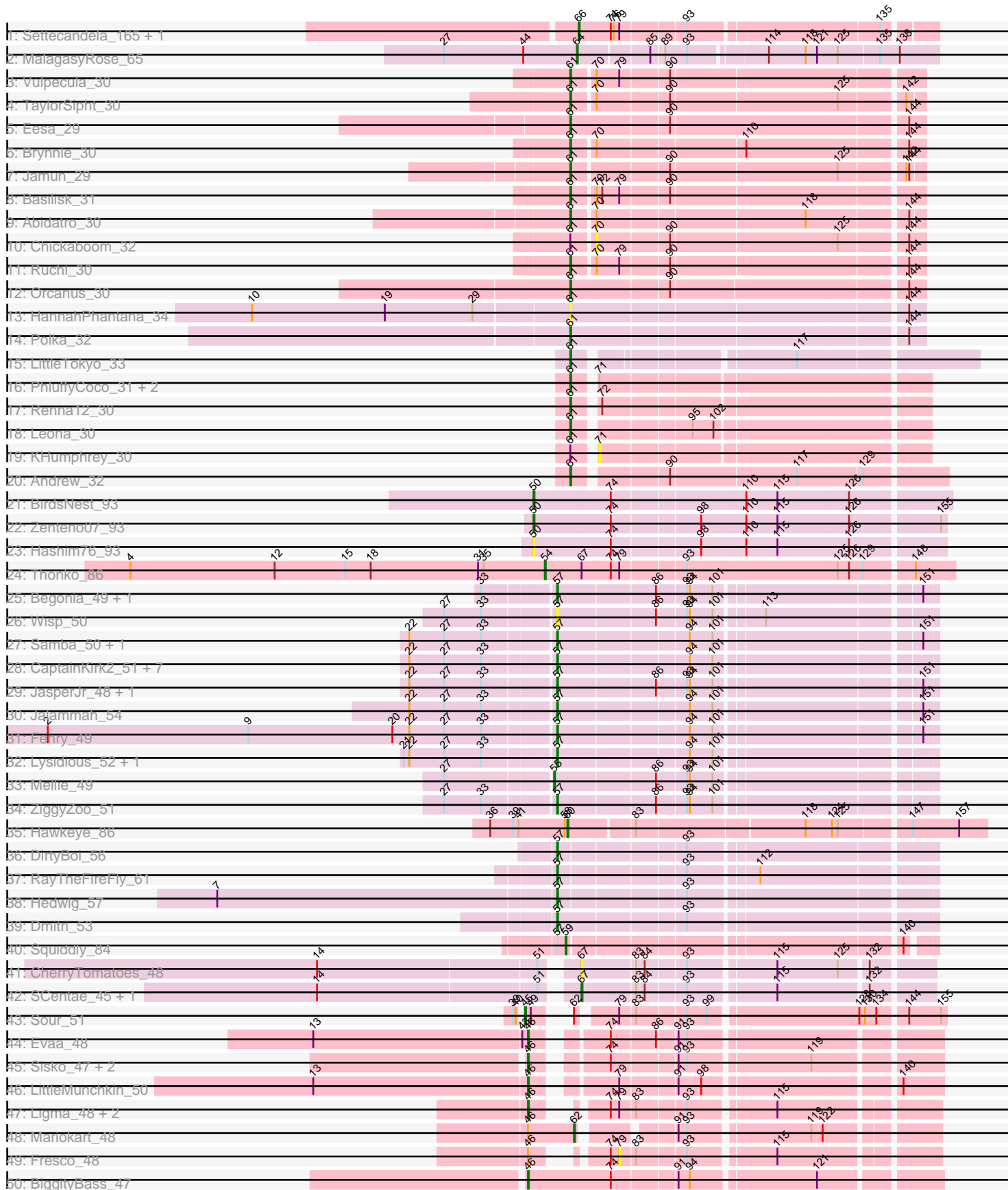
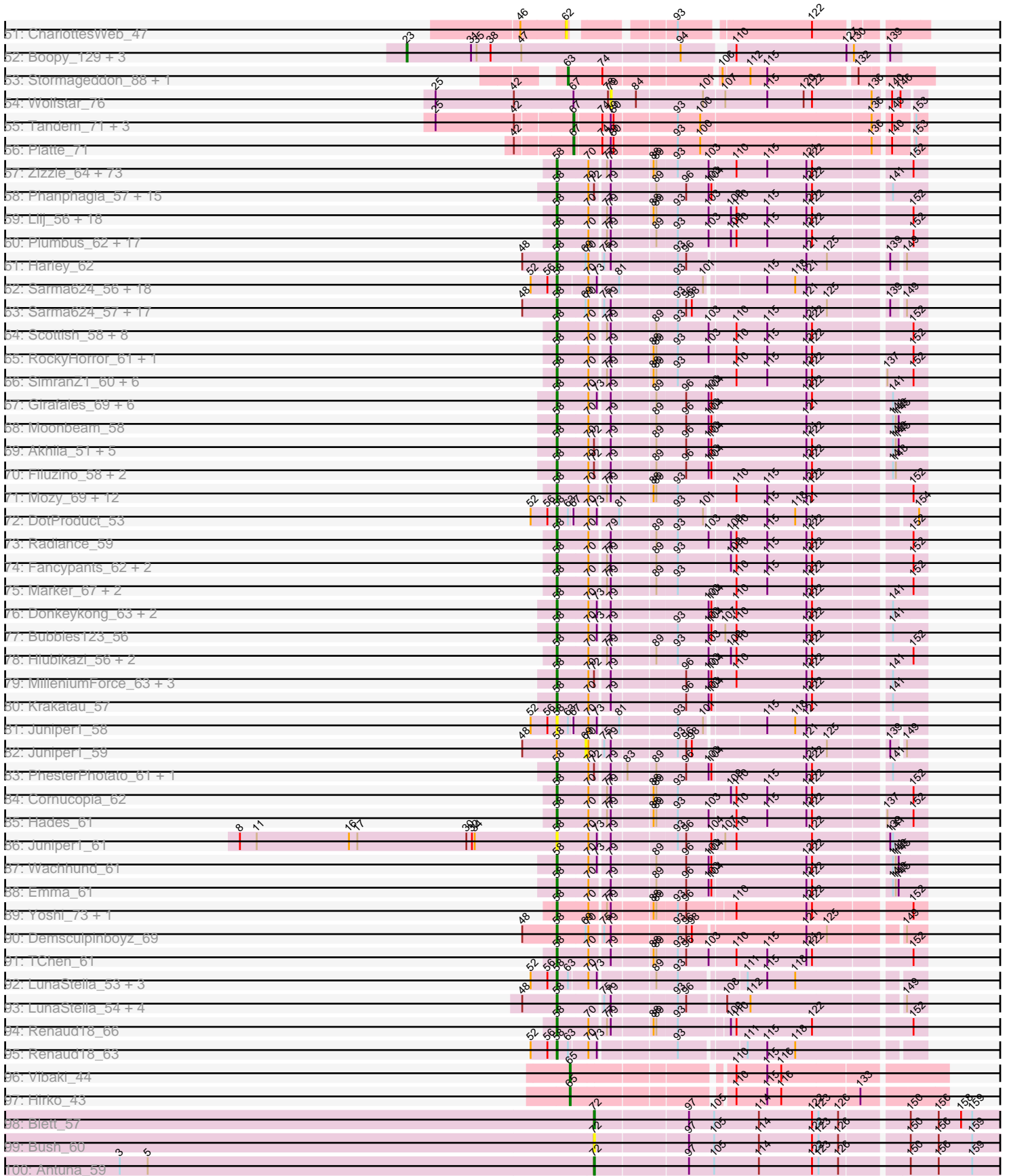


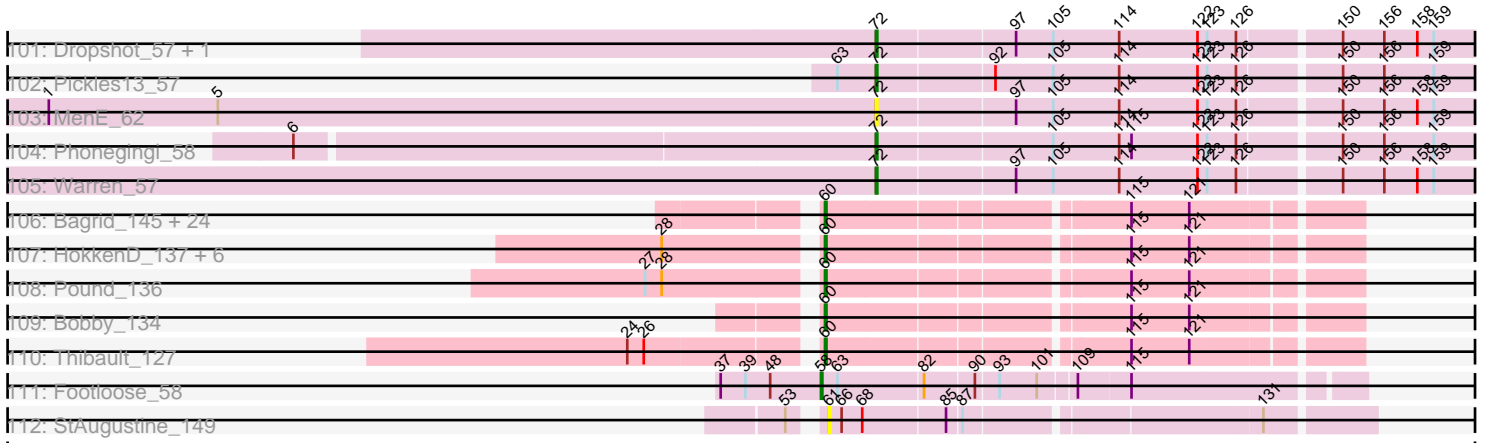
Pham 163267



Pham 163267



Pham 163267



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 163267 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163267 has 387 members, 39 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_165, Phrappuccino_165
- Track 2 : MalagasyRose_65
- Track 3 : Vulpecula_30
- Track 4 : TaylorSipht_30
- Track 5 : Eesa_29
- Track 6 : Brynnie_30
- Track 7 : Jamun_29
- Track 8 : Basilisk_31
- Track 9 : Abidatro_30
- Track 10 : Chickaboom_32
- Track 11 : Ruchi_30
- Track 12 : Orcanus_30
- Track 13 : HannahPhantana_34
- Track 14 : Polka_32
- Track 15 : LittleTokyo_33
- Track 16 : PhluffyCoco_31, RedFox_31, Juno112_30
- Track 17 : Renna12_30
- Track 18 : Leona_30
- Track 19 : KHumphrey_30
- Track 20 : Andrew_32
- Track 21 : BirdsNest_93
- Track 22 : Zenteno07_93
- Track 23 : Hashim76_93
- Track 24 : Thonko_86
- Track 25 : Begonia_49, Malachai_49
- Track 26 : Wisp_50
- Track 27 : Samba_50, Hitter_51
- Track 28 : CaptainKirk2_51, MintFen_51, BlingBling_48, Barco_49, Melba_50, Delian_54, Zarbodnamra_50, Archis_54
- Track 29 : JasperJr_48, Guacamole_48
- Track 30 : Jalammah_54
- Track 31 : Fenry_49
- Track 32 : Lysidious_52, Utz_44
- Track 33 : Mellie_49
- Track 34 : ZiggyZoo_51
- Track 35 : Hawkeye_86
- Track 36 : DirtyBoi_56

- Track 37 : RayTheFireFly_61
- Track 38 : Hedwig_57
- Track 39 : Dmitri_53
- Track 40 : Squiddly_84
- Track 41 : CherryTomatoes_48
- Track 42 : SCentae_45, Pupper_45
- Track 43 : Sour_51
- Track 44 : Evaa_48
- Track 45 : Sisko_47, AnClar_48, Yago84_47
- Track 46 : LittleMunchkin_50
- Track 47 : Ligma_48, Axumite_48, Shatter_48
- Track 48 : Mariokart_48
- Track 49 : Fresco_48
- Track 50 : BiggityBass_47
- Track 51 : CharlottesWeb_47
- Track 52 : Boopy_129, BlueNGold_128, Forza_129, Mareelih_127
- Track 53 : Stormageddon_88, RedWattleHog_91
- Track 54 : Wolfstar_76
- Track 55 : Tandem_71, Pioneer3_71, Hortus1_71, OlinDD_71
- Track 56 : Platte_71
- Track 57 : Zizzle_64, Rita_61, Zerg_60, DeadP_66, Soul22_66, Martik_60, AlpineSix_65, Koella_54, Zapner_73, LittleShirley_60, CaptainTrips_57, Maravista_61, Rockne_61, Eish_64, James_64, Pippy_58, SG4_57, LastJedi_54, Dorothy_58, Crumble_55, Seabastian_65, Taj_64, Jinglebell_65, Ochi17_63, Jabbawokkie_74, Totinger_62, GUmbie_58, Lizziana_66, Priscilla_60, Whouxphf_57, VRedHorse_60, Dante_61, Yorick_59, Chuckly_63, ShiLan_59, PMC_57, Modragons_64, Blarby_72, Boomer_65, Mattes_64, Firehouse51_61, Inventum_55, OwlsT2W_60, Mutaforma13_64, Starcevich_60, ShowerHandel_61, SiSi_58, Burwell21_58, SwagPiggett_65, Hegedechwinu_60, Pollywog_61, IbOuu_61, Saal_62, BuzzLyseyear_66, Alexphander_64, OlympiaSaint_62, DaWorst_61, Karhdo_57, Wee_64, Sassafras_58, OfUltron_65, Oksu_64, Llama_65, MinionDave_59, FreddyB_61, Brocalys_55, BobaPhett_64, Enby_61, NormanBulbieJr_60, Clifton_55, Eradicator_53, Cabrinians_61, Gorge_64, Polka14_58
- Track 58 : Phanphagia_57, Beakin_61, ArcusAngelus_62, TDanisky_67, DLane_55, Bobi_65, Ms6_55, Melissauen88_58, PopTart_54, SuperGrey_63, SassyB_54, Ardmore_52, Kenuha5_57, Chevrolet_68, Sparkdehlily_67, Tweety_59
- Track 59 : Llij_56, Phatniss_58, Lorde_60, Job42_62, UncleRicky_59, Nivrat_56, Avani_68, Drago_58, QuickMath_62, Kimberlium_63, Jarcob_60, LilMoolah_58, DirtMcgirt_59, Estave1_63, DRBy19_63, Kersh_62, Veteran_57, Philus_63, Rialto_66
- Track 60 : Plumbus_62, Daenerys_54, ByChance_52, Pacc40_54, KingMidas_59, BodEinwohner17_60, Leozinho_59, Leperchaun_52, DosHalletts_66, Tootsieroll_61, JoeyJr_55, PHappiness_55, Doomphist_60, Poenanya_60, DaddyRickover_59, Empress_58, Spoonbill_57, RitaG_55
- Track 61 : Harley_62
- Track 62 : Sarma624_56, Royals2015_61, BigPhil_54, Kingsley_55, Cerasum_54, Harley_61, Starcevich_57, Che8_63, Coco12_57, Ovechkin_57, Seagreen_58, Kimberlium_60, QuickMath_59, Demsculpinboyz_68, JalFarm20_71, Velveteen_53, Che9d_66, Juice456_59, Cornie_53
- Track 63 : Sarma624_57, Starcevich_58, BigPhil_55, Cerasum_55, QuickMath_60, Che8_64, Coco12_58, Ovechkin_58, Seagreen_59, DotProduct_54, Kimberlium_61, JalFarm20_72, Velveteen_54, Che9d_67, Juice456_60, Cornie_54, Kingsley_56,

Royals2015_62

- Track 64 : Scottish_58, EleanorGeorge_61, Blexus_58, ShroomBoi_62, Mova_61, KristaRAM_63, Gandalph_63, MadMen_58, Madiba_58
- Track 65 : RockyHorror_61, Doug_62
- Track 66 : SimranZ1_60, Sabbb_64, Phasih_58, Fastidio_59, Ibhubesi_60, Demsculpinboyz_71, DillTech15_57
- Track 67 : Girafales_69, Sandalphon_61, Quico_68, Florinda_71, Minnie_63, Bipolar_58, Fruitloop_57
- Track 68 : Moonbeam_58
- Track 69 : Akhila_51, MilanaBonita_50, Whatsapiecost_60, Hamulus_61, Ogopogo_65, Flathead_60
- Track 70 : Filuzino_58, StAnnes_58, XFactor_58
- Track 71 : Mozy_69, LunaBlu_62, GigiOuiOui_56, Girr_58, Ruby_56, IrishSherpFalk_61, Mahavrat_58, WillSterrel_61, Latretium_62, Cornie_56, Spartacus_62, MisterCuddles_58, Galactic_59
- Track 72 : DotProduct_53
- Track 73 : Radiance_59
- Track 74 : Fancypants_62, BlueCrab_60, Byougenkin_58
- Track 75 : Marker_67, Spikelee_67, OldBen_57
- Track 76 : Donkeykong_63, Squirty_62, Shauna1_58
- Track 77 : Bubbles123_56
- Track 78 : Hlubikazi_56, Mandlovu_56, Strokeseat_56
- Track 79 : MilleniumForce_63, Ramsey_59, Batiatus_58, Aubs_60
- Track 80 : Krakatau_57
- Track 81 : Juniper1_58
- Track 82 : Juniper1_59
- Track 83 : PhesterPhotato_61, Phalconet_58
- Track 84 : Cornucopia_62
- Track 85 : Hades_61
- Track 86 : Juniper1_61
- Track 87 : Wachhund_61
- Track 88 : Emma_61
- Track 89 : Yoshi_73, ThetaBob_65
- Track 90 : Demsculpinboyz_69
- Track 91 : TChen_61
- Track 92 : LunaStella_53, Yoshi_70, ThetaBob_62, TChen_58
- Track 93 : LunaStella_54, Renaud18_64, Yoshi_71, ThetaBob_63, TChen_59
- Track 94 : Renaud18_66
- Track 95 : Renaud18_63
- Track 96 : Vibaki_44
- Track 97 : Hirko_43
- Track 98 : Blett_57
- Track 99 : Bush_60
- Track 100 : Antuna_59
- Track 101 : Dropshot_57, Appa_57
- Track 102 : Pickles13_57
- Track 103 : MenE_62
- Track 104 : Phonegingi_58
- Track 105 : Warren_57
- Track 106 : Bagrid_145, Dove_137, 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 107 : HokkenD_137, Porcelain_140, Yeet_138, MiaZeal_143, Redno2_139, Lucky2013_136, KashFlow_143
 - Track 108 : Pound_136
 - Track 109 : Bobby_134
 - Track 110 : Thibault_127
 - Track 111 : Footloose_58
 - Track 112 : StAugustine_149

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

The start number called the most often in the published annotations is 58, it was called in 237 of the 348 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_51, Alexphander_64, AlpineSix_65, ArcusAngelus_62, Ardmore_52, Aubs_60, Avani_68, Batiatus_58, Beakin_61, BigPhil_54, BigPhil_55, Bipolar_58, Blarby_72, Blexus_58, BlueCrab_60, BobaPhett_64, Bobi_65, BodEinwohner17_60, Boomer_65, Brocalys_55, Bubbles123_56, Burwell21_58, BuzzLyseyear_66, ByChance_52, Byougenkin_58, Cabrinians_61, CaptainTrips_57, Cerasum_54, Cerasum_55, Che8_63, Che8_64, Che9d_66, Che9d_67, Chevrolet_68, Chuckly_63, Clifton_55, Coco12_57, Coco12_58, Cornie_53, Cornie_54, Cornie_56, Cornucopia_62, Crumble_55, DLane_55, DRBy19_63, DaWorst_61, DaddyRickover_59, Daenerys_54, Dante_61, DeadP_66, Demsculpinboyz_68, Demsculpinboyz_69, Demsculpinboyz_71, DillTech15_57, DirtMcgirt_59, Donkeykong_63, Doomphist_60, Dorothy_58, DosHalletts_66, DotProduct_53, DotProduct_54, Doug_62, Drago_58, Eish_64, EleanorGeorge_61, Emma_61, Empress_58, Enby_61, Eradicator_53, Estave1_63, Fancypants_62, Fastidio_59, Filuzino_58, Firehouse51_61, Flathead_60, Florinda_71, Footloose_58, FreddyB_61, Fruitloop_57, GUmble_58, Galactic_59, Gandolph_63, GigiOuiOui_56, Girafales_69, Girr_58, Gorge_64, Hades_61, Hamulus_61, Harley_61, Harley_62, Hegedechwinu_60, Hlubikazi_56, IbOuu_61, Ibhubesi_60, Inventum_55, IrishSherpFalk_61, Jabbawokkie_74, JalFarm20_71, JalFarm20_72, James_64, Jarcob_60, Jinglebell_65, Job42_62, JoeyJr_55, Juice456_59, Juice456_60, Juniper1_58, Juniper1_61, Karhdo_57, Kenuha5_57, Kersh_62, Kimberlium_60, Kimberlium_61, Kimberlium_63, KingMidas_59, Kingsley_55, Kingsley_56, Koella_54, Krakatau_57, KristaRAM_63, LastJedi_54, Latretium_62, Leozinho_59, Leperchaun_52, LilMoolah_58, LittleShirley_60, Lizziana_66, Llama_65, Llij_56, Lorde_60, LunaBlu_62, LunaStella_53, LunaStella_54, MadMen_58, Madiba_58, Mahavrat_58, Mandlovu_56, Maravista_61, Marker_67, Martik_60, Mattes_64, Melissauren88_58, MilanaBonita_50, MilleniumForce_63, MinionDave_59, Minnie_63, MisterCuddles_58, Modragons_64, Moonbeam_58, Mova_61, Mozy_69, Ms6_55, Mutaforma13_64, Nivrat_56, NormanBulbieJr_60, Ochi17_63, OfUltron_65, Ogopogo_65, Oksu_64, OldBen_57, OlympiaSaint_62, Ovechkin_57, Ovechkin_58, OwlsT2W_60, PHappiness_55, PMC_57, Pacc40_54, Phalconet_58, Phanphagia_57, Phasih_58, Phatniss_58, PhesterPotato_61, Philus_63, Pippy_58, Plumbus_62, Poenanya_60, Polka14_58, Pollywog_61, PopTart_54, Priscilla_60, QuickMath_59, QuickMath_60, QuickMath_62, Quico_68, Radiance_59, Ramsey_59, Renaud18_63, Renaud18_64, Renaud18_66, Rialto_66, RitaG_55, Rita_61, Rockne_61, RockyHorror_61, Royals2015_61, Royals2015_62, Ruby_56, SG4_57,

Saal_62, Sabbb_64, Sandalphon_61, Sarma624_56, Sarma624_57, Sassafras_58, SassyB_54, Scottish_58, Seabastian_65, Seagreen_58, Seagreen_59, Shauna1_58, ShiLan_59, ShowerHandel_61, ShroomBoi_62, SiSi_58, SimranZ1_60, Soul22_66, Sparkdehlily_67, Spartacus_62, Spikelee_67, Spoonbill_57, Squirty_62, StAnnes_58, Starcevich_57, Starcevich_58, Starcevich_60, Strokeseat_56, SuperGrey_63, SwagPigglett_65, TChen_58, TChen_59, TChen_61, TDanisky_67, Taj_64, ThetaBob_62, ThetaBob_63, ThetaBob_65, Tootsieroll_61, Tottinger_62, Tweety_59, UncleRicky_59, VRedHorse_60, Velveteen_53, Velveteen_54, Veteran_57, Wachhund_61, Wee_64, Whatsapiecost_60, Whouxphf_57, WillSterrel_61, XFactor_58, Yorick_59, Yoshi_70, Yoshi_71, Yoshi_73, Zapner_73, Zerg_60, Zizzle_64,

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

- Hawkeye_86, Juniper1_59,

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

- Abidatro_30, AnClar_48, Andrew_32, Antuna_59, Appa_57, Archis_54, Axumite_48, BAKA_144, Bagrid_145, Barco_49, Basilisk_31, Beem_146, Begonia_49, BiggityBass_47, BirdsNest_93, Blett_57, BlingBling_48, BlueNGold_128, Bobby_134, Bombitas_132, Boopy_129, Brynnie_30, Bush_60, CaptainKirk2_51, CharlottesWeb_47, CherryTomatoes_48, Chickaboom_32, Constella_138, Dallas_145, Delian_54, DirtyBoi_56, Dmitri_53, DmpstrDiver_145, Dove_137, Dropshot_57, Duke13_140, Eesa_29, Ejimix_137, EricMillard_136, Evaa_48, Ferry_49, Forza_129, Fresco_48, Guacamole_48, Halley_146, HannahPhantana_34, Hashim76_93, Hedwig_57, Hirko_43, Hitter_51, HokkenD_137, Hortus1_71, Hughesyang_143, Jalammah_54, Jamun_29, JasperJr_48, JuicyJay_140, Juno112_30, KHumphrey_30, Kalah2_135, KashFlow_143, Klein_142, Leona_30, Ligma_48, LittleMunchkin_50, LittleTokyo_33, Lucky2013_136, Lysidious_52, Malachai_49, MalagasyRose_65, Mareelih_127, Mariokart_48, Melba_50, Mellie_49, MenE_62, MiaZeal_143, Minerva_144, MintFen_51, NihilNomen_146, Odette_148, OlinDD_71, Optimus_135, Orcanus_30, PhluffyCoco_31, Phoebus_144, Phonegingi_58, Phrappuccino_165, Pickles13_57, Pioneer3_71, Platte_71, Polka_32, Porcelain_140, Pound_136, Pupper_45, RayTheFireFly_61, RedFox_31, RedWattleHog_91, Redno2_139, Renna12_30, Ruchi_30, SCentae_45, Samba_50, Schatzie_140, Settecandela_165, Shatter_48, Sisko_47, Sour_51, Squiddly_84, StAugustine_149, Stormageddon_88, Tandem_71, TaylorSipt_30, Thibault_127, Thonko_86, ThreeRngTarjay_139, Utz_44, Vibaki_44, Vulpecula_30, Wanda_144, Warren_57, Wisp_50, Wolfstar_76, Yago84_47, Yeet_138, Zarbodnamra_50, Zelink_139, Zenteno07_93, ZiggyZoo_51,

Summary by start number:

Start 23:

- Found in 4 of 387 (1.0%) of genes in pham
- Manual Annotations of this start: 4 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_128 (DS), Boopy_129 (DS), Forza_129 (DS), Mareelih_127 (DS),

Start 45:

- Found in 1 of 387 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Sour_51 (DR),

Start 46:

- Found in 12 of 387 (3.1%) of genes in pham
- Manual Annotations of this start: 8 of 348
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AnClar_48 (DR), Axumite_48 (DR), BiggityBass_47 (DR), Evaa_48 (DR), Ligma_48 (DR), LittleMunchkin_50 (DR), Shatter_48 (DR), Sisko_47 (DR), Yago84_47 (DR),

Start 50:

- Found in 3 of 387 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_93 (B13), Hashim76_93 (B13), Zenteno07_93 (B13),

Start 54:

- Found in 1 of 387 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_86 (B8),

Start 55:

- Found in 1 of 387 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mellie_49 (CV),

Start 57:

- Found in 25 of 387 (6.5%) of genes in pham
- Manual Annotations of this start: 23 of 348
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Archis_54 (CV), Barco_49 (CV), Begonia_49 (CV), BlingBling_48 (CV), CaptainKirk2_51 (CV), Delian_54 (CV), DirtyBoi_56 (DB), Dmitri_53 (DB), Fenry_49 (CV), Guacamole_48 (CV), Hedwig_57 (DB), Hitter_51 (CV), Jalammah_54 (CV), JasperJr_48 (CV), Lysidious_52 (CV), Malachai_49 (CV), Melba_50 (CV), MintFen_51 (CV), RayTheFireFly_61 (DB), Samba_50 (CV), Utz_44 (CV), Wisp_50 (CV), Zarbodnamra_50 (CV), ZiggyZoo_51 (CV),

Start 58:

- Found in 259 of 387 (66.9%) of genes in pham
- Manual Annotations of this start: 237 of 348
- Called 99.2% of time when present
- Phage (with cluster) where this start called: Akhila_51 (F1), Alexphander_64 (F1), AlpineSix_65 (F1), ArcusAngelus_62 (F1), Ardmore_52 (F1), Aubs_60 (F1), Avani_68 (F2), Batiatus_58 (F1), Beakin_61 (F1), BigPhil_54 (F1), BigPhil_55 (F1), Bipolar_58 (F1), Blarby_72 (F), Blexus_58 (F1), BlueCrab_60 (F1), BobaPhett_64 (F1), Bobi_65 (F1), BodEinwohner17_60 (F1), Boomer_65 (F1), Brocalys_55 (F1), Bubbles123_56 (F1), Burwell21_58 (F1), BuzzLyseyear_66 (F1), ByChance_52 (F1), Byougenkin_58 (F1), Cabrinians_61 (F1), CaptainTrips_57 (F1), Cerasum_54 (F1), Cerasum_55 (F1), Che8_63 (F1), Che8_64 (F1), Che9d_66 (F2), Che9d_67 (F2), Chevrolet_68

(F1), Chuckly_63 (F1), Clifton_55 (F1), Coco12_57 (F1), Coco12_58 (F1), Cornie_53 (F5), Cornie_54 (F5), Cornie_56 (F5), Cornucopia_62 (F1), Crumble_55 (F1), DLane_55 (F1), DRBy19_63 (F1), DaWorst_61 (F1), DaddyRickover_59 (F1), Daenerys_54 (F1), Dante_61 (F1), DeadP_66 (F1), Demsculpinboyz_68 (F2), Demsculpinboyz_69 (F2), Demsculpinboyz_71 (F2), DillTech15_57 (F1), DirtMcgirt_59 (F1), Donkeykong_63 (F1), Doomphist_60 (F1), Dorothy_58 (F1), DosHalletts_66 (F1), DotProduct_53 (F1), DotProduct_54 (F1), Doug_62 (F1), Drago_58 (F1), Eish_64 (F1), EleanorGeorge_61 (F1), Emma_61 (F1), Empress_58 (F1), Enby_61 (F1), Eradicator_53 (F1), Estave1_63 (F1), Fancypants_62 (F1), Fastidio_59 (F1), Filuzino_58 (F1), Firehouse51_61 (F1), Flathead_60 (F1), Florinda_71 (F1), Footloose_58 (singleton), FreddyB_61 (F1), Fruitloop_57 (F1), GUmbie_58 (F1), Galactic_59 (F1), Gandolph_63 (F1), GigiOuiOui_56 (F1), Girafales_69 (F1), Girr_58 (F1), Gorge_64 (F1), Hades_61 (F1), Hamulus_61 (F1), Harley_61 (F1), Harley_62 (F1), Hegedechwinu_60 (F1), Hlubikazi_56 (F1), IbOuu_61 (F1), Ibhubesi_60 (F1), Inventum_55 (F1), IrishSherpFalk_61 (F1), Jabbawokkie_74 (F2), JalFarm20_71 (F1), JalFarm20_72 (F1), James_64 (F1), Jarcob_60 (F1), Jinglebell_65 (F1), Job42_62 (F1), JoeyJr_55 (F1), Juice456_59 (F1), Juice456_60 (F1), Juniper1_58 (F1), Juniper1_61 (F1), Karhdo_57 (F1), Kenuha5_57 (F1), Kersh_62 (F1), Kimberlium_60 (F1), Kimberlium_61 (F1), Kimberlium_63 (F1), KingMidas_59 (F1), Kingsley_55 (F1), Kingsley_56 (F1), 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_60 (F1), Lizziana_66 (F1), Llama_65 (F1), Llij_56 (F1), Lorde_60 (F1), LunaBlu_62 (F1), LunaStella_53 (F4), LunaStella_54 (F4), MadMen_58 (F1), Madiba_58 (F1), Mahavrat_58 (F1), Mandlovu_56 (F1), Maravista_61 (F1), Marker_67 (F1), Martik_60 (F1), Mattes_64 (F1), Melissauren88_58 (F1), MilanaBonita_50 (F1), MilleniumForce_63 (F1), MinionDave_59 (F1), Minnie_63 (F1), MisterCuddles_58 (F1), Modragons_64 (F1), Moonbeam_58 (F1), Mova_61 (F1), Mozy_69 (F1), Ms6_55 (F1), Mutaforma13_64 (F1), Nivrat_56 (F1), NormanBulbieJr_60 (F1), Ochi17_63 (F1), OfUltron_65 (F1), Ogopogo_65 (F1), Oksu_64 (F1), OldBen_57 (F1), OlympiaSaint_62 (F1), Ovechkin_57 (F1), Ovechkin_58 (F1), OwlsT2W_60 (F1), PHappiness_55 (F1), PMC_57 (F1), Pacc40_54 (F1), Phalconet_58 (F1), Phanphagia_57 (F1), Phasih_58 (F1), Phatniss_58 (F1), PhesterPhotato_61 (F1), Philus_63 (F1), Pippy_58 (F1), Plumbus_62 (F1), Poenanya_60 (F1), Polka14_58 (F1), Pollywog_61 (F1), PopTart_54 (F1), Priscilla_60 (F1), QuickMath_59 (F1), QuickMath_60 (F1), QuickMath_62 (F1), Quico_68 (F1), Radiance_59 (F1), Ramsey_59 (F1), Renaud18_63 (F4), Renaud18_64 (F4), Renaud18_66 (F4), Rialto_66 (F1), RitaG_55 (F1), Rita_61 (F1), Rockne_61 (F1), RockyHorror_61 (F1), Royals2015_61 (F1), Royals2015_62 (F1), Ruby_56 (F1), SG4_57 (F1), Saal_62 (F1), Sabbb_64 (F1), Sandalphon_61 (F1), Sarma624_56 (F1), Sarma624_57 (F1), Sassafras_58 (F1), SassyB_54 (F1), Scottish_58 (F1), Sebastian_65 (F1), Seagreen_58 (F1), Seagreen_59 (F1), Shauna1_58 (F1), ShiLan_59 (F1), ShowerHandel_61 (F1), ShroomBoi_62 (F1), SiSi_58 (F1), SimranZ1_60 (F1), Soul22_66 (F2), Sparkdehlily_67 (F1), Spartacus_62 (F1), Spikelee_67 (F1), Spoonbill_57 (F1), Squirty_62 (F3), StAnnes_58 (F1), Starcevic_57 (F1), Starcevic_58 (F1), Starcevic_60 (F1), Strokeseat_56 (F1), SuperGrey_63 (F1), SwagPigglett_65 (F1), TChen_58 (F4), TChen_59 (F4), TChen_61 (F4), TDanisky_67 (F1), Taj_64 (F1), ThetaBob_62 (F4), ThetaBob_63 (F4), ThetaBob_65 (F4), Tootsieroll_61 (F1), Totinger_62 (F1), Tweety_59 (F1), UncleRicky_59 (F1), VRedHorse_60 (F1), Velveteen_53 (F1), Velveteen_54 (F1), Veteran_57 (F1), Wachhund_61 (F1), Wee_64 (F1), Whatsapiecost_60 (F1), Whouxphf_57 (F1), WillSterrel_61 (F1), XFactor_58 (F1), Yorick_59 (F1), Yoshi_70 (F2), Yoshi_71 (F2), Yoshi_73 (F2),

Zapner_73 (F2), Zerg_60 (F1), Zizzle_64 (F1),

Start 59:

- Found in 1 of 387 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Squiddly_84 (DN2),

Start 60:

- Found in 36 of 387 (9.3%) of genes in pham
- Manual Annotations of this start: 33 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA_144 (J), Bagrid_145 (J), Beem_146 (J), Bobby_134 (J), Bombitas_132 (J), Constella_138 (J), Dallas_145 (J), DmpstrDiver_145 (J), Dove_137 (J), Duke13_140 (J), Ejimix_137 (J), EricMillard_136 (J), Halley_146 (J), Hawkeye_86 (D2), HokkenD_137 (J), Hughesyang_143 (J), JuicyJay_140 (J), Kalah2_135 (J), KashFlow_143 (J), Klein_142 (J), Lucky2013_136 (J), MiaZeal_143 (J), Minerva_144 (J), NihilNomen_146 (J), Odette_148 (J), Optimus_135 (J), Phoebus_144 (J), Porcelain_140 (J), Pound_136 (J), Redno2_139 (J), Schatzie_140 (J), Thibault_127 (J), ThreeRngTarjay_139 (J), Wanda_144 (J), Yeet_138 (J), Zelink_139 (J),

Start 61:

- Found in 21 of 387 (5.4%) of genes in pham
- Manual Annotations of this start: 15 of 348
- Called 90.5% of time when present
- Phage (with cluster) where this start called: Abidatro_30 (AS1), Andrew_32 (AS3), Basilisk_31 (AS1), Brynnie_30 (AS1), Eesa_29 (AS1), HannahPhantana_34 (AS2), Jamun_29 (AS1), Juno112_30 (AS3), Leona_30 (AS3), LittleTokyo_33 (AS2), Orcanus_30 (AS1), PhluffyCoco_31 (AS3), Polka_32 (AS2), RedFox_31 (AS3), Renna12_30 (AS3), Ruchi_30 (AS1), StAugustine_149 (singleton), TaylorSipt_30 (AS1), Vulpecula_30 (AS1),

Start 62:

- Found in 3 of 387 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 66.7% of time when present
- Phage (with cluster) where this start called: CharlottesWeb_47 (DR), Mariokart_48 (DR),

Start 63:

- Found in 11 of 387 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 348
- Called 18.2% of time when present
- Phage (with cluster) where this start called: RedWattleHog_91 (DX), Stormageddon_88 (DX),

Start 64:

- Found in 1 of 387 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_65 (AG),

Start 65:

- Found in 2 of 387 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 348
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hirko_43 (FL), Vibaki_44 (FL),

Start 66:

- Found in 3 of 387 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 348
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phrappuccino_165 (AA), Settecandela_165 (AA),

Start 67:

- Found in 12 of 387 (3.1%) of genes in pham
- Manual Annotations of this start: 7 of 348
- Called 66.7% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_48 (DO), Hortus1_71 (ED1), OlinDD_71 (ED1), Pioneer3_71 (ED1), Platte_71 (ED1), Pupper_45 (DO), SCentae_45 (DO), Tandem_71 (ED1),

Start 69:

- Found in 21 of 387 (5.4%) of genes in pham
- No Manual Annotations of this start.
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Juniper1_59 (F1),

Start 70:

- Found in 259 of 387 (66.9%) of genes in pham
- No Manual Annotations of this start.
- Called 0.4% of time when present
- Phage (with cluster) where this start called: Chickaboom_32 (AS1),

Start 71:

- Found in 4 of 387 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: KHumphrey_30 (AS3),

Start 72:

- Found in 42 of 387 (10.9%) of genes in pham
- Manual Annotations of this start: 7 of 348
- Called 21.4% of time when present
- Phage (with cluster) where this start called: Antuna_59 (GA), Appa_57 (GA), Blett_57 (GA), Bush_60 (GA), Dropshot_57 (GA), MenE_62 (GA), Phonegingi_58 (GA), Pickles13_57 (GA), Warren_57 (GA),

Start 79:

- Found in 249 of 387 (64.3%) of genes in pham
- No Manual Annotations of this start.
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Fresco_48 (DR), Wolfstar_76 (ED),

Summary by clusters:

There are 27 clusters represented in this pham: AA, singleton, DO, DB, ED1, B13, DX, DR, DS, FL, DN2, AS3, AS2, AS1, AG, F, ED, J, GA, CV, F1, F2, F3, F4, F5, B8, D2,

Info for manual annotations of cluster AA:

- Start number 66 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:

- Start number 64 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AS1:

- Start number 61 was manually annotated 9 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 61 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 61 was manually annotated 4 times for cluster AS3.

Info for manual annotations of cluster B13:

- Start number 50 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B8:

- Start number 54 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster CV:

- Start number 55 was manually annotated 1 time for cluster CV.
- Start number 57 was manually annotated 19 times for cluster CV.

Info for manual annotations of cluster D2:

- Start number 60 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DB:

- Start number 57 was manually annotated 4 times for cluster DB.

Info for manual annotations of cluster DN2:

- Start number 59 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DO:

- Start number 67 was manually annotated 2 times for cluster DO.

Info for manual annotations of cluster DR:

- Start number 45 was manually annotated 1 time for cluster DR.
- Start number 46 was manually annotated 8 times for cluster DR.
- Start number 62 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DS:

- Start number 23 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster DX:

- Start number 63 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster ED1:

- Start number 67 was manually annotated 5 times for cluster ED1.

Info for manual annotations of cluster F1:

- Start number 58 was manually annotated 211 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 58 was manually annotated 12 times for cluster F2.

Info for manual annotations of cluster F3:

- Start number 58 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 58 was manually annotated 9 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 58 was manually annotated 3 times for cluster F5.

Info for manual annotations of cluster FL:

- Start number 65 was manually annotated 2 times for cluster FL.

Info for manual annotations of cluster GA:

- Start number 72 was manually annotated 7 times for cluster GA.

Info for manual annotations of cluster J:

- Start number 60 was manually annotated 32 times for cluster J.

Gene Information:

Gene: Abidatro_30 Start: 21728, Stop: 21387, Start Num: 61

Candidate Starts for Abidatro_30:

(Start: 61 @21728 has 15 MA's), (70, 21707), (118, 21497), (144, 21401),

Gene: Akhila_51 Start: 36387, Stop: 36752, Start Num: 58

Candidate Starts for Akhila_51:

(Start: 58 @36387 has 237 MA's), (70, 36420), (Start: 72 @36426 has 7 MA's), (79, 36438), (89, 36480), (96, 36510), (103, 36534), (104, 36537), (121, 36636), (122, 36642), (141, 36717), (143, 36720), (145, 36723),

Gene: Alexphander_64 Start: 40703, Stop: 41068, Start Num: 58

Candidate Starts for Alexphander_64:

(Start: 58 @40703 has 237 MA's), (70, 40736), (77, 40751), (79, 40754), (88, 40793), (89, 40796), (93, 40817), (103, 40850), (110, 40877), (115, 40910), (121, 40952), (122, 40958), (152, 41054),

Gene: AlpineSix_65 Start: 42816, Stop: 43181, Start Num: 58

Candidate Starts for AlpineSix_65:

(Start: 58 @42816 has 237 MA's), (70, 42849), (77, 42864), (79, 42867), (88, 42906), (89, 42909), (93, 42930), (103, 42963), (110, 42990), (115, 43023), (121, 43065), (122, 43071), (152, 43167),

Gene: AnClar_48 Start: 43435, Stop: 43061, Start Num: 46

Candidate Starts for AnClar_48:

(Start: 46 @43435 has 8 MA's), (74, 43375), (91, 43312), (93, 43303), (119, 43183),

Gene: Andrew_32 Start: 21174, Stop: 20812, Start Num: 61

Candidate Starts for Andrew_32:

(Start: 61 @21174 has 15 MA's), (90, 21087), (117, 20958), (129, 20892),

Gene: Antuna_59 Start: 34183, Stop: 34620, Start Num: 72

Candidate Starts for Antuna_59:

(3, 33676), (5, 33706), (Start: 72 @34183 has 7 MA's), (97, 34279), (105, 34306), (114, 34354), (122, 34411), (123, 34417), (126, 34438), (150, 34504), (156, 34534), (159, 34570),

Gene: Appa_57 Start: 33948, Stop: 34385, Start Num: 72

Candidate Starts for Appa_57:

(Start: 72 @33948 has 7 MA's), (97, 34044), (105, 34071), (114, 34119), (122, 34176), (123, 34182), (126, 34203), (150, 34269), (156, 34299), (158, 34323), (159, 34335),

Gene: Archis_54 Start: 35570, Stop: 35932, Start Num: 57

Candidate Starts for Archis_54:

(22, 35426), (27, 35462), (33, 35501), (Start: 57 @35570 has 23 MA's), (94, 35699), (101, 35723),

Gene: ArcusAngelus_62 Start: 40946, Stop: 41311, Start Num: 58

Candidate Starts for ArcusAngelus_62:

(Start: 58 @40946 has 237 MA's), (70, 40979), (Start: 72 @40985 has 7 MA's), (79, 40997), (89, 41039), (96, 41069), (103, 41093), (104, 41096), (121, 41195), (122, 41201), (141, 41276),

Gene: Ardmore_52 Start: 38473, Stop: 38838, Start Num: 58

Candidate Starts for Ardmore_52:

(Start: 58 @38473 has 237 MA's), (70, 38506), (Start: 72 @38512 has 7 MA's), (79, 38524), (89, 38566), (96, 38596), (103, 38620), (104, 38623), (121, 38722), (122, 38728), (141, 38803),

Gene: Aubs_60 Start: 40637, Stop: 41002, Start Num: 58

Candidate Starts for Aubs_60:

(Start: 58 @40637 has 237 MA's), (70, 40670), (Start: 72 @40676 has 7 MA's), (79, 40688), (96, 40760), (103, 40784), (104, 40787), (110, 40811), (121, 40886), (122, 40892), (141, 40967),

Gene: Avani_68 Start: 41015, Stop: 41380, Start Num: 58

Candidate Starts for Avani_68:

(Start: 58 @41015 has 237 MA's), (70, 41048), (77, 41063), (79, 41066), (88, 41105), (89, 41108), (93, 41129), (103, 41162), (109, 41183), (110, 41189), (115, 41222), (121, 41264), (122, 41270), (152, 41366),

Gene: Axumite_48 Start: 41091, Stop: 40741, Start Num: 46

Candidate Starts for Axumite_48:

(Start: 46 @41091 has 8 MA's), (74, 41046), (79, 41037), (83, 41022), (93, 40974), (115, 40893),

Gene: BAKA_144 Start: 76097, Stop: 76450, Start Num: 60

Candidate Starts for BAKA_144:

(Start: 60 @76097 has 33 MA's), (115, 76298), (121, 76340),

Gene: Bagrid_145 Start: 76792, Stop: 77145, Start Num: 60

Candidate Starts for Bagrid_145:

(Start: 60 @76792 has 33 MA's), (115, 76993), (121, 77035),

Gene: Barco_49 Start: 34620, Stop: 34982, Start Num: 57

Candidate Starts for Barco_49:

(22, 34476), (27, 34512), (33, 34551), (Start: 57 @34620 has 23 MA's), (94, 34749), (101, 34773),

Gene: Basilisk_31 Start: 22679, Stop: 22335, Start Num: 61

Candidate Starts for Basilisk_31:

(Start: 61 @22679 has 15 MA's), (70, 22658), (Start: 72 @22652 has 7 MA's), (79, 22634), (90, 22586),

Gene: Batiatus_58 Start: 40347, Stop: 40712, Start Num: 58

Candidate Starts for Batiatus_58:

(Start: 58 @40347 has 237 MA's), (70, 40380), (Start: 72 @40386 has 7 MA's), (79, 40398), (96, 40470), (103, 40494), (104, 40497), (110, 40521), (121, 40596), (122, 40602), (141, 40677),

Gene: Beakin_61 Start: 39476, Stop: 39841, Start Num: 58

Candidate Starts for Beakin_61:

(Start: 58 @39476 has 237 MA's), (70, 39509), (Start: 72 @39515 has 7 MA's), (79, 39527), (89, 39569), (96, 39599), (103, 39623), (104, 39626), (121, 39725), (122, 39731), (141, 39806),

Gene: Beem_146 Start: 77695, Stop: 78048, Start Num: 60

Candidate Starts for Beem_146:

(Start: 60 @77695 has 33 MA's), (115, 77896), (121, 77938),

Gene: Begonia_49 Start: 37159, Stop: 37521, Start Num: 57

Candidate Starts for Begonia_49:

(33, 37090), (Start: 57 @37159 has 23 MA's), (86, 37258), (93, 37285), (94, 37288), (101, 37312), (151, 37507),

Gene: BigPhil_54 Start: 35652, Stop: 35999, Start Num: 58

Candidate Starts for BigPhil_54:

(52, 35625), (56, 35643), (Start: 58 @35652 has 237 MA's), (70, 35682), (73, 35691), (81, 35709), (93, 35763), (101, 35790), (115, 35847), (118, 35877), (121, 35889),

Gene: BigPhil_55 Start: 35996, Stop: 36349, Start Num: 58

Candidate Starts for BigPhil_55:

(48, 35960), (Start: 58 @35996 has 237 MA's), (69, 36026), (70, 36029), (75, 36041), (79, 36047), (93, 36110), (96, 36119), (98, 36125), (121, 36239), (125, 36260), (139, 36317), (149, 36329),

Gene: BiggityBass_47 Start: 42936, Stop: 42535, Start Num: 46

Candidate Starts for BiggityBass_47:

(Start: 46 @42936 has 8 MA's), (74, 42849), (91, 42786), (94, 42774), (121, 42651),

Gene: Bipolar_58 Start: 40097, Stop: 40462, Start Num: 58

Candidate Starts for Bipolar_58:

(Start: 58 @40097 has 237 MA's), (70, 40130), (73, 40139), (79, 40148), (89, 40190), (96, 40220), (103, 40244), (104, 40247), (121, 40346), (122, 40352), (141, 40427),

Gene: BirdsNest_93 Start: 66573, Stop: 66154, Start Num: 50

Candidate Starts for BirdsNest_93:

(Start: 50 @66573 has 2 MA's), (74, 66492), (110, 66363), (115, 66330), (126, 66255),

Gene: Blarby_72 Start: 42116, Stop: 42481, Start Num: 58

Candidate Starts for Blarby_72:

(Start: 58 @42116 has 237 MA's), (70, 42149), (77, 42164), (79, 42167), (88, 42206), (89, 42209), (93, 42230), (103, 42263), (110, 42290), (115, 42323), (121, 42365), (122, 42371), (152, 42467),

Gene: Blett_57 Start: 34133, Stop: 34570, Start Num: 72

Candidate Starts for Blett_57:

(Start: 72 @34133 has 7 MA's), (97, 34229), (105, 34256), (114, 34304), (122, 34361), (123, 34367), (126, 34388), (150, 34454), (156, 34484), (158, 34508), (159, 34520),

Gene: Blexus_58 Start: 40670, Stop: 41035, Start Num: 58

Candidate Starts for Blexus_58:

(Start: 58 @40670 has 237 MA's), (70, 40703), (77, 40718), (79, 40721), (89, 40763), (93, 40784), (103, 40817), (110, 40844), (115, 40877), (121, 40919), (122, 40925), (152, 41021),

Gene: BlingBling_48 Start: 35583, Stop: 35945, Start Num: 57

Candidate Starts for BlingBling_48:

(22, 35439), (27, 35475), (33, 35514), (Start: 57 @35583 has 23 MA's), (94, 35712), (101, 35736),

Gene: BlueCrab_60 Start: 40975, Stop: 41340, Start Num: 58

Candidate Starts for BlueCrab_60:

(Start: 58 @40975 has 237 MA's), (70, 41008), (77, 41023), (79, 41026), (89, 41068), (93, 41089), (109, 41143), (110, 41149), (115, 41182), (121, 41224), (122, 41230), (152, 41326),

Gene: BlueNGold_128 Start: 82923, Stop: 82429, Start Num: 23

Candidate Starts for BlueNGold_128:

(Start: 23 @82923 has 4 MA's), (31, 82854), (35, 82848), (38, 82833), (47, 82800), (94, 82638), (110, 82593), (127, 82476), (130, 82470), (139, 82440),

Gene: BobaPhett_64 Start: 42932, Stop: 43297, Start Num: 58

Candidate Starts for BobaPhett_64:

(Start: 58 @42932 has 237 MA's), (70, 42965), (77, 42980), (79, 42983), (88, 43022), (89, 43025), (93, 43046), (103, 43079), (110, 43106), (115, 43139), (121, 43181), (122, 43187), (152, 43283),

Gene: Bobby_134 Start: 77532, Stop: 77885, Start Num: 60

Candidate Starts for Bobby_134:

(Start: 60 @77532 has 33 MA's), (115, 77733), (121, 77775),

Gene: Bobi_65 Start: 41950, Stop: 42315, Start Num: 58

Candidate Starts for Bobi_65:

(Start: 58 @41950 has 237 MA's), (70, 41983), (Start: 72 @41989 has 7 MA's), (79, 42001), (89, 42043), (96, 42073), (103, 42097), (104, 42100), (121, 42199), (122, 42205), (141, 42280),

Gene: BodEinwohner17_60 Start: 39737, Stop: 40102, Start Num: 58

Candidate Starts for BodEinwohner17_60:

(Start: 58 @39737 has 237 MA's), (70, 39770), (77, 39785), (79, 39788), (89, 39830), (93, 39851), (103, 39884), (109, 39905), (110, 39911), (115, 39944), (121, 39986), (122, 39992), (152, 40088),

Gene: Bombitas_132 Start: 75106, Stop: 75459, Start Num: 60

Candidate Starts for Bombitas_132:

(Start: 60 @75106 has 33 MA's), (115, 75307), (121, 75349),

Gene: Boomer_65 Start: 42607, Stop: 42972, Start Num: 58

Candidate Starts for Boomer_65:

(Start: 58 @42607 has 237 MA's), (70, 42640), (77, 42655), (79, 42658), (88, 42697), (89, 42700), (93, 42721), (103, 42754), (110, 42781), (115, 42814), (121, 42856), (122, 42862), (152, 42958),

Gene: Boopy_129 Start: 82935, Stop: 82441, Start Num: 23

Candidate Starts for Boopy_129:

(Start: 23 @82935 has 4 MA's), (31, 82866), (35, 82860), (38, 82845), (47, 82812), (94, 82650), (110, 82605), (127, 82488), (130, 82482), (139, 82452),

Gene: Brocalys_55 Start: 37114, Stop: 37479, Start Num: 58

Candidate Starts for Brocalys_55:

(Start: 58 @37114 has 237 MA's), (70, 37147), (77, 37162), (79, 37165), (88, 37204), (89, 37207), (93, 37228), (103, 37261), (110, 37288), (115, 37321), (121, 37363), (122, 37369), (152, 37465),

Gene: Brynnie_30 Start: 22557, Stop: 22213, Start Num: 61

Candidate Starts for Brynnie_30:

(Start: 61 @22557 has 15 MA's), (70, 22536), (110, 22389), (144, 22230),

Gene: Bubbles123_56 Start: 40256, Stop: 40621, Start Num: 58

Candidate Starts for Bubbles123_56:

(Start: 58 @40256 has 237 MA's), (70, 40289), (73, 40298), (79, 40307), (93, 40370), (103, 40403), (104, 40406), (107, 40418), (110, 40430), (121, 40505), (122, 40511), (141, 40586),

Gene: Burwell21_58 Start: 40215, Stop: 40580, Start Num: 58

Candidate Starts for Burwell21_58:

(Start: 58 @40215 has 237 MA's), (70, 40248), (77, 40263), (79, 40266), (88, 40305), (89, 40308), (93, 40329), (103, 40362), (110, 40389), (115, 40422), (121, 40464), (122, 40470), (152, 40566),

Gene: Bush_60 Start: 34082, Stop: 34519, Start Num: 72

Candidate Starts for Bush_60:

(Start: 72 @34082 has 7 MA's), (97, 34178), (105, 34205), (114, 34253), (122, 34310), (123, 34316), (126, 34337), (150, 34403), (156, 34433), (159, 34469),

Gene: BuzzLyseyear_66 Start: 41636, Stop: 42001, Start Num: 58

Candidate Starts for BuzzLyseyear_66:

(Start: 58 @41636 has 237 MA's), (70, 41669), (77, 41684), (79, 41687), (88, 41726), (89, 41729), (93, 41750), (103, 41783), (110, 41810), (115, 41843), (121, 41885), (122, 41891), (152, 41987),

Gene: ByChance_52 Start: 35903, Stop: 36268, Start Num: 58

Candidate Starts for ByChance_52:

(Start: 58 @35903 has 237 MA's), (70, 35936), (77, 35951), (79, 35954), (89, 35996), (93, 36017), (103, 36050), (109, 36071), (110, 36077), (115, 36110), (121, 36152), (122, 36158), (152, 36254),

Gene: Byougenkin_58 Start: 39979, Stop: 40344, Start Num: 58

Candidate Starts for Byougenkin_58:

(Start: 58 @39979 has 237 MA's), (70, 40012), (77, 40027), (79, 40030), (89, 40072), (93, 40093), (109, 40147), (110, 40153), (115, 40186), (121, 40228), (122, 40234), (152, 40330),

Gene: Cabrinians_61 Start: 40293, Stop: 40658, Start Num: 58

Candidate Starts for Cabrinians_61:

(Start: 58 @40293 has 237 MA's), (70, 40326), (77, 40341), (79, 40344), (88, 40383), (89, 40386), (93, 40407), (103, 40440), (110, 40467), (115, 40500), (121, 40542), (122, 40548), (152, 40644),

Gene: CaptainKirk2_51 Start: 34868, Stop: 35230, Start Num: 57
Candidate Starts for CaptainKirk2_51:
(22, 34724), (27, 34760), (33, 34799), (Start: 57 @34868 has 23 MA's), (94, 34997), (101, 35021),

Gene: CaptainTrips_57 Start: 39789, Stop: 40154, Start Num: 58
Candidate Starts for CaptainTrips_57:
(Start: 58 @39789 has 237 MA's), (70, 39822), (77, 39837), (79, 39840), (88, 39879), (89, 39882), (93, 39903), (103, 39936), (110, 39963), (115, 39996), (121, 40038), (122, 40044), (152, 40140),

Gene: Cerasum_55 Start: 36014, Stop: 36367, Start Num: 58
Candidate Starts for Cerasum_55:
(48, 35978), (Start: 58 @36014 has 237 MA's), (69, 36044), (70, 36047), (75, 36059), (79, 36065), (93, 36128), (96, 36137), (98, 36143), (121, 36257), (125, 36278), (139, 36335), (149, 36347),

Gene: Cerasum_54 Start: 35670, Stop: 36017, Start Num: 58
Candidate Starts for Cerasum_54:
(52, 35643), (56, 35661), (Start: 58 @35670 has 237 MA's), (70, 35700), (73, 35709), (81, 35727), (93, 35781), (101, 35808), (115, 35865), (118, 35895), (121, 35907),

Gene: CharlottesWeb_47 Start: 40439, Stop: 40119, Start Num: 62
Candidate Starts for CharlottesWeb_47:
(Start: 46 @40457 has 8 MA's), (Start: 62 @40439 has 1 MA's), (93, 40352), (122, 40223),

Gene: Che8_64 Start: 42503, Stop: 42856, Start Num: 58
Candidate Starts for Che8_64:
(48, 42467), (Start: 58 @42503 has 237 MA's), (69, 42533), (70, 42536), (75, 42548), (79, 42554), (93, 42617), (96, 42626), (98, 42632), (121, 42746), (125, 42767), (139, 42824), (149, 42836),

Gene: Che8_63 Start: 42159, Stop: 42506, Start Num: 58
Candidate Starts for Che8_63:
(52, 42132), (56, 42150), (Start: 58 @42159 has 237 MA's), (70, 42189), (73, 42198), (81, 42216), (93, 42270), (101, 42297), (115, 42354), (118, 42384), (121, 42396),

Gene: Che9d_67 Start: 39585, Stop: 39938, Start Num: 58
Candidate Starts for Che9d_67:
(48, 39549), (Start: 58 @39585 has 237 MA's), (69, 39615), (70, 39618), (75, 39630), (79, 39636), (93, 39699), (96, 39708), (98, 39714), (121, 39828), (125, 39849), (139, 39906), (149, 39918),

Gene: Che9d_66 Start: 39241, Stop: 39588, Start Num: 58
Candidate Starts for Che9d_66:
(52, 39214), (56, 39232), (Start: 58 @39241 has 237 MA's), (70, 39271), (73, 39280), (81, 39298), (93, 39352), (101, 39379), (115, 39436), (118, 39466), (121, 39478),

Gene: CherryTomatoes_48 Start: 15930, Stop: 16262, Start Num: 67
Candidate Starts for CherryTomatoes_48:
(14, 15675), (51, 15903), (Start: 67 @15930 has 7 MA's), (83, 15984), (84, 15993), (93, 16032), (115, 16116), (125, 16179), (132, 16206),

Gene: Chevrolet_68 Start: 40947, Stop: 41312, Start Num: 58
Candidate Starts for Chevrolet_68:
(Start: 58 @40947 has 237 MA's), (70, 40980), (Start: 72 @40986 has 7 MA's), (79, 40998), (89, 41040), (96, 41070), (103, 41094), (104, 41097), (121, 41196), (122, 41202), (141, 41277),

Gene: Chickaboom_32 Start: 21673, Stop: 21350, Start Num: 70

Candidate Starts for Chickaboom_32:

(Start: 61 @21694 has 15 MA's), (70, 21673), (90, 21601), (125, 21430), (144, 21367),

Gene: Chuckly_63 Start: 40935, Stop: 41300, Start Num: 58

Candidate Starts for Chuckly_63:

(Start: 58 @40935 has 237 MA's), (70, 40968), (77, 40983), (79, 40986), (88, 41025), (89, 41028), (93, 41049), (103, 41082), (110, 41109), (115, 41142), (121, 41184), (122, 41190), (152, 41286),

Gene: Clifton_55 Start: 37465, Stop: 37830, Start Num: 58

Candidate Starts for Clifton_55:

(Start: 58 @37465 has 237 MA's), (70, 37498), (77, 37513), (79, 37516), (88, 37555), (89, 37558), (93, 37579), (103, 37612), (110, 37639), (115, 37672), (121, 37714), (122, 37720), (152, 37816),

Gene: Coco12_57 Start: 39727, Stop: 40074, Start Num: 58

Candidate Starts for Coco12_57:

(52, 39700), (56, 39718), (Start: 58 @39727 has 237 MA's), (70, 39757), (73, 39766), (81, 39784), (93, 39838), (101, 39865), (115, 39922), (118, 39952), (121, 39964),

Gene: Coco12_58 Start: 40071, Stop: 40424, Start Num: 58

Candidate Starts for Coco12_58:

(48, 40035), (Start: 58 @40071 has 237 MA's), (69, 40101), (70, 40104), (75, 40116), (79, 40122), (93, 40185), (96, 40194), (98, 40200), (121, 40314), (125, 40335), (139, 40392), (149, 40404),

Gene: Constella_138 Start: 76348, Stop: 76701, Start Num: 60

Candidate Starts for Constella_138:

(Start: 60 @76348 has 33 MA's), (115, 76549), (121, 76591),

Gene: Cornie_53 Start: 37745, Stop: 38092, Start Num: 58

Candidate Starts for Cornie_53:

(52, 37718), (56, 37736), (Start: 58 @37745 has 237 MA's), (70, 37775), (73, 37784), (81, 37802), (93, 37856), (101, 37883), (115, 37940), (118, 37970), (121, 37982),

Gene: Cornie_56 Start: 38714, Stop: 39079, Start Num: 58

Candidate Starts for Cornie_56:

(Start: 58 @38714 has 237 MA's), (70, 38747), (77, 38762), (79, 38765), (88, 38804), (89, 38807), (93, 38828), (110, 38888), (115, 38921), (121, 38963), (122, 38969), (152, 39065),

Gene: Cornie_54 Start: 38089, Stop: 38442, Start Num: 58

Candidate Starts for Cornie_54:

(48, 38053), (Start: 58 @38089 has 237 MA's), (69, 38119), (70, 38122), (75, 38134), (79, 38140), (93, 38203), (96, 38212), (98, 38218), (121, 38332), (125, 38353), (139, 38410), (149, 38422),

Gene: Cornucopia_62 Start: 40943, Stop: 41308, Start Num: 58

Candidate Starts for Cornucopia_62:

(Start: 58 @40943 has 237 MA's), (70, 40976), (77, 40991), (79, 40994), (88, 41033), (89, 41036), (93, 41057), (109, 41111), (110, 41117), (115, 41150), (121, 41192), (122, 41198), (152, 41294),

Gene: Crumble_55 Start: 36229, Stop: 36594, Start Num: 58

Candidate Starts for Crumble_55:

(Start: 58 @36229 has 237 MA's), (70, 36262), (77, 36277), (79, 36280), (88, 36319), (89, 36322), (93, 36343), (103, 36376), (110, 36403), (115, 36436), (121, 36478), (122, 36484), (152, 36580),

Gene: DLane_55 Start: 38997, Stop: 39362, Start Num: 58

Candidate Starts for DLane_55:

(Start: 58 @38997 has 237 MA's), (70, 39030), (Start: 72 @39036 has 7 MA's), (79, 39048), (89, 39090), (96, 39120), (103, 39144), (104, 39147), (121, 39246), (122, 39252), (141, 39327),

Gene: DRBy19_63 Start: 41390, Stop: 41755, Start Num: 58

Candidate Starts for DRBy19_63:

(Start: 58 @41390 has 237 MA's), (70, 41423), (77, 41438), (79, 41441), (88, 41480), (89, 41483), (93, 41504), (103, 41537), (109, 41558), (110, 41564), (115, 41597), (121, 41639), (122, 41645), (152, 41741),

Gene: DaWorst_61 Start: 40694, Stop: 41059, Start Num: 58

Candidate Starts for DaWorst_61:

(Start: 58 @40694 has 237 MA's), (70, 40727), (77, 40742), (79, 40745), (88, 40784), (89, 40787), (93, 40808), (103, 40841), (110, 40868), (115, 40901), (121, 40943), (122, 40949), (152, 41045),

Gene: DaddyRickover_59 Start: 40432, Stop: 40797, Start Num: 58

Candidate Starts for DaddyRickover_59:

(Start: 58 @40432 has 237 MA's), (70, 40465), (77, 40480), (79, 40483), (89, 40525), (93, 40546), (103, 40579), (109, 40600), (110, 40606), (115, 40639), (121, 40681), (122, 40687), (152, 40783),

Gene: Daenerys_54 Start: 38542, Stop: 38907, Start Num: 58

Candidate Starts for Daenerys_54:

(Start: 58 @38542 has 237 MA's), (70, 38575), (77, 38590), (79, 38593), (89, 38635), (93, 38656), (103, 38689), (109, 38710), (110, 38716), (115, 38749), (121, 38791), (122, 38797), (152, 38893),

Gene: Dallas_145 Start: 77162, Stop: 77515, Start Num: 60

Candidate Starts for Dallas_145:

(Start: 60 @77162 has 33 MA's), (115, 77363), (121, 77405),

Gene: Dante_61 Start: 40217, Stop: 40582, Start Num: 58

Candidate Starts for Dante_61:

(Start: 58 @40217 has 237 MA's), (70, 40250), (77, 40265), (79, 40268), (88, 40307), (89, 40310), (93, 40331), (103, 40364), (110, 40391), (115, 40424), (121, 40466), (122, 40472), (152, 40568),

Gene: DeadP_66 Start: 42861, Stop: 43226, Start Num: 58

Candidate Starts for DeadP_66:

(Start: 58 @42861 has 237 MA's), (70, 42894), (77, 42909), (79, 42912), (88, 42951), (89, 42954), (93, 42975), (103, 43008), (110, 43035), (115, 43068), (121, 43110), (122, 43116), (152, 43212),

Gene: Delian_54 Start: 34866, Stop: 35228, Start Num: 57

Candidate Starts for Delian_54:

(22, 34722), (27, 34758), (33, 34797), (Start: 57 @34866 has 23 MA's), (94, 34995), (101, 35019),

Gene: Demsculpinboyz_69 Start: 39586, Stop: 39939, Start Num: 58

Candidate Starts for Demsculpinboyz_69:

(48, 39550), (Start: 58 @39586 has 237 MA's), (69, 39616), (70, 39619), (75, 39631), (79, 39637), (93, 39700), (96, 39709), (98, 39715), (121, 39829), (125, 39850), (149, 39919),

Gene: Demsculpinboyz_68 Start: 39242, Stop: 39589, Start Num: 58

Candidate Starts for Demsculpinboyz_68:

(52, 39215), (56, 39233), (Start: 58 @39242 has 237 MA's), (70, 39272), (73, 39281), (81, 39299), (93, 39353), (101, 39380), (115, 39437), (118, 39467), (121, 39479),

Gene: Demsculpinboyz_71 Start: 40214, Stop: 40579, Start Num: 58

Candidate Starts for Demsculpinboyz_71:

(Start: 58 @40214 has 237 MA's), (70, 40247), (77, 40262), (79, 40265), (88, 40304), (89, 40307), (93, 40328), (110, 40388), (115, 40421), (121, 40463), (122, 40469), (137, 40538), (152, 40565),

Gene: DillTech15_57 Start: 38876, Stop: 39241, Start Num: 58

Candidate Starts for DillTech15_57:

(Start: 58 @38876 has 237 MA's), (70, 38909), (77, 38924), (79, 38927), (88, 38966), (89, 38969), (93, 38990), (110, 39050), (115, 39083), (121, 39125), (122, 39131), (137, 39200), (152, 39227),

Gene: DirtMcgirt_59 Start: 38957, Stop: 39322, Start Num: 58

Candidate Starts for DirtMcgirt_59:

(Start: 58 @38957 has 237 MA's), (70, 38990), (77, 39005), (79, 39008), (88, 39047), (89, 39050), (93, 39071), (103, 39104), (109, 39125), (110, 39131), (115, 39164), (121, 39206), (122, 39212), (152, 39308),

Gene: DirtyBoi_56 Start: 37313, Stop: 37675, Start Num: 57

Candidate Starts for DirtyBoi_56:

(Start: 57 @37313 has 23 MA's), (93, 37436),

Gene: Dmitri_53 Start: 39335, Stop: 39700, Start Num: 57

Candidate Starts for Dmitri_53:

(Start: 57 @39335 has 23 MA's), (93, 39461),

Gene: DmpstrDiver_145 Start: 77081, Stop: 77434, Start Num: 60

Candidate Starts for DmpstrDiver_145:

(Start: 60 @77081 has 33 MA's), (115, 77282), (121, 77324),

Gene: Donkeykong_63 Start: 42892, Stop: 43257, Start Num: 58

Candidate Starts for Donkeykong_63:

(Start: 58 @42892 has 237 MA's), (70, 42925), (73, 42934), (79, 42943), (103, 43039), (104, 43042), (110, 43066), (121, 43141), (122, 43147), (141, 43222),

Gene: Doomphist_60 Start: 41387, Stop: 41752, Start Num: 58

Candidate Starts for Doomphist_60:

(Start: 58 @41387 has 237 MA's), (70, 41420), (77, 41435), (79, 41438), (89, 41480), (93, 41501), (103, 41534), (109, 41555), (110, 41561), (115, 41594), (121, 41636), (122, 41642), (152, 41738),

Gene: Dorothy_58 Start: 39606, Stop: 39971, Start Num: 58

Candidate Starts for Dorothy_58:

(Start: 58 @39606 has 237 MA's), (70, 39639), (77, 39654), (79, 39657), (88, 39696), (89, 39699), (93, 39720), (103, 39753), (110, 39780), (115, 39813), (121, 39855), (122, 39861), (152, 39957),

Gene: DosHalletts_66 Start: 41742, Stop: 42107, Start Num: 58

Candidate Starts for DosHalletts_66:

(Start: 58 @41742 has 237 MA's), (70, 41775), (77, 41790), (79, 41793), (89, 41835), (93, 41856), (103, 41889), (109, 41910), (110, 41916), (115, 41949), (121, 41991), (122, 41997), (152, 42093),

Gene: DotProduct_53 Start: 38248, Stop: 38595, Start Num: 58

Candidate Starts for DotProduct_53:

(52, 38221), (56, 38239), (Start: 58 @38248 has 237 MA's), (Start: 63 @38260 has 2 MA's), (Start: 67 @38263 has 7 MA's), (70, 38278), (73, 38287), (81, 38305), (93, 38359), (101, 38386), (115, 38443), (118, 38473), (121, 38485), (154, 38587),

Gene: DotProduct_54 Start: 38592, Stop: 38945, Start Num: 58

Candidate Starts for DotProduct_54:

(48, 38556), (Start: 58 @38592 has 237 MA's), (69, 38622), (70, 38625), (75, 38637), (79, 38643), (93, 38706), (96, 38715), (98, 38721), (121, 38835), (125, 38856), (139, 38913), (149, 38925),

Gene: Doug_62 Start: 40960, Stop: 41325, Start Num: 58

Candidate Starts for Doug_62:

(Start: 58 @40960 has 237 MA's), (70, 40993), (79, 41011), (88, 41050), (89, 41053), (93, 41074), (103, 41107), (110, 41134), (115, 41167), (121, 41209), (122, 41215), (152, 41311),

Gene: Dove_137 Start: 72680, Stop: 73033, Start Num: 60

Candidate Starts for Dove_137:

(Start: 60 @72680 has 33 MA's), (115, 72881), (121, 72923),

Gene: Drago_58 Start: 38960, Stop: 39325, Start Num: 58

Candidate Starts for Drago_58:

(Start: 58 @38960 has 237 MA's), (70, 38993), (77, 39008), (79, 39011), (88, 39050), (89, 39053), (93, 39074), (103, 39107), (109, 39128), (110, 39134), (115, 39167), (121, 39209), (122, 39215), (152, 39311),

Gene: Dropshot_57 Start: 33783, Stop: 34220, Start Num: 72

Candidate Starts for Dropshot_57:

(Start: 72 @33783 has 7 MA's), (97, 33879), (105, 33906), (114, 33954), (122, 34011), (123, 34017), (126, 34038), (150, 34104), (156, 34134), (158, 34158), (159, 34170),

Gene: Duke13_140 Start: 74382, Stop: 74735, Start Num: 60

Candidate Starts for Duke13_140:

(Start: 60 @74382 has 33 MA's), (115, 74583), (121, 74625),

Gene: Eesa_29 Start: 22456, Stop: 22103, Start Num: 61

Candidate Starts for Eesa_29:

(Start: 61 @22456 has 15 MA's), (90, 22357), (144, 22120),

Gene: Eish_64 Start: 41209, Stop: 41574, Start Num: 58

Candidate Starts for Eish_64:

(Start: 58 @41209 has 237 MA's), (70, 41242), (77, 41257), (79, 41260), (88, 41299), (89, 41302), (93, 41323), (103, 41356), (110, 41383), (115, 41416), (121, 41458), (122, 41464), (152, 41560),

Gene: Ejimix_137 Start: 77230, Stop: 77583, Start Num: 60

Candidate Starts for Ejimix_137:

(Start: 60 @77230 has 33 MA's), (115, 77431), (121, 77473),

Gene: EleanorGeorge_61 Start: 41073, Stop: 41438, Start Num: 58

Candidate Starts for EleanorGeorge_61:

(Start: 58 @41073 has 237 MA's), (70, 41106), (77, 41121), (79, 41124), (89, 41166), (93, 41187), (103, 41220), (110, 41247), (115, 41280), (121, 41322), (122, 41328), (152, 41424),

Gene: Emma_61 Start: 40009, Stop: 40374, Start Num: 58

Candidate Starts for Emma_61:

(Start: 58 @40009 has 237 MA's), (70, 40042), (79, 40060), (89, 40102), (96, 40132), (103, 40156), (104, 40159), (121, 40258), (122, 40264), (141, 40339), (143, 40342), (145, 40345),

Gene: Empress_58 Start: 39956, Stop: 40321, Start Num: 58

Candidate Starts for Empress_58:

(Start: 58 @39956 has 237 MA's), (70, 39989), (77, 40004), (79, 40007), (89, 40049), (93, 40070), (103, 40103), (109, 40124), (110, 40130), (115, 40163), (121, 40205), (122, 40211), (152, 40307),

Gene: Enby_61 Start: 39236, Stop: 39601, Start Num: 58

Candidate Starts for Enby_61:

(Start: 58 @39236 has 237 MA's), (70, 39269), (77, 39284), (79, 39287), (88, 39326), (89, 39329), (93, 39350), (103, 39383), (110, 39410), (115, 39443), (121, 39485), (122, 39491), (152, 39587),

Gene: Eradicator_53 Start: 38486, Stop: 38851, Start Num: 58

Candidate Starts for Eradicator_53:

(Start: 58 @38486 has 237 MA's), (70, 38519), (77, 38534), (79, 38537), (88, 38576), (89, 38579), (93, 38600), (103, 38633), (110, 38660), (115, 38693), (121, 38735), (122, 38741), (152, 38837),

Gene: EricMillard_136 Start: 75734, Stop: 76087, Start Num: 60

Candidate Starts for EricMillard_136:

(Start: 60 @75734 has 33 MA's), (115, 75935), (121, 75977),

Gene: Estave1_63 Start: 41407, Stop: 41772, Start Num: 58

Candidate Starts for Estave1_63:

(Start: 58 @41407 has 237 MA's), (70, 41440), (77, 41455), (79, 41458), (88, 41497), (89, 41500), (93, 41521), (103, 41554), (109, 41575), (110, 41581), (115, 41614), (121, 41656), (122, 41662), (152, 41758),

Gene: Evaa_48 Start: 41735, Stop: 41361, Start Num: 46

Candidate Starts for Evaa_48:

(13, 41960), (43, 41741), (Start: 46 @41735 has 8 MA's), (74, 41675), (86, 41630), (91, 41612), (93, 41603),

Gene: Fancypants_62 Start: 40927, Stop: 41292, Start Num: 58

Candidate Starts for Fancypants_62:

(Start: 58 @40927 has 237 MA's), (70, 40960), (77, 40975), (79, 40978), (89, 41020), (93, 41041), (109, 41095), (110, 41101), (115, 41134), (121, 41176), (122, 41182), (152, 41278),

Gene: Fastidio_59 Start: 39023, Stop: 39388, Start Num: 58

Candidate Starts for Fastidio_59:

(Start: 58 @39023 has 237 MA's), (70, 39056), (77, 39071), (79, 39074), (88, 39113), (89, 39116), (93, 39137), (110, 39197), (115, 39230), (121, 39272), (122, 39278), (137, 39347), (152, 39374),

Gene: Fenry_49 Start: 36364, Stop: 36726, Start Num: 57

Candidate Starts for Fenry_49:

(2, 35836), (9, 36049), (20, 36202), (22, 36220), (27, 36256), (33, 36295), (Start: 57 @36364 has 23 MA's), (94, 36493), (101, 36517), (151, 36712),

Gene: Filuzino_58 Start: 39299, Stop: 39664, Start Num: 58

Candidate Starts for Filuzino_58:

(Start: 58 @39299 has 237 MA's), (70, 39332), (Start: 72 @39338 has 7 MA's), (79, 39350), (89, 39392), (96, 39422), (103, 39446), (104, 39449), (121, 39548), (122, 39554), (141, 39629), (143, 39632),

Gene: Firehouse51_61 Start: 43811, Stop: 44176, Start Num: 58

Candidate Starts for Firehouse51_61:

(Start: 58 @43811 has 237 MA's), (70, 43844), (77, 43859), (79, 43862), (88, 43901), (89, 43904), (93, 43925), (103, 43958), (110, 43985), (115, 44018), (121, 44060), (122, 44066), (152, 44162),

Gene: Flathead_60 Start: 40766, Stop: 41131, Start Num: 58

Candidate Starts for Flathead_60:

(Start: 58 @40766 has 237 MA's), (70, 40799), (Start: 72 @40805 has 7 MA's), (79, 40817), (89, 40859), (96, 40889), (103, 40913), (104, 40916), (121, 41015), (122, 41021), (141, 41096), (143, 41099), (145, 41102),

Gene: Florinda_71 Start: 42396, Stop: 42761, Start Num: 58

Candidate Starts for Florinda_71:

(Start: 58 @42396 has 237 MA's), (70, 42429), (73, 42438), (79, 42447), (89, 42489), (96, 42519), (103, 42543), (104, 42546), (121, 42645), (122, 42651), (141, 42726),

Gene: Footloose_58 Start: 33452, Stop: 33814, Start Num: 58

Candidate Starts for Footloose_58:

(37, 33380), (39, 33398), (48, 33416), (Start: 58 @33452 has 237 MA's), (Start: 63 @33464 has 2 MA's), (82, 33524), (90, 33557), (93, 33572), (101, 33599), (109, 33623), (115, 33659),

Gene: Forza_129 Start: 82851, Stop: 82357, Start Num: 23

Candidate Starts for Forza_129:

(Start: 23 @82851 has 4 MA's), (31, 82782), (35, 82776), (38, 82761), (47, 82728), (94, 82566), (110, 82521), (127, 82404), (130, 82398), (139, 82368),

Gene: FreddyB_61 Start: 39138, Stop: 39503, Start Num: 58

Candidate Starts for FreddyB_61:

(Start: 58 @39138 has 237 MA's), (70, 39171), (77, 39186), (79, 39189), (88, 39228), (89, 39231), (93, 39252), (103, 39285), (110, 39312), (115, 39345), (121, 39387), (122, 39393), (152, 39489),

Gene: Fresco_48 Start: 41037, Stop: 40741, Start Num: 79

Candidate Starts for Fresco_48:

(Start: 46 @41091 has 8 MA's), (74, 41046), (79, 41037), (83, 41022), (93, 40974), (115, 40893),

Gene: Fruitloop_57 Start: 40613, Stop: 40978, Start Num: 58

Candidate Starts for Fruitloop_57:

(Start: 58 @40613 has 237 MA's), (70, 40646), (73, 40655), (79, 40664), (89, 40706), (96, 40736), (103, 40760), (104, 40763), (121, 40862), (122, 40868), (141, 40943),

Gene: GUmbie_58 Start: 39713, Stop: 40078, Start Num: 58

Candidate Starts for GUmbie_58:

(Start: 58 @39713 has 237 MA's), (70, 39746), (77, 39761), (79, 39764), (88, 39803), (89, 39806), (93, 39827), (103, 39860), (110, 39887), (115, 39920), (121, 39962), (122, 39968), (152, 40064),

Gene: Galactic_59 Start: 40176, Stop: 40541, Start Num: 58

Candidate Starts for Galactic_59:

(Start: 58 @40176 has 237 MA's), (70, 40209), (77, 40224), (79, 40227), (88, 40266), (89, 40269), (93, 40290), (110, 40350), (115, 40383), (121, 40425), (122, 40431), (152, 40527),

Gene: Gandalph_63 Start: 40535, Stop: 40900, Start Num: 58

Candidate Starts for Gandalph_63:

(Start: 58 @40535 has 237 MA's), (70, 40568), (77, 40583), (79, 40586), (89, 40628), (93, 40649), (103, 40682), (110, 40709), (115, 40742), (121, 40784), (122, 40790), (152, 40886),

Gene: GigiOuiOui_56 Start: 39153, Stop: 39518, Start Num: 58

Candidate Starts for GigiOuiOui_56:

(Start: 58 @39153 has 237 MA's), (70, 39186), (77, 39201), (79, 39204), (88, 39243), (89, 39246), (93, 39267), (110, 39327), (115, 39360), (121, 39402), (122, 39408), (152, 39504),

Gene: Girafales_69 Start: 42187, Stop: 42552, Start Num: 58

Candidate Starts for Girafales_69:

(Start: 58 @42187 has 237 MA's), (70, 42220), (73, 42229), (79, 42238), (89, 42280), (96, 42310), (103, 42334), (104, 42337), (121, 42436), (122, 42442), (141, 42517),

Gene: Girr_58 Start: 40017, Stop: 40382, Start Num: 58

Candidate Starts for Girr_58:

(Start: 58 @40017 has 237 MA's), (70, 40050), (77, 40065), (79, 40068), (88, 40107), (89, 40110), (93, 40131), (110, 40191), (115, 40224), (121, 40266), (122, 40272), (152, 40368),

Gene: Gorge_64 Start: 41655, Stop: 42020, Start Num: 58

Candidate Starts for Gorge_64:

(Start: 58 @41655 has 237 MA's), (70, 41688), (77, 41703), (79, 41706), (88, 41745), (89, 41748), (93, 41769), (103, 41802), (110, 41829), (115, 41862), (121, 41904), (122, 41910), (152, 42006),

Gene: Guacamole_48 Start: 35005, Stop: 35367, Start Num: 57

Candidate Starts for Guacamole_48:

(22, 34861), (27, 34897), (33, 34936), (Start: 57 @35005 has 23 MA's), (86, 35104), (93, 35131), (94, 35134), (101, 35158), (151, 35353),

Gene: Hades_61 Start: 41111, Stop: 41476, Start Num: 58

Candidate Starts for Hades_61:

(Start: 58 @41111 has 237 MA's), (70, 41144), (77, 41159), (79, 41162), (88, 41201), (89, 41204), (93, 41225), (103, 41258), (110, 41285), (115, 41318), (121, 41360), (122, 41366), (137, 41435), (152, 41462),

Gene: Halley_146 Start: 77546, Stop: 77899, Start Num: 60

Candidate Starts for Halley_146:

(Start: 60 @77546 has 33 MA's), (115, 77747), (121, 77789),

Gene: Hamulus_61 Start: 40756, Stop: 41121, Start Num: 58

Candidate Starts for Hamulus_61:

(Start: 58 @40756 has 237 MA's), (70, 40789), (Start: 72 @40795 has 7 MA's), (79, 40807), (89, 40849), (96, 40879), (103, 40903), (104, 40906), (121, 41005), (122, 41011), (141, 41086), (143, 41089), (145, 41092),

Gene: HannahPhantana_34 Start: 21861, Stop: 21511, Start Num: 61

Candidate Starts for HannahPhantana_34:

(10, 22185), (19, 22044), (29, 21951), (Start: 61 @21861 has 15 MA's), (144, 21528),

Gene: Harley_62 Start: 40658, Stop: 41011, Start Num: 58

Candidate Starts for Harley_62:

(48, 40622), (Start: 58 @40658 has 237 MA's), (69, 40688), (70, 40691), (75, 40703), (79, 40709), (93, 40772), (96, 40781), (121, 40901), (125, 40922), (139, 40979), (149, 40991),

Gene: Harley_61 Start: 40314, Stop: 40661, Start Num: 58

Candidate Starts for Harley_61:

(52, 40287), (56, 40305), (Start: 58 @40314 has 237 MA's), (70, 40344), (73, 40353), (81, 40371), (93, 40425), (101, 40452), (115, 40509), (118, 40539), (121, 40551),

Gene: Hashim76_93 Start: 66062, Stop: 65649, Start Num: 50

Candidate Starts for Hashim76_93:

(Start: 50 @66062 has 2 MA's), (74, 65981), (98, 65894), (110, 65852), (115, 65819), (126, 65744),

Gene: Hawkeye_86 Start: 58033, Stop: 58440, Start Num: 60

Candidate Starts for Hawkeye_86:

(36, 57952), (39, 57976), (41, 57982), (Start: 58 @58030 has 237 MA's), (Start: 60 @58033 has 33 MA's), (83, 58096), (118, 58261), (124, 58288), (125, 58294), (147, 58363), (157, 58411),

Gene: Hedwig_57 Start: 38509, Stop: 38871, Start Num: 57

Candidate Starts for Hedwig_57:

(7, 38158), (Start: 57 @38509 has 23 MA's), (93, 38632),

Gene: Hegedechwinu_60 Start: 39325, Stop: 39690, Start Num: 58

Candidate Starts for Hegedechwinu_60:

(Start: 58 @39325 has 237 MA's), (70, 39358), (77, 39373), (79, 39376), (88, 39415), (89, 39418), (93, 39439), (103, 39472), (110, 39499), (115, 39532), (121, 39574), (122, 39580), (152, 39676),

Gene: Hirko_43 Start: 34532, Stop: 34897, Start Num: 65

Candidate Starts for Hirko_43:

(Start: 65 @34532 has 2 MA's), (110, 34685), (115, 34718), (116, 34733), (133, 34814),

Gene: Hitter_51 Start: 34662, Stop: 35024, Start Num: 57

Candidate Starts for Hitter_51:

(22, 34518), (27, 34554), (33, 34593), (Start: 57 @34662 has 23 MA's), (94, 34791), (101, 34815), (151, 35010),

Gene: Hlubikazi_56 Start: 38331, Stop: 38696, Start Num: 58

Candidate Starts for Hlubikazi_56:

(Start: 58 @38331 has 237 MA's), (70, 38364), (77, 38379), (79, 38382), (89, 38424), (93, 38445), (103, 38478), (109, 38499), (110, 38505), (121, 38580), (122, 38586), (152, 38682),

Gene: HokkenD_137 Start: 76705, Stop: 77058, Start Num: 60

Candidate Starts for HokkenD_137:

(28, 76603), (Start: 60 @76705 has 33 MA's), (115, 76906), (121, 76948),

Gene: Hortus1_71 Start: 44930, Stop: 44580, Start Num: 67

Candidate Starts for Hortus1_71:

(25, 45071), (42, 44987), (Start: 67 @44930 has 7 MA's), (74, 44903), (79, 44894), (80, 44891), (93, 44828), (100, 44804), (136, 44627), (140, 44612), (153, 44591),

Gene: Hughesyang_143 Start: 77316, Stop: 77669, Start Num: 60

Candidate Starts for Hughesyang_143:

(Start: 60 @77316 has 33 MA's), (115, 77517), (121, 77559),

Gene: lbOuu_61 Start: 40693, Stop: 41058, Start Num: 58

Candidate Starts for lbOuu_61:

(Start: 58 @40693 has 237 MA's), (70, 40726), (77, 40741), (79, 40744), (88, 40783), (89, 40786), (93, 40807), (103, 40840), (110, 40867), (115, 40900), (121, 40942), (122, 40948), (152, 41044),

Gene: Ibhubesi_60 Start: 40300, Stop: 40665, Start Num: 58

Candidate Starts for Ibhubesi_60:

(Start: 58 @40300 has 237 MA's), (70, 40333), (77, 40348), (79, 40351), (88, 40390), (89, 40393), (93, 40414), (110, 40474), (115, 40507), (121, 40549), (122, 40555), (137, 40624), (152, 40651),

Gene: Inventum_55 Start: 39804, Stop: 40169, Start Num: 58

Candidate Starts for Inventum_55:

(Start: 58 @39804 has 237 MA's), (70, 39837), (77, 39852), (79, 39855), (88, 39894), (89, 39897), (93, 39918), (103, 39951), (110, 39978), (115, 40011), (121, 40053), (122, 40059), (152, 40155),

Gene: IrishSherpFalk_61 Start: 41968, Stop: 42333, Start Num: 58

Candidate Starts for IrishSherpFalk_61:

(Start: 58 @41968 has 237 MA's), (70, 42001), (77, 42016), (79, 42019), (88, 42058), (89, 42061), (93, 42082), (110, 42142), (115, 42175), (121, 42217), (122, 42223), (152, 42319),

Gene: Jabbawokkie_74 Start: 42036, Stop: 42401, Start Num: 58

Candidate Starts for Jabbawokkie_74:

(Start: 58 @42036 has 237 MA's), (70, 42069), (77, 42084), (79, 42087), (88, 42126), (89, 42129), (93, 42150), (103, 42183), (110, 42210), (115, 42243), (121, 42285), (122, 42291), (152, 42387),

Gene: JalFarm20_71 Start: 43462, Stop: 43809, Start Num: 58

Candidate Starts for JalFarm20_71:

(52, 43435), (56, 43453), (Start: 58 @43462 has 237 MA's), (70, 43492), (73, 43501), (81, 43519), (93, 43573), (101, 43600), (115, 43657), (118, 43687), (121, 43699),

Gene: JalFarm20_72 Start: 43806, Stop: 44159, Start Num: 58

Candidate Starts for JalFarm20_72:

(48, 43770), (Start: 58 @43806 has 237 MA's), (69, 43836), (70, 43839), (75, 43851), (79, 43857), (93, 43920), (96, 43929), (98, 43935), (121, 44049), (125, 44070), (139, 44127), (149, 44139),

Gene: Jalammah_54 Start: 37665, Stop: 38027, Start Num: 57

Candidate Starts for Jalammah_54:

(22, 37521), (27, 37557), (33, 37596), (Start: 57 @37665 has 23 MA's), (94, 37794), (101, 37818), (151, 38013),

Gene: James_64 Start: 41780, Stop: 42145, Start Num: 58

Candidate Starts for James_64:

(Start: 58 @41780 has 237 MA's), (70, 41813), (77, 41828), (79, 41831), (88, 41870), (89, 41873), (93, 41894), (103, 41927), (110, 41954), (115, 41987), (121, 42029), (122, 42035), (152, 42131),

Gene: Jamun_29 Start: 21575, Stop: 21234, Start Num: 61

Candidate Starts for Jamun_29:

(Start: 61 @21575 has 15 MA's), (90, 21482), (125, 21311), (142, 21251), (144, 21248),

Gene: Jarcob_60 Start: 40261, Stop: 40626, Start Num: 58

Candidate Starts for Jarcob_60:

(Start: 58 @40261 has 237 MA's), (70, 40294), (77, 40309), (79, 40312), (88, 40351), (89, 40354), (93, 40375), (103, 40408), (109, 40429), (110, 40435), (115, 40468), (121, 40510), (122, 40516), (152, 40612),

Gene: JasperJr_48 Start: 35005, Stop: 35367, Start Num: 57

Candidate Starts for JasperJr_48:

(22, 34861), (27, 34897), (33, 34936), (Start: 57 @35005 has 23 MA's), (86, 35104), (93, 35131), (94, 35134), (101, 35158), (151, 35353),

Gene: Jinglebell_65 Start: 42815, Stop: 43180, Start Num: 58

Candidate Starts for Jinglebell_65:

(Start: 58 @42815 has 237 MA's), (70, 42848), (77, 42863), (79, 42866), (88, 42905), (89, 42908), (93, 42929), (103, 42962), (110, 42989), (115, 43022), (121, 43064), (122, 43070), (152, 43166),

Gene: Job42_62 Start: 42198, Stop: 42563, Start Num: 58

Candidate Starts for Job42_62:

(Start: 58 @42198 has 237 MA's), (70, 42231), (77, 42246), (79, 42249), (88, 42288), (89, 42291), (93, 42312), (103, 42345), (109, 42366), (110, 42372), (115, 42405), (121, 42447), (122, 42453), (152, 42549),

Gene: JoeyJr_55 Start: 38710, Stop: 39075, Start Num: 58

Candidate Starts for JoeyJr_55:

(Start: 58 @38710 has 237 MA's), (70, 38743), (77, 38758), (79, 38761), (89, 38803), (93, 38824), (103, 38857), (109, 38878), (110, 38884), (115, 38917), (121, 38959), (122, 38965), (152, 39061),

Gene: Juice456_60 Start: 41762, Stop: 42115, Start Num: 58

Candidate Starts for Juice456_60:

(48, 41726), (Start: 58 @41762 has 237 MA's), (69, 41792), (70, 41795), (75, 41807), (79, 41813), (93, 41876), (96, 41885), (98, 41891), (121, 42005), (125, 42026), (139, 42083), (149, 42095),

Gene: Juice456_59 Start: 41418, Stop: 41765, Start Num: 58

Candidate Starts for Juice456_59:

(52, 41391), (56, 41409), (Start: 58 @41418 has 237 MA's), (70, 41448), (73, 41457), (81, 41475), (93, 41529), (101, 41556), (115, 41613), (118, 41643), (121, 41655),

Gene: JuicyJay_140 Start: 78831, Stop: 79184, Start Num: 60

Candidate Starts for JuicyJay_140:

(Start: 60 @78831 has 33 MA's), (115, 79032), (121, 79074),

Gene: Juniper1_58 Start: 39354, Stop: 39701, Start Num: 58

Candidate Starts for Juniper1_58:

(52, 39327), (56, 39345), (Start: 58 @39354 has 237 MA's), (Start: 63 @39366 has 2 MA's), (Start: 67 @39369 has 7 MA's), (70, 39384), (73, 39393), (81, 39411), (93, 39465), (101, 39492), (115, 39549), (118, 39579), (121, 39591),

Gene: Juniper1_59 Start: 39728, Stop: 40051, Start Num: 69

Candidate Starts for Juniper1_59:

(48, 39662), (Start: 58 @39698 has 237 MA's), (69, 39728), (70, 39731), (75, 39743), (79, 39749), (93, 39812), (96, 39821), (98, 39827), (121, 39941), (125, 39962), (139, 40019), (149, 40031),

Gene: Juniper1_61 Start: 40443, Stop: 40808, Start Num: 58

Candidate Starts for Juniper1_61:

(8, 40104), (11, 40122), (16, 40221), (17, 40230), (30, 40347), (32, 40353), (34, 40356), (Start: 58 @40443 has 237 MA's), (70, 40476), (73, 40485), (79, 40494), (93, 40557), (96, 40566), (104, 40593), (107, 40605), (110, 40617), (122, 40698), (139, 40770), (141, 40773),

Gene: Juno112_30 Start: 21210, Stop: 20869, Start Num: 61

Candidate Starts for Juno112_30:
(Start: 61 @21210 has 15 MA's), (71, 21192),

Gene: KHumphrey_30 Start: 21190, Stop: 20867, Start Num: 71
Candidate Starts for KHumphrey_30:
(Start: 61 @21208 has 15 MA's), (71, 21190),

Gene: Kalah2_135 Start: 76437, Stop: 76790, Start Num: 60
Candidate Starts for Kalah2_135:
(Start: 60 @76437 has 33 MA's), (115, 76638), (121, 76680),

Gene: Karhdo_57 Start: 39806, Stop: 40171, Start Num: 58
Candidate Starts for Karhdo_57:
(Start: 58 @39806 has 237 MA's), (70, 39839), (77, 39854), (79, 39857), (88, 39896), (89, 39899), (93, 39920), (103, 39953), (110, 39980), (115, 40013), (121, 40055), (122, 40061), (152, 40157),

Gene: KashFlow_143 Start: 75737, Stop: 76090, Start Num: 60
Candidate Starts for KashFlow_143:
(28, 75635), (Start: 60 @75737 has 33 MA's), (115, 75938), (121, 75980),

Gene: Kenuha5_57 Start: 38874, Stop: 39239, Start Num: 58
Candidate Starts for Kenuha5_57:
(Start: 58 @38874 has 237 MA's), (70, 38907), (Start: 72 @38913 has 7 MA's), (79, 38925), (89, 38967), (96, 38997), (103, 39021), (104, 39024), (121, 39123), (122, 39129), (141, 39204),

Gene: Kersh_62 Start: 42556, Stop: 42921, Start Num: 58
Candidate Starts for Kersh_62:
(Start: 58 @42556 has 237 MA's), (70, 42589), (77, 42604), (79, 42607), (88, 42646), (89, 42649), (93, 42670), (103, 42703), (109, 42724), (110, 42730), (115, 42763), (121, 42805), (122, 42811), (152, 42907),

Gene: Kimberlium_63 Start: 42089, Stop: 42454, Start Num: 58
Candidate Starts for Kimberlium_63:
(Start: 58 @42089 has 237 MA's), (70, 42122), (77, 42137), (79, 42140), (88, 42179), (89, 42182), (93, 42203), (103, 42236), (109, 42257), (110, 42263), (115, 42296), (121, 42338), (122, 42344), (152, 42440),

Gene: Kimberlium_60 Start: 41117, Stop: 41464, Start Num: 58
Candidate Starts for Kimberlium_60:
(52, 41090), (56, 41108), (Start: 58 @41117 has 237 MA's), (70, 41147), (73, 41156), (81, 41174), (93, 41228), (101, 41255), (115, 41312), (118, 41342), (121, 41354),

Gene: Kimberlium_61 Start: 41461, Stop: 41814, Start Num: 58
Candidate Starts for Kimberlium_61:
(48, 41425), (Start: 58 @41461 has 237 MA's), (69, 41491), (70, 41494), (75, 41506), (79, 41512), (93, 41575), (96, 41584), (98, 41590), (121, 41704), (125, 41725), (139, 41782), (149, 41794),

Gene: KingMidas_59 Start: 40372, Stop: 40737, Start Num: 58
Candidate Starts for KingMidas_59:
(Start: 58 @40372 has 237 MA's), (70, 40405), (77, 40420), (79, 40423), (89, 40465), (93, 40486), (103, 40519), (109, 40540), (110, 40546), (115, 40579), (121, 40621), (122, 40627), (152, 40723),

Gene: Kingsley_55 Start: 38460, Stop: 38807, Start Num: 58

Candidate Starts for Kingsley_55:

(52, 38433), (56, 38451), (Start: 58 @38460 has 237 MA's), (70, 38490), (73, 38499), (81, 38517), (93, 38571), (101, 38598), (115, 38655), (118, 38685), (121, 38697),

Gene: Kingsley_56 Start: 38804, Stop: 39157, Start Num: 58

Candidate Starts for Kingsley_56:

(48, 38768), (Start: 58 @38804 has 237 MA's), (69, 38834), (70, 38837), (75, 38849), (79, 38855), (93, 38918), (96, 38927), (98, 38933), (121, 39047), (125, 39068), (139, 39125), (149, 39137),

Gene: Klein_142 Start: 75039, Stop: 75392, Start Num: 60

Candidate Starts for Klein_142:

(Start: 60 @75039 has 33 MA's), (115, 75240), (121, 75282),

Gene: Koella_54 Start: 36191, Stop: 36556, Start Num: 58

Candidate Starts for Koella_54:

(Start: 58 @36191 has 237 MA's), (70, 36224), (77, 36239), (79, 36242), (88, 36281), (89, 36284), (93, 36305), (103, 36338), (110, 36365), (115, 36398), (121, 36440), (122, 36446), (152, 36542),

Gene: Krakatau_57 Start: 39569, Stop: 39934, Start Num: 58

Candidate Starts for Krakatau_57:

(Start: 58 @39569 has 237 MA's), (70, 39602), (79, 39620), (96, 39692), (103, 39716), (104, 39719), (121, 39818), (122, 39824), (141, 39899),

Gene: KristaRAM_63 Start: 42760, Stop: 43125, Start Num: 58

Candidate Starts for KristaRAM_63:

(Start: 58 @42760 has 237 MA's), (70, 42793), (77, 42808), (79, 42811), (89, 42853), (93, 42874), (103, 42907), (110, 42934), (115, 42967), (121, 43009), (122, 43015), (152, 43111),

Gene: LastJedi_54 Start: 37508, Stop: 37873, Start Num: 58

Candidate Starts for LastJedi_54:

(Start: 58 @37508 has 237 MA's), (70, 37541), (77, 37556), (79, 37559), (88, 37598), (89, 37601), (93, 37622), (103, 37655), (110, 37682), (115, 37715), (121, 37757), (122, 37763), (152, 37859),

Gene: Latretium_62 Start: 40834, Stop: 41199, Start Num: 58

Candidate Starts for Latretium_62:

(Start: 58 @40834 has 237 MA's), (70, 40867), (77, 40882), (79, 40885), (88, 40924), (89, 40927), (93, 40948), (110, 41008), (115, 41041), (121, 41083), (122, 41089), (152, 41185),

Gene: Leona_30 Start: 21281, Stop: 20940, Start Num: 61

Candidate Starts for Leona_30:

(Start: 61 @21281 has 15 MA's), (95, 21173), (102, 21152),

Gene: Leozinho_59 Start: 39590, Stop: 39955, Start Num: 58

Candidate Starts for Leozinho_59:

(Start: 58 @39590 has 237 MA's), (70, 39623), (77, 39638), (79, 39641), (89, 39683), (93, 39704), (103, 39737), (109, 39758), (110, 39764), (115, 39797), (121, 39839), (122, 39845), (152, 39941),

Gene: Leperchaun_52 Start: 37940, Stop: 38305, Start Num: 58

Candidate Starts for Leperchaun_52:

(Start: 58 @37940 has 237 MA's), (70, 37973), (77, 37988), (79, 37991), (89, 38033), (93, 38054), (103, 38087), (109, 38108), (110, 38114), (115, 38147), (121, 38189), (122, 38195), (152, 38291),

Gene: Ligma_48 Start: 41091, Stop: 40741, Start Num: 46

Candidate Starts for Ligma_48:

(Start: 46 @41091 has 8 MA's), (74, 41046), (79, 41037), (83, 41022), (93, 40974), (115, 40893),

Gene: LilMoolah_58 Start: 39703, Stop: 40068, Start Num: 58

Candidate Starts for LilMoolah_58:

(Start: 58 @39703 has 237 MA's), (70, 39736), (77, 39751), (79, 39754), (88, 39793), (89, 39796), (93, 39817), (103, 39850), (109, 39871), (110, 39877), (115, 39910), (121, 39952), (122, 39958), (152, 40054),

Gene: LittleMunchkin_50 Start: 44298, Stop: 43924, Start Num: 46

Candidate Starts for LittleMunchkin_50:

(13, 44523), (Start: 46 @44298 has 8 MA's), (79, 44229), (91, 44175), (98, 44151), (140, 43965),

Gene: LittleShirley_60 Start: 40750, Stop: 41115, Start Num: 58

Candidate Starts for LittleShirley_60:

(Start: 58 @40750 has 237 MA's), (70, 40783), (77, 40798), (79, 40801), (88, 40840), (89, 40843), (93, 40864), (103, 40897), (110, 40924), (115, 40957), (121, 40999), (122, 41005), (152, 41101),

Gene: LittleTokyo_33 Start: 21980, Stop: 21597, Start Num: 61

Candidate Starts for LittleTokyo_33:

(Start: 61 @21980 has 15 MA's), (117, 21776),

Gene: Lizziana_66 Start: 41261, Stop: 41626, Start Num: 58

Candidate Starts for Lizziana_66:

(Start: 58 @41261 has 237 MA's), (70, 41294), (77, 41309), (79, 41312), (88, 41351), (89, 41354), (93, 41375), (103, 41408), (110, 41435), (115, 41468), (121, 41510), (122, 41516), (152, 41612),

Gene: Llama_65 Start: 42669, Stop: 43034, Start Num: 58

Candidate Starts for Llama_65:

(Start: 58 @42669 has 237 MA's), (70, 42702), (77, 42717), (79, 42720), (88, 42759), (89, 42762), (93, 42783), (103, 42816), (110, 42843), (115, 42876), (121, 42918), (122, 42924), (152, 43020),

Gene: Llij_56 Start: 39114, Stop: 39479, Start Num: 58

Candidate Starts for Llij_56:

(Start: 58 @39114 has 237 MA's), (70, 39147), (77, 39162), (79, 39165), (88, 39204), (89, 39207), (93, 39228), (103, 39261), (109, 39282), (110, 39288), (115, 39321), (121, 39363), (122, 39369), (152, 39465),

Gene: Lorde_60 Start: 38401, Stop: 38766, Start Num: 58

Candidate Starts for Lorde_60:

(Start: 58 @38401 has 237 MA's), (70, 38434), (77, 38449), (79, 38452), (88, 38491), (89, 38494), (93, 38515), (103, 38548), (109, 38569), (110, 38575), (115, 38608), (121, 38650), (122, 38656), (152, 38752),

Gene: Lucky2013_136 Start: 72791, Stop: 73144, Start Num: 60

Candidate Starts for Lucky2013_136:

(28, 72689), (Start: 60 @72791 has 33 MA's), (115, 72992), (121, 73034),

Gene: LunaBlu_62 Start: 40835, Stop: 41200, Start Num: 58

Candidate Starts for LunaBlu_62:

(Start: 58 @40835 has 237 MA's), (70, 40868), (77, 40883), (79, 40886), (88, 40925), (89, 40928), (93, 40949), (110, 41009), (115, 41042), (121, 41084), (122, 41090), (152, 41186),

Gene: LunaStella_53 Start: 38713, Stop: 39060, Start Num: 58

Candidate Starts for LunaStella_53:

(52, 38686), (56, 38704), (Start: 58 @38713 has 237 MA's), (Start: 63 @38725 has 2 MA's), (70, 38743), (73, 38752), (89, 38803), (93, 38824), (111, 38887), (115, 38908), (118, 38938),

Gene: LunaStella_54 Start: 39057, Stop: 39410, Start Num: 58

Candidate Starts for LunaStella_54:

(48, 39021), (Start: 58 @39057 has 237 MA's), (75, 39102), (79, 39108), (93, 39171), (96, 39180), (108, 39216), (112, 39240), (149, 39390),

Gene: Lysidious_52 Start: 36936, Stop: 37298, Start Num: 57

Candidate Starts for Lysidious_52:

(21, 36786), (22, 36792), (27, 36828), (33, 36867), (Start: 57 @36936 has 23 MA's), (94, 37065), (101, 37089),

Gene: MadMen_58 Start: 40038, Stop: 40403, Start Num: 58

Candidate Starts for MadMen_58:

(Start: 58 @40038 has 237 MA's), (70, 40071), (77, 40086), (79, 40089), (89, 40131), (93, 40152), (103, 40185), (110, 40212), (115, 40245), (121, 40287), (122, 40293), (152, 40389),

Gene: Madiba_58 Start: 39287, Stop: 39652, Start Num: 58

Candidate Starts for Madiba_58:

(Start: 58 @39287 has 237 MA's), (70, 39320), (77, 39335), (79, 39338), (89, 39380), (93, 39401), (103, 39434), (110, 39461), (115, 39494), (121, 39536), (122, 39542), (152, 39638),

Gene: Mahavrat_58 Start: 39663, Stop: 40028, Start Num: 58

Candidate Starts for Mahavrat_58:

(Start: 58 @39663 has 237 MA's), (70, 39696), (77, 39711), (79, 39714), (88, 39753), (89, 39756), (93, 39777), (110, 39837), (115, 39870), (121, 39912), (122, 39918), (152, 40014),

Gene: Malachai_49 Start: 37159, Stop: 37521, Start Num: 57

Candidate Starts for Malachai_49:

(33, 37090), (Start: 57 @37159 has 23 MA's), (86, 37258), (93, 37285), (94, 37288), (101, 37312), (151, 37507),

Gene: MalagasyRose_65 Start: 42032, Stop: 42385, Start Num: 64

Candidate Starts for MalagasyRose_65:

(27, 41891), (44, 41975), (Start: 64 @42032 has 1 MA's), (85, 42101), (89, 42113), (93, 42134), (114, 42209), (118, 42248), (121, 42260), (125, 42281), (135, 42323), (138, 42344),

Gene: Mandlovu_56 Start: 38273, Stop: 38638, Start Num: 58

Candidate Starts for Mandlovu_56:

(Start: 58 @38273 has 237 MA's), (70, 38306), (77, 38321), (79, 38324), (89, 38366), (93, 38387), (103, 38420), (109, 38441), (110, 38447), (121, 38522), (122, 38528), (152, 38624),

Gene: Maravista_61 Start: 41710, Stop: 42075, Start Num: 58

Candidate Starts for Maravista_61:

(Start: 58 @41710 has 237 MA's), (70, 41743), (77, 41758), (79, 41761), (88, 41800), (89, 41803), (93, 41824), (103, 41857), (110, 41884), (115, 41917), (121, 41959), (122, 41965), (152, 42061),

Gene: Mareelih_127 Start: 82353, Stop: 81859, Start Num: 23

Candidate Starts for Mareelih_127:

(Start: 23 @82353 has 4 MA's), (31, 82284), (35, 82278), (38, 82263), (47, 82230), (94, 82068), (110, 82023), (127, 81906), (130, 81900), (139, 81870),

Gene: Mariokart_48 Start: 41216, Stop: 40896, Start Num: 62

Candidate Starts for Mariokart_48:

(Start: 46 @41234 has 8 MA's), (Start: 62 @41216 has 1 MA's), (91, 41138), (93, 41129), (119, 41012), (122, 41000),

Gene: Marker_67 Start: 40381, Stop: 40746, Start Num: 58

Candidate Starts for Marker_67:

(Start: 58 @40381 has 237 MA's), (70, 40414), (77, 40429), (79, 40432), (89, 40474), (93, 40495), (110, 40555), (115, 40588), (121, 40630), (122, 40636), (152, 40732),

Gene: Martik_60 Start: 40214, Stop: 40579, Start Num: 58

Candidate Starts for Martik_60:

(Start: 58 @40214 has 237 MA's), (70, 40247), (77, 40262), (79, 40265), (88, 40304), (89, 40307), (93, 40328), (103, 40361), (110, 40388), (115, 40421), (121, 40463), (122, 40469), (152, 40565),

Gene: Mattes_64 Start: 41780, Stop: 42145, Start Num: 58

Candidate Starts for Mattes_64:

(Start: 58 @41780 has 237 MA's), (70, 41813), (77, 41828), (79, 41831), (88, 41870), (89, 41873), (93, 41894), (103, 41927), (110, 41954), (115, 41987), (121, 42029), (122, 42035), (152, 42131),

Gene: Melba_50 Start: 35408, Stop: 35770, Start Num: 57

Candidate Starts for Melba_50:

(22, 35264), (27, 35300), (33, 35339), (Start: 57 @35408 has 23 MA's), (94, 35537), (101, 35561),

Gene: Melissauren88_58 Start: 39794, Stop: 40159, Start Num: 58

Candidate Starts for Melissauren88_58:

(Start: 58 @39794 has 237 MA's), (70, 39827), (Start: 72 @39833 has 7 MA's), (79, 39845), (89, 39887), (96, 39917), (103, 39941), (104, 39944), (121, 40043), (122, 40049), (141, 40124),

Gene: Mellie_49 Start: 35048, Stop: 35410, Start Num: 55

Candidate Starts for Mellie_49:

(27, 34943), (Start: 55 @35048 has 1 MA's), (86, 35147), (93, 35174), (94, 35177), (101, 35201),

Gene: MenE_62 Start: 34205, Stop: 34642, Start Num: 72

Candidate Starts for MenE_62:

(1, 33605), (5, 33728), (Start: 72 @34205 has 7 MA's), (97, 34301), (105, 34328), (114, 34376), (122, 34433), (123, 34439), (126, 34460), (150, 34526), (156, 34556), (158, 34580), (159, 34592),

Gene: MiaZeal_143 Start: 73930, Stop: 74283, Start Num: 60

Candidate Starts for MiaZeal_143:

(28, 73828), (Start: 60 @73930 has 33 MA's), (115, 74131), (121, 74173),

Gene: MilanaBonita_50 Start: 36387, Stop: 36752, Start Num: 58

Candidate Starts for MilanaBonita_50:

(Start: 58 @36387 has 237 MA's), (70, 36420), (Start: 72 @36426 has 7 MA's), (79, 36438), (89, 36480), (96, 36510), (103, 36534), (104, 36537), (121, 36636), (122, 36642), (141, 36717), (143, 36720), (145, 36723),

Gene: MilleniumForce_63 Start: 42482, Stop: 42847, Start Num: 58

Candidate Starts for MilleniumForce_63:

(Start: 58 @42482 has 237 MA's), (70, 42515), (Start: 72 @42521 has 7 MA's), (79, 42533), (96, 42605), (103, 42629), (104, 42632), (110, 42656), (121, 42731), (122, 42737), (141, 42812),

Gene: Minerva_144 Start: 76488, Stop: 76841, Start Num: 60

Candidate Starts for Minerva_144:

(Start: 60 @76488 has 33 MA's), (115, 76689), (121, 76731),

Gene: MinionDave_59 Start: 40561, Stop: 40926, Start Num: 58

Candidate Starts for MinionDave_59:

(Start: 58 @40561 has 237 MA's), (70, 40594), (77, 40609), (79, 40612), (88, 40651), (89, 40654), (93, 40675), (103, 40708), (110, 40735), (115, 40768), (121, 40810), (122, 40816), (152, 40912),

Gene: Minnie_63 Start: 41784, Stop: 42149, Start Num: 58

Candidate Starts for Minnie_63:

(Start: 58 @41784 has 237 MA's), (70, 41817), (73, 41826), (79, 41835), (89, 41877), (96, 41907), (103, 41931), (104, 41934), (121, 42033), (122, 42039), (141, 42114),

Gene: MintFen_51 Start: 35482, Stop: 35844, Start Num: 57

Candidate Starts for MintFen_51:

(22, 35338), (27, 35374), (33, 35413), (Start: 57 @35482 has 23 MA's), (94, 35611), (101, 35635),

Gene: MisterCuddles_58 Start: 40017, Stop: 40382, Start Num: 58

Candidate Starts for MisterCuddles_58:

(Start: 58 @40017 has 237 MA's), (70, 40050), (77, 40065), (79, 40068), (88, 40107), (89, 40110), (93, 40131), (110, 40191), (115, 40224), (121, 40266), (122, 40272), (152, 40368),

Gene: Modragons_64 Start: 42659, Stop: 43024, Start Num: 58

Candidate Starts for Modragons_64:

(Start: 58 @42659 has 237 MA's), (70, 42692), (77, 42707), (79, 42710), (88, 42749), (89, 42752), (93, 42773), (103, 42806), (110, 42833), (115, 42866), (121, 42908), (122, 42914), (152, 43010),

Gene: Moonbeam_58 Start: 39938, Stop: 40303, Start Num: 58

Candidate Starts for Moonbeam_58:

(Start: 58 @39938 has 237 MA's), (70, 39971), (79, 39989), (89, 40031), (96, 40061), (103, 40085), (104, 40088), (121, 40187), (141, 40268), (143, 40271), (145, 40274),

Gene: Mova_61 Start: 39791, Stop: 40156, Start Num: 58

Candidate Starts for Mova_61:

(Start: 58 @39791 has 237 MA's), (70, 39824), (77, 39839), (79, 39842), (89, 39884), (93, 39905), (103, 39938), (110, 39965), (115, 39998), (121, 40040), (122, 40046), (152, 40142),

Gene: Mozy_69 Start: 42795, Stop: 43160, Start Num: 58

Candidate Starts for Mozy_69:

(Start: 58 @42795 has 237 MA's), (70, 42828), (77, 42843), (79, 42846), (88, 42885), (89, 42888), (93, 42909), (110, 42969), (115, 43002), (121, 43044), (122, 43050), (152, 43146),

Gene: Ms6_55 Start: 35525, Stop: 35890, Start Num: 58

Candidate Starts for Ms6_55:

(Start: 58 @35525 has 237 MA's), (70, 35558), (Start: 72 @35564 has 7 MA's), (79, 35576), (89, 35618), (96, 35648), (103, 35672), (104, 35675), (121, 35774), (122, 35780), (141, 35855),

Gene: Mutaforma13_64 Start: 43121, Stop: 43486, Start Num: 58

Candidate Starts for Mutaforma13_64:

(Start: 58 @43121 has 237 MA's), (70, 43154), (77, 43169), (79, 43172), (88, 43211), (89, 43214), (93, 43235), (103, 43268), (110, 43295), (115, 43328), (121, 43370), (122, 43376), (152, 43472),

Gene: NihilNomen_146 Start: 76776, Stop: 77129, Start Num: 60

Candidate Starts for NihilNomen_146:

(Start: 60 @76776 has 33 MA's), (115, 76977), (121, 77019),

Gene: Nivrat_56 Start: 39576, Stop: 39941, Start Num: 58

Candidate Starts for Nivrat_56:

(Start: 58 @39576 has 237 MA's), (70, 39609), (77, 39624), (79, 39627), (88, 39666), (89, 39669), (93, 39690), (103, 39723), (109, 39744), (110, 39750), (115, 39783), (121, 39825), (122, 39831), (152, 39927),

Gene: NormanBulbieJr_60 Start: 40204, Stop: 40569, Start Num: 58

Candidate Starts for NormanBulbieJr_60:

(Start: 58 @40204 has 237 MA's), (70, 40237), (77, 40252), (79, 40255), (88, 40294), (89, 40297), (93, 40318), (103, 40351), (110, 40378), (115, 40411), (121, 40453), (122, 40459), (152, 40555),

Gene: Ochi17_63 Start: 42266, Stop: 42631, Start Num: 58

Candidate Starts for Ochi17_63:

(Start: 58 @42266 has 237 MA's), (70, 42299), (77, 42314), (79, 42317), (88, 42356), (89, 42359), (93, 42380), (103, 42413), (110, 42440), (115, 42473), (121, 42515), (122, 42521), (152, 42617),

Gene: Odette_148 Start: 78919, Stop: 79272, Start Num: 60

Candidate Starts for Odette_148:

(Start: 60 @78919 has 33 MA's), (115, 79120), (121, 79162),

Gene: OfUltron_65 Start: 42815, Stop: 43180, Start Num: 58

Candidate Starts for OfUltron_65:

(Start: 58 @42815 has 237 MA's), (70, 42848), (77, 42863), (79, 42866), (88, 42905), (89, 42908), (93, 42929), (103, 42962), (110, 42989), (115, 43022), (121, 43064), (122, 43070), (152, 43166),

Gene: Ogopogo_65 Start: 40778, Stop: 41143, Start Num: 58

Candidate Starts for Ogopogo_65:

(Start: 58 @40778 has 237 MA's), (70, 40811), (Start: 72 @40817 has 7 MA's), (79, 40829), (89, 40871), (96, 40901), (103, 40925), (104, 40928), (121, 41027), (122, 41033), (141, 41108), (143, 41111), (145, 41114),

Gene: Oksu_64 Start: 43078, Stop: 43443, Start Num: 58

Candidate Starts for Oksu_64:

(Start: 58 @43078 has 237 MA's), (70, 43111), (77, 43126), (79, 43129), (88, 43168), (89, 43171), (93, 43192), (103, 43225), (110, 43252), (115, 43285), (121, 43327), (122, 43333), (152, 43429),

Gene: OldBen_57 Start: 40129, Stop: 40494, Start Num: 58

Candidate Starts for OldBen_57:

(Start: 58 @40129 has 237 MA's), (70, 40162), (77, 40177), (79, 40180), (89, 40222), (93, 40243), (110, 40303), (115, 40336), (121, 40378), (122, 40384), (152, 40480),

Gene: OlinDD_71 Start: 44929, Stop: 44579, Start Num: 67

Candidate Starts for OlinDD_71:

(25, 45070), (42, 44986), (Start: 67 @44929 has 7 MA's), (74, 44902), (79, 44893), (80, 44890), (93, 44827), (100, 44803), (136, 44626), (140, 44611), (153, 44590),

Gene: OlympiaSaint_62 Start: 40722, Stop: 41087, Start Num: 58

Candidate Starts for OlympiaSaint_62:

(Start: 58 @40722 has 237 MA's), (70, 40755), (77, 40770), (79, 40773), (88, 40812), (89, 40815), (93, 40836), (103, 40869), (110, 40896), (115, 40929), (121, 40971), (122, 40977), (152, 41073),

Gene: Optimus_135 Start: 74056, Stop: 74409, Start Num: 60

Candidate Starts for Optimus_135:

(Start: 60 @74056 has 33 MA's), (115, 74257), (121, 74299),

Gene: Orcanus_30 Start: 22223, Stop: 21873, Start Num: 61

Candidate Starts for Orcanus_30:

(Start: 61 @22223 has 15 MA's), (90, 22124), (144, 21890),

Gene: Ovechkin_57 Start: 39962, Stop: 40309, Start Num: 58

Candidate Starts for Ovechkin_57:

(52, 39935), (56, 39953), (Start: 58 @39962 has 237 MA's), (70, 39992), (73, 40001), (81, 40019), (93, 40073), (101, 40100), (115, 40157), (118, 40187), (121, 40199),

Gene: Ovechkin_58 Start: 40306, Stop: 40659, Start Num: 58

Candidate Starts for Ovechkin_58:

(48, 40270), (Start: 58 @40306 has 237 MA's), (69, 40336), (70, 40339), (75, 40351), (79, 40357), (93, 40420), (96, 40429), (98, 40435), (121, 40549), (125, 40570), (139, 40627), (149, 40639),

Gene: OwlsT2W_60 Start: 40441, Stop: 40806, Start Num: 58

Candidate Starts for OwlsT2W_60:

(Start: 58 @40441 has 237 MA's), (70, 40474), (77, 40489), (79, 40492), (88, 40531), (89, 40534), (93, 40555), (103, 40588), (110, 40615), (115, 40648), (121, 40690), (122, 40696), (152, 40792),

Gene: PHappiness_55 Start: 38486, Stop: 38851, Start Num: 58

Candidate Starts for PHappiness_55:

(Start: 58 @38486 has 237 MA's), (70, 38519), (77, 38534), (79, 38537), (89, 38579), (93, 38600), (103, 38633), (109, 38654), (110, 38660), (115, 38693), (121, 38735), (122, 38741), (152, 38837),

Gene: PMC_57 Start: 40831, Stop: 41196, Start Num: 58

Candidate Starts for PMC_57:

(Start: 58 @40831 has 237 MA's), (70, 40864), (77, 40879), (79, 40882), (88, 40921), (89, 40924), (93, 40945), (103, 40978), (110, 41005), (115, 41038), (121, 41080), (122, 41086), (152, 41182),

Gene: Pacc40_54 Start: 38560, Stop: 38925, Start Num: 58

Candidate Starts for Pacc40_54:

(Start: 58 @38560 has 237 MA's), (70, 38593), (77, 38608), (79, 38611), (89, 38653), (93, 38674), (103, 38707), (109, 38728), (110, 38734), (115, 38767), (121, 38809), (122, 38815), (152, 38911),

Gene: Phalconet_58 Start: 39065, Stop: 39430, Start Num: 58

Candidate Starts for Phalconet_58:

(Start: 58 @39065 has 237 MA's), (70, 39098), (Start: 72 @39104 has 7 MA's), (79, 39116), (83, 39131), (89, 39158), (96, 39188), (103, 39212), (104, 39215), (121, 39314), (122, 39320), (141, 39395),

Gene: Phanphagia_57 Start: 40656, Stop: 41021, Start Num: 58

Candidate Starts for Phanphagia_57:

(Start: 58 @40656 has 237 MA's), (70, 40689), (Start: 72 @40695 has 7 MA's), (79, 40707), (89, 40749), (96, 40779), (103, 40803), (104, 40806), (121, 40905), (122, 40911), (141, 40986),

Gene: Phasih_58 Start: 40630, Stop: 40995, Start Num: 58

Candidate Starts for Phasih_58:

(Start: 58 @40630 has 237 MA's), (70, 40663), (77, 40678), (79, 40681), (88, 40720), (89, 40723), (93, 40744), (110, 40804), (115, 40837), (121, 40879), (122, 40885), (137, 40954), (152, 40981),

Gene: Phatniss_58 Start: 40209, Stop: 40574, Start Num: 58

Candidate Starts for Phatniss_58:

(Start: 58 @40209 has 237 MA's), (70, 40242), (77, 40257), (79, 40260), (88, 40299), (89, 40302), (93, 40323), (103, 40356), (109, 40377), (110, 40383), (115, 40416), (121, 40458), (122, 40464), (152, 40560),

Gene: PhesterPhotato_61 Start: 39882, Stop: 40247, Start Num: 58

Candidate Starts for PhesterPhotato_61:

(Start: 58 @39882 has 237 MA's), (70, 39915), (Start: 72 @39921 has 7 MA's), (79, 39933), (83, 39948), (89, 39975), (96, 40005), (103, 40029), (104, 40032), (121, 40131), (122, 40137), (141, 40212),

Gene: Philus_63 Start: 41366, Stop: 41731, Start Num: 58

Candidate Starts for Philus_63:

(Start: 58 @41366 has 237 MA's), (70, 41399), (77, 41414), (79, 41417), (88, 41456), (89, 41459), (93, 41480), (103, 41513), (109, 41534), (110, 41540), (115, 41573), (121, 41615), (122, 41621), (152, 41717),

Gene: PhluffyCoco_31 Start: 21194, Stop: 20853, Start Num: 61

Candidate Starts for PhluffyCoco_31:

(Start: 61 @21194 has 15 MA's), (71, 21176),

Gene: Phoebus_144 Start: 78670, Stop: 79023, Start Num: 60

Candidate Starts for Phoebus_144:

(Start: 60 @78670 has 33 MA's), (115, 78871), (121, 78913),

Gene: Phonegingi_58 Start: 34265, Stop: 34702, Start Num: 72

Candidate Starts for Phonegingi_58:

(6, 33854), (Start: 72 @34265 has 7 MA's), (105, 34388), (114, 34436), (115, 34445), (122, 34493), (123, 34499), (126, 34520), (150, 34586), (156, 34616), (159, 34652),

Gene: Phrappuccino_165 Start: 110158, Stop: 110505, Start Num: 66

Candidate Starts for Phrappuccino_165:

(Start: 66 @110158 has 2 MA's), (74, 110191), (76, 110194), (79, 110200), (93, 110263), (135, 110455),

Gene: Pickles13_57 Start: 34624, Stop: 35061, Start Num: 72

Candidate Starts for Pickles13_57:

(Start: 63 @34597 has 2 MA's), (Start: 72 @34624 has 7 MA's), (92, 34705), (105, 34747), (114, 34795), (122, 34852), (123, 34858), (126, 34879), (150, 34945), (156, 34975), (159, 35011),

Gene: Pioneer3_71 Start: 44751, Stop: 44401, Start Num: 67

Candidate Starts for Pioneer3_71:

(25, 44892), (42, 44808), (Start: 67 @44751 has 7 MA's), (74, 44724), (79, 44715), (80, 44712), (93, 44649), (100, 44625), (136, 44448), (140, 44433), (153, 44412),

Gene: Pippy_58 Start: 39072, Stop: 39437, Start Num: 58

Candidate Starts for Pippy_58:

(Start: 58 @39072 has 237 MA's), (70, 39105), (77, 39120), (79, 39123), (88, 39162), (89, 39165), (93, 39186), (103, 39219), (110, 39246), (115, 39279), (121, 39321), (122, 39327), (152, 39423),

Gene: Platte_71 Start: 44704, Stop: 44354, Start Num: 67

Candidate Starts for Platte_71:

(42, 44761), (Start: 67 @44704 has 7 MA's), (74, 44677), (79, 44668), (80, 44665), (93, 44602), (100, 44578), (136, 44401), (140, 44386), (153, 44365),

Gene: Plumbus_62 Start: 40530, Stop: 40895, Start Num: 58

Candidate Starts for Plumbus_62:

(Start: 58 @40530 has 237 MA's), (70, 40563), (77, 40578), (79, 40581), (89, 40623), (93, 40644), (103, 40677), (109, 40698), (110, 40704), (115, 40737), (121, 40779), (122, 40785), (152, 40881),

Gene: Poenanya_60 Start: 41387, Stop: 41752, Start Num: 58

Candidate Starts for Poenanya_60:

(Start: 58 @41387 has 237 MA's), (70, 41420), (77, 41435), (79, 41438), (89, 41480), (93, 41501), (103, 41534), (109, 41555), (110, 41561), (115, 41594), (121, 41636), (122, 41642), (152, 41738),

Gene: Polka_32 Start: 21713, Stop: 21363, Start Num: 61

Candidate Starts for Polka_32:

(Start: 61 @21713 has 15 MA's), (144, 21380),

Gene: Polka14_58 Start: 39583, Stop: 39948, Start Num: 58

Candidate Starts for Polka14_58:

(Start: 58 @39583 has 237 MA's), (70, 39616), (77, 39631), (79, 39634), (88, 39673), (89, 39676), (93, 39697), (103, 39730), (110, 39757), (115, 39790), (121, 39832), (122, 39838), (152, 39934),

Gene: Pollywog_61 Start: 41040, Stop: 41405, Start Num: 58

Candidate Starts for Pollywog_61:

(Start: 58 @41040 has 237 MA's), (70, 41073), (77, 41088), (79, 41091), (88, 41130), (89, 41133), (93, 41154), (103, 41187), (110, 41214), (115, 41247), (121, 41289), (122, 41295), (152, 41391),

Gene: PopTart_54 Start: 38690, Stop: 39055, Start Num: 58

Candidate Starts for PopTart_54:

(Start: 58 @38690 has 237 MA's), (70, 38723), (Start: 72 @38729 has 7 MA's), (79, 38741), (89, 38783), (96, 38813), (103, 38837), (104, 38840), (121, 38939), (122, 38945), (141, 39020),

Gene: Porcelain_140 Start: 73737, Stop: 74090, Start Num: 60

Candidate Starts for Porcelain_140:

(28, 73635), (Start: 60 @73737 has 33 MA's), (115, 73938), (121, 73980),

Gene: Pound_136 Start: 76489, Stop: 76842, Start Num: 60

Candidate Starts for Pound_136:

(27, 76375), (28, 76387), (Start: 60 @76489 has 33 MA's), (115, 76690), (121, 76732),

Gene: Priscilla_60 Start: 40303, Stop: 40668, Start Num: 58

Candidate Starts for Priscilla_60:

(Start: 58 @40303 has 237 MA's), (70, 40336), (77, 40351), (79, 40354), (88, 40393), (89, 40396), (93, 40417), (103, 40450), (110, 40477), (115, 40510), (121, 40552), (122, 40558), (152, 40654),

Gene: Pupper_45 Start: 15769, Stop: 16101, Start Num: 67

Candidate Starts for Pupper_45:

(14, 15514), (51, 15742), (Start: 67 @15769 has 7 MA's), (83, 15823), (84, 15832), (93, 15871), (115, 15955), (132, 16045),

Gene: QuickMath_62 Start: 42312, Stop: 42677, Start Num: 58

Candidate Starts for QuickMath_62:

(Start: 58 @42312 has 237 MA's), (70, 42345), (77, 42360), (79, 42363), (88, 42402), (89, 42405), (93, 42426), (103, 42459), (109, 42480), (110, 42486), (115, 42519), (121, 42561), (122, 42567), (152, 42663),

Gene: QuickMath_60 Start: 41684, Stop: 42037, Start Num: 58

Candidate Starts for QuickMath_60:

(48, 41648), (Start: 58 @41684 has 237 MA's), (69, 41714), (70, 41717), (75, 41729), (79, 41735), (93, 41798), (96, 41807), (98, 41813), (121, 41927), (125, 41948), (139, 42005), (149, 42017),

Gene: QuickMath_59 Start: 41340, Stop: 41687, Start Num: 58

Candidate Starts for QuickMath_59:

(52, 41313), (56, 41331), (Start: 58 @41340 has 237 MA's), (70, 41370), (73, 41379), (81, 41397), (93, 41451), (101, 41478), (115, 41535), (118, 41565), (121, 41577),

Gene: Quico_68 Start: 42216, Stop: 42581, Start Num: 58

Candidate Starts for Quico_68:

(Start: 58 @42216 has 237 MA's), (70, 42249), (73, 42258), (79, 42267), (89, 42309), (96, 42339), (103, 42363), (104, 42366), (121, 42465), (122, 42471), (141, 42546),

Gene: Radiance_59 Start: 40325, Stop: 40690, Start Num: 58

Candidate Starts for Radiance_59:

(Start: 58 @40325 has 237 MA's), (70, 40358), (79, 40376), (89, 40418), (93, 40439), (103, 40472), (109, 40493), (110, 40499), (115, 40532), (121, 40574), (122, 40580), (152, 40676),

Gene: Ramsey_59 Start: 40638, Stop: 41003, Start Num: 58

Candidate Starts for Ramsey_59:

(Start: 58 @40638 has 237 MA's), (70, 40671), (Start: 72 @40677 has 7 MA's), (79, 40689), (96, 40761), (103, 40785), (104, 40788), (110, 40812), (121, 40887), (122, 40893), (141, 40968),

Gene: RayTheFireFly_61 Start: 39688, Stop: 40050, Start Num: 57

Candidate Starts for RayTheFireFly_61:

(Start: 57 @39688 has 23 MA's), (93, 39811), (112, 39877),

Gene: RedFox_31 Start: 21207, Stop: 20866, Start Num: 61

Candidate Starts for RedFox_31:

(Start: 61 @21207 has 15 MA's), (71, 21189),

Gene: RedWattleHog_91 Start: 82425, Stop: 82775, Start Num: 63

Candidate Starts for RedWattleHog_91:

(Start: 63 @82425 has 2 MA's), (74, 82461), (106, 82572), (112, 82599), (115, 82617), (132, 82707),

Gene: Redno2_139 Start: 74778, Stop: 75131, Start Num: 60

Candidate Starts for Redno2_139:

(28, 74676), (Start: 60 @74778 has 33 MA's), (115, 74979), (121, 75021),

Gene: Renaud18_64 Start: 40462, Stop: 40815, Start Num: 58

Candidate Starts for Renaud18_64:

(48, 40426), (Start: 58 @40462 has 237 MA's), (75, 40507), (79, 40513), (93, 40576), (96, 40585), (108, 40621), (112, 40645), (149, 40795),

Gene: Renaud18_66 Start: 41090, Stop: 41452, Start Num: 58

Candidate Starts for Renaud18_66:

(Start: 58 @41090 has 237 MA's), (70, 41123), (77, 41138), (79, 41141), (88, 41180), (89, 41183), (93, 41204), (109, 41255), (110, 41261), (122, 41342), (152, 41438),

Gene: Renaud18_63 Start: 40118, Stop: 40465, Start Num: 58

Candidate Starts for Renaud18_63:

(52, 40091), (56, 40109), (Start: 58 @40118 has 237 MA's), (Start: 63 @40130 has 2 MA's), (70, 40148), (73, 40157), (93, 40229), (111, 40292), (115, 40313), (118, 40343),

Gene: Renna12_30 Start: 21228, Stop: 20887, Start Num: 61

Candidate Starts for Renna12_30:

(Start: 61 @21228 has 15 MA's), (Start: 72 @21207 has 7 MA's),

Gene: Rialto_66 Start: 43107, Stop: 43472, Start Num: 58

Candidate Starts for Rialto_66:

(Start: 58 @43107 has 237 MA's), (70, 43140), (77, 43155), (79, 43158), (88, 43197), (89, 43200), (93, 43221), (103, 43254), (109, 43275), (110, 43281), (115, 43314), (121, 43356), (122, 43362), (152, 43458),

Gene: Rita_61 Start: 38934, Stop: 39299, Start Num: 58

Candidate Starts for Rita_61:

(Start: 58 @38934 has 237 MA's), (70, 38967), (77, 38982), (79, 38985), (88, 39024), (89, 39027), (93, 39048), (103, 39081), (110, 39108), (115, 39141), (121, 39183), (122, 39189), (152, 39285),

Gene: RitaG_55 Start: 38831, Stop: 39196, Start Num: 58

Candidate Starts for RitaG_55:

(Start: 58 @38831 has 237 MA's), (70, 38864), (77, 38879), (79, 38882), (89, 38924), (93, 38945), (103, 38978), (109, 38999), (110, 39005), (115, 39038), (121, 39080), (122, 39086), (152, 39182),

Gene: Rockne_61 Start: 40843, Stop: 41208, Start Num: 58

Candidate Starts for Rockne_61:

(Start: 58 @40843 has 237 MA's), (70, 40876), (77, 40891), (79, 40894), (88, 40933), (89, 40936), (93, 40957), (103, 40990), (110, 41017), (115, 41050), (121, 41092), (122, 41098), (152, 41194),

Gene: RockyHorror_61 Start: 39889, Stop: 40254, Start Num: 58

Candidate Starts for RockyHorror_61:

(Start: 58 @39889 has 237 MA's), (70, 39922), (79, 39940), (88, 39979), (89, 39982), (93, 40003), (103, 40036), (110, 40063), (115, 40096), (121, 40138), (122, 40144), (152, 40240),

Gene: Royals2015_61 Start: 39482, Stop: 39829, Start Num: 58

Candidate Starts for Royals2015_61:

(52, 39455), (56, 39473), (Start: 58 @39482 has 237 MA's), (70, 39512), (73, 39521), (81, 39539), (93, 39593), (101, 39620), (115, 39677), (118, 39707), (121, 39719),

Gene: Royals2015_62 Start: 39826, Stop: 40179, Start Num: 58

Candidate Starts for Royals2015_62:

(48, 39790), (Start: 58 @39826 has 237 MA's), (69, 39856), (70, 39859), (75, 39871), (79, 39877), (93, 39940), (96, 39949), (98, 39955), (121, 40069), (125, 40090), (139, 40147), (149, 40159),

Gene: Ruby_56 Start: 40018, Stop: 40383, Start Num: 58

Candidate Starts for Ruby_56:

(Start: 58 @40018 has 237 MA's), (70, 40051), (77, 40066), (79, 40069), (88, 40108), (89, 40111), (93, 40132), (110, 40192), (115, 40225), (121, 40267), (122, 40273), (152, 40369),

Gene: Ruchi_30 Start: 22625, Stop: 22281, Start Num: 61

Candidate Starts for Ruchi_30:

(Start: 61 @22625 has 15 MA's), (70, 22604), (79, 22580), (90, 22532), (144, 22298),

Gene: SCentae_45 Start: 15768, Stop: 16100, Start Num: 67

Candidate Starts for SCentae_45:

(14, 15513), (51, 15741), (Start: 67 @15768 has 7 MA's), (83, 15822), (84, 15831), (93, 15870), (115, 15954), (132, 16044),

Gene: SG4_57 Start: 39721, Stop: 40086, Start Num: 58

Candidate Starts for SG4_57:

(Start: 58 @39721 has 237 MA's), (70, 39754), (77, 39769), (79, 39772), (88, 39811), (89, 39814), (93, 39835), (103, 39868), (110, 39895), (115, 39928), (121, 39970), (122, 39976), (152, 40072),

Gene: Saal_62 Start: 41474, Stop: 41839, Start Num: 58

Candidate Starts for Saal_62:

(Start: 58 @41474 has 237 MA's), (70, 41507), (77, 41522), (79, 41525), (88, 41564), (89, 41567), (93, 41588), (103, 41621), (110, 41648), (115, 41681), (121, 41723), (122, 41729), (152, 41825),

Gene: Sabbb_64 Start: 41162, Stop: 41527, Start Num: 58

Candidate Starts for Sabbb_64:

(Start: 58 @41162 has 237 MA's), (70, 41195), (77, 41210), (79, 41213), (88, 41252), (89, 41255), (93, 41276), (110, 41336), (115, 41369), (121, 41411), (122, 41417), (137, 41486), (152, 41513),

Gene: Samba_50 Start: 37695, Stop: 38057, Start Num: 57

Candidate Starts for Samba_50:

(22, 37551), (27, 37587), (33, 37626), (Start: 57 @37695 has 23 MA's), (94, 37824), (101, 37848), (151, 38043),

Gene: Sandalphon_61 Start: 40762, Stop: 41127, Start Num: 58

Candidate Starts for Sandalphon_61:

(Start: 58 @40762 has 237 MA's), (70, 40795), (73, 40804), (79, 40813), (89, 40855), (96, 40885), (103, 40909), (104, 40912), (121, 41011), (122, 41017), (141, 41092),

Gene: Sarma624_56 Start: 35652, Stop: 35999, Start Num: 58

Candidate Starts for Sarma624_56:

(52, 35625), (56, 35643), (Start: 58 @35652 has 237 MA's), (70, 35682), (73, 35691), (81, 35709), (93, 35763), (101, 35790), (115, 35847), (118, 35877), (121, 35889),

Gene: Sarma624_57 Start: 35996, Stop: 36349, Start Num: 58

Candidate Starts for Sarma624_57:

(48, 35960), (Start: 58 @35996 has 237 MA's), (69, 36026), (70, 36029), (75, 36041), (79, 36047), (93, 36110), (96, 36119), (98, 36125), (121, 36239), (125, 36260), (139, 36317), (149, 36329),

Gene: Sassafras_58 Start: 39803, Stop: 40168, Start Num: 58

Candidate Starts for Sassafras_58:

(Start: 58 @39803 has 237 MA's), (70, 39836), (77, 39851), (79, 39854), (88, 39893), (89, 39896), (93, 39917), (103, 39950), (110, 39977), (115, 40010), (121, 40052), (122, 40058), (152, 40154),

Gene: SassyB_54 Start: 38690, Stop: 39055, Start Num: 58

Candidate Starts for SassyB_54:

(Start: 58 @38690 has 237 MA's), (70, 38723), (Start: 72 @38729 has 7 MA's), (79, 38741), (89, 38783), (96, 38813), (103, 38837), (104, 38840), (121, 38939), (122, 38945), (141, 39020),

Gene: Schatzie_140 Start: 77338, Stop: 77691, Start Num: 60

Candidate Starts for Schatzie_140:

(Start: 60 @77338 has 33 MA's), (115, 77539), (121, 77581),

Gene: Scottish_58 Start: 39849, Stop: 40214, Start Num: 58

Candidate Starts for Scottish_58:

(Start: 58 @39849 has 237 MA's), (70, 39882), (77, 39897), (79, 39900), (89, 39942), (93, 39963), (103, 39996), (110, 40023), (115, 40056), (121, 40098), (122, 40104), (152, 40200),

Gene: Seabastian_65 Start: 42816, Stop: 43181, Start Num: 58

Candidate Starts for Seabastian_65:

(Start: 58 @42816 has 237 MA's), (70, 42849), (77, 42864), (79, 42867), (88, 42906), (89, 42909), (93, 42930), (103, 42963), (110, 42990), (115, 43023), (121, 43065), (122, 43071), (152, 43167),

Gene: Seagreen_58 Start: 39051, Stop: 39398, Start Num: 58

Candidate Starts for Seagreen_58:

(52, 39024), (56, 39042), (Start: 58 @39051 has 237 MA's), (70, 39081), (73, 39090), (81, 39108), (93, 39162), (101, 39189), (115, 39246), (118, 39276), (121, 39288),

Gene: Seagreen_59 Start: 39395, Stop: 39748, Start Num: 58

Candidate Starts for Seagreen_59:

(48, 39359), (Start: 58 @39395 has 237 MA's), (69, 39425), (70, 39428), (75, 39440), (79, 39446), (93, 39509), (96, 39518), (98, 39524), (121, 39638), (125, 39659), (139, 39716), (149, 39728),

Gene: Settecandela_165 Start: 110158, Stop: 110505, Start Num: 66

Candidate Starts for Settecandela_165:

(Start: 66 @110158 has 2 MA's), (74, 110191), (76, 110194), (79, 110200), (93, 110263), (135, 110455),

Gene: Shatter_48 Start: 41091, Stop: 40741, Start Num: 46

Candidate Starts for Shatter_48:

(Start: 46 @41091 has 8 MA's), (74, 41046), (79, 41037), (83, 41022), (93, 40974), (115, 40893),

Gene: Shauna1_58 Start: 40565, Stop: 40930, Start Num: 58

Candidate Starts for Shauna1_58:

(Start: 58 @40565 has 237 MA's), (70, 40598), (73, 40607), (79, 40616), (103, 40712), (104, 40715), (110, 40739), (121, 40814), (122, 40820), (141, 40895),

Gene: ShiLan_59 Start: 40250, Stop: 40615, Start Num: 58

Candidate Starts for ShiLan_59:

(Start: 58 @40250 has 237 MA's), (70, 40283), (77, 40298), (79, 40301), (88, 40340), (89, 40343), (93, 40364), (103, 40397), (110, 40424), (115, 40457), (121, 40499), (122, 40505), (152, 40601),

Gene: ShowerHandel_61 Start: 40214, Stop: 40579, Start Num: 58

Candidate Starts for ShowerHandel_61:

(Start: 58 @40214 has 237 MA's), (70, 40247), (77, 40262), (79, 40265), (88, 40304), (89, 40307), (93, 40328), (103, 40361), (110, 40388), (115, 40421), (121, 40463), (122, 40469), (152, 40565),

Gene: ShroomBoi_62 Start: 41174, Stop: 41539, Start Num: 58

Candidate Starts for ShroomBoi_62:

(Start: 58 @41174 has 237 MA's), (70, 41207), (77, 41222), (79, 41225), (89, 41267), (93, 41288), (103, 41321), (110, 41348), (115, 41381), (121, 41423), (122, 41429), (152, 41525),

Gene: SiSi_58 Start: 39623, Stop: 39988, Start Num: 58

Candidate Starts for SiSi_58:

(Start: 58 @39623 has 237 MA's), (70, 39656), (77, 39671), (79, 39674), (88, 39713), (89, 39716), (93, 39737), (103, 39770), (110, 39797), (115, 39830), (121, 39872), (122, 39878), (152, 39974),

Gene: SimranZ1_60 Start: 40397, Stop: 40762, Start Num: 58

Candidate Starts for SimranZ1_60:

(Start: 58 @40397 has 237 MA's), (70, 40430), (77, 40445), (79, 40448), (88, 40487), (89, 40490), (93, 40511), (110, 40571), (115, 40604), (121, 40646), (122, 40652), (137, 40721), (152, 40748),

Gene: Sisko_47 Start: 41439, Stop: 41065, Start Num: 46

Candidate Starts for Sisko_47:

(Start: 46 @41439 has 8 MA's), (74, 41379), (91, 41316), (93, 41307), (119, 41187),

Gene: Soul22_66 Start: 41808, Stop: 42173, Start Num: 58

Candidate Starts for Soul22_66:

(Start: 58 @41808 has 237 MA's), (70, 41841), (77, 41856), (79, 41859), (88, 41898), (89, 41901), (93, 41922), (103, 41955), (110, 41982), (115, 42015), (121, 42057), (122, 42063), (152, 42159),

Gene: Sour_51 Start: 44771, Stop: 44406, Start Num: 45

Candidate Starts for Sour_51:

(39, 44777), (40, 44774), (Start: 45 @44771 has 1 MA's), (49, 44765), (Start: 62 @44750 has 1 MA's), (79, 44717), (83, 44702), (93, 44654), (99, 44633), (128, 44489), (130, 44483), (134, 44471), (144, 44444), (155, 44411),

Gene: Sparkdehlily_67 Start: 41576, Stop: 41941, Start Num: 58

Candidate Starts for Sparkdehlily_67:

(Start: 58 @41576 has 237 MA's), (70, 41609), (Start: 72 @41615 has 7 MA's), (79, 41627), (89, 41669), (96, 41699), (103, 41723), (104, 41726), (121, 41825), (122, 41831), (141, 41906),

Gene: Spartacus_62 Start: 40884, Stop: 41249, Start Num: 58

Candidate Starts for Spartacus_62:

(Start: 58 @40884 has 237 MA's), (70, 40917), (77, 40932), (79, 40935), (88, 40974), (89, 40977), (93, 40998), (110, 41058), (115, 41091), (121, 41133), (122, 41139), (152, 41235),

Gene: Spikelee_67 Start: 42504, Stop: 42869, Start Num: 58

Candidate Starts for Spikelee_67:

(Start: 58 @42504 has 237 MA's), (70, 42537), (77, 42552), (79, 42555), (89, 42597), (93, 42618), (110, 42678), (115, 42711), (121, 42753), (122, 42759), (152, 42855),

Gene: Spoonbill_57 Start: 38791, Stop: 39156, Start Num: 58

Candidate Starts for Spoonbill_57:

(Start: 58 @38791 has 237 MA's), (70, 38824), (77, 38839), (79, 38842), (89, 38884), (93, 38905), (103, 38938), (109, 38959), (110, 38965), (115, 38998), (121, 39040), (122, 39046), (152, 39142),

Gene: Squiddly_84 Start: 50073, Stop: 50414, Start Num: 59

Candidate Starts for Squiddly_84:

(Start: 57 @50064 has 23 MA's), (Start: 59 @50073 has 1 MA's), (140, 50388),

Gene: Squirry_62 Start: 41343, Stop: 41708, Start Num: 58

Candidate Starts for Squirry_62:

(Start: 58 @41343 has 237 MA's), (70, 41376), (73, 41385), (79, 41394), (103, 41490), (104, 41493), (110, 41517), (121, 41592), (122, 41598), (141, 41673),

Gene: StAnnes_58 Start: 40743, Stop: 41108, Start Num: 58

Candidate Starts for StAnnes_58:

(Start: 58 @40743 has 237 MA's), (70, 40776), (Start: 72 @40782 has 7 MA's), (79, 40794), (89, 40836), (96, 40866), (103, 40890), (104, 40893), (121, 40992), (122, 40998), (141, 41073), (143, 41076),

Gene: StAugustine_149 Start: 84499, Stop: 84137, Start Num: 61

Candidate Starts for StAugustine_149:

(53, 84514), (Start: 61 @84499 has 15 MA's), (Start: 66 @84490 has 2 MA's), (68, 84475), (85, 84418), (87, 84409), (131, 84211),

Gene: Starcevich_58 Start: 39755, Stop: 40108, Start Num: 58

Candidate Starts for Starcevich_58:

(48, 39719), (Start: 58 @39755 has 237 MA's), (69, 39785), (70, 39788), (75, 39800), (79, 39806), (93, 39869), (96, 39878), (98, 39884), (121, 39998), (125, 40019), (139, 40076), (149, 40088),

Gene: Starcevich_57 Start: 39411, Stop: 39758, Start Num: 58

Candidate Starts for Starcevich_57:

(52, 39384), (56, 39402), (Start: 58 @39411 has 237 MA's), (70, 39441), (73, 39450), (81, 39468), (93, 39522), (101, 39549), (115, 39606), (118, 39636), (121, 39648),

Gene: Starcevich_60 Start: 40380, Stop: 40745, Start Num: 58

Candidate Starts for Starcevich_60:

(Start: 58 @40380 has 237 MA's), (70, 40413), (77, 40428), (79, 40431), (88, 40470), (89, 40473), (93, 40494), (103, 40527), (110, 40554), (115, 40587), (121, 40629), (122, 40635), (152, 40731),

Gene: Stormageddon_88 Start: 82406, Stop: 82756, Start Num: 63

Candidate Starts for Stormageddon_88:

(Start: 63 @82406 has 2 MA's), (74, 82442), (106, 82553), (112, 82580), (115, 82598), (132, 82688),

Gene: Strokeseat_56 Start: 38330, Stop: 38695, Start Num: 58

Candidate Starts for Strokeseat_56:

(Start: 58 @38330 has 237 MA's), (70, 38363), (77, 38378), (79, 38381), (89, 38423), (93, 38444), (103, 38477), (109, 38498), (110, 38504), (121, 38579), (122, 38585), (152, 38681),

Gene: SuperGrey_63 Start: 42051, Stop: 42416, Start Num: 58

Candidate Starts for SuperGrey_63:

(Start: 58 @42051 has 237 MA's), (70, 42084), (Start: 72 @42090 has 7 MA's), (79, 42102), (89, 42144), (96, 42174), (103, 42198), (104, 42201), (121, 42300), (122, 42306), (141, 42381),

Gene: SwagPigglett_65 Start: 42522, Stop: 42887, Start Num: 58

Candidate Starts for SwagPigglett_65:

(Start: 58 @42522 has 237 MA's), (70, 42555), (77, 42570), (79, 42573), (88, 42612), (89, 42615), (93, 42636), (103, 42669), (110, 42696), (115, 42729), (121, 42771), (122, 42777), (152, 42873),

Gene: TChen_61 Start: 41633, Stop: 41998, Start Num: 58

Candidate Starts for TChen_61:

(Start: 58 @41633 has 237 MA's), (70, 41666), (79, 41684), (88, 41723), (89, 41726), (93, 41747), (96, 41756), (103, 41780), (110, 41807), (115, 41840), (121, 41882), (122, 41888), (152, 41984),

Gene: TChen_59 Start: 41008, Stop: 41361, Start Num: 58

Candidate Starts for TChen_59:

(48, 40972), (Start: 58 @41008 has 237 MA's), (75, 41053), (79, 41059), (93, 41122), (96, 41131), (108, 41167), (112, 41191), (149, 41341),

Gene: TChen_58 Start: 40664, Stop: 41011, Start Num: 58

Candidate Starts for TChen_58:

(52, 40637), (56, 40655), (Start: 58 @40664 has 237 MA's), (Start: 63 @40676 has 2 MA's), (70, 40694), (73, 40703), (89, 40754), (93, 40775), (111, 40838), (115, 40859), (118, 40889),

Gene: TDanisky_67 Start: 41576, Stop: 41941, Start Num: 58

Candidate Starts for TDanisky_67:

(Start: 58 @41576 has 237 MA's), (70, 41609), (Start: 72 @41615 has 7 MA's), (79, 41627), (89, 41669), (96, 41699), (103, 41723), (104, 41726), (121, 41825), (122, 41831), (141, 41906),

Gene: Taj_64 Start: 41975, Stop: 42340, Start Num: 58

Candidate Starts for Taj_64:

(Start: 58 @41975 has 237 MA's), (70, 42008), (77, 42023), (79, 42026), (88, 42065), (89, 42068), (93, 42089), (103, 42122), (110, 42149), (115, 42182), (121, 42224), (122, 42230), (152, 42326),

Gene: Tandem_71 Start: 44831, Stop: 44481, Start Num: 67

Candidate Starts for Tandem_71:

(25, 44972), (42, 44888), (Start: 67 @44831 has 7 MA's), (74, 44804), (79, 44795), (80, 44792), (93, 44729), (100, 44705), (136, 44528), (140, 44513), (153, 44492),

Gene: TaylorSipht_30 Start: 21627, Stop: 21286, Start Num: 61

Candidate Starts for TaylorSipht_30:

(Start: 61 @21627 has 15 MA's), (70, 21606), (90, 21534), (125, 21363), (142, 21303),

Gene: ThetaBob_62 Start: 40738, Stop: 41085, Start Num: 58

Candidate Starts for ThetaBob_62:

(52, 40711), (56, 40729), (Start: 58 @40738 has 237 MA's), (Start: 63 @40750 has 2 MA's), (70, 40768), (73, 40777), (89, 40828), (93, 40849), (111, 40912), (115, 40933), (118, 40963),

Gene: ThetaBob_63 Start: 41082, Stop: 41435, Start Num: 58

Candidate Starts for ThetaBob_63:

(48, 41046), (Start: 58 @41082 has 237 MA's), (75, 41127), (79, 41133), (93, 41196), (96, 41205), (108, 41241), (112, 41265), (149, 41415),

Gene: ThetaBob_65 Start: 41707, Stop: 42069, Start Num: 58

Candidate Starts for ThetaBob_65:

(Start: 58 @41707 has 237 MA's), (70, 41740), (77, 41755), (79, 41758), (88, 41797), (89, 41800), (93, 41821), (96, 41830), (110, 41878), (121, 41953), (122, 41959), (152, 42055),

Gene: Thibault_127 Start: 73673, Stop: 74026, Start Num: 60

Candidate Starts for Thibault_127:

(24, 73550), (26, 73562), (Start: 60 @73673 has 33 MA's), (115, 73874), (121, 73916),

Gene: Thonko_86 Start: 63155, Stop: 62742, Start Num: 54

Candidate Starts for Thonko_86:

(4, 63593), (12, 63440), (15, 63365), (18, 63338), (31, 63224), (35, 63218), (Start: 54 @63155 has 1 MA's), (Start: 67 @63116 has 7 MA's), (74, 63086), (79, 63077), (93, 63014), (125, 62858), (126, 62846), (129, 62831), (148, 62783),

Gene: ThreeRngTarjay_139 Start: 77261, Stop: 77614, Start Num: 60

Candidate Starts for ThreeRngTarjay_139:

(Start: 60 @77261 has 33 MA's), (115, 77462), (121, 77504),

Gene: Tootsieroll_61 Start: 39546, Stop: 39911, Start Num: 58

Candidate Starts for Tootsieroll_61:

(Start: 58 @39546 has 237 MA's), (70, 39579), (77, 39594), (79, 39597), (89, 39639), (93, 39660), (103, 39693), (109, 39714), (110, 39720), (115, 39753), (121, 39795), (122, 39801), (152, 39897),

Gene: Totinger_62 Start: 39476, Stop: 39841, Start Num: 58

Candidate Starts for Totinger_62:

(Start: 58 @39476 has 237 MA's), (70, 39509), (77, 39524), (79, 39527), (88, 39566), (89, 39569), (93, 39590), (103, 39623), (110, 39650), (115, 39683), (121, 39725), (122, 39731), (152, 39827),

Gene: Tweety_59 Start: 41367, Stop: 41732, Start Num: 58

Candidate Starts for Tweety_59:

(Start: 58 @41367 has 237 MA's), (70, 41400), (Start: 72 @41406 has 7 MA's), (79, 41418), (89, 41460), (96, 41490), (103, 41514), (104, 41517), (121, 41616), (122, 41622), (141, 41697),

Gene: UncleRicky_59 Start: 40457, Stop: 40822, Start Num: 58

Candidate Starts for UncleRicky_59:

(Start: 58 @40457 has 237 MA's), (70, 40490), (77, 40505), (79, 40508), (88, 40547), (89, 40550), (93, 40571), (103, 40604), (109, 40625), (110, 40631), (115, 40664), (121, 40706), (122, 40712), (152, 40808),

Gene: Utz_44 Start: 35948, Stop: 36310, Start Num: 57

Candidate Starts for Utz_44:

(21, 35798), (22, 35804), (27, 35840), (33, 35879), (Start: 57 @35948 has 23 MA's), (94, 36077), (101, 36101),

Gene: VRedHorse_60 Start: 39530, Stop: 39895, Start Num: 58

Candidate Starts for VRedHorse_60:

(Start: 58 @39530 has 237 MA's), (70, 39563), (77, 39578), (79, 39581), (88, 39620), (89, 39623), (93, 39644), (103, 39677), (110, 39704), (115, 39737), (121, 39779), (122, 39785), (152, 39881),

Gene: Velveteen_53 Start: 35652, Stop: 35999, Start Num: 58

Candidate Starts for Velveteen_53:

(52, 35625), (56, 35643), (Start: 58 @35652 has 237 MA's), (70, 35682), (73, 35691), (81, 35709), (93, 35763), (101, 35790), (115, 35847), (118, 35877), (121, 35889),

Gene: Velveteen_54 Start: 35996, Stop: 36349, Start Num: 58

Candidate Starts for Velveteen_54:

(48, 35960), (Start: 58 @35996 has 237 MA's), (69, 36026), (70, 36029), (75, 36041), (79, 36047), (93, 36110), (96, 36119), (98, 36125), (121, 36239), (125, 36260), (139, 36317), (149, 36329),

Gene: Veteran_57 Start: 39234, Stop: 39599, Start Num: 58

Candidate Starts for Veteran_57:

(Start: 58 @39234 has 237 MA's), (70, 39267), (77, 39282), (79, 39285), (88, 39324), (89, 39327), (93, 39348), (103, 39381), (109, 39402), (110, 39408), (115, 39441), (121, 39483), (122, 39489), (152, 39585),

Gene: Vibaki_44 Start: 34927, Stop: 35295, Start Num: 65

Candidate Starts for Vibaki_44:

(Start: 65 @34927 has 2 MA's), (110, 35080), (115, 35113), (116, 35128),

Gene: Vulpecula_30 Start: 22301, Stop: 21957, Start Num: 61

Candidate Starts for Vulpecula_30:

(Start: 61 @22301 has 15 MA's), (70, 22280), (79, 22256), (90, 22208),

Gene: Wachhund_61 Start: 40167, Stop: 40532, Start Num: 58

Candidate Starts for Wachhund_61:

(Start: 58 @40167 has 237 MA's), (70, 40200), (73, 40209), (79, 40218), (89, 40260), (96, 40290), (103, 40314), (104, 40317), (121, 40416), (122, 40422), (141, 40497), (143, 40500), (145, 40503),

Gene: Wanda_144 Start: 74968, Stop: 75321, Start Num: 60

Candidate Starts for Wanda_144:

(Start: 60 @74968 has 33 MA's), (115, 75169), (121, 75211),

Gene: Warren_57 Start: 34005, Stop: 34442, Start Num: 72

Candidate Starts for Warren_57:

(Start: 72 @34005 has 7 MA's), (97, 34101), (105, 34128), (114, 34176), (122, 34233), (123, 34239), (126, 34260), (150, 34326), (156, 34356), (158, 34380), (159, 34392),

Gene: Wee_64 Start: 42051, Stop: 42416, Start Num: 58

Candidate Starts for Wee_64:

(Start: 58 @42051 has 237 MA's), (70, 42084), (77, 42099), (79, 42102), (88, 42141), (89, 42144), (93, 42165), (103, 42198), (110, 42225), (115, 42258), (121, 42300), (122, 42306), (152, 42402),

Gene: Whatsapiecost_60 Start: 39457, Stop: 39822, Start Num: 58

Candidate Starts for Whatsapiecost_60:

(Start: 58 @39457 has 237 MA's), (70, 39490), (Start: 72 @39496 has 7 MA's), (79, 39508), (89, 39550), (96, 39580), (103, 39604), (104, 39607), (121, 39706), (122, 39712), (141, 39787), (143, 39790), (145, 39793),

Gene: Whouxphf_57 Start: 40126, Stop: 40491, Start Num: 58

Candidate Starts for Whouxphf_57:

(Start: 58 @40126 has 237 MA's), (70, 40159), (77, 40174), (79, 40177), (88, 40216), (89, 40219), (93, 40240), (103, 40273), (110, 40300), (115, 40333), (121, 40375), (122, 40381), (152, 40477),

Gene: WillSterrel_61 Start: 42001, Stop: 42366, Start Num: 58

Candidate Starts for WillSterrel_61:

(Start: 58 @42001 has 237 MA's), (70, 42034), (77, 42049), (79, 42052), (88, 42091), (89, 42094), (93, 42115), (110, 42175), (115, 42208), (121, 42250), (122, 42256), (152, 42352),

Gene: Wisp_50 Start: 36176, Stop: 36538, Start Num: 57

Candidate Starts for Wisp_50:

(27, 36068), (33, 36107), (Start: 57 @36176 has 23 MA's), (86, 36275), (93, 36302), (94, 36305), (101, 36329), (113, 36374),

Gene: Wolfstar_76 Start: 46198, Stop: 45881, Start Num: 79

Candidate Starts for Wolfstar_76:

(25, 46384), (42, 46300), (Start: 67 @46237 has 7 MA's), (78, 46201), (79, 46198), (84, 46171), (101, 46102), (107, 46081), (115, 46036), (120, 45997), (122, 45988), (136, 45928), (140, 45913), (146, 45904),

Gene: XFactor_58 Start: 39256, Stop: 39621, Start Num: 58

Candidate Starts for XFactor_58:

(Start: 58 @39256 has 237 MA's), (70, 39289), (Start: 72 @39295 has 7 MA's), (79, 39307), (89, 39349), (96, 39379), (103, 39403), (104, 39406), (121, 39505), (122, 39511), (141, 39586), (143, 39589),

Gene: Yago84_47 Start: 41514, Stop: 41140, Start Num: 46

Candidate Starts for Yago84_47:

(Start: 46 @41514 has 8 MA's), (74, 41454), (91, 41391), (93, 41382), (119, 41262),

Gene: Yeet_138 Start: 76734, Stop: 77087, Start Num: 60

Candidate Starts for Yeet_138:

(28, 76632), (Start: 60 @76734 has 33 MA's), (115, 76935), (121, 76977),

Gene: Yorick_59 Start: 40588, Stop: 40953, Start Num: 58

Candidate Starts for Yorick_59:

(Start: 58 @40588 has 237 MA's), (70, 40621), (77, 40636), (79, 40639), (88, 40678), (89, 40681), (93, 40702), (103, 40735), (110, 40762), (115, 40795), (121, 40837), (122, 40843), (152, 40939),

Gene: Yoshi_73 Start: 41971, Stop: 42333, Start Num: 58

Candidate Starts for Yoshi_73:

(Start: 58 @41971 has 237 MA's), (70, 42004), (77, 42019), (79, 42022), (88, 42061), (89, 42064), (93, 42085), (96, 42094), (110, 42142), (121, 42217), (122, 42223), (152, 42319),

Gene: Yoshi_71 Start: 41346, Stop: 41699, Start Num: 58

Candidate Starts for Yoshi_71:

(48, 41310), (Start: 58 @41346 has 237 MA's), (75, 41391), (79, 41397), (93, 41460), (96, 41469), (108, 41505), (112, 41529), (149, 41679),

Gene: Yoshi_70 Start: 41002, Stop: 41349, Start Num: 58

Candidate Starts for Yoshi_70:

(52, 40975), (56, 40993), (Start: 58 @41002 has 237 MA's), (Start: 63 @41014 has 2 MA's), (70, 41032), (73, 41041), (89, 41092), (93, 41113), (111, 41176), (115, 41197), (118, 41227),

Gene: Zapner_73 Start: 42130, Stop: 42495, Start Num: 58

Candidate Starts for Zapner_73:

(Start: 58 @42130 has 237 MA's), (70, 42163), (77, 42178), (79, 42181), (88, 42220), (89, 42223), (93, 42244), (103, 42277), (110, 42304), (115, 42337), (121, 42379), (122, 42385), (152, 42481),

Gene: Zarbodnamra_50 Start: 34890, Stop: 35252, Start Num: 57

Candidate Starts for Zarbodnamra_50:

(22, 34746), (27, 34782), (33, 34821), (Start: 57 @34890 has 23 MA's), (94, 35019), (101, 35043),

Gene: Zelink_139 Start: 77780, Stop: 78133, Start Num: 60

Candidate Starts for Zelink_139:

(Start: 60 @77780 has 33 MA's), (115, 77981), (121, 78023),

Gene: Zenteno07_93 Start: 66203, Stop: 65790, Start Num: 50

Candidate Starts for Zenteno07_93:

(Start: 50 @66203 has 2 MA's), (74, 66122), (98, 66035), (110, 65993), (115, 65960), (126, 65885), (155, 65795),

Gene: Zerg_60 Start: 40001, Stop: 40366, Start Num: 58

Candidate Starts for Zerg_60:

(Start: 58 @40001 has 237 MA's), (70, 40034), (77, 40049), (79, 40052), (88, 40091), (89, 40094), (93, 40115), (103, 40148), (110, 40175), (115, 40208), (121, 40250), (122, 40256), (152, 40352),

Gene: ZiggyZoo_51 Start: 37223, Stop: 37585, Start Num: 57

Candidate Starts for ZiggyZoo_51:

(27, 37115), (33, 37154), (Start: 57 @37223 has 23 MA's), (86, 37322), (93, 37349), (94, 37352), (101, 37376),

Gene: Zizzle_64 Start: 41844, Stop: 42209, Start Num: 58

Candidate Starts for Zizzle_64:

(Start: 58 @41844 has 237 MA's), (70, 41877), (77, 41892), (79, 41895), (88, 41934), (89, 41937), (93, 41958), (103, 41991), (110, 42018), (115, 42051), (121, 42093), (122, 42099), (152, 42195),