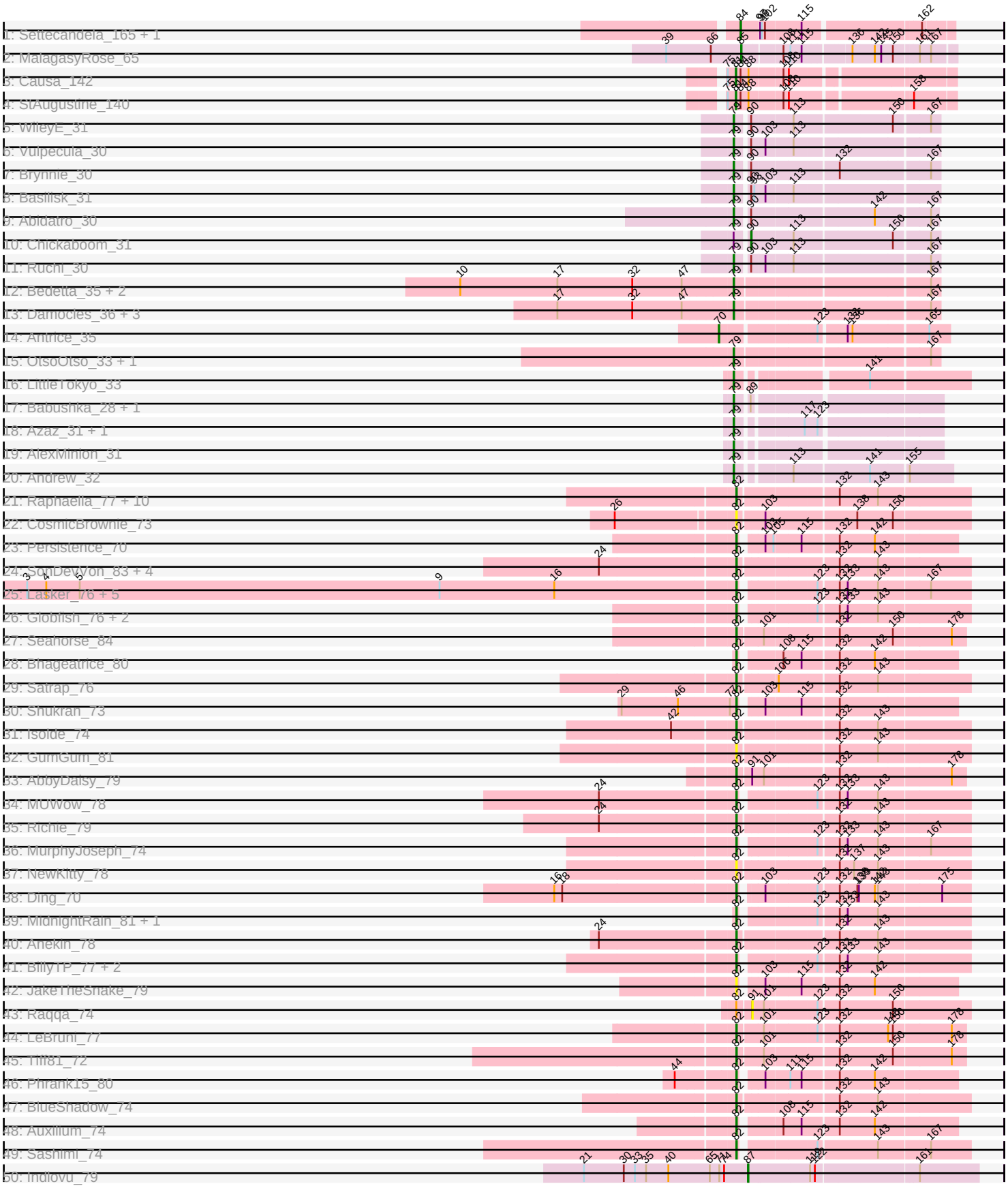
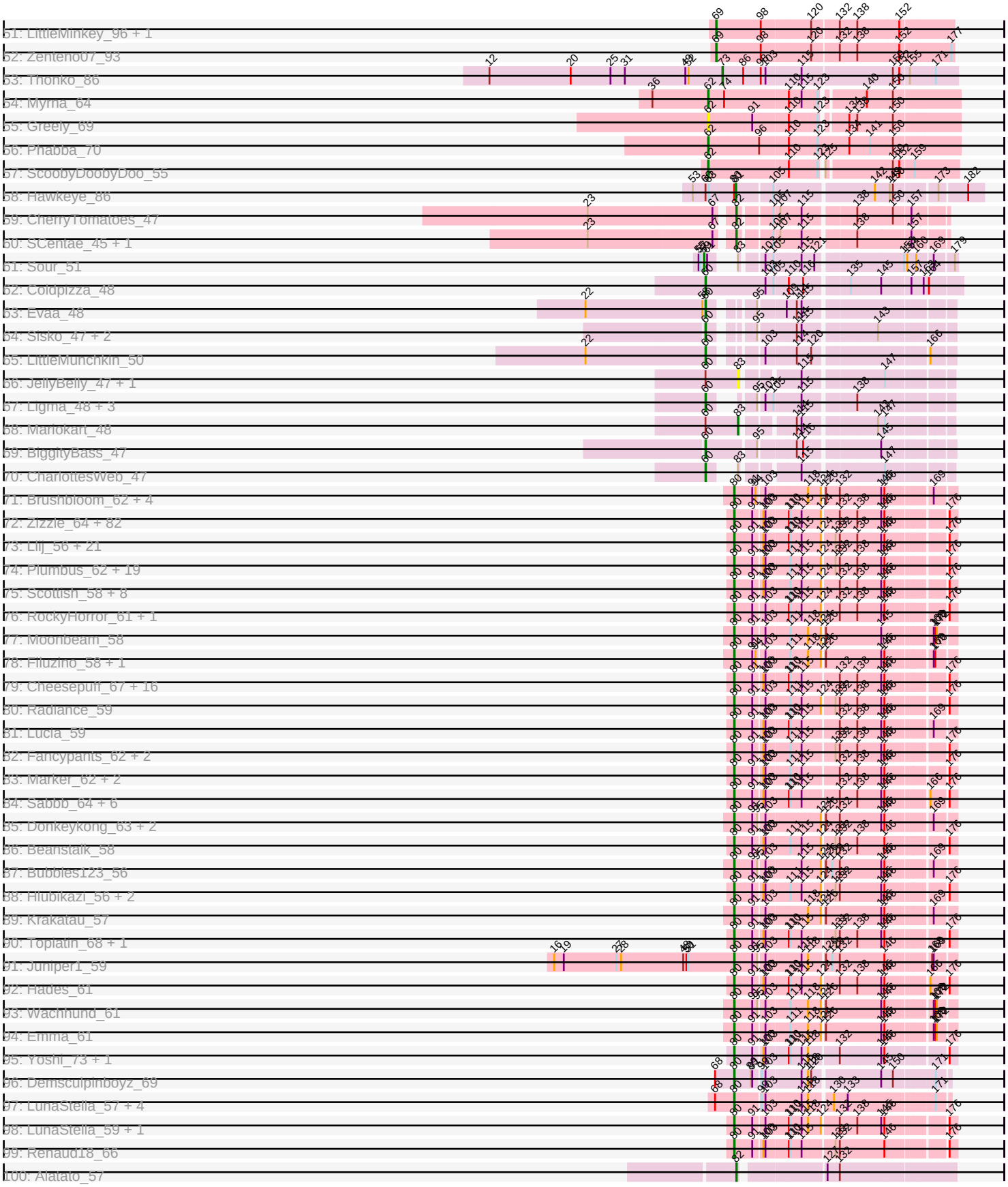
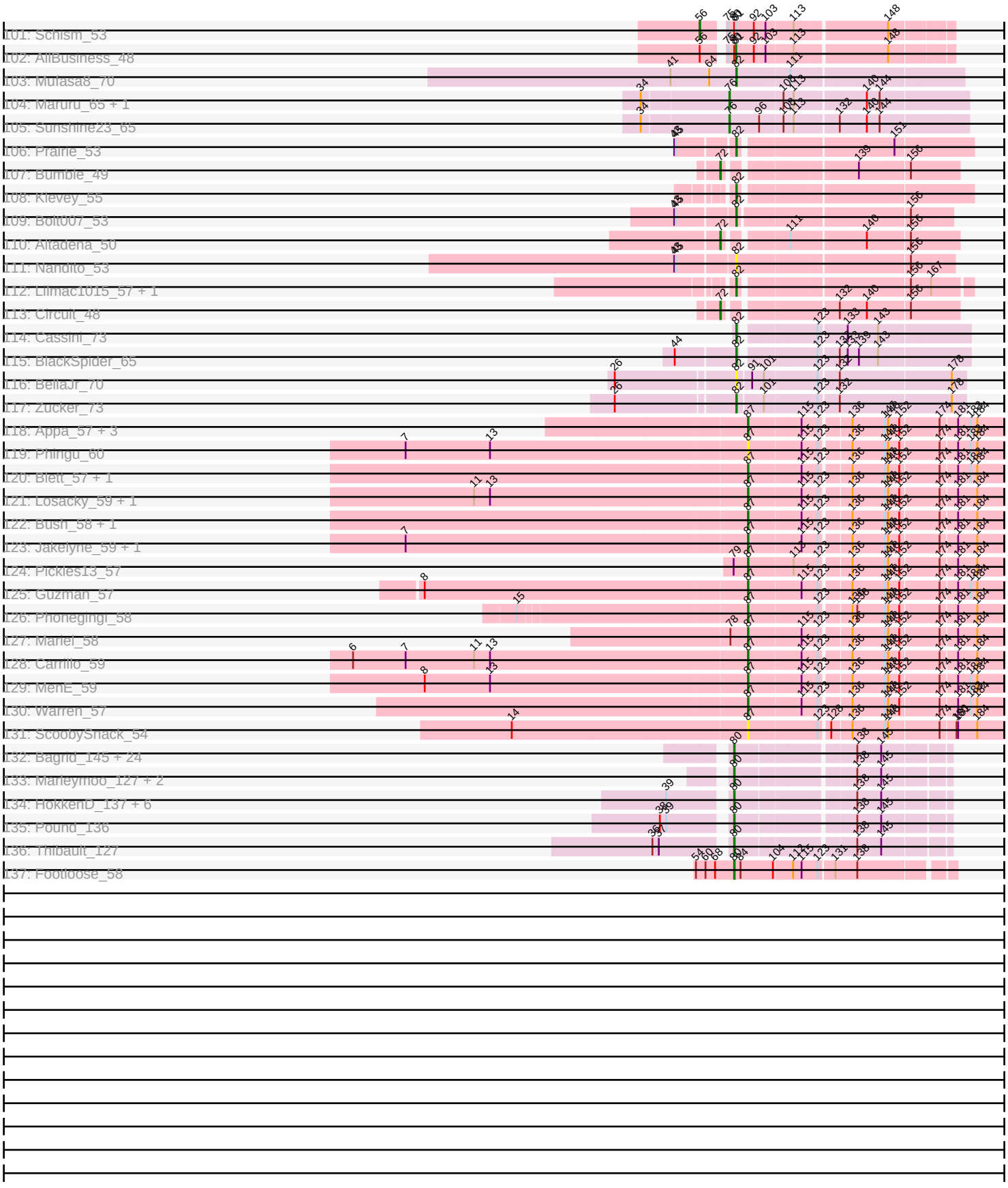
Zoomed Pham 347115



Zoomed Pham 347115



Zoomed Pham 347115



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 347115 Report

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

Pham number 347115 has 392 members, 34 are drafts.

Phages represented in each track:
- Track 1 : Settecandela_165, Phrappuccino_165
- Track 2 : MalagasyRose_65
- Track 3 : Causa_142
- Track 4 : StAugustine_140
- Track 5 : WileyE_31
- Track 6 : Vulpecula_30
- Track 7 : Brynnie_30
- Track 8 : Basilisk_31
- Track 9 : Abidatro_30
- Track 10 : Chickaboom_31
- Track 11 : Ruchi_30
- Track 12 : Bedetta_35, GramZayde_33, Pineda_34
- Track 13 : Damocles_36, Bibble12_33, Colusalem_33, BadWillHunting_35
- Track 14 : Antrice_35
- Track 15 : OtsoOtso_33, Polka_32
- Track 16 : LittleTokyo_33
- Track 17 : Babushka_28, Renna12_30
- Track 18 : Azaz_31, Leona_30
- Track 19 : AlexMinion_31
- Track 20 : Andrew_32
- Track 21 : Raphaella_77, Kabloowy_75, AdaS_72, Faja_79, BenchScraper_76, JellyBread_73, CookieBear_75, Mapleville_71, Sporco_79, Hestia_70, YoungHarleezy_76
- Track 22 : CosmicBrownie_73
- Track 23 : Persistence_70
- Track 24 : SonDevVon_83, Sakai_73, Gorpy_74, MaterMagnus_76, Aikyam_75
- Track 25 : Lasker_76, Crescenzo_79, DarwinJr_80, Hillester_80, BasketStar_76, RadFad_81
- Track 26 : Globfish_76, EvePickles_75, ThayneTheZag_81
- Track 27 : Seahorse_84
- Track 28 : Bhageatrice_80
- Track 29 : Satrap_76
- Track 30 : Shukran_73
- Track 31 : Isolde_74
- Track 32 : GumGum_81
- Track 33 : AbbyDaisy_79
- Track 34 : MUWow_78

• Track 35 : Richie_79
• Track 36 : MurphyJoseph_74
• Track 37 : NewKitty_78
• Track 38 : Ding_70
• Track 39 : MidnightRain_81, SpicyFrank_78
• Track 40 : Anekin_78
• Track 41 : BillyTP_77, Lawnathon_78, Windest_80
• Track 42 : JakeTheSnake_79
• Track 43 : Raqqa_74
• Track 44 : LeBruni_77
• Track 45 : Tiff81_72
• Track 46 : Phrank15_80
• Track 47 : BlueShadow_74
• Track 48 : Auxilium_74
• Track 49 : Sashimi_74
• Track 50 : Indlovu_79
• Track 51 : LittleMinkey_96, Hashim76_90
• Track 52 : Zenteno07_93
• Track 53 : Thonko_86
• Track 54 : Myrna_64
• Track 55 : Greely_69
• Track 56 : Phabba_70
• Track 57 : ScoobyDoobyDoo_55
• Track 58 : Hawkeye_86
• Track 59 : CherryTomatoes_47
• Track 60 : SCentae_45, Pupper_45
• Track 61 : Sour_51
• Track 62 : Coldpizza_48
• Track 63 : Evaa_48
• Track 64 : Sisko_47, AnClar_48, Yago84_47
• Track 65 : LittleMunchkin_50
• Track 66 : JellyBelly_47, Coco2012_47
• Track 67 : Ligma_48, Fresco_48, Axumite_48, Shatter_48
• Track 68 : Mariokart_48
• Track 69 : BiggityBass_47
• Track 70 : CharlottesWeb_47
• Track 71 : Brushbloom_62, MilleniumForce_63, Ramsey_59, Batiatus_58, Aubs_60
• Track 72 : Zizzle_64, Rita_61, DeadP_66, Martik_60, AlpineSix_65, OlympiaSaint_62, Koella_54, Zapner_73, CaptainTrips_57, Maravista_61, Totinger_59, Rockne_61, Eish_64, James_64, Pippy_58, Chuckly_63, SG4_57, LastJedi_54, Dorothy_58, Crumble_55, PhlipPhlop_60, Seabastian_65, Taj_64, Jinglebell_65, Ochi17_63, Wee_64, Jabbawokkie_74, GUmbie_58, Lizziana_66, Soul22_66, Priscilla_60, Whouxphf_57, Zerg_60, VRedHorse_60, Dante_61, Yorick_59, Nichirin_66, PMC_57, Peridot_58, Modragons_64, Blarby_72, Boomer_65, Mattes_64, Firehouse51_61, IbOuu_59, Inventum_55, OwlsT2W_60, Slim_61, Starcevich_60, ShowerHandel_63, SiSi_58, Burwell21_58, EmiMonkey_58, Hegedechwinu_60, Pollywog_61, Saal_62, Alexphander_64, PatoPoderoso_57, DaWorst_61, Karhdo_57, KingJulian_60, SwagPigglett_65, Sassafras_58, OfUltron_65, Oksu_66, Eradicator_53, BuzzLyseyear_66, Llama_65, MinionDave_59, Emmaloid_61, FreddyB_61, Mutaforma13_64, Brocalys_55, BobaPhett_64, Enby_61, ShiLan_59, NormanBulbieJr_60, Clifton_55, Cabrinians_61, Gorge_64, LittleShirley_59, Polka14_58, Corium_57

• Track 73 : Llij_56, Phatniss_58, MulchExplorer_63, Lorde_60, Job42_62, UncleRicky_59, Nivrat_56, Avani_68, Drago_58, QuickMath_62, Kimberlium_63, Jarcob_60, Mwanjiwa_66, DirtMcgirt_59, Estave1_63, LilMoolah_58, DRBy19_63, Kersh_62, Veteran_57, Jennelsea_58, Philus_63, Rialto_66
• Track 74 : Plumbus_62, Daenerys_54, ByChance_52, Pacc40_54, KingMidas_59, BodEinwohner17_60, Vivum_61, Leozinho_59, DosHalletts_62, Tootsieroll_61, Leperchaun_52, Doomphist_60, JoeyJr_55, Poenanya_60, PHappiness_55, DaddyRickover_59, Empress_58, Violac_62, Spoonbill_57, RitaG_55
• Track 75 : Scottish_58, EleanorGeorge_61, Blexus_58, ShroomBoi_62, Mova_61, KristaRAM_63, Gandalph_63, MadMen_58, Madiba_58
• Track 76 : RockyHorror_61, Doug_62
• Track 77 : Moonbeam_58
• Track 78 : Filuzino_58, XFactor_58
• Track 79 : Cheesepuff_67, Mozy_69, Doomslug_69, LunaBlu_62, GigiOuiOui_56, Grimmer_67, Girr_58, Ruby_56, IrishSherpFalk_61, NewHope4_61, Mahavrat_58, WillSterrel_61, Latretium_62, Cornie_56, Spartacus_62, MisterCuddles_58, Galactic_59
• Track 80 : Radiance_59
• Track 81 : Lucia_59
• Track 82 : Fancypants_62, BlueCrab_60, Byougenkin_58
• Track 83 : Marker_62, Spikelee_67, OldBen_57
• Track 84 : Sabbb_64, SimranZ1_60, DillTech15_57, Phasih_58, Fastidio_60, Ibhubesi_60, Demsculpinboyz_71
• Track 85 : Donkeykong_63, Squirty_62, Shauna1_58
• Track 86 : Beanstalk_58
• Track 87 : Bubbles123_56
• Track 88 : Hlubikazi_56, Mandlovu_56, Strokeseat_56
• Track 89 : Krakatau_57
• Track 90 : Topiatin_68, Cornucopia_62
• Track 91 : Juniper1_59
• Track 92 : Hades_61
• Track 93 : Wachhund_61
• Track 94 : Emma_61
• Track 95 : Yoshi_73, ThetaBob_65
• Track 96 : Demsculpinboyz_69
• Track 97 : LunaStella_57, Renaud18_64, Yoshi_71, ThetaBob_63, TChen_59
• Track 98 : LunaStella_59, TChen_61
• Track 99 : Renaud18_66
• Track 100 : Alatato_57
• Track 101 : Schism_53
• Track 102 : AllBusiness_48
• Track 103 : Mufasa8_70
• Track 104 : Maruru_65, Sonali_65
• Track 105 : Sunshine23_65
• Track 106 : Prairie_53
• Track 107 : Bumble_49
• Track 108 : Klevey_55
• Track 109 : Bolt007_53
• Track 110 : Altadena_50
• Track 111 : Nandito_53
• Track 112 : Lilmac1015_57, CalWood4100_57
• Track 113 : Circuit_48
• Track 114 : Cassini_73

• Track 115 : BlackSpider_65
• Track 116 : BellaJr_70
• Track 117 : Zucker_73
• Track 118 : Appa_57, PhillyJawn_58, Winchester007_59, Dropshot_57
• Track 119 : Phingu_60
• Track 120 : Blett_57, NCRodriguez_59
• Track 121 : Losacky_59, Antuna_59
• Track 122 : Bush_58, CookieDog_57
• Track 123 : Jakelyne_59, Violeta_59
• Track 124 : Pickles13_57
• Track 125 : Guzman_57
• Track 126 : Phonegingi_58
• Track 127 : Mariel_58
• Track 128 : Carrillo_59
• Track 129 : MenE_59
• Track 130 : Warren_57
• Track 131 : ScoobySnack_54
• Track 132 : Bagrid_145, Dove_130, NihilNomen_146, Halley_146, Minerva_144, JuicyJay_140, Optimus_135, Wanda_144, Odette_148, DmpstrDiver_145, Ejimix_137, Klein_142, Zelink_139, Kalah2_135, BAKA_144, EricMillard_136, Hughesyang_143, Constella_138, Schatzie_140, Duke13_140, ThreeRngTarjay_139, Dallas_145, Beem_146, Phoebus_144, Bombitas_132
• Track 133 : Marleymoo_127, Bobby_134, Hidrated_128
• Track 134 : HokkenD_137, Porcelain_140, Yeet_138, MiaZeal_143, Redno2_139, Lucky2013_136, KashFlow_143
• Track 135 : Pound_136
• Track 136 : Thibault_127
• Track 137 : Footloose_58

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

The start number called the most often in the published annotations is 80, it was called in 230 of the 358 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alexphander_64, AlpineSix_65, Aubs_60, Avani_68, BAKA_144, Bagrid_145, Batiatus_58, Beanstalk_58, Beem_146, Blarby_72, Blexus_58, BlueCrab_60, BobaPhett_64, Bobby_134, BodEinwohner17_60, Bombitas_132, Boomer_65, Brocalys_55, Brushbloom_62, Bubbles123_56, Burwell21_58, BuzzLyseyear_66, ByChance_52, Byougenkin_58, Cabrinians_61, CaptainTrips_57, Cheesepuff_67, Chuckly_63, Clifton_55, Constella_138, Corium_57, Cornie_56, Cornucopia_62, Crumble_55, DRBy19_63, DaWorst_61, DaddyRickover_59, Daenerys_54, Dallas_145, Dante_61, DeadP_66, Demsculpinboyz_69, Demsculpinboyz_71, DillTech15_57, DirtMcgirt_59, DmpstrDiver_145, Donkeykong_63, Doomphist_60, Doomslug_69, Dorothy_58, DosHalletts_62, Doug_62, Dove_130, Drago_58, Duke13_140, Eish_64, Ejimix_137, EleanorGeorge_61, EmiMonkey_58, Emma_61, Emmaloid_61, Empress_58, Enby_61, Eradicator_53, EricMillard_136, Estave1_63, Fancypants_62, Fastidio_60, Filuzino_58, Firehouse51_61, Footloose_58, FreddyB_61, GUmbie_58, Galactic_59, Gandalph_63, GigiOuiOui_56, Girr_58, Gorge_64, Grimmer_67, Hades_61, Halley_146, Hegedechwinu_60, Hidrated_128,

Hlubikazi_56, HokkenD_137, Hughesyang_143, IbOuu_59, Ibhubesi_60, Inventum_55, IrishSherpFalk_61, Jabbawokkie_74, James_64, Jarcob_60, Jennelsea_58, Jinglebell_65, Job42_62, JoeyJr_55, JuicyJay_140, Juniper1_59, Kalah2_135, Karhdo_57, KashFlow_143, Kersh_62, Kimberlium_63, KingJulian_60, KingMidas_59, Klein_142, Koella_54, Krakatau_57, KristaRAM_63, LastJedi_54, Latretium_62, Leozinho_59, Leperchaun_52, LilMoolah_58, LittleShirley_59, Lizziana_66, Llama_65, Llij_56, Lorde_60, Lucia_59, Lucky2013_136, LunaBlu_62, LunaStella_57, LunaStella_59, MadMen_58, Madiba_58, Mahavrat_58, Mandlovu_56, Maravista_61, Marker_62, Marleymoo_127, Martik_60, Mattes_64, MiaZeal_143, MilleniumForce_63, Minerva_144, MinionDave_59, MisterCuddles_58, Modragons_64, Moonbeam_58, Mova_61, Mozy_69, MulchExplorer_63, Mutaforma13_64, Mwanjiwa_66, NewHope4_61, Nichirin_66, NihilNomen_146, Nivrat_56, NormanBulbieJr_60, Ochi17_63, Odette_148, OfUltron_65, Oksu_66, OldBen_57, OlympiaSaint_62, Optimus_135, OwlsT2W_60, PHappiness_55, PMC_57, Pacc40_54, PatoPoderoso_57, Peridot_58, Phasih_58, Phatniss_58, Philus_63, PhlipPhlop_60, Phoebus_144, Pippy_58, Plumbus_62, Poenanya_60, Polka14_58, Pollywog_61, Porcelain_140, Pound_136, Priscilla_60, QuickMath_62, Radiance_59, Ramsey_59, Redno2_139, Renaud18_64, Renaud18_66, Rialto_66, RitaG_55, Rita_61, Rockne_61, RockyHorror_61, Ruby_56, SG4_57, Saal_62, Sabbb_64, Sassafras_58, Schatzie_140, Scottish_58, Seabastian_65, Shauna1_58, ShiLan_59, ShowerHandel_63, ShroomBoi_62, SiSi_58, SimranZ1_60, Slim_61, Soul22_66, Spartacus_62, Spikelee_67, Spoonbill_57, Squirty_62, Starcevich_60, Strokeseat_56, SwagPigglett_65, TChen_59, TChen_61, Taj_64, ThetaBob_63, ThetaBob_65, Thibault_127, ThreeRngTarjay_139, Tootsieroll_61, Topiatin_68, Totinger_59, UncleRicky_59, VRedHorse_60, Veteran_57, Violac_62, Vivum_61, Wachhund_61, Wanda_144, Wee_64, Whouxphf_57, WillSterrel_61, XFactor_58, Yeet_138, Yorick_59, Yoshi_71, Yoshi_73, Zapner_73, Zelink_139, Zerg_60, Zizzle_64,

Genes that have the "Most Annotated" start but do not call it:
• AllBusiness_48, Hawkeye_86, Schism_53,

Genes that do not have the "Most Annotated" start:
• AbbyDaisy_79, Abidatro_30, AdaS_72, Aikyam_75, Alatato_57, AlexMinion_31, Altadena_50, AnClar_48, Andrew_32, Anekin_78, Antrice_35, Antuna_59, Appa_57, Auxilium_74, Axumite_48, Azaz_31, Babushka_28, BadWillHunting_35, Basilisk_31, BasketStar_76, Bedetta_35, BellaJr_70, BenchScraper_76, Bhageatrice_80, Bibble12_33, BiggityBass_47, BillyTP_77, BlackSpider_65, Blett_57, BlueShadow_74, Bolt007_53, Brynnie_30, Bumble_49, Bush_58, CalWood4100_57, Carrillo_59, Cassini_73, Causa_142, CharlottesWeb_47, CherryTomatoes_47, Chickaboom_31, Circuit_48, Coco2012_47, Coldpizza_48, Colusalem_33, CookieBear_75, CookieDog_57, CosmicBrownie_73, Crescenzo_79, Damocles_36, DarwinJr_80, Ding_70, Dropshot_57, Evaa_48, EvePickles_75, Faja_79, Fresco_48, Globfish_76, Gorpy_74, GramZayde_33, Greely_69, GumGum_81, Guzman_57, Hashim76_90, Hestia_70, Hillester_80, Indlovu_79, Isolde_74, JakeTheSnake_79, Jakelyne_59, JellyBelly_47, JellyBread_73, Kabloowy_75, Klevey_55, Lasker_76, Lawnathon_78, LeBruni_77, Leona_30, Ligma_48, Lilmac1015_57, LittleMinkey_96, LittleMunchkin_50, LittleTokyo_33, Losacky_59, MUWow_78, MalagasyRose_65, Mapleville_71, Mariel_58, Mariokart_48, Maruru_65, MaterMagnus_76, MenE_59, MidnightRain_81, Mufasa8_70, MurphyJoseph_74, Myrna_64, NCRodriguez_59, Nandito_53, NewKitty_78, OtsoOtso_33, Persistence_70, Phabba_70, PhillyJawn_58, Phingu_60, Phonegingi_58, Phrank15_80, Phrappuccino_165, Pickles13_57, Pineda_34, Polka_32, Prairie_53, Pupper_45, RadFad_81,

Raphaella_77, Raqqa_74, Renna12_30, Richie_79, Ruchi_30, SCentae_45, Sakai_73, Sashimi_74, Satrap_76, ScoobyDoobyDoo_55, ScoobySnack_54, Seahorse_84, Settecandela_165, Shatter_48, Shukran_73, Sisko_47, SonDevVon_83, Sonali_65, Sour_51, SpicyFrank_78, Sporco_79, StAugustine_140, Sunshine23_65, ThayneTheZag_81, Thonko_86, Tiff81_72, Violeta_59, Vulpecula_30, Warren_57, WileyE_31, Winchester007_59, Windest_80, Yago84_47, YoungHarleezy_76, Zenteno07_93, Zucker_73,

Summary by start number:

Start 56:
• Found in 2 of 392 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Schism_53 (FF),

Start 59:
• Found in 1 of 392 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sour_51 (DR),

Start 60:
• Found in 17 of 392 (4.3%) of genes in pham
• Manual Annotations of this start: 12 of 358
• Called 70.6% of time when present
• Phage (with cluster) where this start called: AnClar_48 (DR), Axumite_48 (DR), BiggityBass_47 (DR), CharlottesWeb_47 (DR), Coldpizza_48 (DR), Evaa_48 (DR), Fresco_48 (DR), Ligma_48 (DR), LittleMunchkin_50 (DR), Shatter_48 (DR), Sisko_47 (DR), Yago84_47 (DR),

Start 62:
• Found in 4 of 392 (1.0%) of genes in pham
• Manual Annotations of this start: 3 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Greely_69 (C2), Myrna_64 (C2), Phabba_70 (C2), ScoobyDoobyDoo_55 (C2),

Start 69:
• Found in 3 of 392 (0.8%) of genes in pham
• Manual Annotations of this start: 2 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hashim76_90 (B13), LittleMinkey_96 (B13), Zenteno07_93 (B13),

Start 70:
• Found in 1 of 392 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antrice_35 (AS2),

Start 72:
• Found in 3 of 392 (0.8%) of genes in pham

• Manual Annotations of this start: 3 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altadena_50 (FH), Bumble_49 (FH), Circuit_48 (FH),

Start 73:
• Found in 1 of 392 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Thonko_86 (B8),

Start 76:
• Found in 3 of 392 (0.8%) of genes in pham
• Manual Annotations of this start: 3 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Maruru_65 (FG), Sonali_65 (FG), Sunshine23_65 (FG),

Start 79:
• Found in 24 of 392 (6.1%) of genes in pham
• Manual Annotations of this start: 17 of 358
• Called 91.7% of time when present
• Phage (with cluster) where this start called: Abidatro_30 (AS1), AlexMinion_31 (AS3), Andrew_32 (AS3), Azaz_31 (AS3), Babushka_28 (AS3), BadWillHunting_35 (AS2), Basilisk_31 (AS1), Bedetta_35 (AS2), Bibble12_33 (AS2), Brynnie_30 (AS1), Colusalem_33 (AS2), Damocles_36 (AS2), GramZayde_33 (AS2), Leona_30 (AS3), LittleTokyo_33 (AS2), OtsoOtso_33 (AS2), Pineda_34 (AS2), Polka_32 (AS2), Renna12_30 (AS3), Ruchi_30 (AS1), Vulpecula_30 (AS1), WileyE_31 (AS1),

Start 80:
• Found in 243 of 392 (62.0%) of genes in pham
• Manual Annotations of this start: 230 of 358
• Called 98.8% of time when present
• Phage (with cluster) where this start called: Alexphander_64 (F1), AlpineSix_65 (F1), Aubs_60 (F1), Avani_68 (F2), BAKA_144 (J), Bagrid_145 (J), Batiatus_58 (F1), Beanstalk_58 (F1), Beem_146 (J), Blarby_72 (F), Blexus_58 (F1), BlueCrab_60 (F1), BobaPhett_64 (F1), Bobby_134 (J), BodEinwohner17_60 (F1), Bombitas_132 (J), Boomer_65 (F1), Brocalys_55 (F1), Brushbloom_62 (F1), Bubbles123_56 (F1), Burwell21_58 (F1), BuzzLyseyear_66 (F1), ByChance_52 (F1), Byougenkin_58 (F1), Cabrinians_61 (F1), CaptainTrips_57 (F1), Cheesepuff_67 (F1), Chuckly_63 (F1), Clifton_55 (F1), Constella_138 (J), Corium_57 (F1), Cornie_56 (F5), Cornucopia_62 (F1), Crumble_55 (F1), DRBy19_63 (F1), DaWorst_61 (F1), DaddyRickover_59 (F1), Daenerys_54 (F1), Dallas_145 (J), Dante_61 (F1), DeadP_66 (F1), Demsculpinboyz_69 (F2), Demsculpinboyz_71 (F2), DillTech15_57 (F1), DirtMcgirt_59 (F1), DmpstrDiver_145 (J), Donkeykong_63 (F1), Doomphist_60 (F1), Doomslug_69 (F), Dorothy_58 (F1), DosHalletts_62 (F1), Doug_62 (F1), Dove_130 (J), Drago_58 (F1), Duke13_140 (J), Eish_64 (F1), Ejimix_137 (J), EleanorGeorge_61 (F1), EmiMonkey_58 (F1), Emma_61 (F1), Emmaloid_61 (F1), Empress_58 (F1), Enby_61 (F1), Eradicator_53 (F1), EricMillard_136 (J), Estave1_63 (F1), Fancypants_62 (F1), Fastidio_60 (F1), Filuzino_58 (F1), Firehouse51_61 (F1), Footloose_58 (singleton), FreddyB_61 (F1), GUmbie_58 (F1), Galactic_59 (F1), Gandalph_63 (F1), GigiOuiOui_56 (F1), Girr_58 (F1), Gorge_64 (F1), Grimmer_67 (F1), Hades_61 (F1), Halley_146 (J), Hegedechwinu_60 (F1), Hidrated_128 (J),

Hlubikazi_56 (F1), HokkenD_137 (J), Hughesyang_143 (J), IbOuu_59 (F1), Ibhubesi_60 (F1), Inventum_55 (F1), IrishSherpFalk_61 (F1), Jabbawokkie_74 (F2), James_64 (F1), Jarcob_60 (F1), Jennelsea_58 (F1), Jinglebell_65 (F1), Job42_62 (F1), JoeyJr_55 (F1), JuicyJay_140 (J), Juniper1_59 (F1), Kalah2_135 (J), Karhdo_57 (F1), KashFlow_143 (J), Kersh_62 (F1), Kimberlium_63 (F1), KingJulian_60 (F1), KingMidas_59 (F1), Klein_142 (J), Koella_54 (F1), Krakatau_57 (F1), KristaRAM_63 (F1), LastJedi_54 (F1), Latretium_62 (F1), Leozinho_59 (F1), Leperchaun_52 (F1), LilMoolah_58 (F1), LittleShirley_59 (F1), Lizziana_66 (F1), Llama_65 (F1), Llij_56 (F1), Lorde_60 (F1), Lucia_59 (F1), Lucky2013_136 (J), LunaBlu_62 (F1), LunaStella_57 (F4), LunaStella_59 (F4), MadMen_58 (F1), Madiba_58 (F1), Mahavrat_58 (F1), Mandlovu_56 (F1), Maravista_61 (F1), Marker_62 (F1), Marleymoo_127 (J), Martik_60 (F1), Mattes_64 (F1), MiaZeal_143 (J), MilleniumForce_63 (F1), Minerva_144 (J), MinionDave_59 (F1), MisterCuddles_58 (F1), Modragons_64 (F1), Moonbeam_58 (F1), Mova_61 (F1), Mozy_69 (F1), MulchExplorer_63 (F1), Mutaforma13_64 (F1), Mwanjiwa_66 (F1), NewHope4_61 (F1), Nichirin_66 (F1), NihilNomen_146 (J), Nivrat_56 (F1), NormanBulbieJr_60 (F1), Ochi17_63 (F1), Odette_148 (J), OfUltron_65 (F1), Oksu_66 (F1), OldBen_57 (F1), OlympiaSaint_62 (F1), Optimus_135 (J), OwlsT2W_60 (F1), PHappiness_55 (F1), PMC_57 (F1), Pacc40_54 (F1), PatoPoderoso_57 (F1), Peridot_58 (F1), Phasih_58 (F1), Phatniss_58 (F1), Philus_63 (F1), PhlipPhlop_60 (F1), Phoebus_144 (J), Pippy_58 (F1), Plumbus_62 (F1), Poenanya_60 (F1), Polka14_58 (F1), Pollywog_61 (F1), Porcelain_140 (J), Pound_136 (J), Priscilla_60 (F1), QuickMath_62 (F1), Radiance_59 (F1), Ramsey_59 (F1), Redno2_139 (J), Renaud18_64 (F4), Renaud18_66 (F4), Rialto_66 (F1), RitaG_55 (F1), Rita_61 (F1), Rockne_61 (F1), RockyHorror_61 (F1), Ruby_56 (F1), SG4_57 (F1), Saal_62 (F1), Sabbb_64 (F1), Sassafras_58 (F1), Schatzie_140 (J), Scottish_58 (F1), Seabastian_65 (F1), Shauna1_58 (F1), ShiLan_59 (F1), ShowerHandel_63 (F1), ShroomBoi_62 (F1), SiSi_58 (F1), SimranZ1_60 (F1), Slim_61 (F1), Soul22_66 (F2), Spartacus_62 (F1), Spikelee_67 (F1), Spoonbill_57 (F1), Squirty_62 (F3), Starcevich_60 (F1), Strokeseat_56 (F1), SwagPigglett_65 (F1), TChen_59 (F4), TChen_61 (F4), Taj_64 (F1), ThetaBob_63 (F4), ThetaBob_65 (F4), Thibault_127 (J), ThreeRngTarjay_139 (J), Tootsieroll_61 (F1), Topiatin_68 (F1), Totinger_59 (F1), UncleRicky_59 (F1), VRedHorse_60 (F1), Veteran_57 (F1), Violac_62 (F1), Vivum_61 (F1), Wachhund_61 (F1), Wanda_144 (J), Wee_64 (F1), Whouxphf_57 (F1), WillSterrel_61 (F1), XFactor_58 (F1), Yeet_138 (J), Yorick_59 (F1), Yoshi_71 (F2), Yoshi_73 (F2), Zapner_73 (F2), Zelink_139 (J), Zerg_60 (F1), Zizzle_64 (F1),

Start 81:
• Found in 5 of 392 (1.3%) of genes in pham
• Manual Annotations of this start: 4 of 358
• Called 80.0% of time when present
• Phage (with cluster) where this start called: AllBusiness_48 (FF), Causa_142 (AI), Hawkeye_86 (D2), StAugustine_140 (AI),

Start 82:
• Found in 68 of 392 (17.3%) of genes in pham
• Manual Annotations of this start: 57 of 358
• Called 98.5% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_79 (AY), AdaS_72 (AY), Aikyam_75 (AY), Alatato_57 (FB), Anekin_78 (AY), Auxilium_74 (AY), BasketStar_76 (AY), BellaJr_70 (FN), BenchScraper_76 (AY), Bhageatrice_80 (AY), BillyTP_77 (AY), BlackSpider_65 (FN), BlueShadow_74 (AY), Bolt007_53 (FH),

CalWood4100_57 (FH), Cassini_73 (FN), CherryTomatoes_47 (DO), CookieBear_75 (AY), CosmicBrownie_73 (AY), Crescenzo_79 (AY), DarwinJr_80 (AY), Ding_70 (AY), EvePickles_75 (AY), Faja_79 (AY), Globfish_76 (AY), Gorpy_74 (AY), GumGum_81 (AY), Hestia_70 (AY), Hillester_80 (AY), Isolde_74 (AY), JakeTheSnake_79 (AY), JellyBread_73 (AY), Kabloowy_75 (AY), Klevey_55 (FH), Lasker_76 (AY), Lawnathon_78 (AY), LeBruni_77 (AY), Lilmac1015_57 (FH), MUWow_78 (AY), Mapleville_71 (AY), MaterMagnus_76 (AY), MidnightRain_81 (AY), Mufasa8_70 (FG), MurphyJoseph_74 (AY), Nandito_53 (FH), NewKitty_78 (AY), Persistence_70 (AY), Phrank15_80 (AY), Prairie_53 (FH), Pupper_45 (DO), RadFad_81 (AY), Raphaella_77 (AY), Richie_79 (AY), SCentae_45 (DO), Sakai_73 (AY), Sashimi_74 (AY), Satrap_76 (AY), Seahorse_84 (AY), Shukran_73 (AY), SonDevVon_83 (AY), SpicyFrank_78 (AY), Sporco_79 (AY), ThayneTheZag_81 (AY), Tiff81_72 (AY), Windest_80 (AY), YoungHarleezy_76 (AY), Zucker_73 (FN),

Start 83:
• Found in 5 of 392 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Coco2012_47 (DR), JellyBelly_47 (DR), Mariokart_48 (DR),

Start 84:
• Found in 5 of 392 (1.3%) of genes in pham
• Manual Annotations of this start: 2 of 358
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Phrappuccino_165 (AA), Settecandela_165 (AA),

Start 85:
• Found in 1 of 392 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MalagasyRose_65 (AG),

Start 87:
• Found in 22 of 392 (5.6%) of genes in pham
• Manual Annotations of this start: 18 of 358
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antuna_59 (GA), Appa_57 (GA), Blett_57 (GA), Bush_58 (GA), Carrillo_59 (GA), CookieDog_57 (GA), Dropshot_57 (GA), Guzman_57 (GA), Indlovu_79 (B11), Jakelyne_59 (GA), Losacky_59 (GA), Mariel_58 (GA), MenE_59 (GA), NCRodriguez_59 (GA), PhillyJawn_58 (GA), Phingu_60 (GA), Phonegingi_58 (GA), Pickles13_57 (GA), ScoobySnack_54 (GA), Violeta_59 (GA), Warren_57 (GA), Winchester007_59 (GA),

Start 90:
• Found in 7 of 392 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 358
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Chickaboom_31 (AS1),

Start 91:
• Found in 201 of 392 (51.3%) of genes in pham

• No Manual Annotations of this start.
• Called 0.5% of time when present
• Phage (with cluster) where this start called: Raqqa_74 (AY),

Summary by clusters:

There are 28 clusters represented in this pham: AA, singleton, DO, FG, FB, B13, FF, B11, FH, DR, FN, C2, AS3, AS2, AS1, AG, F, AI, J, GA, AY, F1, F2, F3, F4, F5, B8, D2,

Info for manual annotations of cluster AA:
•Start number 84 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:
•Start number 85 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AI:
•Start number 81 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster AS1:
•Start number 79 was manually annotated 6 times for cluster AS1.
•Start number 90 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 70 was manually annotated 1 time for cluster AS2.
•Start number 79 was manually annotated 5 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 79 was manually annotated 6 times for cluster AS3.

Info for manual annotations of cluster AY:
•Start number 82 was manually annotated 45 times for cluster AY.

Info for manual annotations of cluster B11:
•Start number 87 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B13:
•Start number 69 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B8:
•Start number 73 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster C2:
•Start number 62 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster D2:
•Start number 81 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DO:
•Start number 82 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DR:
•Start number 59 was manually annotated 1 time for cluster DR.

•Start number 60 was manually annotated 12 times for cluster DR.
•Start number 83 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster F1:
•Start number 80 was manually annotated 177 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 80 was manually annotated 8 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 80 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 80 was manually annotated 8 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 80 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FB:
•Start number 82 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FF:
•Start number 56 was manually annotated 1 time for cluster FF.
•Start number 81 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FG:
•Start number 76 was manually annotated 3 times for cluster FG.
•Start number 82 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FH:
•Start number 72 was manually annotated 3 times for cluster FH.
•Start number 82 was manually annotated 4 times for cluster FH.

Info for manual annotations of cluster FN:
•Start number 82 was manually annotated 3 times for cluster FN.

Info for manual annotations of cluster GA:
•Start number 87 was manually annotated 17 times for cluster GA.

Info for manual annotations of cluster J:
•Start number 80 was manually annotated 34 times for cluster J.

Gene Information:

Gene: AbbyDaisy_79 Start: 44094, Stop: 44489, Start Num: 82
Candidate Starts for AbbyDaisy_79:
(Start: 82 @44094 has 57 MA's), (91, 44118), (101, 44139), (132, 44265), (178, 44463),

Gene: Abidatro_30 Start: 21728, Stop: 21387, Start Num: 79
Candidate Starts for Abidatro_30:

(Start: 79 @21728 has 17 MA's), (Start: 90 @21707 has 1 MA's), (142, 21497), (167, 21401),

Gene: AdaS_72 Start: 39804, Stop: 40205, Start Num: 82
Candidate Starts for AdaS_72:
(Start: 82 @39804 has 57 MA's), (132, 39972), (143, 40041),

Gene: Aikyam_75 Start: 40510, Stop: 40911, Start Num: 82
Candidate Starts for Aikyam_75:
(24, 40264), (Start: 82 @40510 has 57 MA's), (132, 40678), (143, 40747),

Gene: Alatato_57 Start: 32552, Stop: 32914, Start Num: 82
Candidate Starts for Alatato_57:
(Start: 82 @32552 has 57 MA's), (127, 32687), (132, 32708),

Gene: AlexMinion_31 Start: 21398, Stop: 21057, Start Num: 79
Candidate Starts for AlexMinion_31:
(Start: 79 @21398 has 17 MA's),

Gene: Alexphander_64 Start: 40703, Stop: 41068, Start Num: 80
Candidate Starts for Alexphander_64:
(Start: 80 @40703 has 230 MA's), (91, 40736), (100, 40751), (103, 40754), (110, 40793), (111, 40796), (115, 40817), (124, 40850), (132, 40877), (138, 40910), (145, 40952), (146, 40958), (176, 41054),

Gene: AllBusiness_48 Start: 35021, Stop: 35380, Start Num: 81
Candidate Starts for AllBusiness_48:
(Start: 56 @34973 has 1 MA's), (75, 35006), (Start: 80 @35018 has 230 MA's), (Start: 81 @35021 has 4 MA's), (92, 35054), (103, 35072), (113, 35120), (148, 35279),

Gene: AlpineSix_65 Start: 42816, Stop: 43181, Start Num: 80
Candidate Starts for AlpineSix_65:
(Start: 80 @42816 has 230 MA's), (91, 42849), (100, 42864), (103, 42867), (110, 42906), (111, 42909), (115, 42930), (124, 42963), (132, 42990), (138, 43023), (145, 43065), (146, 43071), (176, 43167),

Gene: Altadena_50 Start: 34978, Stop: 35370, Start Num: 72
Candidate Starts for Altadena_50:
(Start: 72 @34978 has 3 MA's), (111, 35077), (140, 35206), (156, 35281),

Gene: AnClar_48 Start: 43435, Stop: 43061, Start Num: 60
Candidate Starts for AnClar_48:
(Start: 60 @43435 has 12 MA's), (95, 43375), (114, 43312), (115, 43303), (143, 43183),

Gene: Andrew_32 Start: 21174, Stop: 20812, Start Num: 79
Candidate Starts for Andrew_32:
(Start: 79 @21174 has 17 MA's), (113, 21087), (141, 20958), (155, 20892),

Gene: Anekin_78 Start: 43082, Stop: 43483, Start Num: 82
Candidate Starts for Anekin_78:
(24, 42836), (Start: 82 @43082 has 57 MA's), (132, 43250), (143, 43319),

Gene: Antrice_35 Start: 22982, Stop: 22596, Start Num: 70
Candidate Starts for Antrice_35:
(Start: 70 @22982 has 1 MA's), (123, 22820), (133, 22775), (136, 22766), (165, 22634),

Gene: Antuna_59 Start: 34183, Stop: 34620, Start Num: 87
Candidate Starts for Antuna_59:
(11, 33676), (13, 33706), (Start: 87 @34183 has 18 MA's), (115, 34279), (123, 34306), (136, 34354), (147, 34411), (148, 34417), (152, 34438), (174, 34504), (181, 34534), (184, 34570),

Gene: Appa_57 Start: 33948, Stop: 34385, Start Num: 87
Candidate Starts for Appa_57:
(Start: 87 @33948 has 18 MA's), (115, 34044), (123, 34071), (136, 34119), (147, 34176), (148, 34182), (152, 34203), (174, 34269), (181, 34299), (183, 34323), (184, 34335),

Gene: Aubs_60 Start: 40637, Stop: 41002, Start Num: 80
Candidate Starts for Aubs_60:
(Start: 80 @40637 has 230 MA's), (91, 40670), (94, 40676), (103, 40688), (118, 40760), (124, 40784), (126, 40787), (132, 40811), (145, 40886), (146, 40892), (169, 40967),

Gene: Auxilium_74 Start: 40053, Stop: 40418, Start Num: 82
Candidate Starts for Auxilium_74:
(Start: 82 @40053 has 57 MA's), (108, 40116), (115, 40149), (132, 40209), (142, 40272),

Gene: Avani_68 Start: 41015, Stop: 41380, Start Num: 80
Candidate Starts for Avani_68:
(Start: 80 @41015 has 230 MA's), (91, 41048), (100, 41063), (103, 41066), (110, 41105), (111, 41108), (115, 41129), (124, 41162), (131, 41183), (132, 41189), (138, 41222), (145, 41264), (146, 41270), (176, 41366),

Gene: Axumite_48 Start: 41091, Stop: 40741, Start Num: 60
Candidate Starts for Axumite_48:
(Start: 60 @41091 has 12 MA's), (95, 41046), (103, 41037), (105, 41022), (115, 40974), (138, 40893),

Gene: Azaz_31 Start: 21281, Stop: 20940, Start Num: 79
Candidate Starts for Azaz_31:
(Start: 79 @21281 has 17 MA's), (117, 21173), (123, 21152),

Gene: BAKA_144 Start: 76097, Stop: 76450, Start Num: 80
Candidate Starts for BAKA_144:
(Start: 80 @76097 has 230 MA's), (138, 76298), (145, 76340),

Gene: Babushka_28 Start: 21123, Stop: 20782, Start Num: 79
Candidate Starts for Babushka_28:
(Start: 79 @21123 has 17 MA's), (89, 21102),

Gene: BadWillHunting_35 Start: 21856, Stop: 21506, Start Num: 79
Candidate Starts for BadWillHunting_35:
(17, 22180), (32, 22039), (47, 21946), (Start: 79 @21856 has 17 MA's), (167, 21523),

Gene: Bagrid_145 Start: 76792, Stop: 77145, Start Num: 80
Candidate Starts for Bagrid_145:
(Start: 80 @76792 has 230 MA's), (138, 76993), (145, 77035),

Gene: Basilisk_31 Start: 22679, Stop: 22335, Start Num: 79
Candidate Starts for Basilisk_31:
(Start: 79 @22679 has 17 MA's), (Start: 90 @22658 has 1 MA's), (93, 22652), (103, 22634), (113, 22586),

Gene: BasketStar_76 Start: 42848, Stop: 43237, Start Num: 82
Candidate Starts for BasketStar_76:
(1, 41279), (2, 41414), (3, 41525), (4, 41561), (5, 41624), (9, 42302), (16, 42518), (Start: 82 @42848 has 57 MA's), (123, 42971), (132, 43004), (133, 43019), (143, 43073), (167, 43163),

Gene: Batiatus_58 Start: 40347, Stop: 40712, Start Num: 80
Candidate Starts for Batiatus_58:
(Start: 80 @40347 has 230 MA's), (91, 40380), (94, 40386), (103, 40398), (118, 40470), (124, 40494), (126, 40497), (132, 40521), (145, 40596), (146, 40602), (169, 40677),

Gene: Beanstalk_58 Start: 39020, Stop: 39385, Start Num: 80
Candidate Starts for Beanstalk_58:
(Start: 80 @39020 has 230 MA's), (91, 39053), (100, 39068), (103, 39071), (111, 39113), (115, 39134), (124, 39167), (131, 39188), (132, 39194), (138, 39227), (146, 39275), (176, 39371),

Gene: Bedetta_35 Start: 22003, Stop: 21653, Start Num: 79
Candidate Starts for Bedetta_35:
(10, 22510), (17, 22327), (32, 22186), (47, 22093), (Start: 79 @22003 has 17 MA's), (167, 21670),

Gene: Beem_146 Start: 77695, Stop: 78048, Start Num: 80
Candidate Starts for Beem_146:
(Start: 80 @77695 has 230 MA's), (138, 77896), (145, 77938),

Gene: BellaJr_70 Start: 41160, Stop: 41555, Start Num: 82
Candidate Starts for BellaJr_70:
(26, 40953), (Start: 82 @41160 has 57 MA's), (91, 41184), (101, 41205), (123, 41298), (132, 41331), (178, 41529),

Gene: BenchScraper_76 Start: 41215, Stop: 41616, Start Num: 82
Candidate Starts for BenchScraper_76:
(Start: 82 @41215 has 57 MA's), (132, 41383), (143, 41452),

Gene: Bhageatrice_80 Start: 44894, Stop: 45259, Start Num: 82
Candidate Starts for Bhageatrice_80:
(Start: 82 @44894 has 57 MA's), (108, 44957), (115, 44990), (132, 45050), (142, 45113),

Gene: Bibble12_33 Start: 21861, Stop: 21511, Start Num: 79
Candidate Starts for Bibble12_33:
(17, 22185), (32, 22044), (47, 21951), (Start: 79 @21861 has 17 MA's), (167, 21528),

Gene: BiggityBass_47 Start: 42936, Stop: 42535, Start Num: 60
Candidate Starts for BiggityBass_47:
(Start: 60 @42936 has 12 MA's), (95, 42849), (114, 42786), (116, 42774), (145, 42651),

Gene: BillyTP_77 Start: 43046, Stop: 43435, Start Num: 82
Candidate Starts for BillyTP_77:
(Start: 82 @43046 has 57 MA's), (123, 43169), (132, 43202), (133, 43217), (143, 43271),

Gene: BlackSpider_65 Start: 39612, Stop: 40001, Start Num: 82
Candidate Starts for BlackSpider_65:
(44, 39510), (Start: 82 @39612 has 57 MA's), (123, 39735), (132, 39768), (133, 39783), (139, 39804), (143, 39837),

Gene: Blarby_72 Start: 42116, Stop: 42481, Start Num: 80
Candidate Starts for Blarby_72:
(Start: 80 @42116 has 230 MA's), (91, 42149), (100, 42164), (103, 42167), (110, 42206), (111, 42209), (115, 42230), (124, 42263), (132, 42290), (138, 42323), (145, 42365), (146, 42371), (176, 42467),

Gene: Blett_57 Start: 34133, Stop: 34570, Start Num: 87
Candidate Starts for Blett_57:
(Start: 87 @34133 has 18 MA's), (115, 34229), (123, 34256), (136, 34304), (147, 34361), (148, 34367), (152, 34388), (174, 34454), (181, 34484), (183, 34508), (184, 34520),

Gene: Blexus_58 Start: 40670, Stop: 41035, Start Num: 80
Candidate Starts for Blexus_58:
(Start: 80 @40670 has 230 MA's), (91, 40703), (100, 40718), (103, 40721), (111, 40763), (115, 40784), (124, 40817), (132, 40844), (138, 40877), (145, 40919), (146, 40925), (176, 41021),

Gene: BlueCrab_60 Start: 40975, Stop: 41340, Start Num: 80
Candidate Starts for BlueCrab_60:
(Start: 80 @40975 has 230 MA's), (91, 41008), (100, 41023), (103, 41026), (111, 41068), (115, 41089), (131, 41143), (132, 41149), (138, 41182), (145, 41224), (146, 41230), (176, 41326),

Gene: BlueShadow_74 Start: 42358, Stop: 42759, Start Num: 82
Candidate Starts for BlueShadow_74:
(Start: 82 @42358 has 57 MA's), (132, 42526), (143, 42595),

Gene: BobaPhett_64 Start: 42932, Stop: 43297, Start Num: 80
Candidate Starts for BobaPhett_64:
(Start: 80 @42932 has 230 MA's), (91, 42965), (100, 42980), (103, 42983), (110, 43022), (111, 43025), (115, 43046), (124, 43079), (132, 43106), (138, 43139), (145, 43181), (146, 43187), (176, 43283),

Gene: Bobby_134 Start: 77532, Stop: 77885, Start Num: 80
Candidate Starts for Bobby_134:
(Start: 80 @77532 has 230 MA's), (138, 77733), (145, 77775),

Gene: BodEinwohner17_60 Start: 39737, Stop: 40102, Start Num: 80
Candidate Starts for BodEinwohner17_60:
(Start: 80 @39737 has 230 MA's), (91, 39770), (100, 39785), (103, 39788), (111, 39830), (115, 39851), (124, 39884), (131, 39905), (132, 39911), (138, 39944), (145, 39986), (146, 39992), (176, 40088),

Gene: Bolt007_53 Start: 38007, Stop: 38369, Start Num: 82
Candidate Starts for Bolt007_53:
(43, 37902), (45, 37905), (Start: 82 @38007 has 57 MA's), (156, 38295),

Gene: Bombitas_132 Start: 75106, Stop: 75459, Start Num: 80
Candidate Starts for Bombitas_132:
(Start: 80 @75106 has 230 MA's), (138, 75307), (145, 75349),

Gene: Boomer_65 Start: 42607, Stop: 42972, Start Num: 80
Candidate Starts for Boomer_65:
(Start: 80 @42607 has 230 MA's), (91, 42640), (100, 42655), (103, 42658), (110, 42697), (111, 42700), (115, 42721), (124, 42754), (132, 42781), (138, 42814), (145, 42856), (146, 42862), (176, 42958),

Gene: Brocalys_55 Start: 37114, Stop: 37479, Start Num: 80

Candidate Starts for Brocalys_55:
(Start: 80 @37114 has 230 MA's), (91, 37147), (100, 37162), (103, 37165), (110, 37204), (111, 37207), (115, 37228), (124, 37261), (132, 37288), (138, 37321), (145, 37363), (146, 37369), (176, 37465),

Gene: Brushbloom_62 Start: 41279, Stop: 41644, Start Num: 80
Candidate Starts for Brushbloom_62:
(Start: 80 @41279 has 230 MA's), (91, 41312), (94, 41318), (103, 41330), (118, 41402), (124, 41426), (126, 41429), (132, 41453), (145, 41528), (146, 41534), (169, 41609),

Gene: Brynnie_30 Start: 22557, Stop: 22213, Start Num: 79
Candidate Starts for Brynnie_30:
(Start: 79 @22557 has 17 MA's), (Start: 90 @22536 has 1 MA's), (132, 22389), (167, 22230),

Gene: Bubbles123_56 Start: 40256, Stop: 40621, Start Num: 80
Candidate Starts for Bubbles123_56:
(Start: 80 @40256 has 230 MA's), (91, 40289), (95, 40298), (103, 40307), (115, 40370), (124, 40403), (126, 40406), (129, 40418), (132, 40430), (145, 40505), (146, 40511), (169, 40586),

Gene: Bumble_49 Start: 35709, Stop: 36101, Start Num: 72
Candidate Starts for Bumble_49:
(Start: 72 @35709 has 3 MA's), (139, 35925), (156, 36012),

Gene: Burwell21_58 Start: 40215, Stop: 40580, Start Num: 80
Candidate Starts for Burwell21_58:
(Start: 80 @40215 has 230 MA's), (91, 40248), (100, 40263), (103, 40266), (110, 40305), (111, 40308), (115, 40329), (124, 40362), (132, 40389), (138, 40422), (145, 40464), (146, 40470), (176, 40566),

Gene: Bush_58 Start: 34082, Stop: 34519, Start Num: 87
Candidate Starts for Bush_58:
(Start: 87 @34082 has 18 MA's), (115, 34178), (123, 34205), (136, 34253), (147, 34310), (148, 34316), (152, 34337), (174, 34403), (181, 34433), (184, 34469),

Gene: BuzzLyseyear_66 Start: 41636, Stop: 42001, Start Num: 80
Candidate Starts for BuzzLyseyear_66:
(Start: 80 @41636 has 230 MA's), (91, 41669), (100, 41684), (103, 41687), (110, 41726), (111, 41729), (115, 41750), (124, 41783), (132, 41810), (138, 41843), (145, 41885), (146, 41891), (176, 41987),

Gene: ByChance_52 Start: 35903, Stop: 36268, Start Num: 80
Candidate Starts for ByChance_52:
(Start: 80 @35903 has 230 MA's), (91, 35936), (100, 35951), (103, 35954), (111, 35996), (115, 36017), (124, 36050), (131, 36071), (132, 36077), (138, 36110), (145, 36152), (146, 36158), (176, 36254),

Gene: Byougenkin_58 Start: 39979, Stop: 40344, Start Num: 80
Candidate Starts for Byougenkin_58:
(Start: 80 @39979 has 230 MA's), (91, 40012), (100, 40027), (103, 40030), (111, 40072), (115, 40093), (131, 40147), (132, 40153), (138, 40186), (145, 40228), (146, 40234), (176, 40330),

Gene: Cabrinians_61 Start: 40293, Stop: 40658, Start Num: 80
Candidate Starts for Cabrinians_61:
(Start: 80 @40293 has 230 MA's), (91, 40326), (100, 40341), (103, 40344), (110, 40383), (111, 40386), (115, 40407), (124, 40440), (132, 40467), (138, 40500), (145, 40542), (146, 40548), (176, 40644),

Gene: CalWood4100_57 Start: 38014, Stop: 38406, Start Num: 82

Candidate Starts for CalWood4100_57:
(Start: 82 @38014 has 57 MA's), (156, 38299), (167, 38335),

Gene: CaptainTrips_57 Start: 39789, Stop: 40154, Start Num: 80
Candidate Starts for CaptainTrips_57:
(Start: 80 @39789 has 230 MA's), (91, 39822), (100, 39837), (103, 39840), (110, 39879), (111, 39882), (115, 39903), (124, 39936), (132, 39963), (138, 39996), (145, 40038), (146, 40044), (176, 40140),

Gene: Carrillo_59 Start: 34056, Stop: 34493, Start Num: 87
Candidate Starts for Carrillo_59:
(6, 33321), (7, 33420), (11, 33549), (13, 33579), (Start: 87 @34056 has 18 MA's), (115, 34152), (123, 34179), (136, 34227), (147, 34284), (148, 34290), (152, 34311), (174, 34377), (181, 34407), (184, 34443),

Gene: Cassini_73 Start: 42039, Stop: 42428, Start Num: 82
Candidate Starts for Cassini_73:
(Start: 82 @42039 has 57 MA's), (123, 42162), (133, 42210), (143, 42264),

Gene: Causa_142 Start: 83302, Stop: 82940, Start Num: 81
Candidate Starts for Causa_142:
(75, 83317), (Start: 81 @83302 has 4 MA's), (Start: 84 @83293 has 2 MA's), (88, 83278), (108, 83221), (110, 83212),

Gene: CharlottesWeb_47 Start: 40457, Stop: 40119, Start Num: 60
Candidate Starts for CharlottesWeb_47:
(Start: 60 @40457 has 12 MA's), (Start: 83 @40439 has 1 MA's), (115, 40352), (147, 40223),

Gene: Cheesepuff_67 Start: 42252, Stop: 42617, Start Num: 80
Candidate Starts for Cheesepuff_67:
(Start: 80 @42252 has 230 MA's), (91, 42285), (100, 42300), (103, 42303), (110, 42342), (111, 42345), (115, 42366), (132, 42426), (138, 42459), (145, 42501), (146, 42507), (176, 42603),

Gene: CherryTomatoes_47 Start: 15930, Stop: 16262, Start Num: 82
Candidate Starts for CherryTomatoes_47:
(23, 15675), (67, 15903), (Start: 82 @15930 has 57 MA's), (105, 15984), (107, 15993), (115, 16032), (138, 16116), (150, 16179), (157, 16206),

Gene: Chickaboom_31 Start: 21673, Stop: 21350, Start Num: 90
Candidate Starts for Chickaboom_31:
(Start: 79 @21694 has 17 MA's), (Start: 90 @21673 has 1 MA's), (113, 21601), (150, 21430), (167, 21367),

Gene: Chuckly_63 Start: 40935, Stop: 41300, Start Num: 80
Candidate Starts for Chuckly_63:
(Start: 80 @40935 has 230 MA's), (91, 40968), (100, 40983), (103, 40986), (110, 41025), (111, 41028), (115, 41049), (124, 41082), (132, 41109), (138, 41142), (145, 41184), (146, 41190), (176, 41286),

Gene: Circuit_48 Start: 36342, Stop: 36734, Start Num: 72
Candidate Starts for Circuit_48:
(Start: 72 @36342 has 3 MA's), (132, 36522), (140, 36570), (156, 36645),

Gene: Clifton_55 Start: 37465, Stop: 37830, Start Num: 80
Candidate Starts for Clifton_55:

(Start: 80 @37465 has 230 MA's), (91, 37498), (100, 37513), (103, 37516), (110, 37555), (111, 37558), (115, 37579), (124, 37612), (132, 37639), (138, 37672), (145, 37714), (146, 37720), (176, 37816),

Gene: Coco2012_47 Start: 40431, Stop: 40111, Start Num: 83
Candidate Starts for Coco2012_47:
(Start: 60 @40449 has 12 MA's), (Start: 83 @40431 has 1 MA's), (115, 40344), (147, 40215),

Gene: Coldpizza_48 Start: 43898, Stop: 43461, Start Num: 60
Candidate Starts for Coldpizza_48:
(Start: 60 @43898 has 12 MA's), (103, 43787), (105, 43772), (110, 43748), (116, 43721), (135, 43655), (145, 43598), (157, 43550), (163, 43529), (164, 43520),

Gene: Colusalem_33 Start: 21842, Stop: 21492, Start Num: 79
Candidate Starts for Colusalem_33:
(17, 22166), (32, 22025), (47, 21932), (Start: 79 @21842 has 17 MA's), (167, 21509),

Gene: Constella_138 Start: 76348, Stop: 76701, Start Num: 80
Candidate Starts for Constella_138:
(Start: 80 @76348 has 230 MA's), (138, 76549), (145, 76591),

Gene: CookieBear_75 Start: 41689, Stop: 42090, Start Num: 82
Candidate Starts for CookieBear_75:
(Start: 82 @41689 has 57 MA's), (132, 41857), (143, 41926),

Gene: CookieDog_57 Start: 34056, Stop: 34493, Start Num: 87
Candidate Starts for CookieDog_57:
(Start: 87 @34056 has 18 MA's), (115, 34152), (123, 34179), (136, 34227), (147, 34284), (148, 34290), (152, 34311), (174, 34377), (181, 34407), (184, 34443),

Gene: Corium_57 Start: 39332, Stop: 39697, Start Num: 80
Candidate Starts for Corium_57:
(Start: 80 @39332 has 230 MA's), (91, 39365), (100, 39380), (103, 39383), (110, 39422), (111, 39425), (115, 39446), (124, 39479), (132, 39506), (138, 39539), (145, 39581), (146, 39587), (176, 39683),

Gene: Cornie_56 Start: 38714, Stop: 39079, Start Num: 80
Candidate Starts for Cornie_56:
(Start: 80 @38714 has 230 MA's), (91, 38747), (100, 38762), (103, 38765), (110, 38804), (111, 38807), (115, 38828), (132, 38888), (138, 38921), (145, 38963), (146, 38969), (176, 39065),

Gene: Cornucopia_62 Start: 40943, Stop: 41308, Start Num: 80
Candidate Starts for Cornucopia_62:
(Start: 80 @40943 has 230 MA's), (91, 40976), (100, 40991), (103, 40994), (110, 41033), (111, 41036), (115, 41057), (131, 41111), (132, 41117), (138, 41150), (145, 41192), (146, 41198), (176, 41294),

Gene: CosmicBrownie_73 Start: 41072, Stop: 41473, Start Num: 82
Candidate Starts for CosmicBrownie_73:
(26, 40865), (Start: 82 @41072 has 57 MA's), (103, 41117), (138, 41273), (150, 41336),

Gene: Crescenzo_79 Start: 44484, Stop: 44873, Start Num: 82
Candidate Starts for Crescenzo_79:
(1, 42915), (2, 43050), (3, 43161), (4, 43197), (5, 43260), (9, 43938), (16, 44154), (Start: 82 @44484 has 57 MA's), (123, 44607), (132, 44640), (133, 44655), (143, 44709), (167, 44799),

Gene: Crumble_55 Start: 36229, Stop: 36594, Start Num: 80
Candidate Starts for Crumble_55:
(Start: 80 @36229 has 230 MA's), (91, 36262), (100, 36277), (103, 36280), (110, 36319), (111, 36322), (115, 36343), (124, 36376), (132, 36403), (138, 36436), (145, 36478), (146, 36484), (176, 36580),

Gene: DRBy19_63 Start: 41390, Stop: 41755, Start Num: 80
Candidate Starts for DRBy19_63:
(Start: 80 @41390 has 230 MA's), (91, 41423), (100, 41438), (103, 41441), (110, 41480), (111, 41483), (115, 41504), (124, 41537), (131, 41558), (132, 41564), (138, 41597), (145, 41639), (146, 41645), (176, 41741),

Gene: DaWorst_61 Start: 40694, Stop: 41059, Start Num: 80
Candidate Starts for DaWorst_61:
(Start: 80 @40694 has 230 MA's), (91, 40727), (100, 40742), (103, 40745), (110, 40784), (111, 40787), (115, 40808), (124, 40841), (132, 40868), (138, 40901), (145, 40943), (146, 40949), (176, 41045),

Gene: DaddyRickover_59 Start: 40432, Stop: 40797, Start Num: 80
Candidate Starts for DaddyRickover_59:
(Start: 80 @40432 has 230 MA's), (91, 40465), (100, 40480), (103, 40483), (111, 40525), (115, 40546), (124, 40579), (131, 40600), (132, 40606), (138, 40639), (145, 40681), (146, 40687), (176, 40783),

Gene: Daenerys_54 Start: 38542, Stop: 38907, Start Num: 80
Candidate Starts for Daenerys_54:
(Start: 80 @38542 has 230 MA's), (91, 38575), (100, 38590), (103, 38593), (111, 38635), (115, 38656), (124, 38689), (131, 38710), (132, 38716), (138, 38749), (145, 38791), (146, 38797), (176, 38893),

Gene: Dallas_145 Start: 77162, Stop: 77515, Start Num: 80
Candidate Starts for Dallas_145:
(Start: 80 @77162 has 230 MA's), (138, 77363), (145, 77405),

Gene: Damocles_36 Start: 22001, Stop: 21651, Start Num: 79
Candidate Starts for Damocles_36:
(17, 22325), (32, 22184), (47, 22091), (Start: 79 @22001 has 17 MA's), (167, 21668),

Gene: Dante_61 Start: 40217, Stop: 40582, Start Num: 80
Candidate Starts for Dante_61:
(Start: 80 @40217 has 230 MA's), (91, 40250), (100, 40265), (103, 40268), (110, 40307), (111, 40310), (115, 40331), (124, 40364), (132, 40391), (138, 40424), (145, 40466), (146, 40472), (176, 40568),

Gene: DarwinJr_80 Start: 44439, Stop: 44828, Start Num: 82
Candidate Starts for DarwinJr_80:
(1, 42870), (2, 43005), (3, 43116), (4, 43152), (5, 43215), (9, 43893), (16, 44109), (Start: 82 @44439 has 57 MA's), (123, 44562), (132, 44595), (133, 44610), (143, 44664), (167, 44754),

Gene: DeadP_66 Start: 42861, Stop: 43226, Start Num: 80
Candidate Starts for DeadP_66:
(Start: 80 @42861 has 230 MA's), (91, 42894), (100, 42909), (103, 42912), (110, 42951), (111, 42954), (115, 42975), (124, 43008), (132, 43035), (138, 43068), (145, 43110), (146, 43116), (176, 43212),

Gene: Demsculpinboyz_69 Start: 39586, Stop: 39939, Start Num: 80
Candidate Starts for Demsculpinboyz_69:
(68, 39550), (Start: 80 @39586 has 230 MA's), (89, 39616), (91, 39619), (99, 39631), (103, 39637), (115, 39700), (118, 39709), (120, 39715), (145, 39829), (150, 39850), (171, 39919),

Gene: Demsculpinboyz_71 Start: 40214, Stop: 40579, Start Num: 80
Candidate Starts for Demsculpinboyz_71:
(Start: 80 @40214 has 230 MA's), (91, 40247), (100, 40262), (103, 40265), (110, 40304), (111, 40307), (115, 40328), (132, 40388), (138, 40421), (145, 40463), (146, 40469), (166, 40538), (176, 40565),

Gene: DillTech15_57 Start: 38876, Stop: 39241, Start Num: 80
Candidate Starts for DillTech15_57:
(Start: 80 @38876 has 230 MA's), (91, 38909), (100, 38924), (103, 38927), (110, 38966), (111, 38969), (115, 38990), (132, 39050), (138, 39083), (145, 39125), (146, 39131), (166, 39200), (176, 39227),

Gene: Ding_70 Start: 42235, Stop: 42624, Start Num: 82
Candidate Starts for Ding_70:
(16, 41905), (18, 41920), (Start: 82 @42235 has 57 MA's), (103, 42268), (123, 42358), (132, 42391), (138, 42424), (139, 42427), (142, 42454), (143, 42460), (175, 42571),

Gene: DirtMcgirt_59 Start: 38957, Stop: 39322, Start Num: 80
Candidate Starts for DirtMcgirt_59:
(Start: 80 @38957 has 230 MA's), (91, 38990), (100, 39005), (103, 39008), (110, 39047), (111, 39050), (115, 39071), (124, 39104), (131, 39125), (132, 39131), (138, 39164), (145, 39206), (146, 39212), (176, 39308),

Gene: DmpstrDiver_145 Start: 77081, Stop: 77434, Start Num: 80
Candidate Starts for DmpstrDiver_145:
(Start: 80 @77081 has 230 MA's), (138, 77282), (145, 77324),

Gene: Donkeykong_63 Start: 42892, Stop: 43257, Start Num: 80
Candidate Starts for Donkeykong_63:
(Start: 80 @42892 has 230 MA's), (91, 42925), (95, 42934), (103, 42943), (124, 43039), (126, 43042), (132, 43066), (145, 43141), (146, 43147), (169, 43222),

Gene: Doomphist_60 Start: 41387, Stop: 41752, Start Num: 80
Candidate Starts for Doomphist_60:
(Start: 80 @41387 has 230 MA's), (91, 41420), (100, 41435), (103, 41438), (111, 41480), (115, 41501), (124, 41534), (131, 41555), (132, 41561), (138, 41594), (145, 41636), (146, 41642), (176, 41738),

Gene: Doomslug_69 Start: 40807, Stop: 41172, Start Num: 80
Candidate Starts for Doomslug_69:
(Start: 80 @40807 has 230 MA's), (91, 40840), (100, 40855), (103, 40858), (110, 40897), (111, 40900), (115, 40921), (132, 40981), (138, 41014), (145, 41056), (146, 41062), (176, 41158),

Gene: Dorothy_58 Start: 39606, Stop: 39971, Start Num: 80
Candidate Starts for Dorothy_58:
(Start: 80 @39606 has 230 MA's), (91, 39639), (100, 39654), (103, 39657), (110, 39696), (111, 39699), (115, 39720), (124, 39753), (132, 39780), (138, 39813), (145, 39855), (146, 39861), (176, 39957),

Gene: DosHalletts_62 Start: 41742, Stop: 42107, Start Num: 80
Candidate Starts for DosHalletts_62:
(Start: 80 @41742 has 230 MA's), (91, 41775), (100, 41790), (103, 41793), (111, 41835), (115, 41856), (124, 41889), (131, 41910), (132, 41916), (138, 41949), (145, 41991), (146, 41997), (176, 42093),

Gene: Doug_62 Start: 40960, Stop: 41325, Start Num: 80
Candidate Starts for Doug_62:

(Start: 80 @40960 has 230 MA's), (91, 40993), (103, 41011), (110, 41050), (111, 41053), (115, 41074), (124, 41107), (132, 41134), (138, 41167), (145, 41209), (146, 41215), (176, 41311),

Gene: Dove_130 Start: 72680, Stop: 73033, Start Num: 80
Candidate Starts for Dove_130:
(Start: 80 @72680 has 230 MA's), (138, 72881), (145, 72923),

Gene: Drago_58 Start: 38960, Stop: 39325, Start Num: 80
Candidate Starts for Drago_58:
(Start: 80 @38960 has 230 MA's), (91, 38993), (100, 39008), (103, 39011), (110, 39050), (111, 39053), (115, 39074), (124, 39107), (131, 39128), (132, 39134), (138, 39167), (145, 39209), (146, 39215), (176, 39311),

Gene: Dropshot_57 Start: 33783, Stop: 34220, Start Num: 87
Candidate Starts for Dropshot_57:
(Start: 87 @33783 has 18 MA's), (115, 33879), (123, 33906), (136, 33954), (147, 34011), (148, 34017), (152, 34038), (174, 34104), (181, 34134), (183, 34158), (184, 34170),

Gene: Duke13_140 Start: 74382, Stop: 74735, Start Num: 80
Candidate Starts for Duke13_140:
(Start: 80 @74382 has 230 MA's), (138, 74583), (145, 74625),

Gene: Eish_64 Start: 41209, Stop: 41574, Start Num: 80
Candidate Starts for Eish_64:
(Start: 80 @41209 has 230 MA's), (91, 41242), (100, 41257), (103, 41260), (110, 41299), (111, 41302), (115, 41323), (124, 41356), (132, 41383), (138, 41416), (145, 41458), (146, 41464), (176, 41560),

Gene: Ejimix_137 Start: 77230, Stop: 77583, Start Num: 80
Candidate Starts for Ejimix_137:
(Start: 80 @77230 has 230 MA's), (138, 77431), (145, 77473),

Gene: EleanorGeorge_61 Start: 41073, Stop: 41438, Start Num: 80
Candidate Starts for EleanorGeorge_61:
(Start: 80 @41073 has 230 MA's), (91, 41106), (100, 41121), (103, 41124), (111, 41166), (115, 41187), (124, 41220), (132, 41247), (138, 41280), (145, 41322), (146, 41328), (176, 41424),

Gene: EmiMonkey_58 Start: 41923, Stop: 42288, Start Num: 80
Candidate Starts for EmiMonkey_58:
(Start: 80 @41923 has 230 MA's), (91, 41956), (100, 41971), (103, 41974), (110, 42013), (111, 42016), (115, 42037), (124, 42070), (132, 42097), (138, 42130), (145, 42172), (146, 42178), (176, 42274),

Gene: Emma_61 Start: 40009, Stop: 40374, Start Num: 80
Candidate Starts for Emma_61:
(Start: 80 @40009 has 230 MA's), (91, 40042), (103, 40060), (111, 40102), (118, 40132), (124, 40156), (126, 40159), (145, 40258), (146, 40264), (169, 40339), (170, 40342), (172, 40345),

Gene: Emmaloid_61 Start: 41019, Stop: 41384, Start Num: 80
Candidate Starts for Emmaloid_61:
(Start: 80 @41019 has 230 MA's), (91, 41052), (100, 41067), (103, 41070), (110, 41109), (111, 41112), (115, 41133), (124, 41166), (132, 41193), (138, 41226), (145, 41268), (146, 41274), (176, 41370),

Gene: Empress_58 Start: 39956, Stop: 40321, Start Num: 80
Candidate Starts for Empress_58:

(Start: 80 @39956 has 230 MA's), (91, 39989), (100, 40004), (103, 40007), (111, 40049), (115, 40070), (124, 40103), (131, 40124), (132, 40130), (138, 40163), (145, 40205), (146, 40211), (176, 40307),

Gene: Enby_61 Start: 39236, Stop: 39601, Start Num: 80
Candidate Starts for Enby_61:
(Start: 80 @39236 has 230 MA's), (91, 39269), (100, 39284), (103, 39287), (110, 39326), (111, 39329), (115, 39350), (124, 39383), (132, 39410), (138, 39443), (145, 39485), (146, 39491), (176, 39587),

Gene: Eradicator_53 Start: 38486, Stop: 38851, Start Num: 80
Candidate Starts for Eradicator_53:
(Start: 80 @38486 has 230 MA's), (91, 38519), (100, 38534), (103, 38537), (110, 38576), (111, 38579), (115, 38600), (124, 38633), (132, 38660), (138, 38693), (145, 38735), (146, 38741), (176, 38837),

Gene: EricMillard_136 Start: 75734, Stop: 76087, Start Num: 80
Candidate Starts for EricMillard_136:
(Start: 80 @75734 has 230 MA's), (138, 75935), (145, 75977),

Gene: Estave1_63 Start: 41407, Stop: 41772, Start Num: 80
Candidate Starts for Estave1_63:
(Start: 80 @41407 has 230 MA's), (91, 41440), (100, 41455), (103, 41458), (110, 41497), (111, 41500), (115, 41521), (124, 41554), (131, 41575), (132, 41581), (138, 41614), (145, 41656), (146, 41662), (176, 41758),

Gene: Evaa_48 Start: 41735, Stop: 41361, Start Num: 60
Candidate Starts for Evaa_48:
(22, 41960), (58, 41741), (Start: 60 @41735 has 12 MA's), (95, 41675), (109, 41630), (114, 41612), (115, 41603),

Gene: EvePickles_75 Start: 42959, Stop: 43348, Start Num: 82
Candidate Starts for EvePickles_75:
(Start: 82 @42959 has 57 MA's), (123, 43082), (132, 43115), (133, 43130), (143, 43184),

Gene: Faja_79 Start: 43731, Stop: 44132, Start Num: 82
Candidate Starts for Faja_79:
(Start: 82 @43731 has 57 MA's), (132, 43899), (143, 43968),

Gene: Fancypants_62 Start: 40927, Stop: 41292, Start Num: 80
Candidate Starts for Fancypants_62:
(Start: 80 @40927 has 230 MA's), (91, 40960), (100, 40975), (103, 40978), (111, 41020), (115, 41041), (131, 41095), (132, 41101), (138, 41134), (145, 41176), (146, 41182), (176, 41278),

Gene: Fastidio_60 Start: 39023, Stop: 39388, Start Num: 80
Candidate Starts for Fastidio_60:
(Start: 80 @39023 has 230 MA's), (91, 39056), (100, 39071), (103, 39074), (110, 39113), (111, 39116), (115, 39137), (132, 39197), (138, 39230), (145, 39272), (146, 39278), (166, 39347), (176, 39374),

Gene: Filuzino_58 Start: 39299, Stop: 39664, Start Num: 80
Candidate Starts for Filuzino_58:
(Start: 80 @39299 has 230 MA's), (91, 39332), (94, 39338), (103, 39350), (111, 39392), (118, 39422), (124, 39446), (126, 39449), (145, 39548), (146, 39554), (169, 39629), (170, 39632),

Gene: Firehouse51_61 Start: 43811, Stop: 44176, Start Num: 80
Candidate Starts for Firehouse51_61:

(Start: 80 @43811 has 230 MA's), (91, 43844), (100, 43859), (103, 43862), (110, 43901), (111, 43904), (115, 43925), (124, 43958), (132, 43985), (138, 44018), (145, 44060), (146, 44066), (176, 44162),

Gene: Footloose_58 Start: 33452, Stop: 33814, Start Num: 80
Candidate Starts for Footloose_58:
(54, 33380), (Start: 60 @33398 has 12 MA's), (68, 33416), (Start: 80 @33452 has 230 MA's), (Start: 84 @33464 has 2 MA's), (104, 33524), (112, 33557), (115, 33572), (123, 33599), (131, 33623), (138, 33659),

Gene: FreddyB_61 Start: 39138, Stop: 39503, Start Num: 80
Candidate Starts for FreddyB_61:
(Start: 80 @39138 has 230 MA's), (91, 39171), (100, 39186), (103, 39189), (110, 39228), (111, 39231), (115, 39252), (124, 39285), (132, 39312), (138, 39345), (145, 39387), (146, 39393), (176, 39489),

Gene: Fresco_48 Start: 41091, Stop: 40741, Start Num: 60
Candidate Starts for Fresco_48:
(Start: 60 @41091 has 12 MA's), (95, 41046), (103, 41037), (105, 41022), (115, 40974), (138, 40893),

Gene: GUmbie_58 Start: 39713, Stop: 40078, Start Num: 80
Candidate Starts for GUmbie_58:
(Start: 80 @39713 has 230 MA's), (91, 39746), (100, 39761), (103, 39764), (110, 39803), (111, 39806), (115, 39827), (124, 39860), (132, 39887), (138, 39920), (145, 39962), (146, 39968), (176, 40064),

Gene: Galactic_59 Start: 40176, Stop: 40541, Start Num: 80
Candidate Starts for Galactic_59:
(Start: 80 @40176 has 230 MA's), (91, 40209), (100, 40224), (103, 40227), (110, 40266), (111, 40269), (115, 40290), (132, 40350), (138, 40383), (145, 40425), (146, 40431), (176, 40527),

Gene: Gandalph_63 Start: 40535, Stop: 40900, Start Num: 80
Candidate Starts for Gandalph_63:
(Start: 80 @40535 has 230 MA's), (91, 40568), (100, 40583), (103, 40586), (111, 40628), (115, 40649), (124, 40682), (132, 40709), (138, 40742), (145, 40784), (146, 40790), (176, 40886),

Gene: GigiOuiOui_56 Start: 39153, Stop: 39518, Start Num: 80
Candidate Starts for GigiOuiOui_56:
(Start: 80 @39153 has 230 MA's), (91, 39186), (100, 39201), (103, 39204), (110, 39243), (111, 39246), (115, 39267), (132, 39327), (138, 39360), (145, 39402), (146, 39408), (176, 39504),

Gene: Girr_58 Start: 40017, Stop: 40382, Start Num: 80
Candidate Starts for Girr_58:
(Start: 80 @40017 has 230 MA's), (91, 40050), (100, 40065), (103, 40068), (110, 40107), (111, 40110), (115, 40131), (132, 40191), (138, 40224), (145, 40266), (146, 40272), (176, 40368),

Gene: Globfish_76 Start: 41426, Stop: 41815, Start Num: 82
Candidate Starts for Globfish_76:
(Start: 82 @41426 has 57 MA's), (123, 41549), (132, 41582), (133, 41597), (143, 41651),

Gene: Gorge_64 Start: 41655, Stop: 42020, Start Num: 80
Candidate Starts for Gorge_64:
(Start: 80 @41655 has 230 MA's), (91, 41688), (100, 41703), (103, 41706), (110, 41745), (111, 41748), (115, 41769), (124, 41802), (132, 41829), (138, 41862), (145, 41904), (146, 41910), (176, 42006),

Gene: Gorpy_74 Start: 42930, Stop: 43331, Start Num: 82

Candidate Starts for Gorpy_74:
(24, 42684), (Start: 82 @42930 has 57 MA's), (132, 43098), (143, 43167),

Gene: GramZayde_33 Start: 22017, Stop: 21667, Start Num: 79
Candidate Starts for GramZayde_33:
(10, 22524), (17, 22341), (32, 22200), (47, 22107), (Start: 79 @22017 has 17 MA's), (167, 21684),

Gene: Greely_69 Start: 25152, Stop: 25580, Start Num: 62
Candidate Starts for Greely_69:
(Start: 62 @25152 has 3 MA's), (91, 25233), (110, 25296), (123, 25347), (134, 25386), (138, 25401), (150, 25464),

Gene: Grimmer_67 Start: 41812, Stop: 42177, Start Num: 80
Candidate Starts for Grimmer_67:
(Start: 80 @41812 has 230 MA's), (91, 41845), (100, 41860), (103, 41863), (110, 41902), (111, 41905), (115, 41926), (132, 41986), (138, 42019), (145, 42061), (146, 42067), (176, 42163),

Gene: GumGum_81 Start: 42873, Stop: 43274, Start Num: 82
Candidate Starts for GumGum_81:
(Start: 82 @42873 has 57 MA's), (132, 43041), (143, 43110),

Gene: Guzman_57 Start: 34003, Stop: 34440, Start Num: 87
Candidate Starts for Guzman_57:
(8, 33403), (Start: 87 @34003 has 18 MA's), (115, 34099), (123, 34126), (136, 34174), (147, 34231), (148, 34237), (152, 34258), (174, 34324), (181, 34354), (183, 34378), (184, 34390),

Gene: Hades_61 Start: 41111, Stop: 41476, Start Num: 80
Candidate Starts for Hades_61:
(Start: 80 @41111 has 230 MA's), (91, 41144), (100, 41159), (103, 41162), (110, 41201), (111, 41204), (115, 41225), (124, 41258), (132, 41285), (138, 41318), (145, 41360), (146, 41366), (166, 41435), (176, 41462),

Gene: Halley_146 Start: 77546, Stop: 77899, Start Num: 80
Candidate Starts for Halley_146:
(Start: 80 @77546 has 230 MA's), (138, 77747), (145, 77789),

Gene: Hashim76_90 Start: 66062, Stop: 65649, Start Num: 69
Candidate Starts for Hashim76_90:
(Start: 69 @66062 has 2 MA's), (98, 65981), (120, 65894), (132, 65852), (138, 65819), (152, 65744),

Gene: Hawkeye_86 Start: 58033, Stop: 58440, Start Num: 81
Candidate Starts for Hawkeye_86:
(53, 57952), (Start: 60 @57976 has 12 MA's), (63, 57982), (Start: 80 @58030 has 230 MA's), (Start: 81 @58033 has 4 MA's), (105, 58096), (142, 58261), (149, 58288), (150, 58294), (173, 58363), (182, 58411),

Gene: Hegedechwinu_60 Start: 39325, Stop: 39690, Start Num: 80
Candidate Starts for Hegedechwinu_60:
(Start: 80 @39325 has 230 MA's), (91, 39358), (100, 39373), (103, 39376), (110, 39415), (111, 39418), (115, 39439), (124, 39472), (132, 39499), (138, 39532), (145, 39574), (146, 39580), (176, 39676),

Gene: Hestia_70 Start: 39954, Stop: 40355, Start Num: 82
Candidate Starts for Hestia_70:

(Start: 82 @39954 has 57 MA's), (132, 40122), (143, 40191),

Gene: Hidrated_128 Start: 75865, Stop: 76218, Start Num: 80
Candidate Starts for Hidrated_128:
(Start: 80 @75865 has 230 MA's), (138, 76066), (145, 76108),

Gene: Hillester_80 Start: 42975, Stop: 43364, Start Num: 82
Candidate Starts for Hillester_80:
(1, 41406), (2, 41541), (3, 41652), (4, 41688), (5, 41751), (9, 42429), (16, 42645), (Start: 82 @42975 has 57 MA's), (123, 43098), (132, 43131), (133, 43146), (143, 43200), (167, 43290),

Gene: Hlubikazi_56 Start: 38331, Stop: 38696, Start Num: 80
Candidate Starts for Hlubikazi_56:
(Start: 80 @38331 has 230 MA's), (91, 38364), (100, 38379), (103, 38382), (111, 38424), (115, 38445), (124, 38478), (131, 38499), (132, 38505), (145, 38580), (146, 38586), (176, 38682),

Gene: HokkenD_137 Start: 76705, Stop: 77058, Start Num: 80
Candidate Starts for HokkenD_137:
(39, 76603), (Start: 80 @76705 has 230 MA's), (138, 76906), (145, 76948),

Gene: Hughesyang_143 Start: 77316, Stop: 77669, Start Num: 80
Candidate Starts for Hughesyang_143:
(Start: 80 @77316 has 230 MA's), (138, 77517), (145, 77559),

Gene: IbOuu_59 Start: 40693, Stop: 41058, Start Num: 80
Candidate Starts for IbOuu_59:
(Start: 80 @40693 has 230 MA's), (91, 40726), (100, 40741), (103, 40744), (110, 40783), (111, 40786), (115, 40807), (124, 40840), (132, 40867), (138, 40900), (145, 40942), (146, 40948), (176, 41044),

Gene: Ibhubesi_60 Start: 40300, Stop: 40665, Start Num: 80
Candidate Starts for Ibhubesi_60:
(Start: 80 @40300 has 230 MA's), (91, 40333), (100, 40348), (103, 40351), (110, 40390), (111, 40393), (115, 40414), (132, 40474), (138, 40507), (145, 40549), (146, 40555), (166, 40624), (176, 40651),

Gene: Indlovu_79 Start: 64345, Stop: 63932, Start Num: 87
Candidate Starts for Indlovu_79:
(21, 64654), (30, 64579), (33, 64558), (35, 64537), (40, 64495), (65, 64417), (71, 64399), (74, 64390), (Start: 87 @64345 has 18 MA's), (119, 64231), (122, 64222), (161, 64042),

Gene: Inventum_55 Start: 39804, Stop: 40169, Start Num: 80
Candidate Starts for Inventum_55:
(Start: 80 @39804 has 230 MA's), (91, 39837), (100, 39852), (103, 39855), (110, 39894), (111, 39897), (115, 39918), (124, 39951), (132, 39978), (138, 40011), (145, 40053), (146, 40059), (176, 40155),

Gene: IrishSherpFalk_61 Start: 41968, Stop: 42333, Start Num: 80
Candidate Starts for IrishSherpFalk_61:
(Start: 80 @41968 has 230 MA's), (91, 42001), (100, 42016), (103, 42019), (110, 42058), (111, 42061), (115, 42082), (132, 42142), (138, 42175), (145, 42217), (146, 42223), (176, 42319),

Gene: Isolde_74 Start: 41800, Stop: 42201, Start Num: 82
Candidate Starts for Isolde_74:
(42, 41689), (Start: 82 @41800 has 57 MA's), (132, 41968), (143, 42037),

Gene: Jabbawokkie_74 Start: 42036, Stop: 42401, Start Num: 80
Candidate Starts for Jabbawokkie_74:
(Start: 80 @42036 has 230 MA's), (91, 42069), (100, 42084), (103, 42087), (110, 42126), (111, 42129), (115, 42150), (124, 42183), (132, 42210), (138, 42243), (145, 42285), (146, 42291), (176, 42387),

Gene: JakeTheSnake_79 Start: 44784, Stop: 45149, Start Num: 82
Candidate Starts for JakeTheSnake_79:
(Start: 82 @44784 has 57 MA's), (103, 44817), (115, 44880), (132, 44940), (142, 45003),

Gene: Jakelyne_59 Start: 34149, Stop: 34586, Start Num: 87
Candidate Starts for Jakelyne_59:
(7, 33513), (Start: 87 @34149 has 18 MA's), (115, 34245), (123, 34272), (136, 34320), (147, 34377), (148, 34383), (152, 34404), (174, 34470), (181, 34500), (184, 34536),

Gene: James_64 Start: 41780, Stop: 42145, Start Num: 80
Candidate Starts for James_64:
(Start: 80 @41780 has 230 MA's), (91, 41813), (100, 41828), (103, 41831), (110, 41870), (111, 41873), (115, 41894), (124, 41927), (132, 41954), (138, 41987), (145, 42029), (146, 42035), (176, 42131),

Gene: Jarcob_60 Start: 40261, Stop: 40626, Start Num: 80
Candidate Starts for Jarcob_60:
(Start: 80 @40261 has 230 MA's), (91, 40294), (100, 40309), (103, 40312), (110, 40351), (111, 40354), (115, 40375), (124, 40408), (131, 40429), (132, 40435), (138, 40468), (145, 40510), (146, 40516), (176, 40612),

Gene: JellyBelly_47 Start: 40437, Stop: 40117, Start Num: 83
Candidate Starts for JellyBelly_47:
(Start: 60 @40455 has 12 MA's), (Start: 83 @40437 has 1 MA's), (115, 40350), (147, 40221),

Gene: JellyBread_73 Start: 41945, Stop: 42346, Start Num: 82
Candidate Starts for JellyBread_73:
(Start: 82 @41945 has 57 MA's), (132, 42113), (143, 42182),

Gene: Jennelsea_58 Start: 38940, Stop: 39305, Start Num: 80
Candidate Starts for Jennelsea_58:
(Start: 80 @38940 has 230 MA's), (91, 38973), (100, 38988), (103, 38991), (110, 39030), (111, 39033), (115, 39054), (124, 39087), (131, 39108), (132, 39114), (138, 39147), (145, 39189), (146, 39195), (176, 39291),

Gene: Jinglebell_65 Start: 42815, Stop: 43180, Start Num: 80
Candidate Starts for Jinglebell_65:
(Start: 80 @42815 has 230 MA's), (91, 42848), (100, 42863), (103, 42866), (110, 42905), (111, 42908), (115, 42929), (124, 42962), (132, 42989), (138, 43022), (145, 43064), (146, 43070), (176, 43166),

Gene: Job42_62 Start: 42198, Stop: 42563, Start Num: 80
Candidate Starts for Job42_62:
(Start: 80 @42198 has 230 MA's), (91, 42231), (100, 42246), (103, 42249), (110, 42288), (111, 42291), (115, 42312), (124, 42345), (131, 42366), (132, 42372), (138, 42405), (145, 42447), (146, 42453), (176, 42549),

Gene: JoeyJr_55 Start: 38710, Stop: 39075, Start Num: 80
Candidate Starts for JoeyJr_55:

(Start: 80 @38710 has 230 MA's), (91, 38743), (100, 38758), (103, 38761), (111, 38803), (115, 38824), (124, 38857), (131, 38878), (132, 38884), (138, 38917), (145, 38959), (146, 38965), (176, 39061),

Gene: JuicyJay_140 Start: 78831, Stop: 79184, Start Num: 80
Candidate Starts for JuicyJay_140:
(Start: 80 @78831 has 230 MA's), (138, 79032), (145, 79074),

Gene: Juniper1_59 Start: 40443, Stop: 40808, Start Num: 80
Candidate Starts for Juniper1_59:
(16, 40104), (19, 40122), (27, 40221), (28, 40230), (48, 40347), (50, 40353), (51, 40356), (Start: 80 @40443 has 230 MA's), (91, 40476), (95, 40485), (103, 40494), (115, 40557), (118, 40566), (126, 40593), (129, 40605), (132, 40617), (146, 40698), (168, 40770), (169, 40773),

Gene: Kabloowy_75 Start: 42829, Stop: 43230, Start Num: 82
Candidate Starts for Kabloowy_75:
(Start: 82 @42829 has 57 MA's), (132, 42997), (143, 43066),

Gene: Kalah2_135 Start: 76437, Stop: 76790, Start Num: 80
Candidate Starts for Kalah2_135:
(Start: 80 @76437 has 230 MA's), (138, 76638), (145, 76680),

Gene: Karhdo_57 Start: 39806, Stop: 40171, Start Num: 80
Candidate Starts for Karhdo_57:
(Start: 80 @39806 has 230 MA's), (91, 39839), (100, 39854), (103, 39857), (110, 39896), (111, 39899), (115, 39920), (124, 39953), (132, 39980), (138, 40013), (145, 40055), (146, 40061), (176, 40157),

Gene: KashFlow_143 Start: 75737, Stop: 76090, Start Num: 80
Candidate Starts for KashFlow_143:
(39, 75635), (Start: 80 @75737 has 230 MA's), (138, 75938), (145, 75980),

Gene: Kersh_62 Start: 42556, Stop: 42921, Start Num: 80
Candidate Starts for Kersh_62:
(Start: 80 @42556 has 230 MA's), (91, 42589), (100, 42604), (103, 42607), (110, 42646), (111, 42649), (115, 42670), (124, 42703), (131, 42724), (132, 42730), (138, 42763), (145, 42805), (146, 42811), (176, 42907),

Gene: Kimberlium_63 Start: 42089, Stop: 42454, Start Num: 80
Candidate Starts for Kimberlium_63:
(Start: 80 @42089 has 230 MA's), (91, 42122), (100, 42137), (103, 42140), (110, 42179), (111, 42182), (115, 42203), (124, 42236), (131, 42257), (132, 42263), (138, 42296), (145, 42338), (146, 42344), (176, 42440),

Gene: KingJulian_60 Start: 39332, Stop: 39697, Start Num: 80
Candidate Starts for KingJulian_60:
(Start: 80 @39332 has 230 MA's), (91, 39365), (100, 39380), (103, 39383), (110, 39422), (111, 39425), (115, 39446), (124, 39479), (132, 39506), (138, 39539), (145, 39581), (146, 39587), (176, 39683),

Gene: KingMidas_59 Start: 40372, Stop: 40737, Start Num: 80
Candidate Starts for KingMidas_59:
(Start: 80 @40372 has 230 MA's), (91, 40405), (100, 40420), (103, 40423), (111, 40465), (115, 40486), (124, 40519), (131, 40540), (132, 40546), (138, 40579), (145, 40621), (146, 40627), (176, 40723),

Gene: Klein_142 Start: 75039, Stop: 75392, Start Num: 80

Candidate Starts for Klein_142:
(Start: 80 @75039 has 230 MA's), (138, 75240), (145, 75282),

Gene: Klevey_55 Start: 37550, Stop: 37951, Start Num: 82
Candidate Starts for Klevey_55:
(Start: 82 @37550 has 57 MA's),

Gene: Koella_54 Start: 36191, Stop: 36556, Start Num: 80
Candidate Starts for Koella_54:
(Start: 80 @36191 has 230 MA's), (91, 36224), (100, 36239), (103, 36242), (110, 36281), (111, 36284), (115, 36305), (124, 36338), (132, 36365), (138, 36398), (145, 36440), (146, 36446), (176, 36542),

Gene: Krakatau_57 Start: 39569, Stop: 39934, Start Num: 80
Candidate Starts for Krakatau_57:
(Start: 80 @39569 has 230 MA's), (91, 39602), (103, 39620), (118, 39692), (124, 39716), (126, 39719), (145, 39818), (146, 39824), (169, 39899),

Gene: KristaRAM_63 Start: 42760, Stop: 43125, Start Num: 80
Candidate Starts for KristaRAM_63:
(Start: 80 @42760 has 230 MA's), (91, 42793), (100, 42808), (103, 42811), (111, 42853), (115, 42874), (124, 42907), (132, 42934), (138, 42967), (145, 43009), (146, 43015), (176, 43111),

Gene: Lasker_76 Start: 43324, Stop: 43713, Start Num: 82
Candidate Starts for Lasker_76:
(1, 41755), (2, 41890), (3, 42001), (4, 42037), (5, 42100), (9, 42778), (16, 42994), (Start: 82 @43324 has 57 MA's), (123, 43447), (132, 43480), (133, 43495), (143, 43549), (167, 43639),

Gene: LastJedi_54 Start: 37508, Stop: 37873, Start Num: 80
Candidate Starts for LastJedi_54:
(Start: 80 @37508 has 230 MA's), (91, 37541), (100, 37556), (103, 37559), (110, 37598), (111, 37601), (115, 37622), (124, 37655), (132, 37682), (138, 37715), (145, 37757), (146, 37763), (176, 37859),

Gene: Latretium_62 Start: 40834, Stop: 41199, Start Num: 80
Candidate Starts for Latretium_62:
(Start: 80 @40834 has 230 MA's), (91, 40867), (100, 40882), (103, 40885), (110, 40924), (111, 40927), (115, 40948), (132, 41008), (138, 41041), (145, 41083), (146, 41089), (176, 41185),

Gene: Lawnathon_78 Start: 42050, Stop: 42439, Start Num: 82
Candidate Starts for Lawnathon_78:
(Start: 82 @42050 has 57 MA's), (123, 42173), (132, 42206), (133, 42221), (143, 42275),

Gene: LeBruni_77 Start: 41868, Stop: 42263, Start Num: 82
Candidate Starts for LeBruni_77:
(Start: 82 @41868 has 57 MA's), (101, 41913), (123, 42006), (132, 42039), (148, 42126), (150, 42135), (178, 42237),

Gene: Leona_30 Start: 21281, Stop: 20940, Start Num: 79
Candidate Starts for Leona_30:
(Start: 79 @21281 has 17 MA's), (117, 21173), (123, 21152),

Gene: Leozinho_59 Start: 39590, Stop: 39955, Start Num: 80
Candidate Starts for Leozinho_59:

(Start: 80 @39590 has 230 MA's), (91, 39623), (100, 39638), (103, 39641), (111, 39683), (115, 39704), (124, 39737), (131, 39758), (132, 39764), (138, 39797), (145, 39839), (146, 39845), (176, 39941),

Gene: Leperchaun_52 Start: 37940, Stop: 38305, Start Num: 80
Candidate Starts for Leperchaun_52:
(Start: 80 @37940 has 230 MA's), (91, 37973), (100, 37988), (103, 37991), (111, 38033), (115, 38054), (124, 38087), (131, 38108), (132, 38114), (138, 38147), (145, 38189), (146, 38195), (176, 38291),

Gene: Ligma_48 Start: 41091, Stop: 40741, Start Num: 60
Candidate Starts for Ligma_48:
(Start: 60 @41091 has 12 MA's), (95, 41046), (103, 41037), (105, 41022), (115, 40974), (138, 40893),

Gene: LilMoolah_58 Start: 39703, Stop: 40068, Start Num: 80
Candidate Starts for LilMoolah_58:
(Start: 80 @39703 has 230 MA's), (91, 39736), (100, 39751), (103, 39754), (110, 39793), (111, 39796), (115, 39817), (124, 39850), (131, 39871), (132, 39877), (138, 39910), (145, 39952), (146, 39958), (176, 40054),

Gene: Lilmac1015_57 Start: 38014, Stop: 38406, Start Num: 82
Candidate Starts for Lilmac1015_57:
(Start: 82 @38014 has 57 MA's), (156, 38299), (167, 38335),

Gene: LittleMinkey_96 Start: 66537, Stop: 66124, Start Num: 69
Candidate Starts for LittleMinkey_96:
(Start: 69 @66537 has 2 MA's), (98, 66456), (120, 66369), (132, 66327), (138, 66294), (152, 66219),

Gene: LittleMunchkin_50 Start: 44298, Stop: 43924, Start Num: 60
Candidate Starts for LittleMunchkin_50:
(22, 44523), (Start: 60 @44298 has 12 MA's), (103, 44229), (114, 44175), (120, 44151), (166, 43965),

Gene: LittleShirley_59 Start: 40750, Stop: 41115, Start Num: 80
Candidate Starts for LittleShirley_59:
(Start: 80 @40750 has 230 MA's), (91, 40783), (100, 40798), (103, 40801), (110, 40840), (111, 40843), (115, 40864), (124, 40897), (132, 40924), (138, 40957), (145, 40999), (146, 41005), (176, 41101),

Gene: LittleTokyo_33 Start: 21980, Stop: 21597, Start Num: 79
Candidate Starts for LittleTokyo_33:
(Start: 79 @21980 has 17 MA's), (141, 21776),

Gene: Lizziana_66 Start: 41261, Stop: 41626, Start Num: 80
Candidate Starts for Lizziana_66:
(Start: 80 @41261 has 230 MA's), (91, 41294), (100, 41309), (103, 41312), (110, 41351), (111, 41354), (115, 41375), (124, 41408), (132, 41435), (138, 41468), (145, 41510), (146, 41516), (176, 41612),

Gene: Llama_65 Start: 42669, Stop: 43034, Start Num: 80
Candidate Starts for Llama_65:
(Start: 80 @42669 has 230 MA's), (91, 42702), (100, 42717), (103, 42720), (110, 42759), (111, 42762), (115, 42783), (124, 42816), (132, 42843), (138, 42876), (145, 42918), (146, 42924), (176, 43020),

Gene: Llij_56 Start: 39114, Stop: 39479, Start Num: 80
Candidate Starts for Llij_56:
(Start: 80 @39114 has 230 MA's), (91, 39147), (100, 39162), (103, 39165), (110, 39204), (111, 39207), (115, 39228), (124, 39261), (131, 39282), (132, 39288), (138, 39321), (145, 39363), (146, 39369),

(176, 39465),

Gene: Lorde_60 Start: 38401, Stop: 38766, Start Num: 80
Candidate Starts for Lorde_60:
(Start: 80 @38401 has 230 MA's), (91, 38434), (100, 38449), (103, 38452), (110, 38491), (111, 38494), (115, 38515), (124, 38548), (131, 38569), (132, 38575), (138, 38608), (145, 38650), (146, 38656), (176, 38752),

Gene: Losacky_59 Start: 34314, Stop: 34751, Start Num: 87
Candidate Starts for Losacky_59:
(11, 33807), (13, 33837), (Start: 87 @34314 has 18 MA's), (115, 34410), (123, 34437), (136, 34485), (147, 34542), (148, 34548), (152, 34569), (174, 34635), (181, 34665), (184, 34701),

Gene: Lucia_59 Start: 39255, Stop: 39620, Start Num: 80
Candidate Starts for Lucia_59:
(Start: 80 @39255 has 230 MA's), (91, 39288), (100, 39303), (103, 39306), (110, 39345), (111, 39348), (115, 39369), (132, 39429), (138, 39462), (145, 39504), (146, 39510), (169, 39585),

Gene: Lucky2013_136 Start: 72791, Stop: 73144, Start Num: 80
Candidate Starts for Lucky2013_136:
(39, 72689), (Start: 80 @72791 has 230 MA's), (138, 72992), (145, 73034),

Gene: LunaBlu_62 Start: 40835, Stop: 41200, Start Num: 80
Candidate Starts for LunaBlu_62:
(Start: 80 @40835 has 230 MA's), (91, 40868), (100, 40883), (103, 40886), (110, 40925), (111, 40928), (115, 40949), (132, 41009), (138, 41042), (145, 41084), (146, 41090), (176, 41186),

Gene: LunaStella_57 Start: 39057, Stop: 39410, Start Num: 80
Candidate Starts for LunaStella_57:
(68, 39021), (Start: 80 @39057 has 230 MA's), (99, 39102), (103, 39108), (115, 39171), (118, 39180), (130, 39216), (133, 39240), (171, 39390),

Gene: LunaStella_59 Start: 39682, Stop: 40047, Start Num: 80
Candidate Starts for LunaStella_59:
(Start: 80 @39682 has 230 MA's), (91, 39715), (103, 39733), (110, 39772), (111, 39775), (115, 39796), (118, 39805), (124, 39829), (132, 39856), (138, 39889), (145, 39931), (146, 39937), (176, 40033),

Gene: MUWow_78 Start: 43655, Stop: 44044, Start Num: 82
Candidate Starts for MUWow_78:
(24, 43409), (Start: 82 @43655 has 57 MA's), (123, 43778), (132, 43811), (133, 43826), (143, 43880),

Gene: MadMen_58 Start: 40038, Stop: 40403, Start Num: 80
Candidate Starts for MadMen_58:
(Start: 80 @40038 has 230 MA's), (91, 40071), (100, 40086), (103, 40089), (111, 40131), (115, 40152), (124, 40185), (132, 40212), (138, 40245), (145, 40287), (146, 40293), (176, 40389),

Gene: Madiba_58 Start: 39287, Stop: 39652, Start Num: 80
Candidate Starts for Madiba_58:
(Start: 80 @39287 has 230 MA's), (91, 39320), (100, 39335), (103, 39338), (111, 39380), (115, 39401), (124, 39434), (132, 39461), (138, 39494), (145, 39536), (146, 39542), (176, 39638),

Gene: Mahavrat_58 Start: 39663, Stop: 40028, Start Num: 80
Candidate Starts for Mahavrat_58:

(Start: 80 @39663 has 230 MA's), (91, 39696), (100, 39711), (103, 39714), (110, 39753), (111, 39756), (115, 39777), (132, 39837), (138, 39870), (145, 39912), (146, 39918), (176, 40014),

Gene: MalagasyRose_65 Start: 42032, Stop: 42385, Start Num: 85
Candidate Starts for MalagasyRose_65:
(39, 41891), (66, 41975), (Start: 85 @42032 has 1 MA's), (108, 42101), (111, 42113), (115, 42134), (136, 42209), (142, 42248), (145, 42260), (150, 42281), (161, 42323), (167, 42344),

Gene: Mandlovu_56 Start: 38273, Stop: 38638, Start Num: 80
Candidate Starts for Mandlovu_56:
(Start: 80 @38273 has 230 MA's), (91, 38306), (100, 38321), (103, 38324), (111, 38366), (115, 38387), (124, 38420), (131, 38441), (132, 38447), (145, 38522), (146, 38528), (176, 38624),

Gene: Mapleville_71 Start: 41369, Stop: 41770, Start Num: 82
Candidate Starts for Mapleville_71:
(Start: 82 @41369 has 57 MA's), (132, 41537), (143, 41606),

Gene: Maravista_61 Start: 41710, Stop: 42075, Start Num: 80
Candidate Starts for Maravista_61:
(Start: 80 @41710 has 230 MA's), (91, 41743), (100, 41758), (103, 41761), (110, 41800), (111, 41803), (115, 41824), (124, 41857), (132, 41884), (138, 41917), (145, 41959), (146, 41965), (176, 42061),

Gene: Mariel_58 Start: 34532, Stop: 34969, Start Num: 87
Candidate Starts for Mariel_58:
(78, 34499), (Start: 87 @34532 has 18 MA's), (115, 34628), (123, 34655), (136, 34703), (147, 34760), (148, 34766), (152, 34787), (174, 34853), (181, 34883), (184, 34919),

Gene: Mariokart_48 Start: 41216, Stop: 40896, Start Num: 83
Candidate Starts for Mariokart_48:
(Start: 60 @41234 has 12 MA's), (Start: 83 @41216 has 1 MA's), (114, 41138), (115, 41129), (143, 41012), (147, 41000),

Gene: Marker_62 Start: 40381, Stop: 40746, Start Num: 80
Candidate Starts for Marker_62:
(Start: 80 @40381 has 230 MA's), (91, 40414), (100, 40429), (103, 40432), (111, 40474), (115, 40495), (132, 40555), (138, 40588), (145, 40630), (146, 40636), (176, 40732),

Gene: Marleymoo_127 Start: 73278, Stop: 73631, Start Num: 80
Candidate Starts for Marleymoo_127:
(Start: 80 @73278 has 230 MA's), (138, 73479), (145, 73521),

Gene: Martik_60 Start: 40214, Stop: 40579, Start Num: 80
Candidate Starts for Martik_60:
(Start: 80 @40214 has 230 MA's), (91, 40247), (100, 40262), (103, 40265), (110, 40304), (111, 40307), (115, 40328), (124, 40361), (132, 40388), (138, 40421), (145, 40463), (146, 40469), (176, 40565),

Gene: Maruru_65 Start: 44640, Stop: 45053, Start Num: 76
Candidate Starts for Maruru_65:
(34, 44490), (Start: 76 @44640 has 3 MA's), (108, 44730), (113, 44748), (140, 44871), (144, 44895),

Gene: MaterMagnus_76 Start: 42682, Stop: 43083, Start Num: 82
Candidate Starts for MaterMagnus_76:
(24, 42436), (Start: 82 @42682 has 57 MA's), (132, 42850), (143, 42919),

Gene: Mattes_64 Start: 41780, Stop: 42145, Start Num: 80
Candidate Starts for Mattes_64:
(Start: 80 @41780 has 230 MA's), (91, 41813), (100, 41828), (103, 41831), (110, 41870), (111, 41873), (115, 41894), (124, 41927), (132, 41954), (138, 41987), (145, 42029), (146, 42035), (176, 42131),

Gene: MenE_59 Start: 34205, Stop: 34642, Start Num: 87
Candidate Starts for MenE_59:
(8, 33605), (13, 33728), (Start: 87 @34205 has 18 MA's), (115, 34301), (123, 34328), (136, 34376), (147, 34433), (148, 34439), (152, 34460), (174, 34526), (181, 34556), (183, 34580), (184, 34592),

Gene: MiaZeal_143 Start: 73930, Stop: 74283, Start Num: 80
Candidate Starts for MiaZeal_143:
(39, 73828), (Start: 80 @73930 has 230 MA's), (138, 74131), (145, 74173),

Gene: MidnightRain_81 Start: 43270, Stop: 43659, Start Num: 82
Candidate Starts for MidnightRain_81:
(Start: 82 @43270 has 57 MA's), (123, 43393), (132, 43426), (133, 43441), (143, 43495),

Gene: MilleniumForce_63 Start: 42482, Stop: 42847, Start Num: 80
Candidate Starts for MilleniumForce_63:
(Start: 80 @42482 has 230 MA's), (91, 42515), (94, 42521), (103, 42533), (118, 42605), (124, 42629), (126, 42632), (132, 42656), (145, 42731), (146, 42737), (169, 42812),

Gene: Minerva_144 Start: 76488, Stop: 76841, Start Num: 80
Candidate Starts for Minerva_144:
(Start: 80 @76488 has 230 MA's), (138, 76689), (145, 76731),

Gene: MinionDave_59 Start: 40561, Stop: 40926, Start Num: 80
Candidate Starts for MinionDave_59:
(Start: 80 @40561 has 230 MA's), (91, 40594), (100, 40609), (103, 40612), (110, 40651), (111, 40654), (115, 40675), (124, 40708), (132, 40735), (138, 40768), (145, 40810), (146, 40816), (176, 40912),

Gene: MisterCuddles_58 Start: 40017, Stop: 40382, Start Num: 80
Candidate Starts for MisterCuddles_58:
(Start: 80 @40017 has 230 MA's), (91, 40050), (100, 40065), (103, 40068), (110, 40107), (111, 40110), (115, 40131), (132, 40191), (138, 40224), (145, 40266), (146, 40272), (176, 40368),

Gene: Modragons_64 Start: 42659, Stop: 43024, Start Num: 80
Candidate Starts for Modragons_64:
(Start: 80 @42659 has 230 MA's), (91, 42692), (100, 42707), (103, 42710), (110, 42749), (111, 42752), (115, 42773), (124, 42806), (132, 42833), (138, 42866), (145, 42908), (146, 42914), (176, 43010),

Gene: Moonbeam_58 Start: 39938, Stop: 40303, Start Num: 80
Candidate Starts for Moonbeam_58:
(Start: 80 @39938 has 230 MA's), (91, 39971), (103, 39989), (111, 40031), (118, 40061), (124, 40085), (126, 40088), (145, 40187), (169, 40268), (170, 40271), (172, 40274),

Gene: Mova_61 Start: 39791, Stop: 40156, Start Num: 80
Candidate Starts for Mova_61:
(Start: 80 @39791 has 230 MA's), (91, 39824), (100, 39839), (103, 39842), (111, 39884), (115, 39905), (124, 39938), (132, 39965), (138, 39998), (145, 40040), (146, 40046), (176, 40142),

Gene: Mozy_69 Start: 42795, Stop: 43160, Start Num: 80
Candidate Starts for Mozy_69:
(Start: 80 @42795 has 230 MA's), (91, 42828), (100, 42843), (103, 42846), (110, 42885), (111, 42888), (115, 42909), (132, 42969), (138, 43002), (145, 43044), (146, 43050), (176, 43146),

Gene: Mufasa8_70 Start: 44952, Stop: 45344, Start Num: 82
Candidate Starts for Mufasa8_70:
(41, 44829), (64, 44901), (Start: 82 @44952 has 57 MA's), (111, 45045),

Gene: MulchExplorer_63 Start: 42088, Stop: 42453, Start Num: 80
Candidate Starts for MulchExplorer_63:
(Start: 80 @42088 has 230 MA's), (91, 42121), (100, 42136), (103, 42139), (110, 42178), (111, 42181), (115, 42202), (124, 42235), (131, 42256), (132, 42262), (138, 42295), (145, 42337), (146, 42343), (176, 42439),

Gene: MurphyJoseph_74 Start: 40710, Stop: 41099, Start Num: 82
Candidate Starts for MurphyJoseph_74:
(Start: 82 @40710 has 57 MA's), (123, 40833), (132, 40866), (133, 40881), (143, 40935), (167, 41025),

Gene: Mutaforma13_64 Start: 43121, Stop: 43486, Start Num: 80
Candidate Starts for Mutaforma13_64:
(Start: 80 @43121 has 230 MA's), (91, 43154), (100, 43169), (103, 43172), (110, 43211), (111, 43214), (115, 43235), (124, 43268), (132, 43295), (138, 43328), (145, 43370), (146, 43376), (176, 43472),

Gene: Mwanjiwa_66 Start: 40892, Stop: 41257, Start Num: 80
Candidate Starts for Mwanjiwa_66:
(Start: 80 @40892 has 230 MA's), (91, 40925), (100, 40940), (103, 40943), (110, 40982), (111, 40985), (115, 41006), (124, 41039), (131, 41060), (132, 41066), (138, 41099), (145, 41141), (146, 41147), (176, 41243),

Gene: Myrna_64 Start: 24516, Stop: 24944, Start Num: 62
Candidate Starts for Myrna_64:
(36, 24411), (Start: 62 @24516 has 3 MA's), (74, 24546), (110, 24660), (115, 24684), (123, 24711), (140, 24780), (150, 24828),

Gene: NCRodriguez_59 Start: 34274, Stop: 34711, Start Num: 87
Candidate Starts for NCRodriguez_59:
(Start: 87 @34274 has 18 MA's), (115, 34370), (123, 34397), (136, 34445), (147, 34502), (148, 34508), (152, 34529), (174, 34595), (181, 34625), (183, 34649), (184, 34661),

Gene: Nandito_53 Start: 37649, Stop: 38023, Start Num: 82
Candidate Starts for Nandito_53:
(43, 37544), (45, 37547), (Start: 82 @37649 has 57 MA's), (156, 37946),

Gene: NewHope4_61 Start: 40206, Stop: 40571, Start Num: 80
Candidate Starts for NewHope4_61:
(Start: 80 @40206 has 230 MA's), (91, 40239), (100, 40254), (103, 40257), (110, 40296), (111, 40299), (115, 40320), (132, 40380), (138, 40413), (145, 40455), (146, 40461), (176, 40557),

Gene: NewKitty_78 Start: 43640, Stop: 44041, Start Num: 82
Candidate Starts for NewKitty_78:
(Start: 82 @43640 has 57 MA's), (132, 43808), (137, 43835), (143, 43877),

Gene: Nichirin_66 Start: 44200, Stop: 44565, Start Num: 80
Candidate Starts for Nichirin_66:
(Start: 80 @44200 has 230 MA's), (91, 44233), (100, 44248), (103, 44251), (110, 44290), (111, 44293), (115, 44314), (124, 44347), (132, 44374), (138, 44407), (145, 44449), (146, 44455), (176, 44551),

Gene: NihilNomen_146 Start: 76776, Stop: 77129, Start Num: 80
Candidate Starts for NihilNomen_146:
(Start: 80 @76776 has 230 MA's), (138, 76977), (145, 77019),

Gene: Nivrat_56 Start: 39576, Stop: 39941, Start Num: 80
Candidate Starts for Nivrat_56:
(Start: 80 @39576 has 230 MA's), (91, 39609), (100, 39624), (103, 39627), (110, 39666), (111, 39669), (115, 39690), (124, 39723), (131, 39744), (132, 39750), (138, 39783), (145, 39825), (146, 39831), (176, 39927),

Gene: NormanBulbieJr_60 Start: 40204, Stop: 40569, Start Num: 80
Candidate Starts for NormanBulbieJr_60:
(Start: 80 @40204 has 230 MA's), (91, 40237), (100, 40252), (103, 40255), (110, 40294), (111, 40297), (115, 40318), (124, 40351), (132, 40378), (138, 40411), (145, 40453), (146, 40459), (176, 40555),

Gene: Ochi17_63 Start: 42266, Stop: 42631, Start Num: 80
Candidate Starts for Ochi17_63:
(Start: 80 @42266 has 230 MA's), (91, 42299), (100, 42314), (103, 42317), (110, 42356), (111, 42359), (115, 42380), (124, 42413), (132, 42440), (138, 42473), (145, 42515), (146, 42521), (176, 42617),

Gene: Odette_148 Start: 78919, Stop: 79272, Start Num: 80
Candidate Starts for Odette_148:
(Start: 80 @78919 has 230 MA's), (138, 79120), (145, 79162),

Gene: OfUltron_65 Start: 42815, Stop: 43180, Start Num: 80
Candidate Starts for OfUltron_65:
(Start: 80 @42815 has 230 MA's), (91, 42848), (100, 42863), (103, 42866), (110, 42905), (111, 42908), (115, 42929), (124, 42962), (132, 42989), (138, 43022), (145, 43064), (146, 43070), (176, 43166),

Gene: Oksu_66 Start: 43078, Stop: 43443, Start Num: 80
Candidate Starts for Oksu_66:
(Start: 80 @43078 has 230 MA's), (91, 43111), (100, 43126), (103, 43129), (110, 43168), (111, 43171), (115, 43192), (124, 43225), (132, 43252), (138, 43285), (145, 43327), (146, 43333), (176, 43429),

Gene: OldBen_57 Start: 40129, Stop: 40494, Start Num: 80
Candidate Starts for OldBen_57:
(Start: 80 @40129 has 230 MA's), (91, 40162), (100, 40177), (103, 40180), (111, 40222), (115, 40243), (132, 40303), (138, 40336), (145, 40378), (146, 40384), (176, 40480),

Gene: OlympiaSaint_62 Start: 40722, Stop: 41087, Start Num: 80
Candidate Starts for OlympiaSaint_62:
(Start: 80 @40722 has 230 MA's), (91, 40755), (100, 40770), (103, 40773), (110, 40812), (111, 40815), (115, 40836), (124, 40869), (132, 40896), (138, 40929), (145, 40971), (146, 40977), (176, 41073),

Gene: Optimus_135 Start: 74056, Stop: 74409, Start Num: 80
Candidate Starts for Optimus_135:
(Start: 80 @74056 has 230 MA's), (138, 74257), (145, 74299),

Gene: OtsoOtso_33 Start: 21713, Stop: 21363, Start Num: 79
Candidate Starts for OtsoOtso_33:
(Start: 79 @21713 has 17 MA's), (167, 21380),

Gene: OwlsT2W_60 Start: 40441, Stop: 40806, Start Num: 80
Candidate Starts for OwlsT2W_60:
(Start: 80 @40441 has 230 MA's), (91, 40474), (100, 40489), (103, 40492), (110, 40531), (111, 40534), (115, 40555), (124, 40588), (132, 40615), (138, 40648), (145, 40690), (146, 40696), (176, 40792),

Gene: PHappiness_55 Start: 38486, Stop: 38851, Start Num: 80
Candidate Starts for PHappiness_55:
(Start: 80 @38486 has 230 MA's), (91, 38519), (100, 38534), (103, 38537), (111, 38579), (115, 38600), (124, 38633), (131, 38654), (132, 38660), (138, 38693), (145, 38735), (146, 38741), (176, 38837),

Gene: PMC_57 Start: 40831, Stop: 41196, Start Num: 80
Candidate Starts for PMC_57:
(Start: 80 @40831 has 230 MA's), (91, 40864), (100, 40879), (103, 40882), (110, 40921), (111, 40924), (115, 40945), (124, 40978), (132, 41005), (138, 41038), (145, 41080), (146, 41086), (176, 41182),

Gene: Pacc40_54 Start: 38560, Stop: 38925, Start Num: 80
Candidate Starts for Pacc40_54:
(Start: 80 @38560 has 230 MA's), (91, 38593), (100, 38608), (103, 38611), (111, 38653), (115, 38674), (124, 38707), (131, 38728), (132, 38734), (138, 38767), (145, 38809), (146, 38815), (176, 38911),

Gene: PatoPoderoso_57 Start: 39332, Stop: 39697, Start Num: 80
Candidate Starts for PatoPoderoso_57:
(Start: 80 @39332 has 230 MA's), (91, 39365), (100, 39380), (103, 39383), (110, 39422), (111, 39425), (115, 39446), (124, 39479), (132, 39506), (138, 39539), (145, 39581), (146, 39587), (176, 39683),

Gene: Peridot_58 Start: 39669, Stop: 40034, Start Num: 80
Candidate Starts for Peridot_58:
(Start: 80 @39669 has 230 MA's), (91, 39702), (100, 39717), (103, 39720), (110, 39759), (111, 39762), (115, 39783), (124, 39816), (132, 39843), (138, 39876), (145, 39918), (146, 39924), (176, 40020),

Gene: Persistence_70 Start: 40343, Stop: 40708, Start Num: 82
Candidate Starts for Persistence_70:
(Start: 82 @40343 has 57 MA's), (103, 40376), (105, 40391), (115, 40439), (132, 40499), (142, 40562),

Gene: Phabba_70 Start: 24981, Stop: 25430, Start Num: 62
Candidate Starts for Phabba_70:
(Start: 62 @24981 has 3 MA's), (96, 25074), (110, 25125), (123, 25176), (134, 25236), (141, 25272), (150, 25314),

Gene: Phasih_58 Start: 40630, Stop: 40995, Start Num: 80
Candidate Starts for Phasih_58:
(Start: 80 @40630 has 230 MA's), (91, 40663), (100, 40678), (103, 40681), (110, 40720), (111, 40723), (115, 40744), (132, 40804), (138, 40837), (145, 40879), (146, 40885), (166, 40954), (176, 40981),

Gene: Phatniss_58 Start: 40209, Stop: 40574, Start Num: 80
Candidate Starts for Phatniss_58:
(Start: 80 @40209 has 230 MA's), (91, 40242), (100, 40257), (103, 40260), (110, 40299), (111, 40302), (115, 40323), (124, 40356), (131, 40377), (132, 40383), (138, 40416), (145, 40458), (146, 40464), (176, 40560),

Gene: PhillyJawn_58 Start: 33945, Stop: 34382, Start Num: 87
Candidate Starts for PhillyJawn_58:
(Start: 87 @33945 has 18 MA's), (115, 34041), (123, 34068), (136, 34116), (147, 34173), (148, 34179), (152, 34200), (174, 34266), (181, 34296), (183, 34320), (184, 34332),

Gene: Philus_63 Start: 41366, Stop: 41731, Start Num: 80
Candidate Starts for Philus_63:
(Start: 80 @41366 has 230 MA's), (91, 41399), (100, 41414), (103, 41417), (110, 41456), (111, 41459), (115, 41480), (124, 41513), (131, 41534), (132, 41540), (138, 41573), (145, 41615), (146, 41621), (176, 41717),

Gene: Phingu_60 Start: 34169, Stop: 34606, Start Num: 87
Candidate Starts for Phingu_60:
(7, 33533), (13, 33692), (Start: 87 @34169 has 18 MA's), (115, 34265), (123, 34292), (136, 34340), (147, 34397), (148, 34403), (152, 34424), (174, 34490), (181, 34520), (183, 34544), (184, 34556),

Gene: PhlipPhlop_60 Start: 41923, Stop: 42288, Start Num: 80
Candidate Starts for PhlipPhlop_60:
(Start: 80 @41923 has 230 MA's), (91, 41956), (100, 41971), (103, 41974), (110, 42013), (111, 42016), (115, 42037), (124, 42070), (132, 42097), (138, 42130), (145, 42172), (146, 42178), (176, 42274),

Gene: Phoebus_144 Start: 78670, Stop: 79023, Start Num: 80
Candidate Starts for Phoebus_144:
(Start: 80 @78670 has 230 MA's), (138, 78871), (145, 78913),

Gene: Phonegingi_58 Start: 34265, Stop: 34702, Start Num: 87
Candidate Starts for Phonegingi_58:
(15, 33854), (Start: 87 @34265 has 18 MA's), (123, 34388), (136, 34436), (138, 34445), (147, 34493), (148, 34499), (152, 34520), (174, 34586), (181, 34616), (184, 34652),

Gene: Phrank15_80 Start: 42781, Stop: 43146, Start Num: 82
Candidate Starts for Phrank15_80:
(44, 42679), (Start: 82 @42781 has 57 MA's), (103, 42814), (111, 42856), (115, 42877), (132, 42937), (142, 43000),

Gene: Phrappuccino_165 Start: 110158, Stop: 110505, Start Num: 84
Candidate Starts for Phrappuccino_165:
(Start: 84 @110158 has 2 MA's), (97, 110191), (99, 110194), (102, 110200), (115, 110263), (162, 110455),

Gene: Pickles13_57 Start: 34624, Stop: 35061, Start Num: 87
Candidate Starts for Pickles13_57:
(Start: 79 @34597 has 17 MA's), (Start: 87 @34624 has 18 MA's), (113, 34705), (123, 34747), (136, 34795), (147, 34852), (148, 34858), (152, 34879), (174, 34945), (181, 34975), (184, 35011),

Gene: Pineda_34 Start: 22001, Stop: 21651, Start Num: 79
Candidate Starts for Pineda_34:
(10, 22508), (17, 22325), (32, 22184), (47, 22091), (Start: 79 @22001 has 17 MA's), (167, 21668),

Gene: Pippy_58 Start: 39072, Stop: 39437, Start Num: 80
Candidate Starts for Pippy_58:

(Start: 80 @39072 has 230 MA's), (91, 39105), (100, 39120), (103, 39123), (110, 39162), (111, 39165), (115, 39186), (124, 39219), (132, 39246), (138, 39279), (145, 39321), (146, 39327), (176, 39423),

Gene: Plumbus_62 Start: 40530, Stop: 40895, Start Num: 80
Candidate Starts for Plumbus_62:
(Start: 80 @40530 has 230 MA's), (91, 40563), (100, 40578), (103, 40581), (111, 40623), (115, 40644), (124, 40677), (131, 40698), (132, 40704), (138, 40737), (145, 40779), (146, 40785), (176, 40881),

Gene: Poenanya_60 Start: 41387, Stop: 41752, Start Num: 80
Candidate Starts for Poenanya_60:
(Start: 80 @41387 has 230 MA's), (91, 41420), (100, 41435), (103, 41438), (111, 41480), (115, 41501), (124, 41534), (131, 41555), (132, 41561), (138, 41594), (145, 41636), (146, 41642), (176, 41738),

Gene: Polka_32 Start: 21713, Stop: 21363, Start Num: 79
Candidate Starts for Polka_32:
(Start: 79 @21713 has 17 MA's), (167, 21380),

Gene: Polka14_58 Start: 39583, Stop: 39948, Start Num: 80
Candidate Starts for Polka14_58:
(Start: 80 @39583 has 230 MA's), (91, 39616), (100, 39631), (103, 39634), (110, 39673), (111, 39676), (115, 39697), (124, 39730), (132, 39757), (138, 39790), (145, 39832), (146, 39838), (176, 39934),

Gene: Pollywog_61 Start: 41040, Stop: 41405, Start Num: 80
Candidate Starts for Pollywog_61:
(Start: 80 @41040 has 230 MA's), (91, 41073), (100, 41088), (103, 41091), (110, 41130), (111, 41133), (115, 41154), (124, 41187), (132, 41214), (138, 41247), (145, 41289), (146, 41295), (176, 41391),

Gene: Porcelain_140 Start: 73737, Stop: 74090, Start Num: 80
Candidate Starts for Porcelain_140:
(39, 73635), (Start: 80 @73737 has 230 MA's), (138, 73938), (145, 73980),

Gene: Pound_136 Start: 76489, Stop: 76842, Start Num: 80
Candidate Starts for Pound_136:
(38, 76375), (39, 76387), (Start: 80 @76489 has 230 MA's), (138, 76690), (145, 76732),

Gene: Prairie_53 Start: 36909, Stop: 37310, Start Num: 82
Candidate Starts for Prairie_53:
(43, 36807), (45, 36810), (Start: 82 @36909 has 57 MA's), (151, 37170),

Gene: Priscilla_60 Start: 40303, Stop: 40668, Start Num: 80
Candidate Starts for Priscilla_60:
(Start: 80 @40303 has 230 MA's), (91, 40336), (100, 40351), (103, 40354), (110, 40393), (111, 40396), (115, 40417), (124, 40450), (132, 40477), (138, 40510), (145, 40552), (146, 40558), (176, 40654),

Gene: Pupper_45 Start: 15769, Stop: 16101, Start Num: 82
Candidate Starts for Pupper_45:
(23, 15514), (67, 15742), (Start: 82 @15769 has 57 MA's), (105, 15823), (107, 15832), (115, 15871), (138, 15955), (157, 16045),

Gene: QuickMath_62 Start: 42312, Stop: 42677, Start Num: 80
Candidate Starts for QuickMath_62:
(Start: 80 @42312 has 230 MA's), (91, 42345), (100, 42360), (103, 42363), (110, 42402), (111, 42405), (115, 42426), (124, 42459), (131, 42480), (132, 42486), (138, 42519), (145, 42561), (146, 42567),

(176, 42663),

Gene: RadFad_81 Start: 42975, Stop: 43364, Start Num: 82
Candidate Starts for RadFad_81:
(1, 41406), (2, 41541), (3, 41652), (4, 41688), (5, 41751), (9, 42429), (16, 42645), (Start: 82 @42975 has 57 MA's), (123, 43098), (132, 43131), (133, 43146), (143, 43200), (167, 43290),

Gene: Radiance_59 Start: 40325, Stop: 40690, Start Num: 80
Candidate Starts for Radiance_59:
(Start: 80 @40325 has 230 MA's), (91, 40358), (103, 40376), (111, 40418), (115, 40439), (124, 40472), (131, 40493), (132, 40499), (138, 40532), (145, 40574), (146, 40580), (176, 40676),

Gene: Ramsey_59 Start: 40638, Stop: 41003, Start Num: 80
Candidate Starts for Ramsey_59:
(Start: 80 @40638 has 230 MA's), (91, 40671), (94, 40677), (103, 40689), (118, 40761), (124, 40785), (126, 40788), (132, 40812), (145, 40887), (146, 40893), (169, 40968),

Gene: Raphaella_77 Start: 41746, Stop: 42147, Start Num: 82
Candidate Starts for Raphaella_77:
(Start: 82 @41746 has 57 MA's), (132, 41914), (143, 41983),

Gene: Raqqa_74 Start: 42460, Stop: 42840, Start Num: 91
Candidate Starts for Raqqa_74:
(Start: 82 @42436 has 57 MA's), (91, 42460), (101, 42481), (123, 42574), (132, 42607), (150, 42703),

Gene: Redno2_139 Start: 74778, Stop: 75131, Start Num: 80
Candidate Starts for Redno2_139:
(39, 74676), (Start: 80 @74778 has 230 MA's), (138, 74979), (145, 75021),

Gene: Renaud18_64 Start: 40462, Stop: 40815, Start Num: 80
Candidate Starts for Renaud18_64:
(68, 40426), (Start: 80 @40462 has 230 MA's), (99, 40507), (103, 40513), (115, 40576), (118, 40585), (130, 40621), (133, 40645), (171, 40795),

Gene: Renaud18_66 Start: 41090, Stop: 41452, Start Num: 80
Candidate Starts for Renaud18_66:
(Start: 80 @41090 has 230 MA's), (91, 41123), (100, 41138), (103, 41141), (110, 41180), (111, 41183), (115, 41204), (131, 41255), (132, 41261), (146, 41342), (176, 41438),

Gene: Renna12_30 Start: 21228, Stop: 20887, Start Num: 79
Candidate Starts for Renna12_30:
(Start: 79 @21228 has 17 MA's), (89, 21207),

Gene: Rialto_66 Start: 43107, Stop: 43472, Start Num: 80
Candidate Starts for Rialto_66:
(Start: 80 @43107 has 230 MA's), (91, 43140), (100, 43155), (103, 43158), (110, 43197), (111, 43200), (115, 43221), (124, 43254), (131, 43275), (132, 43281), (138, 43314), (145, 43356), (146, 43362), (176, 43458),

Gene: Richie_79 Start: 43614, Stop: 44015, Start Num: 82
Candidate Starts for Richie_79:
(24, 43368), (Start: 82 @43614 has 57 MA's), (132, 43782), (143, 43851),

Gene: Rita_61 Start: 38934, Stop: 39299, Start Num: 80
Candidate Starts for Rita_61:
(Start: 80 @38934 has 230 MA's), (91, 38967), (100, 38982), (103, 38985), (110, 39024), (111, 39027), (115, 39048), (124, 39081), (132, 39108), (138, 39141), (145, 39183), (146, 39189), (176, 39285),

Gene: RitaG_55 Start: 38831, Stop: 39196, Start Num: 80
Candidate Starts for RitaG_55:
(Start: 80 @38831 has 230 MA's), (91, 38864), (100, 38879), (103, 38882), (111, 38924), (115, 38945), (124, 38978), (131, 38999), (132, 39005), (138, 39038), (145, 39080), (146, 39086), (176, 39182),

Gene: Rockne_61 Start: 40843, Stop: 41208, Start Num: 80
Candidate Starts for Rockne_61:
(Start: 80 @40843 has 230 MA's), (91, 40876), (100, 40891), (103, 40894), (110, 40933), (111, 40936), (115, 40957), (124, 40990), (132, 41017), (138, 41050), (145, 41092), (146, 41098), (176, 41194),

Gene: RockyHorror_61 Start: 39889, Stop: 40254, Start Num: 80
Candidate Starts for RockyHorror_61:
(Start: 80 @39889 has 230 MA's), (91, 39922), (103, 39940), (110, 39979), (111, 39982), (115, 40003), (124, 40036), (132, 40063), (138, 40096), (145, 40138), (146, 40144), (176, 40240),

Gene: Ruby_56 Start: 40018, Stop: 40383, Start Num: 80
Candidate Starts for Ruby_56:
(Start: 80 @40018 has 230 MA's), (91, 40051), (100, 40066), (103, 40069), (110, 40108), (111, 40111), (115, 40132), (132, 40192), (138, 40225), (145, 40267), (146, 40273), (176, 40369),

Gene: Ruchi_30 Start: 22625, Stop: 22281, Start Num: 79
Candidate Starts for Ruchi_30:
(Start: 79 @22625 has 17 MA's), (Start: 90 @22604 has 1 MA's), (103, 22580), (113, 22532), (167, 22298),

Gene: SCentae_45 Start: 15768, Stop: 16100, Start Num: 82
Candidate Starts for SCentae_45:
(23, 15513), (67, 15741), (Start: 82 @15768 has 57 MA's), (105, 15822), (107, 15831), (115, 15870), (138, 15954), (157, 16044),

Gene: SG4_57 Start: 39721, Stop: 40086, Start Num: 80
Candidate Starts for SG4_57:
(Start: 80 @39721 has 230 MA's), (91, 39754), (100, 39769), (103, 39772), (110, 39811), (111, 39814), (115, 39835), (124, 39868), (132, 39895), (138, 39928), (145, 39970), (146, 39976), (176, 40072),

Gene: Saal_62 Start: 41474, Stop: 41839, Start Num: 80
Candidate Starts for Saal_62:
(Start: 80 @41474 has 230 MA's), (91, 41507), (100, 41522), (103, 41525), (110, 41564), (111, 41567), (115, 41588), (124, 41621), (132, 41648), (138, 41681), (145, 41723), (146, 41729), (176, 41825),

Gene: Sabbb_64 Start: 41162, Stop: 41527, Start Num: 80
Candidate Starts for Sabbb_64:
(Start: 80 @41162 has 230 MA's), (91, 41195), (100, 41210), (103, 41213), (110, 41252), (111, 41255), (115, 41276), (132, 41336), (138, 41369), (145, 41411), (146, 41417), (166, 41486), (176, 41513),

Gene: Sakai_73 Start: 41641, Stop: 42042, Start Num: 82
Candidate Starts for Sakai_73:
(24, 41395), (Start: 82 @41641 has 57 MA's), (132, 41809), (143, 41878),

Gene: Sashimi_74 Start: 42326, Stop: 42715, Start Num: 82
Candidate Starts for Sashimi_74:
(Start: 82 @42326 has 57 MA's), (123, 42449), (143, 42551), (167, 42641),

Gene: Sassafras_58 Start: 39803, Stop: 40168, Start Num: 80
Candidate Starts for Sassafras_58:
(Start: 80 @39803 has 230 MA's), (91, 39836), (100, 39851), (103, 39854), (110, 39893), (111, 39896), (115, 39917), (124, 39950), (132, 39977), (138, 40010), (145, 40052), (146, 40058), (176, 40154),

Gene: Satrap_76 Start: 42388, Stop: 42789, Start Num: 82
Candidate Starts for Satrap_76:
(Start: 82 @42388 has 57 MA's), (106, 42454), (132, 42556), (143, 42625),

Gene: Schatzie_140 Start: 77338, Stop: 77691, Start Num: 80
Candidate Starts for Schatzie_140:
(Start: 80 @77338 has 230 MA's), (138, 77539), (145, 77581),

Gene: Schism_53 Start: 34682, Stop: 35089, Start Num: 56
Candidate Starts for Schism_53:
(Start: 56 @34682 has 1 MA's), (75, 34715), (Start: 80 @34727 has 230 MA's), (Start: 81 @34730 has 4 MA's), (92, 34763), (103, 34781), (113, 34829), (148, 34988),

Gene: ScoobyDoobyDoo_55 Start: 19568, Stop: 19993, Start Num: 62
Candidate Starts for ScoobyDoobyDoo_55:
(Start: 62 @19568 has 3 MA's), (110, 19712), (123, 19763), (125, 19766), (150, 19880), (152, 19889), (159, 19913),

Gene: ScoobySnack_54 Start: 33919, Stop: 34356, Start Num: 87
Candidate Starts for ScoobySnack_54:
(14, 33487), (Start: 87 @33919 has 18 MA's), (123, 34042), (128, 34057), (136, 34090), (147, 34147), (148, 34153), (174, 34240), (180, 34267), (181, 34270), (184, 34306),

Gene: Scottish_58 Start: 39849, Stop: 40214, Start Num: 80
Candidate Starts for Scottish_58:
(Start: 80 @39849 has 230 MA's), (91, 39882), (100, 39897), (103, 39900), (111, 39942), (115, 39963), (124, 39996), (132, 40023), (138, 40056), (145, 40098), (146, 40104), (176, 40200),

Gene: Seabastian_65 Start: 42816, Stop: 43181, Start Num: 80
Candidate Starts for Seabastian_65:
(Start: 80 @42816 has 230 MA's), (91, 42849), (100, 42864), (103, 42867), (110, 42906), (111, 42909), (115, 42930), (124, 42963), (132, 42990), (138, 43023), (145, 43065), (146, 43071), (176, 43167),

Gene: Seahorse_84 Start: 47304, Stop: 47699, Start Num: 82
Candidate Starts for Seahorse_84:
(Start: 82 @47304 has 57 MA's), (101, 47349), (132, 47475), (150, 47571), (178, 47673),

Gene: Settecandela_165 Start: 110158, Stop: 110505, Start Num: 84
Candidate Starts for Settecandela_165:
(Start: 84 @110158 has 2 MA's), (97, 110191), (99, 110194), (102, 110200), (115, 110263), (162, 110455),

Gene: Shatter_48 Start: 41091, Stop: 40741, Start Num: 60

Candidate Starts for Shatter_48:
(Start: 60 @41091 has 12 MA's), (95, 41046), (103, 41037), (105, 41022), (115, 40974), (138, 40893),

Gene: Shauna1_58 Start: 40565, Stop: 40930, Start Num: 80
Candidate Starts for Shauna1_58:
(Start: 80 @40565 has 230 MA's), (91, 40598), (95, 40607), (103, 40616), (124, 40712), (126, 40715), (132, 40739), (145, 40814), (146, 40820), (169, 40895),

Gene: ShiLan_59 Start: 40250, Stop: 40615, Start Num: 80
Candidate Starts for ShiLan_59:
(Start: 80 @40250 has 230 MA's), (91, 40283), (100, 40298), (103, 40301), (110, 40340), (111, 40343), (115, 40364), (124, 40397), (132, 40424), (138, 40457), (145, 40499), (146, 40505), (176, 40601),

Gene: ShowerHandel_63 Start: 40214, Stop: 40579, Start Num: 80
Candidate Starts for ShowerHandel_63:
(Start: 80 @40214 has 230 MA's), (91, 40247), (100, 40262), (103, 40265), (110, 40304), (111, 40307), (115, 40328), (124, 40361), (132, 40388), (138, 40421), (145, 40463), (146, 40469), (176, 40565),

Gene: ShroomBoi_62 Start: 41174, Stop: 41539, Start Num: 80
Candidate Starts for ShroomBoi_62:
(Start: 80 @41174 has 230 MA's), (91, 41207), (100, 41222), (103, 41225), (111, 41267), (115, 41288), (124, 41321), (132, 41348), (138, 41381), (145, 41423), (146, 41429), (176, 41525),

Gene: Shukran_73 Start: 41223, Stop: 41588, Start Num: 82
Candidate Starts for Shukran_73:
(29, 41013), (46, 41118), (77, 41211), (Start: 82 @41223 has 57 MA's), (103, 41256), (115, 41319), (132, 41379),

Gene: SiSi_58 Start: 39623, Stop: 39988, Start Num: 80
Candidate Starts for SiSi_58:
(Start: 80 @39623 has 230 MA's), (91, 39656), (100, 39671), (103, 39674), (110, 39713), (111, 39716), (115, 39737), (124, 39770), (132, 39797), (138, 39830), (145, 39872), (146, 39878), (176, 39974),

Gene: SimranZ1_60 Start: 40397, Stop: 40762, Start Num: 80
Candidate Starts for SimranZ1_60:
(Start: 80 @40397 has 230 MA's), (91, 40430), (100, 40445), (103, 40448), (110, 40487), (111, 40490), (115, 40511), (132, 40571), (138, 40604), (145, 40646), (146, 40652), (166, 40721), (176, 40748),

Gene: Sisko_47 Start: 41439, Stop: 41065, Start Num: 60
Candidate Starts for Sisko_47:
(Start: 60 @41439 has 12 MA's), (95, 41379), (114, 41316), (115, 41307), (143, 41187),

Gene: Slim_61 Start: 41010, Stop: 41375, Start Num: 80
Candidate Starts for Slim_61:
(Start: 80 @41010 has 230 MA's), (91, 41043), (100, 41058), (103, 41061), (110, 41100), (111, 41103), (115, 41124), (124, 41157), (132, 41184), (138, 41217), (145, 41259), (146, 41265), (176, 41361),

Gene: SonDevVon_83 Start: 42690, Stop: 43091, Start Num: 82
Candidate Starts for SonDevVon_83:
(24, 42444), (Start: 82 @42690 has 57 MA's), (132, 42858), (143, 42927),

Gene: Sonali_65 Start: 45108, Stop: 45521, Start Num: 76
Candidate Starts for Sonali_65:

(34, 44958), (Start: 76 @45108 has 3 MA's), (108, 45198), (113, 45216), (140, 45339), (144, 45363),

Gene: Soul22_66 Start: 41808, Stop: 42173, Start Num: 80
Candidate Starts for Soul22_66:
(Start: 80 @41808 has 230 MA's), (91, 41841), (100, 41856), (103, 41859), (110, 41898), (111, 41901), (115, 41922), (124, 41955), (132, 41982), (138, 42015), (145, 42057), (146, 42063), (176, 42159),

Gene: Sour_51 Start: 44771, Stop: 44406, Start Num: 59
Candidate Starts for Sour_51:
(55, 44777), (57, 44774), (Start: 59 @44771 has 1 MA's), (61, 44765), (Start: 83 @44750 has 1 MA's), (103, 44717), (105, 44702), (115, 44654), (121, 44633), (153, 44489), (154, 44483), (160, 44471), (169, 44444), (179, 44411),

Gene: Spartacus_62 Start: 40884, Stop: 41249, Start Num: 80
Candidate Starts for Spartacus_62:
(Start: 80 @40884 has 230 MA's), (91, 40917), (100, 40932), (103, 40935), (110, 40974), (111, 40977), (115, 40998), (132, 41058), (138, 41091), (145, 41133), (146, 41139), (176, 41235),

Gene: SpicyFrank_78 Start: 42043, Stop: 42432, Start Num: 82
Candidate Starts for SpicyFrank_78:
(Start: 82 @42043 has 57 MA's), (123, 42166), (132, 42199), (133, 42214), (143, 42268),

Gene: Spikelee_67 Start: 42504, Stop: 42869, Start Num: 80
Candidate Starts for Spikelee_67:
(Start: 80 @42504 has 230 MA's), (91, 42537), (100, 42552), (103, 42555), (111, 42597), (115, 42618), (132, 42678), (138, 42711), (145, 42753), (146, 42759), (176, 42855),

Gene: Spoonbill_57 Start: 38791, Stop: 39156, Start Num: 80
Candidate Starts for Spoonbill_57:
(Start: 80 @38791 has 230 MA's), (91, 38824), (100, 38839), (103, 38842), (111, 38884), (115, 38905), (124, 38938), (131, 38959), (132, 38965), (138, 38998), (145, 39040), (146, 39046), (176, 39142),

Gene: Sporco_79 Start: 43426, Stop: 43827, Start Num: 82
Candidate Starts for Sporco_79:
(Start: 82 @43426 has 57 MA's), (132, 43594), (143, 43663),

Gene: Squirty_62 Start: 41343, Stop: 41708, Start Num: 80
Candidate Starts for Squirty_62:
(Start: 80 @41343 has 230 MA's), (91, 41376), (95, 41385), (103, 41394), (124, 41490), (126, 41493), (132, 41517), (145, 41592), (146, 41598), (169, 41673),

Gene: StAugustine_140 Start: 84499, Stop: 84137, Start Num: 81
Candidate Starts for StAugustine_140:
(75, 84514), (Start: 81 @84499 has 4 MA's), (Start: 84 @84490 has 2 MA's), (88, 84475), (108, 84418), (110, 84409), (158, 84211),

Gene: Starcevich_60 Start: 40380, Stop: 40745, Start Num: 80
Candidate Starts for Starcevich_60:
(Start: 80 @40380 has 230 MA's), (91, 40413), (100, 40428), (103, 40431), (110, 40470), (111, 40473), (115, 40494), (124, 40527), (132, 40554), (138, 40587), (145, 40629), (146, 40635), (176, 40731),

Gene: Strokeseat_56 Start: 38330, Stop: 38695, Start Num: 80
Candidate Starts for Strokeseat_56:

(Start: 80 @38330 has 230 MA's), (91, 38363), (100, 38378), (103, 38381), (111, 38423), (115, 38444), (124, 38477), (131, 38498), (132, 38504), (145, 38579), (146, 38585), (176, 38681),

Gene: Sunshine23_65 Start: 44762, Stop: 45172, Start Num: 76
Candidate Starts for Sunshine23_65:
(34, 44612), (Start: 76 @44762 has 3 MA's), (96, 44810), (108, 44852), (113, 44870), (132, 44945), (140, 44993), (144, 45017),

Gene: SwagPigglett_65 Start: 42522, Stop: 42887, Start Num: 80
Candidate Starts for SwagPigglett_65:
(Start: 80 @42522 has 230 MA's), (91, 42555), (100, 42570), (103, 42573), (110, 42612), (111, 42615), (115, 42636), (124, 42669), (132, 42696), (138, 42729), (145, 42771), (146, 42777), (176, 42873),

Gene: TChen_61 Start: 41633, Stop: 41998, Start Num: 80
Candidate Starts for TChen_61:
(Start: 80 @41633 has 230 MA's), (91, 41666), (103, 41684), (110, 41723), (111, 41726), (115, 41747), (118, 41756), (124, 41780), (132, 41807), (138, 41840), (145, 41882), (146, 41888), (176, 41984),

Gene: TChen_59 Start: 41008, Stop: 41361, Start Num: 80
Candidate Starts for TChen_59:
(68, 40972), (Start: 80 @41008 has 230 MA's), (99, 41053), (103, 41059), (115, 41122), (118, 41131), (130, 41167), (133, 41191), (171, 41341),

Gene: Taj_64 Start: 41975, Stop: 42340, Start Num: 80
Candidate Starts for Taj_64:
(Start: 80 @41975 has 230 MA's), (91, 42008), (100, 42023), (103, 42026), (110, 42065), (111, 42068), (115, 42089), (124, 42122), (132, 42149), (138, 42182), (145, 42224), (146, 42230), (176, 42326),

Gene: ThayneTheZag_81 Start: 42670, Stop: 43059, Start Num: 82
Candidate Starts for ThayneTheZag_81:
(Start: 82 @42670 has 57 MA's), (123, 42793), (132, 42826), (133, 42841), (143, 42895),

Gene: ThetaBob_63 Start: 41082, Stop: 41435, Start Num: 80
Candidate Starts for ThetaBob_63:
(68, 41046), (Start: 80 @41082 has 230 MA's), (99, 41127), (103, 41133), (115, 41196), (118, 41205), (130, 41241), (133, 41265), (171, 41415),

Gene: ThetaBob_65 Start: 41707, Stop: 42069, Start Num: 80
Candidate Starts for ThetaBob_65:
(Start: 80 @41707 has 230 MA's), (91, 41740), (100, 41755), (103, 41758), (110, 41797), (111, 41800), (115, 41821), (118, 41830), (132, 41878), (145, 41953), (146, 41959), (176, 42055),

Gene: Thibault_127 Start: 73673, Stop: 74026, Start Num: 80
Candidate Starts for Thibault_127:
(36, 73550), (37, 73562), (Start: 80 @73673 has 230 MA's), (138, 73874), (145, 73916),

Gene: Thonko_86 Start: 63155, Stop: 62742, Start Num: 73
Candidate Starts for Thonko_86:
(12, 63593), (20, 63440), (25, 63365), (31, 63338), (49, 63224), (52, 63218), (Start: 73 @63155 has 1 MA's), (86, 63116), (98, 63086), (103, 63077), (115, 63014), (150, 62858), (152, 62846), (155, 62831), (171, 62783),

Gene: ThreeRngTarjay_139 Start: 77261, Stop: 77614, Start Num: 80

Candidate Starts for ThreeRngTarjay_139:
(Start: 80 @77261 has 230 MA's), (138, 77462), (145, 77504),

Gene: Tiff81_72 Start: 40921, Stop: 41316, Start Num: 82
Candidate Starts for Tiff81_72:
(Start: 82 @40921 has 57 MA's), (101, 40966), (132, 41092), (150, 41188), (178, 41290),

Gene: Tootsieroll_61 Start: 39546, Stop: 39911, Start Num: 80
Candidate Starts for Tootsieroll_61:
(Start: 80 @39546 has 230 MA's), (91, 39579), (100, 39594), (103, 39597), (111, 39639), (115, 39660), (124, 39693), (131, 39714), (132, 39720), (138, 39753), (145, 39795), (146, 39801), (176, 39897),

Gene: Topiatin_68 Start: 42875, Stop: 43240, Start Num: 80
Candidate Starts for Topiatin_68:
(Start: 80 @42875 has 230 MA's), (91, 42908), (100, 42923), (103, 42926), (110, 42965), (111, 42968), (115, 42989), (131, 43043), (132, 43049), (138, 43082), (145, 43124), (146, 43130), (176, 43226),

Gene: Totinger_59 Start: 39476, Stop: 39841, Start Num: 80
Candidate Starts for Totinger_59:
(Start: 80 @39476 has 230 MA's), (91, 39509), (100, 39524), (103, 39527), (110, 39566), (111, 39569), (115, 39590), (124, 39623), (132, 39650), (138, 39683), (145, 39725), (146, 39731), (176, 39827),

Gene: UncleRicky_59 Start: 40457, Stop: 40822, Start Num: 80
Candidate Starts for UncleRicky_59:
(Start: 80 @40457 has 230 MA's), (91, 40490), (100, 40505), (103, 40508), (110, 40547), (111, 40550), (115, 40571), (124, 40604), (131, 40625), (132, 40631), (138, 40664), (145, 40706), (146, 40712), (176, 40808),

Gene: VRedHorse_60 Start: 39530, Stop: 39895, Start Num: 80
Candidate Starts for VRedHorse_60:
(Start: 80 @39530 has 230 MA's), (91, 39563), (100, 39578), (103, 39581), (110, 39620), (111, 39623), (115, 39644), (124, 39677), (132, 39704), (138, 39737), (145, 39779), (146, 39785), (176, 39881),

Gene: Veteran_57 Start: 39234, Stop: 39599, Start Num: 80
Candidate Starts for Veteran_57:
(Start: 80 @39234 has 230 MA's), (91, 39267), (100, 39282), (103, 39285), (110, 39324), (111, 39327), (115, 39348), (124, 39381), (131, 39402), (132, 39408), (138, 39441), (145, 39483), (146, 39489), (176, 39585),

Gene: Violac_62 Start: 41600, Stop: 41965, Start Num: 80
Candidate Starts for Violac_62:
(Start: 80 @41600 has 230 MA's), (91, 41633), (100, 41648), (103, 41651), (111, 41693), (115, 41714), (124, 41747), (131, 41768), (132, 41774), (138, 41807), (145, 41849), (146, 41855), (176, 41951),

Gene: Violeta_59 Start: 34047, Stop: 34484, Start Num: 87
Candidate Starts for Violeta_59:
(7, 33411), (Start: 87 @34047 has 18 MA's), (115, 34143), (123, 34170), (136, 34218), (147, 34275), (148, 34281), (152, 34302), (174, 34368), (181, 34398), (184, 34434),

Gene: Vivum_61 Start: 40532, Stop: 40897, Start Num: 80
Candidate Starts for Vivum_61:
(Start: 80 @40532 has 230 MA's), (91, 40565), (100, 40580), (103, 40583), (111, 40625), (115, 40646), (124, 40679), (131, 40700), (132, 40706), (138, 40739), (145, 40781), (146, 40787), (176, 40883),

Gene: Vulpecula_30 Start: 22301, Stop: 21957, Start Num: 79
Candidate Starts for Vulpecula_30:
(Start: 79 @22301 has 17 MA's), (Start: 90 @22280 has 1 MA's), (103, 22256), (113, 22208),

Gene: Wachhund_61 Start: 40167, Stop: 40532, Start Num: 80
Candidate Starts for Wachhund_61:
(Start: 80 @40167 has 230 MA's), (91, 40200), (95, 40209), (103, 40218), (111, 40260), (118, 40290), (124, 40314), (126, 40317), (145, 40416), (146, 40422), (169, 40497), (170, 40500), (172, 40503),

Gene: Wanda_144 Start: 74968, Stop: 75321, Start Num: 80
Candidate Starts for Wanda_144:
(Start: 80 @74968 has 230 MA's), (138, 75169), (145, 75211),

Gene: Warren_57 Start: 34005, Stop: 34442, Start Num: 87
Candidate Starts for Warren_57:
(Start: 87 @34005 has 18 MA's), (115, 34101), (123, 34128), (136, 34176), (147, 34233), (148, 34239), (152, 34260), (174, 34326), (181, 34356), (183, 34380), (184, 34392),

Gene: Wee_64 Start: 42051, Stop: 42416, Start Num: 80
Candidate Starts for Wee_64:
(Start: 80 @42051 has 230 MA's), (91, 42084), (100, 42099), (103, 42102), (110, 42141), (111, 42144), (115, 42165), (124, 42198), (132, 42225), (138, 42258), (145, 42300), (146, 42306), (176, 42402),

Gene: Whouxphf_57 Start: 40126, Stop: 40491, Start Num: 80
Candidate Starts for Whouxphf_57:
(Start: 80 @40126 has 230 MA's), (91, 40159), (100, 40174), (103, 40177), (110, 40216), (111, 40219), (115, 40240), (124, 40273), (132, 40300), (138, 40333), (145, 40375), (146, 40381), (176, 40477),

Gene: WileyE_31 Start: 21694, Stop: 21350, Start Num: 79
Candidate Starts for WileyE_31:
(Start: 79 @21694 has 17 MA's), (Start: 90 @21673 has 1 MA's), (113, 21601), (150, 21430), (167, 21367),

Gene: WillSterrel_61 Start: 42001, Stop: 42366, Start Num: 80
Candidate Starts for WillSterrel_61:
(Start: 80 @42001 has 230 MA's), (91, 42034), (100, 42049), (103, 42052), (110, 42091), (111, 42094), (115, 42115), (132, 42175), (138, 42208), (145, 42250), (146, 42256), (176, 42352),

Gene: Winchester007_59 Start: 33750, Stop: 34187, Start Num: 87
Candidate Starts for Winchester007_59:
(Start: 87 @33750 has 18 MA's), (115, 33846), (123, 33873), (136, 33921), (147, 33978), (148, 33984), (152, 34005), (174, 34071), (181, 34101), (183, 34125), (184, 34137),

Gene: Windest_80 Start: 41108, Stop: 41497, Start Num: 82
Candidate Starts for Windest_80:
(Start: 82 @41108 has 57 MA's), (123, 41231), (132, 41264), (133, 41279), (143, 41333),

Gene: XFactor_58 Start: 39256, Stop: 39621, Start Num: 80
Candidate Starts for XFactor_58:
(Start: 80 @39256 has 230 MA's), (91, 39289), (94, 39295), (103, 39307), (111, 39349), (118, 39379), (124, 39403), (126, 39406), (145, 39505), (146, 39511), (169, 39586), (170, 39589),

Gene: Yago84_47 Start: 41514, Stop: 41140, Start Num: 60
Candidate Starts for Yago84_47:
(Start: 60 @41514 has 12 MA's), (95, 41454), (114, 41391), (115, 41382), (143, 41262),

Gene: Yeet_138 Start: 76734, Stop: 77087, Start Num: 80
Candidate Starts for Yeet_138:
(39, 76632), (Start: 80 @76734 has 230 MA's), (138, 76935), (145, 76977),

Gene: Yorick_59 Start: 40588, Stop: 40953, Start Num: 80
Candidate Starts for Yorick_59:
(Start: 80 @40588 has 230 MA's), (91, 40621), (100, 40636), (103, 40639), (110, 40678), (111, 40681), (115, 40702), (124, 40735), (132, 40762), (138, 40795), (145, 40837), (146, 40843), (176, 40939),

Gene: Yoshi_73 Start: 41971, Stop: 42333, Start Num: 80
Candidate Starts for Yoshi_73:
(Start: 80 @41971 has 230 MA's), (91, 42004), (100, 42019), (103, 42022), (110, 42061), (111, 42064), (115, 42085), (118, 42094), (132, 42142), (145, 42217), (146, 42223), (176, 42319),

Gene: Yoshi_71 Start: 41346, Stop: 41699, Start Num: 80
Candidate Starts for Yoshi_71:
(68, 41310), (Start: 80 @41346 has 230 MA's), (99, 41391), (103, 41397), (115, 41460), (118, 41469), (130, 41505), (133, 41529), (171, 41679),

Gene: YoungHarleezy_76 Start: 42016, Stop: 42417, Start Num: 82
Candidate Starts for YoungHarleezy_76:
(Start: 82 @42016 has 57 MA's), (132, 42184), (143, 42253),

Gene: Zapner_73 Start: 42130, Stop: 42495, Start Num: 80
Candidate Starts for Zapner_73:
(Start: 80 @42130 has 230 MA's), (91, 42163), (100, 42178), (103, 42181), (110, 42220), (111, 42223), (115, 42244), (124, 42277), (132, 42304), (138, 42337), (145, 42379), (146, 42385), (176, 42481),

Gene: Zelink_139 Start: 77780, Stop: 78133, Start Num: 80
Candidate Starts for Zelink_139:
(Start: 80 @77780 has 230 MA's), (138, 77981), (145, 78023),

Gene: Zenteno07_93 Start: 66203, Stop: 65790, Start Num: 69
Candidate Starts for Zenteno07_93:
(Start: 69 @66203 has 2 MA's), (98, 66122), (120, 66035), (132, 65993), (138, 65960), (152, 65885), (177, 65795),

Gene: Zerg_60 Start: 40001, Stop: 40366, Start Num: 80
Candidate Starts for Zerg_60:
(Start: 80 @40001 has 230 MA's), (91, 40034), (100, 40049), (103, 40052), (110, 40091), (111, 40094), (115, 40115), (124, 40148), (132, 40175), (138, 40208), (145, 40250), (146, 40256), (176, 40352),

Gene: Zizzle_64 Start: 41844, Stop: 42209, Start Num: 80
Candidate Starts for Zizzle_64:
(Start: 80 @41844 has 230 MA's), (91, 41877), (100, 41892), (103, 41895), (110, 41934), (111, 41937), (115, 41958), (124, 41991), (132, 42018), (138, 42051), (145, 42093), (146, 42099), (176, 42195),

Gene: Zucker_73 Start: 43088, Stop: 43483, Start Num: 82
Candidate Starts for Zucker_73:

(26, 42881), (Start: 82 @43088 has 57 MA's), (101, 43133), (123, 43226), (132, 43259), (178, 43457),