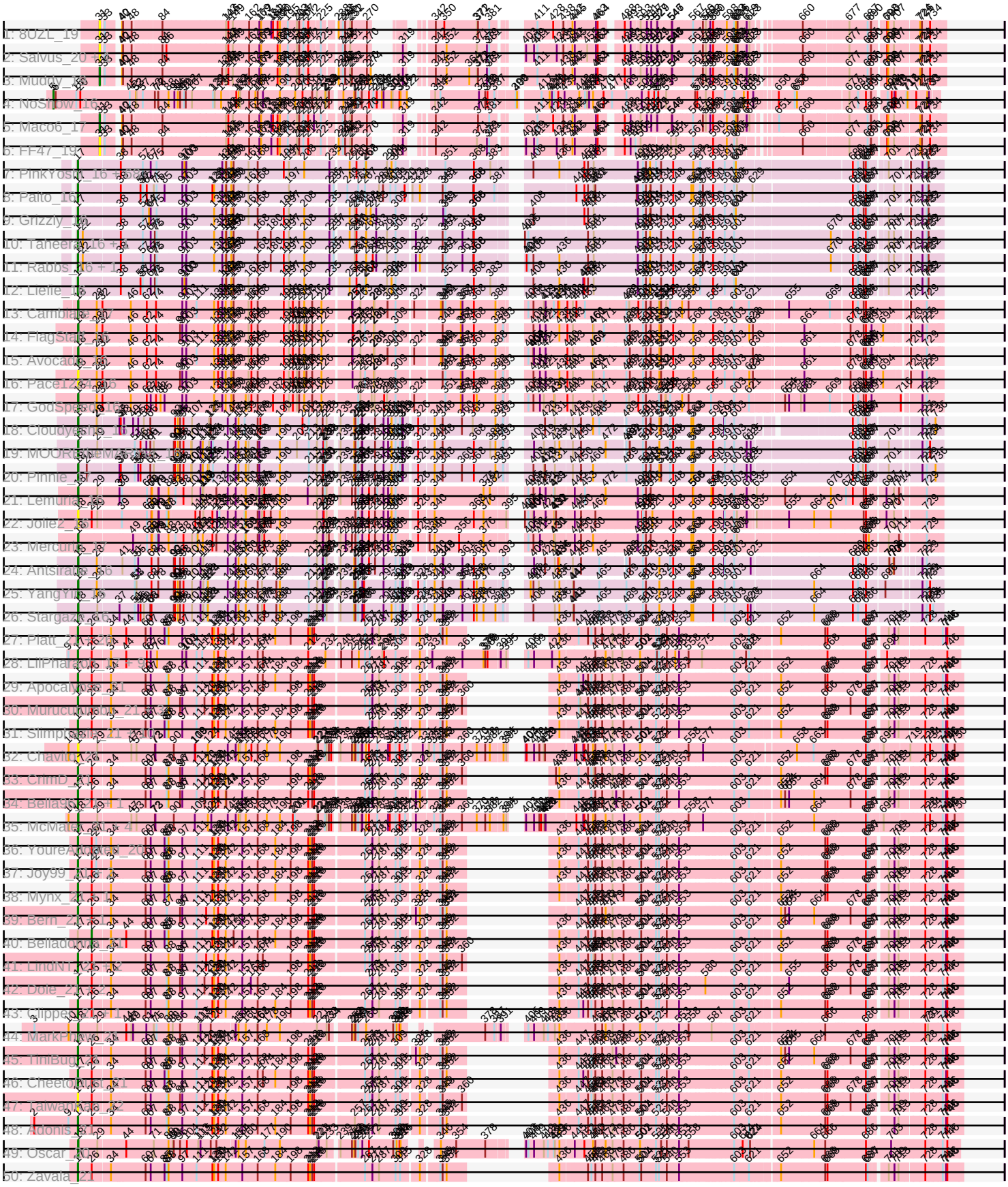
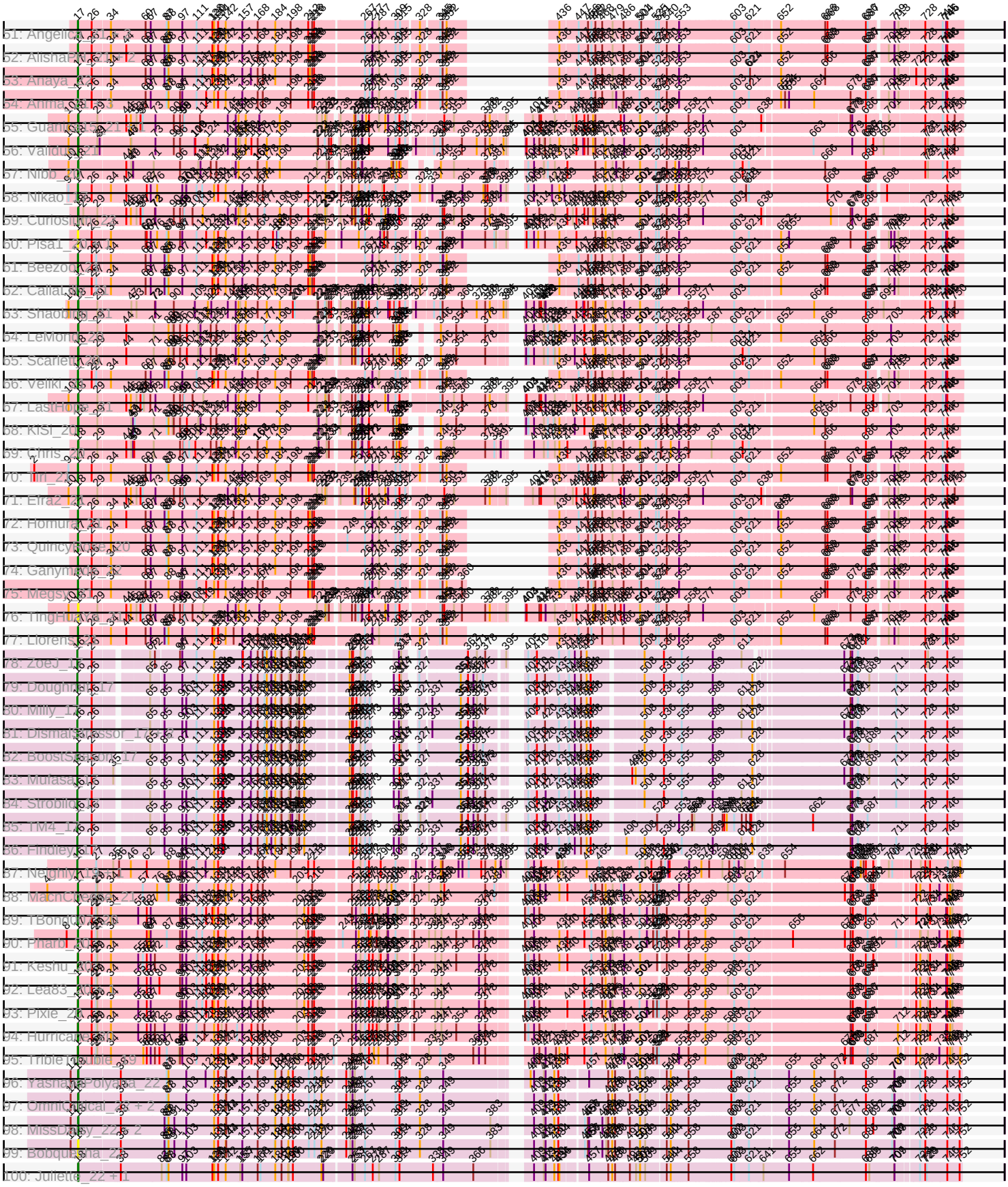
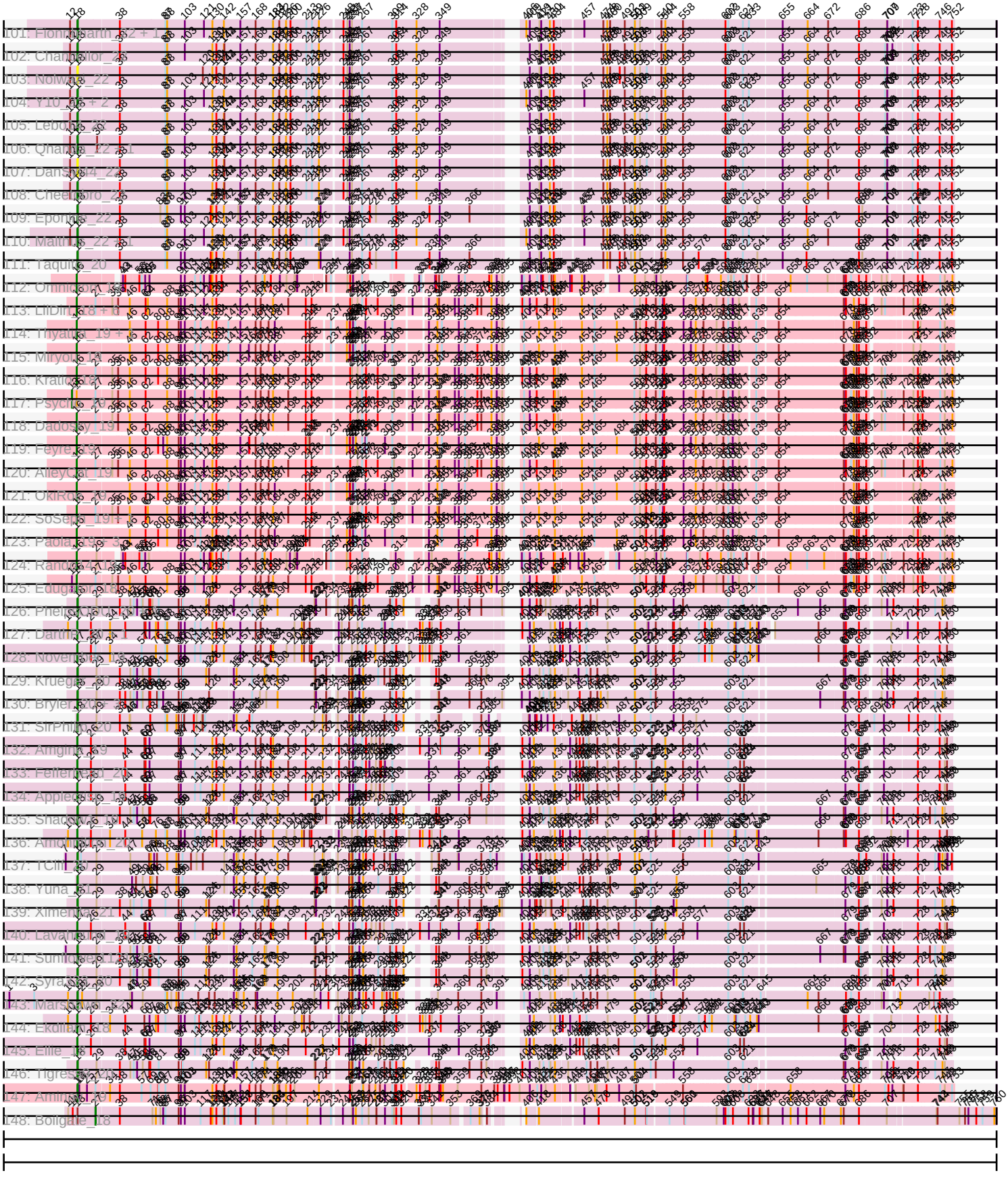
Pham 347153



Pham 347153



Pham 347153



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 347153 Report

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

Pham number 347153 has 320 members, 25 are drafts.

Phages represented in each track:
- Track 1 : 8UZL_19
- Track 2 : Salvus_20, LongHai_20
- Track 3 : Muddy_19
- Track 4 : NoShow_16
- Track 5 : Maco6_17
- Track 6 : FF47_19
- Track 7 : PinkYoshi_16, Darionha_16, CLED96_16, Frosty24_16, ShaboiShabazz_16, Crespo_16, Jeilious_16, ForeverHowLong_16, DingDing_16, LouisV14_16, Jolene_16, Rattrick_16, AizenPogi_16, BQuat_16, Jane_16, Zombie_16, TomBrady_16, Terralys_16, CassieYates_16, Camri_16, Angel_16, Halo_16, OctaviousRex_16, DMoney_16, ECartman_16, Barkley26_16, Kasen3_16, Richarlison_16, Wendigo_16, Remy19_16, Gomashi_16, BPs_16, ZoMa_16, Gideon_16, Peeb_16, Jonghyun_16, JorRay_16, Sweets_16, Phloodle_16, Neoh_16, Cherrybomb426_16, Sizemore_16, Plagueis_16, Phreak_16, Olga_16, Aroostook_16, Ruriko_16, Phish_16, Hope_16, MZKinsey_16, Coleslaw_16, DNAIII_0016, Mowgli_16, Schiebel_16, Avrafan_16, Chance64_16, Hotshotbaby7_16, BruceB_16, TinaBug_16, Marmie_16, Cedasite_16, Maliketh_16, Renaissance_16, GoldenAsh_16, Annihilator_16, Periodt_16, Kareem_16, AzulaCat_16, Primanti_16
- Track 8 : Paito_16
- Track 9 : Grizzly_16
- Track 10 : Taheera_16, Terror_16
- Track 11 : Rabbs_16, Sneeze_16
- Track 12 : Liefie_16
- Track 13 : Cambiare_17
- Track 14 : FlagStaff_16
- Track 15 : Avocado_16
- Track 16 : Pace1224_16
- Track 17 : GodSpeed_16
- Track 18 : Cloudyecho_16
- Track 19 : MOOREtheMARYer_16
- Track 20 : Pinnie_17
- Track 21 : Lemuria_16
- Track 22 : Jolie2_16
- Track 23 : Mercurio_17
- Track 24 : Antsirabe_16
- Track 25 : YangYin_16

• Track 26 : Stargaze_16
• Track 27 : Piatt_21, Durfee_21, BaghaKamala_21, Boiiii_21, Peel_21, Dalmuri_21, Blizzard_21, Topper_21, Inky_21, JAWS_21, Asayake_21, BGlluviae_21, Capricorn_21, Jeckyll_21, CREW_21, Padfoot_21, Rosmarinus_21, Twitch_21, Lokum_21, BEEST_21, BarrelRoll_21, Hyperbowlee_21, Jarvi_21, Spock_21, ShiaSurprise_21, Lunahalos_21, CaseJules_21
• Track 28 : LilPharaoh_17, Mdavu_17, Nutello_17, Amelie_17, Teejan_17, SgtBeansprout_17, Enkosi_17, Trice_17, Torres_17, Biglebops_17
• Track 29 : Apocalypse_21
• Track 30 : Murucutumbu_21, Ageofdapage_21, Stinson_21, LaterM_21
• Track 31 : Slimphazie_21, Jayhawk_21, HedwigODU_21, Adephagia_21, ActinUp_21, Tachez_21, Zabiza_21, Atiba_21, Ramen_21, TruffulaTree_21, Rapunzel97_21
• Track 32 : Chavito_21
• Track 33 : CrimD_21
• Track 34 : Bella96_21, DartGoblin_21
• Track 35 : McMater_21, Niklas_21, Dartin_21, Richo_21, Peanam_21
• Track 36 : YoureAdopted_20
• Track 37 : Joy99_21, Geraldini_21, MeaningOfLife_21
• Track 38 : Mynx_21, Pokerus_20
• Track 39 : Bern_21, Kheparia_23
• Track 40 : Belladonna_21
• Track 41 : LindNT_21, TreyKay_21, Prithvi_21
• Track 42 : Dole_21, Illumine_21, Devera_21
• Track 43 : Clipper_21, MacKat_21
• Track 44 : MarkPhew_21
• Track 45 : TiniBug_21
• Track 46 : CheetoDust_21
• Track 47 : TaiwanKao_22
• Track 48 : Adonis_21
• Track 49 : Oscar_20
• Track 50 : Zavala_21
• Track 51 : Angelica_21, Deby_21, Sulley_21
• Track 52 : AlishaPH_21, Emerson_21, Padpat_21
• Track 53 : Anaya_22
• Track 54 : Anma_21, SamuelLPlaqson_21, DrHayes_21, Urkel_21
• Track 55 : Guanica15_21, Yunkel11_21
• Track 56 : Validus_21
• Track 57 : Nibb_20
• Track 58 : Nikao_17
• Track 59 : Curiosium_22
• Track 60 : Pisa1_20, Pisa4_20
• Track 61 : Beezoo_21
• Track 62 : CallaLilly_21
• Track 63 : Shaobing_21
• Track 64 : LeMond_20
• Track 65 : Scarlett_20
• Track 66 : Veliki_21
• Track 67 : LastHope_21
• Track 68 : KiSi_20
• Track 69 : Chris_20
• Track 70 : Tiri_21
• Track 71 : Efra2_21

• Track 72 : Homura_21
• Track 73 : QuincyRose_20
• Track 74 : Ganymede_22
• Track 75 : Megsy_21
• Track 76 : TingHuaYa_21
• Track 77 : Llorens_21
• Track 78 : ZoeJ_17
• Track 79 : Doughnut_17
• Track 80 : Milly_17
• Track 81 : DismalStressor_17, DismalFunk_17, Marcoliusprime_17
• Track 82 : BoostSeason_17
• Track 83 : Mufasa_17
• Track 84 : Strobilo_17
• Track 85 : TM4_17
• Track 86 : Findley_17
• Track 87 : Neighly_19, Larva_19
• Track 88 : MacnCheese_21
• Track 89 : TBond007_20
• Track 90 : Pharb_20
• Track 91 : Keshu_20
• Track 92 : Lea83_20, ShedlockHolmes_20
• Track 93 : Pixie_20
• Track 94 : Hurricane_20
• Track 95 : TribleTrouble_19
• Track 96 : YasnayaPolyana_22
• Track 97 : OmniCritical_22, Mitti_22, SamScheppers_20
• Track 98 : MissDaisy_22, Patt_22, Reptar3000_22
• Track 99 : Bobquesha_22
• Track 100 : Juliette_22, Ruthiejr_21
• Track 101 : Fionnbharth_22, Wintermute_22
• Track 102 : Chancellor_22
• Track 103 : Nolwazi_22
• Track 104 : Y10_22, JF1_22, Y2_22
• Track 105 : Lebo14_22
• Track 106 : Qhanda_22, Slarp_22
• Track 107 : DanSyl44_22
• Track 108 : Cheetobro_22
• Track 109 : Eponine_22
• Track 110 : Malthus_22, Kraw_22
• Track 111 : Taquito_20
• Track 112 : Omnicron_19
• Track 113 : LilDirt_18, Collard_19, InvictusManeo_19, ViviJ_18, DoubleChamp_19, Agent47_19, BananenDer11_19
• Track 114 : Thyatira_19, Waterfoul_19
• Track 115 : Miryou_19
• Track 116 : Kratio_18
• Track 117 : Psycho_19
• Track 118 : Dadosky_19
• Track 119 : Feyre_19
• Track 120 : AlleyCat_19
• Track 121 : OkiRoe_19
• Track 122 : SoSeph_19, Heftyboy_19
• Track 123 : Paola_19, Gengar_19, Guillsminger_19, Leston_19

• Track 124 : Rando14_19
• Track 125 : Edugator_18
• Track 126 : PhelpsODU_20, Unicorn_20
• Track 127 : DarthP_20, Hammy_20
• Track 128 : November_19
• Track 129 : Krueger_20
• Track 130 : Bryler_20, Cain_20, Tierra_20, Phrank_20
• Track 131 : SirPhilip_20
• Track 132 : Amgine_19
• Track 133 : Fefferhead_20
• Track 134 : Applecrisp_19
• Track 135 : Shadow1_19
• Track 136 : Amohnition_20
• Track 137 : TClif_20
• Track 138 : Yuna_21
• Track 139 : Ximenita_21
• Track 140 : Lavahound_19
• Track 141 : Sunflower1121_19
• Track 142 : Syra333_20
• Track 143 : Marshawn_22
• Track 144 : Ekdilam_18
• Track 145 : Ellie_18
• Track 146 : Tigress9_20
• Track 147 : Aminay_19
• Track 148 : Boilgate_18

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

The start number called the most often in the published annotations is 17, it was called in 184 of the 295 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ActinUp_21, Adephagia_21, Adonis_21, Ageofdapage_21, AizenPogi_16, AlishaPH_21, Amelie_17, Amgine_19, Amohnition_20, Anaya_22, Angel_16, Angelica_21, Anma_21, Annihilator_16, Apocalypse_21, Applecrisp_19, Aroostook_16, Asayake_21, Atiba_21, Avrafan_16, AzulaCat_16, BEEST_21, BGlluviae_21, BPs_16, BQuat_16, BaghaKamala_21, Barkley26_16, BarrelRoll_21, Beezoo_21, Bella96_21, Bern_21, Biglebops_17, Blizzard_21, Boiiii_21, BruceB_16, CLED96_16, CREW_21, CallaLilly_21, Camri_16, Capricorn_21, CaseJules_21, CassieYates_16, Cedasite_16, Chance64_16, CheetoDust_21, Cherrybomb426_16, Clipper_21, Coleslaw_16, Crespo_16, CrimD_21, DMoney_16, DNAIII_0016, Dalmuri_21, Darionha_16, DartGoblin_21, DarthP_20, Deby_21, Devera_21, DingDing_16, Dole_21, DrHayes_21, Durfee_21, ECartman_16, Ekdilam_18, Ellie_18, Emerson_21, Enkosi_17, Fefferhead_20, ForeverHowLong_16, Frosty24_16, Ganymede_22, Geraldini_21, Gideon_16, GoldenAsh_16, Gomashi_16, Grizzly_16, Halo_16, Hammy_20, HedwigODU_21, Homura_21, Hope_16, Hotshotbaby7_16, Hurricane_20, Hyperbowlee_21, Illumine_21, Inky_21, JAWS_21, Jane_16, Jarvi_21, Jayhawk_21, Jeckyll_21, Jeilious_16, Jolene_16, Jonghyun_16, JorRay_16, Joy99_21, Kareem_16, Kasen3_16, Keshu_20, Kheparia_23, LaterM_21, Lavahound_19, Lea83_20, Liefie_16, LilPharaoh_17, LindNT_21, Llorens_21,

Lokum_21, LouisV14_16, Lunahalos_21, MZKinsey_16, MacKat_21, MacnCheese_21, Maliketh_16, Marmie_16, Mdavu_17, MeaningOfLife_21, Megsy_21, Mowgli_16, Murucutumbu_21, Mynx_21, Neoh_16, Nikao_17, November_19, Nutello_17, OctaviousRex_16, Olga_16, Padfoot_21, Padpat_21, Paito_16, Peeb_16, Peel_21, Periodt_16, Pharb_20, Phish_16, Phloodle_16, Phreak_16, Piatt_21, PinkYoshi_16, Pisa1_20, Pisa4_20, Pixie_20, Plagueis_16, Pokerus_20, Primanti_16, Prithvi_21, QuincyRose_20, Rabbs_16, Ramen_21, Rapunzel97_21, Rattrick_16, Remy19_16, Renaissance_16, Richarlison_16, Rosmarinus_21, Ruriko_16, SamuelLPlaqson_21, Schiebel_16, SgtBeansprout_17, ShaboiShabazz_16, ShedlockHolmes_20, ShiaSurprise_21, Sizemore_16, Slimphazie_21, Sneeze_16, Spock_21, Stinson_21, Sulley_21, Sweets_16, TBond007_20, Tachez_21, Taheera_16, TaiwanKao_22, Teejan_17, Terralys_16, Terror_16, TinaBug_16, TiniBug_21, Tiri_21, TomBrady_16, Topper_21, Torres_17, TreyKay_21, TribleTrouble_19, Trice_17, TruffulaTree_21, Twitch_21, Urkel_21, Veliki_21, Wendigo_16, YoureAdopted_20, Zabiza_21, Zavala_21, ZoMa_16, Zombie_16,

Genes that have the "Most Annotated" start but do not call it:
• Belladonna_21,

Genes that do not have the "Most Annotated" start:
• 8UZL_19, Agent47_19, AlleyCat_19, Aminay_19, Antsirabe_16, Avocado_16, BananenDer11_19, Bobquesha_22, Boilgate_18, BoostSeason_17, Bryler_20, Cain_20, Cambiare_17, Chancellor_22, Chavito_21, Cheetobro_22, Chris_20, Cloudyecho_16, Collard_19, Curiosium_22, Dadosky_19, DanSyl44_22, Dartin_21, DismalFunk_17, DismalStressor_17, DoubleChamp_19, Doughnut_17, Edugator_18, Efra2_21, Eponine_22, FF47_19, Feyre_19, Findley_17, Fionnbharth_22, FlagStaff_16, Gengar_19, GodSpeed_16, Guanica15_21, Guillsminger_19, Heftyboy_19, InvictusManeo_19, JF1_22, Jolie2_16, Juliette_22, KiSi_20, Kratio_18, Kraw_22, Krueger_20, Larva_19, LastHope_21, LeMond_20, Lebo14_22, Lemuria_16, Leston_19, LilDirt_18, LongHai_20, MOOREtheMARYer_16, Maco6_17, Malthus_22, Marcoliusprime_17, MarkPhew_21, Marshawn_22, McMater_21, Mercurio_17, Milly_17, Miryou_19, MissDaisy_22, Mitti_22, Muddy_19, Mufasa_17, Neighly_19, Nibb_20, Niklas_21, NoShow_16, Nolwazi_22, OkiRoe_19, OmniCritical_22, Omnicron_19, Oscar_20, Pace1224_16, Paola_19, Patt_22, Peanam_21, PhelpsODU_20, Phrank_20, Pinnie_17, Psycho_19, Qhanda_22, Rando14_19, Reptar3000_22, Richo_21, Ruthiejr_21, Salvus_20, SamScheppers_20, Scarlett_20, Shadow1_19, Shaobing_21, SirPhilip_20, Slarp_22, SoSeph_19, Stargaze_16, Strobilo_17, Sunflower1121_19, Syra333_20, TClif_20, TM4_17, Taquito_20, Thyatira_19, Tierra_20, Tigress9_20, TingHuaYa_21, Unicorn_20, Validus_21, ViviJ_18, Waterfoul_19, Wintermute_22, Ximenita_21, Y10_22, Y2_22, YangYin_16, YasnayaPolyana_22, Yuna_21, Yunkel11_21, ZoeJ_17,

Summary by start number:

Start 5:
• Found in 1 of 320 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 295
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoShow_16 (AB),

Start 13:

• Found in 2 of 320 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 295
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Psycho_19 (K5),

Start 16:
• Found in 38 of 320 (11.9%) of genes in pham
• Manual Annotations of this start: 35 of 295
• Called 97.4% of time when present
• Phage (with cluster) where this start called: Agent47_19 (K5), AlleyCat_19 (K5), BananenDer11_19 (K5), BoostSeason_17 (K2), Collard_19 (K5), Dadosky_19 (K5), DismalFunk_17 (K2), DismalStressor_17 (K2), DoubleChamp_19 (K5), Doughnut_17 (K2), Edugator_18 (K5), Feyre_19 (K5), Findley_17 (K2), Gengar_19 (K5), Guillsminger_19 (K5), Heftyboy_19 (K5), InvictusManeo_19 (K5), Kratio_18 (K5), Larva_19 (K5), Leston_19 (K5), LilDirt_18 (K5), Marcoliusprime_17 (K2), Milly_17 (K2), Miryou_19 (K5), Mufasa_17 (K2), Neighly_19 (K3), OkiRoe_19 (K5), Omnicron_19 (K5), Paola_19 (K5), Rando14_19 (K5), SoSeph_19 (K5), Strobilo_17 (K2), TM4_17 (K2), Thyatira_19 (K5), ViviJ_18 (K5), Waterfoul_19 (K5), ZoeJ_17 (K2),

Start 17:
• Found in 196 of 320 (61.3%) of genes in pham
• Manual Annotations of this start: 184 of 295
• Called 99.5% of time when present
• Phage (with cluster) where this start called: ActinUp_21 (K1), Adephagia_21 (K1), Adonis_21 (K1), Ageofdapage_21 (K1), AizenPogi_16 (G1), AlishaPH_21 (K1), Amelie_17 (K1), Amgine_19 (K6), Amohnition_20 (K6), Anaya_22 (K1), Angel_16 (G1), Angelica_21 (K1), Anma_21 (K1), Annihilator_16 (G1), Apocalypse_21 (K1), Applecrisp_19 (K6), Aroostook_16 (G1), Asayake_21 (K1), Atiba_21 (K1), Avrafan_16 (G1), AzulaCat_16 (G1), BEEST_21 (K1), BGlluviae_21 (K1), BPs_16 (G1), BQuat_16 (G1), BaghaKamala_21 (K1), Barkley26_16 (G1), BarrelRoll_21 (K1), Beezoo_21 (K1), Bella96_21 (K1), Bern_21 (K1), Biglebops_17 (K1), Blizzard_21 (K1), Boiiii_21 (K1), BruceB_16 (G1), CLED96_16 (G1), CREW_21 (K1), CallaLilly_21 (K1), Camri_16 (G1), Capricorn_21 (K1), CaseJules_21 (K1), CassieYates_16 (G1), Cedasite_16 (G1), Chance64_16 (G1), CheetoDust_21 (K1), Cherrybomb426_16 (G1), Clipper_21 (K1), Coleslaw_16 (G1), Crespo_16 (G1), CrimD_21 (K1), DMoney_16 (G1), DNAIII_0016 (G1), Dalmuri_21 (K1), Darionha_16 (G1), DartGoblin_21 (K1), DarthP_20 (K6), Deby_21 (K1), Devera_21 (K1), DingDing_16 (G1), Dole_21 (K1), DrHayes_21 (K1), Durfee_21 (K1), ECartman_16 (G1), Ekdilam_18 (K6), Ellie_18 (K6), Emerson_21 (K1), Enkosi_17 (K1), Fefferhead_20 (K6), ForeverHowLong_16 (G1), Frosty24_16 (G1), Ganymede_22 (K1), Geraldini_21 (K1), Gideon_16 (G1), GoldenAsh_16 (G1), Gomashi_16 (G1), Grizzly_16 (G1), Halo_16 (G1), Hammy_20 (K6), HedwigODU_21 (K1), Homura_21 (K1), Hope_16 (G1), Hotshotbaby7_16 (G1), Hurricane_20 (K3), Hyperbowlee_21 (K1), Illumine_21 (K1), Inky_21 (K1), JAWS_21 (K1), Jane_16 (G1), Jarvi_21 (K1), Jayhawk_21 (K1), Jeckyll_21 (K1), Jeilious_16 (G), Jolene_16 (G1), Jonghyun_16 (G1), JorRay_16 (G1), Joy99_21 (K1), Kareem_16 (G1), Kasen3_16 (G1), Keshu_20 (K3), Kheparia_23 (K1), LaterM_21 (K1), Lavahound_19 (K6), Lea83_20 (K3), Liefie_16 (G1), LilPharaoh_17 (K1), LindNT_21 (K1), Llorens_21 (K1), Lokum_21 (K1), LouisV14_16 (G1), Lunahalos_21 (K1), MZKinsey_16 (G1), MacKat_21 (K1), MacnCheese_21 (K3), Maliketh_16 (G1), Marmie_16 (G1), Mdavu_17 (K1), MeaningOfLife_21 (K1), Megsy_21 (K1), Mowgli_16 (G1), Murucutumbu_21 (K1), Mynx_21 (K1), Neoh_16 (G), Nikao_17 (K1), November_19 (K6), Nutello_17 (K1),

OctaviousRex_16 (G1), Olga_16 (G1), Padfoot_21 (K1), Padpat_21 (K1), Paito_16 (G1), Peeb_16 (G1), Peel_21 (K1), Periodt_16 (G1), Pharb_20 (K3), Phish_16 (G1), Phloodle_16 (G1), Phreak_16 (G1), Piatt_21 (K1), PinkYoshi_16 (G1), Pisa1_20 (K1), Pisa4_20 (K1), Pixie_20 (K3), Plagueis_16 (G1), Pokerus_20 (K1), Primanti_16 (G1), Prithvi_21 (K1), QuincyRose_20 (K1), Rabbs_16 (G1), Ramen_21 (K1), Rapunzel97_21 (K1), Rattrick_16 (G1), Remy19_16 (G1), Renaissance_16 (G1), Richarlison_16 (G1), Rosmarinus_21 (K1), Ruriko_16 (G1), SamuelLPlaqson_21 (K1), Schiebel_16 (G1), SgtBeansprout_17 (K1), ShaboiShabazz_16 (G1), ShedlockHolmes_20 (K3), ShiaSurprise_21 (K1), Sizemore_16 (G1), Slimphazie_21 (K1), Sneeze_16 (G1), Spock_21 (K1), Stinson_21 (K1), Sulley_21 (K1), Sweets_16 (G1), TBond007_20 (K3), Tachez_21 (K1), Taheera_16 (G1), TaiwanKao_22 (K1), Teejan_17 (K1), Terralys_16 (G1), Terror_16 (G1), TinaBug_16 (G1), TiniBug_21 (K1), Tiri_21 (K1), TomBrady_16 (G1), Topper_21 (K1), Torres_17 (K1), TreyKay_21 (K1), TribleTrouble_19 (K3), Trice_17 (K1), TruffulaTree_21 (K1), Twitch_21 (K1), Urkel_21 (K1), Veliki_21 (K1), Wendigo_16 (G1), YoureAdopted_20 (K1), Zabiza_21 (K1), Zavala_21 (K1), ZoMa_16 (G1), Zombie_16 (G1),

Start 18:
• Found in 79 of 320 (24.7%) of genes in pham
• Manual Annotations of this start: 70 of 295
• Called 98.7% of time when present
• Phage (with cluster) where this start called: Aminay_19 (K7), Antsirabe_16 (G5), Avocado_16 (G2), Bobquesha_22 (K4), Bryler_20 (K6), Cain_20 (K6), Cambiare_17 (G2), Chancellor_22 (K4), Chavito_21 (K1), Cheetobro_22 (K4), Chris_20 (K1), Cloudyecho_16 (G3), Curiosium_22 (K1), DanSyl44_22 (K4), Dartin_21 (K1), Efra2_21 (K1), Eponine_22 (K4), Fionnbharth_22 (K4), FlagStaff_16 (G2), GodSpeed_16 (G2), Guanica15_21 (K1), JF1_22 (K4), Jolie2_16 (G4), Juliette_22 (K4), KiSi_20 (K1), Kraw_22 (K4), Krueger_20 (K6), LastHope_21 (K1), LeMond_20 (K1), Lebo14_22 (K4), Lemuria_16 (G4), MOOREtheMARYer_16 (G3), Malthus_22 (K4), MarkPhew_21 (K1), Marshawn_22 (K6), McMater_21 (K1), Mercurio_17 (G4), MissDaisy_22 (K4), Mitti_22 (K4), Nibb_20 (K1), Niklas_21 (K1), Nolwazi_22 (K4), OmniCritical_22 (K4), Oscar_20 (K1), Pace1224_16 (G2), Patt_22 (K4), Peanam_21 (K1), PhelpsODU_20 (K6), Phrank_20 (K6), Pinnie_17 (G3), Qhanda_22 (K4), Reptar3000_22 (K4), Richo_21 (K1), Ruthiejr_21 (K4), SamScheppers_20 (K4), Scarlett_20 (K1), Shadow1_19 (K6), Shaobing_21 (K1), SirPhilip_20 (K6), Slarp_22 (K4), Stargaze_16 (G5), Sunflower1121_19 (K6), Syra333_20 (K6), TClif_20 (K6), Taquito_20 (K4), Tierra_20 (K6), Tigress9_20 (K6), TingHuaYa_21 (K1), Unicorn_20 (K6), Validus_21 (K1), Wintermute_22 (K4), Ximenita_21 (K6), Y10_22 (K4), Y2_22 (K4), YangYin_16 (G5), YasnayaPolyana_22 (K4), Yuna_21 (K6), Yunkel11_21 (K1),

Start 26:
• Found in 131 of 320 (40.9%) of genes in pham
• Manual Annotations of this start: 1 of 295
• Called 0.8% of time when present
• Phage (with cluster) where this start called: Belladonna_21 (K1),

Start 27:
• Found in 35 of 320 (10.9%) of genes in pham
• Manual Annotations of this start: 1 of 295
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Boilgate_18 (K8),

Start 31:

• Found in 7 of 320 (2.2%) of genes in pham
• Manual Annotations of this start: 2 of 295
• Called 85.7% of time when present
• Phage (with cluster) where this start called: 8UZL_19 (AB), FF47_19 (AB), LongHai_20 (AB), Maco6_17 (AB), Muddy_19 (AB), Salvus_20 (AB),

Summary by clusters:

There are 15 clusters represented in this pham: G5, G4, G3, G, G1, K3, K2, K1, AB, K7, K6, K5, K4, K8, G2,

Info for manual annotations of cluster AB:
•Start number 5 was manually annotated 1 time for cluster AB.
•Start number 31 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster G:
•Start number 17 was manually annotated 2 times for cluster G.

Info for manual annotations of cluster G1:
•Start number 17 was manually annotated 70 times for cluster G1.

Info for manual annotations of cluster G2:
•Start number 18 was manually annotated 4 times for cluster G2.

Info for manual annotations of cluster G3:
•Start number 18 was manually annotated 3 times for cluster G3.

Info for manual annotations of cluster G4:
•Start number 18 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:
•Start number 18 was manually annotated 3 times for cluster G5.

Info for manual annotations of cluster K1:
•Start number 17 was manually annotated 93 times for cluster K1.
•Start number 18 was manually annotated 19 times for cluster K1.
•Start number 26 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:
•Start number 16 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:
•Start number 17 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:
•Start number 18 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:
•Start number 13 was manually annotated 1 time for cluster K5.
•Start number 16 was manually annotated 24 times for cluster K5.

Info for manual annotations of cluster K6:
•Start number 17 was manually annotated 10 times for cluster K6.

•Start number 18 was manually annotated 16 times for cluster K6.

Info for manual annotations of cluster K7:
•Start number 18 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:
•Start number 27 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: 8UZL_19 Start: 11439, Stop: 14888, Start Num: 31
Candidate Starts for 8UZL_19:
(Start: 31 @11439 has 2 MA's), (33, 11454), (40, 11502), (42, 11505), (48, 11550), (84, 11673), (143, 12000), (146, 12012), (149, 12033), (162, 12117), (169, 12171), (172, 12180), (181, 12234), (182, 12243), (188, 12267), (190, 12276), (195, 12318), (203, 12363), (204, 12375), (207, 12396), (212, 12420), (225, 12474), (238, 12528), (243, 12549), (246, 12561), (251, 12585), (252, 12594), (270, 12672), (342, 12798), (350, 12840), (371, 13008), (372, 13014), (381, 13059), (411, 13182), (428, 13260), (438, 13293), (442, 13320), (445, 13332), (463, 13440), (464, 13449), (488, 13542), (493, 13572), (503, 13608), (511, 13638), (517, 13656), (527, 13683), (529, 13686), (546, 13740), (547, 13743), (567, 13833), (576, 13881), (581, 13896), (583, 13914), (590, 13929), (598, 13989), (603, 14022), (604, 14031), (606, 14040), (619, 14076), (623, 14091), (660, 14286), (677, 14481), (687, 14577), (690, 14595), (698, 14637), (700, 14643), (707, 14670), (724, 14772), (726, 14781), (734, 14820),

Gene: ActinUp_21 Start: 12079, Stop: 15918, Start Num: 17
Candidate Starts for ActinUp_21:
(Start: 17 @12079 has 184 MA's), (Start: 26 @12148 has 1 MA's), (34, 12235), (60, 12412), (67, 12439), (85, 12511), (87, 12523), (88, 12532), (97, 12604), (111, 12679), (128, 12763), (130, 12772), (134, 12793), (142, 12832), (157, 12910), (168, 12988), (184, 13078), (198, 13153), (212, 13246), (214, 13255), (216, 13267), (218, 13276), (273, 13537), (277, 13552), (287, 13585), (309, 13672), (315, 13696), (328, 13780), (345, 13864), (348, 13876), (352, 13897), (436, 14053), (447, 14134), (456, 14182), (459, 14200), (462, 14221), (468, 14257), (479, 14308), (486, 14365), (501, 14443), (504, 14452), (525, 14530), (540, 14587), (553, 14641), (603, 14881), (621, 14956), (652, 15067), (666, 15286), (668, 15298), (686, 15487), (687, 15496), (701, 15568), (709, 15598), (713, 15619), (728, 15739), (741, 15811), (745, 15829), (746, 15835),

Gene: Adephagia_21 Start: 12079, Stop: 15915, Start Num: 17
Candidate Starts for Adephagia_21:
(Start: 17 @12079 has 184 MA's), (Start: 26 @12148 has 1 MA's), (34, 12235), (60, 12412), (67, 12439), (85, 12511), (87, 12523), (88, 12532), (97, 12604), (111, 12679), (128, 12763), (130, 12772), (134, 12793), (142, 12832), (157, 12910), (168, 12988), (184, 13078), (198, 13153), (212, 13246), (214, 13255), (216, 13267), (218, 13276), (273, 13537), (277, 13552), (287, 13585), (309, 13672), (315, 13696), (328, 13780), (345, 13864), (348, 13876), (352, 13897), (436, 14053), (447, 14134), (456, 14182), (459, 14200), (462, 14221), (468, 14257), (479, 14308), (486, 14365), (501, 14443), (504, 14452), (525, 14530), (540, 14587), (553, 14641), (603, 14881), (621, 14956), (652, 15067), (666, 15286), (668, 15298), (686, 15484), (687, 15493), (701, 15565), (709, 15595), (713, 15616), (728, 15736), (741, 15808), (745, 15826), (746, 15832),

Gene: Adonis_21 Start: 12088, Stop: 15921, Start Num: 17
Candidate Starts for Adonis_21:

(2, 11869), (9, 12049), (Start: 17 @12088 has 184 MA's), (Start: 26 @12157 has 1 MA's), (34, 12244), (60, 12421), (67, 12448), (87, 12532), (88, 12541), (97, 12613), (111, 12688), (128, 12772), (130, 12781), (134, 12802), (142, 12841), (157, 12919), (168, 12997), (184, 13087), (198, 13162), (212, 13255), (214, 13264), (216, 13276), (218, 13285), (257, 13468), (267, 13522), (277, 13561), (287, 13594), (309, 13681), (315, 13705), (328, 13789), (345, 13873), (348, 13885), (352, 13906), (436, 14062), (447, 14143), (456, 14191), (459, 14209), (462, 14230), (468, 14266), (479, 14317), (486, 14374), (501, 14452), (504, 14461), (525, 14539), (540, 14596), (553, 14650), (603, 14890), (621, 14965), (652, 15076), (666, 15295), (668, 15307), (686, 15490), (687, 15499), (709, 15601), (713, 15622), (728, 15742), (741, 15814), (745, 15832), (746, 15838),

Gene: Agent47_19 Start: 12236, Stop: 16342, Start Num: 16
Candidate Starts for Agent47_19:
(Start: 16 @12236 has 35 MA's), (Start: 27 @12329 has 1 MA's), (35, 12407), (36, 12431), (46, 12491), (62, 12575), (64, 12587), (88, 12689), (96, 12749), (97, 12761), (103, 12782), (111, 12836), (121, 12884), (130, 12929), (134, 12950), (157, 13067), (168, 13145), (174, 13169), (184, 13235), (198, 13310), (212, 13403), (218, 13433), (254, 13607), (257, 13616), (263, 13646), (267, 13670), (272, 13691), (290, 13751), (309, 13829), (311, 13838), (325, 13916), (337, 13982), (346, 14024), (348, 14033), (355, 14117), (361, 14138), (363, 14171), (374, 14237), (378, 14258), (388, 14312), (391, 14321), (395, 14339), (404, 14357), (405, 14366), (409, 14396), (416, 14432), (426, 14486), (434, 14522), (436, 14528), (437, 14546), (454, 14651), (465, 14717), (501, 14912), (509, 14942), (518, 14975), (534, 15026), (537, 15047), (541, 15062), (542, 15068), (559, 15152), (574, 15200), (582, 15239), (593, 15299), (600, 15332), (603, 15353), (607, 15377), (617, 15407), (639, 15473), (654, 15545), (678, 15860), (679, 15869), (680, 15872), (682, 15914), (686, 15941), (692, 15971), (701, 16022), (705, 16040), (720, 16106), (725, 16154), (728, 16178), (731, 16190), (747, 16271), (749, 16295), (754, 16334),

Gene: Ageofdapage_21 Start: 12015, Stop: 15848, Start Num: 17
Candidate Starts for Ageofdapage_21:
(Start: 17 @12015 has 184 MA's), (Start: 26 @12084 has 1 MA's), (34, 12171), (60, 12351), (67, 12378), (87, 12462), (88, 12471), (96, 12531), (97, 12543), (111, 12618), (120, 12660), (128, 12702), (130, 12711), (134, 12732), (142, 12771), (157, 12849), (168, 12927), (198, 13092), (212, 13185), (216, 13206), (218, 13215), (267, 13452), (273, 13476), (277, 13491), (287, 13524), (309, 13611), (328, 13719), (345, 13803), (348, 13815), (352, 13836), (360, 13917), (436, 13992), (447, 14073), (449, 14082), (456, 14121), (459, 14139), (462, 14160), (468, 14196), (479, 14247), (486, 14304), (501, 14382), (504, 14391), (525, 14469), (531, 14484), (540, 14526), (553, 14580), (603, 14820), (621, 14895), (652, 15006), (666, 15225), (678, 15339), (686, 15420), (687, 15429), (701, 15501), (709, 15531), (713, 15552), (728, 15669), (741, 15741), (746, 15765),

Gene: AizenPogi_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for AizenPogi_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: AlishaPH_21 Start: 12075, Stop: 15908, Start Num: 17
Candidate Starts for AlishaPH_21:

(Start: 17 @12075 has 184 MA's), (Start: 26 @12144 has 1 MA's), (34, 12231), (44, 12306), (60, 12408), (67, 12435), (85, 12507), (87, 12519), (88, 12528), (97, 12600), (111, 12675), (128, 12759), (130, 12768), (134, 12789), (142, 12828), (157, 12906), (168, 12984), (184, 13074), (198, 13149), (212, 13242), (214, 13251), (216, 13263), (218, 13272), (267, 13509), (277, 13548), (287, 13581), (309, 13668), (315, 13692), (328, 13776), (345, 13860), (348, 13872), (352, 13893), (436, 14049), (447, 14130), (456, 14178), (459, 14196), (462, 14217), (468, 14253), (479, 14304), (486, 14361), (501, 14439), (504, 14448), (525, 14526), (531, 14541), (540, 14583), (553, 14637), (603, 14877), (621, 14952), (652, 15063), (666, 15282), (668, 15294), (686, 15477), (687, 15486), (701, 15558), (709, 15588), (713, 15609), (728, 15729), (741, 15801), (745, 15819), (746, 15825),

Gene: AlleyCat_19 Start: 12112, Stop: 16224, Start Num: 16
Candidate Starts for AlleyCat_19:
(Start: 16 @12112 has 35 MA's), (Start: 27 @12205 has 1 MA's), (35, 12283), (36, 12307), (46, 12367), (62, 12451), (88, 12565), (96, 12625), (97, 12637), (103, 12658), (111, 12712), (121, 12760), (130, 12805), (134, 12826), (157, 12943), (168, 13021), (174, 13045), (180, 13087), (184, 13111), (198, 13186), (212, 13279), (218, 13309), (254, 13483), (263, 13522), (267, 13546), (272, 13567), (290, 13627), (309, 13705), (311, 13714), (325, 13792), (337, 13858), (346, 13900), (348, 13909), (355, 13993), (361, 14014), (363, 14047), (365, 14068), (374, 14113), (378, 14134), (388, 14188), (391, 14197), (395, 14215), (405, 14242), (409, 14272), (416, 14308), (434, 14398), (436, 14404), (437, 14422), (454, 14527), (465, 14593), (501, 14788), (509, 14818), (518, 14851), (534, 14902), (537, 14923), (541, 14938), (542, 14944), (559, 15028), (574, 15076), (582, 15115), (593, 15175), (600, 15208), (603, 15229), (607, 15253), (617, 15283), (639, 15349), (654, 15421), (678, 15736), (679, 15745), (680, 15748), (681, 15775), (682, 15790), (684, 15805), (686, 15817), (692, 15847), (701, 15901), (705, 15919), (720, 15988), (725, 16036), (728, 16060), (731, 16072), (734, 16081), (747, 16153), (749, 16177), (754, 16216),

Gene: Amelie_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Amelie_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: Amgine_19 Start: 11863, Stop: 16011, Start Num: 17
Candidate Starts for Amgine_19:
(Start: 17 @11863 has 184 MA's), (Start: 26 @11932 has 1 MA's), (44, 12094), (60, 12196), (62, 12202), (67, 12223), (96, 12376), (97, 12388), (111, 12463), (130, 12556), (134, 12577), (142, 12616), (157, 12694), (168, 12772), (174, 12796), (182, 12850), (184, 12862), (198, 12937), (212, 13030), (232, 13111), (242, 13174), (252, 13228), (259, 13249), (261, 13261), (267, 13297), (272, 13318), (281, 13345), (287, 13369), (294, 13390), (299, 13411), (309, 13456), (332, 13582), (337, 13630), (350, 13690), (351, 13696), (361, 13786), (376, 13897), (386, 13948), (387, 13954), (404, 14005), (409, 14044), (412, 14065), (436, 14176), (445, 14236), (450, 14269), (452, 14287), (456, 14305), (459, 14323), (461, 14335), (468, 14380), (479, 14431), (486, 14479), (501, 14557), (525, 14644), (528, 14650), (543, 14716), (544, 14719), (558, 14794), (577, 14860), (603, 14995), (618, 15055), (621, 15070), (624, 15076), (679, 15526), (686, 15598), (687, 15607), (703, 15694), (728, 15847), (746, 15946), (749, 15973), (750, 15985),

Gene: Aminay_19 Start: 11993, Stop: 16294, Start Num: 18
Candidate Starts for Aminay_19:
(Start: 18 @11993 has 70 MA's), (19, 12002), (25, 12041), (Start: 27 @12083 has 1 MA's), (34, 12149), (38, 12194), (57, 12308), (69, 12356), (80, 12395), (81, 12398), (87, 12434), (96, 12503), (97, 12515), (101, 12530), (103, 12536), (130, 12683), (134, 12704), (142, 12743), (144, 12746), (157, 12821), (164, 12866), (168, 12899), (174, 12923), (184, 12989), (185, 12992), (190, 13010), (192, 13019), (196, 13052), (200, 13076), (203, 13097), (226, 13214), (253, 13355), (254, 13358), (257, 13367), (267, 13421), (268, 13427), (276, 13457), (286, 13490), (294, 13514), (301, 13541), (309, 13580), (312, 13595), (314, 13601), (320, 13628), (328, 13688), (332, 13706), (335, 13736), (338, 13757), (348, 13805), (349, 13808), (350, 13814), (352, 13826), (359, 13904), (378, 14030), (390, 14099), (392, 14117), (396, 14150), (397, 14153), (398, 14180), (401, 14234), (409, 14288), (417, 14327), (421, 14348), (425, 14372), (436, 14420), (445, 14480), (449, 14489), (461, 14546), (466, 14579), (467, 14588), (476, 14630), (487, 14696), (501, 14777), (504, 14786), (558, 14993), (603, 15194), (621, 15269), (633, 15299), (658, 15485), (679, 15749), (682, 15794), (686, 15821), (705, 15947), (710, 15965), (715, 15986), (719, 16043), (720, 16046), (728, 16118), (747, 16220), (749, 16244), (753, 16283),

Gene: Amohnition_20 Start: 12196, Stop: 16386, Start Num: 17
Candidate Starts for Amohnition_20:
(10, 12151), (Start: 17 @12196 has 184 MA's), (Start: 26 @12265 has 1 MA's), (34, 12352), (44, 12427), (57, 12514), (58, 12517), (76, 12589), (87, 12640), (88, 12649), (96, 12709), (97, 12721), (103, 12742), (111, 12796), (117, 12826), (130, 12889), (134, 12910), (142, 12949), (157, 13027), (168, 13105), (174, 13129), (184, 13195), (197, 13261), (203, 13303), (208, 13342), (210, 13354), (216, 13384), (218, 13393), (241, 13507), (245, 13522), (257, 13576), (263, 13606), (267, 13630), (272, 13651), (286, 13699), (299, 13744), (300, 13747), (309, 13789), (314, 13810), (323, 13858), (332, 13915), (334, 13930), (338, 13966), (341, 13978), (350, 14023), (351, 14029), (361, 14119), (404, 14338), (409, 14377), (412, 14398), (431, 14485), (436, 14509), (439, 14536), (440, 14539), (445, 14569), (452, 14620), (459, 14656), (479, 14764), (501, 14899), (502, 14902), (521, 14968), (523, 14974), (534, 15013), (552, 15085), (554, 15091), (557, 15112), (579, 15196), (584, 15226), (591, 15247), (592, 15259), (603, 15340), (610, 15373), (613, 15382), (615, 15388), (627, 15430), (640, 15481), (643, 15487), (666, 15778), (678, 15892), (679, 15901), (680, 15904), (686, 15973), (713, 16108), (721, 16177), (728, 16225), (746, 16321), (750, 16360),

Gene: Anaya_22 Start: 12098, Stop: 15934, Start Num: 17
Candidate Starts for Anaya_22:
(Start: 17 @12098 has 184 MA's), (Start: 26 @12167 has 1 MA's), (34, 12254), (60, 12431), (67, 12458), (85, 12530), (87, 12542), (88, 12551), (97, 12623), (111, 12698), (117, 12728), (128, 12782), (130, 12791), (134, 12812), (142, 12851), (157, 12929), (163, 12971), (168, 13007), (174, 13031), (184, 13097), (198, 13172), (212, 13265), (214, 13274), (216, 13286), (218, 13295), (267, 13532), (273, 13556), (277, 13571), (287, 13604), (309, 13691), (315, 13715), (328, 13799), (345, 13883), (348, 13895), (352, 13916), (436, 14072), (447, 14153), (459, 14219), (462, 14240), (468, 14276), (479, 14327), (486, 14384), (501, 14462), (504, 14471), (525, 14549), (540, 14606), (553, 14660), (603, 14900), (621, 14975), (624, 14981), (652, 15086), (666, 15305), (686, 15503), (687, 15512), (709, 15614), (713, 15635), (722, 15710), (728, 15755), (741, 15827), (745, 15845), (746, 15851),

Gene: Angel_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Angel_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308),

(568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Angelica_21 Start: 12050, Stop: 15883, Start Num: 17
Candidate Starts for Angelica_21:
(Start: 17 @12050 has 184 MA's), (Start: 26 @12119 has 1 MA's), (34, 12206), (60, 12383), (67, 12410), (87, 12494), (88, 12503), (97, 12575), (111, 12650), (128, 12734), (130, 12743), (134, 12764), (142, 12803), (157, 12881), (168, 12959), (184, 13049), (198, 13124), (212, 13217), (216, 13238), (218, 13247), (267, 13484), (277, 13523), (287, 13556), (309, 13643), (315, 13667), (328, 13751), (345, 13835), (348, 13847), (352, 13868), (436, 14024), (447, 14105), (456, 14153), (459, 14171), (462, 14192), (468, 14228), (479, 14279), (486, 14336), (501, 14414), (504, 14423), (525, 14501), (531, 14516), (540, 14558), (553, 14612), (603, 14852), (621, 14927), (652, 15038), (666, 15257), (668, 15269), (686, 15452), (687, 15461), (709, 15563), (713, 15584), (728, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Anma_21 Start: 12024, Stop: 15863, Start Num: 17
Candidate Starts for Anma_21:
(Start: 17 @12024 has 184 MA's), (Start: 26 @12093 has 1 MA's), (34, 12180), (60, 12360), (67, 12387), (87, 12471), (88, 12480), (96, 12540), (97, 12552), (111, 12627), (122, 12678), (130, 12720), (134, 12741), (142, 12780), (157, 12858), (168, 12936), (174, 12960), (198, 13101), (212, 13194), (216, 13215), (218, 13224), (267, 13461), (273, 13485), (277, 13500), (287, 13533), (309, 13620), (325, 13707), (328, 13728), (345, 13812), (348, 13824), (352, 13845), (436, 14001), (447, 14082), (459, 14148), (462, 14169), (468, 14205), (479, 14256), (481, 14274), (486, 14313), (501, 14391), (525, 14478), (531, 14493), (540, 14535), (553, 14589), (603, 14829), (621, 14904), (652, 15015), (654, 15036), (655, 15057), (664, 15177), (678, 15351), (686, 15432), (687, 15441), (701, 15513), (709, 15543), (713, 15564), (728, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Annihilator_16 Start: 11455, Stop: 15468, Start Num: 17
Candidate Starts for Annihilator_16:
(Start: 17 @11455 has 184 MA's), (38, 11656), (57, 11770), (67, 11812), (75, 11842), (97, 11977), (100, 11989), (103, 11998), (139, 12187), (142, 12205), (144, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (194, 12493), (197, 12517), (208, 12598), (235, 12721), (250, 12805), (260, 12841), (267, 12886), (268, 12892), (299, 13000), (304, 13024), (309, 13045), (351, 13264), (368, 13414), (383, 13501), (408, 13609), (436, 13744), (452, 13855), (456, 13873), (461, 13903), (499, 14125), (507, 14149), (510, 14164), (514, 14185), (525, 14212), (534, 14239), (548, 14299), (568, 14389), (573, 14422), (590, 14485), (597, 14542), (603, 14575), (604, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (701, 15235), (720, 15316), (727, 15376), (729, 15394), (732, 15403),

Gene: Antsirabe_16 Start: 11833, Stop: 15810, Start Num: 18
Candidate Starts for Antsirabe_16:
(Start: 18 @11833 has 70 MA's), (28, 11926), (41, 12046), (51, 12109), (55, 12127), (68, 12190), (78, 12226), (90, 12298), (92, 12304), (96, 12331), (98, 12349), (107, 12394), (115, 12430), (119, 12445), (145, 12568), (151, 12610), (154, 12625), (160, 12661), (168, 12724), (173, 12745), (186, 12817), (190, 12835), (213, 12976), (221, 13018), (228, 13048), (229, 13051), (231, 13060), (233, 13069), (239, 13111), (256, 13183), (258, 13189), (261, 13204), (264, 13222), (265, 13225), (272, 13258), (282, 13285), (295, 13330), (309, 13393), (315, 13417), (318, 13429), (319, 13432), (340, 13561), (348, 13603), (349, 13606), (361, 13708), (368, 13768), (376, 13819), (393, 13903), (409, 13966), (420, 14023), (431, 14074), (434, 14092), (436, 14098), (443, 14149), (450, 14191), (465, 14287), (489, 14410), (492, 14428), (507, 14494), (510, 14509), (532, 14575), (543, 14629), (548, 14644), (562, 14725), (568, 14734), (590, 14827), (595, 14881), (597, 14884), (603, 14917), (625, 14992), (680, 15454), (681, 15481), (686, 15523), (701, 15610), (702, 15613), (706, 15631), (708, 15634),

(727, 15718), (729, 15736),

Gene: Apocalypse_21 Start: 12053, Stop: 15886, Start Num: 17
Candidate Starts for Apocalypse_21:
(Start: 17 @12053 has 184 MA's), (Start: 26 @12122 has 1 MA's), (34, 12209), (60, 12386), (67, 12413), (87, 12497), (88, 12506), (97, 12578), (111, 12653), (128, 12737), (130, 12746), (134, 12767), (142, 12806), (157, 12884), (168, 12962), (174, 12986), (184, 13052), (198, 13127), (212, 13220), (214, 13229), (216, 13241), (218, 13250), (267, 13487), (277, 13526), (287, 13559), (309, 13646), (315, 13670), (328, 13754), (345, 13838), (348, 13850), (352, 13871), (436, 14027), (447, 14108), (451, 14132), (456, 14156), (459, 14174), (462, 14195), (468, 14231), (479, 14282), (486, 14339), (501, 14417), (504, 14426), (525, 14504), (531, 14519), (540, 14561), (553, 14615), (603, 14855), (621, 14930), (652, 15041), (666, 15260), (668, 15272), (686, 15455), (687, 15464), (701, 15536), (709, 15566), (713, 15587), (728, 15707), (741, 15779), (745, 15797), (746, 15803),

Gene: Applecrisp_19 Start: 12274, Stop: 16422, Start Num: 17
Candidate Starts for Applecrisp_19:
(Start: 17 @12274 has 184 MA's), (Start: 26 @12343 has 1 MA's), (44, 12505), (60, 12607), (62, 12613), (67, 12634), (96, 12787), (97, 12799), (111, 12874), (117, 12904), (130, 12967), (134, 12988), (142, 13027), (157, 13105), (168, 13183), (174, 13207), (184, 13273), (198, 13348), (212, 13441), (220, 13474), (232, 13522), (242, 13585), (252, 13639), (253, 13642), (259, 13660), (261, 13672), (272, 13729), (281, 13756), (287, 13780), (294, 13801), (299, 13822), (309, 13867), (337, 14041), (361, 14197), (378, 14317), (386, 14359), (387, 14365), (406, 14437), (409, 14455), (412, 14476), (436, 14587), (445, 14647), (450, 14680), (452, 14698), (456, 14716), (459, 14734), (461, 14746), (468, 14791), (479, 14842), (486, 14890), (501, 14968), (525, 15055), (528, 15061), (531, 15070), (543, 15127), (544, 15130), (558, 15205), (577, 15271), (603, 15406), (618, 15466), (621, 15481), (624, 15487), (679, 15937), (686, 16009), (687, 16018), (703, 16105), (728, 16258), (746, 16357), (749, 16384), (750, 16396),

Gene: Aroostook_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Aroostook_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Asayake_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Asayake_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Atiba_21 Start: 12042, Stop: 15878, Start Num: 17

Candidate Starts for Atiba_21:
(Start: 17 @12042 has 184 MA's), (Start: 26 @12111 has 1 MA's), (34, 12198), (60, 12375), (67, 12402), (85, 12474), (87, 12486), (88, 12495), (97, 12567), (111, 12642), (128, 12726), (130, 12735), (134, 12756), (142, 12795), (157, 12873), (168, 12951), (184, 13041), (198, 13116), (212, 13209), (214, 13218), (216, 13230), (218, 13239), (273, 13500), (277, 13515), (287, 13548), (309, 13635), (315, 13659), (328, 13743), (345, 13827), (348, 13839), (352, 13860), (436, 14016), (447, 14097), (456, 14145), (459, 14163), (462, 14184), (468, 14220), (479, 14271), (486, 14328), (501, 14406), (504, 14415), (525, 14493), (540, 14550), (553, 14604), (603, 14844), (621, 14919), (652, 15030), (666, 15249), (668, 15261), (686, 15447), (687, 15456), (701, 15528), (709, 15558), (713, 15579), (728, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Avocado_16 Start: 11691, Stop: 15731, Start Num: 18
Candidate Starts for Avocado_16:
(Start: 18 @11691 has 70 MA's), (28, 11784), (32, 11814), (46, 11961), (62, 12045), (74, 12093), (97, 12231), (103, 12252), (111, 12306), (130, 12399), (134, 12420), (139, 12441), (142, 12459), (148, 12483), (150, 12495), (161, 12567), (164, 12582), (168, 12615), (194, 12747), (197, 12771), (200, 12792), (204, 12825), (208, 12852), (216, 12894), (226, 12942), (252, 13080), (253, 13083), (263, 13125), (280, 13194), (281, 13197), (300, 13266), (309, 13308), (324, 13386), (346, 13503), (348, 13512), (351, 13527), (358, 13608), (361, 13617), (368, 13677), (388, 13791), (405, 13845), (407, 13869), (408, 13872), (409, 13875), (415, 13905), (421, 13935), (440, 14037), (443, 14058), (460, 14163), (461, 14166), (489, 14319), (492, 14337), (507, 14403), (510, 14418), (516, 14442), (532, 14484), (534, 14493), (548, 14553), (568, 14643), (590, 14739), (597, 14796), (603, 14829), (630, 14904), (661, 15099), (678, 15309), (684, 15378), (686, 15390), (687, 15399), (691, 15420), (720, 15579), (729, 15657),

Gene: Avrafan_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Avrafan_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: AzulaCat_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for AzulaCat_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: BEEST_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for BEEST_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800),

(130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: BGlluviae_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for BGlluviae_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: BPs_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for BPs_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: BQuat_16 Start: 11455, Stop: 15468, Start Num: 17
Candidate Starts for BQuat_16:
(Start: 17 @11455 has 184 MA's), (38, 11656), (57, 11770), (67, 11812), (75, 11842), (97, 11977), (100, 11989), (103, 11998), (139, 12187), (142, 12205), (144, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (194, 12493), (197, 12517), (208, 12598), (235, 12721), (250, 12805), (260, 12841), (267, 12886), (268, 12892), (299, 13000), (304, 13024), (309, 13045), (351, 13264), (368, 13414), (383, 13501), (408, 13609), (436, 13744), (452, 13855), (456, 13873), (461, 13903), (499, 14125), (507, 14149), (510, 14164), (514, 14185), (525, 14212), (534, 14239), (548, 14299), (568, 14389), (573, 14422), (590, 14485), (597, 14542), (603, 14575), (604, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (701, 15235), (720, 15316), (727, 15376), (729, 15394), (732, 15403),

Gene: BaghaKamala_21 Start: 12045, Stop: 15878, Start Num: 17
Candidate Starts for BaghaKamala_21:
(Start: 17 @12045 has 184 MA's), (Start: 26 @12114 has 1 MA's), (34, 12201), (44, 12276), (60, 12378), (67, 12405), (85, 12477), (87, 12489), (88, 12498), (97, 12570), (111, 12645), (128, 12729), (130, 12738), (134, 12759), (142, 12798), (150, 12834), (157, 12876), (168, 12954), (184, 13044), (198, 13119), (212, 13212), (214, 13221), (216, 13233), (218, 13242), (267, 13479), (277, 13518), (287, 13551), (309, 13638), (315, 13662), (328, 13746), (345, 13830), (348, 13842), (352, 13863), (436, 14019), (447, 14100), (456, 14148), (459, 14166), (462, 14187), (468, 14223), (479, 14274), (486, 14331), (501, 14409), (504, 14418), (525, 14496), (531, 14511), (540, 14553), (553, 14607),

(603, 14847), (621, 14922), (652, 15033), (666, 15252), (668, 15264), (686, 15447), (687, 15456), (701, 15528), (709, 15558), (713, 15579), (728, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: BananenDer11_19 Start: 12197, Stop: 16303, Start Num: 16
Candidate Starts for BananenDer11_19:
(Start: 16 @12197 has 35 MA's), (Start: 27 @12290 has 1 MA's), (35, 12368), (36, 12392), (46, 12452), (62, 12536), (64, 12548), (88, 12650), (96, 12710), (97, 12722), (103, 12743), (111, 12797), (121, 12845), (130, 12890), (134, 12911), (157, 13028), (168, 13106), (174, 13130), (184, 13196), (198, 13271), (212, 13364), (218, 13394), (254, 13568), (257, 13577), (263, 13607), (267, 13631), (272, 13652), (290, 13712), (309, 13790), (311, 13799), (325, 13877), (337, 13943), (346, 13985), (348, 13994), (355, 14078), (361, 14099), (363, 14132), (374, 14198), (378, 14219), (388, 14273), (391, 14282), (395, 14300), (404, 14318), (405, 14327), (409, 14357), (416, 14393), (426, 14447), (434, 14483), (436, 14489), (437, 14507), (454, 14612), (465, 14678), (501, 14873), (509, 14903), (518, 14936), (534, 14987), (537, 15008), (541, 15023), (542, 15029), (559, 15113), (574, 15161), (582, 15200), (593, 15260), (600, 15293), (603, 15314), (607, 15338), (617, 15368), (639, 15434), (654, 15506), (678, 15821), (679, 15830), (680, 15833), (682, 15875), (686, 15902), (692, 15932), (701, 15983), (705, 16001), (720, 16067), (725, 16115), (728, 16139), (731, 16151), (747, 16232), (749, 16256), (754, 16295),

Gene: Barkley26_16 Start: 11464, Stop: 15480, Start Num: 17
Candidate Starts for Barkley26_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15100), (681, 15127), (684, 15157), (686, 15169), (687, 15178), (701, 15247), (720, 15328), (727, 15388), (729, 15406), (732, 15415),

Gene: BarrelRoll_21 Start: 12068, Stop: 15901, Start Num: 17
Candidate Starts for BarrelRoll_21:
(Start: 17 @12068 has 184 MA's), (Start: 26 @12137 has 1 MA's), (34, 12224), (44, 12299), (60, 12401), (67, 12428), (85, 12500), (87, 12512), (88, 12521), (97, 12593), (111, 12668), (128, 12752), (130, 12761), (134, 12782), (142, 12821), (150, 12857), (157, 12899), (168, 12977), (184, 13067), (198, 13142), (212, 13235), (214, 13244), (216, 13256), (218, 13265), (267, 13502), (277, 13541), (287, 13574), (309, 13661), (315, 13685), (328, 13769), (345, 13853), (348, 13865), (352, 13886), (436, 14042), (447, 14123), (456, 14171), (459, 14189), (462, 14210), (468, 14246), (479, 14297), (486, 14354), (501, 14432), (504, 14441), (525, 14519), (531, 14534), (540, 14576), (553, 14630), (603, 14870), (621, 14945), (652, 15056), (666, 15275), (668, 15287), (686, 15470), (687, 15479), (701, 15551), (709, 15581), (713, 15602), (728, 15722), (741, 15794), (745, 15812), (746, 15818),

Gene: Beezoo_21 Start: 12092, Stop: 15925, Start Num: 17
Candidate Starts for Beezoo_21:
(Start: 17 @12092 has 184 MA's), (Start: 26 @12161 has 1 MA's), (Start: 27 @12182 has 1 MA's), (34, 12248), (60, 12425), (67, 12452), (85, 12524), (87, 12536), (88, 12545), (97, 12617), (111, 12692), (128, 12776), (130, 12785), (134, 12806), (142, 12845), (157, 12923), (168, 13001), (184, 13091), (198, 13166), (212, 13259), (214, 13268), (216, 13280), (218, 13289), (267, 13526), (277, 13565), (287, 13598), (309, 13685), (315, 13709), (328, 13793), (345, 13877), (348, 13889), (349, 13892), (352, 13910), (436, 14066), (447, 14147), (456, 14195), (459, 14213), (462, 14234), (468, 14270), (479, 14321), (486, 14378), (501, 14456), (504, 14465), (525, 14543), (531, 14558), (540, 14600), (553, 14654), (603, 14894), (621, 14969), (652, 15080), (666, 15299), (668, 15311), (686, 15494),

(687, 15503), (709, 15605), (713, 15626), (728, 15746), (741, 15818), (745, 15836), (746, 15842),

Gene: Bella96_21 Start: 12006, Stop: 15845, Start Num: 17
Candidate Starts for Bella96_21:
(Start: 17 @12006 has 184 MA's), (Start: 26 @12075 has 1 MA's), (34, 12162), (60, 12342), (67, 12369), (87, 12453), (88, 12462), (96, 12522), (97, 12534), (111, 12609), (120, 12651), (128, 12693), (130, 12702), (134, 12723), (142, 12762), (144, 12765), (157, 12840), (168, 12918), (198, 13083), (212, 13176), (216, 13197), (218, 13206), (267, 13443), (273, 13467), (277, 13482), (287, 13515), (309, 13602), (325, 13689), (328, 13710), (345, 13794), (348, 13806), (352, 13827), (436, 13983), (447, 14064), (459, 14130), (462, 14151), (468, 14187), (479, 14238), (481, 14256), (486, 14295), (501, 14373), (504, 14382), (525, 14460), (531, 14475), (540, 14517), (553, 14571), (603, 14811), (621, 14886), (652, 14997), (654, 15018), (655, 15039), (664, 15159), (678, 15333), (686, 15414), (687, 15423), (701, 15495), (709, 15525), (713, 15546), (728, 15666), (741, 15738), (745, 15756), (746, 15762),

Gene: Belladonna_21 Start: 12185, Stop: 15949, Start Num: 26
Candidate Starts for Belladonna_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Bern_21 Start: 12034, Stop: 15873, Start Num: 17
Candidate Starts for Bern_21:
(Start: 17 @12034 has 184 MA's), (Start: 26 @12103 has 1 MA's), (34, 12190), (60, 12370), (67, 12397), (87, 12481), (96, 12550), (97, 12562), (111, 12637), (122, 12688), (130, 12730), (134, 12751), (142, 12790), (157, 12868), (168, 12946), (198, 13111), (212, 13204), (216, 13225), (218, 13234), (267, 13471), (273, 13495), (277, 13510), (287, 13543), (309, 13630), (325, 13717), (328, 13738), (345, 13822), (348, 13834), (351, 13849), (352, 13855), (447, 14092), (456, 14140), (459, 14158), (462, 14179), (468, 14215), (472, 14233), (479, 14266), (501, 14401), (504, 14410), (525, 14488), (531, 14503), (540, 14545), (553, 14599), (603, 14839), (621, 14914), (652, 15025), (654, 15046), (655, 15067), (664, 15187), (678, 15361), (686, 15442), (687, 15451), (701, 15523), (709, 15553), (713, 15574), (728, 15694), (741, 15766), (745, 15784), (746, 15790),

Gene: Biglebops_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Biglebops_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: Blizzard_21 Start: 12116, Stop: 15949, Start Num: 17

Candidate Starts for Blizzard_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Bobquesha_22 Start: 13067, Stop: 17233, Start Num: 18
Candidate Starts for Bobquesha_22:
(12, 13031), (Start: 18 @13067 has 70 MA's), (38, 13265), (85, 13493), (87, 13505), (88, 13514), (91, 13544), (103, 13607), (130, 13754), (134, 13775), (142, 13814), (144, 13817), (157, 13892), (168, 13970), (183, 14057), (184, 14060), (192, 14090), (196, 14123), (200, 14147), (213, 14231), (219, 14261), (226, 14288), (248, 14396), (251, 14417), (253, 14429), (257, 14441), (267, 14495), (309, 14654), (314, 14675), (328, 14783), (349, 14903), (383, 15152), (409, 15263), (419, 15314), (421, 15323), (430, 15368), (434, 15389), (453, 15488), (456, 15503), (457, 15509), (469, 15578), (473, 15599), (474, 15608), (478, 15620), (480, 15629), (492, 15701), (501, 15752), (502, 15755), (509, 15782), (540, 15881), (544, 15899), (558, 15974), (602, 16163), (603, 16175), (621, 16250), (655, 16430), (664, 16550), (672, 16658), (686, 16805), (705, 16925), (707, 16934), (709, 16937), (723, 17036), (728, 17063), (746, 17159), (752, 17222),

Gene: Boiiii_21 Start: 12118, Stop: 15951, Start Num: 17
Candidate Starts for Boiiii_21:
(Start: 17 @12118 has 184 MA's), (Start: 26 @12187 has 1 MA's), (34, 12274), (44, 12349), (60, 12451), (67, 12478), (85, 12550), (87, 12562), (88, 12571), (97, 12643), (111, 12718), (128, 12802), (130, 12811), (134, 12832), (142, 12871), (150, 12907), (157, 12949), (168, 13027), (184, 13117), (198, 13192), (212, 13285), (214, 13294), (216, 13306), (218, 13315), (267, 13552), (277, 13591), (287, 13624), (309, 13711), (315, 13735), (328, 13819), (345, 13903), (348, 13915), (352, 13936), (436, 14092), (447, 14173), (456, 14221), (459, 14239), (462, 14260), (468, 14296), (479, 14347), (486, 14404), (501, 14482), (504, 14491), (525, 14569), (531, 14584), (540, 14626), (553, 14680), (603, 14920), (621, 14995), (652, 15106), (666, 15325), (668, 15337), (686, 15520), (687, 15529), (701, 15601), (709, 15631), (713, 15652), (728, 15772), (741, 15844), (745, 15862), (746, 15868),

Gene: Boilgate_18 Start: 12212, Stop: 16429, Start Num: 27
Candidate Starts for Boilgate_18:
(11, 12077), (14, 12101), (Start: 18 @12122 has 70 MA's), (Start: 27 @12212 has 1 MA's), (38, 12323), (71, 12494), (76, 12512), (83, 12536), (85, 12551), (87, 12563), (96, 12632), (97, 12644), (103, 12665), (117, 12749), (128, 12803), (130, 12812), (134, 12833), (141, 12866), (142, 12872), (144, 12875), (147, 12890), (153, 12926), (157, 12950), (158, 12953), (168, 13028), (171, 13040), (183, 13115), (184, 13118), (185, 13121), (197, 13184), (214, 13295), (229, 13352), (237, 13406), (247, 13448), (257, 13496), (259, 13502), (262, 13517), (267, 13550), (275, 13583), (287, 13622), (288, 13625), (301, 13670), (309, 13709), (311, 13718), (314, 13730), (320, 13757), (330, 13850), (333, 13862), (341, 13919), (353, 14015), (369, 14090), (376, 14138), (377, 14144), (384, 14156), (406, 14192), (418, 14234), (457, 14432), (470, 14507), (492, 14624), (501, 14675), (502, 14678), (518, 14738), (519, 14741), (549, 14837), (560, 14915), (561, 14918), (593, 15074), (601, 15107), (602, 15116), (603, 15128), (608, 15152), (632, 15227), (636, 15236), (637, 15239), (644, 15263), (646, 15272), (647, 15275), (648, 15296), (655, 15368), (658, 15410), (661, 15440), (662, 15482), (667, 15554), (670, 15575), (676, 15662), (678, 15677), (686, 15758), (707, 15890), (743, 16112), (744, 16118), (755, 16232), (756, 16262), (757, 16280), (758, 16322), (759, 16355), (760, 16418),

Gene: BoostSeason_17 Start: 10144, Stop: 13818, Start Num: 16
Candidate Starts for BoostSeason_17:
(Start: 16 @10144 has 35 MA's), (Start: 26 @10216 has 1 MA's), (65, 10450), (85, 10501), (97, 10594), (111, 10669), (130, 10762), (134, 10783), (139, 10804), (140, 10810), (157, 10900), (163, 10942), (168, 10978), (177, 11011), (178, 11023), (181, 11047), (184, 11068), (191, 11092), (192, 11098), (197, 11134), (198, 11143), (203, 11176), (204, 11188), (208, 11215), (250, 11398), (252, 11410), (254, 11416), (263, 11455), (267, 11479), (307, 11512), (314, 11530), (317, 11539), (327, 11572), (357, 11761), (358, 11767), (362, 11803), (367, 11830), (371, 11848), (375, 11866), (405, 11974), (410, 12007), (420, 12040), (435, 12094), (441, 12127), (445, 12148), (450, 12172), (454, 12202), (458, 12223), (508, 12445), (536, 12538), (555, 12616), (589, 12739), (628, 12892), (678, 13309), (679, 13318), (681, 13348), (689, 13408), (711, 13516), (728, 13648), (746, 13741),

Gene: BruceB_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for BruceB_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Bryler_20 Start: 11095, Stop: 15096, Start Num: 18
Candidate Starts for Bryler_20:
(Start: 18 @11095 has 70 MA's), (29, 11188), (38, 11293), (44, 11320), (47, 11347), (51, 11365), (55, 11383), (57, 11407), (59, 11413), (66, 11440), (68, 11446), (78, 11482), (81, 11491), (85, 11515), (96, 11587), (98, 11605), (99, 11608), (126, 11737), (151, 11854), (165, 11950), (173, 11989), (179, 12019), (190, 12079), (221, 12262), (222, 12268), (223, 12271), (234, 12325), (239, 12355), (252, 12415), (256, 12427), (258, 12433), (261, 12448), (265, 12469), (268, 12487), (306, 12625), (309, 12637), (314, 12658), (322, 12697), (347, 12751), (348, 12757), (366, 12919), (378, 12982), (395, 13063), (403, 13078), (409, 13120), (419, 13171), (423, 13192), (429, 13222), (431, 13228), (436, 13252), (443, 13303), (452, 13363), (462, 13420), (468, 13456), (472, 13474), (479, 13507), (501, 13648), (502, 13651), (525, 13735), (534, 13762), (553, 13846), (603, 14086), (621, 14161), (667, 14494), (678, 14596), (679, 14605), (686, 14677), (701, 14761), (709, 14791), (716, 14812), (728, 14929), (741, 15004), (748, 15043), (749, 15055),

Gene: CLED96_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for CLED96_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: CREW_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for CREW_21:

(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Cain_20 Start: 11083, Stop: 15084, Start Num: 18
Candidate Starts for Cain_20:
(Start: 18 @11083 has 70 MA's), (29, 11176), (38, 11281), (44, 11308), (47, 11335), (51, 11353), (55, 11371), (57, 11395), (59, 11401), (66, 11428), (68, 11434), (78, 11470), (81, 11479), (85, 11503), (96, 11575), (98, 11593), (99, 11596), (126, 11725), (151, 11842), (165, 11938), (173, 11977), (179, 12007), (190, 12067), (221, 12250), (222, 12256), (223, 12259), (234, 12313), (239, 12343), (252, 12403), (256, 12415), (258, 12421), (261, 12436), (265, 12457), (268, 12475), (306, 12613), (309, 12625), (314, 12646), (322, 12685), (347, 12739), (348, 12745), (366, 12907), (378, 12970), (395, 13051), (403, 13066), (409, 13108), (419, 13159), (423, 13180), (429, 13210), (431, 13216), (436, 13240), (443, 13291), (452, 13351), (462, 13408), (468, 13444), (472, 13462), (479, 13495), (501, 13636), (502, 13639), (525, 13723), (534, 13750), (553, 13834), (603, 14074), (621, 14149), (667, 14482), (678, 14584), (679, 14593), (686, 14665), (701, 14749), (709, 14779), (716, 14800), (728, 14917), (741, 14992), (748, 15031), (749, 15043),

Gene: CallaLilly_21 Start: 12039, Stop: 15872, Start Num: 17
Candidate Starts for CallaLilly_21:
(Start: 17 @12039 has 184 MA's), (Start: 26 @12108 has 1 MA's), (Start: 27 @12129 has 1 MA's), (34, 12195), (60, 12372), (67, 12399), (85, 12471), (87, 12483), (88, 12492), (97, 12564), (111, 12639), (128, 12723), (130, 12732), (134, 12753), (142, 12792), (150, 12828), (157, 12870), (168, 12948), (184, 13038), (198, 13113), (212, 13206), (214, 13215), (216, 13227), (218, 13236), (267, 13473), (277, 13512), (287, 13545), (309, 13632), (315, 13656), (328, 13740), (345, 13824), (348, 13836), (352, 13857), (436, 14013), (447, 14094), (456, 14142), (459, 14160), (462, 14181), (468, 14217), (479, 14268), (486, 14325), (501, 14403), (504, 14412), (525, 14490), (531, 14505), (540, 14547), (553, 14601), (603, 14841), (621, 14916), (652, 15027), (666, 15246), (668, 15258), (686, 15441), (687, 15450), (701, 15522), (709, 15552), (713, 15573), (728, 15693), (741, 15765), (745, 15783), (746, 15789),

Gene: Cambiare_17 Start: 12153, Stop: 16196, Start Num: 18
Candidate Starts for Cambiare_17:
(Start: 18 @12153 has 70 MA's), (28, 12246), (32, 12276), (46, 12423), (62, 12507), (74, 12555), (97, 12693), (103, 12714), (111, 12768), (130, 12861), (134, 12882), (139, 12903), (142, 12921), (148, 12945), (150, 12957), (161, 13029), (164, 13044), (168, 13077), (194, 13209), (197, 13233), (200, 13254), (204, 13287), (208, 13314), (216, 13356), (226, 13404), (252, 13542), (253, 13545), (263, 13587), (280, 13656), (281, 13659), (300, 13728), (309, 13770), (324, 13848), (346, 13965), (348, 13974), (351, 13989), (358, 14070), (361, 14079), (368, 14139), (388, 14253), (405, 14307), (408, 14334), (419, 14388), (421, 14397), (429, 14439), (434, 14463), (436, 14469), (440, 14499), (443, 14520), (446, 14538), (453, 14583), (489, 14790), (491, 14805), (500, 14853), (507, 14874), (510, 14889), (516, 14913), (531, 14952), (532, 14955), (534, 14964), (539, 14991), (543, 15006), (556, 15057), (558, 15084), (585, 15189), (603, 15285), (621, 15360), (655, 15504), (669, 15705), (680, 15789), (681, 15816), (684, 15846), (686, 15858), (720, 16044), (729, 16122),

Gene: Camri_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Camri_16:

(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Capricorn_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Capricorn_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: CaseJules_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for CaseJules_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: CassieYates_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for CassieYates_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Cedasite_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Cedasite_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912),

(499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Chance64_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Chance64_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Chancellor_22 Start: 13324, Stop: 17499, Start Num: 18
Candidate Starts for Chancellor_22:
(12, 13288), (Start: 18 @13324 has 70 MA's), (38, 13522), (87, 13762), (88, 13771), (103, 13864), (130, 14011), (134, 14032), (142, 14071), (144, 14074), (157, 14149), (168, 14227), (183, 14314), (184, 14317), (192, 14347), (196, 14380), (200, 14404), (213, 14488), (219, 14518), (226, 14545), (248, 14653), (251, 14674), (253, 14686), (257, 14698), (267, 14752), (309, 14911), (314, 14932), (328, 15040), (349, 15160), (409, 15520), (419, 15571), (421, 15580), (430, 15625), (434, 15646), (474, 15865), (478, 15877), (480, 15886), (492, 15958), (501, 16009), (502, 16012), (509, 16039), (540, 16138), (544, 16156), (558, 16231), (602, 16420), (603, 16432), (621, 16507), (655, 16693), (664, 16813), (672, 16921), (686, 17071), (705, 17191), (707, 17200), (709, 17203), (715, 17224), (723, 17302), (728, 17329), (746, 17425), (752, 17488),

Gene: Chavito_21 Start: 11138, Stop: 15292, Start Num: 18
Candidate Starts for Chavito_21:
(10, 11090), (Start: 18 @11138 has 70 MA's), (29, 11231), (47, 11390), (53, 11417), (72, 11507), (73, 11510), (90, 11597), (109, 11705), (110, 11708), (124, 11774), (145, 11876), (151, 11918), (154, 11933), (155, 11942), (160, 11969), (164, 11999), (168, 12032), (178, 12074), (190, 12143), (221, 12329), (222, 12335), (231, 12371), (233, 12380), (234, 12392), (236, 12404), (239, 12422), (252, 12482), (256, 12494), (258, 12500), (261, 12515), (264, 12533), (265, 12536), (268, 12554), (272, 12569), (285, 12608), (301, 12665), (302, 12674), (309, 12704), (314, 12725), (321, 12755), (331, 12824), (335, 12845), (339, 12872), (345, 12902), (348, 12914), (360, 13016), (370, 13094), (378, 13139), (382, 13163), (394, 13217), (395, 13220), (403, 13235), (404, 13238), (409, 13277), (414, 13304), (419, 13328), (420, 13334), (445, 13469), (446, 13478), (451, 13514), (452, 13520), (456, 13538), (460, 13565), (462, 13577), (472, 13631), (479, 13664), (487, 13724), (501, 13805), (502, 13808), (525, 13892), (531, 13907), (558, 14042), (577, 14108), (603, 14243), (658, 14516), (663, 14591), (686, 14852), (687, 14861), (695, 14924), (719, 15047), (728, 15119), (734, 15140), (741, 15191), (745, 15209), (746, 15215), (750, 15254),

Gene: CheetoDust_21 Start: 12093, Stop: 15926, Start Num: 17
Candidate Starts for CheetoDust_21:
(Start: 17 @12093 has 184 MA's), (Start: 26 @12162 has 1 MA's), (34, 12249), (60, 12426), (67, 12453), (85, 12525), (87, 12537), (88, 12546), (97, 12618), (111, 12693), (128, 12777), (130, 12786), (134, 12807), (142, 12846), (157, 12924), (168, 13002), (174, 13026), (184, 13092), (198, 13167), (212, 13260), (214, 13269), (216, 13281), (218, 13290), (267, 13527), (277, 13566), (287, 13599), (309, 13686), (315, 13710), (328, 13794), (345, 13878), (348, 13890), (352, 13911), (436, 14067), (447, 14148), (451, 14172), (456, 14196), (459, 14214), (462, 14235), (468, 14271), (479, 14322),

(486, 14379), (501, 14457), (504, 14466), (525, 14544), (531, 14559), (540, 14601), (553, 14655), (603, 14895), (621, 14970), (652, 15081), (666, 15300), (668, 15312), (686, 15495), (687, 15504), (701, 15576), (709, 15606), (713, 15627), (728, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: Cheetobro_22 Start: 13324, Stop: 17496, Start Num: 18
Candidate Starts for Cheetobro_22:
(12, 13288), (Start: 18 @13324 has 70 MA's), (38, 13522), (87, 13762), (88, 13771), (103, 13864), (130, 14011), (134, 14032), (142, 14071), (144, 14074), (157, 14149), (168, 14227), (183, 14314), (184, 14317), (192, 14347), (196, 14380), (200, 14404), (213, 14488), (219, 14518), (226, 14545), (248, 14653), (251, 14674), (253, 14686), (257, 14698), (267, 14752), (309, 14911), (314, 14932), (328, 15040), (349, 15160), (409, 15520), (419, 15571), (421, 15580), (430, 15625), (434, 15646), (474, 15865), (478, 15877), (480, 15886), (492, 15958), (501, 16009), (502, 16012), (509, 16039), (540, 16138), (544, 16156), (558, 16231), (602, 16420), (603, 16432), (621, 16507), (655, 16693), (664, 16813), (672, 16921), (686, 17068), (705, 17188), (707, 17197), (709, 17200), (723, 17299), (728, 17326), (746, 17422), (752, 17485),

Gene: Cherrybomb426_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Cherrybomb426_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Chris_20 Start: 11071, Stop: 15138, Start Num: 18
Candidate Starts for Chris_20:
(Start: 18 @11071 has 70 MA's), (29, 11164), (44, 11296), (47, 11323), (49, 11332), (50, 11338), (71, 11434), (96, 11563), (98, 11581), (99, 11584), (105, 11611), (110, 11641), (126, 11722), (132, 11752), (136, 11776), (151, 11839), (154, 11854), (167, 11950), (168, 11953), (178, 11995), (190, 12064), (221, 12247), (223, 12256), (233, 12298), (234, 12310), (252, 12400), (256, 12412), (258, 12418), (261, 12433), (264, 12451), (265, 12454), (271, 12484), (272, 12487), (306, 12610), (309, 12622), (310, 12628), (314, 12643), (316, 12649), (346, 12733), (353, 12802), (378, 12967), (387, 13015), (391, 13030), (409, 13105), (419, 13156), (423, 13177), (431, 13213), (436, 13237), (440, 13267), (459, 13384), (461, 13396), (462, 13405), (472, 13459), (479, 13492), (486, 13549), (501, 13627), (502, 13630), (525, 13714), (534, 13741), (544, 13789), (553, 13825), (558, 13864), (587, 13969), (603, 14065), (614, 14107), (621, 14140), (666, 14482), (686, 14680), (703, 14794), (728, 14968), (741, 15052), (746, 15073),

Gene: Clipper_21 Start: 12093, Stop: 15926, Start Num: 17
Candidate Starts for Clipper_21:
(Start: 17 @12093 has 184 MA's), (Start: 26 @12162 has 1 MA's), (34, 12249), (60, 12426), (67, 12453), (87, 12537), (88, 12546), (97, 12618), (111, 12693), (128, 12777), (130, 12786), (134, 12807), (142, 12846), (157, 12924), (168, 13002), (184, 13092), (198, 13167), (212, 13260), (214, 13269), (216, 13281), (218, 13290), (267, 13527), (277, 13566), (287, 13599), (309, 13686), (315, 13710), (328, 13794), (345, 13878), (348, 13890), (352, 13911), (436, 14067), (447, 14148), (451, 14172), (456, 14196), (459, 14214), (462, 14235), (468, 14271), (479, 14322), (486, 14379), (501, 14457), (504, 14466), (525, 14544), (531, 14559), (540, 14601), (553, 14655), (603, 14895), (621, 14970), (652, 15081), (666, 15300), (668, 15312), (686, 15495), (687, 15504), (701, 15576), (709, 15606), (713, 15627), (728, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: Cloudyecho_16 Start: 11718, Stop: 15656, Start Num: 18
Candidate Starts for Cloudyecho_16:
(Start: 18 @11718 has 70 MA's), (28, 11811), (29, 11814), (37, 11919), (38, 11922), (43, 11937), (49, 11985), (55, 12012), (59, 12042), (66, 12069), (92, 12189), (94, 12204), (96, 12216), (98, 12234), (107, 12279), (125, 12357), (126, 12366), (145, 12453), (151, 12495), (154, 12510), (159, 12540), (168, 12609), (170, 12621), (190, 12720), (206, 12834), (213, 12861), (221, 12903), (228, 12933), (233, 12954), (239, 12996), (256, 13068), (258, 13074), (261, 13089), (264, 13107), (265, 13110), (282, 13170), (295, 13215), (301, 13239), (304, 13257), (309, 13278), (315, 13302), (318, 13314), (319, 13317), (326, 13374), (340, 13446), (348, 13488), (360, 13590), (365, 13647), (388, 13767), (393, 13788), (420, 13908), (431, 13959), (443, 14034), (450, 14076), (460, 14139), (465, 14172), (489, 14295), (507, 14379), (510, 14394), (516, 14418), (532, 14460), (534, 14469), (543, 14514), (548, 14529), (562, 14610), (568, 14619), (590, 14712), (595, 14766), (597, 14769), (603, 14802), (680, 15270), (681, 15297), (683, 15324), (686, 15339), (687, 15348), (727, 15564), (729, 15582), (736, 15621),

Gene: Coleslaw_16 Start: 11455, Stop: 15468, Start Num: 17
Candidate Starts for Coleslaw_16:
(Start: 17 @11455 has 184 MA's), (38, 11656), (57, 11770), (67, 11812), (75, 11842), (97, 11977), (100, 11989), (103, 11998), (139, 12187), (142, 12205), (144, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (194, 12493), (197, 12517), (208, 12598), (235, 12721), (250, 12805), (260, 12841), (267, 12886), (268, 12892), (299, 13000), (304, 13024), (309, 13045), (351, 13264), (368, 13414), (383, 13501), (408, 13609), (436, 13744), (452, 13855), (456, 13873), (461, 13903), (499, 14125), (507, 14149), (510, 14164), (514, 14185), (525, 14212), (534, 14239), (548, 14299), (568, 14389), (573, 14422), (590, 14485), (597, 14542), (603, 14575), (604, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (701, 15235), (720, 15316), (727, 15376), (729, 15394), (732, 15403),

Gene: Collard_19 Start: 12197, Stop: 16303, Start Num: 16
Candidate Starts for Collard_19:
(Start: 16 @12197 has 35 MA's), (Start: 27 @12290 has 1 MA's), (35, 12368), (36, 12392), (46, 12452), (62, 12536), (64, 12548), (88, 12650), (96, 12710), (97, 12722), (103, 12743), (111, 12797), (121, 12845), (130, 12890), (134, 12911), (157, 13028), (168, 13106), (174, 13130), (184, 13196), (198, 13271), (212, 13364), (218, 13394), (254, 13568), (257, 13577), (263, 13607), (267, 13631), (272, 13652), (290, 13712), (309, 13790), (311, 13799), (325, 13877), (337, 13943), (346, 13985), (348, 13994), (355, 14078), (361, 14099), (363, 14132), (374, 14198), (378, 14219), (388, 14273), (391, 14282), (395, 14300), (404, 14318), (405, 14327), (409, 14357), (416, 14393), (426, 14447), (434, 14483), (436, 14489), (437, 14507), (454, 14612), (465, 14678), (501, 14873), (509, 14903), (518, 14936), (534, 14987), (537, 15008), (541, 15023), (542, 15029), (559, 15113), (574, 15161), (582, 15200), (593, 15260), (600, 15293), (603, 15314), (607, 15338), (617, 15368), (639, 15434), (654, 15506), (678, 15821), (679, 15830), (680, 15833), (682, 15875), (686, 15902), (692, 15932), (701, 15983), (705, 16001), (720, 16067), (725, 16115), (728, 16139), (731, 16151), (747, 16232), (749, 16256), (754, 16295),

Gene: Crespo_16 Start: 11465, Stop: 15478, Start Num: 17
Candidate Starts for Crespo_16:
(Start: 17 @11465 has 184 MA's), (38, 11666), (57, 11780), (67, 11822), (75, 11852), (97, 11987), (100, 11999), (103, 12008), (139, 12197), (142, 12215), (144, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (194, 12503), (197, 12527), (208, 12608), (235, 12731), (250, 12815), (260, 12851), (267, 12896), (268, 12902), (299, 13010), (304, 13034), (309, 13055), (351, 13274), (368, 13424), (383, 13511), (408, 13619), (436, 13754), (452, 13865), (456, 13883), (461, 13913), (499, 14135), (507, 14159), (510, 14174), (514, 14195), (525, 14222), (534, 14249), (548, 14309), (568, 14399), (573, 14432), (590, 14495), (597, 14552), (603, 14585), (604, 14594), (680, 15098),

(681, 15125), (684, 15155), (686, 15167), (687, 15176), (701, 15245), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: CrimD_21 Start: 12051, Stop: 15887, Start Num: 17
Candidate Starts for CrimD_21:
(Start: 17 @12051 has 184 MA's), (Start: 26 @12120 has 1 MA's), (34, 12207), (60, 12387), (67, 12414), (87, 12498), (88, 12507), (96, 12567), (97, 12579), (111, 12654), (120, 12696), (128, 12738), (130, 12747), (134, 12768), (142, 12807), (157, 12885), (168, 12963), (198, 13128), (212, 13221), (214, 13230), (216, 13242), (218, 13251), (267, 13488), (273, 13512), (277, 13527), (287, 13560), (309, 13647), (315, 13671), (328, 13755), (345, 13839), (348, 13851), (352, 13872), (360, 13953), (432, 14010), (436, 14028), (447, 14109), (456, 14157), (459, 14175), (461, 14187), (462, 14196), (468, 14232), (479, 14283), (486, 14340), (501, 14418), (525, 14505), (531, 14520), (540, 14562), (553, 14616), (603, 14856), (621, 14931), (652, 15042), (666, 15261), (668, 15273), (678, 15375), (686, 15456), (687, 15465), (701, 15537), (709, 15567), (713, 15588), (728, 15708), (741, 15780), (745, 15798), (746, 15804),

Gene: Curiosium_22 Start: 11510, Stop: 15637, Start Num: 18
Candidate Starts for Curiosium_22:
(Start: 18 @11510 has 70 MA's), (23, 11537), (29, 11603), (44, 11735), (46, 11759), (53, 11789), (56, 11810), (57, 11822), (72, 11879), (73, 11882), (90, 11969), (96, 12002), (98, 12020), (99, 12023), (108, 12065), (118, 12110), (145, 12239), (151, 12281), (154, 12296), (155, 12305), (160, 12332), (168, 12395), (177, 12425), (190, 12506), (198, 12557), (212, 12644), (221, 12689), (231, 12731), (232, 12734), (233, 12740), (239, 12782), (252, 12842), (256, 12854), (258, 12860), (261, 12875), (264, 12893), (265, 12896), (268, 12914), (272, 12929), (291, 12989), (298, 13010), (301, 13025), (309, 13064), (313, 13082), (314, 13085), (345, 13262), (348, 13274), (350, 13283), (353, 13334), (360, 13376), (378, 13499), (382, 13523), (404, 13598), (414, 13664), (431, 13745), (440, 13799), (443, 13820), (446, 13838), (452, 13880), (456, 13898), (460, 13925), (462, 13937), (468, 13973), (472, 13991), (480, 14036), (501, 14165), (502, 14168), (525, 14252), (531, 14267), (539, 14306), (540, 14309), (553, 14363), (558, 14402), (577, 14468), (603, 14603), (638, 14729), (670, 15044), (678, 15125), (679, 15134), (686, 15206), (728, 15458), (741, 15530), (746, 15554), (749, 15581),

Gene: DMoney_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for DMoney_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: DNAIII_0016 Start: 11473, Stop: 15486, Start Num: 17
Candidate Starts for DNAIII_0016:
(Start: 17 @11473 has 184 MA's), (38, 11674), (57, 11788), (67, 11830), (75, 11860), (97, 11995), (100, 12007), (103, 12016), (139, 12205), (142, 12223), (144, 12226), (148, 12247), (150, 12259), (161, 12331), (168, 12379), (194, 12511), (197, 12535), (208, 12616), (235, 12739), (250, 12823), (260, 12859), (267, 12904), (268, 12910), (299, 13018), (304, 13042), (309, 13063), (351, 13282), (368, 13432), (383, 13519), (408, 13627), (436, 13762), (452, 13873), (456, 13891), (461, 13921), (499, 14143), (507, 14167), (510, 14182), (514, 14203), (525, 14230), (534, 14257), (548, 14317), (568, 14407), (573, 14440), (590, 14503), (597, 14560), (603, 14593), (604, 14602), (680, 15106), (681, 15133), (684, 15163), (686, 15175), (687, 15184), (701, 15253), (720, 15334), (727, 15394),

(729, 15412), (732, 15421),

Gene: Dadosky_19 Start: 12113, Stop: 16225, Start Num: 16
Candidate Starts for Dadosky_19:
(Start: 16 @12113 has 35 MA's), (Start: 27 @12206 has 1 MA's), (35, 12284), (36, 12308), (46, 12368), (62, 12452), (88, 12566), (96, 12626), (97, 12638), (103, 12659), (111, 12713), (121, 12761), (130, 12806), (134, 12827), (157, 12944), (168, 13022), (174, 13046), (180, 13088), (184, 13112), (198, 13187), (212, 13280), (218, 13310), (254, 13484), (263, 13523), (267, 13547), (272, 13568), (290, 13628), (309, 13706), (325, 13793), (337, 13859), (346, 13901), (348, 13910), (355, 13994), (361, 14015), (363, 14048), (374, 14114), (378, 14135), (388, 14189), (391, 14198), (395, 14216), (405, 14243), (409, 14273), (416, 14309), (434, 14399), (436, 14405), (437, 14423), (454, 14528), (465, 14594), (501, 14789), (509, 14819), (518, 14852), (534, 14903), (537, 14924), (541, 14939), (542, 14945), (559, 15029), (574, 15077), (582, 15116), (593, 15176), (600, 15209), (603, 15230), (607, 15254), (617, 15284), (639, 15350), (654, 15422), (678, 15737), (679, 15746), (680, 15749), (681, 15776), (682, 15791), (684, 15806), (686, 15818), (692, 15848), (701, 15902), (705, 15920), (720, 15989), (725, 16037), (728, 16061), (731, 16073), (734, 16082), (747, 16154), (749, 16178), (754, 16217),

Gene: Dalmuri_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Dalmuri_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: DanSyl44_22 Start: 13327, Stop: 17502, Start Num: 18
Candidate Starts for DanSyl44_22:
(12, 13291), (Start: 18 @13327 has 70 MA's), (38, 13525), (87, 13765), (88, 13774), (103, 13867), (130, 14014), (134, 14035), (142, 14074), (144, 14077), (157, 14152), (168, 14230), (183, 14317), (184, 14320), (192, 14350), (196, 14383), (200, 14407), (213, 14491), (219, 14521), (226, 14548), (248, 14656), (251, 14677), (253, 14689), (257, 14701), (267, 14755), (309, 14914), (314, 14935), (328, 15043), (349, 15163), (409, 15523), (419, 15574), (421, 15583), (430, 15628), (434, 15649), (474, 15868), (478, 15880), (480, 15889), (488, 15934), (492, 15961), (501, 16012), (502, 16015), (509, 16042), (519, 16078), (540, 16141), (544, 16159), (558, 16234), (602, 16423), (603, 16435), (621, 16510), (655, 16696), (664, 16816), (672, 16924), (686, 17074), (705, 17194), (707, 17203), (709, 17206), (723, 17305), (728, 17332), (746, 17428), (752, 17491),

Gene: Darionha_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Darionha_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: DartGoblin_21 Start: 12003, Stop: 15842, Start Num: 17
Candidate Starts for DartGoblin_21:
(Start: 17 @12003 has 184 MA's), (Start: 26 @12072 has 1 MA's), (34, 12159), (60, 12339), (67, 12366), (87, 12450), (88, 12459), (96, 12519), (97, 12531), (111, 12606), (120, 12648), (128, 12690), (130, 12699), (134, 12720), (142, 12759), (144, 12762), (157, 12837), (168, 12915), (198, 13080), (212, 13173), (216, 13194), (218, 13203), (267, 13440), (273, 13464), (277, 13479), (287, 13512), (309, 13599), (325, 13686), (328, 13707), (345, 13791), (348, 13803), (352, 13824), (436, 13980), (447, 14061), (459, 14127), (462, 14148), (468, 14184), (479, 14235), (481, 14253), (486, 14292), (501, 14370), (504, 14379), (525, 14457), (531, 14472), (540, 14514), (553, 14568), (603, 14808), (621, 14883), (652, 14994), (654, 15015), (655, 15036), (664, 15156), (678, 15330), (686, 15411), (687, 15420), (701, 15492), (709, 15522), (713, 15543), (728, 15663), (741, 15735), (745, 15753), (746, 15759),

Gene: DarthP_20 Start: 12196, Stop: 16335, Start Num: 17
Candidate Starts for DarthP_20:
(10, 12151), (Start: 17 @12196 has 184 MA's), (Start: 26 @12265 has 1 MA's), (34, 12352), (44, 12427), (60, 12529), (62, 12535), (67, 12556), (76, 12589), (80, 12601), (87, 12640), (88, 12649), (96, 12709), (97, 12721), (103, 12742), (111, 12796), (117, 12826), (130, 12889), (134, 12910), (142, 12949), (157, 13027), (168, 13105), (174, 13129), (203, 13303), (208, 13342), (209, 13351), (210, 13354), (216, 13384), (241, 13507), (245, 13522), (252, 13561), (263, 13606), (267, 13630), (297, 13732), (299, 13744), (301, 13750), (309, 13789), (332, 13915), (334, 13930), (338, 13966), (341, 13978), (350, 14023), (361, 14119), (404, 14338), (409, 14377), (412, 14398), (431, 14485), (436, 14509), (439, 14536), (440, 14539), (445, 14569), (452, 14620), (459, 14656), (479, 14764), (501, 14899), (502, 14902), (521, 14968), (523, 14974), (534, 15013), (552, 15085), (554, 15091), (557, 15112), (579, 15196), (584, 15226), (591, 15247), (592, 15259), (603, 15340), (610, 15373), (613, 15382), (615, 15388), (627, 15430), (634, 15448), (640, 15481), (643, 15487), (653, 15532), (666, 15742), (678, 15841), (679, 15850), (680, 15853), (686, 15922), (713, 16057), (721, 16126), (728, 16174), (746, 16270), (750, 16309),

Gene: Dartin_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for Dartin_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268, 12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416, 13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Deby_21 Start: 12050, Stop: 15883, Start Num: 17
Candidate Starts for Deby_21:
(Start: 17 @12050 has 184 MA's), (Start: 26 @12119 has 1 MA's), (34, 12206), (60, 12383), (67, 12410), (87, 12494), (88, 12503), (97, 12575), (111, 12650), (128, 12734), (130, 12743), (134, 12764), (142, 12803), (157, 12881), (168, 12959), (184, 13049), (198, 13124), (212, 13217), (216, 13238), (218, 13247), (267, 13484), (277, 13523), (287, 13556), (309, 13643), (315, 13667), (328, 13751), (345, 13835), (348, 13847), (352, 13868), (436, 14024), (447, 14105), (456, 14153), (459, 14171),

(462, 14192), (468, 14228), (479, 14279), (486, 14336), (501, 14414), (504, 14423), (525, 14501), (531, 14516), (540, 14558), (553, 14612), (603, 14852), (621, 14927), (652, 15038), (666, 15257), (668, 15269), (686, 15452), (687, 15461), (709, 15563), (713, 15584), (728, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Devera_21 Start: 12075, Stop: 15929, Start Num: 17
Candidate Starts for Devera_21:
(Start: 17 @12075 has 184 MA's), (Start: 26 @12144 has 1 MA's), (34, 12231), (60, 12411), (67, 12438), (87, 12522), (88, 12531), (96, 12591), (97, 12603), (111, 12678), (120, 12720), (128, 12762), (130, 12771), (134, 12792), (142, 12831), (157, 12909), (163, 12951), (168, 12987), (198, 13152), (212, 13245), (216, 13266), (218, 13275), (273, 13557), (277, 13572), (287, 13605), (309, 13692), (328, 13800), (345, 13884), (348, 13896), (352, 13917), (436, 14073), (447, 14154), (456, 14202), (459, 14220), (462, 14241), (468, 14277), (479, 14328), (486, 14385), (501, 14463), (504, 14472), (525, 14550), (531, 14565), (540, 14607), (553, 14661), (580, 14778), (603, 14901), (621, 14976), (655, 15129), (666, 15306), (678, 15420), (686, 15501), (687, 15510), (701, 15582), (709, 15612), (713, 15633), (728, 15750), (741, 15822), (746, 15846),

Gene: DingDing_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for DingDing_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: DismalFunk_17 Start: 10116, Stop: 13784, Start Num: 16
Candidate Starts for DismalFunk_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (405, 11946), (420, 12012), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (673, 13251), (678, 13281), (679, 13290), (681, 13320), (711, 13485), (728, 13614), (746, 13707),

Gene: DismalStressor_17 Start: 10116, Stop: 13784, Start Num: 16
Candidate Starts for DismalStressor_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (405, 11946), (420, 12012), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (673, 13251), (678, 13281), (679, 13290), (681, 13320), (711, 13485),

(728, 13614), (746, 13707),

Gene: Dole_21 Start: 12077, Stop: 15931, Start Num: 17
Candidate Starts for Dole_21:
(Start: 17 @12077 has 184 MA's), (Start: 26 @12146 has 1 MA's), (34, 12233), (60, 12413), (67, 12440), (87, 12524), (88, 12533), (96, 12593), (97, 12605), (111, 12680), (120, 12722), (128, 12764), (130, 12773), (134, 12794), (142, 12833), (157, 12911), (163, 12953), (168, 12989), (198, 13154), (212, 13247), (216, 13268), (218, 13277), (273, 13559), (277, 13574), (287, 13607), (309, 13694), (328, 13802), (345, 13886), (348, 13898), (352, 13919), (436, 14075), (447, 14156), (456, 14204), (459, 14222), (462, 14243), (468, 14279), (479, 14330), (486, 14387), (501, 14465), (504, 14474), (525, 14552), (531, 14567), (540, 14609), (553, 14663), (580, 14780), (603, 14903), (621, 14978), (655, 15131), (666, 15308), (678, 15422), (686, 15503), (687, 15512), (701, 15584), (709, 15614), (713, 15635), (728, 15752), (741, 15824), (746, 15848),

Gene: DoubleChamp_19 Start: 12197, Stop: 16303, Start Num: 16
Candidate Starts for DoubleChamp_19:
(Start: 16 @12197 has 35 MA's), (Start: 27 @12290 has 1 MA's), (35, 12368), (36, 12392), (46, 12452), (62, 12536), (64, 12548), (88, 12650), (96, 12710), (97, 12722), (103, 12743), (111, 12797), (121, 12845), (130, 12890), (134, 12911), (157, 13028), (168, 13106), (174, 13130), (184, 13196), (198, 13271), (212, 13364), (218, 13394), (254, 13568), (257, 13577), (263, 13607), (267, 13631), (272, 13652), (290, 13712), (309, 13790), (311, 13799), (325, 13877), (337, 13943), (346, 13985), (348, 13994), (355, 14078), (361, 14099), (363, 14132), (374, 14198), (378, 14219), (388, 14273), (391, 14282), (395, 14300), (404, 14318), (405, 14327), (409, 14357), (416, 14393), (426, 14447), (434, 14483), (436, 14489), (437, 14507), (454, 14612), (465, 14678), (501, 14873), (509, 14903), (518, 14936), (534, 14987), (537, 15008), (541, 15023), (542, 15029), (559, 15113), (574, 15161), (582, 15200), (593, 15260), (600, 15293), (603, 15314), (607, 15338), (617, 15368), (639, 15434), (654, 15506), (678, 15821), (679, 15830), (680, 15833), (682, 15875), (686, 15902), (692, 15932), (701, 15983), (705, 16001), (720, 16067), (725, 16115), (728, 16139), (731, 16151), (747, 16232), (749, 16256), (754, 16295),

Gene: Doughnut_17 Start: 10138, Stop: 13812, Start Num: 16
Candidate Starts for Doughnut_17:
(Start: 16 @10138 has 35 MA's), (Start: 26 @10210 has 1 MA's), (65, 10444), (85, 10495), (97, 10588), (111, 10663), (130, 10756), (134, 10777), (139, 10798), (140, 10804), (157, 10894), (163, 10936), (168, 10972), (177, 11005), (178, 11017), (181, 11041), (184, 11062), (191, 11086), (192, 11092), (197, 11128), (198, 11137), (203, 11170), (204, 11182), (208, 11209), (250, 11392), (252, 11404), (254, 11410), (263, 11449), (267, 11473), (307, 11506), (314, 11524), (317, 11533), (327, 11566), (357, 11755), (358, 11761), (362, 11797), (367, 11824), (371, 11842), (375, 11860), (405, 11968), (410, 12001), (420, 12034), (435, 12088), (441, 12121), (445, 12142), (450, 12166), (454, 12196), (458, 12217), (508, 12439), (536, 12532), (555, 12610), (589, 12733), (628, 12886), (673, 13273), (678, 13303), (679, 13312), (681, 13342), (689, 13402), (711, 13510), (728, 13642), (746, 13735),

Gene: DrHayes_21 Start: 12024, Stop: 15863, Start Num: 17
Candidate Starts for DrHayes_21:
(Start: 17 @12024 has 184 MA's), (Start: 26 @12093 has 1 MA's), (34, 12180), (60, 12360), (67, 12387), (87, 12471), (88, 12480), (96, 12540), (97, 12552), (111, 12627), (122, 12678), (130, 12720), (134, 12741), (142, 12780), (157, 12858), (168, 12936), (174, 12960), (198, 13101), (212, 13194), (216, 13215), (218, 13224), (267, 13461), (273, 13485), (277, 13500), (287, 13533), (309, 13620), (325, 13707), (328, 13728), (345, 13812), (348, 13824), (352, 13845), (436, 14001), (447, 14082), (459, 14148), (462, 14169), (468, 14205), (479, 14256), (481, 14274), (486, 14313), (501, 14391), (525, 14478), (531, 14493), (540, 14535), (553, 14589), (603, 14829), (621, 14904), (652, 15015), (654, 15036), (655, 15057), (664, 15177), (678, 15351), (686, 15432), (687, 15441), (701, 15513), (709, 15543), (713, 15564), (728, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Durfee_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Durfee_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: ECartman_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for ECartman_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Edugator_18 Start: 12113, Stop: 16225, Start Num: 16
Candidate Starts for Edugator_18:
(Start: 13 @12092 has 1 MA's), (Start: 16 @12113 has 35 MA's), (Start: 27 @12206 has 1 MA's), (35, 12284), (36, 12308), (46, 12368), (62, 12452), (88, 12566), (96, 12626), (97, 12638), (103, 12659), (111, 12713), (121, 12761), (130, 12806), (134, 12827), (157, 12944), (168, 13022), (174, 13046), (180, 13088), (184, 13112), (198, 13187), (212, 13280), (218, 13310), (254, 13484), (263, 13523), (267, 13547), (272, 13568), (290, 13628), (309, 13706), (325, 13793), (337, 13859), (346, 13901), (348, 13910), (355, 13994), (361, 14015), (363, 14048), (374, 14114), (378, 14135), (388, 14189), (391, 14198), (395, 14216), (405, 14243), (409, 14273), (416, 14309), (434, 14399), (436, 14405), (437, 14423), (454, 14528), (465, 14594), (501, 14789), (509, 14819), (518, 14852), (534, 14903), (537, 14924), (541, 14939), (542, 14945), (559, 15029), (574, 15077), (582, 15116), (593, 15176), (600, 15209), (603, 15230), (607, 15254), (617, 15284), (639, 15350), (654, 15422), (678, 15737), (679, 15746), (680, 15749), (681, 15776), (682, 15791), (684, 15806), (686, 15818), (692, 15848), (701, 15902), (705, 15920), (720, 15989), (725, 16037), (728, 16061), (731, 16073), (734, 16082), (747, 16154), (749, 16178), (754, 16217),

Gene: Efra2_21 Start: 11000, Stop: 15127, Start Num: 18
Candidate Starts for Efra2_21:
(10, 10952), (Start: 18 @11000 has 70 MA's), (29, 11093), (44, 11225), (46, 11249), (53, 11279), (56, 11300), (57, 11312), (73, 11372), (90, 11459), (96, 11492), (98, 11510), (99, 11513), (114, 11585), (145, 11729), (151, 11771), (154, 11786), (160, 11822), (169, 11894), (190, 11996), (221, 12179), (227, 12206), (232, 12224), (233, 12230), (239, 12272), (256, 12344), (258, 12350), (261, 12365), (265, 12386), (268, 12404), (272, 12419), (287, 12467), (298, 12500), (301, 12515), (309, 12554), (314, 12575), (321, 12605), (350, 12773), (353, 12824), (378, 12989), (382, 13013), (395, 13070), (407, 13121), (414, 13154), (416, 13163), (431, 13235), (443, 13310), (446, 13328), (452, 13370), (456, 13388), (460, 13415), (462, 13427), (482, 13556), (487, 13574), (501, 13655), (502, 13658), (525, 13742), (539, 13796), (540, 13799), (558, 13892), (577, 13958), (603, 14093), (638, 14219), (678, 14615), (679, 14624), (686, 14696), (701, 14780), (709, 14810), (713, 14831), (728, 14948),

(741, 15020), (746, 15044), (750, 15083),

Gene: Ekdilam_18 Start: 11907, Stop: 16097, Start Num: 17
Candidate Starts for Ekdilam_18:
(10, 11862), (Start: 17 @11907 has 184 MA's), (Start: 26 @11976 has 1 MA's), (34, 12063), (44, 12138), (60, 12240), (67, 12267), (76, 12300), (80, 12312), (87, 12351), (96, 12420), (97, 12432), (103, 12453), (111, 12507), (116, 12531), (117, 12537), (130, 12600), (134, 12621), (142, 12660), (148, 12684), (157, 12738), (168, 12816), (174, 12840), (187, 12915), (203, 13014), (208, 13053), (210, 13065), (216, 13095), (241, 13218), (245, 13233), (252, 13272), (257, 13287), (267, 13341), (299, 13455), (300, 13458), (309, 13500), (314, 13521), (332, 13626), (334, 13641), (335, 13656), (338, 13677), (341, 13689), (350, 13734), (361, 13830), (378, 13950), (409, 14088), (412, 14109), (431, 14196), (436, 14220), (439, 14247), (440, 14250), (445, 14280), (452, 14331), (459, 14367), (479, 14475), (501, 14610), (502, 14613), (521, 14679), (523, 14685), (534, 14724), (552, 14796), (554, 14802), (557, 14823), (579, 14907), (584, 14937), (591, 14958), (592, 14970), (603, 15051), (610, 15084), (613, 15093), (615, 15099), (627, 15141), (634, 15159), (640, 15192), (643, 15198), (666, 15486), (678, 15600), (679, 15609), (680, 15612), (686, 15681), (713, 15813), (728, 15933), (742, 16011), (746, 16032), (750, 16071),

Gene: Ellie_18 Start: 11944, Stop: 16092, Start Num: 17
Candidate Starts for Ellie_18:
(Start: 17 @11944 has 184 MA's), (Start: 26 @12013 has 1 MA's), (44, 12175), (60, 12277), (62, 12283), (67, 12304), (96, 12457), (97, 12469), (111, 12544), (117, 12574), (130, 12637), (134, 12658), (142, 12697), (157, 12775), (168, 12853), (174, 12877), (184, 12943), (198, 13018), (212, 13111), (232, 13192), (242, 13255), (252, 13309), (253, 13312), (259, 13330), (261, 13342), (272, 13399), (281, 13426), (287, 13450), (294, 13471), (299, 13492), (309, 13537), (337, 13711), (361, 13867), (378, 13987), (386, 14029), (387, 14035), (406, 14107), (409, 14125), (412, 14146), (436, 14257), (445, 14317), (450, 14350), (452, 14368), (456, 14386), (459, 14404), (461, 14416), (468, 14461), (479, 14512), (486, 14560), (501, 14638), (525, 14725), (528, 14731), (531, 14740), (543, 14797), (544, 14800), (558, 14875), (577, 14941), (603, 15076), (618, 15136), (621, 15151), (624, 15157), (679, 15607), (686, 15679), (687, 15688), (703, 15775), (728, 15928), (746, 16027), (749, 16054), (750, 16066),

Gene: Emerson_21 Start: 12076, Stop: 15909, Start Num: 17
Candidate Starts for Emerson_21:
(Start: 17 @12076 has 184 MA's), (Start: 26 @12145 has 1 MA's), (34, 12232), (44, 12307), (60, 12409), (67, 12436), (85, 12508), (87, 12520), (88, 12529), (97, 12601), (111, 12676), (128, 12760), (130, 12769), (134, 12790), (142, 12829), (157, 12907), (168, 12985), (184, 13075), (198, 13150), (212, 13243), (214, 13252), (216, 13264), (218, 13273), (267, 13510), (277, 13549), (287, 13582), (309, 13669), (315, 13693), (328, 13777), (345, 13861), (348, 13873), (352, 13894), (436, 14050), (447, 14131), (456, 14179), (459, 14197), (462, 14218), (468, 14254), (479, 14305), (486, 14362), (501, 14440), (504, 14449), (525, 14527), (531, 14542), (540, 14584), (553, 14638), (603, 14878), (621, 14953), (652, 15064), (666, 15283), (668, 15295), (686, 15478), (687, 15487), (701, 15559), (709, 15589), (713, 15610), (728, 15730), (741, 15802), (745, 15820), (746, 15826),

Gene: Enkosi_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Enkosi_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525,

14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: Eponine_22 Start: 13193, Stop: 17389, Start Num: 18
Candidate Starts for Eponine_22:
(Start: 18 @13193 has 70 MA's), (38, 13391), (83, 13604), (87, 13631), (88, 13640), (97, 13712), (103, 13733), (128, 13871), (130, 13880), (134, 13901), (142, 13940), (155, 14009), (157, 14018), (168, 14096), (171, 14108), (184, 14186), (192, 14216), (196, 14249), (197, 14252), (200, 14273), (226, 14414), (229, 14423), (253, 14555), (257, 14567), (267, 14621), (278, 14660), (287, 14693), (309, 14780), (314, 14801), (338, 14978), (349, 15029), (366, 15188), (409, 15389), (419, 15440), (421, 15449), (430, 15494), (434, 15515), (436, 15521), (455, 15626), (457, 15635), (474, 15734), (478, 15746), (480, 15755), (492, 15827), (497, 15860), (501, 15878), (502, 15881), (509, 15908), (540, 16007), (544, 16025), (558, 16100), (602, 16289), (603, 16301), (621, 16376), (641, 16445), (655, 16577), (662, 16691), (686, 16958), (689, 16976), (707, 17087), (709, 17090), (723, 17189), (728, 17216), (729, 17219), (746, 17315), (752, 17378),

Gene: FF47_19 Start: 11405, Stop: 14815, Start Num: 31
Candidate Starts for FF47_19:
(Start: 31 @11405 has 2 MA's), (33, 11420), (40, 11468), (42, 11471), (48, 11516), (84, 11639), (143, 11966), (146, 11978), (149, 11999), (162, 12083), (169, 12137), (172, 12146), (181, 12200), (188, 12233), (190, 12242), (195, 12284), (203, 12329), (204, 12341), (207, 12362), (212, 12386), (225, 12440), (238, 12494), (243, 12515), (246, 12527), (251, 12551), (252, 12560), (270, 12638), (319, 12695), (342, 12764), (371, 12974), (379, 13013), (381, 13025), (403, 13088), (409, 13130), (411, 13148), (433, 13235), (438, 13259), (442, 13286), (445, 13298), (463, 13406), (464, 13415), (488, 13508), (493, 13538), (495, 13559), (503, 13574), (545, 13685), (551, 13706), (567, 13781), (590, 13877), (598, 13934), (603, 13967), (605, 13982), (660, 14213), (677, 14408), (687, 14504), (690, 14522), (698, 14564), (700, 14570), (707, 14597), (724, 14699), (726, 14708), (734, 14747),

Gene: Fefferhead_20 Start: 12111, Stop: 16259, Start Num: 17
Candidate Starts for Fefferhead_20:
(Start: 17 @12111 has 184 MA's), (Start: 26 @12180 has 1 MA's), (44, 12342), (60, 12444), (62, 12450), (67, 12471), (96, 12624), (97, 12636), (111, 12711), (130, 12804), (134, 12825), (142, 12864), (157, 12942), (168, 13020), (174, 13044), (182, 13098), (184, 13110), (198, 13185), (212, 13278), (232, 13359), (242, 13422), (252, 13476), (259, 13497), (261, 13509), (267, 13545), (272, 13566), (277, 13584), (287, 13617), (294, 13638), (296, 13644), (299, 13659), (301, 13665), (309, 13704), (337, 13878), (361, 14034), (386, 14196), (387, 14202), (404, 14253), (409, 14292), (412, 14313), (436, 14424), (445, 14484), (450, 14517), (452, 14535), (456, 14553), (459, 14571), (461, 14583), (468, 14628), (479, 14679), (486, 14727), (501, 14805), (504, 14814), (525, 14892), (528, 14898), (531, 14907), (543, 14964), (544, 14967), (558, 15042), (577, 15108), (603, 15243), (618, 15303), (621, 15318), (624, 15324), (679, 15774), (686, 15846), (687, 15855), (703, 15942), (728, 16095), (746, 16194), (749, 16221), (750, 16233),

Gene: Feyre_19 Start: 12055, Stop: 16164, Start Num: 16
Candidate Starts for Feyre_19:
(Start: 16 @12055 has 35 MA's), (46, 12313), (62, 12397), (80, 12463), (85, 12490), (88, 12511), (96, 12571), (97, 12583), (103, 12604), (111, 12658), (117, 12688), (130, 12751), (134, 12772), (157, 12889), (163, 12931), (164, 12934), (168, 12967), (177, 13000), (212, 13225), (215, 13237), (216, 13246), (237, 13324), (250, 13387), (253, 13402), (254, 13405), (257, 13414), (259, 13420), (261, 13432), (262, 13435), (267, 13468), (271, 13486), (273, 13492), (301, 13588), (309, 13627), (337, 13780), (346, 13822), (351, 13846), (361, 13936), (363, 13969), (388, 14110), (391, 14119), (395, 14137), (405, 14164), (418, 14242), (436, 14326), (454, 14449), (465, 14515), (484, 14617), (501, 14710), (504, 14719), (509, 14740), (518, 14773), (534, 14824), (537, 14845), (541, 14860), (542,

14866), (559, 14950), (571, 14980), (574, 14998), (582, 15037), (593, 15097), (600, 15130), (603, 15151), (607, 15175), (617, 15208), (639, 15292), (654, 15364), (678, 15673), (682, 15727), (684, 15742), (686, 15754), (692, 15784), (725, 15970), (728, 15994), (731, 16006), (747, 16093), (749, 16117),

Gene: Findley_17 Start: 10116, Stop: 13787, Start Num: 16
Candidate Starts for Findley_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (378, 11850), (405, 11946), (410, 11979), (421, 12015), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (490, 12339), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (678, 13284), (679, 13293), (681, 13323), (711, 13488), (728, 13617), (746, 13710),

Gene: Fionnbharth_22 Start: 13314, Stop: 17489, Start Num: 18
Candidate Starts for Fionnbharth_22:
(12, 13278), (Start: 18 @13314 has 70 MA's), (38, 13512), (87, 13752), (88, 13761), (103, 13854), (121, 13956), (130, 14001), (142, 14061), (157, 14139), (168, 14217), (183, 14304), (184, 14307), (192, 14337), (196, 14370), (200, 14394), (213, 14478), (219, 14508), (226, 14535), (248, 14643), (251, 14664), (253, 14676), (257, 14688), (267, 14742), (309, 14901), (314, 14922), (328, 15030), (349, 15150), (406, 15492), (409, 15510), (419, 15561), (421, 15570), (430, 15615), (434, 15636), (457, 15756), (474, 15855), (478, 15867), (480, 15876), (492, 15948), (501, 15999), (502, 16002), (509, 16029), (540, 16128), (544, 16146), (558, 16221), (602, 16410), (603, 16422), (621, 16497), (633, 16527), (655, 16683), (664, 16803), (672, 16911), (686, 17061), (707, 17190), (709, 17193), (723, 17292), (728, 17319), (746, 17415), (752, 17478),

Gene: FlagStaff_16 Start: 11630, Stop: 15664, Start Num: 18
Candidate Starts for FlagStaff_16:
(Start: 18 @11630 has 70 MA's), (28, 11723), (32, 11753), (46, 11900), (62, 11984), (74, 12032), (96, 12158), (97, 12170), (103, 12191), (130, 12338), (134, 12359), (139, 12380), (142, 12398), (148, 12422), (150, 12434), (161, 12506), (164, 12521), (168, 12554), (194, 12686), (197, 12710), (200, 12731), (203, 12752), (204, 12764), (208, 12791), (210, 12803), (216, 12833), (226, 12881), (253, 13022), (254, 13025), (263, 13064), (267, 13088), (280, 13133), (281, 13136), (309, 13247), (348, 13451), (358, 13547), (361, 13556), (368, 13616), (388, 13730), (393, 13751), (408, 13811), (415, 13844), (421, 13874), (436, 13946), (440, 13976), (443, 13997), (460, 14102), (461, 14105), (471, 14159), (489, 14258), (492, 14276), (507, 14342), (510, 14357), (516, 14381), (532, 14423), (534, 14432), (548, 14492), (568, 14582), (590, 14678), (597, 14735), (603, 14768), (622, 14828), (630, 14843), (661, 15038), (678, 15245), (684, 15314), (686, 15326), (691, 15356), (694, 15416), (720, 15512), (727, 15572), (729, 15590),

Gene: ForeverHowLong_16 Start: 11459, Stop: 15472, Start Num: 17
Candidate Starts for ForeverHowLong_16:
(Start: 17 @11459 has 184 MA's), (38, 11660), (57, 11774), (67, 11816), (75, 11846), (97, 11981), (100, 11993), (103, 12002), (139, 12191), (142, 12209), (144, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (194, 12497), (197, 12521), (208, 12602), (235, 12725), (250, 12809), (260, 12845), (267, 12890), (268, 12896), (299, 13004), (304, 13028), (309, 13049), (351, 13268), (368, 13418), (383, 13505), (408, 13613), (436, 13748), (452, 13859), (456, 13877), (461, 13907), (499, 14129), (507, 14153), (510, 14168), (514, 14189), (525, 14216), (534, 14243), (548, 14303), (568, 14393), (573, 14426), (590, 14489), (597, 14546), (603, 14579), (604, 14588), (680, 15092),

(681, 15119), (684, 15149), (686, 15161), (687, 15170), (701, 15239), (720, 15320), (727, 15380), (729, 15398), (732, 15407),

Gene: Frosty24_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Frosty24_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Ganymede_22 Start: 12096, Stop: 15929, Start Num: 17
Candidate Starts for Ganymede_22:
(Start: 17 @12096 has 184 MA's), (Start: 26 @12165 has 1 MA's), (34, 12252), (60, 12429), (67, 12456), (87, 12540), (88, 12549), (97, 12621), (111, 12696), (128, 12780), (130, 12789), (134, 12810), (142, 12849), (157, 12927), (168, 13005), (184, 13095), (198, 13170), (212, 13263), (216, 13284), (218, 13293), (267, 13530), (277, 13569), (287, 13602), (309, 13689), (315, 13713), (328, 13797), (345, 13881), (348, 13893), (352, 13914), (436, 14070), (447, 14151), (456, 14199), (459, 14217), (462, 14238), (468, 14274), (479, 14325), (486, 14382), (501, 14460), (504, 14469), (525, 14547), (540, 14604), (553, 14658), (603, 14898), (621, 14973), (652, 15084), (666, 15303), (668, 15315), (686, 15498), (687, 15507), (701, 15579), (709, 15609), (713, 15630), (728, 15750), (741, 15822), (745, 15840), (746, 15846),

Gene: Gengar_19 Start: 12162, Stop: 16271, Start Num: 16
Candidate Starts for Gengar_19:
(Start: 16 @12162 has 35 MA's), (46, 12420), (62, 12504), (80, 12570), (88, 12618), (96, 12678), (97, 12690), (103, 12711), (111, 12765), (117, 12795), (130, 12858), (134, 12879), (147, 12936), (157, 12996), (168, 13074), (174, 13098), (180, 13140), (187, 13173), (212, 13332), (216, 13353), (237, 13431), (250, 13494), (253, 13509), (254, 13512), (257, 13521), (259, 13527), (261, 13539), (267, 13575), (271, 13593), (301, 13695), (309, 13734), (337, 13887), (346, 13929), (351, 13953), (361, 14043), (363, 14076), (374, 14142), (388, 14217), (391, 14226), (395, 14244), (405, 14271), (418, 14349), (436, 14433), (454, 14556), (465, 14622), (484, 14724), (501, 14817), (509, 14847), (515, 14874), (518, 14880), (534, 14931), (537, 14952), (541, 14967), (542, 14973), (559, 15057), (571, 15087), (574, 15105), (582, 15144), (593, 15204), (600, 15237), (603, 15258), (607, 15282), (617, 15315), (639, 15399), (654, 15471), (678, 15780), (682, 15834), (684, 15849), (686, 15861), (692, 15891), (725, 16077), (728, 16101), (731, 16113), (747, 16200), (749, 16224),

Gene: Geraldini_21 Start: 12092, Stop: 15925, Start Num: 17
Candidate Starts for Geraldini_21:
(Start: 17 @12092 has 184 MA's), (Start: 26 @12161 has 1 MA's), (Start: 27 @12182 has 1 MA's), (34, 12248), (60, 12425), (67, 12452), (85, 12524), (87, 12536), (88, 12545), (97, 12617), (111, 12692), (128, 12776), (130, 12785), (134, 12806), (142, 12845), (157, 12923), (168, 13001), (184, 13091), (198, 13166), (212, 13259), (214, 13268), (216, 13280), (218, 13289), (267, 13526), (277, 13565), (287, 13598), (309, 13685), (315, 13709), (328, 13793), (345, 13877), (348, 13889), (352, 13910), (436, 14066), (447, 14147), (456, 14195), (459, 14213), (462, 14234), (468, 14270), (479, 14321), (486, 14378), (501, 14456), (504, 14465), (525, 14543), (531, 14558), (540, 14600), (553, 14654), (603, 14894), (621, 14969), (652, 15080), (666, 15299), (668, 15311), (686, 15494), (687, 15503), (701, 15575), (709, 15605), (713, 15626), (728, 15746), (741, 15818), (745, 15836), (746, 15842),

Gene: Gideon_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Gideon_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: GodSpeed_16 Start: 11597, Stop: 15640, Start Num: 18
Candidate Starts for GodSpeed_16:
(Start: 18 @11597 has 70 MA's), (28, 11690), (32, 11720), (46, 11867), (62, 11951), (67, 11972), (74, 11999), (82, 12023), (85, 12044), (97, 12137), (103, 12158), (130, 12305), (139, 12347), (142, 12365), (148, 12389), (150, 12401), (160, 12461), (161, 12473), (164, 12488), (168, 12521), (182, 12599), (194, 12653), (197, 12677), (200, 12698), (203, 12719), (204, 12731), (208, 12758), (216, 12800), (226, 12848), (261, 13019), (263, 13031), (275, 13088), (281, 13103), (296, 13154), (299, 13169), (309, 13214), (324, 13292), (351, 13433), (358, 13514), (361, 13523), (368, 13583), (370, 13598), (388, 13697), (393, 13718), (405, 13751), (408, 13778), (415, 13811), (419, 13832), (430, 13886), (431, 13889), (440, 13943), (443, 13964), (461, 14072), (471, 14126), (489, 14234), (491, 14249), (500, 14297), (507, 14318), (510, 14333), (531, 14396), (534, 14408), (538, 14432), (539, 14435), (543, 14450), (556, 14501), (558, 14528), (585, 14633), (603, 14729), (621, 14804), (654, 14927), (655, 14948), (659, 15011), (661, 15020), (669, 15149), (680, 15230), (681, 15257), (684, 15287), (686, 15299), (691, 15329), (716, 15467), (727, 15548), (729, 15566),

Gene: GoldenAsh_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for GoldenAsh_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Gomashi_16 Start: 11465, Stop: 15478, Start Num: 17
Candidate Starts for Gomashi_16:
(Start: 17 @11465 has 184 MA's), (38, 11666), (57, 11780), (67, 11822), (75, 11852), (97, 11987), (100, 11999), (103, 12008), (139, 12197), (142, 12215), (144, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (194, 12503), (197, 12527), (208, 12608), (235, 12731), (250, 12815), (260, 12851), (267, 12896), (268, 12902), (299, 13010), (304, 13034), (309, 13055), (351, 13274), (368, 13424), (383, 13511), (408, 13619), (436, 13754), (452, 13865), (456, 13883), (461, 13913), (499, 14135), (507, 14159), (510, 14174), (514, 14195), (525, 14222), (534, 14249), (548, 14309), (568, 14399), (573, 14432), (590, 14495), (597, 14552), (603, 14585), (604, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (701, 15245), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: Grizzly_16 Start: 11464, Stop: 15480, Start Num: 17
Candidate Starts for Grizzly_16:

(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (64, 11812), (67, 11821), (75, 11851), (97, 11986), (103, 12007), (130, 12154), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (257, 12841), (260, 12850), (268, 12901), (274, 12925), (283, 12952), (309, 13054), (349, 13261), (351, 13273), (366, 13420), (368, 13423), (408, 13618), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (516, 14197), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (576, 14446), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15100), (681, 15127), (684, 15157), (686, 15169), (687, 15178), (701, 15247), (720, 15328), (727, 15388), (729, 15406), (732, 15415),

Gene: Guanica15_21 Start: 11016, Stop: 15143, Start Num: 18
Candidate Starts for Guanica15_21:
(10, 10968), (Start: 18 @11016 has 70 MA's), (29, 11109), (44, 11241), (46, 11265), (53, 11295), (56, 11316), (57, 11328), (73, 11388), (90, 11475), (96, 11508), (98, 11526), (99, 11529), (114, 11601), (145, 11745), (151, 11787), (154, 11802), (160, 11838), (169, 11910), (190, 12012), (221, 12195), (227, 12222), (232, 12240), (233, 12246), (239, 12288), (256, 12360), (258, 12366), (261, 12381), (265, 12402), (268, 12420), (272, 12435), (287, 12483), (298, 12516), (301, 12531), (309, 12570), (314, 12591), (321, 12621), (350, 12789), (353, 12840), (378, 13005), (382, 13029), (395, 13086), (407, 13137), (414, 13170), (416, 13179), (431, 13251), (443, 13326), (446, 13344), (452, 13386), (456, 13404), (460, 13431), (462, 13443), (482, 13572), (487, 13590), (501, 13671), (502, 13674), (525, 13758), (539, 13812), (540, 13815), (558, 13908), (577, 13974), (603, 14109), (638, 14235), (678, 14631), (679, 14640), (686, 14712), (701, 14796), (728, 14964), (741, 15036), (746, 15060), (750, 15099),

Gene: Guillsminger_19 Start: 12137, Stop: 16246, Start Num: 16
Candidate Starts for Guillsminger_19:
(Start: 16 @12137 has 35 MA's), (46, 12395), (62, 12479), (80, 12545), (88, 12593), (96, 12653), (97, 12665), (103, 12686), (111, 12740), (117, 12770), (130, 12833), (134, 12854), (147, 12911), (157, 12971), (168, 13049), (174, 13073), (180, 13115), (187, 13148), (212, 13307), (216, 13328), (237, 13406), (250, 13469), (253, 13484), (254, 13487), (257, 13496), (259, 13502), (261, 13514), (267, 13550), (271, 13568), (301, 13670), (309, 13709), (337, 13862), (346, 13904), (351, 13928), (361, 14018), (363, 14051), (374, 14117), (388, 14192), (391, 14201), (395, 14219), (405, 14246), (418, 14324), (436, 14408), (454, 14531), (465, 14597), (484, 14699), (501, 14792), (509, 14822), (515, 14849), (518, 14855), (534, 14906), (537, 14927), (541, 14942), (542, 14948), (559, 15032), (571, 15062), (574, 15080), (582, 15119), (593, 15179), (600, 15212), (603, 15233), (607, 15257), (617, 15290), (639, 15374), (654, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (692, 15866), (725, 16052), (728, 16076), (731, 16088), (747, 16175), (749, 16199),

Gene: Halo_16 Start: 11459, Stop: 15472, Start Num: 17
Candidate Starts for Halo_16:
(Start: 17 @11459 has 184 MA's), (38, 11660), (57, 11774), (67, 11816), (75, 11846), (97, 11981), (100, 11993), (103, 12002), (139, 12191), (142, 12209), (144, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (194, 12497), (197, 12521), (208, 12602), (235, 12725), (250, 12809), (260, 12845), (267, 12890), (268, 12896), (299, 13004), (304, 13028), (309, 13049), (351, 13268), (368, 13418), (383, 13505), (408, 13613), (436, 13748), (452, 13859), (456, 13877), (461, 13907), (499, 14129), (507, 14153), (510, 14168), (514, 14189), (525, 14216), (534, 14243), (548, 14303), (568, 14393), (573, 14426), (590, 14489), (597, 14546), (603, 14579), (604, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (701, 15239), (720, 15320), (727, 15380), (729, 15398), (732, 15407),

Gene: Hammy_20 Start: 12190, Stop: 16329, Start Num: 17
Candidate Starts for Hammy_20:

(10, 12145), (Start: 17 @12190 has 184 MA's), (Start: 26 @12259 has 1 MA's), (34, 12346), (44, 12421), (60, 12523), (62, 12529), (67, 12550), (76, 12583), (80, 12595), (87, 12634), (88, 12643), (96, 12703), (97, 12715), (103, 12736), (111, 12790), (117, 12820), (130, 12883), (134, 12904), (142, 12943), (157, 13021), (168, 13099), (174, 13123), (203, 13297), (208, 13336), (209, 13345), (210, 13348), (216, 13378), (241, 13501), (245, 13516), (252, 13555), (263, 13600), (267, 13624), (297, 13726), (299, 13738), (301, 13744), (309, 13783), (332, 13909), (334, 13924), (338, 13960), (341, 13972), (350, 14017), (361, 14113), (404, 14332), (409, 14371), (412, 14392), (431, 14479), (436, 14503), (439, 14530), (440, 14533), (445, 14563), (452, 14614), (459, 14650), (479, 14758), (501, 14893), (502, 14896), (521, 14962), (523, 14968), (534, 15007), (552, 15079), (554, 15085), (557, 15106), (579, 15190), (584, 15220), (591, 15241), (592, 15253), (603, 15334), (610, 15367), (613, 15376), (615, 15382), (627, 15424), (634, 15442), (640, 15475), (643, 15481), (653, 15526), (666, 15736), (678, 15835), (679, 15844), (680, 15847), (686, 15916), (713, 16051), (721, 16120), (728, 16168), (746, 16264), (750, 16303),

Gene: HedwigODU_21 Start: 12079, Stop: 15918, Start Num: 17
Candidate Starts for HedwigODU_21:
(Start: 17 @12079 has 184 MA's), (Start: 26 @12148 has 1 MA's), (34, 12235), (60, 12412), (67, 12439), (85, 12511), (87, 12523), (88, 12532), (97, 12604), (111, 12679), (128, 12763), (130, 12772), (134, 12793), (142, 12832), (157, 12910), (168, 12988), (184, 13078), (198, 13153), (212, 13246), (214, 13255), (216, 13267), (218, 13276), (273, 13537), (277, 13552), (287, 13585), (309, 13672), (315, 13696), (328, 13780), (345, 13864), (348, 13876), (352, 13897), (436, 14053), (447, 14134), (456, 14182), (459, 14200), (462, 14221), (468, 14257), (479, 14308), (486, 14365), (501, 14443), (504, 14452), (525, 14530), (540, 14587), (553, 14641), (603, 14881), (621, 14956), (652, 15067), (666, 15286), (668, 15298), (686, 15487), (687, 15496), (701, 15568), (709, 15598), (713, 15619), (728, 15739), (741, 15811), (745, 15829), (746, 15835),

Gene: Heftyboy_19 Start: 12264, Stop: 16394, Start Num: 16
Candidate Starts for Heftyboy_19:
(Start: 16 @12264 has 35 MA's), (Start: 27 @12357 has 1 MA's), (35, 12435), (36, 12459), (46, 12519), (62, 12603), (64, 12615), (88, 12717), (96, 12777), (97, 12789), (103, 12810), (111, 12864), (121, 12912), (130, 12957), (134, 12978), (157, 13095), (168, 13173), (174, 13197), (184, 13263), (198, 13338), (212, 13431), (218, 13461), (254, 13635), (257, 13644), (263, 13674), (267, 13698), (272, 13719), (290, 13779), (309, 13857), (311, 13866), (325, 13944), (337, 14010), (346, 14052), (348, 14061), (355, 14145), (361, 14166), (363, 14199), (388, 14340), (391, 14349), (395, 14367), (405, 14394), (418, 14472), (436, 14556), (454, 14679), (465, 14745), (501, 14940), (509, 14970), (515, 14997), (518, 15003), (526, 15030), (537, 15075), (541, 15090), (542, 15096), (559, 15180), (574, 15228), (582, 15267), (593, 15327), (600, 15360), (603, 15381), (607, 15405), (617, 15438), (639, 15522), (654, 15594), (678, 15903), (682, 15957), (684, 15972), (686, 15984), (692, 16014), (725, 16200), (728, 16224), (731, 16236), (747, 16323), (749, 16347),

Gene: Homura_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Homura_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (649, 15089), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Hope_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Hope_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Hotshotbaby7_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Hotshotbaby7_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Hurricane_20 Start: 12208, Stop: 16356, Start Num: 17
Candidate Starts for Hurricane_20:
(Start: 17 @12208 has 184 MA's), (Start: 26 @12277 has 1 MA's), (Start: 27 @12298 has 1 MA's), (29, 12304), (34, 12364), (55, 12502), (62, 12547), (67, 12568), (72, 12589), (85, 12640), (96, 12721), (97, 12733), (103, 12754), (111, 12808), (120, 12850), (130, 12901), (134, 12922), (137, 12940), (144, 12964), (153, 13015), (157, 13039), (164, 13084), (168, 13117), (174, 13141), (203, 13315), (212, 13375), (216, 13396), (218, 13405), (252, 13573), (259, 13594), (263, 13618), (267, 13642), (272, 13663), (278, 13681), (284, 13702), (287, 13714), (299, 13756), (300, 13759), (309, 13801), (312, 13816), (324, 13879), (341, 13990), (347, 14020), (354, 14098), (373, 14218), (378, 14251), (402, 14341), (405, 14359), (409, 14389), (414, 14416), (452, 14632), (459, 14668), (472, 14743), (479, 14776), (480, 14788), (487, 14836), (501, 14917), (502, 14920), (540, 15037), (558, 15130), (580, 15208), (599, 15307), (603, 15331), (621, 15406), (678, 15865), (679, 15874), (680, 15877), (686, 15946), (687, 15955), (712, 16087), (722, 16147), (724, 16165), (731, 16201), (734, 16210), (745, 16276), (746, 16282), (748, 16297), (749, 16309),

Gene: Hyperbowlee_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Hyperbowlee_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Illumine_21 Start: 12077, Stop: 15931, Start Num: 17
Candidate Starts for Illumine_21:

(Start: 17 @12077 has 184 MA's), (Start: 26 @12146 has 1 MA's), (34, 12233), (60, 12413), (67, 12440), (87, 12524), (88, 12533), (96, 12593), (97, 12605), (111, 12680), (120, 12722), (128, 12764), (130, 12773), (134, 12794), (142, 12833), (157, 12911), (163, 12953), (168, 12989), (198, 13154), (212, 13247), (216, 13268), (218, 13277), (273, 13559), (277, 13574), (287, 13607), (309, 13694), (328, 13802), (345, 13886), (348, 13898), (352, 13919), (436, 14075), (447, 14156), (456, 14204), (459, 14222), (462, 14243), (468, 14279), (479, 14330), (486, 14387), (501, 14465), (504, 14474), (525, 14552), (531, 14567), (540, 14609), (553, 14663), (580, 14780), (603, 14903), (621, 14978), (655, 15131), (666, 15308), (678, 15422), (686, 15503), (687, 15512), (701, 15584), (709, 15614), (713, 15635), (728, 15752), (741, 15824), (746, 15848),

Gene: Inky_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Inky_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: InvictusManeo_19 Start: 12240, Stop: 16346, Start Num: 16
Candidate Starts for InvictusManeo_19:
(Start: 16 @12240 has 35 MA's), (Start: 27 @12333 has 1 MA's), (35, 12411), (36, 12435), (46, 12495), (62, 12579), (64, 12591), (88, 12693), (96, 12753), (97, 12765), (103, 12786), (111, 12840), (121, 12888), (130, 12933), (134, 12954), (157, 13071), (168, 13149), (174, 13173), (184, 13239), (198, 13314), (212, 13407), (218, 13437), (254, 13611), (257, 13620), (263, 13650), (267, 13674), (272, 13695), (290, 13755), (309, 13833), (311, 13842), (325, 13920), (337, 13986), (346, 14028), (348, 14037), (355, 14121), (361, 14142), (363, 14175), (374, 14241), (378, 14262), (388, 14316), (391, 14325), (395, 14343), (404, 14361), (405, 14370), (409, 14400), (416, 14436), (426, 14490), (434, 14526), (436, 14532), (437, 14550), (454, 14655), (465, 14721), (501, 14916), (509, 14946), (518, 14979), (534, 15030), (537, 15051), (541, 15066), (542, 15072), (559, 15156), (574, 15204), (582, 15243), (593, 15303), (600, 15336), (603, 15357), (607, 15381), (617, 15411), (639, 15477), (654, 15549), (678, 15864), (679, 15873), (680, 15876), (682, 15918), (686, 15945), (692, 15975), (701, 16026), (705, 16044), (720, 16110), (725, 16158), (728, 16182), (731, 16194), (747, 16275), (749, 16299), (754, 16338),

Gene: JAWS_21 Start: 12070, Stop: 15903, Start Num: 17
Candidate Starts for JAWS_21:
(Start: 17 @12070 has 184 MA's), (Start: 26 @12139 has 1 MA's), (34, 12226), (44, 12301), (60, 12403), (67, 12430), (85, 12502), (87, 12514), (88, 12523), (97, 12595), (111, 12670), (128, 12754), (130, 12763), (134, 12784), (142, 12823), (150, 12859), (157, 12901), (168, 12979), (184, 13069), (198, 13144), (212, 13237), (214, 13246), (216, 13258), (218, 13267), (267, 13504), (277, 13543), (287, 13576), (309, 13663), (315, 13687), (328, 13771), (345, 13855), (348, 13867), (352, 13888), (436, 14044), (447, 14125), (456, 14173), (459, 14191), (462, 14212), (468, 14248), (479, 14299), (486, 14356), (501, 14434), (504, 14443), (525, 14521), (531, 14536), (540, 14578), (553, 14632), (603, 14872), (621, 14947), (652, 15058), (666, 15277), (668, 15289), (686, 15472), (687, 15481), (701, 15553), (709, 15583), (713, 15604), (728, 15724), (741, 15796), (745, 15814), (746, 15820),

Gene: JF1_22 Start: 13313, Stop: 17488, Start Num: 18
Candidate Starts for JF1_22:

(12, 13277), (Start: 18 @13313 has 70 MA's), (38, 13511), (87, 13751), (88, 13760), (103, 13853), (121, 13955), (130, 14000), (142, 14060), (157, 14138), (168, 14216), (183, 14303), (184, 14306), (192, 14336), (196, 14369), (200, 14393), (213, 14477), (219, 14507), (226, 14534), (248, 14642), (251, 14663), (253, 14675), (257, 14687), (267, 14741), (309, 14900), (314, 14921), (328, 15029), (349, 15149), (406, 15491), (409, 15509), (419, 15560), (421, 15569), (430, 15614), (434, 15635), (457, 15755), (474, 15854), (478, 15866), (480, 15875), (492, 15947), (501, 15998), (502, 16001), (509, 16028), (540, 16127), (544, 16145), (558, 16220), (602, 16409), (603, 16421), (621, 16496), (633, 16526), (655, 16682), (664, 16802), (672, 16910), (686, 17060), (705, 17180), (707, 17189), (709, 17192), (723, 17291), (728, 17318), (746, 17414), (752, 17477),

Gene: Jane_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Jane_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Jarvi_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Jarvi_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Jayhawk_21 Start: 12080, Stop: 15916, Start Num: 17
Candidate Starts for Jayhawk_21:
(Start: 17 @12080 has 184 MA's), (Start: 26 @12149 has 1 MA's), (34, 12236), (60, 12413), (67, 12440), (85, 12512), (87, 12524), (88, 12533), (97, 12605), (111, 12680), (128, 12764), (130, 12773), (134, 12794), (142, 12833), (157, 12911), (168, 12989), (184, 13079), (198, 13154), (212, 13247), (214, 13256), (216, 13268), (218, 13277), (273, 13538), (277, 13553), (287, 13586), (309, 13673), (315, 13697), (328, 13781), (345, 13865), (348, 13877), (352, 13898), (436, 14054), (447, 14135), (456, 14183), (459, 14201), (462, 14222), (468, 14258), (479, 14309), (486, 14366), (501, 14444), (504, 14453), (525, 14531), (540, 14588), (553, 14642), (603, 14882), (621, 14957), (652, 15068), (666, 15287), (668, 15299), (686, 15485), (687, 15494), (701, 15566), (709, 15596), (713, 15617), (728, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Jeckyll_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Jeckyll_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934),

(436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Jeilious_16 Start: 11463, Stop: 15476, Start Num: 17
Candidate Starts for Jeilious_16:
(Start: 17 @11463 has 184 MA's), (38, 11664), (57, 11778), (67, 11820), (75, 11850), (97, 11985), (100, 11997), (103, 12006), (139, 12195), (142, 12213), (144, 12216), (148, 12237), (150, 12249), (161, 12321), (168, 12369), (194, 12501), (197, 12525), (208, 12606), (235, 12729), (250, 12813), (260, 12849), (267, 12894), (268, 12900), (299, 13008), (304, 13032), (309, 13053), (351, 13272), (368, 13422), (383, 13509), (408, 13617), (436, 13752), (452, 13863), (456, 13881), (461, 13911), (499, 14133), (507, 14157), (510, 14172), (514, 14193), (525, 14220), (534, 14247), (548, 14307), (568, 14397), (573, 14430), (590, 14493), (597, 14550), (603, 14583), (604, 14592), (680, 15096), (681, 15123), (684, 15153), (686, 15165), (687, 15174), (701, 15243), (720, 15324), (727, 15384), (729, 15402), (732, 15411),

Gene: Jolene_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Jolene_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Jolie2_16 Start: 10765, Stop: 14787, Start Num: 18
Candidate Starts for Jolie2_16:
(Start: 18 @10765 has 70 MA's), (Start: 26 @10834 has 1 MA's), (29, 10861), (39, 10975), (63, 11098), (68, 11122), (70, 11125), (78, 11158), (79, 11161), (87, 11203), (88, 11212), (110, 11344), (114, 11368), (119, 11386), (128, 11431), (133, 11455), (135, 11467), (145, 11509), (151, 11551), (159, 11596), (160, 11602), (168, 11665), (169, 11674), (173, 11686), (176, 11695), (180, 11728), (190, 11776), (221, 11953), (229, 11986), (230, 11989), (233, 12004), (258, 12124), (261, 12139), (264, 12157), (265, 12160), (272, 12193), (282, 12220), (295, 12265), (301, 12289), (304, 12307), (309, 12328), (326, 12424), (340, 12496), (368, 12703), (376, 12754), (395, 12844), (402, 12853), (405, 12871), (407, 12895), (409, 12901), (421, 12961), (430, 13006), (431, 13009), (432, 13015), (445, 13093), (450, 13126), (462, 13201), (499, 13414), (506, 13435), (507, 13438), (510, 13453), (520, 13486), (548, 13588), (568, 13678), (590, 13771), (595, 13825), (597, 13828), (603, 13861), (605, 13876), (619, 13915), (635, 13942), (655, 14080), (664, 14200), (670, 14287), (684, 14443), (686, 14455), (697, 14539), (707, 14578), (729, 14713),

Gene: Jonghyun_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Jonghyun_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097),

(681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: JorRay_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for JorRay_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Joy99_21 Start: 12045, Stop: 15878, Start Num: 17
Candidate Starts for Joy99_21:
(Start: 17 @12045 has 184 MA's), (Start: 26 @12114 has 1 MA's), (Start: 27 @12135 has 1 MA's), (34, 12201), (60, 12378), (67, 12405), (85, 12477), (87, 12489), (88, 12498), (97, 12570), (111, 12645), (128, 12729), (130, 12738), (134, 12759), (142, 12798), (157, 12876), (168, 12954), (184, 13044), (198, 13119), (212, 13212), (214, 13221), (216, 13233), (218, 13242), (267, 13479), (277, 13518), (287, 13551), (309, 13638), (315, 13662), (328, 13746), (345, 13830), (348, 13842), (352, 13863), (436, 14019), (447, 14100), (456, 14148), (459, 14166), (462, 14187), (468, 14223), (479, 14274), (486, 14331), (501, 14409), (504, 14418), (525, 14496), (531, 14511), (540, 14553), (553, 14607), (603, 14847), (621, 14922), (652, 15033), (666, 15252), (668, 15264), (686, 15447), (687, 15456), (701, 15528), (709, 15558), (713, 15579), (728, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Juliette_22 Start: 13193, Stop: 17389, Start Num: 18
Candidate Starts for Juliette_22:
(Start: 18 @13193 has 70 MA's), (38, 13391), (83, 13604), (87, 13631), (88, 13640), (97, 13712), (103, 13733), (128, 13871), (130, 13880), (134, 13901), (142, 13940), (155, 14009), (157, 14018), (168, 14096), (171, 14108), (184, 14186), (192, 14216), (196, 14249), (197, 14252), (200, 14273), (226, 14414), (229, 14423), (253, 14555), (257, 14567), (267, 14621), (278, 14660), (287, 14693), (309, 14780), (314, 14801), (338, 14978), (349, 15029), (366, 15188), (409, 15389), (419, 15440), (421, 15449), (430, 15494), (434, 15515), (436, 15521), (457, 15635), (474, 15734), (478, 15746), (480, 15755), (492, 15827), (497, 15860), (501, 15878), (502, 15881), (509, 15908), (540, 16007), (544, 16025), (558, 16100), (602, 16289), (603, 16301), (621, 16376), (641, 16445), (655, 16577), (662, 16691), (686, 16958), (689, 16976), (707, 17087), (709, 17090), (723, 17189), (728, 17216), (729, 17219), (746, 17315), (752, 17378),

Gene: Kareem_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Kareem_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Kasen3_16 Start: 11465, Stop: 15478, Start Num: 17

Candidate Starts for Kasen3_16:
(Start: 17 @11465 has 184 MA's), (38, 11666), (57, 11780), (67, 11822), (75, 11852), (97, 11987), (100, 11999), (103, 12008), (139, 12197), (142, 12215), (144, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (194, 12503), (197, 12527), (208, 12608), (235, 12731), (250, 12815), (260, 12851), (267, 12896), (268, 12902), (299, 13010), (304, 13034), (309, 13055), (351, 13274), (368, 13424), (383, 13511), (408, 13619), (436, 13754), (452, 13865), (456, 13883), (461, 13913), (499, 14135), (507, 14159), (510, 14174), (514, 14195), (525, 14222), (534, 14249), (548, 14309), (568, 14399), (573, 14432), (590, 14495), (597, 14552), (603, 14585), (604, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (701, 15245), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: Keshu_20 Start: 12188, Stop: 16348, Start Num: 17
Candidate Starts for Keshu_20:
(Start: 17 @12188 has 184 MA's), (Start: 26 @12257 has 1 MA's), (Start: 27 @12278 has 1 MA's), (29, 12284), (34, 12344), (55, 12482), (57, 12506), (62, 12527), (67, 12548), (72, 12569), (96, 12701), (97, 12713), (103, 12734), (111, 12788), (117, 12818), (122, 12839), (128, 12872), (130, 12881), (134, 12902), (142, 12941), (157, 13019), (163, 13061), (168, 13097), (174, 13121), (203, 13295), (208, 13334), (212, 13355), (216, 13376), (218, 13385), (259, 13574), (263, 13598), (267, 13622), (272, 13643), (278, 13661), (287, 13694), (290, 13703), (299, 13736), (300, 13739), (301, 13742), (309, 13781), (311, 13790), (324, 13859), (341, 13970), (347, 14000), (354, 14078), (373, 14198), (378, 14231), (402, 14321), (405, 14339), (409, 14369), (414, 14396), (436, 14501), (440, 14531), (459, 14648), (468, 14705), (472, 14723), (475, 14744), (479, 14756), (487, 14816), (501, 14897), (502, 14900), (528, 14990), (540, 15020), (558, 15113), (580, 15191), (603, 15314), (621, 15389), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (692, 15965), (722, 16139), (724, 16157), (731, 16193), (734, 16202), (745, 16268), (746, 16274), (748, 16289), (749, 16301),

Gene: Kheparia_23 Start: 12034, Stop: 15873, Start Num: 17
Candidate Starts for Kheparia_23:
(Start: 17 @12034 has 184 MA's), (Start: 26 @12103 has 1 MA's), (34, 12190), (60, 12370), (67, 12397), (87, 12481), (96, 12550), (97, 12562), (111, 12637), (122, 12688), (130, 12730), (134, 12751), (142, 12790), (157, 12868), (168, 12946), (198, 13111), (212, 13204), (216, 13225), (218, 13234), (267, 13471), (273, 13495), (277, 13510), (287, 13543), (309, 13630), (325, 13717), (328, 13738), (345, 13822), (348, 13834), (351, 13849), (352, 13855), (447, 14092), (456, 14140), (459, 14158), (462, 14179), (468, 14215), (472, 14233), (479, 14266), (501, 14401), (504, 14410), (525, 14488), (531, 14503), (540, 14545), (553, 14599), (603, 14839), (621, 14914), (652, 15025), (654, 15046), (655, 15067), (664, 15187), (678, 15361), (686, 15442), (687, 15451), (701, 15523), (709, 15553), (713, 15574), (728, 15694), (741, 15766), (745, 15784), (746, 15790),

Gene: KiSi_20 Start: 11011, Stop: 15084, Start Num: 18
Candidate Starts for KiSi_20:
(Start: 18 @11011 has 70 MA's), (29, 11104), (47, 11263), (49, 11272), (51, 11281), (71, 11374), (87, 11443), (88, 11452), (89, 11464), (90, 11470), (96, 11503), (104, 11539), (113, 11596), (115, 11608), (126, 11662), (132, 11692), (151, 11779), (154, 11794), (160, 11830), (190, 12004), (221, 12187), (223, 12196), (233, 12238), (239, 12280), (252, 12340), (256, 12352), (258, 12358), (261, 12373), (264, 12391), (265, 12394), (272, 12427), (306, 12550), (309, 12562), (310, 12568), (314, 12583), (316, 12589), (346, 12673), (354, 12754), (378, 12907), (403, 13003), (405, 13015), (409, 13045), (419, 13096), (423, 13117), (429, 13147), (431, 13153), (436, 13177), (445, 13237), (452, 13288), (460, 13333), (472, 13399), (479, 13432), (486, 13489), (501, 13567), (502, 13570), (525, 13654), (534, 13681), (540, 13711), (553, 13765), (558, 13804), (603, 14005), (621, 14080), (664, 14365), (666, 14422), (686, 14623), (703, 14737), (728, 14914), (741, 14998), (746, 15019),

Gene: Kratio_18 Start: 11868, Stop: 15977, Start Num: 16
Candidate Starts for Kratio_18:

(Start: 16 @11868 has 35 MA's), (Start: 27 @11961 has 1 MA's), (35, 12039), (36, 12063), (46, 12123), (62, 12207), (80, 12273), (88, 12321), (96, 12381), (97, 12393), (103, 12414), (111, 12468), (121, 12516), (130, 12561), (134, 12582), (157, 12699), (168, 12777), (174, 12801), (184, 12867), (198, 12942), (212, 13035), (218, 13065), (254, 13239), (257, 13248), (263, 13278), (267, 13302), (272, 13323), (290, 13383), (309, 13461), (311, 13470), (325, 13548), (337, 13614), (346, 13656), (355, 13749), (361, 13770), (363, 13803), (374, 13869), (378, 13890), (388, 13944), (391, 13953), (395, 13971), (404, 13989), (405, 13998), (409, 14028), (416, 14064), (434, 14154), (436, 14160), (437, 14178), (454, 14283), (465, 14349), (501, 14544), (509, 14574), (518, 14607), (534, 14658), (537, 14679), (541, 14694), (542, 14700), (559, 14784), (574, 14832), (582, 14871), (593, 14931), (600, 14964), (603, 14985), (607, 15009), (639, 15105), (654, 15177), (678, 15492), (679, 15501), (680, 15504), (682, 15546), (684, 15561), (686, 15573), (692, 15603), (701, 15654), (705, 15672), (725, 15789), (728, 15813), (731, 15825), (747, 15906), (749, 15930), (754, 15969),

Gene: Kraw_22 Start: 13237, Stop: 17412, Start Num: 18
Candidate Starts for Kraw_22:
(12, 13201), (Start: 18 @13237 has 70 MA's), (38, 13435), (87, 13675), (88, 13684), (103, 13777), (121, 13879), (130, 13924), (142, 13984), (157, 14062), (168, 14140), (183, 14227), (184, 14230), (192, 14260), (196, 14293), (200, 14317), (213, 14401), (219, 14431), (226, 14458), (248, 14566), (251, 14587), (253, 14599), (257, 14611), (267, 14665), (309, 14824), (314, 14845), (328, 14953), (349, 15073), (406, 15415), (409, 15433), (419, 15484), (421, 15493), (430, 15538), (434, 15559), (457, 15679), (474, 15778), (478, 15790), (480, 15799), (492, 15871), (501, 15922), (502, 15925), (509, 15952), (540, 16051), (544, 16069), (558, 16144), (602, 16333), (603, 16345), (621, 16420), (633, 16450), (655, 16606), (664, 16726), (672, 16834), (686, 16984), (707, 17113), (709, 17116), (723, 17215), (728, 17242), (746, 17338), (752, 17401),

Gene: Krueger_20 Start: 11051, Stop: 15055, Start Num: 18
Candidate Starts for Krueger_20:
(Start: 18 @11051 has 70 MA's), (29, 11144), (38, 11249), (47, 11303), (51, 11321), (55, 11339), (59, 11369), (66, 11396), (68, 11402), (81, 11447), (96, 11543), (98, 11561), (99, 11564), (124, 11678), (126, 11693), (151, 11810), (154, 11825), (165, 11906), (178, 11966), (179, 11975), (190, 12035), (221, 12218), (222, 12224), (234, 12281), (252, 12371), (256, 12383), (258, 12389), (261, 12404), (265, 12425), (268, 12443), (291, 12518), (300, 12551), (306, 12581), (309, 12593), (314, 12614), (322, 12653), (344, 12698), (348, 12713), (366, 12875), (378, 12938), (383, 12965), (404, 13037), (409, 13076), (419, 13127), (423, 13148), (429, 13178), (431, 13184), (436, 13208), (443, 13259), (451, 13313), (459, 13355), (462, 13376), (468, 13412), (479, 13463), (501, 13604), (502, 13607), (525, 13691), (534, 13718), (553, 13802), (603, 14042), (621, 14117), (678, 14555), (679, 14564), (686, 14636), (687, 14645), (701, 14720), (709, 14750), (716, 14771), (728, 14888), (741, 14963), (748, 15002), (749, 15014),

Gene: Larva_19 Start: 11980, Stop: 16092, Start Num: 16
Candidate Starts for Larva_19:
(Start: 16 @11980 has 35 MA's), (Start: 27 @12073 has 1 MA's), (35, 12151), (36, 12175), (46, 12235), (62, 12319), (88, 12433), (96, 12493), (97, 12505), (103, 12526), (111, 12580), (121, 12628), (130, 12673), (134, 12694), (157, 12811), (168, 12889), (174, 12913), (184, 12979), (198, 13054), (212, 13147), (218, 13177), (254, 13351), (263, 13390), (267, 13414), (272, 13435), (290, 13495), (309, 13573), (325, 13660), (337, 13726), (346, 13768), (348, 13777), (355, 13861), (361, 13882), (363, 13915), (374, 13981), (378, 14002), (388, 14056), (391, 14065), (395, 14083), (405, 14110), (409, 14140), (416, 14176), (434, 14266), (436, 14272), (437, 14290), (454, 14395), (465, 14461), (501, 14656), (509, 14686), (518, 14719), (534, 14770), (537, 14791), (541, 14806), (542, 14812), (559, 14896), (574, 14944), (582, 14983), (593, 15043), (600, 15076), (603, 15097), (607, 15121), (617, 15151), (639, 15217), (654, 15289), (678, 15604), (679, 15613), (680, 15616), (681, 15643), (682, 15658), (684, 15673), (686, 15685), (692, 15715), (701, 15769), (705, 15787), (720, 15856), (725, 15904), (728, 15928), (731, 15940), (734, 15949), (747, 16021), (749, 16045), (754, 16084),

Gene: LastHope_21 Start: 11090, Stop: 15217, Start Num: 18
Candidate Starts for LastHope_21:
(10, 11042), (Start: 18 @11090 has 70 MA's), (29, 11183), (44, 11315), (46, 11339), (53, 11369), (56, 11390), (57, 11402), (59, 11408), (66, 11435), (73, 11462), (90, 11549), (96, 11582), (98, 11600), (99, 11603), (108, 11645), (119, 11693), (145, 11819), (151, 11861), (154, 11876), (160, 11912), (169, 11984), (190, 12086), (212, 12224), (221, 12269), (231, 12311), (232, 12314), (233, 12320), (234, 12332), (239, 12362), (252, 12422), (258, 12440), (261, 12455), (264, 12473), (265, 12476), (272, 12509), (298, 12590), (301, 12605), (309, 12644), (314, 12665), (345, 12842), (348, 12854), (353, 12914), (360, 12956), (378, 13079), (382, 13103), (395, 13160), (403, 13175), (404, 13178), (414, 13244), (416, 13253), (421, 13277), (431, 13325), (443, 13400), (446, 13418), (456, 13478), (460, 13505), (462, 13517), (468, 13553), (472, 13571), (480, 13616), (482, 13646), (487, 13664), (501, 13745), (502, 13748), (525, 13832), (531, 13847), (539, 13886), (540, 13889), (558, 13982), (577, 14048), (603, 14183), (664, 14534), (678, 14705), (686, 14786), (692, 14816), (701, 14870), (728, 15038), (741, 15110), (745, 15128), (746, 15134),

Gene: LaterM_21 Start: 12043, Stop: 15876, Start Num: 17
Candidate Starts for LaterM_21:
(Start: 17 @12043 has 184 MA's), (Start: 26 @12112 has 1 MA's), (34, 12199), (60, 12379), (67, 12406), (87, 12490), (88, 12499), (96, 12559), (97, 12571), (111, 12646), (120, 12688), (128, 12730), (130, 12739), (134, 12760), (142, 12799), (157, 12877), (168, 12955), (198, 13120), (212, 13213), (216, 13234), (218, 13243), (267, 13480), (273, 13504), (277, 13519), (287, 13552), (309, 13639), (328, 13747), (345, 13831), (348, 13843), (352, 13864), (360, 13945), (436, 14020), (447, 14101), (449, 14110), (456, 14149), (459, 14167), (462, 14188), (468, 14224), (479, 14275), (486, 14332), (501, 14410), (504, 14419), (525, 14497), (531, 14512), (540, 14554), (553, 14608), (603, 14848), (621, 14923), (652, 15034), (666, 15253), (678, 15367), (686, 15448), (687, 15457), (701, 15529), (709, 15559), (713, 15580), (728, 15697), (741, 15769), (746, 15793),

Gene: Lavahound_19 Start: 11863, Stop: 16011, Start Num: 17
Candidate Starts for Lavahound_19:
(Start: 17 @11863 has 184 MA's), (Start: 26 @11932 has 1 MA's), (44, 12094), (60, 12196), (62, 12202), (67, 12223), (96, 12376), (97, 12388), (111, 12463), (130, 12556), (134, 12577), (142, 12616), (157, 12694), (168, 12772), (174, 12796), (182, 12850), (184, 12862), (198, 12937), (212, 13030), (232, 13111), (242, 13174), (252, 13228), (259, 13249), (261, 13261), (267, 13297), (272, 13318), (281, 13345), (287, 13369), (294, 13390), (299, 13411), (309, 13456), (332, 13582), (337, 13630), (350, 13690), (351, 13696), (361, 13786), (374, 13885), (376, 13897), (386, 13948), (387, 13954), (404, 14005), (409, 14044), (412, 14065), (436, 14176), (445, 14236), (450, 14269), (452, 14287), (456, 14305), (459, 14323), (461, 14335), (468, 14380), (479, 14431), (486, 14479), (501, 14557), (525, 14644), (528, 14650), (531, 14659), (543, 14716), (544, 14719), (558, 14794), (577, 14860), (603, 14995), (618, 15055), (621, 15070), (624, 15076), (679, 15526), (686, 15598), (687, 15607), (703, 15694), (728, 15847), (746, 15946), (749, 15973), (750, 15985),

Gene: LeMond_20 Start: 11082, Stop: 15155, Start Num: 18
Candidate Starts for LeMond_20:
(Start: 18 @11082 has 70 MA's), (29, 11175), (44, 11307), (71, 11445), (88, 11523), (89, 11535), (90, 11541), (96, 11574), (104, 11610), (113, 11667), (115, 11679), (126, 11733), (132, 11763), (151, 11850), (154, 11865), (160, 11901), (177, 11994), (190, 12075), (221, 12258), (223, 12267), (233, 12309), (239, 12351), (252, 12411), (256, 12423), (258, 12429), (261, 12444), (265, 12465), (272, 12498), (306, 12621), (309, 12633), (310, 12639), (314, 12654), (316, 12660), (346, 12744), (354, 12825), (378, 12978), (403, 13074), (409, 13116), (419, 13167), (423, 13188), (429, 13218), (431, 13224), (436, 13248), (445, 13308), (452, 13359), (460, 13404), (462, 13416), (472, 13470), (479, 13503), (486, 13560), (501, 13638), (502, 13641), (525, 13725), (540, 13782), (553, 13836), (558, 13875), (587, 13980), (603, 14076), (621, 14151), (652, 14274), (666, 14493), (686, 14694), (703,

14808), (728, 14985), (741, 15069), (746, 15090),

Gene: Lea83_20 Start: 12197, Stop: 16345, Start Num: 17
Candidate Starts for Lea83_20:
(Start: 17 @12197 has 184 MA's), (Start: 26 @12266 has 1 MA's), (Start: 27 @12287 has 1 MA's), (29, 12293), (34, 12353), (55, 12491), (62, 12536), (67, 12557), (80, 12602), (96, 12710), (97, 12722), (103, 12743), (111, 12797), (117, 12827), (122, 12848), (128, 12881), (130, 12890), (134, 12911), (142, 12950), (157, 13028), (163, 13070), (168, 13106), (174, 13130), (203, 13304), (212, 13364), (216, 13385), (218, 13394), (252, 13562), (259, 13583), (263, 13607), (267, 13631), (272, 13652), (278, 13670), (287, 13703), (299, 13745), (300, 13748), (301, 13751), (309, 13790), (311, 13799), (324, 13868), (341, 13979), (347, 14009), (373, 14207), (378, 14240), (402, 14330), (405, 14348), (409, 14378), (414, 14405), (452, 14621), (459, 14657), (468, 14714), (472, 14732), (479, 14765), (480, 14777), (487, 14825), (501, 14906), (502, 14909), (540, 15026), (558, 15119), (580, 15197), (599, 15296), (603, 15320), (621, 15395), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (722, 16136), (724, 16154), (731, 16190), (734, 16199), (745, 16265), (746, 16271), (748, 16286), (749, 16298),

Gene: Lebo14_22 Start: 13327, Stop: 17505, Start Num: 18
Candidate Starts for Lebo14_22:
(12, 13291), (Start: 18 @13327 has 70 MA's), (38, 13525), (87, 13765), (88, 13774), (103, 13867), (130, 14014), (134, 14035), (142, 14074), (144, 14077), (157, 14152), (168, 14230), (183, 14317), (184, 14320), (192, 14350), (196, 14383), (200, 14407), (213, 14491), (219, 14521), (226, 14548), (248, 14656), (251, 14677), (253, 14689), (257, 14701), (267, 14755), (309, 14914), (314, 14935), (328, 15043), (349, 15163), (409, 15523), (419, 15574), (421, 15583), (430, 15628), (434, 15649), (474, 15868), (478, 15880), (480, 15889), (492, 15961), (501, 16012), (502, 16015), (509, 16042), (519, 16078), (540, 16141), (544, 16159), (558, 16234), (602, 16423), (603, 16435), (621, 16510), (655, 16696), (664, 16816), (672, 16924), (686, 17077), (705, 17197), (707, 17206), (709, 17209), (723, 17308), (728, 17335), (746, 17431), (752, 17494),

Gene: Lemuria_16 Start: 10811, Stop: 14821, Start Num: 18
Candidate Starts for Lemuria_16:
(Start: 18 @10811 has 70 MA's), (29, 10907), (37, 11012), (39, 11021), (63, 11144), (68, 11168), (70, 11171), (78, 11204), (79, 11207), (88, 11258), (93, 11285), (98, 11327), (107, 11372), (115, 11408), (117, 11417), (118, 11420), (119, 11423), (132, 11489), (145, 11546), (151, 11588), (160, 11639), (167, 11699), (169, 11711), (173, 11723), (176, 11732), (190, 11813), (211, 11942), (221, 11990), (228, 12020), (231, 12032), (233, 12041), (239, 12083), (252, 12143), (258, 12161), (261, 12176), (265, 12197), (272, 12230), (282, 12257), (285, 12269), (295, 12302), (301, 12326), (304, 12344), (309, 12365), (326, 12461), (340, 12533), (376, 12791), (382, 12824), (405, 12908), (408, 12935), (415, 12968), (421, 12998), (429, 13040), (431, 13046), (445, 13130), (453, 13184), (472, 13292), (499, 13451), (507, 13475), (510, 13490), (516, 13514), (548, 13625), (566, 13712), (568, 13715), (586, 13802), (590, 13811), (597, 13868), (603, 13901), (619, 13955), (635, 13982), (654, 14096), (670, 14324), (675, 14390), (680, 14426), (684, 14483), (686, 14495), (697, 14573), (707, 14612), (714, 14639), (729, 14747),

Gene: Leston_19 Start: 12267, Stop: 16376, Start Num: 16
Candidate Starts for Leston_19:
(Start: 16 @12267 has 35 MA's), (46, 12525), (62, 12609), (80, 12675), (88, 12723), (96, 12783), (97, 12795), (103, 12816), (111, 12870), (117, 12900), (130, 12963), (134, 12984), (147, 13041), (157, 13101), (168, 13179), (174, 13203), (180, 13245), (187, 13278), (212, 13437), (216, 13458), (237, 13536), (250, 13599), (253, 13614), (254, 13617), (257, 13626), (259, 13632), (261, 13644), (267, 13680), (271, 13698), (301, 13800), (309, 13839), (337, 13992), (346, 14034), (351, 14058), (361, 14148), (363, 14181), (374, 14247), (388, 14322), (391, 14331), (395, 14349), (405, 14376), (418, 14454), (436, 14538), (454, 14661), (465, 14727), (484, 14829), (501, 14922), (509, 14952), (515,

14979), (518, 14985), (534, 15036), (537, 15057), (541, 15072), (542, 15078), (559, 15162), (571, 15192), (574, 15210), (582, 15249), (593, 15309), (600, 15342), (603, 15363), (607, 15387), (617, 15420), (639, 15504), (654, 15576), (678, 15885), (682, 15939), (684, 15954), (686, 15966), (692, 15996), (725, 16182), (728, 16206), (731, 16218), (747, 16305), (749, 16329),

Gene: Liefie_16 Start: 11463, Stop: 15476, Start Num: 17
Candidate Starts for Liefie_16:
(Start: 17 @11463 has 184 MA's), (38, 11664), (56, 11766), (57, 11778), (67, 11820), (72, 11841), (75, 11850), (97, 11985), (100, 11997), (103, 12006), (139, 12195), (142, 12213), (144, 12216), (148, 12237), (150, 12249), (161, 12321), (168, 12369), (194, 12501), (197, 12525), (208, 12606), (235, 12729), (250, 12813), (260, 12849), (267, 12894), (268, 12900), (299, 13008), (304, 13032), (309, 13053), (351, 13272), (368, 13422), (383, 13509), (408, 13617), (436, 13752), (451, 13857), (452, 13863), (456, 13881), (461, 13911), (499, 14133), (507, 14157), (510, 14172), (514, 14193), (534, 14247), (548, 14307), (568, 14397), (573, 14430), (590, 14493), (597, 14550), (603, 14583), (604, 14592), (680, 15096), (681, 15123), (684, 15153), (686, 15165), (687, 15174), (701, 15243), (720, 15324), (727, 15384), (729, 15402), (732, 15411),

Gene: LilDirt_18 Start: 11997, Stop: 16103, Start Num: 16
Candidate Starts for LilDirt_18:
(Start: 16 @11997 has 35 MA's), (Start: 27 @12090 has 1 MA's), (35, 12168), (36, 12192), (46, 12252), (62, 12336), (64, 12348), (88, 12450), (96, 12510), (97, 12522), (103, 12543), (111, 12597), (121, 12645), (130, 12690), (134, 12711), (157, 12828), (168, 12906), (174, 12930), (184, 12996), (198, 13071), (212, 13164), (218, 13194), (254, 13368), (257, 13377), (263, 13407), (267, 13431), (272, 13452), (290, 13512), (309, 13590), (311, 13599), (325, 13677), (337, 13743), (346, 13785), (348, 13794), (355, 13878), (361, 13899), (363, 13932), (374, 13998), (378, 14019), (388, 14073), (391, 14082), (395, 14100), (404, 14118), (405, 14127), (409, 14157), (416, 14193), (426, 14247), (434, 14283), (436, 14289), (437, 14307), (454, 14412), (465, 14478), (501, 14673), (509, 14703), (518, 14736), (534, 14787), (537, 14808), (541, 14823), (542, 14829), (559, 14913), (574, 14961), (582, 15000), (593, 15060), (600, 15093), (603, 15114), (607, 15138), (617, 15168), (639, 15234), (654, 15306), (678, 15621), (679, 15630), (680, 15633), (682, 15675), (686, 15702), (692, 15732), (701, 15783), (705, 15801), (720, 15867), (725, 15915), (728, 15939), (731, 15951), (747, 16032), (749, 16056), (754, 16095),

Gene: LilPharaoh_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for LilPharaoh_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: LindNT_21 Start: 12047, Stop: 15883, Start Num: 17
Candidate Starts for LindNT_21:
(Start: 17 @12047 has 184 MA's), (Start: 26 @12116 has 1 MA's), (34, 12203), (60, 12383), (67, 12410), (88, 12503), (96, 12563), (97, 12575), (111, 12650), (122, 12701), (130, 12743), (134, 12764), (142, 12803), (157, 12881), (168, 12959), (174, 12983), (198, 13124), (212, 13217), (214, 13226), (216, 13238), (218, 13247), (267, 13484), (273, 13508), (277, 13523), (287, 13556), (309, 13643), (315, 13667), (328, 13751), (345, 13835), (348, 13847), (352, 13868), (360, 13949), (436, 14024),

(447, 14105), (456, 14153), (459, 14171), (461, 14183), (462, 14192), (468, 14228), (479, 14279), (486, 14336), (501, 14414), (504, 14423), (525, 14501), (531, 14516), (540, 14558), (553, 14612), (603, 14852), (621, 14927), (652, 15038), (666, 15257), (668, 15269), (678, 15371), (686, 15452), (687, 15461), (701, 15533), (709, 15563), (713, 15584), (728, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Llorens_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Llorens_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Lokum_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Lokum_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: LongHai_20 Start: 11740, Stop: 15189, Start Num: 31
Candidate Starts for LongHai_20:
(Start: 31 @11740 has 2 MA's), (33, 11755), (40, 11803), (42, 11806), (48, 11851), (84, 11974), (86, 11995), (143, 12301), (146, 12313), (149, 12334), (162, 12418), (169, 12472), (172, 12481), (188, 12568), (190, 12577), (195, 12619), (203, 12664), (204, 12676), (207, 12697), (212, 12721), (225, 12775), (243, 12850), (246, 12862), (251, 12886), (270, 12973), (319, 13030), (342, 13099), (352, 13153), (371, 13309), (379, 13348), (381, 13360), (403, 13423), (409, 13465), (411, 13483), (433, 13570), (438, 13594), (442, 13621), (445, 13633), (455, 13699), (463, 13741), (464, 13750), (488, 13843), (493, 13873), (503, 13909), (511, 13939), (517, 13957), (527, 13984), (529, 13987), (545, 14038), (546, 14041), (547, 14044), (567, 14134), (576, 14182), (581, 14197), (583, 14215), (590, 14230), (598, 14290), (603, 14323), (604, 14332), (606, 14341), (619, 14377), (623, 14392), (660, 14587), (677, 14782), (687, 14878), (690, 14896), (698, 14938), (700, 14944), (707, 14971), (724, 15073), (726, 15082), (734, 15121),

Gene: LouisV14_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for LouisV14_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097),

(681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Lunahalos_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Lunahalos_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: MOOREtheMARYer_16 Start: 11710, Stop: 15720, Start Num: 18
Candidate Starts for MOOREtheMARYer_16:
(Start: 18 @11710 has 70 MA's), (29, 11806), (51, 11986), (56, 12016), (61, 12040), (66, 12061), (71, 12079), (90, 12175), (92, 12181), (94, 12196), (96, 12208), (98, 12226), (106, 12268), (107, 12271), (115, 12307), (118, 12319), (125, 12349), (127, 12361), (129, 12370), (145, 12445), (151, 12487), (154, 12502), (160, 12538), (161, 12553), (168, 12601), (169, 12610), (190, 12712), (203, 12796), (213, 12853), (221, 12895), (229, 12928), (230, 12931), (231, 12937), (233, 12946), (239, 12988), (256, 13060), (258, 13066), (261, 13081), (264, 13099), (265, 13102), (282, 13162), (295, 13207), (301, 13231), (304, 13249), (309, 13270), (315, 13294), (318, 13306), (319, 13309), (326, 13366), (340, 13438), (348, 13480), (368, 13645), (383, 13732), (388, 13759), (393, 13780), (409, 13843), (419, 13894), (431, 13951), (436, 13975), (443, 14026), (450, 14068), (472, 14197), (489, 14287), (491, 14302), (492, 14305), (507, 14371), (510, 14386), (532, 14452), (543, 14506), (548, 14521), (562, 14602), (568, 14611), (590, 14704), (597, 14761), (603, 14794), (619, 14848), (625, 14869), (680, 15325), (681, 15352), (683, 15379), (686, 15394), (687, 15403), (701, 15490), (727, 15628), (729, 15646), (734, 15661),

Gene: MZKinsey_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for MZKinsey_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: MacKat_21 Start: 12093, Stop: 15926, Start Num: 17
Candidate Starts for MacKat_21:
(Start: 17 @12093 has 184 MA's), (Start: 26 @12162 has 1 MA's), (34, 12249), (60, 12426), (67, 12453), (87, 12537), (88, 12546), (97, 12618), (111, 12693), (128, 12777), (130, 12786), (134, 12807), (142, 12846), (157, 12924), (168, 13002), (184, 13092), (198, 13167), (212, 13260), (214, 13269), (216, 13281), (218, 13290), (267, 13527), (277, 13566), (287, 13599), (309, 13686), (315, 13710), (328, 13794), (345, 13878), (348, 13890), (352, 13911), (436, 14067), (447, 14148), (451, 14172), (456, 14196), (459, 14214), (462, 14235), (468, 14271), (479, 14322), (486, 14379), (501, 14457), (504, 14466), (525, 14544), (531, 14559), (540, 14601), (553, 14655), (603, 14895), (621, 14970), (652, 15081), (666, 15300), (668, 15312), (686, 15495), (687, 15504), (701, 15576), (709, 15606),

(713, 15627), (728, 15747), (741, 15819), (745, 15837), (746, 15843),

Gene: MacnCheese_21 Start: 12433, Stop: 16590, Start Num: 17
Candidate Starts for MacnCheese_21:
(4, 12283), (Start: 17 @12433 has 184 MA's), (Start: 27 @12523 has 1 MA's), (29, 12529), (34, 12589), (57, 12751), (76, 12826), (87, 12877), (88, 12886), (96, 12946), (97, 12958), (103, 12979), (111, 13033), (130, 13126), (134, 13147), (142, 13186), (148, 13210), (157, 13264), (164, 13309), (168, 13342), (174, 13366), (203, 13540), (216, 13621), (252, 13798), (263, 13843), (267, 13867), (272, 13888), (286, 13936), (299, 13981), (304, 14005), (309, 14026), (324, 14104), (335, 14182), (346, 14242), (347, 14245), (350, 14260), (378, 14476), (387, 14524), (402, 14566), (405, 14584), (409, 14614), (412, 14635), (415, 14644), (421, 14674), (436, 14746), (440, 14776), (459, 14893), (462, 14914), (468, 14950), (472, 14968), (479, 15001), (483, 15046), (487, 15061), (501, 15142), (502, 15145), (522, 15214), (525, 15229), (528, 15235), (531, 15244), (553, 15340), (558, 15379), (599, 15556), (603, 15580), (621, 15655), (674, 16069), (678, 16099), (679, 16108), (680, 16111), (687, 16189), (690, 16207), (692, 16210), (722, 16384), (724, 16402), (734, 16447), (739, 16480), (746, 16516), (748, 16531), (749, 16543),

Gene: Maco6_17 Start: 10697, Stop: 14146, Start Num: 31
Candidate Starts for Maco6_17:
(Start: 31 @10697 has 2 MA's), (33, 10712), (40, 10760), (42, 10763), (48, 10808), (84, 10931), (143, 11258), (146, 11270), (149, 11291), (162, 11375), (169, 11429), (172, 11438), (181, 11492), (182, 11501), (188, 11525), (190, 11534), (195, 11576), (203, 11621), (204, 11633), (207, 11654), (212, 11678), (217, 11708), (225, 11732), (243, 11807), (246, 11819), (251, 11843), (252, 11852), (270, 11930), (319, 11987), (342, 12056), (372, 12272), (381, 12317), (411, 12440), (428, 12518), (438, 12551), (442, 12578), (445, 12590), (463, 12698), (464, 12707), (488, 12800), (493, 12830), (503, 12866), (511, 12896), (517, 12914), (527, 12941), (529, 12944), (546, 12998), (547, 13001), (567, 13091), (576, 13139), (581, 13154), (583, 13172), (590, 13187), (598, 13247), (603, 13280), (604, 13289), (606, 13298), (619, 13334), (623, 13349), (651, 13421), (660, 13544), (677, 13739), (687, 13835), (690, 13853), (698, 13895), (700, 13901), (707, 13928), (724, 14030), (726, 14039), (734, 14078),

Gene: Maliketh_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Maliketh_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Malthus_22 Start: 13237, Stop: 17412, Start Num: 18
Candidate Starts for Malthus_22:
(12, 13201), (Start: 18 @13237 has 70 MA's), (38, 13435), (87, 13675), (88, 13684), (103, 13777), (121, 13879), (130, 13924), (142, 13984), (157, 14062), (168, 14140), (183, 14227), (184, 14230), (192, 14260), (196, 14293), (200, 14317), (213, 14401), (219, 14431), (226, 14458), (248, 14566), (251, 14587), (253, 14599), (257, 14611), (267, 14665), (309, 14824), (314, 14845), (328, 14953), (349, 15073), (406, 15415), (409, 15433), (419, 15484), (421, 15493), (430, 15538), (434, 15559), (457, 15679), (474, 15778), (478, 15790), (480, 15799), (492, 15871), (501, 15922), (502, 15925), (509, 15952), (540, 16051), (544, 16069), (558, 16144), (602, 16333), (603, 16345), (621, 16420), (633, 16450), (655, 16606), (664, 16726), (672, 16834), (686, 16984), (707, 17113), (709, 17116),

(723, 17215), (728, 17242), (746, 17338), (752, 17401),

Gene: Marcoliusprime_17 Start: 10116, Stop: 13784, Start Num: 16
Candidate Starts for Marcoliusprime_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (405, 11946), (420, 12012), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (673, 13251), (678, 13281), (679, 13290), (681, 13320), (711, 13485), (728, 13614), (746, 13707),

Gene: MarkPhew_21 Start: 10973, Stop: 15046, Start Num: 18
Candidate Starts for MarkPhew_21:
(3, 10757), (10, 10937), (Start: 18 @10973 has 70 MA's), (29, 11066), (44, 11198), (47, 11225), (49, 11234), (61, 11297), (71, 11336), (75, 11351), (88, 11414), (89, 11426), (96, 11465), (113, 11558), (115, 11570), (126, 11624), (151, 11741), (154, 11756), (160, 11792), (167, 11852), (168, 11855), (178, 11897), (190, 11966), (221, 12149), (233, 12200), (234, 12212), (252, 12302), (256, 12314), (258, 12320), (261, 12335), (268, 12374), (306, 12512), (309, 12524), (310, 12530), (314, 12545), (316, 12551), (378, 12869), (387, 12917), (391, 12932), (405, 12977), (409, 13007), (419, 13058), (423, 13079), (431, 13115), (436, 13139), (462, 13307), (468, 13343), (472, 13361), (479, 13394), (486, 13451), (501, 13529), (502, 13532), (525, 13616), (553, 13727), (558, 13766), (587, 13871), (603, 13967), (621, 14042), (666, 14390), (686, 14588), (728, 14876), (731, 14888), (741, 14960), (746, 14981),

Gene: Marmie_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Marmie_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Marshawn_22 Start: 11657, Stop: 15661, Start Num: 18
Candidate Starts for Marshawn_22:
(1, 11312), (3, 11444), (10, 11621), (Start: 18 @11657 has 70 MA's), (22, 11681), (29, 11750), (47, 11909), (49, 11918), (59, 11975), (87, 12089), (88, 12098), (89, 12110), (94, 12137), (96, 12149), (99, 12170), (114, 12251), (126, 12308), (132, 12338), (151, 12425), (154, 12440), (155, 12449), (160, 12476), (168, 12539), (169, 12548), (190, 12650), (202, 12725), (221, 12833), (229, 12866), (236, 12908), (239, 12926), (252, 12986), (256, 12998), (258, 13004), (261, 13019), (264, 13037), (265, 13040), (268, 13058), (272, 13073), (284, 13109), (298, 13154), (299, 13163), (302, 13178), (306, 13196), (309, 13208), (310, 13214), (314, 13229), (316, 13235), (347, 13322), (360, 13430), (378, 13553), (391, 13616), (405, 13661), (409, 13691), (419, 13742), (431, 13799), (436, 13823), (447, 13904), (456, 13952), (462, 13991), (468, 14027), (479, 14078), (501, 14219), (502, 14222), (525, 14306), (531, 14321), (540, 14363), (558, 14456), (603, 14657), (621, 14732), (645, 14810), (664, 15026), (666, 15083), (680, 15212), (681, 15239), (686, 15281), (701, 15371), (703, 15383), (718,

15422), (737, 15548), (740, 15572), (741, 15575), (746, 15596),

Gene: McMater_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for McMater_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268, 12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416, 13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Mdavu_17 Start: 11315, Stop: 15448, Start Num: 17
Candidate Starts for Mdavu_17:
(9, 11276), (Start: 17 @11315 has 184 MA's), (Start: 26 @11384 has 1 MA's), (34, 11471), (44, 11549), (62, 11657), (67, 11678), (76, 11711), (97, 11843), (101, 11858), (103, 11864), (111, 11918), (117, 11948), (130, 12011), (134, 12032), (142, 12071), (157, 12149), (168, 12227), (174, 12251), (212, 12485), (232, 12566), (240, 12626), (252, 12683), (262, 12719), (267, 12752), (273, 12776), (293, 12842), (296, 12851), (309, 12911), (328, 13019), (337, 13064), (361, 13220), (376, 13331), (378, 13340), (380, 13352), (391, 13403), (395, 13421), (405, 13448), (409, 13478), (427, 13571), (436, 13610), (462, 13778), (472, 13832), (479, 13865), (485, 13910), (501, 13991), (502, 13994), (525, 14078), (528, 14084), (531, 14093), (540, 14135), (550, 14171), (553, 14189), (558, 14228), (575, 14288), (603, 14429), (618, 14489), (621, 14504), (668, 14846), (686, 15035), (687, 15044), (698, 15107), (746, 15383),

Gene: MeaningOfLife_21 Start: 12052, Stop: 15885, Start Num: 17
Candidate Starts for MeaningOfLife_21:
(Start: 17 @12052 has 184 MA's), (Start: 26 @12121 has 1 MA's), (Start: 27 @12142 has 1 MA's), (34, 12208), (60, 12385), (67, 12412), (85, 12484), (87, 12496), (88, 12505), (97, 12577), (111, 12652), (128, 12736), (130, 12745), (134, 12766), (142, 12805), (157, 12883), (168, 12961), (184, 13051), (198, 13126), (212, 13219), (214, 13228), (216, 13240), (218, 13249), (267, 13486), (277, 13525), (287, 13558), (309, 13645), (315, 13669), (328, 13753), (345, 13837), (348, 13849), (352, 13870), (436, 14026), (447, 14107), (456, 14155), (459, 14173), (462, 14194), (468, 14230), (479, 14281), (486, 14338), (501, 14416), (504, 14425), (525, 14503), (531, 14518), (540, 14560), (553, 14614), (603, 14854), (621, 14929), (652, 15040), (666, 15259), (668, 15271), (686, 15454), (687, 15463), (701, 15535), (709, 15565), (713, 15586), (728, 15706), (741, 15778), (745, 15796), (746, 15802),

Gene: Megsy_21 Start: 12050, Stop: 15886, Start Num: 17
Candidate Starts for Megsy_21:
(Start: 17 @12050 has 184 MA's), (Start: 26 @12119 has 1 MA's), (34, 12206), (60, 12386), (67, 12413), (88, 12506), (96, 12566), (97, 12578), (111, 12653), (122, 12704), (130, 12746), (134, 12767), (142, 12806), (157, 12884), (168, 12962), (174, 12986), (198, 13127), (212, 13220), (214, 13229), (216, 13241), (218, 13250), (267, 13487), (273, 13511), (277, 13526), (287, 13559), (309, 13646), (315, 13670), (328, 13754), (345, 13838), (348, 13850), (352, 13871), (360, 13952), (436, 14027), (447, 14108), (456, 14156), (459, 14174), (461, 14186), (462, 14195), (468, 14231), (479, 14282), (486, 14339), (501, 14417), (504, 14426), (525, 14504), (531, 14519), (553, 14615), (603, 14855), (621, 14930), (652, 15041), (666, 15260), (668, 15272), (678, 15374), (686, 15455), (687, 15464),

(701, 15536), (709, 15566), (713, 15587), (728, 15707), (741, 15779), (745, 15797), (746, 15803),

Gene: Mercurio_17 Start: 11458, Stop: 15474, Start Num: 18
Candidate Starts for Mercurio_17:
(Start: 18 @11458 has 70 MA's), (49, 11725), (63, 11791), (68, 11815), (70, 11818), (75, 11842), (78, 11851), (79, 11854), (88, 11905), (93, 11932), (98, 11974), (107, 12019), (111, 12037), (112, 12040), (118, 12067), (128, 12115), (132, 12136), (145, 12193), (151, 12235), (159, 12280), (160, 12286), (168, 12349), (169, 12358), (173, 12370), (176, 12379), (190, 12460), (221, 12637), (228, 12667), (229, 12670), (233, 12688), (234, 12700), (239, 12730), (247, 12757), (252, 12790), (258, 12808), (261, 12823), (265, 12844), (272, 12877), (282, 12904), (295, 12949), (301, 12973), (304, 12991), (309, 13012), (326, 13108), (336, 13153), (340, 13180), (356, 13309), (376, 13438), (405, 13555), (408, 13582), (415, 13615), (430, 13690), (431, 13693), (445, 13777), (450, 13810), (460, 13873), (499, 14098), (507, 14122), (510, 14137), (516, 14161), (548, 14272), (562, 14353), (568, 14362), (590, 14455), (597, 14512), (603, 14545), (605, 14560), (684, 15139), (686, 15151), (688, 15166), (701, 15238), (714, 15289), (729, 15397),

Gene: Milly_17 Start: 10116, Stop: 13784, Start Num: 16
Candidate Starts for Milly_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (378, 11850), (405, 11946), (410, 11979), (420, 12012), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (678, 13281), (679, 13290), (681, 13320), (711, 13485), (728, 13614), (746, 13707),

Gene: Miryou_19 Start: 12115, Stop: 16230, Start Num: 16
Candidate Starts for Miryou_19:
(Start: 16 @12115 has 35 MA's), (46, 12373), (62, 12457), (80, 12523), (88, 12571), (96, 12631), (97, 12643), (103, 12664), (111, 12718), (117, 12748), (130, 12811), (134, 12832), (147, 12889), (157, 12949), (163, 12991), (168, 13027), (174, 13051), (180, 13093), (187, 13126), (212, 13285), (216, 13306), (237, 13384), (250, 13447), (253, 13462), (254, 13465), (257, 13474), (259, 13480), (261, 13492), (267, 13528), (271, 13546), (301, 13648), (309, 13687), (337, 13840), (346, 13882), (351, 13906), (361, 13996), (363, 14029), (374, 14095), (388, 14170), (391, 14179), (395, 14197), (405, 14224), (418, 14302), (436, 14386), (454, 14509), (465, 14575), (484, 14677), (501, 14770), (509, 14800), (515, 14827), (518, 14833), (534, 14884), (537, 14905), (541, 14920), (542, 14926), (559, 15010), (571, 15040), (574, 15058), (582, 15097), (593, 15157), (600, 15190), (603, 15211), (607, 15235), (617, 15268), (639, 15352), (654, 15424), (678, 15739), (682, 15793), (684, 15808), (686, 15820), (692, 15850), (725, 16036), (731, 16072), (747, 16159), (749, 16183),

Gene: MissDaisy_22 Start: 13088, Stop: 17254, Start Num: 18
Candidate Starts for MissDaisy_22:
(12, 13052), (Start: 18 @13088 has 70 MA's), (38, 13286), (85, 13514), (87, 13526), (88, 13535), (91, 13565), (103, 13628), (130, 13775), (134, 13796), (142, 13835), (144, 13838), (157, 13913), (168, 13991), (183, 14078), (184, 14081), (192, 14111), (196, 14144), (200, 14168), (213, 14252), (219, 14282), (226, 14309), (248, 14417), (251, 14438), (253, 14450), (257, 14462), (267, 14516), (309, 14675), (314, 14696), (328, 14804), (349, 14924), (383, 15173), (409, 15284), (419, 15335), (421, 15344), (430, 15389), (434, 15410), (453, 15509), (456, 15524), (457, 15530), (469, 15599), (473, 15620), (474, 15629), (478, 15641), (480, 15650), (492, 15722), (501, 15773), (502, 15776), (509, 15803), (540, 15902), (544, 15920), (558, 15995), (602, 16184), (603, 16196), (621, 16271), (655,

16451), (664, 16571), (672, 16679), (677, 16739), (686, 16826), (692, 16856), (705, 16946), (707, 16955), (709, 16958), (723, 17057), (728, 17084), (746, 17180), (752, 17243),

Gene: Mitti_22 Start: 13237, Stop: 17412, Start Num: 18
Candidate Starts for Mitti_22:
(12, 13201), (Start: 18 @13237 has 70 MA's), (38, 13435), (87, 13675), (88, 13684), (103, 13777), (130, 13924), (134, 13945), (142, 13984), (144, 13987), (157, 14062), (168, 14140), (183, 14227), (184, 14230), (192, 14260), (196, 14293), (200, 14317), (213, 14401), (219, 14431), (226, 14458), (248, 14566), (251, 14587), (253, 14599), (257, 14611), (267, 14665), (309, 14824), (314, 14845), (328, 14953), (349, 15073), (409, 15433), (419, 15484), (421, 15493), (430, 15538), (434, 15559), (474, 15778), (478, 15790), (480, 15799), (492, 15871), (501, 15922), (502, 15925), (509, 15952), (540, 16051), (544, 16069), (558, 16144), (602, 16333), (603, 16345), (621, 16420), (655, 16606), (664, 16726), (672, 16834), (686, 16984), (705, 17104), (707, 17113), (709, 17116), (723, 17215), (728, 17242), (746, 17338), (752, 17401),

Gene: Mowgli_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Mowgli_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Muddy_19 Start: 11647, Stop: 15096, Start Num: 31
Candidate Starts for Muddy_19:
(Start: 31 @11647 has 2 MA's), (33, 11662), (40, 11710), (42, 11713), (48, 11758), (84, 11881), (138, 12187), (143, 12208), (146, 12220), (149, 12241), (162, 12325), (169, 12379), (172, 12388), (188, 12475), (190, 12484), (195, 12526), (203, 12571), (204, 12583), (207, 12604), (212, 12628), (225, 12682), (238, 12736), (243, 12757), (246, 12769), (251, 12793), (252, 12802), (270, 12880), (274, 12898), (319, 12937), (342, 13006), (352, 13060), (364, 13180), (371, 13216), (372, 13222), (379, 13255), (381, 13267), (411, 13390), (438, 13501), (442, 13528), (445, 13540), (463, 13648), (464, 13657), (488, 13750), (493, 13780), (503, 13816), (511, 13846), (517, 13864), (527, 13891), (529, 13894), (546, 13948), (547, 13951), (567, 14041), (576, 14089), (581, 14104), (583, 14122), (590, 14137), (598, 14197), (603, 14230), (604, 14239), (606, 14248), (619, 14284), (623, 14299), (660, 14494), (677, 14689), (687, 14785), (690, 14803), (698, 14845), (700, 14851), (707, 14878), (724, 14980), (726, 14989), (734, 15028),

Gene: Mufasa_17 Start: 10138, Stop: 13812, Start Num: 16
Candidate Starts for Mufasa_17:
(Start: 16 @10138 has 35 MA's), (Start: 26 @10210 has 1 MA's), (35, 10309), (65, 10444), (85, 10495), (97, 10588), (111, 10663), (130, 10756), (134, 10777), (139, 10798), (140, 10804), (157, 10894), (163, 10936), (168, 10972), (177, 11005), (178, 11017), (181, 11041), (184, 11062), (191, 11086), (192, 11092), (197, 11128), (198, 11137), (203, 11170), (204, 11182), (208, 11209), (250, 11392), (252, 11404), (254, 11410), (263, 11449), (267, 11473), (307, 11506), (314, 11524), (317, 11533), (327, 11566), (357, 11755), (358, 11761), (362, 11797), (367, 11824), (371, 11842), (375, 11860), (378, 11872), (405, 11968), (410, 12001), (420, 12034), (435, 12088), (441, 12121), (445, 12142), (450, 12166), (454, 12196), (458, 12217), (494, 12385), (496, 12403), (508, 12439), (536, 12532), (555, 12610), (589, 12733), (628, 12886), (673, 13273), (678, 13303), (679, 13312), (681, 13342), (689, 13402), (711, 13510), (728, 13642), (746, 13735),

Gene: Murucutumbu_21 Start: 12036, Stop: 15869, Start Num: 17
Candidate Starts for Murucutumbu_21:
(Start: 17 @12036 has 184 MA's), (Start: 26 @12105 has 1 MA's), (34, 12192), (60, 12372), (67, 12399), (87, 12483), (88, 12492), (96, 12552), (97, 12564), (111, 12639), (120, 12681), (128, 12723), (130, 12732), (134, 12753), (142, 12792), (157, 12870), (168, 12948), (198, 13113), (212, 13206), (216, 13227), (218, 13236), (267, 13473), (273, 13497), (277, 13512), (287, 13545), (309, 13632), (328, 13740), (345, 13824), (348, 13836), (352, 13857), (360, 13938), (436, 14013), (447, 14094), (449, 14103), (456, 14142), (459, 14160), (462, 14181), (468, 14217), (479, 14268), (486, 14325), (501, 14403), (504, 14412), (525, 14490), (531, 14505), (540, 14547), (553, 14601), (603, 14841), (621, 14916), (652, 15027), (666, 15246), (678, 15360), (686, 15441), (687, 15450), (701, 15522), (709, 15552), (713, 15573), (728, 15690), (741, 15762), (746, 15786),

Gene: Mynx_21 Start: 12099, Stop: 15932, Start Num: 17
Candidate Starts for Mynx_21:
(Start: 17 @12099 has 184 MA's), (Start: 26 @12168 has 1 MA's), (34, 12255), (60, 12432), (67, 12459), (85, 12531), (87, 12543), (88, 12552), (97, 12624), (111, 12699), (128, 12783), (130, 12792), (134, 12813), (142, 12852), (157, 12930), (168, 13008), (184, 13098), (198, 13173), (212, 13266), (214, 13275), (216, 13287), (218, 13296), (267, 13533), (277, 13572), (287, 13605), (309, 13692), (315, 13716), (328, 13800), (345, 13884), (348, 13896), (352, 13917), (436, 14073), (447, 14154), (456, 14202), (459, 14220), (462, 14241), (468, 14277), (479, 14328), (486, 14385), (501, 14463), (504, 14472), (525, 14550), (531, 14565), (540, 14607), (553, 14661), (603, 14901), (621, 14976), (652, 15087), (666, 15306), (668, 15318), (686, 15501), (687, 15510), (701, 15582), (709, 15612), (713, 15633), (728, 15753), (741, 15825), (745, 15843), (746, 15849),

Gene: Neighly_19 Start: 11979, Stop: 16091, Start Num: 16
Candidate Starts for Neighly_19:
(Start: 16 @11979 has 35 MA's), (Start: 27 @12072 has 1 MA's), (35, 12150), (36, 12174), (46, 12234), (62, 12318), (88, 12432), (96, 12492), (97, 12504), (103, 12525), (111, 12579), (121, 12627), (130, 12672), (134, 12693), (157, 12810), (168, 12888), (174, 12912), (184, 12978), (198, 13053), (212, 13146), (218, 13176), (254, 13350), (263, 13389), (267, 13413), (272, 13434), (290, 13494), (309, 13572), (325, 13659), (337, 13725), (346, 13767), (348, 13776), (355, 13860), (361, 13881), (363, 13914), (374, 13980), (378, 14001), (388, 14055), (391, 14064), (395, 14082), (405, 14109), (409, 14139), (416, 14175), (434, 14265), (436, 14271), (437, 14289), (454, 14394), (465, 14460), (501, 14655), (509, 14685), (518, 14718), (534, 14769), (537, 14790), (541, 14805), (542, 14811), (559, 14895), (574, 14943), (582, 14982), (593, 15042), (600, 15075), (603, 15096), (607, 15120), (617, 15150), (639, 15216), (654, 15288), (678, 15603), (679, 15612), (680, 15615), (681, 15642), (682, 15657), (684, 15672), (686, 15684), (692, 15714), (701, 15768), (705, 15786), (720, 15855), (725, 15903), (728, 15927), (731, 15939), (734, 15948), (747, 16020), (749, 16044), (754, 16083),

Gene: Neoh_16 Start: 11456, Stop: 15469, Start Num: 17
Candidate Starts for Neoh_16:
(Start: 17 @11456 has 184 MA's), (38, 11657), (57, 11771), (67, 11813), (75, 11843), (97, 11978), (100, 11990), (103, 11999), (139, 12188), (142, 12206), (144, 12209), (148, 12230), (150, 12242), (161, 12314), (168, 12362), (194, 12494), (197, 12518), (208, 12599), (235, 12722), (250, 12806), (260, 12842), (267, 12887), (268, 12893), (299, 13001), (304, 13025), (309, 13046), (351, 13265), (368, 13415), (383, 13502), (408, 13610), (436, 13745), (452, 13856), (456, 13874), (461, 13904), (499, 14126), (507, 14150), (510, 14165), (514, 14186), (525, 14213), (534, 14240), (548, 14300), (568, 14390), (573, 14423), (590, 14486), (597, 14543), (603, 14576), (604, 14585), (680, 15089), (681, 15116), (684, 15146), (686, 15158), (687, 15167), (701, 15236), (720, 15317), (727, 15377), (729, 15395), (732, 15404),

Gene: Nibb_20 Start: 11122, Stop: 15189, Start Num: 18

Candidate Starts for Nibb_20:
(10, 11086), (Start: 18 @11122 has 70 MA's), (44, 11347), (47, 11374), (49, 11383), (71, 11485), (96, 11614), (113, 11707), (115, 11719), (126, 11773), (132, 11803), (151, 11890), (154, 11905), (167, 12001), (168, 12004), (178, 12046), (190, 12115), (221, 12298), (233, 12349), (234, 12361), (239, 12391), (252, 12451), (256, 12463), (258, 12469), (261, 12484), (264, 12502), (265, 12505), (304, 12652), (306, 12661), (309, 12673), (310, 12679), (314, 12694), (316, 12700), (346, 12784), (353, 12853), (378, 13018), (387, 13066), (405, 13126), (409, 13156), (419, 13207), (423, 13228), (431, 13264), (440, 13318), (462, 13456), (472, 13510), (479, 13543), (481, 13561), (486, 13600), (501, 13678), (502, 13681), (525, 13765), (540, 13822), (550, 13858), (553, 13876), (558, 13915), (603, 14116), (614, 14158), (621, 14191), (666, 14533), (686, 14731), (728, 15019), (731, 15031), (741, 15103), (746, 15124),

Gene: Nikao_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Nikao_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (439, 13649), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: Niklas_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for Niklas_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268, 12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416, 13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: NoShow_16 Start: 10206, Stop: 14354, Start Num: 5
Candidate Starts for NoShow_16:
(Start: 5 @10206 has 1 MA's), (6, 10218), (15, 10323), (20, 10344), (45, 10602), (52, 10635), (53, 10638), (57, 10671), (72, 10728), (77, 10743), (78, 10746), (88, 10800), (91, 10821), (94, 10839), (96, 10851), (99, 10872), (102, 10881), (107, 10911), (129, 11013), (131, 11022), (136, 11055), (152, 11121), (154, 11133), (155, 11142), (162, 11187), (166, 11220), (168, 11232), (175, 11259), (190, 11343), (202, 11418), (206, 11457), (216, 11502), (221, 11526), (231, 11568), (232, 11571), (233, 11577), (234, 11589), (244, 11634), (256, 11691), (258, 11697), (261, 11712), (264, 11730), (272, 11766), (279, 11784), (284, 11802), (292, 11829), (295, 11838), (304, 11880), (305, 11886), (314, 11922), (316, 11928), (322, 11961), (341, 11985), (345, 12009), (373, 12213), (378, 12246), (380, 12258), (387, 12294), (399, 12378), (400, 12384), (417, 12477), (424, 12519), (427, 12531), (429, 12540), (434, 12564), (439, 12597), (448, 12675), (453, 12705), (455, 12717), (457, 12726), (460,

12747), (470, 12801), (477, 12846), (489, 12921), (505, 12996), (512, 13032), (524, 13059), (525, 13068), (530, 13080), (539, 13116), (570, 13257), (572, 13266), (581, 13311), (590, 13344), (597, 13398), (603, 13431), (616, 13470), (620, 13491), (631, 13518), (650, 13599), (657, 13680), (658, 13692), (677, 13938), (681, 13983), (686, 14025), (690, 14052), (699, 14106), (704, 14127), (709, 14142), (710, 14148), (717, 14202), (718, 14208), (722, 14244), (730, 14301), (733, 14310),

Gene: Nolwazi_22 Start: 13238, Stop: 17413, Start Num: 18
Candidate Starts for Nolwazi_22:
(12, 13202), (Start: 18 @13238 has 70 MA's), (38, 13436), (87, 13676), (88, 13685), (120, 13874), (130, 13925), (134, 13946), (142, 13985), (144, 13988), (157, 14063), (168, 14141), (183, 14228), (184, 14231), (192, 14261), (196, 14294), (200, 14318), (213, 14402), (219, 14432), (226, 14459), (248, 14567), (251, 14588), (253, 14600), (257, 14612), (267, 14666), (309, 14825), (314, 14846), (328, 14954), (349, 15074), (409, 15434), (419, 15485), (421, 15494), (430, 15539), (434, 15560), (474, 15779), (478, 15791), (480, 15800), (488, 15845), (492, 15872), (501, 15923), (502, 15926), (509, 15953), (519, 15989), (540, 16052), (544, 16070), (558, 16145), (602, 16334), (603, 16346), (621, 16421), (655, 16607), (664, 16727), (672, 16835), (686, 16985), (705, 17105), (707, 17114), (709, 17117), (723, 17216), (728, 17243), (746, 17339), (752, 17402),

Gene: November_19 Start: 12038, Stop: 16228, Start Num: 17
Candidate Starts for November_19:
(Start: 17 @12038 has 184 MA's), (Start: 26 @12107 has 1 MA's), (Start: 27 @12128 has 1 MA's), (34, 12194), (57, 12356), (76, 12431), (87, 12482), (88, 12491), (96, 12551), (97, 12563), (103, 12584), (111, 12638), (117, 12668), (130, 12731), (134, 12752), (142, 12791), (157, 12869), (168, 12947), (174, 12971), (182, 13025), (184, 13037), (197, 13103), (203, 13145), (208, 13184), (210, 13196), (216, 13226), (218, 13235), (241, 13349), (245, 13364), (257, 13418), (263, 13448), (267, 13472), (272, 13493), (286, 13541), (299, 13586), (300, 13589), (309, 13631), (314, 13652), (323, 13700), (332, 13757), (334, 13772), (335, 13787), (338, 13808), (341, 13820), (350, 13865), (361, 13961), (409, 14219), (412, 14240), (431, 14327), (436, 14351), (439, 14378), (440, 14381), (445, 14411), (452, 14462), (459, 14498), (479, 14606), (501, 14741), (502, 14744), (521, 14810), (523, 14816), (534, 14855), (552, 14927), (554, 14933), (557, 14954), (579, 15038), (584, 15068), (591, 15089), (592, 15101), (603, 15182), (610, 15215), (613, 15224), (615, 15230), (627, 15272), (634, 15290), (640, 15323), (643, 15329), (666, 15617), (678, 15731), (679, 15740), (680, 15743), (686, 15812), (713, 15947), (728, 16067), (746, 16163), (750, 16202),

Gene: Nutello_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Nutello_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: OctaviousRex_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for OctaviousRex_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273),

(368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: OkiRoe_19 Start: 12137, Stop: 16246, Start Num: 16
Candidate Starts for OkiRoe_19:
(Start: 16 @12137 has 35 MA's), (46, 12395), (62, 12479), (80, 12545), (88, 12593), (96, 12653), (97, 12665), (103, 12686), (111, 12740), (117, 12770), (130, 12833), (134, 12854), (147, 12911), (157, 12971), (168, 13049), (174, 13073), (180, 13115), (187, 13148), (212, 13307), (216, 13328), (237, 13406), (250, 13469), (253, 13484), (254, 13487), (257, 13496), (259, 13502), (261, 13514), (271, 13568), (301, 13670), (309, 13709), (337, 13862), (346, 13904), (351, 13928), (361, 14018), (363, 14051), (388, 14192), (391, 14201), (395, 14219), (405, 14246), (418, 14324), (436, 14408), (454, 14531), (465, 14597), (484, 14699), (501, 14792), (509, 14822), (515, 14849), (518, 14855), (534, 14906), (537, 14927), (541, 14942), (542, 14948), (559, 15032), (574, 15080), (582, 15119), (593, 15179), (600, 15212), (603, 15233), (607, 15257), (617, 15290), (639, 15374), (654, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (692, 15866), (725, 16052), (731, 16088), (747, 16175), (749, 16199),

Gene: Olga_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Olga_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: OmniCritical_22 Start: 13225, Stop: 17397, Start Num: 18
Candidate Starts for OmniCritical_22:
(12, 13189), (Start: 18 @13225 has 70 MA's), (38, 13423), (87, 13663), (88, 13672), (103, 13765), (130, 13912), (134, 13933), (142, 13972), (144, 13975), (157, 14050), (168, 14128), (183, 14215), (184, 14218), (192, 14248), (196, 14281), (200, 14305), (213, 14389), (219, 14419), (226, 14446), (248, 14554), (251, 14575), (253, 14587), (257, 14599), (267, 14653), (309, 14812), (314, 14833), (328, 14941), (349, 15061), (409, 15421), (419, 15472), (421, 15481), (430, 15526), (434, 15547), (474, 15766), (478, 15778), (480, 15787), (492, 15859), (501, 15910), (502, 15913), (509, 15940), (540, 16039), (544, 16057), (558, 16132), (602, 16321), (603, 16333), (621, 16408), (655, 16594), (664, 16714), (672, 16822), (686, 16969), (705, 17089), (707, 17098), (709, 17101), (723, 17200), (728, 17227), (746, 17323), (752, 17386),

Gene: Omnicron_19 Start: 11169, Stop: 15011, Start Num: 16
Candidate Starts for Omnicron_19:
(Start: 16 @11169 has 35 MA's), (43, 11355), (44, 11367), (56, 11433), (57, 11445), (61, 11457), (65, 11475), (67, 11478), (97, 11631), (103, 11652), (111, 11706), (117, 11736), (121, 11754), (127, 11784), (128, 11790), (130, 11799), (134, 11820), (140, 11847), (157, 11937), (168, 12015), (177, 12048), (178, 12060), (182, 12093), (193, 12138), (197, 12171), (203, 12213), (204, 12225), (205, 12228), (234, 12348), (237, 12372), (251, 12438), (254, 12453), (257, 12462), (259, 12468), (267, 12516), (331, 12627), (333, 12636), (343, 12687), (344, 12693), (348, 12708), (351, 12723), (361, 12813), (363, 12846), (386, 12975), (388, 12987), (391, 12996), (395, 13014), (403, 13029), (405,

13041), (409, 13071), (417, 13110), (421, 13131), (422, 13140), (429, 13173), (432, 13185), (434, 13197), (436, 13203), (445, 13263), (446, 13272), (454, 13326), (457, 13338), (487, 13488), (501, 13569), (502, 13572), (515, 13626), (533, 13674), (535, 13683), (539, 13707), (565, 13827), (567, 13830), (586, 13917), (590, 13926), (598, 13986), (603, 14019), (605, 14034), (609, 14040), (621, 14085), (630, 14106), (642, 14133), (658, 14268), (663, 14343), (671, 14451), (678, 14520), (679, 14529), (680, 14532), (681, 14559), (686, 14601), (692, 14631), (701, 14688), (707, 14715), (720, 14775), (728, 14847), (734, 14868), (747, 14940), (749, 14964), (754, 15003),

Gene: Oscar_20 Start: 11083, Stop: 15156, Start Num: 18
Candidate Starts for Oscar_20:
(Start: 18 @11083 has 70 MA's), (29, 11176), (44, 11308), (71, 11446), (88, 11524), (89, 11536), (90, 11542), (96, 11575), (104, 11611), (113, 11668), (115, 11680), (126, 11734), (132, 11764), (151, 11851), (154, 11866), (160, 11902), (177, 11995), (190, 12076), (221, 12259), (223, 12268), (233, 12310), (239, 12352), (252, 12412), (256, 12424), (258, 12430), (261, 12445), (265, 12466), (272, 12499), (306, 12622), (309, 12634), (310, 12640), (314, 12655), (316, 12661), (346, 12745), (354, 12826), (378, 12979), (403, 13075), (405, 13087), (409, 13117), (419, 13168), (423, 13189), (429, 13219), (431, 13225), (436, 13249), (445, 13309), (452, 13360), (460, 13405), (462, 13417), (472, 13471), (479, 13504), (486, 13561), (501, 13639), (502, 13642), (525, 13726), (534, 13753), (540, 13783), (553, 13837), (558, 13876), (603, 14077), (614, 14119), (621, 14152), (624, 14158), (664, 14437), (666, 14494), (686, 14695), (703, 14809), (728, 14986), (741, 15070), (746, 15091),

Gene: Pace1224_16 Start: 11630, Stop: 15664, Start Num: 18
Candidate Starts for Pace1224_16:
(Start: 18 @11630 has 70 MA's), (28, 11723), (32, 11753), (46, 11900), (62, 11984), (74, 12032), (96, 12158), (97, 12170), (103, 12191), (130, 12338), (134, 12359), (139, 12380), (142, 12398), (148, 12422), (150, 12434), (161, 12506), (164, 12521), (168, 12554), (194, 12686), (197, 12710), (200, 12731), (203, 12752), (204, 12764), (208, 12791), (210, 12803), (216, 12833), (226, 12881), (253, 13022), (263, 13064), (267, 13088), (280, 13133), (281, 13136), (309, 13247), (348, 13451), (351, 13466), (358, 13547), (361, 13556), (368, 13616), (388, 13730), (393, 13751), (408, 13811), (415, 13844), (421, 13874), (436, 13946), (440, 13976), (443, 13997), (460, 14102), (461, 14105), (471, 14159), (489, 14258), (492, 14276), (507, 14342), (510, 14357), (516, 14381), (532, 14423), (534, 14432), (548, 14492), (568, 14582), (590, 14678), (597, 14735), (603, 14768), (622, 14828), (630, 14843), (661, 15038), (678, 15245), (684, 15314), (686, 15326), (691, 15356), (694, 15416), (720, 15512), (727, 15572), (729, 15590),

Gene: Padfoot_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Padfoot_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Padpat_21 Start: 12076, Stop: 15909, Start Num: 17
Candidate Starts for Padpat_21:
(Start: 17 @12076 has 184 MA's), (Start: 26 @12145 has 1 MA's), (34, 12232), (44, 12307), (60, 12409), (67, 12436), (85, 12508), (87, 12520), (88, 12529), (97, 12601), (111, 12676), (128, 12760), (130, 12769), (134, 12790), (142, 12829), (157, 12907), (168, 12985), (184, 13075), (198, 13150), (212, 13243), (214, 13252), (216, 13264), (218, 13273), (267, 13510), (277, 13549), (287, 13582),

(309, 13669), (315, 13693), (328, 13777), (345, 13861), (348, 13873), (352, 13894), (436, 14050), (447, 14131), (456, 14179), (459, 14197), (462, 14218), (468, 14254), (479, 14305), (486, 14362), (501, 14440), (504, 14449), (525, 14527), (531, 14542), (540, 14584), (553, 14638), (603, 14878), (621, 14953), (652, 15064), (666, 15283), (668, 15295), (686, 15478), (687, 15487), (701, 15559), (709, 15589), (713, 15610), (728, 15730), (741, 15802), (745, 15820), (746, 15826),

Gene: Paito_16 Start: 11582, Stop: 15610, Start Num: 17
Candidate Starts for Paito_16:
(Start: 17 @11582 has 184 MA's), (38, 11783), (56, 11885), (57, 11897), (62, 11918), (71, 11954), (75, 11969), (85, 12011), (97, 12104), (103, 12125), (128, 12263), (130, 12272), (139, 12314), (142, 12332), (144, 12335), (148, 12356), (150, 12368), (161, 12440), (168, 12488), (197, 12644), (235, 12848), (237, 12869), (249, 12920), (261, 12977), (267, 13013), (287, 13085), (294, 13106), (303, 13145), (309, 13172), (320, 13220), (323, 13241), (328, 13280), (348, 13376), (351, 13391), (366, 13538), (368, 13541), (387, 13649), (446, 13940), (452, 13982), (456, 14000), (461, 14030), (462, 14039), (498, 14246), (499, 14252), (507, 14276), (510, 14291), (514, 14312), (516, 14315), (534, 14366), (548, 14426), (562, 14507), (568, 14516), (573, 14549), (576, 14564), (590, 14612), (597, 14669), (603, 14702), (605, 14717), (629, 14780), (680, 15224), (681, 15251), (686, 15293), (687, 15302), (707, 15401), (720, 15458), (727, 15518), (729, 15536), (732, 15545),

Gene: Paola_19 Start: 12137, Stop: 16246, Start Num: 16
Candidate Starts for Paola_19:
(Start: 16 @12137 has 35 MA's), (46, 12395), (62, 12479), (80, 12545), (88, 12593), (96, 12653), (97, 12665), (103, 12686), (111, 12740), (117, 12770), (130, 12833), (134, 12854), (147, 12911), (157, 12971), (168, 13049), (174, 13073), (180, 13115), (187, 13148), (212, 13307), (216, 13328), (237, 13406), (250, 13469), (253, 13484), (254, 13487), (257, 13496), (259, 13502), (261, 13514), (267, 13550), (271, 13568), (301, 13670), (309, 13709), (337, 13862), (346, 13904), (351, 13928), (361, 14018), (363, 14051), (374, 14117), (388, 14192), (391, 14201), (395, 14219), (405, 14246), (418, 14324), (436, 14408), (454, 14531), (465, 14597), (484, 14699), (501, 14792), (509, 14822), (515, 14849), (518, 14855), (534, 14906), (537, 14927), (541, 14942), (542, 14948), (559, 15032), (571, 15062), (574, 15080), (582, 15119), (593, 15179), (600, 15212), (603, 15233), (607, 15257), (617, 15290), (639, 15374), (654, 15446), (678, 15755), (682, 15809), (684, 15824), (686, 15836), (692, 15866), (725, 16052), (728, 16076), (731, 16088), (747, 16175), (749, 16199),

Gene: Patt_22 Start: 13064, Stop: 17230, Start Num: 18
Candidate Starts for Patt_22:
(12, 13028), (Start: 18 @13064 has 70 MA's), (38, 13262), (85, 13490), (87, 13502), (88, 13511), (91, 13541), (103, 13604), (130, 13751), (134, 13772), (142, 13811), (144, 13814), (157, 13889), (168, 13967), (183, 14054), (184, 14057), (192, 14087), (196, 14120), (200, 14144), (213, 14228), (219, 14258), (226, 14285), (248, 14393), (251, 14414), (253, 14426), (257, 14438), (267, 14492), (309, 14651), (314, 14672), (328, 14780), (349, 14900), (383, 15149), (409, 15260), (419, 15311), (421, 15320), (430, 15365), (434, 15386), (453, 15485), (456, 15500), (457, 15506), (469, 15575), (473, 15596), (474, 15605), (478, 15617), (480, 15626), (492, 15698), (501, 15749), (502, 15752), (509, 15779), (540, 15878), (544, 15896), (558, 15971), (602, 16160), (603, 16172), (621, 16247), (655, 16427), (664, 16547), (672, 16655), (677, 16715), (686, 16802), (692, 16832), (705, 16922), (707, 16931), (709, 16934), (723, 17033), (728, 17060), (746, 17156), (752, 17219),

Gene: Peanam_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for Peanam_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268,

12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416, 13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Peeb_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Peeb_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Peel_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Peel_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Periodt_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Periodt_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Pharb_20 Start: 12014, Stop: 16198, Start Num: 17
Candidate Starts for Pharb_20:
(8, 11966), (Start: 17 @12014 has 184 MA's), (Start: 26 @12083 has 1 MA's), (Start: 27 @12104 has 1 MA's), (29, 12110), (34, 12170), (62, 12353), (64, 12365), (67, 12374), (87, 12458), (96, 12527), (97, 12539), (103, 12560), (111, 12614), (117, 12644), (130, 12707), (134, 12728), (142, 12767), (157, 12845), (168, 12923), (174, 12947), (203, 13121), (209, 13169), (212, 13181), (216, 13202), (218, 13211), (243, 13331), (259, 13400), (262, 13415), (267, 13448), (272, 13469), (274, 13478), (284, 13508), (287, 13520), (299, 13562), (300, 13565), (301, 13568), (309, 13607), (324, 13685), (335,

13763), (341, 13796), (347, 13826), (354, 13904), (366, 13994), (373, 14024), (378, 14057), (402, 14147), (409, 14195), (436, 14327), (440, 14357), (452, 14438), (459, 14474), (468, 14531), (472, 14549), (479, 14582), (487, 14642), (501, 14723), (511, 14762), (522, 14795), (525, 14810), (528, 14816), (531, 14825), (540, 14867), (553, 14921), (558, 14960), (580, 15038), (603, 15161), (621, 15236), (656, 15425), (674, 15665), (678, 15695), (680, 15707), (687, 15785), (711, 15914), (724, 16001), (725, 16004), (731, 16037), (739, 16082), (746, 16118), (748, 16133), (749, 16145), (752, 16181),

Gene: PhelpsODU_20 Start: 11123, Stop: 15124, Start Num: 18
Candidate Starts for PhelpsODU_20:
(Start: 18 @11123 has 70 MA's), (29, 11216), (38, 11321), (47, 11375), (51, 11393), (55, 11411), (57, 11435), (59, 11441), (66, 11468), (68, 11474), (71, 11486), (81, 11519), (96, 11615), (98, 11633), (99, 11636), (124, 11750), (126, 11765), (151, 11882), (165, 11978), (173, 12017), (178, 12038), (179, 12047), (190, 12107), (221, 12290), (222, 12296), (223, 12299), (234, 12353), (239, 12383), (252, 12443), (256, 12455), (258, 12461), (261, 12476), (265, 12497), (268, 12515), (306, 12653), (309, 12665), (314, 12686), (322, 12725), (347, 12779), (348, 12785), (360, 12887), (366, 12947), (378, 13010), (395, 13091), (403, 13106), (404, 13109), (409, 13148), (416, 13184), (419, 13199), (420, 13205), (425, 13232), (431, 13256), (443, 13331), (452, 13391), (462, 13448), (468, 13484), (479, 13535), (501, 13676), (502, 13679), (525, 13763), (534, 13790), (553, 13874), (558, 13913), (603, 14114), (621, 14189), (661, 14408), (667, 14522), (678, 14624), (679, 14633), (686, 14705), (701, 14789), (709, 14819), (716, 14840), (728, 14957), (741, 15032), (748, 15071), (749, 15083),

Gene: Phish_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Phish_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Phloodle_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Phloodle_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Phrank_20 Start: 11071, Stop: 15072, Start Num: 18
Candidate Starts for Phrank_20:
(Start: 18 @11071 has 70 MA's), (29, 11164), (38, 11269), (44, 11296), (47, 11323), (51, 11341), (55, 11359), (57, 11383), (59, 11389), (66, 11416), (68, 11422), (78, 11458), (81, 11467), (85, 11491), (96, 11563), (98, 11581), (99, 11584), (126, 11713), (151, 11830), (165, 11926), (173, 11965), (179, 11995), (190, 12055), (221, 12238), (222, 12244), (223, 12247), (234, 12301), (239, 12331), (252, 12391), (256, 12403), (258, 12409), (261, 12424), (265, 12445), (268, 12463), (306, 12601), (309,

12613), (314, 12634), (322, 12673), (347, 12727), (348, 12733), (366, 12895), (378, 12958), (395, 13039), (403, 13054), (409, 13096), (419, 13147), (423, 13168), (429, 13198), (431, 13204), (436, 13228), (443, 13279), (452, 13339), (462, 13396), (468, 13432), (472, 13450), (479, 13483), (501, 13624), (502, 13627), (525, 13711), (534, 13738), (553, 13822), (603, 14062), (621, 14137), (667, 14470), (678, 14572), (679, 14581), (686, 14653), (701, 14737), (709, 14767), (716, 14788), (728, 14905), (741, 14980), (748, 15019), (749, 15031),

Gene: Phreak_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Phreak_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Piatt_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Piatt_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: PinkYoshi_16 Start: 11455, Stop: 15468, Start Num: 17
Candidate Starts for PinkYoshi_16:
(Start: 17 @11455 has 184 MA's), (38, 11656), (57, 11770), (67, 11812), (75, 11842), (97, 11977), (100, 11989), (103, 11998), (139, 12187), (142, 12205), (144, 12208), (148, 12229), (150, 12241), (161, 12313), (168, 12361), (194, 12493), (197, 12517), (208, 12598), (235, 12721), (250, 12805), (260, 12841), (267, 12886), (268, 12892), (299, 13000), (304, 13024), (309, 13045), (351, 13264), (368, 13414), (383, 13501), (408, 13609), (436, 13744), (452, 13855), (456, 13873), (461, 13903), (499, 14125), (507, 14149), (510, 14164), (514, 14185), (525, 14212), (534, 14239), (548, 14299), (568, 14389), (573, 14422), (590, 14485), (597, 14542), (603, 14575), (604, 14584), (680, 15088), (681, 15115), (684, 15145), (686, 15157), (687, 15166), (701, 15235), (720, 15316), (727, 15376), (729, 15394), (732, 15403),

Gene: Pinnie_17 Start: 12158, Stop: 16180, Start Num: 18
Candidate Starts for Pinnie_17:
(Start: 18 @12158 has 70 MA's), (24, 12203), (37, 12359), (38, 12362), (51, 12434), (55, 12452), (56, 12464), (66, 12509), (71, 12527), (90, 12623), (92, 12629), (94, 12644), (96, 12656), (98, 12674), (106, 12716), (107, 12719), (115, 12755), (118, 12767), (124, 12791), (125, 12797), (129, 12818), (145, 12893), (151, 12935), (154, 12950), (160, 12986), (161, 13001), (168, 13049), (169, 13058), (190, 13160), (213, 13301), (221, 13343), (228, 13373), (230, 13379), (231, 13385), (239, 13436), (256, 13508), (258, 13514), (261, 13529), (264, 13547), (265, 13550), (282, 13610), (295, 13655), (304, 13697), (309, 13718), (315, 13742), (318, 13754), (319, 13757), (326, 13814), (340, 13886), (348, 13928), (360, 14030), (368, 14093), (388, 14207), (393, 14228), (408, 14288), (419, 14342), (420,

14348), (431, 14399), (443, 14474), (450, 14516), (460, 14579), (489, 14744), (507, 14828), (510, 14843), (513, 14861), (516, 14867), (532, 14909), (534, 14918), (543, 14963), (548, 14978), (562, 15059), (568, 15068), (590, 15161), (597, 15218), (603, 15251), (619, 15305), (625, 15326), (680, 15785), (681, 15812), (683, 15839), (686, 15854), (687, 15863), (701, 15950), (727, 16088), (729, 16106), (736, 16145),

Gene: Pisa1_20 Start: 11833, Stop: 15987, Start Num: 17
Candidate Starts for Pisa1_20:
(Start: 17 @11833 has 184 MA's), (Start: 26 @11902 has 1 MA's), (34, 11989), (60, 12169), (62, 12175), (67, 12196), (76, 12229), (87, 12280), (88, 12289), (96, 12349), (97, 12361), (111, 12436), (122, 12487), (130, 12529), (134, 12550), (142, 12589), (157, 12667), (168, 12745), (182, 12823), (187, 12844), (189, 12850), (198, 12910), (212, 13003), (216, 13024), (218, 13033), (232, 13084), (241, 13147), (262, 13237), (267, 13270), (289, 13348), (293, 13360), (296, 13369), (299, 13384), (300, 13387), (309, 13429), (325, 13516), (328, 13537), (345, 13621), (348, 13633), (360, 13735), (361, 13738), (378, 13858), (387, 13906), (389, 13915), (395, 13939), (404, 13957), (405, 13966), (409, 13996), (412, 14017), (420, 14053), (436, 14128), (446, 14197), (462, 14296), (468, 14332), (472, 14350), (479, 14383), (501, 14518), (504, 14527), (525, 14605), (531, 14620), (540, 14662), (553, 14716), (603, 14956), (621, 15031), (652, 15142), (655, 15184), (678, 15475), (686, 15556), (687, 15565), (701, 15637), (703, 15649), (709, 15667), (713, 15688), (728, 15808), (741, 15880), (745, 15898), (746, 15904),

Gene: Pisa4_20 Start: 11833, Stop: 15987, Start Num: 17
Candidate Starts for Pisa4_20:
(Start: 17 @11833 has 184 MA's), (Start: 26 @11902 has 1 MA's), (34, 11989), (60, 12169), (62, 12175), (67, 12196), (76, 12229), (87, 12280), (88, 12289), (96, 12349), (97, 12361), (111, 12436), (122, 12487), (130, 12529), (134, 12550), (142, 12589), (157, 12667), (168, 12745), (182, 12823), (187, 12844), (189, 12850), (198, 12910), (212, 13003), (216, 13024), (218, 13033), (232, 13084), (241, 13147), (262, 13237), (267, 13270), (289, 13348), (293, 13360), (296, 13369), (299, 13384), (300, 13387), (309, 13429), (325, 13516), (328, 13537), (345, 13621), (348, 13633), (360, 13735), (361, 13738), (378, 13858), (387, 13906), (389, 13915), (395, 13939), (404, 13957), (405, 13966), (409, 13996), (412, 14017), (420, 14053), (436, 14128), (446, 14197), (462, 14296), (468, 14332), (472, 14350), (479, 14383), (501, 14518), (504, 14527), (525, 14605), (531, 14620), (540, 14662), (553, 14716), (603, 14956), (621, 15031), (652, 15142), (655, 15184), (678, 15475), (686, 15556), (687, 15565), (701, 15637), (703, 15649), (709, 15667), (713, 15688), (728, 15808), (741, 15880), (745, 15898), (746, 15904),

Gene: Pixie_20 Start: 11949, Stop: 16127, Start Num: 17
Candidate Starts for Pixie_20:
(Start: 17 @11949 has 184 MA's), (Start: 26 @12018 has 1 MA's), (Start: 27 @12039 has 1 MA's), (29, 12045), (34, 12105), (55, 12243), (62, 12288), (67, 12309), (96, 12462), (97, 12474), (103, 12495), (111, 12549), (117, 12579), (122, 12600), (128, 12633), (130, 12642), (134, 12663), (142, 12702), (157, 12780), (163, 12822), (168, 12858), (174, 12882), (203, 13056), (208, 13095), (212, 13116), (216, 13137), (218, 13146), (252, 13314), (259, 13335), (263, 13359), (267, 13383), (272, 13404), (278, 13422), (287, 13455), (299, 13497), (300, 13500), (301, 13503), (309, 13542), (311, 13551), (324, 13620), (341, 13731), (347, 13761), (373, 13959), (378, 13992), (402, 14082), (405, 14100), (409, 14130), (414, 14157), (440, 14292), (452, 14373), (459, 14409), (468, 14466), (472, 14484), (475, 14505), (479, 14517), (487, 14577), (501, 14658), (511, 14697), (522, 14730), (525, 14745), (528, 14751), (531, 14760), (540, 14802), (558, 14895), (580, 14973), (603, 15096), (621, 15171), (678, 15636), (680, 15648), (686, 15717), (687, 15726), (722, 15918), (724, 15936), (731, 15972), (734, 15981), (745, 16047), (746, 16053), (748, 16068), (749, 16080),

Gene: Plagueis_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Plagueis_16:

(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Pokerus_20 Start: 12033, Stop: 15866, Start Num: 17
Candidate Starts for Pokerus_20:
(Start: 17 @12033 has 184 MA's), (Start: 26 @12102 has 1 MA's), (34, 12189), (60, 12366), (67, 12393), (85, 12465), (87, 12477), (88, 12486), (97, 12558), (111, 12633), (128, 12717), (130, 12726), (134, 12747), (142, 12786), (157, 12864), (168, 12942), (184, 13032), (198, 13107), (212, 13200), (214, 13209), (216, 13221), (218, 13230), (267, 13467), (277, 13506), (287, 13539), (309, 13626), (315, 13650), (328, 13734), (345, 13818), (348, 13830), (352, 13851), (436, 14007), (447, 14088), (456, 14136), (459, 14154), (462, 14175), (468, 14211), (479, 14262), (486, 14319), (501, 14397), (504, 14406), (525, 14484), (531, 14499), (540, 14541), (553, 14595), (603, 14835), (621, 14910), (652, 15021), (666, 15240), (668, 15252), (686, 15435), (687, 15444), (701, 15516), (709, 15546), (713, 15567), (728, 15687), (741, 15759), (745, 15777), (746, 15783),

Gene: Primanti_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Primanti_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Prithvi_21 Start: 12047, Stop: 15883, Start Num: 17
Candidate Starts for Prithvi_21:
(Start: 17 @12047 has 184 MA's), (Start: 26 @12116 has 1 MA's), (34, 12203), (60, 12383), (67, 12410), (88, 12503), (96, 12563), (97, 12575), (111, 12650), (122, 12701), (130, 12743), (134, 12764), (142, 12803), (157, 12881), (168, 12959), (174, 12983), (198, 13124), (212, 13217), (214, 13226), (216, 13238), (218, 13247), (267, 13484), (273, 13508), (277, 13523), (287, 13556), (309, 13643), (315, 13667), (328, 13751), (345, 13835), (348, 13847), (352, 13868), (360, 13949), (436, 14024), (447, 14105), (456, 14153), (459, 14171), (461, 14183), (462, 14192), (468, 14228), (479, 14279), (486, 14336), (501, 14414), (504, 14423), (525, 14501), (531, 14516), (540, 14558), (553, 14612), (603, 14852), (621, 14927), (652, 15038), (666, 15257), (668, 15269), (678, 15371), (686, 15452), (687, 15461), (701, 15533), (709, 15563), (713, 15584), (728, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: Psycho_19 Start: 12089, Stop: 16222, Start Num: 13
Candidate Starts for Psycho_19:
(Start: 13 @12089 has 1 MA's), (Start: 16 @12110 has 35 MA's), (Start: 27 @12203 has 1 MA's), (35, 12281), (36, 12305), (46, 12365), (62, 12449), (88, 12563), (96, 12623), (97, 12635), (103, 12656), (111, 12710), (121, 12758), (130, 12803), (134, 12824), (157, 12941), (168, 13019), (174, 13043), (180, 13085), (184, 13109), (198, 13184), (212, 13277), (218, 13307), (254, 13481), (263, 13520),

(267, 13544), (272, 13565), (290, 13625), (309, 13703), (311, 13712), (325, 13790), (337, 13856), (346, 13898), (348, 13907), (355, 13991), (361, 14012), (363, 14045), (374, 14111), (378, 14132), (388, 14186), (391, 14195), (395, 14213), (405, 14240), (409, 14270), (416, 14306), (434, 14396), (436, 14402), (437, 14420), (454, 14525), (465, 14591), (501, 14786), (509, 14816), (518, 14849), (534, 14900), (537, 14921), (541, 14936), (542, 14942), (559, 15026), (574, 15074), (582, 15113), (593, 15173), (600, 15206), (603, 15227), (607, 15251), (617, 15281), (639, 15347), (654, 15419), (678, 15734), (679, 15743), (680, 15746), (681, 15773), (682, 15788), (684, 15803), (686, 15815), (692, 15845), (701, 15899), (705, 15917), (720, 15986), (725, 16034), (728, 16058), (731, 16070), (734, 16079), (747, 16151), (749, 16175), (754, 16214),

Gene: Qhanda_22 Start: 13333, Stop: 17508, Start Num: 18
Candidate Starts for Qhanda_22:
(12, 13297), (Start: 18 @13333 has 70 MA's), (30, 13432), (38, 13531), (87, 13771), (88, 13780), (103, 13873), (130, 14020), (134, 14041), (142, 14080), (144, 14083), (157, 14158), (168, 14236), (183, 14323), (184, 14326), (192, 14356), (196, 14389), (200, 14413), (213, 14497), (219, 14527), (226, 14554), (248, 14662), (251, 14683), (253, 14695), (257, 14707), (267, 14761), (309, 14920), (314, 14941), (328, 15049), (349, 15169), (409, 15529), (419, 15580), (421, 15589), (430, 15634), (434, 15655), (474, 15874), (478, 15886), (480, 15895), (492, 15967), (501, 16018), (502, 16021), (509, 16048), (540, 16147), (544, 16165), (558, 16240), (602, 16429), (603, 16441), (621, 16516), (655, 16702), (664, 16822), (672, 16930), (686, 17080), (705, 17200), (707, 17209), (709, 17212), (723, 17311), (728, 17338), (746, 17434), (752, 17497),

Gene: QuincyRose_20 Start: 12096, Stop: 15929, Start Num: 17
Candidate Starts for QuincyRose_20:
(Start: 17 @12096 has 184 MA's), (Start: 26 @12165 has 1 MA's), (34, 12252), (60, 12429), (67, 12456), (87, 12540), (88, 12549), (97, 12621), (111, 12696), (128, 12780), (130, 12789), (134, 12810), (142, 12849), (157, 12927), (168, 13005), (184, 13095), (198, 13170), (212, 13263), (216, 13284), (218, 13293), (249, 13437), (267, 13530), (277, 13569), (287, 13602), (309, 13689), (315, 13713), (328, 13797), (345, 13881), (348, 13893), (352, 13914), (436, 14070), (447, 14151), (456, 14199), (459, 14217), (462, 14238), (468, 14274), (479, 14325), (486, 14382), (501, 14460), (504, 14469), (525, 14547), (540, 14604), (553, 14658), (603, 14898), (621, 14973), (652, 15084), (666, 15303), (668, 15315), (686, 15498), (687, 15507), (701, 15579), (709, 15609), (713, 15630), (728, 15750), (741, 15822), (745, 15840), (746, 15846),

Gene: Rabbs_16 Start: 11454, Stop: 15479, Start Num: 17
Candidate Starts for Rabbs_16:
(Start: 17 @11454 has 184 MA's), (22, 11478), (38, 11655), (57, 11769), (67, 11811), (72, 11832), (75, 11841), (97, 11976), (103, 11997), (130, 12144), (139, 12186), (142, 12204), (144, 12207), (148, 12228), (150, 12240), (168, 12360), (180, 12426), (194, 12492), (197, 12516), (208, 12597), (235, 12720), (237, 12741), (257, 12831), (260, 12840), (268, 12891), (278, 12924), (283, 12942), (299, 12999), (309, 13044), (325, 13131), (328, 13152), (348, 13248), (351, 13263), (361, 13353), (366, 13410), (368, 13413), (404, 13572), (405, 13581), (408, 13608), (436, 13743), (456, 13872), (461, 13902), (499, 14124), (507, 14148), (510, 14163), (514, 14184), (534, 14238), (548, 14298), (568, 14388), (573, 14421), (576, 14436), (590, 14484), (597, 14541), (603, 14574), (670, 15006), (680, 15096), (681, 15123), (686, 15165), (687, 15174), (701, 15243), (707, 15270), (720, 15327), (727, 15387), (729, 15405), (732, 15414),

Gene: Ramen_21 Start: 12079, Stop: 15915, Start Num: 17
Candidate Starts for Ramen_21:
(Start: 17 @12079 has 184 MA's), (Start: 26 @12148 has 1 MA's), (34, 12235), (60, 12412), (67, 12439), (85, 12511), (87, 12523), (88, 12532), (97, 12604), (111, 12679), (128, 12763), (130, 12772), (134, 12793), (142, 12832), (157, 12910), (168, 12988), (184, 13078), (198, 13153), (212, 13246), (214, 13255), (216, 13267), (218, 13276), (273, 13537), (277, 13552), (287, 13585), (309, 13672),

(315, 13696), (328, 13780), (345, 13864), (348, 13876), (352, 13897), (436, 14053), (447, 14134), (456, 14182), (459, 14200), (462, 14221), (468, 14257), (479, 14308), (486, 14365), (501, 14443), (504, 14452), (525, 14530), (540, 14587), (553, 14641), (603, 14881), (621, 14956), (652, 15067), (666, 15286), (668, 15298), (686, 15484), (687, 15493), (701, 15565), (709, 15595), (713, 15616), (728, 15736), (741, 15808), (745, 15826), (746, 15832),

Gene: Rando14_19 Start: 11071, Stop: 14910, Start Num: 16
Candidate Starts for Rando14_19:
(Start: 16 @11071 has 35 MA's), (29, 11170), (43, 11257), (44, 11269), (56, 11335), (57, 11347), (61, 11359), (65, 11377), (97, 11533), (103, 11554), (117, 11638), (121, 11656), (127, 11686), (128, 11692), (130, 11701), (134, 11722), (140, 11749), (141, 11755), (147, 11779), (157, 11839), (168, 11917), (177, 11950), (178, 11962), (182, 11995), (197, 12073), (199, 12091), (203, 12115), (204, 12127), (205, 12130), (234, 12250), (237, 12274), (250, 12337), (251, 12340), (254, 12355), (267, 12418), (313, 12466), (337, 12559), (341, 12574), (361, 12715), (363, 12748), (386, 12877), (388, 12889), (391, 12898), (394, 12913), (403, 12931), (405, 12943), (409, 12973), (417, 13012), (420, 13030), (421, 13033), (434, 13099), (436, 13105), (440, 13135), (445, 13165), (451, 13210), (454, 13228), (457, 13240), (483, 13375), (487, 13390), (501, 13471), (502, 13474), (515, 13528), (533, 13576), (535, 13585), (539, 13609), (543, 13630), (565, 13729), (567, 13732), (581, 13795), (590, 13828), (598, 13888), (603, 13921), (605, 13936), (609, 13942), (621, 13987), (630, 14008), (642, 14035), (658, 14170), (663, 14245), (670, 14335), (678, 14422), (679, 14431), (680, 14434), (681, 14461), (684, 14491), (686, 14503), (692, 14533), (701, 14587), (705, 14605), (720, 14674), (728, 14746), (734, 14767), (747, 14839), (749, 14863), (754, 14902),

Gene: Rapunzel97_21 Start: 12080, Stop: 15916, Start Num: 17
Candidate Starts for Rapunzel97_21:
(Start: 17 @12080 has 184 MA's), (Start: 26 @12149 has 1 MA's), (34, 12236), (60, 12413), (67, 12440), (85, 12512), (87, 12524), (88, 12533), (97, 12605), (111, 12680), (128, 12764), (130, 12773), (134, 12794), (142, 12833), (157, 12911), (168, 12989), (184, 13079), (198, 13154), (212, 13247), (214, 13256), (216, 13268), (218, 13277), (273, 13538), (277, 13553), (287, 13586), (309, 13673), (315, 13697), (328, 13781), (345, 13865), (348, 13877), (352, 13898), (436, 14054), (447, 14135), (456, 14183), (459, 14201), (462, 14222), (468, 14258), (479, 14309), (486, 14366), (501, 14444), (504, 14453), (525, 14531), (540, 14588), (553, 14642), (603, 14882), (621, 14957), (652, 15068), (666, 15287), (668, 15299), (686, 15485), (687, 15494), (701, 15566), (709, 15596), (713, 15617), (728, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Rattrick_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Rattrick_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Remy19_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Remy19_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273),

(368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Renaissance_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Renaissance_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Reptar3000_22 Start: 13066, Stop: 17232, Start Num: 18
Candidate Starts for Reptar3000_22:
(12, 13030), (Start: 18 @13066 has 70 MA's), (38, 13264), (85, 13492), (87, 13504), (88, 13513), (91, 13543), (103, 13606), (130, 13753), (134, 13774), (142, 13813), (144, 13816), (157, 13891), (168, 13969), (183, 14056), (184, 14059), (192, 14089), (196, 14122), (200, 14146), (213, 14230), (219, 14260), (226, 14287), (248, 14395), (251, 14416), (253, 14428), (257, 14440), (267, 14494), (309, 14653), (314, 14674), (328, 14782), (349, 14902), (383, 15151), (409, 15262), (419, 15313), (421, 15322), (430, 15367), (434, 15388), (453, 15487), (456, 15502), (457, 15508), (469, 15577), (473, 15598), (474, 15607), (478, 15619), (480, 15628), (492, 15700), (501, 15751), (502, 15754), (509, 15781), (540, 15880), (544, 15898), (558, 15973), (602, 16162), (603, 16174), (621, 16249), (655, 16429), (664, 16549), (672, 16657), (677, 16717), (686, 16804), (692, 16834), (705, 16924), (707, 16933), (709, 16936), (723, 17035), (728, 17062), (746, 17158), (752, 17221),

Gene: Richarlison_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Richarlison_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Richo_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for Richo_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268, 12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416,

13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: Rosmarinus_21 Start: 12104, Stop: 15937, Start Num: 17
Candidate Starts for Rosmarinus_21:
(Start: 17 @12104 has 184 MA's), (Start: 26 @12173 has 1 MA's), (34, 12260), (44, 12335), (60, 12437), (67, 12464), (85, 12536), (87, 12548), (88, 12557), (97, 12629), (111, 12704), (128, 12788), (130, 12797), (134, 12818), (142, 12857), (150, 12893), (157, 12935), (168, 13013), (184, 13103), (198, 13178), (212, 13271), (214, 13280), (216, 13292), (218, 13301), (267, 13538), (277, 13577), (287, 13610), (309, 13697), (315, 13721), (328, 13805), (345, 13889), (348, 13901), (352, 13922), (436, 14078), (447, 14159), (456, 14207), (459, 14225), (462, 14246), (468, 14282), (479, 14333), (486, 14390), (501, 14468), (504, 14477), (525, 14555), (531, 14570), (540, 14612), (553, 14666), (603, 14906), (621, 14981), (652, 15092), (666, 15311), (668, 15323), (686, 15506), (687, 15515), (701, 15587), (709, 15617), (713, 15638), (728, 15758), (741, 15830), (745, 15848), (746, 15854),

Gene: Ruriko_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Ruriko_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Ruthiejr_21 Start: 12924, Stop: 17120, Start Num: 18
Candidate Starts for Ruthiejr_21:
(Start: 18 @12924 has 70 MA's), (38, 13122), (83, 13335), (87, 13362), (88, 13371), (97, 13443), (103, 13464), (128, 13602), (130, 13611), (134, 13632), (142, 13671), (155, 13740), (157, 13749), (168, 13827), (171, 13839), (184, 13917), (192, 13947), (196, 13980), (197, 13983), (200, 14004), (226, 14145), (229, 14154), (253, 14286), (257, 14298), (267, 14352), (278, 14391), (287, 14424), (309, 14511), (314, 14532), (338, 14709), (349, 14760), (366, 14919), (409, 15120), (419, 15171), (421, 15180), (430, 15225), (434, 15246), (436, 15252), (457, 15366), (474, 15465), (478, 15477), (480, 15486), (492, 15558), (497, 15591), (501, 15609), (502, 15612), (509, 15639), (540, 15738), (544, 15756), (558, 15831), (602, 16020), (603, 16032), (621, 16107), (641, 16176), (655, 16308), (662, 16422), (686, 16689), (689, 16707), (707, 16818), (709, 16821), (723, 16920), (728, 16947), (729, 16950), (746, 17046), (752, 17109),

Gene: Salvus_20 Start: 11740, Stop: 15189, Start Num: 31
Candidate Starts for Salvus_20:
(Start: 31 @11740 has 2 MA's), (33, 11755), (40, 11803), (42, 11806), (48, 11851), (84, 11974), (86, 11995), (143, 12301), (146, 12313), (149, 12334), (162, 12418), (169, 12472), (172, 12481), (188, 12568), (190, 12577), (195, 12619), (203, 12664), (204, 12676), (207, 12697), (212, 12721), (225, 12775), (243, 12850), (246, 12862), (251, 12886), (270, 12973), (319, 13030), (342, 13099), (352, 13153), (371, 13309), (379, 13348), (381, 13360), (403, 13423), (409, 13465), (411, 13483), (433, 13570), (438, 13594), (442, 13621), (445, 13633), (455, 13699), (463, 13741), (464, 13750), (488, 13843), (493, 13873), (503, 13909), (511, 13939), (517, 13957), (527, 13984), (529, 13987), (545, 14038), (546, 14041), (547, 14044), (567, 14134), (576, 14182), (581, 14197), (583, 14215), (590,

14230), (598, 14290), (603, 14323), (604, 14332), (606, 14341), (619, 14377), (623, 14392), (660, 14587), (677, 14782), (687, 14878), (690, 14896), (698, 14938), (700, 14944), (707, 14971), (724, 15073), (726, 15082), (734, 15121),

Gene: SamScheppers_20 Start: 12840, Stop: 17027, Start Num: 18
Candidate Starts for SamScheppers_20:
(12, 12804), (Start: 18 @12840 has 70 MA's), (38, 13038), (87, 13278), (88, 13287), (103, 13380), (130, 13527), (134, 13548), (142, 13587), (144, 13590), (157, 13665), (168, 13743), (183, 13830), (184, 13833), (192, 13863), (196, 13896), (200, 13920), (213, 14004), (219, 14034), (226, 14061), (248, 14169), (251, 14190), (253, 14202), (257, 14214), (267, 14268), (309, 14427), (314, 14448), (328, 14556), (349, 14676), (409, 15036), (419, 15087), (421, 15096), (430, 15141), (434, 15162), (474, 15381), (478, 15393), (480, 15402), (492, 15474), (501, 15525), (502, 15528), (509, 15555), (540, 15654), (544, 15672), (558, 15747), (602, 15936), (603, 15948), (621, 16023), (655, 16224), (664, 16344), (672, 16452), (686, 16599), (705, 16719), (707, 16728), (709, 16731), (723, 16830), (728, 16857), (746, 16953), (752, 17016),

Gene: SamuelLPlaqson_21 Start: 12024, Stop: 15863, Start Num: 17
Candidate Starts for SamuelLPlaqson_21:
(Start: 17 @12024 has 184 MA's), (Start: 26 @12093 has 1 MA's), (34, 12180), (60, 12360), (67, 12387), (87, 12471), (88, 12480), (96, 12540), (97, 12552), (111, 12627), (122, 12678), (130, 12720), (134, 12741), (142, 12780), (157, 12858), (168, 12936), (174, 12960), (198, 13101), (212, 13194), (216, 13215), (218, 13224), (267, 13461), (273, 13485), (277, 13500), (287, 13533), (309, 13620), (325, 13707), (328, 13728), (345, 13812), (348, 13824), (352, 13845), (436, 14001), (447, 14082), (459, 14148), (462, 14169), (468, 14205), (479, 14256), (481, 14274), (486, 14313), (501, 14391), (525, 14478), (531, 14493), (540, 14535), (553, 14589), (603, 14829), (621, 14904), (652, 15015), (654, 15036), (655, 15057), (664, 15177), (678, 15351), (686, 15432), (687, 15441), (701, 15513), (709, 15543), (713, 15564), (728, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Scarlett_20 Start: 11082, Stop: 15158, Start Num: 18
Candidate Starts for Scarlett_20:
(Start: 18 @11082 has 70 MA's), (29, 11175), (44, 11307), (71, 11445), (88, 11523), (89, 11535), (90, 11541), (96, 11574), (104, 11610), (113, 11667), (115, 11679), (126, 11733), (132, 11763), (151, 11850), (154, 11865), (160, 11901), (177, 11994), (190, 12075), (221, 12258), (223, 12267), (233, 12309), (239, 12351), (252, 12411), (256, 12423), (258, 12429), (261, 12444), (265, 12465), (272, 12498), (306, 12621), (309, 12633), (310, 12639), (314, 12654), (316, 12660), (346, 12744), (354, 12825), (378, 12978), (403, 13074), (405, 13086), (409, 13116), (419, 13167), (423, 13188), (429, 13218), (431, 13224), (436, 13248), (445, 13308), (452, 13359), (460, 13404), (462, 13416), (472, 13470), (479, 13503), (486, 13560), (501, 13638), (502, 13641), (525, 13725), (534, 13752), (540, 13782), (553, 13836), (558, 13875), (603, 14076), (614, 14118), (621, 14151), (664, 14439), (666, 14496), (686, 14697), (703, 14811), (728, 14988), (741, 15072), (746, 15093),

Gene: Schiebel_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Schiebel_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: SgtBeansprout_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for SgtBeansprout_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: ShaboiShabazz_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for ShaboiShabazz_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Shadow1_19 Start: 10962, Stop: 14963, Start Num: 18
Candidate Starts for Shadow1_19:
(Start: 18 @10962 has 70 MA's), (29, 11055), (38, 11160), (47, 11214), (51, 11232), (55, 11250), (59, 11280), (66, 11307), (68, 11313), (96, 11454), (98, 11472), (99, 11475), (124, 11589), (126, 11604), (151, 11721), (154, 11736), (165, 11817), (179, 11886), (190, 11946), (221, 12129), (222, 12135), (234, 12192), (252, 12282), (256, 12294), (258, 12300), (261, 12315), (265, 12336), (268, 12354), (291, 12429), (306, 12492), (309, 12504), (314, 12525), (322, 12564), (344, 12609), (348, 12624), (366, 12786), (383, 12876), (404, 12948), (409, 12987), (419, 13038), (423, 13059), (429, 13089), (431, 13095), (436, 13119), (443, 13170), (459, 13266), (462, 13287), (468, 13323), (479, 13374), (501, 13515), (525, 13602), (534, 13629), (553, 13713), (603, 13953), (621, 14028), (667, 14361), (678, 14463), (679, 14472), (686, 14544), (687, 14553), (701, 14628), (709, 14658), (716, 14679), (728, 14796), (738, 14847), (741, 14871), (748, 14910), (749, 14922),

Gene: Shaobing_21 Start: 11128, Stop: 15282, Start Num: 18
Candidate Starts for Shaobing_21:
(10, 11086), (Start: 18 @11128 has 70 MA's), (29, 11221), (47, 11380), (53, 11407), (72, 11497), (73, 11500), (90, 11587), (109, 11695), (124, 11764), (127, 11782), (145, 11866), (151, 11908), (154, 11923), (155, 11932), (160, 11959), (168, 12022), (178, 12064), (190, 12133), (200, 12196), (201, 12205), (221, 12319), (222, 12325), (231, 12361), (233, 12370), (234, 12382), (236, 12394), (239, 12412), (252, 12472), (256, 12484), (258, 12490), (261, 12505), (264, 12523), (265, 12526), (268, 12544), (272, 12559), (285, 12598), (301, 12655), (302, 12664), (308, 12688), (309, 12694), (314, 12715), (321, 12745), (325, 12778), (339, 12862), (345, 12892), (348, 12904), (360, 13006), (370, 13084), (378, 13129), (382, 13153), (394, 13207), (395, 13210), (403, 13225), (409, 13267), (414, 13294), (416, 13303), (419, 13318), (420, 13324), (421, 13327), (446, 13468), (451, 13504), (452, 13510), (456, 13528), (460, 13555), (462, 13567), (472, 13621), (479, 13654), (487, 13714), (501, 13795), (502, 13798), (525, 13882), (531, 13897), (558, 14032), (577, 14098), (603, 14233), (664, 14584), (686, 14839), (687, 14848), (695, 14914), (728, 15109), (734, 15130), (741, 15181), (745, 15199), (746, 15205), (750, 15244),

Gene: ShedlockHolmes_20 Start: 12197, Stop: 16345, Start Num: 17
Candidate Starts for ShedlockHolmes_20:
(Start: 17 @12197 has 184 MA's), (Start: 26 @12266 has 1 MA's), (Start: 27 @12287 has 1 MA's), (29, 12293), (34, 12353), (55, 12491), (62, 12536), (67, 12557), (80, 12602), (96, 12710), (97, 12722), (103, 12743), (111, 12797), (117, 12827), (122, 12848), (128, 12881), (130, 12890), (134, 12911), (142, 12950), (157, 13028), (163, 13070), (168, 13106), (174, 13130), (203, 13304), (212, 13364), (216, 13385), (218, 13394), (252, 13562), (259, 13583), (263, 13607), (267, 13631), (272, 13652), (278, 13670), (287, 13703), (299, 13745), (300, 13748), (301, 13751), (309, 13790), (311, 13799), (324, 13868), (341, 13979), (347, 14009), (373, 14207), (378, 14240), (402, 14330), (405, 14348), (409, 14378), (414, 14405), (452, 14621), (459, 14657), (468, 14714), (472, 14732), (479, 14765), (480, 14777), (487, 14825), (501, 14906), (502, 14909), (540, 15026), (558, 15119), (580, 15197), (599, 15296), (603, 15320), (621, 15395), (678, 15854), (680, 15866), (686, 15935), (687, 15944), (722, 16136), (724, 16154), (731, 16190), (734, 16199), (745, 16265), (746, 16271), (748, 16286), (749, 16298),

Gene: ShiaSurprise_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for ShiaSurprise_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: SirPhilip_20 Start: 10854, Stop: 14759, Start Num: 18
Candidate Starts for SirPhilip_20:
(Start: 18 @10854 has 70 MA's), (29, 10947), (38, 11052), (46, 11103), (47, 11106), (68, 11205), (87, 11286), (88, 11295), (94, 11334), (96, 11346), (98, 11364), (99, 11367), (102, 11376), (110, 11424), (113, 11439), (119, 11457), (120, 11463), (123, 11475), (151, 11613), (154, 11628), (164, 11694), (165, 11709), (221, 12021), (232, 12066), (233, 12072), (234, 12084), (239, 12114), (252, 12174), (256, 12186), (258, 12192), (261, 12207), (265, 12228), (268, 12246), (269, 12249), (300, 12354), (309, 12396), (314, 12417), (322, 12456), (347, 12510), (348, 12516), (378, 12675), (385, 12708), (407, 12753), (408, 12756), (409, 12759), (414, 12786), (415, 12789), (416, 12795), (421, 12819), (427, 12852), (434, 12885), (446, 12960), (454, 13014), (456, 13020), (459, 13038), (462, 13059), (467, 13092), (487, 13206), (501, 13287), (502, 13290), (525, 13374), (553, 13485), (558, 13524), (575, 13584), (603, 13725), (621, 13800), (679, 14253), (686, 14325), (693, 14379), (703, 14430), (722, 14556), (728, 14598), (741, 14673), (746, 14694),

Gene: Sizemore_16 Start: 11465, Stop: 15478, Start Num: 17
Candidate Starts for Sizemore_16:
(Start: 17 @11465 has 184 MA's), (38, 11666), (57, 11780), (67, 11822), (75, 11852), (97, 11987), (100, 11999), (103, 12008), (139, 12197), (142, 12215), (144, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (194, 12503), (197, 12527), (208, 12608), (235, 12731), (250, 12815), (260, 12851), (267, 12896), (268, 12902), (299, 13010), (304, 13034), (309, 13055), (351, 13274), (368, 13424), (383, 13511), (408, 13619), (436, 13754), (452, 13865), (456, 13883), (461, 13913), (499, 14135), (507, 14159), (510, 14174), (514, 14195), (525, 14222), (534, 14249), (548, 14309), (568, 14399), (573, 14432), (590, 14495), (597, 14552), (603, 14585), (604, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (701, 15245), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: Slarp_22 Start: 13324, Stop: 17499, Start Num: 18
Candidate Starts for Slarp_22:
(12, 13288), (Start: 18 @13324 has 70 MA's), (30, 13423), (38, 13522), (87, 13762), (88, 13771), (103, 13864), (130, 14011), (134, 14032), (142, 14071), (144, 14074), (157, 14149), (168, 14227), (183, 14314), (184, 14317), (192, 14347), (196, 14380), (200, 14404), (213, 14488), (219, 14518), (226, 14545), (248, 14653), (251, 14674), (253, 14686), (257, 14698), (267, 14752), (309, 14911), (314, 14932), (328, 15040), (349, 15160), (409, 15520), (419, 15571), (421, 15580), (430, 15625), (434, 15646), (474, 15865), (478, 15877), (480, 15886), (492, 15958), (501, 16009), (502, 16012), (509, 16039), (540, 16138), (544, 16156), (558, 16231), (602, 16420), (603, 16432), (621, 16507), (655, 16693), (664, 16813), (672, 16921), (686, 17071), (705, 17191), (707, 17200), (709, 17203), (723, 17302), (728, 17329), (746, 17425), (752, 17488),

Gene: Slimphazie_21 Start: 12080, Stop: 15916, Start Num: 17
Candidate Starts for Slimphazie_21:
(Start: 17 @12080 has 184 MA's), (Start: 26 @12149 has 1 MA's), (34, 12236), (60, 12413), (67, 12440), (85, 12512), (87, 12524), (88, 12533), (97, 12605), (111, 12680), (128, 12764), (130, 12773), (134, 12794), (142, 12833), (157, 12911), (168, 12989), (184, 13079), (198, 13154), (212, 13247), (214, 13256), (216, 13268), (218, 13277), (273, 13538), (277, 13553), (287, 13586), (309, 13673), (315, 13697), (328, 13781), (345, 13865), (348, 13877), (352, 13898), (436, 14054), (447, 14135), (456, 14183), (459, 14201), (462, 14222), (468, 14258), (479, 14309), (486, 14366), (501, 14444), (504, 14453), (525, 14531), (540, 14588), (553, 14642), (603, 14882), (621, 14957), (652, 15068), (666, 15287), (668, 15299), (686, 15485), (687, 15494), (701, 15566), (709, 15596), (713, 15617), (728, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Sneeze_16 Start: 11453, Stop: 15478, Start Num: 17
Candidate Starts for Sneeze_16:
(Start: 17 @11453 has 184 MA's), (22, 11477), (38, 11654), (57, 11768), (67, 11810), (72, 11831), (75, 11840), (97, 11975), (103, 11996), (130, 12143), (139, 12185), (142, 12203), (144, 12206), (148, 12227), (150, 12239), (168, 12359), (180, 12425), (194, 12491), (197, 12515), (208, 12596), (235, 12719), (237, 12740), (257, 12830), (260, 12839), (268, 12890), (278, 12923), (283, 12941), (299, 12998), (309, 13043), (325, 13130), (328, 13151), (348, 13247), (351, 13262), (361, 13352), (366, 13409), (368, 13412), (404, 13571), (405, 13580), (408, 13607), (436, 13742), (456, 13871), (461, 13901), (499, 14123), (507, 14147), (510, 14162), (514, 14183), (534, 14237), (548, 14297), (568, 14387), (573, 14420), (576, 14435), (590, 14483), (597, 14540), (603, 14573), (670, 15005), (680, 15095), (681, 15122), (686, 15164), (687, 15173), (701, 15242), (707, 15269), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: SoSeph_19 Start: 12264, Stop: 16394, Start Num: 16
Candidate Starts for SoSeph_19:
(Start: 16 @12264 has 35 MA's), (Start: 27 @12357 has 1 MA's), (35, 12435), (36, 12459), (46, 12519), (62, 12603), (64, 12615), (88, 12717), (96, 12777), (97, 12789), (103, 12810), (111, 12864), (121, 12912), (130, 12957), (134, 12978), (157, 13095), (168, 13173), (174, 13197), (184, 13263), (198, 13338), (212, 13431), (218, 13461), (254, 13635), (257, 13644), (263, 13674), (267, 13698), (272, 13719), (290, 13779), (309, 13857), (311, 13866), (325, 13944), (337, 14010), (346, 14052), (348, 14061), (355, 14145), (361, 14166), (363, 14199), (388, 14340), (391, 14349), (395, 14367), (405, 14394), (418, 14472), (436, 14556), (454, 14679), (465, 14745), (501, 14940), (509, 14970), (515, 14997), (518, 15003), (526, 15030), (537, 15075), (541, 15090), (542, 15096), (559, 15180), (574, 15228), (582, 15267), (593, 15327), (600, 15360), (603, 15381), (607, 15405), (617, 15438), (639, 15522), (654, 15594), (678, 15903), (682, 15957), (684, 15972), (686, 15984), (692, 16014), (725, 16200), (728, 16224), (731, 16236), (747, 16323), (749, 16347),

Gene: Spock_21 Start: 12116, Stop: 15949, Start Num: 17

Candidate Starts for Spock_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Stargaze_16 Start: 11766, Stop: 15800, Start Num: 18
Candidate Starts for Stargaze_16:
(Start: 18 @11766 has 70 MA's), (29, 11862), (37, 11967), (51, 12042), (55, 12060), (56, 12072), (59, 12090), (66, 12117), (68, 12123), (90, 12231), (92, 12237), (94, 12252), (96, 12264), (98, 12282), (107, 12327), (115, 12363), (119, 12378), (123, 12393), (124, 12399), (145, 12501), (151, 12543), (154, 12558), (160, 12594), (168, 12657), (173, 12678), (176, 12687), (186, 12750), (190, 12768), (213, 12909), (221, 12951), (228, 12981), (229, 12984), (231, 12993), (233, 13002), (239, 13044), (255, 13113), (256, 13116), (258, 13122), (261, 13137), (265, 13158), (266, 13167), (295, 13263), (304, 13305), (309, 13326), (315, 13350), (318, 13362), (319, 13365), (326, 13422), (333, 13455), (340, 13494), (348, 13536), (349, 13539), (361, 13641), (368, 13701), (370, 13716), (376, 13752), (388, 13815), (393, 13836), (408, 13896), (431, 14007), (436, 14031), (443, 14082), (444, 14088), (465, 14220), (489, 14352), (507, 14436), (510, 14451), (532, 14517), (548, 14586), (562, 14667), (568, 14676), (590, 14769), (597, 14826), (603, 14859), (620, 14919), (625, 14934), (664, 15213), (680, 15402), (681, 15429), (686, 15471), (727, 15708), (729, 15726), (734, 15741), (735, 15753),

Gene: Stinson_21 Start: 12048, Stop: 15881, Start Num: 17
Candidate Starts for Stinson_21:
(Start: 17 @12048 has 184 MA's), (Start: 26 @12117 has 1 MA's), (34, 12204), (60, 12384), (67, 12411), (87, 12495), (88, 12504), (96, 12564), (97, 12576), (111, 12651), (120, 12693), (128, 12735), (130, 12744), (134, 12765), (142, 12804), (157, 12882), (168, 12960), (198, 13125), (212, 13218), (216, 13239), (218, 13248), (267, 13485), (273, 13509), (277, 13524), (287, 13557), (309, 13644), (328, 13752), (345, 13836), (348, 13848), (352, 13869), (360, 13950), (436, 14025), (447, 14106), (449, 14115), (456, 14154), (459, 14172), (462, 14193), (468, 14229), (479, 14280), (486, 14337), (501, 14415), (504, 14424), (525, 14502), (531, 14517), (540, 14559), (553, 14613), (603, 14853), (621, 14928), (652, 15039), (666, 15258), (678, 15372), (686, 15453), (687, 15462), (701, 15534), (709, 15564), (713, 15585), (728, 15702), (741, 15774), (746, 15798),

Gene: Strobilo_17 Start: 10116, Stop: 13787, Start Num: 16
Candidate Starts for Strobilo_17:
(Start: 16 @10116 has 35 MA's), (Start: 26 @10188 has 1 MA's), (65, 10422), (85, 10473), (97, 10566), (103, 10587), (111, 10641), (130, 10734), (134, 10755), (139, 10776), (140, 10782), (157, 10872), (163, 10914), (168, 10950), (177, 10983), (178, 10995), (181, 11019), (184, 11040), (191, 11064), (192, 11070), (197, 11106), (198, 11115), (203, 11148), (204, 11160), (208, 11187), (250, 11370), (252, 11382), (254, 11388), (260, 11406), (263, 11427), (267, 11451), (273, 11475), (307, 11484), (313, 11499), (317, 11511), (327, 11544), (337, 11592), (357, 11733), (358, 11739), (362, 11775), (367, 11802), (371, 11820), (378, 11850), (405, 11946), (410, 11979), (421, 12015), (435, 12066), (441, 12099), (445, 12120), (450, 12144), (454, 12174), (458, 12195), (508, 12417), (536, 12510), (555, 12588), (589, 12711), (611, 12816), (628, 12864), (678, 13284), (679, 13293), (681, 13323), (711, 13488), (728, 13617), (746, 13710),

Gene: Sulley_21 Start: 12049, Stop: 15882, Start Num: 17
Candidate Starts for Sulley_21:

(Start: 17 @12049 has 184 MA's), (Start: 26 @12118 has 1 MA's), (34, 12205), (60, 12382), (67, 12409), (87, 12493), (88, 12502), (97, 12574), (111, 12649), (128, 12733), (130, 12742), (134, 12763), (142, 12802), (157, 12880), (168, 12958), (184, 13048), (198, 13123), (212, 13216), (216, 13237), (218, 13246), (267, 13483), (277, 13522), (287, 13555), (309, 13642), (315, 13666), (328, 13750), (345, 13834), (348, 13846), (352, 13867), (436, 14023), (447, 14104), (456, 14152), (459, 14170), (462, 14191), (468, 14227), (479, 14278), (486, 14335), (501, 14413), (504, 14422), (525, 14500), (531, 14515), (540, 14557), (553, 14611), (603, 14851), (621, 14926), (652, 15037), (666, 15256), (668, 15268), (686, 15451), (687, 15460), (709, 15562), (713, 15583), (728, 15703), (741, 15775), (745, 15793), (746, 15799),

Gene: Sunflower1121_19 Start: 10973, Stop: 14974, Start Num: 18
Candidate Starts for Sunflower1121_19:
(7, 10925), (Start: 18 @10973 has 70 MA's), (29, 11066), (38, 11171), (47, 11225), (51, 11243), (55, 11261), (59, 11291), (66, 11318), (68, 11324), (81, 11369), (96, 11465), (98, 11483), (99, 11486), (124, 11600), (126, 11615), (151, 11732), (154, 11747), (165, 11828), (178, 11888), (179, 11897), (190, 11957), (221, 12140), (222, 12146), (234, 12203), (252, 12293), (256, 12305), (258, 12311), (261, 12326), (265, 12347), (268, 12365), (291, 12440), (306, 12503), (309, 12515), (314, 12536), (322, 12575), (344, 12620), (348, 12635), (366, 12797), (378, 12860), (383, 12887), (404, 12959), (409, 12998), (419, 13049), (423, 13070), (429, 13100), (431, 13106), (436, 13130), (443, 13181), (462, 13298), (468, 13334), (479, 13385), (501, 13526), (525, 13613), (534, 13640), (553, 13724), (603, 13964), (621, 14039), (667, 14372), (678, 14474), (679, 14483), (686, 14555), (687, 14564), (701, 14639), (709, 14669), (716, 14690), (728, 14807), (738, 14858), (741, 14882), (748, 14921), (749, 14933),

Gene: Sweets_16 Start: 11459, Stop: 15472, Start Num: 17
Candidate Starts for Sweets_16:
(Start: 17 @11459 has 184 MA's), (38, 11660), (57, 11774), (67, 11816), (75, 11846), (97, 11981), (100, 11993), (103, 12002), (139, 12191), (142, 12209), (144, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (194, 12497), (197, 12521), (208, 12602), (235, 12725), (250, 12809), (260, 12845), (267, 12890), (268, 12896), (299, 13004), (304, 13028), (309, 13049), (351, 13268), (368, 13418), (383, 13505), (408, 13613), (436, 13748), (452, 13859), (456, 13877), (461, 13907), (499, 14129), (507, 14153), (510, 14168), (514, 14189), (525, 14216), (534, 14243), (548, 14303), (568, 14393), (573, 14426), (590, 14489), (597, 14546), (603, 14579), (604, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (701, 15239), (720, 15320), (727, 15380), (729, 15398), (732, 15407),

Gene: Syra333_20 Start: 11068, Stop: 15069, Start Num: 18
Candidate Starts for Syra333_20:
(Start: 18 @11068 has 70 MA's), (29, 11161), (38, 11266), (47, 11320), (51, 11338), (55, 11356), (59, 11386), (66, 11413), (68, 11419), (81, 11464), (96, 11560), (98, 11578), (99, 11581), (124, 11695), (126, 11710), (151, 11827), (154, 11842), (165, 11923), (178, 11983), (179, 11992), (190, 12052), (221, 12235), (222, 12241), (234, 12298), (252, 12388), (256, 12400), (258, 12406), (261, 12421), (265, 12442), (268, 12460), (291, 12535), (300, 12568), (306, 12598), (309, 12610), (314, 12631), (322, 12670), (344, 12715), (348, 12730), (366, 12892), (378, 12955), (383, 12982), (404, 13054), (409, 13093), (419, 13144), (423, 13165), (429, 13195), (431, 13201), (436, 13225), (443, 13276), (459, 13372), (462, 13393), (468, 13429), (479, 13480), (501, 13621), (502, 13624), (525, 13708), (534, 13735), (553, 13819), (556, 13831), (603, 14059), (621, 14134), (686, 14650), (687, 14659), (701, 14734), (709, 14764), (716, 14785), (728, 14902), (741, 14977), (748, 15016), (749, 15028),

Gene: TBond007_20 Start: 11948, Stop: 16126, Start Num: 17
Candidate Starts for TBond007_20:
(Start: 17 @11948 has 184 MA's), (Start: 26 @12017 has 1 MA's), (Start: 27 @12038 has 1 MA's), (29, 12044), (34, 12104), (55, 12242), (62, 12287), (67, 12308), (96, 12461), (97, 12473), (103, 12494),

(111, 12548), (117, 12578), (122, 12599), (128, 12632), (130, 12641), (134, 12662), (142, 12701), (157, 12779), (163, 12821), (168, 12857), (174, 12881), (203, 13055), (208, 13094), (212, 13115), (216, 13136), (218, 13145), (252, 13313), (259, 13334), (263, 13358), (267, 13382), (272, 13403), (278, 13421), (287, 13454), (299, 13496), (300, 13499), (301, 13502), (309, 13541), (311, 13550), (324, 13619), (341, 13730), (347, 13760), (373, 13958), (378, 13991), (402, 14081), (405, 14099), (409, 14129), (414, 14156), (452, 14372), (459, 14408), (468, 14465), (472, 14483), (475, 14504), (479, 14516), (487, 14576), (501, 14657), (511, 14696), (522, 14729), (525, 14744), (528, 14750), (531, 14759), (540, 14801), (558, 14894), (580, 14972), (603, 15095), (621, 15170), (678, 15635), (680, 15647), (686, 15716), (687, 15725), (722, 15917), (731, 15971), (734, 15980), (745, 16046), (746, 16052), (748, 16067), (749, 16079),

Gene: TClif_20 Start: 11063, Stop: 15118, Start Num: 18
Candidate Starts for TClif_20:
(7, 11015), (Start: 18 @11063 has 70 MA's), (21, 11081), (29, 11156), (47, 11315), (66, 11408), (70, 11417), (73, 11435), (78, 11450), (88, 11504), (94, 11543), (96, 11555), (99, 11576), (108, 11618), (113, 11648), (120, 11672), (143, 11783), (151, 11822), (154, 11837), (155, 11846), (160, 11873), (168, 11936), (190, 12047), (198, 12098), (221, 12230), (232, 12275), (233, 12281), (239, 12323), (252, 12383), (256, 12395), (258, 12401), (261, 12416), (265, 12437), (268, 12455), (272, 12470), (284, 12506), (300, 12563), (306, 12593), (309, 12605), (313, 12623), (341, 12689), (347, 12719), (348, 12725), (359, 12824), (361, 12830), (378, 12950), (387, 12998), (391, 13013), (403, 13046), (405, 13058), (409, 13088), (416, 13124), (419, 13139), (420, 13145), (425, 13172), (431, 13196), (436, 13220), (440, 13250), (443, 13271), (456, 13349), (462, 13388), (468, 13424), (479, 13475), (488, 13538), (501, 13616), (502, 13619), (508, 13643), (525, 13703), (558, 13853), (603, 14054), (621, 14129), (643, 14198), (686, 14678), (687, 14687), (692, 14708), (701, 14783), (703, 14795), (709, 14813), (716, 14834), (728, 14951), (741, 15026), (745, 15044), (746, 15050), (748, 15065), (749, 15077), (750, 15089), (751, 15092), (752, 15113),

Gene: TM4_17 Start: 10184, Stop: 13873, Start Num: 16
Candidate Starts for TM4_17:
(Start: 16 @10184 has 35 MA's), (Start: 26 @10256 has 1 MA's), (65, 10490), (85, 10541), (97, 10634), (103, 10655), (111, 10709), (130, 10802), (134, 10823), (139, 10844), (140, 10850), (157, 10940), (163, 10982), (168, 11018), (174, 11042), (177, 11051), (178, 11063), (181, 11087), (184, 11108), (191, 11132), (192, 11138), (197, 11174), (198, 11183), (199, 11192), (203, 11216), (204, 11228), (208, 11255), (250, 11438), (252, 11450), (254, 11456), (263, 11495), (267, 11519), (313, 11567), (317, 11579), (327, 11612), (329, 11618), (358, 11807), (360, 11813), (362, 11843), (367, 11870), (371, 11888), (372, 11894), (378, 11918), (395, 11987), (405, 12014), (410, 12047), (420, 12080), (421, 12083), (435, 12134), (441, 12167), (445, 12188), (450, 12212), (454, 12242), (458, 12263), (528, 12545), (553, 12638), (563, 12686), (564, 12689), (569, 12701), (588, 12782), (594, 12815), (596, 12824), (598, 12830), (603, 12863), (612, 12890), (618, 12908), (624, 12926), (626, 12932), (662, 13178), (678, 13358), (679, 13367), (687, 13448), (728, 13703), (746, 13796),

Gene: Tachez_21 Start: 12042, Stop: 15878, Start Num: 17
Candidate Starts for Tachez_21:
(Start: 17 @12042 has 184 MA's), (Start: 26 @12111 has 1 MA's), (34, 12198), (60, 12375), (67, 12402), (85, 12474), (87, 12486), (88, 12495), (97, 12567), (111, 12642), (128, 12726), (130, 12735), (134, 12756), (142, 12795), (157, 12873), (168, 12951), (184, 13041), (198, 13116), (212, 13209), (214, 13218), (216, 13230), (218, 13239), (273, 13500), (277, 13515), (287, 13548), (309, 13635), (315, 13659), (328, 13743), (345, 13827), (348, 13839), (352, 13860), (436, 14016), (447, 14097), (456, 14145), (459, 14163), (462, 14184), (468, 14220), (479, 14271), (486, 14328), (501, 14406), (504, 14415), (525, 14493), (540, 14550), (553, 14604), (603, 14844), (621, 14919), (652, 15030), (666, 15249), (668, 15261), (686, 15447), (687, 15456), (701, 15528), (709, 15558), (713, 15579), (728, 15699), (741, 15771), (745, 15789), (746, 15795),

Gene: Taheera_16 Start: 11466, Stop: 15491, Start Num: 17
Candidate Starts for Taheera_16:
(Start: 17 @11466 has 184 MA's), (22, 11490), (38, 11667), (57, 11781), (67, 11823), (72, 11844), (75, 11853), (97, 11988), (103, 12009), (130, 12156), (139, 12198), (142, 12216), (144, 12219), (147, 12234), (148, 12240), (150, 12252), (168, 12372), (180, 12438), (194, 12504), (197, 12528), (208, 12609), (235, 12732), (237, 12753), (250, 12816), (257, 12843), (260, 12852), (268, 12903), (283, 12954), (299, 13011), (309, 13056), (325, 13143), (348, 13260), (351, 13275), (361, 13365), (366, 13422), (368, 13425), (402, 13575), (405, 13593), (456, 13884), (461, 13914), (499, 14136), (507, 14160), (510, 14175), (514, 14196), (534, 14250), (548, 14310), (568, 14400), (573, 14433), (576, 14448), (590, 14496), (597, 14553), (603, 14586), (670, 15018), (680, 15108), (681, 15135), (686, 15177), (687, 15186), (701, 15255), (707, 15282), (720, 15339), (727, 15399), (729, 15417), (732, 15426),

Gene: TaiwanKao_22 Start: 12053, Stop: 15889, Start Num: 17
Candidate Starts for TaiwanKao_22:
(Start: 17 @12053 has 184 MA's), (Start: 26 @12122 has 1 MA's), (34, 12209), (60, 12389), (67, 12416), (87, 12500), (88, 12509), (96, 12569), (97, 12581), (111, 12656), (120, 12698), (128, 12740), (130, 12749), (134, 12770), (142, 12809), (157, 12887), (168, 12965), (198, 13130), (212, 13223), (214, 13232), (216, 13244), (218, 13253), (267, 13490), (273, 13514), (277, 13529), (287, 13562), (309, 13649), (315, 13673), (328, 13757), (345, 13841), (348, 13853), (360, 13955), (436, 14030), (447, 14111), (456, 14159), (459, 14177), (461, 14189), (462, 14198), (468, 14234), (479, 14285), (486, 14342), (501, 14420), (504, 14429), (525, 14507), (531, 14522), (540, 14564), (553, 14618), (603, 14858), (621, 14933), (652, 15044), (666, 15263), (668, 15275), (678, 15377), (686, 15458), (687, 15467), (701, 15539), (709, 15569), (713, 15590), (728, 15710), (741, 15782), (745, 15800), (746, 15806),

Gene: Taquito_20 Start: 12915, Stop: 17108, Start Num: 18
Candidate Starts for Taquito_20:
(Start: 18 @12915 has 70 MA's), (38, 13113), (87, 13353), (88, 13362), (97, 13434), (103, 13455), (128, 13593), (130, 13602), (134, 13623), (142, 13662), (155, 13731), (157, 13740), (168, 13818), (171, 13830), (184, 13908), (192, 13938), (196, 13971), (197, 13974), (200, 13995), (226, 14136), (229, 14145), (253, 14277), (257, 14289), (267, 14343), (278, 14382), (287, 14415), (309, 14502), (314, 14523), (338, 14700), (349, 14751), (366, 14910), (409, 15111), (419, 15162), (421, 15171), (430, 15216), (434, 15237), (474, 15456), (478, 15468), (480, 15477), (488, 15522), (492, 15549), (497, 15582), (501, 15600), (502, 15603), (509, 15630), (540, 15729), (544, 15747), (558, 15822), (578, 15894), (602, 16011), (603, 16023), (621, 16098), (641, 16167), (655, 16296), (662, 16410), (686, 16677), (689, 16695), (707, 16806), (709, 16809), (723, 16908), (728, 16935), (729, 16938), (746, 17034), (752, 17097),

Gene: Teejan_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Teejan_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: Terralys_16 Start: 11464, Stop: 15477, Start Num: 17

Candidate Starts for Terralys_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Terror_16 Start: 11466, Stop: 15491, Start Num: 17
Candidate Starts for Terror_16:
(Start: 17 @11466 has 184 MA's), (22, 11490), (38, 11667), (57, 11781), (67, 11823), (72, 11844), (75, 11853), (97, 11988), (103, 12009), (130, 12156), (139, 12198), (142, 12216), (144, 12219), (147, 12234), (148, 12240), (150, 12252), (168, 12372), (180, 12438), (194, 12504), (197, 12528), (208, 12609), (235, 12732), (237, 12753), (250, 12816), (257, 12843), (260, 12852), (268, 12903), (283, 12954), (299, 13011), (309, 13056), (325, 13143), (348, 13260), (351, 13275), (361, 13365), (366, 13422), (368, 13425), (402, 13575), (405, 13593), (456, 13884), (461, 13914), (499, 14136), (507, 14160), (510, 14175), (514, 14196), (534, 14250), (548, 14310), (568, 14400), (573, 14433), (576, 14448), (590, 14496), (597, 14553), (603, 14586), (670, 15018), (680, 15108), (681, 15135), (686, 15177), (687, 15186), (701, 15255), (707, 15282), (720, 15339), (727, 15399), (729, 15417), (732, 15426),

Gene: Thyatira_19 Start: 12136, Stop: 16245, Start Num: 16
Candidate Starts for Thyatira_19:
(Start: 16 @12136 has 35 MA's), (46, 12394), (62, 12478), (80, 12544), (88, 12592), (96, 12652), (97, 12664), (103, 12685), (111, 12739), (117, 12769), (130, 12832), (134, 12853), (147, 12910), (157, 12970), (168, 13048), (174, 13072), (180, 13114), (187, 13147), (212, 13306), (216, 13327), (237, 13405), (250, 13468), (253, 13483), (254, 13486), (257, 13495), (259, 13501), (261, 13513), (271, 13567), (301, 13669), (309, 13708), (337, 13861), (346, 13903), (351, 13927), (361, 14017), (363, 14050), (388, 14191), (391, 14200), (395, 14218), (405, 14245), (418, 14323), (436, 14407), (454, 14530), (465, 14596), (484, 14698), (501, 14791), (504, 14800), (509, 14821), (518, 14854), (534, 14905), (537, 14926), (541, 14941), (542, 14947), (559, 15031), (571, 15061), (574, 15079), (582, 15118), (593, 15178), (600, 15211), (603, 15232), (607, 15256), (617, 15289), (639, 15373), (654, 15445), (678, 15754), (682, 15808), (684, 15823), (686, 15835), (692, 15865), (725, 16051), (728, 16075), (731, 16087), (747, 16174), (749, 16198),

Gene: Tierra_20 Start: 11792, Stop: 15793, Start Num: 18
Candidate Starts for Tierra_20:
(Start: 18 @11792 has 70 MA's), (29, 11885), (38, 11990), (44, 12017), (47, 12044), (51, 12062), (55, 12080), (57, 12104), (59, 12110), (66, 12137), (68, 12143), (78, 12179), (81, 12188), (85, 12212), (96, 12284), (98, 12302), (99, 12305), (126, 12434), (151, 12551), (165, 12647), (173, 12686), (179, 12716), (190, 12776), (221, 12959), (222, 12965), (223, 12968), (234, 13022), (239, 13052), (252, 13112), (256, 13124), (258, 13130), (261, 13145), (265, 13166), (268, 13184), (306, 13322), (309, 13334), (314, 13355), (322, 13394), (347, 13448), (348, 13454), (366, 13616), (378, 13679), (395, 13760), (403, 13775), (409, 13817), (419, 13868), (423, 13889), (429, 13919), (431, 13925), (436, 13949), (443, 14000), (452, 14060), (462, 14117), (468, 14153), (472, 14171), (479, 14204), (501, 14345), (502, 14348), (525, 14432), (534, 14459), (553, 14543), (603, 14783), (621, 14858), (667, 15191), (678, 15293), (679, 15302), (686, 15374), (701, 15458), (709, 15488), (716, 15509), (728, 15626), (741, 15701), (748, 15740), (749, 15752),

Gene: Tigress9_20 Start: 11051, Stop: 15055, Start Num: 18

Candidate Starts for Tigress9_20:
(Start: 18 @11051 has 70 MA's), (29, 11144), (38, 11249), (47, 11303), (51, 11321), (55, 11339), (59, 11369), (66, 11396), (68, 11402), (81, 11447), (96, 11543), (98, 11561), (99, 11564), (124, 11678), (126, 11693), (151, 11810), (154, 11825), (165, 11906), (178, 11966), (179, 11975), (190, 12035), (221, 12218), (222, 12224), (234, 12281), (252, 12371), (256, 12383), (258, 12389), (261, 12404), (265, 12425), (268, 12443), (291, 12518), (300, 12551), (306, 12581), (309, 12593), (314, 12614), (322, 12653), (344, 12698), (348, 12713), (366, 12875), (378, 12938), (383, 12965), (404, 13037), (409, 13076), (419, 13127), (423, 13148), (429, 13178), (431, 13184), (436, 13208), (443, 13259), (459, 13355), (462, 13376), (468, 13412), (479, 13463), (501, 13604), (502, 13607), (525, 13691), (534, 13718), (553, 13802), (603, 14042), (621, 14117), (678, 14555), (679, 14564), (686, 14636), (687, 14645), (701, 14720), (709, 14750), (716, 14771), (728, 14888), (741, 14963), (748, 15002), (749, 15014),

Gene: TinaBug_16 Start: 11459, Stop: 15472, Start Num: 17
Candidate Starts for TinaBug_16:
(Start: 17 @11459 has 184 MA's), (38, 11660), (57, 11774), (67, 11816), (75, 11846), (97, 11981), (100, 11993), (103, 12002), (139, 12191), (142, 12209), (144, 12212), (148, 12233), (150, 12245), (161, 12317), (168, 12365), (194, 12497), (197, 12521), (208, 12602), (235, 12725), (250, 12809), (260, 12845), (267, 12890), (268, 12896), (299, 13004), (304, 13028), (309, 13049), (351, 13268), (368, 13418), (383, 13505), (408, 13613), (436, 13748), (452, 13859), (456, 13877), (461, 13907), (499, 14129), (507, 14153), (510, 14168), (514, 14189), (525, 14216), (534, 14243), (548, 14303), (568, 14393), (573, 14426), (590, 14489), (597, 14546), (603, 14579), (604, 14588), (680, 15092), (681, 15119), (684, 15149), (686, 15161), (687, 15170), (701, 15239), (720, 15320), (727, 15380), (729, 15398), (732, 15407),

Gene: TingHuaYa_21 Start: 11093, Stop: 15220, Start Num: 18
Candidate Starts for TingHuaYa_21:
(10, 11045), (Start: 18 @11093 has 70 MA's), (29, 11186), (44, 11318), (46, 11342), (53, 11372), (56, 11393), (57, 11405), (66, 11438), (73, 11465), (90, 11552), (96, 11585), (98, 11603), (99, 11606), (108, 11648), (119, 11696), (145, 11822), (151, 11864), (154, 11879), (160, 11915), (169, 11987), (190, 12089), (221, 12272), (231, 12314), (232, 12317), (233, 12323), (234, 12335), (239, 12365), (252, 12425), (258, 12443), (261, 12458), (264, 12476), (265, 12479), (272, 12512), (298, 12593), (301, 12608), (309, 12647), (314, 12668), (345, 12845), (348, 12857), (350, 12866), (353, 12917), (360, 12959), (378, 13082), (382, 13106), (395, 13163), (403, 13178), (404, 13181), (414, 13247), (416, 13256), (421, 13280), (431, 13328), (443, 13403), (446, 13421), (456, 13481), (460, 13508), (462, 13520), (468, 13556), (472, 13574), (480, 13619), (482, 13649), (487, 13667), (501, 13748), (502, 13751), (525, 13835), (531, 13850), (539, 13889), (540, 13892), (558, 13985), (577, 14051), (603, 14186), (664, 14537), (678, 14708), (686, 14789), (701, 14873), (728, 15041), (741, 15113), (745, 15131), (746, 15137),

Gene: TiniBug_21 Start: 12024, Stop: 15860, Start Num: 17
Candidate Starts for TiniBug_21:
(Start: 17 @12024 has 184 MA's), (Start: 26 @12093 has 1 MA's), (34, 12180), (60, 12360), (67, 12387), (87, 12471), (88, 12480), (96, 12540), (97, 12552), (111, 12627), (120, 12669), (128, 12711), (130, 12720), (134, 12741), (142, 12780), (157, 12858), (168, 12936), (198, 13101), (212, 13194), (216, 13215), (218, 13224), (267, 13461), (273, 13485), (277, 13500), (287, 13533), (309, 13620), (325, 13707), (328, 13728), (345, 13812), (348, 13824), (352, 13845), (436, 14001), (447, 14082), (459, 14148), (462, 14169), (468, 14205), (479, 14256), (481, 14274), (486, 14313), (501, 14391), (525, 14478), (531, 14493), (540, 14535), (553, 14589), (603, 14829), (621, 14904), (652, 15015), (654, 15036), (655, 15057), (664, 15177), (678, 15348), (686, 15429), (687, 15438), (701, 15510), (709, 15540), (713, 15561), (728, 15681), (741, 15753), (745, 15771), (746, 15777),

Gene: Tiri_21 Start: 12088, Stop: 15921, Start Num: 17

Candidate Starts for Tiri_21:
(2, 11869), (9, 12049), (Start: 17 @12088 has 184 MA's), (Start: 26 @12157 has 1 MA's), (34, 12244), (60, 12421), (67, 12448), (87, 12532), (88, 12541), (97, 12613), (111, 12688), (128, 12772), (130, 12781), (134, 12802), (142, 12841), (157, 12919), (168, 12997), (184, 13087), (198, 13162), (212, 13255), (214, 13264), (216, 13276), (218, 13285), (257, 13468), (267, 13522), (277, 13561), (287, 13594), (309, 13681), (315, 13705), (328, 13789), (345, 13873), (348, 13885), (352, 13906), (436, 14062), (447, 14143), (456, 14191), (459, 14209), (462, 14230), (468, 14266), (479, 14317), (486, 14374), (501, 14452), (504, 14461), (525, 14539), (540, 14596), (553, 14650), (603, 14890), (621, 14965), (652, 15076), (666, 15295), (668, 15307), (678, 15409), (686, 15490), (687, 15499), (709, 15601), (713, 15622), (728, 15742), (741, 15814), (745, 15832), (746, 15838),

Gene: TomBrady_16 Start: 11465, Stop: 15478, Start Num: 17
Candidate Starts for TomBrady_16:
(Start: 17 @11465 has 184 MA's), (38, 11666), (57, 11780), (67, 11822), (75, 11852), (97, 11987), (100, 11999), (103, 12008), (139, 12197), (142, 12215), (144, 12218), (148, 12239), (150, 12251), (161, 12323), (168, 12371), (194, 12503), (197, 12527), (208, 12608), (235, 12731), (250, 12815), (260, 12851), (267, 12896), (268, 12902), (299, 13010), (304, 13034), (309, 13055), (351, 13274), (368, 13424), (383, 13511), (408, 13619), (436, 13754), (452, 13865), (456, 13883), (461, 13913), (499, 14135), (507, 14159), (510, 14174), (514, 14195), (525, 14222), (534, 14249), (548, 14309), (568, 14399), (573, 14432), (590, 14495), (597, 14552), (603, 14585), (604, 14594), (680, 15098), (681, 15125), (684, 15155), (686, 15167), (687, 15176), (701, 15245), (720, 15326), (727, 15386), (729, 15404), (732, 15413),

Gene: Topper_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Topper_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Torres_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Torres_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: TreyKay_21 Start: 12047, Stop: 15883, Start Num: 17
Candidate Starts for TreyKay_21:
(Start: 17 @12047 has 184 MA's), (Start: 26 @12116 has 1 MA's), (34, 12203), (60, 12383), (67, 12410), (88, 12503), (96, 12563), (97, 12575), (111, 12650), (122, 12701), (130, 12743), (134, 12764), (142, 12803), (157, 12881), (168, 12959), (174, 12983), (198, 13124), (212, 13217), (214, 13226),

(216, 13238), (218, 13247), (267, 13484), (273, 13508), (277, 13523), (287, 13556), (309, 13643), (315, 13667), (328, 13751), (345, 13835), (348, 13847), (352, 13868), (360, 13949), (436, 14024), (447, 14105), (456, 14153), (459, 14171), (461, 14183), (462, 14192), (468, 14228), (479, 14279), (486, 14336), (501, 14414), (504, 14423), (525, 14501), (531, 14516), (540, 14558), (553, 14612), (603, 14852), (621, 14927), (652, 15038), (666, 15257), (668, 15269), (678, 15371), (686, 15452), (687, 15461), (701, 15533), (709, 15563), (713, 15584), (728, 15704), (741, 15776), (745, 15794), (746, 15800),

Gene: TribleTrouble_19 Start: 12006, Stop: 16166, Start Num: 17
Candidate Starts for TribleTrouble_19:
(Start: 17 @12006 has 184 MA's), (Start: 26 @12075 has 1 MA's), (Start: 27 @12096 has 1 MA's), (29, 12102), (34, 12162), (58, 12327), (62, 12345), (67, 12366), (72, 12387), (80, 12411), (87, 12450), (95, 12513), (96, 12519), (97, 12531), (111, 12606), (130, 12699), (134, 12720), (142, 12759), (157, 12837), (164, 12882), (168, 12915), (174, 12939), (180, 12981), (203, 13113), (212, 13173), (216, 13194), (218, 13203), (237, 13296), (252, 13371), (263, 13416), (267, 13440), (272, 13461), (280, 13485), (286, 13509), (300, 13557), (309, 13599), (335, 13755), (345, 13812), (366, 13986), (373, 14016), (378, 14049), (409, 14187), (414, 14214), (421, 14247), (432, 14301), (436, 14319), (440, 14349), (452, 14430), (459, 14466), (472, 14541), (479, 14574), (483, 14619), (487, 14634), (501, 14715), (502, 14718), (522, 14787), (525, 14802), (528, 14808), (531, 14817), (553, 14913), (558, 14952), (580, 15030), (599, 15129), (603, 15153), (621, 15228), (674, 15654), (678, 15684), (679, 15693), (680, 15696), (687, 15774), (712, 15900), (722, 15960), (724, 15978), (739, 16056), (746, 16092), (748, 16107), (749, 16119), (754, 16158),

Gene: Trice_17 Start: 11327, Stop: 15460, Start Num: 17
Candidate Starts for Trice_17:
(9, 11288), (Start: 17 @11327 has 184 MA's), (Start: 26 @11396 has 1 MA's), (34, 11483), (44, 11561), (62, 11669), (67, 11690), (76, 11723), (97, 11855), (101, 11870), (103, 11876), (111, 11930), (117, 11960), (130, 12023), (134, 12044), (142, 12083), (157, 12161), (168, 12239), (174, 12263), (212, 12497), (232, 12578), (240, 12638), (252, 12695), (262, 12731), (267, 12764), (273, 12788), (293, 12854), (296, 12863), (309, 12923), (328, 13031), (337, 13076), (361, 13232), (376, 13343), (378, 13352), (380, 13364), (391, 13415), (395, 13433), (405, 13460), (409, 13490), (427, 13583), (436, 13622), (462, 13790), (472, 13844), (479, 13877), (485, 13922), (501, 14003), (502, 14006), (525, 14090), (528, 14096), (531, 14105), (540, 14147), (550, 14183), (553, 14201), (558, 14240), (575, 14300), (603, 14441), (618, 14501), (621, 14516), (668, 14858), (686, 15047), (687, 15056), (698, 15119), (746, 15395),

Gene: TruffulaTree_21 Start: 12076, Stop: 15912, Start Num: 17
Candidate Starts for TruffulaTree_21:
(Start: 17 @12076 has 184 MA's), (Start: 26 @12145 has 1 MA's), (34, 12232), (60, 12409), (67, 12436), (85, 12508), (87, 12520), (88, 12529), (97, 12601), (111, 12676), (128, 12760), (130, 12769), (134, 12790), (142, 12829), (157, 12907), (168, 12985), (184, 13075), (198, 13150), (212, 13243), (214, 13252), (216, 13264), (218, 13273), (273, 13534), (277, 13549), (287, 13582), (309, 13669), (315, 13693), (328, 13777), (345, 13861), (348, 13873), (352, 13894), (436, 14050), (447, 14131), (456, 14179), (459, 14197), (462, 14218), (468, 14254), (479, 14305), (486, 14362), (501, 14440), (504, 14449), (525, 14527), (540, 14584), (553, 14638), (603, 14878), (621, 14953), (652, 15064), (666, 15283), (668, 15295), (686, 15481), (687, 15490), (701, 15562), (709, 15592), (713, 15613), (728, 15733), (741, 15805), (745, 15823), (746, 15829),

Gene: Twitch_21 Start: 12116, Stop: 15949, Start Num: 17
Candidate Starts for Twitch_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (34, 12272), (44, 12347), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716), (128, 12800), (130, 12809), (134, 12830), (142, 12869), (150, 12905), (157, 12947), (168, 13025), (184, 13115),

(198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (531, 14582), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15518), (687, 15527), (701, 15599), (709, 15629), (713, 15650), (728, 15770), (741, 15842), (745, 15860), (746, 15866),

Gene: Unicorn_20 Start: 11123, Stop: 15124, Start Num: 18
Candidate Starts for Unicorn_20:
(Start: 18 @11123 has 70 MA's), (29, 11216), (38, 11321), (47, 11375), (51, 11393), (55, 11411), (57, 11435), (59, 11441), (66, 11468), (68, 11474), (71, 11486), (81, 11519), (96, 11615), (98, 11633), (99, 11636), (124, 11750), (126, 11765), (151, 11882), (165, 11978), (173, 12017), (178, 12038), (179, 12047), (190, 12107), (221, 12290), (222, 12296), (223, 12299), (234, 12353), (239, 12383), (252, 12443), (256, 12455), (258, 12461), (261, 12476), (265, 12497), (268, 12515), (306, 12653), (309, 12665), (314, 12686), (322, 12725), (347, 12779), (348, 12785), (360, 12887), (366, 12947), (378, 13010), (395, 13091), (403, 13106), (404, 13109), (409, 13148), (416, 13184), (419, 13199), (420, 13205), (425, 13232), (431, 13256), (443, 13331), (452, 13391), (462, 13448), (468, 13484), (479, 13535), (501, 13676), (502, 13679), (525, 13763), (534, 13790), (553, 13874), (558, 13913), (603, 14114), (621, 14189), (661, 14408), (667, 14522), (678, 14624), (679, 14633), (686, 14705), (701, 14789), (709, 14819), (716, 14840), (728, 14957), (741, 15032), (748, 15071), (749, 15083),

Gene: Urkel_21 Start: 12024, Stop: 15863, Start Num: 17
Candidate Starts for Urkel_21:
(Start: 17 @12024 has 184 MA's), (Start: 26 @12093 has 1 MA's), (34, 12180), (60, 12360), (67, 12387), (87, 12471), (88, 12480), (96, 12540), (97, 12552), (111, 12627), (122, 12678), (130, 12720), (134, 12741), (142, 12780), (157, 12858), (168, 12936), (174, 12960), (198, 13101), (212, 13194), (216, 13215), (218, 13224), (267, 13461), (273, 13485), (277, 13500), (287, 13533), (309, 13620), (325, 13707), (328, 13728), (345, 13812), (348, 13824), (352, 13845), (436, 14001), (447, 14082), (459, 14148), (462, 14169), (468, 14205), (479, 14256), (481, 14274), (486, 14313), (501, 14391), (525, 14478), (531, 14493), (540, 14535), (553, 14589), (603, 14829), (621, 14904), (652, 15015), (654, 15036), (655, 15057), (664, 15177), (678, 15351), (686, 15432), (687, 15441), (701, 15513), (709, 15543), (713, 15564), (728, 15684), (741, 15756), (745, 15774), (746, 15780),

Gene: Validus_21 Start: 11056, Stop: 15213, Start Num: 18
Candidate Starts for Validus_21:
(10, 11008), (Start: 18 @11056 has 70 MA's), (29, 11149), (Start: 31 @11161 has 2 MA's), (46, 11305), (47, 11308), (73, 11428), (90, 11515), (96, 11548), (109, 11623), (110, 11626), (124, 11692), (145, 11794), (151, 11836), (154, 11851), (155, 11860), (160, 11887), (164, 11917), (168, 11950), (178, 11992), (190, 12061), (221, 12247), (222, 12253), (231, 12289), (234, 12310), (236, 12322), (239, 12340), (252, 12400), (256, 12412), (258, 12418), (261, 12433), (264, 12451), (265, 12454), (272, 12487), (301, 12583), (309, 12622), (314, 12643), (321, 12673), (325, 12706), (339, 12790), (345, 12820), (348, 12832), (360, 12934), (370, 13012), (378, 13057), (382, 13081), (394, 13135), (395, 13138), (403, 13153), (404, 13156), (409, 13195), (414, 13222), (419, 13246), (420, 13252), (425, 13279), (436, 13327), (443, 13378), (446, 13396), (451, 13432), (452, 13438), (456, 13456), (460, 13483), (462, 13495), (472, 13549), (479, 13582), (487, 13642), (501, 13723), (502, 13726), (525, 13810), (531, 13825), (540, 13867), (558, 13960), (577, 14026), (603, 14161), (663, 14509), (679, 14701), (686, 14773), (687, 14782), (692, 14803), (695, 14845), (728, 15040), (731, 15052), (741, 15112), (746, 15136), (750, 15175),

Gene: Veliki_21 Start: 12116, Stop: 15952, Start Num: 17
Candidate Starts for Veliki_21:
(Start: 17 @12116 has 184 MA's), (Start: 26 @12185 has 1 MA's), (Start: 27 @12206 has 1 MA's), (34, 12272), (60, 12449), (67, 12476), (85, 12548), (87, 12560), (88, 12569), (97, 12641), (111, 12716),

(128, 12800), (130, 12809), (134, 12830), (142, 12869), (157, 12947), (168, 13025), (184, 13115), (198, 13190), (212, 13283), (214, 13292), (216, 13304), (218, 13313), (267, 13550), (277, 13589), (287, 13622), (309, 13709), (315, 13733), (328, 13817), (345, 13901), (348, 13913), (352, 13934), (436, 14090), (447, 14171), (456, 14219), (459, 14237), (462, 14258), (468, 14294), (479, 14345), (486, 14402), (501, 14480), (504, 14489), (525, 14567), (540, 14624), (553, 14678), (603, 14918), (621, 14993), (652, 15104), (666, 15323), (668, 15335), (686, 15521), (687, 15530), (701, 15602), (709, 15632), (713, 15653), (728, 15773), (741, 15845), (745, 15863), (746, 15869),

Gene: ViviJ_18 Start: 11997, Stop: 16103, Start Num: 16
Candidate Starts for ViviJ_18:
(Start: 16 @11997 has 35 MA's), (Start: 27 @12090 has 1 MA's), (35, 12168), (36, 12192), (46, 12252), (62, 12336), (64, 12348), (88, 12450), (96, 12510), (97, 12522), (103, 12543), (111, 12597), (121, 12645), (130, 12690), (134, 12711), (157, 12828), (168, 12906), (174, 12930), (184, 12996), (198, 13071), (212, 13164), (218, 13194), (254, 13368), (257, 13377), (263, 13407), (267, 13431), (272, 13452), (290, 13512), (309, 13590), (311, 13599), (325, 13677), (337, 13743), (346, 13785), (348, 13794), (355, 13878), (361, 13899), (363, 13932), (374, 13998), (378, 14019), (388, 14073), (391, 14082), (395, 14100), (404, 14118), (405, 14127), (409, 14157), (416, 14193), (426, 14247), (434, 14283), (436, 14289), (437, 14307), (454, 14412), (465, 14478), (501, 14673), (509, 14703), (518, 14736), (534, 14787), (537, 14808), (541, 14823), (542, 14829), (559, 14913), (574, 14961), (582, 15000), (593, 15060), (600, 15093), (603, 15114), (607, 15138), (617, 15168), (639, 15234), (654, 15306), (678, 15621), (679, 15630), (680, 15633), (682, 15675), (686, 15702), (692, 15732), (701, 15783), (705, 15801), (720, 15867), (725, 15915), (728, 15939), (731, 15951), (747, 16032), (749, 16056), (754, 16095),

Gene: Waterfoul_19 Start: 12158, Stop: 16267, Start Num: 16
Candidate Starts for Waterfoul_19:
(Start: 16 @12158 has 35 MA's), (46, 12416), (62, 12500), (80, 12566), (88, 12614), (96, 12674), (97, 12686), (103, 12707), (111, 12761), (117, 12791), (130, 12854), (134, 12875), (147, 12932), (157, 12992), (168, 13070), (174, 13094), (180, 13136), (187, 13169), (212, 13328), (216, 13349), (237, 13427), (250, 13490), (253, 13505), (254, 13508), (257, 13517), (259, 13523), (261, 13535), (271, 13589), (301, 13691), (309, 13730), (337, 13883), (346, 13925), (351, 13949), (361, 14039), (363, 14072), (388, 14213), (391, 14222), (395, 14240), (405, 14267), (418, 14345), (436, 14429), (454, 14552), (465, 14618), (484, 14720), (501, 14813), (504, 14822), (509, 14843), (518, 14876), (534, 14927), (537, 14948), (541, 14963), (542, 14969), (559, 15053), (571, 15083), (574, 15101), (582, 15140), (593, 15200), (600, 15233), (603, 15254), (607, 15278), (617, 15311), (639, 15395), (654, 15467), (678, 15776), (682, 15830), (684, 15845), (686, 15857), (692, 15887), (725, 16073), (728, 16097), (731, 16109), (747, 16196), (749, 16220),

Gene: Wendigo_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Wendigo_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: Wintermute_22 Start: 13313, Stop: 17488, Start Num: 18
Candidate Starts for Wintermute_22:

(12, 13277), (Start: 18 @13313 has 70 MA's), (38, 13511), (87, 13751), (88, 13760), (103, 13853), (121, 13955), (130, 14000), (142, 14060), (157, 14138), (168, 14216), (183, 14303), (184, 14306), (192, 14336), (196, 14369), (200, 14393), (213, 14477), (219, 14507), (226, 14534), (248, 14642), (251, 14663), (253, 14675), (257, 14687), (267, 14741), (309, 14900), (314, 14921), (328, 15029), (349, 15149), (406, 15491), (409, 15509), (419, 15560), (421, 15569), (430, 15614), (434, 15635), (457, 15755), (474, 15854), (478, 15866), (480, 15875), (492, 15947), (501, 15998), (502, 16001), (509, 16028), (540, 16127), (544, 16145), (558, 16220), (602, 16409), (603, 16421), (621, 16496), (633, 16526), (655, 16682), (664, 16802), (672, 16910), (686, 17060), (707, 17189), (709, 17192), (723, 17291), (728, 17318), (746, 17414), (752, 17477),

Gene: Ximenita_21 Start: 11247, Stop: 15251, Start Num: 18
Candidate Starts for Ximenita_21:
(Start: 18 @11247 has 70 MA's), (29, 11340), (38, 11445), (47, 11499), (51, 11517), (57, 11559), (66, 11592), (68, 11598), (87, 11679), (96, 11739), (98, 11757), (99, 11760), (124, 11874), (126, 11889), (151, 12006), (156, 12033), (165, 12102), (178, 12162), (179, 12171), (180, 12183), (190, 12231), (221, 12414), (222, 12420), (223, 12423), (252, 12567), (256, 12579), (258, 12585), (261, 12600), (265, 12621), (268, 12639), (306, 12777), (309, 12789), (314, 12810), (322, 12849), (347, 12903), (348, 12909), (360, 13011), (366, 13071), (378, 13134), (394, 13212), (395, 13215), (403, 13230), (409, 13272), (414, 13299), (416, 13308), (419, 13323), (420, 13329), (425, 13356), (431, 13380), (432, 13386), (440, 13434), (443, 13455), (456, 13533), (459, 13551), (462, 13572), (468, 13608), (479, 13659), (501, 13800), (504, 13809), (525, 13887), (553, 13998), (556, 14010), (603, 14238), (621, 14313), (679, 14757), (686, 14829), (687, 14838), (701, 14913), (709, 14943), (716, 14964), (728, 15081), (741, 15156), (748, 15195), (749, 15207), (754, 15246),

Gene: Y10_22 Start: 13313, Stop: 17488, Start Num: 18
Candidate Starts for Y10_22:
(12, 13277), (Start: 18 @13313 has 70 MA's), (38, 13511), (87, 13751), (88, 13760), (103, 13853), (121, 13955), (130, 14000), (142, 14060), (157, 14138), (168, 14216), (183, 14303), (184, 14306), (192, 14336), (196, 14369), (200, 14393), (213, 14477), (219, 14507), (226, 14534), (248, 14642), (251, 14663), (253, 14675), (257, 14687), (267, 14741), (309, 14900), (314, 14921), (328, 15029), (349, 15149), (406, 15491), (409, 15509), (419, 15560), (421, 15569), (430, 15614), (434, 15635), (457, 15755), (474, 15854), (478, 15866), (480, 15875), (492, 15947), (501, 15998), (502, 16001), (509, 16028), (540, 16127), (544, 16145), (558, 16220), (602, 16409), (603, 16421), (621, 16496), (633, 16526), (655, 16682), (664, 16802), (672, 16910), (686, 17060), (705, 17180), (707, 17189), (709, 17192), (723, 17291), (728, 17318), (746, 17414), (752, 17477),

Gene: Y2_22 Start: 13313, Stop: 17488, Start Num: 18
Candidate Starts for Y2_22:
(12, 13277), (Start: 18 @13313 has 70 MA's), (38, 13511), (87, 13751), (88, 13760), (103, 13853), (121, 13955), (130, 14000), (142, 14060), (157, 14138), (168, 14216), (183, 14303), (184, 14306), (192, 14336), (196, 14369), (200, 14393), (213, 14477), (219, 14507), (226, 14534), (248, 14642), (251, 14663), (253, 14675), (257, 14687), (267, 14741), (309, 14900), (314, 14921), (328, 15029), (349, 15149), (406, 15491), (409, 15509), (419, 15560), (421, 15569), (430, 15614), (434, 15635), (457, 15755), (474, 15854), (478, 15866), (480, 15875), (492, 15947), (501, 15998), (502, 16001), (509, 16028), (540, 16127), (544, 16145), (558, 16220), (602, 16409), (603, 16421), (621, 16496), (633, 16526), (655, 16682), (664, 16802), (672, 16910), (686, 17060), (705, 17180), (707, 17189), (709, 17192), (723, 17291), (728, 17318), (746, 17414), (752, 17477),

Gene: YangYin_16 Start: 11787, Stop: 15824, Start Num: 18
Candidate Starts for YangYin_16:
(Start: 18 @11787 has 70 MA's), (28, 11880), (51, 12063), (53, 12072), (68, 12144), (78, 12180), (90, 12252), (92, 12258), (94, 12273), (96, 12285), (98, 12303), (107, 12348), (115, 12384), (119, 12399), (123, 12414), (124, 12420), (145, 12522), (151, 12564), (154, 12579), (160, 12615), (168, 12678),

(173, 12699), (186, 12771), (190, 12789), (213, 12930), (221, 12972), (228, 13002), (229, 13005), (231, 13014), (233, 13023), (239, 13065), (255, 13134), (256, 13137), (258, 13143), (261, 13158), (265, 13179), (266, 13188), (295, 13284), (309, 13347), (315, 13371), (318, 13383), (319, 13386), (326, 13443), (333, 13476), (340, 13515), (348, 13557), (358, 13653), (361, 13662), (368, 13722), (370, 13737), (376, 13773), (393, 13857), (406, 13902), (408, 13917), (413, 13944), (431, 14028), (436, 14052), (443, 14103), (444, 14109), (465, 14241), (489, 14373), (507, 14457), (510, 14472), (532, 14538), (548, 14607), (562, 14688), (568, 14697), (590, 14790), (597, 14847), (603, 14880), (664, 15237), (680, 15426), (681, 15453), (686, 15495), (696, 15573), (727, 15732), (729, 15750), (734, 15765),

Gene: YasnayaPolyana_22 Start: 13314, Stop: 17489, Start Num: 18
Candidate Starts for YasnayaPolyana_22:
(12, 13278), (Start: 18 @13314 has 70 MA's), (38, 13512), (87, 13752), (88, 13761), (103, 13854), (121, 13956), (130, 14001), (134, 14022), (142, 14061), (144, 14064), (157, 14139), (168, 14217), (183, 14304), (184, 14307), (192, 14337), (196, 14370), (200, 14394), (213, 14478), (219, 14508), (226, 14535), (248, 14643), (251, 14664), (253, 14676), (257, 14688), (267, 14742), (309, 14901), (314, 14922), (328, 15030), (349, 15150), (406, 15492), (409, 15510), (419, 15561), (421, 15570), (430, 15615), (434, 15636), (457, 15756), (474, 15855), (478, 15867), (480, 15876), (492, 15948), (501, 15999), (502, 16002), (509, 16029), (540, 16128), (544, 16146), (558, 16221), (602, 16410), (603, 16422), (621, 16497), (633, 16527), (655, 16683), (664, 16803), (672, 16911), (686, 17061), (707, 17190), (709, 17193), (723, 17292), (728, 17319), (746, 17415), (752, 17478),

Gene: YoureAdopted_20 Start: 12049, Stop: 15885, Start Num: 17
Candidate Starts for YoureAdopted_20:
(Start: 17 @12049 has 184 MA's), (Start: 26 @12118 has 1 MA's), (Start: 27 @12139 has 1 MA's), (34, 12205), (60, 12382), (67, 12409), (85, 12481), (87, 12493), (88, 12502), (97, 12574), (111, 12649), (128, 12733), (130, 12742), (134, 12763), (142, 12802), (157, 12880), (168, 12958), (184, 13048), (198, 13123), (212, 13216), (214, 13225), (216, 13237), (218, 13246), (267, 13483), (277, 13522), (287, 13555), (309, 13642), (315, 13666), (328, 13750), (345, 13834), (348, 13846), (352, 13867), (436, 14023), (447, 14104), (456, 14152), (459, 14170), (462, 14191), (468, 14227), (479, 14278), (486, 14335), (501, 14413), (504, 14422), (525, 14500), (531, 14515), (540, 14557), (553, 14611), (603, 14851), (621, 14926), (652, 15037), (666, 15256), (668, 15268), (686, 15454), (687, 15463), (709, 15565), (713, 15586), (728, 15706), (741, 15778), (745, 15796), (746, 15802),

Gene: Yuna_21 Start: 11197, Stop: 15186, Start Num: 18
Candidate Starts for Yuna_21:
(Start: 18 @11197 has 70 MA's), (29, 11290), (49, 11458), (54, 11479), (59, 11515), (68, 11548), (70, 11551), (71, 11560), (78, 11584), (94, 11677), (96, 11689), (99, 11710), (143, 11926), (151, 11965), (154, 11980), (160, 12016), (167, 12076), (168, 12079), (178, 12121), (190, 12190), (221, 12376), (222, 12382), (223, 12385), (224, 12391), (231, 12418), (233, 12427), (234, 12439), (239, 12469), (252, 12529), (256, 12541), (258, 12547), (261, 12562), (264, 12580), (265, 12583), (268, 12601), (291, 12676), (306, 12739), (309, 12751), (314, 12772), (322, 12811), (344, 12856), (348, 12871), (366, 13033), (378, 13096), (383, 13123), (404, 13195), (409, 13234), (419, 13285), (421, 13294), (423, 13306), (429, 13336), (431, 13342), (436, 13366), (452, 13477), (456, 13495), (462, 13534), (479, 13621), (480, 13633), (501, 13762), (502, 13765), (525, 13849), (556, 13972), (603, 14200), (618, 14260), (621, 14275), (665, 14590), (679, 14722), (681, 14752), (685, 14791), (686, 14794), (689, 14812), (701, 14866), (709, 14896), (716, 14917), (728, 15028), (746, 15121),

Gene: Yunkel11_21 Start: 11016, Stop: 15143, Start Num: 18
Candidate Starts for Yunkel11_21:
(10, 10968), (Start: 18 @11016 has 70 MA's), (29, 11109), (44, 11241), (46, 11265), (53, 11295), (56, 11316), (57, 11328), (73, 11388), (90, 11475), (96, 11508), (98, 11526), (99, 11529), (114, 11601), (145, 11745), (151, 11787), (154, 11802), (160, 11838), (169, 11910), (190, 12012), (221, 12195),

(227, 12222), (232, 12240), (233, 12246), (239, 12288), (256, 12360), (258, 12366), (261, 12381), (265, 12402), (268, 12420), (272, 12435), (287, 12483), (298, 12516), (301, 12531), (309, 12570), (314, 12591), (321, 12621), (350, 12789), (353, 12840), (378, 13005), (382, 13029), (395, 13086), (407, 13137), (414, 13170), (416, 13179), (431, 13251), (443, 13326), (446, 13344), (452, 13386), (456, 13404), (460, 13431), (462, 13443), (482, 13572), (487, 13590), (501, 13671), (502, 13674), (525, 13758), (539, 13812), (540, 13815), (558, 13908), (577, 13974), (603, 14109), (638, 14235), (678, 14631), (679, 14640), (686, 14712), (701, 14796), (728, 14964), (741, 15036), (746, 15060), (750, 15099),

Gene: Zabiza_21 Start: 12077, Stop: 15916, Start Num: 17
Candidate Starts for Zabiza_21:
(Start: 17 @12077 has 184 MA's), (Start: 26 @12146 has 1 MA's), (34, 12233), (60, 12410), (67, 12437), (85, 12509), (87, 12521), (88, 12530), (97, 12602), (111, 12677), (128, 12761), (130, 12770), (134, 12791), (142, 12830), (157, 12908), (168, 12986), (184, 13076), (198, 13151), (212, 13244), (214, 13253), (216, 13265), (218, 13274), (273, 13535), (277, 13550), (287, 13583), (309, 13670), (315, 13694), (328, 13778), (345, 13862), (348, 13874), (352, 13895), (436, 14051), (447, 14132), (456, 14180), (459, 14198), (462, 14219), (468, 14255), (479, 14306), (486, 14363), (501, 14441), (504, 14450), (525, 14528), (540, 14585), (553, 14639), (603, 14879), (621, 14954), (652, 15065), (666, 15284), (668, 15296), (686, 15485), (687, 15494), (701, 15566), (709, 15596), (713, 15617), (728, 15737), (741, 15809), (745, 15827), (746, 15833),

Gene: Zavala_21 Start: 12057, Stop: 15890, Start Num: 17
Candidate Starts for Zavala_21:
(Start: 17 @12057 has 184 MA's), (Start: 26 @12126 has 1 MA's), (34, 12213), (60, 12390), (67, 12417), (85, 12489), (87, 12501), (88, 12510), (97, 12582), (111, 12657), (128, 12741), (130, 12750), (134, 12771), (142, 12810), (157, 12888), (168, 12966), (184, 13056), (198, 13131), (212, 13224), (214, 13233), (216, 13245), (218, 13254), (267, 13491), (277, 13530), (287, 13563), (309, 13650), (315, 13674), (328, 13758), (345, 13842), (348, 13854), (352, 13875), (436, 14031), (456, 14160), (459, 14178), (462, 14199), (468, 14235), (479, 14286), (486, 14343), (501, 14421), (504, 14430), (525, 14508), (531, 14523), (540, 14565), (553, 14619), (603, 14859), (621, 14934), (652, 15045), (666, 15264), (668, 15276), (686, 15459), (687, 15468), (701, 15540), (709, 15570), (713, 15591), (728, 15711), (741, 15783), (745, 15801), (746, 15807),

Gene: ZoMa_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for ZoMa_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),

Gene: ZoeJ_17 Start: 10077, Stop: 13724, Start Num: 16
Candidate Starts for ZoeJ_17:
(Start: 16 @10077 has 35 MA's), (Start: 26 @10149 has 1 MA's), (65, 10383), (72, 10398), (96, 10515), (97, 10527), (111, 10602), (130, 10695), (157, 10833), (158, 10836), (163, 10875), (168, 10911), (174, 10935), (177, 10944), (178, 10956), (181, 10980), (184, 11001), (191, 11025), (192, 11031), (197, 11067), (198, 11076), (203, 11109), (204, 11121), (208, 11148), (250, 11331), (252, 11343), (254, 11349), (263, 11388), (267, 11412), (313, 11460), (317, 11472), (327, 11505), (362, 11736), (371, 11781), (378, 11811), (395, 11880), (405, 11907), (410, 11940), (435, 12027), (441, 12060), (445,

12081), (450, 12105), (454, 12135), (508, 12378), (536, 12471), (555, 12549), (589, 12672), (611, 12777), (673, 13188), (678, 13218), (679, 13227), (681, 13257), (728, 13554), (731, 13566), (746, 13647),

Gene: Zombie_16 Start: 11464, Stop: 15477, Start Num: 17
Candidate Starts for Zombie_16:
(Start: 17 @11464 has 184 MA's), (38, 11665), (57, 11779), (67, 11821), (75, 11851), (97, 11986), (100, 11998), (103, 12007), (139, 12196), (142, 12214), (144, 12217), (148, 12238), (150, 12250), (161, 12322), (168, 12370), (194, 12502), (197, 12526), (208, 12607), (235, 12730), (250, 12814), (260, 12850), (267, 12895), (268, 12901), (299, 13009), (304, 13033), (309, 13054), (351, 13273), (368, 13423), (383, 13510), (408, 13618), (436, 13753), (452, 13864), (456, 13882), (461, 13912), (499, 14134), (507, 14158), (510, 14173), (514, 14194), (525, 14221), (534, 14248), (548, 14308), (568, 14398), (573, 14431), (590, 14494), (597, 14551), (603, 14584), (604, 14593), (680, 15097), (681, 15124), (684, 15154), (686, 15166), (687, 15175), (701, 15244), (720, 15325), (727, 15385), (729, 15403), (732, 15412),