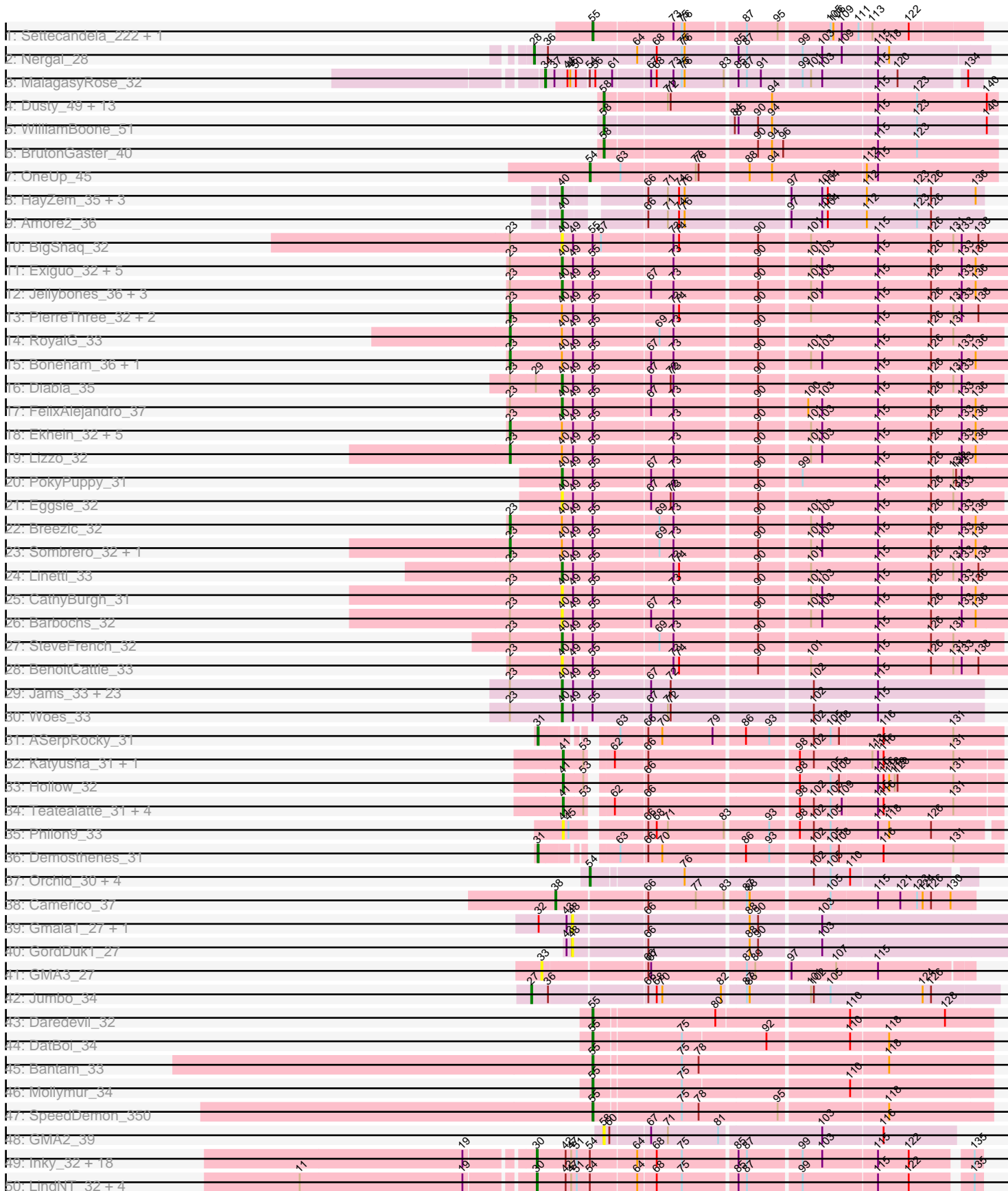
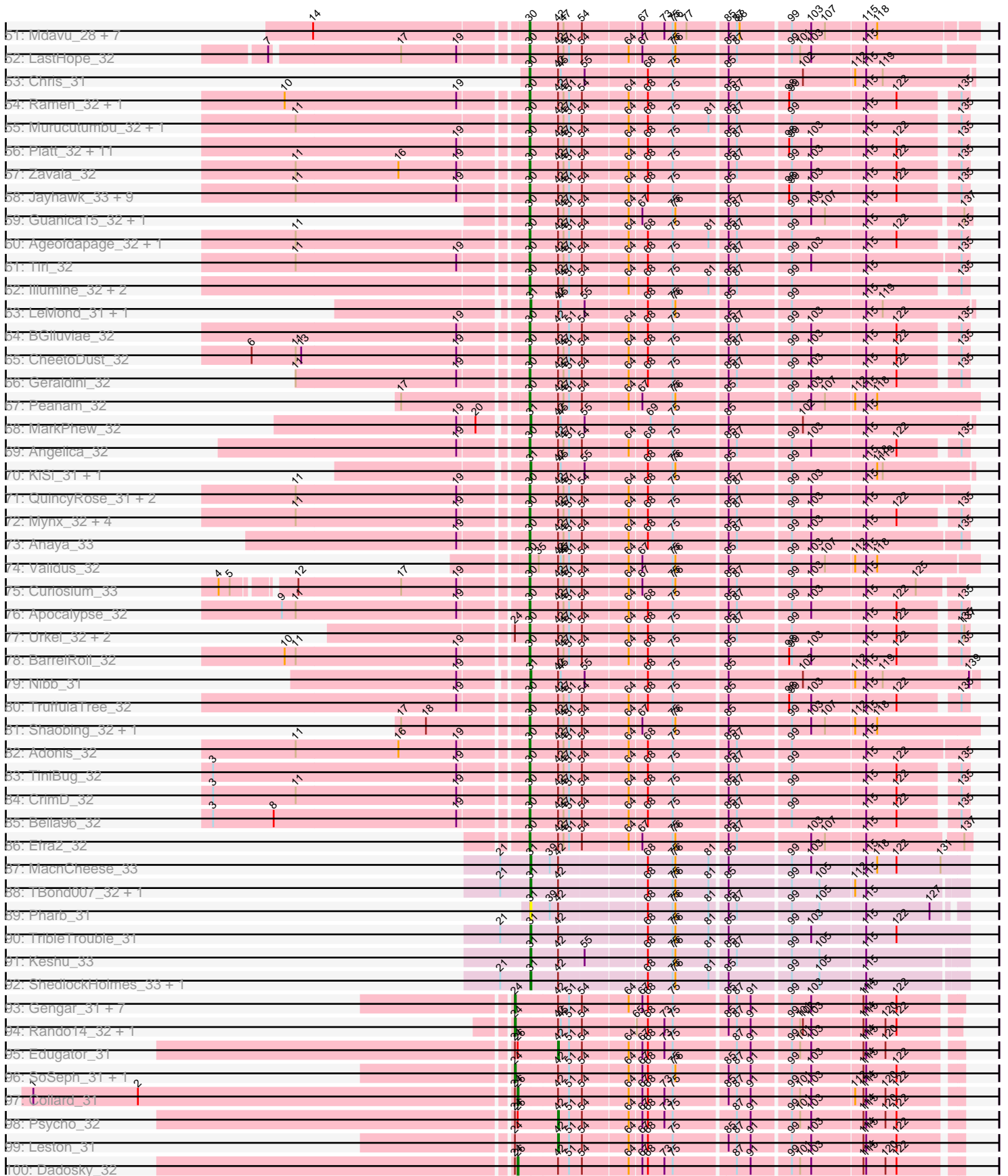


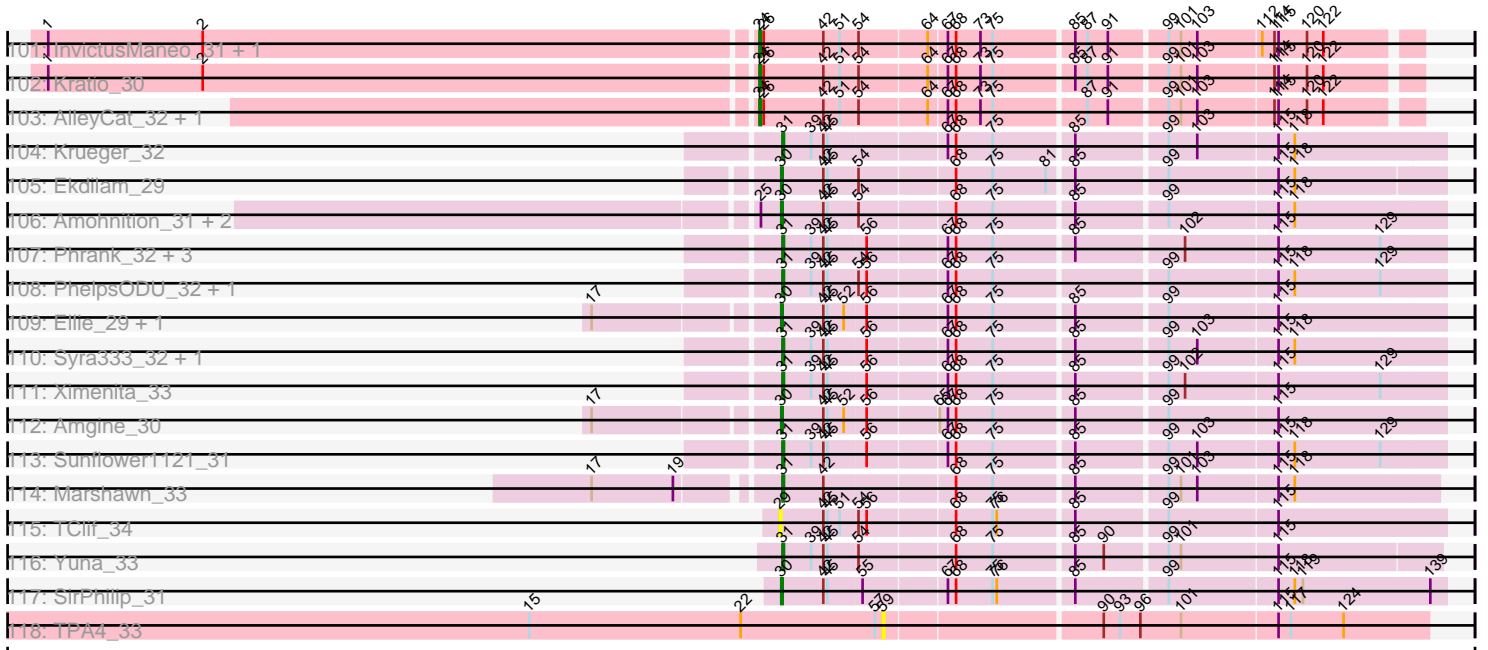
Pham 156060



Pham 156060



Pham 156060



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 156060 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156060 has 272 members, 34 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_222, Phrappuccino_197
- Track 2 : Nergal_28
- Track 3 : MalagasyRose_32
- Track 4 : Dusty_49, Lozinak_52, ClubL_51, Bachita_53, Engineer_53, Miskis_53, Norvs_52, PhinkBoden_51, Abscondus_50, Cucurbita_53, Aphelion_51, Culver_51, Smoothie_53, Toniann_51
- Track 5 : WilliamBoone_51
- Track 6 : BrutonGaster_40
- Track 7 : OneUp_45
- Track 8 : HayZem_35, GMA7_26, GTE7_26, Austin_36
- Track 9 : Amore2_36
- Track 10 : BigShaq_32
- Track 11 : Exiguo_32, RemRem_33, Beaver_36, John316_36, Squibbles_31, Monty_31
- Track 12 : Jellybones_36, Butterball_36, Msay19_37, Poland_39
- Track 13 : PierreThree_32, Chelms_32, Dakiti_32
- Track 14 : RoyalG_33
- Track 15 : Boneham_36, BirksAndSocks_36
- Track 16 : Diabla_35
- Track 17 : FelixAlejandro_37
- Track 18 : Ekhein_32, GourdThymes_32, Hotorobo_32, Flakey_32, Sam12_32, Gorko_32
- Track 19 : Lizzo_32
- Track 20 : PokyPuppy_31
- Track 21 : Eggsie_32
- Track 22 : Breezic_32
- Track 23 : Sombrero_32, Adgers_33
- Track 24 : Linetti_33
- Track 25 : CathyBurgh_31
- Track 26 : Barbochs_32
- Track 27 : SteveFrench_32
- Track 28 : BenoitCattle_33
- Track 29 : Jams_33, Luker_34, Teal_33, GalacticEye_33, Sticker17_33, Nimi13_33, Minos_34, Harambe_33, Lahirium_33, Anamika_33, Hail2Pitt_33, Neoevie_33, Guillaume_33, Newt_34, Hello_33, Shelley_33, Berries_34, Charianelly_33, Bianmat_33, Damp_33, MrWormie_33, Jormungandr_33, Kaseim_34, Lidong_33
- Track 30 : Woes_33

- Track 31 : ASerpRocky_31
- Track 32 : Katyusha_31, Benczkowski14_31
- Track 33 : Hollow_32
- Track 34 : Teatealatte_31, Tredge_31, Kvothe_31, Niagara_31, Teech_31
- Track 35 : Philon9_33
- Track 36 : Demosthenes_31
- Track 37 : Orchid_30, Gibbles_29, Kampe_30, PatrickStar_30, RobinSparkles_33
- Track 38 : Camerico_37
- Track 39 : Gmala1_27, GordTnk2_27
- Track 40 : GordDuk1_27
- Track 41 : GMA3_27
- Track 42 : Jumbo_34
- Track 43 : Daredevil_32
- Track 44 : DatBoi_34
- Track 45 : Bantam_33
- Track 46 : Mollymur_34
- Track 47 : SpeedDemon_350
- Track 48 : GMA2_39
- Track 49 : Inky_32, Jarvi_32, Deby_32, Joy99_32, Belladonna_32, Peel_32, Capricorn_32, CREW_32, Topper_32, Dalmuri_32, Twitch_32, Jeckyll_32, AlishaPH_32, Spock_32, Rosmarinus_32, Lunahalos_32, Llorens_32, Sulley_32, YoureAdopted_31
- Track 50 : LindNT_32, TaiwanKao_33, TreyKay_32, Prithvi_32, Megsy_33
- Track 51 : Mdavu_28, Enkosi_28, Binglebops_28, Amelie_28, Nikao_28, SgtBeansprout_28, LilPharaoh_28, Nutello_28
- Track 52 : LastHope_32
- Track 53 : Chris_31
- Track 54 : Ramen_32, JAWS_32
- Track 55 : Murucutumbu_32, LaterM_32
- Track 56 : Piatt_32, Padfoot_32, BaghaKamala_32, BEEST_32, Asayake_32, Blizzard_32, ShiaSurprise_32, CaseJules_32, Durfee_32, Boiiii_32, Hyperbowlee_32, Homura_32
- Track 57 : Zavala_32
- Track 58 : Jayhawk_33, Rapunzel97_32, Slimphazie_32, Adephagia_32, Tachez_32, Zabiza_33, ActinUp_32, Veliki_32, HedwigODU_32, Atiba_32
- Track 59 : Guanica15_32, Yunkel11_32
- Track 60 : Ageofdapage_32, Stinson_33
- Track 61 : Tiri_32
- Track 62 : Illumine_32, Dole_32, Devera_32
- Track 63 : LeMond_31, Oscar_31
- Track 64 : BGlluviae_32
- Track 65 : CheetoDust_32
- Track 66 : Geraldini_32
- Track 67 : Peanam_32
- Track 68 : MarkPhew_32
- Track 69 : Angelica_32
- Track 70 : KiSi_31, Scarlett_31
- Track 71 : QuincyRose_31, Ganymede_33, MeaningOfLife_32
- Track 72 : Mynx_32, Emerson_32, Beezoo_32, Pokerus_31, Padpat_32
- Track 73 : Anaya_33
- Track 74 : Validus_32
- Track 75 : Curiosium_33
- Track 76 : Apocalypse_32

- Track 77 : Urkel_32, SamuelLPlaqson_32, DrHayes_32
- Track 78 : BarrelRoll_32
- Track 79 : Nibb_31
- Track 80 : TruffulaTree_32
- Track 81 : Shaobing_32, Niklas_32
- Track 82 : Adonis_32
- Track 83 : TiniBug_32
- Track 84 : CrimD_32
- Track 85 : Bella96_32
- Track 86 : Efra2_32
- Track 87 : MacnCheese_33
- Track 88 : TBond007_32, Pixie_32
- Track 89 : Pharb_31
- Track 90 : TribbleTrouble_31
- Track 91 : Keshu_33
- Track 92 : ShedlockHolmes_33, Hurricane_33
- Track 93 : Gengar_31, Paola_31, OkiRoe_31, Waterfoul_31, Thyatira_31, Miryou_31, Feyre_31, Guillsminger_31
- Track 94 : Rando14_32, Omnicron_32
- Track 95 : Edugator_31
- Track 96 : SoSeph_31, Heftyboy_31
- Track 97 : Collard_31
- Track 98 : Psycho_32
- Track 99 : Leston_31
- Track 100 : Dadosky_32
- Track 101 : InvictusManeo_31, Agent47_31
- Track 102 : Kratio_30
- Track 103 : AlleyCat_32, Larva_32
- Track 104 : Krueger_32
- Track 105 : Ekdilam_29
- Track 106 : Amohnition_31, DARTH_P_31, Hammy_31
- Track 107 : Phrank_32, Bryler_32, Tierra_32, Cain_32
- Track 108 : PhelpsODU_32, Unicorn_32
- Track 109 : Ellie_29, Fefferhead_31
- Track 110 : Syra333_32, Shadow1_31
- Track 111 : Ximenita_33
- Track 112 : Amgine_30
- Track 113 : Sunflower1121_31
- Track 114 : Marshawn_33
- Track 115 : TClif_34
- Track 116 : Yuna_33
- Track 117 : SirPhilip_31
- Track 118 : TPA4_33

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

The start number called the most often in the published annotations is 30, it was called in 101 of the 238 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_32, Adephegia_32, Adonis_32, Ageofdapage_32, AlishaPH_32, Amelie_28, Amgine_30, Amohntion_31, Anaya_33, Angelica_32, Apocalypse_32, Asayake_32, Atiba_32, BEEST_32, BGIlluviae_32, BaghaKamala_32, BarrelRoll_32, Beezoo_32, Bella96_32, Belladonna_32, Biglebops_28, Blizzard_32, Boiii_32, CREW_32, Capricorn_32, CaseJules_32, CheetoDust_32, Chris_31, CrimD_32, Curiosium_33, Dalmuri_32, DarthP_31, Deby_32, Devera_32, Dole_32, DrHayes_32, Durfee_32, Efra2_32, Ekdilam_29, Ellie_29, Emerson_32, Enkosi_28, Fefferhead_31, Ganymede_33, Geraldini_32, Guanica15_32, Hammy_31, HedwigODU_32, Homura_32, Hyperbowlee_32, Illumine_32, Inky_32, JAWS_32, Jarvi_32, Jayhawk_33, Jeckyll_32, Joy99_32, LastHope_32, LaterM_32, LilPharaoh_28, LindNT_32, Llorens_32, Lunahalos_32, Mdavu_28, MeaningOfLife_32, Megsy_33, Murucutumbu_32, Mynx_32, Nikao_28, Niklas_32, Nutello_28, Padfoot_32, Padpat_32, Peanam_32, Peel_32, Piatt_32, Pokerus_31, Prithvi_32, QuincyRose_31, Ramen_32, Rapunzel97_32, Rosmarinus_32, SamuelLPlaqson_32, SgtBeansprout_28, Shaobing_32, ShiaSurprise_32, SirPhilip_31, Slimphazie_32, Spock_32, Stinson_33, Sulley_32, Tachez_32, TaiwanKao_33, TiniBug_32, Tiri_32, Topper_32, TreyKay_32, TruffulaTree_32, Twitch_32, Urkel_32, Validus_32, Veliki_32, YoureAdopted_31, Yunkel11_32, Zabiza_33, Zavala_32,

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

-

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

- ASerpRocky_31, Abscondus_50, Adgers_33, Agent47_31, AlleyCat_32, Amore2_36, Anamika_33, Aphelion_51, Austin_36, Bachita_53, Bantam_33, Barbochs_32, Beaver_36, Benczkowski14_31, BenoitCattle_33, Berries_34, Bianmat_33, BigShaq_32, BirksAndSocks_36, Boneham_36, Breezic_32, BrutonGaster_40, Bryler_32, Butterball_36, Cain_32, Camerico_37, CathyBurgh_31, Charianelly_33, Chelms_32, ClubL_51, Collard_31, Cucurbita_53, Culver_51, Dadosky_32, Dakiti_32, Damp_33, Daredevil_32, DatBoi_34, Demosthenes_31, Diabla_35, Dusty_49, Edugator_31, Eggsie_32, Ekhein_32, Engineer_53, Exiguo_32, FelixAlejandro_37, Feyre_31, Flakey_32, GMA2_39, GMA3_27, GMA7_26, GTE7_26, GalacticEye_33, Gengar_31, Gibbles_29, Gmala1_27, GordDuk1_27, GordTnk2_27, Gorko_32, GourdThymes_32, Guillaume_33, Guillsminger_31, Hail2Pitt_33, Harambe_33, HayZem_35, Heftyboy_31, Hello_33, Hollow_32, Hotorobo_32, Hurricane_33, InvictusManeo_31, Jams_33, Jellybones_36, John316_36, Jormungandr_33, Jumbo_34, Kampe_30, Kaseim_34, Katyusha_31, Keshu_33, KiSi_31, Kratio_30, Krueger_32, Kvothe_31, Lahirium_33, Larva_32, LeMond_31, Leston_31, Lidong_33, Linetti_33, Lizzo_32, Lozinak_52, Luker_34, MacnCheese_33, MalagasyRose_32, MarkPhew_32, Marshawn_33, Minos_34, Miryou_31, Miskis_53, Mollymur_34, Monty_31, MrWormie_33, Msay19_37, Neevie_33, Nergal_28, Newt_34, Niagara_31, Nibb_31, Nimi13_33, Norvs_52, OkiRoe_31, Omnicron_32, OneUp_45, Orchid_30, Oscar_31, Paola_31, PatrickStar_30, Pharb_31, PhelpsODU_32, Philon9_33, PhinkBoden_51, Phrank_32, Phrappuccino_197, PierreThree_32, Pixie_32, PokyPuppy_31, Poland_39, Psycho_32, Rando14_32, RemRem_33, RobinSparkles_33, RoyalG_33, Sam12_32, Scarlett_31, Settecandela_222, Shadow1_31, ShedlockHolmes_33, Shelley_33, Smoothie_53, SoSeph_31, Sombrero_32, SpeedDemon_350, Squibbles_31, SteveFrench_32, Sticker17_33, Sunflower1121_31, Syra333_32, TBond007_32, TClif_34, TPA4_33, Teal_33, Teatealatte_31, Teech_31, Thyatira_31, Tierra_32, Toniann_51, Tredge_31, TribbleTrouble_31, Unicorn_32, Waterfoul_31, WilliamBoone_51, Woes_33, Ximenita_33, Yuna_33,

Summary by start number:

Start 23:

- Found in 59 of 272 (21.7%) of genes in pham
- Manual Annotations of this start: 16 of 238
- Called 27.1% of time when present
- Phage (with cluster) where this start called: Adgers_33 (CS2), BirksAndSocks_36 (CS2), Boneham_36 (CS2), Breezic_32 (CS2), Chelms_32 (CS2), Dakiti_32 (CS2), Ekhein_32 (CS2), Flakey_32 (CS2), Gorko_32 (CS2), GourdThymes_32 (CS2), Hotorobo_32 (CS2), Lizzo_32 (CS2), PierreThree_32 (CS2), RoyalG_33 (CS2), Sam12_32 (CS2), Sombrero_32 (CS2),

Start 24:

- Found in 25 of 272 (9.2%) of genes in pham
- Manual Annotations of this start: 15 of 238
- Called 68.0% of time when present
- Phage (with cluster) where this start called: Agent47_31 (K5), AlleyCat_32 (K5), Feyre_31 (K5), Gengar_31 (K5), Guillsminger_31 (K5), Heftyboy_31 (K5), InvictusManeo_31 (K5), Kratio_30 (K5), Larva_32 (K5), Miryou_31 (K5), OkiRoe_31 (K5), Omnicron_32 (K5), Paola_31 (K5), Rando14_32 (K5), SoSeph_31 (K5), Thyatira_31 (K5), Waterfoul_31 (K5),

Start 26:

- Found in 9 of 272 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 238
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Collard_31 (K5), Dadosky_32 (K5),

Start 27:

- Found in 1 of 272 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo_34 (DF3),

Start 28:

- Found in 1 of 272 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_28 (AG),

Start 29:

- Found in 2 of 272 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TClif_34 (K6),

Start 30:

- Found in 106 of 272 (39.0%) of genes in pham
- Manual Annotations of this start: 101 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ActinUp_32 (K1), Adephegia_32 (K1), Adonis_32 (K1), Ageofdapage_32 (K1), AlishaPH_32 (K1), Amelie_28 (K1), Amgine_30 (K6), Amohnition_31 (K6), Anaya_33 (K1), Angelica_32 (K1),

Apocalypse_32 (K1), Asayake_32 (K1), Atiba_32 (K1), BEEST_32 (K1), BGIlluviae_32 (K1), BaghaKamala_32 (K1), BarrelRoll_32 (K1), Beezoo_32 (K1), Bella96_32 (K1), Belladonna_32 (K1), Binglebops_28 (K1), Blizzard_32 (K1), Boiiii_32 (K1), CREW_32 (K1), Capricorn_32 (K1), CaseJules_32 (K1), CheetoDust_32 (K1), Chris_31 (K1), CrimD_32 (K1), Curiosium_33 (K1), Dalmuri_32 (K1), DarthP_31 (K6), Deby_32 (K1), Devera_32 (K1), Dole_32 (K1), DrHayes_32 (K1), Durfee_32 (K1), Efra2_32 (K1), Ekdilam_29 (K6), Ellie_29 (K6), Emerson_32 (K1), Enkosi_28 (K1), Fefferhead_31 (K6), Ganymede_33 (K1), Geraldini_32 (K1), Guanica15_32 (K1), Hammy_31 (K6), HedwigODU_32 (K1), Homura_32 (K1), Hyperbowlee_32 (K1), Illumine_32 (K1), Inky_32 (K1), JAWS_32 (K1), Jarvi_32 (K1), Jayhawk_33 (K1), Jeckyll_32 (K1), Joy99_32 (K1), LastHope_32 (K1), LaterM_32 (K1), LilPharaoh_28 (K1), LindNT_32 (K1), Llorens_32 (K1), Lunahalos_32 (K1), Mdavu_28 (K1), MeaningOfLife_32 (K1), Megsy_33 (K1), Murucutumbu_32 (K1), Mynx_32 (K1), Nikao_28 (K1), Niklas_32 (K1), Nutello_28 (K1), Padfoot_32 (K1), Padpat_32 (K1), Peanam_32 (K1), Peel_32 (K1), Piatt_32 (K1), Pokerus_31 (K1), Prithvi_32 (K1), QuincyRose_31 (K1), Ramen_32 (K1), Rapunzel97_32 (K1), Rosmarinus_32 (K1), SamuelLPlaqson_32 (K1), SgtBeansprout_28 (K1), Shaobing_32 (K1), ShiaSurprise_32 (K1), SirPhilip_31 (K6), Slimphazie_32 (K1), Spock_32 (K1), Stinson_33 (K1), Sulley_32 (K1), Tachez_32 (K1), TaiwanKao_33 (K1), TiniBug_32 (K1), Tiri_32 (K1), Topper_32 (K1), TreyKay_32 (K1), TruffulaTree_32 (K1), Twitch_32 (K1), Urkel_32 (K1), Validus_32 (K1), Veliki_32 (K1), YoureAdopted_31 (K1), Yunkel11_32 (K1), Zabiza_33 (K1), Zavala_32 (K1),

Start 31:

- Found in 29 of 272 (10.7%) of genes in pham
- Manual Annotations of this start: 28 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_31 (CS4), Bryler_32 (K6), Cain_32 (K6), Demosthenes_31 (CS4), Hurricane_33 (K3), Keshu_33 (K3), KiSi_31 (K1), Krueger_32 (K6), LeMond_31 (K1), MacnCheese_33 (K3), MarkPhew_32 (K1), Marshawn_33 (K6), Nibb_31 (K1), Oscar_31 (K1), Pharb_31 (K3), PhelpsODU_32 (K6), Phrank_32 (K6), Pixie_32 (K3), Scarlett_31 (K1), Shadow1_31 (K6), ShedlockHolmes_33 (K3), Sunflower1121_31 (K6), Syra333_32 (K6), TBond007_32 (K3), Tierra_32 (K6), TribbleTrouble_31 (K3), Unicorn_32 (K6), Ximenita_33 (K6), Yuna_33 (K6),

Start 33:

- Found in 1 of 272 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA3_27 (DF2),

Start 34:

- Found in 1 of 272 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_32 (AG),

Start 38:

- Found in 1 of 272 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camerico_37 (DF),

Start 40:

- Found in 66 of 272 (24.3%) of genes in pham
- Manual Annotations of this start: 36 of 238
- Called 75.8% of time when present
- Phage (with cluster) where this start called: Amore2_36 (CS1), Anamika_33 (CS3), Austin_36 (CS1), Barbochs_32 (CS2), Beaver_36 (CS2), BenoitCattle_33 (CS2), Berries_34 (CS3), Bianmat_33 (CS3), BigShaq_32 (CS2), Butterball_36 (CS2), CathyBurgh_31 (CS2), Charianelly_33 (CS3), Damp_33 (CS3), Diabla_35 (CS2), Eggsie_32 (CS2), Exiguo_32 (CS2), FelixAlejandro_37 (CS2), GMA7_26 (CS1), GTE7_26 (CS1), GalacticEye_33 (CS3), Guillaume_33 (CS3), Hail2Pitt_33 (CS3), Harambe_33 (CS3), HayZem_35 (CS1), Hello_33 (CS3), Jams_33 (CS3), Jellybones_36 (CS2), John316_36 (CS2), Jormungandr_33 (CS3), Kaseim_34 (CS3), Lahirium_33 (CS3), Lidong_33 (CS3), Linetti_33 (CS2), Luker_34 (CS3), Minos_34 (CS3), Monty_31 (CS2), MrWormie_33 (CS3), Msay19_37 (CS2), Neoevie_33 (CS3), Newt_34 (CS3), Nimi13_33 (CS3), PokyPuppy_31 (CS2), Poland_39 (CS2), RemRem_33 (CS2), Shelley_33 (CS3), Squibbles_31 (CS2), SteveFrench_32 (CS2), Sticker17_33 (CS3), Teal_33 (CS3), Woes_33 (CS3),

Start 41:

- Found in 9 of 272 (3.3%) of genes in pham
- Manual Annotations of this start: 7 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benczkowski14_31 (CS4), Hollow_32 (CS4), Katyusha_31 (CS4), Kvothe_31 (CS4), Niagara_31 (CS4), Philon9_33 (CS4), Teatealatte_31 (CS4), Teech_31 (CS4), Tredge_31 (CS4),

Start 42:

- Found in 156 of 272 (57.4%) of genes in pham
- Manual Annotations of this start: 3 of 238
- Called 1.9% of time when present
- Phage (with cluster) where this start called: Edugator_31 (K5), Leston_31 (K5), Psycho_32 (K5),

Start 48:

- Found in 3 of 272 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gmala1_27 (DF1), GordDuk1_27 (DF1), GordTnk2_27 (DF1),

Start 54:

- Found in 134 of 272 (49.3%) of genes in pham
- Manual Annotations of this start: 6 of 238
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Gibbles_29 (CX), Kampe_30 (CX), OneUp_45 (CQ2), Orchid_30 (CX), PatrickStar_30 (CX), RobinSparkles_33 (CX),

Start 55:

- Found in 77 of 272 (28.3%) of genes in pham
- Manual Annotations of this start: 7 of 238
- Called 9.1% of time when present

- Phage (with cluster) where this start called: Bantam_33 (DL), Daredevil_32 (DL), DatBoi_34 (DL), Mollymur_34 (DL), Phrappuccino_197 (AA), Settecandela_222 (AA), SpeedDemon_350 (DL),

Start 58:

- Found in 17 of 272 (6.2%) of genes in pham
- Manual Annotations of this start: 13 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_50 (CQ), Aphelion_51 (CQ1), Bachita_53 (CQ1), BrutonGaster_40 (CQ2), ClubL_51 (CQ1), Cucurbita_53 (CQ1), Culver_51 (CQ1), Dusty_49 (CQ), Engineer_53 (CQ1), GMA2_39 (DS), Lozinak_52 (CQ1), Miskis_53 (CQ), Norvs_52 (CQ), PhinkBoden_51 (CQ1), Smoothie_53 (CQ1), Toniann_51 (CQ1), WilliamBoone_51 (CQ1),

Start 59:

- Found in 1 of 272 (0.4%) 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_33 (singleton),

Summary by clusters:

There are 21 clusters represented in this pham: AA, DL, CQ1, AG, DF, DF1, singleton, DF3, DF2, K3, K1, CX, K6, K5, CQ2, CS4, CQ, CS1, DS, CS3, CS2,

Info for manual annotations of cluster AA:

- Start number 55 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:

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

Info for manual annotations of cluster CQ:

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

Info for manual annotations of cluster CQ1:

- Start number 58 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 54 was manually annotated 1 time for cluster CQ2.
- Start number 58 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CS1:

- Start number 40 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 23 was manually annotated 16 times for cluster CS2.
- Start number 40 was manually annotated 13 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 40 was manually annotated 21 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 31 was manually annotated 2 times for cluster CS4.
- Start number 41 was manually annotated 7 times for cluster CS4.

Info for manual annotations of cluster CX:

- Start number 54 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DF:

- Start number 38 was manually annotated 1 time for cluster DF.

Info for manual annotations of cluster DF3:

- Start number 27 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DL:

- Start number 55 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster K1:

- Start number 30 was manually annotated 93 times for cluster K1.
- Start number 31 was manually annotated 6 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 31 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K5:

- Start number 24 was manually annotated 15 times for cluster K5.
- Start number 26 was manually annotated 2 times for cluster K5.
- Start number 42 was manually annotated 3 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 30 was manually annotated 8 times for cluster K6.
- Start number 31 was manually annotated 13 times for cluster K6.

Gene Information:

Gene: ASerpRocky_31 Start: 39045, Stop: 39497, Start Num: 31

Candidate Starts for ASerpRocky_31:

(Start: 31 @39045 has 28 MA's), (63, 39105), (66, 39132), (70, 39147), (79, 39201), (86, 39231), (93, 39255), (102, 39297), (105, 39315), (108, 39324), (116, 39369), (131, 39444),

Gene: Abscondus_50 Start: 32639, Stop: 33046, Start Num: 58

Candidate Starts for Abscondus_50:

(Start: 58 @32639 has 13 MA's), (71, 32702), (72, 32705), (94, 32807), (115, 32918), (123, 32960), (140, 33035),

Gene: ActinUp_32 Start: 27346, Stop: 27786, Start Num: 30

Candidate Starts for ActinUp_32:

(11, 27109), (19, 27283), (Start: 30 @27346 has 101 MA's), (Start: 42 @27376 has 3 MA's), (47, 27382), (51, 27388), (Start: 54 @27400 has 6 MA's), (64, 27448), (68, 27466), (75, 27493), (85, 27547), (98, 27607), (99, 27610), (103, 27631), (115, 27688), (122, 27721), (135, 27778),

Gene: Adephagia_32 Start: 27343, Stop: 27783, Start Num: 30

Candidate Starts for Adephagia_32:

(11, 27106), (19, 27280), (Start: 30 @27343 has 101 MA's), (Start: 42 @27373 has 3 MA's), (47, 27379), (51, 27385), (Start: 54 @27397 has 6 MA's), (64, 27445), (68, 27463), (75, 27490), (85, 27544), (98, 27604), (99, 27607), (103, 27628), (115, 27685), (122, 27718), (135, 27775),

Gene: Adgers_33 Start: 37508, Stop: 38029, Start Num: 23

Candidate Starts for Adgers_33:

(Start: 23 @37508 has 16 MA's), (Start: 40 @37562 has 36 MA's), (49, 37574), (Start: 55 @37595 has 7 MA's), (69, 37664), (73, 37679), (90, 37763), (101, 37814), (103, 37826), (115, 37886), (126, 37943), (133, 37976), (136, 37991),

Gene: Adonis_32 Start: 27349, Stop: 27798, Start Num: 30

Candidate Starts for Adonis_32:

(11, 27112), (16, 27223), (19, 27286), (Start: 30 @27349 has 101 MA's), (Start: 42 @27379 has 3 MA's), (47, 27385), (51, 27391), (Start: 54 @27403 has 6 MA's), (64, 27451), (68, 27469), (75, 27496), (85, 27550), (87, 27559), (99, 27613), (115, 27691),

Gene: Agent47_31 Start: 27985, Stop: 28437, Start Num: 24

Candidate Starts for Agent47_31:

(1, 27472), (2, 27586), (Start: 24 @27985 has 15 MA's), (Start: 26 @27988 has 2 MA's), (Start: 42 @28030 has 3 MA's), (51, 28042), (Start: 54 @28054 has 6 MA's), (64, 28102), (67, 28114), (68, 28120), (73, 28138), (75, 28147), (85, 28201), (87, 28210), (91, 28225), (99, 28264), (101, 28273), (103, 28285), (112, 28330), (114, 28339), (115, 28342), (120, 28363), (122, 28375),

Gene: Ageofdapage_32 Start: 27286, Stop: 27726, Start Num: 30

Candidate Starts for Ageofdapage_32:

(11, 27049), (Start: 30 @27286 has 101 MA's), (Start: 42 @27316 has 3 MA's), (47, 27322), (51, 27328), (Start: 54 @27340 has 6 MA's), (64, 27388), (68, 27406), (75, 27433), (81, 27472), (85, 27487), (87, 27496), (99, 27550), (115, 27628), (122, 27661), (135, 27718),

Gene: AlishaPH_32 Start: 27336, Stop: 27776, Start Num: 30

Candidate Starts for AlishaPH_32:

(19, 27273), (Start: 30 @27336 has 101 MA's), (Start: 42 @27366 has 3 MA's), (47, 27372), (51, 27378), (Start: 54 @27390 has 6 MA's), (64, 27438), (68, 27456), (75, 27483), (85, 27537), (87, 27546), (99, 27600), (103, 27621), (115, 27678), (122, 27711), (135, 27768),

Gene: AlleyCat_32 Start: 27916, Stop: 28368, Start Num: 24

Candidate Starts for AlleyCat_32:

(Start: 24 @27916 has 15 MA's), (Start: 26 @27919 has 2 MA's), (Start: 42 @27961 has 3 MA's), (51, 27973), (Start: 54 @27985 has 6 MA's), (64, 28033), (67, 28045), (68, 28051), (73, 28069), (75, 28078), (87, 28141), (91, 28156), (99, 28195), (101, 28204), (103, 28216), (114, 28270), (115, 28273), (120, 28294), (122, 28306),

Gene: Amelie_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for Amelie_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: Amgine_30 Start: 27287, Stop: 27751, Start Num: 30

Candidate Starts for Amgine_30:

(17, 27164), (Start: 30 @27287 has 101 MA's), (Start: 42 @27317 has 3 MA's), (45, 27320), (52, 27332), (56, 27347), (65, 27395), (67, 27401), (68, 27407), (75, 27434), (85, 27488), (99, 27551), (115, 27629),

Gene: Amohnition_31 Start: 27721, Stop: 28185, Start Num: 30

Candidate Starts for Amohnition_31:

(25, 27706), (Start: 30 @27721 has 101 MA's), (Start: 42 @27751 has 3 MA's), (45, 27754), (Start: 54 @27775 has 6 MA's), (68, 27841), (75, 27868), (85, 27922), (99, 27985), (115, 28063), (118, 28075),

Gene: Amore2_36 Start: 38215, Stop: 38634, Start Num: 40

Candidate Starts for Amore2_36:

(Start: 40 @38215 has 36 MA's), (66, 38287), (71, 38308), (74, 38320), (76, 38326), (97, 38428), (103, 38461), (104, 38467), (112, 38509), (123, 38563), (126, 38578),

Gene: Anamika_33 Start: 39971, Stop: 40408, Start Num: 40

Candidate Starts for Anamika_33:

(Start: 23 @39917 has 16 MA's), (Start: 40 @39971 has 36 MA's), (49, 39983), (Start: 55 @40004 has 7 MA's), (67, 40064), (72, 40085), (102, 40226), (115, 40295),

Gene: Anaya_33 Start: 27362, Stop: 27811, Start Num: 30

Candidate Starts for Anaya_33:

(19, 27299), (Start: 30 @27362 has 101 MA's), (Start: 42 @27392 has 3 MA's), (47, 27398), (51, 27404), (Start: 54 @27416 has 6 MA's), (64, 27464), (68, 27482), (75, 27509), (85, 27563), (87, 27572), (99, 27626), (103, 27647), (115, 27704), (135, 27803),

Gene: Angelica_32 Start: 27293, Stop: 27733, Start Num: 30

Candidate Starts for Angelica_32:

(19, 27230), (Start: 30 @27293 has 101 MA's), (Start: 42 @27323 has 3 MA's), (47, 27329), (51, 27335), (Start: 54 @27347 has 6 MA's), (64, 27395), (68, 27413), (75, 27440), (85, 27494), (87, 27503), (99, 27557), (103, 27578), (115, 27635), (122, 27668), (135, 27725),

Gene: Aphelion_51 Start: 32908, Stop: 33315, Start Num: 58

Candidate Starts for Aphelion_51:

(Start: 58 @32908 has 13 MA's), (71, 32971), (72, 32974), (94, 33076), (115, 33187), (123, 33229), (140, 33304),

Gene: Apocalypse_32 Start: 27314, Stop: 27754, Start Num: 30

Candidate Starts for Apocalypse_32:

(9, 27062), (11, 27077), (19, 27251), (Start: 30 @27314 has 101 MA's), (Start: 42 @27344 has 3 MA's), (47, 27350), (51, 27356), (Start: 54 @27368 has 6 MA's), (64, 27416), (68, 27434), (75, 27461), (85, 27515), (87, 27524), (99, 27578), (103, 27599), (115, 27656), (122, 27689), (135, 27746),

Gene: Asayake_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Asayake_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Atiba_32 Start: 27306, Stop: 27746, Start Num: 30

Candidate Starts for Atiba_32:

(11, 27069), (19, 27243), (Start: 30 @27306 has 101 MA's), (Start: 42 @27336 has 3 MA's), (47, 27342), (51, 27348), (Start: 54 @27360 has 6 MA's), (64, 27408), (68, 27426), (75, 27453), (85, 27507), (98, 27567), (99, 27570), (103, 27591), (115, 27648), (122, 27681), (135, 27738),

Gene: Austin_36 Start: 38215, Stop: 38634, Start Num: 40

Candidate Starts for Austin_36:

(Start: 40 @38215 has 36 MA's), (66, 38287), (71, 38308), (74, 38320), (76, 38326), (97, 38428), (103, 38461), (104, 38467), (112, 38509), (123, 38563), (126, 38578), (136, 38626),

Gene: BEEST_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for BEEST_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: BGlluviae_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for BGlluviae_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Bachita_53 Start: 33341, Stop: 33748, Start Num: 58

Candidate Starts for Bachita_53:

(Start: 58 @33341 has 13 MA's), (71, 33404), (72, 33407), (94, 33509), (115, 33620), (123, 33662), (140, 33737),

Gene: BaghaKamala_32 Start: 27306, Stop: 27746, Start Num: 30

Candidate Starts for BaghaKamala_32:

(19, 27243), (Start: 30 @27306 has 101 MA's), (Start: 42 @27336 has 3 MA's), (47, 27342), (51, 27348), (Start: 54 @27360 has 6 MA's), (64, 27408), (68, 27426), (75, 27453), (85, 27507), (87, 27516), (98, 27567), (99, 27570), (103, 27591), (115, 27648), (122, 27681), (135, 27738),

Gene: Bantam_33 Start: 30576, Stop: 30989, Start Num: 55

Candidate Starts for Bantam_33:

(Start: 55 @30576 has 7 MA's), (75, 30666), (78, 30684), (118, 30879),

Gene: Barbochs_32 Start: 37400, Stop: 37867, Start Num: 40

Candidate Starts for Barbochs_32:

(Start: 23 @37346 has 16 MA's), (Start: 40 @37400 has 36 MA's), (49, 37412), (Start: 55 @37433 has 7 MA's), (67, 37493), (73, 37517), (90, 37601), (101, 37652), (103, 37664), (115, 37724), (126, 37781), (133, 37814), (136, 37829),

Gene: BarrelRoll_32 Start: 27329, Stop: 27769, Start Num: 30

Candidate Starts for BarrelRoll_32:

(10, 27080), (11, 27092), (19, 27266), (Start: 30 @27329 has 101 MA's), (Start: 42 @27359 has 3 MA's), (47, 27365), (51, 27371), (Start: 54 @27383 has 6 MA's), (64, 27431), (68, 27449), (75, 27476), (85, 27530), (98, 27590), (99, 27593), (103, 27614), (115, 27671), (122, 27704), (135, 27761),

Gene: Beaver_36 Start: 39448, Stop: 39915, Start Num: 40

Candidate Starts for Beaver_36:

(Start: 23 @39394 has 16 MA's), (Start: 40 @39448 has 36 MA's), (49, 39460), (Start: 55 @39481 has 7 MA's), (73, 39565), (90, 39649), (101, 39700), (103, 39712), (115, 39772), (126, 39829), (133, 39862), (136, 39877),

Gene: Beezoo_32 Start: 27354, Stop: 27794, Start Num: 30

Candidate Starts for Beezoo_32:

(11, 27117), (19, 27291), (Start: 30 @27354 has 101 MA's), (Start: 42 @27384 has 3 MA's), (47, 27390), (51, 27396), (Start: 54 @27408 has 6 MA's), (64, 27456), (68, 27474), (75, 27501), (85, 27555), (87, 27564), (99, 27618), (103, 27639), (115, 27696), (122, 27729), (135, 27786),

Gene: Bella96_32 Start: 27247, Stop: 27687, Start Num: 30

Candidate Starts for Bella96_32:

(3, 26920), (8, 26986), (19, 27184), (Start: 30 @27247 has 101 MA's), (Start: 42 @27277 has 3 MA's), (47, 27283), (51, 27289), (Start: 54 @27301 has 6 MA's), (64, 27349), (68, 27367), (75, 27394), (85, 27448), (87, 27457), (99, 27511), (115, 27589), (122, 27622), (135, 27679),

Gene: Belladonna_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Belladonna_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Benczkowski14_31 Start: 39098, Stop: 39532, Start Num: 41

Candidate Starts for Benczkowski14_31:

(Start: 41 @39098 has 7 MA's), (53, 39119), (62, 39137), (66, 39170), (98, 39320), (102, 39335), (113, 39395), (115, 39401), (116, 39407), (131, 39482),

Gene: BenoitCattle_33 Start: 37503, Stop: 37970, Start Num: 40

Candidate Starts for BenoitCattle_33:

(Start: 23 @37449 has 16 MA's), (Start: 40 @37503 has 36 MA's), (49, 37515), (Start: 55 @37536 has 7 MA's), (73, 37620), (74, 37626), (90, 37704), (101, 37755), (115, 37827), (126, 37884), (131, 37908), (133, 37917), (138, 37935),

Gene: Berries_34 Start: 39941, Stop: 40378, Start Num: 40

Candidate Starts for Berries_34:

(Start: 23 @39887 has 16 MA's), (Start: 40 @39941 has 36 MA's), (49, 39953), (Start: 55 @39974 has 7 MA's), (67, 40034), (72, 40055), (102, 40196), (115, 40265),

Gene: Bianmat_33 Start: 39981, Stop: 40418, Start Num: 40

Candidate Starts for Bianmat_33:

(Start: 23 @39927 has 16 MA's), (Start: 40 @39981 has 36 MA's), (49, 39993), (Start: 55 @40014 has 7 MA's), (67, 40074), (72, 40095), (102, 40236), (115, 40305),

Gene: BigShaq_32 Start: 37508, Stop: 37975, Start Num: 40

Candidate Starts for BigShaq_32:

(Start: 23 @37454 has 16 MA's), (Start: 40 @37508 has 36 MA's), (49, 37520), (Start: 55 @37541 has 7 MA's), (57, 37550), (73, 37625), (74, 37631), (90, 37709), (101, 37760), (115, 37832), (126, 37889), (131, 37913), (133, 37922), (138, 37940),

Gene: Biglebops_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for Biglebops_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: BirksAndSocks_36 Start: 39372, Stop: 39893, Start Num: 23

Candidate Starts for BirksAndSocks_36:

(Start: 23 @39372 has 16 MA's), (Start: 40 @39426 has 36 MA's), (49, 39438), (Start: 55 @39459 has 7 MA's), (67, 39519), (73, 39543), (90, 39627), (101, 39678), (103, 39690), (115, 39750), (126, 39807),

(133, 39840), (136, 39855),

Gene: Blizzard_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Blizzard_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Boiiii_32 Start: 27379, Stop: 27819, Start Num: 30

Candidate Starts for Boiiii_32:

(19, 27316), (Start: 30 @27379 has 101 MA's), (Start: 42 @27409 has 3 MA's), (47, 27415), (51, 27421), (Start: 54 @27433 has 6 MA's), (64, 27481), (68, 27499), (75, 27526), (85, 27580), (87, 27589), (98, 27640), (99, 27643), (103, 27664), (115, 27721), (122, 27754), (135, 27811),

Gene: Boneham_36 Start: 39371, Stop: 39892, Start Num: 23

Candidate Starts for Boneham_36:

(Start: 23 @39371 has 16 MA's), (Start: 40 @39425 has 36 MA's), (49, 39437), (Start: 55 @39458 has 7 MA's), (67, 39518), (73, 39542), (90, 39626), (101, 39677), (103, 39689), (115, 39749), (126, 39806), (133, 39839), (136, 39854),

Gene: Breezic_32 Start: 37360, Stop: 37881, Start Num: 23

Candidate Starts for Breezic_32:

(Start: 23 @37360 has 16 MA's), (Start: 40 @37414 has 36 MA's), (49, 37426), (Start: 55 @37447 has 7 MA's), (69, 37516), (73, 37531), (90, 37615), (101, 37666), (103, 37678), (115, 37738), (126, 37795), (133, 37828), (136, 37843),

Gene: BrutonGaster_40 Start: 30025, Stop: 30432, Start Num: 58

Candidate Starts for BrutonGaster_40:

(Start: 58 @30025 has 13 MA's), (90, 30178), (94, 30193), (96, 30205), (115, 30304), (123, 30346),

Gene: Bryler_32 Start: 26627, Stop: 27091, Start Num: 31

Candidate Starts for Bryler_32:

(Start: 31 @26627 has 28 MA's), (39, 26648), (Start: 42 @26657 has 3 MA's), (45, 26660), (56, 26687), (67, 26741), (68, 26747), (75, 26774), (85, 26828), (102, 26903), (115, 26969), (129, 27044),

Gene: Butterball_36 Start: 39425, Stop: 39892, Start Num: 40

Candidate Starts for Butterball_36:

(Start: 23 @39371 has 16 MA's), (Start: 40 @39425 has 36 MA's), (49, 39437), (Start: 55 @39458 has 7 MA's), (67, 39518), (73, 39542), (90, 39626), (101, 39677), (103, 39689), (115, 39749), (126, 39806), (133, 39839), (136, 39854),

Gene: CREW_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for CREW_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Cain_32 Start: 26615, Stop: 27079, Start Num: 31

Candidate Starts for Cain_32:

(Start: 31 @26615 has 28 MA's), (39, 26636), (Start: 42 @26645 has 3 MA's), (45, 26648), (56, 26675), (67, 26729), (68, 26735), (75, 26762), (85, 26816), (102, 26891), (115, 26957), (129, 27032),

Gene: Camerico_37 Start: 41920, Stop: 42348, Start Num: 38

Candidate Starts for Camerico_37:

(Start: 38 @41920 has 1 MA's), (66, 42013), (77, 42064), (83, 42094), (87, 42112), (88, 42115), (105, 42196), (115, 42244), (121, 42268), (123, 42286), (124, 42292), (126, 42301), (130, 42322),

Gene: Capricorn_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Capricorn_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: CaseJules_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for CaseJules_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: CathyBurgh_31 Start: 38268, Stop: 38735, Start Num: 40

Candidate Starts for CathyBurgh_31:

(Start: 23 @38214 has 16 MA's), (Start: 40 @38268 has 36 MA's), (49, 38280), (Start: 55 @38301 has 7 MA's), (73, 38385), (90, 38469), (101, 38520), (103, 38532), (115, 38592), (126, 38649), (133, 38682), (136, 38697),

Gene: Charianelly_33 Start: 39691, Stop: 40128, Start Num: 40

Candidate Starts for Charianelly_33:

(Start: 23 @39637 has 16 MA's), (Start: 40 @39691 has 36 MA's), (49, 39703), (Start: 55 @39724 has 7 MA's), (67, 39784), (72, 39805), (102, 39946), (115, 40015),

Gene: CheetoDust_32 Start: 27354, Stop: 27794, Start Num: 30

Candidate Starts for CheetoDust_32:

(6, 27069), (11, 27117), (13, 27123), (19, 27291), (Start: 30 @27354 has 101 MA's), (Start: 42 @27384 has 3 MA's), (47, 27390), (51, 27396), (Start: 54 @27408 has 6 MA's), (64, 27456), (68, 27474), (75, 27501), (85, 27555), (87, 27564), (99, 27618), (103, 27639), (115, 27696), (122, 27729), (135, 27786),

Gene: Chelms_32 Start: 37457, Stop: 37978, Start Num: 23

Candidate Starts for Chelms_32:

(Start: 23 @37457 has 16 MA's), (Start: 40 @37511 has 36 MA's), (49, 37523), (Start: 55 @37544 has 7 MA's), (73, 37628), (74, 37634), (90, 37712), (101, 37763), (115, 37835), (126, 37892), (131, 37916), (133, 37925), (138, 37943),

Gene: Chris_31 Start: 26496, Stop: 26951, Start Num: 30

Candidate Starts for Chris_31:

(Start: 30 @26496 has 101 MA's), (Start: 42 @26526 has 3 MA's), (45, 26529), (Start: 55 @26553 has 7 MA's), (68, 26616), (75, 26643), (85, 26697), (102, 26772), (112, 26826), (115, 26838), (119, 26856),

Gene: ClubL_51 Start: 32830, Stop: 33237, Start Num: 58

Candidate Starts for ClubL_51:

(Start: 58 @32830 has 13 MA's), (71, 32893), (72, 32896), (94, 32998), (115, 33109), (123, 33151), (140, 33226),

Gene: Collard_31 Start: 27949, Stop: 28398, Start Num: 26

Candidate Starts for Collard_31:

(1, 27433), (2, 27547), (Start: 24 @27946 has 15 MA's), (Start: 26 @27949 has 2 MA's), (Start: 42 @27991 has 3 MA's), (51, 28003), (Start: 54 @28015 has 6 MA's), (64, 28063), (67, 28075), (68, 28081), (73, 28099), (75, 28108), (85, 28162), (87, 28171), (91, 28186), (99, 28225), (101, 28234), (103, 28246), (112, 28291), (114, 28300), (115, 28303), (120, 28324), (122, 28336),

Gene: CrimD_32 Start: 27314, Stop: 27754, Start Num: 30

Candidate Starts for CrimD_32:

(3, 26987), (11, 27077), (19, 27251), (Start: 30 @27314 has 101 MA's), (Start: 42 @27344 has 3 MA's), (47, 27350), (51, 27356), (Start: 54 @27368 has 6 MA's), (64, 27416), (68, 27434), (75, 27461), (85, 27515), (87, 27524), (99, 27578), (115, 27656), (122, 27689), (135, 27746),

Gene: Cucurbita_53 Start: 34200, Stop: 34607, Start Num: 58

Candidate Starts for Cucurbita_53:

(Start: 58 @34200 has 13 MA's), (71, 34263), (72, 34266), (94, 34368), (115, 34479), (123, 34521), (140, 34596),

Gene: Culver_51 Start: 32639, Stop: 33046, Start Num: 58

Candidate Starts for Culver_51:

(Start: 58 @32639 has 13 MA's), (71, 32702), (72, 32705), (94, 32807), (115, 32918), (123, 32960), (140, 33035),

Gene: Curiosium_33 Start: 27140, Stop: 27580, Start Num: 30

Candidate Starts for Curiosium_33:

(4, 26840), (5, 26852), (12, 26906), (17, 27017), (19, 27077), (Start: 30 @27140 has 101 MA's), (Start: 42 @27170 has 3 MA's), (47, 27176), (51, 27182), (Start: 54 @27194 has 6 MA's), (64, 27242), (67, 27254), (75, 27287), (76, 27290), (85, 27341), (87, 27350), (99, 27404), (103, 27425), (115, 27482), (125, 27536),

Gene: Dadosky_32 Start: 27920, Stop: 28369, Start Num: 26

Candidate Starts for Dadosky_32:

(Start: 24 @27917 has 15 MA's), (Start: 26 @27920 has 2 MA's), (Start: 42 @27962 has 3 MA's), (51, 27974), (Start: 54 @27986 has 6 MA's), (64, 28034), (67, 28046), (68, 28052), (73, 28070), (75, 28079), (87, 28142), (91, 28157), (99, 28196), (101, 28205), (103, 28217), (114, 28271), (115, 28274), (120, 28295), (122, 28307),

Gene: Dakiti_32 Start: 38325, Stop: 38846, Start Num: 23

Candidate Starts for Dakiti_32:

(Start: 23 @38325 has 16 MA's), (Start: 40 @38379 has 36 MA's), (49, 38391), (Start: 55 @38412 has 7 MA's), (73, 38496), (74, 38502), (90, 38580), (101, 38631), (115, 38703), (126, 38760), (131, 38784), (133, 38793), (138, 38811),

Gene: Dalmuri_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Dalmuri_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Damp_33 Start: 38855, Stop: 39292, Start Num: 40

Candidate Starts for Damp_33:

(Start: 23 @38801 has 16 MA's), (Start: 40 @38855 has 36 MA's), (49, 38867), (Start: 55 @38888 has 7 MA's), (67, 38948), (72, 38969), (102, 39110), (115, 39179),

Gene: Daredevil_32 Start: 29087, Stop: 29497, Start Num: 55

Candidate Starts for Daredevil_32:

(Start: 55 @29087 has 7 MA's), (80, 29213), (110, 29348), (128, 29447),

Gene: DarthP_31 Start: 27643, Stop: 28107, Start Num: 30

Candidate Starts for DarthP_31:

(25, 27628), (Start: 30 @27643 has 101 MA's), (Start: 42 @27673 has 3 MA's), (45, 27676), (Start: 54 @27697 has 6 MA's), (68, 27763), (75, 27790), (85, 27844), (99, 27907), (115, 27985), (118, 27997),

Gene: DatBoi_34 Start: 31309, Stop: 31719, Start Num: 55

Candidate Starts for DatBoi_34:

(Start: 55 @31309 has 7 MA's), (75, 31399), (92, 31486), (110, 31570), (118, 31609),

Gene: Deby_32 Start: 27311, Stop: 27751, Start Num: 30

Candidate Starts for Deby_32:

(19, 27248), (Start: 30 @27311 has 101 MA's), (Start: 42 @27341 has 3 MA's), (47, 27347), (51, 27353), (Start: 54 @27365 has 6 MA's), (64, 27413), (68, 27431), (75, 27458), (85, 27512), (87, 27521), (99, 27575), (103, 27596), (115, 27653), (122, 27686), (135, 27743),

Gene: Demosthenes_31 Start: 39018, Stop: 39470, Start Num: 31

Candidate Starts for Demosthenes_31:

(Start: 31 @39018 has 28 MA's), (63, 39078), (66, 39105), (70, 39120), (86, 39204), (93, 39228), (102, 39270), (105, 39288), (108, 39297), (116, 39342), (131, 39417),

Gene: Devera_32 Start: 27351, Stop: 27791, Start Num: 30

Candidate Starts for Devera_32:

(Start: 30 @27351 has 101 MA's), (Start: 42 @27381 has 3 MA's), (47, 27387), (51, 27393), (Start: 54 @27405 has 6 MA's), (64, 27453), (68, 27471), (75, 27498), (81, 27537), (85, 27552), (87, 27561), (99, 27615), (115, 27693), (135, 27783),

Gene: Diabla_35 Start: 39281, Stop: 39739, Start Num: 40

Candidate Starts for Diabla_35:

(Start: 23 @39227 has 16 MA's), (29, 39254), (Start: 40 @39281 has 36 MA's), (49, 39293), (Start: 55 @39314 has 7 MA's), (67, 39374), (72, 39395), (73, 39398), (90, 39482), (115, 39605), (126, 39662), (131, 39686), (133, 39695),

Gene: Dole_32 Start: 27353, Stop: 27793, Start Num: 30

Candidate Starts for Dole_32:

(Start: 30 @27353 has 101 MA's), (Start: 42 @27383 has 3 MA's), (47, 27389), (51, 27395), (Start: 54 @27407 has 6 MA's), (64, 27455), (68, 27473), (75, 27500), (81, 27539), (85, 27554), (87, 27563), (99, 27617), (115, 27695), (135, 27785),

Gene: DrHayes_32 Start: 27266, Stop: 27706, Start Num: 30

Candidate Starts for DrHayes_32:

(Start: 24 @27251 has 15 MA's), (Start: 30 @27266 has 101 MA's), (Start: 42 @27296 has 3 MA's), (47, 27302), (51, 27308), (Start: 54 @27320 has 6 MA's), (64, 27368), (68, 27386), (75, 27413), (85, 27467), (87, 27476), (99, 27530), (115, 27608), (122, 27641), (135, 27698), (137, 27701),

Gene: Durfee_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Durfee_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Dusty_49 Start: 32639, Stop: 33046, Start Num: 58

Candidate Starts for Dusty_49:

(Start: 58 @32639 has 13 MA's), (71, 32702), (72, 32705), (94, 32807), (115, 32918), (123, 32960), (140, 33035),

Gene: Edugator_31 Start: 27961, Stop: 28368, Start Num: 42

Candidate Starts for Edugator_31:

(Start: 24 @27916 has 15 MA's), (Start: 26 @27919 has 2 MA's), (Start: 42 @27961 has 3 MA's), (51, 27973), (Start: 54 @27985 has 6 MA's), (64, 28033), (67, 28045), (68, 28051), (73, 28069), (75, 28078), (87, 28141), (91, 28156), (99, 28195), (101, 28204), (103, 28216), (114, 28270), (115, 28273), (120, 28294),

Gene: Efra2_32 Start: 26582, Stop: 27031, Start Num: 30

Candidate Starts for Efra2_32:

(Start: 30 @26582 has 101 MA's), (Start: 42 @26612 has 3 MA's), (47, 26618), (51, 26624), (Start: 54 @26636 has 6 MA's), (64, 26684), (67, 26696), (75, 26729), (76, 26732), (85, 26783), (87, 26792), (103, 26867), (107, 26882), (115, 26924), (137, 27023),

Gene: Eggsie_32 Start: 37550, Stop: 38008, Start Num: 40

Candidate Starts for Eggsie_32:

(Start: 40 @37550 has 36 MA's), (49, 37562), (Start: 55 @37583 has 7 MA's), (67, 37643), (72, 37664), (73, 37667), (90, 37751), (115, 37874), (126, 37931), (131, 37955), (133, 37964),

Gene: Ekdilam_29 Start: 27401, Stop: 27862, Start Num: 30

Candidate Starts for Ekdilam_29:

(Start: 30 @27401 has 101 MA's), (Start: 42 @27431 has 3 MA's), (45, 27434), (Start: 54 @27455 has 6 MA's), (68, 27521), (75, 27548), (81, 27587), (85, 27602), (99, 27665), (115, 27743), (118, 27755),

Gene: Ekhein_32 Start: 37342, Stop: 37863, Start Num: 23

Candidate Starts for Ekhein_32:

(Start: 23 @37342 has 16 MA's), (Start: 40 @37396 has 36 MA's), (49, 37408), (Start: 55 @37429 has 7 MA's), (73, 37513), (90, 37597), (101, 37648), (103, 37660), (115, 37720), (126, 37777), (133, 37810), (136, 37825),

Gene: Ellie_29 Start: 27400, Stop: 27864, Start Num: 30

Candidate Starts for Ellie_29:

(17, 27277), (Start: 30 @27400 has 101 MA's), (Start: 42 @27430 has 3 MA's), (45, 27433), (52, 27445), (56, 27460), (67, 27514), (68, 27520), (75, 27547), (85, 27601), (99, 27664), (115, 27742),

Gene: Emerson_32 Start: 27337, Stop: 27777, Start Num: 30

Candidate Starts for Emerson_32:

(11, 27100), (19, 27274), (Start: 30 @27337 has 101 MA's), (Start: 42 @27367 has 3 MA's), (47, 27373), (51, 27379), (Start: 54 @27391 has 6 MA's), (64, 27439), (68, 27457), (75, 27484), (85, 27538), (87, 27547), (99, 27601), (103, 27622), (115, 27679), (122, 27712), (135, 27769),

Gene: Engineer_53 Start: 33314, Stop: 33721, Start Num: 58

Candidate Starts for Engineer_53:

(Start: 58 @33314 has 13 MA's), (71, 33377), (72, 33380), (94, 33482), (115, 33593), (123, 33635), (140, 33710),

Gene: Enkosi_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for Enkosi_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: Exiguo_32 Start: 37408, Stop: 37875, Start Num: 40

Candidate Starts for Exiguo_32:

(Start: 23 @37354 has 16 MA's), (Start: 40 @37408 has 36 MA's), (49, 37420), (Start: 55 @37441 has 7 MA's), (73, 37525), (90, 37609), (101, 37660), (103, 37672), (115, 37732), (126, 37789), (133, 37822), (136, 37837),

Gene: Fefferhead_31 Start: 27600, Stop: 28064, Start Num: 30

Candidate Starts for Fefferhead_31:

(17, 27477), (Start: 30 @27600 has 101 MA's), (Start: 42 @27630 has 3 MA's), (45, 27633), (52, 27645), (56, 27660), (67, 27714), (68, 27720), (75, 27747), (85, 27801), (99, 27864), (115, 27942),

Gene: FelixAlejandro_37 Start: 39623, Stop: 40090, Start Num: 40

Candidate Starts for FelixAlejandro_37:

(Start: 23 @39569 has 16 MA's), (Start: 40 @39623 has 36 MA's), (49, 39635), (Start: 55 @39656 has 7 MA's), (67, 39716), (73, 39740), (90, 39824), (100, 39872), (103, 39887), (115, 39947), (126, 40004), (133, 40037), (136, 40052),

Gene: Feyre_31 Start: 27833, Stop: 28285, Start Num: 24

Candidate Starts for Feyre_31:

(Start: 24 @27833 has 15 MA's), (Start: 42 @27878 has 3 MA's), (51, 27890), (Start: 54 @27902 has 6 MA's), (64, 27950), (67, 27962), (68, 27968), (75, 27995), (85, 28049), (87, 28058), (91, 28073), (99, 28112), (103, 28133), (114, 28187), (115, 28190), (122, 28223),

Gene: Flakey_32 Start: 38218, Stop: 38739, Start Num: 23

Candidate Starts for Flakey_32:

(Start: 23 @38218 has 16 MA's), (Start: 40 @38272 has 36 MA's), (49, 38284), (Start: 55 @38305 has 7 MA's), (73, 38389), (90, 38473), (101, 38524), (103, 38536), (115, 38596), (126, 38653), (133, 38686), (136, 38701),

Gene: GMA2_39 Start: 41812, Stop: 42174, Start Num: 58

Candidate Starts for GMA2_39:

(Start: 58 @41812 has 13 MA's), (60, 41818), (67, 41857), (71, 41875), (81, 41929), (103, 42034), (116, 42097),

Gene: GMA3_27 Start: 36415, Stop: 36849, Start Num: 33

Candidate Starts for GMA3_27:

(33, 36415), (66, 36520), (67, 36523), (87, 36619), (89, 36628), (97, 36661), (107, 36709), (115, 36751),

Gene: GMA7_26 Start: 32429, Stop: 32848, Start Num: 40

Candidate Starts for GMA7_26:

(Start: 40 @32429 has 36 MA's), (66, 32501), (71, 32522), (74, 32534), (76, 32540), (97, 32642), (103, 32675), (104, 32681), (112, 32723), (123, 32777), (126, 32792), (136, 32840),

Gene: GTE7_26 Start: 32460, Stop: 32879, Start Num: 40

Candidate Starts for GTE7_26:

(Start: 40 @32460 has 36 MA's), (66, 32532), (71, 32553), (74, 32565), (76, 32571), (97, 32673), (103, 32706), (104, 32712), (112, 32754), (123, 32808), (126, 32823), (136, 32871),

Gene: GalacticEye_33 Start: 39653, Stop: 40090, Start Num: 40

Candidate Starts for GalacticEye_33:

(Start: 23 @39599 has 16 MA's), (Start: 40 @39653 has 36 MA's), (49, 39665), (Start: 55 @39686 has 7 MA's), (67, 39746), (72, 39767), (102, 39908), (115, 39977),

Gene: Ganymede_33 Start: 27357, Stop: 27806, Start Num: 30

Candidate Starts for Ganymede_33:

(11, 27120), (19, 27294), (Start: 30 @27357 has 101 MA's), (Start: 42 @27387 has 3 MA's), (47, 27393), (51, 27399), (Start: 54 @27411 has 6 MA's), (64, 27459), (68, 27477), (75, 27504), (85, 27558), (87, 27567), (99, 27621), (103, 27642), (115, 27699),

Gene: Gengar_31 Start: 27943, Stop: 28395, Start Num: 24

Candidate Starts for Gengar_31:

(Start: 24 @27943 has 15 MA's), (Start: 42 @27988 has 3 MA's), (51, 28000), (Start: 54 @28012 has 6 MA's), (64, 28060), (67, 28072), (68, 28078), (75, 28105), (85, 28159), (87, 28168), (91, 28183), (99, 28222), (103, 28243), (114, 28297), (115, 28300), (122, 28333),

Gene: Geraldini_32 Start: 27354, Stop: 27794, Start Num: 30

Candidate Starts for Geraldini_32:

(11, 27117), (19, 27291), (Start: 30 @27354 has 101 MA's), (Start: 42 @27384 has 3 MA's), (47, 27390), (51, 27396), (Start: 54 @27408 has 6 MA's), (64, 27456), (68, 27474), (75, 27501), (85, 27555), (87, 27564), (99, 27618), (103, 27639), (115, 27696), (122, 27729), (135, 27786),

Gene: Gibbles_29 Start: 35291, Stop: 35674, Start Num: 54

Candidate Starts for Gibbles_29:

(Start: 54 @35291 has 6 MA's), (76, 35387), (102, 35513), (105, 35531), (110, 35552),

Gene: Gmala1_27 Start: 34646, Stop: 35092, Start Num: 48

Candidate Starts for Gmala1_27:

(32, 34610), (43, 34640), (48, 34646), (66, 34721), (88, 34823), (90, 34832), (103, 34895),

Gene: GordDuk1_27 Start: 34584, Stop: 35030, Start Num: 48

Candidate Starts for GordDuk1_27:

(43, 34578), (48, 34584), (66, 34659), (88, 34761), (90, 34770), (103, 34833),

Gene: GordTnk2_27 Start: 34553, Stop: 34999, Start Num: 48

Candidate Starts for GordTnk2_27:

(32, 34517), (43, 34547), (48, 34553), (66, 34628), (88, 34730), (90, 34739), (103, 34802),

Gene: Gorko_32 Start: 37346, Stop: 37867, Start Num: 23

Candidate Starts for Gorko_32:

(Start: 23 @37346 has 16 MA's), (Start: 40 @37400 has 36 MA's), (49, 37412), (Start: 55 @37433 has 7 MA's), (73, 37517), (90, 37601), (101, 37652), (103, 37664), (115, 37724), (126, 37781), (133, 37814), (136, 37829),

Gene: GourdThymes_32 Start: 38220, Stop: 38741, Start Num: 23

Candidate Starts for GourdThymes_32:

(Start: 23 @38220 has 16 MA's), (Start: 40 @38274 has 36 MA's), (49, 38286), (Start: 55 @38307 has 7 MA's), (73, 38391), (90, 38475), (101, 38526), (103, 38538), (115, 38598), (126, 38655), (133, 38688), (136, 38703),

Gene: Guanica15_32 Start: 26599, Stop: 27048, Start Num: 30

Candidate Starts for Guanica15_32:

(Start: 30 @26599 has 101 MA's), (Start: 42 @26629 has 3 MA's), (47, 26635), (51, 26641), (Start: 54 @26653 has 6 MA's), (64, 26701), (67, 26713), (75, 26746), (76, 26749), (85, 26800), (87, 26809), (99, 26863), (103, 26884), (107, 26899), (115, 26941), (137, 27040),

Gene: Guillaume_33 Start: 39703, Stop: 40140, Start Num: 40

Candidate Starts for Guillaume_33:

(Start: 23 @39649 has 16 MA's), (Start: 40 @39703 has 36 MA's), (49, 39715), (Start: 55 @39736 has 7 MA's), (67, 39796), (72, 39817), (102, 39958), (115, 40027),

Gene: Guillsminger_31 Start: 27915, Stop: 28367, Start Num: 24

Candidate Starts for Guillsminger_31:

(Start: 24 @27915 has 15 MA's), (Start: 42 @27960 has 3 MA's), (51, 27972), (Start: 54 @27984 has 6 MA's), (64, 28032), (67, 28044), (68, 28050), (75, 28077), (85, 28131), (87, 28140), (91, 28155), (99, 28194), (103, 28215), (114, 28269), (115, 28272), (122, 28305),

Gene: Hail2Pitt_33 Start: 40180, Stop: 40617, Start Num: 40

Candidate Starts for Hail2Pitt_33:

(Start: 23 @40126 has 16 MA's), (Start: 40 @40180 has 36 MA's), (49, 40192), (Start: 55 @40213 has 7 MA's), (67, 40273), (72, 40294), (102, 40435), (115, 40504),

Gene: Hammy_31 Start: 27634, Stop: 28098, Start Num: 30

Candidate Starts for Hammy_31:

(25, 27619), (Start: 30 @27634 has 101 MA's), (Start: 42 @27664 has 3 MA's), (45, 27667), (Start: 54 @27688 has 6 MA's), (68, 27754), (75, 27781), (85, 27835), (99, 27898), (115, 27976), (118, 27988),

Gene: Harambe_33 Start: 39970, Stop: 40407, Start Num: 40

Candidate Starts for Harambe_33:

(Start: 23 @39916 has 16 MA's), (Start: 40 @39970 has 36 MA's), (49, 39982), (Start: 55 @40003 has 7 MA's), (67, 40063), (72, 40084), (102, 40225), (115, 40294),

Gene: HayZem_35 Start: 38212, Stop: 38631, Start Num: 40

Candidate Starts for HayZem_35:

(Start: 40 @38212 has 36 MA's), (66, 38284), (71, 38305), (74, 38317), (76, 38323), (97, 38425), (103, 38458), (104, 38464), (112, 38506), (123, 38560), (126, 38575), (136, 38623),

Gene: HedwigODU_32 Start: 27346, Stop: 27786, Start Num: 30

Candidate Starts for HedwigODU_32:

(11, 27109), (19, 27283), (Start: 30 @27346 has 101 MA's), (Start: 42 @27376 has 3 MA's), (47, 27382), (51, 27388), (Start: 54 @27400 has 6 MA's), (64, 27448), (68, 27466), (75, 27493), (85, 27547), (98, 27607), (99, 27610), (103, 27631), (115, 27688), (122, 27721), (135, 27778),

Gene: Heftyboy_31 Start: 28061, Stop: 28513, Start Num: 24

Candidate Starts for Heftyboy_31:

(Start: 24 @28061 has 15 MA's), (Start: 42 @28106 has 3 MA's), (51, 28118), (Start: 54 @28130 has 6 MA's), (64, 28178), (67, 28190), (68, 28196), (75, 28223), (76, 28226), (85, 28277), (87, 28286), (91, 28301), (99, 28340), (103, 28361), (114, 28415), (115, 28418), (122, 28451),

Gene: Hello_33 Start: 39932, Stop: 40369, Start Num: 40

Candidate Starts for Hello_33:

(Start: 23 @39878 has 16 MA's), (Start: 40 @39932 has 36 MA's), (49, 39944), (Start: 55 @39965 has 7 MA's), (67, 40025), (72, 40046), (102, 40187), (115, 40256),

Gene: Hollow_32 Start: 39444, Stop: 39878, Start Num: 41

Candidate Starts for Hollow_32:

(Start: 41 @39444 has 7 MA's), (53, 39465), (66, 39516), (98, 39666), (105, 39699), (108, 39708), (115, 39747), (116, 39753), (118, 39759), (119, 39765), (120, 39768), (131, 39828),

Gene: Homura_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Homura_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Hotorobo_32 Start: 38225, Stop: 38746, Start Num: 23

Candidate Starts for Hotorobo_32:

(Start: 23 @38225 has 16 MA's), (Start: 40 @38279 has 36 MA's), (49, 38291), (Start: 55 @38312 has 7 MA's), (73, 38396), (90, 38480), (101, 38531), (103, 38543), (115, 38603), (126, 38660), (133, 38693), (136, 38708),

Gene: Hurricane_33 Start: 28195, Stop: 28641, Start Num: 31

Candidate Starts for Hurricane_33:

(21, 28162), (Start: 31 @28195 has 28 MA's), (Start: 42 @28225 has 3 MA's), (68, 28315), (75, 28342), (76, 28345), (81, 28381), (85, 28396), (99, 28459), (105, 28489), (115, 28537),

Gene: Hyperbowlee_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Hyperbowlee_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Illumine_32 Start: 27353, Stop: 27793, Start Num: 30

Candidate Starts for Illumine_32:

(Start: 30 @27353 has 101 MA's), (Start: 42 @27383 has 3 MA's), (47, 27389), (51, 27395), (Start: 54 @27407 has 6 MA's), (64, 27455), (68, 27473), (75, 27500), (81, 27539), (85, 27554), (87, 27563), (99, 27617), (115, 27695), (135, 27785),

Gene: Inky_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Inky_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: InvictusManeo_31 Start: 27989, Stop: 28441, Start Num: 24

Candidate Starts for InvictusManeo_31:

(1, 27476), (2, 27590), (Start: 24 @27989 has 15 MA's), (Start: 26 @27992 has 2 MA's), (Start: 42 @28034 has 3 MA's), (51, 28046), (Start: 54 @28058 has 6 MA's), (64, 28106), (67, 28118), (68, 28124), (73, 28142), (75, 28151), (85, 28205), (87, 28214), (91, 28229), (99, 28268), (101, 28277), (103, 28289), (112, 28334), (114, 28343), (115, 28346), (120, 28367), (122, 28379),

Gene: JAWS_32 Start: 27331, Stop: 27771, Start Num: 30

Candidate Starts for JAWS_32:

(10, 27082), (19, 27268), (Start: 30 @27331 has 101 MA's), (Start: 42 @27361 has 3 MA's), (47, 27367), (51, 27373), (Start: 54 @27385 has 6 MA's), (64, 27433), (68, 27451), (75, 27478), (85, 27532), (87, 27541), (98, 27592), (99, 27595), (115, 27673), (122, 27706), (135, 27763),

Gene: Jams_33 Start: 39141, Stop: 39578, Start Num: 40

Candidate Starts for Jams_33:

(Start: 23 @39087 has 16 MA's), (Start: 40 @39141 has 36 MA's), (49, 39153), (Start: 55 @39174 has 7 MA's), (67, 39234), (72, 39255), (102, 39396), (115, 39465),

Gene: Jarvi_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Jarvi_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Jayhawk_33 Start: 27344, Stop: 27784, Start Num: 30

Candidate Starts for Jayhawk_33:

(11, 27107), (19, 27281), (Start: 30 @27344 has 101 MA's), (Start: 42 @27374 has 3 MA's), (47, 27380), (51, 27386), (Start: 54 @27398 has 6 MA's), (64, 27446), (68, 27464), (75, 27491), (85, 27545), (98, 27605), (99, 27608), (103, 27629), (115, 27686), (122, 27719), (135, 27776),

Gene: Jeckyll_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Jeckyll_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Jellybones_36 Start: 39484, Stop: 39951, Start Num: 40

Candidate Starts for Jellybones_36:

(Start: 23 @39430 has 16 MA's), (Start: 40 @39484 has 36 MA's), (49, 39496), (Start: 55 @39517 has 7 MA's), (67, 39577), (73, 39601), (90, 39685), (101, 39736), (103, 39748), (115, 39808), (126, 39865), (133, 39898), (136, 39913),

Gene: John316_36 Start: 39437, Stop: 39904, Start Num: 40

Candidate Starts for John316_36:

(Start: 23 @39383 has 16 MA's), (Start: 40 @39437 has 36 MA's), (49, 39449), (Start: 55 @39470 has 7 MA's), (73, 39554), (90, 39638), (101, 39689), (103, 39701), (115, 39761), (126, 39818), (133, 39851), (136, 39866),

Gene: Jormungandr_33 Start: 39685, Stop: 40122, Start Num: 40

Candidate Starts for Jormungandr_33:

(Start: 23 @39631 has 16 MA's), (Start: 40 @39685 has 36 MA's), (49, 39697), (Start: 55 @39718 has 7 MA's), (67, 39778), (72, 39799), (102, 39940), (115, 40009),

Gene: Joy99_32 Start: 27306, Stop: 27746, Start Num: 30

Candidate Starts for Joy99_32:

(19, 27243), (Start: 30 @27306 has 101 MA's), (Start: 42 @27336 has 3 MA's), (47, 27342), (51, 27348), (Start: 54 @27360 has 6 MA's), (64, 27408), (68, 27426), (75, 27453), (85, 27507), (87, 27516), (99, 27570), (103, 27591), (115, 27648), (122, 27681), (135, 27738),

Gene: Jumbo_34 Start: 40874, Stop: 41350, Start Num: 27

Candidate Starts for Jumbo_34:

(Start: 27 @40874 has 1 MA's), (36, 40892), (66, 40991), (68, 41000), (70, 41006), (82, 41069), (87, 41090), (88, 41093), (101, 41153), (102, 41156), (105, 41174), (124, 41270), (126, 41279),

Gene: Kampe_30 Start: 35152, Stop: 35535, Start Num: 54

Candidate Starts for Kampe_30:

(Start: 54 @35152 has 6 MA's), (76, 35248), (102, 35374), (105, 35392), (110, 35413),

Gene: Kaseim_34 Start: 39126, Stop: 39563, Start Num: 40

Candidate Starts for Kaseim_34:

(Start: 23 @39072 has 16 MA's), (Start: 40 @39126 has 36 MA's), (49, 39138), (Start: 55 @39159 has 7 MA's), (67, 39219), (72, 39240), (102, 39381), (115, 39450),

Gene: Katyusha_31 Start: 39098, Stop: 39532, Start Num: 41

Candidate Starts for Katyusha_31:

(Start: 41 @39098 has 7 MA's), (53, 39119), (62, 39137), (66, 39170), (98, 39320), (102, 39335), (113, 39395), (115, 39401), (116, 39407), (131, 39482),

Gene: Keshu_33 Start: 28183, Stop: 28629, Start Num: 31

Candidate Starts for Keshu_33:

(Start: 31 @28183 has 28 MA's), (Start: 42 @28213 has 3 MA's), (Start: 55 @28240 has 7 MA's), (68, 28303), (75, 28330), (76, 28333), (81, 28369), (85, 28384), (87, 28393), (99, 28447), (105, 28477), (115, 28525),

Gene: KiSi_31 Start: 26374, Stop: 26829, Start Num: 31

Candidate Starts for KiSi_31:

(Start: 31 @26374 has 28 MA's), (Start: 42 @26404 has 3 MA's), (45, 26407), (Start: 55 @26431 has 7 MA's), (68, 26494), (75, 26521), (76, 26524), (85, 26575), (99, 26638), (115, 26716), (118, 26728), (119, 26734),

Gene: Kratio_30 Start: 27620, Stop: 28072, Start Num: 24

Candidate Starts for Kratio_30:

(1, 27107), (2, 27221), (Start: 24 @27620 has 15 MA's), (Start: 26 @27623 has 2 MA's), (Start: 42 @27665 has 3 MA's), (51, 27677), (Start: 54 @27689 has 6 MA's), (64, 27737), (67, 27749), (68, 27755), (73, 27773), (75, 27782), (85, 27836), (87, 27845), (91, 27860), (99, 27899), (101, 27908), (103, 27920), (114, 27974), (115, 27977), (120, 27998), (122, 28010),

Gene: Krueger_32 Start: 26494, Stop: 26958, Start Num: 31

Candidate Starts for Krueger_32:

(Start: 31 @26494 has 28 MA's), (39, 26515), (Start: 42 @26524 has 3 MA's), (45, 26527), (67, 26608), (68, 26614), (75, 26641), (85, 26695), (99, 26758), (103, 26779), (115, 26836), (118, 26848),

Gene: Kvothe_31 Start: 38997, Stop: 39431, Start Num: 41

Candidate Starts for Kvothe_31:

(Start: 41 @38997 has 7 MA's), (53, 39018), (62, 39036), (66, 39069), (98, 39219), (102, 39234), (105, 39252), (109, 39264), (115, 39300), (116, 39306), (131, 39381),

Gene: Lahirium_33 Start: 40207, Stop: 40644, Start Num: 40

Candidate Starts for Lahirium_33:

(Start: 23 @40153 has 16 MA's), (Start: 40 @40207 has 36 MA's), (49, 40219), (Start: 55 @40240 has 7 MA's), (67, 40300), (72, 40321), (102, 40462), (115, 40531),

Gene: Larva_32 Start: 27784, Stop: 28236, Start Num: 24

Candidate Starts for Larva_32:

(Start: 24 @27784 has 15 MA's), (Start: 26 @27787 has 2 MA's), (Start: 42 @27829 has 3 MA's), (51, 27841), (Start: 54 @27853 has 6 MA's), (64, 27901), (67, 27913), (68, 27919), (73, 27937), (75, 27946), (87, 28009), (91, 28024), (99, 28063), (101, 28072), (103, 28084), (114, 28138), (115, 28141), (120, 28162), (122, 28174),

Gene: LastHope_32 Start: 26463, Stop: 26915, Start Num: 30

Candidate Starts for LastHope_32:

(7, 26205), (17, 26340), (19, 26400), (Start: 30 @26463 has 101 MA's), (Start: 42 @26493 has 3 MA's), (47, 26499), (51, 26505), (Start: 54 @26517 has 6 MA's), (64, 26565), (67, 26577), (75, 26610), (76, 26613), (85, 26664), (87, 26673), (99, 26727), (101, 26736), (103, 26748), (115, 26805),

Gene: LaterM_32 Start: 27270, Stop: 27710, Start Num: 30

Candidate Starts for LaterM_32:

(11, 27033), (Start: 30 @27270 has 101 MA's), (Start: 42 @27300 has 3 MA's), (47, 27306), (51, 27312), (Start: 54 @27324 has 6 MA's), (64, 27372), (68, 27390), (75, 27417), (81, 27456), (85, 27471), (87, 27480), (99, 27534), (115, 27612), (135, 27702),

Gene: LeMond_31 Start: 26445, Stop: 26900, Start Num: 31

Candidate Starts for LeMond_31:

(Start: 31 @26445 has 28 MA's), (Start: 42 @26475 has 3 MA's), (45, 26478), (Start: 55 @26502 has 7 MA's), (68, 26565), (75, 26592), (76, 26595), (85, 26646), (99, 26709), (115, 26787), (119, 26805),

Gene: Leston_31 Start: 28090, Stop: 28497, Start Num: 42

Candidate Starts for Leston_31:

(Start: 24 @28045 has 15 MA's), (Start: 42 @28090 has 3 MA's), (51, 28102), (Start: 54 @28114 has 6 MA's), (64, 28162), (67, 28174), (68, 28180), (75, 28207), (85, 28261), (87, 28270), (91, 28285), (99, 28324), (103, 28345), (114, 28399), (115, 28402), (122, 28435),

Gene: Lidong_33 Start: 39941, Stop: 40378, Start Num: 40

Candidate Starts for Lidong_33:

(Start: 23 @39887 has 16 MA's), (Start: 40 @39941 has 36 MA's), (49, 39953), (Start: 55 @39974 has 7 MA's), (67, 40034), (72, 40055), (102, 40196), (115, 40265),

Gene: LilPharaoh_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for LilPharaoh_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: LindNT_32 Start: 27310, Stop: 27750, Start Num: 30

Candidate Starts for LindNT_32:

(11, 27073), (19, 27247), (Start: 30 @27310 has 101 MA's), (Start: 42 @27340 has 3 MA's), (47, 27346), (51, 27352), (Start: 54 @27364 has 6 MA's), (64, 27412), (68, 27430), (75, 27457), (85, 27511), (87, 27520), (99, 27574), (115, 27652), (122, 27685), (135, 27742),

Gene: Linetti_33 Start: 38505, Stop: 38972, Start Num: 40

Candidate Starts for Linetti_33:

(Start: 23 @38451 has 16 MA's), (Start: 40 @38505 has 36 MA's), (49, 38517), (Start: 55 @38538 has 7 MA's), (73, 38622), (74, 38628), (90, 38706), (101, 38757), (115, 38829), (126, 38886), (131, 38910), (133, 38919), (138, 38937),

Gene: Lizzo_32 Start: 38214, Stop: 38735, Start Num: 23

Candidate Starts for Lizzo_32:

(Start: 23 @38214 has 16 MA's), (Start: 40 @38268 has 36 MA's), (49, 38280), (Start: 55 @38301 has 7 MA's), (73, 38385), (90, 38469), (101, 38520), (103, 38532), (115, 38592), (126, 38649), (133, 38682), (136, 38697),

Gene: Llorens_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Llorens_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Lozinak_52 Start: 33369, Stop: 33776, Start Num: 58

Candidate Starts for Lozinak_52:

(Start: 58 @33369 has 13 MA's), (71, 33432), (72, 33435), (94, 33537), (115, 33648), (123, 33690), (140, 33765),

Gene: Luker_34 Start: 40160, Stop: 40597, Start Num: 40

Candidate Starts for Luker_34:

(Start: 23 @40106 has 16 MA's), (Start: 40 @40160 has 36 MA's), (49, 40172), (Start: 55 @40193 has 7 MA's), (67, 40253), (72, 40274), (102, 40415), (115, 40484),

Gene: Lunahalos_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Lunahalos_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: MacnCheese_33 Start: 28230, Stop: 28682, Start Num: 31

Candidate Starts for MacnCheese_33:

(21, 28197), (Start: 31 @28230 has 28 MA's), (39, 28251), (Start: 42 @28260 has 3 MA's), (68, 28350), (75, 28377), (76, 28380), (81, 28416), (85, 28431), (99, 28494), (103, 28515), (115, 28572), (118, 28584), (122, 28605), (131, 28653),

Gene: MalagasyRose_32 Start: 26704, Stop: 27135, Start Num: 34

Candidate Starts for MalagasyRose_32:

(Start: 34 @26704 has 1 MA's), (37, 26713), (44, 26725), (46, 26728), (50, 26734), (Start: 54 @26746 has 6 MA's), (56, 26752), (61, 26770), (67, 26806), (68, 26812), (73, 26830), (75, 26839), (76, 26842), (83, 26884), (85, 26893), (87, 26902), (91, 26917), (99, 26956), (101, 26965), (103, 26977), (115, 27034), (120, 27055), (134, 27121),

Gene: MarkPhew_32 Start: 26343, Stop: 26798, Start Num: 31

Candidate Starts for MarkPhew_32:

(19, 26280), (20, 26298), (Start: 31 @26343 has 28 MA's), (Start: 42 @26373 has 3 MA's), (45, 26376), (Start: 55 @26400 has 7 MA's), (69, 26466), (75, 26490), (85, 26544), (102, 26619), (115, 26685),

Gene: Marshawn_33 Start: 27023, Stop: 27481, Start Num: 31

Candidate Starts for Marshawn_33:

(17, 26900), (19, 26960), (Start: 31 @27023 has 28 MA's), (Start: 42 @27053 has 3 MA's), (68, 27143), (75, 27170), (85, 27224), (99, 27287), (101, 27296), (103, 27308), (115, 27365), (118, 27377),

Gene: Mdavu_28 Start: 26735, Stop: 27193, Start Num: 30

Candidate Starts for Mdavu_28:

(14, 26516), (Start: 30 @26735 has 101 MA's), (Start: 42 @26765 has 3 MA's), (47, 26771), (Start: 54 @26789 has 6 MA's), (67, 26849), (73, 26873), (75, 26882), (76, 26885), (77, 26897), (85, 26936), (87, 26945), (88, 26948), (99, 26999), (103, 27020), (107, 27035), (115, 27077), (118, 27089),

Gene: MeaningOfLife_32 Start: 27313, Stop: 27762, Start Num: 30

Candidate Starts for MeaningOfLife_32:

(11, 27076), (19, 27250), (Start: 30 @27313 has 101 MA's), (Start: 42 @27343 has 3 MA's), (47, 27349), (51, 27355), (Start: 54 @27367 has 6 MA's), (64, 27415), (68, 27433), (75, 27460), (85, 27514), (87, 27523), (99, 27577), (103, 27598), (115, 27655),

Gene: Megsy_33 Start: 27313, Stop: 27753, Start Num: 30

Candidate Starts for Megsy_33:

(11, 27076), (19, 27250), (Start: 30 @27313 has 101 MA's), (Start: 42 @27343 has 3 MA's), (47, 27349), (51, 27355), (Start: 54 @27367 has 6 MA's), (64, 27415), (68, 27433), (75, 27460), (85, 27514), (87, 27523), (99, 27577), (115, 27655), (122, 27688), (135, 27745),

Gene: Minos_34 Start: 39683, Stop: 40120, Start Num: 40

Candidate Starts for Minos_34:

(Start: 23 @39629 has 16 MA's), (Start: 40 @39683 has 36 MA's), (49, 39695), (Start: 55 @39716 has 7 MA's), (67, 39776), (72, 39797), (102, 39938), (115, 40007),

Gene: Miryou_31 Start: 27900, Stop: 28352, Start Num: 24

Candidate Starts for Miryou_31:

(Start: 24 @27900 has 15 MA's), (Start: 42 @27945 has 3 MA's), (51, 27957), (Start: 54 @27969 has 6 MA's), (64, 28017), (67, 28029), (68, 28035), (75, 28062), (85, 28116), (87, 28125), (91, 28140), (99, 28179), (103, 28200), (114, 28254), (115, 28257), (122, 28290),

Gene: Miskis_53 Start: 32674, Stop: 33081, Start Num: 58

Candidate Starts for Miskis_53:

(Start: 58 @32674 has 13 MA's), (71, 32737), (72, 32740), (94, 32842), (115, 32953), (123, 32995), (140, 33070),

Gene: Mollymur_34 Start: 31778, Stop: 32188, Start Num: 55

Candidate Starts for Mollymur_34:

(Start: 55 @31778 has 7 MA's), (75, 31868), (110, 32039),

Gene: Monty_31 Start: 37418, Stop: 37885, Start Num: 40

Candidate Starts for Monty_31:

(Start: 23 @37364 has 16 MA's), (Start: 40 @37418 has 36 MA's), (49, 37430), (Start: 55 @37451 has 7 MA's), (73, 37535), (90, 37619), (101, 37670), (103, 37682), (115, 37742), (126, 37799), (133, 37832), (136, 37847),

Gene: MrWormie_33 Start: 38844, Stop: 39281, Start Num: 40

Candidate Starts for MrWormie_33:

(Start: 23 @38790 has 16 MA's), (Start: 40 @38844 has 36 MA's), (49, 38856), (Start: 55 @38877 has 7 MA's), (67, 38937), (72, 38958), (102, 39099), (115, 39168),

Gene: Msay19_37 Start: 39614, Stop: 40081, Start Num: 40

Candidate Starts for Msay19_37:

(Start: 23 @39560 has 16 MA's), (Start: 40 @39614 has 36 MA's), (49, 39626), (Start: 55 @39647 has 7 MA's), (67, 39707), (73, 39731), (90, 39815), (101, 39866), (103, 39878), (115, 39938), (126, 39995), (133, 40028), (136, 40043),

Gene: Murucutumbu_32 Start: 27289, Stop: 27729, Start Num: 30

Candidate Starts for Murucutumbu_32:

(11, 27052), (Start: 30 @27289 has 101 MA's), (Start: 42 @27319 has 3 MA's), (47, 27325), (51, 27331), (Start: 54 @27343 has 6 MA's), (64, 27391), (68, 27409), (75, 27436), (81, 27475), (85, 27490), (87, 27499), (99, 27553), (115, 27631), (135, 27721),

Gene: Mynx_32 Start: 27360, Stop: 27800, Start Num: 30

Candidate Starts for Mynx_32:

(11, 27123), (19, 27297), (Start: 30 @27360 has 101 MA's), (Start: 42 @27390 has 3 MA's), (47, 27396), (51, 27402), (Start: 54 @27414 has 6 MA's), (64, 27462), (68, 27480), (75, 27507), (85, 27561), (87, 27570), (99, 27624), (103, 27645), (115, 27702), (122, 27735), (135, 27792),

Gene: Neoevie_33 Start: 39947, Stop: 40384, Start Num: 40

Candidate Starts for Neoevie_33:

(Start: 23 @39893 has 16 MA's), (Start: 40 @39947 has 36 MA's), (49, 39959), (Start: 55 @39980 has 7 MA's), (67, 40040), (72, 40061), (102, 40202), (115, 40271),

Gene: Nergal_28 Start: 25031, Stop: 25495, Start Num: 28

Candidate Starts for Nergal_28:

(Start: 28 @25031 has 1 MA's), (36, 25046), (64, 25139), (68, 25157), (75, 25184), (76, 25187), (85, 25238), (87, 25247), (99, 25301), (103, 25322), (109, 25343), (115, 25379), (118, 25391),

Gene: Newt_34 Start: 40174, Stop: 40611, Start Num: 40

Candidate Starts for Newt_34:

(Start: 23 @40120 has 16 MA's), (Start: 40 @40174 has 36 MA's), (49, 40186), (Start: 55 @40207 has 7 MA's), (67, 40267), (72, 40288), (102, 40429), (115, 40498),

Gene: Niagara_31 Start: 39055, Stop: 39489, Start Num: 41

Candidate Starts for Niagara_31:

(Start: 41 @39055 has 7 MA's), (53, 39076), (62, 39094), (66, 39127), (98, 39277), (102, 39292), (105, 39310), (109, 39322), (115, 39358), (116, 39364), (131, 39439),

Gene: Nibb_31 Start: 26478, Stop: 26939, Start Num: 31

Candidate Starts for Nibb_31:

(19, 26415), (Start: 31 @26478 has 28 MA's), (Start: 42 @26508 has 3 MA's), (45, 26511), (Start: 55 @26535 has 7 MA's), (68, 26598), (75, 26625), (85, 26679), (102, 26754), (112, 26808), (115, 26820), (119, 26838), (139, 26931),

Gene: Nikao_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for Nikao_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: Niklas_32 Start: 26625, Stop: 27089, Start Num: 30

Candidate Starts for Niklas_32:

(17, 26499), (18, 26526), (Start: 30 @26625 has 101 MA's), (Start: 42 @26655 has 3 MA's), (47, 26661), (51, 26667), (Start: 54 @26679 has 6 MA's), (64, 26727), (67, 26739), (75, 26772), (76, 26775), (85, 26826), (99, 26889), (103, 26910), (107, 26925), (112, 26955), (115, 26967), (118, 26979),

Gene: Nimi13_33 Start: 39692, Stop: 40129, Start Num: 40

Candidate Starts for Nimi13_33:

(Start: 23 @39638 has 16 MA's), (Start: 40 @39692 has 36 MA's), (49, 39704), (Start: 55 @39725 has 7 MA's), (67, 39785), (72, 39806), (102, 39947), (115, 40016),

Gene: Norvs_52 Start: 32913, Stop: 33320, Start Num: 58

Candidate Starts for Norvs_52:

(Start: 58 @32913 has 13 MA's), (71, 32976), (72, 32979), (94, 33081), (115, 33192), (123, 33234), (140, 33309),

Gene: Nutello_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for Nutello_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: OkiRoe_31 Start: 27916, Stop: 28368, Start Num: 24

Candidate Starts for OkiRoe_31:

(Start: 24 @27916 has 15 MA's), (Start: 42 @27961 has 3 MA's), (51, 27973), (Start: 54 @27985 has 6 MA's), (64, 28033), (67, 28045), (68, 28051), (75, 28078), (85, 28132), (87, 28141), (91, 28156), (99, 28195), (103, 28216), (114, 28270), (115, 28273), (122, 28306),

Gene: Omnicron_32 Start: 26804, Stop: 27253, Start Num: 24

Candidate Starts for Omnicron_32:

(Start: 24 @26804 has 15 MA's), (Start: 42 @26849 has 3 MA's), (45, 26852), (51, 26861), (Start: 54 @26873 has 6 MA's), (65, 26927), (68, 26939), (73, 26957), (75, 26966), (85, 27020), (87, 27029), (91, 27044), (99, 27083), (101, 27092), (102, 27095), (103, 27104), (114, 27158), (115, 27161), (120, 27182), (122, 27194),

Gene: OneUp_45 Start: 30331, Stop: 30756, Start Num: 54

Candidate Starts for OneUp_45:

(Start: 54 @30331 has 6 MA's), (63, 30364), (77, 30442), (78, 30445), (88, 30493), (94, 30517), (112, 30616), (115, 30628),

Gene: Orchid_30 Start: 35152, Stop: 35535, Start Num: 54

Candidate Starts for Orchid_30:

(Start: 54 @35152 has 6 MA's), (76, 35248), (102, 35374), (105, 35392), (110, 35413),

Gene: Oscar_31 Start: 26446, Stop: 26901, Start Num: 31

Candidate Starts for Oscar_31:

(Start: 31 @26446 has 28 MA's), (Start: 42 @26476 has 3 MA's), (45, 26479), (Start: 55 @26503 has 7 MA's), (68, 26566), (75, 26593), (76, 26596), (85, 26647), (99, 26710), (115, 26788), (119, 26806),

Gene: Padfoot_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Padfoot_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Padpat_32 Start: 27337, Stop: 27777, Start Num: 30

Candidate Starts for Padpat_32:

(11, 27100), (19, 27274), (Start: 30 @27337 has 101 MA's), (Start: 42 @27367 has 3 MA's), (47, 27373), (51, 27379), (Start: 54 @27391 has 6 MA's), (64, 27439), (68, 27457), (75, 27484), (85, 27538), (87, 27547), (99, 27601), (103, 27622), (115, 27679), (122, 27712), (135, 27769),

Gene: Paola_31 Start: 27915, Stop: 28367, Start Num: 24

Candidate Starts for Paola_31:

(Start: 24 @27915 has 15 MA's), (Start: 42 @27960 has 3 MA's), (51, 27972), (Start: 54 @27984 has 6 MA's), (64, 28032), (67, 28044), (68, 28050), (75, 28077), (85, 28131), (87, 28140), (91, 28155), (99, 28194), (103, 28215), (114, 28269), (115, 28272), (122, 28305),

Gene: PatrickStar_30 Start: 35152, Stop: 35535, Start Num: 54

Candidate Starts for PatrickStar_30:

(Start: 54 @35152 has 6 MA's), (76, 35248), (102, 35374), (105, 35392), (110, 35413),

Gene: Peanam_32 Start: 26622, Stop: 27086, Start Num: 30

Candidate Starts for Peanam_32:

(17, 26496), (Start: 30 @26622 has 101 MA's), (Start: 42 @26652 has 3 MA's), (47, 26658), (51, 26664), (Start: 54 @26676 has 6 MA's), (64, 26724), (67, 26736), (75, 26769), (76, 26772), (85, 26823), (99, 26886), (103, 26907), (107, 26922), (112, 26952), (115, 26964), (118, 26976),

Gene: Peel_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Peel_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Pharb_31 Start: 27504, Stop: 27944, Start Num: 31

Candidate Starts for Pharb_31:

(Start: 31 @27504 has 28 MA's), (39, 27525), (Start: 42 @27534 has 3 MA's), (68, 27624), (75, 27651), (76, 27654), (81, 27690), (85, 27705), (87, 27714), (99, 27768), (105, 27798), (115, 27846), (127, 27915),

Gene: PhelpsODU_32 Start: 26653, Stop: 27117, Start Num: 31

Candidate Starts for PhelpsODU_32:

(Start: 31 @26653 has 28 MA's), (39, 26674), (Start: 42 @26683 has 3 MA's), (45, 26686), (Start: 54 @26707 has 6 MA's), (56, 26713), (67, 26767), (68, 26773), (75, 26800), (99, 26917), (115, 26995), (118, 27007), (129, 27070),

Gene: Philon9_33 Start: 40236, Stop: 40667, Start Num: 41

Candidate Starts for Philon9_33:

(Start: 41 @40236 has 7 MA's), (45, 40242), (66, 40311), (68, 40320), (71, 40332), (83, 40392), (93, 40434), (98, 40461), (102, 40476), (105, 40494), (115, 40542), (118, 40554), (126, 40599),

Gene: PhinkBoden_51 Start: 33294, Stop: 33701, Start Num: 58

Candidate Starts for PhinkBoden_51:

(Start: 58 @33294 has 13 MA's), (71, 33357), (72, 33360), (94, 33462), (115, 33573), (123, 33615), (140, 33690),

Gene: Phrank_32 Start: 26603, Stop: 27067, Start Num: 31

Candidate Starts for Phrank_32:

(Start: 31 @26603 has 28 MA's), (39, 26624), (Start: 42 @26633 has 3 MA's), (45, 26636), (56, 26663), (67, 26717), (68, 26723), (75, 26750), (85, 26804), (102, 26879), (115, 26945), (129, 27020),

Gene: Phrappuccino_197 Start: 132691, Stop: 133080, Start Num: 55

Candidate Starts for Phrappuccino_197:

(Start: 55 @132691 has 7 MA's), (73, 132772), (75, 132781), (76, 132784), (87, 132841), (95, 132874), (105, 132925), (106, 132928), (109, 132937), (111, 132955), (113, 132967), (122, 133006),

Gene: Piatt_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Piatt_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87,

27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: PierreThree_32 Start: 38322, Stop: 38843, Start Num: 23

Candidate Starts for PierreThree_32:

(Start: 23 @38322 has 16 MA's), (Start: 40 @38376 has 36 MA's), (49, 38388), (Start: 55 @38409 has 7 MA's), (73, 38493), (74, 38499), (90, 38577), (101, 38628), (115, 38700), (126, 38757), (131, 38781), (133, 38790), (138, 38808),

Gene: Pixie_32 Start: 27737, Stop: 28183, Start Num: 31

Candidate Starts for Pixie_32:

(21, 27704), (Start: 31 @27737 has 28 MA's), (Start: 42 @27767 has 3 MA's), (68, 27857), (75, 27884), (76, 27887), (81, 27923), (85, 27938), (99, 28001), (105, 28031), (112, 28067), (115, 28079),

Gene: Pokerus_31 Start: 27294, Stop: 27734, Start Num: 30

Candidate Starts for Pokerus_31:

(11, 27057), (19, 27231), (Start: 30 @27294 has 101 MA's), (Start: 42 @27324 has 3 MA's), (47, 27330), (51, 27336), (Start: 54 @27348 has 6 MA's), (64, 27396), (68, 27414), (75, 27441), (85, 27495), (87, 27504), (99, 27558), (103, 27579), (115, 27636), (122, 27669), (135, 27726),

Gene: PokyPuppy_31 Start: 38322, Stop: 38789, Start Num: 40

Candidate Starts for PokyPuppy_31:

(Start: 40 @38322 has 36 MA's), (49, 38334), (Start: 55 @38355 has 7 MA's), (67, 38415), (73, 38439), (90, 38523), (99, 38565), (115, 38646), (126, 38703), (131, 38727), (132, 38730), (133, 38736),

Gene: Poland_39 Start: 39593, Stop: 40060, Start Num: 40

Candidate Starts for Poland_39:

(Start: 23 @39539 has 16 MA's), (Start: 40 @39593 has 36 MA's), (49, 39605), (Start: 55 @39626 has 7 MA's), (67, 39686), (73, 39710), (90, 39794), (101, 39845), (103, 39857), (115, 39917), (126, 39974), (133, 40007), (136, 40022),

Gene: Prithvi_32 Start: 27310, Stop: 27750, Start Num: 30

Candidate Starts for Prithvi_32:

(11, 27073), (19, 27247), (Start: 30 @27310 has 101 MA's), (Start: 42 @27340 has 3 MA's), (47, 27346), (51, 27352), (Start: 54 @27364 has 6 MA's), (64, 27412), (68, 27430), (75, 27457), (85, 27511), (87, 27520), (99, 27574), (115, 27652), (122, 27685), (135, 27742),

Gene: Psycho_32 Start: 27959, Stop: 28366, Start Num: 42

Candidate Starts for Psycho_32:

(Start: 24 @27914 has 15 MA's), (Start: 26 @27917 has 2 MA's), (Start: 42 @27959 has 3 MA's), (51, 27971), (Start: 54 @27983 has 6 MA's), (64, 28031), (67, 28043), (68, 28049), (73, 28067), (75, 28076), (87, 28139), (91, 28154), (99, 28193), (101, 28202), (103, 28214), (114, 28268), (115, 28271), (120, 28292), (122, 28304),

Gene: QuincyRose_31 Start: 27357, Stop: 27806, Start Num: 30

Candidate Starts for QuincyRose_31:

(11, 27120), (19, 27294), (Start: 30 @27357 has 101 MA's), (Start: 42 @27387 has 3 MA's), (47, 27393), (51, 27399), (Start: 54 @27411 has 6 MA's), (64, 27459), (68, 27477), (75, 27504), (85, 27558), (87, 27567), (99, 27621), (103, 27642), (115, 27699),

Gene: Ramen_32 Start: 27343, Stop: 27783, Start Num: 30

Candidate Starts for Ramen_32:

(10, 27094), (19, 27280), (Start: 30 @27343 has 101 MA's), (Start: 42 @27373 has 3 MA's), (47, 27379), (51, 27385), (Start: 54 @27397 has 6 MA's), (64, 27445), (68, 27463), (75, 27490), (85, 27544), (87, 27553), (98, 27604), (99, 27607), (115, 27685), (122, 27718), (135, 27775),

Gene: Rando14_32 Start: 26763, Stop: 27212, Start Num: 24

Candidate Starts for Rando14_32:

(Start: 24 @26763 has 15 MA's), (Start: 42 @26808 has 3 MA's), (45, 26811), (51, 26820), (Start: 54 @26832 has 6 MA's), (65, 26886), (68, 26898), (73, 26916), (75, 26925), (85, 26979), (87, 26988), (91, 27003), (99, 27042), (101, 27051), (102, 27054), (103, 27063), (114, 27117), (115, 27120), (120, 27141), (122, 27153),

Gene: Rapunzel97_32 Start: 27344, Stop: 27784, Start Num: 30

Candidate Starts for Rapunzel97_32:

(11, 27107), (19, 27281), (Start: 30 @27344 has 101 MA's), (Start: 42 @27374 has 3 MA's), (47, 27380), (51, 27386), (Start: 54 @27398 has 6 MA's), (64, 27446), (68, 27464), (75, 27491), (85, 27545), (98, 27605), (99, 27608), (103, 27629), (115, 27686), (122, 27719), (135, 27776),

Gene: RemRem_33 Start: 37408, Stop: 37875, Start Num: 40

Candidate Starts for RemRem_33:

(Start: 23 @37354 has 16 MA's), (Start: 40 @37408 has 36 MA's), (49, 37420), (Start: 55 @37441 has 7 MA's), (73, 37525), (90, 37609), (101, 37660), (103, 37672), (115, 37732), (126, 37789), (133, 37822), (136, 37837),

Gene: RobinSparkles_33 Start: 36069, Stop: 36452, Start Num: 54

Candidate Starts for RobinSparkles_33:

(Start: 54 @36069 has 6 MA's), (76, 36165), (102, 36291), (105, 36309), (110, 36330),

Gene: Rosmarinus_32 Start: 27365, Stop: 27805, Start Num: 30

Candidate Starts for Rosmarinus_32:

(19, 27302), (Start: 30 @27365 has 101 MA's), (Start: 42 @27395 has 3 MA's), (47, 27401), (51, 27407), (Start: 54 @27419 has 6 MA's), (64, 27467), (68, 27485), (75, 27512), (85, 27566), (87, 27575), (99, 27629), (103, 27650), (115, 27707), (122, 27740), (135, 27797),

Gene: RoyalG_33 Start: 37836, Stop: 38348, Start Num: 23

Candidate Starts for RoyalG_33:

(Start: 23 @37836 has 16 MA's), (Start: 40 @37890 has 36 MA's), (49, 37902), (Start: 55 @37923 has 7 MA's), (69, 37992), (73, 38007), (90, 38091), (115, 38214), (126, 38271), (131, 38295),

Gene: Sam12_32 Start: 37354, Stop: 37875, Start Num: 23

Candidate Starts for Sam12_32:

(Start: 23 @37354 has 16 MA's), (Start: 40 @37408 has 36 MA's), (49, 37420), (Start: 55 @37441 has 7 MA's), (73, 37525), (90, 37609), (101, 37660), (103, 37672), (115, 37732), (126, 37789), (133, 37822), (136, 37837),

Gene: SamuelLPlaqson_32 Start: 27266, Stop: 27706, Start Num: 30

Candidate Starts for SamuelLPlaqson_32:

(Start: 24 @27251 has 15 MA's), (Start: 30 @27266 has 101 MA's), (Start: 42 @27296 has 3 MA's), (47, 27302), (51, 27308), (Start: 54 @27320 has 6 MA's), (64, 27368), (68, 27386), (75, 27413), (85, 27467), (87, 27476), (99, 27530), (115, 27608), (122, 27641), (135, 27698), (137, 27701),

Gene: Scarlett_31 Start: 26447, Stop: 26902, Start Num: 31

Candidate Starts for Scarlett_31:

(Start: 31 @26447 has 28 MA's), (Start: 42 @26477 has 3 MA's), (45, 26480), (Start: 55 @26504 has 7 MA's), (68, 26567), (75, 26594), (76, 26597), (85, 26648), (99, 26711), (115, 26789), (118, 26801), (119, 26807),

Gene: Settecandela_222 Start: 141538, Stop: 141927, Start Num: 55

Candidate Starts for Settecandela_222:

(Start: 55 @141538 has 7 MA's), (73, 141619), (75, 141628), (76, 141631), (87, 141688), (95, 141721), (105, 141772), (106, 141775), (109, 141784), (111, 141802), (113, 141814), (122, 141853),

Gene: SgtBeansprout_28 Start: 26747, Stop: 27205, Start Num: 30

Candidate Starts for SgtBeansprout_28:

(14, 26528), (Start: 30 @26747 has 101 MA's), (Start: 42 @26777 has 3 MA's), (47, 26783), (Start: 54 @26801 has 6 MA's), (67, 26861), (73, 26885), (75, 26894), (76, 26897), (77, 26909), (85, 26948), (87, 26957), (88, 26960), (99, 27011), (103, 27032), (107, 27047), (115, 27089), (118, 27101),

Gene: Shadow1_31 Start: 26476, Stop: 26940, Start Num: 31

Candidate Starts for Shadow1_31:

(Start: 31 @26476 has 28 MA's), (39, 26497), (Start: 42 @26506 has 3 MA's), (45, 26509), (56, 26536), (67, 26590), (68, 26596), (75, 26623), (85, 26677), (99, 26740), (103, 26761), (115, 26818), (118, 26830),

Gene: Shaobing_32 Start: 26622, Stop: 27086, Start Num: 30

Candidate Starts for Shaobing_32:

(17, 26496), (18, 26523), (Start: 30 @26622 has 101 MA's), (Start: 42 @26652 has 3 MA's), (47, 26658), (51, 26664), (Start: 54 @26676 has 6 MA's), (64, 26724), (67, 26736), (75, 26769), (76, 26772), (85, 26823), (99, 26886), (103, 26907), (107, 26922), (112, 26952), (115, 26964), (118, 26976),

Gene: ShedlockHolmes_33 Start: 28259, Stop: 28705, Start Num: 31

Candidate Starts for ShedlockHolmes_33:

(21, 28226), (Start: 31 @28259 has 28 MA's), (Start: 42 @28289 has 3 MA's), (68, 28379), (75, 28406), (76, 28409), (81, 28445), (85, 28460), (99, 28523), (105, 28553), (115, 28601),

Gene: Shelley_33 Start: 39168, Stop: 39605, Start Num: 40

Candidate Starts for Shelley_33:

(Start: 23 @39114 has 16 MA's), (Start: 40 @39168 has 36 MA's), (49, 39180), (Start: 55 @39201 has 7 MA's), (67, 39261), (72, 39282), (102, 39423), (115, 39492),

Gene: ShiaSurprise_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for ShiaSurprise_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (98, 27638), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: SirPhilip_31 Start: 26116, Stop: 26580, Start Num: 30

Candidate Starts for SirPhilip_31:

(Start: 30 @26116 has 101 MA's), (Start: 42 @26146 has 3 MA's), (45, 26149), (Start: 55 @26173 has 7 MA's), (67, 26230), (68, 26236), (75, 26263), (76, 26266), (85, 26317), (99, 26380), (115, 26458), (118, 26470), (119, 26476), (139, 26569),

Gene: Slimphazie_32 Start: 27344, Stop: 27784, Start Num: 30

Candidate Starts for Slimphazie_32:

(11, 27107), (19, 27281), (Start: 30 @27344 has 101 MA's), (Start: 42 @27374 has 3 MA's), (47, 27380), (51, 27386), (Start: 54 @27398 has 6 MA's), (64, 27446), (68, 27464), (75, 27491), (85, 27545), (98, 27605), (99, 27608), (103, 27629), (115, 27686), (122, 27719), (135, 27776),

Gene: Smoothie_53 Start: 33369, Stop: 33776, Start Num: 58

Candidate Starts for Smoothie_53:

(Start: 58 @33369 has 13 MA's), (71, 33432), (72, 33435), (94, 33537), (115, 33648), (123, 33690), (140, 33765),

Gene: SoSeph_31 Start: 28061, Stop: 28513, Start Num: 24

Candidate Starts for SoSeph_31:

(Start: 24 @28061 has 15 MA's), (Start: 42 @28106 has 3 MA's), (51, 28118), (Start: 54 @28130 has 6 MA's), (64, 28178), (67, 28190), (68, 28196), (75, 28223), (76, 28226), (85, 28277), (87, 28286), (91, 28301), (99, 28340), (103, 28361), (114, 28415), (115, 28418), (122, 28451),

Gene: Sombrero_32 Start: 37356, Stop: 37877, Start Num: 23

Candidate Starts for Sombrero_32:

(Start: 23 @37356 has 16 MA's), (Start: 40 @37410 has 36 MA's), (49, 37422), (Start: 55 @37443 has 7 MA's), (69, 37512), (73, 37527), (90, 37611), (101, 37662), (103, 37674), (115, 37734), (126, 37791), (133, 37824), (136, 37839),

Gene: SpeedDemon_350 Start: 32425, Stop: 32838, Start Num: 55

Candidate Starts for SpeedDemon_350:

(Start: 55 @32425 has 7 MA's), (75, 32515), (78, 32533), (95, 32617), (118, 32728),

Gene: Spock_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Spock_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Squibbles_31 Start: 38271, Stop: 38738, Start Num: 40

Candidate Starts for Squibbles_31:

(Start: 23 @38217 has 16 MA's), (Start: 40 @38271 has 36 MA's), (49, 38283), (Start: 55 @38304 has 7 MA's), (73, 38388), (90, 38472), (101, 38523), (103, 38535), (115, 38595), (126, 38652), (133, 38685), (136, 38700),

Gene: SteveFrench_32 Start: 38130, Stop: 38588, Start Num: 40

Candidate Starts for SteveFrench_32:

(Start: 23 @38076 has 16 MA's), (Start: 40 @38130 has 36 MA's), (49, 38142), (Start: 55 @38163 has 7 MA's), (69, 38232), (73, 38247), (90, 38331), (115, 38454), (126, 38511), (131, 38535),

Gene: Sticker17_33 Start: 39683, Stop: 40120, Start Num: 40

Candidate Starts for Sticker17_33:

(Start: 23 @39629 has 16 MA's), (Start: 40 @39683 has 36 MA's), (49, 39695), (Start: 55 @39716 has 7 MA's), (67, 39776), (72, 39797), (102, 39938), (115, 40007),

Gene: Stinson_33 Start: 27579, Stop: 28019, Start Num: 30

Candidate Starts for Stinson_33:

(11, 27342), (Start: 30 @27579 has 101 MA's), (Start: 42 @27609 has 3 MA's), (47, 27615), (51, 27621), (Start: 54 @27633 has 6 MA's), (64, 27681), (68, 27699), (75, 27726), (81, 27765), (85, 27780), (87, 27789), (99, 27843), (115, 27921), (122, 27954), (135, 28011),

Gene: Sulley_32 Start: 27310, Stop: 27750, Start Num: 30

Candidate Starts for Sulley_32:

(19, 27247), (Start: 30 @27310 has 101 MA's), (Start: 42 @27340 has 3 MA's), (47, 27346), (51, 27352), (Start: 54 @27364 has 6 MA's), (64, 27412), (68, 27430), (75, 27457), (85, 27511), (87, 27520), (99, 27574), (103, 27595), (115, 27652), (122, 27685), (135, 27742),

Gene: Sunflower1121_31 Start: 26488, Stop: 26952, Start Num: 31

Candidate Starts for Sunflower1121_31:

(Start: 31 @26488 has 28 MA's), (39, 26509), (Start: 42 @26518 has 3 MA's), (45, 26521), (56, 26548), (67, 26602), (68, 26608), (75, 26635), (85, 26689), (99, 26752), (103, 26773), (115, 26830), (118, 26842), (129, 26905),

Gene: Syra333_32 Start: 26498, Stop: 26962, Start Num: 31

Candidate Starts for Syra333_32:

(Start: 31 @26498 has 28 MA's), (39, 26519), (Start: 42 @26528 has 3 MA's), (45, 26531), (56, 26558), (67, 26612), (68, 26618), (75, 26645), (85, 26699), (99, 26762), (103, 26783), (115, 26840), (118, 26852),

Gene: TBond007_32 Start: 27736, Stop: 28182, Start Num: 31

Candidate Starts for TBond007_32:

(21, 27703), (Start: 31 @27736 has 28 MA's), (Start: 42 @27766 has 3 MA's), (68, 27856), (75, 27883), (76, 27886), (81, 27922), (85, 27937), (99, 28000), (105, 28030), (112, 28066), (115, 28078),

Gene: TClif_34 Start: 27061, Stop: 27525, Start Num: 29

Candidate Starts for TClif_34:

(29, 27061), (Start: 42 @27091 has 3 MA's), (45, 27094), (51, 27103), (Start: 54 @27115 has 6 MA's), (56, 27121), (68, 27181), (75, 27208), (76, 27211), (85, 27262), (99, 27325), (115, 27403),

Gene: TPA4_33 Start: 29799, Stop: 30185, Start Num: 59

Candidate Starts for TPA4_33:

(15, 29538), (22, 29694), (57, 29793), (59, 29799), (90, 29949), (93, 29961), (96, 29976), (101, 30006), (115, 30075), (117, 30084), (124, 30123),

Gene: Tachez_32 Start: 27306, Stop: 27746, Start Num: 30

Candidate Starts for Tachez_32:

(11, 27069), (19, 27243), (Start: 30 @27306 has 101 MA's), (Start: 42 @27336 has 3 MA's), (47, 27342), (51, 27348), (Start: 54 @27360 has 6 MA's), (64, 27408), (68, 27426), (75, 27453), (85, 27507), (98, 27567), (99, 27570), (103, 27591), (115, 27648), (122, 27681), (135, 27738),

Gene: TaiwanKao_33 Start: 27310, Stop: 27750, Start Num: 30

Candidate Starts for TaiwanKao_33:

(11, 27073), (19, 27247), (Start: 30 @27310 has 101 MA's), (Start: 42 @27340 has 3 MA's), (47, 27346), (51, 27352), (Start: 54 @27364 has 6 MA's), (64, 27412), (68, 27430), (75, 27457), (85, 27511), (87, 27520), (99, 27574), (115, 27652), (122, 27685), (135, 27742),

Gene: Teal_33 Start: 40151, Stop: 40588, Start Num: 40

Candidate Starts for Teal_33:

(Start: 23 @40097 has 16 MA's), (Start: 40 @40151 has 36 MA's), (49, 40163), (Start: 55 @40184 has 7 MA's), (67, 40244), (72, 40265), (102, 40406), (115, 40475),

Gene: Teatealatte_31 Start: 39000, Stop: 39434, Start Num: 41

Candidate Starts for Teatealatte_31:

(Start: 41 @39000 has 7 MA's), (53, 39021), (62, 39039), (66, 39072), (98, 39222), (102, 39237), (105, 39255), (109, 39267), (115, 39303), (116, 39309), (131, 39384),

Gene: Teech_31 Start: 38801, Stop: 39235, Start Num: 41

Candidate Starts for Teech_31:

(Start: 41 @38801 has 7 MA's), (53, 38822), (62, 38840), (66, 38873), (98, 39023), (102, 39038), (105, 39056), (109, 39068), (115, 39104), (116, 39110), (131, 39185),

Gene: Thyatira_31 Start: 27915, Stop: 28367, Start Num: 24

Candidate Starts for Thyatira_31:

(Start: 24 @27915 has 15 MA's), (Start: 42 @27960 has 3 MA's), (51, 27972), (Start: 54 @27984 has 6 MA's), (64, 28032), (67, 28044), (68, 28050), (75, 28077), (85, 28131), (87, 28140), (91, 28155), (99, 28194), (103, 28215), (114, 28269), (115, 28272), (122, 28305),

Gene: Tierra_32 Start: 27324, Stop: 27788, Start Num: 31

Candidate Starts for Tierra_32:

(Start: 31 @27324 has 28 MA's), (39, 27345), (Start: 42 @27354 has 3 MA's), (45, 27357), (56, 27384), (67, 27438), (68, 27444), (75, 27471), (85, 27525), (102, 27600), (115, 27666), (129, 27741),

Gene: TiniBug_32 Start: 27262, Stop: 27702, Start Num: 30

Candidate Starts for TiniBug_32:

(3, 26935), (19, 27199), (Start: 30 @27262 has 101 MA's), (Start: 42 @27292 has 3 MA's), (47, 27298), (51, 27304), (Start: 54 @27316 has 6 MA's), (64, 27364), (68, 27382), (75, 27409), (85, 27463), (87, 27472), (99, 27526), (115, 27604), (122, 27637), (135, 27694),

Gene: Tiri_32 Start: 27349, Stop: 27798, Start Num: 30

Candidate Starts for Tiri_32:

(11, 27112), (19, 27286), (Start: 30 @27349 has 101 MA's), (Start: 42 @27379 has 3 MA's), (47, 27385), (51, 27391), (Start: 54 @27403 has 6 MA's), (64, 27451), (68, 27469), (75, 27496), (85, 27550), (87, 27559), (99, 27613), (103, 27634), (115, 27691), (135, 27790),

Gene: Toniann_51 Start: 32856, Stop: 33263, Start Num: 58

Candidate Starts for Toniann_51:

(Start: 58 @32856 has 13 MA's), (71, 32919), (72, 32922), (94, 33024), (115, 33135), (123, 33177), (140, 33252),

Gene: Topper_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Topper_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Tredge_31 Start: 39000, Stop: 39434, Start Num: 41

Candidate Starts for Tredge_31:

(Start: 41 @39000 has 7 MA's), (53, 39021), (62, 39039), (66, 39072), (98, 39222), (102, 39237), (105, 39255), (109, 39267), (115, 39303), (116, 39309), (131, 39384),

Gene: TreyKay_32 Start: 27310, Stop: 27750, Start Num: 30

Candidate Starts for TreyKay_32:

(11, 27073), (19, 27247), (Start: 30 @27310 has 101 MA's), (Start: 42 @27340 has 3 MA's), (47, 27346), (51, 27352), (Start: 54 @27364 has 6 MA's), (64, 27412), (68, 27430), (75, 27457), (85, 27511), (87, 27520), (99, 27574), (115, 27652), (122, 27685), (135, 27742),

Gene: TribbleTrouble_31 Start: 27787, Stop: 28239, Start Num: 31

Candidate Starts for TribbleTrouble_31:

(21, 27754), (Start: 31 @27787 has 28 MA's), (Start: 42 @27817 has 3 MA's), (68, 27907), (75, 27934), (76, 27937), (81, 27973), (85, 27988), (99, 28051), (103, 28072), (115, 28129), (122, 28162),

Gene: TruffulaTree_32 Start: 27340, Stop: 27780, Start Num: 30

Candidate Starts for TruffulaTree_32:

(19, 27277), (Start: 30 @27340 has 101 MA's), (Start: 42 @27370 has 3 MA's), (47, 27376), (51, 27382), (Start: 54 @27394 has 6 MA's), (64, 27442), (68, 27460), (75, 27487), (85, 27541), (98, 27601), (99, 27604), (103, 27625), (115, 27682), (122, 27715), (135, 27772),

Gene: Twitch_32 Start: 27377, Stop: 27817, Start Num: 30

Candidate Starts for Twitch_32:

(19, 27314), (Start: 30 @27377 has 101 MA's), (Start: 42 @27407 has 3 MA's), (47, 27413), (51, 27419), (Start: 54 @27431 has 6 MA's), (64, 27479), (68, 27497), (75, 27524), (85, 27578), (87, 27587), (99, 27641), (103, 27662), (115, 27719), (122, 27752), (135, 27809),

Gene: Unicorn_32 Start: 26653, Stop: 27117, Start Num: 31

Candidate Starts for Unicorn_32:

(Start: 31 @26653 has 28 MA's), (39, 26674), (Start: 42 @26683 has 3 MA's), (45, 26686), (Start: 54 @26707 has 6 MA's), (56, 26713), (67, 26767), (68, 26773), (75, 26800), (99, 26917), (115, 26995), (118, 27007), (129, 27070),

Gene: Urkel_32 Start: 27266, Stop: 27706, Start Num: 30

Candidate Starts for Urkel_32:

(Start: 24 @27251 has 15 MA's), (Start: 30 @27266 has 101 MA's), (Start: 42 @27296 has 3 MA's), (47, 27302), (51, 27308), (Start: 54 @27320 has 6 MA's), (64, 27368), (68, 27386), (75, 27413), (85, 27467), (87, 27476), (99, 27530), (115, 27608), (122, 27641), (135, 27698), (137, 27701),

Gene: Validus_32 Start: 26557, Stop: 27018, Start Num: 30

Candidate Starts for Validus_32:

(Start: 30 @26557 has 101 MA's), (35, 26566), (Start: 42 @26587 has 3 MA's), (45, 26590), (47, 26593), (51, 26599), (Start: 54 @26611 has 6 MA's), (64, 26659), (67, 26671), (75, 26704), (76, 26707), (85, 26758), (99, 26821), (103, 26842), (107, 26857), (112, 26887), (115, 26899), (118, 26911),

Gene: Veliki_32 Start: 27380, Stop: 27820, Start Num: 30

Candidate Starts for Veliki_32:

(11, 27143), (19, 27317), (Start: 30 @27380 has 101 MA's), (Start: 42 @27410 has 3 MA's), (47, 27416), (51, 27422), (Start: 54 @27434 has 6 MA's), (64, 27482), (68, 27500), (75, 27527), (85, 27581), (98, 27641), (99, 27644), (103, 27665), (115, 27722), (122, 27755), (135, 27812),

Gene: Waterfoul_31 Start: 27939, Stop: 28391, Start Num: 24

Candidate Starts for Waterfoul_31:

(Start: 24 @27939 has 15 MA's), (Start: 42 @27984 has 3 MA's), (51, 27996), (Start: 54 @28008 has 6 MA's), (64, 28056), (67, 28068), (68, 28074), (75, 28101), (85, 28155), (87, 28164), (91, 28179), (99, 28218), (103, 28239), (114, 28293), (115, 28296), (122, 28329),

Gene: WilliamBoone_51 Start: 32208, Stop: 32615, Start Num: 58

Candidate Starts for WilliamBoone_51:

(Start: 58 @32208 has 13 MA's), (84, 32337), (85, 32340), (90, 32361), (94, 32376), (115, 32487), (123, 32529), (140, 32604),

Gene: Woes_33 Start: 40202, Stop: 40639, Start Num: 40

Candidate Starts for Woes_33:

(Start: 23 @40148 has 16 MA's), (Start: 40 @40202 has 36 MA's), (49, 40214), (Start: 55 @40235 has 7 MA's), (67, 40295), (71, 40313), (72, 40316), (102, 40457), (115, 40526),

Gene: Ximenita_33 Start: 26680, Stop: 27144, Start Num: 31

Candidate Starts for Ximenita_33:

(Start: 31 @26680 has 28 MA's), (39, 26701), (Start: 42 @26710 has 3 MA's), (45, 26713), (56, 26740), (67, 26794), (68, 26800), (75, 26827), (85, 26881), (99, 26944), (102, 26956), (115, 27022), (129, 27097),

Gene: YoureAdopted_31 Start: 27313, Stop: 27753, Start Num: 30

Candidate Starts for YoureAdopted_31:

(19, 27250), (Start: 30 @27313 has 101 MA's), (Start: 42 @27343 has 3 MA's), (47, 27349), (51, 27355), (Start: 54 @27367 has 6 MA's), (64, 27415), (68, 27433), (75, 27460), (85, 27514), (87, 27523), (99, 27577), (103, 27598), (115, 27655), (122, 27688), (135, 27745),

Gene: Yuna_33 Start: 27088, Stop: 27546, Start Num: 31

Candidate Starts for Yuna_33:

(Start: 31 @27088 has 28 MA's), (39, 27109), (Start: 42 @27118 has 3 MA's), (45, 27121), (Start: 54 @27142 has 6 MA's), (68, 27208), (75, 27235), (85, 27289), (90, 27310), (99, 27352), (101, 27361), (115, 27430),

Gene: Yunkel11_32 Start: 26598, Stop: 27047, Start Num: 30

Candidate Starts for Yunkel11_32:

(Start: 30 @26598 has 101 MA's), (Start: 42 @26628 has 3 MA's), (47, 26634), (51, 26640), (Start: 54 @26652 has 6 MA's), (64, 26700), (67, 26712), (75, 26745), (76, 26748), (85, 26799), (87, 26808), (99, 26862), (103, 26883), (107, 26898), (115, 26940), (137, 27039),

Gene: Zabiza_33 Start: 27344, Stop: 27784, Start Num: 30

Candidate Starts for Zabiza_33:

(11, 27107), (19, 27281), (Start: 30 @27344 has 101 MA's), (Start: 42 @27374 has 3 MA's), (47, 27380), (51, 27386), (Start: 54 @27398 has 6 MA's), (64, 27446), (68, 27464), (75, 27491), (85, 27545), (98, 27605), (99, 27608), (103, 27629), (115, 27686), (122, 27719), (135, 27776),

Gene: Zavala_32 Start: 27319, Stop: 27759, Start Num: 30

Candidate Starts for Zavala_32:

(11, 27082), (16, 27193), (19, 27256), (Start: 30 @27319 has 101 MA's), (Start: 42 @27349 has 3 MA's), (47, 27355), (51, 27361), (Start: 54 @27373 has 6 MA's), (64, 27421), (68, 27439), (75, 27466), (85, 27520), (87, 27529), (99, 27583), (103, 27604), (115, 27661), (122, 27694), (135, 27751),