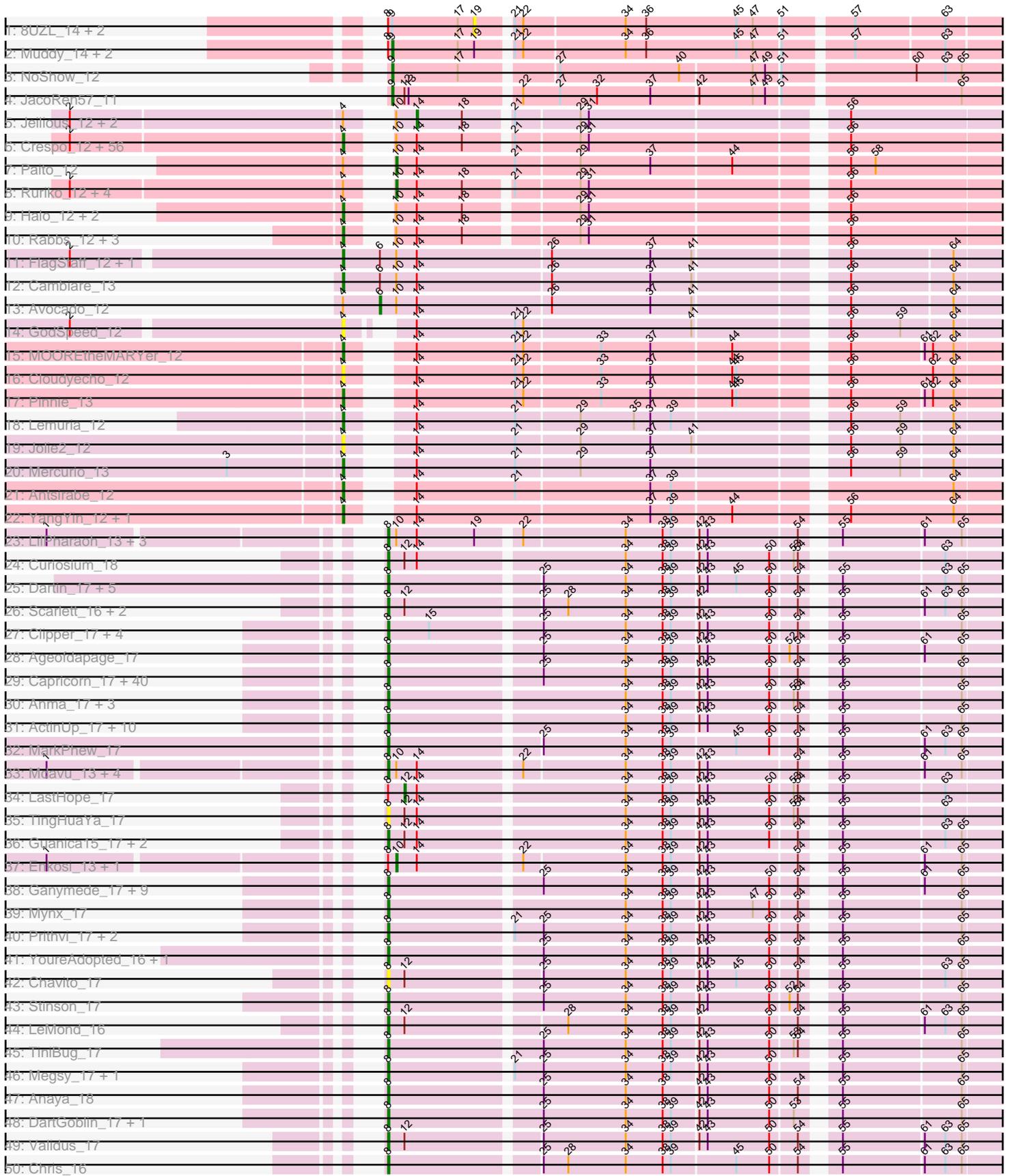
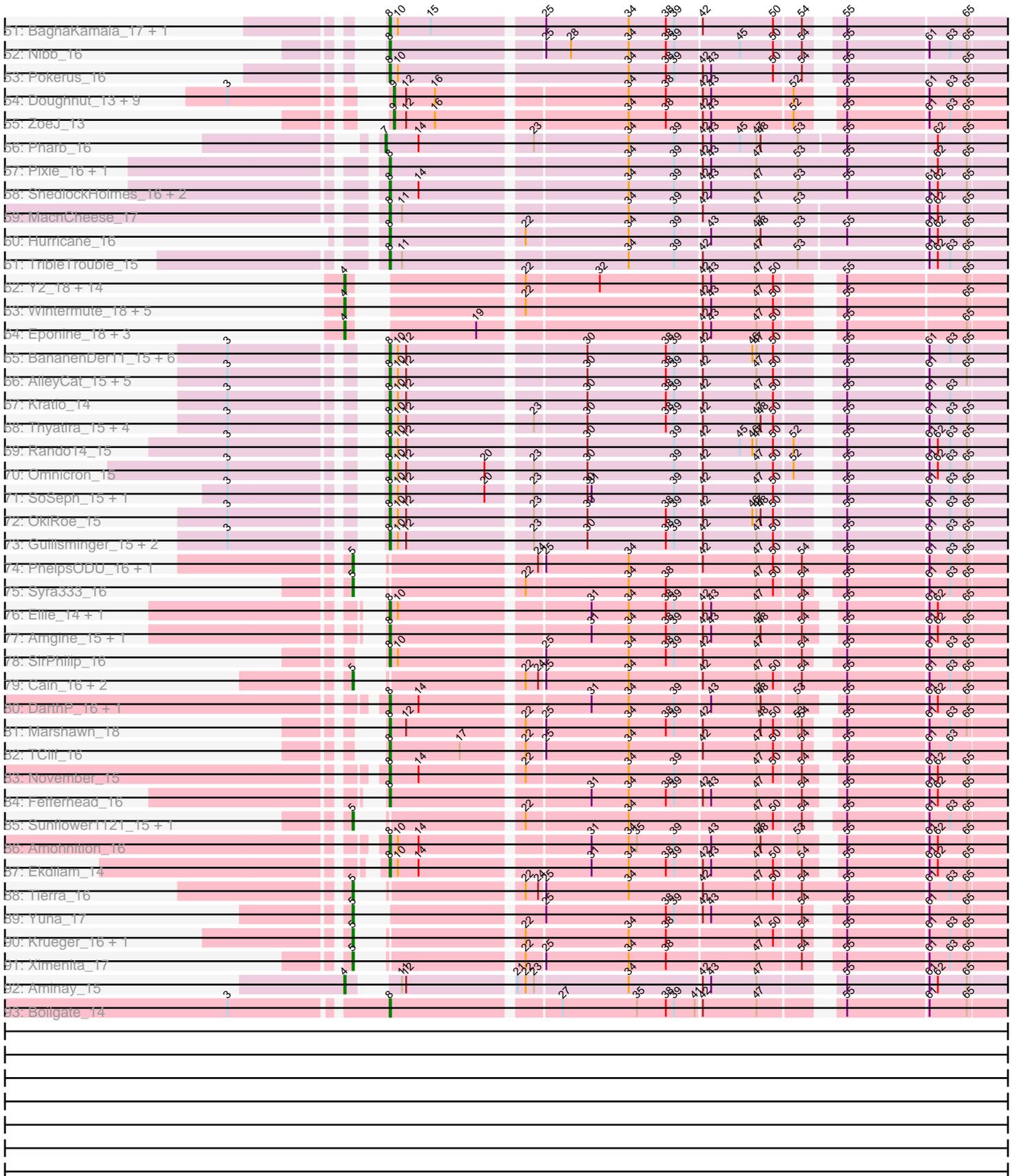


Pham 289010



Pham 289010



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 289010 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289010 has 315 members, 41 are drafts.

Phages represented in each track:

- Track 1 : 8UZL_14, Salvus_15, LongHai_15
- Track 2 : Muddy_14, FF47_14, Maco6_12
- Track 3 : NoShow_12
- Track 4 : JacoRen57_11
- Track 5 : Jeilious_12, Maliketh_12, Phish_12
- Track 6 : Crespo_12, Darionha_12, PinkYoshi_12, CLED96_12, Frosty24_12, ShaboiShabazz_12, ZoMa_12, DingDing_12, DMoney_12, LouisV14_12, AzulaCat_12, Jolene_12, Rattrick_12, BQuat_12, Jane_12, Coleslaw_12, CassieYates_12, Angel_12, TomBrady_12, Camri_12, ECartman_12, OctaviousRex_12, Kasen3_12, Avrafan_12, Wendigo_12, Gomashi_12, Hotshotbaby7_12, DNAllI_0012, Peeb_12, Gideon_12, Remy19_12, Phloodle_12, Periodt_12, Cherrybomb426_12, Neoh_12, Sizemore_12, Plagueis_12, Aroostook_12, Schiebel_12, Barkley26_12, Hope_12, Zombie_12, Mowgli_12, Kareem_12, Chance64_12, Marmie_12, Olga_12, Cedasite_12, Liefie_12, Grizzly_12, JorRay_12, Renaissance_12, GoldenAsh_12, Annihilator_12, Phreak_12, BruceB_12, BPs_12
- Track 7 : Paito_12
- Track 8 : Ruriko_12, AizenPogi_12, Richarlison_12, MZKinsey_12, Jonghyun_12
- Track 9 : Halo_12, Sweets_12, TinaBug_12
- Track 10 : Rabbs_12, Sneeze_12, Taheera_12, Terror_12
- Track 11 : FlagStaff_12, Pace1224_12
- Track 12 : Cambiare_13
- Track 13 : Avocado_12
- Track 14 : GodSpeed_12
- Track 15 : MOOREtheMARYer_12
- Track 16 : Cloudyecho_12
- Track 17 : Pinnie_13
- Track 18 : Lemuria_12
- Track 19 : Jolie2_12
- Track 20 : Mercurio_13
- Track 21 : Antsirabe_12
- Track 22 : YangYin_12, Stargaze_12
- Track 23 : LilPharaoh_13, Amelie_13, SgtBeansprout_13, Binglebops_13
- Track 24 : Curiosium_18
- Track 25 : Dartin_17, Shaobing_17, McMater_17, Richo_17, Peanam_17, Niklas_17
- Track 26 : Scarlett_16, KiSi_16, Oscar_16
- Track 27 : Clipper_17, CheetoDust_17, Tachez_17, Atiba_17, MacKat_17

- Track 28 : Ageofdapage_17
- Track 29 : Capricorn_17, Blizzard_17, Lunahalos_17, Adonis_17, CallaLilly_17, Belladonna_17, AlishaPH_17, JAWS_17, Asayake_17, Angelica_17, Durfee_17, CrimD_17, Rosmarinus_17, Homura_17, Spock_17, Llorens_17, Twitch_17, Deby_17, Emerson_17, ShiaSurprise_17, Beezoo_17, Sulley_17, Geraldini_17, Padpat_17, CaseJules_17, Tiri_17, Jarvi_17, Peel_17, BGIluviae_17, CREW_17, Padfoot_17, Boiiii_17, Dalmuri_17, BarrelRoll_17, BEEST_17, Hyperbowlee_17, Inky_17, Jeckyll_17, Piatt_17, Topper_17, Veliki_17
- Track 30 : Anma_17, SamuelLPlaqson_17, DrHayes_17, Urkel_17
- Track 31 : ActinUp_17, Adephagia_17, HedwigODU_17, MeaningOfLife_17, Ramen_17, Jayhawk_17, TruffulaTree_17, Rapunzel97_17, Zabiza_17, Zavala_17, Slimphazie_17
- Track 32 : MarkPhew_17
- Track 33 : Mdavu_13, Nutello_13, Trice_13, Nikao_13, Teejan_13
- Track 34 : LastHope_17
- Track 35 : TingHuaYa_17
- Track 36 : Guanica15_17, Efra2_17, Yunkel11_17
- Track 37 : Enkosi_13, Torres_13
- Track 38 : Ganymede_17, QuincyRose_16, Dole_17, Devera_17, Pisa1_16, Illumine_17, Pisa4_16, LaterM_17, Murucutumbu_17, Bern_17
- Track 39 : Mynx_17
- Track 40 : Prithvi_17, LindNT_17, TreyKay_17
- Track 41 : YoureAdopted_16, Apocalypse_17
- Track 42 : Chavito_17
- Track 43 : Stinson_17
- Track 44 : LeMond_16
- Track 45 : TiniBug_17
- Track 46 : Megsy_17, TaiwanKao_17
- Track 47 : Anaya_18
- Track 48 : DartGoblin_17, Bella96_17
- Track 49 : Validus_17
- Track 50 : Chris_16
- Track 51 : BaghaKamala_17, Joy99_17
- Track 52 : Nibb_16
- Track 53 : Pokerus_16
- Track 54 : Doughnut_13, Milly_13, Mufasa_13, DismalStressor_13, DismalFunk_13, TM4_13, Marcoliusprime_13, Findley_13, BoostSeason_13, Strobilo_13
- Track 55 : ZoeJ_13
- Track 56 : Pharb_16
- Track 57 : Pixie_16, TBond007_16
- Track 58 : ShedlockHolmes_16, Lea83_16, Keshu_16
- Track 59 : MacnCheese_17
- Track 60 : Hurricane_16
- Track 61 : TribbleTrouble_15
- Track 62 : Y2_18, Slarp_18, JF1_18, Chancellor_18, MissDaisy_18, Lebo14_18, Bobquesha_18, DanSyl44_18, SamScheppers_16, Qhanda_18, Patt_18, Reptar3000_18, Y10_18, Cheetobro_18, YasnayaPolyana_18
- Track 63 : Wintermute_18, Mitti_18, Kraw_18, Fionnbharth_18, Malthus_18, OmniCritical_18
- Track 64 : Eponine_18, Taquito_16, Juliette_18, Ruthiejr_17
- Track 65 : BananenDer11_15, LiIDirt_14, Collard_15, InvictusManeo_15, Agent47_15, DoubleChamp_15, ViviJ_14

- Track 66 : AlleyCat_15, Psycho_15, Edugator_14, Dadosky_15, Larva_15, Neighly_15
- Track 67 : Kratio_14
- Track 68 : Thyatira_15, Miryou_15, Leston_15, Waterfoul_15, Feyre_15
- Track 69 : Rando14_15
- Track 70 : Omnicron_15
- Track 71 : SoSeph_15, Heftyboy_15
- Track 72 : OkiRoe_15
- Track 73 : Guillsminger_15, Gengar_15, Paola_15
- Track 74 : PhelpsODU_16, Unicorn_16
- Track 75 : Syra333_16
- Track 76 : Ellie_14, Applecrisp_15
- Track 77 : Amgine_15, Lavahound_15
- Track 78 : SirPhilip_16
- Track 79 : Cain_16, Phrank_16, Bryler_16
- Track 80 : DarthP_16, Hammy_16
- Track 81 : Marshawn_18
- Track 82 : TClif_16
- Track 83 : November_15
- Track 84 : Fefferhead_16
- Track 85 : Sunflower1121_15, Shadow1_15
- Track 86 : Amohnition_16
- Track 87 : Ekdilam_14
- Track 88 : Tierra_16
- Track 89 : Yuna_17
- Track 90 : Krueger_16, Tigress9_16
- Track 91 : Ximenita_17
- Track 92 : Aminay_15
- Track 93 : Boilgate_14

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

The start number called the most often in the published annotations is 8, it was called in 149 of the 274 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_17, Adephegia_17, Adonis_17, Agent47_15, Ageofdapage_17, AlishaPH_17, AlleyCat_15, Amelie_13, Amgine_15, Amohnition_16, Anaya_18, Angelica_17, Anma_17, Apocalypse_17, Applecrisp_15, Asayake_17, Atiba_17, BEEST_17, BGlluviae_17, BaghaKamala_17, BananenDer11_15, BarrelRoll_17, Beezoo_17, Bella96_17, Belladonna_17, Bern_17, Biglebops_13, Blizzard_17, Boiiii_17, Boilgate_14, CREW_17, CallaLilly_17, Capricorn_17, CaseJules_17, Chavito_17, CheetoDust_17, Chris_16, Clipper_17, Collard_15, CrimD_17, Curiosium_18, Dadosky_15, Dalmuri_17, DartGoblin_17, DarthP_16, Dartin_17, Deby_17, Devera_17, Dole_17, DoubleChamp_15, DrHayes_17, Durfee_17, Edugator_14, Efra2_17, Ekdilam_14, Ellie_14, Emerson_17, Fefferhead_16, Feyre_15, Ganymede_17, Gengar_15, Geraldini_17, Guanica15_17, Guillsminger_15, Hammy_16, HedwigODU_17, Heftyboy_15, Homura_17, Hurricane_16, Hyperbowlee_17, Illumine_17, Inky_17, InvictusManeo_15, JAWS_17, Jarvi_17, Jayhawk_17, Jeckyll_17, Joy99_17, Keshu_16, KiSi_16, Kratio_14,

Larva_15, LaterM_17, Lavahound_15, LeMond_16, Lea83_16, Leston_15, LilDirt_14, LilPharaoh_13, LindNT_17, Llorens_17, Lunahalos_17, MacKat_17, MacnCheese_17, MarkPhew_17, Marshawn_18, McMater_17, Mdavu_13, MeaningOfLife_17, Megsy_17, Miryou_15, Murucutumbu_17, Mynx_17, Neighly_15, Nibb_16, Nikao_13, Niklas_17, November_15, Nutello_13, OkiRoe_15, Omnicron_15, Oscar_16, Padfoot_17, Padpat_17, Paola_15, Peanam_17, Peel_17, Piatt_17, Pisa1_16, Pisa4_16, Pixie_16, Pokerus_16, Prithvi_17, Psycho_15, QuincyRose_16, Ramen_17, Rando14_15, Rapunzel97_17, Richo_17, Rosmarinus_17, SamuelLPlaqson_17, Scarlett_16, SgtBeansprout_13, Shaobing_17, ShedlockHolmes_16, ShiaSurprise_17, SirPhilip_16, Slimphazie_17, SoSeph_15, Spock_17, Stinson_17, Sulley_17, TBond007_16, TClif_16, Tachez_17, TaiwanKao_17, Teejan_13, Thyatira_15, TingHuaYa_17, TiniBug_17, Tiri_17, Topper_17, TreyKay_17, TribbleTrouble_15, Trice_13, TruffulaTree_17, Twitch_17, Urkel_17, Validus_17, Veliki_17, ViviJ_14, Waterfoul_15, YoureAdopted_16, Yunkel11_17, Zabiza_17, Zavala_17,

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

- 8UZL_14, Enkosi_13, FF47_14, LastHope_17, LongHai_15, Maco6_12, Muddy_14, Salvus_15, Torres_13,

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

- AizenPogi_12, Aminay_15, Angel_12, Annihilator_12, Antsirabe_12, Aroostook_12, Avocado_12, Avrafan_12, AzulaCat_12, BPs_12, BQuat_12, Barkley26_12, Bobquesha_18, BoostSeason_13, BruceB_12, Bryler_16, CLED96_12, Cain_16, Cambiare_13, Camri_12, CassieYates_12, Cedasite_12, Chance64_12, Chancellor_18, Cheetobro_18, Cherrybomb426_12, Cloudyecho_12, Coleslaw_12, Crespo_12, DMoney_12, DNAlI_0012, DanSyl44_18, Darionha_12, DingDing_12, DismalFunk_13, DismalStressor_13, Doughnut_13, ECartman_12, Eponine_18, Findley_13, Fionnbharth_18, FlagStaff_12, Frosty24_12, Gideon_12, GodSpeed_12, GoldenAsh_12, Gomashi_12, Grizzly_12, Halo_12, Hope_12, Hotshotbaby7_12, JF1_18, JacoRen57_11, Jane_12, Jeilious_12, Jolene_12, Jolie2_12, Jonghyun_12, JorRay_12, Juliette_18, Kareem_12, Kasen3_12, Kraw_18, Krueger_16, Lebo14_18, Lemuria_12, Liefie_12, LouisV14_12, MOOREtheMARYer_12, MZKinsey_12, Maliketh_12, Malthus_18, Marcoliusprime_13, Marmie_12, Mercurio_13, Milly_13, MissDaisy_18, Mitti_18, Mowgli_12, Mufasa_13, Neoh_12, NoShow_12, OctaviousRex_12, Olga_12, OmniCritical_18, Pace1224_12, Paito_12, Patt_18, Peeb_12, Periodt_12, Pharb_16, PhelpsODU_16, Phish_12, Phloodle_12, Phrank_16, Phreak_12, PinkYoshi_12, Pinnie_13, Plagueis_12, Qhanda_18, Rabbs_12, Rattrick_12, Remy19_12, Renaissance_12, Reptar3000_18, Richarlison_12, Ruriko_12, Ruthiejr_17, SamScheppers_16, Schiebel_12, ShaboiShabazz_12, Shadow1_15, Sizemore_12, Slarp_18, Sneeze_12, Stargaze_12, Strobilo_13, Sunflower1121_15, Sweets_12, Syra333_16, TM4_13, Taheera_12, Taquito_16, Terror_12, Tierra_16, Tigress9_16, TinaBug_12, TomBrady_12, Unicorn_16, Wendigo_12, Wintermute_18, Ximenita_17, Y10_18, Y2_18, YangYin_12, YasnayaPolyana_18, Yuna_17, ZoMa_12, ZoeJ_13, Zombie_12,

Summary by start number:

Start 4:

- Found in 113 of 315 (35.9%) of genes in pham
- Manual Annotations of this start: 90 of 274
- Called 91.2% of time when present

- Phage (with cluster) where this start called: Aminay_15 (K7), Angel_12 (G1), Annihilator_12 (G1), Antsirabe_12 (G5), Aroostook_12 (G1), Avrafan_12 (G1), AzulaCat_12 (G1), BPs_12 (G1), BQuat_12 (G1), Barkley26_12 (G1), Bobquesha_18 (K4), BruceB_12 (G1), CLED96_12 (G1), Cambiare_13 (G2), Camri_12 (G1), CassieYates_12 (G1), Cedasite_12 (G1), Chance64_12 (G1), Chancellor_18 (K4), Cheetobro_18 (K4), Cherrybomb426_12 (G1), Cloudyecho_12 (G3), Coleslaw_12 (G1), Crespo_12 (G1), DMoney_12 (G1), DNAllI_0012 (G1), DanSyl44_18 (K4), Darionha_12 (G1), DingDing_12 (G1), ECartman_12 (G1), Eponine_18 (K4), Fionnbharth_18 (K4), FlagStaff_12 (G2), Frosty24_12 (G1), Gideon_12 (G1), GodSpeed_12 (G2), GoldenAsh_12 (G1), Gomashi_12 (G1), Grizzly_12 (G1), Halo_12 (G1), Hope_12 (G1), Hotshotbaby7_12 (G1), JF1_18 (K4), Jane_12 (G1), Jolene_12 (G1), Jolie2_12 (G4), JorRay_12 (G1), Juliette_18 (K4), Kareem_12 (G1), Kasen3_12 (G1), Kraw_18 (K4), Lebo14_18 (K4), Lemuria_12 (G4), Liefie_12 (G1), LouisV14_12 (G1), MOOREtheMARYer_12 (G3), Malthus_18 (K4), Marmie_12 (G1), Mercurio_13 (G4), MissDaisy_18 (K4), Mitti_18 (K4), Mowgli_12 (G1), Neoh_12 (G), OctaviousRex_12 (G1), Olga_12 (G1), OmniCritical_18 (K4), Pace1224_12 (G2), Patt_18 (K4), Peeb_12 (G1), Periodt_12 (G1), Phloodle_12 (G1), Phreak_12 (G1), PinkYoshi_12 (G1), Pinnie_13 (G3), Plagueis_12 (G1), Qhanda_18 (K4), Rabbs_12 (G1), Rattrick_12 (G1), Remy19_12 (G1), Renaissance_12 (G1), Reptar3000_18 (K4), Ruthiejr_17 (K4), SamScheppers_16 (K4), Schiebel_12 (G1), ShaboiShabazz_12 (G1), Sizemore_12 (G1), Slarp_18 (K4), Sneeze_12 (G1), Stargaze_12 (G5), Sweets_12 (G1), Taheera_12 (G1), Taquito_16 (K4), Terror_12 (G1), TinaBug_12 (G1), TomBrady_12 (G1), Wendigo_12 (G1), Wintermute_18 (K4), Y10_18 (K4), Y2_18 (K4), YangYin_12 (G5), YasnayaPolyana_18 (K4), ZoMa_12 (G1), Zombie_12 (G1),

Start 5:

- Found in 13 of 315 (4.1%) of genes in pham
- Manual Annotations of this start: 12 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bryler_16 (K6), Cain_16 (K6), Krueger_16 (K6), PhelpsODU_16 (K6), Phrank_16 (K6), Shadow1_15 (K6), Sunflower1121_15 (K6), Syra333_16 (K6), Tierra_16 (K6), Tigress9_16 (K6), Unicorn_16 (K6), Ximenita_17 (K6), Yuna_17 (K6),

Start 6:

- Found in 4 of 315 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Avocado_12 (G2),

Start 7:

- Found in 1 of 315 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharb_16 (K3),

Start 8:

- Found in 175 of 315 (55.6%) of genes in pham
- Manual Annotations of this start: 149 of 274
- Called 94.9% of time when present
- Phage (with cluster) where this start called: ActinUp_17 (K1), Adephegia_17 (K1), Adonis_17 (K1), Agent47_15 (K5), Ageofdapage_17 (K1), AlishaPH_17 (K1),

AlleyCat_15 (K5), Amelie_13 (K1), Amgine_15 (K6), Amohnition_16 (K6), Anaya_18 (K1), Angelica_17 (K1), Anma_17 (K1), Apocalypse_17 (K1), Applecrisp_15 (K6), Asayake_17 (K1), Atiba_17 (K1), BEEST_17 (K1), BGIlluviae_17 (K1), BaghaKamala_17 (K1), BananenDer11_15 (K5), BarrelRoll_17 (K1), Beezoo_17 (K1), Bella96_17 (K1), Belladonna_17 (K1), Bern_17 (K1), Binglebops_13 (K1), Blizzard_17 (K1), Boiiii_17 (K1), Boilgate_14 (K8), CREW_17 (K1), CallaLilly_17 (K1), Capricorn_17 (K1), CaseJules_17 (K1), Chavito_17 (K1), CheetoDust_17 (K1), Chris_16 (K1), Clipper_17 (K1), Collard_15 (K5), CrimD_17 (K1), Curiosium_18 (K1), Dadosky_15 (K5), Dalmuri_17 (K1), DartGoblin_17 (K1), DarthP_16 (K6), Dartin_17 (K1), Deby_17 (K1), Devera_17 (K1), Dole_17 (K1), DoubleChamp_15 (K5), DrHayes_17 (K1), Durfee_17 (K1), Edugator_14 (K5), Efra2_17 (K1), Ekdilam_14 (K6), Ellie_14 (K6), Emerson_17 (K1), Fefferhead_16 (K6), Feyre_15 (K5), Ganymede_17 (K1), Gengar_15 (K5), Geraldini_17 (K1), Guanica15_17 (K1), Guillsminger_15 (K5), Hammy_16 (K6), HedwigODU_17 (K1), Heftyboy_15 (K5), Homura_17 (K1), Hurricane_16 (K3), Hyperbowlee_17 (K1), Illumine_17 (K1), Inky_17 (K1), InvictusManeo_15 (K5), JAWS_17 (K1), Jarvi_17 (K1), Jayhawk_17 (K1), Jeckyll_17 (K1), Joy99_17 (K1), Keshu_16 (K3), KiSi_16 (K1), Kratio_14 (K5), Larva_15 (K5), LaterM_17 (K1), Lavahound_15 (K6), LeMond_16 (K1), Lea83_16 (K3), Leston_15 (K5), LilDirt_14 (K5), LilPharaoh_13 (K1), LindNT_17 (K1), Llorens_17 (K1), Lunahalos_17 (K1), MacKat_17 (K1), MacnCheese_17 (K3), MarkPhew_17 (K1), Marshawn_18 (K6), McMater_17 (K1), Mdavu_13 (K1), MeaningOfLife_17 (K1), Megsy_17 (K1), Miryou_15 (K5), Murucutumbu_17 (K1), Mynx_17 (K1), Neighly_15 (K3), Nibb_16 (K1), Nikao_13 (K1), Niklas_17 (K1), November_15 (K6), Nutello_13 (K1), ŌkiRoe_15 (K5), Omnicron_15 (K5), Oscar_16 (K1), Padfoot_17 (K1), Padpat_17 (K1), Paola_15 (K5), Peanam_17 (K1), Peel_17 (K1), Piatt_17 (K1), Pisa1_16 (K1), Pisa4_16 (K1), Pixie_16 (K3), Pokerus_16 (K1), Prithvi_17 (K1), Psycho_15 (K5), QuincyRose_16 (K1), Ramen_17 (K1), Rando14_15 (K5), Rapunzel97_17 (K1), Richo_17 (K1), Rosmarinus_17 (K1), SamuelLPlaqson_17 (K1), Scarlett_16 (K1), SgtBeansprout_13 (K1), Shaobing_17 (K1), ShedlockHolmes_16 (K3), ShiaSurprise_17 (K1), SirPhilip_16 (K6), Slimphazie_17 (K1), SoSeph_15 (K5), Spock_17 (K1), Stinson_17 (K1), Sulley_17 (K1), TBond007_16 (K3), TClif_16 (K6), Tachez_17 (K1), TaiwanKao_17 (K1), Teejan_13 (K1), Thyatira_15 (K5), TingHuaYa_17 (K1), TiniBug_17 (K1), Tiri_17 (K1), Topper_17 (K1), TreyKay_17 (K1), TribbleTrouble_15 (K3), Trice_13 (K1), TruffulaTree_17 (K1), Twitch_17 (K1), Urkel_17 (K1), Validus_17 (K1), Veliki_17 (K1), ViviJ_14 (K5), Waterfoul_15 (K5), YoureAdopted_16 (K1), Yunkel11_17 (K1), Zabiza_17 (K1), Zavala_17 (K1),

Start 9:

- Found in 19 of 315 (6.0%) of genes in pham
- Manual Annotations of this start: 15 of 274
- Called 84.2% of time when present
- Phage (with cluster) where this start called: BoostSeason_13 (K2), DismalFunk_13 (K2), DismalStressor_13 (K2), Doughnut_13 (K2), FF47_14 (AB), Findley_13 (K2), JacoRen57_11 (AB), Maco6_12 (AB), Marcoliusprime_13 (K2), Milly_13 (K2), Muddy_14 (AB), Mufasa_13 (K2), NoShow_12 (AB), Strobilo_13 (K2), TM4_13 (K2), ZoeJ_13 (K2),

Start 10:

- Found in 123 of 315 (39.0%) of genes in pham
- Manual Annotations of this start: 4 of 274
- Called 6.5% of time when present

- Phage (with cluster) where this start called: AizenPogi_12 (G1), Enkosi_13 (K1), Jonghyun_12 (G1), MZKinsey_12 (G1), Paito_12 (G1), Richarlison_12 (G1), Ruriko_12 (G1), Torres_13 (K1),

Start 12:

- Found in 53 of 315 (16.8%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 1.9% of time when present
- Phage (with cluster) where this start called: LastHope_17 (K1),

Start 14:

- Found in 113 of 315 (35.9%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Jeilious_12 (G), Maliketh_12 (G1), Phish_12 (G1),

Start 19:

- Found in 14 of 315 (4.4%) of genes in pham
- No Manual Annotations of this start.
- Called 21.4% of time when present
- Phage (with cluster) where this start called: 8UZL_14 (AB), LongHai_15 (AB), Salvus_15 (AB),

Summary by clusters:

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

Info for manual annotations of cluster AB:

- Start number 9 was manually annotated 4 times for cluster AB.

Info for manual annotations of cluster G1:

- Start number 4 was manually annotated 59 times for cluster G1.
- Start number 10 was manually annotated 2 times for cluster G1.
- Start number 14 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster G2:

- Start number 4 was manually annotated 2 times for cluster G2.
- Start number 6 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster G3:

- Start number 4 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 4 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 4 was manually annotated 2 times for cluster G5.

Info for manual annotations of cluster K1:

- Start number 8 was manually annotated 105 times for cluster K1.

- Start number 10 was manually annotated 2 times for cluster K1.
- Start number 12 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 9 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 7 was manually annotated 1 time for cluster K3.
- Start number 8 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 4 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 8 was manually annotated 23 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 5 was manually annotated 12 times for cluster K6.
- Start number 8 was manually annotated 12 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 4 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 8 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: 8UZL_14 Start: 8973, Stop: 9347, Start Num: 19

Candidate Starts for 8UZL_14:

(Start: 8 @8910 has 149 MA's), (Start: 9 @8913 has 15 MA's), (17, 8961), (19, 8973), (21, 8994), (22, 9000), (34, 9072), (36, 9087), (45, 9153), (47, 9165), (51, 9183), (57, 9228), (63, 9291),

Gene: ActinUp_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for ActinUp_17:

(Start: 8 @9979 has 149 MA's), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Adephagia_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for Adephagia_17:

(Start: 8 @9979 has 149 MA's), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Adonis_17 Start: 9988, Stop: 10413, Start Num: 8

Candidate Starts for Adonis_17:

(Start: 8 @9988 has 149 MA's), (25, 10093), (34, 10153), (38, 10180), (39, 10186), (42, 10204), (43, 10210), (50, 10255), (54, 10273), (55, 10291), (65, 10375),

Gene: Agent47_15 Start: 10158, Stop: 10580, Start Num: 8

Candidate Starts for Agent47_15:

(3, 10074), (Start: 8 @10158 has 149 MA's), (Start: 10 @10164 has 4 MA's), (Start: 12 @10170 has 1 MA's), (30, 10290), (38, 10347), (39, 10353), (42, 10371), (46, 10407), (47, 10410), (50, 10422), (55, 10458), (61, 10515), (63, 10530), (65, 10542),

Gene: Ageofdapage_17 Start: 9909, Stop: 10334, Start Num: 8

Candidate Starts for Ageofdapage_17:

(Start: 8 @9909 has 149 MA's), (25, 10014), (34, 10074), (38, 10101), (39, 10107), (42, 10125), (43, 10131), (50, 10176), (52, 10188), (54, 10194), (55, 10212), (61, 10269), (65, 10296),

Gene: AizenPogi_12 Start: 9429, Stop: 9857, Start Num: 10

Candidate Starts for AizenPogi_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: AlishaPH_17 Start: 9978, Stop: 10403, Start Num: 8

Candidate Starts for AlishaPH_17:

(Start: 8 @9978 has 149 MA's), (25, 10083), (34, 10143), (38, 10170), (39, 10176), (42, 10194), (43, 10200), (50, 10245), (54, 10263), (55, 10281), (65, 10365),

Gene: AlleyCat_15 Start: 10036, Stop: 10458, Start Num: 8

Candidate Starts for AlleyCat_15:

(3, 9952), (Start: 8 @10036 has 149 MA's), (Start: 10 @10042 has 4 MA's), (Start: 12 @10048 has 1 MA's), (30, 10168), (38, 10225), (39, 10231), (42, 10249), (47, 10288), (50, 10300), (55, 10336), (61, 10393), (65, 10420),

Gene: Amelie_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Amelie_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (19, 9326), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: Amgine_15 Start: 9644, Stop: 10060, Start Num: 8

Candidate Starts for Amgine_15:

(Start: 8 @9644 has 149 MA's), (31, 9779), (34, 9806), (38, 9833), (39, 9839), (42, 9857), (43, 9863), (47, 9896), (48, 9899), (54, 9926), (55, 9944), (61, 10001), (62, 10007), (65, 10028),

Gene: Aminay_15 Start: 9848, Stop: 10276, Start Num: 4

Candidate Starts for Aminay_15:

(Start: 4 @9848 has 90 MA's), (11, 9866), (Start: 12 @9869 has 1 MA's), (21, 9941), (22, 9947), (23, 9953), (34, 10019), (42, 10070), (43, 10076), (47, 10109), (55, 10154), (61, 10211), (62, 10217), (65, 10238),

Gene: Amohnition_16 Start: 9965, Stop: 10381, Start Num: 8

Candidate Starts for Amohnition_16:

(Start: 8 @9965 has 149 MA's), (Start: 10 @9971 has 4 MA's), (Start: 14 @9986 has 1 MA's), (31, 10100), (34, 10127), (35, 10133), (39, 10160), (43, 10184), (47, 10217), (48, 10220), (53, 10244), (55, 10265), (61, 10322), (62, 10328), (65, 10349),

Gene: Anaya_18 Start: 9980, Stop: 10405, Start Num: 8

Candidate Starts for Anaya_18:

(Start: 8 @9980 has 149 MA's), (25, 10085), (34, 10145), (38, 10172), (42, 10196), (43, 10202), (50, 10247), (54, 10265), (55, 10283), (65, 10367),

Gene: Angel_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Angel_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Angelica_17 Start: 9950, Stop: 10375, Start Num: 8

Candidate Starts for Angelica_17:

(Start: 8 @9950 has 149 MA's), (25, 10055), (34, 10115), (38, 10142), (39, 10148), (42, 10166), (43, 10172), (50, 10217), (54, 10235), (55, 10253), (65, 10337),

Gene: Anma_17 Start: 9921, Stop: 10346, Start Num: 8

Candidate Starts for Anma_17:

(Start: 8 @9921 has 149 MA's), (34, 10086), (38, 10113), (39, 10119), (42, 10137), (43, 10143), (50, 10188), (53, 10203), (54, 10206), (55, 10224), (65, 10308),

Gene: Annihilator_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Annihilator_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Antsirabe_12 Start: 9741, Stop: 10193, Start Num: 4

Candidate Starts for Antsirabe_12:

(Start: 4 @9741 has 90 MA's), (Start: 14 @9771 has 1 MA's), (21, 9843), (37, 9939), (39, 9954), (64, 10140),

Gene: Apocalypse_17 Start: 9954, Stop: 10379, Start Num: 8

Candidate Starts for Apocalypse_17:

(Start: 8 @9954 has 149 MA's), (25, 10059), (34, 10119), (38, 10146), (39, 10152), (42, 10170), (43, 10176), (50, 10221), (54, 10239), (55, 10257), (65, 10341),

Gene: Applecrisp_15 Start: 10045, Stop: 10461, Start Num: 8

Candidate Starts for Applecrisp_15:

(Start: 8 @10045 has 149 MA's), (Start: 10 @10051 has 4 MA's), (31, 10180), (34, 10207), (38, 10234), (39, 10240), (42, 10258), (43, 10264), (47, 10297), (54, 10327), (55, 10345), (61, 10402), (62, 10408), (65, 10429),

Gene: Aroostook_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Aroostook_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Asayake_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Asayake_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Atiba_17 Start: 9942, Stop: 10367, Start Num: 8

Candidate Starts for Atiba_17:

(Start: 8 @9942 has 149 MA's), (15, 9972), (25, 10047), (34, 10107), (38, 10134), (39, 10140), (42, 10158), (43, 10164), (50, 10209), (54, 10227), (55, 10245), (65, 10329),

Gene: Avocado_12 Start: 9569, Stop: 10015, Start Num: 6

Candidate Starts for Avocado_12:

(Start: 4 @9542 has 90 MA's), (Start: 6 @9569 has 1 MA's), (Start: 10 @9581 has 4 MA's), (Start: 14 @9596 has 1 MA's), (26, 9692), (37, 9764), (41, 9794), (56, 9890), (64, 9962),

Gene: Avrafan_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Avrafan_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: AzulaCat_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for AzulaCat_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: BEEST_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for BEEST_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: BGlluviae_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for BGlluviae_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: BPs_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for BPs_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: BQuat_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for BQuat_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: BaghaKamala_17 Start: 9945, Stop: 10370, Start Num: 8

Candidate Starts for BaghaKamala_17:

(Start: 8 @9945 has 149 MA's), (Start: 10 @9951 has 4 MA's), (15, 9975), (25, 10050), (34, 10110), (38, 10137), (39, 10143), (42, 10161), (50, 10212), (54, 10230), (55, 10248), (65, 10332),

Gene: BananenDer11_15 Start: 10119, Stop: 10541, Start Num: 8

Candidate Starts for BananenDer11_15:

(3, 10035), (Start: 8 @10119 has 149 MA's), (Start: 10 @10125 has 4 MA's), (Start: 12 @10131 has 1 MA's), (30, 10251), (38, 10308), (39, 10314), (42, 10332), (46, 10368), (47, 10371), (50, 10383), (55, 10419), (61, 10476), (63, 10491), (65, 10503),

Gene: Barkley26_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Barkley26_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: BarrelRoll_17 Start: 9971, Stop: 10396, Start Num: 8

Candidate Starts for BarrelRoll_17:

(Start: 8 @9971 has 149 MA's), (25, 10076), (34, 10136), (38, 10163), (39, 10169), (42, 10187), (43, 10193), (50, 10238), (54, 10256), (55, 10274), (65, 10358),

Gene: Beezoo_17 Start: 9999, Stop: 10424, Start Num: 8

Candidate Starts for Beezoo_17:

(Start: 8 @9999 has 149 MA's), (25, 10104), (34, 10164), (38, 10191), (39, 10197), (42, 10215), (43, 10221), (50, 10266), (54, 10284), (55, 10302), (65, 10386),

Gene: Bella96_17 Start: 9900, Stop: 10325, Start Num: 8

Candidate Starts for Bella96_17:

(Start: 8 @9900 has 149 MA's), (25, 10005), (34, 10065), (38, 10092), (39, 10098), (42, 10116), (43, 10122), (50, 10167), (53, 10182), (55, 10203), (65, 10287),

Gene: Belladonna_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Belladonna_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Bern_17 Start: 9931, Stop: 10356, Start Num: 8

Candidate Starts for Bern_17:

(Start: 8 @9931 has 149 MA's), (25, 10036), (34, 10096), (38, 10123), (39, 10129), (42, 10147), (43, 10153), (50, 10198), (54, 10216), (55, 10234), (61, 10291), (65, 10318),

Gene: Biglebops_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Biglebops_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (19, 9326), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: Blizzard_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Blizzard_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Bobquesha_18 Start: 10963, Stop: 11388, Start Num: 4

Candidate Starts for Bobquesha_18:

(Start: 4 @10963 has 90 MA's), (22, 11059), (32, 11110), (42, 11182), (43, 11188), (47, 11221), (50, 11233), (55, 11266), (65, 11350),

Gene: Boiiii_17 Start: 10021, Stop: 10446, Start Num: 8

Candidate Starts for Boiiii_17:

(Start: 8 @10021 has 149 MA's), (25, 10126), (34, 10186), (38, 10213), (39, 10219), (42, 10237), (43, 10243), (50, 10288), (54, 10306), (55, 10324), (65, 10408),

Gene: Boilgate_14 Start: 9968, Stop: 10381, Start Num: 8

Candidate Starts for Boilgate_14:

(3, 9890), (Start: 8 @9968 has 149 MA's), (27, 10082), (35, 10136), (38, 10157), (39, 10163), (41, 10178), (42, 10181), (47, 10220), (55, 10265), (61, 10322), (65, 10349),

Gene: BoostSeason_13 Start: 7954, Stop: 8373, Start Num: 9

Candidate Starts for BoostSeason_13:

(3, 7870), (Start: 9 @7954 has 15 MA's), (Start: 12 @7963 has 1 MA's), (16, 7984), (34, 8113), (38, 8140), (42, 8164), (43, 8170), (52, 8227), (55, 8248), (61, 8305), (63, 8320), (65, 8332),

Gene: BruceB_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for BruceB_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Bryler_16 Start: 8933, Stop: 9370, Start Num: 5

Candidate Starts for Bryler_16:

(Start: 5 @8933 has 12 MA's), (22, 9023), (24, 9032), (25, 9035), (34, 9095), (42, 9146), (47, 9185), (50, 9197), (54, 9215), (55, 9248), (61, 9305), (63, 9320), (65, 9332),

Gene: CLED96_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for CLED96_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: CREW_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for CREW_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Cain_16 Start: 8921, Stop: 9358, Start Num: 5

Candidate Starts for Cain_16:

(Start: 5 @8921 has 12 MA's), (22, 9011), (24, 9020), (25, 9023), (34, 9083), (42, 9134), (47, 9173), (50, 9185), (54, 9203), (55, 9236), (61, 9293), (63, 9308), (65, 9320),

Gene: CallaLilly_17 Start: 9946, Stop: 10371, Start Num: 8

Candidate Starts for CallaLilly_17:

(Start: 8 @9946 has 149 MA's), (25, 10051), (34, 10111), (38, 10138), (39, 10144), (42, 10162), (43, 10168), (50, 10213), (54, 10231), (55, 10249), (65, 10333),

Gene: Cambiare_13 Start: 10004, Stop: 10477, Start Num: 4

Candidate Starts for Cambiare_13:

(Start: 4 @10004 has 90 MA's), (Start: 6 @10031 has 1 MA's), (Start: 10 @10043 has 4 MA's), (Start: 14 @10058 has 1 MA's), (26, 10154), (37, 10226), (41, 10256), (56, 10352), (64, 10424),

Gene: Camri_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Camri_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Capricorn_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Capricorn_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: CaseJules_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for CaseJules_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: CassieYates_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for CassieYates_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Cedasite_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Cedasite_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Chance64_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Chance64_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Chancellor_18 Start: 11221, Stop: 11646, Start Num: 4

Candidate Starts for Chancellor_18:

(Start: 4 @11221 has 90 MA's), (22, 11317), (32, 11368), (42, 11440), (43, 11446), (47, 11479), (50, 11491), (55, 11524), (65, 11608),

Gene: Chavito_17 Start: 9062, Stop: 9484, Start Num: 8

Candidate Starts for Chavito_17:

(Start: 8 @9062 has 149 MA's), (Start: 12 @9074 has 1 MA's), (25, 9164), (34, 9224), (38, 9251), (39, 9257), (42, 9275), (43, 9281), (45, 9302), (50, 9326), (54, 9344), (55, 9362), (63, 9434), (65, 9446),

Gene: CheetoDust_17 Start: 9996, Stop: 10421, Start Num: 8

Candidate Starts for CheetoDust_17:

(Start: 8 @9996 has 149 MA's), (15, 10026), (25, 10101), (34, 10161), (38, 10188), (39, 10194), (42, 10212), (43, 10218), (50, 10263), (54, 10281), (55, 10299), (65, 10383),

Gene: Cheetobro_18 Start: 11221, Stop: 11646, Start Num: 4

Candidate Starts for Cheetobro_18:

(Start: 4 @11221 has 90 MA's), (22, 11317), (32, 11368), (42, 11440), (43, 11446), (47, 11479), (50, 11491), (55, 11524), (65, 11608),

Gene: Cherrybomb426_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Cherrybomb426_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Chris_16 Start: 8919, Stop: 9338, Start Num: 8

Candidate Starts for Chris_16:

(Start: 8 @8919 has 149 MA's), (25, 9021), (28, 9039), (34, 9081), (38, 9108), (39, 9114), (45, 9159), (50, 9183), (54, 9201), (55, 9219), (61, 9276), (63, 9291), (65, 9303),

Gene: Clipper_17 Start: 9996, Stop: 10421, Start Num: 8

Candidate Starts for Clipper_17:

(Start: 8 @9996 has 149 MA's), (15, 10026), (25, 10101), (34, 10161), (38, 10188), (39, 10194), (42, 10212), (43, 10218), (50, 10263), (54, 10281), (55, 10299), (65, 10383),

Gene: Cloudyecho_12 Start: 9627, Stop: 10079, Start Num: 4

Candidate Starts for Cloudyecho_12:

(Start: 4 @9627 has 90 MA's), (Start: 14 @9657 has 1 MA's), (21, 9729), (22, 9735), (33, 9789), (37, 9825), (44, 9882), (45, 9885), (56, 9951), (62, 10011), (64, 10026),

Gene: Coleslaw_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Coleslaw_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Collard_15 Start: 10119, Stop: 10541, Start Num: 8

Candidate Starts for Collard_15:

(3, 10035), (Start: 8 @10119 has 149 MA's), (Start: 10 @10125 has 4 MA's), (Start: 12 @10131 has 1 MA's), (30, 10251), (38, 10308), (39, 10314), (42, 10332), (46, 10368), (47, 10371), (50, 10383), (55, 10419), (61, 10476), (63, 10491), (65, 10503),

Gene: Crespo_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for Crespo_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: CrimD_17 Start: 9948, Stop: 10373, Start Num: 8

Candidate Starts for CrimD_17:

(Start: 8 @9948 has 149 MA's), (25, 10053), (34, 10113), (38, 10140), (39, 10146), (42, 10164), (43, 10170), (50, 10215), (54, 10233), (55, 10251), (65, 10335),

Gene: Curiosium_18 Start: 9430, Stop: 9855, Start Num: 8

Candidate Starts for Curiosium_18:

(Start: 8 @9430 has 149 MA's), (Start: 12 @9442 has 1 MA's), (Start: 14 @9451 has 1 MA's), (34, 9595), (38, 9622), (39, 9628), (42, 9646), (43, 9652), (50, 9697), (53, 9712), (54, 9715), (63, 9805),

Gene: DMoney_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for DMoney_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: DNAIII_0012 Start: 9423, Stop: 9866, Start Num: 4

Candidate Starts for DNAIII_0012:

(2, 9231), (Start: 4 @9423 has 90 MA's), (Start: 10 @9438 has 4 MA's), (Start: 14 @9453 has 1 MA's), (18, 9486), (21, 9516), (29, 9561), (31, 9567), (56, 9738),

Gene: Dadosky_15 Start: 10037, Stop: 10459, Start Num: 8

Candidate Starts for Dadosky_15:

(3, 9953), (Start: 8 @10037 has 149 MA's), (Start: 10 @10043 has 4 MA's), (Start: 12 @10049 has 1 MA's), (30, 10169), (38, 10226), (39, 10232), (42, 10250), (47, 10289), (50, 10301), (55, 10337), (61, 10394), (65, 10421),

Gene: Dalmuri_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Dalmuri_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: DanSyl44_18 Start: 11224, Stop: 11649, Start Num: 4

Candidate Starts for DanSyl44_18:

(Start: 4 @11224 has 90 MA's), (22, 11320), (32, 11371), (42, 11443), (43, 11449), (47, 11482), (50, 11494), (55, 11527), (65, 11611),

Gene: Darionha_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Darionha_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: DartGoblin_17 Start: 9900, Stop: 10325, Start Num: 8

Candidate Starts for DartGoblin_17:

(Start: 8 @9900 has 149 MA's), (25, 10005), (34, 10065), (38, 10092), (39, 10098), (42, 10116), (43, 10122), (50, 10167), (53, 10182), (55, 10203), (65, 10287),

Gene: DarthP_16 Start: 9965, Stop: 10381, Start Num: 8

Candidate Starts for DarthP_16:

(Start: 8 @9965 has 149 MA's), (Start: 14 @9986 has 1 MA's), (31, 10100), (34, 10127), (39, 10160), (43, 10184), (47, 10217), (48, 10220), (53, 10244), (55, 10265), (61, 10322), (62, 10328), (65, 10349),

Gene: Dartin_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for Dartin_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: Deby_17 Start: 9950, Stop: 10375, Start Num: 8

Candidate Starts for Deby_17:

(Start: 8 @9950 has 149 MA's), (25, 10055), (34, 10115), (38, 10142), (39, 10148), (42, 10166), (43, 10172), (50, 10217), (54, 10235), (55, 10253), (65, 10337),

Gene: Devera_17 Start: 9967, Stop: 10392, Start Num: 8

Candidate Starts for Devera_17:

(Start: 8 @9967 has 149 MA's), (25, 10072), (34, 10132), (38, 10159), (39, 10165), (42, 10183), (43, 10189), (50, 10234), (54, 10252), (55, 10270), (61, 10327), (65, 10354),

Gene: DingDing_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for DingDing_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: DismalFunk_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for DismalFunk_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: DismalStressor_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for DismalStressor_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: Dole_17 Start: 9969, Stop: 10394, Start Num: 8

Candidate Starts for Dole_17:

(Start: 8 @9969 has 149 MA's), (25, 10074), (34, 10134), (38, 10161), (39, 10167), (42, 10185), (43, 10191), (50, 10236), (54, 10254), (55, 10272), (61, 10329), (65, 10356),

Gene: DoubleChamp_15 Start: 10119, Stop: 10541, Start Num: 8

Candidate Starts for DoubleChamp_15:

(3, 10035), (Start: 8 @10119 has 149 MA's), (Start: 10 @10125 has 4 MA's), (Start: 12 @10131 has 1 MA's), (30, 10251), (38, 10308), (39, 10314), (42, 10332), (46, 10368), (47, 10371), (50, 10383), (55, 10419), (61, 10476), (63, 10491), (65, 10503),

Gene: Doughnut_13 Start: 7948, Stop: 8367, Start Num: 9

Candidate Starts for Doughnut_13:

(3, 7864), (Start: 9 @7948 has 15 MA's), (Start: 12 @7957 has 1 MA's), (16, 7978), (34, 8107), (38, 8134), (42, 8158), (43, 8164), (52, 8221), (55, 8242), (61, 8299), (63, 8314), (65, 8326),

Gene: DrHayes_17 Start: 9921, Stop: 10346, Start Num: 8

Candidate Starts for DrHayes_17:

(Start: 8 @9921 has 149 MA's), (34, 10086), (38, 10113), (39, 10119), (42, 10137), (43, 10143), (50, 10188), (53, 10203), (54, 10206), (55, 10224), (65, 10308),

Gene: Durfee_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Durfee_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: ECartman_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for ECartman_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Edugator_14 Start: 10037, Stop: 10459, Start Num: 8

Candidate Starts for Edugator_14:

(3, 9953), (Start: 8 @10037 has 149 MA's), (Start: 10 @10043 has 4 MA's), (Start: 12 @10049 has 1 MA's), (30, 10169), (38, 10226), (39, 10232), (42, 10250), (47, 10289), (50, 10301), (55, 10337), (61, 10394), (65, 10421),

Gene: Efra2_17 Start: 8922, Stop: 9347, Start Num: 8

Candidate Starts for Efra2_17:

(Start: 8 @8922 has 149 MA's), (Start: 12 @8934 has 1 MA's), (Start: 14 @8943 has 1 MA's), (34, 9087), (38, 9114), (39, 9120), (42, 9138), (43, 9144), (50, 9189), (54, 9207), (55, 9225), (63, 9297), (65, 9309),

Gene: Ekdilam_14 Start: 9683, Stop: 10099, Start Num: 8

Candidate Starts for Ekdilam_14:

(Start: 8 @9683 has 149 MA's), (Start: 10 @9689 has 4 MA's), (Start: 14 @9704 has 1 MA's), (31, 9818), (34, 9845), (38, 9872), (39, 9878), (42, 9896), (43, 9902), (47, 9935), (50, 9947), (54, 9965), (55, 9983), (61, 10040), (62, 10046), (65, 10067),

Gene: Ellie_14 Start: 9718, Stop: 10134, Start Num: 8

Candidate Starts for Ellie_14:

(Start: 8 @9718 has 149 MA's), (Start: 10 @9724 has 4 MA's), (31, 9853), (34, 9880), (38, 9907), (39, 9913), (42, 9931), (43, 9937), (47, 9970), (54, 10000), (55, 10018), (61, 10075), (62, 10081), (65, 10102),

Gene: Emerson_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for Emerson_17:

(Start: 8 @9979 has 149 MA's), (25, 10084), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Enkosi_13 Start: 9269, Stop: 9688, Start Num: 10

Candidate Starts for Enkosi_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: Eponine_18 Start: 11085, Stop: 11510, Start Num: 4

Candidate Starts for Eponine_18:

(Start: 4 @11085 has 90 MA's), (19, 11154), (42, 11304), (43, 11310), (47, 11343), (50, 11355), (55, 11388), (65, 11472),

Gene: FF47_14 Start: 8879, Stop: 9313, Start Num: 9

Candidate Starts for FF47_14:

(Start: 8 @8876 has 149 MA's), (Start: 9 @8879 has 15 MA's), (17, 8927), (19, 8939), (21, 8960), (22, 8966), (34, 9038), (36, 9053), (45, 9119), (47, 9131), (51, 9149), (57, 9194), (63, 9257),

Gene: Fefferhead_16 Start: 9885, Stop: 10301, Start Num: 8

Candidate Starts for Fefferhead_16:

(Start: 8 @9885 has 149 MA's), (31, 10020), (34, 10047), (38, 10074), (39, 10080), (42, 10098), (43, 10104), (47, 10137), (54, 10167), (55, 10185), (61, 10242), (62, 10248), (65, 10269),

Gene: Feyre_15 Start: 9985, Stop: 10407, Start Num: 8

Candidate Starts for Feyre_15:

(3, 9901), (Start: 8 @9985 has 149 MA's), (Start: 10 @9991 has 4 MA's), (Start: 12 @9997 has 1 MA's), (23, 10081), (30, 10117), (38, 10174), (39, 10180), (42, 10198), (47, 10237), (48, 10240), (50, 10249), (55, 10285), (61, 10342), (63, 10357), (65, 10369),

Gene: Findley_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for Findley_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: Fionnbharth_18 Start: 11211, Stop: 11636, Start Num: 4

Candidate Starts for Fionnbharth_18:

(Start: 4 @11211 has 90 MA's), (22, 11307), (42, 11430), (43, 11436), (47, 11469), (50, 11481), (55, 11514), (65, 11598),

Gene: FlagStaff_12 Start: 9474, Stop: 9932, Start Num: 4

Candidate Starts for FlagStaff_12:

(2, 9285), (Start: 4 @9474 has 90 MA's), (Start: 6 @9501 has 1 MA's), (Start: 10 @9513 has 4 MA's), (Start: 14 @9528 has 1 MA's), (26, 9624), (37, 9696), (41, 9726), (56, 9822), (64, 9894),

Gene: Frosty24_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Frosty24_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Ganymede_17 Start: 9996, Stop: 10421, Start Num: 8

Candidate Starts for Ganymede_17:

(Start: 8 @9996 has 149 MA's), (25, 10101), (34, 10161), (38, 10188), (39, 10194), (42, 10212), (43, 10218), (50, 10263), (54, 10281), (55, 10299), (61, 10356), (65, 10383),

Gene: Gengar_15 Start: 10092, Stop: 10514, Start Num: 8

Candidate Starts for Gengar_15:

(3, 10008), (Start: 8 @10092 has 149 MA's), (Start: 10 @10098 has 4 MA's), (Start: 12 @10104 has 1 MA's), (23, 10188), (30, 10224), (38, 10281), (39, 10287), (42, 10305), (47, 10344), (50, 10356), (55, 10392), (61, 10449), (63, 10464), (65, 10476),

Gene: Geraldini_17 Start: 9999, Stop: 10424, Start Num: 8

Candidate Starts for Geraldini_17:

(Start: 8 @9999 has 149 MA's), (25, 10104), (34, 10164), (38, 10191), (39, 10197), (42, 10215), (43, 10221), (50, 10266), (54, 10284), (55, 10302), (65, 10386),

Gene: Gideon_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Gideon_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: GodSpeed_12 Start: 9483, Stop: 9917, Start Num: 4

Candidate Starts for GodSpeed_12:

(2, 9294), (Start: 4 @9483 has 90 MA's), (Start: 14 @9513 has 1 MA's), (21, 9585), (22, 9591), (41, 9711), (56, 9807), (59, 9843), (64, 9879),

Gene: GoldenAsh_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for GoldenAsh_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Gomashi_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for Gomashi_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: Grizzly_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Grizzly_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Guanica15_17 Start: 8938, Stop: 9363, Start Num: 8

Candidate Starts for Guanica15_17:

(Start: 8 @8938 has 149 MA's), (Start: 12 @8950 has 1 MA's), (Start: 14 @8959 has 1 MA's), (34, 9103), (38, 9130), (39, 9136), (42, 9154), (43, 9160), (50, 9205), (54, 9223), (55, 9241), (63, 9313), (65, 9325),

Gene: Guillsminger_15 Start: 10067, Stop: 10489, Start Num: 8

Candidate Starts for Guillsminger_15:

(3, 9983), (Start: 8 @10067 has 149 MA's), (Start: 10 @10073 has 4 MA's), (Start: 12 @10079 has 1 MA's), (23, 10163), (30, 10199), (38, 10256), (39, 10262), (42, 10280), (47, 10319), (50, 10331), (55, 10367), (61, 10424), (63, 10439), (65, 10451),

Gene: Halo_12 Start: 9409, Stop: 9852, Start Num: 4

Candidate Starts for Halo_12:

(Start: 4 @9409 has 90 MA's), (Start: 10 @9424 has 4 MA's), (Start: 14 @9439 has 1 MA's), (18, 9472), (29, 9547), (31, 9553), (56, 9724),

Gene: Hammy_16 Start: 9959, Stop: 10375, Start Num: 8

Candidate Starts for Hammy_16:

(Start: 8 @9959 has 149 MA's), (Start: 14 @9980 has 1 MA's), (31, 10094), (34, 10121), (39, 10154), (43, 10178), (47, 10211), (48, 10214), (53, 10238), (55, 10259), (61, 10316), (62, 10322), (65, 10343),

Gene: HedwigODU_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for HedwigODU_17:

(Start: 8 @9979 has 149 MA's), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Heftyboy_15 Start: 10194, Stop: 10616, Start Num: 8

Candidate Starts for Heftyboy_15:

(3, 10110), (Start: 8 @10194 has 149 MA's), (Start: 10 @10200 has 4 MA's), (Start: 12 @10206 has 1 MA's), (20, 10263), (23, 10290), (30, 10326), (31, 10329), (39, 10389), (42, 10407), (47, 10446), (50, 10458), (55, 10494), (61, 10551), (63, 10566), (65, 10578),

Gene: Homura_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Homura_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Hope_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Hope_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Hotshotbaby7_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Hotshotbaby7_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Hurricane_16 Start: 9998, Stop: 10429, Start Num: 8

Candidate Starts for Hurricane_16:

(Start: 8 @9998 has 149 MA's), (22, 10088), (34, 10160), (39, 10193), (43, 10217), (47, 10250), (48, 10253), (53, 10280), (55, 10313), (61, 10370), (62, 10376), (65, 10397),

Gene: Hyperbowlee_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Hyperbowlee_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Illumine_17 Start: 9969, Stop: 10394, Start Num: 8

Candidate Starts for Illumine_17:

(Start: 8 @9969 has 149 MA's), (25, 10074), (34, 10134), (38, 10161), (39, 10167), (42, 10185), (43, 10191), (50, 10236), (54, 10254), (55, 10272), (61, 10329), (65, 10356),

Gene: Inky_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Inky_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: InvictusManeo_15 Start: 10162, Stop: 10584, Start Num: 8

Candidate Starts for InvictusManeo_15:

(3, 10078), (Start: 8 @10162 has 149 MA's), (Start: 10 @10168 has 4 MA's), (Start: 12 @10174 has 1 MA's), (30, 10294), (38, 10351), (39, 10357), (42, 10375), (46, 10411), (47, 10414), (50, 10426), (55,

10462), (61, 10519), (63, 10534), (65, 10546),

Gene: JAWS_17 Start: 9973, Stop: 10398, Start Num: 8

Candidate Starts for JAWS_17:

(Start: 8 @9973 has 149 MA's), (25, 10078), (34, 10138), (38, 10165), (39, 10171), (42, 10189), (43, 10195), (50, 10240), (54, 10258), (55, 10276), (65, 10360),

Gene: JF1_18 Start: 11210, Stop: 11635, Start Num: 4

Candidate Starts for JF1_18:

(Start: 4 @11210 has 90 MA's), (22, 11306), (32, 11357), (42, 11429), (43, 11435), (47, 11468), (50, 11480), (55, 11513), (65, 11597),

Gene: JacoRen57_11 Start: 7951, Stop: 8385, Start Num: 9

Candidate Starts for JacoRen57_11:

(Start: 9 @7951 has 15 MA's), (Start: 12 @7960 has 1 MA's), (13, 7963), (22, 8038), (27, 8065), (32, 8092), (37, 8131), (42, 8164), (47, 8203), (49, 8212), (51, 8221), (65, 8344),

Gene: Jane_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Jane_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Jarvi_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Jarvi_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Jayhawk_17 Start: 9980, Stop: 10405, Start Num: 8

Candidate Starts for Jayhawk_17:

(Start: 8 @9980 has 149 MA's), (34, 10145), (38, 10172), (39, 10178), (42, 10196), (43, 10202), (50, 10247), (54, 10265), (55, 10283), (65, 10367),

Gene: Jeckyll_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Jeckyll_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Jeilious_12 Start: 9443, Stop: 9856, Start Num: 14

Candidate Starts for Jeilious_12:

(2, 9221), (Start: 4 @9413 has 90 MA's), (Start: 10 @9428 has 4 MA's), (Start: 14 @9443 has 1 MA's), (18, 9476), (21, 9506), (29, 9551), (31, 9557), (56, 9728),

Gene: Jolene_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Jolene_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Jolie2_12 Start: 8684, Stop: 9133, Start Num: 4

Candidate Starts for Jolie2_12:

(Start: 4 @8684 has 90 MA's), (Start: 14 @8714 has 1 MA's), (21, 8786), (29, 8831), (37, 8882), (41, 8912), (56, 9008), (59, 9044), (64, 9080),

Gene: Jonghyun_12 Start: 9429, Stop: 9857, Start Num: 10

Candidate Starts for Jonghyun_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: JorRay_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for JorRay_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Joy99_17 Start: 9945, Stop: 10370, Start Num: 8

Candidate Starts for Joy99_17:

(Start: 8 @9945 has 149 MA's), (Start: 10 @9951 has 4 MA's), (15, 9975), (25, 10050), (34, 10110), (38, 10137), (39, 10143), (42, 10161), (50, 10212), (54, 10230), (55, 10248), (65, 10332),

Gene: Juliette_18 Start: 11085, Stop: 11510, Start Num: 4

Candidate Starts for Juliette_18:

(Start: 4 @11085 has 90 MA's), (19, 11154), (42, 11304), (43, 11310), (47, 11343), (50, 11355), (55, 11388), (65, 11472),

Gene: Kareem_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Kareem_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Kasen3_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for Kasen3_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: Keshu_16 Start: 9985, Stop: 10416, Start Num: 8

Candidate Starts for Keshu_16:

(Start: 8 @9985 has 149 MA's), (Start: 14 @10006 has 1 MA's), (34, 10147), (39, 10180), (42, 10198), (43, 10204), (47, 10237), (53, 10267), (55, 10300), (61, 10357), (62, 10363), (65, 10384),

Gene: KiSi_16 Start: 8857, Stop: 9276, Start Num: 8

Candidate Starts for KiSi_16:

(Start: 8 @8857 has 149 MA's), (Start: 12 @8869 has 1 MA's), (25, 8959), (28, 8977), (34, 9019), (38, 9046), (39, 9052), (42, 9070), (50, 9121), (54, 9139), (55, 9157), (61, 9214), (63, 9229), (65, 9241),

Gene: Kratio_14 Start: 9789, Stop: 10211, Start Num: 8

Candidate Starts for Kratio_14:

(3, 9705), (Start: 8 @9789 has 149 MA's), (Start: 10 @9795 has 4 MA's), (Start: 12 @9801 has 1 MA's), (30, 9921), (38, 9978), (39, 9984), (42, 10002), (47, 10041), (50, 10053), (55, 10089), (61, 10146), (63, 10161),

Gene: Kraw_18 Start: 11130, Stop: 11555, Start Num: 4

Candidate Starts for Kraw_18:

(Start: 4 @11130 has 90 MA's), (22, 11226), (42, 11349), (43, 11355), (47, 11388), (50, 11400), (55, 11433), (65, 11517),

Gene: Krueger_16 Start: 8911, Stop: 9333, Start Num: 5

Candidate Starts for Krueger_16:

(Start: 5 @8911 has 12 MA's), (22, 9001), (34, 9073), (38, 9100), (47, 9163), (50, 9175), (54, 9193), (55, 9211), (61, 9268), (63, 9283), (65, 9295),

Gene: Larva_15 Start: 9904, Stop: 10326, Start Num: 8

Candidate Starts for Larva_15:

(3, 9820), (Start: 8 @9904 has 149 MA's), (Start: 10 @9910 has 4 MA's), (Start: 12 @9916 has 1 MA's), (30, 10036), (38, 10093), (39, 10099), (42, 10117), (47, 10156), (50, 10168), (55, 10204), (61, 10261), (65, 10288),

Gene: LastHope_17 Start: 9022, Stop: 9435, Start Num: 12

Candidate Starts for LastHope_17:

(Start: 8 @9010 has 149 MA's), (Start: 12 @9022 has 1 MA's), (Start: 14 @9031 has 1 MA's), (34, 9175), (38, 9202), (39, 9208), (42, 9226), (43, 9232), (50, 9277), (53, 9292), (54, 9295), (55, 9313), (63, 9385),

Gene: LaterM_17 Start: 9937, Stop: 10362, Start Num: 8

Candidate Starts for LaterM_17:

(Start: 8 @9937 has 149 MA's), (25, 10042), (34, 10102), (38, 10129), (39, 10135), (42, 10153), (43, 10159), (50, 10204), (54, 10222), (55, 10240), (61, 10297), (65, 10324),

Gene: Lavahound_15 Start: 9644, Stop: 10060, Start Num: 8

Candidate Starts for Lavahound_15:

(Start: 8 @9644 has 149 MA's), (31, 9779), (34, 9806), (38, 9833), (39, 9839), (42, 9857), (43, 9863), (47, 9896), (48, 9899), (54, 9926), (55, 9944), (61, 10001), (62, 10007), (65, 10028),

Gene: LeMond_16 Start: 8929, Stop: 9348, Start Num: 8

Candidate Starts for LeMond_16:

(Start: 8 @8929 has 149 MA's), (Start: 12 @8941 has 1 MA's), (28, 9049), (34, 9091), (38, 9118), (39, 9124), (42, 9142), (50, 9193), (54, 9211), (55, 9229), (61, 9286), (63, 9301), (65, 9313),

Gene: Lea83_16 Start: 9985, Stop: 10419, Start Num: 8

Candidate Starts for Lea83_16:

(Start: 8 @9985 has 149 MA's), (Start: 14 @10006 has 1 MA's), (34, 10147), (39, 10180), (42, 10198), (43, 10204), (47, 10237), (53, 10267), (55, 10303), (61, 10360), (62, 10366), (65, 10387),

Gene: Lebo14_18 Start: 11224, Stop: 11649, Start Num: 4

Candidate Starts for Lebo14_18:

(Start: 4 @11224 has 90 MA's), (22, 11320), (32, 11371), (42, 11443), (43, 11449), (47, 11482), (50, 11494), (55, 11527), (65, 11611),

Gene: Lemuria_12 Start: 8737, Stop: 9186, Start Num: 4

Candidate Starts for Lemuria_12:

(Start: 4 @8737 has 90 MA's), (Start: 14 @8767 has 1 MA's), (21, 8839), (29, 8884), (35, 8923), (37, 8935), (39, 8950), (56, 9061), (59, 9097), (64, 9133),

Gene: Leston_15 Start: 10197, Stop: 10619, Start Num: 8

Candidate Starts for Leston_15:

(3, 10113), (Start: 8 @10197 has 149 MA's), (Start: 10 @10203 has 4 MA's), (Start: 12 @10209 has 1 MA's), (23, 10293), (30, 10329), (38, 10386), (39, 10392), (42, 10410), (47, 10449), (48, 10452), (50, 10461), (55, 10497), (61, 10554), (63, 10569), (65, 10581),

Gene: Liefie_12 Start: 9413, Stop: 9856, Start Num: 4

Candidate Starts for Liefie_12:

(2, 9221), (Start: 4 @9413 has 90 MA's), (Start: 10 @9428 has 4 MA's), (Start: 14 @9443 has 1 MA's), (18, 9476), (21, 9506), (29, 9551), (31, 9557), (56, 9728),

Gene: LilDirt_14 Start: 9919, Stop: 10341, Start Num: 8

Candidate Starts for LilDirt_14:

(3, 9835), (Start: 8 @9919 has 149 MA's), (Start: 10 @9925 has 4 MA's), (Start: 12 @9931 has 1 MA's), (30, 10051), (38, 10108), (39, 10114), (42, 10132), (46, 10168), (47, 10171), (50, 10183), (55, 10219), (61, 10276), (63, 10291), (65, 10303),

Gene: LilPharaoh_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for LilPharaoh_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (19, 9326), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: LindNT_17 Start: 9943, Stop: 10368, Start Num: 8

Candidate Starts for LindNT_17:

(Start: 8 @9943 has 149 MA's), (21, 10027), (25, 10048), (34, 10108), (38, 10135), (39, 10141), (42, 10159), (43, 10165), (50, 10210), (54, 10228), (55, 10246), (65, 10330),

Gene: Llorens_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Llorens_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: LongHai_15 Start: 9275, Stop: 9649, Start Num: 19

Candidate Starts for LongHai_15:

(Start: 8 @9212 has 149 MA's), (Start: 9 @9215 has 15 MA's), (17, 9263), (19, 9275), (21, 9296), (22, 9302), (34, 9374), (36, 9389), (45, 9455), (47, 9467), (51, 9485), (57, 9530), (63, 9593),

Gene: LouisV14_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for LouisV14_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Lunahalos_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Lunahalos_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: MOOREtheMARYer_12 Start: 9625, Stop: 10074, Start Num: 4

Candidate Starts for MOOREtheMARYer_12:

(Start: 4 @9625 has 90 MA's), (Start: 14 @9655 has 1 MA's), (21, 9727), (22, 9733), (33, 9787), (37, 9823), (44, 9880), (56, 9949), (61, 10000), (62, 10006), (64, 10021),

Gene: MZKinsey_12 Start: 9429, Stop: 9857, Start Num: 10

Candidate Starts for MZKinsey_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: MacKat_17 Start: 9996, Stop: 10421, Start Num: 8

Candidate Starts for MacKat_17:

(Start: 8 @9996 has 149 MA's), (15, 10026), (25, 10101), (34, 10161), (38, 10188), (39, 10194), (42, 10212), (43, 10218), (50, 10263), (54, 10281), (55, 10299), (65, 10383),

Gene: MacnCheese_17 Start: 10213, Stop: 10644, Start Num: 8

Candidate Starts for MacnCheese_17:

(Start: 8 @10213 has 149 MA's), (11, 10222), (34, 10375), (39, 10408), (42, 10426), (47, 10465), (53, 10495), (61, 10585), (62, 10591), (65, 10612),

Gene: Maco6_12 Start: 8171, Stop: 8605, Start Num: 9

Candidate Starts for Maco6_12:

(Start: 8 @8168 has 149 MA's), (Start: 9 @8171 has 15 MA's), (17, 8219), (19, 8231), (21, 8252), (22, 8258), (34, 8330), (36, 8345), (45, 8411), (47, 8423), (51, 8441), (57, 8486), (63, 8549),

Gene: Maliketh_12 Start: 9444, Stop: 9857, Start Num: 14

Candidate Starts for Maliketh_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Malthus_18 Start: 11130, Stop: 11555, Start Num: 4

Candidate Starts for Malthus_18:

(Start: 4 @11130 has 90 MA's), (22, 11226), (42, 11349), (43, 11355), (47, 11388), (50, 11400), (55, 11433), (65, 11517),

Gene: Marcoliusprime_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for Marcoliusprime_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: MarkPhew_17 Start: 8825, Stop: 9244, Start Num: 8

Candidate Starts for MarkPhew_17:

(Start: 8 @8825 has 149 MA's), (25, 8927), (34, 8987), (38, 9014), (39, 9020), (45, 9065), (50, 9089), (54, 9107), (55, 9125), (61, 9182), (63, 9197), (65, 9209),

Gene: Marmie_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Marmie_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Marshawn_18 Start: 9519, Stop: 9941, Start Num: 8

Candidate Starts for Marshawn_18:

(Start: 8 @9519 has 149 MA's), (Start: 12 @9531 has 1 MA's), (22, 9609), (25, 9621), (34, 9681), (38, 9708), (39, 9714), (42, 9732), (48, 9774), (50, 9783), (53, 9798), (54, 9801), (55, 9819), (61, 9876), (63, 9891), (65, 9903),

Gene: McMater_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for McMater_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: Mdavu_13 Start: 9251, Stop: 9676, Start Num: 8

Candidate Starts for Mdavu_13:

(1, 9047), (Start: 8 @9251 has 149 MA's), (Start: 10 @9257 has 4 MA's), (Start: 14 @9272 has 1 MA's), (22, 9341), (34, 9413), (38, 9440), (39, 9446), (42, 9464), (43, 9470), (54, 9533), (55, 9551), (61,

9608), (65, 9635),

Gene: MeaningOfLife_17 Start: 9952, Stop: 10377, Start Num: 8

Candidate Starts for MeaningOfLife_17:

(Start: 8 @9952 has 149 MA's), (34, 10117), (38, 10144), (39, 10150), (42, 10168), (43, 10174), (50, 10219), (54, 10237), (55, 10255), (65, 10339),

Gene: Megsy_17 Start: 9946, Stop: 10371, Start Num: 8

Candidate Starts for Megsy_17:

(Start: 8 @9946 has 149 MA's), (21, 10030), (25, 10051), (34, 10111), (38, 10138), (39, 10144), (42, 10162), (43, 10168), (50, 10213), (55, 10249), (65, 10333),

Gene: Mercurio_13 Start: 9380, Stop: 9829, Start Num: 4

Candidate Starts for Mercurio_13:

(3, 9305), (Start: 4 @9380 has 90 MA's), (Start: 14 @9410 has 1 MA's), (21, 9482), (29, 9527), (37, 9578), (56, 9704), (59, 9740), (64, 9776),

Gene: Milly_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for Milly_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: Miryou_15 Start: 10045, Stop: 10467, Start Num: 8

Candidate Starts for Miryou_15:

(3, 9961), (Start: 8 @10045 has 149 MA's), (Start: 10 @10051 has 4 MA's), (Start: 12 @10057 has 1 MA's), (23, 10141), (30, 10177), (38, 10234), (39, 10240), (42, 10258), (47, 10297), (48, 10300), (50, 10309), (55, 10345), (61, 10402), (63, 10417), (65, 10429),

Gene: MissDaisy_18 Start: 10984, Stop: 11409, Start Num: 4

Candidate Starts for MissDaisy_18:

(Start: 4 @10984 has 90 MA's), (22, 11080), (32, 11131), (42, 11203), (43, 11209), (47, 11242), (50, 11254), (55, 11287), (65, 11371),

Gene: Mitti_18 Start: 11134, Stop: 11559, Start Num: 4

Candidate Starts for Mitti_18:

(Start: 4 @11134 has 90 MA's), (22, 11230), (42, 11353), (43, 11359), (47, 11392), (50, 11404), (55, 11437), (65, 11521),

Gene: Mowgli_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Mowgli_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Muddy_14 Start: 9121, Stop: 9555, Start Num: 9

Candidate Starts for Muddy_14:

(Start: 8 @9118 has 149 MA's), (Start: 9 @9121 has 15 MA's), (17, 9169), (19, 9181), (21, 9202), (22, 9208), (34, 9280), (36, 9295), (45, 9361), (47, 9373), (51, 9391), (57, 9436), (63, 9499),

Gene: Mufasa_13 Start: 7948, Stop: 8367, Start Num: 9

Candidate Starts for Mufasa_13:

(3, 7864), (Start: 9 @7948 has 15 MA's), (Start: 12 @7957 has 1 MA's), (16, 7978), (34, 8107), (38, 8134), (42, 8158), (43, 8164), (52, 8221), (55, 8242), (61, 8299), (63, 8314), (65, 8326),

Gene: Murucutumbu_17 Start: 9930, Stop: 10355, Start Num: 8

Candidate Starts for Murucutumbu_17:

(Start: 8 @9930 has 149 MA's), (25, 10035), (34, 10095), (38, 10122), (39, 10128), (42, 10146), (43, 10152), (50, 10197), (54, 10215), (55, 10233), (61, 10290), (65, 10317),

Gene: Mynx_17 Start: 9999, Stop: 10424, Start Num: 8

Candidate Starts for Mynx_17:

(Start: 8 @9999 has 149 MA's), (34, 10164), (38, 10191), (39, 10197), (42, 10215), (43, 10221), (47, 10254), (50, 10266), (54, 10284), (55, 10302), (65, 10386),

Gene: Neighly_15 Start: 9903, Stop: 10325, Start Num: 8

Candidate Starts for Neighly_15:

(3, 9819), (Start: 8 @9903 has 149 MA's), (Start: 10 @9909 has 4 MA's), (Start: 12 @9915 has 1 MA's), (30, 10035), (38, 10092), (39, 10098), (42, 10116), (47, 10155), (50, 10167), (55, 10203), (61, 10260), (65, 10287),

Gene: Neoh_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for Neoh_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: Nibb_16 Start: 8966, Stop: 9385, Start Num: 8

Candidate Starts for Nibb_16:

(Start: 8 @8966 has 149 MA's), (25, 9068), (28, 9086), (34, 9128), (38, 9155), (39, 9161), (45, 9206), (50, 9230), (54, 9248), (55, 9266), (61, 9323), (63, 9338), (65, 9350),

Gene: Nikao_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Nikao_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: Niklas_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for Niklas_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: NoShow_12 Start: 8260, Stop: 8688, Start Num: 9

Candidate Starts for NoShow_12:

(Start: 9 @8260 has 15 MA's), (17, 8308), (27, 8371), (40, 8458), (47, 8509), (49, 8518), (51, 8527), (60, 8617), (63, 8638), (65, 8650),

Gene: November_15 Start: 9807, Stop: 10223, Start Num: 8

Candidate Starts for November_15:

(Start: 8 @9807 has 149 MA's), (Start: 14 @9828 has 1 MA's), (22, 9897), (34, 9969), (39, 10002), (47, 10059), (50, 10071), (54, 10089), (55, 10107), (61, 10164), (62, 10170), (65, 10191),

Gene: Nutello_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Nutello_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: OctaviousRex_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for OctaviousRex_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: OkiRoe_15 Start: 10067, Stop: 10489, Start Num: 8

Candidate Starts for OkiRoe_15:

(3, 9983), (Start: 8 @10067 has 149 MA's), (Start: 10 @10073 has 4 MA's), (Start: 12 @10079 has 1 MA's), (23, 10163), (30, 10199), (38, 10256), (39, 10262), (42, 10280), (46, 10316), (47, 10319), (48, 10322), (50, 10331), (55, 10367), (61, 10424), (63, 10439), (65, 10451),

Gene: Olga_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Olga_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: OmniCritical_18 Start: 11121, Stop: 11546, Start Num: 4

Candidate Starts for OmniCritical_18:

(Start: 4 @11121 has 90 MA's), (22, 11217), (42, 11340), (43, 11346), (47, 11379), (50, 11391), (55, 11424), (65, 11508),

Gene: Omnicron_15 Start: 9133, Stop: 9555, Start Num: 8

Candidate Starts for Omnicron_15:

(3, 9049), (Start: 8 @9133 has 149 MA's), (Start: 10 @9139 has 4 MA's), (Start: 12 @9145 has 1 MA's), (20, 9202), (23, 9229), (30, 9265), (39, 9328), (42, 9346), (47, 9385), (50, 9397), (52, 9409), (55, 9433), (61, 9490), (62, 9496), (63, 9505), (65, 9517),

Gene: Oscar_16 Start: 8930, Stop: 9349, Start Num: 8

Candidate Starts for Oscar_16:

(Start: 8 @8930 has 149 MA's), (Start: 12 @8942 has 1 MA's), (25, 9032), (28, 9050), (34, 9092), (38, 9119), (39, 9125), (42, 9143), (50, 9194), (54, 9212), (55, 9230), (61, 9287), (63, 9302), (65, 9314),

Gene: Pace1224_12 Start: 9474, Stop: 9932, Start Num: 4

Candidate Starts for Pace1224_12:

(2, 9285), (Start: 4 @9474 has 90 MA's), (Start: 6 @9501 has 1 MA's), (Start: 10 @9513 has 4 MA's), (Start: 14 @9528 has 1 MA's), (26, 9624), (37, 9696), (41, 9726), (56, 9822), (64, 9894),

Gene: Padfoot_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Padfoot_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Padpat_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for Padpat_17:

(Start: 8 @9979 has 149 MA's), (25, 10084), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Paito_12 Start: 9528, Stop: 9965, Start Num: 10

Candidate Starts for Paito_12:

(Start: 4 @9513 has 90 MA's), (Start: 10 @9528 has 4 MA's), (Start: 14 @9543 has 1 MA's), (21, 9615), (29, 9660), (37, 9711), (44, 9768), (56, 9837), (58, 9855),

Gene: Paola_15 Start: 10067, Stop: 10489, Start Num: 8

Candidate Starts for Paola_15:

(3, 9983), (Start: 8 @10067 has 149 MA's), (Start: 10 @10073 has 4 MA's), (Start: 12 @10079 has 1 MA's), (23, 10163), (30, 10199), (38, 10256), (39, 10262), (42, 10280), (47, 10319), (50, 10331), (55, 10367), (61, 10424), (63, 10439), (65, 10451),

Gene: Patt_18 Start: 10960, Stop: 11385, Start Num: 4

Candidate Starts for Patt_18:

(Start: 4 @10960 has 90 MA's), (22, 11056), (32, 11107), (42, 11179), (43, 11185), (47, 11218), (50, 11230), (55, 11263), (65, 11347),

Gene: Peanam_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for Peanam_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: Peeb_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Peeb_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Peel_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Peel_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Periodt_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Periodt_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Pharb_16 Start: 9818, Stop: 10252, Start Num: 7

Candidate Starts for Pharb_16:

(Start: 7 @9818 has 1 MA's), (Start: 14 @9842 has 1 MA's), (23, 9917), (34, 9983), (39, 10016), (42, 10034), (43, 10040), (45, 10061), (47, 10073), (48, 10076), (53, 10103), (55, 10136), (62, 10199), (65, 10220),

Gene: PhelpsODU_16 Start: 8965, Stop: 9402, Start Num: 5

Candidate Starts for PhelpsODU_16:

(Start: 5 @8965 has 12 MA's), (24, 9064), (25, 9067), (34, 9127), (42, 9178), (47, 9217), (50, 9229), (54, 9247), (55, 9280), (61, 9337), (63, 9352), (65, 9364),

Gene: Phish_12 Start: 9444, Stop: 9857, Start Num: 14

Candidate Starts for Phish_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Phloodle_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Phloodle_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Phrank_16 Start: 8909, Stop: 9346, Start Num: 5

Candidate Starts for Phrank_16:

(Start: 5 @8909 has 12 MA's), (22, 8999), (24, 9008), (25, 9011), (34, 9071), (42, 9122), (47, 9161), (50, 9173), (54, 9191), (55, 9224), (61, 9281), (63, 9296), (65, 9308),

Gene: Phreak_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Phreak_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Piatt_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Piatt_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: PinkYoshi_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for PinkYoshi_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Pinnie_13 Start: 10091, Stop: 10540, Start Num: 4

Candidate Starts for Pinnie_13:

(Start: 4 @10091 has 90 MA's), (Start: 14 @10121 has 1 MA's), (21, 10193), (22, 10199), (33, 10253), (37, 10289), (44, 10346), (45, 10349), (56, 10415), (61, 10466), (62, 10472), (64, 10487),

Gene: Pisa1_16 Start: 9727, Stop: 10152, Start Num: 8

Candidate Starts for Pisa1_16:

(Start: 8 @9727 has 149 MA's), (25, 9832), (34, 9892), (38, 9919), (39, 9925), (42, 9943), (43, 9949), (50, 9994), (54, 10012), (55, 10030), (61, 10087), (65, 10114),

Gene: Pisa4_16 Start: 9727, Stop: 10152, Start Num: 8

Candidate Starts for Pisa4_16:

(Start: 8 @9727 has 149 MA's), (25, 9832), (34, 9892), (38, 9919), (39, 9925), (42, 9943), (43, 9949), (50, 9994), (54, 10012), (55, 10030), (61, 10087), (65, 10114),

Gene: Pixie_16 Start: 9737, Stop: 10171, Start Num: 8

Candidate Starts for Pixie_16:

(Start: 8 @9737 has 149 MA's), (34, 9899), (39, 9932), (42, 9950), (43, 9956), (47, 9989), (53, 10019), (55, 10055), (62, 10118), (65, 10139),

Gene: Plagueis_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Plagueis_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Pokerus_16 Start: 9933, Stop: 10358, Start Num: 8

Candidate Starts for Pokerus_16:

(Start: 8 @9933 has 149 MA's), (Start: 10 @9939 has 4 MA's), (34, 10098), (38, 10125), (39, 10131), (42, 10149), (43, 10155), (50, 10200), (54, 10218), (55, 10236), (65, 10320),

Gene: Prithvi_17 Start: 9943, Stop: 10368, Start Num: 8

Candidate Starts for Prithvi_17:

(Start: 8 @9943 has 149 MA's), (21, 10027), (25, 10048), (34, 10108), (38, 10135), (39, 10141), (42, 10159), (43, 10165), (50, 10210), (54, 10228), (55, 10246), (65, 10330),

Gene: Psycho_15 Start: 10034, Stop: 10456, Start Num: 8

Candidate Starts for Psycho_15:

(3, 9950), (Start: 8 @10034 has 149 MA's), (Start: 10 @10040 has 4 MA's), (Start: 12 @10046 has 1 MA's), (30, 10166), (38, 10223), (39, 10229), (42, 10247), (47, 10286), (50, 10298), (55, 10334), (61, 10391), (65, 10418),

Gene: Qhanda_18 Start: 11230, Stop: 11655, Start Num: 4

Candidate Starts for Qhanda_18:

(Start: 4 @11230 has 90 MA's), (22, 11326), (32, 11377), (42, 11449), (43, 11455), (47, 11488), (50, 11500), (55, 11533), (65, 11617),

Gene: QuincyRose_16 Start: 9996, Stop: 10421, Start Num: 8

Candidate Starts for QuincyRose_16:

(Start: 8 @9996 has 149 MA's), (25, 10101), (34, 10161), (38, 10188), (39, 10194), (42, 10212), (43, 10218), (50, 10263), (54, 10281), (55, 10299), (61, 10356), (65, 10383),

Gene: Rabbs_12 Start: 9397, Stop: 9840, Start Num: 4

Candidate Starts for Rabbs_12:

(Start: 4 @9397 has 90 MA's), (Start: 10 @9412 has 4 MA's), (Start: 14 @9427 has 1 MA's), (18, 9460), (29, 9535), (31, 9541), (56, 9712),

Gene: Ramen_17 Start: 9979, Stop: 10404, Start Num: 8

Candidate Starts for Ramen_17:

(Start: 8 @9979 has 149 MA's), (34, 10144), (38, 10171), (39, 10177), (42, 10195), (43, 10201), (50, 10246), (54, 10264), (55, 10282), (65, 10366),

Gene: Rando14_15 Start: 9035, Stop: 9457, Start Num: 8

Candidate Starts for Rando14_15:

(3, 8951), (Start: 8 @9035 has 149 MA's), (Start: 10 @9041 has 4 MA's), (Start: 12 @9047 has 1 MA's), (30, 9167), (39, 9230), (42, 9248), (45, 9275), (46, 9284), (47, 9287), (50, 9299), (52, 9311), (55, 9335), (61, 9392), (62, 9398), (63, 9407), (65, 9419),

Gene: Rapunzel97_17 Start: 9980, Stop: 10405, Start Num: 8

Candidate Starts for Rapunzel97_17:

(Start: 8 @9980 has 149 MA's), (34, 10145), (38, 10172), (39, 10178), (42, 10196), (43, 10202), (50, 10247), (54, 10265), (55, 10283), (65, 10367),

Gene: Rattrick_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Rattrick_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Remy19_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Remy19_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Renaissance_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Renaissance_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Reptar3000_18 Start: 10962, Stop: 11387, Start Num: 4

Candidate Starts for Reptar3000_18:

(Start: 4 @10962 has 90 MA's), (22, 11058), (32, 11109), (42, 11181), (43, 11187), (47, 11220), (50, 11232), (55, 11265), (65, 11349),

Gene: Richarlison_12 Start: 9429, Stop: 9857, Start Num: 10

Candidate Starts for Richarlison_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Richo_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for Richo_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: Rosmarinus_17 Start: 10007, Stop: 10432, Start Num: 8

Candidate Starts for Rosmarinus_17:

(Start: 8 @10007 has 149 MA's), (25, 10112), (34, 10172), (38, 10199), (39, 10205), (42, 10223), (43, 10229), (50, 10274), (54, 10292), (55, 10310), (65, 10394),

Gene: Ruriko_12 Start: 9429, Stop: 9857, Start Num: 10

Candidate Starts for Ruriko_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Ruthiejr_17 Start: 10816, Stop: 11241, Start Num: 4

Candidate Starts for Ruthiejr_17:

(Start: 4 @10816 has 90 MA's), (19, 10885), (42, 11035), (43, 11041), (47, 11074), (50, 11086), (55, 11119), (65, 11203),

Gene: Salvus_15 Start: 9275, Stop: 9649, Start Num: 19

Candidate Starts for Salvus_15:

(Start: 8 @9212 has 149 MA's), (Start: 9 @9215 has 15 MA's), (17, 9263), (19, 9275), (21, 9296), (22, 9302), (34, 9374), (36, 9389), (45, 9455), (47, 9467), (51, 9485), (57, 9530), (63, 9593),

Gene: SamScheppers_16 Start: 10737, Stop: 11162, Start Num: 4

Candidate Starts for SamScheppers_16:

(Start: 4 @10737 has 90 MA's), (22, 10833), (32, 10884), (42, 10956), (43, 10962), (47, 10995), (50, 11007), (55, 11040), (65, 11124),

Gene: SamuelLPlaqson_17 Start: 9921, Stop: 10346, Start Num: 8

Candidate Starts for SamuelLPlaqson_17:

(Start: 8 @9921 has 149 MA's), (34, 10086), (38, 10113), (39, 10119), (42, 10137), (43, 10143), (50, 10188), (53, 10203), (54, 10206), (55, 10224), (65, 10308),

Gene: Scarlett_16 Start: 8929, Stop: 9348, Start Num: 8

Candidate Starts for Scarlett_16:

(Start: 8 @8929 has 149 MA's), (Start: 12 @8941 has 1 MA's), (25, 9031), (28, 9049), (34, 9091), (38, 9118), (39, 9124), (42, 9142), (50, 9193), (54, 9211), (55, 9229), (61, 9286), (63, 9301), (65, 9313),

Gene: Schiebel_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Schiebel_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: SgtBeansprout_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for SgtBeansprout_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (19, 9326), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: ShaboiShabazz_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for ShaboiShabazz_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Shadow1_15 Start: 8820, Stop: 9242, Start Num: 5

Candidate Starts for Shadow1_15:

(Start: 5 @8820 has 12 MA's), (22, 8910), (34, 8982), (47, 9072), (50, 9084), (54, 9102), (55, 9120), (61, 9177), (63, 9192), (65, 9204),

Gene: Shaobing_17 Start: 9056, Stop: 9478, Start Num: 8

Candidate Starts for Shaobing_17:

(Start: 8 @9056 has 149 MA's), (25, 9158), (34, 9218), (38, 9245), (39, 9251), (42, 9269), (43, 9275), (45, 9296), (50, 9320), (54, 9338), (55, 9356), (63, 9428), (65, 9440),

Gene: ShedlockHolmes_16 Start: 9985, Stop: 10419, Start Num: 8

Candidate Starts for ShedlockHolmes_16:

(Start: 8 @9985 has 149 MA's), (Start: 14 @10006 has 1 MA's), (34, 10147), (39, 10180), (42, 10198), (43, 10204), (47, 10237), (53, 10267), (55, 10303), (61, 10360), (62, 10366), (65, 10387),

Gene: ShiaSurprise_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for ShiaSurprise_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: SirPhilip_16 Start: 8686, Stop: 9105, Start Num: 8

Candidate Starts for SirPhilip_16:

(Start: 8 @8686 has 149 MA's), (Start: 10 @8692 has 4 MA's), (25, 8788), (34, 8848), (38, 8875), (39, 8881), (42, 8899), (47, 8938), (54, 8968), (55, 8986), (61, 9043), (63, 9058), (65, 9070),

Gene: Sizemore_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for Sizemore_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: Slarp_18 Start: 11221, Stop: 11646, Start Num: 4

Candidate Starts for Slarp_18:

(Start: 4 @11221 has 90 MA's), (22, 11317), (32, 11368), (42, 11440), (43, 11446), (47, 11479), (50, 11491), (55, 11524), (65, 11608),

Gene: Slimphazie_17 Start: 9980, Stop: 10405, Start Num: 8

Candidate Starts for Slimphazie_17:

(Start: 8 @9980 has 149 MA's), (34, 10145), (38, 10172), (39, 10178), (42, 10196), (43, 10202), (50, 10247), (54, 10265), (55, 10283), (65, 10367),

Gene: Sneeze_12 Start: 9396, Stop: 9839, Start Num: 4

Candidate Starts for Sneeze_12:

(Start: 4 @9396 has 90 MA's), (Start: 10 @9411 has 4 MA's), (Start: 14 @9426 has 1 MA's), (18, 9459), (29, 9534), (31, 9540), (56, 9711),

Gene: SoSeph_15 Start: 10194, Stop: 10616, Start Num: 8

Candidate Starts for SoSeph_15:

(3, 10110), (Start: 8 @10194 has 149 MA's), (Start: 10 @10200 has 4 MA's), (Start: 12 @10206 has 1 MA's), (20, 10263), (23, 10290), (30, 10326), (31, 10329), (39, 10389), (42, 10407), (47, 10446), (50, 10458), (55, 10494), (61, 10551), (63, 10566), (65, 10578),

Gene: Spock_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Spock_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Stargaze_12 Start: 9700, Stop: 10152, Start Num: 4

Candidate Starts for Stargaze_12:

(Start: 4 @9700 has 90 MA's), (Start: 14 @9730 has 1 MA's), (37, 9898), (39, 9913), (44, 9955), (56, 10024), (64, 10099),

Gene: Stinson_17 Start: 9942, Stop: 10367, Start Num: 8

Candidate Starts for Stinson_17:

(Start: 8 @9942 has 149 MA's), (25, 10047), (34, 10107), (38, 10134), (39, 10140), (42, 10158), (43, 10164), (50, 10209), (52, 10221), (54, 10227), (55, 10245), (65, 10329),

Gene: Strobilo_13 Start: 7962, Stop: 8381, Start Num: 9

Candidate Starts for Strobilo_13:

(3, 7878), (Start: 9 @7962 has 15 MA's), (Start: 12 @7971 has 1 MA's), (16, 7992), (34, 8121), (38, 8148), (42, 8172), (43, 8178), (52, 8235), (55, 8256), (61, 8313), (63, 8328), (65, 8340),

Gene: Sulley_17 Start: 9949, Stop: 10374, Start Num: 8

Candidate Starts for Sulley_17:

(Start: 8 @9949 has 149 MA's), (25, 10054), (34, 10114), (38, 10141), (39, 10147), (42, 10165), (43, 10171), (50, 10216), (54, 10234), (55, 10252), (65, 10336),

Gene: Sunflower1121_15 Start: 8831, Stop: 9253, Start Num: 5

Candidate Starts for Sunflower1121_15:

(Start: 5 @8831 has 12 MA's), (22, 8921), (34, 8993), (47, 9083), (50, 9095), (54, 9113), (55, 9131), (61, 9188), (63, 9203), (65, 9215),

Gene: Sweets_12 Start: 9409, Stop: 9852, Start Num: 4

Candidate Starts for Sweets_12:

(Start: 4 @9409 has 90 MA's), (Start: 10 @9424 has 4 MA's), (Start: 14 @9439 has 1 MA's), (18, 9472), (29, 9547), (31, 9553), (56, 9724),

Gene: Syra333_16 Start: 8927, Stop: 9346, Start Num: 5

Candidate Starts for Syra333_16:

(Start: 5 @8927 has 12 MA's), (22, 9017), (34, 9089), (38, 9116), (47, 9179), (50, 9191), (54, 9209), (55, 9227), (61, 9284), (63, 9299), (65, 9311),

Gene: TBond007_16 Start: 9736, Stop: 10170, Start Num: 8

Candidate Starts for TBond007_16:

(Start: 8 @9736 has 149 MA's), (34, 9898), (39, 9931), (42, 9949), (43, 9955), (47, 9988), (53, 10018), (55, 10054), (62, 10117), (65, 10138),

Gene: TClif_16 Start: 8918, Stop: 9340, Start Num: 8

Candidate Starts for TClif_16:

(Start: 8 @8918 has 149 MA's), (17, 8969), (22, 9008), (25, 9020), (34, 9080), (42, 9131), (47, 9170), (50, 9182), (54, 9200), (55, 9218), (61, 9275), (63, 9290),

Gene: TM4_13 Start: 8014, Stop: 8433, Start Num: 9

Candidate Starts for TM4_13:

(3, 7930), (Start: 9 @8014 has 15 MA's), (Start: 12 @8023 has 1 MA's), (16, 8044), (34, 8173), (38, 8200), (42, 8224), (43, 8230), (52, 8287), (55, 8308), (61, 8365), (63, 8380), (65, 8392),

Gene: Tachez_17 Start: 9942, Stop: 10367, Start Num: 8

Candidate Starts for Tachez_17:

(Start: 8 @9942 has 149 MA's), (15, 9972), (25, 10047), (34, 10107), (38, 10134), (39, 10140), (42, 10158), (43, 10164), (50, 10209), (54, 10227), (55, 10245), (65, 10329),

Gene: Taheera_12 Start: 9406, Stop: 9849, Start Num: 4

Candidate Starts for Taheera_12:

(Start: 4 @9406 has 90 MA's), (Start: 10 @9421 has 4 MA's), (Start: 14 @9436 has 1 MA's), (18, 9469), (29, 9544), (31, 9550), (56, 9721),

Gene: TaiwanKao_17 Start: 9949, Stop: 10374, Start Num: 8

Candidate Starts for TaiwanKao_17:

(Start: 8 @9949 has 149 MA's), (21, 10033), (25, 10054), (34, 10114), (38, 10141), (39, 10147), (42, 10165), (43, 10171), (50, 10216), (55, 10252), (65, 10336),

Gene: Taquito_16 Start: 10807, Stop: 11232, Start Num: 4

Candidate Starts for Taquito_16:

(Start: 4 @10807 has 90 MA's), (19, 10876), (42, 11026), (43, 11032), (47, 11065), (50, 11077), (55, 11110), (65, 11194),

Gene: Teejan_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Teejan_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: Terror_12 Start: 9406, Stop: 9849, Start Num: 4

Candidate Starts for Terror_12:

(Start: 4 @9406 has 90 MA's), (Start: 10 @9421 has 4 MA's), (Start: 14 @9436 has 1 MA's), (18, 9469), (29, 9544), (31, 9550), (56, 9721),

Gene: Thyatira_15 Start: 10066, Stop: 10488, Start Num: 8

Candidate Starts for Thyatira_15:

(3, 9982), (Start: 8 @10066 has 149 MA's), (Start: 10 @10072 has 4 MA's), (Start: 12 @10078 has 1 MA's), (23, 10162), (30, 10198), (38, 10255), (39, 10261), (42, 10279), (47, 10318), (48, 10321), (50, 10330), (55, 10366), (61, 10423), (63, 10438), (65, 10450),

Gene: Tierra_16 Start: 9630, Stop: 10067, Start Num: 5

Candidate Starts for Tierra_16:

(Start: 5 @9630 has 12 MA's), (22, 9720), (24, 9729), (25, 9732), (34, 9792), (42, 9843), (47, 9882), (50, 9894), (54, 9912), (55, 9945), (61, 10002), (63, 10017), (65, 10029),

Gene: Tigress9_16 Start: 8911, Stop: 9333, Start Num: 5

Candidate Starts for Tigress9_16:

(Start: 5 @8911 has 12 MA's), (22, 9001), (34, 9073), (38, 9100), (47, 9163), (50, 9175), (54, 9193), (55, 9211), (61, 9268), (63, 9283), (65, 9295),

Gene: TinaBug_12 Start: 9409, Stop: 9852, Start Num: 4

Candidate Starts for TinaBug_12:

(Start: 4 @9409 has 90 MA's), (Start: 10 @9424 has 4 MA's), (Start: 14 @9439 has 1 MA's), (18, 9472), (29, 9547), (31, 9553), (56, 9724),

Gene: TingHuaYa_17 Start: 9013, Stop: 9438, Start Num: 8

Candidate Starts for TingHuaYa_17:

(Start: 8 @9013 has 149 MA's), (Start: 12 @9025 has 1 MA's), (Start: 14 @9034 has 1 MA's), (34, 9178), (38, 9205), (39, 9211), (42, 9229), (43, 9235), (50, 9280), (53, 9295), (54, 9298), (55, 9316), (63, 9388),

Gene: TiniBug_17 Start: 9921, Stop: 10346, Start Num: 8

Candidate Starts for TiniBug_17:

(Start: 8 @9921 has 149 MA's), (25, 10026), (34, 10086), (38, 10113), (39, 10119), (42, 10137), (43, 10143), (50, 10188), (53, 10203), (54, 10206), (55, 10224), (65, 10308),

Gene: Tiri_17 Start: 9988, Stop: 10413, Start Num: 8

Candidate Starts for Tiri_17:

(Start: 8 @9988 has 149 MA's), (25, 10093), (34, 10153), (38, 10180), (39, 10186), (42, 10204), (43, 10210), (50, 10255), (54, 10273), (55, 10291), (65, 10375),

Gene: TomBrady_12 Start: 9415, Stop: 9858, Start Num: 4

Candidate Starts for TomBrady_12:

(2, 9223), (Start: 4 @9415 has 90 MA's), (Start: 10 @9430 has 4 MA's), (Start: 14 @9445 has 1 MA's), (18, 9478), (21, 9508), (29, 9553), (31, 9559), (56, 9730),

Gene: Topper_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Topper_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Torres_13 Start: 9269, Stop: 9688, Start Num: 10

Candidate Starts for Torres_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: TreyKay_17 Start: 9943, Stop: 10368, Start Num: 8

Candidate Starts for TreyKay_17:

(Start: 8 @9943 has 149 MA's), (21, 10027), (25, 10048), (34, 10108), (38, 10135), (39, 10141), (42, 10159), (43, 10165), (50, 10210), (54, 10228), (55, 10246), (65, 10330),

Gene: TribelTrouble_15 Start: 9794, Stop: 10225, Start Num: 8

Candidate Starts for TribelTrouble_15:

(Start: 8 @9794 has 149 MA's), (11, 9803), (34, 9956), (39, 9989), (42, 10007), (47, 10046), (53, 10076), (61, 10166), (62, 10172), (63, 10181), (65, 10193),

Gene: Trice_13 Start: 9263, Stop: 9688, Start Num: 8

Candidate Starts for Trice_13:

(1, 9059), (Start: 8 @9263 has 149 MA's), (Start: 10 @9269 has 4 MA's), (Start: 14 @9284 has 1 MA's), (22, 9353), (34, 9425), (38, 9452), (39, 9458), (42, 9476), (43, 9482), (54, 9545), (55, 9563), (61, 9620), (65, 9647),

Gene: TruffulaTree_17 Start: 9976, Stop: 10401, Start Num: 8

Candidate Starts for TruffulaTree_17:

(Start: 8 @9976 has 149 MA's), (34, 10141), (38, 10168), (39, 10174), (42, 10192), (43, 10198), (50, 10243), (54, 10261), (55, 10279), (65, 10363),

Gene: Twitch_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Twitch_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: Unicorn_16 Start: 8965, Stop: 9402, Start Num: 5

Candidate Starts for Unicorn_16:

(Start: 5 @8965 has 12 MA's), (24, 9064), (25, 9067), (34, 9127), (42, 9178), (47, 9217), (50, 9229), (54, 9247), (55, 9280), (61, 9337), (63, 9352), (65, 9364),

Gene: Urkel_17 Start: 9921, Stop: 10346, Start Num: 8

Candidate Starts for Urkel_17:

(Start: 8 @9921 has 149 MA's), (34, 10086), (38, 10113), (39, 10119), (42, 10137), (43, 10143), (50, 10188), (53, 10203), (54, 10206), (55, 10224), (65, 10308),

Gene: Validus_17 Start: 8976, Stop: 9398, Start Num: 8

Candidate Starts for Validus_17:

(Start: 8 @8976 has 149 MA's), (Start: 12 @8988 has 1 MA's), (25, 9078), (34, 9138), (38, 9165), (39, 9171), (42, 9189), (43, 9195), (50, 9240), (54, 9258), (55, 9276), (61, 9333), (63, 9348), (65, 9360),

Gene: Veliki_17 Start: 10019, Stop: 10444, Start Num: 8

Candidate Starts for Veliki_17:

(Start: 8 @10019 has 149 MA's), (25, 10124), (34, 10184), (38, 10211), (39, 10217), (42, 10235), (43, 10241), (50, 10286), (54, 10304), (55, 10322), (65, 10406),

Gene: ViviJ_14 Start: 9919, Stop: 10341, Start Num: 8

Candidate Starts for ViviJ_14:

(3, 9835), (Start: 8 @9919 has 149 MA's), (Start: 10 @9925 has 4 MA's), (Start: 12 @9931 has 1 MA's), (30, 10051), (38, 10108), (39, 10114), (42, 10132), (46, 10168), (47, 10171), (50, 10183), (55, 10219), (61, 10276), (63, 10291), (65, 10303),

Gene: Waterfoul_15 Start: 10088, Stop: 10510, Start Num: 8

Candidate Starts for Waterfoul_15:

(3, 10004), (Start: 8 @10088 has 149 MA's), (Start: 10 @10094 has 4 MA's), (Start: 12 @10100 has 1 MA's), (23, 10184), (30, 10220), (38, 10277), (39, 10283), (42, 10301), (47, 10340), (48, 10343), (50, 10352), (55, 10388), (61, 10445), (63, 10460), (65, 10472),

Gene: Wendigo_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Wendigo_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: Wintermute_18 Start: 11210, Stop: 11635, Start Num: 4

Candidate Starts for Wintermute_18:

(Start: 4 @11210 has 90 MA's), (22, 11306), (42, 11429), (43, 11435), (47, 11468), (50, 11480), (55, 11513), (65, 11597),

Gene: Ximenita_17 Start: 9106, Stop: 9528, Start Num: 5

Candidate Starts for Ximenita_17:

(Start: 5 @9106 has 12 MA's), (22, 9196), (25, 9208), (34, 9268), (38, 9295), (47, 9358), (54, 9388), (55, 9406), (61, 9463), (63, 9478), (65, 9490),

Gene: Y10_18 Start: 11210, Stop: 11635, Start Num: 4

Candidate Starts for Y10_18:

(Start: 4 @11210 has 90 MA's), (22, 11306), (32, 11357), (42, 11429), (43, 11435), (47, 11468), (50, 11480), (55, 11513), (65, 11597),

Gene: Y2_18 Start: 11210, Stop: 11635, Start Num: 4

Candidate Starts for Y2_18:

(Start: 4 @11210 has 90 MA's), (22, 11306), (32, 11357), (42, 11429), (43, 11435), (47, 11468), (50, 11480), (55, 11513), (65, 11597),

Gene: YangYin_12 Start: 9700, Stop: 10152, Start Num: 4

Candidate Starts for YangYin_12:

(Start: 4 @9700 has 90 MA's), (Start: 14 @9730 has 1 MA's), (37, 9898), (39, 9913), (44, 9955), (56, 10024), (64, 10099),

Gene: YasnayaPolyana_18 Start: 11211, Stop: 11636, Start Num: 4

Candidate Starts for YasnayaPolyana_18:

(Start: 4 @11211 has 90 MA's), (22, 11307), (32, 11358), (42, 11430), (43, 11436), (47, 11469), (50, 11481), (55, 11514), (65, 11598),

Gene: YoureAdopted_16 Start: 9952, Stop: 10377, Start Num: 8

Candidate Starts for YoureAdopted_16:

(Start: 8 @9952 has 149 MA's), (25, 10057), (34, 10117), (38, 10144), (39, 10150), (42, 10168), (43, 10174), (50, 10219), (54, 10237), (55, 10255), (65, 10339),

Gene: Yuna_17 Start: 9099, Stop: 9518, Start Num: 5

Candidate Starts for Yuna_17:

(Start: 5 @9099 has 12 MA's), (25, 9204), (38, 9291), (39, 9297), (42, 9315), (43, 9321), (54, 9384), (55, 9402), (61, 9459), (65, 9486),

Gene: Yunkel11_17 Start: 8938, Stop: 9363, Start Num: 8

Candidate Starts for Yunkel11_17:

(Start: 8 @8938 has 149 MA's), (Start: 12 @8950 has 1 MA's), (Start: 14 @8959 has 1 MA's), (34, 9103), (38, 9130), (39, 9136), (42, 9154), (43, 9160), (50, 9205), (54, 9223), (55, 9241), (63, 9313), (65, 9325),

Gene: Zabiza_17 Start: 9977, Stop: 10402, Start Num: 8

Candidate Starts for Zabiza_17:

(Start: 8 @9977 has 149 MA's), (34, 10142), (38, 10169), (39, 10175), (42, 10193), (43, 10199), (50, 10244), (54, 10262), (55, 10280), (65, 10364),

Gene: Zavala_17 Start: 9958, Stop: 10383, Start Num: 8

Candidate Starts for Zavala_17:

(Start: 8 @9958 has 149 MA's), (34, 10123), (38, 10150), (39, 10156), (42, 10174), (43, 10180), (50, 10225), (54, 10243), (55, 10261), (65, 10345),

Gene: ZoMa_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for ZoMa_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),

Gene: ZoeJ_13 Start: 7910, Stop: 8329, Start Num: 9

Candidate Starts for ZoeJ_13:

(Start: 9 @7910 has 15 MA's), (Start: 12 @7919 has 1 MA's), (16, 7940), (34, 8069), (38, 8096), (42, 8120), (43, 8126), (52, 8183), (55, 8204), (61, 8261), (63, 8276), (65, 8288),

Gene: Zombie_12 Start: 9414, Stop: 9857, Start Num: 4

Candidate Starts for Zombie_12:

(2, 9222), (Start: 4 @9414 has 90 MA's), (Start: 10 @9429 has 4 MA's), (Start: 14 @9444 has 1 MA's), (18, 9477), (21, 9507), (29, 9552), (31, 9558), (56, 9729),