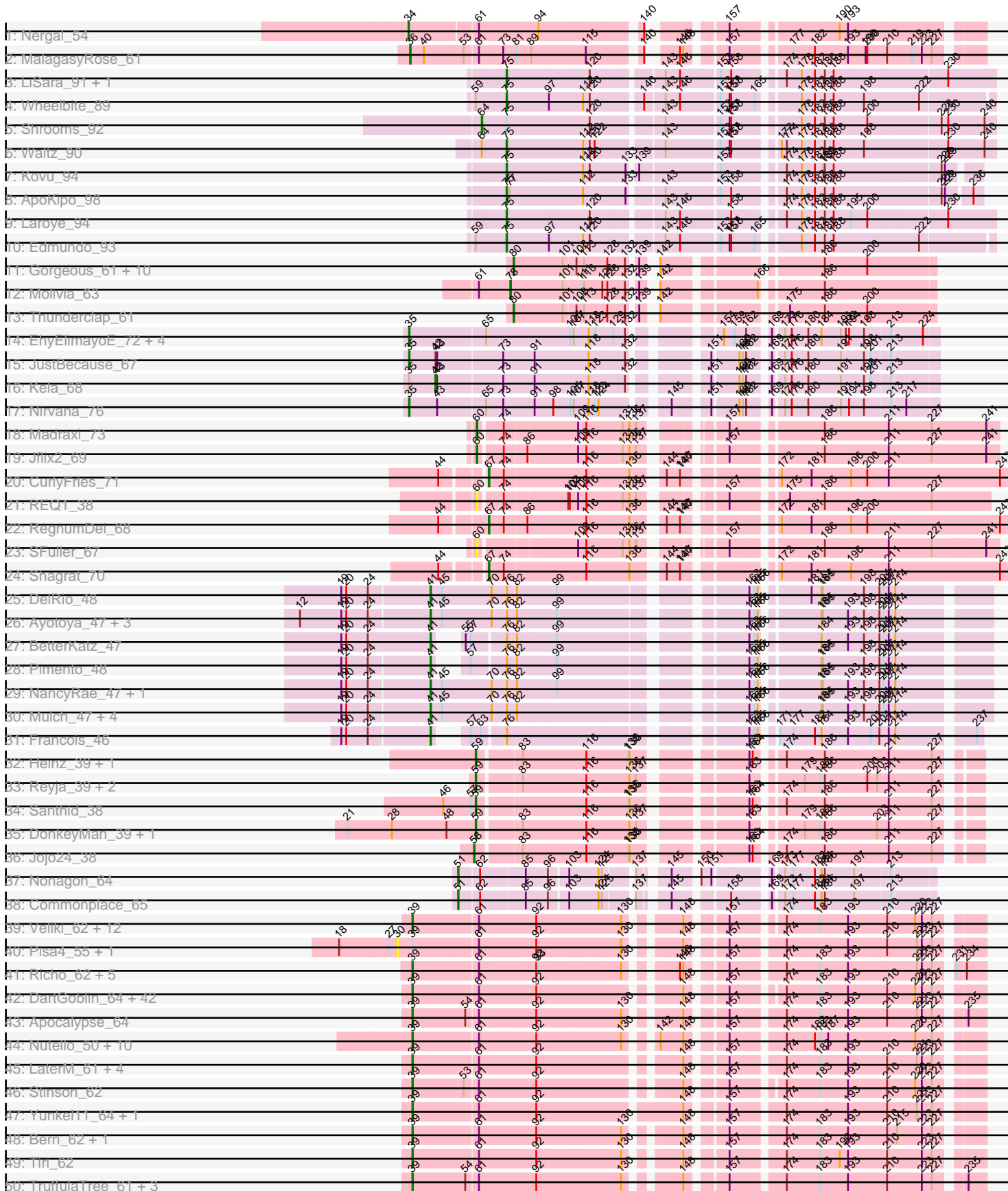
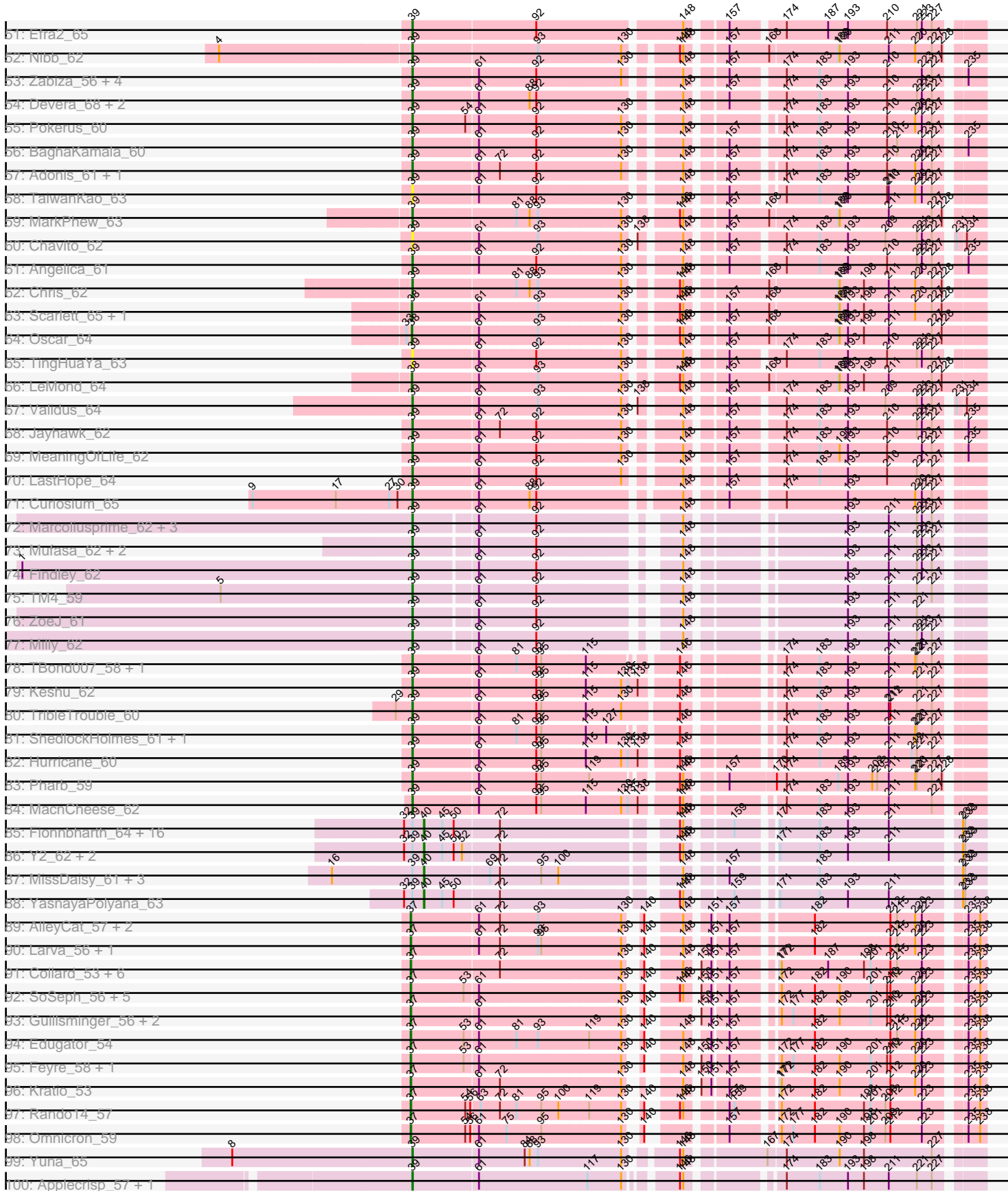


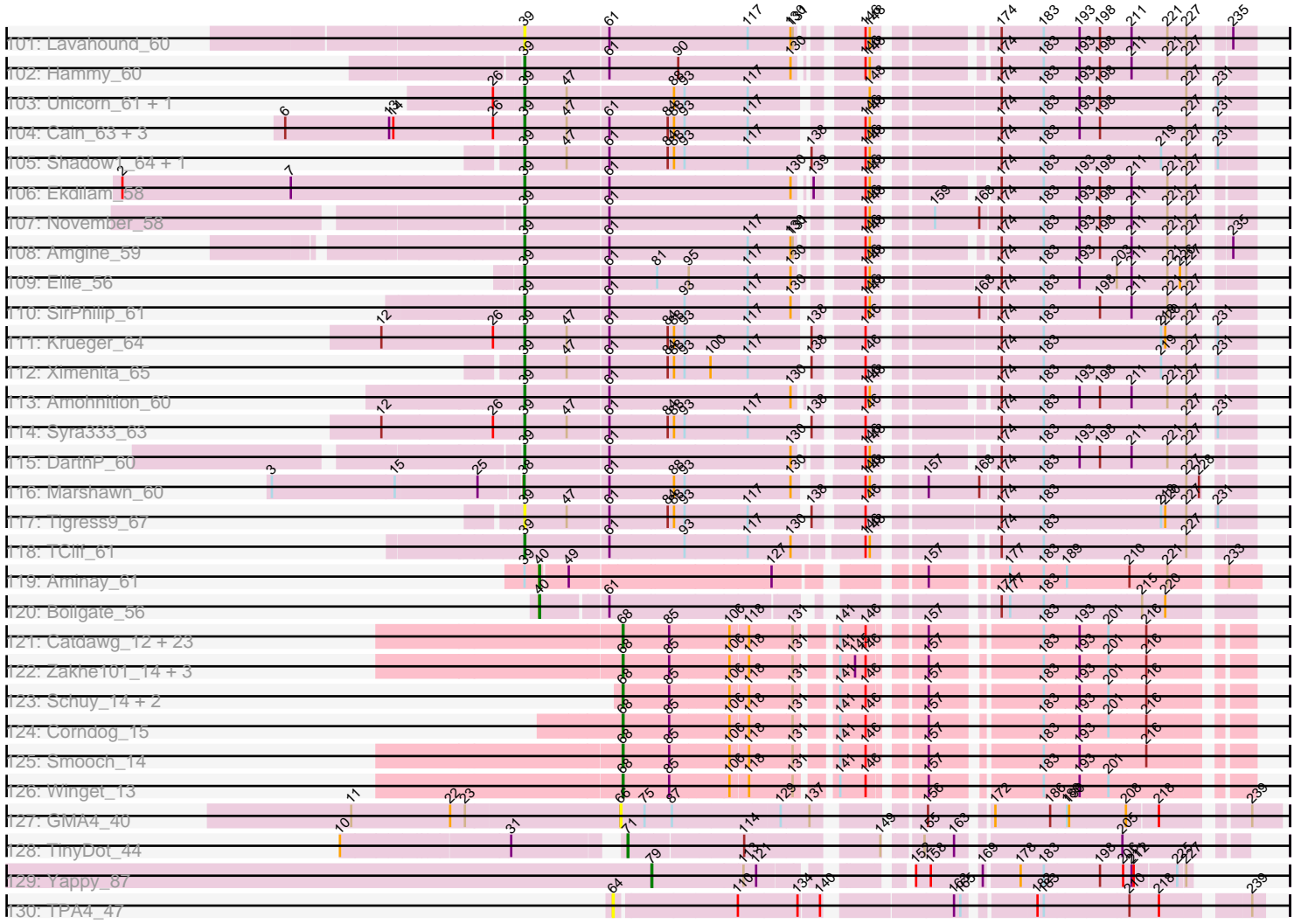
Pham 296169



Pham 296169



Pham 296169



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 296169 Report

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

Pham number 296169 has 323 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Nergal_54
- Track 2 : MalagasyRose_61
- Track 3 : LiSara_91, Salgado_94
- Track 4 : Wheelbite_89
- Track 5 : Shrooms_92
- Track 6 : Waltz_90
- Track 7 : Kovu_94
- Track 8 : ApoKipo_98
- Track 9 : Laroye_94
- Track 10 : Edmundo_93
- Track 11 : Gorgeous_61, Rings_62, Jaek_61, Amigo_62, Heylee_64, Ichor_61, SorJuana_61, Amavida_63, Yeezus_61, Boersma_64, Anansi_61
- Track 12 : Molivia_63
- Track 13 : Thunderclap_61
- Track 14 : EhyElimayoE_72, Sarkar_76, Quantum_71, Satis_72, Kradal_72
- Track 15 : JustBecause_67
- Track 16 : Kela_68
- Track 17 : Nirvana_76
- Track 18 : Madraxi_73
- Track 19 : Jflix2_69
- Track 20 : CurlyFries_71
- Track 21 : REQ1_38
- Track 22 : RegnumDei_68
- Track 23 : SFuller_67
- Track 24 : Shagrat_70
- Track 25 : DelRio_48
- Track 26 : Ayotoya_47, Hamood_47, Chop_47, GrandSlam_47
- Track 27 : BetterKatz_47
- Track 28 : Pimento_48
- Track 29 : NancyRae_47, Bock_47
- Track 30 : Mulch_47, WheatThin_47, Nadeem_47, Brylie_47, Parada_47
- Track 31 : Francois_46
- Track 32 : Heinz_39, Hibiscus_40
- Track 33 : Reyja_39, DearBasketball_41, DinoNuggs_39
- Track 34 : Santhid_38
- Track 35 : DonkeyMan_39, Tarzan_39
- Track 36 : Jojo24_38

- Track 37 : Nonagon_64
- Track 38 : Commonplace_65
- Track 39 : Veliki_62, Emerson_62, Clipper_64, MacKat_56, QuincyRose_60, Anaya_63, YoureAdopted_60, JAWS_61, Mynx_62, Beezoo_63, Ganymede_62, Padpat_63, Geraldini_64
- Track 40 : Pisa4_55, Pisa1_61
- Track 41 : Richo_62, McMater_62, Shaobing_62, Peanam_62, Niklas_62, Dartin_62
- Track 42 : DartGoblin_64, Tachez_61, BGIluviae_61, Anma_63, Twitch_61, Jarvi_61, TiniBug_62, Blizzard_61, DrHayes_62, Atiba_62, Hyperbowlee_61, Adephegia_61, LindNT_60, Urkel_62, Llorens_61, Homura_61, CaseJules_63, Spock_61, Capricorn_61, Rosmarinus_61, ShiaSurprise_62, Lunahalos_61, Boiii_61, Bella96_62, SamuelLPlaqson_62, Joy99_61, CrimD_62, Piatt_61, Durfee_61, Peel_61, Inky_61, Belladonna_61, Padfoot_61, Topper_61, Dalmuri_61, Asayake_61, TreyKay_62, CallaLilly_61, Jeckyll_61, AlishaPH_61, BEEEST_61, CREW_61, Prithvi_62
- Track 43 : Apocalypse_64
- Track 44 : Nutello_50, Teejan_52, SgtBeansprout_50, Nikao_53, Torres_53, Binglebops_50, LilPharaoh_50, Enkosi_52, Amelie_50, Mdavu_51, Trice_50
- Track 45 : LaterM_61, Ageofdapage_64, Sulley_61, Megsy_63, Murucutumbu_62
- Track 46 : Stinson_62
- Track 47 : Yunkel11_64, Guanica15_64
- Track 48 : Bern_62, CheetoDust_60
- Track 49 : Tiri_62
- Track 50 : TruffulaTree_61, BarrelRoll_61, Rapunzel97_62, Slimphazie_61
- Track 51 : Efra2_65
- Track 52 : Nibb_62
- Track 53 : Zabiza_56, Deby_61, Ramen_62, ActinUp_61, HedwigODU_61
- Track 54 : Devera_68, Dole_66, Illumine_66
- Track 55 : Pokerus_60
- Track 56 : BaghaKamala_60
- Track 57 : Adonis_61, Zavala_63
- Track 58 : TaiwanKao_63
- Track 59 : MarkPhew_63
- Track 60 : Chavito_62
- Track 61 : Angelica_61
- Track 62 : Chris_62
- Track 63 : Scarlett_65, KiSi_65
- Track 64 : Oscar_64
- Track 65 : TingHuaYa_63
- Track 66 : LeMond_64
- Track 67 : Validus_64
- Track 68 : Jayhawk_62
- Track 69 : MeaningOfLife_62
- Track 70 : LastHope_64
- Track 71 : Curiosium_65
- Track 72 : Marcoliusprime_62, DismalFunk_62, DismalStressor_62, Strobilo_63
- Track 73 : Mufasa_62, Doughnut_62, BoostSeason_62
- Track 74 : Findley_62
- Track 75 : TM4_59
- Track 76 : ZoeJ_61
- Track 77 : Milly_62
- Track 78 : TBond007_58, Pixie_59
- Track 79 : Keshu_62

- Track 80 : TribbleTrouble_60
- Track 81 : ShedlockHolmes_61, Lea83_60
- Track 82 : Hurricane_60
- Track 83 : Pharb_59
- Track 84 : MacnCheese_62
- Track 85 : Fionnbharth_64, Eponine_66, Juliette_66, DanSyl44_67, Ruthiejr_65, Taquito_63, Malthus_65, Mitti_64, Qhanda_66, Slarp_64, Wintermute_64, Kraw_64, SamScheppers_62, OmniCritical_63, Chancellor_64, Lebo14_63, Cheetobro_64
- Track 86 : Y2_62, Y10_62, JF1_64
- Track 87 : MissDaisy_61, Bobquesha_65, Patt_60, Reptar3000_61
- Track 88 : YasnayaPolyana_63
- Track 89 : AlleyCat_57, Psycho_55, Dadosky_57
- Track 90 : Larva_56, Neighly_57
- Track 91 : Collard_53, DoubleChamp_52, Agent47_55, BananenDer11_52, LilDirt_52, InvictusManeo_53, ViviJ_54
- Track 92 : SoSeph_56, Heftyboy_56, Gengar_55, Waterfoul_57, OkiRoe_56, Miryou_59
- Track 93 : Guillsminger_56, Paola_55, Leston_55
- Track 94 : Edugator_54
- Track 95 : Feyre_58, Thyatira_58
- Track 96 : Kratio_53
- Track 97 : Rando14_57
- Track 98 : Omnicron_59
- Track 99 : Yuna_65
- Track 100 : Applecrisp_57, Fefferhead_58
- Track 101 : Lavahound_60
- Track 102 : Hammy_60
- Track 103 : Unicorn_61, PhelpsODU_61
- Track 104 : Cain_63, Bryler_63, Phrank_63, Tierra_63
- Track 105 : Shadow1_64, Sunflower1121_65
- Track 106 : Ekdilam_58
- Track 107 : November_58
- Track 108 : Amgine_59
- Track 109 : Ellie_56
- Track 110 : SirPhilip_61
- Track 111 : Krueger_64
- Track 112 : Ximenita_65
- Track 113 : Amohnition_60
- Track 114 : Syra333_63
- Track 115 : DarthP_60
- Track 116 : Marshawn_60
- Track 117 : Tigress9_67
- Track 118 : TClif_61
- Track 119 : Aminay_61
- Track 120 : Boilgate_56
- Track 121 : Catdawg_12, JangDynasty_12, YungJamal_14, SchoolBus_12, Alkhayr_13, Idergollasper_12, Blessica_12, FoulBall_12, KingPhillip3_12, Bora_13, Imara_13, Murai_13, YoyoKar_13, Familton_13, Zebo_12, Vagabond_13, Shida_13, Ryadel_15, Mori_13, Firecracker_13, Wogge42_13, Vorrrps_13, NiebruSaylor_13, TelAviv_12
- Track 122 : Zakhe101_14, Ashwin_14, Wildflower_13, Dylan_13
- Track 123 : Schuy_14, Krili_13, MadKillah_14
- Track 124 : Corndog_15

- Track 125 : Smooch_14
- Track 126 : Winget_13
- Track 127 : GMA4_40
- Track 128 : TinyDot_44
- Track 129 : Yappy_87
- Track 130 : TPA4_47

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

The start number called the most often in the published annotations is 39, it was called in 147 of the 291 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_61, Adephegia_61, Adonis_61, Ageofdapage_64, AlishaPH_61, Amelie_50, Amgine_59, Amohnition_60, Anaya_63, Angelica_61, Anma_63, Apocalypse_64, Applecrisp_57, Asayake_61, Atiba_62, BEEST_61, BGlluviae_61, BaghaKamala_60, BarrelRoll_61, Beezoo_63, Bella96_62, Belladonna_61, Bern_62, Biglebops_50, Blizzard_61, Boiiii_61, BoostSeason_62, Bryler_63, CREW_61, Cain_63, CallaLilly_61, Capricorn_61, CaseJules_63, Chavito_62, CheetoDust_60, Chris_62, Clipper_64, CrimD_62, Curiosium_65, Dalmuri_61, DartGoblin_64, DarthP_60, Dartin_62, Deby_61, Devera_68, DismalFunk_62, DismalStressor_62, Dole_66, Doughnut_62, DrHayes_62, Durfee_61, Efra2_65, Ekdilam_58, Ellie_56, Emerson_62, Enkosi_52, Fefferhead_58, Findley_62, Ganymede_62, Geraldini_64, Guanica15_64, Hammy_60, HedwigODU_61, Homura_61, Hurricane_60, Hyperbowlee_61, Illumine_66, Inky_61, JAWS_61, Jarvi_61, Jayhawk_62, Jeckyll_61, Joy99_61, Keshu_62, Krueger_64, LastHope_64, LaterM_61, Lavahound_60, Lea83_60, LilPharaoh_50, LindNT_60, Llorens_61, Lunahalos_61, MacKat_56, MacnCheese_62, Marcoliusprime_62, MarkPhew_63, McMater_62, Mdavu_51, MeaningOfLife_62, Megsy_63, Milly_62, Mufasa_62, Murucutumbu_62, Mynx_62, Nibb_62, Nikao_53, Niklas_62, November_58, Nutello_50, Padfoot_61, Padpat_63, Peanam_62, Peel_61, Pharb_59, PhelpsODU_61, Phrank_63, Piatt_61, Pixie_59, Pokerus_60, Prithvi_62, QuincyRose_60, Ramen_62, Rapunzel97_62, Richo_62, Rosmarinus_61, SamuelLPlaqson_62, SgtBeansprout_50, Shadow1_64, Shaobing_62, ShedlockHolmes_61, ShiaSurprise_62, SirPhilip_61, Slimphazie_61, Spock_61, Stinson_62, Strobilo_63, Sulley_61, Sunflower1121_65, Syra333_63, TBond007_58, TClif_61, TM4_59, Tachez_61, TaiwanKao_63, Teejan_52, Tierra_63, Tigress9_67, TingHuaYa_63, TiniBug_62, Tiri_62, Topper_61, Torres_53, TreyKay_62, TripleTrouble_60, Trice_50, TruffulaTree_61, Twitch_61, Unicorn_61, Urkel_62, Validus_64, Veliki_62, Ximenita_65, YoureAdopted_60, Yuna_65, Yunkel11_64, Zabiza_56, Zavala_63, ZoeJ_61,

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

- Aminay_61, Bobquesha_65, Chancellor_64, Cheetobro_64, DanSyl44_67, Eponine_66, Fionnbharth_64, JF1_64, Juliette_66, Kraw_64, Lebo14_63, Malthus_65, MissDaisy_61, Mitti_64, OmniCritical_63, Patt_60, Pisa1_61, Pisa4_55, Qhanda_66, Reptar3000_61, Ruthiejr_65, SamScheppers_62, Slarp_64, Taquito_63, Wintermute_64, Y10_62, Y2_62, YasnayaPolyana_63,

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

- Agent47_55, Alkhayr_13, AlleyCat_57, Amavida_63, Amigo_62, Anansi_61, ApoKipo_98, Ashwin_14, Ayotoya_47, BananenDer11_52, BetterKatz_47, Blessica_12, Bock_47, Boersma_64, Boilgate_56, Bora_13, Brylie_47, Catdawg_12, Chop_47, Collard_53, Commonplace_65, Corndog_15, CurlyFries_71, Dadosky_57, DearBasketball_41, DelRio_48, DinoNuggs_39, DonkeyMan_39, DoubleChamp_52, Dylan_13, Edmundo_93, Edugator_54, EhyElimayoE_72, Familton_13, Feyre_58, Firecracker_13, FoulBall_12, Francois_46, GMA4_40, Gengar_55, Gorgeous_61, GrandSlam_47, Guillsminger_56, Hamood_47, Heftyboy_56, Heinz_39, Heylee_64, Hibiscus_40, Ichor_61, Idergollasper_12, Imara_13, InvictusManeo_53, Jaek_61, JangDynasty_12, Jflix2_69, Jojo24_38, JustBecause_67, Kela_68, KiSi_65, KingPhillip3_12, Kovu_94, Kradal_72, Kratio_53, Krili_13, Laroye_94, Larva_56, LeMond_64, Leston_55, LiSara_91, LilDirt_52, MadKillah_14, Madraxi_73, MalagasyRose_61, Marshawn_60, Miryou_59, Molivia_63, Mori_13, Mulch_47, Murai_13, Nadeem_47, NancyRae_47, Neighly_57, Nergal_54, NiebruSaylor_13, Nirvana_76, Nonagon_64, OkiRoe_56, Omnicron_59, Oscar_64, Paola_55, Parada_47, Pimento_48, Psycho_55, Quantum_71, REQ1_38, Rando14_57, RegnumDei_68, Reyja_39, Rings_62, Ryadel_15, SFuller_67, Salgado_94, Santhid_38, Sarkar_76, Satis_72, Scarlett_65, SchoolBus_12, Schuy_14, Shagrat_70, Shida_13, Shrooms_92, Smooch_14, SoSeph_56, SorJuana_61, TPA4_47, Tarzan_39, TelAviv_12, Thunderclap_61, Thyatira_58, TinyDot_44, Vagabond_13, ViviJ_54, Vorrrps_13, Waltz_90, Waterfoul_57, WheatThin_47, Wheelbite_89, Wildflower_13, Winget_13, Wogge42_13, Yappy_87, Yeezus_61, YoyoKar_13, YungJamal_14, Zakhe101_14, Zebo_12,

Summary by start number:

Start 30:

- Found in 3 of 323 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Pisa1_61 (K1), Pisa4_55 (K1),

Start 34:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_54 (AG),

Start 35:

- Found in 8 of 323 (2.5%) of genes in pham
- Manual Annotations of this start: 6 of 291
- Called 87.5% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_72 (BM), JustBecause_67 (BM), Kradal_72 (BM), Nirvana_76 (BM), Quantum_71 (BM), Sarkar_76 (BM), Satis_72 (BM),

Start 36:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_61 (AG),

Start 37:

- Found in 27 of 323 (8.4%) of genes in pham
- Manual Annotations of this start: 23 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47_55 (K5), AlleyCat_57 (K5), BananenDer11_52 (K5), Collard_53 (K5), Dadosky_57 (K5), DoubleChamp_52 (K5), Edugator_54 (K5), Feyre_58 (K5), Gengar_55 (K5), Guillsminger_56 (K5), Heftyboy_56 (K5), InvictusManeo_53 (K5), Kratio_53 (K5), Larva_56 (K5), Leston_55 (K5), LilDirt_52 (K5), Miryou_59 (K5), Neighly_57 (K3), OkiRoe_56 (K5), Omnicron_59 (K5), Paola_55 (K5), Psycho_55 (K5), Rando14_57 (K5), SoSeph_56 (K5), Thyatira_58 (K5), ViviJ_54 (K5), Waterfoul_57 (K5),

Start 38:

- Found in 5 of 323 (1.5%) of genes in pham
- Manual Annotations of this start: 5 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi_65 (K1), LeMond_64 (K1), Marshawn_60 (K6), Oscar_64 (K1), Scarlett_65 (K1),

Start 39:

- Found in 187 of 323 (57.9%) of genes in pham
- Manual Annotations of this start: 147 of 291
- Called 85.0% of time when present
- Phage (with cluster) where this start called: ActinUp_61 (K1), Adephegia_61 (K1), Adonis_61 (K1), Ageofdapage_64 (K1), AlishaPH_61 (K1), Amelie_50 (K1), Amgine_59 (K6), Amohntion_60 (K6), Anaya_63 (K1), Angelica_61 (K1), Anma_63 (K1), Apocalypse_64 (K1), Applecrisp_57 (K6), Asayake_61 (K1), Atiba_62 (K1), BEEST_61 (K1), BGlluviae_61 (K1), BaghaKamala_60 (K1), BarrelRoll_61 (K1), Beezoo_63 (K1), Bella96_62 (K1), Belladonna_61 (K1), Bern_62 (K1), Biglebops_50 (K1), Blizzard_61 (K1), Boiiii_61 (K1), BoostSeason_62 (K2), Bryler_63 (K6), CREW_61 (K1), Cain_63 (K6), CallaLilly_61 (K1), Capricorn_61 (K1), CaseJules_63 (K1), Chavito_62 (K1), CheetoDust_60 (K1), Chris_62 (K1), Clipper_64 (K1), CrimD_62 (K1), Curiosium_65 (K1), Dalmuri_61 (K1), DartGoblin_64 (K1), DARTH_P_60 (K6), Dartin_62 (K1), Deby_61 (K1), Devera_68 (K1), DismalFunk_62 (K2), DismalStressor_62 (K2), Dole_66 (K1), Doughnut_62 (K2), DrHayes_62 (K1), Durfee_61 (K1), Efra2_65 (K1), Ekdilam_58 (K6), Ellie_56 (K6), Emerson_62 (K1), Enkosi_52 (K1), Fefferhead_58 (K6), Findley_62 (K2), Ganymede_62 (K1), Geraldini_64 (K1), Guanica15_64 (K1), Hammy_60 (K6), HedwigODU_61 (K1), Homura_61 (K1), Hurricane_60 (K3), Hyperbowlee_61 (K1), Illumine_66 (K1), Inky_61 (K1), JAWS_61 (K1), Jarvi_61 (K1), Jayhawk_62 (K1), Jeckyll_61 (K1), Joy99_61 (K1), Keshu_62 (K3), Krueger_64 (K6), LastHope_64 (K1), LaterM_61 (K1), Lavahound_60 (K6), Lea83_60 (K3), LilPharaoh_50 (K1), LindNT_60 (K1), Llorens_61 (K1), Lunahalos_61 (K1), MacKat_56 (K1), MacnCheese_62 (K3), Marcoliusprime_62 (K2), MarkPhew_63 (K1), McMater_62 (K1), Mdavu_51 (K1), MeaningOfLife_62 (K1), Megsy_63 (K1), Milly_62 (K2), Mufasa_62 (K2), Murucutumbu_62 (K1), Mynx_62 (K1), Nibb_62 (K1), Nikao_53 (K1), Niklas_62 (K1), November_58 (K6), Nutello_50 (K1), Padfoot_61 (K1), Padpat_63 (K1), Peanam_62 (K1), Peel_61 (K1), Pharb_59 (K3), PhelpsODU_61 (K6), Phrank_63 (K6), Piatt_61 (K1), Pixie_59 (K3), Pokerus_60 (K1), Prithvi_62 (K1), QuincyRose_60 (K1), Ramen_62 (K1), Rapunzel97_62 (K1), Richo_62 (K1), Rosmarinus_61 (K1), SamuelLPlaqson_62 (K1), SgtBeansprout_50 (K1), Shadow1_64 (K6), Shaobing_62 (K1), ShedlockHolmes_61 (K3), ShiaSurprise_62 (K1), SirPhilip_61 (K6), Slimphazie_61 (K1), Spock_61 (K1), Stinson_62 (K1), Strobilo_63 (K2), Sulley_61 (K1), Sunflower1121_65 (K6), Syra333_63 (K6), TBond007_58 (K3), TClif_61 (K6),

TM4_59 (K2), Tachez_61 (K1), TaiwanKao_63 (K1), Teejan_52 (K1), Tierra_63 (K6), Tigress9_67 (K6), TingHuaYa_63 (K1), TiniBug_62 (K1), Tiri_62 (K1), Topper_61 (K1), Torres_53 (K1), TreyKay_62 (K1), TribbleTrouble_60 (K3), Trice_50 (K1), TruffulaTree_61 (K1), Twitch_61 (K1), Unicorn_61 (K6), Urkel_62 (K1), Validus_64 (K1), Veliki_62 (K1), Ximenita_65 (K6), YoureAdopted_60 (K1), Yuna_65 (K6), Yunkel11_64 (K1), Zabiza_56 (K1), Zavala_63 (K1), ZoeJ_61 (K2),

Start 40:

- Found in 28 of 323 (8.7%) of genes in pham
- Manual Annotations of this start: 24 of 291
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Aminay_61 (K7), Bobquesha_65 (K4), Boilgate_56 (K8), Chancellor_64 (K4), Cheetobro_64 (K4), DanSyl44_67 (K4), Eponine_66 (K4), Fionnbharth_64 (K4), JF1_64 (K4), Juliette_66 (K4), Kraw_64 (K4), Lebo14_63 (K4), Malthus_65 (K4), MissDaisy_61 (K4), Mitti_64 (K4), OmniCritical_63 (K4), Patt_60 (K4), Qhanda_66 (K4), Reptar3000_61 (K4), Ruthiejr_65 (K4), SamScheppers_62 (K4), Slarp_64 (K4), Taquito_63 (K4), Wintermute_64 (K4), Y10_62 (K4), Y2_62 (K4), YasnayaPolyana_63 (K4),

Start 41:

- Found in 15 of 323 (4.6%) of genes in pham
- Manual Annotations of this start: 15 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_47 (DI), BetterKatz_47 (DI), Bock_47 (DI), Brylie_47 (DI), Chop_47 (DI), DelRio_48 (DI), Francois_46 (DI), GrandSlam_47 (DI), Hamood_47 (DI), Mulch_47 (DI), Nadeem_47 (DI), NancyRae_47 (DI), Parada_47 (DI), Pimento_48 (DI), WheatThin_47 (DI),

Start 42:

- Found in 2 of 323 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kela_68 (BM),

Start 51:

- Found in 2 of 323 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commonplace_65 (JD), Nonagon_64 (JD),

Start 58:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jojo24_38 (DY),

Start 59:

- Found in 10 of 323 (3.1%) of genes in pham
- Manual Annotations of this start: 6 of 291
- Called 80.0% of time when present
- Phage (with cluster) where this start called: DearBasketball_41 (DY), DinoNuggs_39 (DY), DonkeyMan_39 (DY), Heinz_39 (DY), Hibiscus_40 (DY), Reyja_39 (DY),

Santhid_38 (DY), Tarzan_39 (DY),

Start 60:

- Found in 4 of 323 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JfliX2_69 (CF), Madraxi_73 (CF), REQ1_38 (CF), SFuller_67 (CF),

Start 64:

- Found in 3 of 323 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Shrooms_92 (AL), TPA4_47 (singleton),

Start 66:

- Found in 1 of 323 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4_40 (singleton),

Start 67:

- Found in 3 of 323 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CurlyFries_71 (CF), RegnumDei_68 (CF), Shagrat_70 (CF),

Start 68:

- Found in 34 of 323 (10.5%) of genes in pham
- Manual Annotations of this start: 30 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alkhayr_13 (O), Ashwin_14 (O), Blessica_12 (O), Bora_13 (O), Catdawg_12 (O), Corndog_15 (O), Dylan_13 (O), Familton_13 (O), Firecracker_13 (O), FoulBall_12 (O), Idergollasper_12 (O), Imara_13 (O), JangDynasty_12 (O), KingPhillip3_12 (O), Krili_13 (O), MadKillah_14 (O), Mori_13 (O), Murai_13 (O), NiebruSaylor_13 (O), Ryadel_15 (O), SchoolBus_12 (O), Schuy_14 (O), Shida_13 (O), Smooch_14 (O), TelAviv_12 (O), Vagabond_13 (O), Vorrps_13 (O), Wildflower_13 (O), Winget_13 (O), Wogge42_13 (O), YoyoKar_13 (O), YungJamal_14 (O), Zakhe101_14 (O), Zebo_12 (O),

Start 71:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TinyDot_44 (singleton),

Start 75:

- Found in 11 of 323 (3.4%) of genes in pham
- Manual Annotations of this start: 8 of 291
- Called 72.7% of time when present
- Phage (with cluster) where this start called: ApoKipo_98 (AL), Edmundo_93 (AL), Kovu_94 (AL), Laroye_94 (AL), LiSara_91 (AL), Salgado_94 (AL), Waltz_90 (AL),

Wheelbite_89 (AL),

Start 78:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Molivia_63 (AQ),

Start 79:

- Found in 1 of 323 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yappy_87 (singleton),

Start 80:

- Found in 12 of 323 (3.7%) of genes in pham
- Manual Annotations of this start: 12 of 291
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida_63 (AQ), Amigo_62 (AQ), Anansi_61 (AQ), Boersma_64 (AQ), Gorgeous_61 (AQ), Heylee_64 (AQ), Ichor_61 (AQ), Jaek_61 (AQ), Rings_62 (AQ), SorJuana_61 (AQ), Thunderclap_61 (AQ), Yeezus_61 (AQ),

Summary by clusters:

There are 18 clusters represented in this pham: AQ, singleton, AG, DI, BM, K4, CF, O, AL, K3, K2, K1, K7, K6, K5, DY, JD, K8,

Info for manual annotations of cluster AG:

- Start number 34 was manually annotated 1 time for cluster AG.
- Start number 36 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AL:

- Start number 64 was manually annotated 1 time for cluster AL.
- Start number 75 was manually annotated 8 times for cluster AL.

Info for manual annotations of cluster AQ:

- Start number 78 was manually annotated 1 time for cluster AQ.
- Start number 80 was manually annotated 12 times for cluster AQ.

Info for manual annotations of cluster BM:

- Start number 35 was manually annotated 6 times for cluster BM.
- Start number 42 was manually annotated 1 time for cluster BM.

Info for manual annotations of cluster CF:

- Start number 60 was manually annotated 2 times for cluster CF.
- Start number 67 was manually annotated 3 times for cluster CF.

Info for manual annotations of cluster DI:

- Start number 41 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DY:

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

- Start number 59 was manually annotated 6 times for cluster DY.

Info for manual annotations of cluster JD:

- Start number 51 was manually annotated 2 times for cluster JD.

Info for manual annotations of cluster K1:

- Start number 38 was manually annotated 4 times for cluster K1.
- Start number 39 was manually annotated 104 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 39 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 39 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 40 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 37 was manually annotated 23 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 38 was manually annotated 1 time for cluster K6.
- Start number 39 was manually annotated 23 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 40 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 40 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster O:

- Start number 68 was manually annotated 30 times for cluster O.

Gene Information:

Gene: ActinUp_61 Start: 41286, Stop: 42173, Start Num: 39

Candidate Starts for ActinUp_61:

(Start: 39 @41286 has 147 MA's), (61, 41397), (92, 41496), (130, 41646), (148, 41718), (157, 41772), (174, 41856), (183, 41913), (193, 41961), (210, 42027), (223, 42087), (227, 42102), (235, 42144),

Gene: Adephagia_61 Start: 41293, Stop: 42171, Start Num: 39

Candidate Starts for Adephagia_61:

(Start: 39 @41293 has 147 MA's), (61, 41404), (92, 41503), (148, 41725), (157, 41779), (174, 41854), (183, 41911), (193, 41959), (210, 42025), (220, 42073), (223, 42085), (227, 42100),

Gene: Adonis_61 Start: 41528, Stop: 42406, Start Num: 39

Candidate Starts for Adonis_61:

(Start: 39 @41528 has 147 MA's), (61, 41639), (72, 41675), (92, 41738), (130, 41888), (148, 41960), (157, 42014), (174, 42089), (183, 42146), (193, 42194), (210, 42260), (220, 42308), (223, 42320), (227, 42335),

Gene: Agent47_55 Start: 38528, Stop: 39388, Start Num: 37

Candidate Starts for Agent47_55:

(Start: 37 @38528 has 23 MA's), (72, 38678), (130, 38891), (140, 38903), (148, 38942), (150, 38954), (151, 38972), (157, 38996), (171, 39059), (172, 39062), (187, 39143), (198, 39203), (201, 39215), (212, 39248), (215, 39257), (223, 39302), (235, 39359), (238, 39380),

Gene: Ageofdapage_64 Start: 42266, Stop: 43153, Start Num: 39

Candidate Starts for Ageofdapage_64:

(Start: 39 @42266 has 147 MA's), (61, 42377), (92, 42476), (148, 42698), (157, 42752), (174, 42836), (183, 42893), (193, 42941), (210, 43007), (221, 43058), (223, 43067), (227, 43082),

Gene: AlishaPH_61 Start: 41554, Stop: 42432, Start Num: 39

Candidate Starts for AlishaPH_61:

(Start: 39 @41554 has 147 MA's), (61, 41665), (92, 41764), (148, 41986), (157, 42040), (174, 42115), (183, 42172), (193, 42220), (210, 42286), (220, 42334), (223, 42346), (227, 42361),

Gene: Alkhayr_13 Start: 5075, Stop: 5824, Start Num: 68

Candidate Starts for Alkhayr_13:

(Start: 68 @5075 has 30 MA's), (85, 5141), (106, 5219), (118, 5243), (131, 5303), (141, 5345), (146, 5381), (157, 5441), (183, 5570), (193, 5618), (201, 5657), (216, 5705),

Gene: AlleyCat_57 Start: 38832, Stop: 39692, Start Num: 37

Candidate Starts for AlleyCat_57:

(Start: 37 @38832 has 23 MA's), (61, 38946), (72, 38982), (93, 39048), (130, 39195), (140, 39207), (148, 39246), (151, 39276), (157, 39300), (182, 39423), (212, 39552), (215, 39561), (220, 39594), (223, 39606), (235, 39663), (238, 39684),

Gene: Amavida_63 Start: 41647, Stop: 41006, Start Num: 80

Candidate Starts for Amavida_63:

(Start: 80 @41647 has 12 MA's), (101, 41560), (108, 41539), (113, 41527), (128, 41485), (132, 41458), (139, 41446), (142, 41431), (186, 41197), (200, 41122),

Gene: Amelie_50 Start: 38595, Stop: 39482, Start Num: 39

Candidate Starts for Amelie_50:

(Start: 39 @38595 has 147 MA's), (61, 38706), (92, 38805), (130, 38955), (142, 38988), (148, 39027), (157, 39081), (174, 39165), (182, 39213), (183, 39222), (187, 39237), (193, 39270), (220, 39384), (227, 39411),

Gene: Amgine_59 Start: 41956, Stop: 42834, Start Num: 39

Candidate Starts for Amgine_59:

(Start: 39 @41956 has 147 MA's), (61, 42067), (117, 42256), (130, 42316), (131, 42319), (146, 42382), (148, 42388), (174, 42517), (183, 42574), (193, 42622), (198, 42649), (211, 42691), (221, 42739), (227, 42763), (235, 42805),

Gene: Amigo_62 Start: 41862, Stop: 41221, Start Num: 80

Candidate Starts for Amigo_62:

(Start: 80 @41862 has 12 MA's), (101, 41775), (108, 41754), (113, 41742), (128, 41700), (132, 41673), (139, 41661), (142, 41646), (186, 41412), (200, 41337),

Gene: Aminay_61 Start: 40983, Stop: 41852, Start Num: 40

Candidate Starts for Aminay_61:

(Start: 39 @40962 has 147 MA's), (Start: 40 @40983 has 24 MA's), (49, 41019), (127, 41292), (157, 41448), (177, 41535), (183, 41580), (189, 41610), (210, 41694), (221, 41745), (233, 41808),

Gene: Amohnition_60 Start: 41578, Stop: 42447, Start Num: 39

Candidate Starts for Amohnition_60:

(Start: 39 @41578 has 147 MA's), (61, 41689), (130, 41938), (146, 41998), (148, 42004), (174, 42133), (183, 42190), (193, 42238), (198, 42265), (211, 42307), (221, 42355), (227, 42379),

Gene: Anansi_61 Start: 41469, Stop: 40828, Start Num: 80

Candidate Starts for Anansi_61:

(Start: 80 @41469 has 12 MA's), (101, 41382), (108, 41361), (113, 41349), (128, 41307), (132, 41280), (139, 41268), (142, 41253), (186, 41019), (200, 40944),

Gene: Anaya_63 Start: 41812, Stop: 42690, Start Num: 39

Candidate Starts for Anaya_63:

(Start: 39 @41812 has 147 MA's), (61, 41923), (92, 42022), (130, 42172), (148, 42244), (157, 42298), (174, 42373), (183, 42430), (193, 42478), (210, 42544), (220, 42592), (223, 42604), (227, 42619),

Gene: Angelica_61 Start: 41436, Stop: 42323, Start Num: 39

Candidate Starts for Angelica_61:

(Start: 39 @41436 has 147 MA's), (61, 41547), (92, 41646), (130, 41796), (148, 41868), (157, 41922), (174, 42006), (183, 42063), (193, 42111), (210, 42177), (221, 42228), (223, 42237), (227, 42252), (235, 42294),

Gene: Anma_63 Start: 42174, Stop: 43055, Start Num: 39

Candidate Starts for Anma_63:

(Start: 39 @42174 has 147 MA's), (61, 42285), (92, 42384), (148, 42609), (157, 42663), (174, 42738), (183, 42795), (193, 42843), (210, 42909), (220, 42957), (223, 42969), (227, 42984),

Gene: ApoKipo_98 Start: 55915, Stop: 56679, Start Num: 75

Candidate Starts for ApoKipo_98:

(Start: 75 @55915 has 8 MA's), (77, 55921), (112, 56050), (133, 56122), (143, 56176), (153, 56266), (158, 56284), (174, 56356), (178, 56383), (182, 56404), (186, 56422), (188, 56437), (228, 56620), (229, 56626), (236, 56665),

Gene: Apocalypse_64 Start: 42202, Stop: 43089, Start Num: 39

Candidate Starts for Apocalypse_64:

(Start: 39 @42202 has 147 MA's), (54, 42295), (61, 42313), (92, 42412), (130, 42562), (148, 42634), (157, 42688), (174, 42772), (183, 42829), (193, 42877), (210, 42943), (221, 42994), (223, 43003), (227, 43018), (235, 43060),

Gene: Applecrisp_57 Start: 41096, Stop: 41974, Start Num: 39

Candidate Starts for Applecrisp_57:

(Start: 39 @41096 has 147 MA's), (61, 41207), (117, 41396), (130, 41456), (146, 41522), (148, 41528), (174, 41657), (183, 41714), (193, 41762), (198, 41789), (211, 41831), (221, 41879), (227, 41903),

Gene: Asayake_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Asayake_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Ashwin_14 Start: 5310, Stop: 6059, Start Num: 68

Candidate Starts for Ashwin_14:

(Start: 68 @5310 has 30 MA's), (85, 5376), (106, 5454), (118, 5478), (131, 5538), (141, 5580), (145, 5601), (146, 5616), (157, 5676), (183, 5805), (193, 5853), (201, 5892), (216, 5940),

Gene: Atiba_62 Start: 41256, Stop: 42134, Start Num: 39

Candidate Starts for Atiba_62:

(Start: 39 @41256 has 147 MA's), (61, 41367), (92, 41466), (148, 41688), (157, 41742), (174, 41817), (183, 41874), (193, 41922), (210, 41988), (220, 42036), (223, 42048), (227, 42063),

Gene: Ayotoya_47 Start: 34657, Stop: 35544, Start Num: 41

Candidate Starts for Ayotoya_47:

(12, 34429), (19, 34504), (20, 34513), (24, 34552), (Start: 41 @34657 has 15 MA's), (45, 34678), (70, 34768), (76, 34795), (82, 34813), (99, 34882), (163, 35167), (165, 35176), (166, 35182), (184, 35269), (185, 35272), (193, 35314), (198, 35341), (204, 35368), (207, 35374), (211, 35383), (214, 35392),

Gene: BEEST_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for BEEST_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: BGlluviae_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for BGlluviae_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: BaghaKamala_60 Start: 40637, Stop: 41524, Start Num: 39

Candidate Starts for BaghaKamala_60:

(Start: 39 @40637 has 147 MA's), (61, 40748), (92, 40847), (130, 40997), (148, 41069), (157, 41123), (174, 41207), (183, 41264), (193, 41312), (210, 41378), (215, 41393), (223, 41438), (227, 41453), (235, 41495),

Gene: BananenDer11_52 Start: 38489, Stop: 39349, Start Num: 37

Candidate Starts for BananenDer11_52:

(Start: 37 @38489 has 23 MA's), (72, 38639), (130, 38852), (140, 38864), (148, 38903), (150, 38915), (151, 38933), (157, 38957), (171, 39020), (172, 39023), (187, 39104), (198, 39164), (201, 39176), (212, 39209), (215, 39218), (223, 39263), (235, 39320), (238, 39341),

Gene: BarrelRoll_61 Start: 41260, Stop: 42147, Start Num: 39

Candidate Starts for BarrelRoll_61:

(Start: 39 @41260 has 147 MA's), (54, 41353), (61, 41371), (92, 41470), (130, 41620), (148, 41692), (157, 41746), (174, 41830), (183, 41887), (193, 41935), (210, 42001), (223, 42061), (227, 42076), (235, 42118),

Gene: Beezoo_63 Start: 42244, Stop: 43122, Start Num: 39

Candidate Starts for Beezoo_63:

(Start: 39 @42244 has 147 MA's), (61, 42355), (92, 42454), (130, 42604), (148, 42676), (157, 42730), (174, 42805), (183, 42862), (193, 42910), (210, 42976), (220, 43024), (223, 43036), (227, 43051),

Gene: Bella96_62 Start: 42019, Stop: 42900, Start Num: 39

Candidate Starts for Bella96_62:

(Start: 39 @42019 has 147 MA's), (61, 42130), (92, 42229), (148, 42454), (157, 42508), (174, 42583), (183, 42640), (193, 42688), (210, 42754), (220, 42802), (223, 42814), (227, 42829),

Gene: Belladonna_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Belladonna_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Bern_62 Start: 40230, Stop: 41117, Start Num: 39

Candidate Starts for Bern_62:

(Start: 39 @40230 has 147 MA's), (61, 40341), (92, 40440), (130, 40590), (148, 40662), (157, 40716), (174, 40800), (183, 40857), (193, 40905), (210, 40971), (215, 40986), (223, 41031), (227, 41046),

Gene: BetterKatz_47 Start: 34191, Stop: 35018, Start Num: 41

Candidate Starts for BetterKatz_47:

(19, 34029), (20, 34038), (24, 34077), (Start: 41 @34191 has 15 MA's), (55, 34206), (57, 34215), (76, 34269), (82, 34287), (99, 34356), (163, 34641), (165, 34650), (166, 34656), (184, 34743), (193, 34788), (198, 34815), (204, 34842), (207, 34848), (211, 34857), (214, 34866),

Gene: Biglebops_50 Start: 38595, Stop: 39482, Start Num: 39

Candidate Starts for Biglebops_50:

(Start: 39 @38595 has 147 MA's), (61, 38706), (92, 38805), (130, 38955), (142, 38988), (148, 39027), (157, 39081), (174, 39165), (182, 39213), (183, 39222), (187, 39237), (193, 39270), (220, 39384), (227, 39411),

Gene: Blessica_12 Start: 4707, Stop: 5456, Start Num: 68

Candidate Starts for Blessica_12:

(Start: 68 @4707 has 30 MA's), (85, 4773), (106, 4851), (118, 4875), (131, 4935), (141, 4977), (146, 5013), (157, 5073), (183, 5202), (193, 5250), (201, 5289), (216, 5337),

Gene: Blizzard_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Blizzard_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Bobquesha_65 Start: 39808, Stop: 40671, Start Num: 40

Candidate Starts for Bobquesha_65:

(16, 39643), (Start: 39 @39787 has 147 MA's), (Start: 40 @39808 has 24 MA's), (69, 39919), (72, 39937), (95, 40009), (100, 40039), (148, 40222), (157, 40276), (183, 40408), (232, 40633), (233, 40636),

Gene: Bock_47 Start: 33880, Stop: 34767, Start Num: 41

Candidate Starts for Bock_47:

(19, 33727), (20, 33736), (24, 33775), (Start: 41 @33880 has 15 MA's), (45, 33901), (70, 33991), (76, 34018), (82, 34036), (99, 34105), (163, 34390), (165, 34399), (166, 34405), (184, 34492), (185, 34495), (193, 34537), (198, 34564), (204, 34591), (207, 34597), (211, 34606), (214, 34615),

Gene: Boersma_64 Start: 41862, Stop: 41221, Start Num: 80

Candidate Starts for Boersma_64:

(Start: 80 @41862 has 12 MA's), (101, 41775), (108, 41754), (113, 41742), (128, 41700), (132, 41673), (139, 41661), (142, 41646), (186, 41412), (200, 41337),

Gene: Boiiii_61 Start: 41610, Stop: 42488, Start Num: 39

Candidate Starts for Boiiii_61:

(Start: 39 @41610 has 147 MA's), (61, 41721), (92, 41820), (148, 42042), (157, 42096), (174, 42171), (183, 42228), (193, 42276), (210, 42342), (220, 42390), (223, 42402), (227, 42417),

Gene: Boilgate_56 Start: 40641, Stop: 41474, Start Num: 40

Candidate Starts for Boilgate_56:

(Start: 40 @40641 has 24 MA's), (61, 40722), (174, 41154), (177, 41166), (183, 41211), (215, 41340), (220, 41373),

Gene: BoostSeason_62 Start: 42960, Stop: 43817, Start Num: 39

Candidate Starts for BoostSeason_62:

(Start: 39 @42960 has 147 MA's), (61, 43065), (92, 43164), (148, 43374), (193, 43608), (211, 43677), (221, 43725), (223, 43734), (227, 43749),

Gene: Bora_13 Start: 5108, Stop: 5857, Start Num: 68

Candidate Starts for Bora_13:

(Start: 68 @5108 has 30 MA's), (85, 5174), (106, 5252), (118, 5276), (131, 5336), (141, 5378), (146, 5414), (157, 5474), (183, 5603), (193, 5651), (201, 5690), (216, 5738),

Gene: Bryler_63 Start: 40754, Stop: 41653, Start Num: 39

Candidate Starts for Bryler_63:

(6, 40424), (13, 40571), (14, 40577), (26, 40715), (Start: 39 @40754 has 147 MA's), (47, 40814), (61, 40865), (84, 40943), (88, 40952), (93, 40967), (117, 41054), (146, 41180), (148, 41186), (174, 41336), (183, 41393), (193, 41441), (198, 41468), (227, 41582), (231, 41606),

Gene: Brylie_47 Start: 33927, Stop: 34814, Start Num: 41

Candidate Starts for Brylie_47:

(19, 33774), (20, 33783), (24, 33822), (Start: 41 @33927 has 15 MA's), (45, 33948), (70, 34038), (76, 34065), (82, 34083), (163, 34437), (165, 34446), (166, 34452), (184, 34539), (185, 34542), (193, 34584), (198, 34611), (204, 34638), (207, 34644), (211, 34653), (214, 34662),

Gene: CREW_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for CREW_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Cain_63 Start: 40742, Stop: 41641, Start Num: 39

Candidate Starts for Cain_63:

(6, 40412), (13, 40559), (14, 40565), (26, 40703), (Start: 39 @40742 has 147 MA's), (47, 40802), (61, 40853), (84, 40931), (88, 40940), (93, 40955), (117, 41042), (146, 41168), (148, 41174), (174, 41324), (183, 41381), (193, 41429), (198, 41456), (227, 41570), (231, 41594),

Gene: CallaLilly_61 Start: 41334, Stop: 42212, Start Num: 39

Candidate Starts for CallaLilly_61:

(Start: 39 @41334 has 147 MA's), (61, 41445), (92, 41544), (148, 41766), (157, 41820), (174, 41895), (183, 41952), (193, 42000), (210, 42066), (220, 42114), (223, 42126), (227, 42141),

Gene: Capricorn_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Capricorn_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: CaseJules_63 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for CaseJules_63:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Catdawg_12 Start: 4747, Stop: 5496, Start Num: 68

Candidate Starts for Catdawg_12:

(Start: 68 @4747 has 30 MA's), (85, 4813), (106, 4891), (118, 4915), (131, 4975), (141, 5017), (146, 5053), (157, 5113), (183, 5242), (193, 5290), (201, 5329), (216, 5377),

Gene: Chancellor_64 Start: 40918, Stop: 41781, Start Num: 40

Candidate Starts for Chancellor_64:

(32, 40882), (Start: 39 @40897 has 147 MA's), (Start: 40 @40918 has 24 MA's), (45, 40951), (50, 40972), (72, 41047), (146, 41326), (148, 41332), (159, 41395), (171, 41449), (183, 41518), (193, 41566), (211, 41635), (232, 41743), (233, 41746),

Gene: Chavito_62 Start: 42011, Stop: 42898, Start Num: 39

Candidate Starts for Chavito_62:

(Start: 39 @42011 has 147 MA's), (61, 42122), (93, 42224), (130, 42371), (138, 42383), (148, 42443), (157, 42497), (174, 42581), (183, 42638), (193, 42686), (209, 42749), (221, 42803), (223, 42812), (227, 42827), (231, 42851), (234, 42866),

Gene: CheetoDust_60 Start: 40684, Stop: 41571, Start Num: 39

Candidate Starts for CheetoDust_60:

(Start: 39 @40684 has 147 MA's), (61, 40795), (92, 40894), (130, 41044), (148, 41116), (157, 41170), (174, 41254), (183, 41311), (193, 41359), (210, 41425), (215, 41440), (223, 41485), (227, 41500),

Gene: Cheetobro_64 Start: 40915, Stop: 41778, Start Num: 40

Candidate Starts for Cheetobro_64:

(32, 40879), (Start: 39 @40894 has 147 MA's), (Start: 40 @40915 has 24 MA's), (45, 40948), (50, 40969), (72, 41044), (146, 41323), (148, 41329), (159, 41392), (171, 41446), (183, 41515), (193, 41563), (211, 41632), (232, 41740), (233, 41743),

Gene: Chop_47 Start: 34404, Stop: 35291, Start Num: 41

Candidate Starts for Chop_47:

(12, 34176), (19, 34251), (20, 34260), (24, 34299), (Start: 41 @34404 has 15 MA's), (45, 34425), (70, 34515), (76, 34542), (82, 34560), (99, 34629), (163, 34914), (165, 34923), (166, 34929), (184, 35016), (185, 35019), (193, 35061), (198, 35088), (204, 35115), (207, 35121), (211, 35130), (214, 35139),

Gene: Chris_62 Start: 41865, Stop: 42770, Start Num: 39

Candidate Starts for Chris_62:

(Start: 39 @41865 has 147 MA's), (81, 42039), (88, 42063), (93, 42078), (130, 42225), (146, 42294), (148, 42300), (168, 42426), (189, 42540), (190, 42543), (198, 42585), (211, 42627), (220, 42672), (227, 42699), (228, 42717),

Gene: Clipper_64 Start: 41859, Stop: 42737, Start Num: 39

Candidate Starts for Clipper_64:

(Start: 39 @41859 has 147 MA's), (61, 41970), (92, 42069), (130, 42219), (148, 42291), (157, 42345), (174, 42420), (183, 42477), (193, 42525), (210, 42591), (220, 42639), (223, 42651), (227, 42666),

Gene: Collard_53 Start: 38489, Stop: 39349, Start Num: 37

Candidate Starts for Collard_53:

(Start: 37 @38489 has 23 MA's), (72, 38639), (130, 38852), (140, 38864), (148, 38903), (150, 38915), (151, 38933), (157, 38957), (171, 39020), (172, 39023), (187, 39104), (198, 39164), (201, 39176), (212, 39209), (215, 39218), (223, 39263), (235, 39320), (238, 39341),

Gene: Commonplace_65 Start: 42761, Stop: 42051, Start Num: 51

Candidate Starts for Commonplace_65:

(Start: 51 @42761 has 2 MA's), (62, 42728), (85, 42653), (96, 42617), (103, 42587), (124, 42536), (125, 42530), (137, 42491), (145, 42455), (158, 42377), (169, 42323), (173, 42308), (177, 42293), (182, 42257), (184, 42245), (186, 42239), (197, 42188), (213, 42125),

Gene: Corndog_15 Start: 5422, Stop: 6171, Start Num: 68

Candidate Starts for Corndog_15:

(Start: 68 @5422 has 30 MA's), (85, 5488), (106, 5566), (118, 5590), (131, 5650), (141, 5692), (146, 5728), (157, 5788), (183, 5917), (193, 5965), (201, 6004), (216, 6052),

Gene: CrimD_62 Start: 41817, Stop: 42695, Start Num: 39

Candidate Starts for CrimD_62:

(Start: 39 @41817 has 147 MA's), (61, 41928), (92, 42027), (148, 42249), (157, 42303), (174, 42378), (183, 42435), (193, 42483), (210, 42549), (220, 42597), (223, 42609), (227, 42624),

Gene: Curiosium_65 Start: 40936, Stop: 41826, Start Num: 39

Candidate Starts for Curiosium_65:

(9, 40654), (17, 40804), (27, 40900), (30, 40915), (Start: 39 @40936 has 147 MA's), (61, 41047), (88, 41134), (92, 41146), (148, 41371), (157, 41425), (174, 41509), (193, 41614), (220, 41728), (223, 41740), (227, 41755),

Gene: CurlyFries_71 Start: 41313, Stop: 42152, Start Num: 67

Candidate Starts for CurlyFries_71:

(44, 41247), (Start: 67 @41313 has 3 MA's), (74, 41340), (116, 41478), (136, 41553), (144, 41595), (146, 41619), (147, 41622), (172, 41748), (181, 41802), (196, 41871), (200, 41898), (211, 41934), (242, 42129),

Gene: Dadosky_57 Start: 38834, Stop: 39694, Start Num: 37

Candidate Starts for Dadosky_57:

(Start: 37 @38834 has 23 MA's), (61, 38948), (72, 38984), (93, 39050), (130, 39197), (140, 39209), (148, 39248), (151, 39278), (157, 39302), (182, 39425), (212, 39554), (215, 39563), (220, 39596), (223, 39608), (235, 39665), (238, 39686),

Gene: Dalmuri_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Dalmuri_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: DanSyl44_67 Start: 42109, Stop: 42972, Start Num: 40

Candidate Starts for DanSyl44_67:

(32, 42073), (Start: 39 @42088 has 147 MA's), (Start: 40 @42109 has 24 MA's), (45, 42142), (50, 42163), (72, 42238), (146, 42517), (148, 42523), (159, 42586), (171, 42640), (183, 42709), (193, 42757), (211, 42826), (232, 42934), (233, 42937),

Gene: DartGoblin_64 Start: 41991, Stop: 42872, Start Num: 39

Candidate Starts for DartGoblin_64:

(Start: 39 @41991 has 147 MA's), (61, 42102), (92, 42201), (148, 42426), (157, 42480), (174, 42555), (183, 42612), (193, 42660), (210, 42726), (220, 42774), (223, 42786), (227, 42801),

Gene: DarthP_60 Start: 41432, Stop: 42301, Start Num: 39

Candidate Starts for DarthP_60:

(Start: 39 @41432 has 147 MA's), (61, 41543), (130, 41792), (146, 41852), (148, 41858), (174, 41987), (183, 42044), (193, 42092), (198, 42119), (211, 42161), (221, 42209), (227, 42233),

Gene: Dartin_62 Start: 41510, Stop: 42397, Start Num: 39

Candidate Starts for Dartin_62:

(Start: 39 @41510 has 147 MA's), (61, 41621), (92, 41720), (93, 41723), (130, 41870), (146, 41936), (148, 41942), (157, 41996), (174, 42080), (183, 42137), (193, 42185), (221, 42302), (223, 42311), (227, 42326), (231, 42350), (234, 42365),

Gene: DearBasketball_41 Start: 28435, Stop: 29196, Start Num: 59

Candidate Starts for DearBasketball_41:

(Start: 59 @28435 has 6 MA's), (83, 28501), (116, 28612), (136, 28687), (137, 28699), (163, 28843), (179, 28918), (183, 28942), (186, 28951), (200, 29023), (203, 29041), (211, 29059), (227, 29131),

Gene: Deby_61 Start: 41461, Stop: 42348, Start Num: 39

Candidate Starts for Deby_61:

(Start: 39 @41461 has 147 MA's), (61, 41572), (92, 41671), (130, 41821), (148, 41893), (157, 41947), (174, 42031), (183, 42088), (193, 42136), (210, 42202), (223, 42262), (227, 42277), (235, 42319),

Gene: DelRio_48 Start: 35109, Stop: 35996, Start Num: 41

Candidate Starts for DelRio_48:

(19, 34956), (20, 34965), (24, 35004), (Start: 41 @35109 has 15 MA's), (45, 35130), (70, 35220), (76, 35247), (82, 35265), (99, 35334), (163, 35619), (165, 35628), (166, 35634), (181, 35703), (184, 35721), (185, 35724), (198, 35793), (204, 35820), (207, 35826), (211, 35835), (214, 35844),

Gene: Devera_68 Start: 42823, Stop: 43710, Start Num: 39

Candidate Starts for Devera_68:

(Start: 39 @42823 has 147 MA's), (61, 42934), (88, 43021), (92, 43033), (148, 43255), (157, 43309), (174, 43393), (183, 43450), (193, 43498), (210, 43564), (221, 43615), (223, 43624), (227, 43639),

Gene: DinoNuggs_39 Start: 28104, Stop: 28865, Start Num: 59

Candidate Starts for DinoNuggs_39:

(Start: 59 @28104 has 6 MA's), (83, 28170), (116, 28281), (136, 28356), (137, 28368), (163, 28512), (179, 28587), (183, 28611), (186, 28620), (200, 28692), (203, 28710), (211, 28728), (227, 28800),

Gene: DismalFunk_62 Start: 43382, Stop: 44239, Start Num: 39

Candidate Starts for DismalFunk_62:

(Start: 39 @43382 has 147 MA's), (61, 43487), (92, 43586), (148, 43796), (193, 44030), (211, 44099), (221, 44147), (223, 44156), (227, 44171),

Gene: DismalStressor_62 Start: 43382, Stop: 44239, Start Num: 39

Candidate Starts for DismalStressor_62:

(Start: 39 @43382 has 147 MA's), (61, 43487), (92, 43586), (148, 43796), (193, 44030), (211, 44099), (221, 44147), (223, 44156), (227, 44171),

Gene: Dole_66 Start: 42826, Stop: 43713, Start Num: 39

Candidate Starts for Dole_66:

(Start: 39 @42826 has 147 MA's), (61, 42937), (88, 43024), (92, 43036), (148, 43258), (157, 43312), (174, 43396), (183, 43453), (193, 43501), (210, 43567), (221, 43618), (223, 43627), (227, 43642),

Gene: DonkeyMan_39 Start: 29056, Stop: 29817, Start Num: 59

Candidate Starts for DonkeyMan_39:

(21, 28825), (28, 28906), (48, 29005), (Start: 59 @29056 has 6 MA's), (83, 29122), (116, 29233), (136, 29308), (137, 29320), (163, 29464), (179, 29539), (183, 29563), (186, 29572), (203, 29662), (211, 29680), (227, 29752),

Gene: DoubleChamp_52 Start: 38489, Stop: 39349, Start Num: 37

Candidate Starts for DoubleChamp_52:

(Start: 37 @38489 has 23 MA's), (72, 38639), (130, 38852), (140, 38864), (148, 38903), (150, 38915), (151, 38933), (157, 38957), (171, 39020), (172, 39023), (187, 39104), (198, 39164), (201, 39176), (212, 39209), (215, 39218), (223, 39263), (235, 39320), (238, 39341),

Gene: Doughnut_62 Start: 43001, Stop: 43858, Start Num: 39

Candidate Starts for Doughnut_62:

(Start: 39 @43001 has 147 MA's), (61, 43106), (92, 43205), (148, 43415), (193, 43649), (211, 43718), (221, 43766), (223, 43775), (227, 43790),

Gene: DrHayes_62 Start: 42174, Stop: 43055, Start Num: 39

Candidate Starts for DrHayes_62:

(Start: 39 @42174 has 147 MA's), (61, 42285), (92, 42384), (148, 42609), (157, 42663), (174, 42738), (183, 42795), (193, 42843), (210, 42909), (220, 42957), (223, 42969), (227, 42984),

Gene: Durfee_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Durfee_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Dylan_13 Start: 5310, Stop: 6059, Start Num: 68

Candidate Starts for Dylan_13:

(Start: 68 @5310 has 30 MA's), (85, 5376), (106, 5454), (118, 5478), (131, 5538), (141, 5580), (145, 5601), (146, 5616), (157, 5676), (183, 5805), (193, 5853), (201, 5892), (216, 5940),

Gene: Edmundo_93 Start: 54507, Stop: 55298, Start Num: 75

Candidate Starts for Edmundo_93:

(Start: 59 @54456 has 6 MA's), (Start: 75 @54507 has 8 MA's), (97, 54579), (112, 54639), (120, 54651), (143, 54765), (146, 54789), (153, 54855), (157, 54870), (158, 54873), (165, 54912), (178, 54972), (182, 54993), (186, 55011), (188, 55026), (222, 55173),

Gene: Edugator_54 Start: 40255, Stop: 41115, Start Num: 37

Candidate Starts for Edugator_54:

(Start: 37 @40255 has 23 MA's), (53, 40348), (61, 40369), (81, 40432), (93, 40471), (119, 40561), (130, 40618), (140, 40630), (148, 40669), (151, 40699), (157, 40723), (182, 40846), (212, 40975), (215, 40984), (220, 41017), (223, 41029), (235, 41086), (238, 41107),

Gene: Efra2_65 Start: 41374, Stop: 42279, Start Num: 39

Candidate Starts for Efra2_65:

(Start: 39 @41374 has 147 MA's), (92, 41584), (148, 41824), (157, 41878), (174, 41962), (187, 42034), (193, 42067), (210, 42133), (221, 42184), (223, 42193), (227, 42208),

Gene: EhyElimayoE_72 Start: 53494, Stop: 52652, Start Num: 35

Candidate Starts for EhyElimayoE_72:

(Start: 35 @53494 has 6 MA's), (65, 53359), (105, 53212), (107, 53206), (118, 53179), (123, 53167), (129, 53134), (132, 53113), (154, 52999), (159, 52981), (162, 52960), (169, 52930), (173, 52915), (176, 52903), (180, 52876), (184, 52852), (191, 52819), (192, 52810), (194, 52804), (198, 52777), (213, 52732), (224, 52678),

Gene: Ekdilam_58 Start: 41462, Stop: 42331, Start Num: 39

Candidate Starts for Ekdilam_58:

(2, 40907), (7, 41147), (Start: 39 @41462 has 147 MA's), (61, 41573), (130, 41822), (139, 41834), (146, 41882), (148, 41888), (174, 42017), (183, 42074), (193, 42122), (198, 42149), (211, 42191), (221, 42239), (227, 42263),

Gene: Ellie_56 Start: 40800, Stop: 41699, Start Num: 39

Candidate Starts for Ellie_56:

(Start: 39 @40800 has 147 MA's), (61, 40911), (81, 40974), (95, 41019), (117, 41100), (130, 41160), (146, 41226), (148, 41232), (174, 41382), (183, 41439), (193, 41487), (203, 41538), (211, 41556), (221, 41604), (226, 41622), (227, 41628),

Gene: Emerson_62 Start: 41277, Stop: 42155, Start Num: 39

Candidate Starts for Emerson_62:

(Start: 39 @41277 has 147 MA's), (61, 41388), (92, 41487), (130, 41637), (148, 41709), (157, 41763), (174, 41838), (183, 41895), (193, 41943), (210, 42009), (220, 42057), (223, 42069), (227, 42084),

Gene: Enkosi_52 Start: 41208, Stop: 42095, Start Num: 39

Candidate Starts for Enkosi_52:

(Start: 39 @41208 has 147 MA's), (61, 41319), (92, 41418), (130, 41568), (142, 41601), (148, 41640), (157, 41694), (174, 41778), (182, 41826), (183, 41835), (187, 41850), (193, 41883), (220, 41997), (227, 42024),

Gene: Eponine_66 Start: 41761, Stop: 42624, Start Num: 40

Candidate Starts for Eponine_66:

(32, 41725), (Start: 39 @41740 has 147 MA's), (Start: 40 @41761 has 24 MA's), (45, 41794), (50, 41815), (72, 41890), (146, 42169), (148, 42175), (159, 42238), (171, 42292), (183, 42361), (193, 42409), (211, 42478), (232, 42586), (233, 42589),

Gene: Familton_13 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for Familton_13:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: Fefferhead_58 Start: 40735, Stop: 41613, Start Num: 39

Candidate Starts for Fefferhead_58:

(Start: 39 @40735 has 147 MA's), (61, 40846), (117, 41035), (130, 41095), (146, 41161), (148, 41167), (174, 41296), (183, 41353), (193, 41401), (198, 41428), (211, 41470), (221, 41518), (227, 41542),

Gene: Feyre_58 Start: 42214, Stop: 43074, Start Num: 37

Candidate Starts for Feyre_58:

(Start: 37 @42214 has 23 MA's), (53, 42307), (61, 42328), (130, 42577), (140, 42589), (148, 42628), (150, 42640), (151, 42658), (157, 42682), (172, 42748), (177, 42769), (182, 42805), (190, 42847), (201, 42901), (210, 42928), (212, 42934), (220, 42976), (223, 42988), (235, 43045), (238, 43066),

Gene: Findley_62 Start: 43375, Stop: 44232, Start Num: 39

Candidate Starts for Findley_62:

(1, 42673), (Start: 39 @43375 has 147 MA's), (61, 43480), (92, 43579), (148, 43789), (193, 44023), (211, 44092), (221, 44140), (223, 44149), (227, 44164),

Gene: Fionnbharth_64 Start: 41159, Stop: 42022, Start Num: 40

Candidate Starts for Fionnbharth_64:

(32, 41123), (Start: 39 @41138 has 147 MA's), (Start: 40 @41159 has 24 MA's), (45, 41192), (50, 41213), (72, 41288), (146, 41567), (148, 41573), (159, 41636), (171, 41690), (183, 41759), (193, 41807), (211, 41876), (232, 41984), (233, 41987),

Gene: Firecracker_13 Start: 5043, Stop: 5792, Start Num: 68

Candidate Starts for Firecracker_13:

(Start: 68 @5043 has 30 MA's), (85, 5109), (106, 5187), (118, 5211), (131, 5271), (141, 5313), (146, 5349), (157, 5409), (183, 5538), (193, 5586), (201, 5625), (216, 5673),

Gene: FoulBall_12 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for FoulBall_12:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: Francois_46 Start: 34002, Stop: 34811, Start Num: 41

Candidate Starts for Francois_46:

(19, 33849), (20, 33858), (24, 33897), (Start: 41 @34002 has 15 MA's), (57, 34026), (63, 34044), (76, 34080), (163, 34452), (165, 34461), (166, 34467), (171, 34482), (177, 34506), (182, 34542), (184, 34554), (193, 34599), (201, 34638), (204, 34653), (211, 34668), (214, 34677), (237, 34800),

Gene: GMA4_40 Start: 30065, Stop: 30856, Start Num: 66

Candidate Starts for GMA4_40:

(11, 29687), (22, 29828), (23, 29849), (66, 30065), (Start: 75 @30098 has 8 MA's), (87, 30137), (129, 30284), (137, 30323), (156, 30437), (172, 30503), (186, 30578), (189, 30599), (190, 30602), (208, 30677), (218, 30716), (239, 30815),

Gene: Ganymede_62 Start: 41672, Stop: 42550, Start Num: 39

Candidate Starts for Ganymede_62:

(Start: 39 @41672 has 147 MA's), (61, 41783), (92, 41882), (130, 42032), (148, 42104), (157, 42158), (174, 42233), (183, 42290), (193, 42338), (210, 42404), (220, 42452), (223, 42464), (227, 42479),

Gene: Gengar_55 Start: 40233, Stop: 41093, Start Num: 37

Candidate Starts for Gengar_55:

(Start: 37 @40233 has 23 MA's), (53, 40326), (61, 40347), (130, 40596), (140, 40608), (146, 40641), (148, 40647), (150, 40659), (151, 40677), (157, 40701), (172, 40767), (182, 40824), (190, 40866), (201, 40920), (210, 40947), (212, 40953), (220, 40995), (223, 41007), (235, 41064), (238, 41085),

Gene: Geraldini_64 Start: 42329, Stop: 43207, Start Num: 39

Candidate Starts for Geraldini_64:

(Start: 39 @42329 has 147 MA's), (61, 42440), (92, 42539), (130, 42689), (148, 42761), (157, 42815), (174, 42890), (183, 42947), (193, 42995), (210, 43061), (220, 43109), (223, 43121), (227, 43136),

Gene: Gorgeous_61 Start: 41469, Stop: 40828, Start Num: 80

Candidate Starts for Gorgeous_61:

(Start: 80 @41469 has 12 MA's), (101, 41382), (108, 41361), (113, 41349), (128, 41307), (132, 41280), (139, 41268), (142, 41253), (186, 41019), (200, 40944),

Gene: GrandSlam_47 Start: 34404, Stop: 35291, Start Num: 41

Candidate Starts for GrandSlam_47:

(12, 34176), (19, 34251), (20, 34260), (24, 34299), (Start: 41 @34404 has 15 MA's), (45, 34425), (70, 34515), (76, 34542), (82, 34560), (99, 34629), (163, 34914), (165, 34923), (166, 34929), (184, 35016), (185, 35019), (193, 35061), (198, 35088), (204, 35115), (207, 35121), (211, 35130), (214, 35139),

Gene: Guanica15_64 Start: 41115, Stop: 42020, Start Num: 39

Candidate Starts for Guanica15_64:

(Start: 39 @41115 has 147 MA's), (61, 41226), (92, 41325), (148, 41565), (157, 41619), (174, 41703), (193, 41808), (210, 41874), (221, 41925), (223, 41934), (227, 41949),

Gene: Guillsminger_56 Start: 40204, Stop: 41064, Start Num: 37

Candidate Starts for Guillsminger_56:

(Start: 37 @40204 has 23 MA's), (61, 40318), (130, 40567), (140, 40579), (150, 40630), (151, 40648), (157, 40672), (172, 40738), (177, 40759), (182, 40795), (190, 40837), (201, 40891), (210, 40918), (212, 40924), (220, 40966), (223, 40978), (235, 41035), (238, 41056),

Gene: Hammy_60 Start: 41420, Stop: 42289, Start Num: 39

Candidate Starts for Hammy_60:

(Start: 39 @41420 has 147 MA's), (61, 41531), (90, 41624), (130, 41780), (146, 41840), (148, 41846), (174, 41975), (183, 42032), (193, 42080), (198, 42107), (211, 42149), (221, 42197), (227, 42221),

Gene: Hamood_47 Start: 34404, Stop: 35291, Start Num: 41

Candidate Starts for Hamood_47:

(12, 34176), (19, 34251), (20, 34260), (24, 34299), (Start: 41 @34404 has 15 MA's), (45, 34425), (70, 34515), (76, 34542), (82, 34560), (99, 34629), (163, 34914), (165, 34923), (166, 34929), (184, 35016), (185, 35019), (193, 35061), (198, 35088), (204, 35115), (207, 35121), (211, 35130), (214, 35139),

Gene: HedwigODU_61 Start: 41286, Stop: 42173, Start Num: 39

Candidate Starts for HedwigODU_61:

(Start: 39 @41286 has 147 MA's), (61, 41397), (92, 41496), (130, 41646), (148, 41718), (157, 41772), (174, 41856), (183, 41913), (193, 41961), (210, 42027), (223, 42087), (227, 42102), (235, 42144),

Gene: Heftyboy_56 Start: 40576, Stop: 41436, Start Num: 37

Candidate Starts for Heftyboy_56:

(Start: 37 @40576 has 23 MA's), (53, 40669), (61, 40690), (130, 40939), (140, 40951), (146, 40984), (148, 40990), (150, 41002), (151, 41020), (157, 41044), (172, 41110), (182, 41167), (190, 41209), (201, 41263), (210, 41290), (212, 41296), (220, 41338), (223, 41350), (235, 41407), (238, 41428),

Gene: Heinz_39 Start: 27117, Stop: 27878, Start Num: 59

Candidate Starts for Heinz_39:

(Start: 59 @27117 has 6 MA's), (83, 27183), (116, 27294), (135, 27366), (136, 27369), (163, 27525), (164, 27531), (174, 27567), (186, 27633), (211, 27741), (227, 27813),

Gene: Heylee_64 Start: 41647, Stop: 41006, Start Num: 80

Candidate Starts for Heylee_64:

(Start: 80 @41647 has 12 MA's), (101, 41560), (108, 41539), (113, 41527), (128, 41485), (132, 41458), (139, 41446), (142, 41431), (186, 41197), (200, 41122),

Gene: Hibiscus_40 Start: 27066, Stop: 27827, Start Num: 59

Candidate Starts for Hibiscus_40:

(Start: 59 @27066 has 6 MA's), (83, 27132), (116, 27243), (135, 27315), (136, 27318), (163, 27474), (164, 27480), (174, 27516), (186, 27582), (211, 27690), (227, 27762),

Gene: Homura_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Homura_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Hurricane_60 Start: 41376, Stop: 42275, Start Num: 39

Candidate Starts for Hurricane_60:

(Start: 39 @41376 has 147 MA's), (61, 41487), (92, 41586), (95, 41595), (115, 41673), (130, 41736), (135, 41748), (138, 41766), (146, 41823), (174, 41958), (183, 42015), (193, 42063), (211, 42132), (219, 42171), (221, 42180), (227, 42204),

Gene: Hyperbowlee_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Hyperbowlee_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Ichor_61 Start: 41862, Stop: 41221, Start Num: 80

Candidate Starts for Ichor_61:

(Start: 80 @41862 has 12 MA's), (101, 41775), (108, 41754), (113, 41742), (128, 41700), (132, 41673), (139, 41661), (142, 41646), (186, 41412), (200, 41337),

Gene: Idergollasper_12 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for Idergollasper_12:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: Illumine_66 Start: 42825, Stop: 43712, Start Num: 39

Candidate Starts for Illumine_66:

(Start: 39 @42825 has 147 MA's), (61, 42936), (88, 43023), (92, 43035), (148, 43257), (157, 43311), (174, 43395), (183, 43452), (193, 43500), (210, 43566), (221, 43617), (223, 43626), (227, 43641),

Gene: Imara_13 Start: 5001, Stop: 5750, Start Num: 68

Candidate Starts for Imara_13:

(Start: 68 @5001 has 30 MA's), (85, 5067), (106, 5145), (118, 5169), (131, 5229), (141, 5271), (146, 5307), (157, 5367), (183, 5496), (193, 5544), (201, 5583), (216, 5631),

Gene: Inky_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Inky_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: InvictusManeo_53 Start: 38532, Stop: 39392, Start Num: 37

Candidate Starts for InvictusManeo_53:

(Start: 37 @38532 has 23 MA's), (72, 38682), (130, 38895), (140, 38907), (148, 38946), (150, 38958), (151, 38976), (157, 39000), (171, 39063), (172, 39066), (187, 39147), (198, 39207), (201, 39219), (212, 39252), (215, 39261), (223, 39306), (235, 39363), (238, 39384),

Gene: JAWS_61 Start: 41260, Stop: 42138, Start Num: 39

Candidate Starts for JAWS_61:

(Start: 39 @41260 has 147 MA's), (61, 41371), (92, 41470), (130, 41620), (148, 41692), (157, 41746), (174, 41821), (183, 41878), (193, 41926), (210, 41992), (220, 42040), (223, 42052), (227, 42067),

Gene: JF1_64 Start: 41076, Stop: 41939, Start Num: 40

Candidate Starts for JF1_64:

(32, 41040), (Start: 39 @41055 has 147 MA's), (Start: 40 @41076 has 24 MA's), (45, 41109), (50, 41130), (52, 41145), (72, 41205), (146, 41484), (148, 41490), (171, 41607), (183, 41676), (193, 41724), (211, 41793), (232, 41901), (233, 41904),

Gene: Jaek_61 Start: 41862, Stop: 41221, Start Num: 80

Candidate Starts for Jaek_61:

(Start: 80 @41862 has 12 MA's), (101, 41775), (108, 41754), (113, 41742), (128, 41700), (132, 41673), (139, 41661), (142, 41646), (186, 41412), (200, 41337),

Gene: JangDynasty_12 Start: 4837, Stop: 5586, Start Num: 68

Candidate Starts for JangDynasty_12:

(Start: 68 @4837 has 30 MA's), (85, 4903), (106, 4981), (118, 5005), (131, 5065), (141, 5107), (146, 5143), (157, 5203), (183, 5332), (193, 5380), (201, 5419), (216, 5467),

Gene: Jarvi_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Jarvi_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Jayhawk_62 Start: 41281, Stop: 42168, Start Num: 39

Candidate Starts for Jayhawk_62:

(Start: 39 @41281 has 147 MA's), (61, 41392), (72, 41428), (92, 41491), (130, 41641), (148, 41713), (157, 41767), (174, 41851), (183, 41908), (193, 41956), (210, 42022), (221, 42073), (223, 42082), (227, 42097), (235, 42139),

Gene: Jeckyll_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Jeckyll_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Jflix2_69 Start: 43814, Stop: 44623, Start Num: 60

Candidate Starts for Jflix2_69:

(Start: 60 @43814 has 2 MA's), (74, 43853), (86, 43892), (109, 43976), (116, 43988), (131, 44051), (136, 44063), (137, 44075), (157, 44183), (186, 44324), (211, 44432), (227, 44507), (241, 44600),

Gene: Jojo24_38 Start: 27664, Stop: 28428, Start Num: 58

Candidate Starts for Jojo24_38:

(Start: 58 @27664 has 1 MA's), (83, 27733), (116, 27844), (135, 27916), (136, 27919), (163, 28075), (164, 28081), (174, 28117), (186, 28183), (211, 28291), (227, 28363),

Gene: Joy99_61 Start: 41340, Stop: 42218, Start Num: 39

Candidate Starts for Joy99_61:

(Start: 39 @41340 has 147 MA's), (61, 41451), (92, 41550), (148, 41772), (157, 41826), (174, 41901), (183, 41958), (193, 42006), (210, 42072), (220, 42120), (223, 42132), (227, 42147),

Gene: Juliette_66 Start: 41223, Stop: 42086, Start Num: 40

Candidate Starts for Juliette_66:

(32, 41187), (Start: 39 @41202 has 147 MA's), (Start: 40 @41223 has 24 MA's), (45, 41256), (50, 41277), (72, 41352), (146, 41631), (148, 41637), (159, 41700), (171, 41754), (183, 41823), (193, 41871), (211, 41940), (232, 42048), (233, 42051),

Gene: JustBecause_67 Start: 50858, Stop: 50016, Start Num: 35

Candidate Starts for JustBecause_67:

(Start: 35 @50858 has 6 MA's), (Start: 42 @50810 has 1 MA's), (43, 50807), (73, 50693), (91, 50639), (118, 50543), (132, 50477), (151, 50378), (160, 50336), (161, 50330), (162, 50324), (169, 50294), (173, 50279), (176, 50267), (180, 50240), (191, 50183), (198, 50141), (201, 50129), (213, 50096),

Gene: Kela_68 Start: 50675, Stop: 49881, Start Num: 42

Candidate Starts for Kela_68:

(Start: 35 @50723 has 6 MA's), (Start: 42 @50675 has 1 MA's), (43, 50672), (73, 50558), (91, 50504), (118, 50408), (132, 50342), (151, 50243), (160, 50201), (161, 50195), (162, 50189), (169, 50159), (173, 50144), (176, 50132), (180, 50105), (191, 50048), (198, 50006), (201, 49994), (213, 49961),

Gene: Keshu_62 Start: 41474, Stop: 42373, Start Num: 39

Candidate Starts for Keshu_62:

(Start: 39 @41474 has 147 MA's), (61, 41585), (92, 41684), (95, 41693), (115, 41771), (130, 41834), (135, 41846), (138, 41864), (146, 41921), (174, 42056), (183, 42113), (193, 42161), (211, 42230), (221, 42278), (227, 42302),

Gene: KiSi_65 Start: 42230, Stop: 43150, Start Num: 38

Candidate Starts for KiSi_65:

(Start: 38 @42230 has 5 MA's), (61, 42341), (93, 42443), (130, 42590), (146, 42656), (148, 42662), (157, 42716), (168, 42785), (189, 42899), (190, 42902), (193, 42917), (198, 42944), (211, 42986), (220, 43031), (227, 43058), (228, 43076),

Gene: KingPhillip3_12 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for KingPhillip3_12:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: Kovu_94 Start: 55384, Stop: 56145, Start Num: 75

Candidate Starts for Kovu_94:

(Start: 75 @55384 has 8 MA's), (112, 55519), (120, 55531), (133, 55591), (139, 55603), (153, 55735), (174, 55825), (178, 55852), (182, 55873), (185, 55888), (186, 55891), (188, 55906), (228, 56089), (229, 56095),

Gene: Kradal_72 Start: 53494, Stop: 52652, Start Num: 35

Candidate Starts for Kradal_72:

(Start: 35 @53494 has 6 MA's), (65, 53359), (105, 53212), (107, 53206), (118, 53179), (123, 53167), (129, 53134), (132, 53113), (154, 52999), (159, 52981), (162, 52960), (169, 52930), (173, 52915), (176, 52903), (180, 52876), (184, 52852), (191, 52819), (192, 52810), (194, 52804), (198, 52777), (213, 52732), (224, 52678),

Gene: Kratio_53 Start: 38274, Stop: 39134, Start Num: 37

Candidate Starts for Kratio_53:

(Start: 37 @38274 has 23 MA's), (61, 38388), (72, 38424), (130, 38637), (148, 38688), (150, 38700), (151, 38718), (157, 38742), (171, 38805), (172, 38808), (182, 38865), (190, 38907), (201, 38961), (212, 38994), (220, 39036), (223, 39048), (235, 39105), (238, 39126),

Gene: Kraw_64 Start: 40911, Stop: 41774, Start Num: 40

Candidate Starts for Kraw_64:

(32, 40875), (Start: 39 @40890 has 147 MA's), (Start: 40 @40911 has 24 MA's), (45, 40944), (50, 40965), (72, 41040), (146, 41319), (148, 41325), (159, 41388), (171, 41442), (183, 41511), (193, 41559), (211, 41628), (232, 41736), (233, 41739),

Gene: Krili_13 Start: 5076, Stop: 5825, Start Num: 68

Candidate Starts for Krili_13:

(Start: 68 @5076 has 30 MA's), (85, 5142), (106, 5220), (118, 5244), (131, 5304), (141, 5346), (146, 5382), (157, 5442), (183, 5571), (193, 5619), (201, 5658), (216, 5706),

Gene: Krueger_64 Start: 41010, Stop: 41909, Start Num: 39

Candidate Starts for Krueger_64:

(12, 40815), (26, 40971), (Start: 39 @41010 has 147 MA's), (47, 41070), (61, 41121), (84, 41199), (88, 41208), (93, 41223), (117, 41310), (138, 41382), (146, 41436), (174, 41592), (183, 41649), (219, 41805), (220, 41811), (227, 41838), (231, 41862),

Gene: Laroye_94 Start: 54308, Stop: 55111, Start Num: 75

Candidate Starts for Laroye_94:

(Start: 75 @54308 has 8 MA's), (120, 54452), (143, 54569), (146, 54593), (158, 54677), (174, 54749), (178, 54776), (182, 54797), (186, 54815), (188, 54830), (195, 54860), (200, 54890), (230, 55025),

Gene: Larva_56 Start: 39706, Stop: 40566, Start Num: 37

Candidate Starts for Larva_56:

(Start: 37 @39706 has 23 MA's), (61, 39820), (72, 39856), (93, 39922), (95, 39928), (130, 40069), (140, 40081), (148, 40120), (151, 40150), (157, 40174), (182, 40297), (212, 40426), (215, 40435), (220, 40468), (223, 40480), (235, 40537), (238, 40558),

Gene: LastHope_64 Start: 40454, Stop: 41341, Start Num: 39

Candidate Starts for LastHope_64:

(Start: 39 @40454 has 147 MA's), (61, 40565), (92, 40664), (130, 40814), (148, 40886), (157, 40940), (174, 41024), (183, 41081), (193, 41129), (210, 41195), (221, 41246), (227, 41270),

Gene: LaterM_61 Start: 41874, Stop: 42761, Start Num: 39

Candidate Starts for LaterM_61:

(Start: 39 @41874 has 147 MA's), (61, 41985), (92, 42084), (148, 42306), (157, 42360), (174, 42444), (183, 42501), (193, 42549), (210, 42615), (221, 42666), (223, 42675), (227, 42690),

Gene: Lavahound_60 Start: 42095, Stop: 42973, Start Num: 39

Candidate Starts for Lavahound_60:

(Start: 39 @42095 has 147 MA's), (61, 42206), (117, 42395), (130, 42455), (131, 42458), (146, 42521), (148, 42527), (174, 42656), (183, 42713), (193, 42761), (198, 42788), (211, 42830), (221, 42878), (227, 42902), (235, 42944),

Gene: LeMond_64 Start: 41861, Stop: 42784, Start Num: 38

Candidate Starts for LeMond_64:

(Start: 38 @41861 has 5 MA's), (61, 41972), (93, 42074), (130, 42221), (146, 42287), (148, 42293), (157, 42350), (168, 42419), (189, 42533), (190, 42536), (193, 42551), (198, 42578), (211, 42620), (227, 42692), (228, 42710),

Gene: Lea83_60 Start: 41429, Stop: 42310, Start Num: 39

Candidate Starts for Lea83_60:

(Start: 39 @41429 has 147 MA's), (61, 41540), (81, 41603), (92, 41639), (95, 41648), (115, 41726), (127, 41762), (146, 41858), (174, 41993), (183, 42050), (193, 42098), (211, 42167), (220, 42212), (221, 42215), (227, 42239),

Gene: Lebo14_63 Start: 41244, Stop: 42107, Start Num: 40

Candidate Starts for Lebo14_63:

(32, 41208), (Start: 39 @41223 has 147 MA's), (Start: 40 @41244 has 24 MA's), (45, 41277), (50, 41298), (72, 41373), (146, 41652), (148, 41658), (159, 41721), (171, 41775), (183, 41844), (193, 41892), (211, 41961), (232, 42069), (233, 42072),

Gene: Leston_55 Start: 40333, Stop: 41193, Start Num: 37

Candidate Starts for Leston_55:

(Start: 37 @40333 has 23 MA's), (61, 40447), (130, 40696), (140, 40708), (150, 40759), (151, 40777), (157, 40801), (172, 40867), (177, 40888), (182, 40924), (190, 40966), (201, 41020), (210, 41047),

(212, 41053), (220, 41095), (223, 41107), (235, 41164), (238, 41185),

Gene: LiSara_91 Start: 54440, Stop: 55243, Start Num: 75

Candidate Starts for LiSara_91:

(Start: 75 @54440 has 8 MA's), (120, 54584), (143, 54701), (146, 54725), (153, 54791), (158, 54809), (174, 54881), (178, 54908), (182, 54929), (186, 54947), (188, 54962), (230, 55157),

Gene: LilDirt_52 Start: 38290, Stop: 39150, Start Num: 37

Candidate Starts for LilDirt_52:

(Start: 37 @38290 has 23 MA's), (72, 38440), (130, 38653), (140, 38665), (148, 38704), (150, 38716), (151, 38734), (157, 38758), (171, 38821), (172, 38824), (187, 38905), (198, 38965), (201, 38977), (212, 39010), (215, 39019), (223, 39064), (235, 39121), (238, 39142),

Gene: LilPharaoh_50 Start: 38323, Stop: 39210, Start Num: 39

Candidate Starts for LilPharaoh_50:

(Start: 39 @38323 has 147 MA's), (61, 38434), (92, 38533), (130, 38683), (142, 38716), (148, 38755), (157, 38809), (174, 38893), (182, 38941), (183, 38950), (187, 38965), (193, 38998), (220, 39112), (227, 39139),

Gene: LindNT_60 Start: 41483, Stop: 42361, Start Num: 39

Candidate Starts for LindNT_60:

(Start: 39 @41483 has 147 MA's), (61, 41594), (92, 41693), (148, 41915), (157, 41969), (174, 42044), (183, 42101), (193, 42149), (210, 42215), (220, 42263), (223, 42275), (227, 42290),

Gene: Llorens_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Llorens_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Lunahalos_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Lunahalos_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: MacKat_56 Start: 36743, Stop: 37621, Start Num: 39

Candidate Starts for MacKat_56:

(Start: 39 @36743 has 147 MA's), (61, 36854), (92, 36953), (130, 37103), (148, 37175), (157, 37229), (174, 37304), (183, 37361), (193, 37409), (210, 37475), (220, 37523), (223, 37535), (227, 37550),

Gene: MacnCheese_62 Start: 41974, Stop: 42873, Start Num: 39

Candidate Starts for MacnCheese_62:

(Start: 39 @41974 has 147 MA's), (61, 42085), (92, 42184), (95, 42193), (115, 42271), (130, 42334), (135, 42346), (138, 42364), (146, 42421), (148, 42427), (174, 42556), (183, 42613), (193, 42661), (211, 42730), (227, 42802),

Gene: MadKillah_14 Start: 5097, Stop: 5846, Start Num: 68

Candidate Starts for MadKillah_14:

(Start: 68 @5097 has 30 MA's), (85, 5163), (106, 5241), (118, 5265), (131, 5325), (141, 5367), (146, 5403), (157, 5463), (183, 5592), (193, 5640), (201, 5679), (216, 5727),

Gene: Madraxi_73 Start: 46508, Stop: 47317, Start Num: 60

Candidate Starts for Madraxi_73:

(Start: 60 @46508 has 2 MA's), (74, 46547), (109, 46670), (116, 46682), (131, 46745), (136, 46757), (137, 46769), (157, 46877), (186, 47018), (211, 47126), (227, 47201), (241, 47294),

Gene: MalagasyRose_61 Start: 40415, Stop: 41278, Start Num: 36

Candidate Starts for MalagasyRose_61:

(Start: 36 @40415 has 1 MA's), (Start: 40 @40439 has 24 MA's), (53, 40508), (61, 40529), (73, 40571), (81, 40592), (89, 40619), (115, 40715), (140, 40793), (146, 40826), (148, 40832), (157, 40886), (177, 40973), (182, 41009), (193, 41066), (199, 41096), (200, 41099), (210, 41132), (219, 41174), (223, 41192), (227, 41207),

Gene: Malthus_65 Start: 40911, Stop: 41774, Start Num: 40

Candidate Starts for Malthus_65:

(32, 40875), (Start: 39 @40890 has 147 MA's), (Start: 40 @40911 has 24 MA's), (45, 40944), (50, 40965), (72, 41040), (146, 41319), (148, 41325), (159, 41388), (171, 41442), (183, 41511), (193, 41559), (211, 41628), (232, 41736), (233, 41739),

Gene: Marcoliusprime_62 Start: 43382, Stop: 44239, Start Num: 39

Candidate Starts for Marcoliusprime_62:

(Start: 39 @43382 has 147 MA's), (61, 43487), (92, 43586), (148, 43796), (193, 44030), (211, 44099), (221, 44147), (223, 44156), (227, 44171),

Gene: MarkPhew_63 Start: 41511, Stop: 42416, Start Num: 39

Candidate Starts for MarkPhew_63:

(Start: 39 @41511 has 147 MA's), (81, 41685), (88, 41709), (93, 41724), (130, 41871), (146, 41940), (148, 41946), (157, 42003), (168, 42072), (189, 42186), (190, 42189), (211, 42273), (227, 42345), (228, 42363),

Gene: Marshawn_60 Start: 41598, Stop: 42494, Start Num: 38

Candidate Starts for Marshawn_60:

(3, 41262), (15, 41436), (25, 41547), (Start: 38 @41598 has 5 MA's), (61, 41709), (88, 41796), (93, 41811), (130, 41958), (146, 42024), (148, 42030), (157, 42084), (168, 42153), (174, 42180), (183, 42237), (227, 42426), (228, 42444),

Gene: McMater_62 Start: 41510, Stop: 42397, Start Num: 39

Candidate Starts for McMater_62:

(Start: 39 @41510 has 147 MA's), (61, 41621), (92, 41720), (93, 41723), (130, 41870), (146, 41936), (148, 41942), (157, 41996), (174, 42080), (183, 42137), (193, 42185), (221, 42302), (223, 42311), (227, 42326), (231, 42350), (234, 42365),

Gene: Mdavu_51 Start: 38584, Stop: 39471, Start Num: 39

Candidate Starts for Mdavu_51:

(Start: 39 @38584 has 147 MA's), (61, 38695), (92, 38794), (130, 38944), (142, 38977), (148, 39016), (157, 39070), (174, 39154), (182, 39202), (183, 39211), (187, 39226), (193, 39259), (220, 39373), (227, 39400),

Gene: MeaningOfLife_62 Start: 42154, Stop: 43041, Start Num: 39

Candidate Starts for MeaningOfLife_62:

(Start: 39 @42154 has 147 MA's), (61, 42265), (92, 42364), (130, 42514), (148, 42586), (157, 42640), (174, 42724), (183, 42781), (190, 42814), (193, 42829), (210, 42895), (223, 42955), (227, 42970), (235, 43012),

Gene: Megsy_63 Start: 41551, Stop: 42438, Start Num: 39

Candidate Starts for Megsy_63:

(Start: 39 @41551 has 147 MA's), (61, 41662), (92, 41761), (148, 41983), (157, 42037), (174, 42121), (183, 42178), (193, 42226), (210, 42292), (221, 42343), (223, 42352), (227, 42367),

Gene: Milly_62 Start: 43355, Stop: 44212, Start Num: 39

Candidate Starts for Milly_62:

(Start: 39 @43355 has 147 MA's), (61, 43460), (92, 43559), (148, 43769), (193, 44003), (211, 44072), (221, 44120), (223, 44129), (227, 44144),

Gene: Miryou_59 Start: 42930, Stop: 43790, Start Num: 37

Candidate Starts for Miryou_59:

(Start: 37 @42930 has 23 MA's), (53, 43023), (61, 43044), (130, 43293), (140, 43305), (146, 43338), (148, 43344), (150, 43356), (151, 43374), (157, 43398), (172, 43464), (182, 43521), (190, 43563), (201, 43617), (210, 43644), (212, 43650), (220, 43692), (223, 43704), (235, 43761), (238, 43782),

Gene: MissDaisy_61 Start: 39823, Stop: 40686, Start Num: 40

Candidate Starts for MissDaisy_61:

(16, 39658), (Start: 39 @39802 has 147 MA's), (Start: 40 @39823 has 24 MA's), (69, 39934), (72, 39952), (95, 40024), (100, 40054), (148, 40237), (157, 40291), (183, 40423), (232, 40648), (233, 40651),

Gene: Mitti_64 Start: 41090, Stop: 41953, Start Num: 40

Candidate Starts for Mitti_64:

(32, 41054), (Start: 39 @41069 has 147 MA's), (Start: 40 @41090 has 24 MA's), (45, 41123), (50, 41144), (72, 41219), (146, 41498), (148, 41504), (159, 41567), (171, 41621), (183, 41690), (193, 41738), (211, 41807), (232, 41915), (233, 41918),

Gene: Molivia_63 Start: 40276, Stop: 39626, Start Num: 78

Candidate Starts for Molivia_63:

(61, 40333), (Start: 78 @40276 has 1 MA's), (101, 40183), (111, 40156), (113, 40150), (126, 40117), (128, 40108), (132, 40081), (139, 40069), (142, 40054), (166, 39913), (186, 39820),

Gene: Mori_13 Start: 4936, Stop: 5685, Start Num: 68

Candidate Starts for Mori_13:

(Start: 68 @4936 has 30 MA's), (85, 5002), (106, 5080), (118, 5104), (131, 5164), (141, 5206), (146, 5242), (157, 5302), (183, 5431), (193, 5479), (201, 5518), (216, 5566),

Gene: Mufasa_62 Start: 42945, Stop: 43802, Start Num: 39

Candidate Starts for Mufasa_62:

(Start: 39 @42945 has 147 MA's), (61, 43050), (92, 43149), (148, 43359), (193, 43593), (211, 43662), (221, 43710), (223, 43719), (227, 43734),

Gene: Mulch_47 Start: 33927, Stop: 34814, Start Num: 41

Candidate Starts for Mulch_47:

(19, 33774), (20, 33783), (24, 33822), (Start: 41 @33927 has 15 MA's), (45, 33948), (70, 34038), (76, 34065), (82, 34083), (163, 34437), (165, 34446), (166, 34452), (184, 34539), (185, 34542), (193, 34584), (198, 34611), (204, 34638), (207, 34644), (211, 34653), (214, 34662),

Gene: Murai_13 Start: 4936, Stop: 5685, Start Num: 68

Candidate Starts for Murai_13:

(Start: 68 @4936 has 30 MA's), (85, 5002), (106, 5080), (118, 5104), (131, 5164), (141, 5206), (146, 5242), (157, 5302), (183, 5431), (193, 5479), (201, 5518), (216, 5566),

Gene: Murucutumbu_62 Start: 42254, Stop: 43141, Start Num: 39

Candidate Starts for Murucutumbu_62:

(Start: 39 @42254 has 147 MA's), (61, 42365), (92, 42464), (148, 42686), (157, 42740), (174, 42824), (183, 42881), (193, 42929), (210, 42995), (221, 43046), (223, 43055), (227, 43070),

Gene: Mynx_62 Start: 41596, Stop: 42474, Start Num: 39

Candidate Starts for Mynx_62:

(Start: 39 @41596 has 147 MA's), (61, 41707), (92, 41806), (130, 41956), (148, 42028), (157, 42082), (174, 42157), (183, 42214), (193, 42262), (210, 42328), (220, 42376), (223, 42388), (227, 42403),

Gene: Nadeem_47 Start: 33927, Stop: 34814, Start Num: 41

Candidate Starts for Nadeem_47:

(19, 33774), (20, 33783), (24, 33822), (Start: 41 @33927 has 15 MA's), (45, 33948), (70, 34038), (76, 34065), (82, 34083), (163, 34437), (165, 34446), (166, 34452), (184, 34539), (185, 34542), (193, 34584), (198, 34611), (204, 34638), (207, 34644), (211, 34653), (214, 34662),

Gene: NancyRae_47 Start: 33937, Stop: 34824, Start Num: 41

Candidate Starts for NancyRae_47:

(19, 33784), (20, 33793), (24, 33832), (Start: 41 @33937 has 15 MA's), (45, 33958), (70, 34048), (76, 34075), (82, 34093), (99, 34162), (163, 34447), (165, 34456), (166, 34462), (184, 34549), (185, 34552), (193, 34594), (198, 34621), (204, 34648), (207, 34654), (211, 34663), (214, 34672),

Gene: Neighly_57 Start: 39705, Stop: 40565, Start Num: 37

Candidate Starts for Neighly_57:

(Start: 37 @39705 has 23 MA's), (61, 39819), (72, 39855), (93, 39921), (95, 39927), (130, 40068), (140, 40080), (148, 40119), (151, 40149), (157, 40173), (182, 40296), (212, 40425), (215, 40434), (220, 40467), (223, 40479), (235, 40536), (238, 40557),

Gene: Nergal_54 Start: 38056, Stop: 38922, Start Num: 34

Candidate Starts for Nergal_54:

(Start: 34 @38056 has 1 MA's), (61, 38167), (94, 38269), (140, 38437), (157, 38530), (190, 38695), (193, 38710),

Gene: Nibb_62 Start: 41203, Stop: 42108, Start Num: 39

Candidate Starts for Nibb_62:

(4, 40876), (Start: 39 @41203 has 147 MA's), (93, 41416), (130, 41563), (146, 41632), (148, 41638), (157, 41695), (168, 41764), (189, 41878), (190, 41881), (211, 41965), (220, 42010), (227, 42037), (228, 42055),

Gene: NiebruSaylor_13 Start: 4936, Stop: 5685, Start Num: 68

Candidate Starts for NiebruSaylor_13:

(Start: 68 @4936 has 30 MA's), (85, 5002), (106, 5080), (118, 5104), (131, 5164), (141, 5206), (146, 5242), (157, 5302), (183, 5431), (193, 5479), (201, 5518), (216, 5566),

Gene: Nikao_53 Start: 41208, Stop: 42095, Start Num: 39

Candidate Starts for Nikao_53:

(Start: 39 @41208 has 147 MA's), (61, 41319), (92, 41418), (130, 41568), (142, 41601), (148, 41640), (157, 41694), (174, 41778), (182, 41826), (183, 41835), (187, 41850), (193, 41883), (220, 41997), (227, 42024),

Gene: Niklas_62 Start: 41571, Stop: 42458, Start Num: 39

Candidate Starts for Niklas_62:

(Start: 39 @41571 has 147 MA's), (61, 41682), (92, 41781), (93, 41784), (130, 41931), (146, 41997), (148, 42003), (157, 42057), (174, 42141), (183, 42198), (193, 42246), (221, 42363), (223, 42372),

(227, 42387), (231, 42411), (234, 42426),

Gene: Nirvana_76 Start: 55587, Stop: 54745, Start Num: 35

Candidate Starts for Nirvana_76:

(Start: 35 @55587 has 6 MA's), (43, 55536), (65, 55452), (73, 55422), (91, 55368), (98, 55335), (105, 55305), (107, 55299), (118, 55272), (123, 55260), (124, 55254), (145, 55158), (151, 55107), (160, 55065), (161, 55059), (162, 55053), (169, 55023), (173, 55008), (176, 54996), (180, 54969), (191, 54912), (194, 54897), (198, 54870), (213, 54825), (217, 54801),

Gene: Nonagon_64 Start: 42467, Stop: 41757, Start Num: 51

Candidate Starts for Nonagon_64:

(Start: 51 @42467 has 2 MA's), (62, 42434), (85, 42359), (96, 42323), (103, 42293), (124, 42242), (125, 42236), (137, 42197), (145, 42161), (150, 42128), (151, 42110), (169, 42029), (173, 42014), (177, 41999), (182, 41963), (184, 41951), (186, 41945), (197, 41894), (213, 41831),

Gene: November_58 Start: 41306, Stop: 42199, Start Num: 39

Candidate Starts for November_58:

(Start: 39 @41306 has 147 MA's), (61, 41417), (146, 41726), (148, 41732), (159, 41795), (168, 41855), (174, 41882), (183, 41939), (193, 41987), (198, 42014), (211, 42056), (221, 42104), (227, 42128),

Gene: Nutello_50 Start: 38595, Stop: 39482, Start Num: 39

Candidate Starts for Nutello_50:

(Start: 39 @38595 has 147 MA's), (61, 38706), (92, 38805), (130, 38955), (142, 38988), (148, 39027), (157, 39081), (174, 39165), (182, 39213), (183, 39222), (187, 39237), (193, 39270), (220, 39384), (227, 39411),

Gene: OkiRoe_56 Start: 40601, Stop: 41461, Start Num: 37

Candidate Starts for OkiRoe_56:

(Start: 37 @40601 has 23 MA's), (53, 40694), (61, 40715), (130, 40964), (140, 40976), (146, 41009), (148, 41015), (150, 41027), (151, 41045), (157, 41069), (172, 41135), (182, 41192), (190, 41234), (201, 41288), (210, 41315), (212, 41321), (220, 41363), (223, 41375), (235, 41432), (238, 41453),

Gene: OmniCritical_63 Start: 40980, Stop: 41843, Start Num: 40

Candidate Starts for OmniCritical_63:

(32, 40944), (Start: 39 @40959 has 147 MA's), (Start: 40 @40980 has 24 MA's), (45, 41013), (50, 41034), (72, 41109), (146, 41388), (148, 41394), (159, 41457), (171, 41511), (183, 41580), (193, 41628), (211, 41697), (232, 41805), (233, 41808),

Gene: Omnicron_59 Start: 40704, Stop: 41564, Start Num: 37

Candidate Starts for Omnicron_59:

(Start: 37 @40704 has 23 MA's), (54, 40800), (56, 40809), (61, 40818), (Start: 75 @40866 has 8 MA's), (95, 40926), (130, 41067), (140, 41079), (157, 41172), (172, 41238), (177, 41259), (182, 41295), (190, 41337), (198, 41379), (201, 41391), (209, 41415), (212, 41424), (223, 41478), (235, 41535), (238, 41556),

Gene: Oscar_64 Start: 41778, Stop: 42701, Start Num: 38

Candidate Starts for Oscar_64:

(33, 41772), (Start: 38 @41778 has 5 MA's), (61, 41889), (93, 41991), (130, 42138), (146, 42204), (148, 42210), (157, 42267), (168, 42336), (189, 42450), (190, 42453), (193, 42468), (198, 42495), (211, 42537), (227, 42609), (228, 42627),

Gene: Padfoot_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Padfoot_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Padpat_63 Start: 41277, Stop: 42155, Start Num: 39

Candidate Starts for Padpat_63:

(Start: 39 @41277 has 147 MA's), (61, 41388), (92, 41487), (130, 41637), (148, 41709), (157, 41763), (174, 41838), (183, 41895), (193, 41943), (210, 42009), (220, 42057), (223, 42069), (227, 42084),

Gene: Paola_55 Start: 40204, Stop: 41064, Start Num: 37

Candidate Starts for Paola_55:

(Start: 37 @40204 has 23 MA's), (61, 40318), (130, 40567), (140, 40579), (150, 40630), (151, 40648), (157, 40672), (172, 40738), (177, 40759), (182, 40795), (190, 40837), (201, 40891), (210, 40918), (212, 40924), (220, 40966), (223, 40978), (235, 41035), (238, 41056),

Gene: Parada_47 Start: 33927, Stop: 34814, Start Num: 41

Candidate Starts for Parada_47:

(19, 33774), (20, 33783), (24, 33822), (Start: 41 @33927 has 15 MA's), (45, 33948), (70, 34038), (76, 34065), (82, 34083), (163, 34437), (165, 34446), (166, 34452), (184, 34539), (185, 34542), (193, 34584), (198, 34611), (204, 34638), (207, 34644), (211, 34653), (214, 34662),

Gene: Patt_60 Start: 39547, Stop: 40410, Start Num: 40

Candidate Starts for Patt_60:

(16, 39382), (Start: 39 @39526 has 147 MA's), (Start: 40 @39547 has 24 MA's), (69, 39658), (72, 39676), (95, 39748), (100, 39778), (148, 39961), (157, 40015), (183, 40147), (232, 40372), (233, 40375),

Gene: Peanam_62 Start: 41529, Stop: 42416, Start Num: 39

Candidate Starts for Peanam_62:

(Start: 39 @41529 has 147 MA's), (61, 41640), (92, 41739), (93, 41742), (130, 41889), (146, 41955), (148, 41961), (157, 42015), (174, 42099), (183, 42156), (193, 42204), (221, 42321), (223, 42330), (227, 42345), (231, 42369), (234, 42384),

Gene: Peel_61 Start: 41413, Stop: 42291, Start Num: 39

Candidate Starts for Peel_61:

(Start: 39 @41413 has 147 MA's), (61, 41524), (92, 41623), (148, 41845), (157, 41899), (174, 41974), (183, 42031), (193, 42079), (210, 42145), (220, 42193), (223, 42205), (227, 42220),

Gene: Pharb_59 Start: 40578, Stop: 41477, Start Num: 39

Candidate Starts for Pharb_59:

(Start: 39 @40578 has 147 MA's), (61, 40689), (92, 40788), (95, 40797), (119, 40881), (146, 41004), (148, 41010), (157, 41064), (170, 41142), (174, 41160), (189, 41247), (193, 41265), (202, 41307), (203, 41316), (211, 41334), (220, 41379), (221, 41382), (227, 41406), (228, 41424),

Gene: PhelpsODU_61 Start: 40671, Stop: 41570, Start Num: 39

Candidate Starts for PhelpsODU_61:

(26, 40632), (Start: 39 @40671 has 147 MA's), (47, 40731), (88, 40869), (93, 40884), (117, 40971), (148, 41103), (174, 41253), (183, 41310), (193, 41358), (198, 41385), (227, 41499), (231, 41523),

Gene: Phrank_63 Start: 40732, Stop: 41631, Start Num: 39

Candidate Starts for Phrank_63:

(6, 40402), (13, 40549), (14, 40555), (26, 40693), (Start: 39 @40732 has 147 MA's), (47, 40792), (61, 40843), (84, 40921), (88, 40930), (93, 40945), (117, 41032), (146, 41158), (148, 41164), (174, 41314), (183, 41371), (193, 41419), (198, 41446), (227, 41560), (231, 41584),

Gene: Piatt_61 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for Piatt_61:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Pimento_48 Start: 33578, Stop: 34405, Start Num: 41

Candidate Starts for Pimento_48:

(19, 33425), (20, 33434), (24, 33473), (Start: 41 @33578 has 15 MA's), (57, 33602), (76, 33656), (82, 33674), (99, 33743), (163, 34028), (165, 34037), (166, 34043), (184, 34130), (185, 34133), (198, 34202), (204, 34229), (207, 34235), (211, 34244), (214, 34253),

Gene: Pisa1_61 Start: 42235, Stop: 43143, Start Num: 30

Candidate Starts for Pisa1_61:

(18, 42130), (27, 42220), (30, 42235), (Start: 39 @42256 has 147 MA's), (61, 42367), (92, 42466), (130, 42616), (148, 42688), (157, 42742), (174, 42826), (193, 42931), (210, 42997), (221, 43048), (223, 43057), (227, 43072),

Gene: Pisa4_55 Start: 37604, Stop: 38512, Start Num: 30

Candidate Starts for Pisa4_55:

(18, 37499), (27, 37589), (30, 37604), (Start: 39 @37625 has 147 MA's), (61, 37736), (92, 37835), (130, 37985), (148, 38057), (157, 38111), (174, 38195), (193, 38300), (210, 38366), (221, 38417), (223, 38426), (227, 38441),

Gene: Pixie_59 Start: 40914, Stop: 41795, Start Num: 39

Candidate Starts for Pixie_59:

(Start: 39 @40914 has 147 MA's), (61, 41025), (81, 41088), (92, 41124), (95, 41133), (115, 41211), (146, 41343), (174, 41478), (183, 41535), (193, 41583), (211, 41652), (220, 41697), (221, 41700), (227, 41724),

Gene: Pokerus_60 Start: 41329, Stop: 42207, Start Num: 39

Candidate Starts for Pokerus_60:

(Start: 39 @41329 has 147 MA's), (54, 41422), (61, 41440), (92, 41539), (130, 41689), (148, 41761), (174, 41890), (183, 41947), (193, 41995), (210, 42061), (220, 42109), (223, 42121), (227, 42136),

Gene: Prithvi_62 Start: 41483, Stop: 42361, Start Num: 39

Candidate Starts for Prithvi_62:

(Start: 39 @41483 has 147 MA's), (61, 41594), (92, 41693), (148, 41915), (157, 41969), (174, 42044), (183, 42101), (193, 42149), (210, 42215), (220, 42263), (223, 42275), (227, 42290),

Gene: Psycho_55 Start: 38831, Stop: 39691, Start Num: 37

Candidate Starts for Psycho_55:

(Start: 37 @38831 has 23 MA's), (61, 38945), (72, 38981), (93, 39047), (130, 39194), (140, 39206), (148, 39245), (151, 39275), (157, 39299), (182, 39422), (212, 39551), (215, 39560), (220, 39593), (223, 39605), (235, 39662), (238, 39683),

Gene: Qhanda_66 Start: 40927, Stop: 41790, Start Num: 40

Candidate Starts for Qhanda_66:

(32, 40891), (Start: 39 @40906 has 147 MA's), (Start: 40 @40927 has 24 MA's), (45, 40960), (50, 40981), (72, 41056), (146, 41335), (148, 41341), (159, 41404), (171, 41458), (183, 41527), (193, 41575), (211, 41644), (232, 41752), (233, 41755),

Gene: Quantum_71 Start: 53494, Stop: 52652, Start Num: 35

Candidate Starts for Quantum_71:

(Start: 35 @53494 has 6 MA's), (65, 53359), (105, 53212), (107, 53206), (118, 53179), (123, 53167), (129, 53134), (132, 53113), (154, 52999), (159, 52981), (162, 52960), (169, 52930), (173, 52915), (176, 52903), (180, 52876), (184, 52852), (191, 52819), (192, 52810), (194, 52804), (198, 52777), (213, 52732), (224, 52678),

Gene: QuincyRose_60 Start: 41672, Stop: 42550, Start Num: 39

Candidate Starts for QuincyRose_60:

(Start: 39 @41672 has 147 MA's), (61, 41783), (92, 41882), (130, 42032), (148, 42104), (157, 42158), (174, 42233), (183, 42290), (193, 42338), (210, 42404), (220, 42452), (223, 42464), (227, 42479),

Gene: REQ1_38 Start: 15432, Stop: 16226, Start Num: 60

Candidate Starts for REQ1_38:

(Start: 60 @15432 has 2 MA's), (74, 15471), (102, 15576), (104, 15579), (109, 15594), (116, 15606), (131, 15669), (136, 15681), (137, 15693), (157, 15801), (175, 15882), (186, 15942), (227, 16125),

Gene: Ramen_62 Start: 41288, Stop: 42175, Start Num: 39

Candidate Starts for Ramen_62:

(Start: 39 @41288 has 147 MA's), (61, 41399), (92, 41498), (130, 41648), (148, 41720), (157, 41774), (174, 41858), (183, 41915), (193, 41963), (210, 42029), (223, 42089), (227, 42104), (235, 42146),

Gene: Rando14_57 Start: 38404, Stop: 39264, Start Num: 37

Candidate Starts for Rando14_57:

(Start: 37 @38404 has 23 MA's), (54, 38500), (56, 38509), (63, 38521), (72, 38554), (81, 38581), (95, 38626), (100, 38656), (119, 38710), (130, 38767), (140, 38779), (146, 38812), (148, 38818), (157, 38872), (159, 38881), (172, 38938), (182, 38995), (198, 39079), (201, 39091), (209, 39115), (212, 39124), (223, 39178), (235, 39235), (238, 39256),

Gene: Rapunzel97_62 Start: 41275, Stop: 42162, Start Num: 39

Candidate Starts for Rapunzel97_62:

(Start: 39 @41275 has 147 MA's), (54, 41368), (61, 41386), (92, 41485), (130, 41635), (148, 41707), (157, 41761), (174, 41845), (183, 41902), (193, 41950), (210, 42016), (223, 42076), (227, 42091), (235, 42133),

Gene: RegnumDei_68 Start: 42114, Stop: 42953, Start Num: 67

Candidate Starts for RegnumDei_68:

(44, 42036), (Start: 67 @42114 has 3 MA's), (74, 42141), (86, 42180), (116, 42279), (136, 42354), (144, 42396), (146, 42420), (147, 42423), (172, 42549), (181, 42603), (196, 42672), (200, 42699), (242, 42930),

Gene: Reptar3000_61 Start: 39535, Stop: 40398, Start Num: 40

Candidate Starts for Reptar3000_61:

(16, 39370), (Start: 39 @39514 has 147 MA's), (Start: 40 @39535 has 24 MA's), (69, 39646), (72, 39664), (95, 39736), (100, 39766), (148, 39949), (157, 40003), (183, 40135), (232, 40360), (233, 40363),

Gene: Reyja_39 Start: 28104, Stop: 28865, Start Num: 59

Candidate Starts for Reyja_39:

(Start: 59 @28104 has 6 MA's), (83, 28170), (116, 28281), (136, 28356), (137, 28368), (163, 28512), (179, 28587), (183, 28611), (186, 28620), (200, 28692), (203, 28710), (211, 28728), (227, 28800),

Gene: Richo_62 Start: 41510, Stop: 42397, Start Num: 39

Candidate Starts for Richo_62:

(Start: 39 @41510 has 147 MA's), (61, 41621), (92, 41720), (93, 41723), (130, 41870), (146, 41936), (148, 41942), (157, 41996), (174, 42080), (183, 42137), (193, 42185), (221, 42302), (223, 42311), (227, 42326), (231, 42350), (234, 42365),

Gene: Rings_62 Start: 41910, Stop: 41269, Start Num: 80

Candidate Starts for Rings_62:

(Start: 80 @41910 has 12 MA's), (101, 41823), (108, 41802), (113, 41790), (128, 41748), (132, 41721), (139, 41709), (142, 41694), (186, 41460), (200, 41385),

Gene: Rosmarinus_61 Start: 41399, Stop: 42277, Start Num: 39

Candidate Starts for Rosmarinus_61:

(Start: 39 @41399 has 147 MA's), (61, 41510), (92, 41609), (148, 41831), (157, 41885), (174, 41960), (183, 42017), (193, 42065), (210, 42131), (220, 42179), (223, 42191), (227, 42206),

Gene: Ruthiejr_65 Start: 40961, Stop: 41824, Start Num: 40

Candidate Starts for Ruthiejr_65:

(32, 40925), (Start: 39 @40940 has 147 MA's), (Start: 40 @40961 has 24 MA's), (45, 40994), (50, 41015), (72, 41090), (146, 41369), (148, 41375), (159, 41438), (171, 41492), (183, 41561), (193, 41609), (211, 41678), (232, 41786), (233, 41789),

Gene: Ryadel_15 Start: 5530, Stop: 6279, Start Num: 68

Candidate Starts for Ryadel_15:

(Start: 68 @5530 has 30 MA's), (85, 5596), (106, 5674), (118, 5698), (131, 5758), (141, 5800), (146, 5836), (157, 5896), (183, 6025), (193, 6073), (201, 6112), (216, 6160),

Gene: SFuller_67 Start: 43967, Stop: 44776, Start Num: 60

Candidate Starts for SFuller_67:

(Start: 60 @43967 has 2 MA's), (109, 44129), (116, 44141), (131, 44204), (136, 44216), (137, 44228), (157, 44336), (186, 44477), (211, 44585), (227, 44660), (241, 44753),

Gene: Salgado_94 Start: 54110, Stop: 54913, Start Num: 75

Candidate Starts for Salgado_94:

(Start: 75 @54110 has 8 MA's), (120, 54254), (143, 54371), (146, 54395), (153, 54461), (158, 54479), (174, 54551), (178, 54578), (182, 54599), (186, 54617), (188, 54632), (230, 54827),

Gene: SamScheppers_62 Start: 41390, Stop: 42253, Start Num: 40

Candidate Starts for SamScheppers_62:

(32, 41354), (Start: 39 @41369 has 147 MA's), (Start: 40 @41390 has 24 MA's), (45, 41423), (50, 41444), (72, 41519), (146, 41798), (148, 41804), (159, 41867), (171, 41921), (183, 41990), (193, 42038), (211, 42107), (232, 42215), (233, 42218),

Gene: SamuelLPlaqson_62 Start: 42174, Stop: 43055, Start Num: 39

Candidate Starts for SamuelLPlaqson_62:

(Start: 39 @42174 has 147 MA's), (61, 42285), (92, 42384), (148, 42609), (157, 42663), (174, 42738), (183, 42795), (193, 42843), (210, 42909), (220, 42957), (223, 42969), (227, 42984),

Gene: Santhid_38 Start: 26389, Stop: 27150, Start Num: 59

Candidate Starts for Santhid_38:

(46, 26332), (57, 26380), (Start: 59 @26389 has 6 MA's), (116, 26566), (135, 26638), (136, 26641), (163, 26797), (164, 26803), (174, 26839), (186, 26905), (211, 27013), (227, 27085),

Gene: Sarkar_76 Start: 53494, Stop: 52652, Start Num: 35

Candidate Starts for Sarkar_76:

(Start: 35 @53494 has 6 MA's), (65, 53359), (105, 53212), (107, 53206), (118, 53179), (123, 53167), (129, 53134), (132, 53113), (154, 52999), (159, 52981), (162, 52960), (169, 52930), (173, 52915), (176, 52903), (180, 52876), (184, 52852), (191, 52819), (192, 52810), (194, 52804), (198, 52777), (213, 52732), (224, 52678),

Gene: Satis_72 Start: 53490, Stop: 52648, Start Num: 35

Candidate Starts for Satis_72:

(Start: 35 @53490 has 6 MA's), (65, 53355), (105, 53208), (107, 53202), (118, 53175), (123, 53163), (129, 53130), (132, 53109), (154, 52995), (159, 52977), (162, 52956), (169, 52926), (173, 52911), (176, 52899), (180, 52872), (184, 52848), (191, 52815), (192, 52806), (194, 52800), (198, 52773), (213, 52728), (224, 52674),

Gene: Scarlett_65 Start: 42108, Stop: 43028, Start Num: 38

Candidate Starts for Scarlett_65:

(Start: 38 @42108 has 5 MA's), (61, 42219), (93, 42321), (130, 42468), (146, 42534), (148, 42540), (157, 42594), (168, 42663), (189, 42777), (190, 42780), (193, 42795), (198, 42822), (211, 42864), (220, 42909), (227, 42936), (228, 42954),

Gene: SchoolBus_12 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for SchoolBus_12:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: Schuy_14 Start: 5097, Stop: 5846, Start Num: 68

Candidate Starts for Schuy_14:

(Start: 68 @5097 has 30 MA's), (85, 5163), (106, 5241), (118, 5265), (131, 5325), (141, 5367), (146, 5403), (157, 5463), (183, 5592), (193, 5640), (201, 5679), (216, 5727),

Gene: SgtBeansprout_50 Start: 38595, Stop: 39482, Start Num: 39

Candidate Starts for SgtBeansprout_50:

(Start: 39 @38595 has 147 MA's), (61, 38706), (92, 38805), (130, 38955), (142, 38988), (148, 39027), (157, 39081), (174, 39165), (182, 39213), (183, 39222), (187, 39237), (193, 39270), (220, 39384), (227, 39411),

Gene: Shadow1_64 Start: 41184, Stop: 42083, Start Num: 39

Candidate Starts for Shadow1_64:

(Start: 39 @41184 has 147 MA's), (47, 41244), (61, 41295), (84, 41373), (88, 41382), (93, 41397), (117, 41484), (138, 41556), (146, 41610), (148, 41616), (174, 41766), (183, 41823), (219, 41979), (227, 42012), (231, 42036),

Gene: Shagrat_70 Start: 42104, Stop: 42943, Start Num: 67

Candidate Starts for Shagrat_70:

(44, 42035), (Start: 67 @42104 has 3 MA's), (74, 42131), (116, 42269), (136, 42344), (144, 42386), (146, 42410), (147, 42413), (172, 42539), (181, 42593), (196, 42662), (211, 42725), (242, 42920),

Gene: Shaobing_62 Start: 41547, Stop: 42434, Start Num: 39

Candidate Starts for Shaobing_62:

(Start: 39 @41547 has 147 MA's), (61, 41658), (92, 41757), (93, 41760), (130, 41907), (146, 41973), (148, 41979), (157, 42033), (174, 42117), (183, 42174), (193, 42222), (221, 42339), (223, 42348), (227, 42363), (231, 42387), (234, 42402),

Gene: ShedlockHolmes_61 Start: 41433, Stop: 42314, Start Num: 39

Candidate Starts for ShedlockHolmes_61:

(Start: 39 @41433 has 147 MA's), (61, 41544), (81, 41607), (92, 41643), (95, 41652), (115, 41730), (127, 41766), (146, 41862), (174, 41997), (183, 42054), (193, 42102), (211, 42171), (220, 42216), (221, 42219), (227, 42243),

Gene: ShiaSurprise_62 Start: 41608, Stop: 42486, Start Num: 39

Candidate Starts for ShiaSurprise_62:

(Start: 39 @41608 has 147 MA's), (61, 41719), (92, 41818), (148, 42040), (157, 42094), (174, 42169), (183, 42226), (193, 42274), (210, 42340), (220, 42388), (223, 42400), (227, 42415),

Gene: Shida_13 Start: 5002, Stop: 5751, Start Num: 68

Candidate Starts for Shida_13:

(Start: 68 @5002 has 30 MA's), (85, 5068), (106, 5146), (118, 5170), (131, 5230), (141, 5272), (146, 5308), (157, 5368), (183, 5497), (193, 5545), (201, 5584), (216, 5632),

Gene: Shrooms_92 Start: 53698, Stop: 54537, Start Num: 64

Candidate Starts for Shrooms_92:

(Start: 64 @53698 has 1 MA's), (Start: 75 @53740 has 8 MA's), (120, 53884), (143, 53998), (153, 54088), (157, 54103), (158, 54106), (178, 54205), (182, 54226), (186, 54244), (188, 54259), (200, 54319), (228, 54442), (230, 54454), (240, 54520),

Gene: SirPhilip_61 Start: 41827, Stop: 42729, Start Num: 39

Candidate Starts for SirPhilip_61:

(Start: 39 @41827 has 147 MA's), (61, 41938), (93, 42040), (117, 42127), (130, 42187), (146, 42253), (148, 42259), (168, 42382), (174, 42409), (183, 42466), (198, 42541), (211, 42583), (221, 42631), (227, 42655),

Gene: Slarp_64 Start: 40918, Stop: 41781, Start Num: 40

Candidate Starts for Slarp_64:

(32, 40882), (Start: 39 @40897 has 147 MA's), (Start: 40 @40918 has 24 MA's), (45, 40951), (50, 40972), (72, 41047), (146, 41326), (148, 41332), (159, 41395), (171, 41449), (183, 41518), (193, 41566), (211, 41635), (232, 41743), (233, 41746),

Gene: Slimphazie_61 Start: 41275, Stop: 42162, Start Num: 39

Candidate Starts for Slimphazie_61:

(Start: 39 @41275 has 147 MA's), (54, 41368), (61, 41386), (92, 41485), (130, 41635), (148, 41707), (157, 41761), (174, 41845), (183, 41902), (193, 41950), (210, 42016), (223, 42076), (227, 42091), (235, 42133),

Gene: Smooch_14 Start: 5266, Stop: 6015, Start Num: 68

Candidate Starts for Smooch_14:

(Start: 68 @5266 has 30 MA's), (85, 5332), (106, 5410), (118, 5434), (131, 5494), (141, 5536), (146, 5572), (157, 5632), (183, 5761), (193, 5809), (216, 5896),

Gene: SoSeph_56 Start: 40576, Stop: 41436, Start Num: 37

Candidate Starts for SoSeph_56:

(Start: 37 @40576 has 23 MA's), (53, 40669), (61, 40690), (130, 40939), (140, 40951), (146, 40984), (148, 40990), (150, 41002), (151, 41020), (157, 41044), (172, 41110), (182, 41167), (190, 41209), (201, 41263), (210, 41290), (212, 41296), (220, 41338), (223, 41350), (235, 41407), (238, 41428),

Gene: SorJuana_61 Start: 41469, Stop: 40828, Start Num: 80

Candidate Starts for SorJuana_61:

(Start: 80 @41469 has 12 MA's), (101, 41382), (108, 41361), (113, 41349), (128, 41307), (132, 41280), (139, 41268), (142, 41253), (186, 41019), (200, 40944),

Gene: Spock_61 Start: 41412, Stop: 42290, Start Num: 39

Candidate Starts for Spock_61:

(Start: 39 @41412 has 147 MA's), (61, 41523), (92, 41622), (148, 41844), (157, 41898), (174, 41973), (183, 42030), (193, 42078), (210, 42144), (220, 42192), (223, 42204), (227, 42219),

Gene: Stinson_62 Start: 41777, Stop: 42655, Start Num: 39

Candidate Starts for Stinson_62:

(Start: 39 @41777 has 147 MA's), (53, 41867), (61, 41888), (92, 41987), (148, 42209), (157, 42263), (174, 42338), (183, 42395), (193, 42443), (210, 42509), (220, 42557), (223, 42569), (227, 42584),

Gene: Strobilo_63 Start: 43357, Stop: 44214, Start Num: 39

Candidate Starts for Strobilo_63:

(Start: 39 @43357 has 147 MA's), (61, 43462), (92, 43561), (148, 43771), (193, 44005), (211, 44074), (221, 44122), (223, 44131), (227, 44146),

Gene: Sulley_61 Start: 41463, Stop: 42350, Start Num: 39

Candidate Starts for Sulley_61:

(Start: 39 @41463 has 147 MA's), (61, 41574), (92, 41673), (148, 41895), (157, 41949), (174, 42033), (183, 42090), (193, 42138), (210, 42204), (221, 42255), (223, 42264), (227, 42279),

Gene: Sunflower1121_65 Start: 41330, Stop: 42229, Start Num: 39

Candidate Starts for Sunflower1121_65:

(Start: 39 @41330 has 147 MA's), (47, 41390), (61, 41441), (84, 41519), (88, 41528), (93, 41543), (117, 41630), (138, 41702), (146, 41756), (148, 41762), (174, 41912), (183, 41969), (219, 42125), (227, 42158), (231, 42182),

Gene: Syra333_63 Start: 41022, Stop: 41921, Start Num: 39

Candidate Starts for Syra333_63:

(12, 40827), (26, 40983), (Start: 39 @41022 has 147 MA's), (47, 41082), (61, 41133), (84, 41211), (88, 41220), (93, 41235), (117, 41322), (138, 41394), (146, 41448), (174, 41604), (183, 41661), (227, 41850), (231, 41874),

Gene: TBond007_58 Start: 40913, Stop: 41794, Start Num: 39

Candidate Starts for TBond007_58:

(Start: 39 @40913 has 147 MA's), (61, 41024), (81, 41087), (92, 41123), (95, 41132), (115, 41210), (146, 41342), (174, 41477), (183, 41534), (193, 41582), (211, 41651), (220, 41696), (221, 41699), (227, 41723),

Gene: TClif_61 Start: 40980, Stop: 41876, Start Num: 39

Candidate Starts for TClif_61:

(Start: 39 @40980 has 147 MA's), (61, 41091), (93, 41193), (117, 41280), (130, 41340), (146, 41424), (148, 41430), (174, 41559), (183, 41616), (227, 41805),

Gene: TM4_59 Start: 37712, Stop: 38569, Start Num: 39

Candidate Starts for TM4_59:

(5, 37370), (Start: 39 @37712 has 147 MA's), (61, 37817), (92, 37916), (148, 38126), (193, 38360), (211, 38429), (221, 38477), (227, 38501),

Gene: TPA4_47 Start: 36087, Stop: 36890, Start Num: 64

Candidate Starts for TPA4_47:

(Start: 64 @36087 has 1 MA's), (110, 36249), (134, 36333), (140, 36360), (163, 36516), (165, 36525), (182, 36606), (183, 36615), (210, 36729), (218, 36768), (239, 36873),

Gene: Tachez_61 Start: 41256, Stop: 42134, Start Num: 39

Candidate Starts for Tachez_61:

(Start: 39 @41256 has 147 MA's), (61, 41367), (92, 41466), (148, 41688), (157, 41742), (174, 41817), (183, 41874), (193, 41922), (210, 41988), (220, 42036), (223, 42048), (227, 42063),

Gene: TaiwanKao_63 Start: 41545, Stop: 42423, Start Num: 39

Candidate Starts for TaiwanKao_63:

(Start: 39 @41545 has 147 MA's), (61, 41656), (92, 41755), (148, 41977), (157, 42031), (174, 42106), (183, 42163), (193, 42211), (210, 42277), (211, 42280), (220, 42325), (223, 42337), (227, 42352),

Gene: Taquito_63 Start: 41153, Stop: 42016, Start Num: 40

Candidate Starts for Taquito_63:

(32, 41117), (Start: 39 @41132 has 147 MA's), (Start: 40 @41153 has 24 MA's), (45, 41186), (50, 41207), (72, 41282), (146, 41561), (148, 41567), (159, 41630), (171, 41684), (183, 41753), (193, 41801), (211, 41870), (232, 41978), (233, 41981),

Gene: Tarzan_39 Start: 27538, Stop: 28299, Start Num: 59

Candidate Starts for Tarzan_39:

(21, 27307), (28, 27388), (48, 27487), (Start: 59 @27538 has 6 MA's), (83, 27604), (116, 27715), (136, 27790), (137, 27802), (163, 27946), (179, 28021), (183, 28045), (186, 28054), (203, 28144), (211, 28162), (227, 28234),

Gene: Teejan_52 Start: 41208, Stop: 42095, Start Num: 39

Candidate Starts for Teejan_52:

(Start: 39 @41208 has 147 MA's), (61, 41319), (92, 41418), (130, 41568), (142, 41601), (148, 41640), (157, 41694), (174, 41778), (182, 41826), (183, 41835), (187, 41850), (193, 41883), (220, 41997), (227, 42024),

Gene: TelAviv_12 Start: 4745, Stop: 5494, Start Num: 68

Candidate Starts for TelAviv_12:

(Start: 68 @4745 has 30 MA's), (85, 4811), (106, 4889), (118, 4913), (131, 4973), (141, 5015), (146, 5051), (157, 5111), (183, 5240), (193, 5288), (201, 5327), (216, 5375),

Gene: Thunderclap_61 Start: 41891, Stop: 41250, Start Num: 80

Candidate Starts for Thunderclap_61:

(Start: 80 @41891 has 12 MA's), (101, 41804), (108, 41783), (113, 41771), (128, 41729), (132, 41702), (139, 41690), (142, 41675), (175, 41501), (186, 41441), (200, 41366),

Gene: Thyatira_58 Start: 42534, Stop: 43394, Start Num: 37

Candidate Starts for Thyatira_58:

(Start: 37 @42534 has 23 MA's), (53, 42627), (61, 42648), (130, 42897), (140, 42909), (148, 42948), (150, 42960), (151, 42978), (157, 43002), (172, 43068), (177, 43089), (182, 43125), (190, 43167), (201, 43221), (210, 43248), (212, 43254), (220, 43296), (223, 43308), (235, 43365), (238, 43386),

Gene: Tierra_63 Start: 41543, Stop: 42442, Start Num: 39

Candidate Starts for Tierra_63:

(6, 41213), (13, 41360), (14, 41366), (26, 41504), (Start: 39 @41543 has 147 MA's), (47, 41603), (61, 41654), (84, 41732), (88, 41741), (93, 41756), (117, 41843), (146, 41969), (148, 41975), (174, 42125), (183, 42182), (193, 42230), (198, 42257), (227, 42371), (231, 42395),

Gene: Tigress9_67 Start: 41339, Stop: 42238, Start Num: 39

Candidate Starts for Tigress9_67:

(Start: 39 @41339 has 147 MA's), (47, 41399), (61, 41450), (84, 41528), (88, 41537), (93, 41552), (117, 41639), (138, 41711), (146, 41765), (174, 41921), (183, 41978), (219, 42134), (220, 42140), (227, 42167), (231, 42191),

Gene: TingHuaYa_63 Start: 40622, Stop: 41509, Start Num: 39

Candidate Starts for TingHuaYa_63:

(Start: 39 @40622 has 147 MA's), (61, 40733), (92, 40832), (130, 40982), (148, 41054), (157, 41108), (174, 41192), (183, 41249), (193, 41297), (210, 41363), (221, 41414), (223, 41423), (227, 41438),

Gene: TiniBug_62 Start: 42170, Stop: 43051, Start Num: 39

Candidate Starts for TiniBug_62:

(Start: 39 @42170 has 147 MA's), (61, 42281), (92, 42380), (148, 42605), (157, 42659), (174, 42734), (183, 42791), (193, 42839), (210, 42905), (220, 42953), (223, 42965), (227, 42980),

Gene: TinyDot_44 Start: 29888, Stop: 30616, Start Num: 71

Candidate Starts for TinyDot_44:

(10, 29531), (31, 29756), (Start: 71 @29888 has 1 MA's), (114, 30035), (149, 30194), (155, 30230), (163, 30269), (205, 30473),

Gene: Tiri_62 Start: 41574, Stop: 42461, Start Num: 39

Candidate Starts for Tiri_62:

(Start: 39 @41574 has 147 MA's), (61, 41685), (92, 41784), (130, 41934), (148, 42006), (157, 42060), (174, 42144), (183, 42201), (190, 42234), (193, 42249), (210, 42315), (223, 42375), (227, 42390),

Gene: Topper_61 Start: 41411, Stop: 42289, Start Num: 39

Candidate Starts for Topper_61:

(Start: 39 @41411 has 147 MA's), (61, 41522), (92, 41621), (148, 41843), (157, 41897), (174, 41972), (183, 42029), (193, 42077), (210, 42143), (220, 42191), (223, 42203), (227, 42218),

Gene: Torres_53 Start: 41209, Stop: 42096, Start Num: 39

Candidate Starts for Torres_53:

(Start: 39 @41209 has 147 MA's), (61, 41320), (92, 41419), (130, 41569), (142, 41602), (148, 41641), (157, 41695), (174, 41779), (182, 41827), (183, 41836), (187, 41851), (193, 41884), (220, 41998), (227, 42025),

Gene: TreyKay_62 Start: 41483, Stop: 42361, Start Num: 39

Candidate Starts for TreyKay_62:

(Start: 39 @41483 has 147 MA's), (61, 41594), (92, 41693), (148, 41915), (157, 41969), (174, 42044), (183, 42101), (193, 42149), (210, 42215), (220, 42263), (223, 42275), (227, 42290),

Gene: TribbleTrouble_60 Start: 41741, Stop: 42643, Start Num: 39

Candidate Starts for TribbleTrouble_60:

(29, 41720), (Start: 39 @41741 has 147 MA's), (61, 41852), (92, 41951), (95, 41960), (115, 42038), (130, 42101), (146, 42191), (174, 42326), (183, 42383), (193, 42431), (211, 42500), (212, 42503), (221, 42548), (227, 42572),

Gene: Trice_50 Start: 38596, Stop: 39483, Start Num: 39

Candidate Starts for Trice_50:

(Start: 39 @38596 has 147 MA's), (61, 38707), (92, 38806), (130, 38956), (142, 38989), (148, 39028), (157, 39082), (174, 39166), (182, 39214), (183, 39223), (187, 39238), (193, 39271), (220, 39385), (227, 39412),

Gene: TruffulaTree_61 Start: 41271, Stop: 42158, Start Num: 39

Candidate Starts for TruffulaTree_61:

(Start: 39 @41271 has 147 MA's), (54, 41364), (61, 41382), (92, 41481), (130, 41631), (148, 41703), (157, 41757), (174, 41841), (183, 41898), (193, 41946), (210, 42012), (223, 42072), (227, 42087), (235, 42129),

Gene: Twitch_61 Start: 41413, Stop: 42291, Start Num: 39

Candidate Starts for Twitch_61:

(Start: 39 @41413 has 147 MA's), (61, 41524), (92, 41623), (148, 41845), (157, 41899), (174, 41974), (183, 42031), (193, 42079), (210, 42145), (220, 42193), (223, 42205), (227, 42220),

Gene: Unicorn_61 Start: 40671, Stop: 41570, Start Num: 39

Candidate Starts for Unicorn_61:

(26, 40632), (Start: 39 @40671 has 147 MA's), (47, 40731), (88, 40869), (93, 40884), (117, 40971), (148, 41103), (174, 41253), (183, 41310), (193, 41358), (198, 41385), (227, 41499), (231, 41523),

Gene: Urkel_62 Start: 42174, Stop: 43055, Start Num: 39

Candidate Starts for Urkel_62:

(Start: 39 @42174 has 147 MA's), (61, 42285), (92, 42384), (148, 42609), (157, 42663), (174, 42738), (183, 42795), (193, 42843), (210, 42909), (220, 42957), (223, 42969), (227, 42984),

Gene: Vagabond_13 Start: 5002, Stop: 5751, Start Num: 68

Candidate Starts for Vagabond_13:

(Start: 68 @5002 has 30 MA's), (85, 5068), (106, 5146), (118, 5170), (131, 5230), (141, 5272), (146, 5308), (157, 5368), (183, 5497), (193, 5545), (201, 5584), (216, 5632),

Gene: Validus_64 Start: 41893, Stop: 42780, Start Num: 39

Candidate Starts for Validus_64:

(Start: 39 @41893 has 147 MA's), (61, 42004), (93, 42106), (130, 42253), (138, 42265), (148, 42325), (157, 42379), (174, 42463), (183, 42520), (193, 42568), (209, 42631), (221, 42685), (223, 42694), (227, 42709), (231, 42733), (234, 42748),

Gene: Veliki_62 Start: 41251, Stop: 42129, Start Num: 39

Candidate Starts for Veliki_62:

(Start: 39 @41251 has 147 MA's), (61, 41362), (92, 41461), (130, 41611), (148, 41683), (157, 41737), (174, 41812), (183, 41869), (193, 41917), (210, 41983), (220, 42031), (223, 42043), (227, 42058),

Gene: ViviJ_54 Start: 38289, Stop: 39149, Start Num: 37

Candidate Starts for ViviJ_54:

(Start: 37 @38289 has 23 MA's), (72, 38439), (130, 38652), (140, 38664), (148, 38703), (150, 38715), (151, 38733), (157, 38757), (171, 38820), (172, 38823), (187, 38904), (198, 38964), (201, 38976), (212, 39009), (215, 39018), (223, 39063), (235, 39120), (238, 39141),

Gene: Vorrrps_13 Start: 4936, Stop: 5685, Start Num: 68

Candidate Starts for Vorrrps_13:

(Start: 68 @4936 has 30 MA's), (85, 5002), (106, 5080), (118, 5104), (131, 5164), (141, 5206), (146, 5242), (157, 5302), (183, 5431), (193, 5479), (201, 5518), (216, 5566),

Gene: Waltz_90 Start: 52528, Stop: 53325, Start Num: 75

Candidate Starts for Waltz_90:

(Start: 64 @52486 has 1 MA's), (Start: 75 @52528 has 8 MA's), (112, 52660), (120, 52672), (122, 52681), (143, 52786), (153, 52876), (157, 52891), (158, 52894), (172, 52957), (174, 52966), (178, 52993), (182, 53014), (186, 53032), (188, 53047), (198, 53101), (230, 53242), (240, 53308),

Gene: Waterfoul_57 Start: 40638, Stop: 41498, Start Num: 37

Candidate Starts for Waterfoul_57:

(Start: 37 @40638 has 23 MA's), (53, 40731), (61, 40752), (130, 41001), (140, 41013), (146, 41046), (148, 41052), (150, 41064), (151, 41082), (157, 41106), (172, 41172), (182, 41229), (190, 41271), (201, 41325), (210, 41352), (212, 41358), (220, 41400), (223, 41412), (235, 41469), (238, 41490),

Gene: WheatThin_47 Start: 33927, Stop: 34814, Start Num: 41

Candidate Starts for WheatThin_47:

(19, 33774), (20, 33783), (24, 33822), (Start: 41 @33927 has 15 MA's), (45, 33948), (70, 34038), (76, 34065), (82, 34083), (163, 34437), (165, 34446), (166, 34452), (184, 34539), (185, 34542), (193, 34584), (198, 34611), (204, 34638), (207, 34644), (211, 34653), (214, 34662),

Gene: Wheelbite_89 Start: 54204, Stop: 54995, Start Num: 75

Candidate Starts for Wheelbite_89:

(Start: 59 @54153 has 6 MA's), (Start: 75 @54204 has 8 MA's), (97, 54276), (112, 54336), (120, 54348), (140, 54429), (143, 54462), (146, 54486), (153, 54552), (157, 54567), (158, 54570), (165, 54609), (178, 54669), (182, 54690), (186, 54708), (188, 54723), (198, 54777), (222, 54870),

Gene: Wildflower_13 Start: 4962, Stop: 5711, Start Num: 68

Candidate Starts for Wildflower_13:

(Start: 68 @4962 has 30 MA's), (85, 5028), (106, 5106), (118, 5130), (131, 5190), (141, 5232), (145, 5253), (146, 5268), (157, 5328), (183, 5457), (193, 5505), (201, 5544), (216, 5592),

Gene: Winget_13 Start: 5001, Stop: 5750, Start Num: 68

Candidate Starts for Winget_13:

(Start: 68 @5001 has 30 MA's), (85, 5067), (106, 5145), (118, 5169), (131, 5229), (141, 5271), (146, 5307), (157, 5367), (183, 5496), (193, 5544), (201, 5583),

Gene: Wintermute_64 Start: 41148, Stop: 42011, Start Num: 40

Candidate Starts for Wintermute_64:

(32, 41112), (Start: 39 @41127 has 147 MA's), (Start: 40 @41148 has 24 MA's), (45, 41181), (50, 41202), (72, 41277), (146, 41556), (148, 41562), (159, 41625), (171, 41679), (183, 41748), (193, 41796), (211, 41865), (232, 41973), (233, 41976),

Gene: Wogge42_13 Start: 5091, Stop: 5840, Start Num: 68

Candidate Starts for Wogge42_13:

(Start: 68 @5091 has 30 MA's), (85, 5157), (106, 5235), (118, 5259), (131, 5319), (141, 5361), (146, 5397), (157, 5457), (183, 5586), (193, 5634), (201, 5673), (216, 5721),

Gene: Ximenita_65 Start: 41348, Stop: 42247, Start Num: 39

Candidate Starts for Ximenita_65:

(Start: 39 @41348 has 147 MA's), (47, 41408), (61, 41459), (84, 41537), (88, 41546), (93, 41561), (100, 41597), (117, 41648), (138, 41720), (146, 41774), (174, 41930), (183, 41987), (219, 42143), (227, 42176), (231, 42200),

Gene: Y10_62 Start: 41076, Stop: 41939, Start Num: 40

Candidate Starts for Y10_62:

(32, 41040), (Start: 39 @41055 has 147 MA's), (Start: 40 @41076 has 24 MA's), (45, 41109), (50, 41130), (52, 41145), (72, 41205), (146, 41484), (148, 41490), (171, 41607), (183, 41676), (193, 41724), (211, 41793), (232, 41901), (233, 41904),

Gene: Y2_62 Start: 41076, Stop: 41939, Start Num: 40

Candidate Starts for Y2_62:

(32, 41040), (Start: 39 @41055 has 147 MA's), (Start: 40 @41076 has 24 MA's), (45, 41109), (50, 41130), (52, 41145), (72, 41205), (146, 41484), (148, 41490), (171, 41607), (183, 41676), (193, 41724), (211, 41793), (232, 41901), (233, 41904),

Gene: Yappy_87 Start: 45148, Stop: 44513, Start Num: 79

Candidate Starts for Yappy_87:

(Start: 79 @45148 has 1 MA's), (113, 45022), (121, 45004), (152, 44860), (158, 44839), (169, 44785), (178, 44740), (183, 44710), (198, 44632), (206, 44599), (211, 44587), (212, 44584), (225, 44530), (227, 44521),

Gene: YasnayaPolyana_63 Start: 41001, Stop: 41864, Start Num: 40

Candidate Starts for YasnayaPolyana_63:

(32, 40965), (Start: 39 @40980 has 147 MA's), (Start: 40 @41001 has 24 MA's), (45, 41034), (50, 41055), (72, 41130), (146, 41409), (148, 41415), (159, 41478), (171, 41532), (183, 41601), (193, 41649), (211, 41718), (232, 41826), (233, 41829),

Gene: Yeezus_61 Start: 41861, Stop: 41220, Start Num: 80

Candidate Starts for Yeezus_61:

(Start: 80 @41861 has 12 MA's), (101, 41774), (108, 41753), (113, 41741), (128, 41699), (132, 41672), (139, 41660), (142, 41645), (186, 41411), (200, 41336),

Gene: YoureAdopted_60 Start: 41400, Stop: 42278, Start Num: 39

Candidate Starts for YoureAdopted_60:

(Start: 39 @41400 has 147 MA's), (61, 41511), (92, 41610), (130, 41760), (148, 41832), (157, 41886), (174, 41961), (183, 42018), (193, 42066), (210, 42132), (220, 42180), (223, 42192), (227, 42207),

Gene: YoyoKar_13 Start: 4749, Stop: 5498, Start Num: 68

Candidate Starts for YoyoKar_13:

(Start: 68 @4749 has 30 MA's), (85, 4815), (106, 4893), (118, 4917), (131, 4977), (141, 5019), (146, 5055), (157, 5115), (183, 5244), (193, 5292), (201, 5331), (216, 5379),

Gene: Yuna_65 Start: 42443, Stop: 43345, Start Num: 39

Candidate Starts for Yuna_65:

(8, 42131), (Start: 39 @42443 has 147 MA's), (61, 42554), (84, 42632), (88, 42641), (93, 42656), (130, 42803), (146, 42872), (148, 42878), (167, 42998), (174, 43028), (190, 43118), (198, 43160), (227, 43274),

Gene: YungJamal_14 Start: 5302, Stop: 6051, Start Num: 68

Candidate Starts for YungJamal_14:

(Start: 68 @5302 has 30 MA's), (85, 5368), (106, 5446), (118, 5470), (131, 5530), (141, 5572), (146, 5608), (157, 5668), (183, 5797), (193, 5845), (201, 5884), (216, 5932),

Gene: Yunkel11_64 Start: 41120, Stop: 42025, Start Num: 39

Candidate Starts for Yunkel11_64:

(Start: 39 @41120 has 147 MA's), (61, 41231), (92, 41330), (148, 41570), (157, 41624), (174, 41708), (193, 41813), (210, 41879), (221, 41930), (223, 41939), (227, 41954),

Gene: Zabiza_56 Start: 37591, Stop: 38478, Start Num: 39

Candidate Starts for Zabiza_56:

(Start: 39 @37591 has 147 MA's), (61, 37702), (92, 37801), (130, 37951), (148, 38023), (157, 38077), (174, 38161), (183, 38218), (193, 38266), (210, 38332), (223, 38392), (227, 38407), (235, 38449),

Gene: Zakhe101_14 Start: 5314, Stop: 6063, Start Num: 68

Candidate Starts for Zakhe101_14:

(Start: 68 @5314 has 30 MA's), (85, 5380), (106, 5458), (118, 5482), (131, 5542), (141, 5584), (145, 5605), (146, 5620), (157, 5680), (183, 5809), (193, 5857), (201, 5896), (216, 5944),

Gene: Zavala_63 Start: 41556, Stop: 42434, Start Num: 39

Candidate Starts for Zavala_63:

(Start: 39 @41556 has 147 MA's), (61, 41667), (72, 41703), (92, 41766), (130, 41916), (148, 41988), (157, 42042), (174, 42117), (183, 42174), (193, 42222), (210, 42288), (220, 42336), (223, 42348), (227, 42363),

Gene: Zebo_12 Start: 4748, Stop: 5497, Start Num: 68

Candidate Starts for Zebo_12:

(Start: 68 @4748 has 30 MA's), (85, 4814), (106, 4892), (118, 4916), (131, 4976), (141, 5018), (146, 5054), (157, 5114), (183, 5243), (193, 5291), (201, 5330), (216, 5378),

Gene: ZoeJ_61 Start: 42753, Stop: 43610, Start Num: 39

Candidate Starts for ZoeJ_61:

(Start: 39 @42753 has 147 MA's), (61, 42858), (92, 42957), (148, 43167), (193, 43401), (211, 43470), (221, 43518),