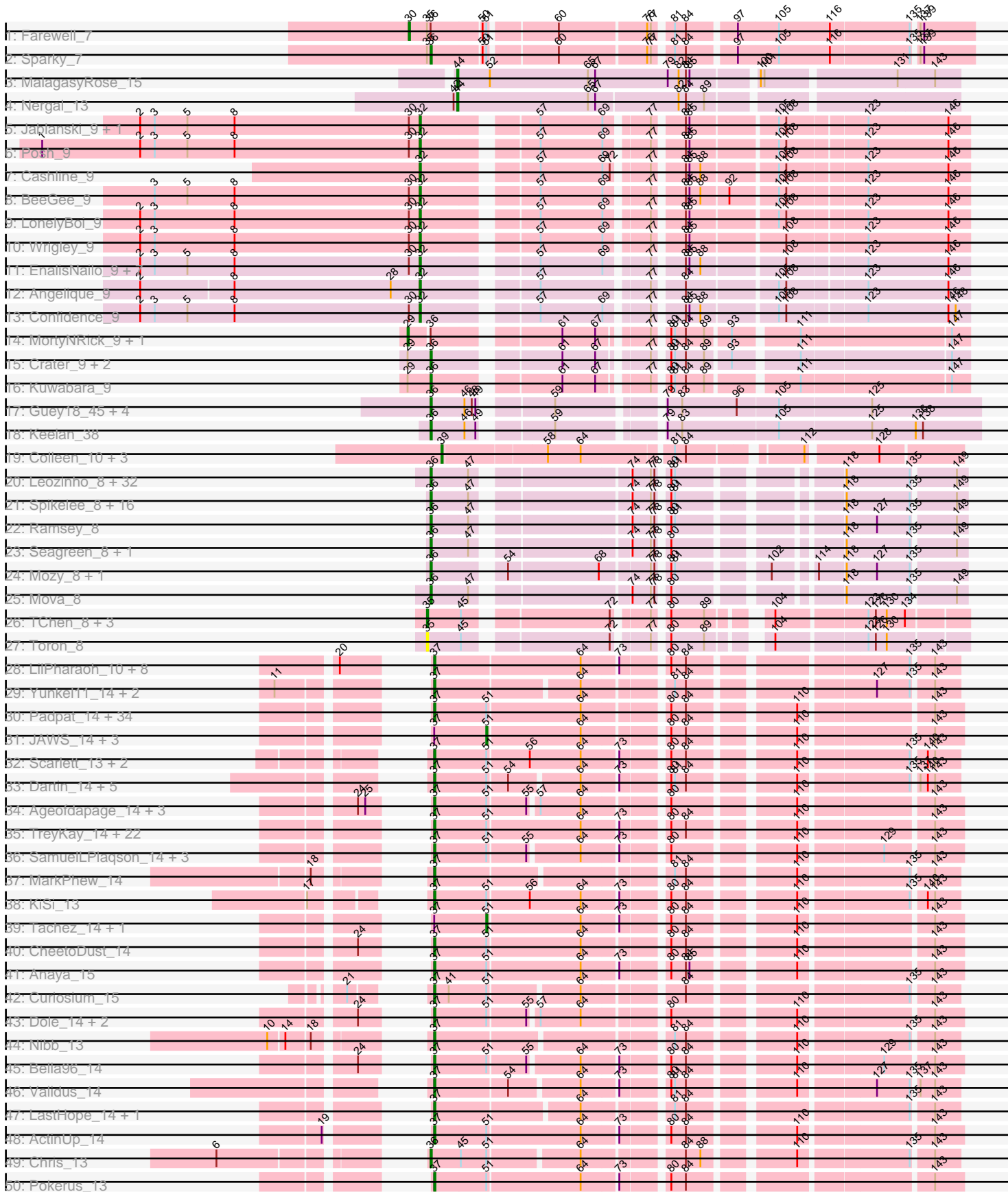
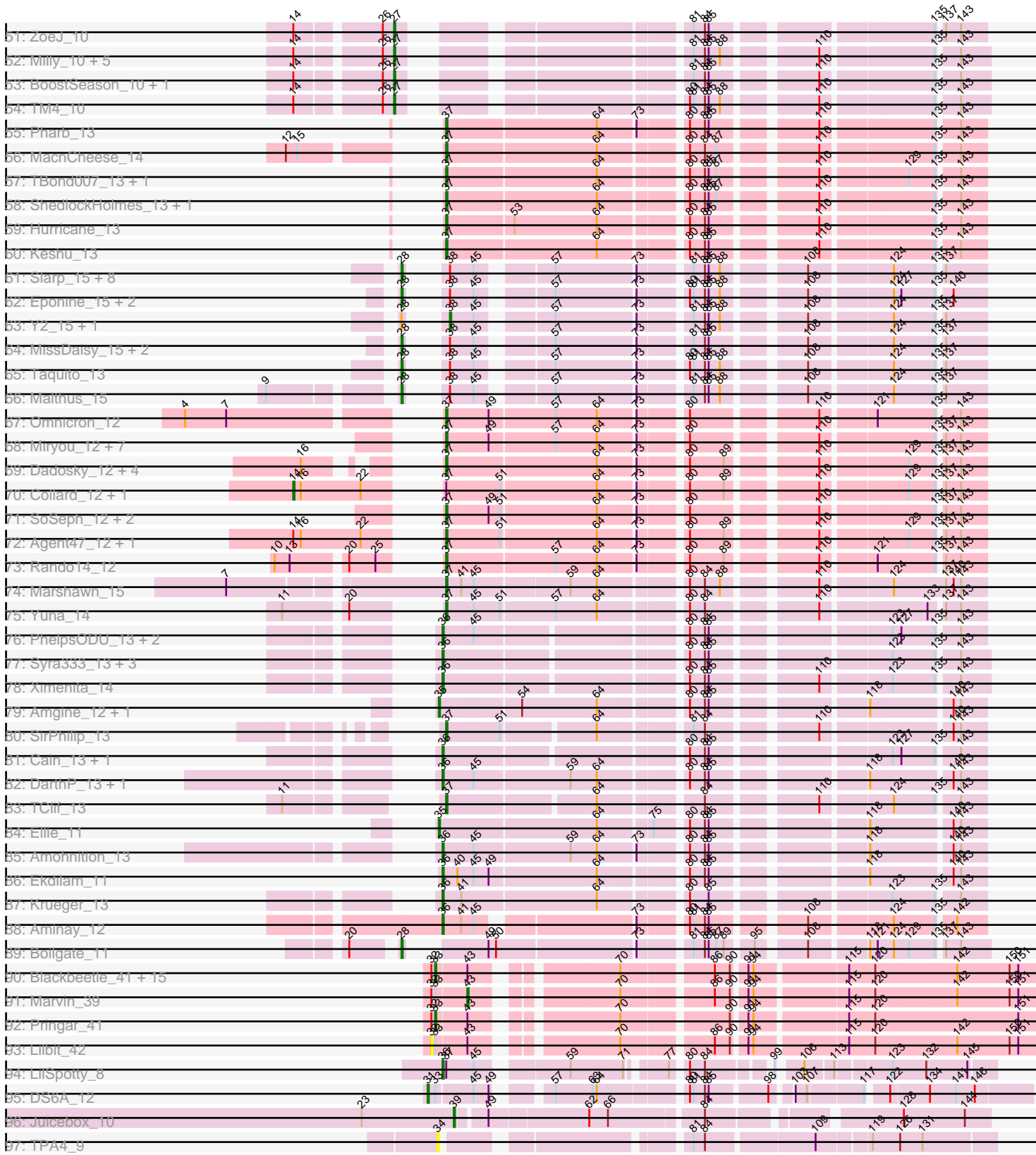


Pham 193676



Pham 193676



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 193676 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193676 has 313 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Farewell_7
- Track 2 : Sparky_7
- Track 3 : MalagasyRose_15
- Track 4 : Nergal_13
- Track 5 : Jablanski_9, Pytheas_9
- Track 6 : Posh_9
- Track 7 : Cashline_9
- Track 8 : BeeGee_9
- Track 9 : LonelyBoi_9
- Track 10 : Wrigley_9
- Track 11 : EnalisNailo_9, Bradissa_9, EMSquaredA_9, Lilas_9, Marteena_9, BritBrat_9, Pollux_9, Floral_9
- Track 12 : Angelique_9
- Track 13 : Confidence_9
- Track 14 : MortyNRick_9, Apricot_9
- Track 15 : Crater_9, BearBQ_9, Birdsong_9
- Track 16 : Kuwabara_9
- Track 17 : Guey18_45, Volt_42, Fryberger_40, Ronaldo_43, Ziko_43
- Track 18 : Keelan_38
- Track 19 : Colleen_10, Poushou_10, TouchMeNot_10, Arianna_10
- Track 20 : Leozinho_8, Awesomesauce_8, Alexphander_8, Kimberlium_8, Coco12_8, DirtMcgirt_8, Bobi_8, OwlsT2W_8, Girafales_8, Lorde_8, BuzzLyseyear_8, Enby_8, Boomer_8, MulchExplorer_9, JalFarm20_8, Rialto_8, SimranZ1_8, Stap_8, Plumbus_8, Job42_8, Quico_8, Pollywog_8, LittleShirley_8, DosHalletts_8, Oksu_8, Marker_8, DaWorst_8, Juice456_8, Drago_8, Beakin_8, Totinger_8, UncleRicky_8, Tootsieroll_8
- Track 21 : Spikelee_8, BigPhil_8, Kingsley_8, Flathead_8, Starcevich_8, Misha28_8, ChickenDinner_8, Piper2020_8, Cerasum_8, Hegedechwinu_8, DocMcStuffins_8, Madiba_8, RockyHorror_8, TootsiePop_8, Sarma624_8, Squirty_8, Velveteen_8
- Track 22 : Ramsey_8
- Track 23 : Seagreen_8, Frankie_8
- Track 24 : Mozy_8, Cornucopia_8
- Track 25 : Mova_8
- Track 26 : TChen_8, LunaStella_8, ThetaBob_8, Renaud18_8
- Track 27 : Toron_8

- Track 28 : LilPharaoh_10, Nikao_10, Amelie_10, Nutello_10, Enkosi_10, Torres_10, Mdavu_10, SgtBeansprout_10, Binglebops_10
- Track 29 : Yunkel11_14, Guanica15_14, Efra2_14
- Track 30 : Padpat_14, Lunahalos_14, Capricorn_14, BEEST_14, Belladonna_14, Asayake_14, Ganymede_14, Topper_14, Spock_14, Twitch_14, MeaningOfLife_14, QuincyRose_13, ShiaSurprise_14, Mynx_14, Emerson_14, Llorens_14, Rosmarinus_14, Blizzard_14, CaseJules_14, Jarvi_14, Peel_14, Padfoot_14, Dalmuri_14, Homura_14, Hyperbowlee_14, Inky_14, CREW_14, Jeckyll_14, BaghaKamala_14, Veliki_14, Piatt_14, Zavala_14, Joy99_14, BGlluviae_14, BarrelRoll_14
- Track 31 : JAWS_14, Durfee_14, AlishaPH_14, Boiiii_14
- Track 32 : Scarlett_13, LeMond_13, Oscar_13
- Track 33 : Dartin_14, Shaobing_14, Niklas_14, Peanam_14, McMater_14, Richo_14
- Track 34 : Ageofdapage_14, Stinson_14, LaterM_14, Murucutumbu_14
- Track 35 : TreyKay_14, Adonis_14, Adephagia_14, Angelica_14, HedwigODU_14, CrimD_14, Beezoo_14, Sulley_14, Jayhawk_14, Ramen_14, YoureAdopted_13, Tiri_14, TruffulaTree_14, Geraldini_14, Megsy_14, Apocalypse_14, Rapunzel97_14, Prithvi_14, Atiba_14, TaiwanKao_14, LindNT_14, Zabiza_14, Slimphazie_14
- Track 36 : SamuelLPlaqson_14, DrHayes_14, TiniBug_14, Urkel_14
- Track 37 : MarkPhew_14
- Track 38 : KiSi_13
- Track 39 : Tachez_14, Deby_14
- Track 40 : CheetoDust_14
- Track 41 : Anaya_15
- Track 42 : Curiosium_15
- Track 43 : Dole_14, Devera_14, Illumine_14
- Track 44 : Nibb_13
- Track 45 : Bella96_14
- Track 46 : Validus_14
- Track 47 : LastHope_14, TingHuaYa_14
- Track 48 : ActinUp_14
- Track 49 : Chris_13
- Track 50 : Pokerus_13
- Track 51 : ZoeJ_10
- Track 52 : Milly_10, DismalFunk_10, Marcoliusprime_10, Findley_10, Strobilo_10, DismalStressor_10
- Track 53 : BoostSeason_10, Mufasa_10
- Track 54 : TM4_10
- Track 55 : Pharb_13
- Track 56 : MacnCheese_14
- Track 57 : TBond007_13, Pixie_13
- Track 58 : ShedlockHolmes_13, TripleTrouble_12
- Track 59 : Hurricane_13
- Track 60 : Keshu_13
- Track 61 : Slarp_15, OmniCritical_15, Mitti_15, Chancellor_15, Wintermute_15, JF1_15, Fionnbharth_15, SamScheppers_13, Cheetobro_15
- Track 62 : Eponine_15, Ruthiejr_14, Juliette_15
- Track 63 : Y2_15, Y10_15
- Track 64 : MissDaisy_15, Patt_15, Reptar3000_15
- Track 65 : Taquito_13
- Track 66 : Malthus_15
- Track 67 : Omnicron_12

- Track 68 : Miryou_12, Thyatira_12, OkiRoe_12, Waterfoul_12, Gengar_12, Paola_12, Feyre_12, Guillsminger_12
- Track 69 : Dadosky_12, Edugator_11, AlleyCat_12, Larva_12, Psycho_12
- Track 70 : Collard_12, Kratio_11
- Track 71 : SoSeph_12, Heftyboy_12, Leston_12
- Track 72 : Agent47_12, InvictusManeo_12
- Track 73 : Rando14_12
- Track 74 : Marshawn_15
- Track 75 : Yuna_14
- Track 76 : PhelpsODU_13, Tierra_13, Unicorn_13
- Track 77 : Syra333_13, Shadow1_12, Phrank_13, Sunflower1121_12
- Track 78 : Ximenita_14
- Track 79 : Amgine_12, Fefferhead_13
- Track 80 : SirPhilip_13
- Track 81 : Cain_13, Bryler_13
- Track 82 : DarthP_13, Hammy_13
- Track 83 : TClif_13
- Track 84 : Ellie_11
- Track 85 : Amohnition_13
- Track 86 : Ekdilam_11
- Track 87 : Krueger_13
- Track 88 : Aminay_12
- Track 89 : Boilgate_11
- Track 90 : Blackbeetle_41, Corazon_39, Clarkson_42, JoieB_42, Beelzebub_45, Huphlepuuff_43, LittleLaf_41, Gattaca_40, Raela_41, Tesla_40, Poise_41, RedRaider77_41, MosMoris_39, Caprice_38, FeliMaine_41, VasuNzinga_41
- Track 91 : Marvin_39
- Track 92 : Pringar_41
- Track 93 : Lilbit_42
- Track 94 : LilSpotty_8
- Track 95 : DS6A_12
- Track 96 : Juicebox_10
- Track 97 : TPA4_9

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

The start number called the most often in the published annotations is 37, it was called in 128 of the 298 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_14, Adephegia_14, Adonis_14, Agent47_12, Ageofdapage_14, AlleyCat_12, Amelie_10, Anaya_15, Angelica_14, Apocalypse_14, Asayake_14, Atiba_14, BEEST_14, BGlluviae_14, BaghaKamala_14, BarrelRoll_14, Beezoo_14, Bella96_14, Belladonna_14, Binglebops_10, Blizzard_14, CREW_14, Capricorn_14, CaseJules_14, CheetoDust_14, CrimD_14, Curiosium_15, Dadosky_12, Dalmuri_14, Dartin_14, Devera_14, Dole_14, DrHayes_14, Edugator_11, Efra2_14, Emerson_14, Enkosi_10, Feyre_12, Ganymede_14, Gengar_12, Geraldini_14, Guanica15_14, Guillsminger_12, HedwigODU_14, Heftyboy_12, Homura_14, Hurricane_13, Hyperbowlee_14, Illumine_14, Inky_14, InvictusManeo_12, Jarvi_14, Jayhawk_14, Jeckyll_14, Joy99_14, Keshu_13, KiSi_13, Larva_12, LastHope_14, LaterM_14,

LeMond_13, Leston_12, LilPharaoh_10, LindNT_14, Llorens_14, Lunahalos_14, MacnCheese_14, MarkPhew_14, Marshawn_15, McMater_14, Mdavu_10, MeaningOfLife_14, Megsy_14, Miryou_12, Murucutumbu_14, Mynx_14, Nibb_13, Nikao_10, Niklas_14, Nutello_10, OkiRoe_12, Omnicron_12, Oscar_13, Padfoot_14, Padpat_14, Paola_12, Peanam_14, Peel_14, Pharb_13, Piatt_14, Pixie_13, Pokerus_13, Prithvi_14, Psycho_12, QuincyRose_13, Ramen_14, Rando14_12, Rapunzel97_14, Richo_14, Rosmarinus_14, SamuelLPlaqson_14, Scarlett_13, SgtBeansprout_10, Shaobing_14, ShedlockHolmes_13, ShiaSurprise_14, SirPhilip_13, Slimphazie_14, SoSeph_12, Spock_14, Stinson_14, Sulley_14, TBond007_13, TClif_13, TaiwanKao_14, Thyatira_12, TingHuaYa_14, TiniBug_14, Tiri_14, Topper_14, Torres_10, TreyKay_14, TripleTrouble_12, TruffulaTree_14, Twitch_14, Urkel_14, Validus_14, Veliki_14, Waterfoul_12, YoureAdopted_13, Yuna_14, Yunkel11_14, Zabiza_14, Zavala_14,

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

- AlishaPH_14, Boiiii_14, Collard_12, Deby_14, Durfee_14, JAWS_14, Kratio_11, LilSpotty_8, Tachez_14,

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

- Alexphander_8, Amgine_12, Aminay_12, Amohntion_13, Angelique_9, Apricot_9, Arianna_10, Awesomesauce_8, Beakin_8, BearBQ_9, BeeGee_9, Beelzebub_45, BigPhil_8, Birdsong_9, Blackbeetle_41, Bobi_8, Boilgate_11, Boomer_8, BoostSeason_10, Bradissa_9, BritBrat_9, Bryler_13, BuzzLyseyear_8, Cain_13, Caprice_38, Cashline_9, Cerasum_8, Chancellor_15, Cheetobro_15, ChickenDinner_8, Chris_13, Clarkson_42, Coco12_8, Colleen_10, Confidence_9, Corazon_39, Cornucopia_8, Crater_9, DS6A_12, DaWorst_8, DARTH_P_13, DirtMcgirt_8, DismalFunk_10, DismalStressor_10, DocMcStuffins_8, DosHalletts_8, Drago_8, EMSquaredA_9, Ekdilam_11, Ellie_11, EnalisNailo_9, Enby_8, Eponine_15, Farewell_7, Fefferhead_13, FeliMaine_41, Findley_10, Fionnbharth_15, Flathead_8, Floral_9, Frankie_8, Fryberger_40, Gattaca_40, Girafales_8, Guey18_45, Hammy_13, Hegedechwinu_8, Huphlepuuff_43, JF1_15, Jablanski_9, JalFarm20_8, Job42_8, JoieB_42, Juice456_8, Juicebox_10, Juliette_15, Keelan_38, Kimberlium_8, Kingsley_8, Krueger_13, Kuwabara_9, Leozinho_8, Lilas_9, Lilbit_42, LittleLaf_41, LittleShirley_8, LonelyBoi_9, Lorde_8, LunaStella_8, Madiba_8, MalagasyRose_15, Malthus_15, Marcoliusprime_10, Marker_8, Marteena_9, Marvin_39, Milly_10, Misha28_8, MissDaisy_15, Mitti_15, MortyNRick_9, MosMoris_39, Mova_8, Mozy_8, Mufasa_10, MulchExplorer_9, Nergal_13, Oksu_8, OmniCritical_15, OwlsT2W_8, Patt_15, PhelpsODU_13, Phrank_13, Piper2020_8, Plumbus_8, Poise_41, Pollux_9, Pollywog_8, Posh_9, Poushou_10, Pringar_41, Pytheas_9, Quico_8, Raela_41, Ramsey_8, RedRaider77_41, Renaud18_8, Reptar3000_15, Rialto_8, RockyHorror_8, Ronaldo_43, Ruthiejr_14, SamScheppers_13, Sarma624_8, Seagreen_8, Shadow1_12, SimranZ1_8, Slarp_15, Sparky_7, Spikelee_8, Squirty_8, Stap_8, Starcevich_8, Strobilo_10, Sunflower1121_12, Syra333_13, TChen_8, TM4_10, TPA4_9, Taquito_13, Tesla_40, ThetaBob_8, Tierra_13, TootsiePop_8, Tootsieroll_8, Toron_8, Totinger_8, TouchMeNot_10, UncleRicky_8, Unicorn_13, VasuNzinga_41, Velveteen_8, Volt_42, Wintermute_15, Wrigley_9, Ximenita_14, Y10_15, Y2_15, Ziko_43, ZoeJ_10,

Summary by start number:

Start 14:

- Found in 15 of 313 (4.8%) of genes in pham
- Manual Annotations of this start: 2 of 298

- Called 13.3% of time when present
- Phage (with cluster) where this start called: Collard_12 (K5), Kratio_11 (K5),

Start 27:

- Found in 10 of 313 (3.2%) of genes in pham
- Manual Annotations of this start: 10 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_10 (K2), DismalFunk_10 (K2), DismalStressor_10 (K2), Findley_10 (K2), Marcoliusprime_10 (K2), Milly_10 (K2), Mufasa_10 (K2), Strobilo_10 (K2), TM4_10 (K2), ZoeJ_10 (K2),

Start 28:

- Found in 21 of 313 (6.7%) of genes in pham
- Manual Annotations of this start: 18 of 298
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Boilgate_11 (K8), Chancellor_15 (K4), Cheetobro_15 (K4), Eponine_15 (K4), Fionnbharth_15 (K4), JF1_15 (K4), Juliette_15 (K4), Malthus_15 (K4), MissDaisy_15 (K4), Mitti_15 (K4), OmniCritical_15 (K4), Patt_15 (K4), Reptar3000_15 (K4), Ruthiejr_14 (K4), SamScheppers_13 (K4), Slarp_15 (K4), Taquito_13 (K4), Wintermute_15 (K4),

Start 29:

- Found in 6 of 313 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Apricot_9 (DN3), MortyNRick_9 (DN),

Start 30:

- Found in 16 of 313 (5.1%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Farewell_7 (AF),

Start 31:

- Found in 1 of 313 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A_12 (singleton),

Start 32:

- Found in 36 of 313 (11.5%) of genes in pham
- Manual Annotations of this start: 17 of 298
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Angelique_9 (CY1), BeeGee_9 (CY), Bradissa_9 (CY1), BritBrat_9 (CY2), Cashline_9 (CY), Confidence_9 (CY1), EMSquaredA_9 (CY1), EnalisNailo_9 (CY1), Floral_9 (CY1), Jablanski_9 (CY), Lilas_9 (CY1), Lilbit_42 (S), LonelyBoi_9 (CY), Marteena_9 (CY1), Pollux_9 (CY1), Posh_9 (CY), Pytheas_9 (CY), Wrigley_9 (CY),

Start 33:

- Found in 20 of 313 (6.4%) of genes in pham
- Manual Annotations of this start: 15 of 298
- Called 85.0% of time when present

- Phage (with cluster) where this start called: Beelzebub_45 (S), Blackbeetle_41 (S), Caprice_38 (S), Clarkson_42 (S), Corazon_39 (S), FeliMaine_41 (S), Gattaca_40 (S), Huphlepuuff_43 (S), JoieB_42 (S), LittleLaf_41 (S), MosMoris_39 (S), Poise_41 (S), Pringar_41 (S), Raela_41 (S), RedRaider77_41 (S), Tesla_40 (S), VasuNzinga_41 (S),

Start 34:

- Found in 1 of 313 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_9 (singleton),

Start 35:

- Found in 10 of 313 (3.2%) of genes in pham
- Manual Annotations of this start: 7 of 298
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Amgine_12 (K6), Ellie_11 (K6), Fefferhead_13 (K6), LunaStella_8 (F4), Renaud18_8 (F4), TChen_8 (F4), ThetaBob_8 (F4), Toron_8 (F6),

Start 36:

- Found in 88 of 313 (28.1%) of genes in pham
- Manual Annotations of this start: 82 of 298
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Alexphander_8 (F1), Aminay_12 (K7), Amohntion_13 (K6), Awesomesauce_8 (F1), Beakin_8 (F1), BearBQ_9 (DN), BigPhil_8 (F1), Birdsong_9 (DN), Bobi_8 (F1), Boomer_8 (F1), Bryler_13 (K6), BuzzLyseyear_8 (F1), Cain_13 (K6), Cerasum_8 (F1), ChickenDinner_8 (F1), Chris_13 (K1), Coco12_8 (F1), Cornucopia_8 (F1), Crater_9 (DN3), DaWorst_8 (F1), DarthP_13 (K6), DirtMcgirt_8 (F1), DocMcStuffins_8 (F1), DosHalletts_8 (F1), Drago_8 (F1), Ekdilam_11 (K6), Enby_8 (F1), Flathead_8 (F1), Frankie_8 (F1), Fryberger_40 (DP), Girafales_8 (F1), Guey18_45 (DP), Hammy_13 (K6), Hegedechwinu_8 (F1), JalFarm20_8 (F1), Job42_8 (F1), Juice456_8 (F1), Keelan_38 (DP), Kimberlium_8 (F1), Kingsley_8 (F1), Krueger_13 (K6), Kuwabara_9 (DN4), Leozinho_8 (F1), LilSpotty_8 (singleton), LittleShirley_8 (F1), Lorde_8 (F1), Madiba_8 (F1), Marker_8 (F1), Misha28_8 (F1), Mova_8 (F1), Mozy_8 (F1), MulchExplorer_9 (F1), Oksu_8 (F1), OwlsT2W_8 (F1), PhelpsODU_13 (K6), Phrank_13 (K6), Piper2020_8 (F1), Plumbus_8 (F1), Pollywog_8 (F1), Quico_8 (F1), Ramsey_8 (F1), Rialto_8 (F1), RockyHorror_8 (F1), Ronaldo_43 (DP), Sarma624_8 (F1), Seagreen_8 (F1), Shadow1_12 (K6), SimranZ1_8 (F1), Sparky_7 (AF), Spikelee_8 (F1), Squirty_8 (F3), Stap_8 (F1), Starcevich_8 (F1), Sunflower1121_12 (K6), Syra333_13 (K6), Tierra_13 (K6), TootsiePop_8 (F1), Tootsieroll_8 (F1), Totinger_8 (F1), UncleRicky_8 (F1), Unicorn_13 (K6), Velveteen_8 (F1), Volt_42 (DP), Ximenita_14 (K6), Ziko_43 (DP),

Start 37:

- Found in 143 of 313 (45.7%) of genes in pham
- Manual Annotations of this start: 128 of 298
- Called 93.7% of time when present
- Phage (with cluster) where this start called: ActinUp_14 (K1), Adephegia_14 (K1), Adonis_14 (K1), Agent47_12 (K5), Ageofdapage_14 (K1), AlleyCat_12 (K5), Amelie_10 (K1), Anaya_15 (K1), Angelica_14 (K1), Apocalypse_14 (K1), Asayake_14 (K1), Atiba_14 (K1), BEEST_14 (K1), BGlluviae_14 (K1), BaghaKamala_14 (K1),

BarrelRoll_14 (K1), Beezoo_14 (K1), Bella96_14 (K1), Belladonna_14 (K1), Binglebops_10 (K1), Blizzard_14 (K1), CREW_14 (K1), Capricorn_14 (K1), CaseJules_14 (K1), CheetoDust_14 (K1), CrimD_14 (K1), Curiosium_15 (K1), Dadosky_12 (K5), Dalmuri_14 (K1), Dartin_14 (K1), Devera_14 (K1), Dole_14 (K1), DrHayes_14 (K1), Edugator_11 (K5), Efra2_14 (K1), Emerson_14 (K1), Enkosi_10 (K1), Feyre_12 (K5), Ganymede_14 (K1), Gengar_12 (K5), Geraldini_14 (K1), Guanica15_14 (K1), Guillsminger_12 (K5), HedwigODU_14 (K1), Heftyboy_12 (K5), Homura_14 (K1), Hurricane_13 (K3), Hyperbowlee_14 (K1), Illumine_14 (K1), Inky_14 (K1), InvictusManeo_12 (K5), Jarvi_14 (K1), Jayhawk_14 (K1), Jeckyll_14 (K1), Joy99_14 (K1), Keshu_13 (K3), KiSi_13 (K1), Larva_12 (K5), LastHope_14 (K1), LaterM_14 (K1), LeMond_13 (K1), Leston_12 (K5), LilPharaoh_10 (K1), LindNT_14 (K1), Llorens_14 (K1), Lunahalos_14 (K1), MacnCheese_14 (K3), MarkPhew_14 (K1), Marshawn_15 (K6), McMater_14 (K1), Mdavu_10 (K1), MeaningOfLife_14 (K1), Megsy_14 (K1), Miryou_12 (K5), Murucutumbu_14 (K1), Mynx_14 (K1), Nibb_13 (K1), Nikao_10 (K1), Niklas_14 (K1), Nutello_10 (K1), OkiRoe_12 (K5), Omnicron_12 (K5), Oscar_13 (K1), Padfoot_14 (K1), Padpat_14 (K1), Paola_12 (K5), Peanam_14 (K1), Peel_14 (K1), Pharb_13 (K3), Piatt_14 (K1), Pixie_13 (K3), Pokerus_13 (K1), Prithvi_14 (K1), Psycho_12 (K5), QuincyRose_13 (K1), Ramen_14 (K1), Rando14_12 (K5), Rapunzel97_14 (K1), Richo_14 (K1), Rosmarinus_14 (K1), SamuelLPlaqson_14 (K1), Scarlett_13 (K1), SgtBeansprout_10 (K1), Shaobing_14 (K1), ShedlockHolmes_13 (K3), ShiaSurprise_14 (K1), SirPhilip_13 (K6), Slimphazie_14 (K1), SoSeph_12 (K5), Spock_14 (K1), Stinson_14 (K1), Sulley_14 (K1), TBond007_13 (K3), TClif_13 (K6), TaiwanKao_14 (K1), Thyatira_12 (K5), TingHuaYa_14 (K1), TiniBug_14 (K1), Tiri_14 (K1), Topper_14 (K1), Torres_10 (K1), TreyKay_14 (K1), TribbleTrouble_12 (K3), TruffulaTree_14 (K1), Twitch_14 (K1), Urkel_14 (K1), Validus_14 (K1), Veliki_14 (K1), Waterfoul_12 (K5), YoureAdopted_13 (K1), Yuna_14 (K6), Yunkel11_14 (K1), Zabiza_14 (K1), Zavala_14 (K1),

Start 38:

- Found in 19 of 313 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 298
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Y10_15 (K4), Y2_15 (K4),

Start 39:

- Found in 5 of 313 (1.6%) of genes in pham
- Manual Annotations of this start: 5 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arianna_10 (EO), Colleen_10 (EO), Juicebox_10 (singleton), Poushou_10 (EO), TouchMeNot_10 (EO),

Start 43:

- Found in 19 of 313 (6.1%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Marvin_39 (S),

Start 44:

- Found in 2 of 313 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 298
- Called 100.0% of time when present

- Phage (with cluster) where this start called: MalagasyRose_15 (AG), Nergal_13 (AG),

Start 51:

- Found in 103 of 313 (32.9%) of genes in pham
- Manual Annotations of this start: 6 of 298
- Called 5.8% of time when present
- Phage (with cluster) where this start called: AlishaPH_14 (K1), Boiiii_14 (K1), Deby_14 (K1), Durfee_14 (K1), JAWS_14 (K1), Tachez_14 (K1),

Summary by clusters:

There are 24 clusters represented in this pham: DN, singleton, EO, K3, K2, K1, K7, K6, K5, K4, K8, DP, DN4, DN3, CY2, CY1, AG, AF, S, F1, F3, F4, F6, CY,

Info for manual annotations of cluster AF:

- Start number 30 was manually annotated 1 time for cluster AF.
- Start number 36 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AG:

- Start number 44 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster CY:

- Start number 32 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 32 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 32 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:

- Start number 36 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 29 was manually annotated 1 time for cluster DN3.
- Start number 36 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 36 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 36 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EO:

- Start number 39 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster F1:

- Start number 36 was manually annotated 52 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 36 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 35 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster K1:

- Start number 36 was manually annotated 1 time for cluster K1.
- Start number 37 was manually annotated 96 times for cluster K1.
- Start number 51 was manually annotated 6 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 27 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 37 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 28 was manually annotated 17 times for cluster K4.
- Start number 38 was manually annotated 2 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 14 was manually annotated 2 times for cluster K5.
- Start number 37 was manually annotated 20 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 35 was manually annotated 3 times for cluster K6.
- Start number 36 was manually annotated 15 times for cluster K6.
- Start number 37 was manually annotated 4 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 36 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 28 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster S:

- Start number 33 was manually annotated 15 times for cluster S.
- Start number 43 was manually annotated 1 time for cluster S.

Gene Information:

Gene: ActinUp_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for ActinUp_14:

(19, 8939), (Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (73, 9125), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: Adephagia_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for Adephagia_14:

(Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (73, 9125), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: Adonis_14 Start: 8990, Stop: 9376, Start Num: 37

Candidate Starts for Adonis_14:

(Start: 37 @8990 has 128 MA's), (Start: 51 @9032 has 6 MA's), (64, 9107), (73, 9134), (80, 9167), (84, 9179), (110, 9254), (143, 9353),

Gene: Agent47_12 Start: 9178, Stop: 9561, Start Num: 37

Candidate Starts for Agent47_12:

(Start: 14 @9097 has 2 MA's), (16, 9103), (22, 9151), (Start: 37 @9178 has 128 MA's), (Start: 51 @9220 has 6 MA's), (64, 9295), (73, 9322), (80, 9355), (89, 9382), (110, 9442), (129, 9505), (135, 9526), (137, 9529), (143, 9541),

Gene: Ageofdapage_14 Start: 8917, Stop: 9297, Start Num: 37

Candidate Starts for Ageofdapage_14:

(24, 8896), (25, 8902), (Start: 37 @8917 has 128 MA's), (Start: 51 @8959 has 6 MA's), (55, 8989), (57, 8995), (64, 9028), (80, 9088), (110, 9175), (143, 9274),

Gene: Alexphander_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Alexphander_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: AlishaPH_14 Start: 9022, Stop: 9366, Start Num: 51

Candidate Starts for AlishaPH_14:

(Start: 37 @8980 has 128 MA's), (Start: 51 @9022 has 6 MA's), (64, 9097), (80, 9157), (84, 9169), (110, 9244), (143, 9343),

Gene: AlleyCat_12 Start: 9056, Stop: 9439, Start Num: 37

Candidate Starts for AlleyCat_12:

(16, 9008), (Start: 37 @9056 has 128 MA's), (64, 9173), (73, 9200), (80, 9233), (89, 9260), (110, 9320), (129, 9383), (135, 9404), (137, 9407), (143, 9419),

Gene: Amelie_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Amelie_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Amgine_12 Start: 8610, Stop: 8999, Start Num: 35

Candidate Starts for Amgine_12:

(Start: 35 @8610 has 7 MA's), (54, 8673), (64, 8733), (80, 8793), (84, 8805), (85, 8808), (118, 8913), (140, 8973), (143, 8979),

Gene: Aminay_12 Start: 8892, Stop: 9263, Start Num: 36

Candidate Starts for Aminay_12:

(Start: 36 @8892 has 82 MA's), (41, 8907), (45, 8916), (73, 9024), (80, 9057), (81, 9060), (84, 9069), (85, 9072), (108, 9135), (124, 9195), (135, 9228), (142, 9240),

Gene: Amohndition_13 Start: 8913, Stop: 9299, Start Num: 36

Candidate Starts for Amohndition_13:

(Start: 36 @8913 has 82 MA's), (45, 8937), (59, 9012), (64, 9033), (73, 9060), (80, 9093), (84, 9105), (85, 9108), (118, 9213), (140, 9273), (143, 9279),

Gene: Anaya_15 Start: 8982, Stop: 9368, Start Num: 37

Candidate Starts for Anaya_15:

(Start: 37 @8982 has 128 MA's), (Start: 51 @9024 has 6 MA's), (64, 9099), (73, 9126), (80, 9159), (84, 9171), (85, 9174), (110, 9246), (143, 9345),

Gene: Angelica_14 Start: 8952, Stop: 9338, Start Num: 37

Candidate Starts for Angelica_14:

(Start: 37 @8952 has 128 MA's), (Start: 51 @8994 has 6 MA's), (64, 9069), (73, 9096), (80, 9129), (84, 9141), (110, 9216), (143, 9315),

Gene: Angelique_9 Start: 7078, Stop: 7479, Start Num: 32

Candidate Starts for Angelique_9:

(2, 6850), (8, 6925), (Start: 28 @7054 has 18 MA's), (Start: 32 @7078 has 17 MA's), (57, 7159), (77, 7240), (84, 7261), (105, 7330), (108, 7336), (123, 7396), (146, 7462),

Gene: Apocalypse_14 Start: 8956, Stop: 9342, Start Num: 37

Candidate Starts for Apocalypse_14:

(Start: 37 @8956 has 128 MA's), (Start: 51 @8998 has 6 MA's), (64, 9073), (73, 9100), (80, 9133), (84, 9145), (110, 9220), (143, 9319),

Gene: Apricot_9 Start: 6396, Stop: 6794, Start Num: 29

Candidate Starts for Apricot_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (93, 6615), (111, 6663), (147, 6780),

Gene: Arianna_10 Start: 8239, Stop: 8625, Start Num: 39

Candidate Starts for Arianna_10:

(Start: 39 @8239 has 5 MA's), (58, 8320), (64, 8347), (81, 8416), (84, 8425), (112, 8506), (128, 8560),

Gene: Asayake_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Asayake_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Atiba_14 Start: 8944, Stop: 9330, Start Num: 37

Candidate Starts for Atiba_14:

(Start: 37 @8944 has 128 MA's), (Start: 51 @8986 has 6 MA's), (64, 9061), (73, 9088), (80, 9121), (84, 9133), (110, 9208), (143, 9307),

Gene: Awesomesauce_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for Awesomesauce_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: BEEST_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for BEEST_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: BGlluviae_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for BGlluviae_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: BaghaKamala_14 Start: 8947, Stop: 9333, Start Num: 37

Candidate Starts for BaghaKamala_14:

(Start: 37 @8947 has 128 MA's), (Start: 51 @8989 has 6 MA's), (64, 9064), (80, 9124), (84, 9136), (110, 9211), (143, 9310),

Gene: BarrelRoll_14 Start: 8973, Stop: 9359, Start Num: 37

Candidate Starts for BarrelRoll_14:

(Start: 37 @8973 has 128 MA's), (Start: 51 @9015 has 6 MA's), (64, 9090), (80, 9150), (84, 9162), (110, 9237), (143, 9336),

Gene: Beakin_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for Beakin_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: BearBQ_9 Start: 6411, Stop: 6794, Start Num: 36

Candidate Starts for BearBQ_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (93, 6615), (111, 6663), (147, 6780),

Gene: BeeGee_9 Start: 7080, Stop: 7481, Start Num: 32

Candidate Starts for BeeGee_9:

(3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 1 MA's), (Start: 32 @7080 has 17 MA's), (57, 7161), (69, 7212), (77, 7242), (84, 7263), (85, 7266), (88, 7275), (92, 7296), (105, 7332), (108, 7338), (123, 7398), (146, 7464),

Gene: Beelzebub_45 Start: 17697, Stop: 18122, Start Num: 33

Candidate Starts for Beelzebub_45:

(Start: 32 @17694 has 17 MA's), (Start: 33 @17697 has 15 MA's), (Start: 43 @17721 has 1 MA's), (70, 17814), (86, 17880), (90, 17892), (91, 17901), (94, 17904), (115, 17973), (120, 17994), (142, 18057), (150, 18099), (151, 18105),

Gene: Beezoo_14 Start: 9001, Stop: 9387, Start Num: 37

Candidate Starts for Beezoo_14:

(Start: 37 @9001 has 128 MA's), (Start: 51 @9043 has 6 MA's), (64, 9118), (73, 9145), (80, 9178), (84, 9190), (110, 9265), (143, 9364),

Gene: Bella96_14 Start: 8908, Stop: 9288, Start Num: 37

Candidate Starts for Bella96_14:

(24, 8887), (Start: 37 @8908 has 128 MA's), (Start: 51 @8950 has 6 MA's), (55, 8980), (64, 9019), (73, 9046), (80, 9079), (84, 9091), (110, 9166), (129, 9229), (143, 9265),

Gene: Belladonna_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Belladonna_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: BigPhil_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for BigPhil_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Binglebops_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Binglebops_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Birdsong_9 Start: 6411, Stop: 6794, Start Num: 36

Candidate Starts for Birdsong_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (93, 6615), (111, 6663), (147, 6780),

Gene: Blackbeetle_41 Start: 16716, Stop: 17141, Start Num: 33

Candidate Starts for Blackbeetle_41:

(Start: 32 @16713 has 17 MA's), (Start: 33 @16716 has 15 MA's), (Start: 43 @16740 has 1 MA's), (70, 16833), (86, 16899), (90, 16911), (91, 16920), (94, 16923), (115, 16992), (120, 17013), (142, 17076), (150, 17118), (151, 17124),

Gene: Blizzard_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Blizzard_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Bobi_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Bobi_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Boiiii_14 Start: 9065, Stop: 9409, Start Num: 51

Candidate Starts for Boiiii_14:

(Start: 37 @9023 has 128 MA's), (Start: 51 @9065 has 6 MA's), (64, 9140), (80, 9200), (84, 9212), (110, 9287), (143, 9386),

Gene: Boilgate_11 Start: 8967, Stop: 9359, Start Num: 28

Candidate Starts for Boilgate_11:

(20, 8937), (Start: 28 @8967 has 18 MA's), (49, 9006), (50, 9012), (73, 9117), (81, 9153), (84, 9162), (85, 9165), (87, 9171), (89, 9177), (95, 9195), (108, 9228), (118, 9270), (121, 9276), (124, 9288), (129, 9300), (135, 9321), (137, 9324), (143, 9336),

Gene: Boomer_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Boomer_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: BoostSeason_10 Start: 6968, Stop: 7354, Start Num: 27

Candidate Starts for BoostSeason_10:

(Start: 14 @6899 has 2 MA's), (26, 6959), (Start: 27 @6968 has 10 MA's), (81, 7148), (84, 7157), (85, 7160), (110, 7232), (135, 7316), (143, 7331),

Gene: Bradissa_9 Start: 7084, Stop: 7485, Start Num: 32

Candidate Starts for Bradissa_9:

(2, 6853), (3, 6865), (5, 6892), (8, 6931), (Start: 30 @7075 has 1 MA's), (Start: 32 @7084 has 17 MA's), (57, 7165), (69, 7216), (77, 7246), (84, 7267), (85, 7270), (88, 7279), (108, 7342), (123, 7402), (146, 7468),

Gene: BritBrat_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for BritBrat_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Bryler_13 Start: 7935, Stop: 8315, Start Num: 36

Candidate Starts for Bryler_13:

(Start: 36 @7935 has 82 MA's), (80, 8109), (84, 8121), (85, 8124), (123, 8247), (127, 8253), (135, 8280), (143, 8295),

Gene: BuzzLyseyear_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for BuzzLyseyear_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: CREW_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for CREW_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Cain_13 Start: 7923, Stop: 8303, Start Num: 36

Candidate Starts for Cain_13:

(Start: 36 @7923 has 82 MA's), (80, 8097), (84, 8109), (85, 8112), (123, 8235), (127, 8241), (135, 8268), (143, 8283),

Gene: Caprice_38 Start: 16786, Stop: 17211, Start Num: 33

Candidate Starts for Caprice_38:

(Start: 32 @16783 has 17 MA's), (Start: 33 @16786 has 15 MA's), (Start: 43 @16810 has 1 MA's), (70, 16903), (86, 16969), (90, 16981), (91, 16990), (94, 16993), (115, 17062), (120, 17083), (142, 17146), (150, 17188), (151, 17194),

Gene: Capricorn_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Capricorn_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: CaseJules_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for CaseJules_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Cashline_9 Start: 6933, Stop: 7334, Start Num: 32

Candidate Starts for Cashline_9:

(Start: 32 @6933 has 17 MA's), (57, 7014), (69, 7065), (72, 7071), (77, 7095), (84, 7116), (85, 7119), (88, 7128), (105, 7185), (108, 7191), (123, 7251), (146, 7317),

Gene: Cerasum_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Cerasum_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Chancellor_15 Start: 10244, Stop: 10618, Start Num: 28

Candidate Starts for Chancellor_15:

(Start: 28 @10244 has 18 MA's), (Start: 38 @10253 has 2 MA's), (45, 10271), (57, 10319), (73, 10379), (81, 10415), (84, 10424), (85, 10427), (88, 10436), (108, 10490), (124, 10550), (135, 10583), (137, 10586),

Gene: CheetoDust_14 Start: 8998, Stop: 9384, Start Num: 37

Candidate Starts for CheetoDust_14:

(24, 8977), (Start: 37 @8998 has 128 MA's), (Start: 51 @9040 has 6 MA's), (64, 9115), (80, 9175), (84, 9187), (110, 9262), (143, 9361),

Gene: Cheetobro_15 Start: 10244, Stop: 10618, Start Num: 28

Candidate Starts for Cheetobro_15:

(Start: 28 @10244 has 18 MA's), (Start: 38 @10253 has 2 MA's), (45, 10271), (57, 10319), (73, 10379), (81, 10415), (84, 10424), (85, 10427), (88, 10436), (108, 10490), (124, 10550), (135, 10583), (137, 10586),

Gene: ChickenDinner_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for ChickenDinner_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: Chris_13 Start: 7918, Stop: 8298, Start Num: 36

Candidate Starts for Chris_13:

(6, 7798), (Start: 36 @7918 has 82 MA's), (45, 7942), (Start: 51 @7963 has 6 MA's), (64, 8032), (84, 8104), (88, 8116), (110, 8179), (135, 8263), (143, 8278),

Gene: Clarkson_42 Start: 17398, Stop: 17823, Start Num: 33

Candidate Starts for Clarkson_42:

(Start: 32 @17395 has 17 MA's), (Start: 33 @17398 has 15 MA's), (Start: 43 @17422 has 1 MA's), (70, 17515), (86, 17581), (90, 17593), (91, 17602), (94, 17605), (115, 17674), (120, 17695), (142, 17758), (150, 17800), (151, 17806),

Gene: Coco12_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Coco12_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Collard_12 Start: 9058, Stop: 9522, Start Num: 14

Candidate Starts for Collard_12:

(Start: 14 @9058 has 2 MA's), (16, 9064), (22, 9112), (Start: 37 @9139 has 128 MA's), (Start: 51 @9181 has 6 MA's), (64, 9256), (73, 9283), (80, 9316), (89, 9343), (110, 9403), (129, 9466), (135, 9487), (137, 9490), (143, 9502),

Gene: Colleen_10 Start: 8239, Stop: 8625, Start Num: 39

Candidate Starts for Colleen_10:

(Start: 39 @8239 has 5 MA's), (58, 8320), (64, 8347), (81, 8416), (84, 8425), (112, 8506), (128, 8560),

Gene: Confidence_9 Start: 7080, Stop: 7481, Start Num: 32

Candidate Starts for Confidence_9:

(2, 6849), (3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 1 MA's), (Start: 32 @7080 has 17 MA's), (57, 7161), (69, 7212), (77, 7242), (84, 7263), (85, 7266), (88, 7275), (105, 7332), (108, 7338), (123, 7398), (146, 7464), (148, 7470),

Gene: Corazon_39 Start: 17351, Stop: 17776, Start Num: 33

Candidate Starts for Corazon_39:

(Start: 32 @17348 has 17 MA's), (Start: 33 @17351 has 15 MA's), (Start: 43 @17375 has 1 MA's), (70, 17468), (86, 17534), (90, 17546), (91, 17555), (94, 17558), (115, 17627), (120, 17648), (142, 17711), (150, 17753), (151, 17759),

Gene: Cornucopia_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Cornucopia_8:

(Start: 36 @5928 has 82 MA's), (54, 5976), (68, 6048), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (102, 6159), (114, 6186), (118, 6207), (127, 6231), (135, 6258),

Gene: Crater_9 Start: 6411, Stop: 6794, Start Num: 36

Candidate Starts for Crater_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (93, 6615), (111, 6663), (147, 6780),

Gene: CrimD_14 Start: 8950, Stop: 9336, Start Num: 37

Candidate Starts for CrimD_14:

(Start: 37 @8950 has 128 MA's), (Start: 51 @8992 has 6 MA's), (64, 9067), (73, 9094), (80, 9127), (84, 9139), (110, 9214), (143, 9313),

Gene: Curiosium_15 Start: 8430, Stop: 8807, Start Num: 37

Candidate Starts for Curiosium_15:

(21, 8403), (Start: 37 @8430 has 128 MA's), (41, 8442), (Start: 51 @8472 has 6 MA's), (64, 8541), (84, 8613), (135, 8772), (143, 8787),

Gene: DS6A_12 Start: 9306, Stop: 9719, Start Num: 31

Candidate Starts for DS6A_12:

(Start: 31 @9306 has 1 MA's), (Start: 33 @9312 has 15 MA's), (45, 9339), (49, 9351), (57, 9381), (63, 9411), (64, 9414), (80, 9477), (81, 9480), (84, 9489), (85, 9492), (98, 9534), (103, 9546), (107, 9555), (117, 9597), (122, 9609), (134, 9639), (141, 9660), (146, 9675),

Gene: DaWorst_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for DaWorst_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Dadosky_12 Start: 9057, Stop: 9440, Start Num: 37

Candidate Starts for Dadosky_12:

(16, 9009), (Start: 37 @9057 has 128 MA's), (64, 9174), (73, 9201), (80, 9234), (89, 9261), (110, 9321), (129, 9384), (135, 9405), (137, 9408), (143, 9420),

Gene: Dalmuri_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Dalmuri_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: DarthP_13 Start: 8913, Stop: 9299, Start Num: 36

Candidate Starts for DarthP_13:

(Start: 36 @8913 has 82 MA's), (45, 8937), (59, 9012), (64, 9033), (80, 9093), (84, 9105), (85, 9108), (118, 9213), (140, 9273), (143, 9279),

Gene: Dartin_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for Dartin_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: Deby_14 Start: 8994, Stop: 9338, Start Num: 51

Candidate Starts for Deby_14:

(Start: 37 @8952 has 128 MA's), (Start: 51 @8994 has 6 MA's), (64, 9069), (73, 9096), (80, 9129), (84, 9141), (110, 9216), (143, 9315),

Gene: Devera_14 Start: 8975, Stop: 9355, Start Num: 37

Candidate Starts for Devera_14:

(24, 8954), (Start: 37 @8975 has 128 MA's), (Start: 51 @9017 has 6 MA's), (55, 9047), (57, 9053), (64, 9086), (80, 9146), (110, 9233), (143, 9332),

Gene: DirtMcgirt_8 Start: 5930, Stop: 6301, Start Num: 36

Candidate Starts for DirtMcgirt_8:

(Start: 36 @5930 has 82 MA's), (47, 5960), (74, 6071), (77, 6086), (78, 6089), (80, 6095), (81, 6098), (118, 6209), (135, 6260), (149, 6293),

Gene: DismalFunk_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for DismalFunk_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: DismalStressor_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for DismalStressor_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: DocMcStuffins_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for DocMcStuffins_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: Dole_14 Start: 8977, Stop: 9357, Start Num: 37

Candidate Starts for Dole_14:

(24, 8956), (Start: 37 @8977 has 128 MA's), (Start: 51 @9019 has 6 MA's), (55, 9049), (57, 9055), (64, 9088), (80, 9148), (110, 9235), (143, 9334),

Gene: DosHalletts_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for DosHalletts_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: DrHayes_14 Start: 8929, Stop: 9309, Start Num: 37

Candidate Starts for DrHayes_14:

(Start: 37 @8929 has 128 MA's), (Start: 51 @8971 has 6 MA's), (55, 9001), (64, 9040), (73, 9067), (80, 9100), (110, 9187), (129, 9250), (143, 9286),

Gene: Drago_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Drago_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Durfee_14 Start: 9063, Stop: 9407, Start Num: 51

Candidate Starts for Durfee_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: EMSquaredA_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for EMSquaredA_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Edugator_11 Start: 9057, Stop: 9440, Start Num: 37

Candidate Starts for Edugator_11:

(16, 9009), (Start: 37 @9057 has 128 MA's), (64, 9174), (73, 9201), (80, 9234), (89, 9261), (110, 9321), (129, 9384), (135, 9405), (137, 9408), (143, 9420),

Gene: Efra2_14 Start: 7916, Stop: 8293, Start Num: 37

Candidate Starts for Efra2_14:

(11, 7838), (Start: 37 @7916 has 128 MA's), (64, 8027), (81, 8090), (84, 8099), (127, 8231), (135, 8258), (143, 8273),

Gene: Ekdilam_11 Start: 8640, Stop: 9026, Start Num: 36

Candidate Starts for Ekdilam_11:

(Start: 36 @8640 has 82 MA's), (40, 8652), (45, 8664), (49, 8676), (64, 8760), (80, 8820), (84, 8832), (85, 8835), (118, 8940), (140, 9000), (143, 9006),

Gene: Ellie_11 Start: 8684, Stop: 9073, Start Num: 35

Candidate Starts for Ellie_11:

(Start: 35 @8684 has 7 MA's), (64, 8807), (75, 8846), (80, 8867), (84, 8879), (85, 8882), (118, 8987), (140, 9047), (143, 9053),

Gene: Emerson_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for Emerson_14:

(Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: EnalisNailo_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for EnalisNailo_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Enby_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Enby_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Enkosi_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Enkosi_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Eponine_15 Start: 10108, Stop: 10482, Start Num: 28

Candidate Starts for Eponine_15:

(Start: 28 @10108 has 18 MA's), (Start: 38 @10117 has 2 MA's), (45, 10135), (57, 10183), (73, 10243), (80, 10276), (81, 10279), (84, 10288), (85, 10291), (88, 10300), (108, 10354), (124, 10414), (127, 10420), (135, 10447), (140, 10456),

Gene: Farewell_7 Start: 6385, Stop: 6810, Start Num: 30

Candidate Starts for Farewell_7:

(Start: 30 @6385 has 1 MA's), (Start: 35 @6400 has 7 MA's), (Start: 36 @6403 has 82 MA's), (50, 6442), (Start: 51 @6445 has 6 MA's), (60, 6496), (76, 6565), (77, 6568), (81, 6580), (84, 6589), (97, 6625), (105, 6658), (116, 6700), (135, 6763), (137, 6766), (139, 6769),

Gene: Fefferhead_13 Start: 8851, Stop: 9240, Start Num: 35

Candidate Starts for Fefferhead_13:

(Start: 35 @8851 has 7 MA's), (54, 8914), (64, 8974), (80, 9034), (84, 9046), (85, 9049), (118, 9154), (140, 9214), (143, 9220),

Gene: FeliMaine_41 Start: 17399, Stop: 17824, Start Num: 33

Candidate Starts for FeliMaine_41:

(Start: 32 @17396 has 17 MA's), (Start: 33 @17399 has 15 MA's), (Start: 43 @17423 has 1 MA's), (70, 17516), (86, 17582), (90, 17594), (91, 17603), (94, 17606), (115, 17675), (120, 17696), (142, 17759), (150, 17801), (151, 17807),

Gene: Feyre_12 Start: 9005, Stop: 9388, Start Num: 37

Candidate Starts for Feyre_12:

(Start: 37 @9005 has 128 MA's), (49, 9038), (57, 9089), (64, 9122), (73, 9149), (80, 9182), (110, 9269), (135, 9353), (137, 9356), (143, 9368),

Gene: Findley_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for Findley_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: Fionnbharth_15 Start: 10234, Stop: 10608, Start Num: 28

Candidate Starts for Fionnbharth_15:

(Start: 28 @10234 has 18 MA's), (Start: 38 @10243 has 2 MA's), (45, 10261), (57, 10309), (73, 10369), (81, 10405), (84, 10414), (85, 10417), (88, 10426), (108, 10480), (124, 10540), (135, 10573), (137, 10576),

Gene: Flathead_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Flathead_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Floral_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for Floral_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Frankie_8 Start: 6121, Stop: 6492, Start Num: 36

Candidate Starts for Frankie_8:

(Start: 36 @6121 has 82 MA's), (47, 6151), (74, 6262), (77, 6277), (78, 6280), (80, 6286), (118, 6400), (135, 6451), (149, 6484),

Gene: Fryberger_40 Start: 15313, Stop: 15726, Start Num: 36

Candidate Starts for Fryberger_40:

(Start: 36 @15313 has 82 MA's), (46, 15340), (48, 15346), (49, 15349), (59, 15397), (79, 15472), (83, 15484), (96, 15529), (105, 15562), (125, 15637),

Gene: Ganymede_14 Start: 8998, Stop: 9384, Start Num: 37

Candidate Starts for Ganymede_14:

(Start: 37 @8998 has 128 MA's), (Start: 51 @9040 has 6 MA's), (64, 9115), (80, 9175), (84, 9187), (110, 9262), (143, 9361),

Gene: Gattaca_40 Start: 16578, Stop: 17003, Start Num: 33

Candidate Starts for Gattaca_40:

(Start: 32 @16575 has 17 MA's), (Start: 33 @16578 has 15 MA's), (Start: 43 @16602 has 1 MA's), (70, 16695), (86, 16761), (90, 16773), (91, 16782), (94, 16785), (115, 16854), (120, 16875), (142, 16938), (150, 16980), (151, 16986),

Gene: Gengar_12 Start: 9112, Stop: 9495, Start Num: 37

Candidate Starts for Gengar_12:

(Start: 37 @9112 has 128 MA's), (49, 9145), (57, 9196), (64, 9229), (73, 9256), (80, 9289), (110, 9376), (135, 9460), (137, 9463), (143, 9475),

Gene: Geraldini_14 Start: 9001, Stop: 9387, Start Num: 37

Candidate Starts for Geraldini_14:

(Start: 37 @9001 has 128 MA's), (Start: 51 @9043 has 6 MA's), (64, 9118), (73, 9145), (80, 9178), (84, 9190), (110, 9265), (143, 9364),

Gene: Girafales_8 Start: 5923, Stop: 6294, Start Num: 36

Candidate Starts for Girafales_8:

(Start: 36 @5923 has 82 MA's), (47, 5953), (74, 6064), (77, 6079), (78, 6082), (80, 6088), (81, 6091), (118, 6202), (135, 6253), (149, 6286),

Gene: Guanica15_14 Start: 7932, Stop: 8309, Start Num: 37

Candidate Starts for Guanica15_14:

(11, 7854), (Start: 37 @7932 has 128 MA's), (64, 8043), (81, 8106), (84, 8115), (127, 8247), (135, 8274), (143, 8289),

Gene: Guey18_45 Start: 16506, Stop: 16919, Start Num: 36

Candidate Starts for Guey18_45:

(Start: 36 @16506 has 82 MA's), (46, 16533), (48, 16539), (49, 16542), (59, 16590), (79, 16665), (83, 16677), (96, 16722), (105, 16755), (125, 16830),

Gene: Guillsminger_12 Start: 9087, Stop: 9470, Start Num: 37

Candidate Starts for Guillsminger_12:

(Start: 37 @9087 has 128 MA's), (49, 9120), (57, 9171), (64, 9204), (73, 9231), (80, 9264), (110, 9351), (135, 9435), (137, 9438), (143, 9450),

Gene: Hammy_13 Start: 8907, Stop: 9293, Start Num: 36

Candidate Starts for Hammy_13:

(Start: 36 @8907 has 82 MA's), (45, 8931), (59, 9006), (64, 9027), (80, 9087), (84, 9099), (85, 9102), (118, 9207), (140, 9267), (143, 9273),

Gene: HedwigODU_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for HedwigODU_14:

(Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (73, 9125), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: Heftyboy_12 Start: 9214, Stop: 9597, Start Num: 37

Candidate Starts for Heftyboy_12:

(Start: 37 @9214 has 128 MA's), (49, 9247), (Start: 51 @9256 has 6 MA's), (64, 9331), (73, 9358), (80, 9391), (110, 9478), (135, 9562), (137, 9565), (143, 9577),

Gene: Hegedechwinu_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Hegedechwinu_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Homura_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Homura_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Huphlebuff_43 Start: 17203, Stop: 17628, Start Num: 33

Candidate Starts for Huphlebuff_43:

(Start: 32 @17200 has 17 MA's), (Start: 33 @17203 has 15 MA's), (Start: 43 @17227 has 1 MA's), (70, 17320), (86, 17386), (90, 17398), (91, 17407), (94, 17410), (115, 17479), (120, 17500), (142, 17563), (150, 17605), (151, 17611),

Gene: Hurricane_13 Start: 9000, Stop: 9383, Start Num: 37

Candidate Starts for Hurricane_13:

(Start: 37 @9000 has 128 MA's), (53, 9051), (64, 9117), (80, 9177), (84, 9189), (85, 9192), (110, 9264), (135, 9348), (143, 9363),

Gene: Hyperbowlee_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Hyperbowlee_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Illumine_14 Start: 8977, Stop: 9357, Start Num: 37

Candidate Starts for Illumine_14:

(24, 8956), (Start: 37 @8977 has 128 MA's), (Start: 51 @9019 has 6 MA's), (55, 9049), (57, 9055), (64, 9088), (80, 9148), (110, 9235), (143, 9334),

Gene: Inky_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Inky_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: InvictusManeo_12 Start: 9182, Stop: 9565, Start Num: 37

Candidate Starts for InvictusManeo_12:

(Start: 14 @9101 has 2 MA's), (16, 9107), (22, 9155), (Start: 37 @9182 has 128 MA's), (Start: 51 @9224 has 6 MA's), (64, 9299), (73, 9326), (80, 9359), (89, 9386), (110, 9446), (129, 9509), (135, 9530), (137, 9533), (143, 9545),

Gene: JAWS_14 Start: 9017, Stop: 9361, Start Num: 51

Candidate Starts for JAWS_14:

(Start: 37 @8975 has 128 MA's), (Start: 51 @9017 has 6 MA's), (64, 9092), (80, 9152), (84, 9164), (110, 9239), (143, 9338),

Gene: JF1_15 Start: 10233, Stop: 10607, Start Num: 28

Candidate Starts for JF1_15:

(Start: 28 @10233 has 18 MA's), (Start: 38 @10242 has 2 MA's), (45, 10260), (57, 10308), (73, 10368), (81, 10404), (84, 10413), (85, 10416), (88, 10425), (108, 10479), (124, 10539), (135, 10572), (137, 10575),

Gene: Jablanski_9 Start: 6933, Stop: 7334, Start Num: 32

Candidate Starts for Jablanski_9:

(2, 6702), (3, 6714), (5, 6741), (8, 6780), (Start: 30 @6924 has 1 MA's), (Start: 32 @6933 has 17 MA's), (57, 7014), (69, 7065), (77, 7095), (84, 7116), (85, 7119), (105, 7185), (108, 7191), (123, 7251), (146, 7317),

Gene: JalFarm20_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for JalFarm20_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Jarvi_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Jarvi_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Jayhawk_14 Start: 8982, Stop: 9368, Start Num: 37

Candidate Starts for Jayhawk_14:

(Start: 37 @8982 has 128 MA's), (Start: 51 @9024 has 6 MA's), (64, 9099), (73, 9126), (80, 9159), (84, 9171), (110, 9246), (143, 9345),

Gene: Jeckyll_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Jeckyll_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Job42_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Job42_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: JoieB_42 Start: 17422, Stop: 17847, Start Num: 33

Candidate Starts for JoieB_42:

(Start: 32 @17419 has 17 MA's), (Start: 33 @17422 has 15 MA's), (Start: 43 @17446 has 1 MA's), (70, 17539), (86, 17605), (90, 17617), (91, 17626), (94, 17629), (115, 17698), (120, 17719), (142, 17782), (150, 17824), (151, 17830),

Gene: Joy99_14 Start: 8947, Stop: 9333, Start Num: 37

Candidate Starts for Joy99_14:

(Start: 37 @8947 has 128 MA's), (Start: 51 @8989 has 6 MA's), (64, 9064), (80, 9124), (84, 9136), (110, 9211), (143, 9310),

Gene: Juice456_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Juice456_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Juicebox_10 Start: 7876, Stop: 8259, Start Num: 39

Candidate Starts for Juicebox_10:

(23, 7804), (Start: 39 @7876 has 5 MA's), (49, 7897), (62, 7972), (66, 7987), (84, 8056), (128, 8191), (144, 8239),

Gene: Juliette_15 Start: 10108, Stop: 10482, Start Num: 28

Candidate Starts for Juliette_15:

(Start: 28 @10108 has 18 MA's), (Start: 38 @10117 has 2 MA's), (45, 10135), (57, 10183), (73, 10243), (80, 10276), (81, 10279), (84, 10288), (85, 10291), (88, 10300), (108, 10354), (124, 10414), (127, 10420), (135, 10447), (140, 10456),

Gene: Keelan_38 Start: 15288, Stop: 15701, Start Num: 36

Candidate Starts for Keelan_38:

(Start: 36 @15288 has 82 MA's), (46, 15315), (49, 15324), (59, 15372), (79, 15447), (83, 15459), (105, 15537), (125, 15612), (136, 15648), (138, 15654),

Gene: Keshu_13 Start: 8987, Stop: 9370, Start Num: 37

Candidate Starts for Keshu_13:

(Start: 37 @8987 has 128 MA's), (64, 9104), (80, 9164), (84, 9176), (85, 9179), (110, 9251), (135, 9335), (143, 9350),

Gene: KiSi_13 Start: 7852, Stop: 8235, Start Num: 37

Candidate Starts for KiSi_13:

(17, 7804), (Start: 37 @7852 has 128 MA's), (Start: 51 @7894 has 6 MA's), (56, 7927), (64, 7969), (73, 7996), (80, 8029), (84, 8041), (110, 8116), (135, 8200), (140, 8209), (143, 8215),

Gene: Kimberlium_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Kimberlium_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Kingsley_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Kingsley_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Kratio_11 Start: 8728, Stop: 9192, Start Num: 14

Candidate Starts for Kratio_11:

(Start: 14 @8728 has 2 MA's), (16, 8734), (22, 8782), (Start: 37 @8809 has 128 MA's), (Start: 51 @8851 has 6 MA's), (64, 8926), (73, 8953), (80, 8986), (89, 9013), (110, 9073), (129, 9136), (135, 9157), (137, 9160), (143, 9172),

Gene: Krueger_13 Start: 7907, Stop: 8293, Start Num: 36

Candidate Starts for Krueger_13:

(Start: 36 @7907 has 82 MA's), (41, 7922), (64, 8027), (80, 8087), (85, 8102), (123, 8225), (135, 8258), (143, 8273),

Gene: Kuwabara_9 Start: 6411, Stop: 6794, Start Num: 36

Candidate Starts for Kuwabara_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (111, 6663), (147, 6780),

Gene: Larva_12 Start: 8924, Stop: 9307, Start Num: 37

Candidate Starts for Larva_12:

(16, 8876), (Start: 37 @8924 has 128 MA's), (64, 9041), (73, 9068), (80, 9101), (89, 9128), (110, 9188), (129, 9251), (135, 9272), (137, 9275), (143, 9287),

Gene: LastHope_14 Start: 8004, Stop: 8381, Start Num: 37

Candidate Starts for LastHope_14:

(Start: 37 @8004 has 128 MA's), (64, 8115), (81, 8178), (84, 8187), (135, 8346), (143, 8361),

Gene: LaterM_14 Start: 8945, Stop: 9325, Start Num: 37

Candidate Starts for LaterM_14:

(24, 8924), (25, 8930), (Start: 37 @8945 has 128 MA's), (Start: 51 @8987 has 6 MA's), (55, 9017), (57, 9023), (64, 9056), (80, 9116), (110, 9203), (143, 9302),

Gene: LeMond_13 Start: 7924, Stop: 8307, Start Num: 37

Candidate Starts for LeMond_13:

(Start: 37 @7924 has 128 MA's), (Start: 51 @7966 has 6 MA's), (56, 7999), (64, 8041), (73, 8068), (80, 8101), (84, 8113), (110, 8188), (135, 8272), (140, 8281), (143, 8287),

Gene: Leozinho_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Leozinho_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Leston_12 Start: 9217, Stop: 9600, Start Num: 37

Candidate Starts for Leston_12:

(Start: 37 @9217 has 128 MA's), (49, 9250), (Start: 51 @9259 has 6 MA's), (64, 9334), (73, 9361), (80, 9394), (110, 9481), (135, 9565), (137, 9568), (143, 9580),

Gene: LilPharaoh_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for LilPharaoh_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: LilSpotty_8 Start: 6103, Stop: 6471, Start Num: 36

Candidate Starts for LilSpotty_8:

(Start: 36 @6103 has 82 MA's), (Start: 37 @6106 has 128 MA's), (45, 6127), (59, 6187), (71, 6229), (77, 6253), (80, 6262), (84, 6274), (99, 6316), (106, 6331), (113, 6352), (123, 6391), (132, 6418), (145, 6451),

Gene: Lilas_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for Lilas_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Lilbit_42 Start: 17396, Stop: 17824, Start Num: 32

Candidate Starts for Lilbit_42:

(Start: 32 @17396 has 17 MA's), (Start: 33 @17399 has 15 MA's), (Start: 43 @17423 has 1 MA's), (70, 17516), (86, 17582), (90, 17594), (91, 17603), (94, 17606), (115, 17675), (120, 17696), (142,

17759), (150, 17801), (151, 17807),

Gene: LindNT_14 Start: 8945, Stop: 9331, Start Num: 37

Candidate Starts for LindNT_14:

(Start: 37 @8945 has 128 MA's), (Start: 51 @8987 has 6 MA's), (64, 9062), (73, 9089), (80, 9122), (84, 9134), (110, 9209), (143, 9308),

Gene: LittleLaf_41 Start: 17128, Stop: 17553, Start Num: 33

Candidate Starts for LittleLaf_41:

(Start: 32 @17125 has 17 MA's), (Start: 33 @17128 has 15 MA's), (Start: 43 @17152 has 1 MA's), (70, 17245), (86, 17311), (90, 17323), (91, 17332), (94, 17335), (115, 17404), (120, 17425), (142, 17488), (150, 17530), (151, 17536),

Gene: LittleShirley_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for LittleShirley_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Llorens_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Llorens_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: LonelyBoi_9 Start: 6933, Stop: 7334, Start Num: 32

Candidate Starts for LonelyBoi_9:

(2, 6702), (3, 6714), (8, 6780), (Start: 30 @6924 has 1 MA's), (Start: 32 @6933 has 17 MA's), (57, 7014), (69, 7065), (77, 7095), (84, 7116), (85, 7119), (105, 7185), (108, 7191), (123, 7251), (146, 7317),

Gene: Lorde_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Lorde_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: LunaStella_8 Start: 6532, Stop: 6906, Start Num: 35

Candidate Starts for LunaStella_8:

(Start: 35 @6532 has 7 MA's), (45, 6559), (72, 6664), (77, 6688), (80, 6697), (89, 6724), (104, 6760), (123, 6829), (126, 6835), (130, 6844), (134, 6859),

Gene: Lunahalos_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Lunahalos_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: MacnCheese_14 Start: 9215, Stop: 9598, Start Num: 37

Candidate Starts for MacnCheese_14:

(12, 9137), (15, 9146), (Start: 37 @9215 has 128 MA's), (64, 9332), (80, 9392), (84, 9404), (87, 9413), (110, 9479), (135, 9563), (143, 9578),

Gene: Madiba_8 Start: 5926, Stop: 6297, Start Num: 36

Candidate Starts for Madiba_8:

(Start: 36 @5926 has 82 MA's), (47, 5956), (74, 6067), (77, 6082), (78, 6085), (80, 6091), (81, 6094), (118, 6205), (135, 6256), (149, 6289),

Gene: MalagasyRose_15 Start: 9283, Stop: 9678, Start Num: 44

Candidate Starts for MalagasyRose_15:

(Start: 44 @9283 has 2 MA's), (52, 9310), (65, 9391), (67, 9397), (79, 9457), (82, 9466), (84, 9472), (85, 9475), (100, 9523), (101, 9526), (131, 9628), (143, 9658),

Gene: Malthus_15 Start: 10153, Stop: 10527, Start Num: 28

Candidate Starts for Malthus_15:

(9, 10069), (Start: 28 @10153 has 18 MA's), (Start: 38 @10162 has 2 MA's), (45, 10180), (57, 10228), (73, 10288), (81, 10324), (84, 10333), (85, 10336), (88, 10345), (108, 10399), (124, 10459), (135, 10492), (137, 10495),

Gene: Marcoliusprime_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for Marcoliusprime_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: MarkPhew_14 Start: 7826, Stop: 8203, Start Num: 37

Candidate Starts for MarkPhew_14:

(18, 7775), (Start: 37 @7826 has 128 MA's), (81, 8000), (84, 8009), (110, 8084), (135, 8168), (143, 8183),

Gene: Marker_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Marker_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Marshawn_15 Start: 8512, Stop: 8898, Start Num: 37

Candidate Starts for Marshawn_15:

(7, 8353), (Start: 37 @8512 has 128 MA's), (41, 8524), (45, 8533), (59, 8605), (64, 8626), (80, 8686), (84, 8698), (88, 8710), (110, 8773), (124, 8824), (137, 8866), (140, 8872), (143, 8878),

Gene: Marteena_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for Marteena_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Marvin_39 Start: 17422, Stop: 17823, Start Num: 43

Candidate Starts for Marvin_39:

(Start: 32 @17395 has 17 MA's), (Start: 33 @17398 has 15 MA's), (Start: 43 @17422 has 1 MA's), (70, 17515), (86, 17581), (90, 17593), (91, 17602), (94, 17605), (115, 17674), (120, 17695), (142, 17758), (150, 17800), (151, 17806),

Gene: McMater_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for McMater_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: Mdavu_10 Start: 8254, Stop: 8637, Start Num: 37

Candidate Starts for Mdavu_10:

(20, 8218), (Start: 37 @8254 has 128 MA's), (64, 8371), (73, 8398), (80, 8431), (84, 8443), (135, 8602), (143, 8617),

Gene: MeaningOfLife_14 Start: 8954, Stop: 9340, Start Num: 37

Candidate Starts for MeaningOfLife_14:

(Start: 37 @8954 has 128 MA's), (Start: 51 @8996 has 6 MA's), (64, 9071), (80, 9131), (84, 9143), (110, 9218), (143, 9317),

Gene: Megsy_14 Start: 8948, Stop: 9334, Start Num: 37

Candidate Starts for Megsy_14:

(Start: 37 @8948 has 128 MA's), (Start: 51 @8990 has 6 MA's), (64, 9065), (73, 9092), (80, 9125), (84, 9137), (110, 9212), (143, 9311),

Gene: Milly_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for Milly_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: Miryou_12 Start: 9065, Stop: 9448, Start Num: 37

Candidate Starts for Miryou_12:

(Start: 37 @9065 has 128 MA's), (49, 9098), (57, 9149), (64, 9182), (73, 9209), (80, 9242), (110, 9329), (135, 9413), (137, 9416), (143, 9428),

Gene: Misha28_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for Misha28_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: MissDaisy_15 Start: 10007, Stop: 10381, Start Num: 28

Candidate Starts for MissDaisy_15:

(Start: 28 @10007 has 18 MA's), (Start: 38 @10016 has 2 MA's), (45, 10034), (57, 10082), (73, 10142), (81, 10178), (84, 10187), (85, 10190), (108, 10253), (124, 10313), (135, 10346), (137, 10349),

Gene: Mitti_15 Start: 10157, Stop: 10531, Start Num: 28

Candidate Starts for Mitti_15:

(Start: 28 @10157 has 18 MA's), (Start: 38 @10166 has 2 MA's), (45, 10184), (57, 10232), (73, 10292), (81, 10328), (84, 10337), (85, 10340), (88, 10349), (108, 10403), (124, 10463), (135, 10496), (137, 10499),

Gene: MortyNRick_9 Start: 6396, Stop: 6794, Start Num: 29

Candidate Starts for MortyNRick_9:

(Start: 29 @6396 has 1 MA's), (Start: 36 @6411 has 82 MA's), (61, 6501), (67, 6528), (77, 6561), (80, 6570), (81, 6573), (84, 6582), (89, 6597), (93, 6615), (111, 6663), (147, 6780),

Gene: MosMoris_39 Start: 16578, Stop: 17003, Start Num: 33

Candidate Starts for MosMoris_39:

(Start: 32 @16575 has 17 MA's), (Start: 33 @16578 has 15 MA's), (Start: 43 @16602 has 1 MA's), (70, 16695), (86, 16761), (90, 16773), (91, 16782), (94, 16785), (115, 16854), (120, 16875), (142, 16938), (150, 16980), (151, 16986),

Gene: Mova_8 Start: 5930, Stop: 6301, Start Num: 36

Candidate Starts for Mova_8:

(Start: 36 @5930 has 82 MA's), (47, 5960), (74, 6071), (77, 6086), (78, 6089), (80, 6095), (118, 6209), (135, 6260), (149, 6293),

Gene: Mozy_8 Start: 5926, Stop: 6297, Start Num: 36

Candidate Starts for Mozy_8:

(Start: 36 @5926 has 82 MA's), (54, 5974), (68, 6046), (77, 6082), (78, 6085), (80, 6091), (81, 6094), (102, 6157), (114, 6184), (118, 6205), (127, 6229), (135, 6256),

Gene: Mufasa_10 Start: 6962, Stop: 7348, Start Num: 27

Candidate Starts for Mufasa_10:

(Start: 14 @6893 has 2 MA's), (26, 6953), (Start: 27 @6962 has 10 MA's), (81, 7142), (84, 7151), (85, 7154), (110, 7226), (135, 7310), (143, 7325),

Gene: MulchExplorer_9 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for MulchExplorer_9:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Murucutumbu_14 Start: 8938, Stop: 9318, Start Num: 37

Candidate Starts for Murucutumbu_14:

(24, 8917), (25, 8923), (Start: 37 @8938 has 128 MA's), (Start: 51 @8980 has 6 MA's), (55, 9010), (57, 9016), (64, 9049), (80, 9109), (110, 9196), (143, 9295),

Gene: Mynx_14 Start: 9001, Stop: 9387, Start Num: 37

Candidate Starts for Mynx_14:

(Start: 37 @9001 has 128 MA's), (Start: 51 @9043 has 6 MA's), (64, 9118), (80, 9178), (84, 9190), (110, 9265), (143, 9364),

Gene: Nergal_13 Start: 9749, Stop: 10141, Start Num: 44

Candidate Starts for Nergal_13:

(42, 9746), (Start: 44 @9749 has 2 MA's), (65, 9857), (67, 9863), (82, 9929), (84, 9935), (89, 9950),

Gene: Nibb_13 Start: 7968, Stop: 8345, Start Num: 37

Candidate Starts for Nibb_13:

(10, 7887), (Start: 14 @7899 has 2 MA's), (18, 7917), (Start: 37 @7968 has 128 MA's), (81, 8142), (84, 8151), (110, 8226), (135, 8310), (143, 8325),

Gene: Nikao_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Nikao_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Niklas_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for Niklas_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: Nutello_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Nutello_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: OkiRoe_12 Start: 9087, Stop: 9470, Start Num: 37

Candidate Starts for OkiRoe_12:

(Start: 37 @9087 has 128 MA's), (49, 9120), (57, 9171), (64, 9204), (73, 9231), (80, 9264), (110, 9351), (135, 9435), (137, 9438), (143, 9450),

Gene: Oksu_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Oksu_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: OmniCritical_15 Start: 10144, Stop: 10518, Start Num: 28

Candidate Starts for OmniCritical_15:

(Start: 28 @10144 has 18 MA's), (Start: 38 @10153 has 2 MA's), (45, 10171), (57, 10219), (73, 10279), (81, 10315), (84, 10324), (85, 10327), (88, 10336), (108, 10390), (124, 10450), (135, 10483), (137, 10486),

Gene: Omnicron_12 Start: 8147, Stop: 8530, Start Num: 37

Candidate Starts for Omnicron_12:

(4, 7988), (7, 8021), (Start: 37 @8147 has 128 MA's), (49, 8180), (57, 8231), (64, 8264), (73, 8291), (80, 8324), (110, 8411), (121, 8450), (135, 8495), (143, 8510),

Gene: Oscar_13 Start: 7925, Stop: 8308, Start Num: 37

Candidate Starts for Oscar_13:

(Start: 37 @7925 has 128 MA's), (Start: 51 @7967 has 6 MA's), (56, 8000), (64, 8042), (73, 8069), (80, 8102), (84, 8114), (110, 8189), (135, 8273), (140, 8282), (143, 8288),

Gene: OwlsT2W_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for OwlsT2W_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Padfoot_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Padfoot_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Padpat_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for Padpat_14:

(Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: Paola_12 Start: 9087, Stop: 9470, Start Num: 37

Candidate Starts for Paola_12:

(Start: 37 @9087 has 128 MA's), (49, 9120), (57, 9171), (64, 9204), (73, 9231), (80, 9264), (110, 9351), (135, 9435), (137, 9438), (143, 9450),

Gene: Patt_15 Start: 9983, Stop: 10357, Start Num: 28

Candidate Starts for Patt_15:

(Start: 28 @9983 has 18 MA's), (Start: 38 @9992 has 2 MA's), (45, 10010), (57, 10058), (73, 10118), (81, 10154), (84, 10163), (85, 10166), (108, 10229), (124, 10289), (135, 10322), (137, 10325),

Gene: Peanam_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for Peanam_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: Peel_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Peel_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Pharb_13 Start: 8835, Stop: 9218, Start Num: 37

Candidate Starts for Pharb_13:

(Start: 37 @8835 has 128 MA's), (64, 8952), (73, 8979), (80, 9012), (84, 9024), (85, 9027), (110, 9099), (135, 9183), (143, 9198),

Gene: PhelpsODU_13 Start: 7967, Stop: 8347, Start Num: 36

Candidate Starts for PhelpsODU_13:

(Start: 36 @7967 has 82 MA's), (45, 7991), (80, 8141), (84, 8153), (85, 8156), (123, 8279), (127, 8285), (135, 8312), (143, 8327),

Gene: Phrank_13 Start: 7911, Stop: 8291, Start Num: 36

Candidate Starts for Phrank_13:

(Start: 36 @7911 has 82 MA's), (80, 8085), (84, 8097), (85, 8100), (123, 8223), (135, 8256), (143, 8271),

Gene: Piatt_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Piatt_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Piper2020_8 Start: 5930, Stop: 6301, Start Num: 36

Candidate Starts for Piper2020_8:

(Start: 36 @5930 has 82 MA's), (47, 5960), (74, 6071), (77, 6086), (78, 6089), (80, 6095), (81, 6098), (118, 6209), (135, 6260), (149, 6293),

Gene: Pixie_13 Start: 8739, Stop: 9122, Start Num: 37

Candidate Starts for Pixie_13:

(Start: 37 @8739 has 128 MA's), (64, 8856), (80, 8916), (84, 8928), (85, 8931), (87, 8937), (110, 9003), (129, 9066), (135, 9087), (143, 9102),

Gene: Plumbus_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Plumbus_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Poise_41 Start: 16716, Stop: 17141, Start Num: 33

Candidate Starts for Poise_41:

(Start: 32 @16713 has 17 MA's), (Start: 33 @16716 has 15 MA's), (Start: 43 @16740 has 1 MA's), (70, 16833), (86, 16899), (90, 16911), (91, 16920), (94, 16923), (115, 16992), (120, 17013), (142, 17076), (150, 17118), (151, 17124),

Gene: Pokerus_13 Start: 8935, Stop: 9321, Start Num: 37

Candidate Starts for Pokerus_13:

(Start: 37 @8935 has 128 MA's), (Start: 51 @8977 has 6 MA's), (64, 9052), (73, 9079), (80, 9112), (84, 9124), (143, 9298),

Gene: Pollux_9 Start: 7086, Stop: 7487, Start Num: 32

Candidate Starts for Pollux_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 1 MA's), (Start: 32 @7086 has 17 MA's), (57, 7167), (69, 7218), (77, 7248), (84, 7269), (85, 7272), (88, 7281), (108, 7344), (123, 7404), (146, 7470),

Gene: Pollywog_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Pollywog_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Posh_9 Start: 7080, Stop: 7481, Start Num: 32

Candidate Starts for Posh_9:

(1, 6768), (2, 6849), (3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 1 MA's), (Start: 32 @7080 has 17 MA's), (57, 7161), (69, 7212), (77, 7242), (84, 7263), (85, 7266), (105, 7332), (108, 7338), (123, 7398), (146, 7464),

Gene: Poushou_10 Start: 8239, Stop: 8625, Start Num: 39

Candidate Starts for Poushou_10:

(Start: 39 @8239 has 5 MA's), (58, 8320), (64, 8347), (81, 8416), (84, 8425), (112, 8506), (128, 8560),

Gene: Pringar_41 Start: 17028, Stop: 17453, Start Num: 33

Candidate Starts for Pringar_41:

(Start: 32 @17025 has 17 MA's), (Start: 33 @17028 has 15 MA's), (Start: 43 @17052 has 1 MA's), (70, 17145), (90, 17223), (91, 17232), (94, 17235), (115, 17304), (120, 17325), (151, 17436),

Gene: Prithvi_14 Start: 8945, Stop: 9331, Start Num: 37

Candidate Starts for Prithvi_14:

(Start: 37 @8945 has 128 MA's), (Start: 51 @8987 has 6 MA's), (64, 9062), (73, 9089), (80, 9122), (84, 9134), (110, 9209), (143, 9308),

Gene: Psycho_12 Start: 9054, Stop: 9437, Start Num: 37

Candidate Starts for Psycho_12:

(16, 9006), (Start: 37 @9054 has 128 MA's), (64, 9171), (73, 9198), (80, 9231), (89, 9258), (110, 9318), (129, 9381), (135, 9402), (137, 9405), (143, 9417),

Gene: Pytheas_9 Start: 6933, Stop: 7334, Start Num: 32

Candidate Starts for Pytheas_9:

(2, 6702), (3, 6714), (5, 6741), (8, 6780), (Start: 30 @6924 has 1 MA's), (Start: 32 @6933 has 17 MA's), (57, 7014), (69, 7065), (77, 7095), (84, 7116), (85, 7119), (105, 7185), (108, 7191), (123, 7251), (146, 7317),

Gene: Quico_8 Start: 5923, Stop: 6294, Start Num: 36

Candidate Starts for Quico_8:

(Start: 36 @5923 has 82 MA's), (47, 5953), (74, 6064), (77, 6079), (78, 6082), (80, 6088), (81, 6091), (118, 6202), (135, 6253), (149, 6286),

Gene: QuincyRose_13 Start: 8998, Stop: 9384, Start Num: 37

Candidate Starts for QuincyRose_13:

(Start: 37 @8998 has 128 MA's), (Start: 51 @9040 has 6 MA's), (64, 9115), (80, 9175), (84, 9187), (110, 9262), (143, 9361),

Gene: Raela_41 Start: 17271, Stop: 17696, Start Num: 33

Candidate Starts for Raela_41:

(Start: 32 @17268 has 17 MA's), (Start: 33 @17271 has 15 MA's), (Start: 43 @17295 has 1 MA's), (70, 17388), (86, 17454), (90, 17466), (91, 17475), (94, 17478), (115, 17547), (120, 17568), (142, 17631), (150, 17673), (151, 17679),

Gene: Ramen_14 Start: 8981, Stop: 9367, Start Num: 37

Candidate Starts for Ramen_14:

(Start: 37 @8981 has 128 MA's), (Start: 51 @9023 has 6 MA's), (64, 9098), (73, 9125), (80, 9158), (84, 9170), (110, 9245), (143, 9344),

Gene: Ramsey_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Ramsey_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (127, 6230), (135, 6257), (149, 6290),

Gene: Rando14_12 Start: 8049, Stop: 8432, Start Num: 37

Candidate Starts for Rando14_12:

(10, 7962), (13, 7974), (20, 8013), (25, 8034), (Start: 37 @8049 has 128 MA's), (57, 8133), (64, 8166), (73, 8193), (80, 8226), (89, 8253), (110, 8313), (121, 8352), (135, 8397), (137, 8400), (143, 8412),

Gene: Rapunzel97_14 Start: 8982, Stop: 9368, Start Num: 37

Candidate Starts for Rapunzel97_14:

(Start: 37 @8982 has 128 MA's), (Start: 51 @9024 has 6 MA's), (64, 9099), (73, 9126), (80, 9159), (84, 9171), (110, 9246), (143, 9345),

Gene: RedRaider77_41 Start: 17172, Stop: 17597, Start Num: 33

Candidate Starts for RedRaider77_41:

(Start: 32 @17169 has 17 MA's), (Start: 33 @17172 has 15 MA's), (Start: 43 @17196 has 1 MA's), (70, 17289), (86, 17355), (90, 17367), (91, 17376), (94, 17379), (115, 17448), (120, 17469), (142, 17532), (150, 17574), (151, 17580),

Gene: Renaud18_8 Start: 6412, Stop: 6783, Start Num: 35

Candidate Starts for Renaud18_8:

(Start: 35 @6412 has 7 MA's), (45, 6436), (72, 6541), (77, 6565), (80, 6574), (89, 6601), (104, 6637), (123, 6706), (126, 6712), (130, 6721), (134, 6736),

Gene: Reptar3000_15 Start: 9985, Stop: 10359, Start Num: 28

Candidate Starts for Reptar3000_15:

(Start: 28 @9985 has 18 MA's), (Start: 38 @9994 has 2 MA's), (45, 10012), (57, 10060), (73, 10120), (81, 10156), (84, 10165), (85, 10168), (108, 10231), (124, 10291), (135, 10324), (137, 10327),

Gene: Rialto_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Rialto_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: Richo_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for Richo_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: RockyHorror_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for RockyHorror_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Ronaldo_43 Start: 16243, Stop: 16656, Start Num: 36

Candidate Starts for Ronaldo_43:

(Start: 36 @16243 has 82 MA's), (46, 16270), (48, 16276), (49, 16279), (59, 16327), (79, 16402), (83, 16414), (96, 16459), (105, 16492), (125, 16567),

Gene: Rosmarinus_14 Start: 9009, Stop: 9395, Start Num: 37

Candidate Starts for Rosmarinus_14:

(Start: 37 @9009 has 128 MA's), (Start: 51 @9051 has 6 MA's), (64, 9126), (80, 9186), (84, 9198), (110, 9273), (143, 9372),

Gene: Ruthiejr_14 Start: 9839, Stop: 10213, Start Num: 28

Candidate Starts for Ruthiejr_14:

(Start: 28 @9839 has 18 MA's), (Start: 38 @9848 has 2 MA's), (45, 9866), (57, 9914), (73, 9974), (80, 10007), (81, 10010), (84, 10019), (85, 10022), (88, 10031), (108, 10085), (124, 10145), (127, 10151), (135, 10178), (140, 10187),

Gene: SamScheppers_13 Start: 9760, Stop: 10134, Start Num: 28

Candidate Starts for SamScheppers_13:

(Start: 28 @9760 has 18 MA's), (Start: 38 @9769 has 2 MA's), (45, 9787), (57, 9835), (73, 9895), (81, 9931), (84, 9940), (85, 9943), (88, 9952), (108, 10006), (124, 10066), (135, 10099), (137, 10102),

Gene: SamuelLPlaqson_14 Start: 8929, Stop: 9309, Start Num: 37

Candidate Starts for SamuelLPlaqson_14:

(Start: 37 @8929 has 128 MA's), (Start: 51 @8971 has 6 MA's), (55, 9001), (64, 9040), (73, 9067), (80, 9100), (110, 9187), (129, 9250), (143, 9286),

Gene: Sarma624_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Sarma624_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Scarlett_13 Start: 7924, Stop: 8307, Start Num: 37

Candidate Starts for Scarlett_13:

(Start: 37 @7924 has 128 MA's), (Start: 51 @7966 has 6 MA's), (56, 7999), (64, 8041), (73, 8068), (80, 8101), (84, 8113), (110, 8188), (135, 8272), (140, 8281), (143, 8287),

Gene: Seagreen_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Seagreen_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (118, 6207), (135, 6258), (149, 6291),

Gene: SgtBeansprout_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for SgtBeansprout_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Shadow1_12 Start: 7822, Stop: 8202, Start Num: 36

Candidate Starts for Shadow1_12:

(Start: 36 @7822 has 82 MA's), (80, 7996), (84, 8008), (85, 8011), (123, 8134), (135, 8167), (143, 8182),

Gene: Shaobing_14 Start: 8056, Stop: 8433, Start Num: 37

Candidate Starts for Shaobing_14:

(Start: 37 @8056 has 128 MA's), (Start: 51 @8098 has 6 MA's), (54, 8113), (64, 8167), (73, 8194), (80, 8227), (81, 8230), (84, 8239), (110, 8314), (135, 8398), (137, 8401), (140, 8407), (143, 8413),

Gene: ShedlockHolmes_13 Start: 8987, Stop: 9370, Start Num: 37

Candidate Starts for ShedlockHolmes_13:

(Start: 37 @8987 has 128 MA's), (64, 9104), (80, 9164), (84, 9176), (85, 9179), (87, 9185), (110, 9251), (135, 9335), (143, 9350),

Gene: ShiaSurprise_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for ShiaSurprise_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: SimranZ1_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for SimranZ1_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: SirPhilip_13 Start: 7688, Stop: 8065, Start Num: 37

Candidate Starts for SirPhilip_13:

(Start: 37 @7688 has 128 MA's), (Start: 51 @7730 has 6 MA's), (64, 7799), (81, 7862), (84, 7871), (110, 7946), (140, 8039), (143, 8045),

Gene: Slarp_15 Start: 10244, Stop: 10618, Start Num: 28

Candidate Starts for Slarp_15:

(Start: 28 @10244 has 18 MA's), (Start: 38 @10253 has 2 MA's), (45, 10271), (57, 10319), (73, 10379), (81, 10415), (84, 10424), (85, 10427), (88, 10436), (108, 10490), (124, 10550), (135, 10583), (137, 10586),

Gene: Slimphazie_14 Start: 8982, Stop: 9368, Start Num: 37

Candidate Starts for Slimphazie_14:

(Start: 37 @8982 has 128 MA's), (Start: 51 @9024 has 6 MA's), (64, 9099), (73, 9126), (80, 9159), (84, 9171), (110, 9246), (143, 9345),

Gene: SoSeph_12 Start: 9214, Stop: 9597, Start Num: 37

Candidate Starts for SoSeph_12:

(Start: 37 @9214 has 128 MA's), (49, 9247), (Start: 51 @9256 has 6 MA's), (64, 9331), (73, 9358), (80, 9391), (110, 9478), (135, 9562), (137, 9565), (143, 9577),

Gene: Sparky_7 Start: 6404, Stop: 6811, Start Num: 36

Candidate Starts for Sparky_7:

(Start: 35 @6401 has 7 MA's), (Start: 36 @6404 has 82 MA's), (50, 6443), (Start: 51 @6446 has 6 MA's), (60, 6497), (76, 6566), (77, 6569), (81, 6581), (84, 6590), (97, 6626), (105, 6659), (116, 6701), (135, 6764), (137, 6767), (139, 6770),

Gene: Spikelee_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Spikelee_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Spock_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Spock_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Squirty_8 Start: 5926, Stop: 6297, Start Num: 36

Candidate Starts for Squirty_8:

(Start: 36 @5926 has 82 MA's), (47, 5956), (74, 6067), (77, 6082), (78, 6085), (80, 6091), (81, 6094), (118, 6205), (135, 6256), (149, 6289),

Gene: Stap_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Stap_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Starcevich_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Starcevich_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Stinson_14 Start: 8950, Stop: 9330, Start Num: 37

Candidate Starts for Stinson_14:

(24, 8929), (25, 8935), (Start: 37 @8950 has 128 MA's), (Start: 51 @8992 has 6 MA's), (55, 9022), (57, 9028), (64, 9061), (80, 9121), (110, 9208), (143, 9307),

Gene: Strobilo_10 Start: 6976, Stop: 7362, Start Num: 27

Candidate Starts for Strobilo_10:

(Start: 14 @6907 has 2 MA's), (26, 6967), (Start: 27 @6976 has 10 MA's), (81, 7156), (84, 7165), (85, 7168), (88, 7177), (110, 7240), (135, 7324), (143, 7339),

Gene: Sulley_14 Start: 8951, Stop: 9337, Start Num: 37

Candidate Starts for Sulley_14:

(Start: 37 @8951 has 128 MA's), (Start: 51 @8993 has 6 MA's), (64, 9068), (73, 9095), (80, 9128), (84, 9140), (110, 9215), (143, 9314),

Gene: Sunflower1121_12 Start: 7833, Stop: 8213, Start Num: 36

Candidate Starts for Sunflower1121_12:

(Start: 36 @7833 has 82 MA's), (80, 8007), (84, 8019), (85, 8022), (123, 8145), (135, 8178), (143, 8193),

Gene: Syra333_13 Start: 7926, Stop: 8309, Start Num: 36

Candidate Starts for Syra333_13:

(Start: 36 @7926 has 82 MA's), (80, 8100), (84, 8112), (85, 8115), (123, 8238), (135, 8271), (143, 8286),

Gene: TBond007_13 Start: 8738, Stop: 9121, Start Num: 37

Candidate Starts for TBond007_13:

(Start: 37 @8738 has 128 MA's), (64, 8855), (80, 8915), (84, 8927), (85, 8930), (87, 8936), (110, 9002), (129, 9065), (135, 9086), (143, 9101),

Gene: TChen_8 Start: 6532, Stop: 6906, Start Num: 35

Candidate Starts for TChen_8:

(Start: 35 @6532 has 7 MA's), (45, 6559), (72, 6664), (77, 6688), (80, 6697), (89, 6724), (104, 6760), (123, 6829), (126, 6835), (130, 6844), (134, 6859),

Gene: TClif_13 Start: 7920, Stop: 8297, Start Num: 37

Candidate Starts for TClif_13:

(11, 7842), (Start: 37 @7920 has 128 MA's), (64, 8031), (84, 8103), (110, 8178), (124, 8229), (135, 8262), (143, 8277),

Gene: TM4_10 Start: 7028, Stop: 7414, Start Num: 27

Candidate Starts for TM4_10:

(Start: 14 @6959 has 2 MA's), (26, 7019), (Start: 27 @7028 has 10 MA's), (80, 7205), (81, 7208), (84, 7217), (85, 7220), (88, 7229), (110, 7292), (135, 7376), (143, 7391),

Gene: TPA4_9 Start: 7567, Stop: 7953, Start Num: 34

Candidate Starts for TPA4_9:

(34, 7567), (81, 7729), (84, 7738), (109, 7819), (119, 7858), (126, 7879), (131, 7897),

Gene: Tachez_14 Start: 8986, Stop: 9330, Start Num: 51

Candidate Starts for Tachez_14:

(Start: 37 @8944 has 128 MA's), (Start: 51 @8986 has 6 MA's), (64, 9061), (73, 9088), (80, 9121), (84, 9133), (110, 9208), (143, 9307),

Gene: TaiwanKao_14 Start: 8951, Stop: 9337, Start Num: 37

Candidate Starts for TaiwanKao_14:

(Start: 37 @8951 has 128 MA's), (Start: 51 @8993 has 6 MA's), (64, 9068), (73, 9095), (80, 9128), (84, 9140), (110, 9215), (143, 9314),

Gene: Taquito_13 Start: 9830, Stop: 10204, Start Num: 28

Candidate Starts for Taquito_13:

(Start: 28 @9830 has 18 MA's), (Start: 38 @9839 has 2 MA's), (45, 9857), (57, 9905), (73, 9965), (80, 9998), (81, 10001), (84, 10010), (85, 10013), (88, 10022), (108, 10076), (124, 10136), (135, 10169), (137, 10172),

Gene: Tesla_40 Start: 17021, Stop: 17446, Start Num: 33

Candidate Starts for Tesla_40:

(Start: 32 @17018 has 17 MA's), (Start: 33 @17021 has 15 MA's), (Start: 43 @17045 has 1 MA's), (70, 17138), (86, 17204), (90, 17216), (91, 17225), (94, 17228), (115, 17297), (120, 17318), (142, 17381), (150, 17423), (151, 17429),

Gene: ThetaBob_8 Start: 6412, Stop: 6786, Start Num: 35

Candidate Starts for ThetaBob_8:

(Start: 35 @6412 has 7 MA's), (45, 6439), (72, 6544), (77, 6568), (80, 6577), (89, 6604), (104, 6640), (123, 6709), (126, 6715), (130, 6724), (134, 6739),

Gene: Thyatira_12 Start: 9086, Stop: 9469, Start Num: 37

Candidate Starts for Thyatira_12:

(Start: 37 @9086 has 128 MA's), (49, 9119), (57, 9170), (64, 9203), (73, 9230), (80, 9263), (110, 9350), (135, 9434), (137, 9437), (143, 9449),

Gene: Tierra_13 Start: 8632, Stop: 9012, Start Num: 36

Candidate Starts for Tierra_13:

(Start: 36 @8632 has 82 MA's), (45, 8656), (80, 8806), (84, 8818), (85, 8821), (123, 8944), (127, 8950), (135, 8977), (143, 8992),

Gene: TingHuaYa_14 Start: 8007, Stop: 8384, Start Num: 37

Candidate Starts for TingHuaYa_14:

(Start: 37 @8007 has 128 MA's), (64, 8118), (81, 8181), (84, 8190), (135, 8349), (143, 8364),

Gene: TiniBug_14 Start: 8929, Stop: 9309, Start Num: 37

Candidate Starts for TiniBug_14:

(Start: 37 @8929 has 128 MA's), (Start: 51 @8971 has 6 MA's), (55, 9001), (64, 9040), (73, 9067), (80, 9100), (110, 9187), (129, 9250), (143, 9286),

Gene: Tiri_14 Start: 8990, Stop: 9376, Start Num: 37

Candidate Starts for Tiri_14:

(Start: 37 @8990 has 128 MA's), (Start: 51 @9032 has 6 MA's), (64, 9107), (73, 9134), (80, 9167), (84, 9179), (110, 9254), (143, 9353),

Gene: TootsiePop_8 Start: 5931, Stop: 6302, Start Num: 36

Candidate Starts for TootsiePop_8:

(Start: 36 @5931 has 82 MA's), (47, 5961), (74, 6072), (77, 6087), (78, 6090), (80, 6096), (81, 6099), (118, 6210), (135, 6261), (149, 6294),

Gene: Tootsieroll_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for Tootsieroll_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Topper_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Topper_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Toron_8 Start: 6532, Stop: 6906, Start Num: 35

Candidate Starts for Toron_8:

(Start: 35 @6532 has 7 MA's), (45, 6559), (72, 6664), (77, 6688), (80, 6697), (89, 6724), (104, 6760), (123, 6829), (126, 6835), (130, 6844),

Gene: Torres_10 Start: 8266, Stop: 8649, Start Num: 37

Candidate Starts for Torres_10:

(20, 8230), (Start: 37 @8266 has 128 MA's), (64, 8383), (73, 8410), (80, 8443), (84, 8455), (135, 8614), (143, 8629),

Gene: Totinger_8 Start: 5929, Stop: 6300, Start Num: 36

Candidate Starts for Totinger_8:

(Start: 36 @5929 has 82 MA's), (47, 5959), (74, 6070), (77, 6085), (78, 6088), (80, 6094), (81, 6097), (118, 6208), (135, 6259), (149, 6292),

Gene: TouchMeNot_10 Start: 8239, Stop: 8625, Start Num: 39

Candidate Starts for TouchMeNot_10:

(Start: 39 @8239 has 5 MA's), (58, 8320), (64, 8347), (81, 8416), (84, 8425), (112, 8506), (128, 8560),

Gene: TreyKay_14 Start: 8945, Stop: 9331, Start Num: 37

Candidate Starts for TreyKay_14:

(Start: 37 @8945 has 128 MA's), (Start: 51 @8987 has 6 MA's), (64, 9062), (73, 9089), (80, 9122), (84, 9134), (110, 9209), (143, 9308),

Gene: TribelTrouble_12 Start: 8796, Stop: 9179, Start Num: 37

Candidate Starts for TribelTrouble_12:

(Start: 37 @8796 has 128 MA's), (64, 8913), (80, 8973), (84, 8985), (85, 8988), (87, 8994), (110, 9060), (135, 9144), (143, 9159),

Gene: TruffulaTree_14 Start: 8978, Stop: 9364, Start Num: 37

Candidate Starts for TruffulaTree_14:

(Start: 37 @8978 has 128 MA's), (Start: 51 @9020 has 6 MA's), (64, 9095), (73, 9122), (80, 9155), (84, 9167), (110, 9242), (143, 9341),

Gene: Twitch_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Twitch_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: UncleRicky_8 Start: 5928, Stop: 6299, Start Num: 36

Candidate Starts for UncleRicky_8:

(Start: 36 @5928 has 82 MA's), (47, 5958), (74, 6069), (77, 6084), (78, 6087), (80, 6093), (81, 6096), (118, 6207), (135, 6258), (149, 6291),

Gene: Unicorn_13 Start: 7967, Stop: 8347, Start Num: 36

Candidate Starts for Unicorn_13:

(Start: 36 @7967 has 82 MA's), (45, 7991), (80, 8141), (84, 8153), (85, 8156), (123, 8279), (127, 8285), (135, 8312), (143, 8327),

Gene: Urkel_14 Start: 8929, Stop: 9309, Start Num: 37

Candidate Starts for Urkel_14:

(Start: 37 @8929 has 128 MA's), (Start: 51 @8971 has 6 MA's), (55, 9001), (64, 9040), (73, 9067), (80, 9100), (110, 9187), (129, 9250), (143, 9286),

Gene: Validus_14 Start: 7976, Stop: 8353, Start Num: 37

Candidate Starts for Validus_14:

(Start: 37 @7976 has 128 MA's), (54, 8033), (64, 8087), (73, 8114), (80, 8147), (81, 8150), (84, 8159), (110, 8234), (127, 8291), (135, 8318), (137, 8321), (143, 8333),

Gene: VasuNzinga_41 Start: 16605, Stop: 17030, Start Num: 33

Candidate Starts for VasuNzinga_41:

(Start: 32 @16602 has 17 MA's), (Start: 33 @16605 has 15 MA's), (Start: 43 @16629 has 1 MA's), (70, 16722), (86, 16788), (90, 16800), (91, 16809), (94, 16812), (115, 16881), (120, 16902), (142, 16965), (150, 17007), (151, 17013),

Gene: Veliki_14 Start: 9021, Stop: 9407, Start Num: 37

Candidate Starts for Veliki_14:

(Start: 37 @9021 has 128 MA's), (Start: 51 @9063 has 6 MA's), (64, 9138), (80, 9198), (84, 9210), (110, 9285), (143, 9384),

Gene: Velveteen_8 Start: 5927, Stop: 6298, Start Num: 36

Candidate Starts for Velveteen_8:

(Start: 36 @5927 has 82 MA's), (47, 5957), (74, 6068), (77, 6083), (78, 6086), (80, 6092), (81, 6095), (118, 6206), (135, 6257), (149, 6290),

Gene: Volt_42 Start: 16243, Stop: 16656, Start Num: 36

Candidate Starts for Volt_42:

(Start: 36 @16243 has 82 MA's), (46, 16270), (48, 16276), (49, 16279), (59, 16327), (79, 16402), (83, 16414), (96, 16459), (105, 16492), (125, 16567),

Gene: Waterfoul_12 Start: 9108, Stop: 9491, Start Num: 37

Candidate Starts for Waterfoul_12:

(Start: 37 @9108 has 128 MA's), (49, 9141), (57, 9192), (64, 9225), (73, 9252), (80, 9285), (110, 9372), (135, 9456), (137, 9459), (143, 9471),

Gene: Wintermute_15 Start: 10233, Stop: 10607, Start Num: 28

Candidate Starts for Wintermute_15:

(Start: 28 @10233 has 18 MA's), (Start: 38 @10242 has 2 MA's), (45, 10260), (57, 10308), (73, 10368), (81, 10404), (84, 10413), (85, 10416), (88, 10425), (108, 10479), (124, 10539), (135, 10572), (137, 10575),

Gene: Wrigley_9 Start: 6930, Stop: 7331, Start Num: 32

Candidate Starts for Wrigley_9:

(2, 6699), (3, 6711), (8, 6777), (Start: 30 @6921 has 1 MA's), (Start: 32 @6930 has 17 MA's), (57, 7011), (69, 7062), (77, 7092), (84, 7113), (85, 7116), (108, 7188), (123, 7248), (146, 7314),

Gene: Ximenita_14 Start: 8105, Stop: 8488, Start Num: 36

Candidate Starts for Ximenita_14:

(Start: 36 @8105 has 82 MA's), (80, 8279), (84, 8291), (85, 8294), (110, 8366), (123, 8417), (135, 8450), (143, 8465),

Gene: Y10_15 Start: 10242, Stop: 10607, Start Num: 38

Candidate Starts for Y10_15:

(Start: 28 @10233 has 18 MA's), (Start: 38 @10242 has 2 MA's), (45, 10260), (57, 10308), (73, 10368), (81, 10404), (84, 10413), (85, 10416), (88, 10425), (108, 10479), (124, 10539), (135, 10572), (137, 10575),

Gene: Y2_15 Start: 10242, Stop: 10607, Start Num: 38

Candidate Starts for Y2_15:

(Start: 28 @10233 has 18 MA's), (Start: 38 @10242 has 2 MA's), (45, 10260), (57, 10308), (73, 10368), (81, 10404), (84, 10413), (85, 10416), (88, 10425), (108, 10479), (124, 10539), (135, 10572), (137, 10575),

Gene: YoureAdopted_13 Start: 8954, Stop: 9340, Start Num: 37

Candidate Starts for YoureAdopted_13:

(Start: 37 @8954 has 128 MA's), (Start: 51 @8996 has 6 MA's), (64, 9071), (73, 9098), (80, 9131), (84, 9143), (110, 9218), (143, 9317),

Gene: Yuna_14 Start: 8096, Stop: 8479, Start Num: 37

Candidate Starts for Yuna_14:

(11, 8015), (20, 8060), (Start: 37 @8096 has 128 MA's), (45, 8117), (Start: 51 @8138 has 6 MA's), (57, 8180), (64, 8213), (80, 8273), (84, 8285), (110, 8360), (133, 8438), (137, 8447), (143, 8459),

Gene: Yunkel11_14 Start: 7932, Stop: 8309, Start Num: 37

Candidate Starts for Yunkel11_14:

(11, 7854), (Start: 37 @7932 has 128 MA's), (64, 8043), (81, 8106), (84, 8115), (127, 8247), (135, 8274), (143, 8289),

Gene: Zabiza_14 Start: 8979, Stop: 9365, Start Num: 37

Candidate Starts for Zabiza_14:

(Start: 37 @8979 has 128 MA's), (Start: 51 @9021 has 6 MA's), (64, 9096), (73, 9123), (80, 9156), (84, 9168), (110, 9243), (143, 9342),

Gene: Zavala_14 Start: 8960, Stop: 9346, Start Num: 37

Candidate Starts for Zavala_14:

(Start: 37 @8960 has 128 MA's), (Start: 51 @9002 has 6 MA's), (64, 9077), (80, 9137), (84, 9149), (110, 9224), (143, 9323),

Gene: Ziko_43 Start: 16183, Stop: 16596, Start Num: 36

Candidate Starts for Ziko_43:

(Start: 36 @16183 has 82 MA's), (46, 16210), (48, 16216), (49, 16219), (59, 16267), (79, 16342), (83, 16354), (96, 16399), (105, 16432), (125, 16507),

Gene: ZoeJ_10 Start: 6927, Stop: 7310, Start Num: 27

Candidate Starts for ZoeJ_10:

(Start: 14 @6858 has 2 MA's), (26, 6918), (Start: 27 @6927 has 10 MA's), (81, 7107), (84, 7116), (85, 7119), (135, 7275), (137, 7278), (143, 7290),