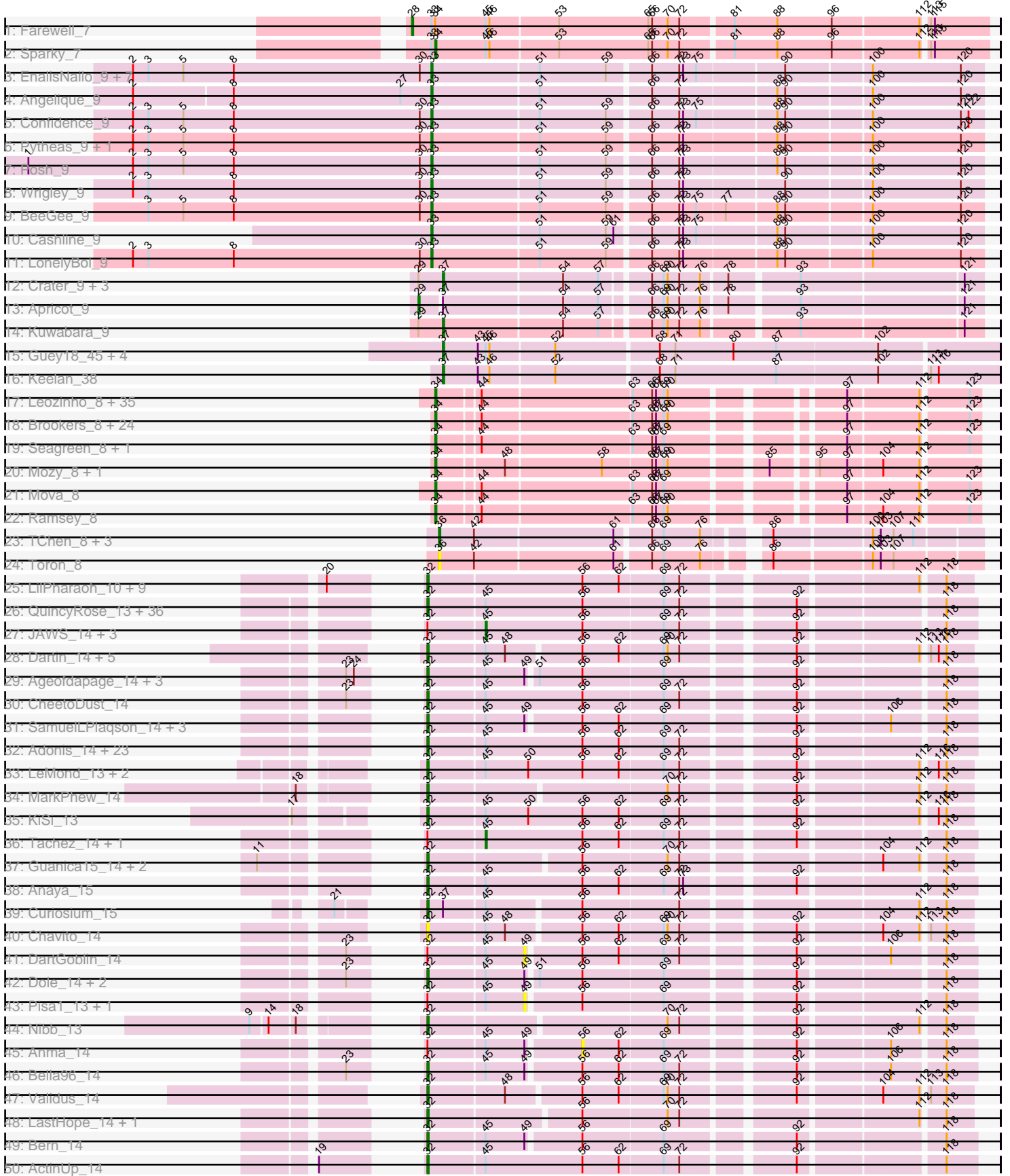
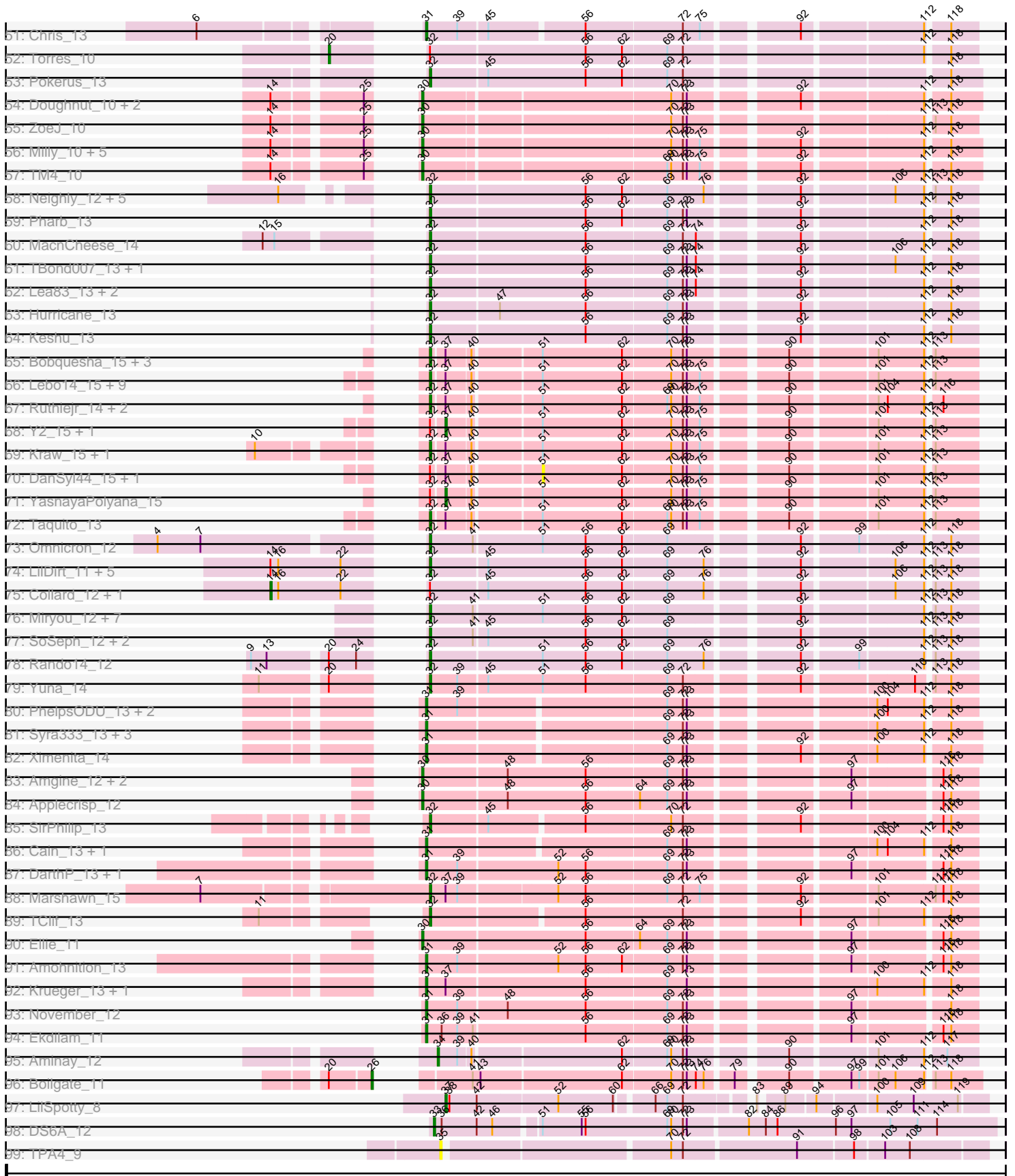


Pham 296168



Pham 296168



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 296168 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296168 has 326 members, 30 are drafts.

Phages represented in each track:

- Track 1 : Farewell_7
- Track 2 : Sparky_7
- Track 3 : EnalisNailo_9, Bradissa_9, EMSquaredA_9, Marteena_9, Floral_9, BritBrat_9, Lilas_9, Pollux_9
- Track 4 : Angelique_9
- Track 5 : Confidence_9
- Track 6 : Pytheas_9, Jablanski_9
- Track 7 : Posh_9
- Track 8 : Wrigley_9
- Track 9 : BeeGee_9
- Track 10 : Cashline_9
- Track 11 : LonelyBoi_9
- Track 12 : Crater_9, BearBQ_9, MortyNRick_9, Birdsong_9
- Track 13 : Apricot_9
- Track 14 : Kuwabara_9
- Track 15 : Guey18_45, Volt_42, Fryberger_40, Ronaldo_43, Ziko_43
- Track 16 : Keelan_38
- Track 17 : Leozinho_8, Awesomesauce_8, Kimberlium_8, Coco12_8, Plumbus_8, DirtMcgirt_8, Alexphander_8, Bobi_8, OwlsT2W_8, Girafales_8, Lorde_8, BuzzLyseyear_8, Enby_8, Boomer_8, Emmaloid_8, MulchExplorer_8, JalFarm20_8, Lucia_8, SimranZ1_8, Slim_8, Stap_8, Job42_8, Quico_8, Pollywog_8, LittleShirley_8, DosHalletts_8, Oksu_8, Marker_8, DaWorst_8, Rialto_8, Juice456_8, Drago_8, Beakin_8, Totinger_8, UncleRicky_8, Tootsieroll_8
- Track 18 : Brookers_8, Spikelee_8, BigPhil_8, Kingsley_8, Aloeri_8, Doomslug_9, Flathead_8, Starceвич_8, Misha28_8, Beanstalk_8, ChickenDinner_8, Piper2020_8, Cerasum_8, Hegedechwinu_8, Tchotchke_8, DocMcStuffins_8, Madiba_8, RockyHorror_8, Brushbloom_8, TootsiePop_8, LordVader_9, Peridot_9, Sarma624_8, Squirty_8, Velveteen_8
- Track 19 : Seagreen_8, Frankie_8
- Track 20 : Mozy_8, Cornucopia_8
- Track 21 : Mova_8
- Track 22 : Ramsey_8
- Track 23 : TChen_8, LunaStella_8, ThetaBob_8, Renaud18_8
- Track 24 : Toron_8
- Track 25 : LilPharaoh_10, SgtBeansprout_10, Trice_10, Nikao_10, Amelie_10, Nutello_10, Enkosi_10, Teejan_10, Mdavu_10, Binglebops_10

- Track 26 : QuincyRose_13, Padpat_14, Clipper_14, Capricorn_14, BEEST_14, Belladonna_14, Ganymede_14, Topper_14, Joy99_14, Spock_14, Twitch_14, MeaningOfLife_14, ShiaSurprise_14, Mynx_14, Emerson_14, Asayake_14, Llorens_14, Homura_14, Rosmarinus_14, Blizzard_14, CaseJules_14, Jarvi_14, Peel_14, MacKat_14, Padfoot_14, Lunahalos_14, Dalmuri_14, Hyperbowlee_14, Inky_14, CREW_14, Jeckyll_14, BaghaKamala_14, Veliki_14, Piatt_14, Zavala_14, BGIlluviae_14, BarrelRoll_14
- Track 27 : JAWS_14, Durfee_14, AlishaPH_14, Boiiii_14
- Track 28 : Dartin_14, Shaobing_14, Niklas_14, Peanam_14, McMater_14, Richo_14
- Track 29 : Ageofdapage_14, Stinson_14, Murucutumbu_14, LaterM_14
- Track 30 : CheetoDust_14
- Track 31 : SamuelLPlaqson_14, DrHayes_14, TiniBug_14, Urkel_14
- Track 32 : Adonis_14, CallaLilly_14, Adephagia_14, Angelica_14, HedwigODU_14, CrimD_14, TreyKay_14, Sulley_14, Jayhawk_14, Ramen_14, YoureAdopted_13, Tiri_14, Beezoo_14, Geraldini_14, Megsy_14, Apocalypse_14, Rapunzel97_14, Prithvi_14, Atiba_14, TaiwanKao_14, LindNT_14, Zabiza_14, TruffulaTree_14, Slimphazie_14
- Track 33 : LeMond_13, Scarlett_13, Oscar_13
- Track 34 : MarkPhew_14
- Track 35 : KiSi_13
- Track 36 : Tachez_14, Deby_14
- Track 37 : Guanica15_14, Yunkel11_14, Efra2_14
- Track 38 : Anaya_15
- Track 39 : Curiosium_15
- Track 40 : Chavito_14
- Track 41 : DartGoblin_14
- Track 42 : Dole_14, Devera_14, Illumine_14
- Track 43 : Pisa1_13, Pisa4_13
- Track 44 : Nibb_13
- Track 45 : Anma_14
- Track 46 : Bella96_14
- Track 47 : Validus_14
- Track 48 : LastHope_14, TingHuaYa_14
- Track 49 : Bern_14
- Track 50 : ActinUp_14
- Track 51 : Chris_13
- Track 52 : Torres_10
- Track 53 : Pokerus_13
- Track 54 : Doughnut_10, BoostSeason_10, Mufasa_10
- Track 55 : ZoeJ_10
- Track 56 : Milly_10, DismalFunk_10, Marcoliusprime_10, Findley_10, Strobilo_10, DismalStressor_10
- Track 57 : TM4_10
- Track 58 : Neighly_12, Larva_12, Dadosky_12, AlleyCat_12, Psycho_12, Edugator_11
- Track 59 : Pharb_13
- Track 60 : MacnCheese_14
- Track 61 : TBond007_13, Pixie_13
- Track 62 : Lea83_13, ShedlockHolmes_13, TribbleTrouble_12
- Track 63 : Hurricane_13
- Track 64 : Keshu_13
- Track 65 : Bobqvesha_15, MissDaisy_15, Patt_15, Reptar3000_15

- Track 66 : Lebo14_15, Slarp_15, JF1_15, OmniCritical_15, Mitti_15, Chancellor_15, Wintermute_15, Fionnbharth_15, SamScheppers_13, Cheetobro_15
- Track 67 : Ruthiejr_14, Eponine_15, Juliette_15
- Track 68 : Y2_15, Y10_15
- Track 69 : Kraw_15, Malthus_15
- Track 70 : DanSyl44_15, Qhanda_15
- Track 71 : YasnayaPolyana_15
- Track 72 : Taquito_13
- Track 73 : Omnicron_12
- Track 74 : LilDirt_11, DoubleChamp_12, ViviJ_11, Agent47_12, BananenDer11_12, InvictusManeo_12
- Track 75 : Collard_12, Kratio_11
- Track 76 : Miryou_12, Thyatira_12, OkiRoe_12, Waterfoul_12, Gengar_12, Paola_12, Feyre_12, Guillsminger_12
- Track 77 : SoSeph_12, Heftyboy_12, Leston_12
- Track 78 : Rando14_12
- Track 79 : Yuna_14
- Track 80 : PhelpsODU_13, Tierra_13, Unicorn_13
- Track 81 : Syra333_13, Shadow1_12, Phrank_13, Sunflower1121_12
- Track 82 : Ximenita_14
- Track 83 : Amgine_12, Fefferhead_13, Lavahound_12
- Track 84 : Applecrisp_12
- Track 85 : SirPhilip_13
- Track 86 : Cain_13, Bryler_13
- Track 87 : DarthP_13, Hammy_13
- Track 88 : Marshawn_15
- Track 89 : TClif_13
- Track 90 : Ellie_11
- Track 91 : Amohnition_13
- Track 92 : Krueger_13, Tigress9_13
- Track 93 : November_12
- Track 94 : Ekdilam_11
- Track 95 : Aminay_12
- Track 96 : Boilgate_11
- Track 97 : LilSpotty_8
- Track 98 : DS6A_12
- Track 99 : 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 32, it was called in 153 of the 296 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, BGIlluviae_14, BaghaKamala_14, BananenDer11_12, BarrelRoll_14, Beezoo_14, Bella96_14, Belladonna_14, Bern_14, Biglebops_10, Blizzard_14, Bobquesha_15, CREW_14, CallaLilly_14, Capricorn_14, CaseJules_14, Chancellor_15, Chavito_14, CheetoDust_14, Cheetobro_15, Clipper_14, CrimD_14,

Curiosium_15, Dadosky_12, Dalmuri_14, Dartin_14, Devera_14, Dole_14, DoubleChamp_12, DrHayes_14, Edugator_11, Efra2_14, Emerson_14, Enkosi_10, Eponine_15, Feyre_12, Fionnbharth_15, 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, JF1_15, Jarvi_14, Jayhawk_14, Jeckyll_14, Joy99_14, Juliette_15, Keshu_13, KiSi_13, Kraw_15, Larva_12, LastHope_14, LaterM_14, LeMond_13, Lea83_13, Lebo14_15, Leston_12, LilDirt_11, LilPharaoh_10, LindNT_14, Llorens_14, Lunahalos_14, MacKat_14, MacnCheese_14, Malthus_15, MarkPheW_14, Marshawn_15, McMater_14, Mdavu_10, MeaningOfLife_14, Megsy_14, Miryou_12, MissDaisy_15, Mitti_15, Murucutumbu_14, Mynx_14, Neighly_12, Nibb_13, Nikao_10, Niklas_14, Nutello_10, OkiRoe_12, OmniCritical_15, Omnicron_12, Oscar_13, Padfoot_14, Padpat_14, Paola_12, Patt_15, Peanam_14, Peel_14, Pharb_13, Piatt_14, Pixie_13, Pokerus_13, Prithvi_14, Psycho_12, QuincyRose_13, Ramen_14, Rando14_12, Rapunzel97_14, Reptar3000_15, Richo_14, Rosmarinus_14, Ruthiejr_14, SamScheppers_13, SamuelLPlaqson_14, Scarlett_13, SgtBeansprout_10, Shaobing_14, ShedlockHolmes_13, ShiaSurprise_14, SirPhilip_13, Slarp_15, Slimphazie_14, SoSeph_12, Spock_14, Stinson_14, Sulley_14, TBond007_13, TClif_13, TaiwanKao_14, Taquito_13, Teejan_10, Thyatira_12, TingHuaYa_14, TiniBug_14, Tiri_14, Topper_14, TreyKay_14, TribbleTrouble_12, Trice_10, TruffulaTree_14, Twitch_14, Urkel_14, Validus_14, Veliki_14, ViviJ_11, Waterfoul_12, Wintermute_15, YoureAdopted_13, Yuna_14, Yunkel11_14, Zabiza_14, Zavala_14,

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

- AlishaPH_14, Anma_14, Boiiii_14, Collard_12, DanSyl44_15, DartGoblin_14, Deby_14, Durfee_14, JAWS_14, Kratio_11, Pisa1_13, Pisa4_13, Qhanda_15, Tachez_14, Torres_10, Y10_15, Y2_15, YasnayaPolyana_15,

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

- Alexphander_8, Aloeri_8, Amgine_12, Aminay_12, Amohnition_13, Angelique_9, Applecrisp_12, Apricot_9, Awesomesauce_8, Beakin_8, Beanstalk_8, BearBQ_9, BeeGee_9, BigPhil_8, Birdsong_9, Bobi_8, Boilgate_11, Boomer_8, BoostSeason_10, Bradissa_9, BritBrat_9, Brookers_8, Brushbloom_8, Bryler_13, BuzzLyseyear_8, Cain_13, Cashline_9, Cerasum_8, ChickenDinner_8, Chris_13, Coco12_8, Confidence_9, Cornucopia_8, Crater_9, DS6A_12, DaWorst_8, DARTH_P_13, DirtMcGirt_8, DismalFunk_10, DismalStressor_10, DocMcStuffins_8, Doomslug_9, DosHalletts_8, Doughnut_10, Drago_8, EMSquaredA_9, Ekdilam_11, Ellie_11, Emmaloid_8, EnalisNailo_9, Enby_8, Farewell_7, Fefferhead_13, Findley_10, Flathead_8, Floral_9, Frankie_8, Fryberger_40, Girafales_8, Guey18_45, Hammy_13, Hegedechwinu_8, Jablanski_9, JalFarm20_8, Job42_8, Juice456_8, Keelan_38, Kimberlium_8, Kingsley_8, Krueger_13, Kuwabara_9, Lavahound_12, Leozinho_8, LilSpotty_8, Lilas_9, LittleShirley_8, LonelyBoi_9, LordVader_9, Lorde_8, Lucia_8, LunaStella_8, Madiba_8, Marcoliusprime_10, Marker_8, Marteena_9, Milly_10, Misha28_8, MortyNRick_9, Mova_8, Mozy_8, Mufasa_10, MulchExplorer_8, November_12, Oksu_8, OwlsT2W_8, Peridot_9, PhelpsODU_13, Phrank_13, Piper2020_8, Plumbus_8, Pollux_9, Pollywog_8, Posh_9, Pytheas_9, Quico_8, Ramsey_8, Renaud18_8, Rialto_8, RockyHorror_8, Ronaldo_43, Sarma624_8, Seagreen_8, Shadow1_12, SimranZ1_8, Slim_8, Sparky_7, Spikelee_8, Squirty_8, Stap_8, StarceVich_8, Strobilo_10, Sunflower1121_12, Syra333_13, TChen_8, TM4_10, TPA4_9, Tchochke_8, ThetaBob_8, Tierra_13, Tigress9_13, TootsiePop_8, Tootsieroll_8, Toron_8, Totinger_8, UncleRicky_8, Unicorn_13, Velveteen_8, Volt_42, Wrigley_9, Ximenita_14, Ziko_43, ZoeJ_10,

Summary by start number:

Start 14:

- Found in 20 of 326 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 296
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Collard_12 (K5), Kratio_11 (K5),

Start 20:

- Found in 14 of 326 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 296
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Torres_10 (K1),

Start 26:

- Found in 1 of 326 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 296
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_11 (K8),

Start 28:

- Found in 1 of 326 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 296
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_7 (AF),

Start 29:

- Found in 6 of 326 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 296
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Apricot_9 (DN3),

Start 30:

- Found in 31 of 326 (9.5%) of genes in pham
- Manual Annotations of this start: 15 of 296
- Called 51.6% of time when present
- Phage (with cluster) where this start called: Amgine_12 (K6), Applecrisp_12 (K6), BoostSeason_10 (K2), DismalFunk_10 (K2), DismalStressor_10 (K2), Doughnut_10 (K2), Ellie_11 (K6), Fefferhead_13 (K6), Findley_10 (K2), Lavahound_12 (K6), Marcoliusprime_10 (K2), Milly_10 (K2), Mufasa_10 (K2), Strobilo_10 (K2), TM4_10 (K2), ZoeJ_10 (K2),

Start 31:

- Found in 18 of 326 (5.5%) of genes in pham
- Manual Annotations of this start: 17 of 296
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amohnition_13 (K6), Bryler_13 (K6), Cain_13 (K6), Chris_13 (K1), DarthP_13 (K6), Ekdilam_11 (K6), Hammy_13 (K6), Krueger_13 (K6), November_12 (K6), PhelpsODU_13 (K6), Phrank_13 (K6), Shadow1_12 (K6), Sunflower1121_12 (K6), Syra333_13 (K6), Tierra_13 (K6), Tigress9_13 (K6), Unicorn_13 (K6), Ximenita_14 (K6),

Start 32:

- Found in 184 of 326 (56.4%) of genes in pham
- Manual Annotations of this start: 153 of 296
- Called 90.2% of time when present
- Phage (with cluster) where this start called: ActinUp_14 (K1), Adephagia_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), BananenDer11_12 (K5), BarrelRoll_14 (K1), Beezoo_14 (K1), Bella96_14 (K1), Belladonna_14 (K1), Bern_14 (K1), Binglebops_10 (K1), Blizzard_14 (K1), Bobquesha_15 (K4), CREW_14 (K1), CallaLilly_14 (K1), Capricorn_14 (K1), CaseJules_14 (K1), Chancellor_15 (K4), Chavito_14 (K1), CheetoDust_14 (K1), Cheetobro_15 (K4), Clipper_14 (K1), CrimD_14 (K1), Curiosium_15 (K1), Dadosky_12 (K5), Dalmuri_14 (K1), Dartin_14 (K1), Devera_14 (K1), Dole_14 (K1), DoubleChamp_12 (K5), DrHayes_14 (K1), Edugator_11 (K5), Efra2_14 (K1), Emerson_14 (K1), Enkosi_10 (K1), Eponine_15 (K4), Feyre_12 (K5), Fionnbharth_15 (K4), 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), JF1_15 (K4), Jarvi_14 (K1), Jayhawk_14 (K1), Jeckyll_14 (K1), Joy99_14 (K1), Juliette_15 (K4), Keshu_13 (K3), KiSi_13 (K1), Kraw_15 (K4), Larva_12 (K5), LastHope_14 (K1), LaterM_14 (K1), LeMond_13 (K1), Lea83_13 (K3), Lebo14_15 (K4), Leston_12 (K5), LilDirt_11 (K5), LilPharaoh_10 (K1), LindNT_14 (K1), Llorens_14 (K1), Lunahalos_14 (K1), MacKat_14 (K1), MacnCheese_14 (K3), Malthus_15 (K4), MarkPhew_14 (K1), Marshawn_15 (K6), McMater_14 (K1), Mdavu_10 (K1), MeaningOfLife_14 (K1), Megsy_14 (K1), Miryou_12 (K5), MissDaisy_15 (K4), Mitti_15 (K4), Murucutumbu_14 (K1), Mynx_14 (K1), Neighly_12 (K3), Nibb_13 (K1), Nikao_10 (K1), Niklas_14 (K1), Nutello_10 (K1), OkiRoe_12 (K5), OmniCritical_15 (K4), Omnicron_12 (K5), Oscar_13 (K1), Padfoot_14 (K1), Padpat_14 (K1), Paola_12 (K5), Patt_15 (K4), 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), Reptar3000_15 (K4), Richo_14 (K1), Rosmarinus_14 (K1), Ruthiejr_14 (K4), SamScheppers_13 (K4), SamuelLPlaqson_14 (K1), Scarlett_13 (K1), SgtBeansprout_10 (K1), Shaobing_14 (K1), ShedlockHolmes_13 (K3), ShiaSurprise_14 (K1), SirPhilip_13 (K6), Slarp_15 (K4), Slimphazie_14 (K1), SoSeph_12 (K5), Spock_14 (K1), Stinson_14 (K1), Sulley_14 (K1), TBond007_13 (K3), TClif_13 (K6), TaiwanKao_14 (K1), Taquito_13 (K4), Teejan_10 (K1), Thyatira_12 (K5), TingHuaYa_14 (K1), TiniBug_14 (K1), Tiri_14 (K1), Topper_14 (K1), TreyKay_14 (K1), TribbleTrouble_12 (K3), Trice_10 (K1), TruffulaTree_14 (K1), Twitch_14 (K1), Urkel_14 (K1), Validus_14 (K1), Veliki_14 (K1), ViviJ_11 (K5), Waterfoul_12 (K5), Wintermute_15 (K4), YoureAdopted_13 (K1), Yuna_14 (K6), Yunkel11_14 (K1), Zabiza_14 (K1), Zavala_14 (K1),

Start 33:

- Found in 20 of 326 (6.1%) of genes in pham
- Manual Annotations of this start: 18 of 296
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Angelique_9 (CY1), BeeGee_9 (CY5), Bradissa_9 (CY1), BritBrat_9 (CY2), Cashline_9 (CY6), Confidence_9 (CY1), DS6A_12 (singleton), EMSquaredA_9 (CY1), EnalisNailo_9 (CY1), Floral_9 (CY1), Jablanski_9 (CY3), Lilas_9 (CY1), LonelyBoi_9 (CY7), Marteena_9 (CY1), Pollux_9 (CY1), Posh_9 (CY4), Pytheas_9 (CY3), Wrigley_9 (CY4),

Start 34:

- Found in 70 of 326 (21.5%) of genes in pham
- Manual Annotations of this start: 62 of 296
- Called 98.6% of time when present
- Phage (with cluster) where this start called: Alexphander_8 (F1), Aloeri_8 (F1), Aminay_12 (K7), Awesomesauce_8 (F1), Beakin_8 (F1), Beanstalk_8 (F1), BigPhil_8 (F1), Bobi_8 (F1), Boomer_8 (F1), Brookers_8 (F1), Brushbloom_8 (F1), BuzzLyseyear_8 (F1), Cerasum_8 (F1), ChickenDinner_8 (F1), Coco12_8 (F1), Cornucopia_8 (F1), DaWorst_8 (F1), DirtMcgirt_8 (F1), DocMcStuffins_8 (F1), Doomslug_9 (F), DosHalletts_8 (F1), Drago_8 (F1), Emmaloid_8 (F1), Enby_8 (F1), Flathead_8 (F1), Frankie_8 (F1), Girafales_8 (F1), Hegedechwinu_8 (F1), JalFarm20_8 (F1), Job42_8 (F1), Juice456_8 (F1), Kimberlium_8 (F1), Kingsley_8 (F1), Leozinho_8 (F1), LittleShirley_8 (F1), LordVader_9 (F), Lorde_8 (F1), Lucia_8 (F1), Madiba_8 (F1), Marker_8 (F1), Misha28_8 (F1), Mova_8 (F1), Mozy_8 (F1), MulchExplorer_8 (F1), Oksu_8 (F1), OwlsT2W_8 (F1), Peridot_9 (F1), Piper2020_8 (F1), Plumbus_8 (F1), Pollywog_8 (F1), Quico_8 (F1), Ramsey_8 (F1), Rialto_8 (F1), RockyHorror_8 (F1), Sarma624_8 (F1), Seagreen_8 (F1), SimranZ1_8 (F1), Slim_8 (F1), Sparky_7 (AF), Spikelee_8 (F1), Squirty_8 (F3), Stap_8 (F1), Starcevich_8 (F1), Tchotchke_8 (F1), TootsiePop_8 (F1), Tootsieroll_8 (F1), Totinger_8 (F1), UncleRicky_8 (F1), Velveteen_8 (F1),

Start 35:

- Found in 1 of 326 (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 36:

- Found in 7 of 326 (2.1%) of genes in pham
- Manual Annotations of this start: 4 of 296
- Called 71.4% of time when present
- Phage (with cluster) where this start called: LunaStella_8 (F4), Renaud18_8 (F4), TChen_8 (F4), ThetaBob_8 (F4), Toron_8 (F6),

Start 37:

- Found in 42 of 326 (12.9%) of genes in pham
- Manual Annotations of this start: 15 of 296
- Called 35.7% of time when present
- Phage (with cluster) where this start called: BearBQ_9 (DN), Birdsong_9 (DN), Crater_9 (DN3), Fryberger_40 (DP), Guey18_45 (DP), Keelan_38 (DP), Kuwabara_9 (DN4), LilSpotty_8 (singleton), MortyNRick_9 (DN), Ronaldo_43 (DP), Volt_42 (DP), Y10_15 (K4), Y2_15 (K4), YasnayaPolyana_15 (K4), Ziko_43 (DP),

Start 45:

- Found in 121 of 326 (37.1%) of genes in pham
- Manual Annotations of this start: 6 of 296
- Called 5.0% 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),

Start 49:

- Found in 17 of 326 (5.2%) of genes in pham
- No Manual Annotations of this start.

- Called 17.6% of time when present
- Phage (with cluster) where this start called: DartGoblin_14 (K1), Pisa1_13 (K1), Pisa4_13 (K1),

Start 51:

- Found in 61 of 326 (18.7%) of genes in pham
- No Manual Annotations of this start.
- Called 3.3% of time when present
- Phage (with cluster) where this start called: DanSyl44_15 (K4), Qhanda_15 (K4),

Start 56:

- Found in 171 of 326 (52.5%) of genes in pham
- No Manual Annotations of this start.
- Called 0.6% of time when present
- Phage (with cluster) where this start called: Anma_14 (K1),

Summary by clusters:

There are 26 clusters represented in this pham: DN, singleton, K3, K2, K1, K7, K6, K5, K4, K8, DP, AF, DN4, DN3, CY3, CY2, CY1, CY7, CY6, CY5, F, F1, F3, F4, F6, CY4,

Info for manual annotations of cluster AF:

- Start number 28 was manually annotated 1 time for cluster AF.
- Start number 34 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster CY1:

- Start number 33 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 33 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 33 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 33 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 33 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 33 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 33 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DN:

- Start number 37 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 29 was manually annotated 1 time for cluster DN3.
- Start number 37 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 37 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 37 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster F1:

- Start number 34 was manually annotated 59 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 34 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 36 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster K1:

- Start number 20 was manually annotated 1 time for cluster K1.
- Start number 31 was manually annotated 1 time for cluster K1.
- Start number 32 was manually annotated 100 times for cluster K1.
- Start number 45 was manually annotated 6 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 30 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 32 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 32 was manually annotated 19 times for cluster K4.
- Start number 37 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 14 was manually annotated 2 times for cluster K5.
- Start number 32 was manually annotated 21 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 30 was manually annotated 4 times for cluster K6.
- Start number 31 was manually annotated 16 times for cluster K6.
- Start number 32 was manually annotated 4 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 34 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 26 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: ActinUp_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for ActinUp_14:

(19, 8939), (Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (62, 9125), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Adephagia_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for Adephagia_14:

(Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (62, 9125), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Adonis_14 Start: 8990, Stop: 9376, Start Num: 32

Candidate Starts for Adonis_14:

(Start: 32 @8990 has 153 MA's), (Start: 45 @9032 has 6 MA's), (56, 9107), (62, 9134), (69, 9167), (72, 9179), (92, 9254), (118, 9353),

Gene: Agent47_12 Start: 9178, Stop: 9561, Start Num: 32

Candidate Starts for Agent47_12:

(Start: 14 @9097 has 2 MA's), (16, 9103), (22, 9151), (Start: 32 @9178 has 153 MA's), (Start: 45 @9220 has 6 MA's), (56, 9295), (62, 9322), (69, 9355), (76, 9382), (92, 9442), (106, 9505), (112, 9526), (113, 9529), (118, 9541),

Gene: Ageofdapage_14 Start: 8917, Stop: 9297, Start Num: 32

Candidate Starts for Ageofdapage_14:

(23, 8896), (24, 8902), (Start: 32 @8917 has 153 MA's), (Start: 45 @8959 has 6 MA's), (49, 8989), (51, 8995), (56, 9028), (69, 9088), (92, 9175), (118, 9274),

Gene: Alexphander_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Alexphander_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: AlishaPH_14 Start: 9022, Stop: 9366, Start Num: 45

Candidate Starts for AlishaPH_14:

(Start: 32 @8980 has 153 MA's), (Start: 45 @9022 has 6 MA's), (56, 9097), (69, 9157), (72, 9169), (92, 9244), (118, 9343),

Gene: AlleyCat_12 Start: 9056, Stop: 9439, Start Num: 32

Candidate Starts for AlleyCat_12:

(16, 9008), (Start: 32 @9056 has 153 MA's), (56, 9173), (62, 9200), (69, 9233), (76, 9260), (92, 9320), (106, 9383), (112, 9404), (113, 9407), (118, 9419),

Gene: Aloeri_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for Aloeri_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: Amelie_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Amelie_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Amgine_12 Start: 8610, Stop: 8999, Start Num: 30

Candidate Starts for Amgine_12:

(Start: 30 @8610 has 15 MA's), (48, 8673), (56, 8733), (69, 8793), (72, 8805), (73, 8808), (97, 8913), (116, 8973), (118, 8979),

Gene: Aminay_12 Start: 8892, Stop: 9263, Start Num: 34

Candidate Starts for Aminay_12:

(Start: 34 @8892 has 62 MA's), (39, 8907), (40, 8916), (62, 9024), (69, 9057), (70, 9060), (72, 9069), (73, 9072), (90, 9135), (101, 9195), (112, 9228), (117, 9240),

Gene: Amohnition_13 Start: 8913, Stop: 9299, Start Num: 31

Candidate Starts for Amohnition_13:

(Start: 31 @8913 has 17 MA's), (39, 8937), (52, 9012), (56, 9033), (62, 9060), (69, 9093), (72, 9105), (73, 9108), (97, 9213), (116, 9273), (118, 9279),

Gene: Anaya_15 Start: 8982, Stop: 9368, Start Num: 32

Candidate Starts for Anaya_15:

(Start: 32 @8982 has 153 MA's), (Start: 45 @9024 has 6 MA's), (56, 9099), (62, 9126), (69, 9159), (72, 9171), (73, 9174), (92, 9246), (118, 9345),

Gene: Angelica_14 Start: 8952, Stop: 9338, Start Num: 32

Candidate Starts for Angelica_14:

(Start: 32 @8952 has 153 MA's), (Start: 45 @8994 has 6 MA's), (56, 9069), (62, 9096), (69, 9129), (72, 9141), (92, 9216), (118, 9315),

Gene: Angelique_9 Start: 7078, Stop: 7479, Start Num: 33

Candidate Starts for Angelique_9:

(2, 6850), (8, 6925), (27, 7054), (Start: 33 @7078 has 18 MA's), (51, 7159), (66, 7240), (72, 7261), (88, 7330), (90, 7336), (100, 7396), (120, 7462),

Gene: Anma_14 Start: 9040, Stop: 9309, Start Num: 56

Candidate Starts for Anma_14:

(Start: 32 @8929 has 153 MA's), (Start: 45 @8971 has 6 MA's), (49, 9001), (56, 9040), (62, 9067), (69, 9100), (92, 9187), (106, 9250), (118, 9286),

Gene: Apocalypse_14 Start: 8956, Stop: 9342, Start Num: 32

Candidate Starts for Apocalypse_14:

(Start: 32 @8956 has 153 MA's), (Start: 45 @8998 has 6 MA's), (56, 9073), (62, 9100), (69, 9133), (72, 9145), (92, 9220), (118, 9319),

Gene: Applecrisp_12 Start: 9011, Stop: 9400, Start Num: 30

Candidate Starts for Applecrisp_12:

(Start: 30 @9011 has 15 MA's), (48, 9074), (56, 9134), (64, 9173), (69, 9194), (72, 9206), (73, 9209), (97, 9314), (116, 9374), (118, 9380),

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

Candidate Starts for Apricot_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (78, 6615), (93, 6663), (121, 6780),

Gene: Asayake_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Asayake_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Atiba_14 Start: 8944, Stop: 9330, Start Num: 32

Candidate Starts for Atiba_14:

(Start: 32 @8944 has 153 MA's), (Start: 45 @8986 has 6 MA's), (56, 9061), (62, 9088), (69, 9121), (72, 9133), (92, 9208), (118, 9307),

Gene: Awesomesauce_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for Awesomesauce_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: BEEST_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for BEEST_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: BGlluviae_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for BGlluviae_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: BaghaKamala_14 Start: 8947, Stop: 9333, Start Num: 32

Candidate Starts for BaghaKamala_14:

(Start: 32 @8947 has 153 MA's), (Start: 45 @8989 has 6 MA's), (56, 9064), (69, 9124), (72, 9136), (92, 9211), (118, 9310),

Gene: BananenDer11_12 Start: 9139, Stop: 9522, Start Num: 32

Candidate Starts for BananenDer11_12:

(Start: 14 @9058 has 2 MA's), (16, 9064), (22, 9112), (Start: 32 @9139 has 153 MA's), (Start: 45 @9181 has 6 MA's), (56, 9256), (62, 9283), (69, 9316), (76, 9343), (92, 9403), (106, 9466), (112, 9487), (113, 9490), (118, 9502),

Gene: BarrelRoll_14 Start: 8973, Stop: 9359, Start Num: 32

Candidate Starts for BarrelRoll_14:

(Start: 32 @8973 has 153 MA's), (Start: 45 @9015 has 6 MA's), (56, 9090), (69, 9150), (72, 9162), (92, 9237), (118, 9336),

Gene: Beakin_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for Beakin_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: Beanstalk_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Beanstalk_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: BearBQ_9 Start: 6411, Stop: 6794, Start Num: 37

Candidate Starts for BearBQ_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (78, 6615), (93, 6663), (121, 6780),

Gene: BeeGee_9 Start: 7080, Stop: 7481, Start Num: 33

Candidate Starts for BeeGee_9:

(3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 15 MA's), (Start: 33 @7080 has 18 MA's), (51, 7161), (59, 7212), (66, 7242), (72, 7263), (73, 7266), (75, 7275), (77, 7296), (88, 7332), (90, 7338), (100, 7398), (120, 7464),

Gene: Beezoo_14 Start: 9001, Stop: 9387, Start Num: 32

Candidate Starts for Beezoo_14:

(Start: 32 @9001 has 153 MA's), (Start: 45 @9043 has 6 MA's), (56, 9118), (62, 9145), (69, 9178), (72, 9190), (92, 9265), (118, 9364),

Gene: Bella96_14 Start: 8908, Stop: 9288, Start Num: 32

Candidate Starts for Bella96_14:

(23, 8887), (Start: 32 @8908 has 153 MA's), (Start: 45 @8950 has 6 MA's), (49, 8980), (56, 9019), (62, 9046), (69, 9079), (72, 9091), (92, 9166), (106, 9229), (118, 9265),

Gene: Belladonna_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Belladonna_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Bern_14 Start: 8939, Stop: 9319, Start Num: 32

Candidate Starts for Bern_14:

(Start: 32 @8939 has 153 MA's), (Start: 45 @8981 has 6 MA's), (49, 9011), (56, 9050), (69, 9110), (92, 9197), (118, 9296),

Gene: BigPhil_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for BigPhil_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Biglebops_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Biglebops_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Birdsong_9 Start: 6411, Stop: 6794, Start Num: 37

Candidate Starts for Birdsong_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (78, 6615), (93, 6663), (121, 6780),

Gene: Blizzard_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Blizzard_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Bobi_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Bobi_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Bobquesha_15 Start: 9986, Stop: 10360, Start Num: 32

Candidate Starts for Bobquesha_15:

(Start: 32 @9986 has 153 MA's), (Start: 37 @9995 has 15 MA's), (40, 10013), (51, 10061), (62, 10121), (70, 10157), (72, 10166), (73, 10169), (90, 10232), (101, 10292), (112, 10325), (113, 10328),

Gene: Boiiii_14 Start: 9065, Stop: 9409, Start Num: 45

Candidate Starts for Boiiii_14:

(Start: 32 @9023 has 153 MA's), (Start: 45 @9065 has 6 MA's), (56, 9140), (69, 9200), (72, 9212), (92, 9287), (118, 9386),

Gene: Boilgate_11 Start: 8967, Stop: 9359, Start Num: 26

Candidate Starts for Boilgate_11:

(Start: 20 @8937 has 1 MA's), (Start: 26 @8967 has 1 MA's), (41, 9006), (43, 9012), (62, 9117), (70, 9153), (72, 9162), (73, 9165), (74, 9171), (76, 9177), (79, 9195), (90, 9228), (97, 9270), (99, 9276), (101, 9288), (106, 9300), (112, 9321), (113, 9324), (118, 9336),

Gene: Boomer_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Boomer_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: BoostSeason_10 Start: 6968, Stop: 7354, Start Num: 30

Candidate Starts for BoostSeason_10:

(Start: 14 @6899 has 2 MA's), (25, 6959), (Start: 30 @6968 has 15 MA's), (70, 7148), (72, 7157), (73, 7160), (92, 7232), (112, 7316), (118, 7331),

Gene: Bradissa_9 Start: 7084, Stop: 7485, Start Num: 33

Candidate Starts for Bradissa_9:

(2, 6853), (3, 6865), (5, 6892), (8, 6931), (Start: 30 @7075 has 15 MA's), (Start: 33 @7084 has 18 MA's), (51, 7165), (59, 7216), (66, 7246), (72, 7267), (73, 7270), (75, 7279), (90, 7342), (100, 7402), (120, 7468),

Gene: BritBrat_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for BritBrat_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: Brookers_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Brookers_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Brushbloom_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Brushbloom_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Bryler_13 Start: 7935, Stop: 8315, Start Num: 31

Candidate Starts for Bryler_13:

(Start: 31 @7935 has 17 MA's), (69, 8109), (72, 8121), (73, 8124), (100, 8247), (104, 8253), (112, 8280), (118, 8295),

Gene: BuzzLyseyear_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for BuzzLyseyear_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: CREW_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for CREW_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Cain_13 Start: 7923, Stop: 8303, Start Num: 31

Candidate Starts for Cain_13:

(Start: 31 @7923 has 17 MA's), (69, 8097), (72, 8109), (73, 8112), (100, 8235), (104, 8241), (112, 8268), (118, 8283),

Gene: CallaLilly_14 Start: 8948, Stop: 9334, Start Num: 32

Candidate Starts for CallaLilly_14:

(Start: 32 @8948 has 153 MA's), (Start: 45 @8990 has 6 MA's), (56, 9065), (62, 9092), (69, 9125), (72, 9137), (92, 9212), (118, 9311),

Gene: Capricorn_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Capricorn_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: CaseJules_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for CaseJules_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Cashline_9 Start: 6933, Stop: 7334, Start Num: 33

Candidate Starts for Cashline_9:

(Start: 33 @6933 has 18 MA's), (51, 7014), (59, 7065), (61, 7071), (66, 7095), (72, 7116), (73, 7119), (75, 7128), (88, 7185), (90, 7191), (100, 7251), (120, 7317),

Gene: Cerasum_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Cerasum_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Chancellor_15 Start: 10244, Stop: 10618, Start Num: 32

Candidate Starts for Chancellor_15:

(Start: 32 @10244 has 153 MA's), (Start: 37 @10253 has 15 MA's), (40, 10271), (51, 10319), (62, 10379), (70, 10415), (72, 10424), (73, 10427), (75, 10436), (90, 10490), (101, 10550), (112, 10583), (113, 10586),

Gene: Chavito_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Chavito_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (104, 8371), (112, 8398), (113, 8401), (118, 8413),

Gene: CheetoDust_14 Start: 8998, Stop: 9384, Start Num: 32

Candidate Starts for CheetoDust_14:

(23, 8977), (Start: 32 @8998 has 153 MA's), (Start: 45 @9040 has 6 MA's), (56, 9115), (69, 9175), (72, 9187), (92, 9262), (118, 9361),

Gene: Cheetobro_15 Start: 10244, Stop: 10618, Start Num: 32

Candidate Starts for Cheetobro_15:

(Start: 32 @10244 has 153 MA's), (Start: 37 @10253 has 15 MA's), (40, 10271), (51, 10319), (62, 10379), (70, 10415), (72, 10424), (73, 10427), (75, 10436), (90, 10490), (101, 10550), (112, 10583), (113, 10586),

Gene: ChickenDinner_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for ChickenDinner_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: Chris_13 Start: 7918, Stop: 8298, Start Num: 31

Candidate Starts for Chris_13:

(6, 7798), (Start: 31 @7918 has 17 MA's), (39, 7942), (Start: 45 @7963 has 6 MA's), (56, 8032), (72, 8104), (75, 8116), (92, 8179), (112, 8263), (118, 8278),

Gene: Clipper_14 Start: 8998, Stop: 9384, Start Num: 32

Candidate Starts for Clipper_14:

(Start: 32 @8998 has 153 MA's), (Start: 45 @9040 has 6 MA's), (56, 9115), (69, 9175), (72, 9187), (92, 9262), (118, 9361),

Gene: Coco12_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Coco12_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 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: 32 @9139 has 153 MA's), (Start: 45 @9181 has 6 MA's), (56, 9256), (62, 9283), (69, 9316), (76, 9343), (92, 9403), (106, 9466), (112, 9487), (113, 9490), (118, 9502),

Gene: Confidence_9 Start: 7080, Stop: 7481, Start Num: 33

Candidate Starts for Confidence_9:

(2, 6849), (3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 15 MA's), (Start: 33 @7080 has 18 MA's), (51, 7161), (59, 7212), (66, 7242), (72, 7263), (73, 7266), (75, 7275), (88, 7332), (90, 7338), (100, 7398), (120, 7464), (122, 7470),

Gene: Cornucopia_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Cornucopia_8:

(Start: 34 @5928 has 62 MA's), (48, 5976), (58, 6048), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (85, 6159), (95, 6186), (97, 6207), (104, 6231), (112, 6258),

Gene: Crater_9 Start: 6411, Stop: 6794, Start Num: 37

Candidate Starts for Crater_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (78, 6615), (93, 6663), (121, 6780),

Gene: CrimD_14 Start: 8950, Stop: 9336, Start Num: 32

Candidate Starts for CrimD_14:

(Start: 32 @8950 has 153 MA's), (Start: 45 @8992 has 6 MA's), (56, 9067), (62, 9094), (69, 9127), (72, 9139), (92, 9214), (118, 9313),

Gene: Curiosium_15 Start: 8430, Stop: 8807, Start Num: 32

Candidate Starts for Curiosium_15:

(21, 8403), (Start: 32 @8430 has 153 MA's), (Start: 37 @8442 has 15 MA's), (Start: 45 @8472 has 6 MA's), (56, 8541), (72, 8613), (112, 8772), (118, 8787),

Gene: DS6A_12 Start: 9306, Stop: 9719, Start Num: 33

Candidate Starts for DS6A_12:

(Start: 33 @9306 has 18 MA's), (Start: 36 @9312 has 4 MA's), (42, 9339), (46, 9351), (51, 9381), (55, 9411), (56, 9414), (69, 9477), (70, 9480), (72, 9489), (73, 9492), (82, 9534), (84, 9546), (86, 9555), (96, 9597), (97, 9609), (105, 9639), (111, 9660), (114, 9675),

Gene: DaWorst_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for DaWorst_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Dadosky_12 Start: 9057, Stop: 9440, Start Num: 32

Candidate Starts for Dadosky_12:

(16, 9009), (Start: 32 @9057 has 153 MA's), (56, 9174), (62, 9201), (69, 9234), (76, 9261), (92, 9321), (106, 9384), (112, 9405), (113, 9408), (118, 9420),

Gene: Dalmuri_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Dalmuri_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: DanSyl44_15 Start: 10322, Stop: 10621, Start Num: 51

Candidate Starts for DanSyl44_15:

(Start: 32 @10247 has 153 MA's), (Start: 37 @10256 has 15 MA's), (40, 10274), (51, 10322), (62, 10382), (70, 10418), (72, 10427), (73, 10430), (75, 10439), (90, 10493), (101, 10553), (112, 10586), (113, 10589),

Gene: DartGoblin_14 Start: 8980, Stop: 9288, Start Num: 49

Candidate Starts for DartGoblin_14:

(23, 8887), (Start: 32 @8908 has 153 MA's), (Start: 45 @8950 has 6 MA's), (49, 8980), (56, 9019), (62, 9046), (69, 9079), (72, 9091), (92, 9166), (106, 9229), (118, 9265),

Gene: DarthP_13 Start: 8913, Stop: 9299, Start Num: 31

Candidate Starts for DarthP_13:

(Start: 31 @8913 has 17 MA's), (39, 8937), (52, 9012), (56, 9033), (69, 9093), (72, 9105), (73, 9108), (97, 9213), (116, 9273), (118, 9279),

Gene: Dartin_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Dartin_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: Deby_14 Start: 8994, Stop: 9338, Start Num: 45

Candidate Starts for Deby_14:

(Start: 32 @8952 has 153 MA's), (Start: 45 @8994 has 6 MA's), (56, 9069), (62, 9096), (69, 9129), (72, 9141), (92, 9216), (118, 9315),

Gene: Devera_14 Start: 8975, Stop: 9355, Start Num: 32

Candidate Starts for Devera_14:

(23, 8954), (Start: 32 @8975 has 153 MA's), (Start: 45 @9017 has 6 MA's), (49, 9047), (51, 9053), (56, 9086), (69, 9146), (92, 9233), (118, 9332),

Gene: DirtMcgirt_8 Start: 5930, Stop: 6301, Start Num: 34

Candidate Starts for DirtMcgirt_8:

(Start: 34 @5930 has 62 MA's), (44, 5960), (63, 6071), (66, 6086), (67, 6089), (69, 6095), (70, 6098), (97, 6209), (112, 6260), (123, 6293),

Gene: DismalFunk_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for DismalFunk_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: DismalStressor_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for DismalStressor_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: DocMcStuffins_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for DocMcStuffins_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: Dole_14 Start: 8977, Stop: 9357, Start Num: 32

Candidate Starts for Dole_14:

(23, 8956), (Start: 32 @8977 has 153 MA's), (Start: 45 @9019 has 6 MA's), (49, 9049), (51, 9055), (56, 9088), (69, 9148), (92, 9235), (118, 9334),

Gene: Doomslug_9 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Doomslug_9:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: DosHalletts_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for DosHalletts_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: DoubleChamp_12 Start: 9139, Stop: 9522, Start Num: 32

Candidate Starts for DoubleChamp_12:

(Start: 14 @9058 has 2 MA's), (16, 9064), (22, 9112), (Start: 32 @9139 has 153 MA's), (Start: 45 @9181 has 6 MA's), (56, 9256), (62, 9283), (69, 9316), (76, 9343), (92, 9403), (106, 9466), (112, 9487), (113, 9490), (118, 9502),

Gene: Doughnut_10 Start: 6962, Stop: 7348, Start Num: 30

Candidate Starts for Doughnut_10:

(Start: 14 @6893 has 2 MA's), (25, 6953), (Start: 30 @6962 has 15 MA's), (70, 7142), (72, 7151), (73, 7154), (92, 7226), (112, 7310), (118, 7325),

Gene: DrHayes_14 Start: 8929, Stop: 9309, Start Num: 32

Candidate Starts for DrHayes_14:

(Start: 32 @8929 has 153 MA's), (Start: 45 @8971 has 6 MA's), (49, 9001), (56, 9040), (62, 9067), (69, 9100), (92, 9187), (106, 9250), (118, 9286),

Gene: Drago_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Drago_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Durfee_14 Start: 9063, Stop: 9407, Start Num: 45

Candidate Starts for Durfee_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: EMSquaredA_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for EMSquaredA_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: Edugator_11 Start: 9057, Stop: 9440, Start Num: 32

Candidate Starts for Edugator_11:

(16, 9009), (Start: 32 @9057 has 153 MA's), (56, 9174), (62, 9201), (69, 9234), (76, 9261), (92, 9321), (106, 9384), (112, 9405), (113, 9408), (118, 9420),

Gene: Efra2_14 Start: 7916, Stop: 8293, Start Num: 32

Candidate Starts for Efra2_14:

(11, 7838), (Start: 32 @7916 has 153 MA's), (56, 8027), (70, 8090), (72, 8099), (104, 8231), (112, 8258), (118, 8273),

Gene: Ekdilam_11 Start: 8640, Stop: 9026, Start Num: 31

Candidate Starts for Ekdilam_11:

(Start: 31 @8640 has 17 MA's), (Start: 36 @8652 has 4 MA's), (39, 8664), (41, 8676), (56, 8760), (69, 8820), (72, 8832), (73, 8835), (97, 8940), (116, 9000), (118, 9006),

Gene: Ellie_11 Start: 8684, Stop: 9073, Start Num: 30

Candidate Starts for Ellie_11:

(Start: 30 @8684 has 15 MA's), (56, 8807), (64, 8846), (69, 8867), (72, 8879), (73, 8882), (97, 8987), (116, 9047), (118, 9053),

Gene: Emerson_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for Emerson_14:

(Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Emmaloid_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Emmaloid_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: EnalisNailo_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for EnalisNailo_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: Enby_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Enby_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Enkosi_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Enkosi_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Eponine_15 Start: 10108, Stop: 10482, Start Num: 32

Candidate Starts for Eponine_15:

(Start: 32 @10108 has 153 MA's), (Start: 37 @10117 has 15 MA's), (40, 10135), (51, 10183), (62, 10243), (69, 10276), (70, 10279), (72, 10288), (73, 10291), (75, 10300), (90, 10354), (101, 10414), (104, 10420), (112, 10447), (116, 10456),

Gene: Farewell_7 Start: 6385, Stop: 6810, Start Num: 28

Candidate Starts for Farewell_7:

(Start: 28 @6385 has 1 MA's), (Start: 33 @6400 has 18 MA's), (Start: 34 @6403 has 62 MA's), (Start: 45 @6442 has 6 MA's), (46, 6445), (53, 6496), (65, 6565), (66, 6568), (70, 6580), (72, 6589), (81, 6625), (88, 6658), (96, 6700), (112, 6763), (113, 6766), (115, 6769),

Gene: Fefferhead_13 Start: 8851, Stop: 9240, Start Num: 30

Candidate Starts for Fefferhead_13:

(Start: 30 @8851 has 15 MA's), (48, 8914), (56, 8974), (69, 9034), (72, 9046), (73, 9049), (97, 9154), (116, 9214), (118, 9220),

Gene: Feyre_12 Start: 9005, Stop: 9388, Start Num: 32

Candidate Starts for Feyre_12:

(Start: 32 @9005 has 153 MA's), (41, 9038), (51, 9089), (56, 9122), (62, 9149), (69, 9182), (92, 9269), (112, 9353), (113, 9356), (118, 9368),

Gene: Findley_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for Findley_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: Fionnbharth_15 Start: 10234, Stop: 10608, Start Num: 32

Candidate Starts for Fionnbharth_15:

(Start: 32 @10234 has 153 MA's), (Start: 37 @10243 has 15 MA's), (40, 10261), (51, 10309), (62, 10369), (70, 10405), (72, 10414), (73, 10417), (75, 10426), (90, 10480), (101, 10540), (112, 10573), (113, 10576),

Gene: Flathead_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Flathead_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Floral_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for Floral_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: Frankie_8 Start: 6121, Stop: 6492, Start Num: 34

Candidate Starts for Frankie_8:

(Start: 34 @6121 has 62 MA's), (44, 6151), (63, 6262), (66, 6277), (67, 6280), (69, 6286), (97, 6400), (112, 6451), (123, 6484),

Gene: Fryberger_40 Start: 15313, Stop: 15726, Start Num: 37

Candidate Starts for Fryberger_40:

(Start: 37 @15313 has 15 MA's), (43, 15340), (Start: 45 @15346 has 6 MA's), (46, 15349), (52, 15397), (68, 15472), (71, 15484), (80, 15529), (87, 15562), (102, 15637),

Gene: Ganymede_14 Start: 8998, Stop: 9384, Start Num: 32

Candidate Starts for Ganymede_14:

(Start: 32 @8998 has 153 MA's), (Start: 45 @9040 has 6 MA's), (56, 9115), (69, 9175), (72, 9187), (92, 9262), (118, 9361),

Gene: Gengar_12 Start: 9112, Stop: 9495, Start Num: 32

Candidate Starts for Gengar_12:

(Start: 32 @9112 has 153 MA's), (41, 9145), (51, 9196), (56, 9229), (62, 9256), (69, 9289), (92, 9376), (112, 9460), (113, 9463), (118, 9475),

Gene: Geraldini_14 Start: 9001, Stop: 9387, Start Num: 32

Candidate Starts for Geraldini_14:

(Start: 32 @9001 has 153 MA's), (Start: 45 @9043 has 6 MA's), (56, 9118), (62, 9145), (69, 9178), (72, 9190), (92, 9265), (118, 9364),

Gene: Girafales_8 Start: 5923, Stop: 6294, Start Num: 34

Candidate Starts for Girafales_8:

(Start: 34 @5923 has 62 MA's), (44, 5953), (63, 6064), (66, 6079), (67, 6082), (69, 6088), (70, 6091), (97, 6202), (112, 6253), (123, 6286),

Gene: Guanica15_14 Start: 7932, Stop: 8309, Start Num: 32

Candidate Starts for Guanica15_14:

(11, 7854), (Start: 32 @7932 has 153 MA's), (56, 8043), (70, 8106), (72, 8115), (104, 8247), (112, 8274), (118, 8289),

Gene: Guey18_45 Start: 16506, Stop: 16919, Start Num: 37

Candidate Starts for Guey18_45:

(Start: 37 @16506 has 15 MA's), (43, 16533), (Start: 45 @16539 has 6 MA's), (46, 16542), (52, 16590), (68, 16665), (71, 16677), (80, 16722), (87, 16755), (102, 16830),

Gene: Guillsminger_12 Start: 9087, Stop: 9470, Start Num: 32

Candidate Starts for Guillsminger_12:

(Start: 32 @9087 has 153 MA's), (41, 9120), (51, 9171), (56, 9204), (62, 9231), (69, 9264), (92, 9351), (112, 9435), (113, 9438), (118, 9450),

Gene: Hammy_13 Start: 8907, Stop: 9293, Start Num: 31

Candidate Starts for Hammy_13:

(Start: 31 @8907 has 17 MA's), (39, 8931), (52, 9006), (56, 9027), (69, 9087), (72, 9099), (73, 9102), (97, 9207), (116, 9267), (118, 9273),

Gene: HedwigODU_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for HedwigODU_14:

(Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (62, 9125), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Heftyboy_12 Start: 9214, Stop: 9597, Start Num: 32

Candidate Starts for Heftyboy_12:

(Start: 32 @9214 has 153 MA's), (41, 9247), (Start: 45 @9256 has 6 MA's), (56, 9331), (62, 9358), (69, 9391), (92, 9478), (112, 9562), (113, 9565), (118, 9577),

Gene: Hegedechwinu_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Hegedechwinu_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Homura_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Homura_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Hurricane_13 Start: 9000, Stop: 9383, Start Num: 32

Candidate Starts for Hurricane_13:

(Start: 32 @9000 has 153 MA's), (47, 9051), (56, 9117), (69, 9177), (72, 9189), (73, 9192), (92, 9264), (112, 9348), (118, 9363),

Gene: Hyperbowlee_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Hyperbowlee_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Illumine_14 Start: 8977, Stop: 9357, Start Num: 32

Candidate Starts for Illumine_14:

(23, 8956), (Start: 32 @8977 has 153 MA's), (Start: 45 @9019 has 6 MA's), (49, 9049), (51, 9055), (56, 9088), (69, 9148), (92, 9235), (118, 9334),

Gene: Inky_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Inky_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: InvictusManeo_12 Start: 9182, Stop: 9565, Start Num: 32

Candidate Starts for InvictusManeo_12:

(Start: 14 @9101 has 2 MA's), (16, 9107), (22, 9155), (Start: 32 @9182 has 153 MA's), (Start: 45 @9224 has 6 MA's), (56, 9299), (62, 9326), (69, 9359), (76, 9386), (92, 9446), (106, 9509), (112, 9530), (113, 9533), (118, 9545),

Gene: JAWS_14 Start: 9017, Stop: 9361, Start Num: 45

Candidate Starts for JAWS_14:

(Start: 32 @8975 has 153 MA's), (Start: 45 @9017 has 6 MA's), (56, 9092), (69, 9152), (72, 9164), (92, 9239), (118, 9338),

Gene: JF1_15 Start: 10233, Stop: 10607, Start Num: 32

Candidate Starts for JF1_15:

(Start: 32 @10233 has 153 MA's), (Start: 37 @10242 has 15 MA's), (40, 10260), (51, 10308), (62, 10368), (70, 10404), (72, 10413), (73, 10416), (75, 10425), (90, 10479), (101, 10539), (112, 10572),

(113, 10575),

Gene: Jablanski_9 Start: 6933, Stop: 7334, Start Num: 33

Candidate Starts for Jablanski_9:

(2, 6702), (3, 6714), (5, 6741), (8, 6780), (Start: 30 @6924 has 15 MA's), (Start: 33 @6933 has 18 MA's), (51, 7014), (59, 7065), (66, 7095), (72, 7116), (73, 7119), (88, 7185), (90, 7191), (100, 7251), (120, 7317),

Gene: JalFarm20_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for JalFarm20_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Jarvi_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Jarvi_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Jayhawk_14 Start: 8982, Stop: 9368, Start Num: 32

Candidate Starts for Jayhawk_14:

(Start: 32 @8982 has 153 MA's), (Start: 45 @9024 has 6 MA's), (56, 9099), (62, 9126), (69, 9159), (72, 9171), (92, 9246), (118, 9345),

Gene: Jeckyll_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Jeckyll_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Job42_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Job42_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Joy99_14 Start: 8947, Stop: 9333, Start Num: 32

Candidate Starts for Joy99_14:

(Start: 32 @8947 has 153 MA's), (Start: 45 @8989 has 6 MA's), (56, 9064), (69, 9124), (72, 9136), (92, 9211), (118, 9310),

Gene: Juice456_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Juice456_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Juliette_15 Start: 10108, Stop: 10482, Start Num: 32

Candidate Starts for Juliette_15:

(Start: 32 @10108 has 153 MA's), (Start: 37 @10117 has 15 MA's), (40, 10135), (51, 10183), (62, 10243), (69, 10276), (70, 10279), (72, 10288), (73, 10291), (75, 10300), (90, 10354), (101, 10414), (104, 10420), (112, 10447), (116, 10456),

Gene: Keelan_38 Start: 15288, Stop: 15701, Start Num: 37

Candidate Starts for Keelan_38:

(Start: 37 @15288 has 15 MA's), (43, 15315), (46, 15324), (52, 15372), (68, 15447), (71, 15459), (87, 15537), (102, 15612), (113, 15648), (116, 15654),

Gene: Keshu_13 Start: 8987, Stop: 9370, Start Num: 32

Candidate Starts for Keshu_13:

(Start: 32 @8987 has 153 MA's), (56, 9104), (69, 9164), (72, 9176), (73, 9179), (92, 9251), (112, 9335), (118, 9350),

Gene: KiSi_13 Start: 7852, Stop: 8235, Start Num: 32

Candidate Starts for KiSi_13:

(17, 7804), (Start: 32 @7852 has 153 MA's), (Start: 45 @7894 has 6 MA's), (50, 7927), (56, 7969), (62, 7996), (69, 8029), (72, 8041), (92, 8116), (112, 8200), (116, 8209), (118, 8215),

Gene: Kimberlium_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Kimberlium_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Kingsley_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Kingsley_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 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: 32 @8809 has 153 MA's), (Start: 45 @8851 has 6 MA's), (56, 8926), (62, 8953), (69, 8986), (76, 9013), (92, 9073), (106, 9136), (112, 9157), (113, 9160), (118, 9172),

Gene: Kraw_15 Start: 10153, Stop: 10527, Start Num: 32

Candidate Starts for Kraw_15:

(10, 10069), (Start: 32 @10153 has 153 MA's), (Start: 37 @10162 has 15 MA's), (40, 10180), (51, 10228), (62, 10288), (70, 10324), (72, 10333), (73, 10336), (75, 10345), (90, 10399), (101, 10459), (112, 10492), (113, 10495),

Gene: Krueger_13 Start: 7907, Stop: 8293, Start Num: 31

Candidate Starts for Krueger_13:

(Start: 31 @7907 has 17 MA's), (Start: 37 @7922 has 15 MA's), (56, 8027), (69, 8087), (73, 8102), (100, 8225), (112, 8258), (118, 8273),

Gene: Kuwabara_9 Start: 6411, Stop: 6794, Start Num: 37

Candidate Starts for Kuwabara_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (93, 6663), (121, 6780),

Gene: Larva_12 Start: 8924, Stop: 9307, Start Num: 32

Candidate Starts for Larva_12:

(16, 8876), (Start: 32 @8924 has 153 MA's), (56, 9041), (62, 9068), (69, 9101), (76, 9128), (92, 9188), (106, 9251), (112, 9272), (113, 9275), (118, 9287),

Gene: LastHope_14 Start: 8004, Stop: 8381, Start Num: 32

Candidate Starts for LastHope_14:

(Start: 32 @8004 has 153 MA's), (56, 8115), (70, 8178), (72, 8187), (112, 8346), (118, 8361),

Gene: LaterM_14 Start: 8945, Stop: 9325, Start Num: 32

Candidate Starts for LaterM_14:

(23, 8924), (24, 8930), (Start: 32 @8945 has 153 MA's), (Start: 45 @8987 has 6 MA's), (49, 9017), (51, 9023), (56, 9056), (69, 9116), (92, 9203), (118, 9302),

Gene: Lavahound_12 Start: 8610, Stop: 8999, Start Num: 30

Candidate Starts for Lavahound_12:

(Start: 30 @8610 has 15 MA's), (48, 8673), (56, 8733), (69, 8793), (72, 8805), (73, 8808), (97, 8913), (116, 8973), (118, 8979),

Gene: LeMond_13 Start: 7924, Stop: 8307, Start Num: 32

Candidate Starts for LeMond_13:

(Start: 32 @7924 has 153 MA's), (Start: 45 @7966 has 6 MA's), (50, 7999), (56, 8041), (62, 8068), (69, 8101), (72, 8113), (92, 8188), (112, 8272), (116, 8281), (118, 8287),

Gene: Lea83_13 Start: 8987, Stop: 9370, Start Num: 32

Candidate Starts for Lea83_13:

(Start: 32 @8987 has 153 MA's), (56, 9104), (69, 9164), (72, 9176), (73, 9179), (74, 9185), (92, 9251), (112, 9335), (118, 9350),

Gene: Lebo14_15 Start: 10247, Stop: 10621, Start Num: 32

Candidate Starts for Lebo14_15:

(Start: 32 @10247 has 153 MA's), (Start: 37 @10256 has 15 MA's), (40, 10274), (51, 10322), (62, 10382), (70, 10418), (72, 10427), (73, 10430), (75, 10439), (90, 10493), (101, 10553), (112, 10586), (113, 10589),

Gene: Leozinho_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Leozinho_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Leston_12 Start: 9217, Stop: 9600, Start Num: 32

Candidate Starts for Leston_12:

(Start: 32 @9217 has 153 MA's), (41, 9250), (Start: 45 @9259 has 6 MA's), (56, 9334), (62, 9361), (69, 9394), (92, 9481), (112, 9565), (113, 9568), (118, 9580),

Gene: LilDirt_11 Start: 8939, Stop: 9322, Start Num: 32

Candidate Starts for LilDirt_11:

(Start: 14 @8858 has 2 MA's), (16, 8864), (22, 8912), (Start: 32 @8939 has 153 MA's), (Start: 45 @8981 has 6 MA's), (56, 9056), (62, 9083), (69, 9116), (76, 9143), (92, 9203), (106, 9266), (112, 9287), (113, 9290), (118, 9302),

Gene: LilPharaoh_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for LilPharaoh_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: LilSpotty_8 Start: 6103, Stop: 6471, Start Num: 37

Candidate Starts for LilSpotty_8:

(Start: 37 @6103 has 15 MA's), (38, 6106), (42, 6127), (52, 6187), (60, 6229), (66, 6253), (69, 6262), (72, 6274), (83, 6316), (89, 6331), (94, 6352), (100, 6391), (109, 6418), (119, 6451),

Gene: Lilas_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for Lilas_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: LindNT_14 Start: 8945, Stop: 9331, Start Num: 32

Candidate Starts for LindNT_14:

(Start: 32 @8945 has 153 MA's), (Start: 45 @8987 has 6 MA's), (56, 9062), (62, 9089), (69, 9122), (72, 9134), (92, 9209), (118, 9308),

Gene: LittleShirley_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for LittleShirley_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Llorens_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Llorens_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: LonelyBoi_9 Start: 6933, Stop: 7334, Start Num: 33

Candidate Starts for LonelyBoi_9:

(2, 6702), (3, 6714), (8, 6780), (Start: 30 @6924 has 15 MA's), (Start: 33 @6933 has 18 MA's), (51, 7014), (59, 7065), (66, 7095), (72, 7116), (73, 7119), (88, 7185), (90, 7191), (100, 7251), (120, 7317),

Gene: LordVader_9 Start: 5923, Stop: 6294, Start Num: 34

Candidate Starts for LordVader_9:

(Start: 34 @5923 has 62 MA's), (44, 5953), (63, 6064), (66, 6079), (67, 6082), (69, 6088), (70, 6091), (97, 6202), (112, 6253), (123, 6286),

Gene: Lorde_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Lorde_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Lucia_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Lucia_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: LunaStella_8 Start: 6532, Stop: 6906, Start Num: 36

Candidate Starts for LunaStella_8:

(Start: 36 @6532 has 4 MA's), (42, 6559), (61, 6664), (66, 6688), (69, 6697), (76, 6724), (86, 6760), (100, 6829), (103, 6835), (107, 6844), (111, 6859),

Gene: Lunahalos_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Lunahalos_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: MacKat_14 Start: 8998, Stop: 9384, Start Num: 32

Candidate Starts for MacKat_14:

(Start: 32 @8998 has 153 MA's), (Start: 45 @9040 has 6 MA's), (56, 9115), (69, 9175), (72, 9187), (92, 9262), (118, 9361),

Gene: MacnCheese_14 Start: 9215, Stop: 9598, Start Num: 32

Candidate Starts for MacnCheese_14:

(12, 9137), (15, 9146), (Start: 32 @9215 has 153 MA's), (56, 9332), (69, 9392), (72, 9404), (74, 9413), (92, 9479), (112, 9563), (118, 9578),

Gene: Madiba_8 Start: 5926, Stop: 6297, Start Num: 34

Candidate Starts for Madiba_8:

(Start: 34 @5926 has 62 MA's), (44, 5956), (63, 6067), (66, 6082), (67, 6085), (69, 6091), (70, 6094), (97, 6205), (112, 6256), (123, 6289),

Gene: Malthus_15 Start: 10153, Stop: 10527, Start Num: 32

Candidate Starts for Malthus_15:

(10, 10069), (Start: 32 @10153 has 153 MA's), (Start: 37 @10162 has 15 MA's), (40, 10180), (51, 10228), (62, 10288), (70, 10324), (72, 10333), (73, 10336), (75, 10345), (90, 10399), (101, 10459), (112, 10492), (113, 10495),

Gene: Marcoliusprime_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for Marcoliusprime_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: MarkPhew_14 Start: 7826, Stop: 8203, Start Num: 32

Candidate Starts for MarkPhew_14:

(18, 7775), (Start: 32 @7826 has 153 MA's), (70, 8000), (72, 8009), (92, 8084), (112, 8168), (118, 8183),

Gene: Marker_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Marker_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Marshawn_15 Start: 8512, Stop: 8898, Start Num: 32

Candidate Starts for Marshawn_15:

(7, 8353), (Start: 32 @8512 has 153 MA's), (Start: 37 @8524 has 15 MA's), (39, 8533), (52, 8605), (56, 8626), (69, 8686), (72, 8698), (75, 8710), (92, 8773), (101, 8824), (113, 8866), (116, 8872), (118, 8878),

Gene: Marteena_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for Marteena_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: McMater_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for McMater_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: Mdavu_10 Start: 8254, Stop: 8637, Start Num: 32

Candidate Starts for Mdavu_10:

(Start: 20 @8218 has 1 MA's), (Start: 32 @8254 has 153 MA's), (56, 8371), (62, 8398), (69, 8431), (72, 8443), (112, 8602), (118, 8617),

Gene: MeaningOfLife_14 Start: 8954, Stop: 9340, Start Num: 32

Candidate Starts for MeaningOfLife_14:

(Start: 32 @8954 has 153 MA's), (Start: 45 @8996 has 6 MA's), (56, 9071), (69, 9131), (72, 9143), (92, 9218), (118, 9317),

Gene: Megsy_14 Start: 8948, Stop: 9334, Start Num: 32

Candidate Starts for Megsy_14:

(Start: 32 @8948 has 153 MA's), (Start: 45 @8990 has 6 MA's), (56, 9065), (62, 9092), (69, 9125), (72, 9137), (92, 9212), (118, 9311),

Gene: Milly_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for Milly_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: Miryou_12 Start: 9065, Stop: 9448, Start Num: 32

Candidate Starts for Miryou_12:

(Start: 32 @9065 has 153 MA's), (41, 9098), (51, 9149), (56, 9182), (62, 9209), (69, 9242), (92, 9329), (112, 9413), (113, 9416), (118, 9428),

Gene: Misha28_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for Misha28_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: MissDaisy_15 Start: 10007, Stop: 10381, Start Num: 32

Candidate Starts for MissDaisy_15:

(Start: 32 @10007 has 153 MA's), (Start: 37 @10016 has 15 MA's), (40, 10034), (51, 10082), (62, 10142), (70, 10178), (72, 10187), (73, 10190), (90, 10253), (101, 10313), (112, 10346), (113, 10349),

Gene: Mitti_15 Start: 10157, Stop: 10531, Start Num: 32

Candidate Starts for Mitti_15:

(Start: 32 @10157 has 153 MA's), (Start: 37 @10166 has 15 MA's), (40, 10184), (51, 10232), (62, 10292), (70, 10328), (72, 10337), (73, 10340), (75, 10349), (90, 10403), (101, 10463), (112, 10496), (113, 10499),

Gene: MortyNRick_9 Start: 6411, Stop: 6794, Start Num: 37

Candidate Starts for MortyNRick_9:

(Start: 29 @6396 has 1 MA's), (Start: 37 @6411 has 15 MA's), (54, 6501), (57, 6528), (66, 6561), (69, 6570), (70, 6573), (72, 6582), (76, 6597), (78, 6615), (93, 6663), (121, 6780),

Gene: Mova_8 Start: 5930, Stop: 6301, Start Num: 34

Candidate Starts for Mova_8:

(Start: 34 @5930 has 62 MA's), (44, 5960), (63, 6071), (66, 6086), (67, 6089), (69, 6095), (97, 6209), (112, 6260), (123, 6293),

Gene: Mozy_8 Start: 5926, Stop: 6297, Start Num: 34

Candidate Starts for Mozy_8:

(Start: 34 @5926 has 62 MA's), (48, 5974), (58, 6046), (66, 6082), (67, 6085), (69, 6091), (70, 6094), (85, 6157), (95, 6184), (97, 6205), (104, 6229), (112, 6256),

Gene: Mufasa_10 Start: 6962, Stop: 7348, Start Num: 30

Candidate Starts for Mufasa_10:

(Start: 14 @6893 has 2 MA's), (25, 6953), (Start: 30 @6962 has 15 MA's), (70, 7142), (72, 7151), (73, 7154), (92, 7226), (112, 7310), (118, 7325),

Gene: MulchExplorer_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for MulchExplorer_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Murucutumbu_14 Start: 8938, Stop: 9318, Start Num: 32

Candidate Starts for Murucutumbu_14:

(23, 8917), (24, 8923), (Start: 32 @8938 has 153 MA's), (Start: 45 @8980 has 6 MA's), (49, 9010), (51, 9016), (56, 9049), (69, 9109), (92, 9196), (118, 9295),

Gene: Mynx_14 Start: 9001, Stop: 9387, Start Num: 32

Candidate Starts for Mynx_14:

(Start: 32 @9001 has 153 MA's), (Start: 45 @9043 has 6 MA's), (56, 9118), (69, 9178), (72, 9190), (92, 9265), (118, 9364),

Gene: Neighly_12 Start: 8923, Stop: 9306, Start Num: 32

Candidate Starts for Neighly_12:

(16, 8875), (Start: 32 @8923 has 153 MA's), (56, 9040), (62, 9067), (69, 9100), (76, 9127), (92, 9187), (106, 9250), (112, 9271), (113, 9274), (118, 9286),

Gene: Nibb_13 Start: 7968, Stop: 8345, Start Num: 32

Candidate Starts for Nibb_13:

(9, 7887), (Start: 14 @7899 has 2 MA's), (18, 7917), (Start: 32 @7968 has 153 MA's), (70, 8142), (72, 8151), (92, 8226), (112, 8310), (118, 8325),

Gene: Nikao_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Nikao_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Niklas_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Niklas_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: November_12 Start: 8758, Stop: 9144, Start Num: 31

Candidate Starts for November_12:

(Start: 31 @8758 has 17 MA's), (39, 8782), (48, 8818), (56, 8878), (69, 8938), (72, 8950), (73, 8953), (97, 9058), (118, 9124),

Gene: Nutello_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Nutello_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: OkiRoe_12 Start: 9087, Stop: 9470, Start Num: 32

Candidate Starts for OkiRoe_12:

(Start: 32 @9087 has 153 MA's), (41, 9120), (51, 9171), (56, 9204), (62, 9231), (69, 9264), (92, 9351), (112, 9435), (113, 9438), (118, 9450),

Gene: Oksu_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Oksu_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: OmniCritical_15 Start: 10144, Stop: 10518, Start Num: 32

Candidate Starts for OmniCritical_15:

(Start: 32 @10144 has 153 MA's), (Start: 37 @10153 has 15 MA's), (40, 10171), (51, 10219), (62, 10279), (70, 10315), (72, 10324), (73, 10327), (75, 10336), (90, 10390), (101, 10450), (112, 10483), (113, 10486),

Gene: Omnicron_12 Start: 8147, Stop: 8530, Start Num: 32

Candidate Starts for Omnicron_12:

(4, 7988), (7, 8021), (Start: 32 @8147 has 153 MA's), (41, 8180), (51, 8231), (56, 8264), (62, 8291), (69, 8324), (92, 8411), (99, 8450), (112, 8495), (118, 8510),

Gene: Oscar_13 Start: 7925, Stop: 8308, Start Num: 32

Candidate Starts for Oscar_13:

(Start: 32 @7925 has 153 MA's), (Start: 45 @7967 has 6 MA's), (50, 8000), (56, 8042), (62, 8069), (69, 8102), (72, 8114), (92, 8189), (112, 8273), (116, 8282), (118, 8288),

Gene: OwlsT2W_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for OwlsT2W_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Padfoot_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Padfoot_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Padpat_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for Padpat_14:

(Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Paola_12 Start: 9087, Stop: 9470, Start Num: 32

Candidate Starts for Paola_12:

(Start: 32 @9087 has 153 MA's), (41, 9120), (51, 9171), (56, 9204), (62, 9231), (69, 9264), (92, 9351), (112, 9435), (113, 9438), (118, 9450),

Gene: Patt_15 Start: 9983, Stop: 10357, Start Num: 32

Candidate Starts for Patt_15:

(Start: 32 @9983 has 153 MA's), (Start: 37 @9992 has 15 MA's), (40, 10010), (51, 10058), (62, 10118), (70, 10154), (72, 10163), (73, 10166), (90, 10229), (101, 10289), (112, 10322), (113, 10325),

Gene: Peanam_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Peanam_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: Peel_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Peel_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Peridot_9 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Peridot_9:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Pharb_13 Start: 8835, Stop: 9218, Start Num: 32

Candidate Starts for Pharb_13:

(Start: 32 @8835 has 153 MA's), (56, 8952), (62, 8979), (69, 9012), (72, 9024), (73, 9027), (92, 9099), (112, 9183), (118, 9198),

Gene: PhelpsODU_13 Start: 7967, Stop: 8347, Start Num: 31

Candidate Starts for PhelpsODU_13:

(Start: 31 @7967 has 17 MA's), (39, 7991), (69, 8141), (72, 8153), (73, 8156), (100, 8279), (104, 8285), (112, 8312), (118, 8327),

Gene: Phrank_13 Start: 7911, Stop: 8291, Start Num: 31

Candidate Starts for Phrank_13:

(Start: 31 @7911 has 17 MA's), (69, 8085), (72, 8097), (73, 8100), (100, 8223), (112, 8256), (118, 8271),

Gene: Piatt_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Piatt_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Piper2020_8 Start: 5930, Stop: 6301, Start Num: 34

Candidate Starts for Piper2020_8:

(Start: 34 @5930 has 62 MA's), (44, 5960), (63, 6071), (66, 6086), (67, 6089), (69, 6095), (70, 6098), (97, 6209), (112, 6260), (123, 6293),

Gene: Pisa1_13 Start: 8807, Stop: 9115, Start Num: 49

Candidate Starts for Pisa1_13:

(Start: 32 @8735 has 153 MA's), (Start: 45 @8777 has 6 MA's), (49, 8807), (56, 8846), (69, 8906), (92, 8993), (118, 9092),

Gene: Pisa4_13 Start: 8807, Stop: 9115, Start Num: 49

Candidate Starts for Pisa4_13:

(Start: 32 @8735 has 153 MA's), (Start: 45 @8777 has 6 MA's), (49, 8807), (56, 8846), (69, 8906), (92, 8993), (118, 9092),

Gene: Pixie_13 Start: 8739, Stop: 9122, Start Num: 32

Candidate Starts for Pixie_13:

(Start: 32 @8739 has 153 MA's), (56, 8856), (69, 8916), (72, 8928), (73, 8931), (74, 8937), (92, 9003), (106, 9066), (112, 9087), (118, 9102),

Gene: Plumbus_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Plumbus_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Pokerus_13 Start: 8935, Stop: 9321, Start Num: 32

Candidate Starts for Pokerus_13:

(Start: 32 @8935 has 153 MA's), (Start: 45 @8977 has 6 MA's), (56, 9052), (62, 9079), (69, 9112), (72, 9124), (118, 9298),

Gene: Pollux_9 Start: 7086, Stop: 7487, Start Num: 33

Candidate Starts for Pollux_9:

(2, 6855), (3, 6867), (5, 6894), (8, 6933), (Start: 30 @7077 has 15 MA's), (Start: 33 @7086 has 18 MA's), (51, 7167), (59, 7218), (66, 7248), (72, 7269), (73, 7272), (75, 7281), (90, 7344), (100, 7404), (120, 7470),

Gene: Pollywog_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Pollywog_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Posh_9 Start: 7080, Stop: 7481, Start Num: 33

Candidate Starts for Posh_9:

(1, 6768), (2, 6849), (3, 6861), (5, 6888), (8, 6927), (Start: 30 @7071 has 15 MA's), (Start: 33 @7080 has 18 MA's), (51, 7161), (59, 7212), (66, 7242), (72, 7263), (73, 7266), (88, 7332), (90, 7338), (100, 7398), (120, 7464),

Gene: Prithvi_14 Start: 8945, Stop: 9331, Start Num: 32

Candidate Starts for Prithvi_14:

(Start: 32 @8945 has 153 MA's), (Start: 45 @8987 has 6 MA's), (56, 9062), (62, 9089), (69, 9122), (72, 9134), (92, 9209), (118, 9308),

Gene: Psycho_12 Start: 9054, Stop: 9437, Start Num: 32

Candidate Starts for Psycho_12:

(16, 9006), (Start: 32 @9054 has 153 MA's), (56, 9171), (62, 9198), (69, 9231), (76, 9258), (92, 9318), (106, 9381), (112, 9402), (113, 9405), (118, 9417),

Gene: Pytheas_9 Start: 6933, Stop: 7334, Start Num: 33

Candidate Starts for Pytheas_9:

(2, 6702), (3, 6714), (5, 6741), (8, 6780), (Start: 30 @6924 has 15 MA's), (Start: 33 @6933 has 18 MA's), (51, 7014), (59, 7065), (66, 7095), (72, 7116), (73, 7119), (88, 7185), (90, 7191), (100, 7251), (120, 7317),

Gene: Qhanda_15 Start: 10328, Stop: 10627, Start Num: 51

Candidate Starts for Qhanda_15:

(Start: 32 @10253 has 153 MA's), (Start: 37 @10262 has 15 MA's), (40, 10280), (51, 10328), (62, 10388), (70, 10424), (72, 10433), (73, 10436), (75, 10445), (90, 10499), (101, 10559), (112, 10592), (113, 10595),

Gene: Quico_8 Start: 5923, Stop: 6294, Start Num: 34

Candidate Starts for Quico_8:

(Start: 34 @5923 has 62 MA's), (44, 5953), (63, 6064), (66, 6079), (67, 6082), (69, 6088), (70, 6091), (97, 6202), (112, 6253), (123, 6286),

Gene: QuincyRose_13 Start: 8998, Stop: 9384, Start Num: 32

Candidate Starts for QuincyRose_13:

(Start: 32 @8998 has 153 MA's), (Start: 45 @9040 has 6 MA's), (56, 9115), (69, 9175), (72, 9187), (92, 9262), (118, 9361),

Gene: Ramen_14 Start: 8981, Stop: 9367, Start Num: 32

Candidate Starts for Ramen_14:

(Start: 32 @8981 has 153 MA's), (Start: 45 @9023 has 6 MA's), (56, 9098), (62, 9125), (69, 9158), (72, 9170), (92, 9245), (118, 9344),

Gene: Ramsey_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Ramsey_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (104, 6230), (112, 6257), (123, 6290),

Gene: Rando14_12 Start: 8049, Stop: 8432, Start Num: 32

Candidate Starts for Rando14_12:

(9, 7962), (13, 7974), (Start: 20 @8013 has 1 MA's), (24, 8034), (Start: 32 @8049 has 153 MA's), (51, 8133), (56, 8166), (62, 8193), (69, 8226), (76, 8253), (92, 8313), (99, 8352), (112, 8397), (113, 8400), (118, 8412),

Gene: Rapunzel97_14 Start: 8982, Stop: 9368, Start Num: 32

Candidate Starts for Rapunzel97_14:

(Start: 32 @8982 has 153 MA's), (Start: 45 @9024 has 6 MA's), (56, 9099), (62, 9126), (69, 9159), (72, 9171), (92, 9246), (118, 9345),

Gene: Renaud18_8 Start: 6412, Stop: 6783, Start Num: 36

Candidate Starts for Renaud18_8:

(Start: 36 @6412 has 4 MA's), (42, 6436), (61, 6541), (66, 6565), (69, 6574), (76, 6601), (86, 6637), (100, 6706), (103, 6712), (107, 6721), (111, 6736),

Gene: Reptar3000_15 Start: 9985, Stop: 10359, Start Num: 32

Candidate Starts for Reptar3000_15:

(Start: 32 @9985 has 153 MA's), (Start: 37 @9994 has 15 MA's), (40, 10012), (51, 10060), (62, 10120), (70, 10156), (72, 10165), (73, 10168), (90, 10231), (101, 10291), (112, 10324), (113, 10327),

Gene: Rialto_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Rialto_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Richo_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Richo_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: RockyHorror_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for RockyHorror_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Ronaldo_43 Start: 16243, Stop: 16656, Start Num: 37

Candidate Starts for Ronaldo_43:

(Start: 37 @16243 has 15 MA's), (43, 16270), (Start: 45 @16276 has 6 MA's), (46, 16279), (52, 16327), (68, 16402), (71, 16414), (80, 16459), (87, 16492), (102, 16567),

Gene: Rosmarinus_14 Start: 9009, Stop: 9395, Start Num: 32

Candidate Starts for Rosmarinus_14:

(Start: 32 @9009 has 153 MA's), (Start: 45 @9051 has 6 MA's), (56, 9126), (69, 9186), (72, 9198), (92, 9273), (118, 9372),

Gene: Ruthiejr_14 Start: 9839, Stop: 10213, Start Num: 32

Candidate Starts for Ruthiejr_14:

(Start: 32 @9839 has 153 MA's), (Start: 37 @9848 has 15 MA's), (40, 9866), (51, 9914), (62, 9974), (69, 10007), (70, 10010), (72, 10019), (73, 10022), (75, 10031), (90, 10085), (101, 10145), (104, 10151), (112, 10178), (116, 10187),

Gene: SamScheppers_13 Start: 9760, Stop: 10134, Start Num: 32

Candidate Starts for SamScheppers_13:

(Start: 32 @9760 has 153 MA's), (Start: 37 @9769 has 15 MA's), (40, 9787), (51, 9835), (62, 9895), (70, 9931), (72, 9940), (73, 9943), (75, 9952), (90, 10006), (101, 10066), (112, 10099), (113, 10102),

Gene: SamuelLPlaqson_14 Start: 8929, Stop: 9309, Start Num: 32

Candidate Starts for SamuelLPlaqson_14:

(Start: 32 @8929 has 153 MA's), (Start: 45 @8971 has 6 MA's), (49, 9001), (56, 9040), (62, 9067), (69, 9100), (92, 9187), (106, 9250), (118, 9286),

Gene: Sarma624_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Sarma624_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: Scarlett_13 Start: 7924, Stop: 8307, Start Num: 32

Candidate Starts for Scarlett_13:

(Start: 32 @7924 has 153 MA's), (Start: 45 @7966 has 6 MA's), (50, 7999), (56, 8041), (62, 8068), (69, 8101), (72, 8113), (92, 8188), (112, 8272), (116, 8281), (118, 8287),

Gene: Seagreen_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Seagreen_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (97, 6207), (112, 6258), (123, 6291),

Gene: SgtBeansprout_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for SgtBeansprout_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Shadow1_12 Start: 7822, Stop: 8202, Start Num: 31

Candidate Starts for Shadow1_12:

(Start: 31 @7822 has 17 MA's), (69, 7996), (72, 8008), (73, 8011), (100, 8134), (112, 8167), (118, 8182),

Gene: Shaobing_14 Start: 8056, Stop: 8433, Start Num: 32

Candidate Starts for Shaobing_14:

(Start: 32 @8056 has 153 MA's), (Start: 45 @8098 has 6 MA's), (48, 8113), (56, 8167), (62, 8194), (69, 8227), (70, 8230), (72, 8239), (92, 8314), (112, 8398), (113, 8401), (116, 8407), (118, 8413),

Gene: ShedlockHolmes_13 Start: 8987, Stop: 9370, Start Num: 32

Candidate Starts for ShedlockHolmes_13:

(Start: 32 @8987 has 153 MA's), (56, 9104), (69, 9164), (72, 9176), (73, 9179), (74, 9185), (92, 9251), (112, 9335), (118, 9350),

Gene: ShiaSurprise_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for ShiaSurprise_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: SimranZ1_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for SimranZ1_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: SirPhilip_13 Start: 7688, Stop: 8065, Start Num: 32

Candidate Starts for SirPhilip_13:

(Start: 32 @7688 has 153 MA's), (Start: 45 @7730 has 6 MA's), (56, 7799), (70, 7862), (72, 7871), (92, 7946), (116, 8039), (118, 8045),

Gene: Slarp_15 Start: 10244, Stop: 10618, Start Num: 32

Candidate Starts for Slarp_15:

(Start: 32 @10244 has 153 MA's), (Start: 37 @10253 has 15 MA's), (40, 10271), (51, 10319), (62, 10379), (70, 10415), (72, 10424), (73, 10427), (75, 10436), (90, 10490), (101, 10550), (112, 10583), (113, 10586),

Gene: Slim_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Slim_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: Slimphazie_14 Start: 8982, Stop: 9368, Start Num: 32

Candidate Starts for Slimphazie_14:

(Start: 32 @8982 has 153 MA's), (Start: 45 @9024 has 6 MA's), (56, 9099), (62, 9126), (69, 9159), (72, 9171), (92, 9246), (118, 9345),

Gene: SoSeph_12 Start: 9214, Stop: 9597, Start Num: 32

Candidate Starts for SoSeph_12:

(Start: 32 @9214 has 153 MA's), (41, 9247), (Start: 45 @9256 has 6 MA's), (56, 9331), (62, 9358), (69, 9391), (92, 9478), (112, 9562), (113, 9565), (118, 9577),

Gene: Sparky_7 Start: 6404, Stop: 6811, Start Num: 34

Candidate Starts for Sparky_7:

(Start: 33 @6401 has 18 MA's), (Start: 34 @6404 has 62 MA's), (Start: 45 @6443 has 6 MA's), (46, 6446), (53, 6497), (65, 6566), (66, 6569), (70, 6581), (72, 6590), (81, 6626), (88, 6659), (96, 6701), (112, 6764), (113, 6767), (115, 6770),

Gene: Spikelee_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Spikelee_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Spock_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Spock_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Squirty_8 Start: 5926, Stop: 6297, Start Num: 34

Candidate Starts for Squirty_8:

(Start: 34 @5926 has 62 MA's), (44, 5956), (63, 6067), (66, 6082), (67, 6085), (69, 6091), (70, 6094), (97, 6205), (112, 6256), (123, 6289),

Gene: Stap_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Stap_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Starcevich_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Starcevich_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Stinson_14 Start: 8950, Stop: 9330, Start Num: 32

Candidate Starts for Stinson_14:

(23, 8929), (24, 8935), (Start: 32 @8950 has 153 MA's), (Start: 45 @8992 has 6 MA's), (49, 9022), (51, 9028), (56, 9061), (69, 9121), (92, 9208), (118, 9307),

Gene: Strobilo_10 Start: 6976, Stop: 7362, Start Num: 30

Candidate Starts for Strobilo_10:

(Start: 14 @6907 has 2 MA's), (25, 6967), (Start: 30 @6976 has 15 MA's), (70, 7156), (72, 7165), (73, 7168), (75, 7177), (92, 7240), (112, 7324), (118, 7339),

Gene: Sulley_14 Start: 8951, Stop: 9337, Start Num: 32

Candidate Starts for Sulley_14:

(Start: 32 @8951 has 153 MA's), (Start: 45 @8993 has 6 MA's), (56, 9068), (62, 9095), (69, 9128), (72, 9140), (92, 9215), (118, 9314),

Gene: Sunflower1121_12 Start: 7833, Stop: 8213, Start Num: 31

Candidate Starts for Sunflower1121_12:

(Start: 31 @7833 has 17 MA's), (69, 8007), (72, 8019), (73, 8022), (100, 8145), (112, 8178), (118, 8193),

Gene: Syra333_13 Start: 7926, Stop: 8309, Start Num: 31

Candidate Starts for Syra333_13:

(Start: 31 @7926 has 17 MA's), (69, 8100), (72, 8112), (73, 8115), (100, 8238), (112, 8271), (118, 8286),

Gene: TBond007_13 Start: 8738, Stop: 9121, Start Num: 32

Candidate Starts for TBond007_13:

(Start: 32 @8738 has 153 MA's), (56, 8855), (69, 8915), (72, 8927), (73, 8930), (74, 8936), (92, 9002), (106, 9065), (112, 9086), (118, 9101),

Gene: TChen_8 Start: 6532, Stop: 6906, Start Num: 36

Candidate Starts for TChen_8:

(Start: 36 @6532 has 4 MA's), (42, 6559), (61, 6664), (66, 6688), (69, 6697), (76, 6724), (86, 6760), (100, 6829), (103, 6835), (107, 6844), (111, 6859),

Gene: TClif_13 Start: 7920, Stop: 8297, Start Num: 32

Candidate Starts for TClif_13:

(11, 7842), (Start: 32 @7920 has 153 MA's), (56, 8031), (72, 8103), (92, 8178), (101, 8229), (112, 8262), (118, 8277),

Gene: TM4_10 Start: 7028, Stop: 7414, Start Num: 30

Candidate Starts for TM4_10:

(Start: 14 @6959 has 2 MA's), (25, 7019), (Start: 30 @7028 has 15 MA's), (69, 7205), (70, 7208), (72, 7217), (73, 7220), (75, 7229), (92, 7292), (112, 7376), (118, 7391),

Gene: TPA4_9 Start: 7567, Stop: 7953, Start Num: 35

Candidate Starts for TPA4_9:

(35, 7567), (70, 7729), (72, 7738), (91, 7819), (98, 7858), (103, 7879), (108, 7897),

Gene: Tachez_14 Start: 8986, Stop: 9330, Start Num: 45

Candidate Starts for Tachez_14:

(Start: 32 @8944 has 153 MA's), (Start: 45 @8986 has 6 MA's), (56, 9061), (62, 9088), (69, 9121), (72, 9133), (92, 9208), (118, 9307),

Gene: TaiwanKao_14 Start: 8951, Stop: 9337, Start Num: 32

Candidate Starts for TaiwanKao_14:

(Start: 32 @8951 has 153 MA's), (Start: 45 @8993 has 6 MA's), (56, 9068), (62, 9095), (69, 9128), (72, 9140), (92, 9215), (118, 9314),

Gene: Taquito_13 Start: 9830, Stop: 10204, Start Num: 32

Candidate Starts for Taquito_13:

(Start: 32 @9830 has 153 MA's), (Start: 37 @9839 has 15 MA's), (40, 9857), (51, 9905), (62, 9965), (69, 9998), (70, 10001), (72, 10010), (73, 10013), (75, 10022), (90, 10076), (101, 10136), (112, 10169), (113, 10172),

Gene: Tchotchke_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Tchotchke_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Teejan_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Teejan_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: ThetaBob_8 Start: 6412, Stop: 6786, Start Num: 36

Candidate Starts for ThetaBob_8:

(Start: 36 @6412 has 4 MA's), (42, 6439), (61, 6544), (66, 6568), (69, 6577), (76, 6604), (86, 6640), (100, 6709), (103, 6715), (107, 6724), (111, 6739),

Gene: Thyatira_12 Start: 9086, Stop: 9469, Start Num: 32

Candidate Starts for Thyatira_12:

(Start: 32 @9086 has 153 MA's), (41, 9119), (51, 9170), (56, 9203), (62, 9230), (69, 9263), (92, 9350), (112, 9434), (113, 9437), (118, 9449),

Gene: Tierra_13 Start: 8632, Stop: 9012, Start Num: 31

Candidate Starts for Tierra_13:

(Start: 31 @8632 has 17 MA's), (39, 8656), (69, 8806), (72, 8818), (73, 8821), (100, 8944), (104, 8950), (112, 8977), (118, 8992),

Gene: Tigress9_13 Start: 7907, Stop: 8293, Start Num: 31

Candidate Starts for Tigress9_13:

(Start: 31 @7907 has 17 MA's), (Start: 37 @7922 has 15 MA's), (56, 8027), (69, 8087), (73, 8102), (100, 8225), (112, 8258), (118, 8273),

Gene: TingHuaYa_14 Start: 8007, Stop: 8384, Start Num: 32

Candidate Starts for TingHuaYa_14:

(Start: 32 @8007 has 153 MA's), (56, 8118), (70, 8181), (72, 8190), (112, 8349), (118, 8364),

Gene: TiniBug_14 Start: 8929, Stop: 9309, Start Num: 32

Candidate Starts for TiniBug_14:

(Start: 32 @8929 has 153 MA's), (Start: 45 @8971 has 6 MA's), (49, 9001), (56, 9040), (62, 9067), (69, 9100), (92, 9187), (106, 9250), (118, 9286),

Gene: Tiri_14 Start: 8990, Stop: 9376, Start Num: 32

Candidate Starts for Tiri_14:

(Start: 32 @8990 has 153 MA's), (Start: 45 @9032 has 6 MA's), (56, 9107), (62, 9134), (69, 9167), (72, 9179), (92, 9254), (118, 9353),

Gene: TootsiePop_8 Start: 5931, Stop: 6302, Start Num: 34

Candidate Starts for TootsiePop_8:

(Start: 34 @5931 has 62 MA's), (44, 5961), (63, 6072), (66, 6087), (67, 6090), (69, 6096), (70, 6099), (97, 6210), (112, 6261), (123, 6294),

Gene: Tootsieroll_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for Tootsieroll_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Topper_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Topper_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Toron_8 Start: 6532, Stop: 6906, Start Num: 36

Candidate Starts for Toron_8:

(Start: 36 @6532 has 4 MA's), (42, 6559), (61, 6664), (66, 6688), (69, 6697), (76, 6724), (86, 6760), (100, 6829), (103, 6835), (107, 6844),

Gene: Torres_10 Start: 8230, Stop: 8649, Start Num: 20

Candidate Starts for Torres_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: Totinger_8 Start: 5929, Stop: 6300, Start Num: 34

Candidate Starts for Totinger_8:

(Start: 34 @5929 has 62 MA's), (44, 5959), (63, 6070), (66, 6085), (67, 6088), (69, 6094), (70, 6097), (97, 6208), (112, 6259), (123, 6292),

Gene: TreyKay_14 Start: 8945, Stop: 9331, Start Num: 32

Candidate Starts for TreyKay_14:

(Start: 32 @8945 has 153 MA's), (Start: 45 @8987 has 6 MA's), (56, 9062), (62, 9089), (69, 9122), (72, 9134), (92, 9209), (118, 9308),

Gene: TribelTrouble_12 Start: 8796, Stop: 9179, Start Num: 32

Candidate Starts for TribelTrouble_12:

(Start: 32 @8796 has 153 MA's), (56, 8913), (69, 8973), (72, 8985), (73, 8988), (74, 8994), (92, 9060), (112, 9144), (118, 9159),

Gene: Trice_10 Start: 8266, Stop: 8649, Start Num: 32

Candidate Starts for Trice_10:

(Start: 20 @8230 has 1 MA's), (Start: 32 @8266 has 153 MA's), (56, 8383), (62, 8410), (69, 8443), (72, 8455), (112, 8614), (118, 8629),

Gene: TruffulaTree_14 Start: 8978, Stop: 9364, Start Num: 32

Candidate Starts for TruffulaTree_14:

(Start: 32 @8978 has 153 MA's), (Start: 45 @9020 has 6 MA's), (56, 9095), (62, 9122), (69, 9155), (72, 9167), (92, 9242), (118, 9341),

Gene: Twitch_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Twitch_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: UncleRicky_8 Start: 5928, Stop: 6299, Start Num: 34

Candidate Starts for UncleRicky_8:

(Start: 34 @5928 has 62 MA's), (44, 5958), (63, 6069), (66, 6084), (67, 6087), (69, 6093), (70, 6096), (97, 6207), (112, 6258), (123, 6291),

Gene: Unicorn_13 Start: 7967, Stop: 8347, Start Num: 31

Candidate Starts for Unicorn_13:

(Start: 31 @7967 has 17 MA's), (39, 7991), (69, 8141), (72, 8153), (73, 8156), (100, 8279), (104, 8285), (112, 8312), (118, 8327),

Gene: Urkel_14 Start: 8929, Stop: 9309, Start Num: 32

Candidate Starts for Urkel_14:

(Start: 32 @8929 has 153 MA's), (Start: 45 @8971 has 6 MA's), (49, 9001), (56, 9040), (62, 9067), (69, 9100), (92, 9187), (106, 9250), (118, 9286),

Gene: Validus_14 Start: 7976, Stop: 8353, Start Num: 32

Candidate Starts for Validus_14:

(Start: 32 @7976 has 153 MA's), (48, 8033), (56, 8087), (62, 8114), (69, 8147), (70, 8150), (72, 8159), (92, 8234), (104, 8291), (112, 8318), (113, 8321), (118, 8333),

Gene: Veliki_14 Start: 9021, Stop: 9407, Start Num: 32

Candidate Starts for Veliki_14:

(Start: 32 @9021 has 153 MA's), (Start: 45 @9063 has 6 MA's), (56, 9138), (69, 9198), (72, 9210), (92, 9285), (118, 9384),

Gene: Velveteen_8 Start: 5927, Stop: 6298, Start Num: 34

Candidate Starts for Velveteen_8:

(Start: 34 @5927 has 62 MA's), (44, 5957), (63, 6068), (66, 6083), (67, 6086), (69, 6092), (70, 6095), (97, 6206), (112, 6257), (123, 6290),

Gene: ViviJ_11 Start: 8939, Stop: 9322, Start Num: 32

Candidate Starts for ViviJ_11:

(Start: 14 @8858 has 2 MA's), (16, 8864), (22, 8912), (Start: 32 @8939 has 153 MA's), (Start: 45 @8981 has 6 MA's), (56, 9056), (62, 9083), (69, 9116), (76, 9143), (92, 9203), (106, 9266), (112, 9287), (113, 9290), (118, 9302),

Gene: Volt_42 Start: 16243, Stop: 16656, Start Num: 37

Candidate Starts for Volt_42:

(Start: 37 @16243 has 15 MA's), (43, 16270), (Start: 45 @16276 has 6 MA's), (46, 16279), (52, 16327), (68, 16402), (71, 16414), (80, 16459), (87, 16492), (102, 16567),

Gene: Waterfoul_12 Start: 9108, Stop: 9491, Start Num: 32

Candidate Starts for Waterfoul_12:

(Start: 32 @9108 has 153 MA's), (41, 9141), (51, 9192), (56, 9225), (62, 9252), (69, 9285), (92, 9372), (112, 9456), (113, 9459), (118, 9471),

Gene: Wintermute_15 Start: 10233, Stop: 10607, Start Num: 32

Candidate Starts for Wintermute_15:

(Start: 32 @10233 has 153 MA's), (Start: 37 @10242 has 15 MA's), (40, 10260), (51, 10308), (62, 10368), (70, 10404), (72, 10413), (73, 10416), (75, 10425), (90, 10479), (101, 10539), (112, 10572), (113, 10575),

Gene: Wrigley_9 Start: 6930, Stop: 7331, Start Num: 33

Candidate Starts for Wrigley_9:

(2, 6699), (3, 6711), (8, 6777), (Start: 30 @6921 has 15 MA's), (Start: 33 @6930 has 18 MA's), (51, 7011), (59, 7062), (66, 7092), (72, 7113), (73, 7116), (90, 7188), (100, 7248), (120, 7314),

Gene: Ximenita_14 Start: 8105, Stop: 8488, Start Num: 31

Candidate Starts for Ximenita_14:

(Start: 31 @8105 has 17 MA's), (69, 8279), (72, 8291), (73, 8294), (92, 8366), (100, 8417), (112, 8450), (118, 8465),

Gene: Y10_15 Start: 10242, Stop: 10607, Start Num: 37

Candidate Starts for Y10_15:

(Start: 32 @10233 has 153 MA's), (Start: 37 @10242 has 15 MA's), (40, 10260), (51, 10308), (62, 10368), (70, 10404), (72, 10413), (73, 10416), (75, 10425), (90, 10479), (101, 10539), (112, 10572), (113, 10575),

Gene: Y2_15 Start: 10242, Stop: 10607, Start Num: 37

Candidate Starts for Y2_15:

(Start: 32 @10233 has 153 MA's), (Start: 37 @10242 has 15 MA's), (40, 10260), (51, 10308), (62, 10368), (70, 10404), (72, 10413), (73, 10416), (75, 10425), (90, 10479), (101, 10539), (112, 10572), (113, 10575),

Gene: YasnayaPolyana_15 Start: 10243, Stop: 10608, Start Num: 37

Candidate Starts for YasnayaPolyana_15:

(Start: 32 @10234 has 153 MA's), (Start: 37 @10243 has 15 MA's), (40, 10261), (51, 10309), (62, 10369), (70, 10405), (72, 10414), (73, 10417), (75, 10426), (90, 10480), (101, 10540), (112, 10573), (113, 10576),

Gene: YoureAdopted_13 Start: 8954, Stop: 9340, Start Num: 32

Candidate Starts for YoureAdopted_13:

(Start: 32 @8954 has 153 MA's), (Start: 45 @8996 has 6 MA's), (56, 9071), (62, 9098), (69, 9131), (72, 9143), (92, 9218), (118, 9317),

Gene: Yuna_14 Start: 8096, Stop: 8479, Start Num: 32

Candidate Starts for Yuna_14:

(11, 8015), (Start: 20 @8060 has 1 MA's), (Start: 32 @8096 has 153 MA's), (39, 8117), (Start: 45 @8138 has 6 MA's), (51, 8180), (56, 8213), (69, 8273), (72, 8285), (92, 8360), (110, 8438), (113, 8447), (118, 8459),

Gene: Yunkel11_14 Start: 7932, Stop: 8309, Start Num: 32

Candidate Starts for Yunkel11_14:

(11, 7854), (Start: 32 @7932 has 153 MA's), (56, 8043), (70, 8106), (72, 8115), (104, 8247), (112, 8274), (118, 8289),

Gene: Zabiza_14 Start: 8979, Stop: 9365, Start Num: 32

Candidate Starts for Zabiza_14:

(Start: 32 @8979 has 153 MA's), (Start: 45 @9021 has 6 MA's), (56, 9096), (62, 9123), (69, 9156), (72, 9168), (92, 9243), (118, 9342),

Gene: Zavala_14 Start: 8960, Stop: 9346, Start Num: 32

Candidate Starts for Zavala_14:

(Start: 32 @8960 has 153 MA's), (Start: 45 @9002 has 6 MA's), (56, 9077), (69, 9137), (72, 9149), (92, 9224), (118, 9323),

Gene: Ziko_43 Start: 16183, Stop: 16596, Start Num: 37

Candidate Starts for Ziko_43:

(Start: 37 @16183 has 15 MA's), (43, 16210), (Start: 45 @16216 has 6 MA's), (46, 16219), (52, 16267), (68, 16342), (71, 16354), (80, 16399), (87, 16432), (102, 16507),

Gene: ZoeJ_10 Start: 6927, Stop: 7310, Start Num: 30

Candidate Starts for ZoeJ_10:

(Start: 14 @6858 has 2 MA's), (25, 6918), (Start: 30 @6927 has 15 MA's), (70, 7107), (72, 7116), (73, 7119), (112, 7275), (113, 7278), (118, 7290),