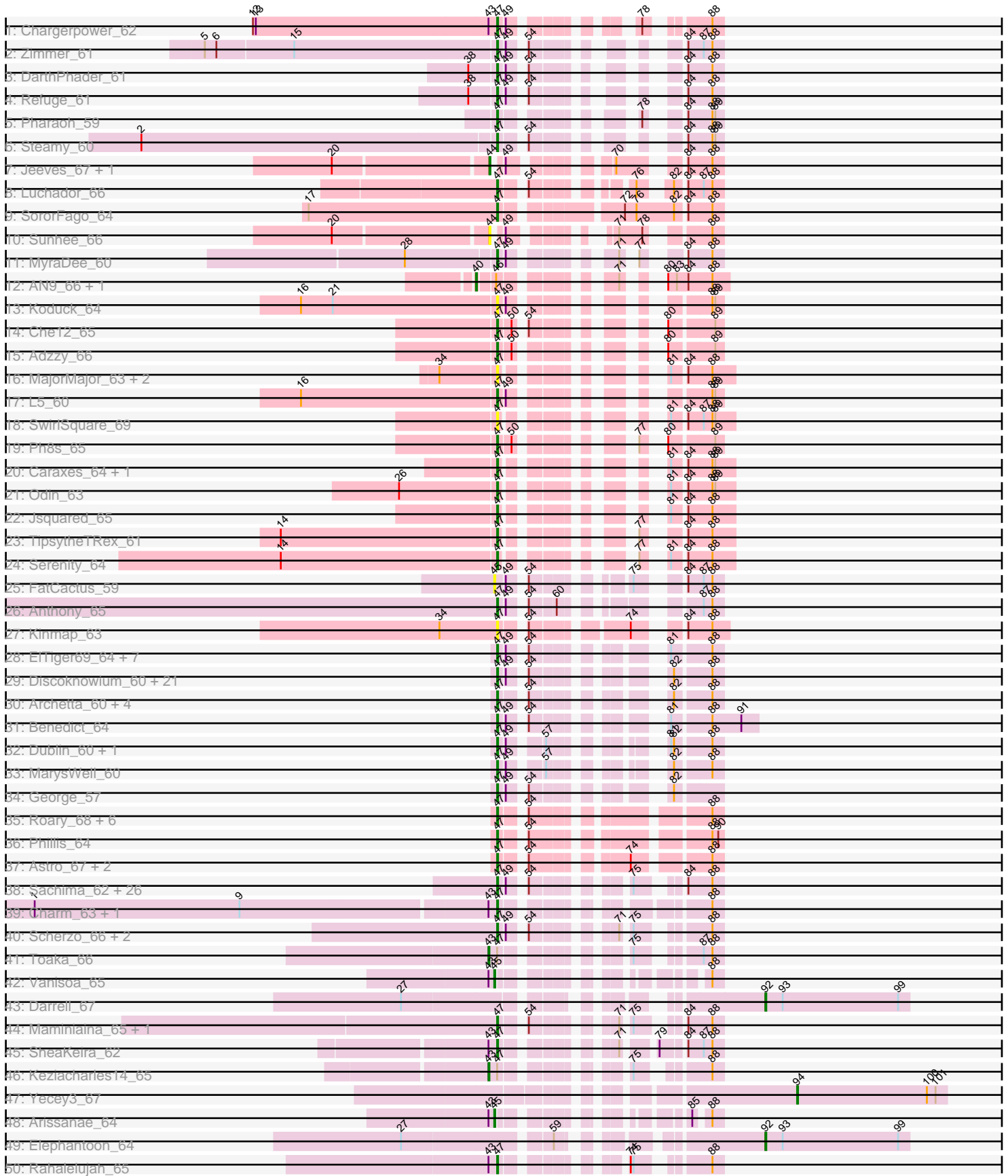
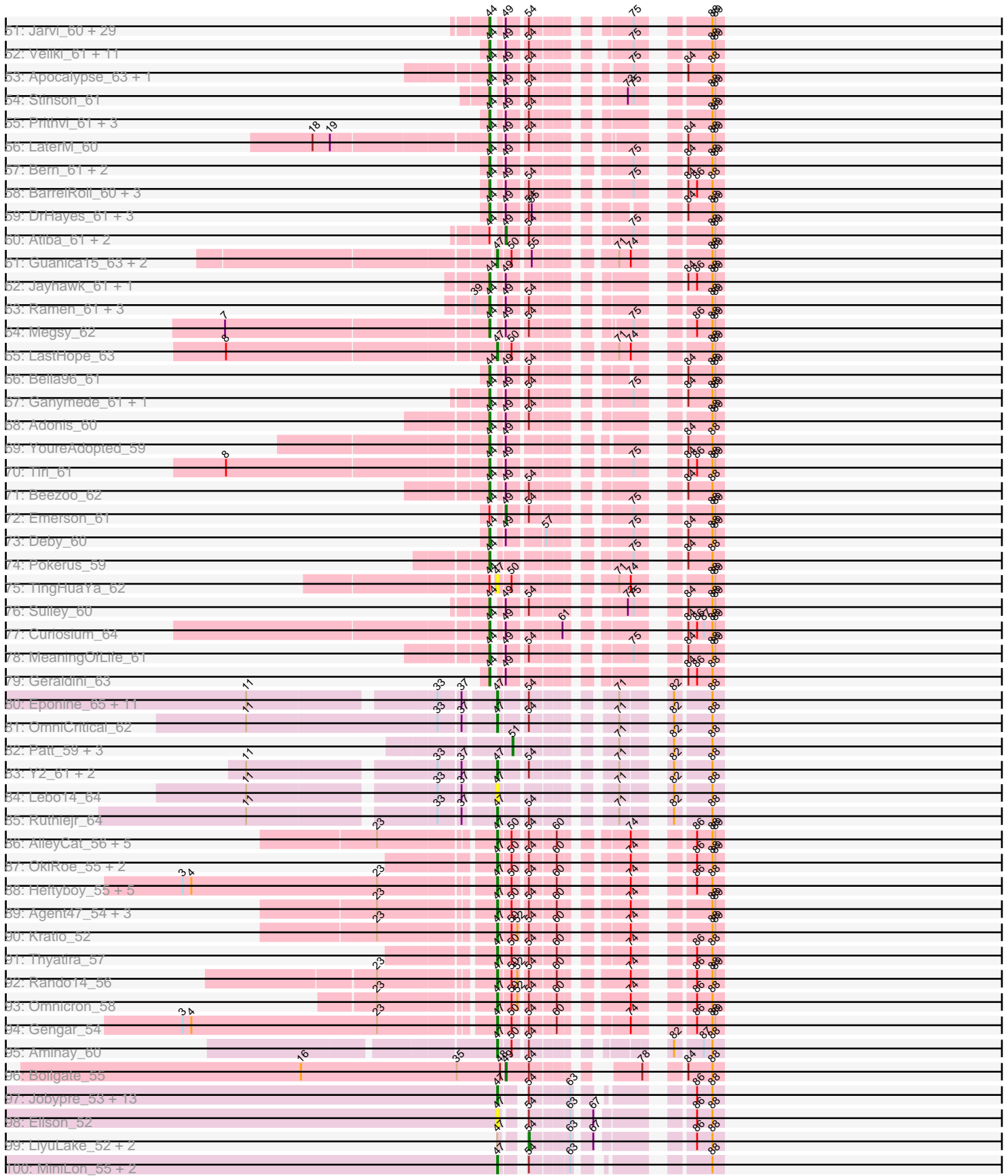


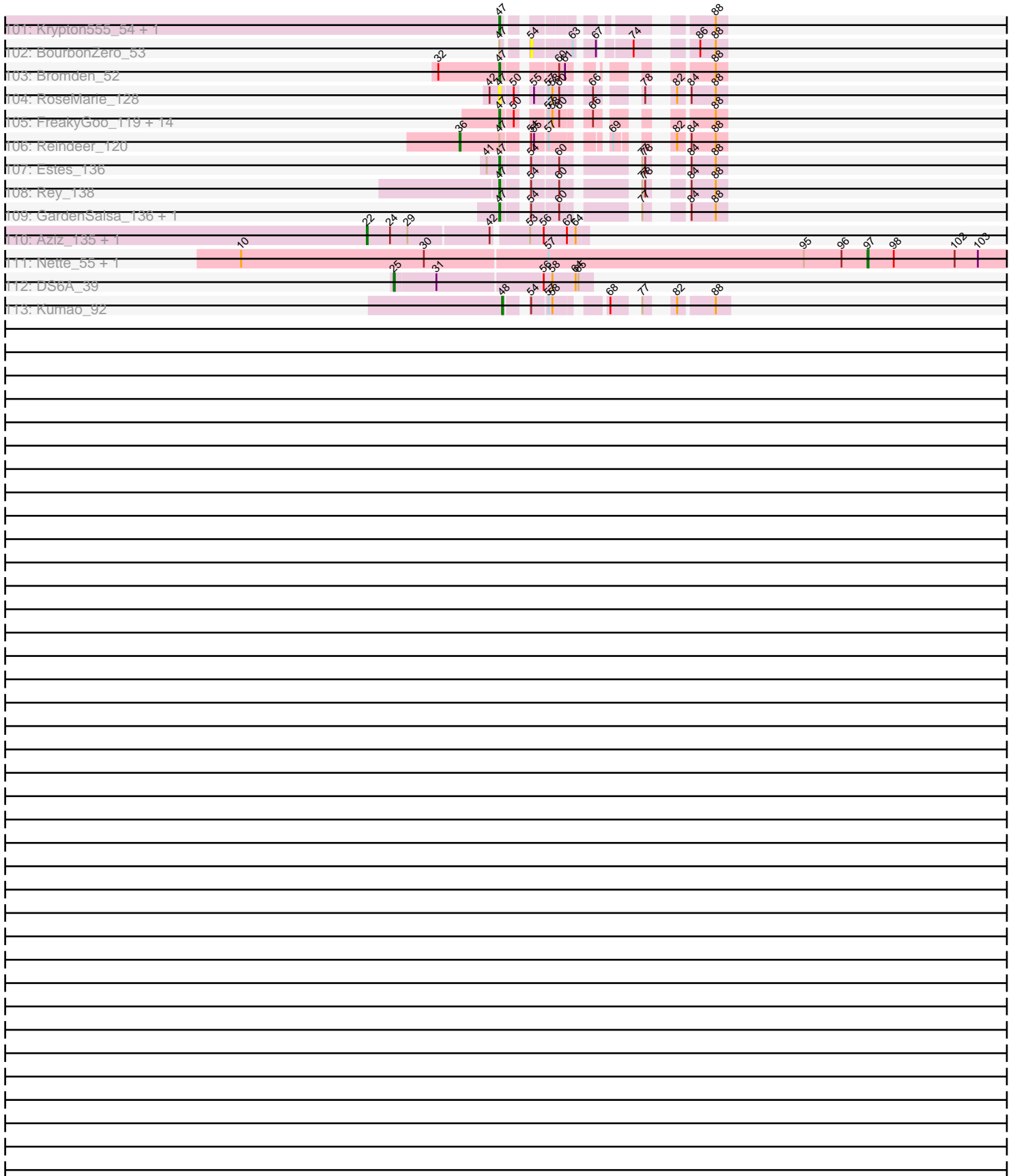
Pham 224217



Pham 224217



Pham 224217



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 224217 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224217 has 316 members, 42 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_62
- Track 2 : Zimmer_61
- Track 3 : DarthPhader_61
- Track 4 : Refuge_61
- Track 5 : Pharaoh_59
- Track 6 : Steamy_60
- Track 7 : Jeeves_67, Gail_65
- Track 8 : Luchador_66
- Track 9 : SororFago_64
- Track 10 : Sunhee_66
- Track 11 : MyraDee_60
- Track 12 : AN9_66, AN18_66
- Track 13 : Koduck_64
- Track 14 : Che12_65
- Track 15 : Adzzy_66
- Track 16 : MajorMajor_63, Quokka_63, Bradman_64
- Track 17 : L5_60
- Track 18 : SwirlSquare_69
- Track 19 : Ph8s_65
- Track 20 : Caraxes_64, Superchunk_63
- Track 21 : Odin_63
- Track 22 : Jsquared_65
- Track 23 : TipsytheTRex_61
- Track 24 : Serenity_64
- Track 25 : FatCactus_59
- Track 26 : Anthony_65
- Track 27 : Kinmap_63
- Track 28 : EITiger69_64, Jabiru_63, Airmid_62, PetterN_67, UnionJack_63, Scorpia_64, Chadwick_64, Naca_62
- Track 29 : Discoknowium_60, Aragog_62, Twigg_58, HuhtaEnerson15_60, ForGetIt_63, Tiger_62, Phlorence_61, Bonamassa_60, Cuco_61, PickleBack_63, Jovo_63, Milcery_60, Swirley_62, Prinasha11_59, Coog_59, Theia_59, Conspiracy_63, Midas2_59, AgentM_62, Tarynearal_59, LittleCherry_60, Lev2_63
- Track 30 : Archetta_60, SydNat_62, Ghoulboy_62, Zolita_61, Bluefalcon_58
- Track 31 : Benedict_64
- Track 32 : Dublin_60, Micasa_60
- Track 33 : MarysWell_60

- Track 34 : George_57
- Track 35 : Roary_68, Danforth_67, Saintus_62, Expelliarmus_64, Stephig9_66, Smeadley_67, Dixon_66
- Track 36 : Phillis_64
- Track 37 : Astro_67, NearlyHeadless_67, Groundhog_66
- Track 38 : Sachima_62, Hanray_64, EmyBug_63, Halex_64, Alma_64, PackMan_65, Conquerage_64, HortumSL17_67, Phaeder_66, Eidsmoe_64, Priya_64, Beemo_67, EdogawaKiddo_64, Jiawan_63, Qobbit_64, ExplosioNervosa_64, RyeScarlet_68, Pioneer_67, Catalina_68, Tubs_66, Onglai_64, Phonnegut_67, Aliter_67, Lilleskat_62, Fayely_64, Myxus_66, Spouty_64
- Track 39 : Charm_63, DreamTeam1_63
- Track 40 : Scherzo_66, Ugenie5_62, LoneWolf_66
- Track 41 : Toaka_66
- Track 42 : Vanisoa_65
- Track 43 : Darrell_67
- Track 44 : Maminiaina_65, BogosyJay_65
- Track 45 : SheaKeira_62
- Track 46 : Keziacharles14_65
- Track 47 : Yecey3_67
- Track 48 : Arissanae_64
- Track 49 : Elephantoon_64
- Track 50 : Rahalelujah_65
- Track 51 : Jarvi_60, Rosmarinus_60, CREW_60, Boiiii_60, Topper_60, Lunahalos_60, BGlluviae_60, Dalmuri_60, Peel_60, Hyperbowlee_60, Asayake_60, Jeckyll_60, CaseJules_62, BEEST_60, ShiaSurprise_61, Inky_60, Joy99_60, Capricorn_60, Belladonna_60, Adephagia_60, Ageofdapage_63, Homura_60, Blizzard_60, Tachez_60, Spock_60, Durfee_60, Twitch_60, Piatt_60, CallaLilly_62, Llorens_60
- Track 52 : Veliki_61, MacKat_55, Padpat_62, Devera_67, Clipper_64, JAWS_60, TaiwanKao_62, CrimD_61, Dole_65, Zavala_62, Mynx_61, Illumine_65
- Track 53 : Apocalypse_63, Angelica_60
- Track 54 : Stinson_61
- Track 55 : Prithvi_61, LindNT_59, Murucutumbu_61, TreyKay_61
- Track 56 : LaterM_60
- Track 57 : Bern_61, BaghaKamala_59, CheetoDust_59
- Track 58 : BarrelRoll_60, Rapunzel97_61, Slimphazie_60, TruffulaTree_60
- Track 59 : DrHayes_61, SamuelLPlaqson_61, Urkel_61, TiniBug_61
- Track 60 : Atiba_61, AlishaPH_60, Padfoot_60
- Track 61 : Guanica15_63, Efra2_64, Yunkel11_63
- Track 62 : Jayhawk_61, Anaya_62
- Track 63 : Ramen_61, ActinUp_60, Zabiza_55, HedwigODU_60
- Track 64 : Megsy_62
- Track 65 : LastHope_63
- Track 66 : Bella96_61
- Track 67 : Ganymede_61, QuincyRose_59
- Track 68 : Adonis_60
- Track 69 : YoureAdopted_59
- Track 70 : Tiri_61
- Track 71 : Beezoo_62
- Track 72 : Emerson_61
- Track 73 : Deby_60
- Track 74 : Pokerus_59
- Track 75 : TingHuaYa_62

- Track 76 : Sulley_60
- Track 77 : Curiosium_64
- Track 78 : MeaningOfLife_61
- Track 79 : Geraldini_63
- Track 80 : Eponine_65, Taquito_62, Malthus_64, Juliette_65, Slarp_63, Fionnbharth_63, Mitti_63, Wintermute_63, Chancellor_63, Kraw_64, Cheetobro_63, SamScheppers_61
- Track 81 : OmniCritical_62
- Track 82 : Patt_59, MissDaisy_60, Bobquesha_64, Reptar3000_60
- Track 83 : Y2_61, Y10_61, JF1_63
- Track 84 : Lebo14_64
- Track 85 : Ruthiejr_64
- Track 86 : AlleyCat_56, Larva_55, Edugator_53, Neighly_56, Psycho_54, Dadosky_56
- Track 87 : OkiRoe_55, Feyre_57, Miryou_58
- Track 88 : Heftyboy_55, Leston_54, Waterfoul_56, Paola_54, SoSeph_55, Guillsminger_55
- Track 89 : Agent47_54, Collard_52, InvictusManeo_52, ViviJ_52
- Track 90 : Kratio_52
- Track 91 : Thyatira_57
- Track 92 : Rando14_56
- Track 93 : Omnicron_58
- Track 94 : Gengar_54
- Track 95 : Aminay_60
- Track 96 : Boilgate_55
- Track 97 : Jobypre_53, Kingsolomon_52, Finnry_52, Clautastrophe_52, Red305_53, Bellis_52, Samty_52, TriFive_53, Jubie_52, Snenia_52, MsGreen_52, Nicholas_52, Lumos_54, Moostard_52
- Track 98 : Ellson_52
- Track 99 : LiyuLake_52, KirDoubleO7_51, DuncansLeg_53
- Track 100 : MiniLon_55, MiniMac_55, Lolly9_52
- Track 101 : Krypton555_54, Whirlwind_53
- Track 102 : BourbonZero_53
- Track 103 : Bromden_52
- Track 104 : RoseMarie_128
- Track 105 : FreakyGoo_119, Auspice_119, Dulcita_120, Diminimus_120, Skinny_125, IPhane7_117, Bricole_121, KleverKiS_122, Izel_118, PegLeg_123, Glaske16_122, TyDawg_114, LilhomieP_119, Bongo_119, SlimJimmy_119
- Track 106 : Reindeer_120
- Track 107 : Estes_136
- Track 108 : Rey_138
- Track 109 : GardenSalsa_136, MrMagoo_138
- Track 110 : Aziz_135, GenevaB15_138
- Track 111 : Nette_55, Mendokysei_52
- Track 112 : DS6A_39
- Track 113 : Kumao_92

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

The start number called the most often in the published annotations is 47, it was called in 172 of the 274 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adzzy_66, Agent47_54, AgentM_62, Airmid_62, Aliter_67, AlleyCat_56, Alma_64, Aminay_60, Anthony_65, Aragog_62, Archetta_60, Astro_67, Auspice_119, Beemo_67, Bellis_52, Benedict_64, Bluefalcon_58, BogosyJay_65, Bonamassa_60, Bongo_119, Bradman_64, Bricole_121, Bromden_52, Caraxes_64, Catalina_68, Chadwick_64, Chancellor_63, Chargerpower_62, Charm_63, Che12_65, Cheetobro_63, Clautastrophe_52, Collard_52, Conquerage_64, Conspiracy_63, Coog_59, Cuco_61, Dadosky_56, Danforth_67, DarthPhader_61, Diminimus_120, Discoknowium_60, Dixon_66, DreamTeam1_63, Dublin_60, Dulcita_120, EdogawaKiddo_64, Edugator_53, Efra2_64, Eidsmoe_64, ElTiger69_64, Ellson_52, EmyBug_63, Eponine_65, Estes_136, Expelliarmus_64, ExplosioNervosa_64, Fayely_64, Feyre_57, Finnry_52, Fionnbharth_63, ForGetIt_63, FreakyGoo_119, GardenSalsa_136, Gengar_54, George_57, Ghoulboy_62, Glaske16_122, Groundhog_66, Guanica15_63, Guillsminger_55, Hanray_64, Heftyboy_55, Horex_64, HortumSL17_67, HuhtaEnerson15_60, IPHane7_117, InvictusManeo_52, Izel_118, JF1_63, Jabiru_63, Jiawan_63, Jobypre_53, Jovo_63, Jsquared_65, Jubie_52, Juliette_65, Kingsolomon_52, Kinmap_63, KleverKiS_122, Koduck_64, Kratio_52, Kraw_64, Krypton555_54, L5_60, Larva_55, LastHope_63, Lebo14_64, Leston_54, Lev2_63, LilhomieP_119, Lilleskat_62, LittleCherry_60, Lolly9_52, LoneWolf_66, Luchador_66, Lumos_54, MajorMajor_63, Malthus_64, Maminiaina_65, MarysWell_60, Micasa_60, Midas2_59, Milcery_60, MiniLon_55, MiniMac_55, Miryou_58, Mitti_63, Moostard_52, MrMagoo_138, MsGreen_52, MyraDee_60, Myxus_66, Naca_62, NearlyHeadless_67, Neighly_56, Nicholas_52, Odin_63, OkiRoe_55, OmniCritical_62, Omnicron_58, Onglai_64, PackMan_65, Paola_54, PegLeg_123, PetterN_67, Ph8s_65, Phaeder_66, Pharaoh_59, Phillis_64, Phlorence_61, Phonnegut_67, PickleBack_63, Pioneer_67, Prinashel1_59, Priya_64, Psycho_54, Qobbit_64, Quokka_63, Rahalelujah_65, Rando14_56, Red305_53, Refuge_61, Rey_138, Roary_68, RoseMarie_128, Ruthiejr_64, RyeScarlet_68, Sachima_62, Saintus_62, SamScheppers_61, Samty_52, Scherzo_66, Scorpia_64, Serenity_64, SheaKeira_62, Skinny_125, Slarp_63, SlimJimmy_119, Smeadley_67, Snenia_52, SoSeph_55, SororFago_64, Spouty_64, Steamy_60, Stephig9_66, Superchunk_63, SwirlSquare_69, Swirley_62, SydNat_62, Taquito_62, Tarynearal_59, Theia_59, Thyatira_57, Tiger_62, TingHuaYa_62, TipsytheTRex_61, TriFive_53, Tubs_66, Twigg_58, TyDawg_114, Ugenie5_62, UnionJack_63, ViviJ_52, Waterfoul_56, Whirlwind_53, Wintermute_63, Y10_61, Y2_61, Yunkel11_63, Zimmer_61, Zolita_61,

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

- BourbonZero_53, DuncansLeg_53, Keziacharles14_65, KirDoubleO7_51, LiyuLake_52, Reindeer_120, Toaka_66,

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

- AN9_66, ANI8_66, ActinUp_60, Adephagia_60, Adonis_60, Ageofdapage_63, AlishaPH_60, Anaya_62, Angelica_60, Apocalypse_63, Arissanae_64, Asayake_60, Atiba_61, Aziz_135, BEEST_60, BGlluviae_60, BaghaKamala_59, BarrelRoll_60, Beezoo_62, Bella96_61, Belladonna_60, Bern_61, Blizzard_60, Bobquesha_64, Boiiii_60, Boilgate_55, CREW_60, CallaLilly_62, Capricorn_60, CaseJules_62, CheetoDust_59, Clipper_64, CrimD_61, Curiosium_64, DS6A_39, Dalmuri_60, Darrell_67, Deby_60, Devera_67, Dole_65, DrHayes_61, Durfee_60, Elephantoon_64, Emerson_61, FatCactus_59, Gail_65, Ganymede_61,

GenevaB15_138, Geraldini_63, HedwigODU_60, Homura_60, Hyperbowlee_60, Illumine_65, Inky_60, JAWS_60, Jarvi_60, Jayhawk_61, Jeckyll_60, Jeeves_67, Joy99_60, Kumao_92, LaterM_60, LindNT_59, Llorens_60, Lunahalos_60, MacKat_55, MeaningOfLife_61, Megsy_62, Mendokysei_52, MissDaisy_60, Murucutumbu_61, Mynx_61, Nette_55, Padfoot_60, Padpat_62, Patt_59, Peel_60, Piatt_60, Pokerus_59, Prithvi_61, QuincyRose_59, Ramen_61, Rapunzel97_61, Reptar3000_60, Rosmarinus_60, SamuelLPlaqson_61, ShiaSurprise_61, Slimphazie_60, Spock_60, Stinson_61, Sulley_60, Sunhee_66, Tachez_60, TaiwanKao_62, TiniBug_61, Tiri_61, Topper_60, TreyKay_61, TruffulaTree_60, Twitch_60, Urkel_61, Vanisoa_65, Veliki_61, Yecey3_67, YoureAdopted_59, Zabiza_55, Zavala_62,

Summary by start number:

Start 22:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_135 (M2), GenevaB15_138 (M2),

Start 25:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A_39 (singleton),

Start 36:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reindeer_120 (M1),

Start 40:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9_66 (A2), ANI8_66 (A2),

Start 43:

- Found in 9 of 316 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 274
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Keziacharles14_65 (A9), Toaka_66 (A9),

Start 44:

- Found in 89 of 316 (28.2%) of genes in pham
- Manual Annotations of this start: 78 of 274
- Called 94.4% of time when present
- Phage (with cluster) where this start called: ActinUp_60 (K1), Adephegia_60 (K1), Adonis_60 (K1), Ageofdapage_63 (K1), Anaya_62 (K1), Angelica_60 (K1), Apocalypse_63 (K1), Asayake_60 (K1), BEEST_60 (K1), BGlluviae_60 (K1), BaghaKamala_59 (K1), BarrelRoll_60 (K1), Beezoo_62 (K1), Bella96_61 (K1), Belladonna_60 (K1), Bern_61 (K1), Blizzard_60 (K1), Boiii_60 (K1), CREW_60 (K1),

CallaLilly_62 (K1), Capricorn_60 (K1), CaseJules_62 (K1), CheetoDust_59 (K1), Clipper_64 (K1), CrimD_61 (K1), Curiosium_64 (K1), Dalmuri_60 (K1), Deby_60 (K1), Devera_67 (K1), Dole_65 (K1), DrHayes_61 (K1), Durfee_60 (K1), Gail_65 (A14), Ganymede_61 (K1), Geraldini_63 (K1), HedwigODU_60 (K1), Homura_60 (K1), Hyperbowlee_60 (K1), Illumine_65 (K1), Inky_60 (K1), JAWS_60 (K1), Jarvi_60 (K1), Jayhawk_61 (K1), Jeckyll_60 (K1), Jeeves_67 (A14), Joy99_60 (K1), LaterM_60 (K1), LindNT_59 (K1), Llorens_60 (K1), Lunahalos_60 (K1), MacKat_55 (K1), MeaningOfLife_61 (K1), Megsy_62 (K1), Murucutumbu_61 (K1), Mynx_61 (K1), Padpat_62 (K1), Peel_60 (K1), Piatt_60 (K1), Pokerus_59 (K1), Prithvi_61 (K1), QuincyRose_59 (K1), Ramen_61 (K1), Rapunzel97_61 (K1), Rosmarinus_60 (K1), SamuelLPlaqson_61 (K1), ShiaSurprise_61 (K1), Slimphazie_60 (K1), Spock_60 (K1), Stinson_61 (K1), Sulley_60 (K1), Sunhee_66 (A14), Tachez_60 (K1), TaiwanKao_62 (K1), TiniBug_61 (K1), Tiri_61 (K1), Topper_60 (K1), TreyKay_61 (K1), TruffulaTree_60 (K1), Twitch_60 (K1), Urkel_61 (K1), Veliki_61 (K1), YoureAdopted_59 (K1), Zabiza_55 (K1), Zavala_62 (K1),

Start 45:

- Found in 3 of 316 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arissanae_64 (A9), FatCactus_59 (A20), Vanisoa_65 (A9),

Start 47:

- Found in 209 of 316 (66.1%) of genes in pham
- Manual Annotations of this start: 172 of 274
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Adzzy_66 (A2), Agent47_54 (K5), AgentM_62 (A5), Airmid_62 (A5), Aliter_67 (A9), AlleyCat_56 (K5), Alma_64 (A9), Aminay_60 (K7), Anthony_65 (A20), Aragog_62 (A5), Archetta_60 (A5), Astro_67 (A8), Auspice_119 (M1), Beemo_67 (A9), Bellis_52 (L3), Benedict_64 (A5), Bluefalcon_58 (A5), BogosyJay_65 (A9), Bonamassa_60 (A5), Bongo_119 (M1), Bradman_64 (A2), Bricole_121 (M1), Bromden_52 (L4), Caraxes_64 (A2), Catalina_68 (A9), Chadwick_64 (A5), Chancellor_63 (K4), Chargerpower_62 (A), Charm_63 (A9), Che12_65 (A2), Cheetobro_63 (K4), Clautastrophe_52 (L3), Collard_52 (K5), Conquerage_64 (A9), Conspiracy_63 (A5), Coog_59 (A5), Cuco_61 (A5), Dadosky_56 (K5), Danforth_67 (A8), DarthPhader_61 (A12), Diminimus_120 (M1), Discoknowium_60 (A5), Dixon_66 (A8), DreamTeam1_63 (A9), Dublin_60 (A5), Dulcita_120 (M1), EdogawaKiddo_64 (A9), Edugator_53 (K5), Efra2_64 (K1), Eidsmoe_64 (A9), EITiger69_64 (A5), Ellson_52 (L3), EmyBug_63 (A9), Eponine_65 (K4), Estes_136 (M2), Expelliarmus_64 (A8), ExplosioNervosa_64 (A9), Fayely_64 (A9), Feyre_57 (K5), Finnry_52 (L3), Fionnbharth_63 (K4), ForGetIt_63 (A5), FreakyGoo_119 (M1), GardenSalsa_136 (M2), Gengar_54 (K5), George_57 (A5), Ghoulboy_62 (A5), Glaske16_122 (M1), Groundhog_66 (A8), Guanica15_63 (K1), Guillsminger_55 (K5), Hanray_64 (A9), Heftyboy_55 (K5), Horex_64 (A9), HortumSL17_67 (A9), HuhtaEnerson15_60 (A5), IPhane7_117 (M1), InvictusManeo_52 (K5), Izel_118 (M1), JF1_63 (K4), Jabiru_63 (A5), Jiawan_63 (A9), Jobypre_53 (L3), Jovo_63 (A5), Jsquared_65 (A2), Jubie_52 (L3), Juliette_65 (K4), Kingsolomon_52 (L3), Kinmap_63 (A21), KleverKiS_122 (M1), Koduck_64 (A2), Kratio_52 (K5), Kraw_64 (K4), Krypton555_54 (L3), L5_60 (A2), Larva_55 (K5), LastHope_63 (K1), Lebo14_64 (K4), Leston_54 (K5), Lev2_63 (A5), LilhomieP_119 (M1), Lilleskat_62 (A9), LittleCherry_60 (A5), Lolly9_52 (L3), LoneWolf_66 (A9), Luchador_66 (A14), Lumos_54 (L3), MajorMajor_63 (A2), Malthus_64 (K4),

Maminiaina_65 (A9), MarysWell_60 (A5), Micasa_60 (A5), Midas2_59 (A5), Milcery_60 (A5), MiniLon_55 (L3), MiniMac_55 (L3), Miryou_58 (K5), Mitti_63 (K4), Moostard_52 (L3), MrMagoo_138 (M2), MsGreen_52 (L3), MyraDee_60 (A18), Myxus_66 (A9), Naca_62 (A5), NearlyHeadless_67 (A8), Neighly_56 (K3), Nicholas_52 (L3), Odin_63 (A2), OkiRoe_55 (K5), OmniCritical_62 (K4), Omnicron_58 (K5), Onglai_64 (A9), PackMan_65 (A9), Paola_54 (K5), PegLeg_123 (M1), PetterN_67 (A5), Ph8s_65 (A2), Phaeder_66 (A9), Pharaoh_59 (A12), Phillis_64 (A8), Phlorence_61 (A5), Phonnegut_67 (A9), PickleBack_63 (A5), Pioneer_67 (A9), Prinasha11_59 (A5), Priya_64 (A9), Psycho_54 (K5), Qobbit_64 (A9), Quokka_63 (A2), Rahalelujah_65 (A9), Rando14_56 (K5), Red305_53 (L3), Refuge_61 (A12), Rey_138 (M2), Roary_68 (A8), RoseMarie_128 (M), Ruthiejr_64 (K4), RyeScarlet_68 (A9), Sachima_62 (A9), Saintus_62 (A8), SamScheppers_61 (K4), Samty_52 (L3), Scherzo_66 (A9), Scorpia_64 (A5), Serenity_64 (A2), SheaKeira_62 (A9), Skinny_125 (M1), Slarp_63 (K4), SlimJimmy_119 (M1), Smeadley_67 (A8), Snenia_52 (L3), SoSeph_55 (K5), SororFago_64 (A14), Spouty_64 (A9), Steamy_60 (A12), Stephig9_66 (A8), Superchunk_63 (A2), SwirlSquare_69 (A2), Swirley_62 (A5), SydNat_62 (A5), Taquito_62 (K4), Tarynearal_59 (A5), Theia_59 (A5), Thyatira_57 (K5), Tiger_62 (A5), TingHuaYa_62 (K1), TopsytheTRex_61 (A2), TriFive_53 (L3), Tubs_66 (A9), Twigg_58 (A5), TyDawg_114 (M1), Ugenie5_62 (A9), UnionJack_63 (A5), ViviJ_52 (K5), Waterfoul_56 (K5), Whirlwind_53 (L3), Wintermute_63 (K4), Y10_61 (K4), Y2_61 (K4), Yunkel11_63 (K1), Zimmer_61 (A12), Zolita_61 (A5),

Start 48:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kumao_92 (singleton),

Start 49:

- Found in 162 of 316 (51.3%) of genes in pham
- Manual Annotations of this start: 5 of 274
- Called 3.1% of time when present
- Phage (with cluster) where this start called: AlishaPH_60 (K1), Atiba_61 (K1), Boilgate_55 (K8), Emerson_61 (K1), Padfoot_60 (K1),

Start 51:

- Found in 4 of 316 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobquesha_64 (K4), MissDaisy_60 (K4), Patt_59 (K4), Reptar3000_60 (K4),

Start 54:

- Found in 234 of 316 (74.1%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 1.7% of time when present
- Phage (with cluster) where this start called: BourbonZero_53 (L3), DuncansLeg_53 (L3), KirDoubleO7_51 (L3), LiyuLake_52 (L3),

Start 92:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 274

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darrell_67 (A9), Elephantoon_64 (A9),

Start 94:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yecey3_67 (A9),

Start 97:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 274
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mendokysei_52 (T), Nette_55 (T),

Summary by clusters:

There are 23 clusters represented in this pham: singleton, K4, K3, K1, M1, K5, M2, K8, A14, A12, A18, A2, A5, A9, A8, A, M, L4, L3, A20, A21, K7, T,

Info for manual annotations of cluster A:

- Start number 47 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

- Start number 47 was manually annotated 5 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 44 was manually annotated 2 times for cluster A14.
- Start number 47 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A18:

- Start number 47 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 40 was manually annotated 2 times for cluster A2.
- Start number 47 was manually annotated 9 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 47 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 47 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 47 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 43 was manually annotated 2 times for cluster A9.
- Start number 45 was manually annotated 2 times for cluster A9.
- Start number 47 was manually annotated 28 times for cluster A9.
- Start number 92 was manually annotated 2 times for cluster A9.
- Start number 94 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster K1:

- Start number 44 was manually annotated 76 times for cluster K1.
- Start number 47 was manually annotated 4 times for cluster K1.
- Start number 49 was manually annotated 4 times for cluster K1.

Info for manual annotations of cluster K4:

- Start number 47 was manually annotated 16 times for cluster K4.
- Start number 51 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 47 was manually annotated 22 times for cluster K5.

Info for manual annotations of cluster K7:

- Start number 47 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 49 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L3:

- Start number 47 was manually annotated 16 times for cluster L3.
- Start number 54 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L4:

- Start number 47 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster M1:

- Start number 36 was manually annotated 1 time for cluster M1.
- Start number 47 was manually annotated 12 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 22 was manually annotated 2 times for cluster M2.
- Start number 47 was manually annotated 4 times for cluster M2.

Info for manual annotations of cluster T:

- Start number 97 was manually annotated 1 time for cluster T.

Gene Information:

Gene: AN9_66 Start: 40276, Stop: 40106, Start Num: 40

Candidate Starts for AN9_66:

(Start: 40 @40276 has 2 MA's), (46, 40261), (71, 40183), (80, 40168), (83, 40159), (84, 40147), (88, 40123),

Gene: ANI8_66 Start: 40276, Stop: 40106, Start Num: 40

Candidate Starts for ANI8_66:

(Start: 40 @40276 has 2 MA's), (46, 40261), (71, 40183), (80, 40168), (83, 40159), (84, 40147), (88, 40123),

Gene: ActinUp_60 Start: 41125, Stop: 41289, Start Num: 44
Candidate Starts for ActinUp_60:
(39, 41110), (Start: 44 @41125 has 78 MA's), (Start: 49 @41131 has 5 MA's), (Start: 54 @41149 has 1 MA's), (88, 41278), (89, 41281),

Gene: Adephagia_60 Start: 41132, Stop: 41296, Start Num: 44
Candidate Starts for Adephagia_60:
(Start: 44 @41132 has 78 MA's), (Start: 49 @41138 has 5 MA's), (Start: 54 @41156 has 1 MA's), (75, 41231), (88, 41285), (89, 41288),

Gene: Adonis_60 Start: 41367, Stop: 41531, Start Num: 44
Candidate Starts for Adonis_60:
(Start: 44 @41367 has 78 MA's), (Start: 49 @41373 has 5 MA's), (Start: 54 @41391 has 1 MA's), (88, 41520), (89, 41523),

Gene: Adzzy_66 Start: 39083, Stop: 38940, Start Num: 47
Candidate Starts for Adzzy_66:
(Start: 47 @39083 has 172 MA's), (50, 39071), (80, 38990), (89, 38948),

Gene: Agent47_54 Start: 38364, Stop: 38531, Start Num: 47
Candidate Starts for Agent47_54:
(23, 38262), (Start: 47 @38364 has 172 MA's), (50, 38376), (Start: 54 @38388 has 1 MA's), (60, 38412), (74, 38463), (88, 38520), (89, 38523),

Gene: AgentM_62 Start: 40126, Stop: 39974, Start Num: 47
Candidate Starts for AgentM_62:
(Start: 47 @40126 has 172 MA's), (Start: 49 @40120 has 5 MA's), (Start: 54 @40108 has 1 MA's), (82, 40018), (88, 39985),

Gene: Ageofdapage_63 Start: 42108, Stop: 42269, Start Num: 44
Candidate Starts for Ageofdapage_63:
(Start: 44 @42108 has 78 MA's), (Start: 49 @42114 has 5 MA's), (Start: 54 @42132 has 1 MA's), (75, 42204), (88, 42258), (89, 42261),

Gene: Airmid_62 Start: 40118, Stop: 39966, Start Num: 47
Candidate Starts for Airmid_62:
(Start: 47 @40118 has 172 MA's), (Start: 49 @40112 has 5 MA's), (Start: 54 @40100 has 1 MA's), (81, 40013), (88, 39977),

Gene: AlishaPH_60 Start: 41399, Stop: 41557, Start Num: 49
Candidate Starts for AlishaPH_60:
(Start: 44 @41393 has 78 MA's), (Start: 49 @41399 has 5 MA's), (Start: 54 @41417 has 1 MA's), (75, 41492), (88, 41546), (89, 41549),

Gene: Aliter_67 Start: 40348, Stop: 40199, Start Num: 47
Candidate Starts for Aliter_67:
(Start: 47 @40348 has 172 MA's), (Start: 49 @40342 has 5 MA's), (Start: 54 @40330 has 1 MA's), (75, 40264), (84, 40234), (88, 40210),

Gene: AlleyCat_56 Start: 38668, Stop: 38835, Start Num: 47
Candidate Starts for AlleyCat_56:
(23, 38566), (Start: 47 @38668 has 172 MA's), (50, 38680), (Start: 54 @38692 has 1 MA's), (60, 38716), (74, 38767), (86, 38809), (88, 38824), (89, 38827),

Gene: Alma_64 Start: 40243, Stop: 40094, Start Num: 47

Candidate Starts for Alma_64:

(Start: 47 @40243 has 172 MA's), (Start: 49 @40237 has 5 MA's), (Start: 54 @40225 has 1 MA's), (75, 40159), (84, 40129), (88, 40105),

Gene: Aminay_60 Start: 40828, Stop: 40986, Start Num: 47

Candidate Starts for Aminay_60:

(Start: 47 @40828 has 172 MA's), (50, 40840), (Start: 54 @40852 has 1 MA's), (82, 40942), (87, 40966), (88, 40975),

Gene: Anaya_62 Start: 41648, Stop: 41815, Start Num: 44

Candidate Starts for Anaya_62:

(Start: 44 @41648 has 78 MA's), (Start: 49 @41654 has 5 MA's), (84, 41780), (86, 41789), (88, 41804), (89, 41807),

Gene: Angelica_60 Start: 41275, Stop: 41439, Start Num: 44

Candidate Starts for Angelica_60:

(Start: 44 @41275 has 78 MA's), (Start: 49 @41281 has 5 MA's), (Start: 54 @41299 has 1 MA's), (75, 41374), (84, 41404), (88, 41428),

Gene: Anthony_65 Start: 40664, Stop: 40509, Start Num: 47

Candidate Starts for Anthony_65:

(Start: 47 @40664 has 172 MA's), (Start: 49 @40658 has 5 MA's), (Start: 54 @40646 has 1 MA's), (60, 40622), (87, 40529), (88, 40520),

Gene: Apocalypse_63 Start: 42044, Stop: 42205, Start Num: 44

Candidate Starts for Apocalypse_63:

(Start: 44 @42044 has 78 MA's), (Start: 49 @42050 has 5 MA's), (Start: 54 @42068 has 1 MA's), (75, 42140), (84, 42170), (88, 42194),

Gene: Aragog_62 Start: 40146, Stop: 39994, Start Num: 47

Candidate Starts for Aragog_62:

(Start: 47 @40146 has 172 MA's), (Start: 49 @40140 has 5 MA's), (Start: 54 @40128 has 1 MA's), (82, 40038), (88, 40005),

Gene: Archetta_60 Start: 40330, Stop: 40178, Start Num: 47

Candidate Starts for Archetta_60:

(Start: 47 @40330 has 172 MA's), (Start: 54 @40312 has 1 MA's), (82, 40222), (88, 40189),

Gene: Arissanae_64 Start: 40777, Stop: 40631, Start Num: 45

Candidate Starts for Arissanae_64:

(Start: 43 @40783 has 2 MA's), (Start: 45 @40777 has 2 MA's), (85, 40654), (88, 40642),

Gene: Asayake_60 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for Asayake_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: Astro_67 Start: 39968, Stop: 39795, Start Num: 47

Candidate Starts for Astro_67:

(Start: 47 @39968 has 172 MA's), (Start: 54 @39950 has 1 MA's), (74, 39872), (88, 39806),

Gene: Atiba_61 Start: 41101, Stop: 41259, Start Num: 49

Candidate Starts for Atiba_61:

(Start: 44 @41095 has 78 MA's), (Start: 49 @41101 has 5 MA's), (Start: 54 @41119 has 1 MA's), (75, 41194), (88, 41248), (89, 41251),

Gene: Auspice_119 Start: 63668, Stop: 63817, Start Num: 47

Candidate Starts for Auspice_119:

(Start: 47 @63668 has 172 MA's), (50, 63680), (57, 63701), (58, 63704), (60, 63710), (66, 63731), (88, 63806),

Gene: Aziz_135 Start: 65233, Stop: 65445, Start Num: 22

Candidate Starts for Aziz_135:

(Start: 22 @65233 has 2 MA's), (24, 65257), (29, 65275), (42, 65356), (53, 65389), (56, 65401), (62, 65425), (64, 65434),

Gene: BEEST_60 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for BEEST_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: BGlluviae_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for BGlluviae_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: BaghaKamala_59 Start: 40476, Stop: 40640, Start Num: 44

Candidate Starts for BaghaKamala_59:

(Start: 44 @40476 has 78 MA's), (Start: 49 @40482 has 5 MA's), (75, 40575), (84, 40605), (88, 40629), (89, 40632),

Gene: BarrelRoll_60 Start: 41099, Stop: 41263, Start Num: 44

Candidate Starts for BarrelRoll_60:

(Start: 44 @41099 has 78 MA's), (Start: 49 @41105 has 5 MA's), (Start: 54 @41123 has 1 MA's), (75, 41198), (84, 41228), (86, 41237), (88, 41252),

Gene: Beemo_67 Start: 40518, Stop: 40369, Start Num: 47

Candidate Starts for Beemo_67:

(Start: 47 @40518 has 172 MA's), (Start: 49 @40512 has 5 MA's), (Start: 54 @40500 has 1 MA's), (75, 40434), (84, 40404), (88, 40380),

Gene: Beezoo_62 Start: 42083, Stop: 42247, Start Num: 44

Candidate Starts for Beezoo_62:

(Start: 44 @42083 has 78 MA's), (Start: 49 @42089 has 5 MA's), (Start: 54 @42107 has 1 MA's), (84, 42212), (88, 42236),

Gene: Bella96_61 Start: 41864, Stop: 42022, Start Num: 44

Candidate Starts for Bella96_61:

(Start: 44 @41864 has 78 MA's), (Start: 49 @41870 has 5 MA's), (Start: 54 @41888 has 1 MA's), (84, 41987), (88, 42011), (89, 42014),

Gene: Belladonna_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Belladonna_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Bellis_52 Start: 40421, Stop: 40579, Start Num: 47

Candidate Starts for Bellis_52:

(Start: 47 @40421 has 172 MA's), (Start: 54 @40439 has 1 MA's), (63, 40475), (86, 40553), (88, 40568),

Gene: Benedict_64 Start: 40407, Stop: 40219, Start Num: 47

Candidate Starts for Benedict_64:

(Start: 47 @40407 has 172 MA's), (Start: 49 @40401 has 5 MA's), (Start: 54 @40389 has 1 MA's), (81, 40302), (88, 40266), (91, 40236),

Gene: Bern_61 Start: 40066, Stop: 40233, Start Num: 44

Candidate Starts for Bern_61:

(Start: 44 @40066 has 78 MA's), (Start: 49 @40072 has 5 MA's), (75, 40168), (84, 40198), (88, 40222), (89, 40225),

Gene: Blizzard_60 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for Blizzard_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: Bluefalcon_58 Start: 40350, Stop: 40198, Start Num: 47

Candidate Starts for Bluefalcon_58:

(Start: 47 @40350 has 172 MA's), (Start: 54 @40332 has 1 MA's), (82, 40242), (88, 40209),

Gene: Bobquesha_64 Start: 39659, Stop: 39811, Start Num: 51

Candidate Starts for Bobquesha_64:

(Start: 51 @39659 has 3 MA's), (71, 39734), (82, 39767), (88, 39800),

Gene: BogosyJay_65 Start: 40318, Stop: 40169, Start Num: 47

Candidate Starts for BogosyJay_65:

(Start: 47 @40318 has 172 MA's), (Start: 54 @40300 has 1 MA's), (71, 40240), (75, 40234), (84, 40204), (88, 40180),

Gene: Boiiii_60 Start: 41449, Stop: 41613, Start Num: 44

Candidate Starts for Boiiii_60:

(Start: 44 @41449 has 78 MA's), (Start: 49 @41455 has 5 MA's), (Start: 54 @41473 has 1 MA's), (75, 41548), (88, 41602), (89, 41605),

Gene: Boilgate_55 Start: 40489, Stop: 40644, Start Num: 49

Candidate Starts for Boilgate_55:

(16, 40279), (35, 40441), (Start: 48 @40486 has 1 MA's), (Start: 49 @40489 has 5 MA's), (Start: 54 @40513 has 1 MA's), (78, 40588), (84, 40609), (88, 40633),

Gene: Bonamassa_60 Start: 39968, Stop: 39816, Start Num: 47

Candidate Starts for Bonamassa_60:

(Start: 47 @39968 has 172 MA's), (Start: 49 @39962 has 5 MA's), (Start: 54 @39950 has 1 MA's), (82, 39860), (88, 39827),

Gene: Bongo_119 Start: 63284, Stop: 63433, Start Num: 47

Candidate Starts for Bongo_119:

(Start: 47 @63284 has 172 MA's), (50, 63296), (57, 63317), (58, 63320), (60, 63326), (66, 63347), (88, 63422),

Gene: BourbonZero_53 Start: 40479, Stop: 40625, Start Num: 54

Candidate Starts for BourbonZero_53:

(Start: 47 @40464 has 172 MA's), (Start: 54 @40479 has 1 MA's), (63, 40515), (67, 40530), (74, 40557), (86, 40599), (88, 40614),

Gene: Bradman_64 Start: 39432, Stop: 39280, Start Num: 47

Candidate Starts for Bradman_64:

(34, 39489), (Start: 47 @39432 has 172 MA's), (81, 39339), (84, 39327), (88, 39303),

Gene: Bricole_121 Start: 63432, Stop: 63581, Start Num: 47

Candidate Starts for Bricole_121:

(Start: 47 @63432 has 172 MA's), (50, 63444), (57, 63465), (58, 63468), (60, 63474), (66, 63495), (88, 63570),

Gene: Bromden_52 Start: 39680, Stop: 39823, Start Num: 47

Candidate Starts for Bromden_52:

(32, 39617), (Start: 47 @39680 has 172 MA's), (60, 39722), (61, 39728), (88, 39812),

Gene: CREW_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for CREW_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: CallaLilly_62 Start: 41173, Stop: 41337, Start Num: 44

Candidate Starts for CallaLilly_62:

(Start: 44 @41173 has 78 MA's), (Start: 49 @41179 has 5 MA's), (Start: 54 @41197 has 1 MA's), (75, 41272), (88, 41326), (89, 41329),

Gene: Capricorn_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Capricorn_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Caraxes_64 Start: 38825, Stop: 38673, Start Num: 47

Candidate Starts for Caraxes_64:

(Start: 47 @38825 has 172 MA's), (81, 38732), (84, 38720), (88, 38696), (89, 38693),

Gene: CaseJules_62 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for CaseJules_62:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: Catalina_68 Start: 40421, Stop: 40272, Start Num: 47

Candidate Starts for Catalina_68:

(Start: 47 @40421 has 172 MA's), (Start: 49 @40415 has 5 MA's), (Start: 54 @40403 has 1 MA's), (75, 40337), (84, 40307), (88, 40283),

Gene: Chadwick_64 Start: 40094, Stop: 39942, Start Num: 47

Candidate Starts for Chadwick_64:

(Start: 47 @40094 has 172 MA's), (Start: 49 @40088 has 5 MA's), (Start: 54 @40076 has 1 MA's), (81, 39989), (88, 39953),

Gene: Chancellor_63 Start: 40757, Stop: 40921, Start Num: 47

Candidate Starts for Chancellor_63:

(11, 40532), (33, 40709), (37, 40730), (Start: 47 @40757 has 172 MA's), (Start: 54 @40781 has 1 MA's), (71, 40844), (82, 40877), (88, 40910),

Gene: Chargerpower_62 Start: 38721, Stop: 38578, Start Num: 47

Candidate Starts for Chargerpower_62:

(12, 38973), (13, 38970), (Start: 43 @38730 has 2 MA's), (Start: 47 @38721 has 172 MA's), (Start: 49 @38715 has 5 MA's), (78, 38634), (88, 38589),

Gene: Charm_63 Start: 39921, Stop: 39760, Start Num: 47

Candidate Starts for Charm_63:

(1, 40392), (9, 40179), (Start: 43 @39930 has 2 MA's), (Start: 47 @39921 has 172 MA's), (88, 39771),

Gene: Che12_65 Start: 39044, Stop: 38901, Start Num: 47

Candidate Starts for Che12_65:

(Start: 47 @39044 has 172 MA's), (50, 39032), (Start: 54 @39026 has 1 MA's), (80, 38951), (89, 38909),

Gene: CheetoDust_59 Start: 40520, Stop: 40687, Start Num: 44

Candidate Starts for CheetoDust_59:

(Start: 44 @40520 has 78 MA's), (Start: 49 @40526 has 5 MA's), (75, 40622), (84, 40652), (88, 40676), (89, 40679),

Gene: Cheetobro_63 Start: 40754, Stop: 40918, Start Num: 47

Candidate Starts for Cheetobro_63:

(11, 40529), (33, 40706), (37, 40727), (Start: 47 @40754 has 172 MA's), (Start: 54 @40778 has 1 MA's), (71, 40841), (82, 40874), (88, 40907),

Gene: Clautastrophe_52 Start: 40418, Stop: 40576, Start Num: 47

Candidate Starts for Clautastrophe_52:

(Start: 47 @40418 has 172 MA's), (Start: 54 @40436 has 1 MA's), (63, 40472), (86, 40550), (88, 40565),

Gene: Clipper_64 Start: 41698, Stop: 41862, Start Num: 44

Candidate Starts for Clipper_64:

(Start: 44 @41698 has 78 MA's), (Start: 49 @41704 has 5 MA's), (Start: 54 @41722 has 1 MA's), (75, 41797), (88, 41851), (89, 41854),

Gene: Collard_52 Start: 38325, Stop: 38492, Start Num: 47

Candidate Starts for Collard_52:

(23, 38223), (Start: 47 @38325 has 172 MA's), (50, 38337), (Start: 54 @38349 has 1 MA's), (60, 38373), (74, 38424), (88, 38481), (89, 38484),

Gene: Conquerage_64 Start: 40012, Stop: 39863, Start Num: 47

Candidate Starts for Conquerage_64:

(Start: 47 @40012 has 172 MA's), (Start: 49 @40006 has 5 MA's), (Start: 54 @39994 has 1 MA's), (75, 39928), (84, 39898), (88, 39874),

Gene: Conspiracy_63 Start: 40368, Stop: 40216, Start Num: 47

Candidate Starts for Conspiracy_63:

(Start: 47 @40368 has 172 MA's), (Start: 49 @40362 has 5 MA's), (Start: 54 @40350 has 1 MA's), (82, 40260), (88, 40227),

Gene: Coog_59 Start: 40182, Stop: 40030, Start Num: 47

Candidate Starts for Coog_59:

(Start: 47 @40182 has 172 MA's), (Start: 49 @40176 has 5 MA's), (Start: 54 @40164 has 1 MA's), (82, 40074), (88, 40041),

Gene: CrimD_61 Start: 41656, Stop: 41820, Start Num: 44

Candidate Starts for CrimD_61:

(Start: 44 @41656 has 78 MA's), (Start: 49 @41662 has 5 MA's), (Start: 54 @41680 has 1 MA's), (75, 41755), (88, 41809), (89, 41812),

Gene: Cuco_61 Start: 40042, Stop: 39890, Start Num: 47

Candidate Starts for Cuco_61:

(Start: 47 @40042 has 172 MA's), (Start: 49 @40036 has 5 MA's), (Start: 54 @40024 has 1 MA's), (82, 39934), (88, 39901),

Gene: Curiosium_64 Start: 40772, Stop: 40939, Start Num: 44

Candidate Starts for Curiosium_64:

(Start: 44 @40772 has 78 MA's), (Start: 49 @40778 has 5 MA's), (61, 40826), (84, 40904), (86, 40913), (87, 40919), (88, 40928), (89, 40931),

Gene: DS6A_39 Start: 32218, Stop: 32024, Start Num: 25

Candidate Starts for DS6A_39:

(Start: 25 @32218 has 1 MA's), (31, 32176), (56, 32074), (58, 32065), (64, 32041), (65, 32038),

Gene: Dadosky_56 Start: 38670, Stop: 38837, Start Num: 47

Candidate Starts for Dadosky_56:

(23, 38568), (Start: 47 @38670 has 172 MA's), (50, 38682), (Start: 54 @38694 has 1 MA's), (60, 38718), (74, 38769), (86, 38811), (88, 38826), (89, 38829),

Gene: Dalmuri_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Dalmuri_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Danforth_67 Start: 40022, Stop: 39849, Start Num: 47

Candidate Starts for Danforth_67:

(Start: 47 @40022 has 172 MA's), (Start: 54 @40004 has 1 MA's), (88, 39860),

Gene: Darrell_67 Start: 40849, Stop: 40700, Start Num: 92

Candidate Starts for Darrell_67:

(27, 41098), (Start: 92 @40849 has 2 MA's), (93, 40831), (99, 40711),

Gene: DarthPhader_61 Start: 41122, Stop: 40982, Start Num: 47

Candidate Starts for DarthPhader_61:

(38, 41149), (Start: 47 @41122 has 172 MA's), (Start: 49 @41116 has 5 MA's), (Start: 54 @41104 has 1 MA's), (84, 41017), (88, 40993),

Gene: Deby_60 Start: 41297, Stop: 41464, Start Num: 44

Candidate Starts for Deby_60:

(Start: 44 @41297 has 78 MA's), (Start: 49 @41303 has 5 MA's), (57, 41336), (75, 41399), (84, 41429), (88, 41453), (89, 41456),

Gene: Devera_67 Start: 42665, Stop: 42826, Start Num: 44

Candidate Starts for Devera_67:

(Start: 44 @42665 has 78 MA's), (Start: 49 @42671 has 5 MA's), (Start: 54 @42689 has 1 MA's), (75, 42761), (88, 42815), (89, 42818),

Gene: Diminimus_120 Start: 63279, Stop: 63428, Start Num: 47

Candidate Starts for Diminimus_120:

(Start: 47 @63279 has 172 MA's), (50, 63291), (57, 63312), (58, 63315), (60, 63321), (66, 63342), (88, 63417),

Gene: Discoknowium_60 Start: 39885, Stop: 39733, Start Num: 47

Candidate Starts for Discoknowium_60:

(Start: 47 @39885 has 172 MA's), (Start: 49 @39879 has 5 MA's), (Start: 54 @39867 has 1 MA's), (82, 39777), (88, 39744),

Gene: Dixon_66 Start: 39542, Stop: 39369, Start Num: 47

Candidate Starts for Dixon_66:

(Start: 47 @39542 has 172 MA's), (Start: 54 @39524 has 1 MA's), (88, 39380),

Gene: Dole_65 Start: 42668, Stop: 42829, Start Num: 44

Candidate Starts for Dole_65:

(Start: 44 @42668 has 78 MA's), (Start: 49 @42674 has 5 MA's), (Start: 54 @42692 has 1 MA's), (75, 42764), (88, 42818), (89, 42821),

Gene: DrHayes_61 Start: 42019, Stop: 42177, Start Num: 44

Candidate Starts for DrHayes_61:

(Start: 44 @42019 has 78 MA's), (Start: 49 @42025 has 5 MA's), (Start: 54 @42043 has 1 MA's), (55, 42046), (84, 42142), (88, 42166), (89, 42169),

Gene: DreamTeam1_63 Start: 39753, Stop: 39592, Start Num: 47

Candidate Starts for DreamTeam1_63:

(1, 40224), (9, 40011), (Start: 43 @39762 has 2 MA's), (Start: 47 @39753 has 172 MA's), (88, 39603),

Gene: Dublin_60 Start: 40039, Stop: 39890, Start Num: 47

Candidate Starts for Dublin_60:

(Start: 47 @40039 has 172 MA's), (Start: 49 @40033 has 5 MA's), (57, 40006), (81, 39937), (82, 39934), (88, 39901),

Gene: Dulcita_120 Start: 63280, Stop: 63429, Start Num: 47

Candidate Starts for Dulcita_120:

(Start: 47 @63280 has 172 MA's), (50, 63292), (57, 63313), (58, 63316), (60, 63322), (66, 63343), (88, 63418),

Gene: DuncansLeg_53 Start: 40461, Stop: 40607, Start Num: 54

Candidate Starts for DuncansLeg_53:

(Start: 47 @40446 has 172 MA's), (Start: 54 @40461 has 1 MA's), (63, 40497), (67, 40512), (86, 40581), (88, 40596),

Gene: Durfee_60 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for Durfee_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: EdogawaKiddo_64 Start: 40388, Stop: 40239, Start Num: 47

Candidate Starts for EdogawaKiddo_64:

(Start: 47 @40388 has 172 MA's), (Start: 49 @40382 has 5 MA's), (Start: 54 @40370 has 1 MA's), (75, 40304), (84, 40274), (88, 40250),

Gene: Edugator_53 Start: 40091, Stop: 40258, Start Num: 47

Candidate Starts for Edugator_53:

(23, 39989), (Start: 47 @40091 has 172 MA's), (50, 40103), (Start: 54 @40115 has 1 MA's), (60, 40139), (74, 40190), (86, 40232), (88, 40247), (89, 40250),

Gene: Efra2_64 Start: 41207, Stop: 41377, Start Num: 47

Candidate Starts for Efra2_64:

(Start: 47 @41207 has 172 MA's), (50, 41219), (55, 41234), (71, 41297), (74, 41309), (88, 41366), (89, 41369),

Gene: Eidsmoe_64 Start: 40004, Stop: 39855, Start Num: 47

Candidate Starts for Eidsmoe_64:

(Start: 47 @40004 has 172 MA's), (Start: 49 @39998 has 5 MA's), (Start: 54 @39986 has 1 MA's), (75, 39920), (84, 39890), (88, 39866),

Gene: EITiger69_64 Start: 40342, Stop: 40190, Start Num: 47

Candidate Starts for EITiger69_64:

(Start: 47 @40342 has 172 MA's), (Start: 49 @40336 has 5 MA's), (Start: 54 @40324 has 1 MA's), (81, 40237), (88, 40201),

Gene: Elephantoon_64 Start: 39594, Stop: 39445, Start Num: 92

Candidate Starts for Elephantoon_64:

(27, 39897), (59, 39756), (Start: 92 @39594 has 2 MA's), (93, 39576), (99, 39456),

Gene: Ellson_52 Start: 40476, Stop: 40637, Start Num: 47

Candidate Starts for Ellson_52:

(Start: 47 @40476 has 172 MA's), (Start: 54 @40491 has 1 MA's), (63, 40527), (67, 40542), (86, 40611), (88, 40626),

Gene: Emerson_61 Start: 41122, Stop: 41280, Start Num: 49

Candidate Starts for Emerson_61:

(Start: 44 @41116 has 78 MA's), (Start: 49 @41122 has 5 MA's), (Start: 54 @41140 has 1 MA's), (75, 41215), (88, 41269), (89, 41272),

Gene: EmyBug_63 Start: 40006, Stop: 39857, Start Num: 47

Candidate Starts for EmyBug_63:

(Start: 47 @40006 has 172 MA's), (Start: 49 @40000 has 5 MA's), (Start: 54 @39988 has 1 MA's), (75, 39922), (84, 39892), (88, 39868),

Gene: Eponine_65 Start: 41600, Stop: 41764, Start Num: 47

Candidate Starts for Eponine_65:

(11, 41375), (33, 41552), (37, 41573), (Start: 47 @41600 has 172 MA's), (Start: 54 @41624 has 1 MA's), (71, 41687), (82, 41720), (88, 41753),

Gene: Estes_136 Start: 65447, Stop: 65605, Start Num: 47

Candidate Starts for Estes_136:

(41, 65435), (Start: 47 @65447 has 172 MA's), (Start: 54 @65465 has 1 MA's), (60, 65489), (77, 65546), (78, 65549), (84, 65570), (88, 65594),

Gene: Expelliarmus_64 Start: 39746, Stop: 39573, Start Num: 47

Candidate Starts for Expelliarmus_64:

(Start: 47 @39746 has 172 MA's), (Start: 54 @39728 has 1 MA's), (88, 39584),

Gene: ExplosioNervosa_64 Start: 40072, Stop: 39923, Start Num: 47

Candidate Starts for ExplosioNervosa_64:

(Start: 47 @40072 has 172 MA's), (Start: 49 @40066 has 5 MA's), (Start: 54 @40054 has 1 MA's), (75, 39988), (84, 39958), (88, 39934),

Gene: FatCactus_59 Start: 39594, Stop: 39439, Start Num: 45

Candidate Starts for FatCactus_59:

(Start: 45 @39594 has 2 MA's), (Start: 49 @39585 has 5 MA's), (Start: 54 @39573 has 1 MA's), (75, 39504), (84, 39474), (87, 39459), (88, 39450),

Gene: Fayely_64 Start: 39973, Stop: 39824, Start Num: 47

Candidate Starts for Fayely_64:

(Start: 47 @39973 has 172 MA's), (Start: 49 @39967 has 5 MA's), (Start: 54 @39955 has 1 MA's), (75, 39889), (84, 39859), (88, 39835),

Gene: Feyre_57 Start: 42050, Stop: 42217, Start Num: 47

Candidate Starts for Feyre_57:

(Start: 47 @42050 has 172 MA's), (50, 42062), (Start: 54 @42074 has 1 MA's), (60, 42098), (74, 42149), (86, 42191), (88, 42206), (89, 42209),

Gene: Finnry_52 Start: 40683, Stop: 40844, Start Num: 47

Candidate Starts for Finnry_52:

(Start: 47 @40683 has 172 MA's), (Start: 54 @40701 has 1 MA's), (63, 40737), (86, 40818), (88, 40833),

Gene: Fionnbharth_63 Start: 40998, Stop: 41162, Start Num: 47

Candidate Starts for Fionnbharth_63:

(11, 40773), (33, 40950), (37, 40971), (Start: 47 @40998 has 172 MA's), (Start: 54 @41022 has 1 MA's), (71, 41085), (82, 41118), (88, 41151),

Gene: ForGetIt_63 Start: 40393, Stop: 40241, Start Num: 47

Candidate Starts for ForGetIt_63:

(Start: 47 @40393 has 172 MA's), (Start: 49 @40387 has 5 MA's), (Start: 54 @40375 has 1 MA's), (82, 40285), (88, 40252),

Gene: FreakyGoo_119 Start: 63764, Stop: 63913, Start Num: 47

Candidate Starts for FreakyGoo_119:

(Start: 47 @63764 has 172 MA's), (50, 63776), (57, 63797), (58, 63800), (60, 63806), (66, 63827), (88, 63902),

Gene: Gail_65 Start: 41004, Stop: 40843, Start Num: 44

Candidate Starts for Gail_65:

(20, 41157), (Start: 44 @41004 has 78 MA's), (Start: 49 @40998 has 5 MA's), (70, 40926), (84, 40878), (88, 40854),

Gene: Ganymede_61 Start: 41511, Stop: 41675, Start Num: 44
Candidate Starts for Ganymede_61:
(Start: 44 @41511 has 78 MA's), (Start: 49 @41517 has 5 MA's), (Start: 54 @41535 has 1 MA's), (75, 41610), (84, 41640), (88, 41664), (89, 41667),

Gene: GardenSalsa_136 Start: 65626, Stop: 65784, Start Num: 47
Candidate Starts for GardenSalsa_136:
(Start: 47 @65626 has 172 MA's), (Start: 54 @65644 has 1 MA's), (60, 65668), (77, 65725), (84, 65749), (88, 65773),

Gene: GenevaB15_138 Start: 65233, Stop: 65445, Start Num: 22
Candidate Starts for GenevaB15_138:
(Start: 22 @65233 has 2 MA's), (24, 65257), (29, 65275), (42, 65356), (53, 65389), (56, 65401), (62, 65425), (64, 65434),

Gene: Gengar_54 Start: 40069, Stop: 40236, Start Num: 47
Candidate Starts for Gengar_54:
(3, 39766), (4, 39775), (23, 39967), (Start: 47 @40069 has 172 MA's), (50, 40081), (Start: 54 @40093 has 1 MA's), (60, 40117), (74, 40168), (86, 40210), (88, 40225), (89, 40228),

Gene: George_57 Start: 39712, Stop: 39560, Start Num: 47
Candidate Starts for George_57:
(Start: 47 @39712 has 172 MA's), (Start: 49 @39706 has 5 MA's), (Start: 54 @39694 has 1 MA's), (82, 39604),

Gene: Geraldini_63 Start: 42165, Stop: 42332, Start Num: 44
Candidate Starts for Geraldini_63:
(Start: 44 @42165 has 78 MA's), (Start: 49 @42171 has 5 MA's), (84, 42297), (86, 42306), (88, 42321),

Gene: Ghoulboy_62 Start: 40604, Stop: 40452, Start Num: 47
Candidate Starts for Ghoulboy_62:
(Start: 47 @40604 has 172 MA's), (Start: 54 @40586 has 1 MA's), (82, 40496), (88, 40463),

Gene: Glaske16_122 Start: 64397, Stop: 64546, Start Num: 47
Candidate Starts for Glaske16_122:
(Start: 47 @64397 has 172 MA's), (50, 64409), (57, 64430), (58, 64433), (60, 64439), (66, 64460), (88, 64535),

Gene: Groundhog_66 Start: 39946, Stop: 39773, Start Num: 47
Candidate Starts for Groundhog_66:
(Start: 47 @39946 has 172 MA's), (Start: 54 @39928 has 1 MA's), (74, 39850), (88, 39784),

Gene: Guanica15_63 Start: 40948, Stop: 41118, Start Num: 47
Candidate Starts for Guanica15_63:
(Start: 47 @40948 has 172 MA's), (50, 40960), (55, 40975), (71, 41038), (74, 41050), (88, 41107), (89, 41110),

Gene: Guillsminger_55 Start: 40040, Stop: 40207, Start Num: 47
Candidate Starts for Guillsminger_55:
(3, 39737), (4, 39746), (23, 39938), (Start: 47 @40040 has 172 MA's), (50, 40052), (Start: 54 @40064 has 1 MA's), (60, 40088), (74, 40139), (86, 40181), (88, 40196),

Gene: Hanray_64 Start: 40336, Stop: 40187, Start Num: 47

Candidate Starts for Hanray_64:

(Start: 47 @40336 has 172 MA's), (Start: 49 @40330 has 5 MA's), (Start: 54 @40318 has 1 MA's), (75, 40252), (84, 40222), (88, 40198),

Gene: HedwigODU_60 Start: 41125, Stop: 41289, Start Num: 44

Candidate Starts for HedwigODU_60:

(39, 41110), (Start: 44 @41125 has 78 MA's), (Start: 49 @41131 has 5 MA's), (Start: 54 @41149 has 1 MA's), (88, 41278), (89, 41281),

Gene: Heftyboy_55 Start: 40412, Stop: 40579, Start Num: 47

Candidate Starts for Heftyboy_55:

(3, 40109), (4, 40118), (23, 40310), (Start: 47 @40412 has 172 MA's), (50, 40424), (Start: 54 @40436 has 1 MA's), (60, 40460), (74, 40511), (86, 40553), (88, 40568),

Gene: Horex_64 Start: 40352, Stop: 40203, Start Num: 47

Candidate Starts for Horex_64:

(Start: 47 @40352 has 172 MA's), (Start: 49 @40346 has 5 MA's), (Start: 54 @40334 has 1 MA's), (75, 40268), (84, 40238), (88, 40214),

Gene: Homura_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Homura_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: HortumSL17_67 Start: 40420, Stop: 40271, Start Num: 47

Candidate Starts for HortumSL17_67:

(Start: 47 @40420 has 172 MA's), (Start: 49 @40414 has 5 MA's), (Start: 54 @40402 has 1 MA's), (75, 40336), (84, 40306), (88, 40282),

Gene: HuhtaEnerson15_60 Start: 39862, Stop: 39710, Start Num: 47

Candidate Starts for HuhtaEnerson15_60:

(Start: 47 @39862 has 172 MA's), (Start: 49 @39856 has 5 MA's), (Start: 54 @39844 has 1 MA's), (82, 39754), (88, 39721),

Gene: Hyperbowlee_60 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for Hyperbowlee_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: IPhane7_117 Start: 63284, Stop: 63433, Start Num: 47

Candidate Starts for IPhane7_117:

(Start: 47 @63284 has 172 MA's), (50, 63296), (57, 63317), (58, 63320), (60, 63326), (66, 63347), (88, 63422),

Gene: Illumine_65 Start: 42667, Stop: 42828, Start Num: 44

Candidate Starts for Illumine_65:

(Start: 44 @42667 has 78 MA's), (Start: 49 @42673 has 5 MA's), (Start: 54 @42691 has 1 MA's), (75, 42763), (88, 42817), (89, 42820),

Gene: Inky_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Inky_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: InvictusManeo_52 Start: 38368, Stop: 38535, Start Num: 47

Candidate Starts for InvictusManeo_52:

(23, 38266), (Start: 47 @38368 has 172 MA's), (50, 38380), (Start: 54 @38392 has 1 MA's), (60, 38416), (74, 38467), (88, 38524), (89, 38527),

Gene: Izel_118 Start: 63279, Stop: 63428, Start Num: 47

Candidate Starts for Izel_118:

(Start: 47 @63279 has 172 MA's), (50, 63291), (57, 63312), (58, 63315), (60, 63321), (66, 63342), (88, 63417),

Gene: JAWS_60 Start: 41105, Stop: 41263, Start Num: 44

Candidate Starts for JAWS_60:

(Start: 44 @41105 has 78 MA's), (Start: 49 @41111 has 5 MA's), (Start: 54 @41129 has 1 MA's), (75, 41198), (88, 41252), (89, 41255),

Gene: JF1_63 Start: 40915, Stop: 41079, Start Num: 47

Candidate Starts for JF1_63:

(11, 40690), (33, 40867), (37, 40888), (Start: 47 @40915 has 172 MA's), (Start: 54 @40939 has 1 MA's), (71, 41002), (82, 41035), (88, 41068),

Gene: Jabiru_63 Start: 40261, Stop: 40109, Start Num: 47

Candidate Starts for Jabiru_63:

(Start: 47 @40261 has 172 MA's), (Start: 49 @40255 has 5 MA's), (Start: 54 @40243 has 1 MA's), (81, 40156), (88, 40120),

Gene: Jarvi_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Jarvi_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Jayhawk_61 Start: 41120, Stop: 41284, Start Num: 44

Candidate Starts for Jayhawk_61:

(Start: 44 @41120 has 78 MA's), (Start: 49 @41126 has 5 MA's), (84, 41249), (86, 41258), (88, 41273), (89, 41276),

Gene: Jeckyll_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Jeckyll_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Jeeves_67 Start: 39998, Stop: 39837, Start Num: 44

Candidate Starts for Jeeves_67:

(20, 40151), (Start: 44 @39998 has 78 MA's), (Start: 49 @39992 has 5 MA's), (70, 39920), (84, 39872), (88, 39848),

Gene: Jiawan_63 Start: 40368, Stop: 40219, Start Num: 47

Candidate Starts for Jiawan_63:

(Start: 47 @40368 has 172 MA's), (Start: 49 @40362 has 5 MA's), (Start: 54 @40350 has 1 MA's), (75, 40284), (84, 40254), (88, 40230),

Gene: Jobypre_53 Start: 40418, Stop: 40576, Start Num: 47

Candidate Starts for Jobypre_53:

(Start: 47 @40418 has 172 MA's), (Start: 54 @40436 has 1 MA's), (63, 40472), (86, 40550), (88, 40565),

Gene: Jovo_63 Start: 40649, Stop: 40497, Start Num: 47

Candidate Starts for Jovo_63:

(Start: 47 @40649 has 172 MA's), (Start: 49 @40643 has 5 MA's), (Start: 54 @40631 has 1 MA's), (82, 40541), (88, 40508),

Gene: Joy99_60 Start: 41179, Stop: 41343, Start Num: 44

Candidate Starts for Joy99_60:

(Start: 44 @41179 has 78 MA's), (Start: 49 @41185 has 5 MA's), (Start: 54 @41203 has 1 MA's), (75, 41278), (88, 41332), (89, 41335),

Gene: Jsquared_65 Start: 39590, Stop: 39438, Start Num: 47

Candidate Starts for Jsquared_65:

(Start: 47 @39590 has 172 MA's), (81, 39497), (84, 39485), (88, 39461),

Gene: Jubie_52 Start: 40553, Stop: 40711, Start Num: 47

Candidate Starts for Jubie_52:

(Start: 47 @40553 has 172 MA's), (Start: 54 @40571 has 1 MA's), (63, 40607), (86, 40685), (88, 40700),

Gene: Juliette_65 Start: 41062, Stop: 41226, Start Num: 47

Candidate Starts for Juliette_65:

(11, 40837), (33, 41014), (37, 41035), (Start: 47 @41062 has 172 MA's), (Start: 54 @41086 has 1 MA's), (71, 41149), (82, 41182), (88, 41215),

Gene: Keziacharles14_65 Start: 41367, Stop: 41209, Start Num: 43

Candidate Starts for Keziacharles14_65:

(Start: 43 @41367 has 2 MA's), (Start: 47 @41358 has 172 MA's), (75, 41274), (88, 41220),

Gene: Kingsolomon_52 Start: 40419, Stop: 40580, Start Num: 47

Candidate Starts for Kingsolomon_52:

(Start: 47 @40419 has 172 MA's), (Start: 54 @40437 has 1 MA's), (63, 40473), (86, 40554), (88, 40569),

Gene: Kinmap_63 Start: 38733, Stop: 38560, Start Num: 47

Candidate Starts for Kinmap_63:

(34, 38793), (Start: 47 @38733 has 172 MA's), (Start: 54 @38715 has 1 MA's), (74, 38634), (84, 38601), (88, 38577),

Gene: KirDoubleO7_51 Start: 40465, Stop: 40611, Start Num: 54

Candidate Starts for KirDoubleO7_51:

(Start: 47 @40450 has 172 MA's), (Start: 54 @40465 has 1 MA's), (63, 40501), (67, 40516), (86, 40585), (88, 40600),

Gene: KleverKiS_122 Start: 64769, Stop: 64918, Start Num: 47

Candidate Starts for KleverKiS_122:

(Start: 47 @64769 has 172 MA's), (50, 64781), (57, 64802), (58, 64805), (60, 64811), (66, 64832), (88, 64907),

Gene: Koduck_64 Start: 39435, Stop: 39292, Start Num: 47

Candidate Starts for Koduck_64:

(16, 39636), (21, 39603), (Start: 47 @39435 has 172 MA's), (Start: 49 @39429 has 5 MA's), (88, 39303), (89, 39300),

Gene: Kratio_52 Start: 38110, Stop: 38277, Start Num: 47

Candidate Starts for Kratio_52:

(23, 38008), (Start: 47 @38110 has 172 MA's), (50, 38122), (52, 38128), (Start: 54 @38134 has 1 MA's), (60, 38158), (74, 38209), (88, 38266), (89, 38269),

Gene: Kraw_64 Start: 40750, Stop: 40914, Start Num: 47

Candidate Starts for Kraw_64:

(11, 40525), (33, 40702), (37, 40723), (Start: 47 @40750 has 172 MA's), (Start: 54 @40774 has 1 MA's), (71, 40837), (82, 40870), (88, 40903),

Gene: Krypton555_54 Start: 40655, Stop: 40813, Start Num: 47

Candidate Starts for Krypton555_54:

(Start: 47 @40655 has 172 MA's), (88, 40802),

Gene: Kumao_92 Start: 57451, Stop: 57603, Start Num: 48

Candidate Starts for Kumao_92:

(Start: 48 @57451 has 1 MA's), (Start: 54 @57466 has 1 MA's), (57, 57481), (58, 57484), (68, 57523), (77, 57541), (82, 57556), (88, 57589),

Gene: L5_60 Start: 39522, Stop: 39379, Start Num: 47

Candidate Starts for L5_60:

(16, 39723), (Start: 47 @39522 has 172 MA's), (Start: 49 @39516 has 5 MA's), (88, 39390), (89, 39387),

Gene: Larva_55 Start: 39542, Stop: 39709, Start Num: 47

Candidate Starts for Larva_55:

(23, 39440), (Start: 47 @39542 has 172 MA's), (50, 39554), (Start: 54 @39566 has 1 MA's), (60, 39590), (74, 39641), (86, 39683), (88, 39698), (89, 39701),

Gene: LastHope_63 Start: 40287, Stop: 40457, Start Num: 47

Candidate Starts for LastHope_63:

(8, 40026), (Start: 47 @40287 has 172 MA's), (50, 40299), (71, 40377), (74, 40389), (88, 40446), (89, 40449),

Gene: LaterM_60 Start: 41716, Stop: 41877, Start Num: 44

Candidate Starts for LaterM_60:

(18, 41548), (19, 41566), (Start: 44 @41716 has 78 MA's), (Start: 49 @41722 has 5 MA's), (Start: 54 @41740 has 1 MA's), (84, 41842), (88, 41866), (89, 41869),

Gene: Lebo14_64 Start: 41083, Stop: 41247, Start Num: 47

Candidate Starts for Lebo14_64:

(11, 40858), (33, 41035), (37, 41056), (Start: 47 @41083 has 172 MA's), (71, 41170), (82, 41203), (88, 41236),

Gene: Leston_54 Start: 40169, Stop: 40336, Start Num: 47

Candidate Starts for Leston_54:

(3, 39866), (4, 39875), (23, 40067), (Start: 47 @40169 has 172 MA's), (50, 40181), (Start: 54 @40193 has 1 MA's), (60, 40217), (74, 40268), (86, 40310), (88, 40325),

Gene: Lev2_63 Start: 40281, Stop: 40129, Start Num: 47

Candidate Starts for Lev2_63:

(Start: 47 @40281 has 172 MA's), (Start: 49 @40275 has 5 MA's), (Start: 54 @40263 has 1 MA's), (82, 40173), (88, 40140),

Gene: LilhomieP_119 Start: 64562, Stop: 64711, Start Num: 47

Candidate Starts for LilhomieP_119:

(Start: 47 @64562 has 172 MA's), (50, 64574), (57, 64595), (58, 64598), (60, 64604), (66, 64625), (88, 64700),

Gene: Lilleskat_62 Start: 40204, Stop: 40055, Start Num: 47

Candidate Starts for Lilleskat_62:

(Start: 47 @40204 has 172 MA's), (Start: 49 @40198 has 5 MA's), (Start: 54 @40186 has 1 MA's), (75, 40120), (84, 40090), (88, 40066),

Gene: LindNT_59 Start: 41322, Stop: 41486, Start Num: 44

Candidate Starts for LindNT_59:

(Start: 44 @41322 has 78 MA's), (Start: 49 @41328 has 5 MA's), (Start: 54 @41346 has 1 MA's), (88, 41475), (89, 41478),

Gene: LittleCherry_60 Start: 39732, Stop: 39580, Start Num: 47

Candidate Starts for LittleCherry_60:

(Start: 47 @39732 has 172 MA's), (Start: 49 @39726 has 5 MA's), (Start: 54 @39714 has 1 MA's), (82, 39624), (88, 39591),

Gene: LiyuLake_52 Start: 40481, Stop: 40627, Start Num: 54

Candidate Starts for LiyuLake_52:

(Start: 47 @40466 has 172 MA's), (Start: 54 @40481 has 1 MA's), (63, 40517), (67, 40532), (86, 40601), (88, 40616),

Gene: Llorens_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Llorens_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: Lolly9_52 Start: 40240, Stop: 40398, Start Num: 47

Candidate Starts for Lolly9_52:

(Start: 47 @40240 has 172 MA's), (Start: 54 @40258 has 1 MA's), (63, 40294), (88, 40387),

Gene: LoneWolf_66 Start: 40322, Stop: 40173, Start Num: 47

Candidate Starts for LoneWolf_66:

(Start: 47 @40322 has 172 MA's), (Start: 49 @40316 has 5 MA's), (Start: 54 @40304 has 1 MA's), (71, 40244), (75, 40238), (88, 40184),

Gene: Luchador_66 Start: 41501, Stop: 41346, Start Num: 47

Candidate Starts for Luchador_66:

(Start: 47 @41501 has 172 MA's), (Start: 54 @41483 has 1 MA's), (76, 41411), (82, 41390), (84, 41381), (87, 41366), (88, 41357),

Gene: Lumos_54 Start: 40415, Stop: 40573, Start Num: 47

Candidate Starts for Lumos_54:

(Start: 47 @40415 has 172 MA's), (Start: 54 @40433 has 1 MA's), (63, 40469), (86, 40547), (88, 40562),

Gene: Lunahalos_60 Start: 41250, Stop: 41414, Start Num: 44
Candidate Starts for Lunahalos_60:
(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: MacKat_55 Start: 36582, Stop: 36746, Start Num: 44
Candidate Starts for MacKat_55:
(Start: 44 @36582 has 78 MA's), (Start: 49 @36588 has 5 MA's), (Start: 54 @36606 has 1 MA's), (75, 36681), (88, 36735), (89, 36738),

Gene: MajorMajor_63 Start: 39432, Stop: 39280, Start Num: 47
Candidate Starts for MajorMajor_63:
(34, 39489), (Start: 47 @39432 has 172 MA's), (81, 39339), (84, 39327), (88, 39303),

Gene: Malthus_64 Start: 40750, Stop: 40914, Start Num: 47
Candidate Starts for Malthus_64:
(11, 40525), (33, 40702), (37, 40723), (Start: 47 @40750 has 172 MA's), (Start: 54 @40774 has 1 MA's), (71, 40837), (82, 40870), (88, 40903),

Gene: Maminiaina_65 Start: 40300, Stop: 40151, Start Num: 47
Candidate Starts for Maminiaina_65:
(Start: 47 @40300 has 172 MA's), (Start: 54 @40282 has 1 MA's), (71, 40222), (75, 40216), (84, 40186), (88, 40162),

Gene: MarysWell_60 Start: 40282, Stop: 40133, Start Num: 47
Candidate Starts for MarysWell_60:
(Start: 47 @40282 has 172 MA's), (Start: 49 @40276 has 5 MA's), (57, 40249), (82, 40177), (88, 40144),

Gene: MeaningOfLife_61 Start: 41993, Stop: 42157, Start Num: 44
Candidate Starts for MeaningOfLife_61:
(Start: 44 @41993 has 78 MA's), (Start: 49 @41999 has 5 MA's), (Start: 54 @42017 has 1 MA's), (75, 42092), (84, 42122), (88, 42146), (89, 42149),

Gene: Megsy_62 Start: 41393, Stop: 41554, Start Num: 44
Candidate Starts for Megsy_62:
(7, 41132), (Start: 44 @41393 has 78 MA's), (Start: 49 @41399 has 5 MA's), (Start: 54 @41417 has 1 MA's), (75, 41489), (86, 41528), (88, 41543), (89, 41546),

Gene: Mendokysei_52 Start: 37971, Stop: 38135, Start Num: 97
Candidate Starts for Mendokysei_52:
(10, 37329), (30, 37518), (57, 37641), (95, 37905), (96, 37944), (Start: 97 @37971 has 1 MA's), (98, 37998), (102, 38061), (103, 38085),

Gene: Micasa_60 Start: 40004, Stop: 39855, Start Num: 47
Candidate Starts for Micasa_60:
(Start: 47 @40004 has 172 MA's), (Start: 49 @39998 has 5 MA's), (57, 39971), (81, 39902), (82, 39899), (88, 39866),

Gene: Midas2_59 Start: 40182, Stop: 40030, Start Num: 47
Candidate Starts for Midas2_59:
(Start: 47 @40182 has 172 MA's), (Start: 49 @40176 has 5 MA's), (Start: 54 @40164 has 1 MA's), (82, 40074), (88, 40041),

Gene: Milcery_60 Start: 39680, Stop: 39528, Start Num: 47

Candidate Starts for Milcery_60:

(Start: 47 @39680 has 172 MA's), (Start: 49 @39674 has 5 MA's), (Start: 54 @39662 has 1 MA's), (82, 39572), (88, 39539),

Gene: MiniLon_55 Start: 40241, Stop: 40399, Start Num: 47

Candidate Starts for MiniLon_55:

(Start: 47 @40241 has 172 MA's), (Start: 54 @40259 has 1 MA's), (63, 40295), (88, 40388),

Gene: MiniMac_55 Start: 40239, Stop: 40397, Start Num: 47

Candidate Starts for MiniMac_55:

(Start: 47 @40239 has 172 MA's), (Start: 54 @40257 has 1 MA's), (63, 40293), (88, 40386),

Gene: Miryou_58 Start: 42766, Stop: 42933, Start Num: 47

Candidate Starts for Miryou_58:

(Start: 47 @42766 has 172 MA's), (50, 42778), (Start: 54 @42790 has 1 MA's), (60, 42814), (74, 42865), (86, 42907), (88, 42922), (89, 42925),

Gene: MissDaisy_60 Start: 39674, Stop: 39826, Start Num: 51

Candidate Starts for MissDaisy_60:

(Start: 51 @39674 has 3 MA's), (71, 39749), (82, 39782), (88, 39815),

Gene: Mitti_63 Start: 40929, Stop: 41093, Start Num: 47

Candidate Starts for Mitti_63:

(11, 40704), (33, 40881), (37, 40902), (Start: 47 @40929 has 172 MA's), (Start: 54 @40953 has 1 MA's), (71, 41016), (82, 41049), (88, 41082),

Gene: Moostard_52 Start: 40421, Stop: 40579, Start Num: 47

Candidate Starts for Moostard_52:

(Start: 47 @40421 has 172 MA's), (Start: 54 @40439 has 1 MA's), (63, 40475), (86, 40553), (88, 40568),

Gene: MrMagoo_138 Start: 65627, Stop: 65785, Start Num: 47

Candidate Starts for MrMagoo_138:

(Start: 47 @65627 has 172 MA's), (Start: 54 @65645 has 1 MA's), (60, 65669), (77, 65726), (84, 65750), (88, 65774),

Gene: MsGreen_52 Start: 40418, Stop: 40576, Start Num: 47

Candidate Starts for MsGreen_52:

(Start: 47 @40418 has 172 MA's), (Start: 54 @40436 has 1 MA's), (63, 40472), (86, 40550), (88, 40565),

Gene: Murucutumbu_61 Start: 42093, Stop: 42257, Start Num: 44

Candidate Starts for Murucutumbu_61:

(Start: 44 @42093 has 78 MA's), (Start: 49 @42099 has 5 MA's), (Start: 54 @42117 has 1 MA's), (88, 42246), (89, 42249),

Gene: Mynx_61 Start: 41435, Stop: 41599, Start Num: 44

Candidate Starts for Mynx_61:

(Start: 44 @41435 has 78 MA's), (Start: 49 @41441 has 5 MA's), (Start: 54 @41459 has 1 MA's), (75, 41534), (88, 41588), (89, 41591),

Gene: MyraDee_60 Start: 36959, Stop: 36816, Start Num: 47

Candidate Starts for MyraDee_60:

(28, 37049), (Start: 47 @36959 has 172 MA's), (Start: 49 @36953 has 5 MA's), (71, 36881), (77, 36875), (84, 36851), (88, 36827),

Gene: Myxus_66 Start: 40420, Stop: 40271, Start Num: 47

Candidate Starts for Myxus_66:

(Start: 47 @40420 has 172 MA's), (Start: 49 @40414 has 5 MA's), (Start: 54 @40402 has 1 MA's), (75, 40336), (84, 40306), (88, 40282),

Gene: Naca_62 Start: 40646, Stop: 40494, Start Num: 47

Candidate Starts for Naca_62:

(Start: 47 @40646 has 172 MA's), (Start: 49 @40640 has 5 MA's), (Start: 54 @40628 has 1 MA's), (81, 40541), (88, 40505),

Gene: NearlyHeadless_67 Start: 39788, Stop: 39615, Start Num: 47

Candidate Starts for NearlyHeadless_67:

(Start: 47 @39788 has 172 MA's), (Start: 54 @39770 has 1 MA's), (74, 39692), (88, 39626),

Gene: Neighly_56 Start: 39541, Stop: 39708, Start Num: 47

Candidate Starts for Neighly_56:

(23, 39439), (Start: 47 @39541 has 172 MA's), (50, 39553), (Start: 54 @39565 has 1 MA's), (60, 39589), (74, 39640), (86, 39682), (88, 39697), (89, 39700),

Gene: Nette_55 Start: 37980, Stop: 38144, Start Num: 97

Candidate Starts for Nette_55:

(10, 37338), (30, 37527), (57, 37650), (95, 37914), (96, 37953), (Start: 97 @37980 has 1 MA's), (98, 38007), (102, 38070), (103, 38094),

Gene: Nicholas_52 Start: 40419, Stop: 40580, Start Num: 47

Candidate Starts for Nicholas_52:

(Start: 47 @40419 has 172 MA's), (Start: 54 @40437 has 1 MA's), (63, 40473), (86, 40554), (88, 40569),

Gene: Odin_63 Start: 39209, Stop: 39057, Start Num: 47

Candidate Starts for Odin_63:

(26, 39308), (Start: 47 @39209 has 172 MA's), (81, 39116), (84, 39104), (88, 39080), (89, 39077),

Gene: OkiRoe_55 Start: 40437, Stop: 40604, Start Num: 47

Candidate Starts for OkiRoe_55:

(Start: 47 @40437 has 172 MA's), (50, 40449), (Start: 54 @40461 has 1 MA's), (60, 40485), (74, 40536), (86, 40578), (88, 40593), (89, 40596),

Gene: OmniCritical_62 Start: 40819, Stop: 40983, Start Num: 47

Candidate Starts for OmniCritical_62:

(11, 40579), (33, 40771), (37, 40792), (Start: 47 @40819 has 172 MA's), (Start: 54 @40843 has 1 MA's), (71, 40906), (82, 40939), (88, 40972),

Gene: Omnicron_58 Start: 40537, Stop: 40707, Start Num: 47

Candidate Starts for Omnicron_58:

(23, 40435), (Start: 47 @40537 has 172 MA's), (50, 40549), (52, 40555), (Start: 54 @40561 has 1 MA's), (60, 40585), (74, 40639), (86, 40681), (88, 40696),

Gene: Onglai_64 Start: 38624, Stop: 38475, Start Num: 47

Candidate Starts for Onglai_64:

(Start: 47 @38624 has 172 MA's), (Start: 49 @38618 has 5 MA's), (Start: 54 @38606 has 1 MA's), (75, 38540), (84, 38510), (88, 38486),

Gene: PackMan_65 Start: 40295, Stop: 40146, Start Num: 47

Candidate Starts for PackMan_65:

(Start: 47 @40295 has 172 MA's), (Start: 49 @40289 has 5 MA's), (Start: 54 @40277 has 1 MA's), (75, 40211), (84, 40181), (88, 40157),

Gene: Padfoot_60 Start: 41453, Stop: 41611, Start Num: 49

Candidate Starts for Padfoot_60:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: Padpat_62 Start: 41116, Stop: 41280, Start Num: 44

Candidate Starts for Padpat_62:

(Start: 44 @41116 has 78 MA's), (Start: 49 @41122 has 5 MA's), (Start: 54 @41140 has 1 MA's), (75, 41215), (88, 41269), (89, 41272),

Gene: Paola_54 Start: 40040, Stop: 40207, Start Num: 47

Candidate Starts for Paola_54:

(3, 39737), (4, 39746), (23, 39938), (Start: 47 @40040 has 172 MA's), (50, 40052), (Start: 54 @40064 has 1 MA's), (60, 40088), (74, 40139), (86, 40181), (88, 40196),

Gene: Patt_59 Start: 39398, Stop: 39550, Start Num: 51

Candidate Starts for Patt_59:

(Start: 51 @39398 has 3 MA's), (71, 39473), (82, 39506), (88, 39539),

Gene: Peel_60 Start: 41252, Stop: 41416, Start Num: 44

Candidate Starts for Peel_60:

(Start: 44 @41252 has 78 MA's), (Start: 49 @41258 has 5 MA's), (Start: 54 @41276 has 1 MA's), (75, 41351), (88, 41405), (89, 41408),

Gene: PegLeg_123 Start: 64446, Stop: 64595, Start Num: 47

Candidate Starts for PegLeg_123:

(Start: 47 @64446 has 172 MA's), (50, 64458), (57, 64479), (58, 64482), (60, 64488), (66, 64509), (88, 64584),

Gene: PetterN_67 Start: 40392, Stop: 40240, Start Num: 47

Candidate Starts for PetterN_67:

(Start: 47 @40392 has 172 MA's), (Start: 49 @40386 has 5 MA's), (Start: 54 @40374 has 1 MA's), (81, 40287), (88, 40251),

Gene: Ph8s_65 Start: 39383, Stop: 39240, Start Num: 47

Candidate Starts for Ph8s_65:

(Start: 47 @39383 has 172 MA's), (50, 39371), (77, 39299), (80, 39290), (89, 39248),

Gene: Phaeder_66 Start: 40295, Stop: 40146, Start Num: 47

Candidate Starts for Phaeder_66:

(Start: 47 @40295 has 172 MA's), (Start: 49 @40289 has 5 MA's), (Start: 54 @40277 has 1 MA's), (75, 40211), (84, 40181), (88, 40157),

Gene: Pharaoh_59 Start: 39999, Stop: 39856, Start Num: 47
Candidate Starts for Pharaoh_59:
(Start: 47 @39999 has 172 MA's), (78, 39912), (84, 39891), (88, 39867), (89, 39864),

Gene: Phillis_64 Start: 39236, Stop: 39063, Start Num: 47
Candidate Starts for Phillis_64:
(Start: 47 @39236 has 172 MA's), (Start: 54 @39218 has 1 MA's), (88, 39074), (90, 39068),

Gene: Phlorence_61 Start: 40026, Stop: 39874, Start Num: 47
Candidate Starts for Phlorence_61:
(Start: 47 @40026 has 172 MA's), (Start: 49 @40020 has 5 MA's), (Start: 54 @40008 has 1 MA's), (82, 39918), (88, 39885),

Gene: Phonnegut_67 Start: 40517, Stop: 40368, Start Num: 47
Candidate Starts for Phonnegut_67:
(Start: 47 @40517 has 172 MA's), (Start: 49 @40511 has 5 MA's), (Start: 54 @40499 has 1 MA's), (75, 40433), (84, 40403), (88, 40379),

Gene: Piatt_60 Start: 41447, Stop: 41611, Start Num: 44
Candidate Starts for Piatt_60:
(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: PickleBack_63 Start: 40203, Stop: 40051, Start Num: 47
Candidate Starts for PickleBack_63:
(Start: 47 @40203 has 172 MA's), (Start: 49 @40197 has 5 MA's), (Start: 54 @40185 has 1 MA's), (82, 40095), (88, 40062),

Gene: Pioneer_67 Start: 40517, Stop: 40368, Start Num: 47
Candidate Starts for Pioneer_67:
(Start: 47 @40517 has 172 MA's), (Start: 49 @40511 has 5 MA's), (Start: 54 @40499 has 1 MA's), (75, 40433), (84, 40403), (88, 40379),

Gene: Pokerus_59 Start: 41165, Stop: 41332, Start Num: 44
Candidate Starts for Pokerus_59:
(Start: 44 @41165 has 78 MA's), (75, 41267), (84, 41297), (88, 41321),

Gene: Prinashe11_59 Start: 39741, Stop: 39589, Start Num: 47
Candidate Starts for Prinashe11_59:
(Start: 47 @39741 has 172 MA's), (Start: 49 @39735 has 5 MA's), (Start: 54 @39723 has 1 MA's), (82, 39633), (88, 39600),

Gene: Prithvi_61 Start: 41322, Stop: 41486, Start Num: 44
Candidate Starts for Prithvi_61:
(Start: 44 @41322 has 78 MA's), (Start: 49 @41328 has 5 MA's), (Start: 54 @41346 has 1 MA's), (88, 41475), (89, 41478),

Gene: Priya_64 Start: 40007, Stop: 39858, Start Num: 47
Candidate Starts for Priya_64:
(Start: 47 @40007 has 172 MA's), (Start: 49 @40001 has 5 MA's), (Start: 54 @39989 has 1 MA's), (75, 39923), (84, 39893), (88, 39869),

Gene: Psycho_54 Start: 38667, Stop: 38834, Start Num: 47

Candidate Starts for Psycho_54:

(23, 38565), (Start: 47 @38667 has 172 MA's), (50, 38679), (Start: 54 @38691 has 1 MA's), (60, 38715), (74, 38766), (86, 38808), (88, 38823), (89, 38826),

Gene: Qobbit_64 Start: 39969, Stop: 39820, Start Num: 47

Candidate Starts for Qobbit_64:

(Start: 47 @39969 has 172 MA's), (Start: 49 @39963 has 5 MA's), (Start: 54 @39951 has 1 MA's), (75, 39885), (84, 39855), (88, 39831),

Gene: QuincyRose_59 Start: 41511, Stop: 41675, Start Num: 44

Candidate Starts for QuincyRose_59:

(Start: 44 @41511 has 78 MA's), (Start: 49 @41517 has 5 MA's), (Start: 54 @41535 has 1 MA's), (75, 41610), (84, 41640), (88, 41664), (89, 41667),

Gene: Quokka_63 Start: 39432, Stop: 39280, Start Num: 47

Candidate Starts for Quokka_63:

(34, 39489), (Start: 47 @39432 has 172 MA's), (81, 39339), (84, 39327), (88, 39303),

Gene: Rahalelujah_65 Start: 39922, Stop: 39773, Start Num: 47

Candidate Starts for Rahalelujah_65:

(Start: 43 @39931 has 2 MA's), (Start: 47 @39922 has 172 MA's), (74, 39841), (75, 39838), (88, 39784),

Gene: Ramen_61 Start: 41127, Stop: 41291, Start Num: 44

Candidate Starts for Ramen_61:

(39, 41112), (Start: 44 @41127 has 78 MA's), (Start: 49 @41133 has 5 MA's), (Start: 54 @41151 has 1 MA's), (88, 41280), (89, 41283),

Gene: Rando14_56 Start: 38237, Stop: 38407, Start Num: 47

Candidate Starts for Rando14_56:

(23, 38135), (Start: 47 @38237 has 172 MA's), (50, 38249), (52, 38255), (Start: 54 @38261 has 1 MA's), (60, 38285), (74, 38339), (86, 38381), (88, 38396), (89, 38399),

Gene: Rapunzel97_61 Start: 41114, Stop: 41278, Start Num: 44

Candidate Starts for Rapunzel97_61:

(Start: 44 @41114 has 78 MA's), (Start: 49 @41120 has 5 MA's), (Start: 54 @41138 has 1 MA's), (75, 41213), (84, 41243), (86, 41252), (88, 41267),

Gene: Red305_53 Start: 40418, Stop: 40576, Start Num: 47

Candidate Starts for Red305_53:

(Start: 47 @40418 has 172 MA's), (Start: 54 @40436 has 1 MA's), (63, 40472), (86, 40550), (88, 40565),

Gene: Refuge_61 Start: 41137, Stop: 40997, Start Num: 47

Candidate Starts for Refuge_61:

(38, 41164), (Start: 47 @41137 has 172 MA's), (Start: 49 @41131 has 5 MA's), (Start: 54 @41119 has 1 MA's), (84, 41032), (88, 41008),

Gene: Reindeer_120 Start: 64620, Stop: 64802, Start Num: 36

Candidate Starts for Reindeer_120:

(Start: 36 @64620 has 1 MA's), (Start: 47 @64659 has 172 MA's), (Start: 54 @64677 has 1 MA's), (55, 64680), (57, 64692), (69, 64731), (82, 64758), (84, 64767), (88, 64791),

Gene: Reptar3000_60 Start: 39386, Stop: 39538, Start Num: 51
Candidate Starts for Reptar3000_60:
(Start: 51 @39386 has 3 MA's), (71, 39461), (82, 39494), (88, 39527),

Gene: Rey_138 Start: 65174, Stop: 65332, Start Num: 47
Candidate Starts for Rey_138:
(Start: 47 @65174 has 172 MA's), (Start: 54 @65192 has 1 MA's), (60, 65216), (77, 65273), (78, 65276), (84, 65297), (88, 65321),

Gene: Roary_68 Start: 40007, Stop: 39834, Start Num: 47
Candidate Starts for Roary_68:
(Start: 47 @40007 has 172 MA's), (Start: 54 @39989 has 1 MA's), (88, 39845),

Gene: RoseMarie_128 Start: 67157, Stop: 67306, Start Num: 47
Candidate Starts for RoseMarie_128:
(42, 67148), (Start: 47 @67157 has 172 MA's), (50, 67169), (55, 67178), (57, 67190), (58, 67193), (60, 67199), (66, 67220), (78, 67250), (82, 67262), (84, 67271), (88, 67295),

Gene: Rosmarinus_60 Start: 41238, Stop: 41402, Start Num: 44
Candidate Starts for Rosmarinus_60:
(Start: 44 @41238 has 78 MA's), (Start: 49 @41244 has 5 MA's), (Start: 54 @41262 has 1 MA's), (75, 41337), (88, 41391), (89, 41394),

Gene: Ruthiejr_64 Start: 40800, Stop: 40964, Start Num: 47
Candidate Starts for Ruthiejr_64:
(11, 40575), (33, 40752), (37, 40773), (Start: 47 @40800 has 172 MA's), (Start: 54 @40824 has 1 MA's), (71, 40887), (82, 40920), (88, 40953),

Gene: RyeScarlet_68 Start: 40492, Stop: 40343, Start Num: 47
Candidate Starts for RyeScarlet_68:
(Start: 47 @40492 has 172 MA's), (Start: 49 @40486 has 5 MA's), (Start: 54 @40474 has 1 MA's), (75, 40408), (84, 40378), (88, 40354),

Gene: Sachima_62 Start: 40321, Stop: 40172, Start Num: 47
Candidate Starts for Sachima_62:
(Start: 47 @40321 has 172 MA's), (Start: 49 @40315 has 5 MA's), (Start: 54 @40303 has 1 MA's), (75, 40237), (84, 40207), (88, 40183),

Gene: Saintus_62 Start: 36672, Stop: 36499, Start Num: 47
Candidate Starts for Saintus_62:
(Start: 47 @36672 has 172 MA's), (Start: 54 @36654 has 1 MA's), (88, 36510),

Gene: SamScheppers_61 Start: 41229, Stop: 41393, Start Num: 47
Candidate Starts for SamScheppers_61:
(11, 41004), (33, 41181), (37, 41202), (Start: 47 @41229 has 172 MA's), (Start: 54 @41253 has 1 MA's), (71, 41316), (82, 41349), (88, 41382),

Gene: Samty_52 Start: 40420, Stop: 40581, Start Num: 47
Candidate Starts for Samty_52:
(Start: 47 @40420 has 172 MA's), (Start: 54 @40438 has 1 MA's), (63, 40474), (86, 40555), (88, 40570),

Gene: SamuelLPlaqson_61 Start: 42019, Stop: 42177, Start Num: 44

Candidate Starts for SamuelLPlaqson_61:

(Start: 44 @42019 has 78 MA's), (Start: 49 @42025 has 5 MA's), (Start: 54 @42043 has 1 MA's), (55, 42046), (84, 42142), (88, 42166), (89, 42169),

Gene: Scherzo_66 Start: 40652, Stop: 40503, Start Num: 47

Candidate Starts for Scherzo_66:

(Start: 47 @40652 has 172 MA's), (Start: 49 @40646 has 5 MA's), (Start: 54 @40634 has 1 MA's), (71, 40574), (75, 40568), (88, 40514),

Gene: Scorpia_64 Start: 40451, Stop: 40299, Start Num: 47

Candidate Starts for Scorpia_64:

(Start: 47 @40451 has 172 MA's), (Start: 49 @40445 has 5 MA's), (Start: 54 @40433 has 1 MA's), (81, 40346), (88, 40310),

Gene: Serenity_64 Start: 39562, Stop: 39410, Start Num: 47

Candidate Starts for Serenity_64:

(14, 39784), (Start: 47 @39562 has 172 MA's), (77, 39481), (81, 39469), (84, 39457), (88, 39433),

Gene: SheaKeira_62 Start: 39772, Stop: 39614, Start Num: 47

Candidate Starts for SheaKeira_62:

(Start: 43 @39781 has 2 MA's), (Start: 47 @39772 has 172 MA's), (71, 39694), (79, 39670), (84, 39649), (87, 39634), (88, 39625),

Gene: ShiaSurprise_61 Start: 41447, Stop: 41611, Start Num: 44

Candidate Starts for ShiaSurprise_61:

(Start: 44 @41447 has 78 MA's), (Start: 49 @41453 has 5 MA's), (Start: 54 @41471 has 1 MA's), (75, 41546), (88, 41600), (89, 41603),

Gene: Skinny_125 Start: 65562, Stop: 65711, Start Num: 47

Candidate Starts for Skinny_125:

(Start: 47 @65562 has 172 MA's), (50, 65574), (57, 65595), (58, 65598), (60, 65604), (66, 65625), (88, 65700),

Gene: Slarp_63 Start: 40757, Stop: 40921, Start Num: 47

Candidate Starts for Slarp_63:

(11, 40532), (33, 40709), (37, 40730), (Start: 47 @40757 has 172 MA's), (Start: 54 @40781 has 1 MA's), (71, 40844), (82, 40877), (88, 40910),

Gene: SlimJimmy_119 Start: 64271, Stop: 64420, Start Num: 47

Candidate Starts for SlimJimmy_119:

(Start: 47 @64271 has 172 MA's), (50, 64283), (57, 64304), (58, 64307), (60, 64313), (66, 64334), (88, 64409),

Gene: Slimphazie_60 Start: 41114, Stop: 41278, Start Num: 44

Candidate Starts for Slimphazie_60:

(Start: 44 @41114 has 78 MA's), (Start: 49 @41120 has 5 MA's), (Start: 54 @41138 has 1 MA's), (75, 41213), (84, 41243), (86, 41252), (88, 41267),

Gene: Smeadley_67 Start: 39868, Stop: 39695, Start Num: 47

Candidate Starts for Smeadley_67:

(Start: 47 @39868 has 172 MA's), (Start: 54 @39850 has 1 MA's), (88, 39706),

Gene: Snenia_52 Start: 40419, Stop: 40577, Start Num: 47

Candidate Starts for Snenia_52:

(Start: 47 @40419 has 172 MA's), (Start: 54 @40437 has 1 MA's), (63, 40473), (86, 40551), (88, 40566),

Gene: SoSeph_55 Start: 40412, Stop: 40579, Start Num: 47

Candidate Starts for SoSeph_55:

(3, 40109), (4, 40118), (23, 40310), (Start: 47 @40412 has 172 MA's), (50, 40424), (Start: 54 @40436 has 1 MA's), (60, 40460), (74, 40511), (86, 40553), (88, 40568),

Gene: SororFago_64 Start: 40881, Stop: 40684, Start Num: 47

Candidate Starts for SororFago_64:

(17, 41076), (Start: 47 @40881 has 172 MA's), (72, 40779), (76, 40767), (82, 40728), (84, 40719), (88, 40695),

Gene: Spock_60 Start: 41251, Stop: 41415, Start Num: 44

Candidate Starts for Spock_60:

(Start: 44 @41251 has 78 MA's), (Start: 49 @41257 has 5 MA's), (Start: 54 @41275 has 1 MA's), (75, 41350), (88, 41404), (89, 41407),

Gene: Spouty_64 Start: 40006, Stop: 39857, Start Num: 47

Candidate Starts for Spouty_64:

(Start: 47 @40006 has 172 MA's), (Start: 49 @40000 has 5 MA's), (Start: 54 @39988 has 1 MA's), (75, 39922), (84, 39892), (88, 39868),

Gene: Steamy_60 Start: 39733, Stop: 39590, Start Num: 47

Candidate Starts for Steamy_60:

(2, 40096), (Start: 47 @39733 has 172 MA's), (Start: 54 @39715 has 1 MA's), (84, 39625), (88, 39601), (89, 39598),

Gene: Stephig9_66 Start: 39802, Stop: 39629, Start Num: 47

Candidate Starts for Stephig9_66:

(Start: 47 @39802 has 172 MA's), (Start: 54 @39784 has 1 MA's), (88, 39640),

Gene: Stinson_61 Start: 41616, Stop: 41780, Start Num: 44

Candidate Starts for Stinson_61:

(Start: 44 @41616 has 78 MA's), (Start: 49 @41622 has 5 MA's), (Start: 54 @41640 has 1 MA's), (73, 41709), (75, 41715), (88, 41769), (89, 41772),

Gene: Sulley_60 Start: 41302, Stop: 41466, Start Num: 44

Candidate Starts for Sulley_60:

(Start: 44 @41302 has 78 MA's), (Start: 49 @41308 has 5 MA's), (Start: 54 @41326 has 1 MA's), (73, 41395), (75, 41401), (84, 41431), (88, 41455), (89, 41458),

Gene: Sunhee_66 Start: 39448, Stop: 39299, Start Num: 44

Candidate Starts for Sunhee_66:

(20, 39601), (Start: 44 @39448 has 78 MA's), (Start: 49 @39442 has 5 MA's), (71, 39379), (78, 39355), (88, 39310),

Gene: Superchunk_63 Start: 38825, Stop: 38673, Start Num: 47

Candidate Starts for Superchunk_63:

(Start: 47 @38825 has 172 MA's), (81, 38732), (84, 38720), (88, 38696), (89, 38693),

Gene: SwirlSquare_69 Start: 39747, Stop: 39595, Start Num: 47

Candidate Starts for SwirlSquare_69:

(Start: 47 @39747 has 172 MA's), (81, 39654), (84, 39642), (87, 39627), (88, 39618), (89, 39615),

Gene: Swirley_62 Start: 40071, Stop: 39919, Start Num: 47

Candidate Starts for Swirley_62:

(Start: 47 @40071 has 172 MA's), (Start: 49 @40065 has 5 MA's), (Start: 54 @40053 has 1 MA's), (82, 39963), (88, 39930),

Gene: SydNat_62 Start: 40613, Stop: 40461, Start Num: 47

Candidate Starts for SydNat_62:

(Start: 47 @40613 has 172 MA's), (Start: 54 @40595 has 1 MA's), (82, 40505), (88, 40472),

Gene: Tachez_60 Start: 41095, Stop: 41259, Start Num: 44

Candidate Starts for Tachez_60:

(Start: 44 @41095 has 78 MA's), (Start: 49 @41101 has 5 MA's), (Start: 54 @41119 has 1 MA's), (75, 41194), (88, 41248), (89, 41251),

Gene: TaiwanKao_62 Start: 41384, Stop: 41548, Start Num: 44

Candidate Starts for TaiwanKao_62:

(Start: 44 @41384 has 78 MA's), (Start: 49 @41390 has 5 MA's), (Start: 54 @41408 has 1 MA's), (75, 41483), (88, 41537), (89, 41540),

Gene: Taquito_62 Start: 40992, Stop: 41156, Start Num: 47

Candidate Starts for Taquito_62:

(11, 40767), (33, 40944), (37, 40965), (Start: 47 @40992 has 172 MA's), (Start: 54 @41016 has 1 MA's), (71, 41079), (82, 41112), (88, 41145),

Gene: Tarynearal_59 Start: 39666, Stop: 39514, Start Num: 47

Candidate Starts for Tarynearal_59:

(Start: 47 @39666 has 172 MA's), (Start: 49 @39660 has 5 MA's), (Start: 54 @39648 has 1 MA's), (82, 39558), (88, 39525),

Gene: Theia_59 Start: 40266, Stop: 40114, Start Num: 47

Candidate Starts for Theia_59:

(Start: 47 @40266 has 172 MA's), (Start: 49 @40260 has 5 MA's), (Start: 54 @40248 has 1 MA's), (82, 40158), (88, 40125),

Gene: Thyatira_57 Start: 42370, Stop: 42537, Start Num: 47

Candidate Starts for Thyatira_57:

(Start: 47 @42370 has 172 MA's), (50, 42382), (Start: 54 @42394 has 1 MA's), (60, 42418), (74, 42469), (86, 42511), (88, 42526),

Gene: Tiger_62 Start: 39947, Stop: 39795, Start Num: 47

Candidate Starts for Tiger_62:

(Start: 47 @39947 has 172 MA's), (Start: 49 @39941 has 5 MA's), (Start: 54 @39929 has 1 MA's), (82, 39839), (88, 39806),

Gene: TingHuaYa_62 Start: 40455, Stop: 40625, Start Num: 47

Candidate Starts for TingHuaYa_62:

(Start: 44 @40452 has 78 MA's), (Start: 47 @40455 has 172 MA's), (50, 40467), (71, 40545), (74, 40557), (88, 40614), (89, 40617),

Gene: TiniBug_61 Start: 42015, Stop: 42173, Start Num: 44

Candidate Starts for TiniBug_61:

(Start: 44 @42015 has 78 MA's), (Start: 49 @42021 has 5 MA's), (Start: 54 @42039 has 1 MA's), (55, 42042), (84, 42138), (88, 42162), (89, 42165),

Gene: TopsytheTRex_61 Start: 39632, Stop: 39480, Start Num: 47

Candidate Starts for TopsytheTRex_61:

(14, 39854), (Start: 47 @39632 has 172 MA's), (77, 39551), (84, 39527), (88, 39503),

Gene: Tiri_61 Start: 41410, Stop: 41577, Start Num: 44

Candidate Starts for Tiri_61:

(8, 41149), (Start: 44 @41410 has 78 MA's), (Start: 49 @41416 has 5 MA's), (75, 41512), (84, 41542), (86, 41551), (88, 41566), (89, 41569),

Gene: Toaka_66 Start: 40403, Stop: 40245, Start Num: 43

Candidate Starts for Toaka_66:

(Start: 43 @40403 has 2 MA's), (Start: 47 @40394 has 172 MA's), (75, 40310), (87, 40265), (88, 40256),

Gene: Topper_60 Start: 41250, Stop: 41414, Start Num: 44

Candidate Starts for Topper_60:

(Start: 44 @41250 has 78 MA's), (Start: 49 @41256 has 5 MA's), (Start: 54 @41274 has 1 MA's), (75, 41349), (88, 41403), (89, 41406),

Gene: TreyKay_61 Start: 41322, Stop: 41486, Start Num: 44

Candidate Starts for TreyKay_61:

(Start: 44 @41322 has 78 MA's), (Start: 49 @41328 has 5 MA's), (Start: 54 @41346 has 1 MA's), (88, 41475), (89, 41478),

Gene: TriFive_53 Start: 40418, Stop: 40576, Start Num: 47

Candidate Starts for TriFive_53:

(Start: 47 @40418 has 172 MA's), (Start: 54 @40436 has 1 MA's), (63, 40472), (86, 40550), (88, 40565),

Gene: TruffulaTree_60 Start: 41110, Stop: 41274, Start Num: 44

Candidate Starts for TruffulaTree_60:

(Start: 44 @41110 has 78 MA's), (Start: 49 @41116 has 5 MA's), (Start: 54 @41134 has 1 MA's), (75, 41209), (84, 41239), (86, 41248), (88, 41263),

Gene: Tubs_66 Start: 40295, Stop: 40146, Start Num: 47

Candidate Starts for Tubs_66:

(Start: 47 @40295 has 172 MA's), (Start: 49 @40289 has 5 MA's), (Start: 54 @40277 has 1 MA's), (75, 40211), (84, 40181), (88, 40157),

Gene: Twigg_58 Start: 39719, Stop: 39567, Start Num: 47

Candidate Starts for Twigg_58:

(Start: 47 @39719 has 172 MA's), (Start: 49 @39713 has 5 MA's), (Start: 54 @39701 has 1 MA's), (82, 39611), (88, 39578),

Gene: Twitch_60 Start: 41252, Stop: 41416, Start Num: 44

Candidate Starts for Twitch_60:

(Start: 44 @41252 has 78 MA's), (Start: 49 @41258 has 5 MA's), (Start: 54 @41276 has 1 MA's), (75, 41351), (88, 41405), (89, 41408),

Gene: TyDawg_114 Start: 63287, Stop: 63436, Start Num: 47
Candidate Starts for TyDawg_114:
(Start: 47 @63287 has 172 MA's), (50, 63299), (57, 63320), (58, 63323), (60, 63329), (66, 63350), (88, 63425),

Gene: Ugenie5_62 Start: 40651, Stop: 40502, Start Num: 47
Candidate Starts for Ugenie5_62:
(Start: 47 @40651 has 172 MA's), (Start: 49 @40645 has 5 MA's), (Start: 54 @40633 has 1 MA's), (71, 40573), (75, 40567), (88, 40513),

Gene: UnionJack_63 Start: 39933, Stop: 39781, Start Num: 47
Candidate Starts for UnionJack_63:
(Start: 47 @39933 has 172 MA's), (Start: 49 @39927 has 5 MA's), (Start: 54 @39915 has 1 MA's), (81, 39828), (88, 39792),

Gene: Urkel_61 Start: 42019, Stop: 42177, Start Num: 44
Candidate Starts for Urkel_61:
(Start: 44 @42019 has 78 MA's), (Start: 49 @42025 has 5 MA's), (Start: 54 @42043 has 1 MA's), (55, 42046), (84, 42142), (88, 42166), (89, 42169),

Gene: Vanisoa_65 Start: 41342, Stop: 41196, Start Num: 45
Candidate Starts for Vanisoa_65:
(Start: 43 @41348 has 2 MA's), (Start: 45 @41342 has 2 MA's), (88, 41207),

Gene: Veliki_61 Start: 41096, Stop: 41254, Start Num: 44
Candidate Starts for Veliki_61:
(Start: 44 @41096 has 78 MA's), (Start: 49 @41102 has 5 MA's), (Start: 54 @41120 has 1 MA's), (75, 41189), (88, 41243), (89, 41246),

Gene: ViviJ_52 Start: 38125, Stop: 38292, Start Num: 47
Candidate Starts for ViviJ_52:
(23, 38023), (Start: 47 @38125 has 172 MA's), (50, 38137), (Start: 54 @38149 has 1 MA's), (60, 38173), (74, 38224), (88, 38281), (89, 38284),

Gene: Waterfoul_56 Start: 40474, Stop: 40641, Start Num: 47
Candidate Starts for Waterfoul_56:
(3, 40171), (4, 40180), (23, 40372), (Start: 47 @40474 has 172 MA's), (50, 40486), (Start: 54 @40498 has 1 MA's), (60, 40522), (74, 40573), (86, 40615), (88, 40630),

Gene: Whirlwind_53 Start: 40234, Stop: 40392, Start Num: 47
Candidate Starts for Whirlwind_53:
(Start: 47 @40234 has 172 MA's), (88, 40381),

Gene: Wintermute_63 Start: 40987, Stop: 41151, Start Num: 47
Candidate Starts for Wintermute_63:
(11, 40762), (33, 40939), (37, 40960), (Start: 47 @40987 has 172 MA's), (Start: 54 @41011 has 1 MA's), (71, 41074), (82, 41107), (88, 41140),

Gene: Y10_61 Start: 40915, Stop: 41079, Start Num: 47
Candidate Starts for Y10_61:
(11, 40690), (33, 40867), (37, 40888), (Start: 47 @40915 has 172 MA's), (Start: 54 @40939 has 1 MA's), (71, 41002), (82, 41035), (88, 41068),

Gene: Y2_61 Start: 40915, Stop: 41079, Start Num: 47

Candidate Starts for Y2_61:

(11, 40690), (33, 40867), (37, 40888), (Start: 47 @40915 has 172 MA's), (Start: 54 @40939 has 1 MA's), (71, 41002), (82, 41035), (88, 41068),

Gene: Yecey3_67 Start: 40309, Stop: 40154, Start Num: 94

Candidate Starts for Yecey3_67:

(Start: 94 @40309 has 1 MA's), (100, 40174), (101, 40165),

Gene: YoureAdopted_59 Start: 41239, Stop: 41403, Start Num: 44

Candidate Starts for YoureAdopted_59:

(Start: 44 @41239 has 78 MA's), (Start: 49 @41245 has 5 MA's), (84, 41368), (88, 41392),

Gene: Yunkel11_63 Start: 40947, Stop: 41123, Start Num: 47

Candidate Starts for Yunkel11_63:

(Start: 47 @40947 has 172 MA's), (50, 40959), (55, 40974), (71, 41043), (74, 41055), (88, 41112), (89, 41115),

Gene: Zabiza_55 Start: 37430, Stop: 37594, Start Num: 44

Candidate Starts for Zabiza_55:

(39, 37415), (Start: 44 @37430 has 78 MA's), (Start: 49 @37436 has 5 MA's), (Start: 54 @37454 has 1 MA's), (88, 37583), (89, 37586),

Gene: Zavala_62 Start: 41395, Stop: 41559, Start Num: 44

Candidate Starts for Zavala_62:

(Start: 44 @41395 has 78 MA's), (Start: 49 @41401 has 5 MA's), (Start: 54 @41419 has 1 MA's), (75, 41494), (88, 41548), (89, 41551),

Gene: Zimmer_61 Start: 40965, Stop: 40825, Start Num: 47

Candidate Starts for Zimmer_61:

(5, 41262), (6, 41250), (15, 41172), (Start: 47 @40965 has 172 MA's), (Start: 49 @40959 has 5 MA's), (Start: 54 @40947 has 1 MA's), (84, 40860), (87, 40845), (88, 40836),

Gene: Zolita_61 Start: 40617, Stop: 40465, Start Num: 47

Candidate Starts for Zolita_61:

(Start: 47 @40617 has 172 MA's), (Start: 54 @40599 has 1 MA's), (82, 40509), (88, 40476),