish_16
• Track 76 : Balloona_15
• Track 77 : Starburst_17
• Track 78 : Biskit_17, SketchMex_15
• Track 79 : Survivors_18
• Track 80 : Button_17
• Track 81 : RanchParmCat_19
• Track 82 : GoldHunter_16
• Track 83 : SummitAcademy_15
• Track 84 : Hexbug_18
• Track 85 : Dre3_16, Gibbous_16
• Track 86 : MunkgeeRoachy_16
• Track 87 : HippoPololi_18
• Track 88 : MAnor_16
• Track 89 : Cleo_16

• Track 90 : Typhonomachy_16
• Track 91 : Nibbles_18
• Track 92 : SteamedHams_18
• Track 93 : BillDoor_18
• Track 94 : Sopespian_16
• Track 95 : Troje_16
• Track 96 : RedBaron_18
• Track 97 : Pons_16
• Track 98 : Yucky_16
• Track 99 : SheckWes_15
• Track 100 : Socotra_17, Axym_16
• Track 101 : MaVan_18
• Track 102 : Blondies_17
• Track 103 : MScarn_18
• Track 104 : Margaret_19
• Track 105 : Burnsey_16
• Track 106 : Azira_18
• Track 107 : Fribs8_17
• Track 108 : PhrostedPhlake_18
• Track 109 : Wocket_18
• Track 110 : Malachai_18, Begonia_18
• Track 111 : Murp_17
• Track 112 : MintFen_17, BlingBling_17, Melba_17, Barco_17
• Track 113 : CaptainKirk2_17, Delian_17, UmaThurman_17
• Track 114 : Pipp_17
• Track 115 : Wisp_16
• Track 116 : Mellie_16
• Track 117 : Gambino_19, Blueberry_19, Azula_19, MissRona_19
• Track 118 : Frokostdame_17
• Track 119 : Petra_19
• Track 120 : ZiggyZoo_16, Obliviate_16
• Track 121 : Samba_17
• Track 122 : PrincePatrick_17
• Track 123 : CarolAnn_17, Soilmate_17
• Track 124 : Walrus_18
• Track 125 : Blino_17
• Track 126 : CheeseSpider_19
• Track 127 : William_17
• Track 128 : Guacamole_17, JasperJr_17
• Track 129 : Zilla_17
• Track 130 : Hitter_17
• Track 131 : Jalammah_19
• Track 132 : Toast_17
• Track 133 : Fenry_16
• Track 134 : KappaFarmDelta_17
• Track 135 : JuJu_17
• Track 136 : Lysidious_18
• Track 137 : Utz_17
• Track 138 : Archis_18
• Track 139 : PCoral7_17
• Track 140 : Zarbodnamra_17
• Track 141 : Fairfaxidum_17
• Track 142 : Bowser_17

• Track 143 : BackstagePass_17
• Track 144 : Eyes_17
• Track 145 : GEazy_17, HannahD_17, NaLuna_17
• Track 146 : BBQValindra_17
• Track 147 : Kiko_18
• Track 148 : TaronosaurasRx_17
• Track 149 : Schnabeltier_17, MagicMan_17
• Track 150 : ZAYM_17
• Track 151 : Jecs_18
• Track 152 : DirtyBoi_18
• Track 153 : Opie_17
• Track 154 : Bunker_17
• Track 155 : Hedwig_18
• Track 156 : BotCity_18, Asapag_18, BENtherdunthat_18
• Track 157 : Budski_18
• Track 158 : Malisha_19
• Track 159 : Periwinkle_20
• Track 160 : Lutum_18, Kenna_17
• Track 161 : Whitney_19
• Track 162 : CheeseTouch_18
• Track 163 : Leroy_18
• Track 164 : Getalong_19
• Track 165 : Phabuloso_18, LitninMcQueen_18
• Track 166 : Horus_18
• Track 167 : ShawBrad_18
• Track 168 : Frickyeah_18
• Track 169 : Kamaru_18, Holliday_18
• Track 170 : Phistory_19
• Track 171 : Spooky_18
• Track 172 : Squiddly_20
• Track 173 : Malibo_18
• Track 174 : MicyPS_15
• Track 175 : PSonyx_15
• Track 176 : Taotie_15
• Track 177 : Whack_16
• Track 178 : REQ2_18

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

The start number called the most often in the published annotations is 26, it was called in 50 of the 200 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apiary_43, Arti_39, BiPauneto_42, Bonum_42, Braxoaddie_43, Buggaboo_40, CoffeeBean_43, Commandaria_41, Dalilpop_44, Emianna_39, Ennea_45, Flapper_43, Float294_41, Foxboro_40, Fury_48, GRU1_29, GTE5_30, GTE8_28, Gagieri_43, GrootJr_41, HomeFry_45, HubbaBubba_37, IDyn_40, Jifall16_38, Kabluna_42, KidneyBean_39, Kurt_39, Lollipop1437_44, MacGully_48, Marietta_41, Maselop_43, MerCougar_40, NadineRae_39, NatB6_39, NosilaM_42, NovumRegina_39, Outis_40, Patio_42, Pemberton_42, Phomeo_38, Pleakley_48,

Polyyuki_43, RedRaider_46, Scuba_48, Skysand_41, StarStruck_40, Sukkupi_41, SuperSulley_40, Tracker_39, Turuncu_43, Wheezy_39, WhoseManz_41, Yndexa_41,

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

Genes that do not have the "Most Annotated" start:
• Agatha_16, AikoCarson_15, Amok_15, AndPeggy_15, Archis_18, Asapag_18, Axym_16, Azira_18, Azula_19, BBQValindra_17, BENtherdunthat_18, BackstagePass_17, Balloona_15, Barco_17, Bavilard_16, Begonia_18, BigChungus_15, BillDoor_18, Biskit_17, BlingBling_17, Blino_17, Blondies_17, Blueberry_19, BotCity_18, Bowser_17, Bubble_16, Budski_18, Bunker_17, Burnsey_16, Button_17, Buttrmlkdreams_16, CanesSauce_16, CaptainKirk2_17, CaramelLatte_16, CarolAnn_17, Carsonalex_17, CheeseSpider_19, CheeseTouch_18, CherryonLim_17, ChickenTender_18, ChocoMunchkin_16, Cleo_16, CocoaPuff_15, Cozz_16, Delian_17, DirtyBoi_18, Dre3_16, ElJefes_15, Elinal_17, Eliott_16, Emalyn_15, Eyes_17, Fairfaxidum_17, Feastonyeet_15, Fenry_16, Fribs8_17, Frickyeah_18, Frokostdame_17, GEazy_17, GTE2_14, Gambino_19, Getalong_19, GiKK_19, Gibbous_16, GoldHunter_16, Guacamole_17, HannahD_17, Hedwig_18, Hexbug_18, HippoPololi_18, Hitter_17, Holliday_18, Horseradish_17, Horus_18, Jalammah_19, Jamzy_19, JasperJr_17, Jecs_18, JuJu_17, Kamaru_18, KappaFarmDelta_17, KayGee_16, Kenna_17, Kiko_18, Lauer_15, Leroy_18, LitninMcQueen_18, Lutum_18, Lysidious_18, MAnor_16, MScarn_18, MaVan_18, MagicMan_17, Malachai_18, Malibo_18, Malisha_19, Malvina_18, Margaret_19, Mayweather_17, McDazzle_15, Melba_17, Mellie_16, MicyPS_15, MintFen_17, MissRona_19, MunkgeeRoachy_16, Murp_17, NaLuna_17, Nibbles_18, Nina_17, Nodigi_18, Obliviate_16, Opie_17, Orla_18, PCoral7_17, PSonyx_15, Periwinkle_20, Petra_19, Phabuloso_18, Phistory_19, PhrostedPhlake_18, Pipp_17, Pons_16, PotPie_16, PrincePatrick_17, PsychoKiller_16, Quasar_16, RADical_17, REQ2_18, RSchmailzl_17, RanchParmCat_19, RedBaron_18, Samba_17, Schnabeltier_17, ShawBrad_18, SheckWes_15, SketchMex_15, Socotra_17, Soilmate_17, Sopespian_16, Spooky_18, Squiddly_20, Starburst_17, SteamedHams_18, SummitAcademy_15, Survivors_18, SweatNTears_18, Taotie_15, Tarnish_16, TaronosaurasRx_17, Toast_17, Tolls_18, Troje_16, Typhonomachy_16, UmaThurman_17, Utz_17, Vine_17, Wallaby_20, Walrus_18, Whack_16, Whitney_19, William_17, Wisp_16, Wocket_18, Wolfwood_18, Yarn_15, Yucky_16, Yummy_17, ZAYM_17, Zarbodnamra_17, Zareef_18, ZiggyZoo_16, Zilla_17,

Summary by start number:

Start 1:
• Found in 2 of 226 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: REQ2_18 (singleton), Whack_16 (singleton),

Start 6:
• Found in 1 of 226 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Pipp_17 (CV),

Start 8:
• Found in 5 of 226 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Toast_17 (CV),

Start 9:
• Found in 46 of 226 (20.4%) of genes in pham
• Manual Annotations of this start: 39 of 200
• Called 87.0% of time when present
• Phage (with cluster) where this start called: Archis_18 (CV), Azula_19 (CV), Barco_17 (CV), Begonia_18 (CV), BlingBling_17 (CV), Blino_17 (CV), Blueberry_19 (CV), CaptainKirk2_17 (CV), CarolAnn_17 (CV), Delian_17 (CV), Fairfaxidum_17 (CV), Fenry_16 (CV), Gambino_19 (CV), Guacamole_17 (CV), Hitter_17 (CV), Jalammah_19 (CV), JasperJr_17 (CV), JuJu_17 (CV), KappaFarmDelta_17 (CV), Lysidious_18 (CV), Malachai_18 (CV), Melba_17 (CV), Mellie_16 (CV), MintFen_17 (CV), MissRona_19 (CV), Murp_17 (CV), Obliviate_16 (CV), PCoral7_17 (CV), PhrostedPhlake_18 (CV), PrincePatrick_17 (CV), Samba_17 (CV), Soilmate_17 (CV), UmaThurman_17 (CV), Utz_17 (CV), William_17 (CV), Wisp_16 (CV), Wocket_18 (CV), Zarbodnamra_17 (CV), ZiggyZoo_16 (CV), Zilla_17 (CV),

Start 11:
• Found in 37 of 226 (16.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 2.7% of time when present
• Phage (with cluster) where this start called: Frokostdame_17 (CV),

Start 12:
• Found in 37 of 226 (16.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 2.7% of time when present
• Phage (with cluster) where this start called: Walrus_18 (CV),

Start 14:
• Found in 41 of 226 (18.1%) of genes in pham
• Manual Annotations of this start: 2 of 200
• Called 4.9% of time when present
• Phage (with cluster) where this start called: CheeseSpider_19 (CV), Petra_19 (CV),

Start 20:
• Found in 1 of 226 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phistory_19 (DN1),

Start 21:
• Found in 1 of 226 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Periwinkle_20 (DN1),

Start 22:
• Found in 15 of 226 (6.6%) of genes in pham
• Manual Annotations of this start: 11 of 200
• Called 73.3% of time when present
• Phage (with cluster) where this start called: Asapag_18 (DN1), BENtherdunthat_18 (DN1), BotCity_18 (DN), CheeseTouch_18 (DN1), Holliday_18 (DN1), Kamaru_18 (DN1), Kenna_17 (DN1), Leroy_18 (DN1), LitninMcQueen_18 (DN1), Lutum_18 (DN1), Phabuloso_18 (DN1),

Start 23:
• Found in 24 of 226 (10.6%) of genes in pham
• Manual Annotations of this start: 5 of 200
• Called 20.8% of time when present
• Phage (with cluster) where this start called: Getalong_19 (DN1), Malisha_19 (DN), Spooky_18 (DN2), Squiddly_20 (DN2), Whitney_19 (DN1),

Start 26:
• Found in 53 of 226 (23.5%) of genes in pham
• Manual Annotations of this start: 50 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apiary_43 (CR6), Arti_39 (CR2), BiPauneto_42 (CR4), Bonum_42 (CR2), Braxoaddie_43 (CR6), Buggaboo_40 (CR2), CoffeeBean_43 (CR6), Commandaria_41 (CR2), Dalilpop_44 (CR1), Emianna_39 (CR2), Ennea_45 (CR3), Flapper_43 (CR1), Float294_41 (CR3), Foxboro_40 (CR2), Fury_48 (CR5), GRU1_29 (CR1), GTE5_30 (CR1), GTE8_28 (CR2), Gagieri_43 (CR6), GrootJr_41 (CR2), HomeFry_45 (CR5), HubbaBubba_37 (CR4), IDyn_40 (CR4), Jifall16_38 (CR2), Kabluna_42 (CR2), KidneyBean_39 (CR2), Kurt_39 (CR2), Lollipop1437_44 (CR3), MacGully_48 (CR7), Marietta_41 (CR4), Maselop_43 (CR6), MerCougar_40 (CR2), NadineRae_39 (CR4), NatB6_39 (CR2), NosilaM_42 (CR2), NovumRegina_39 (CR2), Outis_40 (CR2), Patio_42 (CR3), Pemberton_42 (CR4), Phomeo_38 (CR2), Pleakley_48 (CR5), Polyyuki_43 (CR6), RedRaider_46 (CR3), Scuba_48 (CR5), Skysand_41 (CR3), StarStruck_40 (CR2), Sukkupi_41 (CR4), SuperSulley_40 (CR2), Tracker_39 (CR2), Turuncu_43 (CR1), Wheezy_39 (CR2), WhoseManz_41 (CR4), Yndexa_41 (CR4),

Start 27:
• Found in 17 of 226 (7.5%) of genes in pham
• Manual Annotations of this start: 14 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BBQValindra_17 (DB), BackstagePass_17 (DB), Bowser_17 (DB), Bunker_17 (DB), DirtyBoi_18 (DB), Eyes_17 (DB), GEazy_17 (DB), HannahD_17 (DB), Hedwig_18 (DB), Jecs_18 (DB), Kiko_18 (DB), MagicMan_17 (DB), NaLuna_17 (DB), Opie_17 (DB), Schnabeltier_17 (DB), TaronosaurasRx_17 (DB), ZAYM_17 (DB),

Start 30:
• Found in 65 of 226 (28.8%) of genes in pham
• Manual Annotations of this start: 41 of 200
• Called 76.9% of time when present
• Phage (with cluster) where this start called: Agatha_16 (CT), Axym_16 (CT), Azira_18 (CT), Bavilard_16 (CT), BigChungus_15 (CT), Bubble_16 (CT), Burnsey_16 (CT), Carsonalex_17 (CT), CherryonLim_17 (CT), ChickenTender_18 (CT), Cleo_16 (CT), CocoaPuff_15 (CT), Cozz_16 (CT), Dre3_16 (CT), Elinal_17 (CT), Eliott_16

(CT), Feastonyeet_15 (CT), Fribs8_17 (CT), Gibbous_16 (CT), GoldHunter_16 (CT), HippoPololi_18 (CT), KayGee_16 (CT), Lauer_15 (CT), MAnor_16 (CT), MaVan_18 (CT), Malvina_18 (CT), Mayweather_17 (CT), MunkgeeRoachy_16 (CT), Nibbles_18 (CT), Nina_17 (CT), Pons_16 (CT), PotPie_16 (CT), PsychoKiller_16 (CT), Quasar_16 (CT), RADical_17 (CT), RSchmailzl_17 (CT), RedBaron_18 (CT), SheckWes_15 (CT), Socotra_17 (CT), Sopespian_16 (CT), Starburst_17 (CT), SummitAcademy_15 (CT), Survivors_18 (CT), Tarnish_16 (CT), Typhonomachy_16 (CT), Vine_17 (CT), Wallaby_20 (CT), Wolfwood_18 (CT), Yucky_16 (CT), Zareef_18 (CT),

Start 33:
• Found in 24 of 226 (10.6%) of genes in pham
• Manual Annotations of this start: 2 of 200
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Frickyeah_18 (DN1), Horus_18 (DN1), ShawBrad_18 (DN1),

Start 44:
• Found in 3 of 226 (1.3%) of genes in pham
• Manual Annotations of this start: 2 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MicyPS_15 (EQ), PSonyx_15 (EQ), Taotie_15 (EQ),

Start 49:
• Found in 20 of 226 (8.8%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 5.0% of time when present
• Phage (with cluster) where this start called: Budski_18 (DN),

Start 53:
• Found in 54 of 226 (23.9%) of genes in pham
• No Manual Annotations of this start.
• Called 5.6% of time when present
• Phage (with cluster) where this start called: Balloona_15 (CT), ElJefes_15 (CT), McDazzle_15 (CT),

Start 108:
• Found in 21 of 226 (9.3%) of genes in pham
• Manual Annotations of this start: 16 of 200
• Called 90.5% of time when present
• Phage (with cluster) where this start called: AikoCarson_15 (CT), Amok_15 (CT), AndPeggy_15 (CT), BillDoor_18 (CT), Biskit_17 (CT), Buttrmlkdreams_16 (CT), CanesSauce_16 (CT), CaramelLatte_16 (CT), ChocoMunchkin_16 (CT), Emalyn_15 (CT), Horseradish_17 (CT), MScarn_18 (CT), SketchMex_15 (CT), SteamedHams_18 (CT), SweatNTears_18 (CT), Tolls_18 (CT), Troje_16 (CT), Yarn_15 (CT), Yummy_17 (CT),

Start 112:
• Found in 1 of 226 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Malibo_18 (DW),

Start 115:
• Found in 24 of 226 (10.6%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 4.2% of time when present
• Phage (with cluster) where this start called: Blondies_17 (CT),

Start 127:
• Found in 8 of 226 (3.5%) of genes in pham
• Manual Annotations of this start: 7 of 200
• Called 87.5% of time when present
• Phage (with cluster) where this start called: GiKK_19 (CT), Hexbug_18 (CT), Jamzy_19 (CT), Margaret_19 (CT), Nodigi_18 (CT), Orla_18 (CT), RanchParmCat_19 (CT),

Start 139:
• Found in 8 of 226 (3.5%) of genes in pham
• Manual Annotations of this start: 1 of 200
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Button_17 (CT),

Start 154:
• Found in 56 of 226 (24.8%) of genes in pham
• No Manual Annotations of this start.
• Called 1.8% of time when present
• Phage (with cluster) where this start called: GTE2_14 (CT),

Summary by clusters:

There are 16 clusters represented in this pham: CR2, CR3, DN, CR1, CR6, CR7, CR4, CR5, DB, singleton, DN1, DN2, DW, EQ, CV, CT,

Info for manual annotations of cluster CR1:
•Start number 26 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 26 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 26 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 26 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 26 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 26 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 26 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CT:
•Start number 30 was manually annotated 41 times for cluster CT.
•Start number 108 was manually annotated 16 times for cluster CT.
•Start number 115 was manually annotated 1 time for cluster CT.
•Start number 127 was manually annotated 7 times for cluster CT.
•Start number 139 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster CV:
•Start number 6 was manually annotated 1 time for cluster CV.
•Start number 8 was manually annotated 1 time for cluster CV.
•Start number 9 was manually annotated 39 times for cluster CV.
•Start number 11 was manually annotated 1 time for cluster CV.
•Start number 12 was manually annotated 1 time for cluster CV.
•Start number 14 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster DB:
•Start number 27 was manually annotated 14 times for cluster DB.

Info for manual annotations of cluster DN:
•Start number 22 was manually annotated 1 time for cluster DN.
•Start number 23 was manually annotated 1 time for cluster DN.
•Start number 49 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 20 was manually annotated 1 time for cluster DN1.
•Start number 21 was manually annotated 1 time for cluster DN1.
•Start number 22 was manually annotated 10 times for cluster DN1.
•Start number 23 was manually annotated 2 times for cluster DN1.
•Start number 33 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 23 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DW:
•Start number 112 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster EQ:
•Start number 44 was manually annotated 2 times for cluster EQ.

Gene Information:

Gene: Agatha_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Agatha_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (434, 11663), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567,

12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (688, 12698), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: AikoCarson_15 Start: 9357, Stop: 14072, Start Num: 108
Candidate Starts for AikoCarson_15:
(Start: 108 @9357 has 16 MA's), (Start: 115 @9384 has 1 MA's), (154, 9513), (173, 9600), (177, 9615), (184, 9660), (186, 9672), (190, 9690), (194, 9717), (207, 9789), (212, 9831), (214, 9846), (215, 9849), (221, 9873), (224, 9891), (228, 9909), (238, 9954), (240, 9963), (248, 9990), (257, 10023), (272, 10083), (276, 10122), (282, 10161), (284, 10176), (297, 10245), (303, 10272), (328, 10368), (332, 10386), (349, 10449), (384, 10617), (388, 10623), (404, 10737), (406, 10743), (410, 10758), (450, 10947), (455, 10968), (458, 10986), (460, 10995), (484, 11130), (502, 11205), (509, 11241), (517, 11280), (518, 11283), (522, 11307), (529, 11337), (533, 11352), (541, 11376), (557, 11415), (567, 11454), (569, 11460), (615, 11619), (674, 11868), (675, 11871), (679, 11904), (686, 11925), (701, 11994), (703, 12000), (726, 12099), (743, 12144), (764, 12231), (807, 12366), (859, 12558), (880, 12627), (881, 12651), (918, 12792), (972, 13005), (978, 13026), (995, 13083), (1069, 13386), (1079, 13443), (1085, 13461), (1108, 13527), (1120, 13599), (1130, 13650), (1138, 13674), (1139, 13680), (1141, 13689), (1149, 13719), (1165, 13785), (1170, 13833), (1180, 13893), (1200, 13983), (1213, 14043),

Gene: Amok_15 Start: 9357, Stop: 14069, Start Num: 108
Candidate Starts for Amok_15:
(Start: 108 @9357 has 16 MA's), (Start: 115 @9384 has 1 MA's), (154, 9513), (173, 9600), (177, 9615), (184, 9660), (186, 9672), (190, 9690), (194, 9717), (207, 9789), (212, 9831), (214, 9846), (215, 9849), (221, 9873), (224, 9891), (228, 9909), (232, 9930), (238, 9954), (240, 9963), (248, 9990), (257, 10023), (259, 10032), (276, 10122), (282, 10161), (284, 10176), (297, 10245), (303, 10272), (328, 10368), (332, 10386), (349, 10449), (384, 10617), (388, 10623), (404, 10737), (406, 10743), (410, 10758), (450, 10947), (455, 10968), (458, 10986), (460, 10995), (484, 11130), (498, 11184), (502, 11205), (509, 11241), (517, 11280), (518, 11283), (522, 11307), (529, 11337), (533, 11352), (541, 11376), (557, 11415), (567, 11454), (569, 11460), (605, 11586), (614, 11616), (615, 11619), (620, 11637), (621, 11640), (674, 11868), (675, 11871), (679, 11904), (686, 11925), (701, 11994), (703, 12000), (764, 12231), (807, 12366), (859, 12558), (880, 12627), (881, 12651), (918, 12792), (972, 13005), (978, 13026), (995, 13080), (1069, 13383), (1079, 13440), (1085, 13458), (1108, 13524), (1120, 13596), (1130, 13647), (1139, 13677), (1141, 13686), (1149, 13716), (1165, 13782), (1170, 13830), (1180, 13890), (1200, 13980), (1213, 14040),

Gene: AndPeggy_15 Start: 9645, Stop: 14432, Start Num: 108
Candidate Starts for AndPeggy_15:
(Start: 108 @9645 has 16 MA's), (Start: 115 @9672 has 1 MA's), (140, 9750), (154, 9801), (173, 9888), (177, 9903), (186, 9960), (190, 9978), (194, 10005), (195, 10008), (207, 10077), (214, 10134), (224, 10179), (228, 10197), (238, 10242), (248, 10278), (257, 10311), (268, 10359), (269, 10362), (276, 10410), (282, 10449), (284, 10464), (328, 10656), (332, 10674), (353, 10758), (384, 10905), (393, 10932), (404, 11025), (406, 11031), (410, 11046), (416, 11085), (418, 11097), (431, 11163), (450, 11235), (454, 11253), (455, 11256), (460, 11283), (509, 11529), (522, 11595), (533, 11640), (540, 11661), (541, 11664), (542, 11667), (557, 11703), (567, 11742), (569, 11748), (578, 11775), (614, 11904), (615, 11907), (620, 11925), (652, 12048), (655, 12063), (679, 12192), (686, 12213), (694, 12255), (701, 12282), (703, 12288), (738, 12420), (743, 12432), (764, 12519), (779, 12561), (793, 12597), (828, 12723), (836, 12762), (872, 12891), (882, 12948), (893, 12990), (918, 13083), (940, 13158), (953, 13221), (972, 13302), (978, 13323), (1012, 13500), (1014, 13506), (1065, 13725), (1079, 13803), (1085, 13821), (1090, 13827), (1108, 13887), (1111, 13905), (1118, 13938), (1130, 14010),

(1141, 14049), (1149, 14079), (1165, 14145), (1170, 14193), (1180, 14253), (1200, 14343), (1213, 14403),

Gene: Apiary_43 Start: 25209, Stop: 30419, Start Num: 26
Candidate Starts for Apiary_43:
(Start: 26 @25209 has 50 MA's), (57, 25401), (84, 25557), (99, 25611), (100, 25614), (122, 25692), (126, 25707), (196, 25998), (212, 26118), (218, 26145), (259, 26343), (285, 26520), (293, 26562), (305, 26640), (306, 26646), (325, 26718), (329, 26730), (330, 26736), (336, 26757), (345, 26796), (357, 26853), (365, 26895), (366, 26904), (374, 26937), (375, 26955), (378, 26985), (402, 27111), (412, 27144), (417, 27177), (421, 27207), (431, 27255), (432, 27264), (446, 27318), (462, 27390), (463, 27411), (466, 27420), (501, 27576), (514, 27627), (527, 27675), (539, 27708), (555, 27747), (556, 27750), (577, 27801), (578, 27804), (586, 27837), (597, 27879), (601, 27891), (602, 27894), (605, 27903), (617, 27945), (618, 27948), (620, 27954), (623, 27966), (636, 28020), (638, 28032), (677, 28209), (680, 28218), (682, 28221), (693, 28266), (716, 28356), (720, 28374), (765, 28539), (772, 28569), (775, 28584), (816, 28740), (821, 28752), (827, 28776), (840, 28830), (850, 28863), (857, 28908), (881, 29001), (883, 29010), (885, 29022), (886, 29031), (890, 29052), (891, 29055), (910, 29127), (911, 29130), (917, 29151), (926, 29193), (965, 29343), (984, 29376), (988, 29385), (1046, 29622), (1055, 29667), (1068, 29733), (1071, 29739), (1075, 29760), (1076, 29769), (1081, 29790), (1091, 29811), (1105, 29856), (1136, 29997), (1178, 30186), (1182, 30219), (1203, 30321), (1207, 30333), (1212, 30360),

Gene: Archis_18 Start: 10485, Stop: 16007, Start Num: 9
Candidate Starts for Archis_18:
(Start: 9 @10485 has 39 MA's), (Start: 11 @10500 has 1 MA's), (Start: 12 @10506 has 1 MA's), (Start: 14 @10536 has 2 MA's), (15, 10545), (16, 10548), (19, 10590), (40, 10701), (43, 10722), (61, 10842), (68, 10884), (82, 10950), (86, 10968), (93, 10989), (94, 10992), (98, 11010), (109, 11034), (135, 11118), (137, 11124), (148, 11160), (153, 11175), (155, 11184), (189, 11352), (193, 11379), (210, 11496), (245, 11667), (251, 11697), (285, 11901), (294, 11946), (297, 11973), (299, 11985), (320, 12075), (331, 12120), (339, 12147), (345, 12177), (362, 12264), (363, 12267), (370, 12306), (383, 12390), (394, 12426), (398, 12468), (404, 12513), (406, 12519), (409, 12531), (410, 12534), (419, 12588), (427, 12627), (430, 12648), (431, 12651), (434, 12669), (437, 12678), (442, 12696), (448, 12717), (450, 12723), (455, 12744), (460, 12771), (473, 12849), (532, 13038), (544, 13062), (552, 13074), (554, 13077), (572, 13092), (577, 13107), (578, 13110), (591, 13161), (614, 13242), (615, 13245), (624, 13278), (633, 13308), (638, 13332), (710, 13665), (722, 13713), (728, 13758), (729, 13761), (733, 13776), (746, 13821), (747, 13830), (748, 13839), (757, 13890), (776, 13962), (786, 13980), (791, 14001), (813, 14100), (814, 14103), (822, 14136), (839, 14202), (843, 14220), (847, 14235), (853, 14268), (867, 14319), (877, 14370), (884, 14418), (927, 14613), (928, 14616), (946, 14688), (948, 14691), (961, 14757), (962, 14760), (966, 14778), (985, 14838), (1001, 14895), (1003, 14913), (1021, 14994), (1022, 14997), (1026, 15012), (1062, 15171), (1075, 15225), (1088, 15291), (1104, 15345), (1106, 15357), (1108, 15363), (1113, 15393), (1130, 15486), (1138, 15510), (1142, 15528), (1149, 15552), (1151, 15558), (1157, 15579), (1165, 15618), (1185, 15759), (1199, 15822), (1202, 15840), (1215, 15897), (1227, 15990),

Gene: Arti_39 Start: 23467, Stop: 28866, Start Num: 26
Candidate Starts for Arti_39:
(Start: 26 @23467 has 50 MA's), (57, 23659), (79, 23794), (84, 23815), (89, 23830), (129, 23959), (149, 24010), (157, 24043), (222, 24412), (232, 24469), (278, 24706), (281, 24736), (285, 24769), (305, 24889), (314, 24919), (337, 25009), (345, 25045), (355, 25093), (356, 25099), (361, 25123), (365, 25144), (366, 25153), (375, 25204), (378, 25234), (437, 25534), (449, 25576), (450, 25579), (462, 25639), (466, 25669), (506, 25807), (510, 25825), (516, 25852), (524, 25873), (526, 25879), (539, 25918), (540, 25921), (570, 25981), (575, 25993), (578, 26002), (591, 26053), (594, 26068), (633, 26206), (636, 26218), (653, 26293), (671, 26380), (692, 26485), (694, 26497), (718, 26590), (722, 26614), (729, 26662), (733, 26677), (742, 26698), (746, 26722), (747, 26731), (750, 26740),

(752, 26746), (758, 26782), (763, 26809), (791, 26902), (814, 27010), (826, 27061), (831, 27085), (839, 27112), (846, 27145), (853, 27178), (867, 27235), (873, 27262), (877, 27277), (885, 27334), (898, 27400), (919, 27484), (946, 27592), (948, 27595), (953, 27625), (1125, 28399), (1140, 28438), (1161, 28525), (1178, 28633), (1191, 28720), (1197, 28744), (1203, 28768), (1210, 28798), (1212, 28807),

Gene: Asapag_18 Start: 9881, Stop: 15508, Start Num: 22
Candidate Starts for Asapag_18:
(Start: 22 @9881 has 11 MA's), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94, 10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (293, 11210), (294, 11213), (295, 11219), (297, 11240), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (535, 12404), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (616, 12668), (623, 12692), (630, 12725), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692, 13076), (693, 13079), (694, 13088), (700, 13112), (721, 13193), (722, 13199), (728, 13244), (729, 13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (790, 13484), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (915, 14027), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (969, 14261), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14858), (1113, 14945), (1117, 14972), (1118, 14975), (1128, 15050), (1135, 15074), (1147, 15113), (1157, 15149), (1160, 15170), (1172, 15257), (1179, 15299), (1185, 15332), (1187, 15344), (1205, 15422), (1219, 15488),

Gene: Axym_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Axym_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (427, 11621), (434, 11663), (438, 11675), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (520, 12065), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (688, 12698), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1121, 14300), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: Azira_18 Start: 10619, Stop: 15748, Start Num: 30
Candidate Starts for Azira_18:
(24, 10598), (Start: 30 @10619 has 41 MA's), (34, 10646), (53, 10775), (68, 10871), (78, 10922), (95, 10979), (104, 11012), (105, 11015), (132, 11102), (138, 11114), (153, 11162), (154, 11165), (155, 11171), (166, 11225), (168, 11231), (178, 11279), (190, 11345), (193, 11366), (267, 11759), (268, 11762), (282, 11864), (294, 11930), (295, 11936), (297, 11957), (345, 12161), (348, 12179), (350,

12185), (352, 12197), (355, 12209), (362, 12248), (365, 12260), (372, 12296), (379, 12353), (384, 12377), (388, 12383), (406, 12503), (410, 12518), (416, 12557), (430, 12632), (438, 12665), (442, 12680), (443, 12686), (445, 12692), (455, 12728), (474, 12836), (487, 12908), (501, 12962), (522, 13067), (533, 13112), (541, 13136), (562, 13196), (566, 13208), (567, 13214), (576, 13241), (577, 13244), (578, 13247), (603, 13340), (605, 13346), (620, 13397), (638, 13466), (647, 13499), (651, 13514), (652, 13520), (663, 13577), (667, 13589), (674, 13628), (675, 13631), (677, 13652), (679, 13664), (686, 13685), (688, 13688), (694, 13727), (697, 13739), (701, 13754), (740, 13895), (764, 13991), (790, 14057), (795, 14078), (798, 14084), (859, 14321), (869, 14351), (880, 14390), (909, 14525), (916, 14555), (923, 14576), (965, 14735), (972, 14768), (1033, 14981), (1044, 14999), (1047, 15005), (1085, 15134), (1108, 15200), (1118, 15251), (1130, 15323), (1141, 15362), (1149, 15392), (1158, 15425), (1165, 15458), (1175, 15530), (1186, 15602), (1199, 15656), (1201, 15662), (1213, 15719),

Gene: Azula_19 Start: 10619, Stop: 16108, Start Num: 9
Candidate Starts for Azula_19:
(Start: 9 @10619 has 39 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 2 MA's), (15, 10679), (16, 10682), (19, 10724), (40, 10835), (43, 10856), (61, 10976), (68, 11018), (82, 11084), (86, 11102), (93, 11123), (94, 11126), (98, 11144), (109, 11168), (135, 11252), (148, 11294), (153, 11309), (155, 11318), (189, 11486), (193, 11513), (210, 11630), (245, 11801), (251, 11831), (285, 12035), (294, 12080), (297, 12107), (299, 12119), (301, 12131), (320, 12209), (331, 12254), (339, 12281), (345, 12311), (362, 12398), (363, 12401), (370, 12440), (379, 12503), (381, 12512), (394, 12560), (398, 12602), (404, 12647), (406, 12653), (410, 12668), (419, 12722), (427, 12761), (430, 12782), (431, 12785), (434, 12803), (442, 12830), (448, 12851), (450, 12857), (455, 12878), (458, 12896), (460, 12905), (528, 13178), (554, 13232), (577, 13262), (578, 13265), (591, 13316), (614, 13397), (615, 13400), (624, 13433), (633, 13463), (638, 13487), (654, 13553), (710, 13820), (722, 13868), (726, 13901), (728, 13913), (729, 13916), (746, 13976), (747, 13985), (748, 13994), (757, 14045), (776, 14117), (786, 14135), (791, 14156), (813, 14255), (814, 14258), (822, 14291), (839, 14357), (843, 14375), (847, 14390), (853, 14423), (867, 14474), (877, 14525), (887, 14594), (927, 14768), (928, 14771), (946, 14843), (948, 14846), (961, 14912), (962, 14915), (966, 14933), (985, 14993), (1001, 15050), (1003, 15068), (1021, 15149), (1022, 15152), (1026, 15167), (1062, 15338), (1075, 15392), (1100, 15464), (1103, 15473), (1109, 15509), (1122, 15569), (1126, 15587), (1131, 15605), (1147, 15650), (1156, 15683), (1174, 15794), (1185, 15863), (1199, 15926), (1202, 15944), (1227, 16094),

Gene: BBQValindra_17 Start: 10583, Stop: 15709, Start Num: 27
Candidate Starts for BBQValindra_17:
(Start: 27 @10583 has 14 MA's), (Start: 30 @10592 has 41 MA's), (74, 10865), (76, 10874), (80, 10904), (98, 10970), (151, 11126), (155, 11144), (185, 11297), (193, 11339), (207, 11426), (243, 11618), (268, 11735), (274, 11774), (285, 11858), (287, 11867), (290, 11891), (293, 11900), (295, 11909), (299, 11942), (301, 11954), (305, 11978), (318, 12023), (320, 12032), (329, 12068), (339, 12104), (342, 12116), (345, 12134), (352, 12170), (375, 12293), (381, 12335), (389, 12359), (404, 12470), (405, 12473), (406, 12476), (410, 12491), (419, 12545), (427, 12584), (445, 12665), (450, 12680), (455, 12701), (457, 12716), (460, 12728), (463, 12764), (471, 12800), (511, 12962), (550, 13019), (564, 13031), (565, 13034), (578, 13067), (580, 13073), (582, 13085), (603, 13160), (605, 13166), (607, 13172), (613, 13193), (614, 13196), (615, 13199), (633, 13262), (642, 13298), (646, 13313), (652, 13337), (655, 13352), (656, 13355), (669, 13415), (689, 13514), (696, 13556), (718, 13634), (730, 13703), (739, 13721), (761, 13829), (762, 13832), (764, 13838), (770, 13856), (771, 13859), (777, 13880), (787, 13898), (788, 13901), (790, 13910), (815, 14015), (826, 14045), (830, 14063), (831, 14069), (851, 14129), (863, 14189), (878, 14237), (881, 14267), (899, 14315), (904, 14327), (917, 14387), (932, 14444), (941, 14462), (951, 14507), (957, 14534), (961, 14552), (968, 14582), (970, 14591), (981, 14630), (983, 14636), (987, 14645), (1016, 14804), (1027, 14846), (1074, 15038), (1075, 15041), (1095, 15098), (1098, 15107), (1102, 15119), (1106, 15140), (1156, 15353), (1165, 15392), (1175, 15461), (1184, 15515), (1216, 15668), (1220, 15692),

Gene: BENtherdunthat_18 Start: 9881, Stop: 15508, Start Num: 22
Candidate Starts for BENtherdunthat_18:
(Start: 22 @9881 has 11 MA's), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94, 10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (293, 11210), (294, 11213), (295, 11219), (297, 11240), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (535, 12404), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (616, 12668), (623, 12692), (630, 12725), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692, 13076), (693, 13079), (694, 13088), (700, 13112), (721, 13193), (722, 13199), (728, 13244), (729, 13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (790, 13484), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (915, 14027), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (969, 14261), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14858), (1113, 14945), (1117, 14972), (1118, 14975), (1128, 15050), (1135, 15074), (1147, 15113), (1157, 15149), (1160, 15170), (1172, 15257), (1179, 15299), (1185, 15332), (1187, 15344), (1205, 15422), (1219, 15488),

Gene: BackstagePass_17 Start: 10561, Stop: 15849, Start Num: 27
Candidate Starts for BackstagePass_17:
(Start: 27 @10561 has 14 MA's), (Start: 30 @10570 has 41 MA's), (74, 10843), (76, 10852), (80, 10882), (97, 10945), (102, 10957), (109, 10972), (116, 10999), (142, 11083), (151, 11104), (158, 11131), (161, 11143), (185, 11275), (193, 11317), (202, 11371), (207, 11404), (245, 11605), (262, 11683), (285, 11836), (290, 11869), (293, 11878), (295, 11887), (299, 11920), (301, 11932), (305, 11956), (318, 12001), (331, 12055), (338, 12079), (339, 12082), (342, 12094), (345, 12112), (352, 12148), (375, 12271), (381, 12313), (404, 12448), (406, 12454), (410, 12469), (426, 12559), (427, 12562), (431, 12586), (437, 12613), (446, 12646), (450, 12658), (455, 12679), (460, 12706), (471, 12778), (514, 12949), (515, 12952), (516, 12964), (518, 12973), (538, 13057), (558, 13102), (578, 13174), (582, 13192), (591, 13225), (593, 13237), (605, 13273), (615, 13306), (628, 13357), (642, 13405), (652, 13444), (655, 13459), (656, 13462), (657, 13468), (667, 13513), (689, 13621), (696, 13663), (718, 13741), (722, 13765), (730, 13810), (761, 13933), (762, 13936), (771, 13963), (777, 13984), (787, 14002), (788, 14005), (790, 14014), (815, 14119), (831, 14173), (885, 14398), (895, 14434), (917, 14524), (927, 14566), (951, 14647), (957, 14674), (961, 14692), (970, 14731), (981, 14770), (983, 14776), (987, 14785), (1016, 14944), (1027, 14986), (1074, 15178), (1075, 15181), (1098, 15247), (1102, 15259), (1106, 15280), (1107, 15283), (1156, 15493), (1165, 15532), (1175, 15601), (1184, 15655), (1216, 15808),

Gene: Balloona_15 Start: 9534, Stop: 14471, Start Num: 53
Candidate Starts for Balloona_15:
(Start: 30 @9378 has 41 MA's), (53, 9534), (77, 9663), (81, 9693), (101, 9762), (105, 9774), (117, 9810), (132, 9861), (137, 9870), (148, 9906), (155, 9930), (168, 9990), (179, 10044), (185, 10083), (187, 10089), (190, 10104), (193, 10125), (220, 10296), (232, 10359), (243, 10404), (261, 10485), (285, 10644), (290, 10677), (294, 10689), (297, 10716), (307, 10773), (316, 10803), (319, 10815), (344, 10917), (345, 10920), (362, 11007), (372, 11055), (394, 11169), (406, 11262), (410, 11277), (413, 11298), (419, 11331), (425, 11361), (428, 11373), (434, 11412), (441, 11436), (442, 11439), (449, 11463), (455, 11487), (473, 11592), (494, 11670), (501, 11700), (502, 11703), (509, 11739),

(518, 11781), (522, 11805), (525, 11820), (529, 11835), (533, 11850), (541, 11874), (557, 11913), (560, 11928), (562, 11934), (576, 11979), (578, 11985), (613, 12111), (622, 12141), (636, 12192), (645, 12228), (650, 12249), (651, 12252), (665, 12324), (675, 12369), (679, 12402), (686, 12423), (697, 12477), (717, 12552), (743, 12636), (764, 12723), (825, 12909), (859, 13041), (869, 13071), (899, 13209), (914, 13260), (923, 13290), (965, 13455), (972, 13485), (1025, 13665), (1035, 13716), (1047, 13743), (1056, 13764), (1085, 13860), (1103, 13908), (1108, 13926), (1130, 14049), (1138, 14073), (1141, 14088), (1149, 14118), (1157, 14145), (1158, 14151), (1165, 14184), (1174, 14253), (1175, 14256), (1180, 14292), (1200, 14382),

Gene: Barco_17 Start: 10274, Stop: 15796, Start Num: 9
Candidate Starts for Barco_17:
(Start: 9 @10274 has 39 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 2 MA's), (15, 10334), (16, 10337), (19, 10379), (40, 10490), (43, 10511), (61, 10631), (68, 10673), (82, 10739), (86, 10757), (93, 10778), (94, 10781), (98, 10799), (109, 10823), (135, 10907), (136, 10910), (148, 10949), (153, 10964), (155, 10973), (189, 11141), (193, 11168), (210, 11285), (245, 11456), (251, 11486), (285, 11690), (294, 11735), (297, 11762), (299, 11774), (320, 11864), (331, 11909), (339, 11936), (345, 11966), (362, 12053), (363, 12056), (370, 12095), (383, 12179), (394, 12215), (398, 12257), (404, 12302), (406, 12308), (409, 12320), (410, 12323), (419, 12377), (427, 12416), (430, 12437), (431, 12440), (434, 12458), (437, 12467), (442, 12485), (448, 12506), (450, 12512), (455, 12533), (460, 12560), (473, 12638), (532, 12827), (544, 12851), (552, 12863), (554, 12866), (572, 12881), (577, 12896), (578, 12899), (591, 12950), (614, 13031), (615, 13034), (624, 13067), (633, 13097), (638, 13121), (710, 13454), (722, 13502), (728, 13547), (729, 13550), (733, 13565), (746, 13610), (747, 13619), (748, 13628), (757, 13679), (776, 13751), (786, 13769), (791, 13790), (813, 13889), (814, 13892), (822, 13925), (839, 13991), (843, 14009), (847, 14024), (853, 14057), (867, 14108), (877, 14159), (884, 14207), (927, 14402), (928, 14405), (946, 14477), (948, 14480), (961, 14546), (962, 14549), (966, 14567), (985, 14627), (1001, 14684), (1003, 14702), (1021, 14783), (1022, 14786), (1026, 14801), (1075, 15014), (1088, 15080), (1104, 15134), (1106, 15146), (1108, 15152), (1130, 15275), (1138, 15299), (1142, 15317), (1149, 15341), (1151, 15347), (1157, 15368), (1165, 15407), (1185, 15548), (1187, 15560), (1199, 15611), (1202, 15629), (1227, 15779),

Gene: Bavilard_16 Start: 10158, Stop: 15257, Start Num: 30
Candidate Starts for Bavilard_16:
(Start: 30 @10158 has 41 MA's), (53, 10314), (77, 10443), (81, 10473), (93, 10515), (101, 10542), (117, 10590), (132, 10641), (137, 10650), (148, 10686), (155, 10710), (168, 10770), (179, 10824), (185, 10863), (187, 10869), (190, 10884), (193, 10905), (218, 11064), (220, 11076), (232, 11139), (243, 11184), (261, 11265), (285, 11424), (290, 11457), (294, 11469), (297, 11496), (307, 11553), (316, 11583), (319, 11595), (344, 11697), (345, 11700), (362, 11787), (371, 11832), (372, 11835), (394, 11949), (406, 12042), (410, 12057), (413, 12078), (419, 12111), (425, 12141), (428, 12153), (434, 12192), (441, 12216), (442, 12219), (449, 12243), (455, 12267), (473, 12372), (486, 12420), (494, 12450), (499, 12465), (501, 12480), (509, 12519), (518, 12561), (522, 12585), (525, 12600), (529, 12615), (533, 12630), (541, 12654), (557, 12693), (560, 12708), (562, 12714), (568, 12735), (576, 12759), (578, 12765), (613, 12891), (622, 12921), (632, 12957), (633, 12960), (645, 13008), (650, 13029), (651, 13032), (665, 13104), (675, 13149), (679, 13182), (686, 13203), (697, 13257), (717, 13332), (743, 13416), (764, 13503), (825, 13689), (859, 13821), (869, 13851), (899, 13989), (914, 14040), (923, 14070), (952, 14175), (965, 14226), (972, 14256), (1025, 14436), (1035, 14487), (1047, 14529), (1056, 14550), (1085, 14646), (1108, 14712), (1130, 14835), (1138, 14859), (1141, 14874), (1149, 14904), (1157, 14931), (1158, 14937), (1165, 14970), (1174, 15039), (1175, 15042), (1180, 15078), (1200, 15168),

Gene: Begonia_18 Start: 10785, Stop: 16274, Start Num: 9
Candidate Starts for Begonia_18:

(Start: 9 @10785 has 39 MA's), (13, 10824), (Start: 14 @10836 has 2 MA's), (15, 10845), (16, 10848), (19, 10890), (40, 11001), (43, 11022), (61, 11142), (68, 11184), (82, 11250), (86, 11268), (92, 11283), (93, 11289), (94, 11292), (98, 11310), (109, 11334), (135, 11418), (148, 11460), (153, 11475), (155, 11484), (189, 11652), (193, 11679), (205, 11754), (210, 11796), (219, 11844), (245, 11967), (251, 11997), (285, 12201), (294, 12246), (297, 12273), (299, 12285), (320, 12375), (331, 12420), (339, 12447), (345, 12477), (362, 12564), (370, 12606), (394, 12726), (398, 12768), (404, 12813), (406, 12819), (409, 12831), (410, 12834), (419, 12888), (427, 12927), (430, 12948), (431, 12951), (434, 12969), (442, 12996), (450, 13023), (455, 13044), (460, 13071), (471, 13143), (528, 13344), (532, 13359), (544, 13383), (554, 13398), (577, 13428), (578, 13431), (591, 13482), (614, 13563), (615, 13566), (624, 13599), (633, 13629), (638, 13653), (654, 13719), (710, 13986), (722, 14034), (728, 14079), (729, 14082), (733, 14097), (746, 14142), (747, 14151), (748, 14160), (757, 14211), (776, 14283), (786, 14301), (791, 14322), (813, 14421), (814, 14424), (822, 14457), (839, 14523), (843, 14541), (847, 14556), (853, 14589), (867, 14640), (877, 14691), (927, 14934), (928, 14937), (948, 15012), (961, 15078), (962, 15081), (966, 15099), (985, 15159), (1021, 15315), (1022, 15318), (1026, 15333), (1075, 15552), (1095, 15609), (1100, 15624), (1109, 15672), (1119, 15717), (1153, 15837), (1156, 15846), (1164, 15885), (1174, 15957), (1185, 16026), (1187, 16038), (1199, 16089), (1202, 16107), (1215, 16164), (1227, 16257),

Gene: BiPauneto_42 Start: 23233, Stop: 28638, Start Num: 26
Candidate Starts for BiPauneto_42:
(Start: 26 @23233 has 50 MA's), (46, 23344), (48, 23362), (51, 23392), (58, 23431), (80, 23566), (84, 23581), (125, 23719), (149, 23779), (155, 23806), (157, 23812), (202, 24058), (208, 24100), (218, 24163), (220, 24175), (222, 24181), (277, 24463), (285, 24538), (303, 24646), (314, 24688), (334, 24769), (345, 24814), (355, 24862), (361, 24892), (366, 24922), (375, 24973), (378, 25003), (414, 25183), (415, 25189), (417, 25195), (437, 25303), (450, 25348), (452, 25354), (468, 25444), (492, 25519), (510, 25594), (516, 25621), (524, 25642), (529, 25660), (539, 25687), (586, 25804), (589, 25816), (598, 25849), (600, 25855), (607, 25876), (612, 25891), (616, 25909), (623, 25933), (625, 25942), (644, 26020), (652, 26053), (665, 26122), (677, 26188), (718, 26359), (729, 26431), (733, 26446), (746, 26491), (747, 26500), (750, 26509), (776, 26632), (791, 26671), (800, 26707), (814, 26779), (815, 26782), (826, 26830), (831, 26854), (837, 26878), (839, 26881), (846, 26914), (853, 26947), (866, 27004), (867, 27007), (877, 27049), (885, 27106), (887, 27118), (898, 27172), (904, 27187), (914, 27238), (919, 27256), (924, 27280), (933, 27316), (946, 27376), (948, 27379), (953, 27409), (958, 27430), (1007, 27640), (1032, 27751), (1140, 28210), (1150, 28252), (1191, 28492), (1207, 28552), (1210, 28570), (1212, 28579),

Gene: BigChungus_15 Start: 9403, Stop: 14511, Start Num: 30
Candidate Starts for BigChungus_15:
(Start: 30 @9403 has 41 MA's), (53, 9559), (77, 9688), (81, 9718), (101, 9787), (105, 9799), (117, 9835), (132, 9886), (137, 9895), (148, 9931), (155, 9955), (168, 10015), (179, 10069), (185, 10108), (187, 10114), (190, 10129), (193, 10150), (220, 10321), (232, 10384), (243, 10429), (261, 10510), (285, 10669), (290, 10702), (294, 10714), (297, 10741), (307, 10798), (316, 10828), (319, 10840), (344, 10942), (345, 10945), (362, 11032), (372, 11080), (394, 11194), (406, 11287), (410, 11302), (413, 11323), (419, 11356), (425, 11386), (428, 11398), (434, 11437), (441, 11461), (442, 11464), (449, 11488), (455, 11512), (473, 11617), (494, 11695), (501, 11725), (502, 11728), (509, 11764), (518, 11806), (522, 11830), (525, 11845), (529, 11860), (533, 11875), (541, 11899), (557, 11938), (560, 11953), (562, 11959), (576, 12004), (578, 12010), (613, 12136), (622, 12166), (632, 12202), (633, 12205), (645, 12253), (650, 12274), (651, 12277), (665, 12349), (675, 12394), (679, 12427), (686, 12448), (697, 12502), (717, 12577), (743, 12661), (764, 12748), (859, 13066), (869, 13096), (899, 13234), (914, 13285), (923, 13315), (965, 13480), (972, 13510), (1025, 13690), (1035, 13741), (1047, 13783), (1056, 13804), (1085, 13900), (1103, 13948), (1108, 13966), (1130, 14089), (1138, 14113), (1141, 14128), (1149, 14158), (1157, 14185), (1158, 14191), (1165, 14224), (1174, 14293), (1175, 14296), (1180, 14332), (1200, 14422),

Gene: BillDoor_18 Start: 9610, Stop: 14400, Start Num: 108
Candidate Starts for BillDoor_18:
(Start: 108 @9610 has 16 MA's), (Start: 115 @9637 has 1 MA's), (140, 9715), (154, 9766), (173, 9853), (177, 9868), (186, 9925), (190, 9943), (194, 9970), (195, 9973), (207, 10042), (214, 10099), (224, 10144), (228, 10162), (238, 10207), (248, 10243), (257, 10276), (268, 10324), (269, 10327), (276, 10375), (282, 10414), (284, 10429), (328, 10621), (332, 10639), (353, 10723), (384, 10870), (393, 10897), (404, 10990), (406, 10996), (410, 11011), (416, 11050), (418, 11062), (431, 11128), (450, 11200), (454, 11218), (455, 11221), (460, 11248), (484, 11383), (502, 11458), (509, 11494), (522, 11560), (533, 11605), (540, 11626), (541, 11629), (542, 11632), (557, 11668), (567, 11707), (569, 11713), (578, 11740), (614, 11869), (615, 11872), (620, 11890), (652, 12013), (655, 12028), (679, 12157), (686, 12178), (694, 12220), (701, 12247), (703, 12253), (738, 12385), (743, 12397), (764, 12484), (779, 12526), (793, 12562), (828, 12688), (836, 12727), (872, 12856), (882, 12913), (893, 12958), (918, 13051), (940, 13126), (953, 13189), (972, 13270), (978, 13291), (1012, 13468), (1014, 13474), (1065, 13693), (1079, 13771), (1085, 13789), (1090, 13795), (1108, 13855), (1111, 13873), (1118, 13906), (1130, 13978), (1141, 14017), (1149, 14047), (1165, 14113), (1170, 14161), (1180, 14221), (1200, 14311), (1213, 14371),

Gene: Biskit_17 Start: 9616, Stop: 14415, Start Num: 108
Candidate Starts for Biskit_17:
(Start: 108 @9616 has 16 MA's), (Start: 115 @9643 has 1 MA's), (154, 9772), (177, 9874), (184, 9919), (186, 9931), (190, 9949), (194, 9976), (195, 9979), (198, 9994), (206, 10045), (207, 10048), (214, 10105), (215, 10108), (224, 10150), (228, 10168), (238, 10213), (248, 10249), (257, 10282), (264, 10315), (265, 10327), (276, 10381), (282, 10420), (284, 10435), (286, 10444), (292, 10471), (300, 10522), (312, 10564), (316, 10582), (319, 10591), (332, 10645), (349, 10708), (352, 10723), (365, 10786), (384, 10876), (393, 10903), (404, 10996), (406, 11002), (410, 11017), (416, 11056), (431, 11134), (439, 11167), (450, 11206), (454, 11224), (455, 11227), (460, 11254), (470, 11311), (473, 11332), (485, 11395), (494, 11431), (498, 11443), (502, 11464), (509, 11500), (518, 11542), (520, 11554), (522, 11566), (533, 11611), (534, 11614), (540, 11632), (541, 11635), (542, 11638), (567, 11713), (569, 11719), (578, 11746), (592, 11806), (597, 11821), (613, 11872), (614, 11875), (615, 11878), (620, 11896), (646, 11995), (650, 12010), (651, 12013), (679, 12163), (686, 12184), (694, 12226), (701, 12253), (703, 12259), (738, 12391), (743, 12403), (764, 12490), (779, 12532), (793, 12568), (813, 12643), (828, 12694), (836, 12733), (856, 12811), (872, 12862), (882, 12919), (918, 13057), (940, 13132), (972, 13276), (978, 13297), (1012, 13474), (1014, 13480), (1085, 13804), (1090, 13810), (1108, 13870), (1111, 13888), (1118, 13921), (1130, 13993), (1141, 14032), (1149, 14062), (1165, 14128), (1170, 14176), (1180, 14236), (1200, 14326), (1213, 14386),

Gene: BlingBling_17 Start: 10274, Stop: 15796, Start Num: 9
Candidate Starts for BlingBling_17:
(Start: 9 @10274 has 39 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 2 MA's), (15, 10334), (16, 10337), (19, 10379), (40, 10490), (43, 10511), (61, 10631), (68, 10673), (82, 10739), (86, 10757), (93, 10778), (94, 10781), (98, 10799), (109, 10823), (135, 10907), (136, 10910), (148, 10949), (153, 10964), (155, 10973), (189, 11141), (193, 11168), (210, 11285), (245, 11456), (251, 11486), (285, 11690), (294, 11735), (297, 11762), (299, 11774), (320, 11864), (331, 11909), (339, 11936), (345, 11966), (362, 12053), (363, 12056), (370, 12095), (383, 12179), (394, 12215), (398, 12257), (404, 12302), (406, 12308), (409, 12320), (410, 12323), (419, 12377), (427, 12416), (430, 12437), (431, 12440), (434, 12458), (437, 12467), (442, 12485), (448, 12506), (450, 12512), (455, 12533), (460, 12560), (473, 12638), (532, 12827), (544, 12851), (552, 12863), (554, 12866), (572, 12881), (577, 12896), (578, 12899), (591, 12950), (614, 13031), (615, 13034), (624, 13067), (633, 13097), (638, 13121), (710, 13454), (722, 13502), (728, 13547), (729, 13550), (733, 13565), (746, 13610), (747, 13619), (748, 13628), (757, 13679), (776, 13751), (786, 13769), (791, 13790), (813, 13889), (814, 13892), (822, 13925), (839, 13991), (843, 14009), (847, 14024), (853, 14057), (867, 14108), (877, 14159), (884, 14207), (927, 14402), (928, 14405), (946, 14477), (948, 14480), (961, 14546), (962, 14549), (966, 14567), (985, 14627), (1001, 14684), (1003,

14702), (1021, 14783), (1022, 14786), (1026, 14801), (1075, 15014), (1088, 15080), (1104, 15134), (1106, 15146), (1108, 15152), (1130, 15275), (1138, 15299), (1142, 15317), (1149, 15341), (1151, 15347), (1157, 15368), (1165, 15407), (1185, 15548), (1187, 15560), (1199, 15611), (1202, 15629), (1227, 15779),

Gene: Blino_17 Start: 10173, Stop: 15764, Start Num: 9
Candidate Starts for Blino_17:
(Start: 9 @10173 has 39 MA's), (Start: 11 @10188 has 1 MA's), (Start: 14 @10224 has 2 MA's), (15, 10233), (16, 10236), (19, 10278), (40, 10389), (43, 10410), (61, 10530), (82, 10638), (86, 10656), (93, 10677), (94, 10680), (98, 10698), (137, 10812), (148, 10848), (153, 10863), (155, 10872), (189, 11040), (193, 11067), (210, 11184), (245, 11355), (251, 11385), (285, 11589), (294, 11634), (331, 11808), (339, 11835), (345, 11865), (362, 11952), (363, 11955), (370, 11994), (379, 12057), (394, 12114), (398, 12156), (404, 12201), (406, 12207), (409, 12219), (410, 12222), (419, 12276), (427, 12315), (430, 12336), (431, 12339), (434, 12357), (442, 12384), (448, 12405), (450, 12411), (455, 12432), (460, 12459), (467, 12507), (473, 12537), (511, 12693), (516, 12717), (518, 12726), (521, 12747), (546, 12828), (577, 12924), (578, 12927), (580, 12933), (590, 12975), (591, 12978), (595, 12999), (614, 13059), (615, 13062), (624, 13095), (633, 13125), (654, 13215), (710, 13482), (722, 13530), (728, 13575), (729, 13578), (733, 13593), (746, 13638), (747, 13647), (748, 13656), (757, 13707), (776, 13779), (786, 13797), (791, 13818), (813, 13917), (814, 13920), (822, 13953), (839, 14019), (843, 14037), (847, 14052), (853, 14085), (867, 14136), (877, 14187), (884, 14235), (927, 14430), (928, 14433), (946, 14505), (948, 14508), (961, 14574), (962, 14577), (966, 14595), (985, 14655), (1003, 14730), (1022, 14814), (1026, 14829), (1075, 15042), (1095, 15099), (1100, 15114), (1109, 15162), (1119, 15207), (1153, 15327), (1156, 15336), (1164, 15375), (1174, 15447), (1185, 15516), (1199, 15579), (1202, 15597), (1215, 15654), (1227, 15747),

Gene: Blondies_17 Start: 9629, Stop: 14398, Start Num: 115
Candidate Starts for Blondies_17:
(Start: 108 @9602 has 16 MA's), (Start: 115 @9629 has 1 MA's), (117, 9635), (154, 9758), (177, 9860), (184, 9905), (186, 9917), (190, 9935), (194, 9962), (195, 9965), (198, 9980), (206, 10031), (207, 10034), (214, 10091), (215, 10094), (216, 10097), (224, 10136), (228, 10154), (238, 10199), (248, 10235), (257, 10268), (264, 10301), (265, 10313), (276, 10367), (282, 10406), (284, 10421), (286, 10430), (292, 10457), (300, 10508), (316, 10568), (319, 10577), (332, 10631), (349, 10694), (352, 10709), (365, 10772), (384, 10862), (393, 10889), (404, 10982), (406, 10988), (410, 11003), (416, 11042), (431, 11120), (439, 11153), (450, 11192), (454, 11210), (455, 11213), (460, 11240), (470, 11297), (473, 11318), (485, 11381), (498, 11429), (502, 11450), (509, 11486), (518, 11528), (522, 11552), (533, 11597), (534, 11600), (540, 11618), (541, 11621), (542, 11624), (567, 11699), (569, 11705), (578, 11732), (592, 11792), (613, 11858), (614, 11861), (615, 11864), (620, 11882), (646, 11981), (650, 11996), (651, 11999), (679, 12149), (686, 12170), (694, 12212), (701, 12239), (703, 12245), (738, 12377), (743, 12389), (764, 12476), (779, 12518), (793, 12554), (813, 12629), (828, 12680), (836, 12719), (872, 12848), (882, 12905), (918, 13043), (940, 13118), (972, 13262), (978, 13283), (1012, 13457), (1014, 13463), (1085, 13787), (1090, 13793), (1108, 13853), (1111, 13871), (1118, 13904), (1130, 13976), (1141, 14015), (1149, 14045), (1165, 14111), (1170, 14159), (1180, 14219), (1200, 14309), (1213, 14369),

Gene: Blueberry_19 Start: 10619, Stop: 16108, Start Num: 9
Candidate Starts for Blueberry_19:
(Start: 9 @10619 has 39 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 2 MA's), (15, 10679), (16, 10682), (19, 10724), (40, 10835), (43, 10856), (61, 10976), (68, 11018), (82, 11084), (86, 11102), (93, 11123), (94, 11126), (98, 11144), (109, 11168), (135, 11252), (148, 11294), (153, 11309), (155, 11318), (189, 11486), (193, 11513), (210, 11630), (245, 11801), (251, 11831), (285, 12035), (294, 12080), (297, 12107), (299, 12119), (301, 12131), (320, 12209), (331, 12254), (339, 12281), (345, 12311), (362, 12398), (363, 12401), (370, 12440), (379, 12503), (381, 12512), (394, 12560), (398, 12602), (404, 12647), (406, 12653), (410, 12668), (419,

12722), (427, 12761), (430, 12782), (431, 12785), (434, 12803), (442, 12830), (448, 12851), (450, 12857), (455, 12878), (458, 12896), (460, 12905), (528, 13178), (554, 13232), (577, 13262), (578, 13265), (591, 13316), (614, 13397), (615, 13400), (624, 13433), (633, 13463), (638, 13487), (654, 13553), (710, 13820), (722, 13868), (726, 13901), (728, 13913), (729, 13916), (746, 13976), (747, 13985), (748, 13994), (757, 14045), (776, 14117), (786, 14135), (791, 14156), (813, 14255), (814, 14258), (822, 14291), (839, 14357), (843, 14375), (847, 14390), (853, 14423), (867, 14474), (877, 14525), (887, 14594), (927, 14768), (928, 14771), (946, 14843), (948, 14846), (961, 14912), (962, 14915), (966, 14933), (985, 14993), (1001, 15050), (1003, 15068), (1021, 15149), (1022, 15152), (1026, 15167), (1062, 15338), (1075, 15392), (1100, 15464), (1103, 15473), (1109, 15509), (1122, 15569), (1126, 15587), (1131, 15605), (1147, 15650), (1156, 15683), (1174, 15794), (1185, 15863), (1199, 15926), (1202, 15944), (1227, 16094),

Gene: Bonum_42 Start: 23809, Stop: 29223, Start Num: 26
Candidate Starts for Bonum_42:
(Start: 26 @23809 has 50 MA's), (48, 23938), (84, 24157), (157, 24370), (208, 24658), (218, 24721), (220, 24733), (222, 24739), (263, 24940), (278, 25033), (281, 25063), (285, 25096), (305, 25216), (314, 25246), (315, 25249), (337, 25336), (345, 25372), (355, 25420), (361, 25450), (362, 25459), (365, 25471), (366, 25480), (375, 25531), (378, 25561), (426, 25804), (431, 25831), (432, 25840), (437, 25861), (450, 25906), (462, 25966), (464, 25990), (468, 26002), (516, 26179), (529, 26218), (537, 26239), (550, 26263), (570, 26308), (578, 26329), (580, 26335), (589, 26374), (591, 26380), (595, 26401), (601, 26416), (608, 26437), (619, 26476), (623, 26491), (625, 26500), (627, 26509), (631, 26521), (637, 26551), (638, 26557), (639, 26560), (652, 26611), (657, 26635), (665, 26677), (669, 26689), (692, 26809), (694, 26821), (709, 26881), (718, 26914), (721, 26932), (722, 26938), (729, 26986), (733, 27001), (735, 27010), (737, 27013), (746, 27046), (747, 27055), (750, 27064), (751, 27067), (752, 27070), (791, 27226), (814, 27334), (815, 27337), (826, 27385), (831, 27409), (839, 27436), (846, 27469), (853, 27502), (867, 27559), (877, 27601), (885, 27658), (903, 27736), (919, 27808), (924, 27832), (933, 27865), (935, 27874), (946, 27916), (948, 27919), (953, 27949), (956, 27961), (967, 28021), (1049, 28375), (1101, 28609), (1129, 28762), (1140, 28795), (1150, 28837), (1162, 28888), (1191, 29077), (1203, 29125), (1210, 29155), (1212, 29164), (1217, 29188),

Gene: BotCity_18 Start: 9879, Stop: 15506, Start Num: 22
Candidate Starts for BotCity_18:
(Start: 22 @9879 has 11 MA's), (Start: 33 @9924 has 2 MA's), (35, 9945), (39, 9966), (47, 10011), (Start: 49 @10026 has 1 MA's), (62, 10110), (70, 10152), (74, 10164), (86, 10227), (92, 10242), (94, 10251), (98, 10269), (101, 10275), (117, 10323), (159, 10458), (188, 10608), (193, 10638), (251, 10962), (273, 11058), (285, 11166), (293, 11208), (294, 11211), (295, 11217), (297, 11238), (315, 11319), (331, 11385), (339, 11412), (342, 11424), (345, 11442), (347, 11454), (352, 11478), (355, 11490), (362, 11529), (363, 11532), (365, 11541), (370, 11571), (390, 11676), (394, 11691), (397, 11721), (398, 11733), (404, 11778), (406, 11784), (410, 11799), (414, 11829), (418, 11850), (419, 11853), (431, 11916), (437, 11943), (438, 11946), (439, 11949), (440, 11955), (447, 11979), (448, 11982), (450, 11988), (452, 11994), (455, 12009), (458, 12027), (463, 12072), (482, 12156), (483, 12162), (487, 12189), (509, 12282), (511, 12291), (522, 12348), (524, 12360), (534, 12396), (535, 12402), (552, 12444), (557, 12456), (567, 12495), (569, 12501), (570, 12504), (576, 12522), (577, 12525), (578, 12528), (584, 12552), (605, 12627), (616, 12666), (623, 12690), (630, 12723), (650, 12834), (654, 12867), (662, 12930), (670, 12966), (676, 12996), (692, 13074), (693, 13077), (694, 13086), (700, 13110), (721, 13191), (722, 13197), (728, 13242), (729, 13245), (733, 13260), (746, 13305), (747, 13314), (748, 13323), (749, 13326), (773, 13431), (789, 13479), (790, 13482), (791, 13485), (813, 13584), (814, 13587), (818, 13599), (847, 13716), (853, 13749), (867, 13800), (875, 13830), (883, 13890), (904, 13971), (907, 13992), (915, 14025), (934, 14097), (937, 14106), (962, 14220), (967, 14250), (969, 14259), (979, 14298), (980, 14301), (991, 14331), (995, 14352), (1029, 14550), (1043, 14613), (1044, 14619), (1054, 14670), (1092, 14856), (1113, 14943), (1117, 14970), (1118, 14973), (1128, 15048), (1135, 15072), (1147, 15111), (1157, 15147), (1160, 15168), (1172, 15255), (1179, 15297), (1185, 15330), (1187, 15342), (1205, 15420), (1219, 15486),

Gene: Bowser_17 Start: 10588, Stop: 15702, Start Num: 27
Candidate Starts for Bowser_17:
(Start: 27 @10588 has 14 MA's), (Start: 30 @10597 has 41 MA's), (74, 10870), (76, 10879), (80, 10909), (83, 10918), (98, 10975), (119, 11038), (142, 11110), (151, 11131), (155, 11149), (185, 11302), (193, 11344), (202, 11398), (244, 11626), (268, 11740), (274, 11779), (285, 11863), (290, 11896), (293, 11905), (295, 11914), (299, 11947), (301, 11959), (305, 11983), (318, 12028), (329, 12073), (339, 12109), (342, 12121), (345, 12139), (352, 12175), (375, 12298), (377, 12322), (381, 12340), (404, 12475), (406, 12481), (409, 12493), (410, 12496), (419, 12550), (427, 12589), (430, 12610), (431, 12613), (434, 12631), (437, 12640), (450, 12685), (455, 12706), (460, 12733), (473, 12811), (511, 12967), (550, 13024), (564, 13036), (565, 13039), (578, 13072), (582, 13090), (603, 13165), (605, 13171), (607, 13177), (613, 13198), (614, 13201), (615, 13204), (633, 13267), (642, 13303), (646, 13318), (652, 13342), (655, 13357), (656, 13360), (657, 13366), (667, 13411), (669, 13420), (689, 13519), (696, 13561), (719, 13645), (730, 13708), (739, 13726), (761, 13834), (764, 13843), (770, 13861), (771, 13864), (787, 13903), (788, 13906), (790, 13915), (826, 14050), (831, 14074), (863, 14194), (877, 14239), (881, 14272), (899, 14320), (904, 14332), (917, 14392), (951, 14512), (957, 14539), (961, 14557), (981, 14635), (983, 14641), (987, 14650), (1008, 14770), (1016, 14809), (1027, 14851), (1050, 14944), (1074, 15037), (1075, 15040), (1095, 15097), (1098, 15106), (1102, 15118), (1106, 15139), (1123, 15244), (1156, 15352), (1165, 15391), (1175, 15460), (1184, 15514), (1216, 15664),

Gene: Braxoaddie_43 Start: 25198, Stop: 30408, Start Num: 26
Candidate Starts for Braxoaddie_43:
(Start: 26 @25198 has 50 MA's), (57, 25390), (84, 25546), (99, 25600), (100, 25603), (122, 25681), (126, 25696), (196, 25987), (212, 26107), (218, 26134), (259, 26332), (285, 26509), (293, 26551), (305, 26629), (306, 26635), (325, 26707), (329, 26719), (330, 26725), (336, 26746), (345, 26785), (357, 26842), (365, 26884), (366, 26893), (374, 26926), (375, 26944), (378, 26974), (402, 27100), (412, 27133), (417, 27166), (421, 27196), (431, 27244), (432, 27253), (446, 27307), (462, 27379), (463, 27400), (466, 27409), (501, 27565), (514, 27616), (527, 27664), (539, 27697), (555, 27736), (556, 27739), (577, 27790), (578, 27793), (586, 27826), (597, 27868), (601, 27880), (602, 27883), (605, 27892), (617, 27934), (618, 27937), (620, 27943), (623, 27955), (636, 28009), (638, 28021), (677, 28198), (680, 28207), (682, 28210), (693, 28255), (716, 28345), (720, 28363), (765, 28528), (772, 28558), (775, 28573), (816, 28729), (821, 28741), (827, 28765), (840, 28819), (850, 28852), (857, 28897), (881, 28990), (883, 28999), (885, 29011), (886, 29020), (890, 29041), (891, 29044), (910, 29116), (911, 29119), (917, 29140), (926, 29182), (965, 29332), (984, 29365), (988, 29374), (1046, 29611), (1055, 29656), (1068, 29722), (1071, 29728), (1075, 29749), (1076, 29758), (1081, 29779), (1091, 29800), (1105, 29845), (1136, 29986), (1178, 30175), (1182, 30208), (1203, 30310), (1207, 30322), (1212, 30349),

Gene: Bubble_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Bubble_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (395, 11426), (406, 11513), (410, 11528), (416, 11567), (427, 11621), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240),

(1121, 14300), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: Budski_18 Start: 10015, Stop: 15501, Start Num: 49
Candidate Starts for Budski_18:
(Start: 22 @9868 has 11 MA's), (31, 9895), (Start: 33 @9913 has 2 MA's), (35, 9934), (39, 9955), (47, 10000), (Start: 49 @10015 has 1 MA's), (62, 10099), (70, 10141), (74, 10153), (86, 10216), (92, 10231), (94, 10240), (98, 10258), (101, 10264), (117, 10312), (159, 10447), (188, 10597), (193, 10627), (228, 10846), (245, 10921), (251, 10951), (285, 11155), (293, 11197), (294, 11200), (295, 11206), (297, 11227), (315, 11308), (331, 11374), (339, 11401), (342, 11413), (345, 11431), (347, 11443), (352, 11467), (355, 11479), (362, 11518), (363, 11521), (365, 11530), (370, 11560), (376, 11605), (390, 11665), (394, 11680), (397, 11710), (398, 11722), (404, 11767), (406, 11773), (410, 11788), (414, 11818), (418, 11839), (419, 11842), (431, 11905), (437, 11932), (438, 11935), (439, 11938), (440, 11944), (447, 11968), (448, 11971), (450, 11977), (452, 11983), (455, 11998), (458, 12016), (471, 12097), (482, 12145), (483, 12151), (487, 12178), (522, 12337), (524, 12349), (534, 12385), (557, 12445), (567, 12484), (569, 12490), (570, 12493), (577, 12514), (578, 12517), (605, 12616), (616, 12655), (623, 12679), (630, 12712), (635, 12757), (648, 12811), (659, 12898), (662, 12919), (670, 12955), (676, 12985), (692, 13063), (693, 13066), (694, 13075), (700, 13099), (721, 13180), (722, 13186), (728, 13231), (729, 13234), (733, 13249), (746, 13294), (747, 13303), (748, 13312), (749, 13315), (773, 13420), (789, 13468), (791, 13474), (813, 13573), (814, 13576), (818, 13588), (847, 13705), (853, 13738), (867, 13789), (870, 13801), (875, 13819), (883, 13879), (904, 13960), (907, 13981), (915, 14014), (931, 14077), (937, 14095), (962, 14209), (967, 14239), (969, 14248), (979, 14287), (980, 14290), (991, 14320), (995, 14341), (1019, 14494), (1029, 14545), (1043, 14608), (1044, 14614), (1054, 14665), (1092, 14851), (1113, 14938), (1117, 14965), (1118, 14968), (1128, 15043), (1135, 15067), (1147, 15106), (1157, 15142), (1160, 15163), (1172, 15250), (1179, 15292), (1185, 15325), (1187, 15337), (1205, 15415), (1219, 15481),

Gene: Buggaboo_40 Start: 24297, Stop: 29702, Start Num: 26
Candidate Starts for Buggaboo_40:
(Start: 26 @24297 has 50 MA's), (48, 24426), (84, 24645), (86, 24654), (157, 24858), (208, 25146), (218, 25209), (220, 25221), (222, 25227), (278, 25521), (281, 25551), (285, 25584), (301, 25680), (305, 25704), (314, 25734), (337, 25824), (345, 25860), (355, 25908), (356, 25914), (358, 25923), (361, 25938), (365, 25959), (366, 25968), (375, 26019), (378, 26049), (426, 26292), (431, 26319), (432, 26328), (437, 26349), (450, 26394), (462, 26454), (464, 26478), (468, 26490), (516, 26667), (529, 26706), (537, 26727), (554, 26760), (569, 26793), (570, 26796), (578, 26817), (580, 26823), (589, 26862), (591, 26868), (595, 26889), (601, 26904), (608, 26925), (619, 26964), (623, 26979), (625, 26988), (627, 26997), (631, 27009), (637, 27039), (638, 27045), (639, 27048), (652, 27099), (657, 27123), (665, 27165), (669, 27177), (692, 27297), (694, 27309), (709, 27369), (718, 27402), (721, 27420), (722, 27426), (729, 27474), (733, 27489), (735, 27498), (737, 27501), (746, 27534), (747, 27543), (750, 27552), (752, 27558), (791, 27714), (814, 27822), (815, 27825), (826, 27873), (831, 27897), (839, 27924), (846, 27957), (853, 27990), (867, 28047), (877, 28089), (884, 28137), (885, 28146), (886, 28155), (903, 28224), (914, 28278), (919, 28296), (921, 28311), (933, 28353), (935, 28362), (946, 28404), (948, 28407), (953, 28437), (956, 28449), (1129, 29241), (1140, 29274), (1150, 29316), (1162, 29367), (1191, 29556), (1203, 29604), (1210, 29634), (1212, 29643), (1217, 29667),

Gene: Bunker_17 Start: 10580, Stop: 15829, Start Num: 27
Candidate Starts for Bunker_17:
(Start: 27 @10580 has 14 MA's), (Start: 30 @10589 has 41 MA's), (51, 10736), (74, 10862), (76, 10871), (90, 10934), (92, 10940), (93, 10946), (98, 10967), (109, 10991), (117, 11021), (119, 11030), (151, 11123), (154, 11135), (155, 11141), (185, 11294), (193, 11336), (202, 11390), (207, 11423), (245, 11624), (285, 11855), (290, 11888), (293, 11897), (295, 11906), (299, 11939), (301, 11951), (305, 11975), (318, 12020), (320, 12029), (339, 12101), (342, 12113), (345, 12131), (352, 12167),

(375, 12290), (377, 12314), (400, 12431), (404, 12467), (406, 12473), (410, 12488), (419, 12542), (427, 12581), (430, 12602), (431, 12605), (434, 12623), (437, 12632), (450, 12677), (454, 12695), (455, 12698), (460, 12725), (473, 12803), (514, 12968), (516, 12983), (518, 12992), (538, 13076), (576, 13187), (578, 13193), (580, 13199), (591, 13244), (593, 13256), (605, 13292), (607, 13298), (613, 13319), (615, 13325), (616, 13331), (628, 13376), (633, 13388), (642, 13424), (652, 13463), (655, 13478), (656, 13481), (657, 13487), (667, 13532), (696, 13682), (718, 13760), (719, 13766), (730, 13832), (739, 13850), (761, 13958), (762, 13961), (770, 13985), (771, 13988), (787, 14027), (788, 14030), (790, 14039), (803, 14087), (826, 14174), (831, 14198), (851, 14258), (863, 14318), (881, 14396), (899, 14444), (904, 14456), (917, 14516), (951, 14633), (957, 14660), (981, 14756), (983, 14762), (987, 14771), (1016, 14930), (1027, 14972), (1098, 15230), (1102, 15242), (1106, 15263), (1107, 15266), (1109, 15284), (1156, 15476), (1165, 15515), (1184, 15638), (1216, 15788), (1220, 15812),

Gene: Burnsey_16 Start: 9630, Stop: 14768, Start Num: 30
Candidate Starts for Burnsey_16:
(Start: 23 @9606 has 5 MA's), (Start: 30 @9630 has 41 MA's), (34, 9657), (53, 9786), (63, 9861), (101, 10014), (102, 10017), (132, 10113), (137, 10122), (145, 10152), (148, 10158), (153, 10173), (154, 10176), (159, 10197), (178, 10290), (190, 10356), (193, 10377), (210, 10494), (243, 10656), (251, 10695), (267, 10770), (290, 10929), (294, 10941), (297, 10968), (304, 11013), (307, 11025), (331, 11115), (336, 11133), (342, 11154), (347, 11184), (352, 11208), (355, 11220), (362, 11259), (368, 11292), (388, 11394), (389, 11397), (394, 11421), (406, 11514), (410, 11529), (416, 11568), (434, 11664), (445, 11703), (446, 11706), (455, 11739), (474, 11847), (475, 11850), (484, 11901), (502, 11976), (522, 12078), (533, 12123), (540, 12144), (541, 12147), (542, 12150), (567, 12225), (578, 12258), (583, 12279), (591, 12309), (605, 12357), (607, 12363), (615, 12390), (651, 12525), (675, 12642), (679, 12675), (686, 12696), (688, 12699), (701, 12765), (703, 12771), (706, 12786), (740, 12906), (743, 12915), (764, 12999), (859, 13320), (913, 13539), (923, 13575), (978, 13788), (1033, 13980), (1047, 14028), (1056, 14049), (1085, 14157), (1108, 14223), (1111, 14241), (1121, 14301), (1130, 14346), (1139, 14376), (1141, 14385), (1149, 14415), (1165, 14481), (1170, 14529), (1180, 14589), (1199, 14676), (1213, 14739),

Gene: Button_17 Start: 9644, Stop: 13834, Start Num: 139
Candidate Starts for Button_17:
(Start: 127 @9617 has 7 MA's), (Start: 139 @9644 has 1 MA's), (193, 9890), (203, 9953), (211, 10010), (214, 10037), (225, 10079), (236, 10142), (238, 10157), (243, 10175), (246, 10193), (250, 10205), (258, 10238), (266, 10280), (271, 10295), (283, 10400), (288, 10424), (295, 10463), (298, 10487), (302, 10514), (308, 10544), (315, 10565), (327, 10619), (331, 10634), (359, 10763), (379, 10895), (381, 10904), (387, 10940), (410, 11081), (413, 11102), (419, 11135), (422, 11153), (426, 11171), (434, 11216), (450, 11270), (455, 11291), (463, 11354), (476, 11402), (479, 11414), (490, 11453), (504, 11507), (512, 11534), (514, 11540), (518, 11564), (519, 11567), (551, 11627), (561, 11660), (578, 11699), (582, 11717), (583, 11720), (593, 11762), (596, 11774), (607, 11807), (614, 11831), (621, 11855), (622, 11858), (652, 11972), (654, 11984), (660, 12014), (664, 12023), (666, 12029), (696, 12182), (711, 12242), (713, 12251), (715, 12257), (724, 12293), (754, 12425), (792, 12563), (799, 12587), (848, 12785), (849, 12788), (885, 12950), (892, 12974), (894, 12977), (922, 13079), (950, 13184), (971, 13256), (977, 13280), (980, 13292), (990, 13316), (992, 13328), (1011, 13412), (1013, 13418), (1024, 13460), (1028, 13481), (1038, 13514), (1045, 13547), (1052, 13568), (1058, 13595), (1077, 13655), (1080, 13682), (1083, 13691), (1086, 13703), (1115, 13805),

Gene: Buttrmlkdreams_16 Start: 9601, Stop: 14397, Start Num: 108
Candidate Starts for Buttrmlkdreams_16:
(Start: 108 @9601 has 16 MA's), (Start: 115 @9628 has 1 MA's), (117, 9634), (154, 9757), (177, 9859), (184, 9904), (186, 9916), (190, 9934), (194, 9961), (195, 9964), (198, 9979), (206, 10030), (207, 10033), (214, 10090), (215, 10093), (224, 10135), (228, 10153), (238, 10198), (248, 10234), (257, 10267), (264, 10300), (265, 10312), (276, 10366), (282, 10405), (284, 10420), (286, 10429), (292,

10456), (300, 10507), (316, 10567), (319, 10576), (332, 10630), (349, 10693), (352, 10708), (384, 10861), (393, 10888), (401, 10969), (404, 10981), (406, 10987), (410, 11002), (414, 11032), (416, 11041), (431, 11119), (439, 11152), (450, 11191), (454, 11209), (455, 11212), (460, 11239), (470, 11296), (473, 11317), (485, 11380), (498, 11428), (502, 11449), (509, 11485), (518, 11527), (522, 11551), (533, 11596), (534, 11599), (540, 11617), (541, 11620), (542, 11623), (567, 11698), (569, 11704), (578, 11731), (592, 11791), (613, 11857), (614, 11860), (615, 11863), (620, 11881), (646, 11980), (650, 11995), (651, 11998), (679, 12148), (686, 12169), (694, 12211), (701, 12238), (703, 12244), (743, 12388), (764, 12475), (779, 12517), (793, 12553), (813, 12628), (828, 12679), (836, 12718), (872, 12847), (882, 12904), (918, 13042), (940, 13117), (972, 13261), (978, 13282), (1012, 13456), (1014, 13462), (1085, 13786), (1090, 13792), (1108, 13852), (1118, 13903), (1130, 13975), (1141, 14014), (1149, 14044), (1165, 14110), (1170, 14158), (1180, 14218), (1200, 14308), (1213, 14368),

Gene: CanesSauce_16 Start: 9646, Stop: 14433, Start Num: 108
Candidate Starts for CanesSauce_16:
(Start: 108 @9646 has 16 MA's), (Start: 115 @9673 has 1 MA's), (140, 9751), (154, 9802), (173, 9889), (177, 9904), (186, 9961), (190, 9979), (194, 10006), (195, 10009), (207, 10078), (214, 10135), (224, 10180), (228, 10198), (238, 10243), (248, 10279), (257, 10312), (268, 10360), (269, 10363), (276, 10411), (282, 10450), (284, 10465), (328, 10657), (332, 10675), (353, 10759), (384, 10906), (393, 10933), (404, 11026), (406, 11032), (410, 11047), (416, 11086), (418, 11098), (431, 11164), (450, 11236), (454, 11254), (455, 11257), (460, 11284), (509, 11530), (522, 11596), (533, 11641), (540, 11662), (541, 11665), (542, 11668), (557, 11704), (567, 11743), (569, 11749), (578, 11776), (614, 11905), (615, 11908), (620, 11926), (652, 12049), (655, 12064), (679, 12193), (686, 12214), (694, 12256), (701, 12283), (703, 12289), (738, 12421), (743, 12433), (764, 12520), (779, 12562), (793, 12598), (828, 12724), (836, 12763), (872, 12892), (882, 12949), (893, 12991), (918, 13084), (940, 13159), (953, 13222), (972, 13303), (978, 13324), (1012, 13501), (1014, 13507), (1065, 13726), (1079, 13804), (1085, 13822), (1090, 13828), (1108, 13888), (1111, 13906), (1118, 13939), (1130, 14011), (1141, 14050), (1149, 14080), (1165, 14146), (1170, 14194), (1180, 14254), (1200, 14344), (1213, 14404),

Gene: CaptainKirk2_17 Start: 10277, Stop: 15820, Start Num: 9
Candidate Starts for CaptainKirk2_17:
(Start: 9 @10277 has 39 MA's), (Start: 11 @10292 has 1 MA's), (Start: 12 @10298 has 1 MA's), (Start: 14 @10328 has 2 MA's), (15, 10337), (16, 10340), (19, 10382), (40, 10493), (43, 10514), (82, 10742), (86, 10760), (92, 10775), (93, 10781), (94, 10784), (98, 10802), (109, 10826), (135, 10910), (136, 10913), (148, 10952), (153, 10967), (155, 10976), (189, 11144), (193, 11171), (251, 11489), (285, 11693), (294, 11738), (295, 11744), (297, 11765), (299, 11777), (320, 11867), (331, 11912), (339, 11939), (345, 11969), (362, 12056), (363, 12059), (370, 12098), (394, 12218), (398, 12260), (404, 12305), (406, 12311), (410, 12326), (419, 12380), (427, 12419), (430, 12440), (431, 12443), (434, 12461), (437, 12470), (448, 12509), (450, 12515), (455, 12536), (460, 12563), (501, 12770), (528, 12836), (544, 12875), (554, 12890), (577, 12920), (578, 12923), (591, 12974), (614, 13055), (615, 13058), (624, 13091), (633, 13121), (638, 13145), (710, 13478), (722, 13526), (728, 13571), (729, 13574), (733, 13589), (746, 13634), (747, 13643), (748, 13652), (757, 13703), (776, 13775), (786, 13793), (791, 13814), (813, 13913), (814, 13916), (822, 13949), (839, 14015), (843, 14033), (847, 14048), (853, 14081), (867, 14132), (877, 14183), (884, 14231), (927, 14426), (928, 14429), (946, 14501), (948, 14504), (961, 14570), (962, 14573), (966, 14591), (985, 14651), (1001, 14708), (1003, 14726), (1021, 14807), (1022, 14810), (1026, 14825), (1062, 14984), (1075, 15038), (1088, 15104), (1104, 15158), (1106, 15170), (1108, 15176), (1130, 15299), (1138, 15323), (1142, 15341), (1149, 15365), (1151, 15371), (1157, 15392), (1165, 15431), (1185, 15572), (1187, 15584), (1199, 15635), (1202, 15653), (1227, 15803),

Gene: CaramelLatte_16 Start: 9646, Stop: 14433, Start Num: 108
Candidate Starts for CaramelLatte_16:

(Start: 108 @9646 has 16 MA's), (Start: 115 @9673 has 1 MA's), (140, 9751), (154, 9802), (173, 9889), (177, 9904), (186, 9961), (190, 9979), (194, 10006), (195, 10009), (207, 10078), (214, 10135), (224, 10180), (228, 10198), (238, 10243), (248, 10279), (257, 10312), (268, 10360), (269, 10363), (276, 10411), (282, 10450), (284, 10465), (328, 10657), (332, 10675), (353, 10759), (384, 10906), (393, 10933), (404, 11026), (406, 11032), (410, 11047), (416, 11086), (418, 11098), (431, 11164), (450, 11236), (454, 11254), (455, 11257), (460, 11284), (509, 11530), (522, 11596), (533, 11641), (540, 11662), (541, 11665), (542, 11668), (557, 11704), (567, 11743), (569, 11749), (578, 11776), (614, 11905), (615, 11908), (620, 11926), (652, 12049), (655, 12064), (679, 12193), (686, 12214), (694, 12256), (701, 12283), (703, 12289), (738, 12421), (743, 12433), (764, 12520), (779, 12562), (793, 12598), (828, 12724), (836, 12763), (872, 12892), (882, 12949), (893, 12991), (918, 13084), (940, 13159), (953, 13222), (972, 13303), (978, 13324), (1012, 13501), (1014, 13507), (1065, 13726), (1079, 13804), (1085, 13822), (1090, 13828), (1108, 13888), (1111, 13906), (1118, 13939), (1130, 14011), (1141, 14050), (1149, 14080), (1165, 14146), (1170, 14194), (1180, 14254), (1200, 14344), (1213, 14404),

Gene: CarolAnn_17 Start: 10172, Stop: 15763, Start Num: 9
Candidate Starts for CarolAnn_17:
(Start: 9 @10172 has 39 MA's), (Start: 11 @10187 has 1 MA's), (Start: 14 @10223 has 2 MA's), (15, 10232), (16, 10235), (19, 10277), (40, 10388), (43, 10409), (61, 10529), (82, 10637), (86, 10655), (93, 10676), (94, 10679), (98, 10697), (137, 10811), (148, 10847), (153, 10862), (155, 10871), (189, 11039), (193, 11066), (210, 11183), (245, 11354), (251, 11384), (285, 11588), (294, 11633), (331, 11807), (339, 11834), (345, 11864), (349, 11885), (362, 11951), (363, 11954), (370, 11993), (379, 12056), (394, 12113), (398, 12155), (404, 12200), (406, 12206), (409, 12218), (410, 12221), (419, 12275), (427, 12314), (430, 12335), (431, 12338), (434, 12356), (442, 12383), (448, 12404), (450, 12410), (455, 12431), (460, 12458), (467, 12506), (473, 12536), (511, 12692), (516, 12716), (518, 12725), (521, 12746), (546, 12827), (577, 12923), (578, 12926), (580, 12932), (590, 12974), (591, 12977), (595, 12998), (614, 13058), (615, 13061), (624, 13094), (633, 13124), (654, 13214), (710, 13481), (722, 13529), (728, 13574), (729, 13577), (733, 13592), (746, 13637), (747, 13646), (748, 13655), (757, 13706), (776, 13778), (786, 13796), (791, 13817), (813, 13916), (814, 13919), (822, 13952), (839, 14018), (843, 14036), (847, 14051), (853, 14084), (867, 14135), (877, 14186), (884, 14234), (927, 14429), (928, 14432), (946, 14504), (948, 14507), (961, 14573), (962, 14576), (966, 14594), (985, 14654), (1003, 14729), (1022, 14813), (1026, 14828), (1075, 15041), (1095, 15098), (1100, 15113), (1109, 15161), (1119, 15206), (1153, 15326), (1156, 15335), (1164, 15374), (1174, 15446), (1185, 15515), (1199, 15578), (1202, 15596), (1215, 15653), (1227, 15746),

Gene: Carsonalex_17 Start: 9687, Stop: 14825, Start Num: 30
Candidate Starts for Carsonalex_17:
(Start: 23 @9663 has 5 MA's), (Start: 30 @9687 has 41 MA's), (34, 9714), (53, 9843), (63, 9918), (101, 10071), (102, 10074), (132, 10170), (137, 10179), (145, 10209), (148, 10215), (153, 10230), (154, 10233), (159, 10254), (174, 10326), (178, 10347), (190, 10413), (193, 10434), (210, 10551), (243, 10713), (251, 10752), (267, 10827), (297, 11025), (321, 11133), (342, 11211), (345, 11229), (348, 11247), (362, 11316), (365, 11328), (371, 11361), (393, 11472), (394, 11478), (406, 11571), (410, 11586), (434, 11721), (443, 11754), (455, 11796), (474, 11904), (484, 11958), (501, 12030), (502, 12033), (522, 12135), (533, 12180), (535, 12189), (540, 12201), (541, 12204), (542, 12207), (567, 12282), (568, 12285), (569, 12288), (573, 12300), (576, 12309), (578, 12315), (588, 12357), (591, 12366), (605, 12414), (615, 12447), (651, 12582), (675, 12699), (679, 12732), (686, 12753), (701, 12822), (703, 12828), (740, 12963), (743, 12972), (764, 13056), (859, 13377), (913, 13596), (923, 13632), (978, 13845), (1033, 14037), (1047, 14085), (1056, 14106), (1085, 14214), (1108, 14280), (1111, 14298), (1121, 14358), (1130, 14403), (1139, 14433), (1141, 14442), (1149, 14472), (1165, 14538), (1170, 14586), (1180, 14646), (1199, 14733), (1213, 14796),

Gene: CheeseSpider_19 Start: 10667, Stop: 16162, Start Num: 14
Candidate Starts for CheeseSpider_19:

(Start: 9 @10616 has 39 MA's), (10, 10628), (Start: 11 @10631 has 1 MA's), (Start: 14 @10667 has 2 MA's), (15, 10676), (16, 10679), (19, 10721), (40, 10832), (43, 10853), (82, 11081), (86, 11099), (93, 11120), (94, 11123), (98, 11141), (109, 11165), (135, 11249), (137, 11255), (148, 11291), (153, 11306), (155, 11315), (189, 11483), (193, 11510), (210, 11627), (245, 11798), (251, 11828), (285, 12032), (294, 12077), (297, 12104), (299, 12116), (320, 12206), (331, 12251), (339, 12278), (345, 12308), (362, 12395), (370, 12437), (372, 12443), (394, 12557), (398, 12599), (404, 12644), (406, 12650), (410, 12665), (419, 12719), (427, 12758), (430, 12779), (431, 12782), (434, 12800), (442, 12827), (450, 12854), (455, 12875), (460, 12902), (528, 13175), (544, 13214), (554, 13229), (577, 13259), (578, 13262), (591, 13313), (615, 13397), (624, 13430), (633, 13460), (638, 13484), (654, 13550), (692, 13739), (710, 13817), (722, 13865), (726, 13898), (728, 13910), (729, 13913), (733, 13928), (735, 13937), (746, 13973), (747, 13982), (748, 13991), (757, 14042), (776, 14114), (786, 14132), (791, 14153), (813, 14252), (814, 14255), (822, 14288), (839, 14354), (843, 14372), (847, 14387), (853, 14420), (867, 14471), (877, 14522), (927, 14765), (928, 14768), (939, 14801), (946, 14840), (948, 14843), (961, 14909), (962, 14912), (985, 14990), (1001, 15047), (1003, 15065), (1021, 15146), (1026, 15164), (1075, 15377), (1088, 15443), (1106, 15509), (1108, 15515), (1130, 15638), (1138, 15662), (1142, 15680), (1149, 15704), (1151, 15710), (1157, 15731), (1165, 15770), (1185, 15911), (1199, 15974), (1215, 16052),

Gene: CheeseTouch_18 Start: 9868, Stop: 15501, Start Num: 22
Candidate Starts for CheeseTouch_18:
(Start: 22 @9868 has 11 MA's), (Start: 33 @9913 has 2 MA's), (35, 9934), (39, 9955), (47, 10000), (Start: 49 @10015 has 1 MA's), (62, 10099), (70, 10141), (74, 10153), (86, 10216), (92, 10231), (94, 10240), (98, 10258), (101, 10264), (117, 10312), (159, 10447), (188, 10597), (193, 10627), (245, 10921), (251, 10951), (282, 11134), (285, 11155), (294, 11200), (295, 11206), (297, 11227), (315, 11308), (331, 11374), (339, 11401), (342, 11413), (345, 11431), (347, 11443), (352, 11467), (355, 11479), (362, 11518), (365, 11530), (370, 11560), (376, 11605), (390, 11665), (394, 11680), (397, 11710), (398, 11722), (404, 11767), (406, 11773), (409, 11785), (410, 11788), (413, 11809), (418, 11839), (419, 11842), (431, 11905), (437, 11932), (438, 11935), (439, 11938), (440, 11944), (447, 11968), (448, 11971), (450, 11977), (452, 11983), (455, 11998), (458, 12016), (471, 12097), (482, 12145), (483, 12151), (487, 12178), (522, 12337), (524, 12349), (534, 12385), (535, 12391), (552, 12433), (557, 12445), (567, 12484), (569, 12490), (570, 12493), (576, 12511), (577, 12514), (578, 12517), (584, 12541), (605, 12616), (616, 12655), (623, 12679), (630, 12712), (650, 12823), (654, 12856), (662, 12919), (670, 12955), (676, 12985), (692, 13063), (693, 13066), (694, 13075), (700, 13099), (722, 13186), (728, 13231), (729, 13234), (733, 13249), (746, 13294), (747, 13303), (748, 13312), (749, 13315), (773, 13420), (789, 13468), (791, 13474), (813, 13573), (814, 13576), (818, 13588), (847, 13705), (853, 13738), (867, 13789), (875, 13819), (883, 13879), (904, 13960), (907, 13981), (908, 13984), (915, 14014), (931, 14077), (934, 14086), (937, 14095), (962, 14209), (967, 14239), (979, 14287), (980, 14290), (991, 14320), (995, 14341), (1029, 14539), (1043, 14602), (1044, 14608), (1054, 14659), (1092, 14851), (1113, 14938), (1117, 14965), (1118, 14968), (1128, 15043), (1135, 15067), (1147, 15106), (1157, 15142), (1160, 15163), (1172, 15250), (1179, 15292), (1185, 15325), (1187, 15337), (1205, 15415), (1219, 15481),

Gene: CherryonLim_17 Start: 10133, Stop: 15220, Start Num: 30
Candidate Starts for CherryonLim_17:
(Start: 30 @10133 has 41 MA's), (53, 10289), (77, 10418), (93, 10490), (101, 10517), (117, 10565), (119, 10574), (132, 10616), (136, 10622), (137, 10625), (148, 10661), (155, 10685), (162, 10712), (179, 10799), (185, 10838), (187, 10844), (190, 10859), (193, 10880), (202, 10934), (220, 11051), (232, 11114), (243, 11159), (261, 11240), (285, 11402), (287, 11411), (290, 11435), (294, 11447), (297, 11474), (299, 11486), (307, 11531), (316, 11561), (319, 11573), (344, 11675), (345, 11678), (362, 11765), (367, 11792), (382, 11882), (389, 11903), (394, 11927), (400, 11978), (406, 12020), (410, 12035), (412, 12044), (413, 12056), (419, 12089), (428, 12131), (440, 12191), (441, 12194), (442, 12197), (443, 12203), (449, 12221), (455, 12245), (463, 12308), (470, 12329), (473, 12350), (486, 12398), (494, 12428), (500, 12455), (501, 12458), (518, 12539), (520, 12551), (522, 12563),

(525, 12578), (533, 12608), (540, 12629), (541, 12632), (562, 12692), (568, 12713), (576, 12737), (578, 12743), (600, 12827), (613, 12869), (622, 12899), (633, 12938), (645, 12986), (650, 13007), (651, 13010), (652, 13016), (665, 13082), (675, 13127), (679, 13160), (686, 13181), (697, 13235), (740, 13385), (743, 13394), (764, 13481), (823, 13658), (859, 13799), (869, 13829), (899, 13967), (923, 14048), (965, 14201), (972, 14231), (1031, 14441), (1033, 14450), (1035, 14456), (1047, 14492), (1085, 14609), (1090, 14615), (1103, 14657), (1108, 14675), (1130, 14798), (1138, 14822), (1141, 14837), (1149, 14867), (1157, 14894), (1158, 14900), (1165, 14933), (1174, 15002), (1175, 15005), (1180, 15041), (1193, 15113), (1200, 15131),

Gene: ChickenTender_18 Start: 9679, Stop: 14817, Start Num: 30
Candidate Starts for ChickenTender_18:
(Start: 30 @9679 has 41 MA's), (34, 9706), (53, 9835), (63, 9910), (101, 10063), (102, 10066), (132, 10162), (137, 10171), (145, 10201), (148, 10207), (153, 10222), (154, 10225), (159, 10246), (174, 10318), (178, 10339), (190, 10405), (193, 10426), (210, 10543), (243, 10705), (251, 10744), (290, 10978), (294, 10990), (297, 11017), (331, 11164), (342, 11203), (352, 11257), (355, 11269), (362, 11308), (368, 11341), (388, 11443), (389, 11446), (394, 11470), (400, 11521), (406, 11563), (410, 11578), (416, 11617), (434, 11713), (446, 11755), (455, 11788), (474, 11896), (484, 11950), (502, 12025), (522, 12127), (533, 12172), (541, 12196), (542, 12199), (562, 12256), (567, 12274), (578, 12307), (583, 12328), (591, 12358), (605, 12406), (607, 12412), (615, 12439), (651, 12574), (675, 12691), (679, 12724), (686, 12745), (701, 12814), (703, 12820), (743, 12964), (764, 13048), (859, 13369), (913, 13588), (916, 13603), (923, 13624), (975, 13825), (978, 13837), (1047, 14077), (1056, 14098), (1085, 14206), (1108, 14272), (1111, 14290), (1130, 14395), (1138, 14419), (1139, 14425), (1141, 14434), (1149, 14464), (1165, 14530), (1170, 14578), (1180, 14638), (1199, 14725), (1213, 14788),

Gene: ChocoMunchkin_16 Start: 9646, Stop: 14433, Start Num: 108
Candidate Starts for ChocoMunchkin_16:
(Start: 108 @9646 has 16 MA's), (Start: 115 @9673 has 1 MA's), (140, 9751), (154, 9802), (173, 9889), (177, 9904), (186, 9961), (190, 9979), (194, 10006), (195, 10009), (207, 10078), (214, 10135), (224, 10180), (228, 10198), (238, 10243), (248, 10279), (257, 10312), (268, 10360), (269, 10363), (276, 10411), (282, 10450), (284, 10465), (328, 10657), (332, 10675), (353, 10759), (384, 10906), (393, 10933), (404, 11026), (406, 11032), (410, 11047), (416, 11086), (418, 11098), (431, 11164), (450, 11236), (454, 11254), (455, 11257), (460, 11284), (509, 11530), (522, 11596), (533, 11641), (540, 11662), (541, 11665), (542, 11668), (557, 11704), (567, 11743), (569, 11749), (578, 11776), (614, 11905), (615, 11908), (620, 11926), (652, 12049), (655, 12064), (679, 12193), (686, 12214), (694, 12256), (701, 12283), (703, 12289), (738, 12421), (743, 12433), (764, 12520), (779, 12562), (793, 12598), (828, 12724), (836, 12763), (872, 12892), (882, 12949), (893, 12991), (918, 13084), (940, 13159), (953, 13222), (972, 13303), (978, 13324), (1012, 13501), (1014, 13507), (1065, 13726), (1079, 13804), (1085, 13822), (1090, 13828), (1108, 13888), (1111, 13906), (1118, 13939), (1130, 14011), (1141, 14050), (1149, 14080), (1165, 14146), (1170, 14194), (1180, 14254), (1200, 14344), (1213, 14404),

Gene: Cleo_16 Start: 9909, Stop: 15023, Start Num: 30
Candidate Starts for Cleo_16:
(24, 9888), (Start: 30 @9909 has 41 MA's), (34, 9936), (53, 10065), (66, 10149), (68, 10161), (78, 10212), (87, 10245), (95, 10269), (104, 10302), (132, 10392), (153, 10452), (154, 10455), (168, 10521), (176, 10557), (178, 10569), (188, 10626), (190, 10635), (193, 10656), (254, 10995), (268, 11052), (282, 11154), (294, 11220), (295, 11226), (297, 11247), (331, 11394), (345, 11451), (348, 11469), (351, 11484), (355, 11499), (362, 11538), (379, 11643), (384, 11667), (388, 11673), (403, 11784), (406, 11793), (410, 11808), (416, 11847), (434, 11943), (442, 11970), (443, 11976), (445, 11982), (454, 12015), (455, 12018), (474, 12126), (482, 12165), (487, 12198), (496, 12228), (497, 12231), (501, 12252), (502, 12255), (522, 12357), (533, 12402), (541, 12426), (542, 12429), (576, 12531), (577, 12534), (578, 12537), (591, 12588), (605, 12636), (607, 12642), (620, 12687), (651,

12804), (652, 12810), (663, 12867), (675, 12921), (677, 12942), (679, 12954), (686, 12975), (688, 12978), (701, 13044), (703, 13050), (740, 13185), (756, 13251), (764, 13278), (793, 13356), (859, 13596), (869, 13626), (909, 13800), (916, 13830), (923, 13851), (952, 13959), (962, 13995), (972, 14043), (1047, 14280), (1079, 14391), (1085, 14409), (1108, 14475), (1118, 14526), (1130, 14598), (1139, 14628), (1141, 14637), (1142, 14640), (1149, 14667), (1157, 14694), (1165, 14733), (1170, 14781), (1180, 14841), (1186, 14877), (1199, 14931),

Gene: CocoaPuff_15 Start: 9378, Stop: 14465, Start Num: 30
Candidate Starts for CocoaPuff_15:
(Start: 30 @9378 has 41 MA's), (53, 9534), (77, 9663), (81, 9693), (101, 9762), (105, 9774), (117, 9810), (119, 9819), (132, 9861), (137, 9870), (148, 9906), (155, 9930), (168, 9990), (179, 10044), (185, 10083), (187, 10089), (190, 10104), (193, 10125), (218, 10284), (220, 10296), (232, 10359), (243, 10404), (261, 10485), (285, 10644), (290, 10677), (294, 10689), (297, 10716), (307, 10773), (316, 10803), (319, 10815), (344, 10917), (345, 10920), (362, 11007), (372, 11055), (394, 11169), (406, 11262), (410, 11277), (413, 11298), (419, 11331), (425, 11361), (428, 11373), (434, 11412), (441, 11436), (442, 11439), (449, 11463), (455, 11487), (473, 11592), (486, 11640), (494, 11670), (499, 11685), (501, 11700), (509, 11739), (518, 11781), (522, 11805), (525, 11820), (529, 11835), (533, 11850), (541, 11874), (557, 11913), (560, 11928), (562, 11934), (568, 11955), (576, 11979), (578, 11985), (613, 12111), (622, 12141), (633, 12180), (645, 12228), (650, 12249), (651, 12252), (665, 12324), (675, 12369), (679, 12402), (686, 12423), (697, 12477), (717, 12552), (743, 12636), (764, 12723), (859, 13041), (869, 13071), (899, 13209), (914, 13260), (923, 13290), (965, 13449), (972, 13479), (1025, 13659), (1035, 13710), (1047, 13737), (1056, 13758), (1085, 13854), (1103, 13902), (1108, 13920), (1130, 14043), (1138, 14067), (1141, 14082), (1149, 14112), (1157, 14139), (1158, 14145), (1165, 14178), (1174, 14247), (1175, 14250), (1180, 14286), (1200, 14376),

Gene: CoffeeBean_43 Start: 25156, Stop: 30366, Start Num: 26
Candidate Starts for CoffeeBean_43:
(Start: 26 @25156 has 50 MA's), (57, 25348), (84, 25504), (88, 25516), (99, 25558), (100, 25561), (122, 25639), (126, 25654), (157, 25747), (196, 25945), (212, 26065), (218, 26092), (259, 26290), (285, 26467), (293, 26509), (305, 26587), (306, 26593), (325, 26665), (329, 26677), (330, 26683), (336, 26704), (345, 26743), (357, 26800), (365, 26842), (366, 26851), (374, 26884), (375, 26902), (378, 26932), (402, 27058), (412, 27091), (421, 27154), (431, 27202), (432, 27211), (446, 27265), (462, 27337), (463, 27358), (466, 27367), (501, 27523), (514, 27574), (527, 27622), (539, 27655), (555, 27694), (556, 27697), (577, 27748), (578, 27751), (586, 27784), (597, 27826), (601, 27838), (602, 27841), (605, 27850), (617, 27892), (618, 27895), (620, 27901), (623, 27913), (636, 27967), (638, 27979), (677, 28156), (680, 28165), (682, 28168), (693, 28213), (716, 28303), (720, 28321), (765, 28486), (772, 28516), (775, 28531), (816, 28687), (821, 28699), (827, 28723), (840, 28777), (850, 28810), (857, 28855), (881, 28948), (883, 28957), (885, 28969), (886, 28978), (890, 28999), (891, 29002), (910, 29074), (911, 29077), (917, 29098), (926, 29140), (965, 29290), (984, 29323), (988, 29332), (1046, 29569), (1055, 29614), (1068, 29680), (1071, 29686), (1075, 29707), (1076, 29716), (1081, 29737), (1091, 29758), (1105, 29803), (1136, 29944), (1178, 30133), (1182, 30166), (1203, 30268), (1207, 30280), (1212, 30307),

Gene: Commandaria_41 Start: 24799, Stop: 30195, Start Num: 26
Candidate Starts for Commandaria_41:
(Start: 26 @24799 has 50 MA's), (77, 25105), (79, 25126), (84, 25147), (157, 25369), (160, 25381), (208, 25657), (218, 25720), (220, 25732), (222, 25738), (277, 26020), (278, 26032), (281, 26062), (285, 26095), (293, 26137), (303, 26203), (314, 26245), (334, 26326), (345, 26371), (361, 26449), (365, 26470), (366, 26479), (375, 26530), (377, 26554), (378, 26560), (426, 26803), (432, 26839), (437, 26860), (449, 26902), (450, 26905), (495, 27085), (510, 27151), (516, 27178), (526, 27205), (529, 27217), (540, 27247), (567, 27298), (575, 27319), (578, 27328), (584, 27352), (588, 27370), (597, 27403), (623, 27490), (633, 27532), (636, 27544), (659, 27646), (671, 27706), (695, 27826), (712, 27901), (718, 27916), (721, 27934), (722, 27940), (729, 27988), (733, 28003), (746, 28048),

(747, 28057), (750, 28066), (752, 28072), (791, 28228), (814, 28336), (815, 28339), (826, 28387), (831, 28411), (839, 28438), (846, 28471), (853, 28504), (866, 28558), (867, 28561), (877, 28603), (885, 28660), (886, 28669), (889, 28684), (898, 28726), (903, 28738), (910, 28774), (914, 28792), (939, 28888), (946, 28930), (948, 28933), (953, 28963), (956, 28975), (958, 28984), (1015, 29218), (1049, 29353), (1140, 29767), (1163, 29863), (1190, 30040), (1191, 30049), (1197, 30073), (1210, 30127), (1212, 30136),

Gene: Cozz_16 Start: 9630, Stop: 14768, Start Num: 30
Candidate Starts for Cozz_16:
(Start: 23 @9606 has 5 MA's), (Start: 30 @9630 has 41 MA's), (34, 9657), (53, 9786), (63, 9861), (101, 10014), (102, 10017), (132, 10113), (137, 10122), (145, 10152), (148, 10158), (153, 10173), (154, 10176), (159, 10197), (174, 10269), (178, 10290), (190, 10356), (193, 10377), (210, 10494), (243, 10656), (251, 10695), (267, 10770), (290, 10929), (294, 10941), (297, 10968), (304, 11013), (307, 11025), (331, 11115), (336, 11133), (342, 11154), (347, 11184), (352, 11208), (355, 11220), (362, 11259), (368, 11292), (388, 11394), (389, 11397), (394, 11421), (406, 11514), (410, 11529), (416, 11568), (434, 11664), (445, 11703), (446, 11706), (455, 11739), (474, 11847), (475, 11850), (484, 11901), (502, 11976), (522, 12078), (533, 12123), (540, 12144), (541, 12147), (542, 12150), (567, 12225), (578, 12258), (583, 12279), (605, 12357), (607, 12363), (615, 12390), (651, 12525), (675, 12642), (679, 12675), (686, 12696), (701, 12765), (703, 12771), (706, 12786), (740, 12906), (743, 12915), (764, 12999), (859, 13320), (913, 13539), (923, 13575), (978, 13788), (1033, 13980), (1047, 14028), (1056, 14049), (1085, 14157), (1108, 14223), (1111, 14241), (1121, 14301), (1130, 14346), (1139, 14376), (1141, 14385), (1149, 14415), (1165, 14481), (1170, 14529), (1180, 14589), (1199, 14676), (1213, 14739),

Gene: Dalilpop_44 Start: 25804, Stop: 31200, Start Num: 26
Candidate Starts for Dalilpop_44:
(Start: 26 @25804 has 50 MA's), (57, 25996), (106, 26221), (155, 26368), (182, 26503), (218, 26725), (222, 26743), (260, 26926), (278, 27037), (281, 27067), (285, 27100), (314, 27250), (325, 27298), (334, 27331), (345, 27376), (355, 27424), (361, 27454), (366, 27484), (375, 27535), (378, 27565), (417, 27757), (426, 27808), (437, 27865), (449, 27907), (450, 27910), (485, 28060), (491, 28078), (516, 28183), (526, 28210), (531, 28231), (554, 28276), (563, 28291), (567, 28303), (575, 28324), (585, 28363), (595, 28405), (601, 28420), (609, 28444), (611, 28450), (621, 28486), (626, 28507), (636, 28549), (645, 28585), (692, 28816), (694, 28828), (718, 28921), (721, 28939), (722, 28945), (729, 28993), (733, 29008), (746, 29053), (747, 29062), (750, 29071), (752, 29077), (791, 29233), (800, 29269), (814, 29341), (826, 29392), (831, 29416), (839, 29443), (846, 29476), (853, 29509), (867, 29566), (873, 29593), (877, 29608), (885, 29665), (910, 29779), (914, 29797), (919, 29815), (921, 29830), (946, 29920), (948, 29923), (959, 29977), (989, 30076), (1140, 30772), (1169, 30910), (1176, 30961), (1191, 31054), (1192, 31066), (1203, 31102), (1209, 31129), (1212, 31141),

Gene: Delian_17 Start: 10277, Stop: 15820, Start Num: 9
Candidate Starts for Delian_17:
(Start: 9 @10277 has 39 MA's), (Start: 11 @10292 has 1 MA's), (Start: 12 @10298 has 1 MA's), (Start: 14 @10328 has 2 MA's), (15, 10337), (16, 10340), (19, 10382), (40, 10493), (43, 10514), (82, 10742), (86, 10760), (92, 10775), (93, 10781), (94, 10784), (98, 10802), (109, 10826), (135, 10910), (136, 10913), (148, 10952), (153, 10967), (155, 10976), (189, 11144), (193, 11171), (251, 11489), (285, 11693), (294, 11738), (295, 11744), (297, 11765), (299, 11777), (320, 11867), (331, 11912), (339, 11939), (345, 11969), (362, 12056), (363, 12059), (370, 12098), (394, 12218), (398, 12260), (404, 12305), (406, 12311), (410, 12326), (419, 12380), (427, 12419), (430, 12440), (431, 12443), (434, 12461), (437, 12470), (448, 12509), (450, 12515), (455, 12536), (460, 12563), (501, 12770), (528, 12836), (544, 12875), (554, 12890), (577, 12920), (578, 12923), (591, 12974), (614, 13055), (615, 13058), (624, 13091), (633, 13121), (638, 13145), (710, 13478), (722, 13526), (728, 13571), (729, 13574), (733, 13589), (746, 13634), (747, 13643), (748, 13652), (757, 13703), (776, 13775), (786, 13793), (791, 13814), (813, 13913), (814, 13916), (822, 13949), (839, 14015), (843, 14033), (847,

14048), (853, 14081), (867, 14132), (877, 14183), (884, 14231), (927, 14426), (928, 14429), (946, 14501), (948, 14504), (961, 14570), (962, 14573), (966, 14591), (985, 14651), (1001, 14708), (1003, 14726), (1021, 14807), (1022, 14810), (1026, 14825), (1062, 14984), (1075, 15038), (1088, 15104), (1104, 15158), (1106, 15170), (1108, 15176), (1130, 15299), (1138, 15323), (1142, 15341), (1149, 15365), (1151, 15371), (1157, 15392), (1165, 15431), (1185, 15572), (1187, 15584), (1199, 15635), (1202, 15653), (1227, 15803),

Gene: DirtyBoi_18 Start: 11005, Stop: 16017, Start Num: 27
Candidate Starts for DirtyBoi_18:
(Start: 27 @11005 has 14 MA's), (Start: 33 @11035 has 2 MA's), (35, 11056), (41, 11092), (76, 11296), (80, 11326), (102, 11401), (137, 11506), (155, 11566), (171, 11644), (172, 11647), (185, 11719), (193, 11761), (207, 11848), (285, 12277), (290, 12310), (295, 12328), (301, 12373), (305, 12397), (318, 12442), (320, 12451), (329, 12487), (331, 12496), (338, 12520), (342, 12535), (345, 12553), (362, 12640), (373, 12694), (375, 12712), (390, 12787), (396, 12817), (404, 12889), (406, 12895), (410, 12910), (419, 12964), (431, 13027), (434, 13045), (442, 13072), (445, 13084), (450, 13099), (455, 13120), (477, 13240), (482, 13267), (487, 13300), (499, 13339), (501, 13354), (511, 13402), (516, 13426), (521, 13456), (538, 13519), (558, 13564), (559, 13567), (578, 13636), (595, 13708), (603, 13729), (605, 13735), (607, 13741), (614, 13765), (615, 13768), (621, 13789), (628, 13819), (633, 13831), (642, 13867), (655, 13921), (656, 13924), (657, 13930), (667, 13975), (669, 13984), (696, 14125), (704, 14158), (718, 14203), (719, 14209), (721, 14221), (730, 14272), (756, 14356), (762, 14380), (770, 14404), (771, 14407), (790, 14458), (803, 14506), (826, 14593), (831, 14617), (833, 14629), (841, 14650), (851, 14677), (877, 14782), (881, 14815), (899, 14863), (904, 14875), (930, 14947), (936, 14956), (996, 15112), (1009, 15142), (1071, 15334), (1106, 15454), (1107, 15457), (1137, 15601), (1156, 15664), (1184, 15826), (1185, 15838), (1198, 15895), (1214, 15970), (1216, 15976), (1221, 16006), (1222, 16009),

Gene: Dre3_16 Start: 9856, Stop: 14970, Start Num: 30
Candidate Starts for Dre3_16:
(24, 9835), (Start: 30 @9856 has 41 MA's), (34, 9883), (53, 10012), (66, 10096), (68, 10108), (78, 10159), (87, 10192), (95, 10216), (104, 10249), (132, 10339), (153, 10399), (154, 10402), (168, 10468), (176, 10504), (178, 10516), (188, 10573), (190, 10582), (193, 10603), (254, 10942), (268, 10999), (282, 11101), (294, 11167), (295, 11173), (297, 11194), (331, 11341), (345, 11398), (348, 11416), (351, 11431), (355, 11446), (362, 11485), (379, 11590), (384, 11614), (388, 11620), (403, 11731), (406, 11740), (410, 11755), (416, 11794), (434, 11890), (442, 11917), (443, 11923), (445, 11929), (454, 11962), (455, 11965), (474, 12073), (482, 12112), (487, 12145), (496, 12175), (497, 12178), (501, 12199), (502, 12202), (522, 12304), (533, 12349), (541, 12373), (542, 12376), (568, 12454), (576, 12478), (577, 12481), (578, 12484), (591, 12535), (605, 12583), (607, 12589), (620, 12634), (651, 12751), (652, 12757), (663, 12814), (675, 12868), (677, 12889), (679, 12901), (686, 12922), (688, 12925), (701, 12991), (703, 12997), (740, 13132), (756, 13198), (764, 13225), (793, 13303), (859, 13543), (869, 13573), (909, 13747), (916, 13777), (923, 13798), (952, 13906), (972, 13990), (1047, 14227), (1079, 14338), (1085, 14356), (1108, 14422), (1118, 14473), (1130, 14545), (1141, 14584), (1142, 14587), (1149, 14614), (1157, 14641), (1165, 14680), (1170, 14728), (1180, 14788), (1186, 14824), (1199, 14878),

Gene: ElJefes_15 Start: 10009, Stop: 14943, Start Num: 53
Candidate Starts for ElJefes_15:
(Start: 30 @9853 has 41 MA's), (53, 10009), (70, 10114), (77, 10138), (86, 10189), (101, 10237), (117, 10285), (119, 10294), (132, 10336), (136, 10342), (137, 10345), (148, 10381), (155, 10405), (162, 10432), (179, 10519), (185, 10558), (187, 10564), (190, 10579), (193, 10600), (202, 10654), (220, 10771), (232, 10834), (243, 10879), (251, 10918), (261, 10960), (285, 11122), (287, 11131), (290, 11155), (294, 11167), (297, 11194), (299, 11206), (307, 11251), (316, 11281), (319, 11293), (344, 11395), (345, 11398), (362, 11485), (367, 11512), (376, 11572), (382, 11602), (389, 11623), (394, 11647), (400, 11698), (406, 11740), (410, 11755), (412, 11764), (413, 11776), (419, 11809), (428,

11851), (440, 11911), (441, 11914), (442, 11917), (449, 11941), (455, 11965), (473, 12070), (486, 12118), (501, 12178), (502, 12181), (509, 12217), (522, 12283), (525, 12298), (529, 12313), (533, 12328), (540, 12349), (541, 12352), (557, 12391), (560, 12406), (562, 12412), (568, 12433), (576, 12457), (578, 12463), (613, 12589), (622, 12619), (633, 12658), (645, 12706), (650, 12727), (651, 12730), (652, 12736), (665, 12802), (675, 12847), (679, 12880), (686, 12901), (697, 12955), (740, 13105), (743, 13114), (764, 13201), (823, 13378), (859, 13519), (869, 13549), (899, 13687), (923, 13768), (965, 13921), (972, 13951), (1031, 14173), (1033, 14182), (1035, 14188), (1047, 14215), (1085, 14332), (1090, 14338), (1103, 14380), (1108, 14398), (1130, 14521), (1138, 14545), (1141, 14560), (1149, 14590), (1157, 14617), (1158, 14623), (1165, 14656), (1174, 14725), (1175, 14728), (1180, 14764), (1193, 14836), (1200, 14854),

Gene: Elinal_17 Start: 9384, Stop: 14468, Start Num: 30
Candidate Starts for Elinal_17:
(Start: 30 @9384 has 41 MA's), (53, 9540), (77, 9669), (81, 9699), (101, 9768), (105, 9780), (119, 9825), (132, 9867), (137, 9876), (148, 9912), (155, 9936), (179, 10050), (185, 10089), (187, 10095), (188, 10101), (190, 10110), (193, 10131), (220, 10302), (232, 10365), (243, 10410), (261, 10491), (285, 10650), (290, 10683), (294, 10695), (297, 10722), (307, 10779), (316, 10809), (319, 10821), (344, 10923), (345, 10926), (362, 11013), (372, 11061), (394, 11175), (406, 11268), (410, 11283), (413, 11304), (419, 11337), (425, 11367), (428, 11379), (434, 11418), (441, 11442), (442, 11445), (449, 11469), (455, 11493), (473, 11598), (486, 11646), (494, 11676), (499, 11691), (501, 11706), (509, 11745), (518, 11787), (520, 11799), (522, 11811), (525, 11826), (529, 11841), (533, 11856), (541, 11880), (557, 11919), (560, 11934), (562, 11940), (568, 11961), (576, 11985), (578, 11991), (613, 12117), (622, 12147), (636, 12198), (645, 12234), (650, 12255), (651, 12258), (665, 12330), (675, 12375), (679, 12408), (686, 12429), (697, 12483), (717, 12558), (743, 12642), (764, 12729), (825, 12915), (859, 13047), (869, 13077), (899, 13215), (914, 13266), (923, 13296), (965, 13452), (972, 13482), (1025, 13662), (1035, 13713), (1047, 13740), (1056, 13761), (1085, 13857), (1103, 13905), (1108, 13923), (1130, 14046), (1138, 14070), (1141, 14085), (1149, 14115), (1157, 14142), (1158, 14148), (1165, 14181), (1174, 14250), (1175, 14253), (1180, 14289), (1200, 14379),

Gene: Eliott_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Eliott_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (445, 11702), (446, 11705), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: Emalyn_15 Start: 9356, Stop: 14068, Start Num: 108
Candidate Starts for Emalyn_15:
(Start: 108 @9356 has 16 MA's), (154, 9512), (173, 9599), (177, 9614), (184, 9659), (186, 9671), (190, 9689), (194, 9716), (207, 9788), (212, 9830), (214, 9845), (215, 9848), (221, 9872), (224, 9890), (228, 9908), (232, 9929), (238, 9953), (240, 9962), (248, 9989), (257, 10022), (259, 10031), (276, 10121), (282, 10160), (284, 10175), (297, 10244), (303, 10271), (328, 10367), (332, 10385), (349, 10448), (384, 10616), (388, 10622), (404, 10736), (406, 10742), (410, 10757), (450, 10946), (455, 10967),

(458, 10985), (460, 10994), (484, 11129), (502, 11204), (509, 11240), (517, 11279), (518, 11282), (522, 11306), (529, 11336), (533, 11351), (541, 11375), (557, 11414), (567, 11453), (569, 11459), (615, 11618), (674, 11867), (675, 11870), (679, 11903), (686, 11924), (701, 11993), (703, 11999), (764, 12230), (807, 12365), (859, 12557), (880, 12626), (881, 12650), (918, 12791), (972, 13004), (978, 13025), (995, 13079), (1069, 13382), (1079, 13439), (1085, 13457), (1108, 13523), (1120, 13595), (1130, 13646), (1138, 13670), (1139, 13676), (1141, 13685), (1149, 13715), (1165, 13781), (1170, 13829), (1180, 13889), (1200, 13979), (1213, 14039),

Gene: Emianna_39 Start: 24486, Stop: 29879, Start Num: 26
Candidate Starts for Emianna_39:
(Start: 26 @24486 has 50 MA's), (79, 24813), (84, 24834), (129, 24978), (149, 25023), (157, 25056), (180, 25176), (222, 25425), (232, 25482), (278, 25719), (281, 25749), (285, 25782), (305, 25902), (314, 25932), (337, 26022), (345, 26058), (355, 26106), (356, 26112), (361, 26136), (365, 26157), (366, 26166), (375, 26217), (378, 26247), (437, 26547), (449, 26589), (450, 26592), (462, 26652), (466, 26682), (506, 26820), (510, 26838), (516, 26865), (524, 26886), (526, 26892), (539, 26931), (540, 26934), (570, 26994), (575, 27006), (578, 27015), (591, 27066), (594, 27081), (633, 27219), (636, 27231), (653, 27306), (671, 27393), (692, 27498), (694, 27510), (718, 27603), (722, 27627), (729, 27675), (733, 27690), (742, 27711), (746, 27735), (747, 27744), (750, 27753), (752, 27759), (758, 27795), (763, 27822), (791, 27915), (814, 28023), (826, 28074), (831, 28098), (839, 28125), (846, 28158), (853, 28191), (867, 28248), (873, 28275), (877, 28290), (885, 28347), (898, 28413), (919, 28497), (946, 28605), (948, 28608), (953, 28638), (1125, 29412), (1140, 29451), (1161, 29538), (1178, 29646), (1191, 29733), (1197, 29757), (1203, 29781), (1210, 29811), (1212, 29820),

Gene: Ennea_45 Start: 25122, Stop: 30548, Start Num: 26
Candidate Starts for Ennea_45:
(Start: 26 @25122 has 50 MA's), (84, 25470), (103, 25530), (106, 25539), (182, 25812), (218, 26034), (220, 26046), (222, 26052), (278, 26346), (281, 26376), (285, 26409), (314, 26559), (337, 26649), (345, 26685), (355, 26733), (356, 26739), (361, 26763), (365, 26784), (366, 26793), (375, 26844), (378, 26874), (426, 27117), (437, 27174), (450, 27219), (452, 27225), (481, 27357), (489, 27384), (516, 27492), (524, 27513), (526, 27519), (540, 27561), (578, 27642), (580, 27648), (591, 27693), (594, 27708), (612, 27762), (636, 27858), (671, 28020), (677, 28059), (685, 28089), (694, 28137), (709, 28197), (718, 28230), (722, 28254), (729, 28302), (733, 28317), (735, 28326), (746, 28362), (747, 28371), (750, 28380), (751, 28383), (752, 28386), (791, 28542), (800, 28578), (814, 28650), (826, 28698), (839, 28749), (846, 28782), (853, 28815), (867, 28872), (871, 28887), (898, 29037), (903, 29049), (921, 29136), (935, 29187), (946, 29229), (948, 29232), (953, 29262), (1017, 29556), (1037, 29646), (1041, 29667), (1058, 29736), (1073, 29823), (1140, 30120), (1152, 30168), (1161, 30207), (1191, 30402), (1203, 30450), (1207, 30462), (1209, 30477), (1212, 30489), (1213, 30498),

Gene: Eyes_17 Start: 10596, Stop: 15716, Start Num: 27
Candidate Starts for Eyes_17:
(Start: 27 @10596 has 14 MA's), (Start: 30 @10605 has 41 MA's), (67, 10848), (74, 10878), (76, 10887), (80, 10917), (92, 10956), (98, 10983), (151, 11139), (155, 11157), (185, 11310), (193, 11352), (202, 11406), (243, 11631), (244, 11634), (251, 11670), (268, 11748), (274, 11787), (285, 11871), (290, 11904), (293, 11913), (295, 11922), (299, 11955), (301, 11967), (305, 11991), (318, 12036), (320, 12045), (329, 12081), (339, 12117), (342, 12129), (345, 12147), (352, 12183), (354, 12192), (375, 12306), (381, 12348), (404, 12483), (405, 12486), (406, 12489), (410, 12504), (419, 12558), (427, 12597), (445, 12678), (450, 12693), (455, 12714), (463, 12777), (471, 12813), (511, 12975), (550, 13032), (564, 13044), (565, 13047), (578, 13080), (582, 13098), (603, 13173), (605, 13179), (607, 13185), (613, 13206), (614, 13209), (615, 13212), (633, 13275), (642, 13311), (646, 13326), (652, 13350), (655, 13365), (656, 13368), (657, 13374), (669, 13428), (689, 13527), (696, 13569), (718, 13647), (730, 13716), (739, 13734), (761, 13842), (762, 13845), (770, 13869), (771, 13872), (777, 13893), (788, 13914), (790, 13923), (826, 14058), (831, 14082), (851, 14142), (863, 14202), (877, 14247), (881, 14280), (899, 14328), (904, 14340), (917, 14400), (957, 14550), (961, 14568),

(981, 14646), (983, 14652), (987, 14661), (993, 14688), (1008, 14781), (1016, 14820), (1027, 14862), (1066, 15015), (1074, 15048), (1075, 15051), (1095, 15108), (1098, 15117), (1102, 15129), (1106, 15150), (1109, 15171), (1156, 15363), (1165, 15402), (1175, 15471), (1184, 15525), (1216, 15678),

Gene: Fairfaxidum_17 Start: 10343, Stop: 15964, Start Num: 9
Candidate Starts for Fairfaxidum_17:
(Start: 8 @10307 has 1 MA's), (Start: 9 @10343 has 39 MA's), (Start: 12 @10364 has 1 MA's), (13, 10382), (16, 10406), (19, 10448), (38, 10547), (40, 10559), (43, 10580), (51, 10637), (62, 10709), (66, 10730), (70, 10751), (76, 10772), (77, 10775), (85, 10823), (86, 10826), (94, 10850), (98, 10868), (117, 10922), (137, 10982), (148, 11018), (151, 11024), (193, 11237), (223, 11423), (245, 11525), (247, 11540), (251, 11555), (263, 11612), (294, 11804), (318, 11924), (339, 12005), (345, 12035), (352, 12071), (362, 12122), (370, 12164), (394, 12284), (400, 12335), (404, 12371), (406, 12377), (410, 12392), (419, 12446), (427, 12485), (431, 12509), (434, 12527), (443, 12560), (448, 12575), (450, 12581), (454, 12599), (455, 12602), (460, 12629), (463, 12665), (518, 12896), (524, 12932), (525, 12935), (534, 12968), (568, 13070), (578, 13103), (593, 13166), (605, 13202), (615, 13238), (622, 13262), (628, 13289), (650, 13370), (662, 13436), (668, 13454), (689, 13559), (694, 13592), (710, 13658), (712, 13667), (722, 13706), (726, 13739), (728, 13751), (729, 13754), (733, 13769), (735, 13778), (746, 13814), (747, 13823), (748, 13832), (770, 13928), (789, 13988), (790, 13991), (791, 13994), (796, 14015), (814, 14096), (824, 14138), (847, 14225), (853, 14258), (855, 14267), (867, 14309), (887, 14423), (927, 14597), (946, 14672), (948, 14675), (953, 14705), (954, 14708), (960, 14732), (961, 14741), (962, 14744), (985, 14822), (1001, 14879), (1026, 14996), (1039, 15047), (1075, 15185), (1088, 15251), (1106, 15317), (1108, 15323), (1111, 15341), (1127, 15434), (1130, 15446), (1146, 15494), (1149, 15512), (1151, 15518), (1157, 15539), (1165, 15578), (1185, 15719), (1199, 15782), (1215, 15857), (1227, 15950),

Gene: Feastonyeet_15 Start: 9403, Stop: 14511, Start Num: 30
Candidate Starts for Feastonyeet_15:
(Start: 30 @9403 has 41 MA's), (53, 9559), (77, 9688), (81, 9718), (101, 9787), (105, 9799), (117, 9835), (132, 9886), (137, 9895), (148, 9931), (155, 9955), (168, 10015), (179, 10069), (185, 10108), (187, 10114), (190, 10129), (193, 10150), (220, 10321), (232, 10384), (243, 10429), (261, 10510), (285, 10669), (290, 10702), (294, 10714), (297, 10741), (307, 10798), (316, 10828), (319, 10840), (344, 10942), (345, 10945), (362, 11032), (372, 11080), (394, 11194), (406, 11287), (410, 11302), (413, 11323), (419, 11356), (425, 11386), (428, 11398), (434, 11437), (441, 11461), (442, 11464), (449, 11488), (455, 11512), (473, 11617), (494, 11695), (501, 11725), (502, 11728), (509, 11764), (518, 11806), (522, 11830), (525, 11845), (529, 11860), (533, 11875), (541, 11899), (557, 11938), (560, 11953), (562, 11959), (576, 12004), (578, 12010), (613, 12136), (622, 12166), (632, 12202), (633, 12205), (645, 12253), (650, 12274), (651, 12277), (665, 12349), (675, 12394), (679, 12427), (686, 12448), (697, 12502), (717, 12577), (743, 12661), (764, 12748), (859, 13066), (869, 13096), (899, 13234), (914, 13285), (923, 13315), (965, 13480), (972, 13510), (1025, 13690), (1035, 13741), (1047, 13783), (1056, 13804), (1085, 13900), (1103, 13948), (1108, 13966), (1130, 14089), (1138, 14113), (1141, 14128), (1149, 14158), (1157, 14185), (1158, 14191), (1165, 14224), (1174, 14293), (1175, 14296), (1180, 14332), (1200, 14422),

Gene: Fenry_16 Start: 10023, Stop: 15515, Start Num: 9
Candidate Starts for Fenry_16:
(Start: 9 @10023 has 39 MA's), (Start: 11 @10038 has 1 MA's), (Start: 12 @10044 has 1 MA's), (Start: 14 @10074 has 2 MA's), (15, 10083), (16, 10086), (19, 10128), (40, 10239), (43, 10260), (61, 10380), (82, 10488), (86, 10506), (92, 10521), (93, 10527), (94, 10530), (98, 10548), (109, 10572), (135, 10656), (137, 10662), (148, 10698), (153, 10713), (155, 10722), (189, 10890), (193, 10917), (228, 11130), (251, 11235), (285, 11439), (294, 11484), (297, 11511), (299, 11523), (320, 11613), (331, 11658), (339, 11685), (345, 11715), (362, 11802), (363, 11805), (370, 11844), (394, 11964), (398, 12006), (404, 12051), (406, 12057), (409, 12069), (410, 12072), (419, 12126), (427, 12165), (430, 12186), (431, 12189), (434, 12207), (448, 12255), (450, 12261), (455, 12282), (460, 12309), (471,

12381), (501, 12516), (530, 12588), (532, 12597), (538, 12609), (544, 12621), (554, 12636), (577, 12666), (578, 12669), (591, 12720), (614, 12801), (615, 12804), (624, 12837), (633, 12867), (638, 12891), (654, 12957), (699, 13173), (710, 13224), (722, 13272), (728, 13317), (729, 13320), (733, 13335), (746, 13380), (747, 13389), (748, 13398), (757, 13449), (776, 13521), (786, 13539), (791, 13560), (813, 13659), (814, 13662), (822, 13695), (839, 13761), (843, 13779), (847, 13794), (853, 13827), (867, 13878), (877, 13929), (927, 14172), (928, 14175), (946, 14247), (948, 14250), (961, 14316), (962, 14319), (966, 14337), (985, 14397), (1021, 14553), (1022, 14556), (1026, 14571), (1062, 14742), (1075, 14796), (1095, 14853), (1100, 14868), (1109, 14916), (1119, 14961), (1153, 15081), (1156, 15090), (1164, 15129), (1174, 15201), (1185, 15270), (1187, 15282), (1199, 15333), (1202, 15351), (1227, 15501),

Gene: Flapper_43 Start: 24865, Stop: 30267, Start Num: 26
Candidate Starts for Flapper_43:
(Start: 26 @24865 has 50 MA's), (57, 25057), (94, 25246), (106, 25282), (182, 25561), (218, 25783), (222, 25801), (245, 25915), (278, 26095), (281, 26125), (285, 26158), (314, 26308), (325, 26356), (334, 26389), (345, 26434), (355, 26482), (361, 26512), (366, 26542), (375, 26593), (378, 26623), (417, 26815), (437, 26923), (449, 26965), (450, 26968), (485, 27118), (516, 27241), (526, 27268), (554, 27334), (563, 27349), (567, 27361), (571, 27373), (575, 27382), (585, 27421), (609, 27502), (611, 27508), (616, 27529), (621, 27544), (626, 27565), (636, 27607), (645, 27643), (652, 27673), (692, 27874), (694, 27886), (718, 27979), (722, 28003), (729, 28051), (733, 28066), (746, 28111), (747, 28120), (750, 28129), (752, 28135), (791, 28291), (814, 28399), (815, 28402), (826, 28450), (831, 28474), (837, 28498), (839, 28501), (846, 28534), (853, 28567), (867, 28624), (871, 28639), (877, 28666), (885, 28723), (910, 28837), (914, 28855), (919, 28873), (921, 28888), (946, 28978), (959, 29035), (1049, 29413), (1140, 29839), (1176, 30028), (1191, 30121), (1203, 30169), (1209, 30196), (1212, 30208),

Gene: Float294_41 Start: 24561, Stop: 29990, Start Num: 26
Candidate Starts for Float294_41:
(Start: 26 @24561 has 50 MA's), (84, 24909), (103, 24969), (106, 24978), (182, 25254), (191, 25296), (218, 25476), (220, 25488), (222, 25494), (267, 25713), (278, 25788), (281, 25818), (285, 25851), (314, 26001), (337, 26091), (345, 26127), (355, 26175), (356, 26181), (361, 26205), (365, 26226), (366, 26235), (375, 26286), (378, 26316), (426, 26559), (437, 26616), (440, 26628), (450, 26661), (452, 26667), (481, 26799), (489, 26826), (516, 26934), (524, 26955), (540, 27003), (578, 27084), (580, 27090), (591, 27135), (594, 27150), (612, 27204), (636, 27300), (671, 27462), (677, 27501), (685, 27531), (694, 27579), (709, 27639), (718, 27672), (722, 27696), (729, 27744), (733, 27759), (735, 27768), (746, 27804), (747, 27813), (750, 27822), (751, 27825), (752, 27828), (791, 27984), (800, 28020), (814, 28092), (826, 28140), (839, 28191), (846, 28224), (853, 28257), (867, 28314), (871, 28329), (898, 28479), (903, 28491), (921, 28578), (935, 28629), (946, 28671), (948, 28674), (953, 28704), (1017, 28998), (1037, 29088), (1041, 29109), (1058, 29178), (1073, 29265), (1140, 29562), (1152, 29610), (1161, 29649), (1191, 29844), (1203, 29892), (1207, 29904), (1209, 29919), (1212, 29931), (1213, 29940),

Gene: Foxboro_40 Start: 24992, Stop: 30385, Start Num: 26
Candidate Starts for Foxboro_40:
(Start: 26 @24992 has 50 MA's), (79, 25319), (84, 25340), (129, 25484), (149, 25529), (157, 25562), (180, 25682), (222, 25931), (232, 25988), (278, 26225), (281, 26255), (285, 26288), (305, 26408), (314, 26438), (337, 26528), (345, 26564), (355, 26612), (356, 26618), (361, 26642), (365, 26663), (366, 26672), (375, 26723), (378, 26753), (437, 27053), (449, 27095), (450, 27098), (462, 27158), (466, 27188), (506, 27326), (510, 27344), (516, 27371), (524, 27392), (526, 27398), (539, 27437), (540, 27440), (570, 27500), (575, 27512), (578, 27521), (591, 27572), (594, 27587), (625, 27692), (633, 27725), (636, 27737), (653, 27812), (671, 27899), (692, 28004), (694, 28016), (718, 28109), (722, 28133), (729, 28181), (733, 28196), (742, 28217), (746, 28241), (747, 28250), (750, 28259), (752, 28265), (758, 28301), (763, 28328), (791, 28421), (814, 28529), (826, 28580), (831, 28604),

(839, 28631), (846, 28664), (853, 28697), (867, 28754), (873, 28781), (877, 28796), (885, 28853), (898, 28919), (919, 29003), (946, 29111), (948, 29114), (953, 29144), (1125, 29918), (1140, 29957), (1161, 30044), (1178, 30152), (1191, 30239), (1197, 30263), (1203, 30287), (1210, 30317), (1212, 30326),

Gene: Fribs8_17 Start: 10424, Stop: 15559, Start Num: 30
Candidate Starts for Fribs8_17:
(Start: 30 @10424 has 41 MA's), (34, 10451), (53, 10580), (68, 10676), (78, 10727), (87, 10760), (95, 10784), (104, 10817), (132, 10907), (153, 10967), (154, 10970), (166, 11030), (168, 11036), (178, 11084), (190, 11150), (193, 11171), (200, 11207), (268, 11567), (282, 11669), (290, 11723), (291, 11726), (294, 11735), (295, 11741), (297, 11762), (331, 11909), (345, 11966), (348, 11984), (352, 12002), (355, 12014), (362, 12053), (372, 12101), (379, 12158), (384, 12182), (388, 12188), (403, 12299), (406, 12308), (410, 12323), (416, 12362), (430, 12437), (442, 12485), (443, 12491), (455, 12533), (474, 12641), (482, 12680), (487, 12713), (522, 12872), (533, 12917), (541, 12941), (568, 13022), (576, 13046), (577, 13049), (578, 13052), (582, 13070), (591, 13103), (603, 13145), (615, 13184), (628, 13235), (651, 13319), (652, 13325), (663, 13382), (667, 13394), (675, 13436), (677, 13457), (679, 13469), (686, 13490), (688, 13493), (701, 13559), (706, 13580), (740, 13700), (756, 13766), (764, 13793), (781, 13838), (790, 13859), (795, 13880), (859, 14123), (869, 14153), (880, 14192), (909, 14327), (916, 14357), (923, 14378), (972, 14570), (1033, 14783), (1042, 14801), (1047, 14816), (1079, 14927), (1085, 14945), (1108, 15011), (1118, 15062), (1127, 15122), (1130, 15134), (1141, 15173), (1142, 15176), (1149, 15203), (1158, 15236), (1165, 15269), (1199, 15467), (1201, 15473), (1213, 15530),

Gene: Frickyeah_18 Start: 9926, Stop: 15508, Start Num: 33
Candidate Starts for Frickyeah_18:
(Start: 22 @9881 has 11 MA's), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94, 10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (294, 11213), (295, 11219), (297, 11240), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (376, 11618), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (535, 12404), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (616, 12668), (623, 12692), (630, 12725), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692, 13076), (693, 13079), (694, 13088), (700, 13112), (721, 13193), (722, 13199), (728, 13244), (729, 13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (790, 13484), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (915, 14027), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (969, 14261), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14858), (1113, 14945), (1117, 14972), (1118, 14975), (1128, 15050), (1135, 15074), (1147, 15113), (1157, 15149), (1160, 15170), (1172, 15257), (1179, 15299), (1185, 15332), (1187, 15344), (1205, 15422), (1219, 15488),

Gene: Frokostdame_17 Start: 10288, Stop: 15762, Start Num: 11
Candidate Starts for Frokostdame_17:
(Start: 9 @10273 has 39 MA's), (10, 10285), (Start: 11 @10288 has 1 MA's), (Start: 12 @10294 has 1 MA's), (Start: 14 @10324 has 2 MA's), (15, 10333), (19, 10378), (40, 10489), (43, 10510), (61, 10630), (68, 10672), (82, 10738), (86, 10756), (93, 10777), (94, 10780), (98, 10798), (109, 10822), (135, 10906), (148, 10948), (153, 10963), (155, 10972), (189, 11140), (193, 11167), (210, 11284), (220,

11338), (228, 11380), (251, 11485), (285, 11689), (294, 11734), (295, 11740), (297, 11761), (299, 11773), (320, 11863), (331, 11908), (339, 11935), (345, 11965), (362, 12052), (363, 12055), (370, 12094), (379, 12157), (381, 12166), (394, 12214), (398, 12256), (406, 12307), (410, 12322), (419, 12376), (427, 12415), (430, 12436), (431, 12439), (434, 12457), (442, 12484), (448, 12505), (450, 12511), (455, 12532), (458, 12550), (460, 12559), (528, 12832), (538, 12859), (544, 12871), (554, 12886), (577, 12916), (578, 12919), (591, 12970), (603, 13012), (614, 13051), (615, 13054), (624, 13087), (633, 13117), (638, 13141), (654, 13207), (710, 13474), (722, 13522), (726, 13555), (728, 13567), (729, 13570), (733, 13585), (746, 13630), (747, 13639), (748, 13648), (757, 13699), (776, 13771), (786, 13789), (791, 13810), (813, 13909), (814, 13912), (822, 13945), (839, 14011), (843, 14029), (847, 14044), (853, 14077), (867, 14128), (877, 14179), (927, 14422), (928, 14425), (946, 14497), (948, 14500), (961, 14566), (962, 14569), (966, 14587), (985, 14647), (1001, 14704), (1003, 14722), (1021, 14803), (1022, 14806), (1026, 14821), (1062, 14992), (1075, 15046), (1100, 15118), (1103, 15127), (1109, 15163), (1122, 15223), (1126, 15241), (1131, 15259), (1147, 15304), (1156, 15337), (1174, 15448), (1185, 15517), (1199, 15580), (1202, 15598), (1227, 15748),

Gene: Fury_48 Start: 24214, Stop: 29757, Start Num: 26
Candidate Starts for Fury_48:
(Start: 26 @24214 has 50 MA's), (57, 24403), (66, 24472), (67, 24475), (79, 24538), (84, 24559), (157, 24787), (218, 25138), (222, 25156), (237, 25243), (245, 25270), (263, 25357), (273, 25396), (278, 25450), (281, 25480), (285, 25513), (290, 25546), (303, 25621), (345, 25789), (361, 25867), (365, 25888), (366, 25897), (371, 25921), (375, 25948), (378, 25978), (431, 26248), (437, 26278), (450, 26323), (510, 26569), (516, 26596), (521, 26602), (531, 26644), (554, 26689), (571, 26728), (580, 26752), (589, 26791), (591, 26797), (601, 26833), (605, 26845), (607, 26851), (608, 26854), (616, 26884), (619, 26893), (623, 26908), (637, 26968), (641, 26986), (665, 27097), (677, 27163), (694, 27241), (718, 27358), (722, 27382), (729, 27430), (733, 27445), (741, 27463), (746, 27490), (755, 27541), (766, 27595), (785, 27655), (805, 27742), (808, 27763), (835, 27886), (894, 28204), (898, 28228), (903, 28240), (946, 28420), (1025, 28801), (1037, 28855), (1057, 28945), (1143, 29341), (1161, 29416), (1177, 29521), (1191, 29611), (1207, 29671), (1209, 29686), (1212, 29698), (1213, 29707),

Gene: GEazy_17 Start: 10605, Stop: 15728, Start Num: 27
Candidate Starts for GEazy_17:
(Start: 27 @10605 has 14 MA's), (Start: 30 @10614 has 41 MA's), (74, 10887), (76, 10896), (80, 10926), (119, 11055), (155, 11166), (167, 11223), (193, 11361), (202, 11415), (207, 11448), (245, 11649), (251, 11679), (268, 11757), (273, 11775), (274, 11796), (285, 11880), (290, 11913), (293, 11922), (295, 11931), (299, 11964), (301, 11976), (305, 12000), (318, 12045), (320, 12054), (329, 12090), (331, 12099), (339, 12126), (342, 12138), (345, 12156), (352, 12192), (375, 12315), (381, 12357), (404, 12492), (405, 12495), (406, 12498), (410, 12513), (419, 12567), (427, 12606), (445, 12687), (450, 12702), (455, 12723), (457, 12738), (460, 12750), (463, 12786), (471, 12822), (511, 12984), (550, 13041), (564, 13053), (565, 13056), (578, 13089), (582, 13107), (603, 13182), (605, 13188), (607, 13194), (613, 13215), (614, 13218), (615, 13221), (633, 13284), (642, 13320), (646, 13335), (652, 13359), (655, 13374), (656, 13377), (669, 13437), (689, 13536), (696, 13578), (718, 13656), (730, 13725), (739, 13743), (761, 13851), (770, 13878), (771, 13881), (787, 13920), (788, 13923), (790, 13932), (803, 13980), (826, 14067), (831, 14091), (851, 14151), (863, 14211), (881, 14289), (899, 14337), (904, 14349), (917, 14409), (927, 14451), (951, 14532), (957, 14559), (961, 14577), (968, 14607), (981, 14655), (983, 14661), (987, 14670), (999, 14718), (1008, 14790), (1016, 14829), (1027, 14871), (1074, 15057), (1075, 15060), (1095, 15117), (1098, 15126), (1102, 15138), (1106, 15159), (1156, 15372), (1165, 15411), (1175, 15480), (1184, 15534), (1198, 15606), (1216, 15687), (1220, 15711),

Gene: GRU1_29 Start: 16753, Stop: 22167, Start Num: 26
Candidate Starts for GRU1_29:

(Start: 26 @16753 has 50 MA's), (106, 17170), (182, 17461), (218, 17683), (222, 17701), (278, 17995), (281, 18025), (285, 18058), (310, 18196), (314, 18208), (325, 18256), (334, 18289), (345, 18334), (355, 18382), (361, 18412), (366, 18442), (375, 18493), (378, 18523), (417, 18715), (426, 18766), (437, 18823), (449, 18865), (450, 18868), (485, 19018), (516, 19141), (526, 19168), (531, 19189), (554, 19234), (563, 19249), (567, 19261), (575, 19282), (585, 19321), (595, 19363), (601, 19378), (609, 19402), (611, 19408), (621, 19444), (626, 19465), (636, 19507), (645, 19543), (692, 19774), (694, 19786), (718, 19879), (722, 19903), (729, 19951), (733, 19966), (746, 20011), (747, 20020), (750, 20029), (752, 20035), (791, 20191), (800, 20227), (814, 20299), (826, 20350), (831, 20374), (837, 20398), (839, 20401), (846, 20434), (853, 20467), (867, 20524), (871, 20539), (877, 20566), (885, 20623), (910, 20737), (914, 20755), (919, 20773), (921, 20788), (946, 20878), (948, 20881), (959, 20935), (1140, 21739), (1171, 21910), (1176, 21928), (1191, 22021), (1203, 22069), (1209, 22096), (1212, 22108),

Gene: GTE2_14 Start: 9463, Stop: 14106, Start Num: 154
Candidate Starts for GTE2_14:
(Start: 108 @9307 has 16 MA's), (Start: 115 @9334 has 1 MA's), (140, 9412), (154, 9463), (173, 9550), (177, 9565), (186, 9622), (190, 9640), (194, 9667), (195, 9670), (207, 9739), (214, 9796), (224, 9841), (228, 9859), (238, 9904), (248, 9940), (257, 9973), (268, 10021), (269, 10024), (276, 10072), (282, 10111), (284, 10126), (328, 10318), (332, 10336), (353, 10420), (384, 10567), (393, 10594), (404, 10687), (406, 10693), (410, 10708), (416, 10747), (431, 10825), (450, 10897), (454, 10915), (455, 10918), (484, 11080), (502, 11155), (509, 11191), (522, 11257), (533, 11302), (540, 11323), (541, 11326), (542, 11329), (557, 11365), (567, 11404), (569, 11410), (576, 11431), (578, 11437), (592, 11497), (614, 11566), (615, 11569), (620, 11587), (652, 11710), (655, 11725), (679, 11854), (686, 11875), (693, 11908), (701, 11944), (703, 11950), (738, 12082), (743, 12094), (764, 12181), (813, 12334), (828, 12385), (836, 12424), (872, 12553), (882, 12610), (893, 12655), (918, 12748), (940, 12823), (953, 12886), (972, 12967), (978, 12988), (1012, 13174), (1014, 13180), (1065, 13399), (1079, 13477), (1085, 13495), (1090, 13501), (1108, 13561), (1111, 13579), (1118, 13612), (1130, 13684), (1141, 13723), (1149, 13753), (1165, 13819), (1170, 13867), (1180, 13927), (1200, 14017), (1213, 14077),

Gene: GTE5_30 Start: 17717, Stop: 23122, Start Num: 26
Candidate Starts for GTE5_30:
(Start: 26 @17717 has 50 MA's), (57, 17909), (94, 18098), (106, 18134), (182, 18413), (218, 18635), (222, 18653), (278, 18947), (281, 18977), (285, 19010), (314, 19160), (325, 19208), (334, 19241), (345, 19286), (355, 19334), (361, 19364), (366, 19394), (375, 19445), (378, 19475), (417, 19667), (426, 19718), (437, 19775), (449, 19817), (450, 19820), (485, 19970), (516, 20093), (526, 20120), (531, 20141), (554, 20186), (563, 20201), (567, 20213), (571, 20225), (575, 20234), (585, 20273), (609, 20354), (611, 20360), (621, 20396), (626, 20417), (636, 20459), (645, 20495), (692, 20726), (718, 20831), (722, 20855), (729, 20903), (733, 20918), (746, 20963), (747, 20972), (750, 20981), (752, 20987), (758, 21023), (791, 21143), (814, 21251), (815, 21254), (826, 21302), (831, 21326), (837, 21350), (839, 21353), (846, 21386), (853, 21419), (866, 21476), (867, 21479), (877, 21521), (885, 21578), (910, 21692), (914, 21710), (919, 21728), (921, 21743), (946, 21833), (959, 21890), (1034, 22229), (1049, 22268), (1140, 22694), (1176, 22883), (1191, 22976), (1192, 22988), (1203, 23024), (1209, 23051), (1212, 23063),

Gene: GTE8_28 Start: 17751, Stop: 23138, Start Num: 26
Candidate Starts for GTE8_28:
(Start: 26 @17751 has 50 MA's), (79, 18078), (84, 18099), (129, 18243), (157, 18321), (222, 18690), (232, 18747), (278, 18984), (281, 19014), (285, 19047), (305, 19167), (314, 19197), (335, 19278), (345, 19323), (355, 19371), (356, 19377), (361, 19401), (365, 19422), (366, 19431), (375, 19482), (378, 19512), (426, 19755), (437, 19812), (449, 19854), (450, 19857), (462, 19917), (516, 20130), (524, 20151), (526, 20157), (540, 20199), (578, 20280), (580, 20286), (591, 20331), (594, 20346), (598, 20358), (653, 20571), (671, 20658), (692, 20763), (694, 20775), (718, 20868), (721, 20886),

(722, 20892), (729, 20940), (733, 20955), (746, 21000), (747, 21009), (750, 21018), (752, 21024), (763, 21087), (791, 21180), (813, 21285), (814, 21288), (817, 21300), (826, 21333), (831, 21357), (837, 21381), (839, 21384), (846, 21417), (853, 21450), (867, 21507), (877, 21549), (898, 21672), (903, 21684), (919, 21756), (924, 21780), (946, 21864), (948, 21867), (953, 21897), (1125, 22671), (1140, 22710), (1161, 22797), (1167, 22836), (1191, 22992), (1197, 23016), (1203, 23040), (1210, 23070), (1212, 23079),

Gene: Gagieri_43 Start: 25032, Stop: 30248, Start Num: 26
Candidate Starts for Gagieri_43:
(Start: 26 @25032 has 50 MA's), (57, 25224), (79, 25359), (84, 25380), (91, 25401), (107, 25452), (Start: 115 @25482 has 1 MA's), (122, 25515), (126, 25530), (149, 25602), (157, 25635), (180, 25755), (196, 25833), (202, 25875), (218, 25980), (259, 26178), (285, 26355), (293, 26397), (305, 26475), (325, 26553), (330, 26571), (336, 26592), (345, 26631), (357, 26688), (365, 26730), (366, 26739), (374, 26772), (375, 26790), (378, 26820), (401, 26940), (407, 26961), (412, 26979), (417, 27012), (421, 27042), (431, 27090), (435, 27114), (450, 27165), (462, 27225), (463, 27246), (466, 27255), (480, 27318), (484, 27345), (485, 27351), (499, 27396), (501, 27411), (505, 27429), (514, 27462), (527, 27510), (555, 27582), (556, 27585), (570, 27615), (577, 27636), (578, 27639), (586, 27672), (592, 27699), (597, 27714), (601, 27726), (602, 27729), (605, 27738), (617, 27780), (618, 27783), (620, 27789), (623, 27801), (634, 27846), (636, 27855), (638, 27867), (672, 28020), (677, 28044), (680, 28053), (682, 28056), (687, 28068), (716, 28191), (720, 28209), (772, 28404), (775, 28419), (782, 28434), (788, 28452), (816, 28569), (840, 28659), (850, 28692), (857, 28737), (881, 28830), (883, 28839), (885, 28851), (886, 28860), (910, 28956), (917, 28980), (926, 29022), (984, 29202), (988, 29211), (1046, 29448), (1055, 29493), (1068, 29559), (1071, 29565), (1075, 29586), (1076, 29595), (1081, 29616), (1082, 29619), (1091, 29637), (1105, 29682), (1114, 29715), (1136, 29823), (1178, 30012), (1182, 30045), (1188, 30078), (1191, 30099), (1203, 30147), (1207, 30159), (1212, 30186),

Gene: Gambino_19 Start: 10619, Stop: 16108, Start Num: 9
Candidate Starts for Gambino_19:
(Start: 9 @10619 has 39 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 2 MA's), (15, 10679), (16, 10682), (19, 10724), (40, 10835), (43, 10856), (61, 10976), (68, 11018), (82, 11084), (86, 11102), (93, 11123), (94, 11126), (98, 11144), (109, 11168), (135, 11252), (148, 11294), (153, 11309), (155, 11318), (189, 11486), (193, 11513), (210, 11630), (245, 11801), (251, 11831), (285, 12035), (294, 12080), (297, 12107), (299, 12119), (301, 12131), (320, 12209), (331, 12254), (339, 12281), (345, 12311), (362, 12398), (363, 12401), (370, 12440), (379, 12503), (381, 12512), (394, 12560), (398, 12602), (404, 12647), (406, 12653), (410, 12668), (419, 12722), (427, 12761), (430, 12782), (431, 12785), (434, 12803), (442, 12830), (448, 12851), (450, 12857), (455, 12878), (458, 12896), (460, 12905), (528, 13178), (554, 13232), (577, 13262), (578, 13265), (591, 13316), (614, 13397), (615, 13400), (624, 13433), (633, 13463), (638, 13487), (654, 13553), (710, 13820), (722, 13868), (726, 13901), (728, 13913), (729, 13916), (746, 13976), (747, 13985), (748, 13994), (757, 14045), (776, 14117), (786, 14135), (791, 14156), (813, 14255), (814, 14258), (822, 14291), (839, 14357), (843, 14375), (847, 14390), (853, 14423), (867, 14474), (877, 14525), (887, 14594), (927, 14768), (928, 14771), (946, 14843), (948, 14846), (961, 14912), (962, 14915), (966, 14933), (985, 14993), (1001, 15050), (1003, 15068), (1021, 15149), (1022, 15152), (1026, 15167), (1062, 15338), (1075, 15392), (1100, 15464), (1103, 15473), (1109, 15509), (1122, 15569), (1126, 15587), (1131, 15605), (1147, 15650), (1156, 15683), (1174, 15794), (1185, 15863), (1199, 15926), (1202, 15944), (1227, 16094),

Gene: Getalong_19 Start: 10672, Stop: 16305, Start Num: 23
Candidate Starts for Getalong_19:
(Start: 23 @10672 has 5 MA's), (Start: 33 @10717 has 2 MA's), (35, 10738), (39, 10759), (47, 10804), (Start: 49 @10819 has 1 MA's), (62, 10903), (70, 10945), (74, 10957), (86, 11020), (92, 11035), (94, 11044), (98, 11062), (101, 11068), (117, 11116), (159, 11251), (188, 11401), (193, 11431), (228,

11650), (245, 11725), (251, 11755), (285, 11959), (294, 12004), (295, 12010), (297, 12031), (301, 12055), (315, 12112), (331, 12178), (339, 12205), (342, 12217), (345, 12235), (347, 12247), (352, 12271), (355, 12283), (362, 12322), (363, 12325), (365, 12334), (370, 12364), (376, 12409), (390, 12469), (394, 12484), (397, 12514), (398, 12526), (404, 12571), (406, 12577), (410, 12592), (414, 12622), (418, 12643), (419, 12646), (431, 12709), (437, 12736), (438, 12739), (439, 12742), (440, 12748), (447, 12772), (448, 12775), (450, 12781), (452, 12787), (455, 12802), (458, 12820), (463, 12865), (482, 12949), (483, 12955), (487, 12982), (509, 13075), (511, 13084), (522, 13141), (524, 13153), (534, 13189), (535, 13195), (552, 13237), (557, 13249), (567, 13288), (569, 13294), (570, 13297), (576, 13315), (577, 13318), (578, 13321), (605, 13420), (616, 13459), (623, 13483), (630, 13516), (650, 13627), (654, 13660), (662, 13723), (670, 13759), (676, 13789), (692, 13867), (693, 13870), (694, 13879), (700, 13903), (722, 13990), (728, 14035), (729, 14038), (733, 14053), (746, 14098), (747, 14107), (748, 14116), (749, 14119), (773, 14224), (789, 14272), (791, 14278), (813, 14377), (814, 14380), (818, 14392), (847, 14509), (853, 14542), (867, 14593), (875, 14623), (883, 14683), (904, 14764), (907, 14785), (908, 14788), (915, 14818), (931, 14881), (934, 14890), (937, 14899), (962, 15013), (967, 15043), (979, 15091), (980, 15094), (991, 15124), (995, 15145), (1029, 15343), (1043, 15406), (1044, 15412), (1054, 15463), (1092, 15655), (1113, 15742), (1117, 15769), (1118, 15772), (1128, 15847), (1135, 15871), (1147, 15910), (1157, 15946), (1160, 15967), (1172, 16054), (1179, 16096), (1185, 16129), (1187, 16141), (1219, 16285),

Gene: GiKK_19 Start: 9920, Stop: 14137, Start Num: 127
Candidate Starts for GiKK_19:
(Start: 127 @9920 has 7 MA's), (Start: 139 @9947 has 1 MA's), (193, 10193), (203, 10256), (211, 10313), (214, 10340), (225, 10382), (236, 10445), (238, 10460), (243, 10478), (246, 10496), (250, 10508), (258, 10541), (266, 10583), (271, 10598), (282, 10694), (283, 10703), (295, 10766), (296, 10781), (302, 10817), (315, 10868), (322, 10901), (324, 10910), (343, 10991), (357, 11057), (359, 11066), (360, 11075), (364, 11096), (386, 11231), (387, 11243), (410, 11384), (413, 11405), (419, 11438), (422, 11456), (426, 11474), (434, 11519), (450, 11573), (452, 11579), (455, 11594), (463, 11657), (476, 11705), (480, 11720), (490, 11756), (504, 11810), (512, 11837), (513, 11840), (514, 11843), (518, 11867), (519, 11870), (551, 11930), (577, 11999), (578, 12002), (582, 12020), (591, 12053), (605, 12104), (614, 12134), (621, 12158), (622, 12161), (654, 12287), (658, 12308), (660, 12317), (664, 12326), (666, 12332), (696, 12485), (713, 12554), (715, 12560), (724, 12596), (753, 12725), (792, 12866), (799, 12890), (811, 12935), (848, 13088), (849, 13091), (894, 13283), (905, 13313), (950, 13487), (971, 13559), (980, 13595), (990, 13619), (992, 13631), (1002, 13673), (1011, 13715), (1013, 13721), (1020, 13745), (1024, 13763), (1028, 13784), (1033, 13811), (1038, 13817), (1045, 13850), (1052, 13871), (1058, 13898), (1067, 13922), (1077, 13958), (1086, 14006), (1115, 14108),

Gene: Gibbous_16 Start: 9856, Stop: 14970, Start Num: 30
Candidate Starts for Gibbous_16:
(24, 9835), (Start: 30 @9856 has 41 MA's), (34, 9883), (53, 10012), (66, 10096), (68, 10108), (78, 10159), (87, 10192), (95, 10216), (104, 10249), (132, 10339), (153, 10399), (154, 10402), (168, 10468), (176, 10504), (178, 10516), (188, 10573), (190, 10582), (193, 10603), (254, 10942), (268, 10999), (282, 11101), (294, 11167), (295, 11173), (297, 11194), (331, 11341), (345, 11398), (348, 11416), (351, 11431), (355, 11446), (362, 11485), (379, 11590), (384, 11614), (388, 11620), (403, 11731), (406, 11740), (410, 11755), (416, 11794), (434, 11890), (442, 11917), (443, 11923), (445, 11929), (454, 11962), (455, 11965), (474, 12073), (482, 12112), (487, 12145), (496, 12175), (497, 12178), (501, 12199), (502, 12202), (522, 12304), (533, 12349), (541, 12373), (542, 12376), (568, 12454), (576, 12478), (577, 12481), (578, 12484), (591, 12535), (605, 12583), (607, 12589), (620, 12634), (651, 12751), (652, 12757), (663, 12814), (675, 12868), (677, 12889), (679, 12901), (686, 12922), (688, 12925), (701, 12991), (703, 12997), (740, 13132), (756, 13198), (764, 13225), (793, 13303), (859, 13543), (869, 13573), (909, 13747), (916, 13777), (923, 13798), (952, 13906), (972, 13990), (1047, 14227), (1079, 14338), (1085, 14356), (1108, 14422), (1118, 14473), (1130, 14545), (1141, 14584), (1142, 14587), (1149, 14614), (1157, 14641), (1165, 14680), (1170, 14728), (1180,

14788), (1186, 14824), (1199, 14878),

Gene: GoldHunter_16 Start: 9630, Stop: 14768, Start Num: 30
Candidate Starts for GoldHunter_16:
(Start: 23 @9606 has 5 MA's), (Start: 30 @9630 has 41 MA's), (34, 9657), (53, 9786), (63, 9861), (101, 10014), (102, 10017), (132, 10113), (137, 10122), (145, 10152), (148, 10158), (153, 10173), (154, 10176), (159, 10197), (174, 10269), (178, 10290), (190, 10356), (193, 10377), (210, 10494), (243, 10656), (251, 10695), (267, 10770), (290, 10929), (294, 10941), (297, 10968), (304, 11013), (307, 11025), (331, 11115), (336, 11133), (342, 11154), (347, 11184), (352, 11208), (355, 11220), (362, 11259), (368, 11292), (388, 11394), (389, 11397), (394, 11421), (406, 11514), (410, 11529), (416, 11568), (427, 11622), (434, 11664), (446, 11706), (454, 11736), (455, 11739), (474, 11847), (475, 11850), (484, 11901), (502, 11976), (520, 12066), (522, 12078), (533, 12123), (540, 12144), (541, 12147), (542, 12150), (567, 12225), (578, 12258), (583, 12279), (591, 12309), (605, 12357), (607, 12363), (615, 12390), (651, 12525), (675, 12642), (679, 12675), (686, 12696), (688, 12699), (701, 12765), (703, 12771), (706, 12786), (740, 12906), (743, 12915), (764, 12999), (859, 13320), (913, 13539), (923, 13575), (978, 13788), (1033, 13980), (1047, 14028), (1056, 14049), (1085, 14157), (1108, 14223), (1111, 14241), (1121, 14301), (1130, 14346), (1139, 14376), (1141, 14385), (1149, 14415), (1165, 14481), (1170, 14529), (1180, 14589), (1199, 14676), (1213, 14739),

Gene: GrootJr_41 Start: 23862, Stop: 29261, Start Num: 26
Candidate Starts for GrootJr_41:
(Start: 26 @23862 has 50 MA's), (57, 24054), (79, 24189), (84, 24210), (89, 24225), (129, 24354), (149, 24405), (157, 24438), (222, 24807), (232, 24864), (278, 25101), (281, 25131), (285, 25164), (305, 25284), (314, 25314), (337, 25404), (345, 25440), (355, 25488), (356, 25494), (361, 25518), (365, 25539), (366, 25548), (375, 25599), (378, 25629), (437, 25929), (449, 25971), (450, 25974), (462, 26034), (466, 26064), (506, 26202), (510, 26220), (516, 26247), (524, 26268), (526, 26274), (539, 26313), (540, 26316), (570, 26376), (575, 26388), (578, 26397), (591, 26448), (594, 26463), (633, 26601), (636, 26613), (653, 26688), (671, 26775), (692, 26880), (694, 26892), (718, 26985), (722, 27009), (729, 27057), (733, 27072), (742, 27093), (746, 27117), (747, 27126), (750, 27135), (752, 27141), (758, 27177), (763, 27204), (791, 27297), (814, 27405), (826, 27456), (831, 27480), (839, 27507), (846, 27540), (853, 27573), (867, 27630), (873, 27657), (877, 27672), (885, 27729), (898, 27795), (919, 27879), (946, 27987), (948, 27990), (953, 28020), (1125, 28794), (1140, 28833), (1161, 28920), (1178, 29028), (1191, 29115), (1197, 29139), (1203, 29163), (1210, 29193), (1212, 29202),

Gene: Guacamole_17 Start: 10278, Stop: 15800, Start Num: 9
Candidate Starts for Guacamole_17:
(Start: 9 @10278 has 39 MA's), (Start: 11 @10293 has 1 MA's), (Start: 12 @10299 has 1 MA's), (Start: 14 @10329 has 2 MA's), (15, 10338), (16, 10341), (19, 10383), (40, 10494), (43, 10515), (61, 10635), (68, 10677), (82, 10743), (86, 10761), (93, 10782), (94, 10785), (98, 10803), (109, 10827), (135, 10911), (136, 10914), (148, 10953), (153, 10968), (155, 10977), (189, 11145), (193, 11172), (210, 11289), (219, 11337), (245, 11460), (251, 11490), (285, 11694), (294, 11739), (297, 11766), (299, 11778), (320, 11868), (331, 11913), (339, 11940), (345, 11970), (362, 12057), (363, 12060), (370, 12099), (383, 12183), (394, 12219), (398, 12261), (404, 12306), (406, 12312), (409, 12324), (410, 12327), (419, 12381), (427, 12420), (430, 12441), (431, 12444), (434, 12462), (437, 12471), (442, 12489), (448, 12510), (450, 12516), (455, 12537), (460, 12564), (473, 12642), (532, 12831), (544, 12855), (552, 12867), (554, 12870), (572, 12885), (577, 12900), (578, 12903), (591, 12954), (614, 13035), (615, 13038), (624, 13071), (633, 13101), (638, 13125), (673, 13284), (710, 13458), (722, 13506), (728, 13551), (729, 13554), (733, 13569), (746, 13614), (747, 13623), (748, 13632), (757, 13683), (776, 13755), (786, 13773), (791, 13794), (813, 13893), (814, 13896), (822, 13929), (839, 13995), (843, 14013), (847, 14028), (853, 14061), (867, 14112), (877, 14163), (884, 14211), (927, 14406), (928, 14409), (946, 14481), (948, 14484), (961, 14550), (962, 14553), (966, 14571), (985, 14631), (1001, 14688), (1003, 14706), (1021, 14787), (1022, 14790), (1026, 14805), (1075, 15018),

(1088, 15084), (1104, 15138), (1106, 15150), (1108, 15156), (1130, 15279), (1138, 15303), (1142, 15321), (1149, 15345), (1151, 15351), (1157, 15372), (1165, 15411), (1185, 15552), (1187, 15564), (1199, 15615), (1202, 15633), (1227, 15783),

Gene: HannahD_17 Start: 10605, Stop: 15728, Start Num: 27
Candidate Starts for HannahD_17:
(Start: 27 @10605 has 14 MA's), (Start: 30 @10614 has 41 MA's), (74, 10887), (76, 10896), (80, 10926), (119, 11055), (155, 11166), (167, 11223), (193, 11361), (202, 11415), (207, 11448), (245, 11649), (251, 11679), (268, 11757), (273, 11775), (274, 11796), (285, 11880), (290, 11913), (293, 11922), (295, 11931), (299, 11964), (301, 11976), (305, 12000), (318, 12045), (320, 12054), (329, 12090), (331, 12099), (339, 12126), (342, 12138), (345, 12156), (352, 12192), (375, 12315), (381, 12357), (404, 12492), (405, 12495), (406, 12498), (410, 12513), (419, 12567), (427, 12606), (445, 12687), (450, 12702), (455, 12723), (457, 12738), (460, 12750), (463, 12786), (471, 12822), (511, 12984), (550, 13041), (564, 13053), (565, 13056), (578, 13089), (582, 13107), (603, 13182), (605, 13188), (607, 13194), (613, 13215), (614, 13218), (615, 13221), (633, 13284), (642, 13320), (646, 13335), (652, 13359), (655, 13374), (656, 13377), (669, 13437), (689, 13536), (696, 13578), (718, 13656), (730, 13725), (739, 13743), (761, 13851), (770, 13878), (771, 13881), (787, 13920), (788, 13923), (790, 13932), (803, 13980), (826, 14067), (831, 14091), (851, 14151), (863, 14211), (881, 14289), (899, 14337), (904, 14349), (917, 14409), (927, 14451), (951, 14532), (957, 14559), (961, 14577), (968, 14607), (981, 14655), (983, 14661), (987, 14670), (999, 14718), (1008, 14790), (1016, 14829), (1027, 14871), (1074, 15057), (1075, 15060), (1095, 15117), (1098, 15126), (1102, 15138), (1106, 15159), (1156, 15372), (1165, 15411), (1175, 15480), (1184, 15534), (1198, 15606), (1216, 15687), (1220, 15711),

Gene: Hedwig_18 Start: 11001, Stop: 16013, Start Num: 27
Candidate Starts for Hedwig_18:
(Start: 27 @11001 has 14 MA's), (Start: 33 @11031 has 2 MA's), (35, 11052), (41, 11088), (76, 11292), (80, 11322), (102, 11397), (137, 11502), (155, 11562), (171, 11640), (172, 11643), (185, 11715), (193, 11757), (207, 11844), (285, 12273), (287, 12282), (290, 12306), (295, 12324), (301, 12369), (305, 12393), (318, 12438), (320, 12447), (329, 12483), (331, 12492), (338, 12516), (342, 12531), (345, 12549), (350, 12573), (362, 12636), (373, 12690), (375, 12708), (390, 12783), (396, 12813), (404, 12885), (406, 12891), (410, 12906), (413, 12927), (419, 12960), (431, 13023), (434, 13041), (442, 13068), (445, 13080), (450, 13095), (455, 13116), (477, 13236), (482, 13263), (487, 13296), (499, 13335), (501, 13350), (511, 13398), (516, 13422), (521, 13452), (538, 13515), (558, 13560), (559, 13563), (578, 13632), (595, 13704), (603, 13725), (605, 13731), (607, 13737), (614, 13761), (615, 13764), (621, 13785), (628, 13815), (633, 13827), (642, 13863), (655, 13917), (656, 13920), (657, 13926), (667, 13971), (669, 13980), (696, 14121), (704, 14154), (718, 14199), (719, 14205), (721, 14217), (730, 14268), (756, 14352), (762, 14376), (770, 14400), (771, 14403), (790, 14454), (803, 14502), (826, 14589), (831, 14613), (833, 14625), (841, 14646), (851, 14673), (877, 14778), (881, 14811), (899, 14859), (904, 14871), (930, 14943), (936, 14952), (996, 15108), (1009, 15138), (1071, 15330), (1106, 15450), (1107, 15453), (1137, 15597), (1156, 15660), (1184, 15822), (1185, 15834), (1198, 15891), (1214, 15966), (1216, 15972), (1221, 16002), (1222, 16005),

Gene: Hexbug_18 Start: 10603, Stop: 14823, Start Num: 127
Candidate Starts for Hexbug_18:
(Start: 127 @10603 has 7 MA's), (Start: 139 @10630 has 1 MA's), (203, 10939), (211, 10996), (213, 11020), (225, 11065), (226, 11068), (234, 11110), (236, 11128), (238, 11143), (243, 11161), (245, 11170), (258, 11224), (271, 11281), (280, 11362), (288, 11410), (295, 11449), (296, 11464), (298, 11473), (302, 11500), (308, 11530), (309, 11533), (315, 11551), (343, 11674), (357, 11740), (368, 11803), (381, 11890), (394, 11959), (409, 12064), (410, 12067), (413, 12088), (419, 12121), (422, 12139), (426, 12157), (430, 12181), (434, 12202), (437, 12211), (450, 12256), (451, 12259), (455, 12277), (476, 12388), (479, 12400), (480, 12403), (490, 12439), (501, 12481), (504, 12493), (512, 12520), (519, 12553), (556, 12628), (577, 12682), (578, 12685), (582, 12703), (593, 12748), (605,

12787), (607, 12793), (614, 12817), (620, 12838), (621, 12841), (622, 12844), (654, 12970), (658, 12991), (660, 13000), (664, 13009), (666, 13015), (696, 13168), (707, 13213), (713, 13237), (715, 13243), (724, 13279), (727, 13312), (734, 13336), (747, 13387), (754, 13432), (792, 13570), (801, 13600), (894, 13981), (950, 14173), (971, 14245), (980, 14281), (990, 14305), (992, 14317), (1002, 14359), (1013, 14407), (1028, 14470), (1038, 14503), (1045, 14536), (1052, 14557), (1058, 14584), (1067, 14608), (1077, 14644), (1080, 14671), (1083, 14680), (1086, 14692), (1115, 14794),

Gene: HippoPololi_18 Start: 10513, Stop: 15630, Start Num: 30
Candidate Starts for HippoPololi_18:
(24, 10492), (Start: 30 @10513 has 41 MA's), (34, 10540), (53, 10669), (66, 10753), (75, 10792), (78, 10816), (95, 10873), (102, 10900), (104, 10906), (132, 10996), (153, 11056), (154, 11059), (168, 11125), (178, 11173), (190, 11239), (193, 11260), (254, 11599), (267, 11653), (268, 11656), (282, 11758), (291, 11815), (293, 11821), (294, 11824), (295, 11830), (297, 11851), (320, 11953), (345, 12055), (348, 12073), (362, 12142), (372, 12190), (379, 12247), (384, 12271), (388, 12277), (406, 12397), (410, 12412), (416, 12451), (430, 12526), (434, 12547), (442, 12574), (443, 12580), (454, 12619), (455, 12622), (474, 12730), (487, 12802), (501, 12856), (522, 12961), (533, 13006), (541, 13030), (568, 13111), (577, 13138), (578, 13141), (591, 13192), (605, 13240), (607, 13246), (620, 13291), (651, 13408), (652, 13414), (663, 13471), (675, 13525), (677, 13546), (679, 13558), (686, 13579), (688, 13582), (701, 13648), (703, 13654), (740, 13789), (743, 13798), (756, 13855), (764, 13882), (798, 13975), (859, 14203), (867, 14224), (869, 14233), (909, 14407), (916, 14437), (923, 14458), (972, 14650), (1008, 14740), (1047, 14887), (1056, 14908), (1085, 15016), (1098, 15049), (1108, 15082), (1118, 15133), (1130, 15205), (1141, 15244), (1142, 15247), (1149, 15274), (1158, 15307), (1165, 15340), (1168, 15361), (1170, 15388), (1186, 15484), (1199, 15538),

Gene: Hitter_17 Start: 10274, Stop: 15796, Start Num: 9
Candidate Starts for Hitter_17:
(Start: 9 @10274 has 39 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 2 MA's), (15, 10334), (16, 10337), (19, 10379), (40, 10490), (43, 10511), (82, 10739), (86, 10757), (92, 10772), (93, 10778), (94, 10781), (98, 10799), (109, 10823), (135, 10907), (137, 10913), (148, 10949), (153, 10964), (155, 10973), (189, 11141), (193, 11168), (210, 11285), (245, 11456), (251, 11486), (285, 11690), (294, 11735), (331, 11909), (339, 11936), (345, 11966), (362, 12053), (370, 12095), (383, 12179), (394, 12215), (398, 12257), (404, 12302), (406, 12308), (409, 12320), (410, 12323), (419, 12377), (427, 12416), (430, 12437), (431, 12440), (434, 12458), (437, 12467), (442, 12485), (448, 12506), (450, 12512), (455, 12533), (460, 12560), (473, 12638), (532, 12827), (544, 12851), (552, 12863), (554, 12866), (572, 12881), (577, 12896), (578, 12899), (591, 12950), (614, 13031), (615, 13034), (624, 13067), (633, 13097), (638, 13121), (710, 13454), (722, 13502), (728, 13547), (729, 13550), (733, 13565), (746, 13610), (747, 13619), (748, 13628), (757, 13679), (776, 13751), (786, 13769), (791, 13790), (813, 13889), (814, 13892), (822, 13925), (839, 13991), (843, 14009), (847, 14024), (853, 14057), (867, 14108), (877, 14159), (927, 14402), (928, 14405), (946, 14477), (948, 14480), (961, 14546), (962, 14549), (966, 14567), (985, 14627), (1001, 14684), (1003, 14702), (1021, 14783), (1022, 14786), (1026, 14801), (1075, 15014), (1088, 15080), (1089, 15086), (1106, 15146), (1108, 15152), (1130, 15275), (1138, 15299), (1142, 15317), (1149, 15341), (1151, 15347), (1157, 15368), (1165, 15407), (1185, 15548), (1187, 15560), (1199, 15611), (1202, 15629), (1227, 15779),

Gene: Holliday_18 Start: 9868, Stop: 15501, Start Num: 22
Candidate Starts for Holliday_18:
(Start: 22 @9868 has 11 MA's), (31, 9895), (Start: 33 @9913 has 2 MA's), (35, 9934), (39, 9955), (47, 10000), (Start: 49 @10015 has 1 MA's), (62, 10099), (70, 10141), (74, 10153), (86, 10216), (92, 10231), (94, 10240), (98, 10258), (101, 10264), (117, 10312), (159, 10447), (188, 10597), (193, 10627), (228, 10846), (245, 10921), (251, 10951), (285, 11155), (293, 11197), (294, 11200), (295, 11206), (297, 11227), (315, 11308), (331, 11374), (339, 11401), (342, 11413), (345, 11431), (347, 11443), (352, 11467), (355, 11479), (362, 11518), (363, 11521), (365, 11530), (370, 11560), (376,

11605), (390, 11665), (394, 11680), (397, 11710), (398, 11722), (404, 11767), (406, 11773), (410, 11788), (414, 11818), (418, 11839), (419, 11842), (431, 11905), (437, 11932), (438, 11935), (439, 11938), (440, 11944), (447, 11968), (448, 11971), (450, 11977), (452, 11983), (455, 11998), (458, 12016), (471, 12097), (482, 12145), (483, 12151), (487, 12178), (522, 12337), (524, 12349), (534, 12385), (557, 12445), (567, 12484), (569, 12490), (570, 12493), (577, 12514), (578, 12517), (605, 12616), (616, 12655), (623, 12679), (630, 12712), (635, 12757), (648, 12811), (659, 12898), (662, 12919), (670, 12955), (676, 12985), (692, 13063), (693, 13066), (694, 13075), (700, 13099), (721, 13180), (722, 13186), (728, 13231), (729, 13234), (733, 13249), (746, 13294), (747, 13303), (748, 13312), (749, 13315), (773, 13420), (789, 13468), (791, 13474), (813, 13573), (814, 13576), (818, 13588), (847, 13705), (853, 13738), (867, 13789), (870, 13801), (875, 13819), (883, 13879), (904, 13960), (907, 13981), (915, 14014), (931, 14077), (937, 14095), (962, 14209), (967, 14239), (969, 14248), (979, 14287), (980, 14290), (991, 14320), (995, 14341), (1019, 14494), (1029, 14545), (1043, 14608), (1044, 14614), (1054, 14665), (1092, 14851), (1113, 14938), (1117, 14965), (1118, 14968), (1128, 15043), (1135, 15067), (1147, 15106), (1157, 15142), (1160, 15163), (1172, 15250), (1179, 15292), (1185, 15325), (1187, 15337), (1205, 15415), (1219, 15481),

Gene: HomeFry_45 Start: 22840, Stop: 28359, Start Num: 26
Candidate Starts for HomeFry_45:
(Start: 26 @22840 has 50 MA's), (57, 23029), (66, 23098), (79, 23164), (84, 23185), (149, 23377), (157, 23410), (166, 23458), (218, 23761), (222, 23779), (237, 23866), (245, 23893), (273, 24019), (278, 24073), (281, 24103), (285, 24136), (290, 24169), (313, 24280), (329, 24346), (345, 24412), (361, 24490), (375, 24571), (378, 24601), (431, 24871), (437, 24901), (450, 24946), (476, 25072), (510, 25192), (516, 25219), (521, 25225), (531, 25267), (554, 25312), (571, 25351), (580, 25375), (589, 25414), (591, 25420), (601, 25456), (605, 25468), (607, 25474), (608, 25477), (619, 25516), (623, 25531), (637, 25591), (641, 25609), (665, 25720), (669, 25732), (677, 25786), (694, 25864), (718, 25981), (722, 26005), (729, 26053), (733, 26068), (746, 26113), (755, 26164), (766, 26218), (785, 26278), (805, 26365), (835, 26509), (898, 26845), (903, 26857), (946, 27037), (998, 27277), (1025, 27421), (1031, 27454), (1143, 27943), (1161, 28018), (1191, 28213), (1207, 28273), (1209, 28288), (1212, 28300), (1213, 28309),

Gene: Horseradish_17 Start: 9515, Stop: 14311, Start Num: 108
Candidate Starts for Horseradish_17:
(Start: 108 @9515 has 16 MA's), (Start: 115 @9542 has 1 MA's), (117, 9548), (154, 9671), (177, 9773), (184, 9818), (186, 9830), (190, 9848), (194, 9875), (195, 9878), (198, 9893), (206, 9944), (207, 9947), (214, 10004), (215, 10007), (216, 10010), (224, 10049), (228, 10067), (238, 10112), (248, 10148), (257, 10181), (264, 10214), (265, 10226), (276, 10280), (282, 10319), (284, 10334), (286, 10343), (292, 10370), (300, 10421), (316, 10481), (319, 10490), (332, 10544), (349, 10607), (352, 10622), (365, 10685), (384, 10775), (393, 10802), (404, 10895), (406, 10901), (410, 10916), (416, 10955), (431, 11033), (439, 11066), (450, 11105), (454, 11123), (455, 11126), (460, 11153), (470, 11210), (473, 11231), (498, 11342), (502, 11363), (509, 11399), (518, 11441), (520, 11453), (522, 11465), (533, 11510), (534, 11513), (540, 11531), (541, 11534), (542, 11537), (567, 11612), (578, 11645), (592, 11705), (613, 11771), (614, 11774), (615, 11777), (620, 11795), (646, 11894), (650, 11909), (651, 11912), (679, 12062), (686, 12083), (694, 12125), (701, 12152), (703, 12158), (738, 12290), (743, 12302), (764, 12389), (779, 12431), (793, 12467), (803, 12503), (813, 12542), (828, 12593), (836, 12632), (856, 12710), (872, 12761), (882, 12818), (918, 12956), (940, 13028), (972, 13172), (978, 13193), (1012, 13370), (1014, 13376), (1085, 13700), (1090, 13706), (1108, 13766), (1111, 13784), (1118, 13817), (1130, 13889), (1141, 13928), (1149, 13958), (1165, 14024), (1167, 14042), (1170, 14072), (1180, 14132), (1200, 14222), (1213, 14282),

Gene: Horus_18 Start: 9926, Stop: 15514, Start Num: 33
Candidate Starts for Horus_18:
(Start: 22 @9881 has 11 MA's), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94,

10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (293, 11210), (294, 11213), (295, 11219), (297, 11240), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (623, 12692), (630, 12725), (640, 12800), (648, 12824), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692, 13076), (693, 13079), (694, 13088), (722, 13199), (728, 13244), (729, 13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (908, 13997), (915, 14027), (931, 14090), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14864), (1113, 14951), (1117, 14978), (1118, 14981), (1128, 15056), (1135, 15080), (1147, 15119), (1157, 15155), (1160, 15176), (1172, 15263), (1179, 15305), (1185, 15338), (1187, 15350), (1219, 15494),

Gene: HubbaBubba_37 Start: 20251, Stop: 25650, Start Num: 26
Candidate Starts for HubbaBubba_37:
(Start: 26 @20251 has 50 MA's), (46, 20362), (48, 20380), (51, 20410), (58, 20449), (80, 20584), (84, 20599), (125, 20737), (155, 20824), (157, 20830), (208, 21118), (218, 21181), (220, 21193), (222, 21199), (277, 21481), (285, 21556), (303, 21664), (314, 21706), (334, 21787), (345, 21832), (355, 21880), (361, 21910), (366, 21940), (375, 21991), (378, 22021), (414, 22201), (417, 22213), (437, 22321), (450, 22366), (452, 22372), (492, 22537), (499, 22558), (510, 22612), (516, 22639), (524, 22660), (529, 22678), (539, 22705), (578, 22789), (586, 22822), (589, 22834), (598, 22867), (600, 22873), (607, 22894), (612, 22909), (616, 22927), (625, 22960), (644, 23038), (665, 23140), (677, 23206), (718, 23377), (729, 23449), (733, 23464), (746, 23509), (747, 23518), (750, 23527), (776, 23650), (791, 23689), (813, 23794), (814, 23797), (819, 23809), (837, 23890), (839, 23893), (846, 23926), (853, 23959), (866, 24016), (867, 24019), (885, 24118), (887, 24130), (898, 24184), (904, 24199), (914, 24250), (919, 24268), (924, 24292), (933, 24328), (946, 24388), (948, 24391), (953, 24421), (958, 24442), (1032, 24763), (1140, 25222), (1150, 25264), (1191, 25504), (1207, 25564), (1210, 25582), (1212, 25591),

Gene: IDyn_40 Start: 21647, Stop: 27046, Start Num: 26
Candidate Starts for IDyn_40:
(Start: 26 @21647 has 50 MA's), (46, 21758), (48, 21776), (51, 21806), (58, 21845), (80, 21980), (84, 21995), (125, 22133), (149, 22193), (155, 22220), (157, 22226), (208, 22514), (218, 22577), (220, 22589), (222, 22595), (277, 22877), (285, 22952), (303, 23060), (314, 23102), (325, 23150), (334, 23183), (345, 23228), (355, 23276), (361, 23306), (366, 23336), (375, 23387), (378, 23417), (414, 23597), (437, 23717), (450, 23762), (452, 23768), (468, 23858), (492, 23933), (510, 24008), (516, 24035), (524, 24056), (529, 24074), (539, 24101), (586, 24218), (589, 24230), (598, 24263), (600, 24269), (607, 24290), (612, 24305), (616, 24323), (623, 24347), (625, 24356), (644, 24434), (665, 24536), (677, 24602), (718, 24773), (729, 24845), (733, 24860), (746, 24905), (747, 24914), (750, 24923), (776, 25046), (791, 25085), (813, 25190), (814, 25193), (819, 25205), (837, 25286), (839, 25289), (846, 25322), (853, 25355), (866, 25412), (867, 25415), (885, 25514), (887, 25526), (898, 25580), (904, 25595), (914, 25646), (919, 25664), (924, 25688), (933, 25724), (946, 25784), (948, 25787), (953, 25817), (958, 25838), (1007, 26048), (1032, 26159), (1140, 26618), (1150, 26660), (1191, 26900), (1207, 26960), (1210, 26978), (1212, 26987),

Gene: Jalammah_19 Start: 11050, Stop: 16590, Start Num: 9

Candidate Starts for Jalammah_19:
(Start: 9 @11050 has 39 MA's), (Start: 14 @11101 has 2 MA's), (15, 11110), (16, 11113), (19, 11155), (40, 11266), (43, 11287), (61, 11407), (68, 11449), (82, 11515), (86, 11533), (93, 11554), (94, 11557), (98, 11575), (109, 11599), (135, 11683), (148, 11725), (153, 11740), (155, 11749), (189, 11917), (193, 11944), (210, 12061), (245, 12232), (251, 12262), (285, 12466), (294, 12511), (297, 12538), (299, 12550), (320, 12640), (331, 12685), (339, 12712), (345, 12742), (362, 12829), (363, 12832), (370, 12871), (383, 12955), (394, 12991), (398, 13033), (404, 13078), (406, 13084), (409, 13096), (410, 13099), (419, 13153), (427, 13192), (430, 13213), (431, 13216), (434, 13234), (442, 13261), (448, 13282), (450, 13288), (455, 13309), (460, 13336), (502, 13546), (532, 13624), (544, 13648), (552, 13660), (554, 13663), (572, 13678), (577, 13693), (578, 13696), (591, 13747), (614, 13828), (615, 13831), (624, 13864), (633, 13894), (638, 13918), (654, 13984), (710, 14251), (722, 14299), (728, 14344), (729, 14347), (733, 14362), (746, 14407), (747, 14416), (748, 14425), (757, 14476), (776, 14548), (786, 14566), (791, 14587), (813, 14686), (814, 14689), (822, 14722), (839, 14788), (843, 14806), (847, 14821), (853, 14854), (867, 14905), (877, 14956), (927, 15199), (928, 15202), (946, 15274), (948, 15277), (961, 15343), (962, 15346), (966, 15364), (985, 15424), (1001, 15481), (1003, 15499), (1021, 15580), (1022, 15583), (1026, 15598), (1062, 15757), (1075, 15811), (1088, 15877), (1089, 15883), (1106, 15943), (1108, 15949), (1113, 15979), (1130, 16072), (1138, 16096), (1142, 16114), (1149, 16138), (1151, 16144), (1157, 16165), (1165, 16204), (1185, 16345), (1187, 16357), (1199, 16408), (1202, 16426), (1227, 16576),

Gene: Jamzy_19 Start: 9930, Stop: 14147, Start Num: 127
Candidate Starts for Jamzy_19:
(Start: 127 @9930 has 7 MA's), (Start: 139 @9957 has 1 MA's), (193, 10203), (203, 10266), (211, 10323), (214, 10350), (225, 10392), (236, 10455), (238, 10470), (243, 10488), (246, 10506), (250, 10518), (258, 10551), (266, 10593), (271, 10608), (282, 10704), (283, 10713), (295, 10776), (296, 10791), (302, 10827), (315, 10878), (322, 10911), (324, 10920), (343, 11001), (357, 11067), (359, 11076), (360, 11085), (364, 11106), (386, 11241), (387, 11253), (410, 11394), (413, 11415), (419, 11448), (422, 11466), (426, 11484), (434, 11529), (450, 11583), (455, 11604), (463, 11667), (476, 11715), (480, 11730), (490, 11766), (504, 11820), (512, 11847), (514, 11853), (518, 11877), (519, 11880), (551, 11940), (561, 11973), (578, 12012), (582, 12030), (583, 12033), (593, 12075), (596, 12087), (607, 12120), (608, 12123), (614, 12144), (621, 12168), (622, 12171), (647, 12264), (652, 12285), (654, 12297), (658, 12318), (660, 12327), (664, 12336), (666, 12342), (696, 12495), (711, 12555), (713, 12564), (715, 12570), (724, 12606), (754, 12738), (792, 12876), (799, 12900), (848, 13098), (849, 13101), (885, 13263), (892, 13287), (894, 13290), (922, 13392), (950, 13497), (971, 13569), (977, 13593), (980, 13605), (990, 13629), (992, 13641), (1011, 13725), (1013, 13731), (1024, 13773), (1028, 13794), (1038, 13827), (1045, 13860), (1052, 13881), (1058, 13908), (1077, 13968), (1080, 13995), (1083, 14004), (1086, 14016), (1115, 14118),

Gene: JasperJr_17 Start: 10278, Stop: 15800, Start Num: 9
Candidate Starts for JasperJr_17:
(Start: 9 @10278 has 39 MA's), (Start: 11 @10293 has 1 MA's), (Start: 12 @10299 has 1 MA's), (Start: 14 @10329 has 2 MA's), (15, 10338), (16, 10341), (19, 10383), (40, 10494), (43, 10515), (61, 10635), (68, 10677), (82, 10743), (86, 10761), (93, 10782), (94, 10785), (98, 10803), (109, 10827), (135, 10911), (136, 10914), (148, 10953), (153, 10968), (155, 10977), (189, 11145), (193, 11172), (210, 11289), (219, 11337), (245, 11460), (251, 11490), (285, 11694), (294, 11739), (297, 11766), (299, 11778), (320, 11868), (331, 11913), (339, 11940), (345, 11970), (362, 12057), (363, 12060), (370, 12099), (383, 12183), (394, 12219), (398, 12261), (404, 12306), (406, 12312), (409, 12324), (410, 12327), (419, 12381), (427, 12420), (430, 12441), (431, 12444), (434, 12462), (437, 12471), (442, 12489), (448, 12510), (450, 12516), (455, 12537), (460, 12564), (473, 12642), (532, 12831), (544, 12855), (552, 12867), (554, 12870), (572, 12885), (577, 12900), (578, 12903), (591, 12954), (614, 13035), (615, 13038), (624, 13071), (633, 13101), (638, 13125), (673, 13284), (710, 13458), (722, 13506), (728, 13551), (729, 13554), (733, 13569), (746, 13614), (747, 13623), (748, 13632), (757, 13683), (776, 13755), (786, 13773), (791, 13794), (813, 13893), (814, 13896), (822, 13929), (839,

13995), (843, 14013), (847, 14028), (853, 14061), (867, 14112), (877, 14163), (884, 14211), (927, 14406), (928, 14409), (946, 14481), (948, 14484), (961, 14550), (962, 14553), (966, 14571), (985, 14631), (1001, 14688), (1003, 14706), (1021, 14787), (1022, 14790), (1026, 14805), (1075, 15018), (1088, 15084), (1104, 15138), (1106, 15150), (1108, 15156), (1130, 15279), (1138, 15303), (1142, 15321), (1149, 15345), (1151, 15351), (1157, 15372), (1165, 15411), (1185, 15552), (1187, 15564), (1199, 15615), (1202, 15633), (1227, 15783),

Gene: Jecs_18 Start: 10920, Stop: 16037, Start Num: 27
Candidate Starts for Jecs_18:
(Start: 27 @10920 has 14 MA's), (Start: 30 @10929 has 41 MA's), (74, 11202), (76, 11211), (80, 11241), (83, 11250), (98, 11307), (109, 11331), (142, 11442), (151, 11463), (155, 11481), (185, 11634), (188, 11646), (193, 11676), (243, 11955), (244, 11958), (251, 11994), (268, 12072), (285, 12195), (290, 12228), (295, 12246), (299, 12279), (301, 12291), (305, 12315), (318, 12360), (320, 12369), (329, 12405), (339, 12441), (342, 12453), (345, 12471), (352, 12507), (375, 12630), (377, 12654), (381, 12672), (404, 12807), (406, 12813), (410, 12828), (419, 12882), (424, 12909), (425, 12912), (427, 12921), (430, 12942), (431, 12945), (434, 12963), (437, 12972), (448, 13011), (450, 13017), (455, 13038), (460, 13065), (467, 13113), (473, 13143), (494, 13221), (502, 13254), (511, 13299), (550, 13356), (564, 13368), (565, 13371), (578, 13404), (605, 13503), (607, 13509), (613, 13530), (614, 13533), (615, 13536), (620, 13554), (633, 13599), (642, 13635), (652, 13674), (655, 13689), (656, 13692), (657, 13698), (667, 13743), (669, 13752), (689, 13851), (696, 13893), (718, 13971), (730, 14040), (739, 14058), (761, 14166), (762, 14169), (770, 14193), (771, 14196), (777, 14217), (787, 14235), (788, 14238), (790, 14247), (830, 14400), (831, 14406), (863, 14526), (881, 14604), (899, 14652), (904, 14664), (917, 14724), (951, 14844), (957, 14871), (961, 14889), (981, 14967), (983, 14973), (987, 14982), (993, 15009), (1008, 15102), (1016, 15141), (1027, 15183), (1066, 15336), (1074, 15369), (1075, 15372), (1095, 15429), (1098, 15438), (1102, 15450), (1106, 15471), (1156, 15684), (1165, 15723), (1175, 15792), (1184, 15846), (1216, 15999),

Gene: Jifall16_38 Start: 24140, Stop: 29533, Start Num: 26
Candidate Starts for Jifall16_38:
(Start: 26 @24140 has 50 MA's), (79, 24467), (84, 24488), (129, 24632), (149, 24677), (157, 24710), (180, 24830), (222, 25079), (232, 25136), (278, 25373), (281, 25403), (285, 25436), (305, 25556), (314, 25586), (337, 25676), (345, 25712), (355, 25760), (356, 25766), (361, 25790), (365, 25811), (366, 25820), (375, 25871), (378, 25901), (437, 26201), (449, 26243), (450, 26246), (462, 26306), (466, 26336), (506, 26474), (510, 26492), (516, 26519), (524, 26540), (526, 26546), (539, 26585), (540, 26588), (570, 26648), (575, 26660), (578, 26669), (591, 26720), (594, 26735), (633, 26873), (636, 26885), (653, 26960), (671, 27047), (692, 27152), (694, 27164), (718, 27257), (722, 27281), (729, 27329), (733, 27344), (742, 27365), (746, 27389), (747, 27398), (750, 27407), (752, 27413), (758, 27449), (763, 27476), (791, 27569), (814, 27677), (826, 27728), (831, 27752), (839, 27779), (846, 27812), (853, 27845), (867, 27902), (873, 27929), (877, 27944), (885, 28001), (898, 28067), (919, 28151), (946, 28259), (948, 28262), (953, 28292), (1125, 29066), (1140, 29105), (1161, 29192), (1178, 29300), (1191, 29387), (1194, 29402), (1197, 29411), (1203, 29435), (1210, 29465), (1212, 29474),

Gene: JuJu_17 Start: 10202, Stop: 15721, Start Num: 9
Candidate Starts for JuJu_17:
(Start: 9 @10202 has 39 MA's), (Start: 11 @10217 has 1 MA's), (Start: 12 @10223 has 1 MA's), (Start: 14 @10253 has 2 MA's), (15, 10262), (16, 10265), (19, 10307), (40, 10418), (43, 10439), (86, 10685), (93, 10706), (94, 10709), (98, 10727), (109, 10751), (135, 10835), (137, 10841), (148, 10877), (153, 10892), (155, 10901), (159, 10916), (168, 10961), (189, 11069), (193, 11096), (199, 11129), (251, 11414), (285, 11618), (294, 11663), (331, 11837), (339, 11864), (345, 11894), (362, 11981), (370, 12023), (381, 12095), (394, 12143), (398, 12185), (404, 12230), (406, 12236), (409, 12248), (410, 12251), (419, 12305), (427, 12344), (430, 12365), (431, 12368), (434, 12386), (437, 12395), (442, 12413), (448, 12434), (450, 12440), (455, 12461), (460, 12488), (473, 12566), (501, 12674), (528,

12740), (544, 12779), (577, 12824), (578, 12827), (591, 12878), (614, 12959), (615, 12962), (624, 12995), (633, 13025), (654, 13115), (670, 13196), (694, 13316), (710, 13382), (722, 13430), (728, 13475), (729, 13478), (733, 13493), (735, 13502), (746, 13538), (747, 13547), (748, 13556), (776, 13679), (791, 13718), (813, 13817), (814, 13820), (839, 13919), (843, 13937), (847, 13952), (853, 13985), (867, 14036), (877, 14087), (887, 14156), (927, 14330), (928, 14333), (945, 14399), (946, 14405), (948, 14408), (961, 14474), (962, 14477), (966, 14495), (985, 14555), (1001, 14612), (1003, 14630), (1021, 14711), (1026, 14729), (1039, 14780), (1062, 14888), (1075, 14942), (1088, 15008), (1104, 15062), (1106, 15074), (1108, 15080), (1113, 15110), (1130, 15203), (1138, 15227), (1142, 15245), (1149, 15269), (1151, 15275), (1157, 15296), (1165, 15335), (1185, 15476), (1199, 15539), (1202, 15557), (1215, 15614), (1227, 15707),

Gene: Kabluna_42 Start: 23212, Stop: 28638, Start Num: 26
Candidate Starts for Kabluna_42:
(Start: 26 @23212 has 50 MA's), (48, 23341), (52, 23374), (73, 23503), (84, 23560), (86, 23569), (129, 23704), (157, 23785), (208, 24073), (218, 24136), (220, 24148), (222, 24154), (278, 24448), (281, 24478), (285, 24511), (305, 24631), (314, 24661), (315, 24664), (337, 24751), (345, 24787), (355, 24835), (361, 24865), (365, 24886), (366, 24895), (375, 24946), (378, 24976), (426, 25219), (431, 25246), (432, 25255), (437, 25276), (450, 25321), (461, 25372), (462, 25381), (464, 25405), (516, 25594), (529, 25633), (537, 25654), (550, 25678), (570, 25723), (578, 25744), (580, 25750), (589, 25789), (591, 25795), (595, 25816), (608, 25852), (619, 25891), (623, 25906), (625, 25915), (627, 25924), (631, 25936), (637, 25966), (638, 25972), (639, 25975), (652, 26026), (657, 26050), (665, 26092), (669, 26104), (692, 26224), (694, 26236), (709, 26296), (718, 26329), (721, 26347), (722, 26353), (729, 26401), (733, 26416), (735, 26425), (737, 26428), (746, 26461), (747, 26470), (750, 26479), (751, 26482), (752, 26485), (791, 26641), (814, 26749), (815, 26752), (826, 26800), (831, 26824), (839, 26851), (846, 26884), (853, 26917), (867, 26974), (877, 27016), (885, 27073), (903, 27151), (919, 27223), (924, 27247), (935, 27289), (946, 27331), (948, 27334), (953, 27364), (956, 27376), (967, 27436), (1049, 27790), (1101, 28024), (1129, 28177), (1140, 28210), (1150, 28252), (1162, 28303), (1191, 28492), (1203, 28540), (1210, 28570), (1212, 28579), (1217, 28603),

Gene: Kamaru_18 Start: 9868, Stop: 15501, Start Num: 22
Candidate Starts for Kamaru_18:
(Start: 22 @9868 has 11 MA's), (31, 9895), (Start: 33 @9913 has 2 MA's), (35, 9934), (39, 9955), (47, 10000), (Start: 49 @10015 has 1 MA's), (62, 10099), (70, 10141), (74, 10153), (86, 10216), (92, 10231), (94, 10240), (98, 10258), (101, 10264), (117, 10312), (159, 10447), (188, 10597), (193, 10627), (228, 10846), (245, 10921), (251, 10951), (285, 11155), (293, 11197), (294, 11200), (295, 11206), (297, 11227), (315, 11308), (331, 11374), (339, 11401), (342, 11413), (345, 11431), (347, 11443), (352, 11467), (355, 11479), (362, 11518), (363, 11521), (365, 11530), (370, 11560), (376, 11605), (390, 11665), (394, 11680), (397, 11710), (398, 11722), (404, 11767), (406, 11773), (410, 11788), (414, 11818), (418, 11839), (419, 11842), (431, 11905), (437, 11932), (438, 11935), (439, 11938), (440, 11944), (447, 11968), (448, 11971), (450, 11977), (452, 11983), (455, 11998), (458, 12016), (471, 12097), (482, 12145), (483, 12151), (487, 12178), (522, 12337), (524, 12349), (534, 12385), (557, 12445), (567, 12484), (569, 12490), (570, 12493), (577, 12514), (578, 12517), (605, 12616), (616, 12655), (623, 12679), (630, 12712), (635, 12757), (648, 12811), (659, 12898), (662, 12919), (670, 12955), (676, 12985), (692, 13063), (693, 13066), (694, 13075), (700, 13099), (721, 13180), (722, 13186), (728, 13231), (729, 13234), (733, 13249), (746, 13294), (747, 13303), (748, 13312), (749, 13315), (773, 13420), (789, 13468), (791, 13474), (813, 13573), (814, 13576), (818, 13588), (847, 13705), (853, 13738), (867, 13789), (870, 13801), (875, 13819), (883, 13879), (904, 13960), (907, 13981), (915, 14014), (931, 14077), (937, 14095), (962, 14209), (967, 14239), (969, 14248), (979, 14287), (980, 14290), (991, 14320), (995, 14341), (1019, 14494), (1029, 14545), (1043, 14608), (1044, 14614), (1054, 14665), (1092, 14851), (1113, 14938), (1117, 14965), (1118, 14968), (1128, 15043), (1135, 15067), (1147, 15106), (1157, 15142), (1160, 15163), (1172, 15250), (1179, 15292), (1185, 15325), (1187, 15337), (1205, 15415), (1219, 15481),

Gene: KappaFarmDelta_17 Start: 10424, Stop: 15964, Start Num: 9
Candidate Starts for KappaFarmDelta_17:
(Start: 9 @10424 has 39 MA's), (Start: 11 @10439 has 1 MA's), (Start: 12 @10445 has 1 MA's), (Start: 14 @10475 has 2 MA's), (15, 10484), (16, 10487), (19, 10529), (40, 10640), (43, 10661), (82, 10889), (86, 10907), (93, 10928), (94, 10931), (98, 10949), (109, 10973), (135, 11057), (137, 11063), (148, 11099), (153, 11114), (155, 11123), (189, 11291), (193, 11318), (210, 11435), (245, 11606), (251, 11636), (285, 11840), (294, 11885), (297, 11912), (331, 12059), (339, 12086), (345, 12116), (362, 12203), (363, 12206), (370, 12245), (372, 12251), (394, 12365), (398, 12407), (404, 12452), (406, 12458), (409, 12470), (410, 12473), (419, 12527), (427, 12566), (430, 12587), (431, 12590), (434, 12608), (442, 12635), (448, 12656), (450, 12662), (455, 12683), (460, 12710), (471, 12782), (528, 12983), (532, 12998), (544, 13022), (554, 13037), (577, 13067), (578, 13070), (591, 13121), (615, 13205), (624, 13238), (638, 13292), (692, 13547), (710, 13625), (722, 13673), (726, 13706), (728, 13718), (729, 13721), (733, 13736), (735, 13745), (746, 13781), (747, 13790), (748, 13799), (773, 13907), (789, 13955), (790, 13958), (791, 13961), (796, 13982), (814, 14063), (815, 14066), (847, 14192), (853, 14225), (866, 14273), (867, 14276), (871, 14291), (877, 14327), (927, 14570), (928, 14573), (946, 14645), (948, 14648), (961, 14714), (962, 14717), (966, 14735), (985, 14795), (1001, 14852), (1003, 14870), (1021, 14951), (1026, 14969), (1075, 15182), (1088, 15248), (1106, 15314), (1108, 15320), (1113, 15350), (1130, 15443), (1138, 15467), (1149, 15509), (1157, 15536), (1165, 15575), (1185, 15716), (1199, 15779), (1202, 15797), (1215, 15854),

Gene: KayGee_16 Start: 9384, Stop: 14468, Start Num: 30
Candidate Starts for KayGee_16:
(Start: 30 @9384 has 41 MA's), (53, 9540), (77, 9669), (81, 9699), (101, 9768), (105, 9780), (119, 9825), (132, 9867), (137, 9876), (148, 9912), (155, 9936), (179, 10050), (185, 10089), (187, 10095), (188, 10101), (190, 10110), (193, 10131), (220, 10302), (232, 10365), (243, 10410), (261, 10491), (285, 10650), (290, 10683), (294, 10695), (297, 10722), (307, 10779), (316, 10809), (319, 10821), (344, 10923), (345, 10926), (362, 11013), (372, 11061), (394, 11175), (406, 11268), (410, 11283), (413, 11304), (419, 11337), (425, 11367), (428, 11379), (434, 11418), (441, 11442), (442, 11445), (449, 11469), (455, 11493), (473, 11598), (486, 11646), (494, 11676), (499, 11691), (501, 11706), (509, 11745), (518, 11787), (520, 11799), (522, 11811), (525, 11826), (529, 11841), (533, 11856), (541, 11880), (557, 11919), (560, 11934), (562, 11940), (568, 11961), (576, 11985), (578, 11991), (613, 12117), (622, 12147), (636, 12198), (645, 12234), (650, 12255), (651, 12258), (665, 12330), (675, 12375), (679, 12408), (686, 12429), (697, 12483), (717, 12558), (743, 12642), (764, 12729), (825, 12915), (859, 13047), (869, 13077), (899, 13215), (914, 13266), (923, 13296), (965, 13452), (972, 13482), (1025, 13662), (1035, 13713), (1047, 13740), (1056, 13761), (1085, 13857), (1103, 13905), (1108, 13923), (1130, 14046), (1138, 14070), (1141, 14085), (1149, 14115), (1157, 14142), (1158, 14148), (1165, 14181), (1174, 14250), (1175, 14253), (1180, 14289), (1200, 14379),

Gene: Kenna_17 Start: 9881, Stop: 15508, Start Num: 22
Candidate Starts for Kenna_17:
(Start: 22 @9881 has 11 MA's), (31, 9908), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94, 10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (294, 11213), (295, 11219), (297, 11240), (301, 11264), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (376, 11618), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (535, 12404), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (616, 12668), (623, 12692), (630, 12725), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692,

13076), (693, 13079), (694, 13088), (700, 13112), (721, 13193), (722, 13199), (728, 13244), (729, 13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (790, 13484), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (915, 14027), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (969, 14261), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14858), (1113, 14945), (1117, 14972), (1118, 14975), (1128, 15050), (1135, 15074), (1147, 15113), (1157, 15149), (1160, 15170), (1172, 15257), (1179, 15299), (1185, 15332), (1187, 15344), (1205, 15422), (1219, 15488),

Gene: KidneyBean_39 Start: 24261, Stop: 29657, Start Num: 26
Candidate Starts for KidneyBean_39:
(Start: 26 @24261 has 50 MA's), (57, 24453), (79, 24588), (84, 24609), (89, 24624), (129, 24753), (157, 24834), (222, 25203), (267, 25422), (278, 25497), (281, 25527), (285, 25560), (310, 25698), (314, 25710), (334, 25791), (345, 25836), (355, 25884), (361, 25914), (366, 25944), (369, 25962), (375, 25995), (378, 26025), (426, 26268), (431, 26295), (437, 26325), (449, 26367), (450, 26370), (453, 26385), (466, 26460), (471, 26478), (503, 26583), (510, 26616), (514, 26628), (516, 26643), (521, 26649), (526, 26670), (531, 26691), (554, 26736), (563, 26751), (567, 26763), (569, 26769), (574, 26781), (575, 26784), (581, 26805), (585, 26823), (599, 26874), (621, 26946), (625, 26964), (626, 26967), (637, 27015), (638, 27021), (677, 27210), (690, 27261), (692, 27276), (694, 27288), (718, 27381), (722, 27405), (729, 27453), (733, 27468), (746, 27513), (747, 27522), (750, 27531), (752, 27537), (763, 27600), (791, 27693), (814, 27801), (815, 27804), (826, 27852), (831, 27876), (839, 27903), (846, 27936), (853, 27969), (867, 28026), (877, 28068), (885, 28125), (898, 28191), (919, 28275), (921, 28290), (929, 28320), (946, 28383), (948, 28386), (953, 28416), (1140, 29229), (1161, 29316), (1178, 29424), (1191, 29511), (1197, 29535), (1203, 29559), (1210, 29589), (1212, 29598),

Gene: Kiko_18 Start: 10875, Stop: 15764, Start Num: 27
Candidate Starts for Kiko_18:
(Start: 27 @10875 has 14 MA's), (32, 10899), (41, 10962), (50, 11019), (63, 11115), (67, 11127), (69, 11142), (76, 11166), (80, 11196), (114, 11307), (116, 11313), (117, 11316), (118, 11322), (119, 11325), (121, 11337), (137, 11376), (151, 11418), (154, 11430), (166, 11490), (174, 11523), (185, 11589), (190, 11610), (193, 11631), (202, 11685), (207, 11718), (227, 11835), (243, 11910), (245, 11919), (251, 11949), (268, 12027), (285, 12147), (293, 12189), (295, 12198), (299, 12231), (301, 12243), (305, 12267), (307, 12276), (320, 12321), (329, 12357), (331, 12366), (336, 12384), (345, 12423), (352, 12459), (354, 12468), (362, 12510), (375, 12582), (388, 12645), (400, 12723), (403, 12756), (404, 12759), (406, 12765), (410, 12780), (413, 12801), (418, 12831), (419, 12834), (428, 12876), (437, 12924), (442, 12942), (443, 12948), (448, 12963), (450, 12969), (454, 12987), (455, 12990), (460, 13017), (467, 13065), (470, 13074), (477, 13110), (478, 13113), (487, 13170), (496, 13200), (501, 13224), (511, 13272), (516, 13296), (518, 13305), (521, 13326), (551, 13416), (576, 13500), (578, 13506), (628, 13557), (642, 13605), (646, 13620), (652, 13644), (654, 13656), (655, 13659), (656, 13662), (657, 13668), (667, 13713), (669, 13722), (696, 13863), (704, 13896), (718, 13941), (761, 14136), (762, 14139), (764, 14145), (787, 14205), (790, 14217), (815, 14322), (831, 14376), (842, 14412), (851, 14436), (901, 14637), (938, 14727), (976, 14844), (996, 14886), (1072, 15093), (1075, 15102), (1098, 15168), (1106, 15201), (1156, 15411), (1184, 15573), (1185, 15585), (1198, 15642), (1217, 15726), (1221, 15753),

Gene: Kurt_39 Start: 24501, Stop: 29894, Start Num: 26
Candidate Starts for Kurt_39:
(Start: 26 @24501 has 50 MA's), (79, 24828), (84, 24849), (129, 24993), (149, 25038), (157, 25071), (180, 25191), (222, 25440), (232, 25497), (278, 25734), (281, 25764), (285, 25797), (305, 25917), (314, 25947), (337, 26037), (345, 26073), (355, 26121), (356, 26127), (361, 26151), (365, 26172), (366, 26181), (375, 26232), (378, 26262), (437, 26562), (449, 26604), (450, 26607), (462, 26667),

(466, 26697), (506, 26835), (510, 26853), (516, 26880), (524, 26901), (526, 26907), (539, 26946), (540, 26949), (570, 27009), (575, 27021), (578, 27030), (591, 27081), (594, 27096), (633, 27234), (636, 27246), (653, 27321), (671, 27408), (692, 27513), (694, 27525), (718, 27618), (722, 27642), (729, 27690), (733, 27705), (742, 27726), (746, 27750), (747, 27759), (750, 27768), (752, 27774), (758, 27810), (763, 27837), (791, 27930), (814, 28038), (826, 28089), (831, 28113), (839, 28140), (846, 28173), (853, 28206), (867, 28263), (873, 28290), (877, 28305), (885, 28362), (898, 28428), (919, 28512), (946, 28620), (948, 28623), (953, 28653), (1125, 29427), (1140, 29466), (1161, 29553), (1178, 29661), (1191, 29748), (1197, 29772), (1203, 29796), (1210, 29826), (1212, 29835),

Gene: Lauer_15 Start: 9433, Stop: 14517, Start Num: 30
Candidate Starts for Lauer_15:
(Start: 30 @9433 has 41 MA's), (53, 9589), (77, 9718), (81, 9748), (101, 9817), (105, 9829), (132, 9916), (137, 9925), (148, 9961), (155, 9985), (168, 10045), (179, 10099), (185, 10138), (187, 10144), (190, 10159), (193, 10180), (220, 10351), (232, 10414), (243, 10459), (261, 10540), (285, 10699), (290, 10732), (294, 10744), (297, 10771), (307, 10828), (316, 10858), (319, 10870), (344, 10972), (345, 10975), (362, 11062), (372, 11110), (394, 11224), (406, 11317), (410, 11332), (413, 11353), (419, 11386), (425, 11416), (428, 11428), (434, 11467), (441, 11491), (442, 11494), (449, 11518), (455, 11542), (473, 11647), (494, 11725), (501, 11755), (502, 11758), (509, 11794), (518, 11836), (522, 11860), (525, 11875), (529, 11890), (533, 11905), (541, 11929), (557, 11968), (560, 11983), (562, 11989), (568, 12010), (576, 12034), (578, 12040), (613, 12166), (622, 12196), (633, 12235), (645, 12283), (650, 12304), (651, 12307), (665, 12379), (675, 12424), (679, 12457), (686, 12478), (697, 12532), (717, 12607), (743, 12691), (764, 12778), (825, 12964), (859, 13096), (869, 13126), (899, 13264), (914, 13315), (923, 13345), (965, 13501), (972, 13531), (1025, 13711), (1035, 13762), (1047, 13789), (1056, 13810), (1085, 13906), (1103, 13954), (1108, 13972), (1130, 14095), (1138, 14119), (1141, 14134), (1149, 14164), (1157, 14191), (1158, 14197), (1165, 14230), (1174, 14299), (1175, 14302), (1180, 14338), (1200, 14428),

Gene: Leroy_18 Start: 9882, Stop: 15515, Start Num: 22
Candidate Starts for Leroy_18:
(Start: 22 @9882 has 11 MA's), (Start: 33 @9927 has 2 MA's), (35, 9948), (39, 9969), (47, 10014), (Start: 49 @10029 has 1 MA's), (62, 10113), (70, 10155), (74, 10167), (86, 10230), (92, 10245), (94, 10254), (98, 10272), (101, 10278), (117, 10326), (159, 10461), (188, 10611), (193, 10641), (245, 10935), (251, 10965), (285, 11169), (293, 11211), (294, 11214), (295, 11220), (297, 11241), (301, 11265), (315, 11322), (331, 11388), (339, 11415), (342, 11427), (345, 11445), (347, 11457), (352, 11481), (355, 11493), (362, 11532), (363, 11535), (365, 11544), (370, 11574), (372, 11580), (390, 11679), (394, 11694), (397, 11724), (398, 11736), (404, 11781), (406, 11787), (410, 11802), (414, 11832), (418, 11853), (419, 11856), (431, 11919), (437, 11946), (439, 11952), (447, 11982), (448, 11985), (450, 11991), (452, 11997), (455, 12012), (458, 12030), (471, 12111), (482, 12159), (483, 12165), (485, 12180), (487, 12192), (522, 12351), (524, 12363), (534, 12399), (535, 12405), (557, 12459), (567, 12498), (569, 12504), (570, 12507), (576, 12525), (577, 12528), (578, 12531), (584, 12555), (605, 12630), (623, 12693), (630, 12726), (635, 12771), (648, 12825), (650, 12837), (659, 12912), (662, 12933), (670, 12969), (676, 12999), (693, 13080), (694, 13089), (700, 13113), (722, 13200), (728, 13245), (729, 13248), (746, 13308), (747, 13317), (748, 13326), (773, 13434), (789, 13482), (791, 13488), (813, 13587), (814, 13590), (818, 13602), (847, 13719), (853, 13752), (867, 13803), (875, 13833), (883, 13893), (904, 13974), (907, 13995), (915, 14028), (934, 14100), (937, 14109), (962, 14223), (967, 14253), (969, 14262), (979, 14301), (980, 14304), (991, 14334), (995, 14355), (1029, 14553), (1043, 14616), (1044, 14622), (1054, 14673), (1092, 14865), (1113, 14952), (1117, 14979), (1118, 14982), (1128, 15057), (1135, 15081), (1147, 15120), (1157, 15156), (1160, 15177), (1172, 15264), (1179, 15306), (1185, 15339), (1187, 15351), (1219, 15495),

Gene: LitninMcQueen_18 Start: 9869, Stop: 15502, Start Num: 22
Candidate Starts for LitninMcQueen_18:

(Start: 22 @9869 has 11 MA's), (31, 9896), (Start: 33 @9914 has 2 MA's), (35, 9935), (39, 9956), (47, 10001), (Start: 49 @10016 has 1 MA's), (62, 10100), (70, 10142), (74, 10154), (86, 10217), (92, 10232), (94, 10241), (98, 10259), (101, 10265), (117, 10313), (159, 10448), (188, 10598), (193, 10628), (228, 10847), (245, 10922), (251, 10952), (285, 11156), (293, 11198), (294, 11201), (295, 11207), (297, 11228), (315, 11309), (331, 11375), (339, 11402), (342, 11414), (345, 11432), (347, 11444), (352, 11468), (355, 11480), (362, 11519), (363, 11522), (365, 11531), (370, 11561), (376, 11606), (390, 11666), (394, 11681), (397, 11711), (398, 11723), (404, 11768), (406, 11774), (410, 11789), (414, 11819), (418, 11840), (419, 11843), (431, 11906), (437, 11933), (438, 11936), (439, 11939), (440, 11945), (447, 11969), (448, 11972), (450, 11978), (452, 11984), (455, 11999), (458, 12017), (471, 12098), (482, 12146), (483, 12152), (487, 12179), (522, 12338), (524, 12350), (534, 12386), (557, 12446), (567, 12485), (569, 12491), (570, 12494), (577, 12515), (578, 12518), (605, 12617), (616, 12656), (623, 12680), (630, 12713), (635, 12758), (648, 12812), (659, 12899), (662, 12920), (670, 12956), (676, 12986), (692, 13064), (693, 13067), (694, 13076), (700, 13100), (721, 13181), (722, 13187), (728, 13232), (729, 13235), (733, 13250), (746, 13295), (747, 13304), (748, 13313), (749, 13316), (773, 13421), (789, 13469), (791, 13475), (813, 13574), (814, 13577), (818, 13589), (847, 13706), (853, 13739), (867, 13790), (875, 13820), (883, 13880), (904, 13961), (907, 13982), (915, 14015), (931, 14078), (937, 14096), (962, 14210), (967, 14240), (969, 14249), (979, 14288), (980, 14291), (991, 14321), (995, 14342), (1019, 14495), (1029, 14546), (1043, 14609), (1044, 14615), (1054, 14666), (1092, 14852), (1113, 14939), (1117, 14966), (1118, 14969), (1128, 15044), (1135, 15068), (1147, 15107), (1157, 15143), (1160, 15164), (1172, 15251), (1179, 15293), (1185, 15326), (1187, 15338), (1205, 15416), (1219, 15482),

Gene: Lollipop1437_44 Start: 25110, Stop: 30536, Start Num: 26
Candidate Starts for Lollipop1437_44:
(Start: 26 @25110 has 50 MA's), (84, 25458), (103, 25518), (106, 25527), (182, 25800), (218, 26022), (220, 26034), (222, 26040), (278, 26334), (281, 26364), (285, 26397), (314, 26547), (337, 26637), (345, 26673), (355, 26721), (356, 26727), (361, 26751), (365, 26772), (366, 26781), (375, 26832), (378, 26862), (426, 27105), (437, 27162), (440, 27174), (450, 27207), (452, 27213), (481, 27345), (489, 27372), (516, 27480), (524, 27501), (526, 27507), (540, 27549), (578, 27630), (580, 27636), (591, 27681), (594, 27696), (612, 27750), (636, 27846), (671, 28008), (677, 28047), (685, 28077), (694, 28125), (709, 28185), (718, 28218), (722, 28242), (729, 28290), (733, 28305), (746, 28350), (747, 28359), (750, 28368), (751, 28371), (752, 28374), (791, 28530), (800, 28566), (814, 28638), (826, 28686), (839, 28737), (846, 28770), (853, 28803), (867, 28860), (871, 28875), (898, 29025), (903, 29037), (921, 29124), (935, 29175), (946, 29217), (948, 29220), (953, 29250), (1017, 29544), (1037, 29634), (1041, 29655), (1058, 29724), (1073, 29811), (1140, 30108), (1152, 30156), (1161, 30195), (1191, 30390), (1203, 30438), (1207, 30450), (1209, 30465), (1212, 30477), (1213, 30486),

Gene: Lutum_18 Start: 9881, Stop: 15508, Start Num: 22
Candidate Starts for Lutum_18:
(Start: 22 @9881 has 11 MA's), (31, 9908), (Start: 33 @9926 has 2 MA's), (35, 9947), (39, 9968), (47, 10013), (Start: 49 @10028 has 1 MA's), (62, 10112), (70, 10154), (74, 10166), (86, 10229), (92, 10244), (94, 10253), (98, 10271), (101, 10277), (117, 10325), (159, 10460), (188, 10610), (193, 10640), (251, 10964), (273, 11060), (285, 11168), (294, 11213), (295, 11219), (297, 11240), (301, 11264), (315, 11321), (331, 11387), (339, 11414), (342, 11426), (345, 11444), (347, 11456), (352, 11480), (355, 11492), (362, 11531), (363, 11534), (365, 11543), (370, 11573), (376, 11618), (390, 11678), (394, 11693), (397, 11723), (398, 11735), (404, 11780), (406, 11786), (410, 11801), (414, 11831), (418, 11852), (419, 11855), (431, 11918), (437, 11945), (438, 11948), (439, 11951), (440, 11957), (447, 11981), (448, 11984), (450, 11990), (452, 11996), (455, 12011), (458, 12029), (463, 12074), (482, 12158), (483, 12164), (487, 12191), (509, 12284), (511, 12293), (522, 12350), (524, 12362), (534, 12398), (535, 12404), (552, 12446), (557, 12458), (567, 12497), (569, 12503), (570, 12506), (576, 12524), (577, 12527), (578, 12530), (584, 12554), (605, 12629), (616, 12668), (623, 12692), (630, 12725), (650, 12836), (654, 12869), (662, 12932), (670, 12968), (676, 12998), (692, 13076), (693, 13079), (694, 13088), (700, 13112), (721, 13193), (722, 13199), (728, 13244), (729,

13247), (733, 13262), (746, 13307), (747, 13316), (748, 13325), (749, 13328), (773, 13433), (789, 13481), (790, 13484), (791, 13487), (813, 13586), (814, 13589), (818, 13601), (847, 13718), (853, 13751), (867, 13802), (875, 13832), (883, 13892), (904, 13973), (907, 13994), (915, 14027), (934, 14099), (937, 14108), (962, 14222), (967, 14252), (969, 14261), (979, 14300), (980, 14303), (991, 14333), (995, 14354), (1029, 14552), (1043, 14615), (1044, 14621), (1054, 14672), (1092, 14858), (1113, 14945), (1117, 14972), (1118, 14975), (1128, 15050), (1135, 15074), (1147, 15113), (1157, 15149), (1160, 15170), (1172, 15257), (1179, 15299), (1185, 15332), (1187, 15344), (1205, 15422), (1219, 15488),

Gene: Lysidious_18 Start: 10777, Stop: 16320, Start Num: 9
Candidate Starts for Lysidious_18:
(Start: 9 @10777 has 39 MA's), (Start: 14 @10828 has 2 MA's), (15, 10837), (16, 10840), (19, 10882), (40, 10993), (43, 11014), (61, 11134), (68, 11176), (82, 11242), (86, 11260), (93, 11281), (94, 11284), (98, 11302), (109, 11326), (135, 11410), (137, 11416), (148, 11452), (153, 11467), (155, 11476), (189, 11644), (193, 11671), (210, 11788), (245, 11959), (251, 11989), (285, 12193), (294, 12238), (297, 12265), (299, 12277), (320, 12367), (331, 12412), (339, 12439), (345, 12469), (362, 12556), (363, 12559), (370, 12598), (394, 12718), (398, 12760), (404, 12805), (406, 12811), (409, 12823), (410, 12826), (419, 12880), (427, 12919), (430, 12940), (431, 12943), (434, 12961), (437, 12970), (442, 12988), (448, 13009), (450, 13015), (455, 13036), (460, 13063), (501, 13270), (532, 13351), (544, 13375), (552, 13387), (554, 13390), (572, 13405), (577, 13420), (578, 13423), (591, 13474), (614, 13555), (615, 13558), (624, 13591), (633, 13621), (638, 13645), (654, 13711), (710, 13978), (722, 14026), (728, 14071), (729, 14074), (733, 14089), (746, 14134), (747, 14143), (748, 14152), (757, 14203), (776, 14275), (786, 14293), (791, 14314), (813, 14413), (814, 14416), (822, 14449), (839, 14515), (843, 14533), (847, 14548), (853, 14581), (867, 14632), (877, 14683), (927, 14926), (928, 14929), (946, 15001), (948, 15004), (961, 15070), (962, 15073), (966, 15091), (985, 15151), (1001, 15208), (1003, 15226), (1021, 15307), (1022, 15310), (1026, 15325), (1062, 15484), (1075, 15538), (1088, 15604), (1089, 15610), (1106, 15670), (1108, 15676), (1130, 15799), (1138, 15823), (1142, 15841), (1149, 15865), (1151, 15871), (1157, 15892), (1165, 15931), (1185, 16072), (1187, 16084), (1199, 16135), (1202, 16153), (1215, 16210), (1227, 16303),

Gene: MAnor_16 Start: 9376, Stop: 14475, Start Num: 30
Candidate Starts for MAnor_16:
(Start: 30 @9376 has 41 MA's), (53, 9532), (70, 9637), (77, 9661), (86, 9712), (101, 9760), (117, 9808), (119, 9817), (132, 9859), (136, 9865), (137, 9868), (148, 9904), (155, 9928), (162, 9955), (179, 10042), (185, 10081), (187, 10087), (190, 10102), (193, 10123), (220, 10294), (232, 10357), (243, 10402), (251, 10441), (261, 10483), (285, 10645), (287, 10654), (290, 10678), (294, 10690), (297, 10717), (299, 10729), (307, 10774), (316, 10804), (319, 10816), (344, 10918), (345, 10921), (362, 11008), (367, 11035), (376, 11095), (382, 11125), (389, 11146), (394, 11170), (406, 11263), (410, 11278), (412, 11287), (413, 11299), (419, 11332), (428, 11374), (440, 11434), (441, 11437), (442, 11440), (443, 11446), (449, 11464), (455, 11488), (473, 11593), (501, 11701), (502, 11704), (509, 11740), (522, 11806), (525, 11821), (529, 11836), (533, 11851), (540, 11872), (541, 11875), (542, 11878), (557, 11914), (560, 11929), (562, 11935), (568, 11956), (576, 11980), (578, 11986), (613, 12112), (622, 12142), (633, 12181), (645, 12229), (650, 12250), (651, 12253), (652, 12259), (665, 12325), (675, 12370), (679, 12403), (686, 12424), (697, 12478), (740, 12628), (743, 12637), (764, 12724), (823, 12901), (859, 13042), (869, 13072), (899, 13210), (923, 13291), (965, 13444), (972, 13474), (1031, 13696), (1033, 13705), (1035, 13711), (1047, 13747), (1085, 13864), (1103, 13912), (1108, 13930), (1130, 14053), (1138, 14077), (1141, 14092), (1149, 14122), (1157, 14149), (1158, 14155), (1165, 14188), (1174, 14257), (1175, 14260), (1180, 14296), (1193, 14368), (1195, 14371), (1200, 14386),

Gene: MScarn_18 Start: 9601, Stop: 14400, Start Num: 108
Candidate Starts for MScarn_18:

(Start: 108 @9601 has 16 MA's), (Start: 115 @9628 has 1 MA's), (117, 9634), (154, 9757), (177, 9859), (184, 9904), (186, 9916), (190, 9934), (194, 9961), (195, 9964), (198, 9979), (206, 10030), (207, 10033), (214, 10090), (215, 10093), (224, 10135), (228, 10153), (238, 10198), (248, 10234), (257, 10267), (264, 10300), (265, 10312), (276, 10366), (282, 10405), (284, 10420), (286, 10429), (292, 10456), (300, 10507), (316, 10567), (319, 10576), (332, 10630), (349, 10693), (352, 10708), (384, 10861), (393, 10888), (404, 10981), (406, 10987), (410, 11002), (416, 11041), (431, 11119), (439, 11152), (450, 11191), (454, 11209), (455, 11212), (460, 11239), (470, 11296), (473, 11317), (498, 11428), (502, 11449), (509, 11485), (518, 11527), (520, 11539), (522, 11551), (533, 11596), (534, 11599), (540, 11617), (541, 11620), (542, 11623), (567, 11698), (578, 11731), (592, 11791), (613, 11857), (614, 11860), (615, 11863), (620, 11881), (646, 11980), (650, 11995), (651, 11998), (679, 12148), (686, 12169), (694, 12211), (701, 12238), (703, 12244), (743, 12388), (764, 12475), (779, 12517), (793, 12553), (813, 12628), (828, 12679), (836, 12718), (845, 12742), (872, 12847), (882, 12904), (918, 13042), (940, 13117), (972, 13261), (978, 13282), (1012, 13459), (1014, 13465), (1085, 13789), (1090, 13795), (1108, 13855), (1118, 13906), (1130, 13978), (1141, 14017), (1149, 14047), (1165, 14113), (1170, 14161), (1180, 14221), (1200, 14311), (1213, 14371),

Gene: MaVan_18 Start: 10619, Stop: 15748, Start Num: 30
Candidate Starts for MaVan_18:
(24, 10598), (Start: 30 @10619 has 41 MA's), (34, 10646), (53, 10775), (68, 10871), (78, 10922), (95, 10979), (104, 11012), (105, 11015), (132, 11102), (138, 11114), (153, 11162), (154, 11165), (155, 11171), (166, 11225), (168, 11231), (178, 11279), (190, 11345), (193, 11366), (267, 11759), (268, 11762), (282, 11864), (294, 11930), (295, 11936), (297, 11957), (345, 12161), (348, 12179), (352, 12197), (355, 12209), (362, 12248), (365, 12260), (372, 12296), (379, 12353), (384, 12377), (388, 12383), (406, 12503), (410, 12518), (416, 12557), (430, 12632), (438, 12665), (442, 12680), (443, 12686), (445, 12692), (455, 12728), (474, 12836), (487, 12908), (501, 12962), (503, 12968), (533, 13112), (541, 13136), (562, 13196), (566, 13208), (567, 13214), (576, 13241), (577, 13244), (578, 13247), (603, 13340), (605, 13346), (620, 13397), (638, 13466), (647, 13499), (651, 13514), (652, 13520), (663, 13577), (667, 13589), (674, 13628), (675, 13631), (677, 13652), (679, 13664), (686, 13685), (688, 13688), (694, 13727), (697, 13739), (701, 13754), (740, 13895), (764, 13991), (790, 14057), (795, 14078), (798, 14084), (859, 14321), (869, 14351), (880, 14390), (909, 14525), (916, 14555), (923, 14576), (965, 14735), (972, 14768), (1033, 14981), (1044, 14999), (1047, 15005), (1085, 15134), (1108, 15200), (1118, 15251), (1130, 15323), (1141, 15362), (1149, 15392), (1158, 15425), (1165, 15458), (1175, 15530), (1186, 15602), (1199, 15656), (1201, 15662), (1213, 15719),

Gene: MacGully_48 Start: 25696, Stop: 30690, Start Num: 26
Candidate Starts for MacGully_48:
(Start: 26 @25696 has 50 MA's), (55, 25882), (57, 25888), (60, 25906), (79, 26023), (84, 26044), (99, 26098), (Start: 115 @26146 has 1 MA's), (122, 26179), (124, 26185), (131, 26194), (157, 26257), (160, 26269), (180, 26377), (185, 26407), (218, 26602), (231, 26668), (259, 26800), (274, 26881), (285, 26977), (290, 27010), (293, 27019), (299, 27061), (325, 27175), (330, 27193), (336, 27214), (361, 27331), (374, 27394), (375, 27412), (378, 27442), (412, 27601), (417, 27634), (437, 27742), (450, 27787), (472, 27898), (510, 28033), (516, 28060), (524, 28081), (529, 28099), (540, 28129), (558, 28162), (577, 28198), (578, 28201), (584, 28222), (587, 28234), (605, 28285), (621, 28330), (626, 28348), (636, 28381), (649, 28426), (681, 28573), (684, 28585), (714, 28678), (719, 28696), (731, 28762), (772, 28909), (775, 28924), (782, 28939), (788, 28957), (816, 29071), (821, 29083), (834, 29137), (840, 29161), (850, 29194), (852, 29203), (885, 29329), (886, 29338), (891, 29362), (910, 29440), (926, 29506), (963, 29638), (1059, 29950), (1064, 29980), (1070, 30001), (1091, 30082), (1093, 30088), (1097, 30097), (1105, 30127), (1114, 30160), (1132, 30253), (1136, 30265), (1154, 30325), (1166, 30373), (1207, 30601), (1210, 30619), (1212, 30628),

Gene: MagicMan_17 Start: 10932, Stop: 16046, Start Num: 27
Candidate Starts for MagicMan_17:

(Start: 27 @10932 has 14 MA's), (Start: 30 @10941 has 41 MA's), (74, 11214), (76, 11223), (80, 11253), (83, 11262), (98, 11319), (119, 11382), (142, 11454), (151, 11475), (155, 11493), (185, 11646), (193, 11688), (202, 11742), (207, 11775), (243, 11967), (244, 11970), (251, 12006), (268, 12084), (274, 12123), (285, 12207), (290, 12240), (293, 12249), (295, 12258), (299, 12291), (301, 12303), (305, 12327), (318, 12372), (320, 12381), (329, 12417), (331, 12426), (339, 12453), (342, 12465), (345, 12483), (352, 12519), (375, 12642), (381, 12684), (404, 12819), (405, 12822), (406, 12825), (410, 12840), (419, 12894), (427, 12933), (442, 13002), (445, 13014), (450, 13029), (455, 13050), (457, 13065), (460, 13077), (463, 13113), (471, 13149), (511, 13311), (550, 13368), (564, 13380), (565, 13383), (578, 13416), (603, 13509), (605, 13515), (607, 13521), (613, 13542), (614, 13545), (615, 13548), (633, 13611), (642, 13647), (646, 13662), (652, 13686), (655, 13701), (656, 13704), (657, 13710), (669, 13764), (689, 13863), (696, 13905), (718, 13983), (722, 14007), (730, 14052), (761, 14178), (764, 14187), (770, 14205), (771, 14208), (787, 14247), (788, 14250), (790, 14259), (831, 14418), (863, 14538), (881, 14616), (899, 14664), (904, 14676), (917, 14736), (951, 14853), (957, 14880), (961, 14898), (981, 14976), (983, 14982), (987, 14991), (993, 15018), (1008, 15111), (1016, 15150), (1027, 15192), (1066, 15345), (1074, 15378), (1075, 15381), (1095, 15438), (1098, 15447), (1102, 15459), (1106, 15480), (1109, 15501), (1156, 15693), (1165, 15732), (1175, 15801), (1184, 15855), (1216, 16008),

Gene: Malachai_18 Start: 10785, Stop: 16274, Start Num: 9
Candidate Starts for Malachai_18:
(Start: 9 @10785 has 39 MA's), (13, 10824), (Start: 14 @10836 has 2 MA's), (15, 10845), (16, 10848), (19, 10890), (40, 11001), (43, 11022), (61, 11142), (68, 11184), (82, 11250), (86, 11268), (92, 11283), (93, 11289), (94, 11292), (98, 11310), (109, 11334), (135, 11418), (148, 11460), (153, 11475), (155, 11484), (189, 11652), (193, 11679), (205, 11754), (210, 11796), (219, 11844), (245, 11967), (251, 11997), (285, 12201), (294, 12246), (297, 12273), (299, 12285), (320, 12375), (331, 12420), (339, 12447), (345, 12477), (362, 12564), (370, 12606), (394, 12726), (398, 12768), (404, 12813), (406, 12819), (409, 12831), (410, 12834), (419, 12888), (427, 12927), (430, 12948), (431, 12951), (434, 12969), (442, 12996), (450, 13023), (455, 13044), (460, 13071), (471, 13143), (528, 13344), (532, 13359), (544, 13383), (554, 13398), (577, 13428), (578, 13431), (591, 13482), (614, 13563), (615, 13566), (624, 13599), (633, 13629), (638, 13653), (654, 13719), (710, 13986), (722, 14034), (728, 14079), (729, 14082), (733, 14097), (746, 14142), (747, 14151), (748, 14160), (757, 14211), (776, 14283), (786, 14301), (791, 14322), (813, 14421), (814, 14424), (822, 14457), (839, 14523), (843, 14541), (847, 14556), (853, 14589), (867, 14640), (877, 14691), (927, 14934), (928, 14937), (948, 15012), (961, 15078), (962, 15081), (966, 15099), (985, 15159), (1021, 15315), (1022, 15318), (1026, 15333), (1075, 15552), (1095, 15609), (1100, 15624), (1109, 15672), (1119, 15717), (1153, 15837), (1156, 15846), (1164, 15885), (1174, 15957), (1185, 16026), (1187, 16038), (1199, 16089), (1202, 16107), (1215, 16164), (1227, 16257),

Gene: Malibo_18 Start: 10639, Stop: 15675, Start Num: 112
Candidate Starts for Malibo_18:
(Start: 112 @10639 has 1 MA's), (123, 10681), (128, 10690), (133, 10702), (141, 10726), (152, 10759), (159, 10783), (165, 10804), (214, 11089), (217, 11098), (229, 11149), (230, 11152), (241, 11203), (252, 11251), (253, 11254), (270, 11317), (275, 11350), (289, 11443), (295, 11476), (311, 11548), (320, 11581), (323, 11593), (328, 11614), (348, 11701), (360, 11755), (378, 11872), (411, 12019), (420, 12073), (421, 12082), (428, 12106), (431, 12127), (436, 12148), (444, 12178), (451, 12199), (459, 12235), (462, 12247), (463, 12268), (465, 12274), (466, 12277), (470, 12289), (479, 12337), (501, 12433), (532, 12514), (543, 12538), (578, 12586), (580, 12592), (584, 12610), (605, 12685), (608, 12694), (613, 12712), (614, 12715), (630, 12781), (639, 12847), (650, 12892), (652, 12913), (694, 13144), (710, 13210), (729, 13306), (733, 13321), (747, 13375), (748, 13384), (791, 13546), (813, 13645), (814, 13648), (839, 13747), (843, 13765), (847, 13780), (853, 13813), (867, 13864), (871, 13879), (877, 13915), (878, 13918), (884, 13963), (888, 13993), (896, 14020), (900, 14041), (909, 14083), (927, 14158), (928, 14161), (943, 14212), (953, 14266), (962, 14305), (964, 14317), (969, 14344), (971, 14350), (985, 14410), (1036, 14692), (1059, 14797), (1063, 14821), (1087, 14950),

(1092, 14974), (1113, 15061), (1117, 15088), (1160, 15286), (1172, 15373), (1178, 15394), (1218, 15586),

Gene: Malisha_19 Start: 11668, Stop: 17280, Start Num: 23
Candidate Starts for Malisha_19:
(Start: 23 @11668 has 5 MA's), (28, 11686), (31, 11695), (Start: 33 @11713 has 2 MA's), (35, 11734), (37, 11746), (47, 11800), (Start: 49 @11815 has 1 MA's), (80, 11992), (86, 12016), (94, 12040), (98, 12058), (114, 12103), (136, 12169), (137, 12172), (155, 12232), (188, 12397), (193, 12427), (215, 12583), (245, 12721), (273, 12847), (285, 12955), (290, 12988), (294, 13000), (297, 13027), (331, 13174), (339, 13201), (345, 13231), (352, 13267), (362, 13318), (363, 13321), (365, 13330), (372, 13366), (381, 13432), (394, 13480), (396, 13495), (397, 13510), (403, 13564), (404, 13567), (406, 13573), (409, 13585), (410, 13588), (418, 13639), (419, 13642), (427, 13681), (450, 13777), (455, 13798), (494, 14002), (501, 14032), (518, 14113), (522, 14137), (524, 14149), (534, 14185), (557, 14245), (567, 14284), (570, 14293), (577, 14314), (578, 14317), (605, 14416), (616, 14455), (623, 14479), (630, 14512), (635, 14557), (648, 14611), (650, 14623), (659, 14698), (662, 14719), (670, 14755), (676, 14785), (693, 14866), (694, 14875), (700, 14899), (721, 14980), (722, 14986), (728, 15031), (729, 15034), (746, 15094), (747, 15103), (748, 15112), (773, 15220), (789, 15268), (791, 15274), (813, 15373), (814, 15376), (818, 15388), (847, 15505), (853, 15538), (866, 15586), (867, 15589), (875, 15619), (883, 15679), (904, 15760), (907, 15781), (908, 15784), (931, 15877), (934, 15886), (957, 15988), (962, 16009), (967, 16039), (969, 16048), (979, 16087), (980, 16090), (982, 16093), (991, 16120), (1000, 16174), (1019, 16291), (1039, 16375), (1040, 16387), (1043, 16399), (1044, 16405), (1053, 16432), (1054, 16456), (1092, 16633), (1113, 16720), (1116, 16738), (1117, 16747), (1128, 16825), (1132, 16840), (1135, 16849), (1157, 16924), (1159, 16933), (1160, 16945), (1172, 17032), (1179, 17074), (1185, 17107), (1187, 17119), (1205, 17194), (1219, 17260),

Gene: Malvina_18 Start: 10516, Stop: 15633, Start Num: 30
Candidate Starts for Malvina_18:
(24, 10495), (Start: 30 @10516 has 41 MA's), (34, 10543), (53, 10672), (66, 10756), (75, 10795), (78, 10819), (95, 10876), (102, 10903), (104, 10909), (132, 10999), (153, 11059), (154, 11062), (168, 11128), (178, 11176), (190, 11242), (193, 11263), (254, 11602), (267, 11656), (268, 11659), (282, 11761), (291, 11818), (293, 11824), (294, 11827), (295, 11833), (297, 11854), (307, 11911), (320, 11956), (345, 12058), (348, 12076), (362, 12145), (372, 12193), (379, 12250), (384, 12274), (388, 12280), (406, 12400), (410, 12415), (416, 12454), (430, 12529), (434, 12550), (442, 12577), (443, 12583), (454, 12622), (455, 12625), (474, 12733), (487, 12805), (500, 12856), (501, 12859), (522, 12964), (533, 13009), (541, 13033), (568, 13114), (577, 13141), (578, 13144), (591, 13195), (605, 13243), (607, 13249), (620, 13294), (651, 13411), (652, 13417), (663, 13474), (675, 13528), (677, 13549), (679, 13561), (686, 13582), (688, 13585), (701, 13651), (703, 13657), (740, 13792), (743, 13801), (756, 13858), (764, 13885), (798, 13978), (859, 14206), (867, 14227), (869, 14236), (909, 14410), (916, 14440), (923, 14461), (972, 14653), (1008, 14743), (1047, 14890), (1056, 14911), (1085, 15019), (1108, 15085), (1118, 15136), (1130, 15208), (1141, 15247), (1142, 15250), (1149, 15277), (1158, 15310), (1165, 15343), (1168, 15364), (1170, 15391), (1186, 15487), (1199, 15541), (1201, 15547),

Gene: Margaret_19 Start: 10311, Stop: 14516, Start Num: 127
Candidate Starts for Margaret_19:
(Start: 127 @10311 has 7 MA's), (Start: 139 @10338 has 1 MA's), (201, 10626), (203, 10647), (204, 10653), (209, 10686), (211, 10704), (213, 10728), (234, 10818), (235, 10827), (236, 10836), (243, 10869), (249, 10896), (251, 10905), (256, 10929), (283, 11082), (295, 11145), (296, 11160), (302, 11196), (308, 11226), (315, 11247), (324, 11289), (343, 11370), (359, 11445), (360, 11454), (364, 11475), (387, 11622), (410, 11763), (413, 11784), (419, 11817), (422, 11835), (427, 11856), (430, 11877), (434, 11898), (449, 11949), (450, 11952), (451, 11955), (455, 11973), (469, 12054), (476, 12084), (490, 12135), (504, 12189), (512, 12216), (519, 12249), (551, 12309), (577, 12378), (578, 12381), (605, 12483), (607, 12489), (614, 12513), (621, 12537), (622, 12540), (647, 12633), (654,

12666), (658, 12687), (660, 12696), (664, 12705), (666, 12711), (696, 12864), (713, 12933), (715, 12939), (724, 12975), (753, 13104), (792, 13245), (799, 13269), (811, 13314), (848, 13467), (849, 13470), (894, 13659), (905, 13689), (950, 13866), (971, 13938), (977, 13962), (980, 13974), (990, 13998), (992, 14010), (1011, 14094), (1013, 14100), (1024, 14142), (1028, 14163), (1038, 14196), (1045, 14229), (1052, 14250), (1058, 14277), (1067, 14301), (1077, 14337), (1086, 14385), (1115, 14487),

Gene: Marietta_41 Start: 21563, Stop: 26962, Start Num: 26
Candidate Starts for Marietta_41:
(Start: 26 @21563 has 50 MA's), (46, 21674), (48, 21692), (51, 21722), (58, 21761), (80, 21896), (84, 21911), (125, 22049), (155, 22136), (157, 22142), (208, 22430), (218, 22493), (220, 22505), (222, 22511), (277, 22793), (285, 22868), (303, 22976), (314, 23018), (334, 23099), (345, 23144), (355, 23192), (361, 23222), (366, 23252), (375, 23303), (378, 23333), (414, 23513), (415, 23519), (417, 23525), (437, 23633), (450, 23678), (452, 23684), (492, 23849), (499, 23870), (510, 23924), (516, 23951), (524, 23972), (529, 23990), (539, 24017), (586, 24134), (589, 24146), (598, 24179), (600, 24185), (607, 24206), (612, 24221), (616, 24239), (623, 24263), (625, 24272), (644, 24350), (665, 24452), (677, 24518), (718, 24689), (729, 24761), (733, 24776), (746, 24821), (747, 24830), (750, 24839), (776, 24962), (791, 25001), (813, 25106), (814, 25109), (819, 25121), (837, 25202), (839, 25205), (846, 25238), (853, 25271), (866, 25328), (867, 25331), (877, 25373), (885, 25430), (887, 25442), (898, 25496), (904, 25511), (914, 25562), (919, 25580), (924, 25604), (933, 25640), (946, 25700), (948, 25703), (953, 25733), (958, 25754), (1007, 25964), (1032, 26075), (1140, 26534), (1150, 26576), (1191, 26816), (1207, 26876), (1210, 26894), (1212, 26903),

Gene: Maselop_43 Start: 25232, Stop: 30442, Start Num: 26
Candidate Starts for Maselop_43:
(Start: 26 @25232 has 50 MA's), (57, 25424), (84, 25580), (88, 25592), (99, 25634), (100, 25637), (122, 25715), (126, 25730), (157, 25823), (196, 26021), (212, 26141), (218, 26168), (259, 26366), (285, 26543), (293, 26585), (305, 26663), (306, 26669), (325, 26741), (329, 26753), (330, 26759), (336, 26780), (345, 26819), (357, 26876), (365, 26918), (366, 26927), (374, 26960), (375, 26978), (378, 27008), (402, 27134), (412, 27167), (421, 27230), (431, 27278), (432, 27287), (446, 27341), (462, 27413), (463, 27434), (466, 27443), (501, 27599), (514, 27650), (527, 27698), (539, 27731), (555, 27770), (556, 27773), (577, 27824), (578, 27827), (586, 27860), (597, 27902), (601, 27914), (602, 27917), (605, 27926), (617, 27968), (618, 27971), (620, 27977), (623, 27989), (636, 28043), (638, 28055), (677, 28232), (680, 28241), (682, 28244), (693, 28289), (716, 28379), (720, 28397), (765, 28562), (772, 28592), (775, 28607), (816, 28763), (821, 28775), (827, 28799), (840, 28853), (850, 28886), (857, 28931), (881, 29024), (883, 29033), (885, 29045), (886, 29054), (890, 29075), (891, 29078), (910, 29150), (911, 29153), (917, 29174), (926, 29216), (965, 29366), (984, 29399), (988, 29408), (1046, 29645), (1055, 29690), (1068, 29756), (1071, 29762), (1075, 29783), (1076, 29792), (1081, 29813), (1091, 29834), (1105, 29879), (1136, 30020), (1178, 30209), (1182, 30242), (1203, 30344), (1207, 30356), (1212, 30383),

Gene: Mayweather_17 Start: 10006, Stop: 15090, Start Num: 30
Candidate Starts for Mayweather_17:
(Start: 30 @10006 has 41 MA's), (53, 10162), (77, 10291), (81, 10321), (101, 10390), (105, 10402), (111, 10417), (117, 10438), (119, 10447), (132, 10489), (137, 10498), (148, 10534), (155, 10558), (168, 10618), (179, 10672), (185, 10711), (187, 10717), (190, 10732), (193, 10753), (220, 10924), (232, 10987), (243, 11032), (261, 11113), (285, 11272), (290, 11305), (294, 11317), (297, 11344), (307, 11401), (316, 11431), (319, 11443), (344, 11545), (345, 11548), (362, 11635), (372, 11683), (394, 11797), (406, 11890), (410, 11905), (413, 11926), (419, 11959), (428, 12001), (434, 12040), (441, 12064), (442, 12067), (443, 12073), (449, 12091), (455, 12115), (473, 12220), (486, 12268), (501, 12328), (502, 12331), (509, 12367), (522, 12433), (525, 12448), (533, 12478), (540, 12499), (541, 12502), (557, 12541), (562, 12562), (568, 12583), (576, 12607), (578, 12613), (613, 12739), (622, 12769), (633, 12808), (645, 12856), (650, 12877), (651, 12880), (665, 12952), (675, 12997),

(679, 13030), (686, 13051), (697, 13105), (717, 13180), (743, 13264), (764, 13351), (859, 13669), (869, 13699), (899, 13837), (914, 13888), (923, 13918), (965, 14071), (972, 14101), (1031, 14311), (1033, 14320), (1035, 14326), (1047, 14362), (1085, 14479), (1090, 14485), (1103, 14527), (1108, 14545), (1130, 14668), (1138, 14692), (1141, 14707), (1149, 14737), (1157, 14764), (1158, 14770), (1165, 14803), (1174, 14872), (1175, 14875), (1180, 14911), (1193, 14983), (1200, 15001),

Gene: McDazzle_15 Start: 10003, Stop: 14937, Start Num: 53
Candidate Starts for McDazzle_15:
(Start: 30 @9847 has 41 MA's), (53, 10003), (70, 10108), (77, 10132), (86, 10183), (101, 10231), (117, 10279), (119, 10288), (132, 10330), (136, 10336), (137, 10339), (148, 10375), (155, 10399), (162, 10426), (179, 10513), (185, 10552), (187, 10558), (190, 10573), (193, 10594), (202, 10648), (220, 10765), (232, 10828), (243, 10873), (251, 10912), (261, 10954), (285, 11116), (287, 11125), (290, 11149), (294, 11161), (297, 11188), (299, 11200), (307, 11245), (316, 11275), (319, 11287), (344, 11389), (345, 11392), (362, 11479), (367, 11506), (376, 11566), (382, 11596), (389, 11617), (394, 11641), (400, 11692), (406, 11734), (410, 11749), (412, 11758), (413, 11770), (419, 11803), (428, 11845), (440, 11905), (441, 11908), (442, 11911), (449, 11935), (455, 11959), (473, 12064), (486, 12112), (501, 12172), (502, 12175), (509, 12211), (522, 12277), (525, 12292), (529, 12307), (533, 12322), (540, 12343), (541, 12346), (557, 12385), (560, 12400), (562, 12406), (568, 12427), (576, 12451), (578, 12457), (613, 12583), (622, 12613), (633, 12652), (645, 12700), (650, 12721), (651, 12724), (652, 12730), (665, 12796), (675, 12841), (679, 12874), (686, 12895), (697, 12949), (740, 13099), (743, 13108), (764, 13195), (823, 13372), (859, 13513), (869, 13543), (899, 13681), (923, 13762), (965, 13915), (972, 13945), (1031, 14167), (1033, 14176), (1035, 14182), (1047, 14209), (1085, 14326), (1090, 14332), (1103, 14374), (1108, 14392), (1130, 14515), (1138, 14539), (1141, 14554), (1149, 14584), (1157, 14611), (1158, 14617), (1165, 14650), (1174, 14719), (1175, 14722), (1180, 14758), (1193, 14830), (1200, 14848),

Gene: Melba_17 Start: 10274, Stop: 15796, Start Num: 9
Candidate Starts for Melba_17:
(Start: 9 @10274 has 39 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 2 MA's), (15, 10334), (16, 10337), (19, 10379), (40, 10490), (43, 10511), (61, 10631), (68, 10673), (82, 10739), (86, 10757), (93, 10778), (94, 10781), (98, 10799), (109, 10823), (135, 10907), (136, 10910), (148, 10949), (153, 10964), (155, 10973), (189, 11141), (193, 11168), (210, 11285), (245, 11456), (251, 11486), (285, 11690), (294, 11735), (297, 11762), (299, 11774), (320, 11864), (331, 11909), (339, 11936), (345, 11966), (362, 12053), (363, 12056), (370, 12095), (383, 12179), (394, 12215), (398, 12257), (404, 12302), (406, 12308), (409, 12320), (410, 12323), (419, 12377), (427, 12416), (430, 12437), (431, 12440), (434, 12458), (437, 12467), (442, 12485), (448, 12506), (450, 12512), (455, 12533), (460, 12560), (473, 12638), (532, 12827), (544, 12851), (552, 12863), (554, 12866), (572, 12881), (577, 12896), (578, 12899), (591, 12950), (614, 13031), (615, 13034), (624, 13067), (633, 13097), (638, 13121), (710, 13454), (722, 13502), (728, 13547), (729, 13550), (733, 13565), (746, 13610), (747, 13619), (748, 13628), (757, 13679), (776, 13751), (786, 13769), (791, 13790), (813, 13889), (814, 13892), (822, 13925), (839, 13991), (843, 14009), (847, 14024), (853, 14057), (867, 14108), (877, 14159), (884, 14207), (927, 14402), (928, 14405), (946, 14477), (948, 14480), (961, 14546), (962, 14549), (966, 14567), (985, 14627), (1001, 14684), (1003, 14702), (1021, 14783), (1022, 14786), (1026, 14801), (1075, 15014), (1088, 15080), (1104, 15134), (1106, 15146), (1108, 15152), (1130, 15275), (1138, 15299), (1142, 15317), (1149, 15341), (1151, 15347), (1157, 15368), (1165, 15407), (1185, 15548), (1187, 15560), (1199, 15611), (1202, 15629), (1227, 15779),

Gene: Mellie_16 Start: 10014, Stop: 15557, Start Num: 9
Candidate Starts for Mellie_16:
(Start: 9 @10014 has 39 MA's), (Start: 11 @10029 has 1 MA's), (Start: 12 @10035 has 1 MA's), (Start: 14 @10065 has 2 MA's), (15, 10074), (16, 10077), (19, 10119), (40, 10230), (43, 10251), (82, 10479), (86, 10497), (92, 10512), (93, 10518), (94, 10521), (98, 10539), (109, 10563), (135, 10647), (137,

10653), (148, 10689), (153, 10704), (155, 10713), (189, 10881), (193, 10908), (210, 11025), (245, 11196), (251, 11226), (285, 11430), (294, 11475), (297, 11502), (299, 11514), (320, 11604), (339, 11676), (345, 11706), (362, 11793), (363, 11796), (370, 11835), (394, 11955), (398, 11997), (404, 12042), (406, 12048), (409, 12060), (410, 12063), (419, 12117), (427, 12156), (430, 12177), (431, 12180), (434, 12198), (448, 12246), (450, 12252), (455, 12273), (460, 12300), (471, 12372), (501, 12507), (532, 12588), (544, 12612), (554, 12627), (577, 12657), (578, 12660), (591, 12711), (614, 12792), (615, 12795), (624, 12828), (633, 12858), (638, 12882), (654, 12948), (710, 13215), (715, 13233), (722, 13263), (728, 13308), (729, 13311), (733, 13326), (735, 13335), (746, 13371), (747, 13380), (748, 13389), (757, 13440), (776, 13512), (786, 13530), (791, 13551), (813, 13650), (814, 13653), (822, 13686), (839, 13752), (843, 13770), (847, 13785), (853, 13818), (867, 13869), (877, 13920), (927, 14163), (928, 14166), (946, 14238), (948, 14241), (961, 14307), (962, 14310), (966, 14328), (985, 14388), (1001, 14445), (1003, 14463), (1021, 14544), (1022, 14547), (1026, 14562), (1075, 14775), (1088, 14841), (1089, 14847), (1106, 14907), (1108, 14913), (1130, 15036), (1138, 15060), (1142, 15078), (1149, 15102), (1151, 15108), (1157, 15129), (1165, 15168), (1185, 15309), (1187, 15321), (1199, 15372), (1202, 15390), (1227, 15540),

Gene: MerCougar_40 Start: 24411, Stop: 29816, Start Num: 26
Candidate Starts for MerCougar_40:
(Start: 26 @24411 has 50 MA's), (48, 24540), (149, 24939), (157, 24972), (208, 25260), (218, 25323), (220, 25335), (222, 25341), (278, 25635), (281, 25665), (285, 25698), (305, 25818), (345, 25974), (355, 26022), (361, 26052), (366, 26082), (375, 26133), (378, 26163), (414, 26343), (426, 26406), (431, 26433), (434, 26454), (437, 26463), (450, 26508), (462, 26568), (466, 26598), (468, 26604), (516, 26781), (523, 26799), (526, 26808), (531, 26829), (541, 26853), (563, 26889), (567, 26901), (574, 26919), (575, 26922), (599, 27012), (616, 27069), (625, 27102), (626, 27105), (637, 27153), (638, 27159), (694, 27426), (709, 27486), (718, 27519), (721, 27537), (722, 27543), (729, 27591), (733, 27606), (735, 27615), (737, 27618), (746, 27651), (747, 27660), (750, 27669), (751, 27672), (752, 27675), (763, 27738), (791, 27831), (814, 27939), (815, 27942), (826, 27990), (831, 28014), (839, 28041), (846, 28074), (853, 28107), (867, 28164), (877, 28206), (885, 28263), (898, 28329), (903, 28341), (919, 28413), (946, 28518), (1125, 29346), (1140, 29388), (1150, 29430), (1162, 29481), (1178, 29583), (1203, 29718), (1210, 29748), (1212, 29757),

Gene: MicyPS_15 Start: 10507, Stop: 16509, Start Num: 44
Candidate Starts for MicyPS_15:
(Start: 44 @10507 has 2 MA's), (51, 10558), (126, 10885), (134, 10900), (165, 11017), (166, 11023), (169, 11032), (170, 11035), (181, 11098), (183, 11110), (285, 11722), (294, 11767), (303, 11830), (314, 11872), (315, 11875), (323, 11908), (346, 12001), (353, 12040), (355, 12046), (362, 12085), (372, 12133), (413, 12391), (423, 12445), (455, 12586), (456, 12592), (488, 12778), (498, 12811), (507, 12862), (515, 12895), (533, 12985), (548, 13021), (585, 13144), (618, 13264), (621, 13273), (623, 13282), (626, 13294), (629, 13309), (647, 13393), (650, 13405), (659, 13456), (661, 13468), (663, 13477), (670, 13510), (678, 13552), (698, 13645), (702, 13660), (705, 13681), (736, 13846), (744, 13867), (745, 13873), (759, 13957), (767, 13999), (772, 14032), (797, 14125), (805, 14164), (820, 14242), (853, 14407), (860, 14446), (868, 14497), (876, 14536), (877, 14545), (897, 14665), (920, 14764), (949, 14899), (982, 15046), (1006, 15190), (1018, 15259), (1048, 15394), (1084, 15604), (1093, 15640), (1112, 15727), (1124, 15820), (1133, 15850), (1144, 15889), (1145, 15892), (1169, 16015), (1173, 16057), (1181, 16096), (1186, 16126), (1189, 16138), (1210, 16225), (1211, 16231), (1223, 16309), (1224, 16321), (1226, 16333), (1229, 16372), (1230, 16402), (1231, 16414), (1232, 16459), (1233, 16474),

Gene: MintFen_17 Start: 10274, Stop: 15796, Start Num: 9
Candidate Starts for MintFen_17:
(Start: 9 @10274 has 39 MA's), (Start: 11 @10289 has 1 MA's), (Start: 12 @10295 has 1 MA's), (Start: 14 @10325 has 2 MA's), (15, 10334), (16, 10337), (19, 10379), (40, 10490), (43, 10511), (61, 10631), (68, 10673), (82, 10739), (86, 10757), (93, 10778), (94, 10781), (98, 10799), (109, 10823), (135,

10907), (136, 10910), (148, 10949), (153, 10964), (155, 10973), (189, 11141), (193, 11168), (210, 11285), (245, 11456), (251, 11486), (285, 11690), (294, 11735), (297, 11762), (299, 11774), (320, 11864), (331, 11909), (339, 11936), (345, 11966), (362, 12053), (363, 12056), (370, 12095), (383, 12179), (394, 12215), (398, 12257), (404, 12302), (406, 12308), (409, 12320), (410, 12323), (419, 12377), (427, 12416), (430, 12437), (431, 12440), (434, 12458), (437, 12467), (442, 12485), (448, 12506), (450, 12512), (455, 12533), (460, 12560), (473, 12638), (532, 12827), (544, 12851), (552, 12863), (554, 12866), (572, 12881), (577, 12896), (578, 12899), (591, 12950), (614, 13031), (615, 13034), (624, 13067), (633, 13097), (638, 13121), (710, 13454), (722, 13502), (728, 13547), (729, 13550), (733, 13565), (746, 13610), (747, 13619), (748, 13628), (757, 13679), (776, 13751), (786, 13769), (791, 13790), (813, 13889), (814, 13892), (822, 13925), (839, 13991), (843, 14009), (847, 14024), (853, 14057), (867, 14108), (877, 14159), (884, 14207), (927, 14402), (928, 14405), (946, 14477), (948, 14480), (961, 14546), (962, 14549), (966, 14567), (985, 14627), (1001, 14684), (1003, 14702), (1021, 14783), (1022, 14786), (1026, 14801), (1075, 15014), (1088, 15080), (1104, 15134), (1106, 15146), (1108, 15152), (1130, 15275), (1138, 15299), (1142, 15317), (1149, 15341), (1151, 15347), (1157, 15368), (1165, 15407), (1185, 15548), (1187, 15560), (1199, 15611), (1202, 15629), (1227, 15779),

Gene: MissRona_19 Start: 10619, Stop: 16108, Start Num: 9
Candidate Starts for MissRona_19:
(Start: 9 @10619 has 39 MA's), (Start: 11 @10634 has 1 MA's), (Start: 12 @10640 has 1 MA's), (Start: 14 @10670 has 2 MA's), (15, 10679), (16, 10682), (19, 10724), (40, 10835), (43, 10856), (61, 10976), (68, 11018), (82, 11084), (86, 11102), (93, 11123), (94, 11126), (98, 11144), (109, 11168), (135, 11252), (148, 11294), (153, 11309), (155, 11318), (189, 11486), (193, 11513), (210, 11630), (245, 11801), (251, 11831), (285, 12035), (294, 12080), (297, 12107), (299, 12119), (301, 12131), (320, 12209), (331, 12254), (339, 12281), (345, 12311), (362, 12398), (363, 12401), (370, 12440), (379, 12503), (381, 12512), (394, 12560), (398, 12602), (404, 12647), (406, 12653), (410, 12668), (419, 12722), (427, 12761), (430, 12782), (431, 12785), (434, 12803), (442, 12830), (448, 12851), (450, 12857), (455, 12878), (458, 12896), (460, 12905), (528, 13178), (554, 13232), (577, 13262), (578, 13265), (591, 13316), (614, 13397), (615, 13400), (624, 13433), (633, 13463), (638, 13487), (654, 13553), (710, 13820), (722, 13868), (726, 13901), (728, 13913), (729, 13916), (746, 13976), (747, 13985), (748, 13994), (757, 14045), (776, 14117), (786, 14135), (791, 14156), (813, 14255), (814, 14258), (822, 14291), (839, 14357), (843, 14375), (847, 14390), (853, 14423), (867, 14474), (877, 14525), (887, 14594), (927, 14768), (928, 14771), (946, 14843), (948, 14846), (961, 14912), (962, 14915), (966, 14933), (985, 14993), (1001, 15050), (1003, 15068), (1021, 15149), (1022, 15152), (1026, 15167), (1062, 15338), (1075, 15392), (1100, 15464), (1103, 15473), (1109, 15509), (1122, 15569), (1126, 15587), (1131, 15605), (1147, 15650), (1156, 15683), (1174, 15794), (1185, 15863), (1199, 15926), (1202, 15944), (1227, 16094),

Gene: MunkgeeRoachy_16 Start: 9677, Stop: 14815, Start Num: 30
Candidate Starts for MunkgeeRoachy_16:
(Start: 23 @9653 has 5 MA's), (Start: 30 @9677 has 41 MA's), (34, 9704), (53, 9833), (63, 9908), (101, 10061), (102, 10064), (132, 10160), (137, 10169), (145, 10199), (148, 10205), (153, 10220), (154, 10223), (159, 10244), (174, 10316), (178, 10337), (190, 10403), (193, 10424), (210, 10541), (243, 10703), (251, 10742), (267, 10817), (290, 10976), (294, 10988), (297, 11015), (304, 11060), (307, 11072), (336, 11180), (342, 11201), (347, 11231), (352, 11255), (355, 11267), (362, 11306), (368, 11339), (388, 11441), (389, 11444), (393, 11462), (394, 11468), (406, 11561), (410, 11576), (416, 11615), (427, 11669), (434, 11711), (446, 11753), (454, 11783), (455, 11786), (474, 11894), (475, 11897), (484, 11948), (502, 12023), (520, 12113), (522, 12125), (533, 12170), (540, 12191), (541, 12194), (542, 12197), (567, 12272), (578, 12305), (583, 12326), (591, 12356), (605, 12404), (607, 12410), (615, 12437), (651, 12572), (675, 12689), (679, 12722), (686, 12743), (688, 12746), (701, 12812), (703, 12818), (706, 12833), (740, 12953), (743, 12962), (764, 13046), (859, 13367), (913, 13586), (923, 13622), (978, 13835), (1033, 14027), (1047, 14075), (1056, 14096), (1085, 14204), (1108, 14270), (1111, 14288), (1130, 14393), (1139, 14423), (1141, 14432), (1149, 14462), (1165,

14528), (1170, 14576), (1180, 14636), (1199, 14723), (1213, 14786),

Gene: Murp_17 Start: 10264, Stop: 15864, Start Num: 9
Candidate Starts for Murp_17:
(Start: 9 @10264 has 39 MA's), (Start: 11 @10279 has 1 MA's), (Start: 12 @10285 has 1 MA's), (Start: 14 @10315 has 2 MA's), (15, 10324), (16, 10327), (19, 10369), (40, 10480), (43, 10501), (61, 10621), (69, 10669), (82, 10729), (86, 10747), (93, 10768), (94, 10771), (98, 10789), (135, 10897), (137, 10903), (148, 10939), (153, 10954), (155, 10963), (189, 11131), (193, 11158), (210, 11275), (245, 11446), (251, 11476), (273, 11572), (285, 11680), (294, 11725), (297, 11752), (299, 11764), (320, 11854), (331, 11899), (339, 11926), (345, 11956), (362, 12043), (370, 12085), (372, 12091), (394, 12205), (398, 12247), (404, 12292), (406, 12298), (410, 12313), (419, 12367), (427, 12406), (430, 12427), (431, 12430), (434, 12448), (437, 12457), (442, 12475), (448, 12496), (450, 12502), (455, 12523), (460, 12550), (467, 12598), (473, 12628), (528, 12802), (544, 12841), (554, 12856), (577, 12886), (578, 12889), (591, 12940), (614, 13021), (615, 13024), (624, 13057), (633, 13087), (638, 13111), (652, 13165), (654, 13177), (692, 13366), (710, 13444), (721, 13486), (728, 13537), (729, 13540), (733, 13555), (737, 13567), (746, 13600), (747, 13609), (768, 13723), (778, 13777), (784, 13795), (804, 13879), (805, 13885), (812, 13921), (879, 14245), (885, 14293), (887, 14305), (902, 14368), (917, 14437), (924, 14467), (925, 14470), (927, 14479), (928, 14482), (939, 14515), (946, 14554), (948, 14557), (961, 14623), (962, 14626), (966, 14644), (985, 14704), (1001, 14761), (1003, 14779), (1021, 14860), (1026, 14878), (1075, 15079), (1088, 15145), (1106, 15211), (1108, 15217), (1130, 15343), (1138, 15367), (1142, 15385), (1149, 15409), (1151, 15415), (1157, 15436), (1165, 15475), (1185, 15616), (1199, 15679), (1202, 15697), (1215, 15757), (1227, 15850),

Gene: NaLuna_17 Start: 10605, Stop: 15728, Start Num: 27
Candidate Starts for NaLuna_17:
(Start: 27 @10605 has 14 MA's), (Start: 30 @10614 has 41 MA's), (74, 10887), (76, 10896), (80, 10926), (119, 11055), (155, 11166), (167, 11223), (193, 11361), (202, 11415), (207, 11448), (245, 11649), (251, 11679), (268, 11757), (273, 11775), (274, 11796), (285, 11880), (290, 11913), (293, 11922), (295, 11931), (299, 11964), (301, 11976), (305, 12000), (318, 12045), (320, 12054), (329, 12090), (331, 12099), (339, 12126), (342, 12138), (345, 12156), (352, 12192), (375, 12315), (381, 12357), (404, 12492), (405, 12495), (406, 12498), (410, 12513), (419, 12567), (427, 12606), (445, 12687), (450, 12702), (455, 12723), (457, 12738), (460, 12750), (463, 12786), (471, 12822), (511, 12984), (550, 13041), (564, 13053), (565, 13056), (578, 13089), (582, 13107), (603, 13182), (605, 13188), (607, 13194), (613, 13215), (614, 13218), (615, 13221), (633, 13284), (642, 13320), (646, 13335), (652, 13359), (655, 13374), (656, 13377), (669, 13437), (689, 13536), (696, 13578), (718, 13656), (730, 13725), (739, 13743), (761, 13851), (770, 13878), (771, 13881), (787, 13920), (788, 13923), (790, 13932), (803, 13980), (826, 14067), (831, 14091), (851, 14151), (863, 14211), (881, 14289), (899, 14337), (904, 14349), (917, 14409), (927, 14451), (951, 14532), (957, 14559), (961, 14577), (968, 14607), (981, 14655), (983, 14661), (987, 14670), (999, 14718), (1008, 14790), (1016, 14829), (1027, 14871), (1074, 15057), (1075, 15060), (1095, 15117), (1098, 15126), (1102, 15138), (1106, 15159), (1156, 15372), (1165, 15411), (1175, 15480), (1184, 15534), (1198, 15606), (1216, 15687), (1220, 15711),

Gene: NadineRae_39 Start: 20810, Stop: 26215, Start Num: 26
Candidate Starts for NadineRae_39:
(Start: 26 @20810 has 50 MA's), (46, 20921), (48, 20939), (51, 20969), (58, 21008), (80, 21143), (84, 21158), (125, 21296), (149, 21356), (155, 21383), (157, 21389), (208, 21677), (218, 21740), (220, 21752), (222, 21758), (277, 22040), (285, 22115), (303, 22223), (314, 22265), (334, 22346), (345, 22391), (355, 22439), (361, 22469), (366, 22499), (375, 22550), (378, 22580), (381, 22592), (414, 22760), (437, 22880), (450, 22925), (452, 22931), (492, 23096), (510, 23171), (516, 23198), (524, 23219), (529, 23237), (539, 23264), (586, 23381), (589, 23393), (598, 23426), (600, 23432), (607, 23453), (612, 23468), (616, 23486), (623, 23510), (625, 23519), (644, 23597), (665, 23699), (677, 23765), (718, 23936), (721, 23954), (729, 24008), (733, 24023), (746, 24068), (747, 24077), (750,

24086), (791, 24248), (800, 24284), (814, 24356), (815, 24359), (826, 24407), (831, 24431), (837, 24455), (839, 24458), (846, 24491), (853, 24524), (866, 24581), (867, 24584), (877, 24626), (885, 24683), (887, 24695), (898, 24749), (904, 24764), (914, 24815), (919, 24833), (924, 24857), (933, 24893), (946, 24953), (948, 24956), (953, 24986), (958, 25007), (1007, 25217), (1032, 25328), (1140, 25787), (1150, 25829), (1191, 26069), (1207, 26129), (1210, 26147), (1212, 26156),

Gene: NatB6_39 Start: 23537, Stop: 28930, Start Num: 26
Candidate Starts for NatB6_39:
(Start: 26 @23537 has 50 MA's), (79, 23864), (84, 23885), (129, 24029), (149, 24074), (157, 24107), (180, 24227), (222, 24476), (232, 24533), (278, 24770), (281, 24800), (285, 24833), (305, 24953), (314, 24983), (337, 25073), (345, 25109), (355, 25157), (356, 25163), (361, 25187), (365, 25208), (366, 25217), (375, 25268), (378, 25298), (437, 25598), (449, 25640), (450, 25643), (462, 25703), (466, 25733), (506, 25871), (510, 25889), (516, 25916), (524, 25937), (526, 25943), (539, 25982), (540, 25985), (570, 26045), (575, 26057), (578, 26066), (591, 26117), (594, 26132), (633, 26270), (636, 26282), (653, 26357), (671, 26444), (692, 26549), (694, 26561), (718, 26654), (722, 26678), (729, 26726), (733, 26741), (742, 26762), (746, 26786), (747, 26795), (750, 26804), (752, 26810), (758, 26846), (763, 26873), (791, 26966), (814, 27074), (826, 27125), (831, 27149), (839, 27176), (846, 27209), (853, 27242), (867, 27299), (873, 27326), (877, 27341), (885, 27398), (898, 27464), (919, 27548), (946, 27656), (948, 27659), (953, 27689), (1125, 28463), (1140, 28502), (1161, 28589), (1178, 28697), (1191, 28784), (1197, 28808), (1203, 28832), (1210, 28862), (1212, 28871),

Gene: Nibbles_18 Start: 10619, Stop: 15748, Start Num: 30
Candidate Starts for Nibbles_18:
(24, 10598), (Start: 30 @10619 has 41 MA's), (34, 10646), (53, 10775), (68, 10871), (78, 10922), (95, 10979), (104, 11012), (105, 11015), (132, 11102), (138, 11114), (153, 11162), (154, 11165), (155, 11171), (166, 11225), (168, 11231), (178, 11279), (190, 11345), (193, 11366), (267, 11759), (268, 11762), (282, 11864), (294, 11930), (295, 11936), (297, 11957), (345, 12161), (348, 12179), (350, 12185), (352, 12197), (355, 12209), (362, 12248), (365, 12260), (372, 12296), (379, 12353), (384, 12377), (406, 12503), (410, 12518), (416, 12557), (430, 12632), (438, 12665), (442, 12680), (443, 12686), (445, 12692), (455, 12728), (474, 12836), (487, 12908), (501, 12962), (533, 13112), (541, 13136), (562, 13196), (566, 13208), (567, 13214), (576, 13241), (577, 13244), (578, 13247), (603, 13340), (605, 13346), (620, 13397), (638, 13466), (647, 13499), (651, 13514), (652, 13520), (663, 13577), (667, 13589), (674, 13628), (675, 13631), (677, 13652), (679, 13664), (686, 13685), (688, 13688), (694, 13727), (697, 13739), (701, 13754), (740, 13895), (764, 13991), (790, 14057), (795, 14078), (798, 14084), (859, 14321), (869, 14351), (880, 14390), (909, 14525), (916, 14555), (923, 14576), (965, 14735), (972, 14768), (1033, 14981), (1044, 14999), (1047, 15005), (1085, 15134), (1108, 15200), (1118, 15251), (1130, 15323), (1141, 15362), (1149, 15392), (1158, 15425), (1165, 15458), (1175, 15530), (1186, 15602), (1199, 15656), (1201, 15662), (1213, 15719),

Gene: Nina_17 Start: 10662, Stop: 15809, Start Num: 30
Candidate Starts for Nina_17:
(Start: 23 @10638 has 5 MA's), (Start: 30 @10662 has 41 MA's), (34, 10689), (53, 10818), (66, 10911), (67, 10914), (85, 11004), (93, 11028), (109, 11073), (111, 11082), (132, 11154), (136, 11160), (137, 11163), (144, 11190), (147, 11196), (153, 11214), (154, 11217), (159, 11238), (174, 11310), (178, 11331), (190, 11397), (193, 11418), (210, 11535), (243, 11697), (251, 11736), (267, 11811), (290, 11970), (294, 11982), (297, 12009), (304, 12054), (307, 12066), (331, 12156), (336, 12174), (342, 12195), (347, 12225), (352, 12249), (355, 12261), (362, 12300), (368, 12333), (388, 12435), (389, 12438), (394, 12462), (406, 12555), (410, 12570), (416, 12609), (427, 12663), (434, 12705), (438, 12717), (446, 12747), (454, 12777), (455, 12780), (474, 12888), (475, 12891), (484, 12942), (485, 12948), (502, 13017), (520, 13107), (522, 13119), (533, 13164), (540, 13185), (541, 13188), (542, 13191), (567, 13266), (578, 13299), (583, 13320), (591, 13350), (605, 13398), (607, 13404), (615, 13431), (651, 13566), (675, 13683), (679, 13716), (686, 13737), (701, 13806), (703, 13812), (706, 13827), (740, 13947), (743, 13956), (764, 14040), (859, 14361), (867, 14382), (913, 14580), (923,

14616), (978, 14829), (1033, 15021), (1047, 15069), (1056, 15090), (1085, 15198), (1108, 15264), (1111, 15282), (1130, 15387), (1139, 15417), (1141, 15426), (1149, 15456), (1165, 15522), (1170, 15570), (1180, 15630), (1199, 15717), (1213, 15780),

Gene: Nodigi_18 Start: 10594, Stop: 14802, Start Num: 127
Candidate Starts for Nodigi_18:
(Start: 127 @10594 has 7 MA's), (Start: 139 @10621 has 1 MA's), (203, 10930), (211, 10987), (213, 11011), (225, 11056), (234, 11101), (236, 11119), (238, 11134), (243, 11152), (245, 11161), (258, 11215), (271, 11272), (280, 11353), (288, 11401), (295, 11440), (296, 11455), (298, 11464), (302, 11491), (308, 11521), (315, 11542), (343, 11665), (357, 11731), (368, 11794), (381, 11881), (394, 11950), (410, 12058), (413, 12079), (419, 12112), (422, 12130), (426, 12148), (430, 12172), (437, 12202), (450, 12247), (451, 12250), (455, 12268), (476, 12379), (479, 12391), (480, 12394), (490, 12430), (501, 12472), (504, 12484), (512, 12511), (519, 12544), (556, 12619), (577, 12673), (578, 12676), (582, 12694), (593, 12739), (607, 12784), (621, 12832), (622, 12835), (654, 12961), (660, 12991), (664, 13000), (666, 13006), (696, 13159), (707, 13204), (713, 13228), (715, 13234), (724, 13270), (734, 13327), (747, 13378), (754, 13423), (792, 13561), (801, 13591), (848, 13783), (894, 13960), (950, 14152), (971, 14224), (980, 14260), (990, 14284), (992, 14296), (1002, 14338), (1013, 14386), (1028, 14449), (1033, 14476), (1038, 14482), (1045, 14515), (1052, 14536), (1058, 14563), (1067, 14587), (1077, 14623), (1080, 14650), (1083, 14659), (1086, 14671), (1115, 14773),

Gene: NosilaM_42 Start: 24109, Stop: 29535, Start Num: 26
Candidate Starts for NosilaM_42:
(Start: 26 @24109 has 50 MA's), (48, 24238), (52, 24271), (73, 24400), (84, 24457), (86, 24466), (129, 24601), (157, 24682), (208, 24970), (218, 25033), (220, 25045), (222, 25051), (278, 25345), (281, 25375), (285, 25408), (305, 25528), (314, 25558), (315, 25561), (337, 25648), (345, 25684), (355, 25732), (361, 25762), (365, 25783), (366, 25792), (375, 25843), (378, 25873), (424, 26107), (426, 26116), (431, 26143), (432, 26152), (437, 26173), (450, 26218), (462, 26278), (464, 26302), (468, 26314), (516, 26491), (529, 26530), (537, 26551), (550, 26575), (570, 26620), (578, 26641), (580, 26647), (589, 26686), (591, 26692), (595, 26713), (601, 26728), (608, 26749), (619, 26788), (623, 26803), (625, 26812), (627, 26821), (631, 26833), (637, 26863), (638, 26869), (639, 26872), (652, 26923), (657, 26947), (665, 26989), (669, 27001), (692, 27121), (694, 27133), (709, 27193), (718, 27226), (721, 27244), (722, 27250), (729, 27298), (733, 27313), (735, 27322), (737, 27325), (746, 27358), (747, 27367), (750, 27376), (751, 27379), (752, 27382), (791, 27538), (814, 27646), (815, 27649), (826, 27697), (831, 27721), (839, 27748), (846, 27781), (853, 27814), (867, 27871), (885, 27970), (903, 28048), (919, 28120), (924, 28144), (933, 28177), (935, 28186), (948, 28231), (953, 28261), (956, 28273), (1049, 28687), (1101, 28921), (1129, 29074), (1140, 29107), (1150, 29149), (1162, 29200), (1191, 29389), (1203, 29437), (1210, 29467), (1212, 29476), (1217, 29500),

Gene: NovumRegina_39 Start: 23861, Stop: 29260, Start Num: 26
Candidate Starts for NovumRegina_39:
(Start: 26 @23861 has 50 MA's), (57, 24053), (79, 24188), (84, 24209), (89, 24224), (129, 24353), (149, 24404), (157, 24437), (222, 24806), (232, 24863), (278, 25100), (281, 25130), (285, 25163), (305, 25283), (314, 25313), (337, 25403), (345, 25439), (355, 25487), (356, 25493), (361, 25517), (365, 25538), (366, 25547), (375, 25598), (378, 25628), (437, 25928), (449, 25970), (450, 25973), (462, 26033), (466, 26063), (506, 26201), (510, 26219), (516, 26246), (524, 26267), (526, 26273), (539, 26312), (540, 26315), (570, 26375), (575, 26387), (578, 26396), (591, 26447), (594, 26462), (633, 26600), (636, 26612), (653, 26687), (671, 26774), (692, 26879), (694, 26891), (718, 26984), (722, 27008), (729, 27056), (733, 27071), (742, 27092), (746, 27116), (747, 27125), (750, 27134), (752, 27140), (758, 27176), (763, 27203), (791, 27296), (814, 27404), (826, 27455), (831, 27479), (839, 27506), (846, 27539), (853, 27572), (867, 27629), (873, 27656), (877, 27671), (885, 27728), (898, 27794), (919, 27878), (946, 27986), (948, 27989), (953, 28019), (1125, 28793), (1140, 28832), (1161, 28919), (1178, 29027), (1191, 29114), (1197, 29138), (1203, 29162), (1210, 29192), (1212, 29201),

Gene: Obliviate_16 Start: 10043, Stop: 15586, Start Num: 9
Candidate Starts for Obliviate_16:
(Start: 9 @10043 has 39 MA's), (Start: 11 @10058 has 1 MA's), (Start: 12 @10064 has 1 MA's), (Start: 14 @10094 has 2 MA's), (15, 10103), (16, 10106), (19, 10148), (40, 10259), (43, 10280), (82, 10508), (86, 10526), (92, 10541), (93, 10547), (94, 10550), (98, 10568), (109, 10592), (135, 10676), (137, 10682), (148, 10718), (153, 10733), (155, 10742), (189, 10910), (193, 10937), (210, 11054), (220, 11108), (245, 11225), (251, 11255), (285, 11459), (294, 11504), (297, 11531), (299, 11543), (320, 11633), (331, 11678), (339, 11705), (345, 11735), (362, 11822), (363, 11825), (370, 11864), (394, 11984), (398, 12026), (404, 12071), (406, 12077), (409, 12089), (410, 12092), (419, 12146), (427, 12185), (430, 12206), (431, 12209), (434, 12227), (442, 12254), (448, 12275), (450, 12281), (455, 12302), (460, 12329), (471, 12401), (501, 12536), (532, 12617), (544, 12641), (554, 12656), (577, 12686), (578, 12689), (591, 12740), (614, 12821), (615, 12824), (624, 12857), (633, 12887), (638, 12911), (654, 12977), (710, 13244), (715, 13262), (722, 13292), (728, 13337), (729, 13340), (733, 13355), (735, 13364), (746, 13400), (747, 13409), (748, 13418), (757, 13469), (776, 13541), (786, 13559), (791, 13580), (813, 13679), (814, 13682), (822, 13715), (839, 13781), (843, 13799), (847, 13814), (853, 13847), (867, 13898), (877, 13949), (927, 14192), (928, 14195), (946, 14267), (948, 14270), (961, 14336), (962, 14339), (966, 14357), (985, 14417), (1001, 14474), (1003, 14492), (1021, 14573), (1022, 14576), (1026, 14591), (1062, 14750), (1075, 14804), (1088, 14870), (1089, 14876), (1106, 14936), (1108, 14942), (1118, 14993), (1130, 15065), (1138, 15089), (1142, 15107), (1149, 15131), (1151, 15137), (1157, 15158), (1165, 15197), (1185, 15338), (1187, 15350), (1199, 15401), (1202, 15419), (1227, 15569),

Gene: Opie_17 Start: 10940, Stop: 16069, Start Num: 27
Candidate Starts for Opie_17:
(Start: 27 @10940 has 14 MA's), (Start: 30 @10949 has 41 MA's), (74, 11222), (76, 11231), (98, 11327), (113, 11369), (119, 11390), (151, 11483), (155, 11501), (193, 11696), (218, 11855), (243, 11975), (244, 11978), (251, 12014), (268, 12092), (285, 12215), (290, 12248), (293, 12257), (295, 12266), (299, 12299), (301, 12311), (305, 12335), (318, 12380), (329, 12425), (339, 12461), (342, 12473), (345, 12491), (352, 12527), (375, 12650), (381, 12692), (404, 12827), (405, 12830), (406, 12833), (410, 12848), (419, 12902), (427, 12941), (445, 13022), (450, 13037), (455, 13058), (457, 13073), (460, 13085), (463, 13121), (471, 13157), (511, 13319), (526, 13352), (550, 13376), (564, 13388), (565, 13391), (578, 13424), (582, 13442), (605, 13523), (607, 13529), (613, 13550), (614, 13553), (615, 13556), (642, 13655), (646, 13670), (652, 13694), (655, 13709), (656, 13712), (657, 13718), (669, 13772), (689, 13871), (696, 13913), (704, 13946), (718, 13991), (722, 14015), (730, 14060), (739, 14078), (761, 14186), (771, 14216), (787, 14255), (788, 14258), (790, 14267), (858, 14516), (865, 14540), (899, 14684), (906, 14708), (917, 14759), (951, 14876), (957, 14903), (961, 14921), (981, 14999), (983, 15005), (987, 15014), (993, 15041), (1008, 15134), (1016, 15173), (1027, 15215), (1066, 15368), (1074, 15401), (1075, 15404), (1095, 15461), (1098, 15470), (1102, 15482), (1106, 15503), (1109, 15524), (1156, 15716), (1165, 15755), (1174, 15821), (1175, 15824), (1184, 15878), (1216, 16031),

Gene: Orla_18 Start: 10598, Stop: 14806, Start Num: 127
Candidate Starts for Orla_18:
(Start: 127 @10598 has 7 MA's), (Start: 139 @10625 has 1 MA's), (203, 10934), (211, 10991), (213, 11015), (225, 11060), (234, 11105), (236, 11123), (238, 11138), (243, 11156), (245, 11165), (258, 11219), (271, 11276), (280, 11357), (288, 11405), (295, 11444), (296, 11459), (298, 11468), (302, 11495), (308, 11525), (315, 11546), (343, 11669), (357, 11735), (368, 11798), (381, 11885), (394, 11954), (410, 12062), (413, 12083), (419, 12116), (422, 12134), (426, 12152), (430, 12176), (437, 12206), (450, 12251), (451, 12254), (455, 12272), (476, 12383), (479, 12395), (490, 12434), (501, 12476), (504, 12488), (508, 12500), (512, 12515), (519, 12548), (556, 12623), (577, 12677), (578, 12680), (582, 12698), (593, 12743), (605, 12782), (607, 12788), (614, 12812), (620, 12833), (621, 12836), (622, 12839), (654, 12965), (658, 12986), (660, 12995), (664, 13004), (666, 13010), (696,

13163), (707, 13208), (713, 13232), (715, 13238), (724, 13274), (727, 13307), (734, 13331), (747, 13382), (754, 13427), (792, 13565), (801, 13595), (848, 13787), (894, 13964), (950, 14156), (971, 14228), (980, 14264), (990, 14288), (992, 14300), (1002, 14342), (1013, 14390), (1028, 14453), (1033, 14480), (1038, 14486), (1045, 14519), (1052, 14540), (1058, 14567), (1067, 14591), (1077, 14627), (1080, 14654), (1083, 14663), (1086, 14675), (1115, 14777),

Gene: Outis_40 Start: 24099, Stop: 29510, Start Num: 26
Candidate Starts for Outis_40:
(Start: 26 @24099 has 50 MA's), (46, 24210), (48, 24228), (66, 24360), (84, 24447), (86, 24456), (149, 24633), (157, 24666), (164, 24702), (208, 24954), (218, 25017), (220, 25029), (222, 25035), (278, 25329), (281, 25359), (285, 25392), (305, 25512), (337, 25632), (345, 25668), (355, 25716), (361, 25746), (366, 25776), (375, 25827), (378, 25857), (414, 26037), (426, 26100), (431, 26127), (437, 26157), (450, 26202), (459, 26244), (462, 26262), (466, 26292), (468, 26298), (516, 26475), (526, 26502), (531, 26523), (550, 26559), (563, 26583), (567, 26595), (574, 26613), (575, 26616), (599, 26706), (616, 26763), (625, 26796), (626, 26799), (637, 26847), (638, 26853), (645, 26877), (692, 27108), (694, 27120), (709, 27180), (718, 27213), (721, 27231), (722, 27237), (727, 27279), (729, 27285), (733, 27300), (735, 27309), (737, 27312), (746, 27345), (747, 27354), (750, 27363), (751, 27366), (752, 27369), (791, 27525), (814, 27633), (815, 27636), (826, 27684), (831, 27708), (839, 27735), (846, 27768), (853, 27801), (867, 27858), (877, 27900), (885, 27957), (903, 28035), (919, 28107), (946, 28212), (1125, 29040), (1140, 29082), (1150, 29124), (1162, 29175), (1178, 29277), (1203, 29412), (1210, 29442), (1212, 29451),

Gene: PCoral7_17 Start: 10271, Stop: 15886, Start Num: 9
Candidate Starts for PCoral7_17:
(Start: 8 @10235 has 1 MA's), (Start: 9 @10271 has 39 MA's), (Start: 12 @10292 has 1 MA's), (15, 10331), (19, 10376), (36, 10466), (38, 10475), (40, 10487), (43, 10508), (51, 10565), (62, 10637), (66, 10658), (76, 10700), (77, 10703), (80, 10730), (85, 10751), (86, 10754), (93, 10775), (98, 10796), (116, 10847), (117, 10850), (137, 10910), (180, 11093), (193, 11165), (223, 11351), (245, 11453), (247, 11468), (251, 11483), (263, 11540), (294, 11732), (318, 11852), (339, 11933), (345, 11963), (352, 11999), (362, 12050), (388, 12185), (389, 12188), (394, 12212), (400, 12263), (404, 12299), (406, 12305), (410, 12320), (419, 12374), (427, 12413), (431, 12437), (434, 12455), (448, 12503), (450, 12509), (454, 12527), (455, 12530), (457, 12545), (460, 12557), (467, 12605), (501, 12743), (518, 12824), (522, 12848), (524, 12860), (525, 12863), (534, 12896), (568, 12998), (576, 13025), (577, 13028), (578, 13031), (580, 13037), (591, 13082), (593, 13094), (597, 13106), (605, 13130), (610, 13145), (614, 13160), (615, 13163), (622, 13187), (628, 13214), (650, 13295), (668, 13379), (689, 13484), (694, 13517), (710, 13583), (712, 13592), (722, 13631), (726, 13664), (728, 13676), (729, 13679), (733, 13694), (735, 13703), (746, 13739), (747, 13748), (748, 13757), (789, 13913), (790, 13916), (791, 13919), (796, 13940), (814, 14021), (824, 14063), (847, 14150), (853, 14183), (855, 14192), (867, 14234), (887, 14348), (925, 14513), (946, 14597), (948, 14600), (953, 14630), (954, 14633), (961, 14666), (962, 14669), (985, 14747), (1001, 14804), (1026, 14921), (1039, 14972), (1066, 15074), (1075, 15107), (1088, 15173), (1106, 15239), (1108, 15245), (1111, 15263), (1118, 15296), (1130, 15368), (1142, 15410), (1146, 15416), (1149, 15434), (1151, 15440), (1157, 15461), (1165, 15500), (1185, 15641), (1199, 15704), (1215, 15779), (1227, 15872),

Gene: PSonyx_15 Start: 10611, Stop: 16625, Start Num: 44
Candidate Starts for PSonyx_15:
(Start: 44 @10611 has 2 MA's), (51, 10662), (134, 11004), (146, 11040), (165, 11121), (166, 11127), (169, 11136), (170, 11139), (177, 11172), (181, 11202), (183, 11214), (285, 11826), (294, 11871), (303, 11934), (323, 12012), (341, 12078), (346, 12105), (353, 12144), (355, 12150), (362, 12189), (372, 12237), (423, 12549), (488, 12882), (498, 12915), (507, 12966), (515, 12999), (533, 13089), (536, 13098), (548, 13125), (585, 13248), (618, 13368), (621, 13377), (623, 13386), (626, 13398), (647, 13497), (650, 13509), (661, 13572), (663, 13581), (678, 13656), (683, 13677), (698, 13749), (702, 13764), (744, 13971), (759, 14061), (767, 14103), (772, 14136), (797, 14229), (820, 14346),

(838, 14439), (853, 14511), (860, 14550), (864, 14577), (868, 14601), (877, 14649), (897, 14769), (920, 14868), (982, 15153), (1006, 15297), (1018, 15366), (1048, 15501), (1084, 15711), (1093, 15747), (1112, 15834), (1124, 15927), (1133, 15957), (1144, 15996), (1148, 16011), (1158, 16053), (1159, 16056), (1171, 16146), (1183, 16212), (1185, 16227), (1189, 16248), (1210, 16341), (1211, 16347), (1223, 16425), (1224, 16437), (1226, 16449), (1228, 16479), (1229, 16488), (1230, 16518), (1231, 16530), (1232, 16575), (1233, 16590),

Gene: Patio_42 Start: 24346, Stop: 29772, Start Num: 26
Candidate Starts for Patio_42:
(Start: 26 @24346 has 50 MA's), (84, 24694), (103, 24754), (106, 24763), (182, 25036), (218, 25258), (220, 25270), (222, 25276), (267, 25495), (278, 25570), (281, 25600), (285, 25633), (314, 25783), (337, 25873), (345, 25909), (355, 25957), (356, 25963), (361, 25987), (365, 26008), (366, 26017), (375, 26068), (378, 26098), (426, 26341), (437, 26398), (450, 26443), (452, 26449), (481, 26581), (489, 26608), (516, 26716), (524, 26737), (526, 26743), (540, 26785), (578, 26866), (580, 26872), (591, 26917), (594, 26932), (612, 26986), (636, 27082), (671, 27244), (677, 27283), (685, 27313), (694, 27361), (709, 27421), (718, 27454), (722, 27478), (729, 27526), (733, 27541), (746, 27586), (747, 27595), (750, 27604), (751, 27607), (752, 27610), (791, 27766), (800, 27802), (814, 27874), (826, 27922), (839, 27973), (846, 28006), (853, 28039), (867, 28096), (871, 28111), (898, 28261), (903, 28273), (921, 28360), (935, 28411), (946, 28453), (948, 28456), (953, 28486), (1017, 28780), (1037, 28870), (1041, 28891), (1058, 28960), (1073, 29047), (1140, 29344), (1152, 29392), (1161, 29431), (1191, 29626), (1203, 29674), (1207, 29686), (1209, 29701), (1212, 29713), (1213, 29722),

Gene: Pemberton_42 Start: 21550, Stop: 26955, Start Num: 26
Candidate Starts for Pemberton_42:
(Start: 26 @21550 has 50 MA's), (46, 21661), (48, 21679), (51, 21709), (58, 21748), (80, 21883), (84, 21898), (125, 22036), (149, 22096), (155, 22123), (157, 22129), (202, 22375), (208, 22417), (218, 22480), (220, 22492), (222, 22498), (277, 22780), (285, 22855), (303, 22963), (314, 23005), (334, 23086), (345, 23131), (355, 23179), (361, 23209), (366, 23239), (375, 23290), (378, 23320), (414, 23500), (415, 23506), (417, 23512), (437, 23620), (450, 23665), (452, 23671), (468, 23761), (492, 23836), (510, 23911), (516, 23938), (524, 23959), (529, 23977), (539, 24004), (578, 24088), (584, 24112), (586, 24121), (589, 24133), (598, 24166), (600, 24172), (607, 24193), (612, 24208), (616, 24226), (619, 24235), (623, 24250), (625, 24259), (644, 24337), (652, 24370), (665, 24439), (677, 24505), (718, 24676), (729, 24748), (733, 24763), (746, 24808), (747, 24817), (750, 24826), (776, 24949), (791, 24988), (800, 25024), (814, 25096), (815, 25099), (826, 25147), (831, 25171), (837, 25195), (839, 25198), (846, 25231), (853, 25264), (866, 25321), (867, 25324), (877, 25366), (885, 25423), (887, 25435), (898, 25489), (904, 25504), (914, 25555), (919, 25573), (924, 25597), (933, 25633), (946, 25693), (948, 25696), (953, 25726), (958, 25747), (1007, 25957), (1032, 26068), (1140, 26527), (1150, 26569), (1191, 26809), (1207, 26869), (1210, 26887), (1212, 26896),

Gene: Periwinkle_20 Start: 10340, Stop: 15973, Start Num: 21
Candidate Starts for Periwinkle_20:
(18, 10313), (Start: 21 @10340 has 1 MA's), (Start: 33 @10385 has 2 MA's), (35, 10406), (39, 10427), (47, 10472), (Start: 49 @10487 has 1 MA's), (62, 10571), (70, 10613), (74, 10625), (86, 10688), (92, 10703), (94, 10712), (98, 10730), (101, 10736), (117, 10784), (135, 10838), (159, 10919), (187, 11063), (188, 11069), (193, 11099), (228, 11318), (245, 11393), (251, 11423), (282, 11606), (285, 11627), (294, 11672), (295, 11678), (297, 11699), (315, 11780), (331, 11846), (339, 11873), (342, 11885), (345, 11903), (347, 11915), (352, 11939), (355, 11951), (362, 11990), (363, 11993), (365, 12002), (370, 12032), (376, 12077), (390, 12137), (394, 12152), (397, 12182), (398, 12194), (404, 12239), (406, 12245), (409, 12257), (410, 12260), (413, 12281), (418, 12311), (419, 12314), (431, 12377), (437, 12404), (438, 12407), (439, 12410), (440, 12416), (447, 12440), (448, 12443), (450, 12449), (452, 12455), (455, 12470), (458, 12488), (471, 12569), (482, 12617), (483, 12623), (487, 12650), (522, 12809), (524, 12821), (534, 12857), (557, 12917), (567, 12956), (569, 12962), (570, 12965), (577, 12986), (578, 12989), (605, 13088), (616, 13127), (623, 13151), (630, 13184), (635,

13229), (648, 13283), (659, 13370), (662, 13391), (670, 13427), (676, 13457), (693, 13538), (694, 13547), (700, 13571), (721, 13652), (722, 13658), (728, 13703), (729, 13706), (746, 13766), (747, 13775), (748, 13784), (773, 13892), (789, 13940), (791, 13946), (813, 14045), (814, 14048), (818, 14060), (847, 14177), (853, 14210), (867, 14261), (875, 14291), (883, 14351), (904, 14432), (907, 14453), (915, 14486), (931, 14549), (934, 14558), (937, 14567), (962, 14681), (967, 14711), (969, 14720), (979, 14759), (980, 14762), (991, 14792), (995, 14813), (1029, 15017), (1043, 15080), (1044, 15086), (1054, 15137), (1092, 15323), (1113, 15410), (1117, 15437), (1118, 15440), (1128, 15515), (1135, 15539), (1147, 15578), (1157, 15614), (1160, 15635), (1172, 15722), (1179, 15764), (1185, 15797), (1187, 15809), (1205, 15887), (1219, 15953),

Gene: Petra_19 Start: 10705, Stop: 16197, Start Num: 14
Candidate Starts for Petra_19:
(Start: 9 @10654 has 39 MA's), (Start: 11 @10669 has 1 MA's), (Start: 12 @10675 has 1 MA's), (Start: 14 @10705 has 2 MA's), (15, 10714), (16, 10717), (19, 10759), (40, 10870), (43, 10891), (82, 11119), (86, 11137), (93, 11158), (94, 11161), (98, 11179), (109, 11203), (135, 11287), (148, 11329), (153, 11344), (155, 11353), (189, 11521), (193, 11548), (210, 11665), (245, 11836), (251, 11866), (285, 12070), (294, 12115), (331, 12289), (339, 12316), (345, 12346), (362, 12433), (370, 12475), (372, 12481), (394, 12595), (396, 12610), (398, 12637), (404, 12682), (406, 12688), (410, 12703), (419, 12757), (427, 12796), (430, 12817), (431, 12820), (434, 12838), (442, 12865), (448, 12886), (450, 12892), (455, 12913), (460, 12940), (528, 13213), (544, 13252), (554, 13267), (577, 13297), (578, 13300), (591, 13351), (614, 13432), (615, 13435), (624, 13468), (633, 13498), (654, 13588), (710, 13855), (722, 13903), (728, 13948), (729, 13951), (733, 13966), (735, 13975), (746, 14011), (747, 14020), (748, 14029), (757, 14080), (776, 14152), (786, 14170), (791, 14191), (813, 14290), (814, 14293), (822, 14326), (839, 14392), (843, 14410), (847, 14425), (853, 14458), (867, 14509), (877, 14560), (927, 14803), (928, 14806), (946, 14878), (948, 14881), (961, 14947), (962, 14950), (966, 14968), (985, 15028), (1001, 15085), (1003, 15103), (1021, 15184), (1022, 15187), (1026, 15202), (1062, 15361), (1075, 15415), (1088, 15481), (1106, 15547), (1108, 15553), (1130, 15676), (1138, 15700), (1142, 15718), (1149, 15742), (1151, 15748), (1157, 15769), (1165, 15808), (1185, 15949), (1187, 15961), (1199, 16012), (1202, 16030), (1215, 16087), (1227, 16180),

Gene: Phabuloso_18 Start: 9869, Stop: 15502, Start Num: 22
Candidate Starts for Phabuloso_18:
(Start: 22 @9869 has 11 MA's), (31, 9896), (Start: 33 @9914 has 2 MA's), (35, 9935), (39, 9956), (47, 10001), (Start: 49 @10016 has 1 MA's), (62, 10100), (70, 10142), (74, 10154), (86, 10217), (92, 10232), (94, 10241), (98, 10259), (101, 10265), (117, 10313), (159, 10448), (188, 10598), (193, 10628), (228, 10847), (245, 10922), (251, 10952), (285, 11156), (293, 11198), (294, 11201), (295, 11207), (297, 11228), (315, 11309), (331, 11375), (339, 11402), (342, 11414), (345, 11432), (347, 11444), (352, 11468), (355, 11480), (362, 11519), (363, 11522), (365, 11531), (370, 11561), (376, 11606), (390, 11666), (394, 11681), (397, 11711), (398, 11723), (404, 11768), (406, 11774), (410, 11789), (414, 11819), (418, 11840), (419, 11843), (431, 11906), (437, 11933), (438, 11936), (439, 11939), (440, 11945), (447, 11969), (448, 11972), (450, 11978), (452, 11984), (455, 11999), (458, 12017), (471, 12098), (482, 12146), (483, 12152), (487, 12179), (522, 12338), (524, 12350), (534, 12386), (557, 12446), (567, 12485), (569, 12491), (570, 12494), (577, 12515), (578, 12518), (605, 12617), (616, 12656), (623, 12680), (630, 12713), (635, 12758), (648, 12812), (659, 12899), (662, 12920), (670, 12956), (676, 12986), (692, 13064), (693, 13067), (694, 13076), (700, 13100), (721, 13181), (722, 13187), (728, 13232), (729, 13235), (733, 13250), (746, 13295), (747, 13304), (748, 13313), (749, 13316), (773, 13421), (789, 13469), (791, 13475), (813, 13574), (814, 13577), (818, 13589), (847, 13706), (853, 13739), (867, 13790), (875, 13820), (883, 13880), (904, 13961), (907, 13982), (915, 14015), (931, 14078), (937, 14096), (962, 14210), (967, 14240), (969, 14249), (979, 14288), (980, 14291), (991, 14321), (995, 14342), (1019, 14495), (1029, 14546), (1043, 14609), (1044, 14615), (1054, 14666), (1092, 14852), (1113, 14939), (1117, 14966), (1118, 14969), (1128, 15044), (1135, 15068), (1147, 15107), (1157, 15143), (1160, 15164), (1172, 15251), (1179, 15293), (1185, 15326), (1187, 15338), (1205, 15416), (1219, 15482),

Gene: Phistory_19 Start: 10653, Stop: 16280, Start Num: 20
Candidate Starts for Phistory_19:
(Start: 20 @10653 has 1 MA's), (25, 10659), (Start: 33 @10698 has 2 MA's), (47, 10785), (62, 10884), (70, 10926), (74, 10938), (86, 11001), (92, 11016), (94, 11025), (98, 11043), (101, 11049), (117, 11097), (141, 11172), (159, 11232), (188, 11382), (193, 11412), (245, 11706), (251, 11736), (282, 11919), (285, 11940), (293, 11982), (294, 11985), (295, 11991), (297, 12012), (299, 12024), (313, 12084), (318, 12105), (331, 12159), (339, 12186), (342, 12198), (345, 12216), (347, 12228), (352, 12252), (355, 12264), (362, 12303), (363, 12306), (365, 12315), (371, 12348), (381, 12417), (388, 12438), (394, 12465), (395, 12471), (398, 12507), (399, 12510), (404, 12552), (406, 12558), (409, 12570), (410, 12573), (418, 12624), (419, 12627), (431, 12690), (432, 12699), (437, 12717), (438, 12720), (440, 12729), (450, 12762), (455, 12783), (456, 12789), (457, 12798), (463, 12846), (473, 12888), (482, 12930), (487, 12963), (500, 13014), (501, 13017), (509, 13056), (511, 13065), (522, 13122), (524, 13134), (534, 13170), (557, 13230), (567, 13269), (569, 13275), (577, 13299), (578, 13302), (582, 13320), (605, 13401), (623, 13464), (630, 13497), (640, 13572), (648, 13596), (650, 13608), (654, 13641), (662, 13704), (670, 13740), (676, 13770), (692, 13848), (693, 13851), (694, 13860), (700, 13884), (722, 13971), (728, 14016), (729, 14019), (733, 14034), (746, 14079), (747, 14088), (748, 14097), (749, 14100), (773, 14205), (789, 14253), (791, 14259), (813, 14358), (814, 14361), (818, 14373), (847, 14490), (853, 14523), (867, 14574), (875, 14604), (883, 14664), (904, 14745), (907, 14766), (908, 14769), (931, 14862), (937, 14880), (962, 14994), (967, 15024), (969, 15033), (979, 15072), (980, 15075), (991, 15105), (995, 15126), (1029, 15324), (1043, 15387), (1044, 15393), (1053, 15420), (1054, 15444), (1092, 15630), (1113, 15717), (1117, 15744), (1118, 15747), (1128, 15822), (1135, 15846), (1147, 15885), (1157, 15921), (1160, 15942), (1172, 16029), (1179, 16071), (1185, 16104), (1187, 16116), (1205, 16194), (1219, 16260),

Gene: Phomeo_38 Start: 24136, Stop: 29529, Start Num: 26
Candidate Starts for Phomeo_38:
(Start: 26 @24136 has 50 MA's), (79, 24463), (84, 24484), (129, 24628), (149, 24673), (157, 24706), (180, 24826), (222, 25075), (232, 25132), (278, 25369), (281, 25399), (285, 25432), (305, 25552), (314, 25582), (337, 25672), (345, 25708), (355, 25756), (356, 25762), (361, 25786), (365, 25807), (366, 25816), (375, 25867), (378, 25897), (437, 26197), (449, 26239), (450, 26242), (462, 26302), (466, 26332), (506, 26470), (510, 26488), (516, 26515), (524, 26536), (526, 26542), (539, 26581), (540, 26584), (570, 26644), (575, 26656), (578, 26665), (591, 26716), (594, 26731), (633, 26869), (636, 26881), (653, 26956), (671, 27043), (692, 27148), (694, 27160), (718, 27253), (722, 27277), (729, 27325), (733, 27340), (742, 27361), (746, 27385), (747, 27394), (750, 27403), (752, 27409), (758, 27445), (763, 27472), (791, 27565), (814, 27673), (826, 27724), (831, 27748), (839, 27775), (846, 27808), (853, 27841), (867, 27898), (873, 27925), (877, 27940), (885, 27997), (898, 28063), (919, 28147), (946, 28255), (948, 28258), (953, 28288), (1125, 29062), (1140, 29101), (1161, 29188), (1178, 29296), (1191, 29383), (1197, 29407), (1203, 29431), (1210, 29461), (1212, 29470),

Gene: PhrostedPhlake_18 Start: 10632, Stop: 16172, Start Num: 9
Candidate Starts for PhrostedPhlake_18:
(Start: 9 @10632 has 39 MA's), (Start: 11 @10647 has 1 MA's), (Start: 12 @10653 has 1 MA's), (Start: 14 @10683 has 2 MA's), (15, 10692), (19, 10737), (40, 10848), (43, 10869), (82, 11097), (86, 11115), (93, 11136), (94, 11139), (98, 11157), (109, 11181), (135, 11265), (137, 11271), (148, 11307), (153, 11322), (155, 11331), (168, 11391), (189, 11499), (193, 11526), (210, 11643), (220, 11697), (228, 11739), (245, 11814), (251, 11844), (285, 12048), (294, 12093), (331, 12267), (339, 12294), (345, 12324), (362, 12411), (370, 12453), (379, 12516), (394, 12573), (398, 12615), (404, 12660), (406, 12666), (410, 12681), (419, 12735), (427, 12774), (430, 12795), (431, 12798), (434, 12816), (442, 12843), (448, 12864), (450, 12870), (455, 12891), (460, 12918), (544, 13230), (554, 13245), (577, 13275), (578, 13278), (591, 13329), (614, 13410), (615, 13413), (624, 13446), (633, 13476), (654, 13566), (710, 13833), (722, 13881), (726, 13914), (728, 13926), (729, 13929), (733, 13944), (735, 13953), (746, 13989), (747, 13998), (748, 14007), (773, 14115), (789, 14163), (790, 14166), (791,

14169), (814, 14271), (815, 14274), (847, 14400), (853, 14433), (866, 14481), (867, 14484), (877, 14535), (887, 14604), (927, 14778), (928, 14781), (946, 14853), (948, 14856), (961, 14922), (962, 14925), (966, 14943), (985, 15003), (1001, 15060), (1003, 15078), (1021, 15159), (1022, 15162), (1026, 15177), (1062, 15336), (1075, 15390), (1088, 15456), (1106, 15522), (1108, 15528), (1113, 15558), (1130, 15651), (1138, 15675), (1142, 15693), (1149, 15717), (1151, 15723), (1157, 15744), (1165, 15783), (1185, 15924), (1199, 15987), (1202, 16005), (1227, 16155),

Gene: Pipp_17 Start: 10133, Stop: 15790, Start Num: 6
Candidate Starts for Pipp_17:
(5, 10094), (Start: 6 @10133 has 1 MA's), (Start: 9 @10247 has 39 MA's), (Start: 11 @10262 has 1 MA's), (Start: 12 @10268 has 1 MA's), (Start: 14 @10298 has 2 MA's), (15, 10307), (16, 10310), (19, 10352), (40, 10463), (43, 10484), (86, 10730), (93, 10751), (94, 10754), (98, 10772), (109, 10796), (135, 10880), (137, 10886), (148, 10922), (153, 10937), (155, 10946), (159, 10961), (168, 11006), (189, 11114), (193, 11141), (199, 11174), (210, 11258), (251, 11459), (285, 11663), (295, 11714), (297, 11735), (299, 11747), (320, 11837), (331, 11882), (339, 11909), (345, 11939), (362, 12026), (363, 12029), (370, 12068), (381, 12140), (394, 12188), (398, 12230), (404, 12275), (406, 12281), (409, 12293), (410, 12296), (419, 12350), (427, 12389), (430, 12410), (431, 12413), (434, 12431), (442, 12458), (448, 12479), (450, 12485), (455, 12506), (501, 12740), (528, 12806), (544, 12845), (554, 12860), (577, 12890), (578, 12893), (591, 12944), (614, 13025), (615, 13028), (624, 13061), (633, 13091), (654, 13181), (694, 13382), (710, 13448), (722, 13496), (728, 13541), (729, 13544), (733, 13559), (735, 13568), (746, 13604), (747, 13613), (748, 13622), (776, 13745), (791, 13784), (813, 13883), (814, 13886), (839, 13985), (843, 14003), (847, 14018), (853, 14051), (867, 14102), (877, 14153), (887, 14222), (927, 14396), (928, 14399), (945, 14465), (946, 14471), (948, 14474), (961, 14540), (962, 14543), (966, 14561), (985, 14621), (1001, 14678), (1003, 14696), (1021, 14777), (1026, 14795), (1039, 14846), (1062, 14954), (1075, 15008), (1088, 15074), (1104, 15128), (1106, 15140), (1108, 15146), (1113, 15176), (1130, 15269), (1138, 15293), (1142, 15311), (1149, 15335), (1151, 15341), (1157, 15362), (1165, 15401), (1185, 15542), (1199, 15605), (1202, 15623), (1215, 15680), (1227, 15773),

Gene: Pleakley_48 Start: 24215, Stop: 29758, Start Num: 26
Candidate Starts for Pleakley_48:
(Start: 26 @24215 has 50 MA's), (57, 24404), (66, 24473), (67, 24476), (79, 24539), (84, 24560), (157, 24788), (218, 25139), (222, 25157), (237, 25244), (245, 25271), (263, 25358), (273, 25397), (278, 25451), (281, 25481), (285, 25514), (290, 25547), (303, 25622), (345, 25790), (361, 25868), (365, 25889), (366, 25898), (371, 25922), (375, 25949), (378, 25979), (431, 26249), (437, 26279), (450, 26324), (510, 26570), (516, 26597), (521, 26603), (531, 26645), (554, 26690), (571, 26729), (580, 26753), (589, 26792), (591, 26798), (601, 26834), (605, 26846), (607, 26852), (608, 26855), (616, 26885), (619, 26894), (623, 26909), (637, 26969), (641, 26987), (665, 27098), (677, 27164), (694, 27242), (718, 27359), (722, 27383), (729, 27431), (733, 27446), (741, 27464), (746, 27491), (755, 27542), (766, 27596), (785, 27656), (805, 27743), (808, 27764), (835, 27887), (894, 28205), (898, 28229), (903, 28241), (946, 28421), (1025, 28802), (1037, 28856), (1057, 28946), (1143, 29342), (1161, 29417), (1177, 29522), (1191, 29612), (1207, 29672), (1209, 29687), (1212, 29699), (1213, 29708),

Gene: Polyyuki_43 Start: 25221, Stop: 30431, Start Num: 26
Candidate Starts for Polyyuki_43:
(Start: 26 @25221 has 50 MA's), (57, 25413), (84, 25569), (99, 25623), (100, 25626), (122, 25704), (126, 25719), (196, 26010), (212, 26130), (218, 26157), (259, 26355), (285, 26532), (293, 26574), (305, 26652), (306, 26658), (325, 26730), (329, 26742), (330, 26748), (336, 26769), (345, 26808), (357, 26865), (365, 26907), (366, 26916), (374, 26949), (375, 26967), (378, 26997), (402, 27123), (412, 27156), (417, 27189), (421, 27219), (431, 27267), (432, 27276), (446, 27330), (462, 27402), (463, 27423), (466, 27432), (501, 27588), (514, 27639), (527, 27687), (539, 27720), (555, 27759), (556, 27762), (577, 27813), (578, 27816), (586, 27849), (597, 27891), (601, 27903), (602, 27906),

(605, 27915), (617, 27957), (618, 27960), (620, 27966), (623, 27978), (636, 28032), (638, 28044), (677, 28221), (680, 28230), (682, 28233), (693, 28278), (716, 28368), (720, 28386), (765, 28551), (772, 28581), (775, 28596), (816, 28752), (821, 28764), (827, 28788), (840, 28842), (850, 28875), (857, 28920), (881, 29013), (883, 29022), (885, 29034), (886, 29043), (890, 29064), (891, 29067), (910, 29139), (911, 29142), (917, 29163), (926, 29205), (965, 29355), (984, 29388), (988, 29397), (1046, 29634), (1055, 29679), (1068, 29745), (1071, 29751), (1075, 29772), (1076, 29781), (1081, 29802), (1091, 29823), (1105, 29868), (1136, 30009), (1178, 30198), (1182, 30231), (1203, 30333), (1207, 30345), (1212, 30372),

Gene: Pons_16 Start: 9384, Stop: 14465, Start Num: 30
Candidate Starts for Pons_16:
(Start: 30 @9384 has 41 MA's), (53, 9540), (77, 9669), (81, 9699), (101, 9768), (105, 9780), (111, 9795), (117, 9816), (119, 9825), (132, 9867), (137, 9876), (148, 9912), (155, 9936), (168, 9996), (179, 10050), (185, 10089), (187, 10095), (190, 10110), (193, 10131), (202, 10185), (220, 10302), (232, 10365), (243, 10410), (251, 10449), (261, 10491), (285, 10650), (290, 10683), (294, 10695), (297, 10722), (307, 10779), (316, 10809), (319, 10821), (344, 10923), (345, 10926), (362, 11013), (372, 11061), (394, 11175), (400, 11226), (406, 11268), (410, 11283), (412, 11292), (413, 11304), (419, 11337), (428, 11379), (440, 11439), (441, 11442), (442, 11445), (443, 11451), (449, 11469), (455, 11493), (473, 11598), (486, 11646), (501, 11706), (502, 11709), (509, 11745), (525, 11826), (533, 11856), (540, 11877), (541, 11880), (542, 11883), (568, 11961), (576, 11985), (578, 11991), (613, 12117), (622, 12147), (633, 12186), (645, 12234), (650, 12255), (651, 12258), (652, 12264), (665, 12330), (675, 12375), (679, 12408), (686, 12429), (697, 12483), (740, 12633), (743, 12642), (764, 12729), (859, 13047), (869, 13077), (899, 13215), (923, 13296), (965, 13446), (972, 13476), (1031, 13686), (1033, 13695), (1035, 13701), (1047, 13737), (1085, 13854), (1090, 13860), (1103, 13902), (1108, 13920), (1130, 14043), (1138, 14067), (1141, 14082), (1149, 14112), (1157, 14139), (1158, 14145), (1165, 14178), (1174, 14247), (1175, 14250), (1180, 14286), (1193, 14358), (1200, 14376),

Gene: PotPie_16 Start: 10237, Stop: 15330, Start Num: 30
Candidate Starts for PotPie_16:
(Start: 30 @10237 has 41 MA's), (53, 10393), (77, 10522), (81, 10552), (101, 10621), (105, 10633), (117, 10669), (119, 10678), (132, 10720), (137, 10729), (148, 10765), (155, 10789), (179, 10903), (185, 10942), (190, 10963), (193, 10984), (220, 11155), (232, 11218), (243, 11263), (261, 11344), (285, 11503), (290, 11536), (294, 11548), (297, 11575), (307, 11632), (316, 11662), (319, 11674), (344, 11776), (345, 11779), (362, 11866), (372, 11914), (394, 12028), (406, 12121), (410, 12136), (413, 12157), (419, 12190), (425, 12220), (428, 12232), (434, 12271), (441, 12295), (442, 12298), (449, 12322), (455, 12346), (473, 12451), (494, 12529), (501, 12559), (502, 12562), (509, 12598), (518, 12640), (522, 12664), (525, 12679), (529, 12694), (533, 12709), (541, 12733), (557, 12772), (560, 12787), (562, 12793), (576, 12838), (578, 12844), (613, 12970), (622, 13000), (636, 13051), (645, 13087), (650, 13108), (651, 13111), (665, 13183), (675, 13228), (679, 13261), (686, 13282), (697, 13336), (717, 13411), (743, 13495), (764, 13582), (859, 13900), (869, 13930), (899, 14068), (914, 14119), (923, 14149), (965, 14314), (972, 14344), (1025, 14524), (1035, 14575), (1047, 14602), (1056, 14623), (1085, 14719), (1103, 14767), (1108, 14785), (1130, 14908), (1138, 14932), (1141, 14947), (1149, 14977), (1157, 15004), (1158, 15010), (1165, 15043), (1174, 15112), (1175, 15115), (1180, 15151), (1200, 15241),

Gene: PrincePatrick_17 Start: 10339, Stop: 15960, Start Num: 9
Candidate Starts for PrincePatrick_17:
(Start: 8 @10303 has 1 MA's), (Start: 9 @10339 has 39 MA's), (Start: 12 @10360 has 1 MA's), (15, 10399), (19, 10444), (36, 10534), (38, 10543), (40, 10555), (43, 10576), (51, 10633), (62, 10705), (66, 10726), (76, 10768), (77, 10771), (80, 10798), (85, 10819), (86, 10822), (93, 10843), (98, 10864), (116, 10915), (117, 10918), (137, 10978), (180, 11161), (193, 11233), (223, 11419), (245, 11521), (247, 11536), (251, 11551), (263, 11608), (294, 11800), (318, 11920), (339, 12001), (345, 12031), (352, 12067), (362, 12118), (370, 12160), (381, 12232), (392, 12268), (394, 12280), (400, 12331), (406,

12373), (410, 12388), (419, 12442), (427, 12481), (431, 12505), (434, 12523), (448, 12571), (450, 12577), (454, 12595), (455, 12598), (457, 12613), (460, 12625), (467, 12673), (473, 12703), (493, 12778), (518, 12892), (522, 12916), (524, 12928), (525, 12931), (534, 12964), (568, 13066), (578, 13099), (591, 13150), (593, 13162), (597, 13174), (605, 13198), (615, 13234), (622, 13258), (628, 13285), (650, 13366), (668, 13450), (689, 13555), (694, 13588), (710, 13654), (712, 13663), (722, 13702), (726, 13735), (728, 13747), (729, 13750), (733, 13765), (735, 13774), (746, 13810), (747, 13819), (748, 13828), (756, 13870), (789, 13984), (790, 13987), (791, 13990), (796, 14011), (814, 14092), (824, 14134), (847, 14221), (853, 14254), (855, 14263), (867, 14305), (887, 14419), (946, 14668), (948, 14671), (953, 14701), (954, 14704), (960, 14728), (961, 14737), (962, 14740), (985, 14818), (1001, 14875), (1026, 14992), (1039, 15043), (1075, 15181), (1088, 15247), (1106, 15313), (1108, 15319), (1111, 15337), (1127, 15430), (1130, 15442), (1146, 15490), (1149, 15508), (1151, 15514), (1157, 15535), (1165, 15574), (1185, 15715), (1199, 15778), (1215, 15853), (1227, 15946),

Gene: PsychoKiller_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for PsychoKiller_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (445, 11702), (446, 11705), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: Quasar_16 Start: 10238, Stop: 15376, Start Num: 30
Candidate Starts for Quasar_16:
(Start: 23 @10214 has 5 MA's), (Start: 30 @10238 has 41 MA's), (34, 10265), (53, 10394), (63, 10469), (101, 10622), (102, 10625), (132, 10721), (137, 10730), (145, 10760), (148, 10766), (153, 10781), (154, 10784), (159, 10805), (174, 10877), (178, 10898), (190, 10964), (193, 10985), (210, 11102), (243, 11264), (251, 11303), (267, 11378), (290, 11537), (294, 11549), (297, 11576), (304, 11621), (307, 11633), (331, 11723), (336, 11741), (342, 11762), (347, 11792), (352, 11816), (355, 11828), (362, 11867), (368, 11900), (388, 12002), (389, 12005), (394, 12029), (395, 12035), (406, 12122), (410, 12137), (416, 12176), (446, 12314), (454, 12344), (455, 12347), (474, 12455), (475, 12458), (484, 12509), (502, 12584), (522, 12686), (533, 12731), (540, 12752), (541, 12755), (542, 12758), (567, 12833), (578, 12866), (583, 12887), (591, 12917), (605, 12965), (607, 12971), (615, 12998), (651, 13133), (675, 13250), (679, 13283), (686, 13304), (688, 13307), (701, 13373), (703, 13379), (706, 13394), (740, 13514), (743, 13523), (764, 13607), (859, 13928), (913, 14147), (923, 14183), (978, 14396), (1033, 14588), (1047, 14636), (1056, 14657), (1085, 14765), (1108, 14831), (1111, 14849), (1130, 14954), (1139, 14984), (1141, 14993), (1149, 15023), (1165, 15089), (1170, 15137), (1180, 15197), (1199, 15284), (1213, 15347),

Gene: RADical_17 Start: 9630, Stop: 14768, Start Num: 30
Candidate Starts for RADical_17:
(Start: 23 @9606 has 5 MA's), (Start: 30 @9630 has 41 MA's), (34, 9657), (53, 9786), (63, 9861), (101, 10014), (102, 10017), (132, 10113), (137, 10122), (145, 10152), (148, 10158), (153, 10173), (154, 10176), (158, 10191), (159, 10197), (174, 10269), (178, 10290), (190, 10356), (193, 10377), (210, 10494), (243, 10656), (251, 10695), (267, 10770), (290, 10929), (294, 10941), (297, 10968), (304,

11013), (307, 11025), (331, 11115), (336, 11133), (342, 11154), (347, 11184), (352, 11208), (355, 11220), (362, 11259), (368, 11292), (388, 11394), (389, 11397), (394, 11421), (406, 11514), (410, 11529), (416, 11568), (434, 11664), (438, 11676), (446, 11706), (455, 11739), (474, 11847), (475, 11850), (484, 11901), (502, 11976), (522, 12078), (533, 12123), (540, 12144), (541, 12147), (542, 12150), (567, 12225), (578, 12258), (583, 12279), (605, 12357), (607, 12363), (615, 12390), (651, 12525), (675, 12642), (679, 12675), (686, 12696), (701, 12765), (703, 12771), (706, 12786), (740, 12906), (743, 12915), (764, 12999), (859, 13320), (913, 13539), (923, 13575), (978, 13788), (1033, 13980), (1047, 14028), (1056, 14049), (1085, 14157), (1108, 14223), (1111, 14241), (1121, 14301), (1130, 14346), (1139, 14376), (1141, 14385), (1149, 14415), (1165, 14481), (1170, 14529), (1180, 14589), (1199, 14676), (1213, 14739),

Gene: REQ2_18 Start: 12445, Stop: 18258, Start Num: 1
Candidate Starts for REQ2_18:
(Start: 1 @12445 has 1 MA's), (3, 12493), (7, 12664), (17, 12805), (42, 12958), (45, 12970), (54, 13045), (56, 13051), (59, 13060), (64, 13114), (71, 13147), (81, 13198), (82, 13201), (96, 13252), (114, 13306), (Start: 115 @13309 has 1 MA's), (130, 13366), (131, 13369), (143, 13402), (150, 13420), (156, 13447), (157, 13450), (163, 13480), (173, 13531), (175, 13540), (192, 13630), (279, 14125), (295, 14227), (308, 14308), (317, 14338), (333, 14407), (343, 14452), (356, 14515), (381, 14668), (400, 14767), (404, 14803), (406, 14809), (408, 14818), (410, 14824), (426, 14914), (432, 14950), (441, 14983), (449, 15010), (455, 15034), (457, 15049), (460, 15061), (474, 15142), (500, 15244), (545, 15430), (553, 15445), (575, 15517), (579, 15529), (582, 15544), (593, 15589), (603, 15622), (606, 15631), (616, 15667), (652, 15802), (657, 15826), (659, 15838), (662, 15859), (665, 15871), (683, 15961), (708, 16075), (712, 16093), (725, 16150), (750, 16264), (754, 16297), (783, 16405), (792, 16441), (802, 16480), (806, 16498), (810, 16519), (812, 16522), (832, 16615), (874, 16750), (878, 16771), (888, 16828), (973, 17152), (986, 17185), (1005, 17263), (1013, 17308), (1023, 17347), (1028, 17377), (1030, 17392), (1038, 17410), (1045, 17443), (1096, 17611), (1186, 18052), (1189, 18064), (1195, 18094), (1196, 18097), (1208, 18142), (1217, 18190),

Gene: RSchmailzl_17 Start: 9773, Stop: 14911, Start Num: 30
Candidate Starts for RSchmailzl_17:
(Start: 23 @9749 has 5 MA's), (Start: 30 @9773 has 41 MA's), (34, 9800), (53, 9929), (63, 10004), (101, 10157), (102, 10160), (132, 10256), (137, 10265), (145, 10295), (148, 10301), (153, 10316), (154, 10319), (159, 10340), (174, 10412), (178, 10433), (190, 10499), (193, 10520), (210, 10637), (243, 10799), (251, 10838), (267, 10913), (290, 11072), (294, 11084), (297, 11111), (304, 11156), (307, 11168), (331, 11258), (336, 11276), (342, 11297), (347, 11327), (352, 11351), (355, 11363), (362, 11402), (368, 11435), (371, 11447), (388, 11537), (389, 11540), (394, 11564), (395, 11570), (406, 11657), (410, 11672), (416, 11711), (427, 11765), (434, 11807), (438, 11819), (443, 11840), (455, 11882), (474, 11990), (485, 12050), (502, 12119), (520, 12209), (522, 12221), (533, 12266), (540, 12287), (541, 12290), (542, 12293), (567, 12368), (573, 12386), (578, 12401), (591, 12452), (605, 12500), (607, 12506), (615, 12533), (651, 12668), (675, 12785), (679, 12818), (686, 12839), (688, 12842), (701, 12908), (703, 12914), (706, 12929), (740, 13049), (743, 13058), (764, 13142), (859, 13463), (913, 13682), (923, 13718), (978, 13931), (1033, 14123), (1047, 14171), (1056, 14192), (1085, 14300), (1108, 14366), (1111, 14384), (1130, 14489), (1139, 14519), (1141, 14528), (1149, 14558), (1165, 14624), (1170, 14672), (1180, 14732), (1199, 14819), (1213, 14882),

Gene: RanchParmCat_19 Start: 10311, Stop: 14516, Start Num: 127
Candidate Starts for RanchParmCat_19:
(Start: 127 @10311 has 7 MA's), (Start: 139 @10338 has 1 MA's), (201, 10626), (203, 10647), (204, 10653), (209, 10686), (211, 10704), (213, 10728), (234, 10818), (235, 10827), (236, 10836), (243, 10869), (249, 10896), (251, 10905), (256, 10929), (283, 11082), (295, 11145), (296, 11160), (302, 11196), (308, 11226), (315, 11247), (324, 11289), (343, 11370), (359, 11445), (360, 11454), (364, 11475), (387, 11622), (410, 11763), (413, 11784), (418, 11814), (419, 11817), (422, 11835), (427, 11856), (430, 11877), (434, 11898), (449, 11949), (450, 11952), (451, 11955), (455, 11973), (469,

12054), (476, 12084), (490, 12135), (504, 12189), (512, 12216), (519, 12249), (551, 12309), (577, 12378), (578, 12381), (605, 12483), (607, 12489), (621, 12537), (622, 12540), (647, 12633), (654, 12666), (658, 12687), (660, 12696), (664, 12705), (666, 12711), (696, 12864), (713, 12933), (715, 12939), (724, 12975), (753, 13104), (792, 13245), (799, 13269), (811, 13314), (848, 13467), (849, 13470), (894, 13659), (905, 13689), (950, 13866), (971, 13938), (977, 13962), (980, 13974), (990, 13998), (992, 14010), (1011, 14094), (1013, 14100), (1024, 14142), (1028, 14163), (1038, 14196), (1045, 14229), (1052, 14250), (1058, 14277), (1067, 14301), (1077, 14337), (1086, 14385), (1115, 14487),

Gene: RedBaron_18 Start: 9673, Stop: 14811, Start Num: 30
Candidate Starts for RedBaron_18:
(Start: 23 @9649 has 5 MA's), (Start: 30 @9673 has 41 MA's), (34, 9700), (53, 9829), (63, 9904), (101, 10057), (102, 10060), (132, 10156), (137, 10165), (145, 10195), (148, 10201), (153, 10216), (154, 10219), (159, 10240), (174, 10312), (178, 10333), (190, 10399), (193, 10420), (210, 10537), (243, 10699), (251, 10738), (267, 10813), (297, 11011), (321, 11119), (342, 11197), (345, 11215), (348, 11233), (362, 11302), (363, 11305), (365, 11314), (371, 11347), (393, 11458), (394, 11464), (406, 11557), (410, 11572), (434, 11707), (443, 11740), (455, 11782), (474, 11890), (484, 11944), (501, 12016), (502, 12019), (522, 12121), (533, 12166), (535, 12175), (540, 12187), (541, 12190), (542, 12193), (567, 12268), (568, 12271), (569, 12274), (573, 12286), (576, 12295), (578, 12301), (588, 12343), (591, 12352), (605, 12400), (615, 12433), (651, 12568), (675, 12685), (679, 12718), (686, 12739), (701, 12808), (703, 12814), (740, 12949), (743, 12958), (764, 13042), (859, 13363), (913, 13582), (923, 13618), (1033, 14023), (1047, 14071), (1056, 14092), (1085, 14200), (1108, 14266), (1111, 14284), (1130, 14389), (1139, 14419), (1141, 14428), (1149, 14458), (1165, 14524), (1170, 14572), (1180, 14632), (1199, 14719), (1213, 14782),

Gene: RedRaider_46 Start: 26371, Stop: 31794, Start Num: 26
Candidate Starts for RedRaider_46:
(Start: 26 @26371 has 50 MA's), (84, 26719), (103, 26779), (106, 26788), (160, 26944), (182, 27061), (218, 27283), (220, 27295), (222, 27301), (273, 27541), (278, 27595), (281, 27625), (285, 27658), (314, 27808), (337, 27898), (345, 27934), (355, 27982), (361, 28012), (365, 28033), (366, 28042), (375, 28093), (378, 28123), (391, 28168), (426, 28366), (437, 28423), (450, 28468), (452, 28474), (462, 28528), (464, 28552), (489, 28633), (516, 28741), (524, 28762), (540, 28810), (575, 28882), (578, 28891), (580, 28897), (591, 28942), (594, 28957), (612, 29011), (619, 29038), (636, 29107), (671, 29269), (685, 29338), (694, 29386), (709, 29446), (718, 29479), (722, 29503), (729, 29551), (733, 29566), (735, 29575), (737, 29578), (746, 29611), (747, 29620), (750, 29629), (751, 29632), (752, 29635), (791, 29791), (800, 29827), (814, 29899), (826, 29947), (839, 29998), (846, 30031), (853, 30064), (867, 30121), (871, 30136), (898, 30286), (903, 30298), (935, 30436), (946, 30478), (948, 30481), (953, 30511), (1017, 30805), (1025, 30841), (1037, 30895), (1041, 30916), (1058, 30985), (1061, 31009), (1140, 31366), (1152, 31414), (1155, 31426), (1161, 31453), (1163, 31462), (1177, 31558), (1191, 31648), (1203, 31696), (1207, 31708), (1209, 31723), (1212, 31735), (1213, 31744),

Gene: Samba_17 Start: 10382, Stop: 15874, Start Num: 9
Candidate Starts for Samba_17:
(Start: 9 @10382 has 39 MA's), (Start: 11 @10397 has 1 MA's), (Start: 12 @10403 has 1 MA's), (Start: 14 @10433 has 2 MA's), (15, 10442), (16, 10445), (19, 10487), (40, 10598), (43, 10619), (61, 10739), (68, 10781), (82, 10847), (86, 10865), (92, 10880), (93, 10886), (94, 10889), (98, 10907), (109, 10931), (135, 11015), (148, 11057), (153, 11072), (155, 11081), (189, 11249), (193, 11276), (210, 11393), (245, 11564), (251, 11594), (285, 11798), (294, 11843), (297, 11870), (299, 11882), (320, 11972), (331, 12017), (339, 12044), (345, 12074), (362, 12161), (370, 12203), (379, 12266), (381, 12275), (394, 12323), (398, 12365), (404, 12410), (406, 12416), (409, 12428), (410, 12431), (419, 12485), (427, 12524), (430, 12545), (431, 12548), (434, 12566), (437, 12575), (448, 12614), (450, 12620), (454, 12638), (455, 12641), (460, 12668), (528, 12941), (538, 12968), (544, 12980), (552, 12992),

(554, 12995), (577, 13025), (578, 13028), (591, 13079), (614, 13160), (615, 13163), (624, 13196), (633, 13226), (638, 13250), (654, 13316), (710, 13583), (722, 13631), (728, 13676), (729, 13679), (733, 13694), (746, 13739), (747, 13748), (748, 13757), (757, 13808), (776, 13880), (786, 13898), (791, 13919), (813, 14018), (814, 14021), (822, 14054), (839, 14120), (843, 14138), (847, 14153), (853, 14186), (867, 14237), (877, 14288), (927, 14531), (928, 14534), (946, 14606), (948, 14609), (961, 14675), (962, 14678), (966, 14696), (985, 14756), (1021, 14912), (1022, 14915), (1026, 14930), (1062, 15101), (1075, 15155), (1095, 15212), (1100, 15227), (1109, 15275), (1119, 15320), (1153, 15440), (1156, 15449), (1164, 15488), (1174, 15560), (1185, 15629), (1199, 15692), (1202, 15710), (1227, 15860),

Gene: Schnabeltier_17 Start: 10933, Stop: 16047, Start Num: 27
Candidate Starts for Schnabeltier_17:
(Start: 27 @10933 has 14 MA's), (Start: 30 @10942 has 41 MA's), (74, 11215), (76, 11224), (80, 11254), (83, 11263), (98, 11320), (119, 11383), (142, 11455), (151, 11476), (155, 11494), (185, 11647), (193, 11689), (202, 11743), (207, 11776), (243, 11968), (244, 11971), (251, 12007), (268, 12085), (274, 12124), (285, 12208), (290, 12241), (293, 12250), (295, 12259), (299, 12292), (301, 12304), (305, 12328), (318, 12373), (320, 12382), (329, 12418), (331, 12427), (339, 12454), (342, 12466), (345, 12484), (352, 12520), (375, 12643), (381, 12685), (404, 12820), (405, 12823), (406, 12826), (410, 12841), (419, 12895), (427, 12934), (442, 13003), (445, 13015), (450, 13030), (455, 13051), (457, 13066), (460, 13078), (463, 13114), (471, 13150), (511, 13312), (550, 13369), (564, 13381), (565, 13384), (578, 13417), (603, 13510), (605, 13516), (607, 13522), (613, 13543), (614, 13546), (615, 13549), (633, 13612), (642, 13648), (646, 13663), (652, 13687), (655, 13702), (656, 13705), (657, 13711), (669, 13765), (689, 13864), (696, 13906), (718, 13984), (722, 14008), (730, 14053), (761, 14179), (764, 14188), (770, 14206), (771, 14209), (787, 14248), (788, 14251), (790, 14260), (831, 14419), (863, 14539), (881, 14617), (899, 14665), (904, 14677), (917, 14737), (951, 14854), (957, 14881), (961, 14899), (981, 14977), (983, 14983), (987, 14992), (993, 15019), (1008, 15112), (1016, 15151), (1027, 15193), (1066, 15346), (1074, 15379), (1075, 15382), (1095, 15439), (1098, 15448), (1102, 15460), (1106, 15481), (1109, 15502), (1156, 15694), (1165, 15733), (1175, 15802), (1184, 15856), (1216, 16009),

Gene: Scuba_48 Start: 24292, Stop: 29835, Start Num: 26
Candidate Starts for Scuba_48:
(Start: 26 @24292 has 50 MA's), (57, 24481), (66, 24550), (67, 24553), (79, 24616), (84, 24637), (157, 24865), (218, 25216), (222, 25234), (237, 25321), (245, 25348), (255, 25402), (273, 25474), (278, 25528), (281, 25558), (285, 25591), (290, 25624), (303, 25699), (345, 25867), (361, 25945), (366, 25975), (371, 25999), (375, 26026), (377, 26050), (378, 26056), (431, 26326), (437, 26356), (440, 26368), (450, 26401), (510, 26647), (516, 26674), (521, 26680), (531, 26722), (554, 26767), (571, 26806), (580, 26830), (589, 26869), (591, 26875), (601, 26911), (605, 26923), (607, 26929), (608, 26932), (616, 26962), (619, 26971), (623, 26986), (637, 27046), (641, 27064), (665, 27175), (677, 27241), (694, 27319), (718, 27436), (722, 27460), (729, 27508), (733, 27523), (741, 27541), (746, 27568), (755, 27619), (766, 27673), (785, 27733), (805, 27820), (808, 27841), (835, 27964), (894, 28282), (898, 28306), (903, 28318), (912, 28363), (946, 28498), (1025, 28879), (1037, 28933), (1057, 29023), (1060, 29047), (1143, 29419), (1161, 29494), (1177, 29599), (1191, 29689), (1207, 29749), (1209, 29764), (1212, 29776), (1213, 29785),

Gene: ShawBrad_18 Start: 9931, Stop: 15516, Start Num: 33
Candidate Starts for ShawBrad_18:
(Start: 22 @9886 has 11 MA's), (Start: 33 @9931 has 2 MA's), (35, 9952), (39, 9973), (47, 10018), (Start: 49 @10033 has 1 MA's), (62, 10117), (70, 10159), (74, 10171), (86, 10234), (92, 10249), (94, 10258), (98, 10276), (101, 10282), (117, 10330), (159, 10465), (188, 10615), (193, 10645), (245, 10939), (251, 10969), (285, 11173), (293, 11215), (294, 11218), (295, 11224), (297, 11245), (315, 11326), (331, 11392), (339, 11419), (342, 11431), (345, 11449), (347, 11461), (352, 11485), (355, 11497), (362, 11536), (363, 11539), (365, 11548), (370, 11578), (376, 11623), (390, 11683), (394,

11698), (397, 11728), (398, 11740), (404, 11785), (406, 11791), (409, 11803), (410, 11806), (413, 11827), (418, 11857), (419, 11860), (431, 11923), (437, 11950), (438, 11953), (439, 11956), (440, 11962), (447, 11986), (448, 11989), (450, 11995), (452, 12001), (455, 12016), (458, 12034), (471, 12115), (482, 12163), (483, 12169), (487, 12196), (509, 12289), (516, 12322), (522, 12352), (539, 12415), (547, 12433), (557, 12460), (605, 12631), (623, 12694), (630, 12727), (640, 12802), (648, 12826), (650, 12838), (654, 12871), (662, 12934), (670, 12970), (676, 13000), (692, 13078), (693, 13081), (694, 13090), (722, 13201), (728, 13246), (729, 13249), (733, 13264), (746, 13309), (747, 13318), (748, 13327), (749, 13330), (773, 13435), (789, 13483), (791, 13489), (813, 13588), (814, 13591), (818, 13603), (847, 13720), (853, 13753), (867, 13804), (875, 13834), (883, 13894), (904, 13975), (907, 13996), (915, 14029), (931, 14092), (937, 14110), (962, 14224), (967, 14254), (969, 14263), (979, 14302), (980, 14305), (991, 14335), (995, 14356), (1029, 14554), (1043, 14617), (1044, 14623), (1054, 14674), (1092, 14866), (1113, 14953), (1117, 14980), (1118, 14983), (1128, 15058), (1135, 15082), (1147, 15121), (1157, 15157), (1160, 15178), (1172, 15265), (1179, 15307), (1185, 15340), (1187, 15352), (1219, 15496),

Gene: SheckWes_15 Start: 9372, Stop: 14465, Start Num: 30
Candidate Starts for SheckWes_15:
(Start: 30 @9372 has 41 MA's), (53, 9528), (70, 9633), (77, 9657), (86, 9708), (92, 9723), (101, 9756), (117, 9804), (119, 9813), (132, 9855), (136, 9861), (137, 9864), (148, 9900), (155, 9924), (162, 9951), (179, 10038), (185, 10077), (187, 10083), (190, 10098), (193, 10119), (202, 10173), (220, 10290), (232, 10353), (243, 10398), (251, 10437), (261, 10479), (285, 10641), (287, 10650), (290, 10674), (294, 10686), (297, 10713), (299, 10725), (307, 10770), (316, 10800), (319, 10812), (344, 10914), (345, 10917), (362, 11004), (367, 11031), (376, 11091), (382, 11121), (389, 11142), (394, 11166), (400, 11217), (406, 11259), (410, 11274), (412, 11283), (413, 11295), (419, 11328), (428, 11370), (440, 11430), (441, 11433), (442, 11436), (443, 11442), (449, 11460), (455, 11484), (470, 11568), (473, 11589), (486, 11637), (501, 11697), (502, 11700), (509, 11736), (522, 11802), (525, 11817), (533, 11847), (540, 11868), (541, 11871), (542, 11874), (568, 11952), (576, 11976), (578, 11982), (613, 12108), (622, 12138), (633, 12177), (645, 12225), (650, 12246), (651, 12249), (652, 12255), (665, 12321), (675, 12366), (679, 12399), (686, 12420), (697, 12474), (740, 12624), (743, 12633), (764, 12720), (823, 12897), (859, 13038), (869, 13068), (899, 13206), (923, 13287), (965, 13440), (972, 13470), (1031, 13686), (1033, 13695), (1035, 13701), (1047, 13737), (1085, 13854), (1090, 13860), (1103, 13902), (1108, 13920), (1130, 14043), (1138, 14067), (1141, 14082), (1149, 14112), (1157, 14139), (1158, 14145), (1165, 14178), (1174, 14247), (1175, 14250), (1180, 14286), (1193, 14358), (1195, 14361), (1200, 14376),

Gene: SketchMex_15 Start: 9616, Stop: 14415, Start Num: 108
Candidate Starts for SketchMex_15:
(Start: 108 @9616 has 16 MA's), (Start: 115 @9643 has 1 MA's), (154, 9772), (177, 9874), (184, 9919), (186, 9931), (190, 9949), (194, 9976), (195, 9979), (198, 9994), (206, 10045), (207, 10048), (214, 10105), (215, 10108), (224, 10150), (228, 10168), (238, 10213), (248, 10249), (257, 10282), (264, 10315), (265, 10327), (276, 10381), (282, 10420), (284, 10435), (286, 10444), (292, 10471), (300, 10522), (312, 10564), (316, 10582), (319, 10591), (332, 10645), (349, 10708), (352, 10723), (365, 10786), (384, 10876), (393, 10903), (404, 10996), (406, 11002), (410, 11017), (416, 11056), (431, 11134), (439, 11167), (450, 11206), (454, 11224), (455, 11227), (460, 11254), (470, 11311), (473, 11332), (485, 11395), (494, 11431), (498, 11443), (502, 11464), (509, 11500), (518, 11542), (520, 11554), (522, 11566), (533, 11611), (534, 11614), (540, 11632), (541, 11635), (542, 11638), (567, 11713), (569, 11719), (578, 11746), (592, 11806), (597, 11821), (613, 11872), (614, 11875), (615, 11878), (620, 11896), (646, 11995), (650, 12010), (651, 12013), (679, 12163), (686, 12184), (694, 12226), (701, 12253), (703, 12259), (738, 12391), (743, 12403), (764, 12490), (779, 12532), (793, 12568), (813, 12643), (828, 12694), (836, 12733), (856, 12811), (872, 12862), (882, 12919), (918, 13057), (940, 13132), (972, 13276), (978, 13297), (1012, 13474), (1014, 13480), (1085, 13804), (1090, 13810), (1108, 13870), (1111, 13888), (1118, 13921), (1130, 13993), (1141, 14032), (1149, 14062), (1165, 14128), (1170, 14176), (1180, 14236), (1200, 14326), (1213, 14386),

Gene: Skysand_41 Start: 24563, Stop: 29992, Start Num: 26
Candidate Starts for Skysand_41:
(Start: 26 @24563 has 50 MA's), (84, 24911), (103, 24971), (106, 24980), (182, 25256), (191, 25298), (218, 25478), (220, 25490), (222, 25496), (267, 25715), (278, 25790), (281, 25820), (285, 25853), (314, 26003), (337, 26093), (345, 26129), (355, 26177), (356, 26183), (361, 26207), (365, 26228), (366, 26237), (375, 26288), (378, 26318), (426, 26561), (437, 26618), (440, 26630), (450, 26663), (452, 26669), (481, 26801), (489, 26828), (516, 26936), (524, 26957), (540, 27005), (578, 27086), (580, 27092), (591, 27137), (594, 27152), (612, 27206), (636, 27302), (671, 27464), (677, 27503), (685, 27533), (694, 27581), (709, 27641), (718, 27674), (722, 27698), (729, 27746), (733, 27761), (735, 27770), (746, 27806), (747, 27815), (750, 27824), (751, 27827), (752, 27830), (791, 27986), (800, 28022), (814, 28094), (826, 28142), (839, 28193), (846, 28226), (853, 28259), (867, 28316), (871, 28331), (898, 28481), (903, 28493), (921, 28580), (935, 28631), (946, 28673), (948, 28676), (953, 28706), (1017, 29000), (1037, 29090), (1041, 29111), (1058, 29180), (1073, 29267), (1140, 29564), (1152, 29612), (1161, 29651), (1191, 29846), (1203, 29894), (1207, 29906), (1209, 29921), (1212, 29933), (1213, 29942),

Gene: Socotra_17 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Socotra_17:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (427, 11621), (434, 11663), (438, 11675), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (520, 12065), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (688, 12698), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1121, 14300), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: Soilmate_17 Start: 10172, Stop: 15763, Start Num: 9
Candidate Starts for Soilmate_17:
(Start: 9 @10172 has 39 MA's), (Start: 11 @10187 has 1 MA's), (Start: 14 @10223 has 2 MA's), (15, 10232), (16, 10235), (19, 10277), (40, 10388), (43, 10409), (61, 10529), (82, 10637), (86, 10655), (93, 10676), (94, 10679), (98, 10697), (137, 10811), (148, 10847), (153, 10862), (155, 10871), (189, 11039), (193, 11066), (210, 11183), (245, 11354), (251, 11384), (285, 11588), (294, 11633), (331, 11807), (339, 11834), (345, 11864), (349, 11885), (362, 11951), (363, 11954), (370, 11993), (379, 12056), (394, 12113), (398, 12155), (404, 12200), (406, 12206), (409, 12218), (410, 12221), (419, 12275), (427, 12314), (430, 12335), (431, 12338), (434, 12356), (442, 12383), (448, 12404), (450, 12410), (455, 12431), (460, 12458), (467, 12506), (473, 12536), (511, 12692), (516, 12716), (518, 12725), (521, 12746), (546, 12827), (577, 12923), (578, 12926), (580, 12932), (590, 12974), (591, 12977), (595, 12998), (614, 13058), (615, 13061), (624, 13094), (633, 13124), (654, 13214), (710, 13481), (722, 13529), (728, 13574), (729, 13577), (733, 13592), (746, 13637), (747, 13646), (748, 13655), (757, 13706), (776, 13778), (786, 13796), (791, 13817), (813, 13916), (814, 13919), (822, 13952), (839, 14018), (843, 14036), (847, 14051), (853, 14084), (867, 14135), (877, 14186), (884, 14234), (927, 14429), (928, 14432), (946, 14504), (948, 14507), (961, 14573), (962, 14576), (966, 14594), (985, 14654), (1003, 14729), (1022, 14813), (1026, 14828), (1075, 15041), (1095, 15098), (1100, 15113), (1109, 15161), (1119, 15206), (1153, 15326), (1156, 15335), (1164, 15374), (1174, 15446), (1185, 15515), (1199, 15578), (1202, 15596), (1215, 15653), (1227, 15746),

Gene: Sopespian_16 Start: 9630, Stop: 14768, Start Num: 30
Candidate Starts for Sopespian_16:
(Start: 23 @9606 has 5 MA's), (Start: 30 @9630 has 41 MA's), (34, 9657), (53, 9786), (63, 9861), (101, 10014), (102, 10017), (132, 10113), (137, 10122), (145, 10152), (148, 10158), (153, 10173), (154, 10176), (159, 10197), (174, 10269), (178, 10290), (190, 10356), (193, 10377), (210, 10494), (243, 10656), (251, 10695), (267, 10770), (290, 10929), (294, 10941), (297, 10968), (304, 11013), (307, 11025), (331, 11115), (336, 11133), (342, 11154), (347, 11184), (352, 11208), (355, 11220), (362, 11259), (368, 11292), (388, 11394), (389, 11397), (394, 11421), (406, 11514), (410, 11529), (416, 11568), (445, 11703), (446, 11706), (455, 11739), (474, 11847), (475, 11850), (484, 11901), (502, 11976), (520, 12066), (522, 12078), (533, 12123), (540, 12144), (541, 12147), (542, 12150), (567, 12225), (578, 12258), (583, 12279), (591, 12309), (605, 12357), (607, 12363), (615, 12390), (651, 12525), (675, 12642), (679, 12675), (686, 12696), (701, 12765), (703, 12771), (706, 12786), (740, 12906), (743, 12915), (764, 12999), (859, 13320), (913, 13539), (923, 13575), (978, 13788), (1033, 13980), (1047, 14028), (1056, 14049), (1085, 14157), (1108, 14223), (1111, 14241), (1130, 14346), (1139, 14376), (1141, 14385), (1149, 14415), (1165, 14481), (1170, 14529), (1180, 14589), (1199, 14676), (1213, 14739),

Gene: Spooky_18 Start: 9874, Stop: 15489, Start Num: 23
Candidate Starts for Spooky_18:
(Start: 23 @9874 has 5 MA's), (Start: 33 @9919 has 2 MA's), (35, 9940), (39, 9961), (47, 10006), (94, 10246), (121, 10339), (124, 10351), (136, 10375), (137, 10378), (155, 10438), (158, 10447), (159, 10453), (174, 10525), (188, 10603), (190, 10612), (193, 10633), (273, 11053), (285, 11161), (290, 11194), (294, 11206), (297, 11233), (331, 11380), (339, 11407), (345, 11437), (352, 11473), (362, 11524), (363, 11527), (365, 11536), (372, 11572), (381, 11638), (394, 11686), (403, 11770), (404, 11773), (406, 11779), (409, 11791), (410, 11794), (418, 11845), (419, 11848), (427, 11887), (450, 11983), (455, 12004), (494, 12208), (501, 12238), (518, 12319), (522, 12343), (524, 12355), (534, 12391), (557, 12451), (567, 12490), (569, 12496), (570, 12499), (577, 12520), (578, 12523), (605, 12622), (616, 12661), (623, 12685), (630, 12718), (635, 12763), (648, 12817), (650, 12829), (659, 12904), (662, 12925), (670, 12961), (676, 12991), (693, 13072), (694, 13081), (700, 13105), (721, 13186), (722, 13192), (728, 13237), (729, 13240), (733, 13255), (746, 13300), (747, 13309), (748, 13318), (773, 13426), (786, 13459), (789, 13474), (791, 13480), (813, 13579), (814, 13582), (815, 13585), (818, 13594), (847, 13711), (853, 13744), (866, 13792), (867, 13795), (875, 13825), (883, 13885), (904, 13966), (907, 13987), (908, 13990), (931, 14083), (934, 14092), (957, 14194), (962, 14215), (967, 14245), (969, 14254), (979, 14293), (980, 14296), (982, 14299), (991, 14326), (1000, 14380), (1019, 14497), (1039, 14581), (1040, 14593), (1043, 14605), (1044, 14611), (1053, 14638), (1054, 14662), (1092, 14839), (1113, 14926), (1116, 14944), (1117, 14953), (1128, 15031), (1134, 15049), (1159, 15139), (1160, 15151), (1172, 15238), (1179, 15280), (1185, 15313), (1187, 15325), (1219, 15469),

Gene: Squiddly_20 Start: 11289, Stop: 16901, Start Num: 23
Candidate Starts for Squiddly_20:
(Start: 23 @11289 has 5 MA's), (28, 11307), (31, 11316), (Start: 33 @11334 has 2 MA's), (35, 11355), (37, 11367), (47, 11421), (Start: 49 @11436 has 1 MA's), (78, 11604), (80, 11613), (86, 11637), (94, 11661), (98, 11679), (114, 11724), (136, 11790), (137, 11793), (155, 11853), (188, 12018), (193, 12048), (215, 12204), (245, 12342), (247, 12357), (273, 12468), (285, 12576), (293, 12618), (294, 12621), (295, 12627), (297, 12648), (299, 12660), (331, 12795), (339, 12822), (345, 12852), (348, 12870), (362, 12939), (365, 12951), (381, 13053), (394, 13101), (398, 13143), (404, 13188), (406, 13194), (409, 13206), (410, 13209), (413, 13230), (418, 13260), (419, 13263), (426, 13299), (427, 13302), (443, 13377), (450, 13398), (455, 13419), (470, 13503), (486, 13593), (518, 13734), (524, 13770), (533, 13803), (534, 13806), (540, 13824), (557, 13866), (567, 13905), (569, 13911), (570, 13914), (577, 13935), (578, 13938), (605, 14037), (616, 14076), (630, 14133), (640, 14208), (650, 14244), (662, 14340), (670, 14376), (676, 14406), (692, 14484), (693, 14487), (694, 14496), (700,

14520), (706, 14544), (715, 14577), (721, 14601), (722, 14607), (726, 14640), (728, 14652), (729, 14655), (733, 14670), (741, 14688), (746, 14715), (747, 14724), (748, 14733), (749, 14736), (773, 14841), (789, 14889), (791, 14895), (814, 14997), (818, 15009), (847, 15126), (853, 15159), (867, 15210), (870, 15222), (875, 15240), (883, 15300), (904, 15381), (907, 15402), (931, 15498), (937, 15516), (944, 15540), (957, 15609), (962, 15630), (967, 15660), (969, 15669), (979, 15708), (980, 15711), (982, 15714), (991, 15741), (1000, 15795), (1019, 15912), (1039, 15996), (1040, 16008), (1043, 16020), (1044, 16026), (1053, 16053), (1054, 16077), (1092, 16254), (1113, 16341), (1116, 16359), (1117, 16368), (1128, 16446), (1132, 16461), (1135, 16470), (1157, 16545), (1159, 16554), (1160, 16566), (1172, 16653), (1179, 16695), (1185, 16728), (1187, 16740), (1205, 16815), (1219, 16881),

Gene: StarStruck_40 Start: 24099, Stop: 29510, Start Num: 26
Candidate Starts for StarStruck_40:
(Start: 26 @24099 has 50 MA's), (46, 24210), (48, 24228), (66, 24360), (84, 24447), (86, 24456), (149, 24633), (157, 24666), (164, 24702), (208, 24954), (218, 25017), (220, 25029), (222, 25035), (278, 25329), (281, 25359), (285, 25392), (305, 25512), (337, 25632), (345, 25668), (355, 25716), (361, 25746), (366, 25776), (375, 25827), (378, 25857), (414, 26037), (426, 26100), (431, 26127), (437, 26157), (450, 26202), (459, 26244), (462, 26262), (466, 26292), (468, 26298), (516, 26475), (526, 26502), (531, 26523), (550, 26559), (563, 26583), (567, 26595), (574, 26613), (575, 26616), (599, 26706), (616, 26763), (625, 26796), (626, 26799), (637, 26847), (638, 26853), (645, 26877), (692, 27108), (694, 27120), (709, 27180), (718, 27213), (721, 27231), (722, 27237), (727, 27279), (729, 27285), (733, 27300), (735, 27309), (737, 27312), (746, 27345), (747, 27354), (750, 27363), (751, 27366), (752, 27369), (791, 27525), (814, 27633), (815, 27636), (826, 27684), (831, 27708), (839, 27735), (846, 27768), (853, 27801), (867, 27858), (877, 27900), (885, 27957), (903, 28035), (919, 28107), (946, 28212), (1125, 29040), (1140, 29082), (1150, 29124), (1162, 29175), (1178, 29277), (1203, 29412), (1210, 29442), (1212, 29451),

Gene: Starburst_17 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Starburst_17:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (388, 11393), (389, 11396), (394, 11420), (395, 11426), (406, 11513), (410, 11528), (416, 11567), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (522, 12077), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1121, 14300), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: SteamedHams_18 Start: 9646, Stop: 14433, Start Num: 108
Candidate Starts for SteamedHams_18:
(Start: 108 @9646 has 16 MA's), (Start: 115 @9673 has 1 MA's), (140, 9751), (154, 9802), (173, 9889), (177, 9904), (186, 9961), (190, 9979), (194, 10006), (195, 10009), (207, 10078), (214, 10135), (224, 10180), (228, 10198), (238, 10243), (248, 10279), (257, 10312), (268, 10360), (269, 10363), (276, 10411), (282, 10450), (284, 10465), (315, 10606), (328, 10657), (332, 10675), (347, 10729), (384, 10906), (393, 10933), (404, 11026), (406, 11032), (410, 11047), (416, 11086), (418, 11098), (431, 11164), (450, 11236), (454, 11254), (455, 11257), (460, 11284), (509, 11530), (522, 11596), (533, 11641), (540, 11662), (541, 11665), (542, 11668), (557, 11704), (567, 11743), (569, 11749), (578,

11776), (614, 11905), (615, 11908), (620, 11926), (652, 12049), (655, 12064), (679, 12193), (686, 12214), (694, 12256), (701, 12283), (703, 12289), (738, 12421), (743, 12433), (764, 12520), (779, 12562), (793, 12598), (828, 12724), (836, 12763), (872, 12892), (882, 12949), (893, 12991), (918, 13084), (940, 13159), (953, 13222), (972, 13303), (978, 13324), (1012, 13501), (1014, 13507), (1065, 13726), (1079, 13804), (1085, 13822), (1090, 13828), (1108, 13888), (1111, 13906), (1118, 13939), (1130, 14011), (1141, 14050), (1149, 14080), (1165, 14146), (1170, 14194), (1180, 14254), (1200, 14344), (1213, 14404),

Gene: Sukkupi_41 Start: 23124, Stop: 28529, Start Num: 26
Candidate Starts for Sukkupi_41:
(Start: 26 @23124 has 50 MA's), (46, 23235), (48, 23253), (51, 23283), (58, 23322), (80, 23457), (84, 23472), (125, 23610), (149, 23670), (155, 23697), (157, 23703), (202, 23949), (208, 23991), (218, 24054), (220, 24066), (222, 24072), (277, 24354), (285, 24429), (303, 24537), (314, 24579), (334, 24660), (345, 24705), (355, 24753), (361, 24783), (366, 24813), (375, 24864), (378, 24894), (414, 25074), (415, 25080), (417, 25086), (437, 25194), (450, 25239), (452, 25245), (468, 25335), (492, 25410), (510, 25485), (516, 25512), (524, 25533), (529, 25551), (539, 25578), (586, 25695), (589, 25707), (598, 25740), (600, 25746), (607, 25767), (612, 25782), (616, 25800), (623, 25824), (625, 25833), (644, 25911), (652, 25944), (665, 26013), (677, 26079), (718, 26250), (729, 26322), (733, 26337), (746, 26382), (747, 26391), (750, 26400), (776, 26523), (791, 26562), (800, 26598), (814, 26670), (815, 26673), (826, 26721), (831, 26745), (837, 26769), (839, 26772), (846, 26805), (853, 26838), (866, 26895), (867, 26898), (877, 26940), (885, 26997), (887, 27009), (898, 27063), (904, 27078), (914, 27129), (919, 27147), (924, 27171), (933, 27207), (946, 27267), (948, 27270), (953, 27300), (958, 27321), (1007, 27531), (1032, 27642), (1140, 28101), (1150, 28143), (1191, 28383), (1207, 28443), (1210, 28461), (1212, 28470),

Gene: SummitAcademy_15 Start: 9452, Stop: 14545, Start Num: 30
Candidate Starts for SummitAcademy_15:
(Start: 30 @9452 has 41 MA's), (53, 9608), (77, 9737), (81, 9767), (101, 9836), (105, 9848), (117, 9884), (132, 9935), (137, 9944), (148, 9980), (155, 10004), (168, 10064), (179, 10118), (185, 10157), (187, 10163), (190, 10178), (193, 10199), (220, 10370), (232, 10433), (243, 10478), (261, 10559), (285, 10718), (290, 10751), (294, 10763), (297, 10790), (307, 10847), (316, 10877), (319, 10889), (344, 10991), (345, 10994), (362, 11081), (372, 11129), (394, 11243), (406, 11336), (410, 11351), (413, 11372), (419, 11405), (425, 11435), (428, 11447), (434, 11486), (441, 11510), (442, 11513), (449, 11537), (455, 11561), (473, 11666), (494, 11744), (501, 11774), (502, 11777), (509, 11813), (518, 11855), (522, 11879), (525, 11894), (529, 11909), (533, 11924), (541, 11948), (557, 11987), (560, 12002), (562, 12008), (568, 12029), (576, 12053), (578, 12059), (613, 12185), (622, 12215), (636, 12266), (645, 12302), (650, 12323), (651, 12326), (665, 12398), (675, 12443), (679, 12476), (686, 12497), (697, 12551), (717, 12626), (743, 12710), (764, 12797), (859, 13115), (869, 13145), (899, 13283), (914, 13334), (923, 13364), (965, 13529), (972, 13559), (1025, 13739), (1035, 13790), (1047, 13817), (1056, 13838), (1085, 13934), (1103, 13982), (1108, 14000), (1130, 14123), (1138, 14147), (1141, 14162), (1149, 14192), (1157, 14219), (1158, 14225), (1165, 14258), (1174, 14327), (1175, 14330), (1180, 14366), (1200, 14456),

Gene: SuperSulley_40 Start: 24297, Stop: 29702, Start Num: 26
Candidate Starts for SuperSulley_40:
(Start: 26 @24297 has 50 MA's), (48, 24426), (84, 24645), (86, 24654), (157, 24858), (208, 25146), (218, 25209), (220, 25221), (222, 25227), (278, 25521), (281, 25551), (285, 25584), (301, 25680), (305, 25704), (314, 25734), (337, 25824), (345, 25860), (355, 25908), (356, 25914), (358, 25923), (361, 25938), (365, 25959), (366, 25968), (375, 26019), (378, 26049), (426, 26292), (431, 26319), (432, 26328), (437, 26349), (450, 26394), (462, 26454), (464, 26478), (468, 26490), (516, 26667), (529, 26706), (537, 26727), (554, 26760), (569, 26793), (570, 26796), (578, 26817), (580, 26823), (589, 26862), (591, 26868), (595, 26889), (601, 26904), (608, 26925), (619, 26964), (623, 26979), (625, 26988), (627, 26997), (631, 27009), (637, 27039), (638, 27045), (639, 27048), (652, 27099),

(657, 27123), (665, 27165), (669, 27177), (692, 27297), (694, 27309), (709, 27369), (718, 27402), (721, 27420), (722, 27426), (729, 27474), (733, 27489), (735, 27498), (737, 27501), (746, 27534), (747, 27543), (750, 27552), (752, 27558), (791, 27714), (814, 27822), (815, 27825), (826, 27873), (831, 27897), (839, 27924), (846, 27957), (853, 27990), (867, 28047), (877, 28089), (884, 28137), (885, 28146), (886, 28155), (903, 28224), (914, 28278), (919, 28296), (921, 28311), (933, 28353), (935, 28362), (946, 28404), (948, 28407), (953, 28437), (956, 28449), (1129, 29241), (1140, 29274), (1150, 29316), (1162, 29367), (1191, 29556), (1203, 29604), (1210, 29634), (1212, 29643), (1217, 29667),

Gene: Survivors_18 Start: 10474, Stop: 15597, Start Num: 30
Candidate Starts for Survivors_18:
(24, 10453), (Start: 30 @10474 has 41 MA's), (34, 10501), (53, 10630), (68, 10726), (78, 10777), (95, 10834), (104, 10867), (105, 10870), (132, 10957), (138, 10969), (153, 11017), (154, 11020), (155, 11026), (166, 11080), (168, 11086), (178, 11134), (190, 11200), (193, 11221), (267, 11614), (268, 11617), (282, 11719), (294, 11785), (295, 11791), (297, 11812), (345, 12016), (348, 12034), (350, 12040), (352, 12052), (355, 12064), (362, 12103), (365, 12115), (372, 12151), (379, 12208), (384, 12232), (388, 12238), (406, 12358), (410, 12373), (416, 12412), (430, 12487), (438, 12520), (442, 12535), (443, 12541), (445, 12547), (455, 12583), (474, 12691), (487, 12763), (501, 12817), (533, 12967), (541, 12991), (562, 13051), (566, 13063), (567, 13069), (576, 13096), (577, 13099), (578, 13102), (603, 13195), (605, 13201), (620, 13252), (638, 13321), (647, 13354), (651, 13369), (652, 13375), (663, 13432), (667, 13444), (674, 13483), (675, 13486), (677, 13507), (679, 13519), (686, 13540), (688, 13543), (694, 13582), (697, 13594), (701, 13609), (740, 13750), (764, 13846), (790, 13912), (795, 13933), (798, 13939), (859, 14176), (869, 14206), (880, 14245), (909, 14380), (916, 14410), (923, 14431), (962, 14569), (972, 14617), (1044, 14848), (1047, 14854), (1085, 14983), (1108, 15049), (1118, 15100), (1130, 15172), (1141, 15211), (1149, 15241), (1158, 15274), (1165, 15307), (1175, 15379), (1186, 15451), (1199, 15505), (1201, 15511), (1213, 15568),

Gene: SweatNTears_18 Start: 10127, Stop: 14926, Start Num: 108
Candidate Starts for SweatNTears_18:
(Start: 108 @10127 has 16 MA's), (Start: 115 @10154 has 1 MA's), (117, 10160), (154, 10283), (177, 10385), (184, 10430), (186, 10442), (190, 10460), (194, 10487), (195, 10490), (198, 10505), (206, 10556), (207, 10559), (214, 10616), (215, 10619), (224, 10661), (228, 10679), (238, 10724), (248, 10760), (257, 10793), (264, 10826), (265, 10838), (276, 10892), (282, 10931), (284, 10946), (286, 10955), (292, 10982), (300, 11033), (316, 11093), (319, 11102), (332, 11156), (349, 11219), (352, 11234), (365, 11297), (384, 11387), (393, 11414), (401, 11495), (404, 11507), (406, 11513), (410, 11528), (414, 11558), (416, 11567), (431, 11645), (439, 11678), (450, 11717), (454, 11735), (455, 11738), (460, 11765), (470, 11822), (473, 11843), (498, 11954), (502, 11975), (509, 12011), (518, 12053), (520, 12065), (522, 12077), (533, 12122), (534, 12125), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (592, 12317), (613, 12383), (614, 12386), (615, 12389), (620, 12407), (646, 12506), (650, 12521), (651, 12524), (679, 12674), (686, 12695), (694, 12737), (701, 12764), (703, 12770), (738, 12902), (743, 12914), (764, 13001), (779, 13043), (793, 13079), (813, 13154), (828, 13205), (836, 13244), (845, 13268), (872, 13373), (882, 13430), (918, 13568), (940, 13643), (972, 13787), (978, 13808), (1012, 13985), (1014, 13991), (1085, 14315), (1090, 14321), (1108, 14381), (1111, 14399), (1118, 14432), (1130, 14504), (1141, 14543), (1149, 14573), (1165, 14639), (1170, 14687), (1180, 14747), (1200, 14837), (1213, 14897),

Gene: Taotie_15 Start: 11508, Stop: 17519, Start Num: 44
Candidate Starts for Taotie_15:
(Start: 44 @11508 has 2 MA's), (51, 11559), (134, 11901), (146, 11937), (165, 12018), (166, 12024), (169, 12033), (170, 12036), (177, 12069), (181, 12099), (183, 12111), (285, 12723), (294, 12768), (303, 12831), (323, 12909), (341, 12975), (346, 13002), (353, 13041), (355, 13047), (362, 13086), (372, 13134), (423, 13446), (488, 13779), (498, 13812), (507, 13863), (515, 13896), (533, 13986), (548, 14022), (585, 14145), (618, 14265), (621, 14274), (623, 14283), (626, 14295), (647, 14394),

(650, 14406), (659, 14457), (661, 14469), (663, 14478), (670, 14511), (678, 14553), (683, 14574), (698, 14646), (702, 14661), (705, 14682), (744, 14868), (767, 15000), (769, 15015), (772, 15033), (797, 15126), (809, 15189), (853, 15408), (860, 15447), (864, 15474), (868, 15498), (876, 15537), (877, 15546), (897, 15666), (912, 15726), (920, 15765), (982, 16047), (1006, 16191), (1018, 16260), (1048, 16395), (1084, 16605), (1093, 16641), (1112, 16728), (1124, 16821), (1133, 16851), (1144, 16890), (1148, 16905), (1158, 16947), (1159, 16950), (1171, 17040), (1183, 17106), (1185, 17121), (1189, 17142), (1210, 17235), (1211, 17241), (1223, 17319), (1224, 17331), (1226, 17343), (1228, 17373), (1229, 17382), (1230, 17412), (1231, 17424), (1232, 17469), (1233, 17484),

Gene: Tarnish_16 Start: 9751, Stop: 14835, Start Num: 30
Candidate Starts for Tarnish_16:
(Start: 30 @9751 has 41 MA's), (53, 9907), (77, 10036), (81, 10066), (101, 10135), (105, 10147), (117, 10183), (132, 10234), (137, 10243), (148, 10279), (155, 10303), (168, 10363), (179, 10417), (185, 10456), (190, 10477), (193, 10498), (218, 10657), (220, 10669), (232, 10732), (243, 10777), (261, 10858), (285, 11017), (290, 11050), (294, 11062), (297, 11089), (307, 11146), (316, 11176), (319, 11188), (344, 11290), (345, 11293), (362, 11380), (372, 11428), (394, 11542), (406, 11635), (410, 11650), (413, 11671), (419, 11704), (425, 11734), (428, 11746), (434, 11785), (441, 11809), (442, 11812), (449, 11836), (455, 11860), (473, 11965), (486, 12013), (494, 12043), (499, 12058), (501, 12073), (509, 12112), (518, 12154), (522, 12178), (529, 12208), (533, 12223), (541, 12247), (557, 12286), (560, 12301), (562, 12307), (568, 12328), (576, 12352), (578, 12358), (613, 12484), (622, 12514), (633, 12553), (645, 12601), (650, 12622), (651, 12625), (665, 12697), (675, 12742), (679, 12775), (686, 12796), (697, 12850), (717, 12925), (743, 13009), (764, 13096), (825, 13282), (859, 13414), (869, 13444), (899, 13582), (914, 13633), (923, 13663), (952, 13768), (965, 13819), (972, 13849), (1025, 14029), (1035, 14080), (1047, 14107), (1056, 14128), (1085, 14224), (1103, 14272), (1108, 14290), (1130, 14413), (1138, 14437), (1141, 14452), (1149, 14482), (1157, 14509), (1158, 14515), (1165, 14548), (1174, 14617), (1175, 14620), (1180, 14656), (1200, 14746),

Gene: TaronosaurasRx_17 Start: 10940, Stop: 16063, Start Num: 27
Candidate Starts for TaronosaurasRx_17:
(Start: 27 @10940 has 14 MA's), (29, 10946), (74, 11219), (76, 11228), (83, 11267), (98, 11324), (119, 11387), (151, 11480), (155, 11498), (185, 11651), (193, 11693), (207, 11780), (243, 11972), (244, 11975), (251, 12011), (262, 12059), (285, 12212), (290, 12245), (293, 12254), (295, 12263), (299, 12296), (301, 12308), (305, 12332), (318, 12377), (320, 12386), (331, 12431), (339, 12458), (342, 12470), (345, 12488), (375, 12647), (377, 12671), (379, 12680), (380, 12683), (404, 12824), (405, 12827), (406, 12830), (409, 12842), (410, 12845), (419, 12899), (427, 12938), (450, 13034), (455, 13055), (457, 13070), (460, 13082), (471, 13154), (511, 13316), (550, 13373), (564, 13385), (565, 13388), (578, 13421), (603, 13514), (605, 13520), (607, 13526), (613, 13547), (614, 13550), (615, 13553), (621, 13574), (628, 13604), (642, 13652), (643, 13658), (646, 13667), (652, 13691), (655, 13706), (656, 13709), (657, 13715), (667, 13760), (669, 13769), (689, 13868), (696, 13910), (704, 13943), (718, 13988), (722, 14012), (730, 14057), (739, 14075), (771, 14213), (777, 14234), (787, 14252), (788, 14255), (790, 14264), (854, 14495), (858, 14513), (865, 14537), (899, 14681), (906, 14705), (917, 14756), (957, 14900), (961, 14918), (970, 14957), (981, 14996), (983, 15002), (987, 15011), (997, 15053), (1008, 15131), (1016, 15170), (1050, 15305), (1074, 15398), (1075, 15401), (1095, 15458), (1098, 15467), (1102, 15479), (1106, 15500), (1156, 15713), (1165, 15752), (1175, 15821), (1184, 15875), (1216, 16025),

Gene: Toast_17 Start: 10235, Stop: 15886, Start Num: 8
Candidate Starts for Toast_17:
(Start: 8 @10235 has 1 MA's), (Start: 9 @10271 has 39 MA's), (Start: 12 @10292 has 1 MA's), (15, 10331), (19, 10376), (36, 10466), (38, 10475), (40, 10487), (43, 10508), (51, 10565), (62, 10637), (66, 10658), (76, 10700), (77, 10703), (80, 10730), (85, 10751), (86, 10754), (93, 10775), (98, 10796), (116, 10847), (117, 10850), (137, 10910), (180, 11093), (193, 11165), (223, 11351), (245, 11453), (247, 11468), (251, 11483), (263, 11540), (294, 11732), (318, 11852), (339, 11933), (345, 11963), (352,

11999), (362, 12050), (388, 12185), (389, 12188), (394, 12212), (400, 12263), (404, 12299), (406, 12305), (410, 12320), (419, 12374), (427, 12413), (431, 12437), (434, 12455), (448, 12503), (450, 12509), (454, 12527), (455, 12530), (457, 12545), (460, 12557), (467, 12605), (501, 12743), (518, 12824), (522, 12848), (524, 12860), (525, 12863), (534, 12896), (568, 12998), (576, 13025), (577, 13028), (578, 13031), (580, 13037), (591, 13082), (593, 13094), (597, 13106), (605, 13130), (610, 13145), (614, 13160), (615, 13163), (622, 13187), (628, 13214), (650, 13295), (668, 13379), (689, 13484), (694, 13517), (710, 13583), (712, 13592), (722, 13631), (726, 13664), (728, 13676), (729, 13679), (733, 13694), (735, 13703), (746, 13739), (747, 13748), (748, 13757), (789, 13913), (790, 13916), (791, 13919), (796, 13940), (814, 14021), (824, 14063), (847, 14150), (853, 14183), (855, 14192), (867, 14234), (887, 14348), (925, 14513), (946, 14597), (948, 14600), (953, 14630), (954, 14633), (961, 14666), (962, 14669), (985, 14747), (1001, 14804), (1026, 14921), (1039, 14972), (1066, 15074), (1075, 15107), (1088, 15173), (1106, 15239), (1108, 15245), (1111, 15263), (1118, 15296), (1130, 15368), (1142, 15410), (1146, 15416), (1149, 15434), (1151, 15440), (1157, 15461), (1165, 15500), (1185, 15641), (1199, 15704), (1215, 15779), (1227, 15872),

Gene: Tolls_18 Start: 9649, Stop: 14436, Start Num: 108
Candidate Starts for Tolls_18:
(Start: 108 @9649 has 16 MA's), (Start: 115 @9676 has 1 MA's), (140, 9754), (154, 9805), (173, 9892), (177, 9907), (186, 9964), (190, 9982), (194, 10009), (195, 10012), (207, 10081), (214, 10138), (224, 10183), (228, 10201), (238, 10246), (242, 10261), (248, 10282), (257, 10315), (268, 10363), (269, 10366), (276, 10414), (282, 10453), (284, 10468), (328, 10660), (332, 10678), (353, 10762), (384, 10909), (393, 10936), (404, 11029), (406, 11035), (410, 11050), (416, 11089), (418, 11101), (431, 11167), (450, 11239), (454, 11257), (455, 11260), (460, 11287), (509, 11533), (522, 11599), (533, 11644), (540, 11665), (541, 11668), (542, 11671), (557, 11707), (567, 11746), (569, 11752), (578, 11779), (614, 11908), (615, 11911), (620, 11929), (652, 12052), (655, 12067), (679, 12196), (686, 12217), (694, 12259), (701, 12286), (703, 12292), (738, 12424), (743, 12436), (764, 12523), (779, 12565), (793, 12601), (828, 12727), (836, 12766), (872, 12895), (882, 12952), (893, 12994), (918, 13087), (940, 13162), (953, 13225), (972, 13306), (978, 13327), (1012, 13504), (1014, 13510), (1065, 13729), (1079, 13807), (1085, 13825), (1090, 13831), (1108, 13891), (1111, 13909), (1118, 13942), (1130, 14014), (1141, 14053), (1149, 14083), (1165, 14149), (1170, 14197), (1180, 14257), (1200, 14347), (1213, 14407),

Gene: Tracker_39 Start: 23264, Stop: 28657, Start Num: 26
Candidate Starts for Tracker_39:
(Start: 26 @23264 has 50 MA's), (79, 23591), (84, 23612), (129, 23756), (149, 23801), (157, 23834), (180, 23954), (222, 24203), (232, 24260), (278, 24497), (281, 24527), (285, 24560), (305, 24680), (314, 24710), (337, 24800), (345, 24836), (355, 24884), (356, 24890), (361, 24914), (365, 24935), (366, 24944), (375, 24995), (378, 25025), (437, 25325), (449, 25367), (450, 25370), (462, 25430), (466, 25460), (506, 25598), (510, 25616), (516, 25643), (524, 25664), (526, 25670), (539, 25709), (540, 25712), (570, 25772), (575, 25784), (578, 25793), (591, 25844), (594, 25859), (625, 25964), (633, 25997), (636, 26009), (653, 26084), (671, 26171), (692, 26276), (694, 26288), (718, 26381), (722, 26405), (729, 26453), (733, 26468), (742, 26489), (746, 26513), (747, 26522), (750, 26531), (752, 26537), (758, 26573), (763, 26600), (791, 26693), (814, 26801), (826, 26852), (831, 26876), (839, 26903), (846, 26936), (853, 26969), (867, 27026), (873, 27053), (877, 27068), (885, 27125), (898, 27191), (919, 27275), (946, 27383), (948, 27386), (953, 27416), (1125, 28190), (1140, 28229), (1161, 28316), (1178, 28424), (1191, 28511), (1197, 28535), (1203, 28559), (1210, 28589), (1212, 28598),

Gene: Troje_16 Start: 9601, Stop: 14397, Start Num: 108
Candidate Starts for Troje_16:
(Start: 108 @9601 has 16 MA's), (Start: 115 @9628 has 1 MA's), (117, 9634), (154, 9757), (177, 9859), (184, 9904), (186, 9916), (190, 9934), (194, 9961), (195, 9964), (198, 9979), (206, 10030), (207, 10033), (214, 10090), (215, 10093), (224, 10135), (228, 10153), (238, 10198), (248, 10234), (257,

10267), (264, 10300), (265, 10312), (276, 10366), (282, 10405), (284, 10420), (286, 10429), (292, 10456), (300, 10507), (316, 10567), (319, 10576), (332, 10630), (349, 10693), (352, 10708), (384, 10861), (393, 10888), (401, 10969), (404, 10981), (406, 10987), (410, 11002), (416, 11041), (431, 11119), (439, 11152), (450, 11191), (454, 11209), (455, 11212), (460, 11239), (470, 11296), (473, 11317), (485, 11380), (498, 11428), (502, 11449), (509, 11485), (518, 11527), (522, 11551), (533, 11596), (534, 11599), (540, 11617), (541, 11620), (542, 11623), (567, 11698), (569, 11704), (578, 11731), (592, 11791), (613, 11857), (614, 11860), (615, 11863), (620, 11881), (646, 11980), (650, 11995), (651, 11998), (679, 12148), (686, 12169), (694, 12211), (701, 12238), (703, 12244), (743, 12388), (764, 12475), (779, 12517), (793, 12553), (813, 12628), (828, 12679), (836, 12718), (856, 12796), (872, 12847), (882, 12904), (918, 13042), (940, 13114), (972, 13258), (978, 13279), (1012, 13456), (1014, 13462), (1085, 13786), (1090, 13792), (1108, 13852), (1111, 13870), (1118, 13903), (1130, 13975), (1141, 14014), (1149, 14044), (1165, 14110), (1167, 14128), (1170, 14158), (1180, 14218), (1200, 14308), (1213, 14368),

Gene: Turuncu_43 Start: 24570, Stop: 29978, Start Num: 26
Candidate Starts for Turuncu_43:
(Start: 26 @24570 has 50 MA's), (57, 24762), (94, 24951), (106, 24987), (155, 25134), (182, 25269), (218, 25491), (222, 25509), (278, 25803), (281, 25833), (285, 25866), (314, 26016), (325, 26064), (334, 26097), (345, 26142), (355, 26190), (361, 26220), (366, 26250), (375, 26301), (378, 26331), (417, 26523), (426, 26574), (437, 26631), (449, 26673), (450, 26676), (485, 26826), (516, 26949), (526, 26976), (531, 26997), (563, 27057), (567, 27069), (571, 27081), (575, 27090), (585, 27129), (609, 27210), (611, 27216), (616, 27237), (621, 27252), (626, 27273), (636, 27315), (645, 27351), (692, 27582), (694, 27594), (718, 27687), (722, 27711), (729, 27759), (733, 27774), (746, 27819), (747, 27828), (750, 27837), (752, 27843), (791, 27999), (814, 28107), (815, 28110), (826, 28158), (831, 28182), (837, 28206), (839, 28209), (846, 28242), (853, 28275), (866, 28332), (867, 28335), (877, 28377), (885, 28434), (910, 28548), (914, 28566), (919, 28584), (921, 28599), (946, 28689), (959, 28746), (1049, 29124), (1078, 29301), (1140, 29550), (1176, 29739), (1191, 29832), (1203, 29880), (1209, 29907), (1212, 29919),

Gene: Typhonomachy_16 Start: 9629, Stop: 14767, Start Num: 30
Candidate Starts for Typhonomachy_16:
(Start: 23 @9605 has 5 MA's), (Start: 30 @9629 has 41 MA's), (34, 9656), (53, 9785), (63, 9860), (101, 10013), (102, 10016), (132, 10112), (137, 10121), (145, 10151), (148, 10157), (153, 10172), (154, 10175), (159, 10196), (174, 10268), (178, 10289), (190, 10355), (193, 10376), (210, 10493), (243, 10655), (251, 10694), (267, 10769), (290, 10928), (294, 10940), (297, 10967), (304, 11012), (307, 11024), (331, 11114), (336, 11132), (342, 11153), (347, 11183), (352, 11207), (355, 11219), (362, 11258), (368, 11291), (371, 11303), (388, 11393), (389, 11396), (394, 11420), (406, 11513), (410, 11528), (416, 11567), (427, 11621), (434, 11663), (446, 11705), (454, 11735), (455, 11738), (474, 11846), (475, 11849), (484, 11900), (502, 11975), (520, 12065), (522, 12077), (531, 12116), (533, 12122), (540, 12143), (541, 12146), (542, 12149), (567, 12224), (578, 12257), (583, 12278), (591, 12308), (605, 12356), (607, 12362), (615, 12389), (651, 12524), (675, 12641), (679, 12674), (686, 12695), (701, 12764), (703, 12770), (706, 12785), (740, 12905), (743, 12914), (764, 12998), (859, 13319), (913, 13538), (923, 13574), (978, 13787), (1033, 13979), (1047, 14027), (1056, 14048), (1085, 14156), (1108, 14222), (1111, 14240), (1130, 14345), (1139, 14375), (1141, 14384), (1149, 14414), (1165, 14480), (1170, 14528), (1180, 14588), (1199, 14675), (1213, 14738),

Gene: UmaThurman_17 Start: 10381, Stop: 15924, Start Num: 9
Candidate Starts for UmaThurman_17:
(Start: 9 @10381 has 39 MA's), (Start: 11 @10396 has 1 MA's), (Start: 12 @10402 has 1 MA's), (Start: 14 @10432 has 2 MA's), (15, 10441), (16, 10444), (19, 10486), (40, 10597), (43, 10618), (82, 10846), (86, 10864), (92, 10879), (93, 10885), (94, 10888), (98, 10906), (109, 10930), (135, 11014), (136, 11017), (148, 11056), (153, 11071), (155, 11080), (189, 11248), (193, 11275), (251, 11593), (285, 11797), (294, 11842), (295, 11848), (297, 11869), (299, 11881), (320, 11971), (331, 12016), (339,

12043), (345, 12073), (362, 12160), (363, 12163), (370, 12202), (394, 12322), (398, 12364), (404, 12409), (406, 12415), (410, 12430), (419, 12484), (427, 12523), (430, 12544), (431, 12547), (434, 12565), (437, 12574), (448, 12613), (450, 12619), (455, 12640), (460, 12667), (501, 12874), (528, 12940), (544, 12979), (554, 12994), (577, 13024), (578, 13027), (591, 13078), (614, 13159), (615, 13162), (624, 13195), (633, 13225), (638, 13249), (710, 13582), (722, 13630), (728, 13675), (729, 13678), (733, 13693), (746, 13738), (747, 13747), (748, 13756), (757, 13807), (776, 13879), (786, 13897), (791, 13918), (813, 14017), (814, 14020), (822, 14053), (839, 14119), (843, 14137), (847, 14152), (853, 14185), (867, 14236), (877, 14287), (884, 14335), (927, 14530), (928, 14533), (946, 14605), (948, 14608), (961, 14674), (962, 14677), (966, 14695), (985, 14755), (1001, 14812), (1003, 14830), (1021, 14911), (1022, 14914), (1026, 14929), (1062, 15088), (1075, 15142), (1088, 15208), (1104, 15262), (1106, 15274), (1108, 15280), (1130, 15403), (1138, 15427), (1142, 15445), (1149, 15469), (1151, 15475), (1157, 15496), (1165, 15535), (1185, 15676), (1187, 15688), (1199, 15739), (1202, 15757), (1227, 15907),

Gene: Utz_17 Start: 10248, Stop: 15791, Start Num: 9
Candidate Starts for Utz_17:
(Start: 9 @10248 has 39 MA's), (Start: 11 @10263 has 1 MA's), (Start: 12 @10269 has 1 MA's), (Start: 14 @10299 has 2 MA's), (15, 10308), (16, 10311), (19, 10353), (40, 10464), (43, 10485), (61, 10605), (68, 10647), (82, 10713), (86, 10731), (93, 10752), (94, 10755), (98, 10773), (109, 10797), (135, 10881), (136, 10884), (148, 10923), (153, 10938), (155, 10947), (189, 11115), (193, 11142), (210, 11259), (245, 11430), (251, 11460), (285, 11664), (294, 11709), (297, 11736), (299, 11748), (320, 11838), (339, 11910), (345, 11940), (362, 12027), (363, 12030), (370, 12069), (394, 12189), (398, 12231), (404, 12276), (406, 12282), (409, 12294), (410, 12297), (419, 12351), (427, 12390), (430, 12411), (431, 12414), (434, 12432), (448, 12480), (450, 12486), (455, 12507), (460, 12534), (528, 12807), (544, 12846), (554, 12861), (577, 12891), (578, 12894), (591, 12945), (614, 13026), (615, 13029), (624, 13062), (633, 13092), (638, 13116), (654, 13182), (710, 13449), (715, 13467), (722, 13497), (728, 13542), (729, 13545), (733, 13560), (735, 13569), (746, 13605), (747, 13614), (748, 13623), (757, 13674), (776, 13746), (786, 13764), (791, 13785), (813, 13884), (814, 13887), (822, 13920), (839, 13986), (843, 14004), (847, 14019), (853, 14052), (867, 14103), (877, 14154), (927, 14397), (928, 14400), (946, 14472), (948, 14475), (961, 14541), (962, 14544), (966, 14562), (985, 14622), (1001, 14679), (1003, 14697), (1021, 14778), (1022, 14781), (1026, 14796), (1075, 15009), (1088, 15075), (1106, 15141), (1108, 15147), (1130, 15270), (1138, 15294), (1142, 15312), (1149, 15336), (1151, 15342), (1157, 15363), (1165, 15402), (1185, 15543), (1199, 15606), (1202, 15624), (1209, 15651), (1215, 15681), (1227, 15774),

Gene: Vine_17 Start: 10381, Stop: 15480, Start Num: 30
Candidate Starts for Vine_17:
(Start: 30 @10381 has 41 MA's), (53, 10537), (77, 10666), (81, 10696), (101, 10765), (105, 10777), (117, 10813), (119, 10822), (132, 10864), (137, 10873), (148, 10909), (155, 10933), (168, 10993), (179, 11047), (185, 11086), (190, 11107), (193, 11128), (218, 11287), (220, 11299), (232, 11362), (243, 11407), (261, 11488), (285, 11647), (290, 11680), (294, 11692), (297, 11719), (307, 11776), (316, 11806), (319, 11818), (344, 11920), (345, 11923), (362, 12010), (371, 12055), (372, 12058), (394, 12172), (406, 12265), (410, 12280), (413, 12301), (419, 12334), (425, 12364), (428, 12376), (434, 12415), (441, 12439), (442, 12442), (449, 12466), (455, 12490), (473, 12595), (494, 12673), (501, 12703), (502, 12706), (509, 12742), (518, 12784), (522, 12808), (525, 12823), (529, 12838), (533, 12853), (541, 12877), (557, 12916), (560, 12931), (562, 12937), (568, 12958), (576, 12982), (578, 12988), (613, 13114), (622, 13144), (636, 13195), (645, 13231), (650, 13252), (651, 13255), (665, 13327), (675, 13372), (679, 13405), (686, 13426), (697, 13480), (717, 13555), (743, 13639), (764, 13726), (825, 13912), (859, 14044), (869, 14074), (899, 14212), (914, 14263), (923, 14293), (952, 14398), (965, 14449), (972, 14479), (1025, 14659), (1035, 14710), (1047, 14752), (1056, 14773), (1085, 14869), (1103, 14917), (1108, 14935), (1130, 15058), (1138, 15082), (1141, 15097), (1149, 15127), (1157, 15154), (1158, 15160), (1165, 15193), (1174, 15262), (1175, 15265), (1180, 15301), (1200, 15391),

Gene: Wallaby_20 Start: 10618, Stop: 15741, Start Num: 30
Candidate Starts for Wallaby_20:
(24, 10597), (Start: 30 @10618 has 41 MA's), (34, 10645), (53, 10774), (68, 10870), (78, 10921), (95, 10978), (104, 11011), (105, 11014), (132, 11101), (138, 11113), (153, 11161), (154, 11164), (155, 11170), (166, 11224), (168, 11230), (178, 11278), (190, 11344), (193, 11365), (267, 11758), (268, 11761), (282, 11863), (294, 11929), (295, 11935), (297, 11956), (345, 12160), (348, 12178), (350, 12184), (352, 12196), (355, 12208), (362, 12247), (365, 12259), (372, 12295), (379, 12352), (384, 12376), (406, 12502), (410, 12517), (416, 12556), (430, 12631), (438, 12664), (442, 12679), (443, 12685), (445, 12691), (455, 12727), (474, 12835), (487, 12907), (501, 12961), (533, 13111), (541, 13135), (562, 13195), (566, 13207), (567, 13213), (576, 13240), (577, 13243), (578, 13246), (603, 13339), (605, 13345), (620, 13396), (638, 13465), (647, 13498), (651, 13513), (652, 13519), (663, 13576), (667, 13588), (674, 13627), (675, 13630), (677, 13651), (679, 13663), (686, 13684), (688, 13687), (694, 13726), (697, 13738), (701, 13753), (740, 13894), (764, 13990), (790, 14056), (795, 14077), (798, 14083), (859, 14320), (869, 14350), (916, 14554), (923, 14575), (962, 14713), (972, 14761), (1044, 14992), (1047, 14998), (1085, 15127), (1108, 15193), (1118, 15244), (1130, 15316), (1141, 15355), (1149, 15385), (1158, 15418), (1165, 15451), (1175, 15523), (1186, 15595), (1199, 15649), (1201, 15655), (1213, 15712),

Gene: Walrus_18 Start: 10497, Stop: 16019, Start Num: 12
Candidate Starts for Walrus_18:
(Start: 9 @10476 has 39 MA's), (Start: 11 @10491 has 1 MA's), (Start: 12 @10497 has 1 MA's), (Start: 14 @10527 has 2 MA's), (15, 10536), (16, 10539), (19, 10581), (40, 10692), (43, 10713), (61, 10833), (82, 10941), (86, 10959), (94, 10983), (98, 11001), (109, 11025), (135, 11109), (137, 11115), (148, 11151), (153, 11166), (155, 11175), (159, 11190), (168, 11235), (172, 11256), (189, 11343), (193, 11370), (199, 11403), (210, 11487), (220, 11541), (228, 11583), (245, 11658), (251, 11688), (285, 11892), (294, 11937), (331, 12111), (339, 12138), (345, 12168), (362, 12255), (363, 12258), (370, 12297), (372, 12303), (379, 12360), (394, 12417), (398, 12459), (404, 12504), (406, 12510), (410, 12525), (419, 12579), (427, 12618), (430, 12639), (431, 12642), (434, 12660), (442, 12687), (448, 12708), (450, 12714), (455, 12735), (471, 12834), (528, 13035), (532, 13050), (544, 13074), (554, 13089), (577, 13119), (578, 13122), (591, 13173), (614, 13254), (615, 13257), (624, 13290), (633, 13320), (638, 13344), (654, 13410), (710, 13677), (722, 13725), (728, 13770), (729, 13773), (733, 13788), (741, 13806), (746, 13833), (747, 13842), (748, 13851), (757, 13902), (776, 13974), (786, 13992), (791, 14013), (813, 14112), (814, 14115), (822, 14148), (839, 14214), (843, 14232), (847, 14247), (853, 14280), (867, 14331), (877, 14382), (927, 14625), (928, 14628), (946, 14700), (948, 14703), (961, 14769), (962, 14772), (966, 14790), (985, 14850), (1001, 14907), (1003, 14925), (1021, 15006), (1022, 15009), (1026, 15024), (1062, 15183), (1075, 15237), (1088, 15303), (1089, 15309), (1106, 15369), (1108, 15375), (1130, 15498), (1138, 15522), (1142, 15540), (1149, 15564), (1151, 15570), (1157, 15591), (1165, 15630), (1185, 15771), (1187, 15783), (1199, 15834), (1202, 15852), (1225, 15981), (1227, 16002),

Gene: Whack_16 Start: 10349, Stop: 16249, Start Num: 1
Candidate Starts for Whack_16:
(Start: 1 @10349 has 1 MA's), (2, 10358), (3, 10397), (4, 10445), (45, 10874), (54, 10949), (56, 10955), (64, 11018), (65, 11021), (72, 11054), (81, 11102), (82, 11105), (110, 11192), (Start: 115 @11213 has 1 MA's), (120, 11231), (130, 11270), (143, 11306), (157, 11354), (163, 11384), (175, 11444), (197, 11567), (233, 11777), (239, 11819), (279, 12029), (288, 12083), (295, 12134), (308, 12215), (340, 12341), (343, 12359), (385, 12593), (400, 12674), (404, 12710), (406, 12716), (410, 12731), (418, 12782), (419, 12785), (429, 12836), (433, 12860), (434, 12866), (443, 12899), (452, 12926), (455, 12941), (463, 13004), (470, 13025), (482, 13088), (494, 13145), (516, 13247), (549, 13343), (574, 13400), (576, 13406), (577, 13409), (604, 13511), (610, 13529), (616, 13553), (675, 13802), (677, 13823), (691, 13880), (723, 14024), (732, 14081), (755, 14183), (760, 14207), (761, 14210), (778, 14270), (780, 14276), (794, 14324), (812, 14399), (829, 14498), (842, 14549), (844, 14555), (861,

14636), (862, 14645), (942, 14966), (947, 14990), (955, 15026), (964, 15065), (974, 15110), (994, 15170), (1004, 15212), (1009, 15242), (1010, 15245), (1051, 15416), (1052, 15419), (1056, 15446), (1090, 15578), (1094, 15593), (1097, 15599), (1099, 15608), (1110, 15656), (1165, 15905), (1175, 15977), (1186, 16052), (1196, 16097), (1204, 16127), (1206, 16136), (1213, 16172), (1217, 16187),

Gene: Wheezy_39 Start: 23469, Stop: 28862, Start Num: 26
Candidate Starts for Wheezy_39:
(Start: 26 @23469 has 50 MA's), (79, 23796), (84, 23817), (129, 23961), (149, 24006), (157, 24039), (180, 24159), (222, 24408), (232, 24465), (263, 24609), (278, 24702), (281, 24732), (285, 24765), (305, 24885), (314, 24915), (337, 25005), (345, 25041), (355, 25089), (356, 25095), (361, 25119), (365, 25140), (366, 25149), (375, 25200), (378, 25230), (437, 25530), (449, 25572), (450, 25575), (462, 25635), (466, 25665), (506, 25803), (510, 25821), (516, 25848), (524, 25869), (526, 25875), (539, 25914), (540, 25917), (570, 25977), (575, 25989), (578, 25998), (591, 26049), (594, 26064), (633, 26202), (636, 26214), (653, 26289), (671, 26376), (692, 26481), (694, 26493), (718, 26586), (722, 26610), (729, 26658), (733, 26673), (742, 26694), (746, 26718), (747, 26727), (750, 26736), (752, 26742), (758, 26778), (791, 26898), (814, 27006), (826, 27057), (831, 27081), (839, 27108), (846, 27141), (853, 27174), (867, 27231), (873, 27258), (877, 27273), (885, 27330), (898, 27396), (919, 27480), (946, 27588), (948, 27591), (953, 27621), (1125, 28395), (1140, 28434), (1161, 28521), (1178, 28629), (1191, 28716), (1197, 28740), (1203, 28764), (1210, 28794), (1212, 28803),

Gene: Whitney_19 Start: 10672, Stop: 16305, Start Num: 23
Candidate Starts for Whitney_19:
(Start: 23 @10672 has 5 MA's), (Start: 33 @10717 has 2 MA's), (35, 10738), (39, 10759), (47, 10804), (Start: 49 @10819 has 1 MA's), (62, 10903), (70, 10945), (74, 10957), (86, 11020), (92, 11035), (94, 11044), (98, 11062), (101, 11068), (117, 11116), (159, 11251), (188, 11401), (193, 11431), (228, 11650), (245, 11725), (251, 11755), (285, 11959), (294, 12004), (295, 12010), (297, 12031), (301, 12055), (315, 12112), (331, 12178), (339, 12205), (342, 12217), (345, 12235), (347, 12247), (352, 12271), (355, 12283), (362, 12322), (363, 12325), (365, 12334), (370, 12364), (376, 12409), (390, 12469), (394, 12484), (397, 12514), (398, 12526), (404, 12571), (406, 12577), (410, 12592), (414, 12622), (418, 12643), (419, 12646), (431, 12709), (437, 12736), (438, 12739), (439, 12742), (440, 12748), (447, 12772), (448, 12775), (450, 12781), (452, 12787), (455, 12802), (458, 12820), (463, 12865), (482, 12949), (483, 12955), (487, 12982), (509, 13075), (511, 13084), (522, 13141), (524, 13153), (534, 13189), (535, 13195), (552, 13237), (557, 13249), (567, 13288), (569, 13294), (570, 13297), (576, 13315), (577, 13318), (578, 13321), (584, 13345), (605, 13420), (616, 13459), (623, 13483), (630, 13516), (650, 13627), (654, 13660), (662, 13723), (670, 13759), (676, 13789), (692, 13867), (693, 13870), (694, 13879), (700, 13903), (722, 13990), (728, 14035), (729, 14038), (733, 14053), (746, 14098), (747, 14107), (748, 14116), (749, 14119), (773, 14224), (789, 14272), (791, 14278), (813, 14377), (814, 14380), (818, 14392), (847, 14509), (853, 14542), (867, 14593), (875, 14623), (883, 14683), (904, 14764), (907, 14785), (908, 14788), (915, 14818), (931, 14881), (934, 14890), (937, 14899), (962, 15013), (967, 15043), (979, 15091), (980, 15094), (991, 15124), (995, 15145), (1029, 15343), (1043, 15406), (1044, 15412), (1054, 15463), (1092, 15655), (1113, 15742), (1117, 15769), (1118, 15772), (1128, 15847), (1135, 15871), (1147, 15910), (1157, 15946), (1160, 15967), (1172, 16054), (1179, 16096), (1185, 16129), (1187, 16141), (1219, 16285),

Gene: WhoseManz_41 Start: 21176, Stop: 26575, Start Num: 26
Candidate Starts for WhoseManz_41:
(Start: 26 @21176 has 50 MA's), (46, 21287), (48, 21305), (51, 21335), (58, 21374), (80, 21509), (84, 21524), (125, 21662), (155, 21749), (157, 21755), (208, 22043), (218, 22106), (220, 22118), (222, 22124), (277, 22406), (285, 22481), (303, 22589), (314, 22631), (334, 22712), (345, 22757), (355, 22805), (361, 22835), (366, 22865), (375, 22916), (378, 22946), (414, 23126), (415, 23132), (417, 23138), (437, 23246), (450, 23291), (452, 23297), (492, 23462), (499, 23483), (510, 23537), (516, 23564), (524, 23585), (529, 23603), (539, 23630), (586, 23747), (589, 23759), (598, 23792), (600, 23798), (607, 23819), (612, 23834), (616, 23852), (623, 23876), (625, 23885), (644, 23963), (665,

24065), (677, 24131), (718, 24302), (729, 24374), (733, 24389), (746, 24434), (747, 24443), (750, 24452), (776, 24575), (791, 24614), (813, 24719), (814, 24722), (819, 24734), (837, 24815), (839, 24818), (846, 24851), (853, 24884), (866, 24941), (867, 24944), (877, 24986), (885, 25043), (887, 25055), (898, 25109), (904, 25124), (914, 25175), (919, 25193), (924, 25217), (933, 25253), (946, 25313), (948, 25316), (953, 25346), (958, 25367), (1007, 25577), (1032, 25688), (1140, 26147), (1150, 26189), (1191, 26429), (1207, 26489), (1210, 26507), (1212, 26516),

Gene: William_17 Start: 10217, Stop: 15835, Start Num: 9
Candidate Starts for William_17:
(Start: 8 @10181 has 1 MA's), (Start: 9 @10217 has 39 MA's), (Start: 12 @10238 has 1 MA's), (16, 10280), (19, 10322), (36, 10412), (38, 10421), (40, 10433), (43, 10454), (53, 10520), (62, 10583), (66, 10604), (76, 10646), (77, 10649), (80, 10676), (85, 10697), (86, 10700), (93, 10721), (98, 10742), (116, 10793), (117, 10796), (137, 10856), (180, 11039), (193, 11111), (223, 11297), (245, 11399), (247, 11414), (251, 11429), (263, 11486), (294, 11678), (318, 11798), (339, 11879), (345, 11909), (352, 11945), (362, 11996), (388, 12131), (389, 12134), (394, 12158), (400, 12209), (404, 12245), (406, 12251), (410, 12266), (419, 12320), (427, 12359), (431, 12383), (434, 12401), (448, 12449), (450, 12455), (454, 12473), (455, 12476), (457, 12491), (460, 12503), (467, 12551), (501, 12689), (518, 12770), (522, 12794), (524, 12806), (525, 12809), (534, 12842), (568, 12944), (576, 12971), (577, 12974), (578, 12977), (580, 12983), (593, 13040), (597, 13052), (605, 13076), (610, 13091), (614, 13106), (615, 13109), (622, 13133), (628, 13160), (650, 13241), (668, 13325), (689, 13430), (694, 13463), (710, 13529), (712, 13538), (722, 13577), (726, 13610), (728, 13622), (729, 13625), (733, 13640), (735, 13649), (746, 13685), (747, 13694), (748, 13703), (789, 13859), (790, 13862), (791, 13865), (796, 13886), (814, 13967), (824, 14009), (847, 14096), (853, 14129), (855, 14138), (867, 14180), (887, 14294), (946, 14543), (948, 14546), (953, 14576), (954, 14579), (960, 14603), (961, 14612), (962, 14615), (985, 14693), (1001, 14750), (1026, 14867), (1039, 14918), (1075, 15056), (1088, 15122), (1106, 15188), (1108, 15194), (1111, 15212), (1127, 15305), (1130, 15317), (1146, 15365), (1149, 15383), (1151, 15389), (1157, 15410), (1165, 15449), (1185, 15590), (1199, 15653), (1215, 15728), (1227, 15821),

Gene: Wisp_16 Start: 10014, Stop: 15509, Start Num: 9
Candidate Starts for Wisp_16:
(Start: 9 @10014 has 39 MA's), (Start: 11 @10029 has 1 MA's), (Start: 12 @10035 has 1 MA's), (Start: 14 @10065 has 2 MA's), (15, 10074), (16, 10077), (19, 10119), (40, 10230), (43, 10251), (61, 10371), (68, 10413), (77, 10446), (82, 10479), (86, 10497), (92, 10512), (93, 10518), (94, 10521), (98, 10539), (109, 10563), (135, 10647), (148, 10689), (153, 10704), (155, 10713), (189, 10881), (193, 10908), (210, 11025), (245, 11196), (251, 11226), (285, 11430), (294, 11475), (297, 11502), (299, 11514), (320, 11604), (331, 11649), (339, 11676), (345, 11706), (362, 11793), (363, 11796), (370, 11835), (379, 11898), (394, 11955), (398, 11997), (404, 12042), (406, 12048), (409, 12060), (410, 12063), (419, 12117), (427, 12156), (430, 12177), (431, 12180), (434, 12198), (442, 12225), (448, 12246), (450, 12252), (454, 12270), (455, 12273), (456, 12279), (460, 12300), (528, 12573), (538, 12600), (544, 12612), (554, 12627), (577, 12657), (578, 12660), (614, 12792), (615, 12795), (624, 12828), (633, 12858), (638, 12882), (654, 12948), (710, 13215), (722, 13263), (728, 13308), (729, 13311), (733, 13326), (746, 13371), (747, 13380), (748, 13389), (757, 13440), (776, 13512), (786, 13530), (791, 13551), (813, 13650), (814, 13653), (822, 13686), (839, 13752), (843, 13770), (847, 13785), (853, 13818), (867, 13869), (877, 13920), (927, 14163), (928, 14166), (946, 14238), (948, 14241), (961, 14307), (962, 14310), (966, 14328), (985, 14388), (1021, 14544), (1022, 14547), (1026, 14562), (1062, 14733), (1075, 14787), (1095, 14844), (1100, 14859), (1109, 14907), (1119, 14952), (1153, 15072), (1156, 15081), (1164, 15120), (1174, 15192), (1185, 15261), (1187, 15273), (1199, 15324), (1202, 15342), (1215, 15399), (1227, 15492),

Gene: Wocket_18 Start: 10497, Stop: 15983, Start Num: 9
Candidate Starts for Wocket_18:

(Start: 9 @10497 has 39 MA's), (Start: 11 @10512 has 1 MA's), (Start: 14 @10548 has 2 MA's), (15, 10557), (16, 10560), (19, 10602), (40, 10713), (43, 10734), (61, 10854), (82, 10962), (86, 10980), (93, 11001), (94, 11004), (98, 11022), (109, 11046), (117, 11076), (135, 11130), (137, 11136), (148, 11172), (153, 11187), (155, 11196), (189, 11364), (193, 11391), (220, 11562), (228, 11604), (245, 11679), (251, 11709), (285, 11913), (294, 11958), (295, 11964), (297, 11985), (299, 11997), (320, 12087), (331, 12132), (339, 12159), (345, 12189), (362, 12276), (370, 12318), (381, 12390), (394, 12438), (398, 12480), (404, 12525), (406, 12531), (410, 12546), (419, 12600), (427, 12639), (430, 12660), (431, 12663), (434, 12681), (442, 12708), (448, 12729), (450, 12735), (455, 12756), (460, 12783), (544, 13095), (554, 13110), (577, 13140), (578, 13143), (591, 13194), (614, 13275), (615, 13278), (624, 13311), (633, 13341), (638, 13365), (654, 13431), (710, 13698), (721, 13740), (722, 13746), (726, 13779), (728, 13791), (729, 13794), (733, 13809), (741, 13827), (746, 13854), (747, 13863), (748, 13872), (773, 13980), (789, 14028), (790, 14031), (791, 14034), (796, 14055), (814, 14136), (815, 14139), (847, 14265), (853, 14298), (866, 14346), (867, 14349), (871, 14364), (877, 14400), (928, 14646), (946, 14718), (948, 14721), (961, 14787), (962, 14790), (966, 14808), (985, 14868), (1021, 15024), (1026, 15042), (1062, 15207), (1075, 15261), (1095, 15318), (1100, 15333), (1109, 15381), (1119, 15426), (1153, 15546), (1156, 15555), (1164, 15594), (1174, 15666), (1185, 15735), (1199, 15798), (1202, 15816), (1210, 15846),

Gene: Wolfwood_18 Start: 10618, Stop: 15741, Start Num: 30
Candidate Starts for Wolfwood_18:
(24, 10597), (Start: 30 @10618 has 41 MA's), (34, 10645), (53, 10774), (68, 10870), (78, 10921), (95, 10978), (104, 11011), (105, 11014), (132, 11101), (138, 11113), (153, 11161), (154, 11164), (155, 11170), (156, 11173), (166, 11224), (168, 11230), (178, 11278), (190, 11344), (193, 11365), (267, 11758), (268, 11761), (282, 11863), (291, 11920), (293, 11926), (294, 11929), (295, 11935), (297, 11956), (320, 12058), (326, 12085), (345, 12160), (348, 12178), (352, 12196), (355, 12208), (362, 12247), (372, 12295), (379, 12352), (384, 12376), (388, 12382), (406, 12502), (410, 12517), (416, 12556), (430, 12631), (438, 12664), (442, 12679), (443, 12685), (445, 12691), (455, 12727), (474, 12835), (487, 12907), (501, 12961), (522, 13066), (533, 13111), (541, 13135), (562, 13195), (566, 13207), (567, 13213), (576, 13240), (577, 13243), (578, 13246), (603, 13339), (605, 13345), (620, 13396), (638, 13465), (647, 13498), (651, 13513), (652, 13519), (663, 13576), (667, 13588), (674, 13627), (675, 13630), (677, 13651), (679, 13663), (686, 13684), (688, 13687), (694, 13726), (697, 13738), (701, 13753), (740, 13894), (764, 13990), (790, 14056), (795, 14077), (798, 14083), (859, 14320), (869, 14350), (909, 14524), (916, 14554), (923, 14575), (962, 14713), (972, 14761), (1044, 14992), (1047, 14998), (1085, 15127), (1108, 15193), (1118, 15244), (1130, 15316), (1141, 15355), (1149, 15385), (1158, 15418), (1165, 15451), (1186, 15595), (1199, 15649), (1201, 15655), (1213, 15712),

Gene: Yarn_15 Start: 9639, Stop: 14426, Start Num: 108
Candidate Starts for Yarn_15:
(Start: 108 @9639 has 16 MA's), (Start: 115 @9666 has 1 MA's), (140, 9744), (154, 9795), (173, 9882), (177, 9897), (186, 9954), (190, 9972), (194, 9999), (195, 10002), (207, 10071), (214, 10128), (224, 10173), (228, 10191), (238, 10236), (248, 10272), (257, 10305), (268, 10353), (269, 10356), (276, 10404), (282, 10443), (284, 10458), (328, 10650), (332, 10668), (353, 10752), (384, 10899), (393, 10926), (404, 11019), (406, 11025), (410, 11040), (416, 11079), (418, 11091), (431, 11157), (450, 11229), (454, 11247), (455, 11250), (460, 11277), (509, 11523), (522, 11589), (533, 11634), (540, 11655), (541, 11658), (542, 11661), (557, 11697), (567, 11736), (569, 11742), (578, 11769), (614, 11898), (615, 11901), (620, 11919), (652, 12042), (655, 12057), (679, 12186), (686, 12207), (694, 12249), (701, 12276), (703, 12282), (738, 12414), (743, 12426), (764, 12513), (779, 12555), (793, 12591), (828, 12717), (836, 12756), (872, 12885), (882, 12942), (893, 12984), (918, 13077), (940, 13152), (953, 13215), (972, 13296), (978, 13317), (1012, 13494), (1014, 13500), (1065, 13719), (1079, 13797), (1085, 13815), (1090, 13821), (1108, 13881), (1111, 13899), (1118, 13932), (1130, 14004), (1141, 14043), (1149, 14073), (1165, 14139), (1170, 14187), (1180, 14247), (1200, 14337), (1213, 14397),

Gene: Yndexa_41 Start: 23124, Stop: 28529, Start Num: 26
Candidate Starts for Yndexa_41:
(Start: 26 @23124 has 50 MA's), (46, 23235), (48, 23253), (51, 23283), (58, 23322), (80, 23457), (84, 23472), (125, 23610), (149, 23670), (155, 23697), (157, 23703), (202, 23949), (208, 23991), (218, 24054), (220, 24066), (222, 24072), (277, 24354), (285, 24429), (303, 24537), (314, 24579), (334, 24660), (345, 24705), (355, 24753), (361, 24783), (366, 24813), (375, 24864), (378, 24894), (414, 25074), (415, 25080), (417, 25086), (437, 25194), (450, 25239), (452, 25245), (468, 25335), (492, 25410), (510, 25485), (516, 25512), (524, 25533), (529, 25551), (539, 25578), (586, 25695), (589, 25707), (598, 25740), (600, 25746), (607, 25767), (612, 25782), (616, 25800), (623, 25824), (625, 25833), (644, 25911), (652, 25944), (665, 26013), (677, 26079), (718, 26250), (729, 26322), (733, 26337), (746, 26382), (747, 26391), (750, 26400), (776, 26523), (791, 26562), (800, 26598), (814, 26670), (815, 26673), (826, 26721), (831, 26745), (837, 26769), (839, 26772), (846, 26805), (853, 26838), (866, 26895), (867, 26898), (877, 26940), (885, 26997), (887, 27009), (898, 27063), (904, 27078), (914, 27129), (919, 27147), (924, 27171), (933, 27207), (946, 27267), (948, 27270), (953, 27300), (958, 27321), (1007, 27531), (1032, 27642), (1140, 28101), (1150, 28143), (1191, 28383), (1207, 28443), (1210, 28461), (1212, 28470),

Gene: Yucky_16 Start: 10241, Stop: 15340, Start Num: 30
Candidate Starts for Yucky_16:
(Start: 30 @10241 has 41 MA's), (53, 10397), (81, 10556), (101, 10625), (117, 10673), (132, 10724), (137, 10733), (148, 10769), (155, 10793), (168, 10853), (179, 10907), (185, 10946), (187, 10952), (190, 10967), (193, 10988), (218, 11147), (220, 11159), (232, 11222), (243, 11267), (261, 11348), (285, 11507), (290, 11540), (294, 11552), (297, 11579), (307, 11636), (316, 11666), (319, 11678), (344, 11780), (345, 11783), (362, 11870), (371, 11915), (372, 11918), (394, 12032), (406, 12125), (410, 12140), (413, 12161), (419, 12194), (425, 12224), (428, 12236), (434, 12275), (441, 12299), (442, 12302), (449, 12326), (455, 12350), (473, 12455), (486, 12503), (494, 12533), (499, 12548), (501, 12563), (509, 12602), (518, 12644), (522, 12668), (525, 12683), (529, 12698), (533, 12713), (541, 12737), (557, 12776), (560, 12791), (562, 12797), (568, 12818), (576, 12842), (578, 12848), (613, 12974), (622, 13004), (632, 13040), (633, 13043), (645, 13091), (650, 13112), (651, 13115), (665, 13187), (675, 13232), (679, 13265), (686, 13286), (697, 13340), (717, 13415), (743, 13499), (764, 13586), (825, 13772), (859, 13904), (869, 13934), (899, 14072), (914, 14123), (923, 14153), (952, 14258), (965, 14309), (972, 14339), (1025, 14519), (1035, 14570), (1047, 14612), (1056, 14633), (1085, 14729), (1103, 14777), (1108, 14795), (1130, 14918), (1138, 14942), (1141, 14957), (1149, 14987), (1157, 15014), (1158, 15020), (1165, 15053), (1174, 15122), (1175, 15125), (1180, 15161), (1200, 15251),

Gene: Yummy_17 Start: 9515, Stop: 14311, Start Num: 108
Candidate Starts for Yummy_17:
(Start: 108 @9515 has 16 MA's), (Start: 115 @9542 has 1 MA's), (117, 9548), (154, 9671), (177, 9773), (184, 9818), (186, 9830), (190, 9848), (194, 9875), (195, 9878), (198, 9893), (206, 9944), (207, 9947), (214, 10004), (215, 10007), (216, 10010), (224, 10049), (228, 10067), (238, 10112), (248, 10148), (257, 10181), (264, 10214), (265, 10226), (276, 10280), (282, 10319), (284, 10334), (286, 10343), (292, 10370), (300, 10421), (316, 10481), (319, 10490), (332, 10544), (349, 10607), (352, 10622), (365, 10685), (384, 10775), (393, 10802), (404, 10895), (406, 10901), (410, 10916), (416, 10955), (431, 11033), (439, 11066), (450, 11105), (454, 11123), (455, 11126), (460, 11153), (470, 11210), (473, 11231), (498, 11342), (502, 11363), (509, 11399), (518, 11441), (520, 11453), (522, 11465), (533, 11510), (534, 11513), (540, 11531), (541, 11534), (542, 11537), (567, 11612), (578, 11645), (592, 11705), (613, 11771), (614, 11774), (615, 11777), (620, 11795), (646, 11894), (650, 11909), (651, 11912), (679, 12062), (686, 12083), (694, 12125), (701, 12152), (703, 12158), (738, 12290), (743, 12302), (764, 12389), (779, 12431), (793, 12467), (803, 12503), (813, 12542), (828, 12593), (836, 12632), (856, 12710), (872, 12761), (882, 12818), (918, 12956), (940, 13028), (972, 13172), (978, 13193), (1012, 13370), (1014, 13376), (1085, 13700), (1090, 13706), (1108, 13766), (1111,

13784), (1118, 13817), (1130, 13889), (1141, 13928), (1149, 13958), (1165, 14024), (1167, 14042), (1170, 14072), (1180, 14132), (1200, 14222), (1213, 14282),

Gene: ZAYM_17 Start: 10932, Stop: 16055, Start Num: 27
Candidate Starts for ZAYM_17:
(Start: 27 @10932 has 14 MA's), (29, 10938), (74, 11211), (76, 11220), (83, 11259), (98, 11316), (119, 11379), (151, 11472), (155, 11490), (185, 11643), (193, 11685), (207, 11772), (243, 11964), (244, 11967), (251, 12003), (262, 12051), (285, 12204), (290, 12237), (293, 12246), (295, 12255), (299, 12288), (301, 12300), (305, 12324), (318, 12369), (320, 12378), (339, 12450), (342, 12462), (345, 12480), (375, 12639), (377, 12663), (379, 12672), (380, 12675), (404, 12816), (405, 12819), (406, 12822), (410, 12837), (419, 12891), (427, 12930), (450, 13026), (455, 13047), (457, 13062), (460, 13074), (471, 13146), (511, 13308), (550, 13365), (564, 13377), (565, 13380), (578, 13413), (603, 13506), (605, 13512), (607, 13518), (613, 13539), (614, 13542), (615, 13545), (621, 13566), (628, 13596), (642, 13644), (643, 13650), (646, 13659), (652, 13683), (655, 13698), (656, 13701), (657, 13707), (667, 13752), (669, 13761), (689, 13860), (696, 13902), (704, 13935), (718, 13980), (722, 14004), (730, 14049), (739, 14067), (771, 14205), (777, 14226), (787, 14244), (788, 14247), (790, 14256), (854, 14487), (858, 14505), (865, 14529), (899, 14673), (906, 14697), (917, 14748), (957, 14892), (961, 14910), (970, 14949), (981, 14988), (983, 14994), (987, 15003), (997, 15045), (1008, 15123), (1016, 15162), (1050, 15297), (1074, 15390), (1075, 15393), (1095, 15450), (1098, 15459), (1102, 15471), (1106, 15492), (1156, 15705), (1165, 15744), (1175, 15813), (1184, 15867), (1216, 16017),

Gene: Zarbodnamra_17 Start: 10273, Stop: 15795, Start Num: 9
Candidate Starts for Zarbodnamra_17:
(Start: 9 @10273 has 39 MA's), (Start: 11 @10288 has 1 MA's), (Start: 12 @10294 has 1 MA's), (Start: 14 @10324 has 2 MA's), (15, 10333), (16, 10336), (19, 10378), (40, 10489), (43, 10510), (82, 10738), (86, 10756), (92, 10771), (93, 10777), (94, 10780), (98, 10798), (109, 10822), (135, 10906), (136, 10909), (148, 10948), (153, 10963), (155, 10972), (189, 11140), (193, 11167), (245, 11455), (251, 11485), (285, 11689), (294, 11734), (297, 11761), (299, 11773), (320, 11863), (331, 11908), (339, 11935), (345, 11965), (362, 12052), (363, 12055), (370, 12094), (383, 12178), (394, 12214), (398, 12256), (404, 12301), (406, 12307), (409, 12319), (410, 12322), (419, 12376), (427, 12415), (430, 12436), (431, 12439), (434, 12457), (437, 12466), (442, 12484), (448, 12505), (450, 12511), (455, 12532), (460, 12559), (473, 12637), (532, 12826), (544, 12850), (552, 12862), (554, 12865), (572, 12880), (577, 12895), (578, 12898), (591, 12949), (614, 13030), (615, 13033), (624, 13066), (633, 13096), (638, 13120), (710, 13453), (722, 13501), (728, 13546), (729, 13549), (733, 13564), (746, 13609), (747, 13618), (748, 13627), (757, 13678), (776, 13750), (786, 13768), (791, 13789), (813, 13888), (814, 13891), (822, 13924), (839, 13990), (843, 14008), (847, 14023), (853, 14056), (867, 14107), (877, 14158), (927, 14401), (928, 14404), (946, 14476), (948, 14479), (961, 14545), (962, 14548), (966, 14566), (985, 14626), (1001, 14683), (1003, 14701), (1021, 14782), (1022, 14785), (1026, 14800), (1062, 14959), (1075, 15013), (1088, 15079), (1089, 15085), (1106, 15145), (1108, 15151), (1130, 15274), (1138, 15298), (1142, 15316), (1149, 15340), (1151, 15346), (1157, 15367), (1165, 15406), (1185, 15547), (1187, 15559), (1199, 15610), (1202, 15628), (1227, 15778),

Gene: Zareef_18 Start: 10620, Stop: 15749, Start Num: 30
Candidate Starts for Zareef_18:
(24, 10599), (Start: 30 @10620 has 41 MA's), (34, 10647), (53, 10776), (68, 10872), (78, 10923), (95, 10980), (104, 11013), (105, 11016), (132, 11103), (138, 11115), (153, 11163), (154, 11166), (155, 11172), (156, 11175), (166, 11226), (168, 11232), (178, 11280), (190, 11346), (193, 11367), (267, 11760), (268, 11763), (282, 11865), (291, 11922), (293, 11928), (294, 11931), (295, 11937), (297, 11958), (320, 12060), (326, 12087), (345, 12162), (348, 12180), (352, 12198), (355, 12210), (362, 12249), (372, 12297), (379, 12354), (384, 12378), (388, 12384), (406, 12504), (410, 12519), (416, 12558), (430, 12633), (438, 12666), (442, 12681), (443, 12687), (445, 12693), (455, 12729), (474, 12837), (487, 12909), (501, 12963), (522, 13068), (533, 13113), (541, 13137), (554, 13167), (562,

13197), (566, 13209), (567, 13215), (576, 13242), (578, 13248), (603, 13341), (605, 13347), (620, 13398), (638, 13467), (647, 13500), (651, 13515), (652, 13521), (663, 13578), (675, 13632), (677, 13653), (679, 13665), (686, 13686), (688, 13689), (701, 13755), (740, 13896), (764, 13992), (774, 14025), (790, 14058), (795, 14079), (798, 14085), (859, 14322), (869, 14352), (909, 14526), (916, 14556), (923, 14577), (972, 14769), (975, 14778), (1008, 14859), (1044, 15000), (1047, 15006), (1085, 15135), (1108, 15201), (1118, 15252), (1130, 15324), (1141, 15363), (1142, 15366), (1149, 15393), (1158, 15426), (1165, 15459), (1175, 15531), (1186, 15603), (1199, 15657), (1201, 15663), (1213, 15720),

Gene: ZiggyZoo_16 Start: 10043, Stop: 15586, Start Num: 9
Candidate Starts for ZiggyZoo_16:
(Start: 9 @10043 has 39 MA's), (Start: 11 @10058 has 1 MA's), (Start: 12 @10064 has 1 MA's), (Start: 14 @10094 has 2 MA's), (15, 10103), (16, 10106), (19, 10148), (40, 10259), (43, 10280), (82, 10508), (86, 10526), (92, 10541), (93, 10547), (94, 10550), (98, 10568), (109, 10592), (135, 10676), (137, 10682), (148, 10718), (153, 10733), (155, 10742), (189, 10910), (193, 10937), (210, 11054), (220, 11108), (245, 11225), (251, 11255), (285, 11459), (294, 11504), (297, 11531), (299, 11543), (320, 11633), (331, 11678), (339, 11705), (345, 11735), (362, 11822), (363, 11825), (370, 11864), (394, 11984), (398, 12026), (404, 12071), (406, 12077), (409, 12089), (410, 12092), (419, 12146), (427, 12185), (430, 12206), (431, 12209), (434, 12227), (442, 12254), (448, 12275), (450, 12281), (455, 12302), (460, 12329), (471, 12401), (501, 12536), (532, 12617), (544, 12641), (554, 12656), (577, 12686), (578, 12689), (591, 12740), (614, 12821), (615, 12824), (624, 12857), (633, 12887), (638, 12911), (654, 12977), (710, 13244), (715, 13262), (722, 13292), (728, 13337), (729, 13340), (733, 13355), (735, 13364), (746, 13400), (747, 13409), (748, 13418), (757, 13469), (776, 13541), (786, 13559), (791, 13580), (813, 13679), (814, 13682), (822, 13715), (839, 13781), (843, 13799), (847, 13814), (853, 13847), (867, 13898), (877, 13949), (927, 14192), (928, 14195), (946, 14267), (948, 14270), (961, 14336), (962, 14339), (966, 14357), (985, 14417), (1001, 14474), (1003, 14492), (1021, 14573), (1022, 14576), (1026, 14591), (1062, 14750), (1075, 14804), (1088, 14870), (1089, 14876), (1106, 14936), (1108, 14942), (1118, 14993), (1130, 15065), (1138, 15089), (1142, 15107), (1149, 15131), (1151, 15137), (1157, 15158), (1165, 15197), (1185, 15338), (1187, 15350), (1199, 15401), (1202, 15419), (1227, 15569),

Gene: Zilla_17 Start: 10324, Stop: 15813, Start Num: 9
Candidate Starts for Zilla_17:
(Start: 9 @10324 has 39 MA's), (Start: 11 @10339 has 1 MA's), (Start: 12 @10345 has 1 MA's), (Start: 14 @10375 has 2 MA's), (15, 10384), (16, 10387), (19, 10429), (40, 10540), (43, 10561), (61, 10681), (68, 10723), (82, 10789), (86, 10807), (93, 10828), (94, 10831), (98, 10849), (109, 10873), (135, 10957), (148, 10999), (153, 11014), (155, 11023), (189, 11191), (193, 11218), (210, 11335), (245, 11506), (251, 11536), (285, 11740), (294, 11785), (297, 11812), (299, 11824), (301, 11836), (320, 11914), (331, 11959), (339, 11986), (345, 12016), (362, 12103), (363, 12106), (370, 12145), (394, 12265), (398, 12307), (406, 12358), (410, 12373), (419, 12427), (427, 12466), (430, 12487), (431, 12490), (434, 12508), (442, 12535), (448, 12556), (450, 12562), (455, 12583), (458, 12601), (460, 12610), (528, 12883), (554, 12937), (577, 12967), (578, 12970), (591, 13021), (614, 13102), (615, 13105), (624, 13138), (633, 13168), (638, 13192), (654, 13258), (710, 13525), (722, 13573), (726, 13606), (728, 13618), (729, 13621), (746, 13681), (747, 13690), (748, 13699), (757, 13750), (776, 13822), (786, 13840), (791, 13861), (813, 13960), (814, 13963), (822, 13996), (839, 14062), (843, 14080), (847, 14095), (853, 14128), (867, 14179), (877, 14230), (887, 14299), (927, 14473), (928, 14476), (946, 14548), (948, 14551), (961, 14617), (962, 14620), (966, 14638), (985, 14698), (1001, 14755), (1003, 14773), (1021, 14854), (1022, 14857), (1026, 14872), (1062, 15043), (1075, 15097), (1100, 15169), (1103, 15178), (1109, 15214), (1122, 15274), (1126, 15292), (1131, 15310), (1147, 15355), (1156, 15388), (1174, 15499), (1185, 15568), (1199, 15631), (1202, 15649), (1227, 15799),