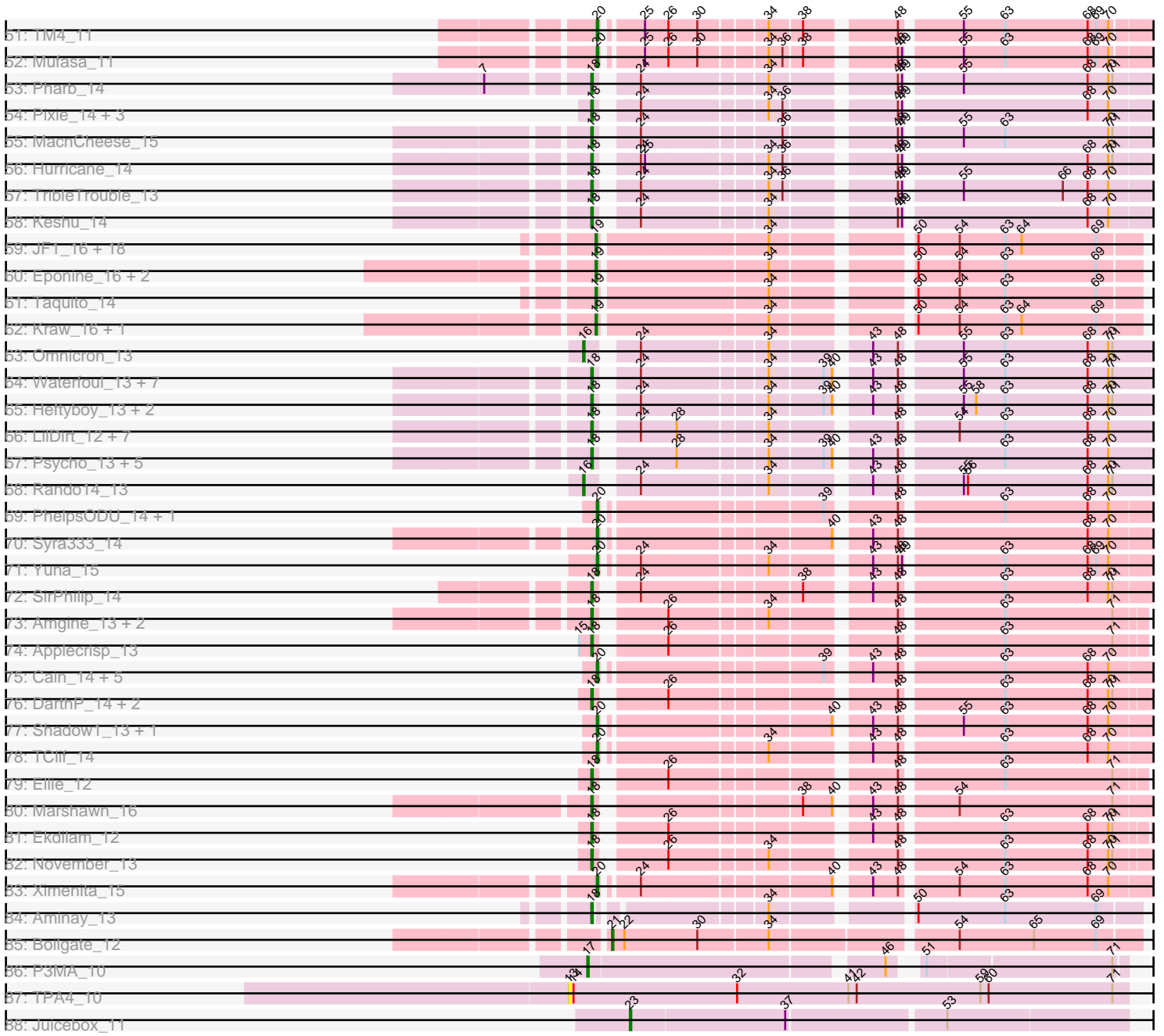


Pham 311144



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 311144 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311144 has 312 members, 29 are drafts.

Phages represented in each track:

- Track 1 : Darionha_10, CLED96_10, Zombie_10, Jeilious_10, LouisV14_10, AizenPogi_10, Jane_10, Phreak_10, OctaviousRex_10, Richarlison_10, Gomashi_10, Remy19_10, Aroostook_10, Annihilator_10, Gideon_10
- Track 2 : Crespo_10, PinkYoshi_10, ShaboiShabazz_10, Frosty24_10, ZoMa_10, DingDing_10, Rattrick_10, BQuat_10, Coleslaw_10, DMoney_10, Peeb_10, Cherrybomb426_10, CassieYates_10, Angel_10, ECartman_10, Kasen3_10, Avrafan_10, DNAlll_0010, Cedasite_10, Maliketh_10, Phloodle_10, Periodt_10, Liefie_10, Neoh_10, Jonghyun_10, Schiebel_10, Kareem_10, Plagueis_10, Olga_10, GoldenAsh_10, Barkley26_10, Phish_10, Ruriko_10, Hope_10, Wendigo_10, MZKinsey_10, Hotshotbaby7_10, Mowgli_10, Jolene_10, Chance64_10, Sizemore_10, Marmie_10, Camri_10, JorRay_10, Renaissance_10, TomBrady_10, AzulaCat_10, Primanti_10, BruceB_10, BPs_10
- Track 3 : Sweets_10, Halo_10, TinaBug_10
- Track 4 : Paito_10
- Track 5 : ForeverHowLong_10
- Track 6 : Taheera_10, Terror_10
- Track 7 : Rabbs_10
- Track 8 : Sneeze_10
- Track 9 : Grizzly_10
- Track 10 : Cambiare_11
- Track 11 : GodSpeed_10
- Track 12 : FlagStaff_10, Pace1224_10
- Track 13 : Avocado_10
- Track 14 : Cloudyecho_10
- Track 15 : Pinnie_11
- Track 16 : MOOREtheMARYer_10
- Track 17 : Lemuria_10
- Track 18 : Jolie2_10
- Track 19 : Mercurio_11
- Track 20 : Antsirabe_10
- Track 21 : YangYin_10
- Track 22 : Stargaze_10
- Track 23 : LilPharaoh_11, Mdavu_11, Enkosi_11, Nutello_11, Amelie_11, Trice_11, Binglebops_11, SgtBeansprout_11, Teejan_11, Nikao_11, Torres_11
- Track 24 : Anma_15
- Track 25 : Dartin_15, McMater_15, Richo_15, Peanam_15, Niklas_15, Shaobing_15
- Track 26 : Clipper_15, MacKat_15

- Track 27 : Scarlett_14, KiSi_14, Oscar_14, LeMond_14
- Track 28 : Capricorn_15, ShiaSurprise_15, Blizzard_15, Lunahalos_15, Belladonna_15, BEEST_15, JAWS_15, Durfee_15, Homura_15, Spock_15, Twitch_15, Llorens_15, CaseJules_15, Jarvi_15, Asayake_15, Peel_15, BGIlluviae_15, CREW_15, Dalmuri_15, Padfoot_15, Piatt_15, Rosmarinus_15, Topper_15, BarrelRoll_15, Hyperbowlee_15, Inky_15, Jeckyll_15, Veliki_15, Boiiii_15
- Track 29 : CheetoDust_15, CallaLilly_15, Adephagia_15, HedwigODU_15, BaghaKamala_15, MeaningOfLife_15, Mynx_15, Beezoo_15, Jayhawk_15, YoureAdopted_14, Ramen_15, Rapunzel97_15, TruffulaTree_15, Geraldini_15, Apocalypse_15, ActinUp_15, Zabiza_15, Joy99_15, Slimphazie_15
- Track 30 : Ageofdapage_15
- Track 31 : LastHope_15
- Track 32 : SamuelLPlaqson_15, TiniBug_15, DrHayes_15, Urkel_15
- Track 33 : Adonis_15, Angelica_15, Tachez_15, Deby_15, QuincyRose_14, Ganymede_15, Emerson_15, Padpat_15, Sulley_15, AlishaPH_15, Atiba_15, Tiri_15, Zavala_15, Pokerus_14
- Track 34 : MarkPhew_15
- Track 35 : CrimD_15, TreyKay_15, Prithvi_15, LindNT_15
- Track 36 : Pisa4_14, Bern_15
- Track 37 : TingHuaYa_15
- Track 38 : Anaya_16
- Track 39 : TaiwanKao_15, Devera_15, Illumine_15, Megsy_15, Bella96_15, Dole_15, DartGoblin_15
- Track 40 : Chavito_15
- Track 41 : Murucutumbu_15, LaterM_15, Stinson_15
- Track 42 : Pisa1_14
- Track 43 : Yunke11_15, Guanica15_15, Efra2_15
- Track 44 : Validus_15
- Track 45 : Chris_14
- Track 46 : Nibb_14
- Track 47 : Curiosium_16
- Track 48 : Doughnut_11, BoostSeason_11
- Track 49 : ZoeJ_11
- Track 50 : Milly_11, DismalStressor_11, DismalFunk_11, Marcoliusprime_11, Findley_11, Strobilo_11
- Track 51 : TM4_11
- Track 52 : Mufasa_11
- Track 53 : Pharb_14
- Track 54 : Pixie_14, TBond007_14, Lea83_14, ShedlockHolmes_14
- Track 55 : MacnCheese_15
- Track 56 : Hurricane_14
- Track 57 : TribbleTrouble_13
- Track 58 : Keshu_14
- Track 59 : JF1_16, Cheetobro_16, OmniCritical_16, Y2_16, Chancellor_16, MissDaisy_16, Slarp_16, Bobquesha_16, DanSyl44_16, Qhanda_16, Wintermute_16, SamScheppers_14, Y10_16, Fionnbharth_16, YasnayaPolyana_16, Reptar3000_16, Lebo14_16, Patt_16, Mitti_16
- Track 60 : Eponine_16, Ruthiejr_15, Juliette_16
- Track 61 : Taquito_14
- Track 62 : Kraw_16, Malthus_16
- Track 63 : Omnicron_13
- Track 64 : Waterfoul_13, Thyatira_13, OkiRoe_13, Miryou_13, Guillsminger_13, Gengar_13, Feyre_13, Paola_13

- Track 65 : Heftyboy_13, SoSeph_13, Leston_13
- Track 66 : LilDirt_12, Collard_13, BananenDer11_13, Kratio_12, InvictusManeo_13, DoubleChamp_13, ViviJ_12, Agent47_13
- Track 67 : Psycho_13, Dadosky_13, AlleyCat_13, Larva_13, Neighly_13, Edugator_12
- Track 68 : Rando14_13
- Track 69 : PhelpsODU_14, Unicorn_14
- Track 70 : Syra333_14
- Track 71 : Yuna_15
- Track 72 : SirPhilip_14
- Track 73 : Amgine_13, Fefferhead_14, Lavahound_13
- Track 74 : Applecrisp_13
- Track 75 : Cain_14, Bryler_14, Tierra_14, Tigress9_14, Phrank_14, Krueger_14
- Track 76 : DarthP_14, Amohnition_14, Hammy_14
- Track 77 : Shadow1_13, Sunflower1121_13
- Track 78 : TClif_14
- Track 79 : Ellie_12
- Track 80 : Marshawn_16
- Track 81 : Ekdilam_12
- Track 82 : November_13
- Track 83 : Ximenita_15
- Track 84 : Aminay_13
- Track 85 : Boilgate_12
- Track 86 : P3MA_10
- Track 87 : TPA4_10
- Track 88 : Juicebox_11

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

The start number called the most often in the published annotations is 18, it was called in 191 of the 283 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_15, Adephegia_15, Adonis_15, Agent47_13, Ageofdapage_15, AlishaPH_15, AlleyCat_13, Amgine_13, Aminay_13, Amohnition_14, Angel_10, Angelica_15, Apocalypse_15, Applecrisp_13, Asayake_15, Atiba_15, Avocado_10, Avrafan_10, AzulaCat_10, BEEST_15, BGlluviae_15, BPs_10, BQuat_10, BaghaKamala_15, BananenDer11_13, Barkley26_10, BarrelRoll_15, Beezoo_15, Bella96_15, Belladonna_15, Blizzard_15, Boiiii_15, BruceB_10, CREW_15, CallaLilly_15, Camri_10, Capricorn_15, CaseJules_15, CassieYates_10, Cedasite_10, Chance64_10, CheetoDust_15, Cherrybomb426_10, Chris_14, Clipper_15, Cloudyecho_10, Coleslaw_10, Collard_13, Crespo_10, CrimD_15, DMoney_10, DNAIII_0010, Dadosky_13, Dalmuri_15, DartGoblin_15, DarthP_14, Deby_15, Devera_15, DingDing_10, Dole_15, DoubleChamp_13, DrHayes_15, Durfee_15, ECartman_10, Edugator_12, Ekdilam_12, Ellie_12, Emerson_15, Fefferhead_14, Feyre_13, FlagStaff_10, Frosty24_10, Ganymede_15, Gengar_13, Geraldini_15, GoldenAsh_10, Grizzly_10, Guillsminger_13, Halo_10, Hammy_14, HedwigODU_15, Heftyboy_13, Homura_15, Hope_10, Hotshotbaby7_10, Hurricane_14, Hyperbowlee_15, Illumine_15, Inky_15, InvictusManeo_13, JAWS_15, Jarvi_15, Jayhawk_15, Jeckyll_15, Jolene_10, Jolie2_10, Jonghyun_10, JorRay_10,

Joy99_15, Kareem_10, Kasen3_10, Keshu_14, KiSi_14, Kratio_12, Larva_13, LaterM_15, Lavahound_13, LeMond_14, Lea83_14, Leston_13, Liefie_10, LilDirt_12, LindNT_15, Llorens_15, Lunahalos_15, MOOREtheMARYer_10, MZKinsey_10, MacKat_15, MacnCheese_15, Maliketh_10, MarkPhew_15, Marmie_10, Marshawn_16, MeaningOfLife_15, Megsy_15, Miryou_13, Mowgli_10, Murucutumbu_15, Mynx_15, Neighly_13, Neoh_10, Nibb_14, November_13, OkiRoe_13, Olga_10, Oscar_14, Pace1224_10, Padfoot_15, Padpat_15, Paito_10, Paola_13, Peeb_10, Peel_15, Periodt_10, Pharb_14, Phish_10, Phloodle_10, Piatt_15, PinkYoshi_10, Pinnie_11, Pisa1_14, Pixie_14, Plagueis_10, Pokerus_14, Primanti_10, Prithvi_15, Psycho_13, QuincyRose_14, Ramen_15, Rapunzel97_15, Rattrick_10, Renaissance_10, Rosmarinus_15, Ruriko_10, SamuelLPlaqson_15, Scarlett_14, Schiebel_10, ShaboiShabazz_10, ShedlockHolmes_14, ShiaSurprise_15, SirPhilip_14, Sizemore_10, Slimphazie_15, Sneeze_10, SoSeph_13, Spock_15, Stinson_15, Sulley_15, Sweets_10, TBond007_14, Tachez_15, TaiwanKao_15, Thyatira_13, TinaBug_10, TiniBug_15, Tiri_15, TomBrady_10, Topper_15, TreyKay_15, TribbleTrouble_13, TruffulaTree_15, Twitch_15, Urkel_15, Veliki_15, ViviJ_12, Waterfoul_13, Wendigo_10, YoureAdopted_14, Zabiza_15, Zavala_15, ZoMa_10,

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

- AizenPogi_10, Anaya_16, Anma_15, Annihilator_10, Aroostook_10, Bern_15, CLED96_10, Cambiare_11, Darionha_10, ForeverHowLong_10, Gideon_10, GodSpeed_10, Gomashi_10, Jane_10, Jeilious_10, LouisV14_10, OctaviousRex_10, Phreak_10, Pisa4_14, Rabbs_10, Remy19_10, Richarlison_10, Taheera_10, Terror_10, Zombie_10,

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

- Amelie_11, Antsirabe_10, Biglebops_11, Bobquesha_16, Boilgate_12, BoostSeason_11, Bryler_14, Cain_14, Chancellor_16, Chavito_15, Cheetobro_16, Curiosium_16, DanSyl44_16, Dartin_15, DismalFunk_11, DismalStressor_11, Doughnut_11, Efra2_15, Enkosi_11, Eponine_16, Findley_11, Fionnbharth_16, Guanica15_15, JF1_16, Juicebox_11, Juliette_16, Kraw_16, Krueger_14, LastHope_15, Lebo14_16, Lemuria_10, LilPharaoh_11, Malthus_16, Marcoliusprime_11, McMater_15, Mdavu_11, Mercurio_11, Milly_11, MissDaisy_16, Mitti_16, Mufasa_11, Nikao_11, Niklas_15, Nutello_11, OmniCritical_16, Omnicon_13, P3MA_10, Patt_16, Peanam_15, PhelpsODU_14, Phrank_14, Qhanda_16, Rando14_13, Reptar3000_16, Richo_15, Ruthiejr_15, SamScheppers_14, SgtBeansprout_11, Shadow1_13, Shaobing_15, Slarp_16, Stargaze_10, Strobilo_11, Sunflower1121_13, Syra333_14, TClif_14, TM4_11, TPA4_10, Taquito_14, Teejan_11, Tierra_14, Tigress9_14, TingHuaYa_15, Torres_11, Trice_11, Unicorn_14, Validus_15, Wintermute_16, Ximenita_15, Y10_16, Y2_16, YangYin_10, YasnayaPolyana_16, Yuna_15, Yunkel11_15, ZoeJ_11,

Summary by start number:

Start 8:

- Found in 77 of 312 (24.7%) of genes in pham
- Manual Annotations of this start: 2 of 283
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Taheera_10 (G1), Terror_10 (G1),

Start 11:

- Found in 8 of 312 (2.6%) of genes in pham

- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: GodSpeed_10 (G2),

Start 13:

- Found in 1 of 312 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_10 (singleton),

Start 15:

- Found in 77 of 312 (24.7%) of genes in pham
- No Manual Annotations of this start.
- Called 1.3% of time when present
- Phage (with cluster) where this start called: ForeverHowLong_10 (G1),

Start 16:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 283
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omnicron_13 (K5), Rando14_13 (K5),

Start 17:

- Found in 79 of 312 (25.3%) of genes in pham
- Manual Annotations of this start: 19 of 283
- Called 29.1% of time when present
- Phage (with cluster) where this start called: AizenPogi_10 (G1), Annihilator_10 (G1), Antsirabe_10 (G5), Aroostook_10 (G1), CLED96_10 (G1), Cambiare_11 (G2), Darionha_10 (G1), Gideon_10 (G1), Gomashi_10 (G1), Jane_10 (G1), Jeilious_10 (G), Lemuria_10 (G4), LouisV14_10 (G1), Mercurio_11 (G4), OctaviousRex_10 (G1), P3MA_10 (singleton), Phreak_10 (G1), Rabbs_10 (G1), Remy19_10 (G1), Richarlison_10 (G1), Stargaze_10 (G5), YangYin_10 (G5), Zombie_10 (G1),

Start 18:

- Found in 226 of 312 (72.4%) of genes in pham
- Manual Annotations of this start: 191 of 283
- Called 88.9% of time when present
- Phage (with cluster) where this start called: ActinUp_15 (K1), Adephegia_15 (K1), Adonis_15 (K1), Agent47_13 (K5), Ageofdapage_15 (K1), AlishaPH_15 (K1), AlleyCat_13 (K5), Amgine_13 (K6), Aminay_13 (K7), Amohnton_14 (K6), Angel_10 (G1), Angelica_15 (K1), Apocalypse_15 (K1), Applecrisp_13 (K6), Asayake_15 (K1), Atiba_15 (K1), Avocado_10 (G2), Avrafan_10 (G1), AzulaCat_10 (G1), BEEST_15 (K1), BGlluviae_15 (K1), BPs_10 (G1), BQuat_10 (G1), BaghaKamala_15 (K1), BananenDer11_13 (K5), Barkley26_10 (G1), BarrelRoll_15 (K1), Beezoo_15 (K1), Bella96_15 (K1), Belladonna_15 (K1), Blizzard_15 (K1), Boiiii_15 (K1), BruceB_10 (G1), CREW_15 (K1), CallaLilly_15 (K1), Camri_10 (G1), Capricorn_15 (K1), CaseJules_15 (K1), CassieYates_10 (G1), Cedasite_10 (G1), Chance64_10 (G1), CheetoDust_15 (K1), Cherrybomb426_10 (G1), Chris_14 (K1), Clipper_15 (K1), Cloudyecho_10 (G3), Coleslaw_10 (G1), Collard_13 (K5), Crespo_10 (G1), CrimD_15 (K1), DMoney_10 (G1), DNAll_0010 (G1), Dadosky_13 (K5), Dalmuri_15 (K1), DartGoblin_15 (K1), DarthP_14 (K6), Deby_15 (K1), Devera_15 (K1), DingDing_10 (G1), Dole_15 (K1), DoubleChamp_13 (K5), DrHayes_15 (K1), Durfee_15 (K1), ECartman_10 (G1), Edugator_12 (K5), Ekdilam_12 (K6), Ellie_12

(K6), Emerson_15 (K1), Fefferhead_14 (K6), Feyre_13 (K5), FlagStaff_10 (G2), Frosty24_10 (G1), Ganymede_15 (K1), Gengar_13 (K5), Geraldini_15 (K1), GoldenAsh_10 (G1), Grizzly_10 (G1), Guillsminger_13 (K5), Halo_10 (G1), Hammy_14 (K6), HedwigODU_15 (K1), Heftyboy_13 (K5), Homura_15 (K1), Hope_10 (G1), Hotshotbaby7_10 (G1), Hurricane_14 (K3), Hyperbowlee_15 (K1), Illumine_15 (K1), Inky_15 (K1), InvictusManeo_13 (K5), JAWS_15 (K1), Jarvi_15 (K1), Jayhawk_15 (K1), Jeckyll_15 (K1), Jolene_10 (G1), Jolie2_10 (G4), Jonghyun_10 (G1), JorRay_10 (G1), Joy99_15 (K1), Kareem_10 (G1), Kasen3_10 (G1), Keshu_14 (K3), KiSi_14 (K1), Kratio_12 (K5), Larva_13 (K5), LaterM_15 (K1), Lavahound_13 (K6), LeMond_14 (K1), Lea83_14 (K3), Leston_13 (K5), Liefie_10 (G1), LilDirt_12 (K5), LindNT_15 (K1), Llorens_15 (K1), Lunahalos_15 (K1), MOOREtheMARYer_10 (G3), MZKinsey_10 (G1), MacKat_15 (K1), MacnCheese_15 (K3), Maliketh_10 (G1), MarkPhew_15 (K1), Marmie_10 (G1), Marshawn_16 (K6), MeaningOfLife_15 (K1), Megsy_15 (K1), Miryou_13 (K5), Mowgli_10 (G1), Murucutumbu_15 (K1), Mynx_15 (K1), Neighly_13 (K3), Neoh_10 (G), Nibb_14 (K1), November_13 (K6), OkiRoe_13 (K5), Olga_10 (G1), Oscar_14 (K1), Pace1224_10 (G2), Padfoot_15 (K1), Padpat_15 (K1), Paito_10 (G1), Paola_13 (K5), Peeb_10 (G1), Peel_15 (K1), Periodt_10 (G1), Pharb_14 (K3), Phish_10 (G1), Phloodle_10 (G1), Piatt_15 (K1), PinkYoshi_10 (G1), Pinnie_11 (G3), Pisa1_14 (K1), Pixie_14 (K3), Plagueis_10 (G1), Pokerus_14 (K1), Primanti_10 (G1), Prithvi_15 (K1), Psycho_13 (K5), QuincyRose_14 (K1), Ramen_15 (K1), Rapunzel97_15 (K1), Rattrick_10 (G1), Renaissance_10 (G1), Rosmarinus_15 (K1), Ruriko_10 (G1), SamuelLPlaqson_15 (K1), Scarlett_14 (K1), Schiebel_10 (G1), ShaboShabazz_10 (G1), ShedlockHolmes_14 (K3), ShiaSurprise_15 (K1), SirPhilip_14 (K6), Sizemore_10 (G1), Slimphazie_15 (K1), Sneeze_10 (G1), SoSeph_13 (K5), Spock_15 (K1), Stinson_15 (K1), Sulley_15 (K1), Sweets_10 (G1), TBond007_14 (K3), Tachez_15 (K1), TaiwanKao_15 (K1), Thyatira_13 (K5), TinaBug_10 (G1), TiniBug_15 (K1), Tiri_15 (K1), TomBrady_10 (G1), Topper_15 (K1), TreyKay_15 (K1), TribbleTrouble_13 (K3), TruffulaTree_15 (K1), Twitch_15 (K1), Urkel_15 (K1), Veliki_15 (K1), ViviJ_12 (K5), Waterfoul_13 (K5), Wendigo_10 (G1), YoureAdopted_14 (K1), Zabiza_15 (K1), Zavala_15 (K1), ZoMa_10 (G1),

Start 19:

- Found in 50 of 312 (16.0%) of genes in pham
- Manual Annotations of this start: 40 of 283
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelie_11 (K1), Binglebops_11 (K1), Bobquesha_16 (K4), Chancellor_16 (K4), Chavito_15 (K1), Cheetobro_16 (K4), Curiosium_16 (K1), DanSyl44_16 (K4), Dartin_15 (K1), Efra2_15 (K1), Enkosi_11 (K1), Eponine_16 (K4), Fionnbharth_16 (K4), Guanica15_15 (K1), JF1_16 (K4), Juliette_16 (K4), Kraw_16 (K4), LastHope_15 (K1), Lebo14_16 (K4), LilPharaoh_11 (K1), Malthus_16 (K4), McMater_15 (K1), Mdavu_11 (K1), MissDaisy_16 (K4), Mitti_16 (K4), Nikao_11 (K1), Niklas_15 (K1), Nutello_11 (K1), OmniCritical_16 (K4), Patt_16 (K4), Peanam_15 (K1), Qhanda_16 (K4), Reptar3000_16 (K4), Richo_15 (K1), Ruthiejr_15 (K4), SamScheppers_14 (K4), SgtBeansprout_11 (K1), Shaobing_15 (K1), Slarp_16 (K4), Taquito_14 (K4), Teejan_11 (K1), TingHuaYa_15 (K1), Torres_11 (K1), Trice_11 (K1), Validus_15 (K1), Wintermute_16 (K4), Y10_16 (K4), Y2_16 (K4), YasnayaPolyana_16 (K4), Yunkel11_15 (K1),

Start 20:

- Found in 29 of 312 (9.3%) of genes in pham
- Manual Annotations of this start: 27 of 283
- Called 96.6% of time when present

- Phage (with cluster) where this start called: Anaya_16 (K1), Bern_15 (K1), BoostSeason_11 (K2), Bryler_14 (K6), Cain_14 (K6), DismalFunk_11 (K2), DismalStressor_11 (K2), Doughnut_11 (K2), Findley_11 (K2), Krueger_14 (K6), Marcoliusprime_11 (K2), Milly_11 (K2), Mufasa_11 (K2), PhelpsODU_14 (K6), Phrank_14 (K6), Pisa4_14 (K1), Shadow1_13 (K6), Strobilo_11 (K2), Sunflower1121_13 (K6), Syra333_14 (K6), TClif_14 (K6), TM4_11 (K2), Tierra_14 (K6), Tigress9_14 (K6), Unicorn_14 (K6), Ximenita_15 (K6), Yuna_15 (K6), ZoeJ_11 (K2),

Start 21:

- Found in 2 of 312 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 283
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Boilgate_12 (K8),

Start 23:

- Found in 1 of 312 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 283
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox_11 (singleton),

Start 24:

- Found in 223 of 312 (71.5%) of genes in pham
- No Manual Annotations of this start.
- Called 0.4% of time when present
- Phage (with cluster) where this start called: Anma_15 (K1),

Summary by clusters:

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

Info for manual annotations of cluster G:

- Start number 18 was manually annotated 1 time for cluster G.

Info for manual annotations of cluster G1:

- Start number 8 was manually annotated 2 times for cluster G1.
- Start number 17 was manually annotated 13 times for cluster G1.
- Start number 18 was manually annotated 52 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 17 was manually annotated 1 time for cluster G2.
- Start number 18 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 18 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 17 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 17 was manually annotated 2 times for cluster G5.

Info for manual annotations of cluster K1:

- Start number 18 was manually annotated 89 times for cluster K1.
- Start number 19 was manually annotated 18 times for cluster K1.
- Start number 20 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 20 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 18 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 19 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 16 was manually annotated 2 times for cluster K5.
- Start number 18 was manually annotated 23 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 18 was manually annotated 12 times for cluster K6.
- Start number 20 was manually annotated 14 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 18 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 21 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: ActinUp_15 Start: 9364, Stop: 9720, Start Num: 18

Candidate Starts for ActinUp_15:

(Start: 18 @9364 has 191 MA's), (24, 9388), (33, 9466), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676), (70, 9691),

Gene: Adephagia_15 Start: 9364, Stop: 9720, Start Num: 18

Candidate Starts for Adephagia_15:

(Start: 18 @9364 has 191 MA's), (24, 9388), (33, 9466), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676), (70, 9691),

Gene: Adonis_15 Start: 9373, Stop: 9729, Start Num: 18

Candidate Starts for Adonis_15:

(Start: 18 @9373 has 191 MA's), (24, 9397), (34, 9478), (36, 9487), (48, 9556), (63, 9625), (68, 9685), (70, 9700),

Gene: Agent47_13 Start: 9561, Stop: 9923, Start Num: 18

Candidate Starts for Agent47_13:

(Start: 18 @9561 has 191 MA's), (24, 9582), (28, 9606), (34, 9663), (48, 9741), (54, 9777), (63, 9810), (68, 9870), (70, 9885),

Gene: Ageofdapage_15 Start: 9294, Stop: 9650, Start Num: 18

Candidate Starts for Ageofdapage_15:

(Start: 18 @9294 has 191 MA's), (24, 9318), (34, 9399), (40, 9441), (48, 9477), (63, 9546), (68, 9606),

Gene: AizenPogi_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for AizenPogi_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: AlishaPH_15 Start: 9363, Stop: 9719, Start Num: 18

Candidate Starts for AlishaPH_15:

(Start: 18 @9363 has 191 MA's), (24, 9387), (34, 9468), (36, 9477), (48, 9546), (63, 9615), (68, 9675), (70, 9690),

Gene: AlleyCat_13 Start: 9439, Stop: 9801, Start Num: 18

Candidate Starts for AlleyCat_13:

(Start: 18 @9439 has 191 MA's), (28, 9484), (34, 9541), (39, 9577), (40, 9583), (43, 9601), (48, 9619), (63, 9688), (68, 9748), (70, 9763),

Gene: Amelie_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Amelie_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: Amgine_13 Start: 8999, Stop: 9385, Start Num: 18

Candidate Starts for Amgine_13:

(Start: 18 @8999 has 191 MA's), (26, 9038), (34, 9101), (48, 9179), (63, 9248), (71, 9326),

Gene: Aminay_13 Start: 9263, Stop: 9607, Start Num: 18

Candidate Starts for Aminay_13:

(Start: 18 @9263 has 191 MA's), (34, 9365), (50, 9449), (63, 9512), (69, 9578),

Gene: Amohnition_14 Start: 9299, Stop: 9697, Start Num: 18

Candidate Starts for Amohnition_14:

(Start: 18 @9299 has 191 MA's), (26, 9338), (48, 9479), (63, 9548), (68, 9608), (70, 9623), (71, 9626),

Gene: Anaya_16 Start: 9368, Stop: 9721, Start Num: 20

Candidate Starts for Anaya_16:

(10, 9323), (Start: 18 @9365 has 191 MA's), (Start: 20 @9368 has 27 MA's), (24, 9389), (34, 9470), (48, 9548), (63, 9617), (68, 9677), (70, 9692),

Gene: Angel_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Angel_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Angelica_15 Start: 9335, Stop: 9691, Start Num: 18

Candidate Starts for Angelica_15:

(Start: 18 @9335 has 191 MA's), (24, 9359), (34, 9440), (36, 9449), (48, 9518), (63, 9587), (68, 9647), (70, 9662),

Gene: Anma_15 Start: 9330, Stop: 9662, Start Num: 24

Candidate Starts for Anma_15:

(Start: 18 @9306 has 191 MA's), (24, 9330), (48, 9489), (63, 9558), (68, 9618), (70, 9633),

Gene: Annihilator_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Annihilator_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Antsirabe_10 Start: 9102, Stop: 9464, Start Num: 17

Candidate Starts for Antsirabe_10:

(4, 8934), (6, 9039), (Start: 17 @9102 has 19 MA's), (31, 9183), (44, 9282), (48, 9297), (54, 9333), (67, 9423), (70, 9441),

Gene: Apocalypse_15 Start: 9339, Stop: 9695, Start Num: 18

Candidate Starts for Apocalypse_15:

(Start: 18 @9339 has 191 MA's), (24, 9363), (33, 9441), (34, 9444), (36, 9453), (48, 9522), (63, 9591), (68, 9651), (70, 9666),

Gene: Applecrisp_13 Start: 9400, Stop: 9786, Start Num: 18

Candidate Starts for Applecrisp_13:

(15, 9391), (Start: 18 @9400 has 191 MA's), (26, 9439), (48, 9580), (63, 9649), (71, 9727),

Gene: Aroostook_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Aroostook_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Asayake_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Asayake_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Atiba_15 Start: 9327, Stop: 9683, Start Num: 18

Candidate Starts for Atiba_15:

(Start: 18 @9327 has 191 MA's), (24, 9351), (34, 9432), (36, 9441), (48, 9510), (63, 9579), (68, 9639), (70, 9654),

Gene: Avocado_10 Start: 8948, Stop: 9304, Start Num: 18

Candidate Starts for Avocado_10:

(1, 8579), (4, 8780), (Start: 8 @8888 has 2 MA's), (11, 8921), (Start: 17 @8945 has 19 MA's), (Start: 18 @8948 has 191 MA's), (31, 9026), (48, 9140), (63, 9209), (67, 9266),

Gene: Avrafan_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Avrafan_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: AzulaCat_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for AzulaCat_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: BEEST_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for BEEST_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: BGlluviae_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for BGlluviae_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: BPs_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for BPs_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: BQuat_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for BQuat_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: BaghaKamala_15 Start: 9330, Stop: 9686, Start Num: 18

Candidate Starts for BaghaKamala_15:

(Start: 18 @9330 has 191 MA's), (24, 9354), (33, 9432), (34, 9435), (36, 9444), (48, 9513), (63, 9582), (68, 9642), (70, 9657),

Gene: BananenDer11_13 Start: 9522, Stop: 9884, Start Num: 18

Candidate Starts for BananenDer11_13:

(Start: 18 @9522 has 191 MA's), (24, 9543), (28, 9567), (34, 9624), (48, 9702), (54, 9738), (63, 9771), (68, 9831), (70, 9846),

Gene: Barkley26_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Barkley26_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: BarrelRoll_15 Start: 9356, Stop: 9712, Start Num: 18

Candidate Starts for BarrelRoll_15:

(Start: 18 @9356 has 191 MA's), (24, 9380), (34, 9461), (48, 9539), (55, 9578), (63, 9608), (68, 9668), (70, 9683),

Gene: Beezoo_15 Start: 9384, Stop: 9740, Start Num: 18

Candidate Starts for Beezoo_15:

(Start: 18 @9384 has 191 MA's), (24, 9408), (33, 9486), (34, 9489), (36, 9498), (48, 9567), (63, 9636), (68, 9696), (70, 9711),

Gene: Bella96_15 Start: 9285, Stop: 9641, Start Num: 18

Candidate Starts for Bella96_15:

(Start: 18 @9285 has 191 MA's), (24, 9309), (34, 9390), (48, 9468), (63, 9537), (68, 9597), (70, 9612),

Gene: Belladonna_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Belladonna_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Bern_15 Start: 9319, Stop: 9672, Start Num: 20

Candidate Starts for Bern_15:

(9, 9268), (Start: 18 @9316 has 191 MA's), (Start: 20 @9319 has 27 MA's), (24, 9340), (34, 9421), (48, 9499), (63, 9568), (68, 9628), (70, 9643),

Gene: Biglebops_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Biglebops_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: Blizzard_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Blizzard_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Bobquesha_16 Start: 10363, Stop: 10719, Start Num: 19

Candidate Starts for Bobquesha_16:

(Start: 19 @10363 has 40 MA's), (34, 10477), (50, 10561), (54, 10591), (63, 10624), (64, 10636), (69, 10690),

Gene: Boiiii_15 Start: 9406, Stop: 9762, Start Num: 18

Candidate Starts for Boiiii_15:

(Start: 18 @9406 has 191 MA's), (24, 9430), (34, 9511), (48, 9589), (55, 9628), (63, 9658), (68, 9718), (70, 9733),

Gene: Boilgate_12 Start: 9365, Stop: 9724, Start Num: 21

Candidate Starts for Boilgate_12:

(Start: 21 @9365 has 1 MA's), (22, 9374), (30, 9425), (34, 9473), (54, 9596), (65, 9650), (69, 9695),

Gene: BoostSeason_11 Start: 7354, Stop: 7704, Start Num: 20

Candidate Starts for BoostSeason_11:

(Start: 20 @7354 has 27 MA's), (25, 7378), (26, 7393), (30, 7414), (34, 7456), (36, 7465), (38, 7477), (48, 7534), (49, 7537), (63, 7603), (68, 7663), (69, 7669), (70, 7678),

Gene: BruceB_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for BruceB_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Bryler_14 Start: 8315, Stop: 8668, Start Num: 20

Candidate Starts for Bryler_14:

(Start: 20 @8315 has 27 MA's), (39, 8453), (43, 8477), (48, 8495), (63, 8564), (68, 8624), (70, 8639),

Gene: CLED96_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for CLED96_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: CREW_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for CREW_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Cain_14 Start: 8303, Stop: 8656, Start Num: 20

Candidate Starts for Cain_14:

(Start: 20 @8303 has 27 MA's), (39, 8441), (43, 8465), (48, 8483), (63, 8552), (68, 8612), (70, 8627),

Gene: CallaLilly_15 Start: 9331, Stop: 9687, Start Num: 18

Candidate Starts for CallaLilly_15:

(Start: 18 @9331 has 191 MA's), (24, 9355), (33, 9433), (34, 9436), (36, 9445), (48, 9514), (63, 9583), (68, 9643), (70, 9658),

Gene: Cambiare_11 Start: 9407, Stop: 9766, Start Num: 17

Candidate Starts for Cambiare_11:

(1, 9041), (4, 9242), (Start: 8 @9350 has 2 MA's), (11, 9383), (Start: 17 @9407 has 19 MA's), (Start: 18 @9410 has 191 MA's), (31, 9488), (48, 9602), (63, 9671), (67, 9728),

Gene: Camri_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Camri_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Capricorn_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Capricorn_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: CaseJules_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for CaseJules_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: CassieYates_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for CassieYates_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Cedasite_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Cedasite_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Chance64_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Chance64_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Chancellor_16 Start: 10621, Stop: 10977, Start Num: 19

Candidate Starts for Chancellor_16:

(Start: 19 @10621 has 40 MA's), (34, 10735), (50, 10819), (54, 10849), (63, 10882), (64, 10894), (69, 10948),

Gene: Chavito_15 Start: 8435, Stop: 8794, Start Num: 19

Candidate Starts for Chavito_15:

(12, 8408), (Start: 19 @8435 has 40 MA's), (24, 8462), (25, 8465), (33, 8540), (38, 8564), (48, 8621), (49, 8624), (63, 8690), (68, 8750), (69, 8756), (70, 8765),

Gene: CheetoDust_15 Start: 9381, Stop: 9737, Start Num: 18

Candidate Starts for CheetoDust_15:

(Start: 18 @9381 has 191 MA's), (24, 9405), (33, 9483), (34, 9486), (36, 9495), (48, 9564), (63, 9633), (68, 9693), (70, 9708),

Gene: Cheetobro_16 Start: 10621, Stop: 10977, Start Num: 19

Candidate Starts for Cheetobro_16:

(Start: 19 @10621 has 40 MA's), (34, 10735), (50, 10819), (54, 10849), (63, 10882), (64, 10894), (69, 10948),

Gene: Cherrybomb426_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Cherrybomb426_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Chris_14 Start: 8298, Stop: 8651, Start Num: 18

Candidate Starts for Chris_14:

(Start: 18 @8298 has 191 MA's), (24, 8319), (26, 8337), (31, 8367), (35, 8403), (43, 8460), (48, 8478), (49, 8481), (55, 8517), (63, 8547), (68, 8607), (70, 8622),

Gene: Clipper_15 Start: 9381, Stop: 9737, Start Num: 18

Candidate Starts for Clipper_15:

(Start: 18 @9381 has 191 MA's), (24, 9405), (33, 9483), (34, 9486), (36, 9495), (48, 9564), (55, 9603), (63, 9633), (68, 9693), (70, 9708),

Gene: Cloudyecho_10 Start: 8997, Stop: 9350, Start Num: 18

Candidate Starts for Cloudyecho_10:

(1, 8613), (4, 8808), (5, 8901), (11, 8964), (Start: 18 @8997 has 191 MA's), (44, 9171), (47, 9183), (48, 9186), (54, 9222), (67, 9312), (70, 9330),

Gene: Coleslaw_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Coleslaw_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Collard_13 Start: 9522, Stop: 9884, Start Num: 18

Candidate Starts for Collard_13:

(Start: 18 @9522 has 191 MA's), (24, 9543), (28, 9567), (34, 9624), (48, 9702), (54, 9738), (63, 9771), (68, 9831), (70, 9846),

Gene: Crespo_10 Start: 8812, Stop: 9168, Start Num: 18

Candidate Starts for Crespo_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: CrimD_15 Start: 9333, Stop: 9689, Start Num: 18

Candidate Starts for CrimD_15:

(Start: 18 @9333 has 191 MA's), (24, 9357), (33, 9435), (34, 9438), (48, 9516), (63, 9585), (68, 9645), (70, 9660),

Gene: Curiosium_16 Start: 8809, Stop: 9162, Start Num: 19

Candidate Starts for Curiosium_16:

(Start: 19 @8809 has 40 MA's), (24, 8830), (38, 8932), (43, 8971), (48, 8989), (49, 8992), (55, 9028), (63, 9058), (70, 9133),

Gene: DMoney_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for DMoney_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: DNAIII_0010 Start: 8820, Stop: 9176, Start Num: 18

Candidate Starts for DNAIII_0010:

(6, 8754), (Start: 8 @8760 has 2 MA's), (15, 8811), (Start: 17 @8817 has 19 MA's), (Start: 18 @8820 has 191 MA's), (24, 8850), (47, 9009), (48, 9012), (64, 9093), (69, 9147),

Gene: Dadosky_13 Start: 9440, Stop: 9802, Start Num: 18

Candidate Starts for Dadosky_13:

(Start: 18 @9440 has 191 MA's), (28, 9485), (34, 9542), (39, 9578), (40, 9584), (43, 9602), (48, 9620), (63, 9689), (68, 9749), (70, 9764),

Gene: Dalmuri_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Dalmuri_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: DanSyl44_16 Start: 10624, Stop: 10980, Start Num: 19

Candidate Starts for DanSyl44_16:

(Start: 19 @10624 has 40 MA's), (34, 10738), (50, 10822), (54, 10852), (63, 10885), (64, 10897), (69, 10951),

Gene: Darionha_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Darionha_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: DartGoblin_15 Start: 9285, Stop: 9641, Start Num: 18

Candidate Starts for DartGoblin_15:

(Start: 18 @9285 has 191 MA's), (24, 9309), (34, 9390), (48, 9468), (63, 9537), (68, 9597), (70, 9612),

Gene: DarthP_14 Start: 9299, Stop: 9697, Start Num: 18

Candidate Starts for DarthP_14:

(Start: 18 @9299 has 191 MA's), (26, 9338), (48, 9479), (63, 9548), (68, 9608), (70, 9623), (71, 9626),

Gene: Dartin_15 Start: 8435, Stop: 8788, Start Num: 19

Candidate Starts for Dartin_15:

(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654), (63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: Deby_15 Start: 9335, Stop: 9691, Start Num: 18

Candidate Starts for Deby_15:

(Start: 18 @9335 has 191 MA's), (24, 9359), (34, 9440), (36, 9449), (48, 9518), (63, 9587), (68, 9647), (70, 9662),

Gene: Devera_15 Start: 9352, Stop: 9708, Start Num: 18

Candidate Starts for Devera_15:

(Start: 18 @9352 has 191 MA's), (24, 9376), (34, 9457), (48, 9535), (63, 9604), (68, 9664), (70, 9679),

Gene: DingDing_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for DingDing_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: DismalFunk_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for DismalFunk_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: DismalStressor_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for DismalStressor_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: Dole_15 Start: 9354, Stop: 9710, Start Num: 18

Candidate Starts for Dole_15:

(Start: 18 @9354 has 191 MA's), (24, 9378), (34, 9459), (48, 9537), (63, 9606), (68, 9666), (70, 9681),

Gene: DoubleChamp_13 Start: 9522, Stop: 9884, Start Num: 18

Candidate Starts for DoubleChamp_13:

(Start: 18 @9522 has 191 MA's), (24, 9543), (28, 9567), (34, 9624), (48, 9702), (54, 9738), (63, 9771), (68, 9831), (70, 9846),

Gene: Doughnut_11 Start: 7348, Stop: 7698, Start Num: 20

Candidate Starts for Doughnut_11:

(Start: 20 @7348 has 27 MA's), (25, 7372), (26, 7387), (30, 7408), (34, 7450), (36, 7459), (38, 7471), (48, 7528), (49, 7531), (63, 7597), (68, 7657), (69, 7663), (70, 7672),

Gene: DrHayes_15 Start: 9306, Stop: 9662, Start Num: 18

Candidate Starts for DrHayes_15:

(Start: 18 @9306 has 191 MA's), (24, 9330), (48, 9489), (63, 9558), (68, 9618), (70, 9633),

Gene: Durfee_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Durfee_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: ECartman_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for ECartman_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Edugator_12 Start: 9440, Stop: 9802, Start Num: 18

Candidate Starts for Edugator_12:

(Start: 18 @9440 has 191 MA's), (28, 9485), (34, 9542), (39, 9578), (40, 9584), (43, 9602), (48, 9620), (63, 9689), (68, 9749), (70, 9764),

Gene: Efra2_15 Start: 8295, Stop: 8654, Start Num: 19

Candidate Starts for Efra2_15:

(14, 8280), (Start: 19 @8295 has 40 MA's), (24, 8322), (33, 8400), (38, 8424), (43, 8463), (48, 8481), (52, 8505), (54, 8517), (63, 8550), (70, 8625),

Gene: Ekdilam_12 Start: 9026, Stop: 9418, Start Num: 18

Candidate Starts for Ekdilam_12:

(Start: 18 @9026 has 191 MA's), (26, 9065), (43, 9188), (48, 9206), (63, 9275), (68, 9335), (70, 9350), (71, 9353),

Gene: Ellie_12 Start: 9073, Stop: 9459, Start Num: 18

Candidate Starts for Ellie_12:

(Start: 18 @9073 has 191 MA's), (26, 9112), (48, 9253), (63, 9322), (71, 9400),

Gene: Emerson_15 Start: 9364, Stop: 9720, Start Num: 18

Candidate Starts for Emerson_15:

(Start: 18 @9364 has 191 MA's), (24, 9388), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676), (70, 9691),

Gene: Enkosi_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Enkosi_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: Eponine_16 Start: 10485, Stop: 10841, Start Num: 19

Candidate Starts for Eponine_16:

(Start: 19 @10485 has 40 MA's), (34, 10599), (50, 10683), (54, 10713), (63, 10746), (69, 10812),

Gene: Fefferhead_14 Start: 9240, Stop: 9626, Start Num: 18

Candidate Starts for Fefferhead_14:

(Start: 18 @9240 has 191 MA's), (26, 9279), (34, 9342), (48, 9420), (63, 9489), (71, 9567),

Gene: Feyre_13 Start: 9388, Stop: 9750, Start Num: 18

Candidate Starts for Feyre_13:

(Start: 18 @9388 has 191 MA's), (24, 9409), (34, 9490), (39, 9526), (40, 9532), (43, 9550), (48, 9568), (55, 9607), (63, 9637), (68, 9697), (70, 9712), (71, 9715),

Gene: Findley_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for Findley_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: Fionnbharth_16 Start: 10611, Stop: 10967, Start Num: 19

Candidate Starts for Fionnbharth_16:

(Start: 19 @10611 has 40 MA's), (34, 10725), (50, 10809), (54, 10839), (63, 10872), (64, 10884), (69, 10938),

Gene: FlagStaff_10 Start: 8880, Stop: 9236, Start Num: 18

Candidate Starts for FlagStaff_10:

(1, 8511), (4, 8712), (11, 8853), (Start: 18 @8880 has 191 MA's), (28, 8934), (31, 8958), (48, 9072), (63, 9141), (67, 9198), (70, 9216),

Gene: ForeverHowLong_10 Start: 8797, Stop: 9162, Start Num: 15

Candidate Starts for ForeverHowLong_10:

(2, 8443), (3, 8512), (6, 8740), (Start: 8 @8746 has 2 MA's), (15, 8797), (Start: 18 @8806 has 191 MA's), (24, 8836), (47, 8995), (48, 8998), (69, 9133),

Gene: Frosty24_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Frosty24_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Ganymede_15 Start: 9381, Stop: 9737, Start Num: 18

Candidate Starts for Ganymede_15:

(Start: 18 @9381 has 191 MA's), (24, 9405), (34, 9486), (36, 9495), (48, 9564), (63, 9633), (68, 9693), (70, 9708),

Gene: Gengar_13 Start: 9495, Stop: 9857, Start Num: 18

Candidate Starts for Gengar_13:

(Start: 18 @9495 has 191 MA's), (24, 9516), (34, 9597), (39, 9633), (40, 9639), (43, 9657), (48, 9675), (55, 9714), (63, 9744), (68, 9804), (70, 9819), (71, 9822),

Gene: Geraldini_15 Start: 9384, Stop: 9740, Start Num: 18

Candidate Starts for Geraldini_15:

(Start: 18 @9384 has 191 MA's), (24, 9408), (33, 9486), (34, 9489), (36, 9498), (48, 9567), (63, 9636), (68, 9696), (70, 9711),

Gene: Gideon_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Gideon_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: GodSpeed_10 Start: 8859, Stop: 9245, Start Num: 11

Candidate Starts for GodSpeed_10:

(4, 8718), (11, 8859), (Start: 17 @8883 has 19 MA's), (Start: 18 @8886 has 191 MA's), (27, 8937), (47, 9075), (48, 9078), (54, 9114), (63, 9147), (70, 9222),

Gene: GoldenAsh_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for GoldenAsh_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Gomashi_10 Start: 8809, Stop: 9168, Start Num: 17

Candidate Starts for Gomashi_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: Grizzly_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Grizzly_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Guanica15_15 Start: 8311, Stop: 8670, Start Num: 19

Candidate Starts for Guanica15_15:

(14, 8296), (Start: 19 @8311 has 40 MA's), (24, 8338), (33, 8416), (38, 8440), (43, 8479), (48, 8497), (52, 8521), (54, 8533), (63, 8566), (70, 8641),

Gene: Guillsminger_13 Start: 9470, Stop: 9832, Start Num: 18

Candidate Starts for Guillsminger_13:

(Start: 18 @9470 has 191 MA's), (24, 9491), (34, 9572), (39, 9608), (40, 9614), (43, 9632), (48, 9650), (55, 9689), (63, 9719), (68, 9779), (70, 9794), (71, 9797),

Gene: Halo_10 Start: 8806, Stop: 9162, Start Num: 18

Candidate Starts for Halo_10:

(2, 8443), (3, 8512), (6, 8740), (Start: 8 @8746 has 2 MA's), (15, 8797), (Start: 18 @8806 has 191 MA's), (24, 8836), (47, 8995), (48, 8998), (69, 9133),

Gene: Hammy_14 Start: 9293, Stop: 9691, Start Num: 18

Candidate Starts for Hammy_14:

(Start: 18 @9293 has 191 MA's), (26, 9332), (48, 9473), (63, 9542), (68, 9602), (70, 9617), (71, 9620),

Gene: HedwigODU_15 Start: 9364, Stop: 9720, Start Num: 18

Candidate Starts for HedwigODU_15:

(Start: 18 @9364 has 191 MA's), (24, 9388), (33, 9466), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676), (70, 9691),

Gene: Heftyboy_13 Start: 9597, Stop: 9959, Start Num: 18

Candidate Starts for Heftyboy_13:

(Start: 18 @9597 has 191 MA's), (24, 9618), (34, 9699), (39, 9735), (40, 9741), (43, 9759), (48, 9777), (55, 9816), (58, 9825), (63, 9846), (68, 9906), (70, 9921), (71, 9924),

Gene: Homura_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Homura_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Hope_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Hope_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Hotshotbaby7_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Hotshotbaby7_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Hurricane_14 Start: 9383, Stop: 9736, Start Num: 18

Candidate Starts for Hurricane_14:

(Start: 18 @9383 has 191 MA's), (24, 9404), (25, 9407), (34, 9485), (36, 9494), (48, 9563), (49, 9566), (68, 9692), (70, 9707), (71, 9710),

Gene: Hyperbowlee_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Hyperbowlee_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Illumine_15 Start: 9354, Stop: 9710, Start Num: 18

Candidate Starts for Illumine_15:

(Start: 18 @9354 has 191 MA's), (24, 9378), (34, 9459), (48, 9537), (63, 9606), (68, 9666), (70, 9681),

Gene: Inky_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Inky_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: InvictusManeo_13 Start: 9565, Stop: 9927, Start Num: 18

Candidate Starts for InvictusManeo_13:

(Start: 18 @9565 has 191 MA's), (24, 9586), (28, 9610), (34, 9667), (48, 9745), (54, 9781), (63, 9814), (68, 9874), (70, 9889),

Gene: JAWS_15 Start: 9358, Stop: 9714, Start Num: 18

Candidate Starts for JAWS_15:

(Start: 18 @9358 has 191 MA's), (24, 9382), (34, 9463), (48, 9541), (55, 9580), (63, 9610), (68, 9670), (70, 9685),

Gene: JF1_16 Start: 10610, Stop: 10966, Start Num: 19

Candidate Starts for JF1_16:

(Start: 19 @10610 has 40 MA's), (34, 10724), (50, 10808), (54, 10838), (63, 10871), (64, 10883), (69, 10937),

Gene: Jane_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Jane_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Jarvi_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Jarvi_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Jayhawk_15 Start: 9365, Stop: 9721, Start Num: 18

Candidate Starts for Jayhawk_15:

(Start: 18 @9365 has 191 MA's), (24, 9389), (33, 9467), (34, 9470), (36, 9479), (48, 9548), (63, 9617), (68, 9677), (70, 9692),

Gene: Jeckyll_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Jeckyll_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Jeilious_10 Start: 8807, Stop: 9166, Start Num: 17

Candidate Starts for Jeilious_10:

(6, 8744), (Start: 8 @8750 has 2 MA's), (15, 8801), (Start: 17 @8807 has 19 MA's), (Start: 18 @8810 has 191 MA's), (24, 8840), (47, 8999), (48, 9002), (64, 9083), (69, 9137),

Gene: Jolene_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Jolene_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Jolie2_10 Start: 8054, Stop: 8407, Start Num: 18

Candidate Starts for Jolie2_10:

(3, 7757), (6, 7988), (15, 8045), (Start: 18 @8054 has 191 MA's), (33, 8162), (47, 8240), (48, 8243), (67, 8369), (70, 8387),

Gene: Jonghyun_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Jonghyun_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: JorRay_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for JorRay_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Joy99_15 Start: 9330, Stop: 9686, Start Num: 18

Candidate Starts for Joy99_15:

(Start: 18 @9330 has 191 MA's), (24, 9354), (33, 9432), (34, 9435), (36, 9444), (48, 9513), (63, 9582), (68, 9642), (70, 9657),

Gene: Juicebox_11 Start: 8253, Stop: 8600, Start Num: 23

Candidate Starts for Juicebox_11:

(Start: 23 @8253 has 1 MA's), (37, 8364), (53, 8472),

Gene: Juliette_16 Start: 10485, Stop: 10841, Start Num: 19

Candidate Starts for Juliette_16:

(Start: 19 @10485 has 40 MA's), (34, 10599), (50, 10683), (54, 10713), (63, 10746), (69, 10812),

Gene: Kareem_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Kareem_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Kasen3_10 Start: 8812, Stop: 9168, Start Num: 18

Candidate Starts for Kasen3_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: Keshu_14 Start: 9370, Stop: 9723, Start Num: 18

Candidate Starts for Keshu_14:

(Start: 18 @9370 has 191 MA's), (24, 9391), (34, 9472), (48, 9550), (49, 9553), (68, 9679), (70, 9694),

Gene: KiSi_14 Start: 8236, Stop: 8589, Start Num: 18

Candidate Starts for KiSi_14:

(Start: 18 @8236 has 191 MA's), (24, 8257), (28, 8281), (35, 8341), (43, 8398), (48, 8416), (55, 8455), (62, 8482), (63, 8485), (68, 8545), (70, 8560), (71, 8563),

Gene: Kratio_12 Start: 9192, Stop: 9554, Start Num: 18

Candidate Starts for Kratio_12:

(Start: 18 @9192 has 191 MA's), (24, 9213), (28, 9237), (34, 9294), (48, 9372), (54, 9408), (63, 9441), (68, 9501), (70, 9516),

Gene: Kraw_16 Start: 10530, Stop: 10886, Start Num: 19

Candidate Starts for Kraw_16:

(Start: 19 @10530 has 40 MA's), (34, 10644), (50, 10728), (54, 10758), (63, 10791), (64, 10803), (69, 10857),

Gene: Krueger_14 Start: 8293, Stop: 8646, Start Num: 20

Candidate Starts for Krueger_14:

(Start: 20 @8293 has 27 MA's), (39, 8431), (43, 8455), (48, 8473), (63, 8542), (68, 8602), (70, 8617),

Gene: Larva_13 Start: 9307, Stop: 9669, Start Num: 18

Candidate Starts for Larva_13:

(Start: 18 @9307 has 191 MA's), (28, 9352), (34, 9409), (39, 9445), (40, 9451), (43, 9469), (48, 9487), (63, 9556), (68, 9616), (70, 9631),

Gene: LastHope_15 Start: 8383, Stop: 8742, Start Num: 19

Candidate Starts for LastHope_15:

(Start: 19 @8383 has 40 MA's), (24, 8410), (33, 8488), (38, 8512), (43, 8551), (48, 8569), (63, 8638), (70, 8713),

Gene: LaterM_15 Start: 9322, Stop: 9678, Start Num: 18

Candidate Starts for LaterM_15:

(Start: 18 @9322 has 191 MA's), (24, 9346), (34, 9427), (40, 9469), (48, 9505), (63, 9574), (68, 9634), (70, 9649),

Gene: Lavahound_13 Start: 8999, Stop: 9385, Start Num: 18

Candidate Starts for Lavahound_13:

(Start: 18 @8999 has 191 MA's), (26, 9038), (34, 9101), (48, 9179), (63, 9248), (71, 9326),

Gene: LeMond_14 Start: 8308, Stop: 8661, Start Num: 18

Candidate Starts for LeMond_14:

(Start: 18 @8308 has 191 MA's), (24, 8329), (28, 8353), (35, 8413), (43, 8470), (48, 8488), (55, 8527), (62, 8554), (63, 8557), (68, 8617), (70, 8632), (71, 8635),

Gene: Lea83_14 Start: 9370, Stop: 9723, Start Num: 18

Candidate Starts for Lea83_14:

(Start: 18 @9370 has 191 MA's), (24, 9391), (34, 9472), (36, 9481), (48, 9550), (49, 9553), (68, 9679), (70, 9694),

Gene: Lebo14_16 Start: 10624, Stop: 10980, Start Num: 19

Candidate Starts for Lebo14_16:

(Start: 19 @10624 has 40 MA's), (34, 10738), (50, 10822), (54, 10852), (63, 10885), (64, 10897), (69, 10951),

Gene: Lemuria_10 Start: 8104, Stop: 8460, Start Num: 17

Candidate Starts for Lemuria_10:

(6, 8041), (Start: 17 @8104 has 19 MA's), (47, 8293), (48, 8296), (55, 8335), (56, 8338), (67, 8422), (70, 8440),

Gene: Leston_13 Start: 9600, Stop: 9962, Start Num: 18

Candidate Starts for Leston_13:

(Start: 18 @9600 has 191 MA's), (24, 9621), (34, 9702), (39, 9738), (40, 9744), (43, 9762), (48, 9780), (55, 9819), (58, 9828), (63, 9849), (68, 9909), (70, 9924), (71, 9927),

Gene: Liefie_10 Start: 8810, Stop: 9166, Start Num: 18

Candidate Starts for Liefie_10:

(6, 8744), (Start: 8 @8750 has 2 MA's), (15, 8801), (Start: 17 @8807 has 19 MA's), (Start: 18 @8810 has 191 MA's), (24, 8840), (47, 8999), (48, 9002), (64, 9083), (69, 9137),

Gene: LilDirt_12 Start: 9322, Stop: 9684, Start Num: 18

Candidate Starts for LilDirt_12:

(Start: 18 @9322 has 191 MA's), (24, 9343), (28, 9367), (34, 9424), (48, 9502), (54, 9538), (63, 9571), (68, 9631), (70, 9646),

Gene: LilPharaoh_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for LilPharaoh_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: LindNT_15 Start: 9328, Stop: 9684, Start Num: 18

Candidate Starts for LindNT_15:

(Start: 18 @9328 has 191 MA's), (24, 9352), (33, 9430), (34, 9433), (48, 9511), (63, 9580), (68, 9640), (70, 9655),

Gene: Llorens_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Llorens_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: LouisV14_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for LouisV14_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Lunahalos_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Lunahalos_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: MOOREtheMARYer_10 Start: 8995, Stop: 9348, Start Num: 18

Candidate Starts for MOOREtheMARYer_10:

(1, 8611), (4, 8806), (5, 8899), (11, 8962), (Start: 18 @8995 has 191 MA's), (26, 9043), (31, 9073), (42, 9154), (48, 9184), (54, 9220), (67, 9310), (70, 9328),

Gene: MZKinsey_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for MZKinsey_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: MacKat_15 Start: 9381, Stop: 9737, Start Num: 18

Candidate Starts for MacKat_15:

(Start: 18 @9381 has 191 MA's), (24, 9405), (33, 9483), (34, 9486), (36, 9495), (48, 9564), (55, 9603), (63, 9633), (68, 9693), (70, 9708),

Gene: MacnCheese_15 Start: 9598, Stop: 9951, Start Num: 18

Candidate Starts for MacnCheese_15:

(Start: 18 @9598 has 191 MA's), (24, 9619), (36, 9709), (48, 9778), (49, 9781), (55, 9817), (63, 9847), (70, 9922), (71, 9925),

Gene: Maliketh_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Maliketh_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Malthus_16 Start: 10530, Stop: 10886, Start Num: 19

Candidate Starts for Malthus_16:

(Start: 19 @10530 has 40 MA's), (34, 10644), (50, 10728), (54, 10758), (63, 10791), (64, 10803), (69, 10857),

Gene: Marcoliusprime_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for Marcoliusprime_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: MarkPhew_15 Start: 8204, Stop: 8557, Start Num: 18

Candidate Starts for MarkPhew_15:

(Start: 18 @8204 has 191 MA's), (24, 8225), (26, 8243), (31, 8273), (35, 8309), (43, 8366), (48, 8384), (49, 8387), (55, 8423), (63, 8453), (68, 8513), (70, 8528), (71, 8531),

Gene: Marmie_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Marmie_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Marshawn_16 Start: 8898, Stop: 9251, Start Num: 18

Candidate Starts for Marshawn_16:

(Start: 18 @8898 has 191 MA's), (38, 9021), (40, 9042), (43, 9060), (48, 9078), (54, 9114), (71, 9225),

Gene: McMater_15 Start: 8435, Stop: 8788, Start Num: 19

Candidate Starts for McMater_15:

(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654), (63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: Mdavu_11 Start: 8639, Stop: 8992, Start Num: 19

Candidate Starts for Mdavu_11:

(Start: 19 @8639 has 40 MA's), (24, 8660), (36, 8750), (43, 8801), (45, 8807), (48, 8819), (61, 8879), (63, 8888), (68, 8948), (70, 8963), (71, 8966),

Gene: MeaningOfLife_15 Start: 9337, Stop: 9693, Start Num: 18

Candidate Starts for MeaningOfLife_15:

(Start: 18 @9337 has 191 MA's), (24, 9361), (33, 9439), (34, 9442), (36, 9451), (48, 9520), (63, 9589), (68, 9649), (70, 9664),

Gene: Megsy_15 Start: 9331, Stop: 9687, Start Num: 18

Candidate Starts for Megsy_15:

(Start: 18 @9331 has 191 MA's), (24, 9355), (34, 9436), (48, 9514), (63, 9583), (68, 9643), (70, 9658),

Gene: Mercurio_11 Start: 8738, Stop: 9103, Start Num: 17

Candidate Starts for Mercurio_11:

(1, 8369), (6, 8675), (Start: 17 @8738 has 19 MA's), (Start: 21 @8756 has 1 MA's), (31, 8825), (33, 8858), (47, 8936), (48, 8939), (57, 8984), (67, 9065),

Gene: Milly_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for Milly_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: Miryou_13 Start: 9448, Stop: 9810, Start Num: 18

Candidate Starts for Miryou_13:

(Start: 18 @9448 has 191 MA's), (24, 9469), (34, 9550), (39, 9586), (40, 9592), (43, 9610), (48, 9628), (55, 9667), (63, 9697), (68, 9757), (70, 9772), (71, 9775),

Gene: MissDaisy_16 Start: 10384, Stop: 10740, Start Num: 19

Candidate Starts for MissDaisy_16:

(Start: 19 @10384 has 40 MA's), (34, 10498), (50, 10582), (54, 10612), (63, 10645), (64, 10657), (69, 10711),

Gene: Mitti_16 Start: 10534, Stop: 10890, Start Num: 19

Candidate Starts for Mitti_16:

(Start: 19 @10534 has 40 MA's), (34, 10648), (50, 10732), (54, 10762), (63, 10795), (64, 10807), (69, 10861),

Gene: Mowgli_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Mowgli_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Mufasa_11 Start: 7348, Stop: 7698, Start Num: 20

Candidate Starts for Mufasa_11:

(Start: 20 @7348 has 27 MA's), (25, 7372), (26, 7387), (30, 7408), (34, 7450), (36, 7459), (38, 7471), (48, 7528), (49, 7531), (55, 7567), (63, 7597), (68, 7657), (69, 7663), (70, 7672),

Gene: Murucutumbu_15 Start: 9315, Stop: 9671, Start Num: 18

Candidate Starts for Murucutumbu_15:

(Start: 18 @9315 has 191 MA's), (24, 9339), (34, 9420), (40, 9462), (48, 9498), (63, 9567), (68, 9627), (70, 9642),

Gene: Mynx_15 Start: 9384, Stop: 9740, Start Num: 18

Candidate Starts for Mynx_15:

(Start: 18 @9384 has 191 MA's), (24, 9408), (33, 9486), (34, 9489), (36, 9498), (48, 9567), (63, 9636), (68, 9696), (70, 9711),

Gene: Neighly_13 Start: 9306, Stop: 9668, Start Num: 18

Candidate Starts for Neighly_13:

(Start: 18 @9306 has 191 MA's), (28, 9351), (34, 9408), (39, 9444), (40, 9450), (43, 9468), (48, 9486), (63, 9555), (68, 9615), (70, 9630),

Gene: Neoh_10 Start: 8812, Stop: 9168, Start Num: 18

Candidate Starts for Neoh_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: Nibb_14 Start: 8345, Stop: 8698, Start Num: 18

Candidate Starts for Nibb_14:

(Start: 18 @8345 has 191 MA's), (24, 8366), (26, 8384), (35, 8450), (43, 8507), (48, 8525), (49, 8528), (55, 8564), (63, 8594), (68, 8654), (70, 8669), (71, 8672),

Gene: Nikao_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Nikao_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: Niklas_15 Start: 8435, Stop: 8788, Start Num: 19

Candidate Starts for Niklas_15:

(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654), (63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: November_13 Start: 9144, Stop: 9539, Start Num: 18

Candidate Starts for November_13:

(Start: 18 @9144 has 191 MA's), (26, 9183), (34, 9246), (48, 9324), (63, 9393), (68, 9453), (70, 9468), (71, 9471),

Gene: Nutello_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Nutello_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: OctaviousRex_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for OctaviousRex_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: OkiRoe_13 Start: 9470, Stop: 9832, Start Num: 18

Candidate Starts for OkiRoe_13:

(Start: 18 @9470 has 191 MA's), (24, 9491), (34, 9572), (39, 9608), (40, 9614), (43, 9632), (48, 9650), (55, 9689), (63, 9719), (68, 9779), (70, 9794), (71, 9797),

Gene: Olga_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Olga_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: OmniCritical_16 Start: 10521, Stop: 10877, Start Num: 19

Candidate Starts for OmniCritical_16:

(Start: 19 @10521 has 40 MA's), (34, 10635), (50, 10719), (54, 10749), (63, 10782), (64, 10794), (69, 10848),

Gene: Omnicron_13 Start: 8530, Stop: 8898, Start Num: 16

Candidate Starts for Omnicron_13:

(Start: 16 @8530 has 2 MA's), (24, 8557), (34, 8638), (43, 8698), (48, 8716), (55, 8755), (63, 8785), (68, 8845), (70, 8860), (71, 8863),

Gene: Oscar_14 Start: 8309, Stop: 8662, Start Num: 18

Candidate Starts for Oscar_14:

(Start: 18 @8309 has 191 MA's), (24, 8330), (28, 8354), (35, 8414), (43, 8471), (48, 8489), (55, 8528), (62, 8555), (63, 8558), (68, 8618), (70, 8633), (71, 8636),

Gene: P3MA_10 Start: 7100, Stop: 7444, Start Num: 17
Candidate Starts for P3MA_10:
(Start: 17 @7100 has 19 MA's), (46, 7295), (51, 7307), (71, 7436),

Gene: Pace1224_10 Start: 8880, Stop: 9236, Start Num: 18
Candidate Starts for Pace1224_10:
(1, 8511), (4, 8712), (11, 8853), (Start: 18 @8880 has 191 MA's), (28, 8934), (31, 8958), (48, 9072),
(63, 9141), (67, 9198), (70, 9216),

Gene: Padfoot_15 Start: 9404, Stop: 9760, Start Num: 18
Candidate Starts for Padfoot_15:
(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716),
(70, 9731),

Gene: Padpat_15 Start: 9364, Stop: 9720, Start Num: 18
Candidate Starts for Padpat_15:
(Start: 18 @9364 has 191 MA's), (24, 9388), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676),
(70, 9691),

Gene: Paito_10 Start: 8910, Stop: 9266, Start Num: 18
Candidate Starts for Paito_10:
(Start: 8 @8850 has 2 MA's), (15, 8901), (Start: 18 @8910 has 191 MA's), (29, 8970), (47, 9099), (48,
9102), (63, 9171),

Gene: Paola_13 Start: 9470, Stop: 9832, Start Num: 18
Candidate Starts for Paola_13:
(Start: 18 @9470 has 191 MA's), (24, 9491), (34, 9572), (39, 9608), (40, 9614), (43, 9632), (48, 9650),
(55, 9689), (63, 9719), (68, 9779), (70, 9794), (71, 9797),

Gene: Patt_16 Start: 10360, Stop: 10716, Start Num: 19
Candidate Starts for Patt_16:
(Start: 19 @10360 has 40 MA's), (34, 10474), (50, 10558), (54, 10588), (63, 10621), (64, 10633), (69,
10687),

Gene: Peanam_15 Start: 8435, Stop: 8788, Start Num: 19
Candidate Starts for Peanam_15:
(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654),
(63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: Peeb_10 Start: 8811, Stop: 9167, Start Num: 18
Candidate Starts for Peeb_10:
(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811
has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Peel_15 Start: 9404, Stop: 9760, Start Num: 18
Candidate Starts for Peel_15:
(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716),
(70, 9731),

Gene: Periodt_10 Start: 8811, Stop: 9167, Start Num: 18
Candidate Starts for Periodt_10:
(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811
has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Pharb_14 Start: 9218, Stop: 9571, Start Num: 18

Candidate Starts for Pharb_14:

(7, 9152), (Start: 18 @9218 has 191 MA's), (24, 9239), (34, 9320), (48, 9398), (49, 9401), (55, 9437), (68, 9527), (70, 9542), (71, 9545),

Gene: PhelpsODU_14 Start: 8347, Stop: 8700, Start Num: 20

Candidate Starts for PhelpsODU_14:

(Start: 20 @8347 has 27 MA's), (39, 8485), (48, 8527), (63, 8596), (68, 8656), (70, 8671),

Gene: Phish_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Phish_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Phloodle_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Phloodle_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Phrank_14 Start: 8291, Stop: 8644, Start Num: 20

Candidate Starts for Phrank_14:

(Start: 20 @8291 has 27 MA's), (39, 8429), (43, 8453), (48, 8471), (63, 8540), (68, 8600), (70, 8615),

Gene: Phreak_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Phreak_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Piatt_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Piatt_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: PinkYoshi_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for PinkYoshi_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Pinnie_11 Start: 9461, Stop: 9814, Start Num: 18

Candidate Starts for Pinnie_11:

(4, 9272), (5, 9365), (11, 9428), (Start: 18 @9461 has 191 MA's), (26, 9509), (31, 9539), (48, 9650), (54, 9686), (67, 9776), (70, 9794),

Gene: Pisa1_14 Start: 9112, Stop: 9468, Start Num: 18

Candidate Starts for Pisa1_14:

(9, 9064), (Start: 18 @9112 has 191 MA's), (Start: 20 @9115 has 27 MA's), (24, 9136), (34, 9217), (48, 9295), (63, 9364), (68, 9424), (70, 9439),

Gene: Pisa4_14 Start: 9115, Stop: 9468, Start Num: 20

Candidate Starts for Pisa4_14:

(9, 9064), (Start: 18 @9112 has 191 MA's), (Start: 20 @9115 has 27 MA's), (24, 9136), (34, 9217), (48, 9295), (63, 9364), (68, 9424), (70, 9439),

Gene: Pixie_14 Start: 9122, Stop: 9475, Start Num: 18

Candidate Starts for Pixie_14:

(Start: 18 @9122 has 191 MA's), (24, 9143), (34, 9224), (36, 9233), (48, 9302), (49, 9305), (68, 9431), (70, 9446),

Gene: Plagueis_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Plagueis_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Pokerus_14 Start: 9318, Stop: 9674, Start Num: 18

Candidate Starts for Pokerus_14:

(Start: 18 @9318 has 191 MA's), (24, 9342), (34, 9423), (36, 9432), (48, 9501), (63, 9570), (68, 9630), (70, 9645),

Gene: Primanti_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Primanti_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Prithvi_15 Start: 9328, Stop: 9684, Start Num: 18

Candidate Starts for Prithvi_15:

(Start: 18 @9328 has 191 MA's), (24, 9352), (33, 9430), (34, 9433), (48, 9511), (63, 9580), (68, 9640), (70, 9655),

Gene: Psycho_13 Start: 9437, Stop: 9799, Start Num: 18

Candidate Starts for Psycho_13:

(Start: 18 @9437 has 191 MA's), (28, 9482), (34, 9539), (39, 9575), (40, 9581), (43, 9599), (48, 9617), (63, 9686), (68, 9746), (70, 9761),

Gene: Qhanda_16 Start: 10630, Stop: 10986, Start Num: 19

Candidate Starts for Qhanda_16:

(Start: 19 @10630 has 40 MA's), (34, 10744), (50, 10828), (54, 10858), (63, 10891), (64, 10903), (69, 10957),

Gene: QuincyRose_14 Start: 9381, Stop: 9737, Start Num: 18

Candidate Starts for QuincyRose_14:

(Start: 18 @9381 has 191 MA's), (24, 9405), (34, 9486), (36, 9495), (48, 9564), (63, 9633), (68, 9693), (70, 9708),

Gene: Rabbs_10 Start: 8791, Stop: 9150, Start Num: 17

Candidate Starts for Rabbs_10:

(2, 8431), (3, 8500), (Start: 8 @8734 has 2 MA's), (15, 8785), (Start: 17 @8791 has 19 MA's), (Start: 18 @8794 has 191 MA's), (47, 8983), (48, 8986), (63, 9055), (69, 9121),

Gene: Ramen_15 Start: 9364, Stop: 9720, Start Num: 18

Candidate Starts for Ramen_15:

(Start: 18 @9364 has 191 MA's), (24, 9388), (33, 9466), (34, 9469), (36, 9478), (48, 9547), (63, 9616), (68, 9676), (70, 9691),

Gene: Rando14_13 Start: 8432, Stop: 8800, Start Num: 16

Candidate Starts for Rando14_13:

(Start: 16 @8432 has 2 MA's), (24, 8459), (34, 8540), (43, 8600), (48, 8618), (55, 8657), (56, 8660), (68, 8747), (70, 8762), (71, 8765),

Gene: Rapunzel97_15 Start: 9365, Stop: 9721, Start Num: 18

Candidate Starts for Rapunzel97_15:

(Start: 18 @9365 has 191 MA's), (24, 9389), (33, 9467), (34, 9470), (36, 9479), (48, 9548), (63, 9617), (68, 9677), (70, 9692),

Gene: Rattrick_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Rattrick_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Remy19_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Remy19_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Renaissance_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Renaissance_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Reptar3000_16 Start: 10362, Stop: 10718, Start Num: 19

Candidate Starts for Reptar3000_16:

(Start: 19 @10362 has 40 MA's), (34, 10476), (50, 10560), (54, 10590), (63, 10623), (64, 10635), (69, 10689),

Gene: Richarlison_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Richarlison_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Richo_15 Start: 8435, Stop: 8788, Start Num: 19

Candidate Starts for Richo_15:

(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654), (63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: Rosmarinus_15 Start: 9392, Stop: 9748, Start Num: 18

Candidate Starts for Rosmarinus_15:

(Start: 18 @9392 has 191 MA's), (24, 9416), (34, 9497), (48, 9575), (55, 9614), (63, 9644), (68, 9704), (70, 9719),

Gene: Ruriko_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Ruriko_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Ruthiejr_15 Start: 10216, Stop: 10572, Start Num: 19

Candidate Starts for Ruthiejr_15:

(Start: 19 @10216 has 40 MA's), (34, 10330), (50, 10414), (54, 10444), (63, 10477), (69, 10543),

Gene: SamScheppers_14 Start: 10137, Stop: 10493, Start Num: 19

Candidate Starts for SamScheppers_14:

(Start: 19 @10137 has 40 MA's), (34, 10251), (50, 10335), (54, 10365), (63, 10398), (64, 10410), (69, 10464),

Gene: SamuelLPlaqson_15 Start: 9306, Stop: 9662, Start Num: 18

Candidate Starts for SamuelLPlaqson_15:

(Start: 18 @9306 has 191 MA's), (24, 9330), (48, 9489), (63, 9558), (68, 9618), (70, 9633),

Gene: Scarlett_14 Start: 8308, Stop: 8661, Start Num: 18

Candidate Starts for Scarlett_14:

(Start: 18 @8308 has 191 MA's), (24, 8329), (28, 8353), (35, 8413), (43, 8470), (48, 8488), (55, 8527), (62, 8554), (63, 8557), (68, 8617), (70, 8632), (71, 8635),

Gene: Schiebel_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Schiebel_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: SgtBeansprout_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for SgtBeansprout_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: ShaboiShabazz_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for ShaboiShabazz_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Shadow1_13 Start: 8202, Stop: 8555, Start Num: 20

Candidate Starts for Shadow1_13:

(Start: 20 @8202 has 27 MA's), (40, 8346), (43, 8364), (48, 8382), (55, 8421), (63, 8451), (68, 8511), (70, 8526),

Gene: Shaobing_15 Start: 8435, Stop: 8788, Start Num: 19

Candidate Starts for Shaobing_15:

(Start: 19 @8435 has 40 MA's), (24, 8456), (33, 8534), (38, 8558), (43, 8597), (48, 8615), (55, 8654), (63, 8684), (68, 8744), (70, 8759), (71, 8762),

Gene: ShedlockHolmes_14 Start: 9370, Stop: 9723, Start Num: 18

Candidate Starts for ShedlockHolmes_14:

(Start: 18 @9370 has 191 MA's), (24, 9391), (34, 9472), (36, 9481), (48, 9550), (49, 9553), (68, 9679), (70, 9694),

Gene: ShiaSurprise_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for ShiaSurprise_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: SirPhilip_14 Start: 8065, Stop: 8418, Start Num: 18

Candidate Starts for SirPhilip_14:

(Start: 18 @8065 has 191 MA's), (24, 8086), (38, 8188), (43, 8227), (48, 8245), (63, 8314), (68, 8374), (70, 8389), (71, 8392),

Gene: Sizemore_10 Start: 8812, Stop: 9168, Start Num: 18

Candidate Starts for Sizemore_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: Slarp_16 Start: 10621, Stop: 10977, Start Num: 19

Candidate Starts for Slarp_16:

(Start: 19 @10621 has 40 MA's), (34, 10735), (50, 10819), (54, 10849), (63, 10882), (64, 10894), (69, 10948),

Gene: Slimphazie_15 Start: 9365, Stop: 9721, Start Num: 18

Candidate Starts for Slimphazie_15:

(Start: 18 @9365 has 191 MA's), (24, 9389), (33, 9467), (34, 9470), (36, 9479), (48, 9548), (63, 9617), (68, 9677), (70, 9692),

Gene: Sneeze_10 Start: 8793, Stop: 9149, Start Num: 18

Candidate Starts for Sneeze_10:

(2, 8430), (3, 8499), (Start: 8 @8733 has 2 MA's), (15, 8784), (Start: 17 @8790 has 19 MA's), (Start: 18 @8793 has 191 MA's), (47, 8982), (48, 8985), (63, 9054), (69, 9120),

Gene: SoSeph_13 Start: 9597, Stop: 9959, Start Num: 18

Candidate Starts for SoSeph_13:

(Start: 18 @9597 has 191 MA's), (24, 9618), (34, 9699), (39, 9735), (40, 9741), (43, 9759), (48, 9777), (55, 9816), (58, 9825), (63, 9846), (68, 9906), (70, 9921), (71, 9924),

Gene: Spock_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Spock_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Stargaze_10 Start: 9061, Stop: 9423, Start Num: 17

Candidate Starts for Stargaze_10:

(6, 8998), (Start: 17 @9061 has 19 MA's), (44, 9241), (48, 9256), (54, 9292), (67, 9382), (70, 9400),

Gene: Stinson_15 Start: 9327, Stop: 9683, Start Num: 18

Candidate Starts for Stinson_15:

(Start: 18 @9327 has 191 MA's), (24, 9351), (34, 9432), (40, 9474), (48, 9510), (63, 9579), (68, 9639), (70, 9654),

Gene: Strobilo_11 Start: 7362, Stop: 7712, Start Num: 20

Candidate Starts for Strobilo_11:

(Start: 20 @7362 has 27 MA's), (25, 7386), (30, 7422), (34, 7464), (36, 7473), (38, 7485), (48, 7542), (55, 7581), (63, 7611), (68, 7671), (69, 7677), (70, 7686),

Gene: Sulley_15 Start: 9334, Stop: 9690, Start Num: 18

Candidate Starts for Sulley_15:

(Start: 18 @9334 has 191 MA's), (24, 9358), (34, 9439), (36, 9448), (48, 9517), (63, 9586), (68, 9646), (70, 9661),

Gene: Sunflower1121_13 Start: 8213, Stop: 8566, Start Num: 20

Candidate Starts for Sunflower1121_13:

(Start: 20 @8213 has 27 MA's), (40, 8357), (43, 8375), (48, 8393), (55, 8432), (63, 8462), (68, 8522), (70, 8537),

Gene: Sweets_10 Start: 8806, Stop: 9162, Start Num: 18

Candidate Starts for Sweets_10:

(2, 8443), (3, 8512), (6, 8740), (Start: 8 @8746 has 2 MA's), (15, 8797), (Start: 18 @8806 has 191 MA's), (24, 8836), (47, 8995), (48, 8998), (69, 9133),

Gene: Syra333_14 Start: 8309, Stop: 8662, Start Num: 20

Candidate Starts for Syra333_14:

(Start: 20 @8309 has 27 MA's), (40, 8453), (43, 8471), (48, 8489), (68, 8618), (70, 8633),

Gene: TBond007_14 Start: 9121, Stop: 9474, Start Num: 18

Candidate Starts for TBond007_14:

(Start: 18 @9121 has 191 MA's), (24, 9142), (34, 9223), (36, 9232), (48, 9301), (49, 9304), (68, 9430), (70, 9445),

Gene: TClif_14 Start: 8297, Stop: 8650, Start Num: 20

Candidate Starts for TClif_14:

(Start: 20 @8297 has 27 MA's), (34, 8399), (43, 8459), (48, 8477), (63, 8546), (68, 8606), (70, 8621),

Gene: TM4_11 Start: 7414, Stop: 7764, Start Num: 20

Candidate Starts for TM4_11:

(Start: 20 @7414 has 27 MA's), (25, 7438), (26, 7453), (30, 7474), (34, 7516), (38, 7537), (48, 7594), (55, 7633), (63, 7663), (68, 7723), (69, 7729), (70, 7738),

Gene: TPA4_10 Start: 7947, Stop: 8351, Start Num: 13

Candidate Starts for TPA4_10:

(13, 7947), (14, 7950), (32, 8067), (41, 8148), (42, 8154), (59, 8244), (60, 8250), (71, 8340),

Gene: Tachez_15 Start: 9327, Stop: 9683, Start Num: 18

Candidate Starts for Tachez_15:

(Start: 18 @9327 has 191 MA's), (24, 9351), (34, 9432), (36, 9441), (48, 9510), (63, 9579), (68, 9639), (70, 9654),

Gene: Taheera_10 Start: 8743, Stop: 9159, Start Num: 8

Candidate Starts for Taheera_10:

(2, 8440), (3, 8509), (Start: 8 @8743 has 2 MA's), (15, 8794), (Start: 17 @8800 has 19 MA's), (Start: 18 @8803 has 191 MA's), (47, 8992), (48, 8995), (63, 9064), (69, 9130),

Gene: TaiwanKao_15 Start: 9334, Stop: 9690, Start Num: 18

Candidate Starts for TaiwanKao_15:

(Start: 18 @9334 has 191 MA's), (24, 9358), (34, 9439), (48, 9517), (63, 9586), (68, 9646), (70, 9661),

Gene: Taquito_14 Start: 10207, Stop: 10563, Start Num: 19

Candidate Starts for Taquito_14:

(Start: 19 @10207 has 40 MA's), (34, 10321), (50, 10405), (54, 10435), (63, 10468), (69, 10534),

Gene: Teejan_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Teejan_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: Terror_10 Start: 8743, Stop: 9159, Start Num: 8

Candidate Starts for Terror_10:

(2, 8440), (3, 8509), (Start: 8 @8743 has 2 MA's), (15, 8794), (Start: 17 @8800 has 19 MA's), (Start: 18 @8803 has 191 MA's), (47, 8992), (48, 8995), (63, 9064), (69, 9130),

Gene: Thyatira_13 Start: 9469, Stop: 9831, Start Num: 18

Candidate Starts for Thyatira_13:

(Start: 18 @9469 has 191 MA's), (24, 9490), (34, 9571), (39, 9607), (40, 9613), (43, 9631), (48, 9649), (55, 9688), (63, 9718), (68, 9778), (70, 9793), (71, 9796),

Gene: Tierra_14 Start: 9012, Stop: 9365, Start Num: 20

Candidate Starts for Tierra_14:

(Start: 20 @9012 has 27 MA's), (39, 9150), (43, 9174), (48, 9192), (63, 9261), (68, 9321), (70, 9336),

Gene: Tigress9_14 Start: 8293, Stop: 8646, Start Num: 20

Candidate Starts for Tigress9_14:

(Start: 20 @8293 has 27 MA's), (39, 8431), (43, 8455), (48, 8473), (63, 8542), (68, 8602), (70, 8617),

Gene: TinaBug_10 Start: 8806, Stop: 9162, Start Num: 18

Candidate Starts for TinaBug_10:

(2, 8443), (3, 8512), (6, 8740), (Start: 8 @8746 has 2 MA's), (15, 8797), (Start: 18 @8806 has 191 MA's), (24, 8836), (47, 8995), (48, 8998), (69, 9133),

Gene: TingHuaYa_15 Start: 8386, Stop: 8745, Start Num: 19

Candidate Starts for TingHuaYa_15:

(Start: 19 @8386 has 40 MA's), (24, 8413), (33, 8491), (38, 8515), (43, 8554), (48, 8572), (63, 8641), (64, 8653), (70, 8716),

Gene: TiniBug_15 Start: 9306, Stop: 9662, Start Num: 18

Candidate Starts for TiniBug_15:

(Start: 18 @9306 has 191 MA's), (24, 9330), (48, 9489), (63, 9558), (68, 9618), (70, 9633),

Gene: Tiri_15 Start: 9373, Stop: 9729, Start Num: 18

Candidate Starts for Tiri_15:

(Start: 18 @9373 has 191 MA's), (24, 9397), (34, 9478), (36, 9487), (48, 9556), (63, 9625), (68, 9685), (70, 9700),

Gene: TomBrady_10 Start: 8812, Stop: 9168, Start Num: 18

Candidate Starts for TomBrady_10:

(6, 8746), (Start: 8 @8752 has 2 MA's), (15, 8803), (Start: 17 @8809 has 19 MA's), (Start: 18 @8812 has 191 MA's), (24, 8842), (47, 9001), (48, 9004), (64, 9085), (69, 9139),

Gene: Topper_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Topper_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Torres_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Torres_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: TreyKay_15 Start: 9328, Stop: 9684, Start Num: 18

Candidate Starts for TreyKay_15:

(Start: 18 @9328 has 191 MA's), (24, 9352), (33, 9430), (34, 9433), (48, 9511), (63, 9580), (68, 9640), (70, 9655),

Gene: TribelTrouble_13 Start: 9179, Stop: 9532, Start Num: 18

Candidate Starts for TribelTrouble_13:

(Start: 18 @9179 has 191 MA's), (24, 9200), (34, 9281), (36, 9290), (48, 9359), (49, 9362), (55, 9398), (66, 9470), (68, 9488), (70, 9503),

Gene: Trice_11 Start: 8651, Stop: 9004, Start Num: 19

Candidate Starts for Trice_11:

(Start: 19 @8651 has 40 MA's), (24, 8672), (36, 8762), (43, 8813), (45, 8819), (48, 8831), (61, 8891), (63, 8900), (68, 8960), (70, 8975), (71, 8978),

Gene: TruffulaTree_15 Start: 9361, Stop: 9717, Start Num: 18

Candidate Starts for TruffulaTree_15:

(Start: 18 @9361 has 191 MA's), (24, 9385), (33, 9463), (34, 9466), (36, 9475), (48, 9544), (63, 9613), (68, 9673), (70, 9688),

Gene: Twitch_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Twitch_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: Unicorn_14 Start: 8347, Stop: 8700, Start Num: 20

Candidate Starts for Unicorn_14:

(Start: 20 @8347 has 27 MA's), (39, 8485), (48, 8527), (63, 8596), (68, 8656), (70, 8671),

Gene: Urkel_15 Start: 9306, Stop: 9662, Start Num: 18

Candidate Starts for Urkel_15:

(Start: 18 @9306 has 191 MA's), (24, 9330), (48, 9489), (63, 9558), (68, 9618), (70, 9633),

Gene: Validus_15 Start: 8355, Stop: 8708, Start Num: 19

Candidate Starts for Validus_15:

(Start: 19 @8355 has 40 MA's), (24, 8376), (33, 8454), (43, 8517), (48, 8535), (63, 8604), (68, 8664), (70, 8679), (71, 8682),

Gene: Veliki_15 Start: 9404, Stop: 9760, Start Num: 18

Candidate Starts for Veliki_15:

(Start: 18 @9404 has 191 MA's), (24, 9428), (34, 9509), (48, 9587), (55, 9626), (63, 9656), (68, 9716), (70, 9731),

Gene: ViviJ_12 Start: 9322, Stop: 9684, Start Num: 18

Candidate Starts for ViviJ_12:

(Start: 18 @9322 has 191 MA's), (24, 9343), (28, 9367), (34, 9424), (48, 9502), (54, 9538), (63, 9571), (68, 9631), (70, 9646),

Gene: Waterfoul_13 Start: 9491, Stop: 9853, Start Num: 18

Candidate Starts for Waterfoul_13:

(Start: 18 @9491 has 191 MA's), (24, 9512), (34, 9593), (39, 9629), (40, 9635), (43, 9653), (48, 9671), (55, 9710), (63, 9740), (68, 9800), (70, 9815), (71, 9818),

Gene: Wendigo_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for Wendigo_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: Wintermute_16 Start: 10610, Stop: 10966, Start Num: 19

Candidate Starts for Wintermute_16:

(Start: 19 @10610 has 40 MA's), (34, 10724), (50, 10808), (54, 10838), (63, 10871), (64, 10883), (69, 10937),

Gene: Ximenita_15 Start: 8488, Stop: 8841, Start Num: 20

Candidate Starts for Ximenita_15:

(Start: 20 @8488 has 27 MA's), (24, 8509), (40, 8632), (43, 8650), (48, 8668), (54, 8704), (63, 8737), (68, 8797), (70, 8812),

Gene: Y10_16 Start: 10610, Stop: 10966, Start Num: 19

Candidate Starts for Y10_16:

(Start: 19 @10610 has 40 MA's), (34, 10724), (50, 10808), (54, 10838), (63, 10871), (64, 10883), (69, 10937),

Gene: Y2_16 Start: 10610, Stop: 10966, Start Num: 19

Candidate Starts for Y2_16:

(Start: 19 @10610 has 40 MA's), (34, 10724), (50, 10808), (54, 10838), (63, 10871), (64, 10883), (69, 10937),

Gene: YangYin_10 Start: 9061, Stop: 9423, Start Num: 17

Candidate Starts for YangYin_10:

(4, 8896), (6, 8998), (Start: 17 @9061 has 19 MA's), (44, 9241), (48, 9256), (54, 9292), (67, 9382), (70, 9400),

Gene: YasnayaPolyana_16 Start: 10611, Stop: 10967, Start Num: 19

Candidate Starts for YasnayaPolyana_16:

(Start: 19 @10611 has 40 MA's), (34, 10725), (50, 10809), (54, 10839), (63, 10872), (64, 10884), (69, 10938),

Gene: YoureAdopted_14 Start: 9337, Stop: 9693, Start Num: 18

Candidate Starts for YoureAdopted_14:

(Start: 18 @9337 has 191 MA's), (24, 9361), (33, 9439), (34, 9442), (36, 9451), (48, 9520), (63, 9589), (68, 9649), (70, 9664),

Gene: Yuna_15 Start: 8481, Stop: 8834, Start Num: 20

Candidate Starts for Yuna_15:

(Start: 20 @8481 has 27 MA's), (24, 8502), (34, 8583), (43, 8643), (48, 8661), (49, 8664), (63, 8730), (68, 8790), (69, 8796), (70, 8805),

Gene: Yunkel11_15 Start: 8311, Stop: 8670, Start Num: 19

Candidate Starts for Yunkel11_15:

(14, 8296), (Start: 19 @8311 has 40 MA's), (24, 8338), (33, 8416), (38, 8440), (43, 8479), (48, 8497), (52, 8521), (54, 8533), (63, 8566), (70, 8641),

Gene: Zabiza_15 Start: 9362, Stop: 9718, Start Num: 18

Candidate Starts for Zabiza_15:

(Start: 18 @9362 has 191 MA's), (24, 9386), (33, 9464), (34, 9467), (36, 9476), (48, 9545), (63, 9614), (68, 9674), (70, 9689),

Gene: Zavala_15 Start: 9343, Stop: 9699, Start Num: 18

Candidate Starts for Zavala_15:

(Start: 18 @9343 has 191 MA's), (24, 9367), (34, 9448), (36, 9457), (48, 9526), (63, 9595), (68, 9655), (70, 9670),

Gene: ZoMa_10 Start: 8811, Stop: 9167, Start Num: 18

Candidate Starts for ZoMa_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),

Gene: ZoeJ_11 Start: 7310, Stop: 7669, Start Num: 20

Candidate Starts for ZoeJ_11:

(Start: 20 @7310 has 27 MA's), (25, 7334), (26, 7349), (30, 7370), (34, 7412), (36, 7421), (38, 7433), (48, 7490), (55, 7529), (63, 7559), (68, 7619), (69, 7625), (70, 7634),

Gene: Zombie_10 Start: 8808, Stop: 9167, Start Num: 17

Candidate Starts for Zombie_10:

(6, 8745), (Start: 8 @8751 has 2 MA's), (15, 8802), (Start: 17 @8808 has 19 MA's), (Start: 18 @8811 has 191 MA's), (24, 8841), (47, 9000), (48, 9003), (64, 9084), (69, 9138),