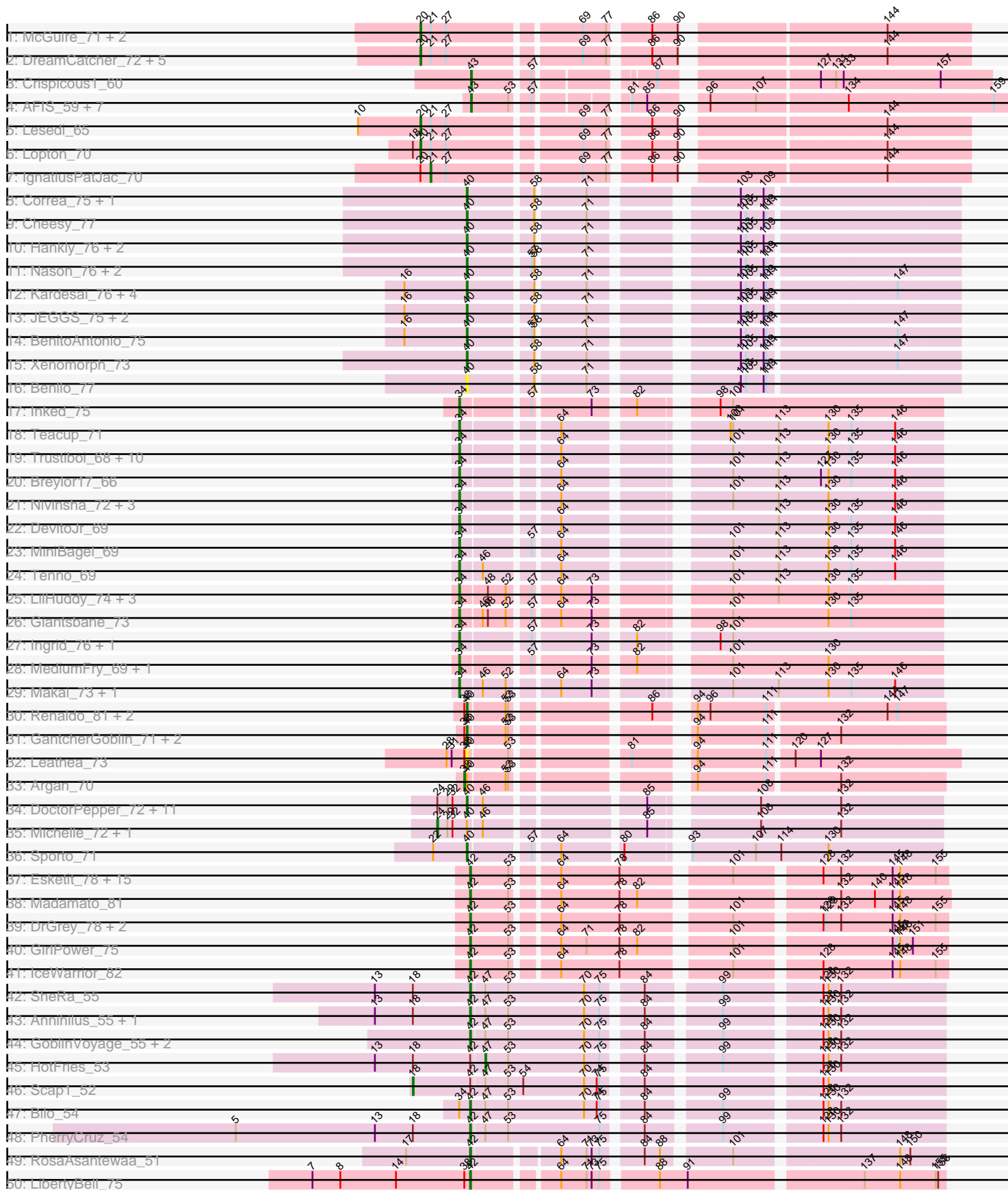
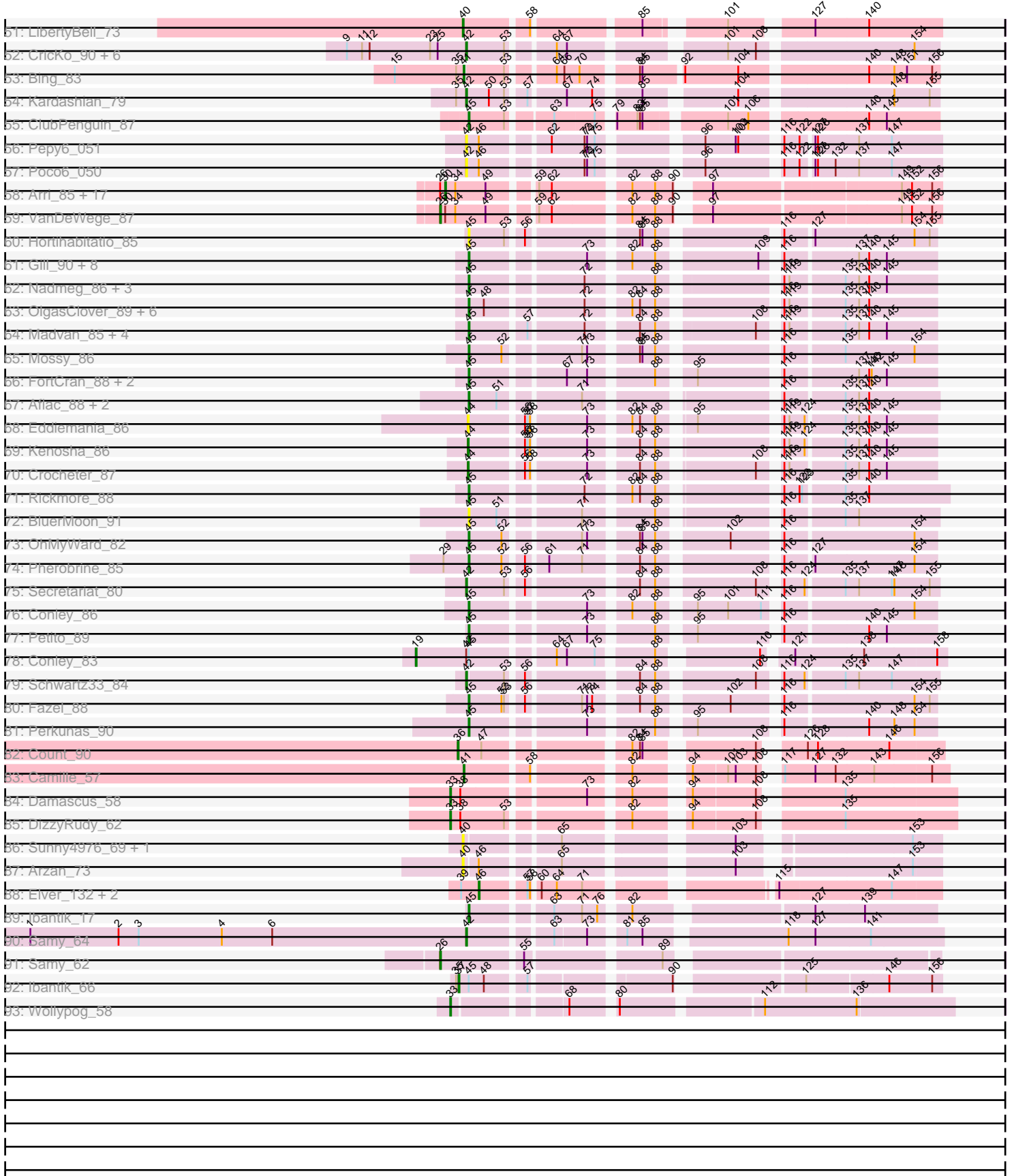


Pham 171187



Pham 171187



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 171187 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171187 has 224 members, 25 are drafts.

Phages represented in each track:

- Track 1 : McGuire_71, Ichabod_74, Squee_73
- Track 2 : DreamCatcher_72, GrecoEtereo_71, AFIS_66, Snazzy_68, SarFire_70, Thor_70
- Track 3 : Crispicious1_60
- Track 4 : AFIS_59, Bruns_64, NEHalo_60, SpikeBT_61, SwissCheese_66, Moose_64, Forsytheast_64, GageAP_64
- Track 5 : Lesedi_65
- Track 6 : Lopton_70
- Track 7 : IgnatiusPatJac_70
- Track 8 : Correa_75, Tribby_80
- Track 9 : Cheesy_77
- Track 10 : Hankly_76, Dynamite_76, NapoleonB_77
- Track 11 : Nason_76, Elsa_76, Arcadia_76
- Track 12 : Kardesai_76, KeaneyLin_72, Mooshroom_77, Circum_78, GoCrazy_73
- Track 13 : JEGGS_75, Heisenberger_75, Mudcat_72
- Track 14 : BenitoAntonio_75
- Track 15 : Xenomorph_73
- Track 16 : Benllo_77
- Track 17 : Inked_75
- Track 18 : Teacup_71
- Track 19 : Trustiboi_68, Gordon_67, Tatanka_63, Darby_67, Brunswick_71, ElephantMan_70, CastorTray_73, Niktson_70, ScienceWizSam_71, Issa_68, CapnMurica_67
- Track 20 : Breylor17_66
- Track 21 : Nivinsha_72, AreFloNak_73, Synepsis_66, Nightmare_70
- Track 22 : DevitoJr_69
- Track 23 : MiniBagel_69
- Track 24 : Tenno_69
- Track 25 : LilHuddy_74, Shepard_74, Phaby_74, Tokki_79
- Track 26 : Giantsbane_73
- Track 27 : Ingrid_76, Loretta_72
- Track 28 : MediumFry_69, Caterpillar_69
- Track 29 : Makai_73, Truckee_71
- Track 30 : Renaldo_81, BarbieDoll_77, Lewando_77
- Track 31 : GantcherGoblin_71, Uzumaki_70, Zeina_76
- Track 32 : Leathea_73
- Track 33 : Argan_70

- Track 34 : DoctorPepper_72, Raunak_73, MrAaronian_72, Djungelskog_71, Linda_72, Sloopyjoe_72, StarLord_72, ProfFrink_73, Salk_72, Egad_72, BronxBay_72, Shiba_71
- Track 35 : Michelle_72, Stayer_72
- Track 36 : Sporto_71
- Track 37 : Esketit_78, TaidaOne_82, Spectropatronm_81, Rima_83, TonyStarch_81, OlympicHelado_84, Meibysrarus_80, FidgetOrca_84, Soshi_81, Indigenous_84, Jaylociraptor_82, Hoshi_83, Maya_82, Namu_84, CherryBlossom_82, TieDye_78
- Track 38 : Madamato_81
- Track 39 : DrGrey_78, FrodoSwaggins_80, Popy_80
- Track 40 : GirlPower_75
- Track 41 : IceWarrior_82
- Track 42 : SheRa_55
- Track 43 : Annihilus_55, Moozy_54
- Track 44 : GoblinVoyage_55, RavenPuff_55, Doxi13_56
- Track 45 : HotFries_53
- Track 46 : Scap1_52
- Track 47 : Bilo_54
- Track 48 : PherryCruz_54
- Track 49 : RosaAsantewaa_51
- Track 50 : LibertyBell_75
- Track 51 : LibertyBell_73
- Track 52 : CricKo_90, FromIndy_88, Regigigas_90, SendItCS_82, Miek_84, Thiqqums_90, Rainydai_87
- Track 53 : Bing_83
- Track 54 : Kardashian_79
- Track 55 : ClubPenguin_87
- Track 56 : Pepy6_051
- Track 57 : POCO6_050
- Track 58 : Arri_85, PullumCavea_83, SmokingBunny_86, Twister6_84, Wizard_80, Fireball_88, TillyBobJoe_83, PinkCoffee_86, Evamon_85, KimmyK_83, Salvador_85, RogerDodger_88, Togo_85, Valary_86, Portcullis_85, Savbucketdawg_80, Shinji_84, Phlop_82
- Track 59 : VanDeWege_87
- Track 60 : Hortihabitatio_85
- Track 61 : Gill_90, Magel_91, Roney_88, Capybara_87, Kerry_89, Tanis_89, Odesza_88, Captrips_87, Gravy_89
- Track 62 : Nadmeg_86, Vardy_86, Runhaar_85, Burley_86
- Track 63 : OlgasClover_89, Figliar_86, Duffington_88, Nithya_87, Chikenjars_88, EndAve_89, AlainaMarie_88
- Track 64 : Madvan_85, Untouchable_89, Zeph_90, Hydrus_87, Phepper_88
- Track 65 : Mossy_86
- Track 66 : FortCran_88, Avazak_89, Artorias_88
- Track 67 : Aflac_88, Jodelie19_87, TenaciousP_94
- Track 68 : Eddiemania_86
- Track 69 : Kenosha_86
- Track 70 : Crocheter_87
- Track 71 : Rickmore_88
- Track 72 : BluerMoon_91
- Track 73 : OhMyWard_82
- Track 74 : Pherobrine_85
- Track 75 : Secretariat_80

- Track 76 : Conley_86
- Track 77 : Petite_89
- Track 78 : Conley_83
- Track 79 : Schwartz33_84
- Track 80 : Fazel_88
- Track 81 : Perkunas_90
- Track 82 : Count_90
- Track 83 : Camille_57
- Track 84 : Damascus_58
- Track 85 : DizzyRudy_62
- Track 86 : Sunny4976_69, Jazzy4900_70
- Track 87 : Arzan_73
- Track 88 : Elver_132, Paella_134, Qui_134
- Track 89 : Ibantik_17
- Track 90 : Samy_64
- Track 91 : Samy_62
- Track 92 : Ibantik_66
- Track 93 : Wollypog_58

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

The start number called the most often in the published annotations is 42, it was called in 41 of the 199 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annihilus_55, Bilo_54, CherryBlossom_82, CricKo_90, Doxi13_56, DrGrey_78, Esketit_78, FidgetOrca_84, FrodoSwaggins_80, FromIndy_88, GirlPower_75, GoblinVoyage_55, Hoshi_83, IceWarrior_82, Indigenous_84, Jaylociraptor_82, Kardashian_79, LibertyBell_75, Madamato_81, Maya_82, Meibysrarus_80, Miek_84, Moozy_54, Namu_84, OlympicHelado_84, Pepy6_051, PherryCruz_54, Poco6_050, Popy_80, Rainydai_87, RavenPuff_55, Regigigas_90, Rima_83, RosaAsantewaa_51, Samy_64, Schwartz33_84, Secretariat_80, SendItCS_82, SheRa_55, Soshi_81, Spectropatronm_81, TaidaOne_82, Thiqqums_90, TieDye_78, TonyStarch_81,

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

- Conley_83, HotFries_53, Scap1_52,

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

- AFIS_59, AFIS_66, Aflac_88, AlainaMarie_88, Arcadia_76, AreFloNak_73, Argan_70, Arri_85, Artorias_88, Arzan_73, Avazak_89, BarbieDoll_77, BenitoAntonio_75, Benllo_77, Bing_83, BluerMoon_91, Breylor17_66, BronxBay_72, Bruns_64, Brunswick_71, Burley_86, Camille_57, CapnMurica_67, Captrips_87, Copybara_87, CastorTray_73, Caterpillar_69, Cheesy_77, Chickenjars_88, Circum_78, ClubPenguin_87, Conley_86, Correa_75, Count_90, Crispicious1_60, Crocheter_87, Damascus_58, Darby_67, DevitoJr_69, DizzyRudy_62, Djungelskog_71, DoctorPepper_72, DreamCatcher_72, Duffington_88, Dynamite_76, Eddiemania_86, Egad_72, ElephantMan_70, Elsa_76, Elver_132, EndAve_89, Evamon_85, Fazel_88, Figliar_86, Fireball_88, Forsytheast_64, FortCran_88, GageAP_64, GantcherGoblin_71, Giantsbane_73, Gill_90, GoCrazy_73, Gordon_67, Gravy_89, GrecoEtereo_71, Hankly_76, Heisenberger_75, Hortihabitatio_85,

Hydrus_87, Ibantik_17, Ibantik_66, Ichabod_74, IgnatiusPatJac_70, Ingrid_76, Inked_75, Issa_68, JEGGS_75, Jazzy4900_70, Jodelie19_87, Kardesai_76, KeaneyLin_72, Kenosha_86, Kerry_89, KimmyK_83, Leathea_73, Lesedi_65, Lewando_77, LibertyBell_73, LilHuddy_74, Linda_72, Lopton_70, Loretta_72, Madvan_85, Magel_91, Makai_73, McGuire_71, MediumFry_69, Michelle_72, MiniBagel_69, Moose_64, Mooshroom_77, Mossy_86, MrAaronian_72, Mudcat_72, NEHalo_60, Nadmeg_86, NapoleonB_77, Nason_76, Nightmare_70, Niktson_70, Nithya_87, Nivinsha_72, Odesza_88, OhMyWard_82, OlgasClover_89, Paella_134, Perkunas_90, Petite_89, Phaby_74, Phepper_88, Pherobrine_85, Phlop_82, PinkCoffee_86, Portcullis_85, ProfFrink_73, PullumCavea_83, Qui_134, Raunak_73, Renaldo_81, Rickmore_88, RogerDodger_88, Roney_88, Runhaar_85, Salk_72, Salvador_85, Samy_62, SarFire_70, Savbucketdawg_80, ScienceWizSam_71, Shepard_74, Shiba_71, Shinji_84, Sloopyjoe_72, SmokingBunny_86, Snazzy_68, SpikeBT_61, Sporto_71, Squee_73, StarLord_72, Stayer_72, Sunny4976_69, SwissCheese_66, Synopsis_66, Tanis_89, Tatanka_63, Teacup_71, TenaciousP_94, Tenno_69, Thor_70, TillyBobJoe_83, Togo_85, Tokki_79, Tribby_80, Truckee_71, Trustiboi_68, Twister6_84, Untouchable_89, Uzumaki_70, Valary_86, VanDeWege_87, Vardy_86, Wizard_80, Wollypog_58, Xenomorph_73, Zeina_76, Zeph_90,

Summary by start number:

Start 18:

- Found in 7 of 224 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Scap1_52 (BI2),

Start 19:

- Found in 1 of 224 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Conley_83 (DJ),

Start 20:

- Found in 12 of 224 (5.4%) of genes in pham
- Manual Annotations of this start: 11 of 199
- Called 91.7% of time when present
- Phage (with cluster) where this start called: AFIS_66 (A1), DreamCatcher_72 (A1), GrecoEtereo_71 (A1), Ichabod_74 (A1), Lesedi_65 (A1), Lopton_70 (A1), McGuire_71 (A1), SarFire_70 (A1), Snazzy_68 (A1), Squee_73 (A1), Thor_70 (A1),

Start 21:

- Found in 12 of 224 (5.4%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 8.3% of time when present
- Phage (with cluster) where this start called: IgnatiusPatJac_70 (A1),

Start 24:

- Found in 14 of 224 (6.2%) of genes in pham
- Manual Annotations of this start: 2 of 199
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Michelle_72 (AW), Stayer_72 (AW),

Start 26:

- Found in 20 of 224 (8.9%) of genes in pham
- Manual Annotations of this start: 2 of 199
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Samy_62 (singleton), VanDeWege_87 (DC1),

Start 30:

- Found in 19 of 224 (8.5%) of genes in pham
- Manual Annotations of this start: 17 of 199
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Arri_85 (DC1), Evamon_85 (DC1), Fireball_88 (DC1), KimmyK_83 (DC1), Phlop_82 (DC1), PinkCoffee_86 (DC1), Portcullis_85 (DC1), PullumCavea_83 (DC1), RogerDodger_88 (DC1), Salvador_85 (DC1), Savbucketdawg_80 (DC1), Shinji_84 (DC1), SmokingBunny_86 (DC1), TillyBobJoe_83 (DC1), Togo_85 (DC1), Twister6_84 (DC1), Valary_86 (DC1), Wizard_80 (DC1),

Start 33:

- Found in 3 of 224 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Damascus_58 (EL), DizzyRudy_62 (EL), Wollypog_58 (singleton),

Start 34:

- Found in 52 of 224 (23.2%) of genes in pham
- Manual Annotations of this start: 28 of 199
- Called 61.5% of time when present
- Phage (with cluster) where this start called: AreFloNak_73 (AU1), Breylor17_66 (AU1), Brunswick_71 (AU1), CapnMurica_67 (AU1), CastorTray_73 (AU1), Caterpillar_69 (AU4), Darby_67 (AU1), DevitoJr_69 (AU1), ElephantMan_70 (AU1), Giantsbane_73 (AU2), Gordon_67 (AU1), Ingrid_76 (AU3), Inked_75 (AU), Issa_68 (AU1), LilHuddy_74 (AU2), Loretta_72 (AU3), Makai_73 (AU5), MediumFry_69 (AU4), MiniBagel_69 (AU1), Nightmare_70 (AU1), Niktson_70 (AU1), Nivinsha_72 (AU1), Phaby_74 (AU2), ScienceWizSam_71 (AU1), Shepard_74 (AU2), Synopsis_66 (AU1), Tatanka_63 (AU1), Teacup_71 (AU1), Tenno_69 (AU1), Tokki_79 (AU2), Truckee_71 (AU5), Trustiboi_68 (AU1),

Start 36:

- Found in 1 of 224 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Count_90 (EL),

Start 37:

- Found in 1 of 224 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_66 (singleton),

Start 38:

- Found in 11 of 224 (4.9%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Argan_70 (AU6),

Start 40:

- Found in 47 of 224 (21.0%) of genes in pham
- Manual Annotations of this start: 34 of 199
- Called 93.6% of time when present
- Phage (with cluster) where this start called: Arcadia_76 (AM), Arzan_73 (FI), BarbieDoll_77 (AU6), BenitoAntonio_75 (AM), Benllo_77 (AM), BronxBay_72 (AW), Cheesy_77 (AM), Circum_78 (AM), Correa_75 (AM), Djungelskog_71 (AW), DoctorPepper_72 (AW), Dynamite_76 (AM), Egad_72 (AW), Elsa_76 (AM), GantcherGoblin_71 (AU6), GoCrazy_73 (AM), Hankly_76 (AM), Heisenberger_75 (AM), JEGGS_75 (AM), Jazzy4900_70 (FI), Kardesai_76 (AM), KeaneyLin_72 (AM), Leathea_73 (AU6), Lewando_77 (AU6), LibertyBell_73 (BI3), Linda_72 (AW), Mooshroom_77 (AM), MrAaronian_72 (AW), Mudcat_72 (AM), NapoleonB_77 (AM), Nason_76 (AM), ProfFrink_73 (AW), Raunak_73 (AW), Renaldo_81 (AU6), Salk_72 (AW), Shiba_71 (AW), Sloopyjoe_72 (AW), Sporto_71 (AW), StarLord_72 (AW), Sunny4976_69 (FI), Tribby_80 (AM), Uzumaki_70 (AU6), Xenomorph_73 (AM), Zeina_76 (AU6),

Start 41:

- Found in 2 of 224 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bing_83 (BI5), Camille_57 (EL),

Start 42:

- Found in 48 of 224 (21.4%) of genes in pham
- Manual Annotations of this start: 41 of 199
- Called 93.8% of time when present
- Phage (with cluster) where this start called: Annihilus_55 (BI2), Bilo_54 (BI2), CherryBlossom_82 (BI1), CricKo_90 (BI4), Doxi13_56 (BI2), DrGrey_78 (BI1), Esketit_78 (BI1), FidgetOrca_84 (BI1), FrodoSwaggins_80 (BI1), FromIndy_88 (BI4), GirlPower_75 (BI1), GoblinVoyage_55 (BI2), Hoshi_83 (BI1), IceWarrior_82 (BI1), Indigenous_84 (BI1), Jaylociraptor_82 (BI1), Kardashian_79 (BI6), LibertyBell_75 (BI3), Madamato_81 (BI1), Maya_82 (BI1), Meibysrarus_80 (BI1), Miek_84 (BI4), Moozy_54 (BI2), Namu_84 (BI1), OlympicHelado_84 (BI1), Pepy6_051 (CC), PherryCruz_54 (BI2), Poco6_050 (CC), Popy_80 (BI1), Rainydai_87 (BI4), RavenPuff_55 (BI2), Regigigas_90 (BI4), Rima_83 (BI1), RosaAsantewaa_51 (BI2), Samy_64 (singleton), Schwartz33_84 (DJ), Secretariat_80 (DJ), SendItCS_82 (BI4), SheRa_55 (BI2), Soshi_81 (BI1), Spectropatronm_81 (BI1), TaidaOne_82 (BI1), Thiqqums_90 (BI4), TieDye_78 (BI1), TonyStarch_81 (BI1),

Start 43:

- Found in 9 of 224 (4.0%) of genes in pham
- Manual Annotations of this start: 9 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AFIS_59 (A1), Bruns_64 (A1), Crispicious1_60 (A1), Forsytheast_64 (A1), GageAP_64 (A1), Moose_64 (A1), NEHalo_60 (A1), SpikeBT_61 (A1), SwissCheese_66 (A1),

Start 44:

- Found in 3 of 224 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crocheter_87 (DJ), Eddiemania_86 (DJ), Kenosha_86 (DJ),

Start 45:

- Found in 45 of 224 (20.1%) of genes in pham
- Manual Annotations of this start: 39 of 199
- Called 95.6% of time when present
- Phage (with cluster) where this start called: Aflac_88 (DJ), AlainaMarie_88 (DJ), Artorias_88 (DJ), Avazak_89 (DJ), BluerMoon_91 (DJ), Burley_86 (DJ), Captrips_87 (DJ), Cappybara_87 (DJ), Chikenjars_88 (DJ), ClubPenguin_87 (BI7), Conley_86 (DJ), Duffington_88 (DJ), EndAve_89 (DJ), Fazel_88 (DJ), Figliar_86 (DJ), FortCran_88 (DJ), Gill_90 (DJ), Gravy_89 (DJ), Hortihabitatio_85 (DJ), Hydrus_87 (DJ), Ibantik_17 (singleton), Jodelie19_87 (DJ), Kerry_89 (DJ), Madvan_85 (DJ), Magel_91 (DJ), Mossy_86 (DJ), Nadmeg_86 (DJ), Nithya_87 (DJ), Odesza_88 (DJ), OhMyWard_82 (DJ), OlgasClover_89 (DJ), Perkunas_90 (DJ), Petito_89 (DJ), Phepper_88 (DJ), Pherobrine_85 (DJ), Rickmore_88 (DJ), Roney_88 (DJ), Runhaar_85 (DJ), Tanis_89 (DJ), TenaciousP_94 (DJ), Untouchable_89 (DJ), Vardy_86 (DJ), Zeph_90 (DJ),

Start 46:

- Found in 24 of 224 (10.7%) of genes in pham
- Manual Annotations of this start: 2 of 199
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Elver_132 (FK), Paella_134 (FK), Qui_134 (FK),

Start 47:

- Found in 11 of 224 (4.9%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 9.1% of time when present
- Phage (with cluster) where this start called: HotFries_53 (BI2),

Summary by clusters:

There are 24 clusters represented in this pham: singleton, DJ, FI, FK, A1, AU1, AU3, AU2, AU5, AU4, AU6, BI1, EL, CC, AM, AU, AW, BI6, BI7, BI4, BI5, BI2, BI3, DC1,

Info for manual annotations of cluster A1:

- Start number 20 was manually annotated 11 times for cluster A1.
- Start number 21 was manually annotated 1 time for cluster A1.
- Start number 43 was manually annotated 9 times for cluster A1.

Info for manual annotations of cluster AM:

- Start number 40 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AU:

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

Info for manual annotations of cluster AU1:

- Start number 34 was manually annotated 17 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 34 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 34 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 34 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 34 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 38 was manually annotated 1 time for cluster AU6.
- Start number 40 was manually annotated 4 times for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 24 was manually annotated 2 times for cluster AW.
- Start number 40 was manually annotated 10 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 42 was manually annotated 22 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 18 was manually annotated 1 time for cluster BI2.
- Start number 42 was manually annotated 9 times for cluster BI2.
- Start number 47 was manually annotated 1 time for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 40 was manually annotated 1 time for cluster BI3.
- Start number 42 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 42 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 41 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 42 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 45 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DC1:

- Start number 26 was manually annotated 1 time for cluster DC1.
- Start number 30 was manually annotated 17 times for cluster DC1.

Info for manual annotations of cluster DJ:

- Start number 19 was manually annotated 1 time for cluster DJ.
- Start number 42 was manually annotated 2 times for cluster DJ.

- Start number 44 was manually annotated 2 times for cluster DJ.
- Start number 45 was manually annotated 37 times for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 33 was manually annotated 2 times for cluster EL.
- Start number 36 was manually annotated 1 time for cluster EL.
- Start number 41 was manually annotated 1 time for cluster EL.

Info for manual annotations of cluster FK:

- Start number 46 was manually annotated 2 times for cluster FK.

Gene Information:

Gene: AFIS_59 Start: 40536, Stop: 39979, Start Num: 43

Candidate Starts for AFIS_59:

(Start: 43 @40536 has 9 MA's), (53, 40494), (57, 40476), (81, 40392), (85, 40374), (96, 40323), (107, 40269), (134, 40167), (159, 39999),

Gene: AFIS_66 Start: 43840, Stop: 43262, Start Num: 20

Candidate Starts for AFIS_66:

(Start: 20 @43840 has 11 MA's), (Start: 21 @43828 has 1 MA's), (27, 43810), (69, 43669), (77, 43642), (86, 43603), (90, 43573), (144, 43360),

Gene: Aflac_88 Start: 56715, Stop: 57197, Start Num: 45

Candidate Starts for Aflac_88:

(Start: 45 @56715 has 39 MA's), (51, 56748), (71, 56832), (116, 57021), (135, 57087), (137, 57102), (140, 57114),

Gene: AlainaMarie_88 Start: 56739, Stop: 57221, Start Num: 45

Candidate Starts for AlainaMarie_88:

(Start: 45 @56739 has 39 MA's), (48, 56757), (72, 56859), (82, 56901), (84, 56910), (88, 56928), (116, 57048), (119, 57054), (135, 57114), (137, 57129), (140, 57141),

Gene: Annihilus_55 Start: 38912, Stop: 39421, Start Num: 42

Candidate Starts for Annihilus_55:

(13, 38804), (Start: 18 @38849 has 1 MA's), (Start: 42 @38912 has 41 MA's), (Start: 47 @38927 has 1 MA's), (53, 38954), (70, 39044), (75, 39062), (84, 39101), (99, 39176), (128, 39278), (130, 39284), (132, 39299),

Gene: Arcadia_76 Start: 45700, Stop: 46212, Start Num: 40

Candidate Starts for Arcadia_76:

(Start: 40 @45700 has 34 MA's), (57, 45766), (58, 45769), (71, 45823), (103, 45967), (105, 45973), (109, 45994), (111, 45997),

Gene: AreFloNak_73 Start: 46808, Stop: 47311, Start Num: 34

Candidate Starts for AreFloNak_73:

(Start: 34 @46808 has 28 MA's), (64, 46907), (101, 47069), (113, 47123), (130, 47180), (146, 47258),

Gene: Argan_70 Start: 44513, Stop: 45007, Start Num: 38

Candidate Starts for Argan_70:

(Start: 38 @44513 has 1 MA's), (Start: 40 @44516 has 34 MA's), (52, 44558), (53, 44561), (94, 44729), (111, 44810), (132, 44888),

Gene: Arri_85 Start: 56022, Stop: 55507, Start Num: 30

Candidate Starts for Arri_85:

(Start: 26 @56028 has 2 MA's), (Start: 30 @56022 has 17 MA's), (Start: 34 @56010 has 28 MA's), (49, 55974), (59, 55929), (62, 55914), (82, 55836), (88, 55809), (90, 55788), (97, 55764), (149, 55554), (152, 55542), (156, 55518),

Gene: Artorias_88 Start: 55253, Stop: 55735, Start Num: 45

Candidate Starts for Artorias_88:

(Start: 45 @55253 has 39 MA's), (67, 55352), (73, 55376), (88, 55442), (95, 55475), (116, 55562), (137, 55643), (140, 55655), (142, 55658), (145, 55676),

Gene: Arzan_73 Start: 46217, Stop: 46693, Start Num: 40

Candidate Starts for Arzan_73:

(Start: 40 @46217 has 34 MA's), (Start: 46 @46232 has 2 MA's), (65, 46313), (103, 46481), (153, 46661),

Gene: Avazak_89 Start: 55682, Stop: 56164, Start Num: 45

Candidate Starts for Avazak_89:

(Start: 45 @55682 has 39 MA's), (67, 55781), (73, 55805), (88, 55871), (95, 55904), (116, 55991), (137, 56072), (140, 56084), (142, 56087), (145, 56105),

Gene: BarbieDoll_77 Start: 46222, Stop: 46713, Start Num: 40

Candidate Starts for BarbieDoll_77:

(Start: 38 @46219 has 1 MA's), (Start: 40 @46222 has 34 MA's), (52, 46264), (53, 46267), (86, 46405), (94, 46435), (96, 46450), (111, 46516), (144, 46648), (147, 46660),

Gene: BenitoAntonio_75 Start: 45340, Stop: 45852, Start Num: 40

Candidate Starts for BenitoAntonio_75:

(16, 45268), (Start: 40 @45340 has 34 MA's), (57, 45406), (58, 45409), (71, 45463), (103, 45607), (105, 45613), (109, 45634), (111, 45637), (147, 45781),

Gene: Benllo_77 Start: 46018, Stop: 46530, Start Num: 40

Candidate Starts for Benllo_77:

(Start: 40 @46018 has 34 MA's), (58, 46087), (71, 46141), (103, 46285), (105, 46291), (109, 46312), (111, 46315),

Gene: Bilo_54 Start: 39203, Stop: 39715, Start Num: 42

Candidate Starts for Bilo_54:

(Start: 34 @39194 has 28 MA's), (Start: 42 @39203 has 41 MA's), (Start: 47 @39221 has 1 MA's), (53, 39248), (70, 39338), (74, 39353), (75, 39356), (84, 39395), (99, 39470), (128, 39572), (130, 39578), (132, 39593),

Gene: Bing_83 Start: 51639, Stop: 52142, Start Num: 41

Candidate Starts for Bing_83:

(15, 51558), (35, 51630), (Start: 41 @51639 has 2 MA's), (53, 51684), (64, 51729), (66, 51738), (70, 51756), (84, 51813), (85, 51816), (92, 51858), (104, 51921), (140, 52059), (148, 52089), (151, 52104), (156, 52134),

Gene: BluerMoon_91 Start: 56545, Stop: 57027, Start Num: 45

Candidate Starts for BluerMoon_91:

(Start: 45 @56545 has 39 MA's), (51, 56578), (71, 56662), (88, 56734), (116, 56851), (135, 56917), (137, 56932),

Gene: Breylor17_66 Start: 47201, Stop: 47704, Start Num: 34

Candidate Starts for Breylor17_66:

(Start: 34 @47201 has 28 MA's), (64, 47300), (101, 47462), (113, 47516), (127, 47564), (130, 47573), (135, 47600), (146, 47651),

Gene: BronxBay_72 Start: 45205, Stop: 45702, Start Num: 40

Candidate Starts for BronxBay_72:

(Start: 24 @45172 has 2 MA's), (29, 45184), (32, 45190), (Start: 40 @45205 has 34 MA's), (Start: 46 @45220 has 2 MA's), (85, 45385), (108, 45493), (132, 45586),

Gene: Bruns_64 Start: 41012, Stop: 40455, Start Num: 43

Candidate Starts for Bruns_64:

(Start: 43 @41012 has 9 MA's), (53, 40970), (57, 40952), (81, 40868), (85, 40850), (96, 40799), (107, 40745), (134, 40643), (159, 40475),

Gene: Brunswick_71 Start: 46642, Stop: 47145, Start Num: 34

Candidate Starts for Brunswick_71:

(Start: 34 @46642 has 28 MA's), (64, 46741), (101, 46903), (113, 46957), (130, 47014), (135, 47041), (146, 47092),

Gene: Burley_86 Start: 55548, Stop: 56027, Start Num: 45

Candidate Starts for Burley_86:

(Start: 45 @55548 has 39 MA's), (72, 55668), (88, 55737), (116, 55854), (119, 55860), (135, 55920), (137, 55935), (140, 55947), (145, 55968),

Gene: Camille_57 Start: 40747, Stop: 41235, Start Num: 41

Candidate Starts for Camille_57:

(Start: 41 @40747 has 2 MA's), (58, 40816), (82, 40915), (94, 40963), (101, 41002), (103, 41011), (108, 41035), (117, 41044), (127, 41080), (132, 41104), (143, 41149), (156, 41215),

Gene: CapnMurica_67 Start: 47359, Stop: 47862, Start Num: 34

Candidate Starts for CapnMurica_67:

(Start: 34 @47359 has 28 MA's), (64, 47458), (101, 47620), (113, 47674), (130, 47731), (135, 47758), (146, 47809),

Gene: Captrips_87 Start: 55033, Stop: 55515, Start Num: 45

Candidate Starts for Captrips_87:

(Start: 45 @55033 has 39 MA's), (73, 55156), (82, 55195), (88, 55222), (109, 55327), (116, 55342), (137, 55423), (140, 55435), (145, 55456),

Gene: Capybara_87 Start: 55256, Stop: 55738, Start Num: 45

Candidate Starts for Capybara_87:

(Start: 45 @55256 has 39 MA's), (73, 55379), (82, 55418), (88, 55445), (109, 55550), (116, 55565), (137, 55646), (140, 55658), (145, 55679),

Gene: CastorTray_73 Start: 47393, Stop: 47896, Start Num: 34

Candidate Starts for CastorTray_73:

(Start: 34 @47393 has 28 MA's), (64, 47492), (101, 47654), (113, 47708), (130, 47765), (135, 47792), (146, 47843),

Gene: Caterpillar_69 Start: 46228, Stop: 46731, Start Num: 34

Candidate Starts for Caterpillar_69:

(Start: 34 @46228 has 28 MA's), (57, 46300), (73, 46363), (82, 46402), (101, 46489), (130, 46600),

Gene: Cheesy_77 Start: 45492, Stop: 46004, Start Num: 40

Candidate Starts for Cheesy_77:

(Start: 40 @45492 has 34 MA's), (58, 45561), (71, 45615), (103, 45759), (105, 45765), (109, 45786), (111, 45789),

Gene: CherryBlossom_82 Start: 50872, Stop: 51381, Start Num: 42

Candidate Starts for CherryBlossom_82:

(Start: 42 @50872 has 41 MA's), (53, 50917), (64, 50962), (78, 51031), (101, 51145), (128, 51235), (132, 51256), (145, 51316), (148, 51325), (155, 51367),

Gene: Chikenjars_88 Start: 56967, Stop: 57449, Start Num: 45

Candidate Starts for Chikenjars_88:

(Start: 45 @56967 has 39 MA's), (48, 56985), (72, 57087), (82, 57129), (84, 57138), (88, 57156), (116, 57276), (119, 57282), (135, 57342), (137, 57357), (140, 57369),

Gene: Circum_78 Start: 46108, Stop: 46620, Start Num: 40

Candidate Starts for Circum_78:

(16, 46036), (Start: 40 @46108 has 34 MA's), (58, 46177), (71, 46231), (103, 46375), (105, 46381), (109, 46402), (111, 46405), (147, 46549),

Gene: ClubPenguin_87 Start: 51570, Stop: 52061, Start Num: 45

Candidate Starts for ClubPenguin_87:

(Start: 45 @51570 has 39 MA's), (53, 51612), (63, 51657), (75, 51702), (79, 51714), (83, 51738), (84, 51741), (85, 51744), (101, 51828), (106, 51852), (140, 51978), (145, 51999),

Gene: Conley_86 Start: 55548, Stop: 56030, Start Num: 45

Candidate Starts for Conley_86:

(Start: 45 @55548 has 39 MA's), (73, 55671), (82, 55710), (88, 55737), (95, 55770), (101, 55806), (111, 55845), (116, 55857), (154, 56004),

Gene: Conley_83 Start: 53384, Stop: 53935, Start Num: 19

Candidate Starts for Conley_83:

(Start: 19 @53384 has 1 MA's), (Start: 42 @53444 has 41 MA's), (Start: 45 @53447 has 39 MA's), (64, 53534), (67, 53546), (75, 53579), (88, 53636), (110, 53735), (121, 53759), (138, 53840), (158, 53924),

Gene: Correa_75 Start: 45066, Stop: 45578, Start Num: 40

Candidate Starts for Correa_75:

(Start: 40 @45066 has 34 MA's), (58, 45135), (71, 45189), (103, 45333), (109, 45360),

Gene: Count_90 Start: 59071, Stop: 59562, Start Num: 36

Candidate Starts for Count_90:

(Start: 36 @59071 has 1 MA's), (Start: 47 @59098 has 1 MA's), (82, 59245), (84, 59254), (85, 59257), (108, 59368), (126, 59404), (128, 59416), (146, 59500),

Gene: CricKo_90 Start: 53073, Stop: 53564, Start Num: 42

Candidate Starts for CricKo_90:

(9, 52932), (11, 52950), (12, 52959), (23, 53031), (25, 53040), (Start: 42 @53073 has 41 MA's), (53, 53118), (64, 53163), (67, 53175), (101, 53331), (108, 53364), (154, 53535),

Gene: Crispicious1_60 Start: 40522, Stop: 39992, Start Num: 43

Candidate Starts for Crispicious1_60:

(Start: 43 @40522 has 9 MA's), (57, 40462), (87, 40348), (127, 40186), (131, 40168), (133, 40159), (157, 40051),

Gene: Crocheter_87 Start: 55966, Stop: 56445, Start Num: 44

Candidate Starts for Crocheter_87:

(Start: 44 @55966 has 2 MA's), (56, 56023), (58, 56029), (73, 56089), (84, 56137), (88, 56155), (108, 56254), (116, 56272), (119, 56278), (135, 56338), (137, 56353), (140, 56365), (145, 56386),

Gene: Damascus_58 Start: 42170, Stop: 42682, Start Num: 33

Candidate Starts for Damascus_58:

(Start: 33 @42170 has 3 MA's), (Start: 38 @42182 has 1 MA's), (73, 42314), (82, 42353), (94, 42401), (108, 42473), (135, 42554),

Gene: Darby_67 Start: 46386, Stop: 46889, Start Num: 34

Candidate Starts for Darby_67:

(Start: 34 @46386 has 28 MA's), (64, 46485), (101, 46647), (113, 46701), (130, 46758), (135, 46785), (146, 46836),

Gene: DevitoJr_69 Start: 46771, Stop: 47274, Start Num: 34

Candidate Starts for DevitoJr_69:

(Start: 34 @46771 has 28 MA's), (64, 46870), (113, 47086), (130, 47143), (135, 47170), (146, 47221),

Gene: DizzyRudy_62 Start: 42057, Stop: 42569, Start Num: 33

Candidate Starts for DizzyRudy_62:

(Start: 33 @42057 has 3 MA's), (Start: 38 @42069 has 1 MA's), (53, 42120), (82, 42240), (94, 42288), (108, 42360), (135, 42441),

Gene: Djungelskog_71 Start: 45207, Stop: 45704, Start Num: 40

Candidate Starts for Djungelskog_71:

(Start: 24 @45174 has 2 MA's), (29, 45186), (32, 45192), (Start: 40 @45207 has 34 MA's), (Start: 46 @45222 has 2 MA's), (85, 45387), (108, 45495), (132, 45588),

Gene: DoctorPepper_72 Start: 44909, Stop: 45406, Start Num: 40

Candidate Starts for DoctorPepper_72:

(Start: 24 @44876 has 2 MA's), (29, 44888), (32, 44894), (Start: 40 @44909 has 34 MA's), (Start: 46 @44924 has 2 MA's), (85, 45089), (108, 45197), (132, 45290),

Gene: Doxi13_56 Start: 39042, Stop: 39551, Start Num: 42

Candidate Starts for Doxi13_56:

(Start: 42 @39042 has 41 MA's), (Start: 47 @39057 has 1 MA's), (53, 39084), (70, 39174), (75, 39192), (84, 39231), (99, 39306), (128, 39408), (130, 39414), (132, 39429),

Gene: DrGrey_78 Start: 51385, Stop: 51894, Start Num: 42

Candidate Starts for DrGrey_78:

(Start: 42 @51385 has 41 MA's), (53, 51430), (64, 51475), (78, 51544), (101, 51658), (128, 51748), (129, 51751), (132, 51769), (145, 51829), (148, 51838), (155, 51880),

Gene: DreamCatcher_72 Start: 44845, Stop: 44267, Start Num: 20

Candidate Starts for DreamCatcher_72:

(Start: 20 @44845 has 11 MA's), (Start: 21 @44833 has 1 MA's), (27, 44815), (69, 44674), (77, 44647), (86, 44608), (90, 44578), (144, 44365),

Gene: Duffington_88 Start: 56767, Stop: 57249, Start Num: 45

Candidate Starts for Duffington_88:

(Start: 45 @56767 has 39 MA's), (48, 56785), (72, 56887), (82, 56929), (84, 56938), (88, 56956), (116, 57076), (119, 57082), (135, 57142), (137, 57157), (140, 57169),

Gene: Dynamite_76 Start: 45552, Stop: 46064, Start Num: 40

Candidate Starts for Dynamite_76:

(Start: 40 @45552 has 34 MA's), (58, 45621), (71, 45675), (103, 45819), (105, 45825), (109, 45846),

Gene: Eddiemania_86 Start: 56862, Stop: 57341, Start Num: 44

Candidate Starts for Eddiemania_86:

(Start: 44 @56862 has 2 MA's), (56, 56919), (57, 56922), (58, 56925), (73, 56985), (82, 57024), (84, 57033), (88, 57051), (95, 57081), (116, 57168), (119, 57174), (124, 57192), (135, 57234), (137, 57249), (140, 57261), (145, 57282),

Gene: Egad_72 Start: 45183, Stop: 45680, Start Num: 40

Candidate Starts for Egad_72:

(Start: 24 @45150 has 2 MA's), (29, 45162), (32, 45168), (Start: 40 @45183 has 34 MA's), (Start: 46 @45198 has 2 MA's), (85, 45363), (108, 45471), (132, 45564),

Gene: ElephantMan_70 Start: 47272, Stop: 47775, Start Num: 34

Candidate Starts for ElephantMan_70:

(Start: 34 @47272 has 28 MA's), (64, 47371), (101, 47533), (113, 47587), (130, 47644), (135, 47671), (146, 47722),

Gene: Elsa_76 Start: 45700, Stop: 46212, Start Num: 40

Candidate Starts for Elsa_76:

(Start: 40 @45700 has 34 MA's), (57, 45766), (58, 45769), (71, 45823), (103, 45967), (105, 45973), (109, 45994), (111, 45997),

Gene: Elver_132 Start: 71317, Stop: 71790, Start Num: 46

Candidate Starts for Elver_132:

(39, 71296), (Start: 46 @71317 has 2 MA's), (57, 71365), (58, 71368), (60, 71374), (64, 71392), (71, 71422), (115, 71605), (147, 71734),

Gene: EndAve_89 Start: 56677, Stop: 57159, Start Num: 45

Candidate Starts for EndAve_89:

(Start: 45 @56677 has 39 MA's), (48, 56695), (72, 56797), (82, 56839), (84, 56848), (88, 56866), (116, 56986), (119, 56992), (135, 57052), (137, 57067), (140, 57079),

Gene: Esketit_78 Start: 49973, Stop: 50482, Start Num: 42

Candidate Starts for Esketit_78:

(Start: 42 @49973 has 41 MA's), (53, 50018), (64, 50063), (78, 50132), (101, 50246), (128, 50336), (132, 50357), (145, 50417), (148, 50426), (155, 50468),

Gene: Evamon_85 Start: 55834, Stop: 55319, Start Num: 30

Candidate Starts for Evamon_85:

(Start: 26 @55840 has 2 MA's), (Start: 30 @55834 has 17 MA's), (Start: 34 @55822 has 28 MA's), (49, 55786), (59, 55741), (62, 55726), (82, 55648), (88, 55621), (90, 55600), (97, 55576), (149, 55366), (152, 55354), (156, 55330),

Gene: Fazel_88 Start: 55520, Stop: 56002, Start Num: 45

Candidate Starts for Fazel_88:

(Start: 45 @55520 has 39 MA's), (52, 55559), (53, 55562), (56, 55577), (71, 55637), (73, 55643), (74, 55649), (84, 55691), (88, 55709), (102, 55781), (116, 55829), (154, 55976), (155, 55994),

Gene: FidgetOrca_84 Start: 51423, Stop: 51932, Start Num: 42

Candidate Starts for FidgetOrca_84:

(Start: 42 @51423 has 41 MA's), (53, 51468), (64, 51513), (78, 51582), (101, 51696), (128, 51786), (132, 51807), (145, 51867), (148, 51876), (155, 51918),

Gene: Figliar_86 Start: 56571, Stop: 57053, Start Num: 45

Candidate Starts for Figliar_86:

(Start: 45 @56571 has 39 MA's), (48, 56589), (72, 56691), (82, 56733), (84, 56742), (88, 56760), (116, 56880), (119, 56886), (135, 56946), (137, 56961), (140, 56973),

Gene: Fireball_88 Start: 56296, Stop: 55781, Start Num: 30

Candidate Starts for Fireball_88:

(Start: 26 @56302 has 2 MA's), (Start: 30 @56296 has 17 MA's), (Start: 34 @56284 has 28 MA's), (49, 56248), (59, 56203), (62, 56188), (82, 56110), (88, 56083), (90, 56062), (97, 56038), (149, 55828), (152, 55816), (156, 55792),

Gene: Forsytheast_64 Start: 41180, Stop: 40623, Start Num: 43

Candidate Starts for Forsytheast_64:

(Start: 43 @41180 has 9 MA's), (53, 41138), (57, 41120), (81, 41036), (85, 41018), (96, 40967), (107, 40913), (134, 40811), (159, 40643),

Gene: FortCran_88 Start: 55254, Stop: 55736, Start Num: 45

Candidate Starts for FortCran_88:

(Start: 45 @55254 has 39 MA's), (67, 55353), (73, 55377), (88, 55443), (95, 55476), (116, 55563), (137, 55644), (140, 55656), (142, 55659), (145, 55677),

Gene: FrodoSwaggins_80 Start: 51780, Stop: 52289, Start Num: 42

Candidate Starts for FrodoSwaggins_80:

(Start: 42 @51780 has 41 MA's), (53, 51825), (64, 51870), (78, 51939), (101, 52053), (128, 52143), (129, 52146), (132, 52164), (145, 52224), (148, 52233), (155, 52275),

Gene: FromIndy_88 Start: 52273, Stop: 52764, Start Num: 42

Candidate Starts for FromIndy_88:

(9, 52132), (11, 52150), (12, 52159), (23, 52231), (25, 52240), (Start: 42 @52273 has 41 MA's), (53, 52318), (64, 52363), (67, 52375), (101, 52531), (108, 52564), (154, 52735),

Gene: GageAP_64 Start: 42203, Stop: 41646, Start Num: 43

Candidate Starts for GageAP_64:

(Start: 43 @42203 has 9 MA's), (53, 42161), (57, 42143), (81, 42059), (85, 42041), (96, 41990), (107, 41936), (134, 41834), (159, 41666),

Gene: GantcherGoblin_71 Start: 44575, Stop: 45066, Start Num: 40

Candidate Starts for GantcherGoblin_71:

(Start: 38 @44572 has 1 MA's), (Start: 40 @44575 has 34 MA's), (52, 44617), (53, 44620), (94, 44788), (111, 44869), (132, 44947),

Gene: Giantsbane_73 Start: 45925, Stop: 46428, Start Num: 34

Candidate Starts for Giantsbane_73:

(Start: 34 @45925 has 28 MA's), (Start: 46 @45949 has 2 MA's), (48, 45955), (52, 45976), (57, 45997), (64, 46024), (73, 46060), (101, 46186), (130, 46297), (135, 46324),

Gene: Gill_90 Start: 55283, Stop: 55765, Start Num: 45

Candidate Starts for Gill_90:

(Start: 45 @55283 has 39 MA's), (73, 55406), (82, 55445), (88, 55472), (109, 55577), (116, 55592), (137, 55673), (140, 55685), (145, 55706),

Gene: GirlPower_75 Start: 50852, Stop: 51361, Start Num: 42

Candidate Starts for GirlPower_75:

(Start: 42 @50852 has 41 MA's), (53, 50897), (64, 50942), (71, 50972), (78, 51011), (82, 51032), (101, 51125), (145, 51296), (147, 51302), (148, 51305), (151, 51320),

Gene: GoCrazy_73 Start: 44995, Stop: 45507, Start Num: 40

Candidate Starts for GoCrazy_73:

(16, 44923), (Start: 40 @44995 has 34 MA's), (58, 45064), (71, 45118), (103, 45262), (105, 45268), (109, 45289), (111, 45292), (147, 45436),

Gene: GoblinVoyage_55 Start: 38886, Stop: 39395, Start Num: 42

Candidate Starts for GoblinVoyage_55:

(Start: 42 @38886 has 41 MA's), (Start: 47 @38901 has 1 MA's), (53, 38928), (70, 39018), (75, 39036), (84, 39075), (99, 39150), (128, 39252), (130, 39258), (132, 39273),

Gene: Gordon_67 Start: 47259, Stop: 47762, Start Num: 34

Candidate Starts for Gordon_67:

(Start: 34 @47259 has 28 MA's), (64, 47358), (101, 47520), (113, 47574), (130, 47631), (135, 47658), (146, 47709),

Gene: Gravy_89 Start: 54946, Stop: 55428, Start Num: 45

Candidate Starts for Gravy_89:

(Start: 45 @54946 has 39 MA's), (73, 55069), (82, 55108), (88, 55135), (109, 55240), (116, 55255), (137, 55336), (140, 55348), (145, 55369),

Gene: GrecoEtereo_71 Start: 44625, Stop: 44047, Start Num: 20

Candidate Starts for GrecoEtereo_71:

(Start: 20 @44625 has 11 MA's), (Start: 21 @44613 has 1 MA's), (27, 44595), (69, 44454), (77, 44427), (86, 44388), (90, 44358), (144, 44145),

Gene: Hankly_76 Start: 45190, Stop: 45702, Start Num: 40

Candidate Starts for Hankly_76:

(Start: 40 @45190 has 34 MA's), (58, 45259), (71, 45313), (103, 45457), (105, 45463), (109, 45484),

Gene: Heisenberger_75 Start: 44957, Stop: 45469, Start Num: 40

Candidate Starts for Heisenberger_75:

(16, 44885), (Start: 40 @44957 has 34 MA's), (58, 45026), (71, 45080), (103, 45224), (105, 45230), (109, 45251), (111, 45254),

Gene: Hortihabitatio_85 Start: 55292, Stop: 55774, Start Num: 45

Candidate Starts for Hortihabitatio_85:

(Start: 45 @55292 has 39 MA's), (53, 55334), (56, 55349), (84, 55463), (85, 55466), (88, 55481), (116, 55601), (127, 55631), (154, 55748), (155, 55766),

Gene: Hoshi_83 Start: 51036, Stop: 51545, Start Num: 42

Candidate Starts for Hoshi_83:

(Start: 42 @51036 has 41 MA's), (53, 51081), (64, 51126), (78, 51195), (101, 51309), (128, 51399), (132, 51420), (145, 51480), (148, 51489), (155, 51531),

Gene: HotFries_53 Start: 39084, Stop: 39578, Start Num: 47

Candidate Starts for HotFries_53:

(13, 38961), (Start: 18 @39006 has 1 MA's), (Start: 42 @39069 has 41 MA's), (Start: 47 @39084 has 1 MA's), (53, 39111), (70, 39201), (75, 39219), (84, 39258), (99, 39333), (128, 39435), (130, 39441), (132, 39456),

Gene: Hydrus_87 Start: 56277, Stop: 56756, Start Num: 45

Candidate Starts for Hydrus_87:

(Start: 45 @56277 has 39 MA's), (57, 56337), (72, 56397), (84, 56448), (88, 56466), (108, 56565), (116, 56583), (119, 56589), (135, 56649), (137, 56664), (140, 56676), (145, 56697),

Gene: Ibantik_17 Start: 6683, Stop: 6195, Start Num: 45

Candidate Starts for Ibantik_17:

(Start: 45 @6683 has 39 MA's), (63, 6599), (71, 6566), (76, 6548), (82, 6521), (127, 6335), (139, 6278),

Gene: Ibantik_66 Start: 28032, Stop: 28526, Start Num: 37

Candidate Starts for Ibantik_66:

(35, 28029), (Start: 37 @28032 has 1 MA's), (Start: 45 @28044 has 39 MA's), (48, 28062), (57, 28104), (90, 28245), (125, 28374), (146, 28464), (156, 28515),

Gene: IceWarrior_82 Start: 50842, Stop: 51351, Start Num: 42

Candidate Starts for IceWarrior_82:

(Start: 42 @50842 has 41 MA's), (53, 50887), (64, 50932), (78, 51001), (101, 51115), (128, 51205), (145, 51286), (148, 51295), (155, 51337),

Gene: Ichabod_74 Start: 45654, Stop: 45076, Start Num: 20

Candidate Starts for Ichabod_74:

(Start: 20 @45654 has 11 MA's), (Start: 21 @45642 has 1 MA's), (27, 45624), (69, 45483), (77, 45456), (86, 45417), (90, 45387), (144, 45174),

Gene: IgnatiusPatJac_70 Start: 44214, Stop: 43648, Start Num: 21

Candidate Starts for IgnatiusPatJac_70:

(Start: 20 @44226 has 11 MA's), (Start: 21 @44214 has 1 MA's), (27, 44196), (69, 44055), (77, 44028), (86, 43989), (90, 43959), (144, 43746),

Gene: Indigenous_84 Start: 51428, Stop: 51937, Start Num: 42

Candidate Starts for Indigenous_84:

(Start: 42 @51428 has 41 MA's), (53, 51473), (64, 51518), (78, 51587), (101, 51701), (128, 51791), (132, 51812), (145, 51872), (148, 51881), (155, 51923),

Gene: Ingrid_76 Start: 47223, Stop: 47726, Start Num: 34

Candidate Starts for Ingrid_76:

(Start: 34 @47223 has 28 MA's), (57, 47295), (73, 47358), (82, 47397), (98, 47469), (101, 47484),

Gene: Inked_75 Start: 47849, Stop: 48352, Start Num: 34

Candidate Starts for Inked_75:

(Start: 34 @47849 has 28 MA's), (57, 47921), (73, 47984), (82, 48023), (98, 48095), (101, 48110),

Gene: Issa_68 Start: 46433, Stop: 46936, Start Num: 34

Candidate Starts for Issa_68:

(Start: 34 @46433 has 28 MA's), (64, 46532), (101, 46694), (113, 46748), (130, 46805), (135, 46832), (146, 46883),

Gene: JEGGS_75 Start: 45036, Stop: 45548, Start Num: 40

Candidate Starts for JEGGS_75:

(16, 44964), (Start: 40 @45036 has 34 MA's), (58, 45105), (71, 45159), (103, 45303), (105, 45309), (109, 45330), (111, 45333),

Gene: Jaylociraptor_82 Start: 51008, Stop: 51517, Start Num: 42

Candidate Starts for Jaylociraptor_82:

(Start: 42 @51008 has 41 MA's), (53, 51053), (64, 51098), (78, 51167), (101, 51281), (128, 51371), (132, 51392), (145, 51452), (148, 51461), (155, 51503),

Gene: Jazzy4900_70 Start: 47081, Stop: 47557, Start Num: 40

Candidate Starts for Jazzy4900_70:

(Start: 40 @47081 has 34 MA's), (65, 47177), (103, 47345), (153, 47525),

Gene: Jodelie19_87 Start: 57758, Stop: 58240, Start Num: 45

Candidate Starts for Jodelie19_87:

(Start: 45 @57758 has 39 MA's), (51, 57791), (71, 57875), (116, 58064), (135, 58130), (137, 58145), (140, 58157),

Gene: Kardashian_79 Start: 51398, Stop: 51889, Start Num: 42

Candidate Starts for Kardashian_79:

(35, 51386), (Start: 42 @51398 has 41 MA's), (50, 51425), (53, 51443), (57, 51461), (67, 51500), (74, 51530), (85, 51575), (104, 51668), (148, 51836), (155, 51878),

Gene: Kardesai_76 Start: 45309, Stop: 45821, Start Num: 40

Candidate Starts for Kardesai_76:

(16, 45237), (Start: 40 @45309 has 34 MA's), (58, 45378), (71, 45432), (103, 45576), (105, 45582), (109, 45603), (111, 45606), (147, 45750),

Gene: KeaneyLin_72 Start: 44995, Stop: 45507, Start Num: 40

Candidate Starts for KeaneyLin_72:

(16, 44923), (Start: 40 @44995 has 34 MA's), (58, 45064), (71, 45118), (103, 45262), (105, 45268), (109, 45289), (111, 45292), (147, 45436),

Gene: Kenosha_86 Start: 56334, Stop: 56813, Start Num: 44

Candidate Starts for Kenosha_86:

(Start: 44 @56334 has 2 MA's), (56, 56391), (57, 56394), (58, 56397), (73, 56457), (84, 56505), (88, 56523), (116, 56640), (119, 56646), (124, 56664), (135, 56706), (137, 56721), (140, 56733), (145, 56754),

Gene: Kerry_89 Start: 55009, Stop: 55491, Start Num: 45

Candidate Starts for Kerry_89:

(Start: 45 @55009 has 39 MA's), (73, 55132), (82, 55171), (88, 55198), (109, 55303), (116, 55318), (137, 55399), (140, 55411), (145, 55432),

Gene: KimmyK_83 Start: 56127, Stop: 55612, Start Num: 30

Candidate Starts for KimmyK_83:

(Start: 26 @56133 has 2 MA's), (Start: 30 @56127 has 17 MA's), (Start: 34 @56115 has 28 MA's), (49, 56079), (59, 56034), (62, 56019), (82, 55941), (88, 55914), (90, 55893), (97, 55869), (149, 55659), (152, 55647), (156, 55623),

Gene: Leathea_73 Start: 44483, Stop: 44992, Start Num: 40

Candidate Starts for Leathea_73:

(28, 44459), (31, 44465), (Start: 38 @44480 has 1 MA's), (Start: 40 @44483 has 34 MA's), (53, 44528), (81, 44642), (94, 44696), (111, 44777), (120, 44801), (127, 44831),

Gene: Lesedi_65 Start: 42530, Stop: 41952, Start Num: 20

Candidate Starts for Lesedi_65:

(10, 42602), (Start: 20 @42530 has 11 MA's), (Start: 21 @42518 has 1 MA's), (27, 42500), (69, 42359), (77, 42332), (86, 42293), (90, 42263), (144, 42050),

Gene: Lewando_77 Start: 46439, Stop: 46930, Start Num: 40

Candidate Starts for Lewando_77:

(Start: 38 @46436 has 1 MA's), (Start: 40 @46439 has 34 MA's), (52, 46481), (53, 46484), (86, 46622), (94, 46652), (96, 46667), (111, 46733), (144, 46865), (147, 46877),

Gene: LibertyBell_75 Start: 48093, Stop: 48605, Start Num: 42

Candidate Starts for LibertyBell_75:

(7, 47907), (8, 47940), (14, 48006), (Start: 38 @48087 has 1 MA's), (Start: 42 @48093 has 41 MA's), (64, 48183), (71, 48213), (73, 48219), (75, 48228), (88, 48285), (91, 48318), (137, 48510), (148, 48552), (155, 48594), (156, 48597),

Gene: LibertyBell_73 Start: 45969, Stop: 46457, Start Num: 40

Candidate Starts for LibertyBell_73:

(Start: 40 @45969 has 34 MA's), (58, 46038), (85, 46152), (101, 46227), (127, 46308), (140, 46371),

Gene: LilHuddy_74 Start: 47051, Stop: 47554, Start Num: 34

Candidate Starts for LilHuddy_74:

(Start: 34 @47051 has 28 MA's), (48, 47081), (52, 47102), (57, 47123), (64, 47150), (73, 47186), (101, 47312), (113, 47366), (130, 47423), (135, 47450),

Gene: Linda_72 Start: 45202, Stop: 45699, Start Num: 40

Candidate Starts for Linda_72:

(Start: 24 @45169 has 2 MA's), (29, 45181), (32, 45187), (Start: 40 @45202 has 34 MA's), (Start: 46 @45217 has 2 MA's), (85, 45382), (108, 45490), (132, 45583),

Gene: Lopton_70 Start: 46302, Stop: 45724, Start Num: 20

Candidate Starts for Lopton_70:

(Start: 18 @46311 has 1 MA's), (Start: 20 @46302 has 11 MA's), (Start: 21 @46290 has 1 MA's), (27, 46272), (69, 46131), (77, 46104), (86, 46065), (90, 46035), (144, 45822),

Gene: Loretta_72 Start: 47223, Stop: 47726, Start Num: 34

Candidate Starts for Loretta_72:

(Start: 34 @47223 has 28 MA's), (57, 47295), (73, 47358), (82, 47397), (98, 47469), (101, 47484),

Gene: Madamoto_81 Start: 50680, Stop: 51192, Start Num: 42

Candidate Starts for Madamoto_81:

(Start: 42 @50680 has 41 MA's), (53, 50725), (64, 50770), (78, 50839), (82, 50860), (132, 51064), (140, 51103), (145, 51124), (148, 51133),

Gene: Madvan_85 Start: 55589, Stop: 56068, Start Num: 45

Candidate Starts for Madvan_85:

(Start: 45 @55589 has 39 MA's), (57, 55649), (72, 55709), (84, 55760), (88, 55778), (108, 55877), (116, 55895), (119, 55901), (135, 55961), (137, 55976), (140, 55988), (145, 56009),

Gene: Magel_91 Start: 55198, Stop: 55680, Start Num: 45

Candidate Starts for Magel_91:

(Start: 45 @55198 has 39 MA's), (73, 55321), (82, 55360), (88, 55387), (109, 55492), (116, 55507), (137, 55588), (140, 55600), (145, 55621),

Gene: Makai_73 Start: 47336, Stop: 47839, Start Num: 34

Candidate Starts for Makai_73:

(Start: 34 @47336 has 28 MA's), (Start: 46 @47360 has 2 MA's), (52, 47387), (64, 47435), (73, 47471), (101, 47597), (113, 47651), (130, 47708), (135, 47735), (146, 47786),

Gene: Maya_82 Start: 51022, Stop: 51531, Start Num: 42

Candidate Starts for Maya_82:

(Start: 42 @51022 has 41 MA's), (53, 51067), (64, 51112), (78, 51181), (101, 51295), (128, 51385), (132, 51406), (145, 51466), (148, 51475), (155, 51517),

Gene: McGuire_71 Start: 44174, Stop: 43596, Start Num: 20

Candidate Starts for McGuire_71:

(Start: 20 @44174 has 11 MA's), (Start: 21 @44162 has 1 MA's), (27, 44144), (69, 44003), (77, 43976), (86, 43937), (90, 43907), (144, 43694),

Gene: MediumFry_69 Start: 46566, Stop: 47069, Start Num: 34

Candidate Starts for MediumFry_69:

(Start: 34 @46566 has 28 MA's), (57, 46638), (73, 46701), (82, 46740), (101, 46827), (130, 46938),

Gene: Meibysrarus_80 Start: 50406, Stop: 50915, Start Num: 42

Candidate Starts for Meibysrarus_80:

(Start: 42 @50406 has 41 MA's), (53, 50451), (64, 50496), (78, 50565), (101, 50679), (128, 50769), (132, 50790), (145, 50850), (148, 50859), (155, 50901),

Gene: Michelle_72 Start: 45171, Stop: 45701, Start Num: 24

Candidate Starts for Michelle_72:

(Start: 24 @45171 has 2 MA's), (29, 45183), (32, 45189), (Start: 40 @45204 has 34 MA's), (Start: 46 @45219 has 2 MA's), (85, 45384), (108, 45492), (132, 45585),

Gene: Miek_84 Start: 51455, Stop: 51946, Start Num: 42

Candidate Starts for Miek_84:

(9, 51314), (11, 51332), (12, 51341), (23, 51413), (25, 51422), (Start: 42 @51455 has 41 MA's), (53, 51500), (64, 51545), (67, 51557), (101, 51713), (108, 51746), (154, 51917),

Gene: MiniBagel_69 Start: 47363, Stop: 47866, Start Num: 34

Candidate Starts for MiniBagel_69:

(Start: 34 @47363 has 28 MA's), (57, 47435), (64, 47462), (101, 47624), (113, 47678), (130, 47735), (135, 47762), (146, 47813),

Gene: Moose_64 Start: 41180, Stop: 40623, Start Num: 43

Candidate Starts for Moose_64:

(Start: 43 @41180 has 9 MA's), (53, 41138), (57, 41120), (81, 41036), (85, 41018), (96, 40967), (107, 40913), (134, 40811), (159, 40643),

Gene: Mooshroom_77 Start: 45309, Stop: 45821, Start Num: 40

Candidate Starts for Mooshroom_77:

(16, 45237), (Start: 40 @45309 has 34 MA's), (58, 45378), (71, 45432), (103, 45576), (105, 45582), (109, 45603), (111, 45606), (147, 45750),

Gene: Moozy_54 Start: 38896, Stop: 39405, Start Num: 42

Candidate Starts for Moozy_54:

(13, 38788), (Start: 18 @38833 has 1 MA's), (Start: 42 @38896 has 41 MA's), (Start: 47 @38911 has 1 MA's), (53, 38938), (70, 39028), (75, 39046), (84, 39085), (99, 39160), (128, 39262), (130, 39268), (132, 39283),

Gene: Mossy_86 Start: 56611, Stop: 57093, Start Num: 45

Candidate Starts for Mossy_86:

(Start: 45 @56611 has 39 MA's), (52, 56650), (71, 56728), (73, 56734), (84, 56782), (85, 56785), (88, 56800), (116, 56920), (135, 56986), (154, 57067),

Gene: MrAaronian_72 Start: 45204, Stop: 45701, Start Num: 40

Candidate Starts for MrAaronian_72:

(Start: 24 @45171 has 2 MA's), (29, 45183), (32, 45189), (Start: 40 @45204 has 34 MA's), (Start: 46 @45219 has 2 MA's), (85, 45384), (108, 45492), (132, 45585),

Gene: Mudcat_72 Start: 46394, Stop: 46906, Start Num: 40

Candidate Starts for Mudcat_72:

(16, 46322), (Start: 40 @46394 has 34 MA's), (58, 46463), (71, 46517), (103, 46661), (105, 46667), (109, 46688), (111, 46691),

Gene: NEHalo_60 Start: 41604, Stop: 41047, Start Num: 43

Candidate Starts for NEHalo_60:

(Start: 43 @41604 has 9 MA's), (53, 41562), (57, 41544), (81, 41460), (85, 41442), (96, 41391), (107, 41337), (134, 41235), (159, 41067),

Gene: Nadmeg_86 Start: 56574, Stop: 57053, Start Num: 45

Candidate Starts for Nadmeg_86:

(Start: 45 @56574 has 39 MA's), (72, 56694), (88, 56763), (116, 56880), (119, 56886), (135, 56946), (137, 56961), (140, 56973), (145, 56994),

Gene: Namo_84 Start: 51477, Stop: 51986, Start Num: 42

Candidate Starts for Namo_84:

(Start: 42 @51477 has 41 MA's), (53, 51522), (64, 51567), (78, 51636), (101, 51750), (128, 51840), (132, 51861), (145, 51921), (148, 51930), (155, 51972),

Gene: NapoleonB_77 Start: 45552, Stop: 46064, Start Num: 40

Candidate Starts for NapoleonB_77:

(Start: 40 @45552 has 34 MA's), (58, 45621), (71, 45675), (103, 45819), (105, 45825), (109, 45846),

Gene: Nason_76 Start: 45700, Stop: 46212, Start Num: 40

Candidate Starts for Nason_76:

(Start: 40 @45700 has 34 MA's), (57, 45766), (58, 45769), (71, 45823), (103, 45967), (105, 45973), (109, 45994), (111, 45997),

Gene: Nightmare_70 Start: 47676, Stop: 48179, Start Num: 34

Candidate Starts for Nightmare_70:

(Start: 34 @47676 has 28 MA's), (64, 47775), (101, 47937), (113, 47991), (130, 48048), (146, 48126),

Gene: Niktson_70 Start: 47272, Stop: 47775, Start Num: 34

Candidate Starts for Niktson_70:

(Start: 34 @47272 has 28 MA's), (64, 47371), (101, 47533), (113, 47587), (130, 47644), (135, 47671), (146, 47722),

Gene: Nithya_87 Start: 56516, Stop: 56998, Start Num: 45

Candidate Starts for Nithya_87:

(Start: 45 @56516 has 39 MA's), (48, 56534), (72, 56636), (82, 56678), (84, 56687), (88, 56705), (116, 56825), (119, 56831), (135, 56891), (137, 56906), (140, 56918),

Gene: Nivinsha_72 Start: 46808, Stop: 47311, Start Num: 34

Candidate Starts for Nivinsha_72:

(Start: 34 @46808 has 28 MA's), (64, 46907), (101, 47069), (113, 47123), (130, 47180), (146, 47258),

Gene: Odesza_88 Start: 55145, Stop: 55627, Start Num: 45

Candidate Starts for Odesza_88:

(Start: 45 @55145 has 39 MA's), (73, 55268), (82, 55307), (88, 55334), (109, 55439), (116, 55454), (137, 55535), (140, 55547), (145, 55568),

Gene: OhMyWard_82 Start: 56405, Stop: 56887, Start Num: 45

Candidate Starts for OhMyWard_82:

(Start: 45 @56405 has 39 MA's), (52, 56444), (71, 56522), (73, 56528), (84, 56576), (85, 56579), (88, 56594), (102, 56666), (116, 56714), (154, 56861),

Gene: OlgasClover_89 Start: 57350, Stop: 57832, Start Num: 45

Candidate Starts for OlgasClover_89:

(Start: 45 @57350 has 39 MA's), (48, 57368), (72, 57470), (82, 57512), (84, 57521), (88, 57539), (116, 57659), (119, 57665), (135, 57725), (137, 57740), (140, 57752),

Gene: OlympicHelado_84 Start: 51498, Stop: 52007, Start Num: 42

Candidate Starts for OlympicHelado_84:

(Start: 42 @51498 has 41 MA's), (53, 51543), (64, 51588), (78, 51657), (101, 51771), (128, 51861), (132, 51882), (145, 51942), (148, 51951), (155, 51993),

Gene: Paella_134 Start: 71880, Stop: 72353, Start Num: 46

Candidate Starts for Paella_134:

(39, 71859), (Start: 46 @71880 has 2 MA's), (57, 71928), (58, 71931), (60, 71937), (64, 71955), (71, 71985), (115, 72168), (147, 72297),

Gene: Pepy6_051 Start: 72091, Stop: 72582, Start Num: 42

Candidate Starts for Pepy6_051:

(Start: 42 @72091 has 41 MA's), (Start: 46 @72106 has 2 MA's), (62, 72175), (72, 72214), (73, 72217), (75, 72226), (96, 72325), (103, 72361), (104, 72364), (116, 72403), (122, 72421), (127, 72433), (128, 72436), (137, 72484), (147, 72523),

Gene: Perkunas_90 Start: 55043, Stop: 55525, Start Num: 45

Candidate Starts for Perkunas_90:

(Start: 45 @55043 has 39 MA's), (73, 55166), (88, 55232), (95, 55265), (116, 55352), (140, 55445), (148, 55475), (154, 55499),

Gene: Petite_89 Start: 55917, Stop: 56399, Start Num: 45

Candidate Starts for Petito_89:

(Start: 45 @55917 has 39 MA's), (73, 56040), (88, 56106), (95, 56139), (116, 56226), (140, 56319), (145, 56340),

Gene: Phaby_74 Start: 47582, Stop: 48085, Start Num: 34

Candidate Starts for Phaby_74:

(Start: 34 @47582 has 28 MA's), (48, 47612), (52, 47633), (57, 47654), (64, 47681), (73, 47717), (101, 47843), (113, 47897), (130, 47954), (135, 47981),

Gene: Phepper_88 Start: 56061, Stop: 56540, Start Num: 45

Candidate Starts for Phepper_88:

(Start: 45 @56061 has 39 MA's), (57, 56121), (72, 56181), (84, 56232), (88, 56250), (108, 56349), (116, 56367), (119, 56373), (135, 56433), (137, 56448), (140, 56460), (145, 56481),

Gene: Pherobrine_85 Start: 55751, Stop: 56233, Start Num: 45

Candidate Starts for Pherobrine_85:

(29, 55721), (Start: 45 @55751 has 39 MA's), (52, 55790), (56, 55808), (61, 55829), (71, 55868), (84, 55922), (88, 55940), (116, 56060), (127, 56090), (154, 56207),

Gene: PherryCruz_54 Start: 39085, Stop: 39594, Start Num: 42

Candidate Starts for PherryCruz_54:

(5, 38812), (13, 38977), (Start: 18 @39022 has 1 MA's), (Start: 42 @39085 has 41 MA's), (Start: 47 @39100 has 1 MA's), (53, 39127), (75, 39235), (84, 39274), (99, 39349), (128, 39451), (130, 39457), (132, 39472),

Gene: Phlop_82 Start: 55730, Stop: 55215, Start Num: 30

Candidate Starts for Phlop_82:

(Start: 26 @55736 has 2 MA's), (Start: 30 @55730 has 17 MA's), (Start: 34 @55718 has 28 MA's), (49, 55682), (59, 55637), (62, 55622), (82, 55544), (88, 55517), (90, 55496), (97, 55472), (149, 55262), (152, 55250), (156, 55226),

Gene: PinkCoffee_86 Start: 55594, Stop: 55079, Start Num: 30

Candidate Starts for PinkCoffee_86:

(Start: 26 @55600 has 2 MA's), (Start: 30 @55594 has 17 MA's), (Start: 34 @55582 has 28 MA's), (49, 55546), (59, 55501), (62, 55486), (82, 55408), (88, 55381), (90, 55360), (97, 55336), (149, 55126), (152, 55114), (156, 55090),

Gene: POCO6_050 Start: 73353, Stop: 73844, Start Num: 42

Candidate Starts for POCO6_050:

(Start: 42 @73353 has 41 MA's), (Start: 46 @73368 has 2 MA's), (72, 73476), (73, 73479), (75, 73488), (96, 73587), (116, 73665), (122, 73683), (127, 73695), (128, 73698), (132, 73719), (137, 73746), (147, 73785),

Gene: Popy_80 Start: 51779, Stop: 52288, Start Num: 42

Candidate Starts for Popy_80:

(Start: 42 @51779 has 41 MA's), (53, 51824), (64, 51869), (78, 51938), (101, 52052), (128, 52142), (129, 52145), (132, 52163), (145, 52223), (148, 52232), (155, 52274),

Gene: Portcullis_85 Start: 55736, Stop: 55221, Start Num: 30

Candidate Starts for Portcullis_85:

(Start: 26 @55742 has 2 MA's), (Start: 30 @55736 has 17 MA's), (Start: 34 @55724 has 28 MA's), (49, 55688), (59, 55643), (62, 55628), (82, 55550), (88, 55523), (90, 55502), (97, 55478), (149, 55268), (152, 55256), (156, 55232),

Gene: ProfFrink_73 Start: 45182, Stop: 45679, Start Num: 40

Candidate Starts for ProfFrink_73:

(Start: 24 @45149 has 2 MA's), (29, 45161), (32, 45167), (Start: 40 @45182 has 34 MA's), (Start: 46 @45197 has 2 MA's), (85, 45362), (108, 45470), (132, 45563),

Gene: PullumCavea_83 Start: 55907, Stop: 55392, Start Num: 30

Candidate Starts for PullumCavea_83:

(Start: 26 @55913 has 2 MA's), (Start: 30 @55907 has 17 MA's), (Start: 34 @55895 has 28 MA's), (49, 55859), (59, 55814), (62, 55799), (82, 55721), (88, 55694), (90, 55673), (97, 55649), (149, 55439), (152, 55427), (156, 55403),

Gene: Qui_134 Start: 71880, Stop: 72353, Start Num: 46

Candidate Starts for Qui_134:

(39, 71859), (Start: 46 @71880 has 2 MA's), (57, 71928), (58, 71931), (60, 71937), (64, 71955), (71, 71985), (115, 72168), (147, 72297),

Gene: Rainydai_87 Start: 53073, Stop: 53564, Start Num: 42

Candidate Starts for Rainydai_87:

(9, 52932), (11, 52950), (12, 52959), (23, 53031), (25, 53040), (Start: 42 @53073 has 41 MA's), (53, 53118), (64, 53163), (67, 53175), (101, 53331), (108, 53364), (154, 53535),

Gene: Raunak_73 Start: 44844, Stop: 45341, Start Num: 40

Candidate Starts for Raunak_73:

(Start: 24 @44811 has 2 MA's), (29, 44823), (32, 44829), (Start: 40 @44844 has 34 MA's), (Start: 46 @44859 has 2 MA's), (85, 45024), (108, 45132), (132, 45225),

Gene: RavenPuff_55 Start: 39055, Stop: 39564, Start Num: 42

Candidate Starts for RavenPuff_55:

(Start: 42 @39055 has 41 MA's), (Start: 47 @39070 has 1 MA's), (53, 39097), (70, 39187), (75, 39205), (84, 39244), (99, 39319), (128, 39421), (130, 39427), (132, 39442),

Gene: Regigigas_90 Start: 52685, Stop: 53176, Start Num: 42

Candidate Starts for Regigigas_90:

(9, 52544), (11, 52562), (12, 52571), (23, 52643), (25, 52652), (Start: 42 @52685 has 41 MA's), (53, 52730), (64, 52775), (67, 52787), (101, 52943), (108, 52976), (154, 53147),

Gene: Renaldo_81 Start: 46660, Stop: 47151, Start Num: 40

Candidate Starts for Renaldo_81:

(Start: 38 @46657 has 1 MA's), (Start: 40 @46660 has 34 MA's), (52, 46702), (53, 46705), (86, 46843), (94, 46873), (96, 46888), (111, 46954), (144, 47086), (147, 47098),

Gene: Rickmore_88 Start: 55645, Stop: 56139, Start Num: 45

Candidate Starts for Rickmore_88:

(Start: 45 @55645 has 39 MA's), (72, 55765), (82, 55807), (84, 55816), (88, 55834), (116, 55951), (122, 55969), (123, 55972), (135, 56017), (140, 56044),

Gene: Rima_83 Start: 51477, Stop: 51986, Start Num: 42

Candidate Starts for Rima_83:

(Start: 42 @51477 has 41 MA's), (53, 51522), (64, 51567), (78, 51636), (101, 51750), (128, 51840), (132, 51861), (145, 51921), (148, 51930), (155, 51972),

Gene: RogerDodger_88 Start: 56495, Stop: 55980, Start Num: 30

Candidate Starts for RogerDodger_88:

(Start: 26 @56501 has 2 MA's), (Start: 30 @56495 has 17 MA's), (Start: 34 @56483 has 28 MA's), (49, 56447), (59, 56402), (62, 56387), (82, 56309), (88, 56282), (90, 56261), (97, 56237), (149, 56027), (152, 56015), (156, 55991),

Gene: Roney_88 Start: 55308, Stop: 55790, Start Num: 45

Candidate Starts for Roney_88:

(Start: 45 @55308 has 39 MA's), (73, 55431), (82, 55470), (88, 55497), (109, 55602), (116, 55617), (137, 55698), (140, 55710), (145, 55731),

Gene: RosaAsantewaa_51 Start: 38179, Stop: 38670, Start Num: 42

Candidate Starts for RosaAsantewaa_51:

(17, 38107), (Start: 42 @38179 has 41 MA's), (64, 38266), (71, 38296), (73, 38302), (75, 38311), (84, 38350), (88, 38368), (101, 38437), (148, 38617), (150, 38629),

Gene: Runhaar_85 Start: 55666, Stop: 56145, Start Num: 45

Candidate Starts for Runhaar_85:

(Start: 45 @55666 has 39 MA's), (72, 55786), (88, 55855), (116, 55972), (119, 55978), (135, 56038), (137, 56053), (140, 56065), (145, 56086),

Gene: Salk_72 Start: 45202, Stop: 45699, Start Num: 40

Candidate Starts for Salk_72:

(Start: 24 @45169 has 2 MA's), (29, 45181), (32, 45187), (Start: 40 @45202 has 34 MA's), (Start: 46 @45217 has 2 MA's), (85, 45382), (108, 45490), (132, 45583),

Gene: Salvador_85 Start: 55832, Stop: 55317, Start Num: 30

Candidate Starts for Salvador_85:

(Start: 26 @55838 has 2 MA's), (Start: 30 @55832 has 17 MA's), (Start: 34 @55820 has 28 MA's), (49, 55784), (59, 55739), (62, 55724), (82, 55646), (88, 55619), (90, 55598), (97, 55574), (149, 55364), (152, 55352), (156, 55328),

Gene: Samy_64 Start: 40970, Stop: 41473, Start Num: 42

Candidate Starts for Samy_64:

(1, 40451), (2, 40556), (3, 40580), (4, 40679), (6, 40739), (Start: 42 @40970 has 41 MA's), (63, 41057), (73, 41093), (81, 41126), (85, 41144), (118, 41297), (127, 41327), (141, 41390),

Gene: Samy_62 Start: 37969, Stop: 38490, Start Num: 26

Candidate Starts for Samy_62:

(Start: 26 @37969 has 2 MA's), (55, 38059), (89, 38200),

Gene: SarFire_70 Start: 44563, Stop: 43985, Start Num: 20

Candidate Starts for SarFire_70:

(Start: 20 @44563 has 11 MA's), (Start: 21 @44551 has 1 MA's), (27, 44533), (69, 44392), (77, 44365), (86, 44326), (90, 44296), (144, 44083),

Gene: Savbucketdawg_80 Start: 55174, Stop: 54659, Start Num: 30

Candidate Starts for Savbucketdawg_80:

(Start: 26 @55180 has 2 MA's), (Start: 30 @55174 has 17 MA's), (Start: 34 @55162 has 28 MA's), (49, 55126), (59, 55081), (62, 55066), (82, 54988), (88, 54961), (90, 54940), (97, 54916), (149, 54706), (152, 54694), (156, 54670),

Gene: Scap1_52 Start: 38365, Stop: 38937, Start Num: 18

Candidate Starts for Scap1_52:

(Start: 18 @38365 has 1 MA's), (Start: 42 @38428 has 41 MA's), (Start: 47 @38443 has 1 MA's), (53, 38470), (54, 38488), (70, 38560), (74, 38575), (75, 38578), (84, 38617), (128, 38794), (130, 38800),

Gene: Schwartz33_84 Start: 54940, Stop: 55425, Start Num: 42

Candidate Starts for Schwartz33_84:

(Start: 42 @54940 has 41 MA's), (53, 54982), (56, 54997), (84, 55111), (88, 55129), (108, 55231), (116, 55249), (124, 55273), (135, 55315), (137, 55330), (147, 55369),

Gene: ScienceWizSam_71 Start: 46973, Stop: 47476, Start Num: 34

Candidate Starts for ScienceWizSam_71:

(Start: 34 @46973 has 28 MA's), (64, 47072), (101, 47234), (113, 47288), (130, 47345), (135, 47372), (146, 47423),

Gene: Secretariat_80 Start: 53208, Stop: 53693, Start Num: 42

Candidate Starts for Secretariat_80:

(Start: 42 @53208 has 41 MA's), (53, 53250), (56, 53265), (84, 53379), (88, 53397), (108, 53499), (116, 53517), (124, 53541), (135, 53583), (137, 53598), (147, 53637), (148, 53640), (155, 53682),

Gene: SendItCS_82 Start: 51443, Stop: 51934, Start Num: 42

Candidate Starts for SendItCS_82:

(9, 51302), (11, 51320), (12, 51329), (23, 51401), (25, 51410), (Start: 42 @51443 has 41 MA's), (53, 51488), (64, 51533), (67, 51545), (101, 51701), (108, 51734), (154, 51905),

Gene: SheRa_55 Start: 38965, Stop: 39474, Start Num: 42

Candidate Starts for SheRa_55:

(13, 38857), (Start: 18 @38902 has 1 MA's), (Start: 42 @38965 has 41 MA's), (Start: 47 @38980 has 1 MA's), (53, 39007), (70, 39097), (75, 39115), (84, 39154), (99, 39229), (128, 39331), (130, 39337), (132, 39352),

Gene: Shepard_74 Start: 46904, Stop: 47407, Start Num: 34

Candidate Starts for Shepard_74:

(Start: 34 @46904 has 28 MA's), (48, 46934), (52, 46955), (57, 46976), (64, 47003), (73, 47039), (101, 47165), (113, 47219), (130, 47276), (135, 47303),

Gene: Shiba_71 Start: 44860, Stop: 45357, Start Num: 40

Candidate Starts for Shiba_71:

(Start: 24 @44827 has 2 MA's), (29, 44839), (32, 44845), (Start: 40 @44860 has 34 MA's), (Start: 46 @44875 has 2 MA's), (85, 45040), (108, 45148), (132, 45241),

Gene: Shinji_84 Start: 55913, Stop: 55398, Start Num: 30

Candidate Starts for Shinji_84:

(Start: 26 @55919 has 2 MA's), (Start: 30 @55913 has 17 MA's), (Start: 34 @55901 has 28 MA's), (49, 55865), (59, 55820), (62, 55805), (82, 55727), (88, 55700), (90, 55679), (97, 55655), (149, 55445), (152, 55433), (156, 55409),

Gene: Sloopyjoe_72 Start: 45206, Stop: 45703, Start Num: 40

Candidate Starts for Sloopyjoe_72:

(Start: 24 @45173 has 2 MA's), (29, 45185), (32, 45191), (Start: 40 @45206 has 34 MA's), (Start: 46 @45221 has 2 MA's), (85, 45386), (108, 45494), (132, 45587),

Gene: SmokingBunny_86 Start: 56828, Stop: 56313, Start Num: 30

Candidate Starts for SmokingBunny_86:

(Start: 26 @56834 has 2 MA's), (Start: 30 @56828 has 17 MA's), (Start: 34 @56816 has 28 MA's), (49, 56780), (59, 56735), (62, 56720), (82, 56642), (88, 56615), (90, 56594), (97, 56570), (149, 56360), (152, 56348), (156, 56324),

Gene: Snazzy_68 Start: 43855, Stop: 43277, Start Num: 20

Candidate Starts for Snazzy_68:

(Start: 20 @43855 has 11 MA's), (Start: 21 @43843 has 1 MA's), (27, 43825), (69, 43684), (77, 43657), (86, 43618), (90, 43588), (144, 43375),

Gene: Soshi_81 Start: 51620, Stop: 52129, Start Num: 42

Candidate Starts for Soshi_81:

(Start: 42 @51620 has 41 MA's), (53, 51665), (64, 51710), (78, 51779), (101, 51893), (128, 51983), (132, 52004), (145, 52064), (148, 52073), (155, 52115),

Gene: Spectropatronm_81 Start: 51016, Stop: 51525, Start Num: 42

Candidate Starts for Spectropatronm_81:

(Start: 42 @51016 has 41 MA's), (53, 51061), (64, 51106), (78, 51175), (101, 51289), (128, 51379), (132, 51400), (145, 51460), (148, 51469), (155, 51511),

Gene: SpikeBT_61 Start: 41461, Stop: 40904, Start Num: 43

Candidate Starts for SpikeBT_61:

(Start: 43 @41461 has 9 MA's), (53, 41419), (57, 41401), (81, 41317), (85, 41299), (96, 41248), (107, 41194), (134, 41092), (159, 40924),

Gene: Sporto_71 Start: 46287, Stop: 46784, Start Num: 40

Candidate Starts for Sporto_71:

(22, 46248), (Start: 40 @46287 has 34 MA's), (57, 46350), (64, 46377), (80, 46440), (93, 46494), (107, 46569), (114, 46599), (130, 46653),

Gene: Squee_73 Start: 44893, Stop: 44315, Start Num: 20

Candidate Starts for Squee_73:

(Start: 20 @44893 has 11 MA's), (Start: 21 @44881 has 1 MA's), (27, 44863), (69, 44722), (77, 44695), (86, 44656), (90, 44626), (144, 44413),

Gene: StarLord_72 Start: 45199, Stop: 45696, Start Num: 40

Candidate Starts for StarLord_72:

(Start: 24 @45166 has 2 MA's), (29, 45178), (32, 45184), (Start: 40 @45199 has 34 MA's), (Start: 46 @45214 has 2 MA's), (85, 45379), (108, 45487), (132, 45580),

Gene: Stayer_72 Start: 45169, Stop: 45699, Start Num: 24

Candidate Starts for Stayer_72:

(Start: 24 @45169 has 2 MA's), (29, 45181), (32, 45187), (Start: 40 @45202 has 34 MA's), (Start: 46 @45217 has 2 MA's), (85, 45382), (108, 45490), (132, 45583),

Gene: Sunny4976_69 Start: 47081, Stop: 47557, Start Num: 40

Candidate Starts for Sunny4976_69:

(Start: 40 @47081 has 34 MA's), (65, 47177), (103, 47345), (153, 47525),

Gene: SwissCheese_66 Start: 41680, Stop: 41123, Start Num: 43

Candidate Starts for SwissCheese_66:

(Start: 43 @41680 has 9 MA's), (53, 41638), (57, 41620), (81, 41536), (85, 41518), (96, 41467), (107, 41413), (134, 41311), (159, 41143),

Gene: Synopsis_66 Start: 46738, Stop: 47241, Start Num: 34
Candidate Starts for Synopsis_66:
(Start: 34 @46738 has 28 MA's), (64, 46837), (101, 46999), (113, 47053), (130, 47110), (146, 47188),

Gene: TaidaOne_82 Start: 51492, Stop: 52001, Start Num: 42
Candidate Starts for TaidaOne_82:
(Start: 42 @51492 has 41 MA's), (53, 51537), (64, 51582), (78, 51651), (101, 51765), (128, 51855),
(132, 51876), (145, 51936), (148, 51945), (155, 51987),

Gene: Tanis_89 Start: 55128, Stop: 55610, Start Num: 45
Candidate Starts for Tanis_89:
(Start: 45 @55128 has 39 MA's), (73, 55251), (82, 55290), (88, 55317), (109, 55422), (116, 55437),
(137, 55518), (140, 55530), (145, 55551),

Gene: Tatanka_63 Start: 46880, Stop: 47383, Start Num: 34
Candidate Starts for Tatanka_63:
(Start: 34 @46880 has 28 MA's), (64, 46979), (101, 47141), (113, 47195), (130, 47252), (135, 47279),
(146, 47330),

Gene: Teacup_71 Start: 47312, Stop: 47815, Start Num: 34
Candidate Starts for Teacup_71:
(Start: 34 @47312 has 28 MA's), (64, 47411), (100, 47570), (101, 47573), (113, 47627), (130, 47684),
(135, 47711), (146, 47762),

Gene: TenaciousP_94 Start: 57721, Stop: 58203, Start Num: 45
Candidate Starts for TenaciousP_94:
(Start: 45 @57721 has 39 MA's), (51, 57754), (71, 57838), (116, 58027), (135, 58093), (137, 58108),
(140, 58120),

Gene: Tenno_69 Start: 47396, Stop: 47899, Start Num: 34
Candidate Starts for Tenno_69:
(Start: 34 @47396 has 28 MA's), (Start: 46 @47420 has 2 MA's), (64, 47495), (101, 47657), (113,
47711), (130, 47768), (135, 47795), (146, 47846),

Gene: Thiqqums_90 Start: 53073, Stop: 53564, Start Num: 42
Candidate Starts for Thiqqums_90:
(9, 52932), (11, 52950), (12, 52959), (23, 53031), (25, 53040), (Start: 42 @53073 has 41 MA's), (53,
53118), (64, 53163), (67, 53175), (101, 53331), (108, 53364), (154, 53535),

Gene: Thor_70 Start: 43921, Stop: 43343, Start Num: 20
Candidate Starts for Thor_70:
(Start: 20 @43921 has 11 MA's), (Start: 21 @43909 has 1 MA's), (27, 43891), (69, 43750), (77,
43723), (86, 43684), (90, 43654), (144, 43441),

Gene: TieDye_78 Start: 50340, Stop: 50849, Start Num: 42
Candidate Starts for TieDye_78:
(Start: 42 @50340 has 41 MA's), (53, 50385), (64, 50430), (78, 50499), (101, 50613), (128, 50703),
(132, 50724), (145, 50784), (148, 50793), (155, 50835),

Gene: TillyBobJoe_83 Start: 55714, Stop: 55199, Start Num: 30
Candidate Starts for TillyBobJoe_83:
(Start: 26 @55720 has 2 MA's), (Start: 30 @55714 has 17 MA's), (Start: 34 @55702 has 28 MA's),
(49, 55666), (59, 55621), (62, 55606), (82, 55528), (88, 55501), (90, 55480), (97, 55456), (149,

55246), (152, 55234), (156, 55210),

Gene: Togo_85 Start: 56828, Stop: 56313, Start Num: 30

Candidate Starts for Togo_85:

(Start: 26 @56834 has 2 MA's), (Start: 30 @56828 has 17 MA's), (Start: 34 @56816 has 28 MA's), (49, 56780), (59, 56735), (62, 56720), (82, 56642), (88, 56615), (90, 56594), (97, 56570), (149, 56360), (152, 56348), (156, 56324),

Gene: Tokki_79 Start: 47450, Stop: 47953, Start Num: 34

Candidate Starts for Tokki_79:

(Start: 34 @47450 has 28 MA's), (48, 47480), (52, 47501), (57, 47522), (64, 47549), (73, 47585), (101, 47711), (113, 47765), (130, 47822), (135, 47849),

Gene: TonyStarch_81 Start: 50778, Stop: 51287, Start Num: 42

Candidate Starts for TonyStarch_81:

(Start: 42 @50778 has 41 MA's), (53, 50823), (64, 50868), (78, 50937), (101, 51051), (128, 51141), (132, 51162), (145, 51222), (148, 51231), (155, 51273),

Gene: Tribby_80 Start: 46452, Stop: 46964, Start Num: 40

Candidate Starts for Tribby_80:

(Start: 40 @46452 has 34 MA's), (58, 46521), (71, 46575), (103, 46719), (109, 46746),

Gene: Truckee_71 Start: 47121, Stop: 47624, Start Num: 34

Candidate Starts for Truckee_71:

(Start: 34 @47121 has 28 MA's), (Start: 46 @47145 has 2 MA's), (52, 47172), (64, 47220), (73, 47256), (101, 47382), (113, 47436), (130, 47493), (135, 47520), (146, 47571),

Gene: Trustiboi_68 Start: 46995, Stop: 47498, Start Num: 34

Candidate Starts for Trustiboi_68:

(Start: 34 @46995 has 28 MA's), (64, 47094), (101, 47256), (113, 47310), (130, 47367), (135, 47394), (146, 47445),

Gene: Twister6_84 Start: 55177, Stop: 54662, Start Num: 30

Candidate Starts for Twister6_84:

(Start: 26 @55183 has 2 MA's), (Start: 30 @55177 has 17 MA's), (Start: 34 @55165 has 28 MA's), (49, 55129), (59, 55084), (62, 55069), (82, 54991), (88, 54964), (90, 54943), (97, 54919), (149, 54709), (152, 54697), (156, 54673),

Gene: Untouchable_89 Start: 57058, Stop: 57537, Start Num: 45

Candidate Starts for Untouchable_89:

(Start: 45 @57058 has 39 MA's), (57, 57118), (72, 57178), (84, 57229), (88, 57247), (108, 57346), (116, 57364), (119, 57370), (135, 57430), (137, 57445), (140, 57457), (145, 57478),

Gene: Uzumaki_70 Start: 44675, Stop: 45166, Start Num: 40

Candidate Starts for Uzumaki_70:

(Start: 38 @44672 has 1 MA's), (Start: 40 @44675 has 34 MA's), (52, 44717), (53, 44720), (94, 44888), (111, 44969), (132, 45047),

Gene: Valary_86 Start: 56820, Stop: 56305, Start Num: 30

Candidate Starts for Valary_86:

(Start: 26 @56826 has 2 MA's), (Start: 30 @56820 has 17 MA's), (Start: 34 @56808 has 28 MA's), (49, 56772), (59, 56727), (62, 56712), (82, 56634), (88, 56607), (90, 56586), (97, 56562), (149, 56352), (152, 56340), (156, 56316),

Gene: VanDeWege_87 Start: 56351, Stop: 55830, Start Num: 26

Candidate Starts for VanDeWege_87:

(Start: 26 @56351 has 2 MA's), (Start: 30 @56345 has 17 MA's), (Start: 34 @56333 has 28 MA's), (49, 56297), (59, 56252), (62, 56237), (82, 56159), (88, 56132), (90, 56111), (97, 56087), (149, 55877), (152, 55865), (156, 55841),

Gene: Vardy_86 Start: 55581, Stop: 56060, Start Num: 45

Candidate Starts for Vardy_86:

(Start: 45 @55581 has 39 MA's), (72, 55701), (88, 55770), (116, 55887), (119, 55893), (135, 55953), (137, 55968), (140, 55980), (145, 56001),

Gene: Wizard_80 Start: 55680, Stop: 55165, Start Num: 30

Candidate Starts for Wizard_80:

(Start: 26 @55686 has 2 MA's), (Start: 30 @55680 has 17 MA's), (Start: 34 @55668 has 28 MA's), (49, 55632), (59, 55587), (62, 55572), (82, 55494), (88, 55467), (90, 55446), (97, 55422), (149, 55212), (152, 55200), (156, 55176),

Gene: Wollypog_58 Start: 43704, Stop: 44234, Start Num: 33

Candidate Starts for Wollypog_58:

(Start: 33 @43704 has 3 MA's), (68, 43818), (80, 43863), (112, 44016), (136, 44124),

Gene: Xenomorph_73 Start: 45979, Stop: 46491, Start Num: 40

Candidate Starts for Xenomorph_73:

(Start: 40 @45979 has 34 MA's), (58, 46048), (71, 46102), (103, 46246), (105, 46252), (109, 46273), (111, 46276), (147, 46420),

Gene: Zeina_76 Start: 45531, Stop: 46022, Start Num: 40

Candidate Starts for Zeina_76:

(Start: 38 @45528 has 1 MA's), (Start: 40 @45531 has 34 MA's), (52, 45573), (53, 45576), (94, 45744), (111, 45825), (132, 45903),

Gene: Zeph_90 Start: 56862, Stop: 57341, Start Num: 45

Candidate Starts for Zeph_90:

(Start: 45 @56862 has 39 MA's), (57, 56922), (72, 56982), (84, 57033), (88, 57051), (108, 57150), (116, 57168), (119, 57174), (135, 57234), (137, 57249), (140, 57261), (145, 57282),