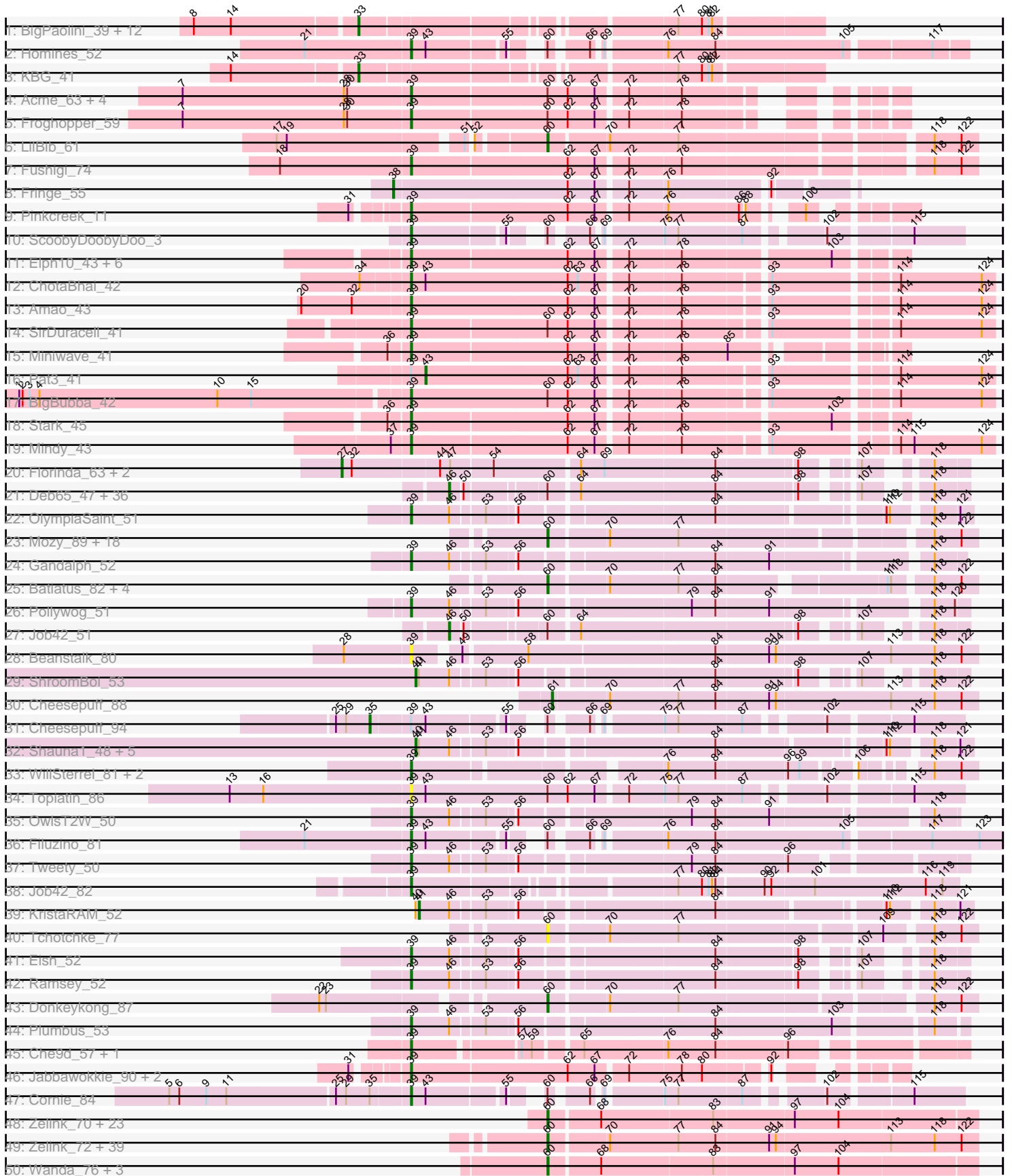
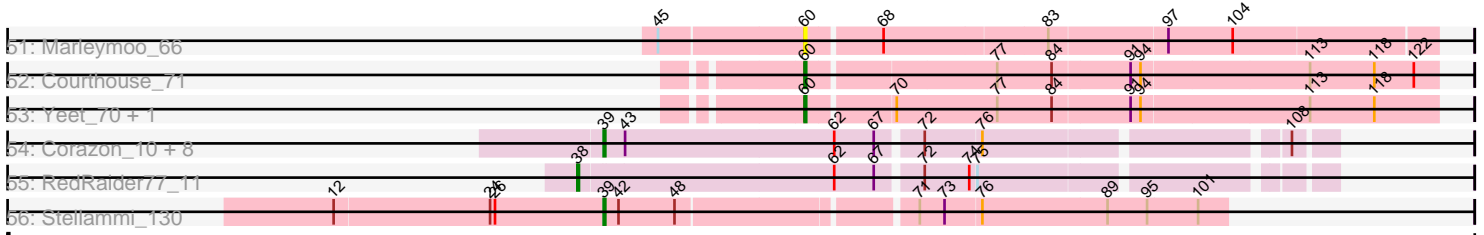


Pham 311224



Pham 311224



Track ID	Track Name	Color	Label
51	MarleyMoo_66	Pink	45
52	Courthouse_71	Pink	60
53	Yeeet_70 + 1	Pink	68
54	Corazon_10 + 8	Purple	77
55	RedRaider77_11	Purple	83
56	Stellammi_130	Purple	84

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 311224 Report

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

Pham number 311224 has 222 members, 23 are drafts.

Phages represented in each track:

- Track 1 : BigPaolini_39, Wilkins_39, ILeeKay_42, Cueylyss_40, LunarLander_41, Eyeball_40, Graduation_42, Puppet_40, Doom_40, Topgun_39, Phlippers_38, Licorice_42, Smairt_41
- Track 2 : Homines_52
- Track 3 : KBG_41
- Track 4 : Acme_63, Lesedi_57, Fajezeel_62, Bxb1_55, Greg_62
- Track 5 : Frog hopper_59
- Track 6 : LilBib_61
- Track 7 : Fushigi_74
- Track 8 : Fringe_55
- Track 9 : Pinkcreek_11
- Track 10 : ScoobyDoobyDoo_3
- Track 11 : Elph10_43, NoSleep_45, Murphy_45, Maxxinista_45, Lilizi_43, Lilac_46, RiverMonster_44
- Track 12 : ChotaBhai_42
- Track 13 : Amao_43
- Track 14 : SirDuracell_41
- Track 15 : Miniwave_41
- Track 16 : Pat3_41
- Track 17 : BigBubba_42
- Track 18 : Stark_45
- Track 19 : Mindy_43
- Track 20 : Florinda_63, Topiatin_56, Quico_60
- Track 21 : Deb65_47, Poenanya_50, Geralt_47, Sandalphon_53, RockyHorror_51, EmiMonkey_48, Vivum_53, DaWorst_52, Blexus_49, BodEinwohner17_52, Leperchaun_44, Daenerys_46, Spoonbill_49, Phasih_48, PMC_45, PHappiness_47, BlueCrab_48, Stap_50, Radiance_51, Boomer_53, JoeyJr_47, Zerg_50, RitaG_47, OldBen_49, Oksu_55, Nimbo_46, Polka14_48, IbOuu_51, Spikelee_57, Doug_53, PhilipPhlop_50, Pacc40_46, Doomphist_50, Rockne_49, Empress_50, KingMidas_51, Scottish_50
- Track 22 : OlympiaSaint_51
- Track 23 : Mozy_89, MadMen_88, LunaBlu_85, Velveteen_76, KristaRAM_80, Brookers_77, Cerasum_76, Bipolar_85, Coco12_79, Sarma624_81, Soul22_83, BigPhil_75, Enzomatic_92, Kingsley_86, SeaLumen_88, NewHope4_85, Ogo pogo_88, LittleE_76, Polo2Bam_91
- Track 24 : Gandalph_52
- Track 25 : Batiatus_82, Ms6_83, MilanaBonita_78, Kumao_60, Akhila_79

- Track 26 : Pollywog_51
- Track 27 : Job42_51
- Track 28 : Beanstalk_80
- Track 29 : ShroomBoi_53
- Track 30 : Cheesepuff_88
- Track 31 : Cheesepuff_94
- Track 32 : Shauna1_48, Phanphagia_48, Bipolar_50, SuperGrey_53, JalFarm20_61, Donkeykong_54
- Track 33 : WillSterrel_81, IrishSherpFalk_82, Spartacus_88
- Track 34 : Topiatin_86
- Track 35 : OwlsT2W_50
- Track 36 : Filuzino_81
- Track 37 : Tweety_50
- Track 38 : Job42_82
- Track 39 : KristaRAM_52
- Track 40 : Tchotchke_77
- Track 41 : Eish_52
- Track 42 : Ramsey_52
- Track 43 : Donkeykong_87
- Track 44 : Plumbus_53
- Track 45 : Che9d_57, Demsculpinboyz_60
- Track 46 : Jabbawokkie_90, Blarby_90, Zapner_89
- Track 47 : Cornie_84
- Track 48 : Zelink_70, Superphikiman_70, Halley_74, Redno2_69, Kalah2_67, Ejimix_72, DmpstrDiver_72, Beem_72, JuicyJay_71, NihilNomen_73, Phoebus_75, Dallas_71, Odette_71, HokkenD_65, Squint_73, Porcelain_72, ThreeRngTarjay_70, Schatzie_67, Qualification_42, FairyPath_41, MiaZeal_73, Lucky2013_70, Hughesyang_71, Ariel_72
- Track 49 : Zelink_72, Superphikiman_72, Bagrid_73, BronnyJames_69, Schatzie_69, Daikon_43, Kalah2_69, Redno2_71, DmpstrDiver_74, MiaZeal_75, Phoebus_77, Beem_74, Mwanjiwa_85, Sprinklers_17, NihilNomen_75, Traaww1_39, Flypotenuse_37, JuicyJay_73, Ejimix_74, Halley_76, Che8_87, Glexan_40, Jant_83, BadAgartude_18, Dallas_73, Odette_73, HokkenD_67, ThreeRngTarjay_72, Shaboozey_68, Porcelain_74, Gator_40, Hughesyang_73, EricMillard_73, Squint_75, Lucky2013_72, Ariel_74, Cali_18, Balomoji_41, Harella_42, Rearden_67
- Track 50 : Wanda_76, Minerva_78, Latretium_83, Klein_72
- Track 51 : Marleymoo_66
- Track 52 : Courthouse_71
- Track 53 : Yeet_70, Marker_88
- Track 54 : Corazon_10, FeliMaine_11, Lilbit_11, LittleLaf_10, Beelzebub_13, Huphlepuuff_11, Pringar_10, JoieB_11, Clarkson_11
- Track 55 : RedRaider77_11
- Track 56 : Stellammi_130

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

The start number called the most often in the published annotations is 60, it was called in 84 of the 199 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_79, Ariel_72, Ariel_74, BadAgartude_18, Bagrid_73, Balomoji_41, Batiatus_82, Beem_72, Beem_74, BigPhil_75, Bipolar_85, BronnyJames_69, Brookers_77, Cali_18, Cerasum_76, Che8_87, Coco12_79, Courthouse_71, Daikon_43, Dallas_71, Dallas_73, DmpstrDiver_72, DmpstrDiver_74, Donkeykong_87, Ejimix_72, Ejimix_74, Enzomatic_92, EricMillard_73, FairyPath_41, Flypotenuse_37, Gator_40, Glexan_40, Halley_74, Halley_76, Harella_42, HokkenD_65, HokkenD_67, Hughesyang_71, Hughesyang_73, Jant_83, JuicyJay_71, JuicyJay_73, Kalah2_67, Kalah2_69, Kingsley_86, Klein_72, KristaRAM_80, Kumao_60, Latretium_83, LilBib_61, LittleE_76, Lucky2013_70, Lucky2013_72, LunaBlu_85, MadMen_88, Marker_88, Marleymoo_66, MiaZeal_73, MiaZeal_75, MilanaBonita_78, Minerva_78, Mozy_89, Ms6_83, Mwanjiwa_85, NewHope4_85, NihilNomen_73, NihilNomen_75, Odette_71, Odette_73, Ogoopogo_88, Phoebus_75, Phoebus_77, Polo2Bam_91, Porcelain_72, Porcelain_74, Qualification_42, Rearden_67, Redno2_69, Redno2_71, Sarma624_81, Schatzie_67, Schatzie_69, SeaLumen_88, Shaboozey_68, Soul22_83, Sprinklers_17, Squint_73, Squint_75, Superphikiman_70, Superphikiman_72, Tchotchke_77, ThreeRngTarjay_70, ThreeRngTarjay_72, Traaww1_39, Velveteen_76, Wanda_76, Yeet_70, Zelink_70, Zelink_72,

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

- Acme_63, BigBubba_42, Blexus_49, BlueCrab_48, BodEinwohner17_52, Boomer_53, Bxb1_55, CheesePuff_94, Cornie_84, DaWorst_52, Daenerys_46, Deb65_47, Doomphist_50, Doug_53, EmiMonkey_48, Empress_50, Fajezeel_62, Filuzino_81, Froghopper_59, Geralt_47, Greg_62, Homines_52, IbOuu_51, Job42_51, JoeyJr_47, KingMidas_51, Leperchaun_44, Lesedi_57, Nimbo_46, Oksu_55, OldBen_49, PHappiness_47, PMC_45, Pacc40_46, Phasih_48, PhilipPhlop_50, Poenanya_50, Polka14_48, Radiance_51, RitaG_47, Rockne_49, RockyHorror_51, Sandalphon_53, ScoobyDoobyDoo_3, Scottish_50, SirDuracell_41, Spikelee_57, Spoonbill_49, Stap_50, Topiatin_86, Vivum_53, Zerg_50,

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

- Amao_43, Beanstalk_80, Beelzebub_13, BigPaolini_39, Bipolar_50, Blarby_90, Che9d_57, CheesePuff_88, ChotaBhai_42, Clarkson_11, Corazon_10, Cueyllyss_40, Demsculpinboyz_60, Donkeykong_54, Doom_40, Eish_52, Elph10_43, Eyeball_40, FeliMaine_11, Florinda_63, Fringe_55, Fushigi_74, Gandolph_52, Graduation_42, HuphlePuff_11, ILeeKay_42, IrishSherpFalk_82, Jabbawokkie_90, JalFarm20_61, Job42_82, JoieB_11, KBG_41, KristaRAM_52, Licorice_42, Lilac_46, Lilbit_11, Lilizi_43, LittleLaf_10, LunarLander_41, Maxxinista_45, Mindy_43, Miniwave_41, Murphy_45, NoSleep_45, OlympiaSaint_51, OwlsT2W_50, Pat3_41, Phanphagia_48, Phlippers_38, Pinkcreek_11, Plumbus_53, Pollywog_51, Pringar_10, Puppet_40, Quico_60, Ramsey_52, RedRaider77_11, RiverMonster_44, Shauna1_48, ShroomBoi_53, Smairt_41, Spartacus_88, Stark_45, Stellammi_130, SuperGrey_53, Topgun_39, Topiatin_56, Tweety_50, Wilkins_39, WillSterrel_81, Zapner_89,

Summary by start number:

Start 27:

- Found in 3 of 222 (1.4%) 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: Florinda_63 (F1), Quico_60 (F1), Topiatin_56 (F1),

Start 33:

- Found in 14 of 222 (6.3%) of genes in pham
- Manual Annotations of this start: 12 of 199
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigPaolini_39 (A1), Cueylyss_40 (A1), Doom_40 (A1), Eyeball_40 (A1), Graduation_42 (A1), ILeeKay_42 (A1), KBG_41 (A1), Licorice_42 (A1), LunarLander_41 (A1), Phlippers_38 (A1), Puppet_40 (A1), Smairt_41 (A1), Topgun_39 (A1), Wilkins_39 (A1),

Start 35:

- Found in 2 of 222 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cheese puff_94 (F1),

Start 38:

- Found in 2 of 222 (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: Fringe_55 (B1), RedRaider77_11 (S),

Start 39:

- Found in 57 of 222 (25.7%) of genes in pham
- Manual Annotations of this start: 52 of 199
- Called 96.5% of time when present
- Phage (with cluster) where this start called: Acme_63 (A1), Amao_43 (E), Beanstalk_80 (F1), Beelzebub_13 (S), BigBubba_42 (E), Blarby_90 (F), Bxb1_55 (A1), Che9d_57 (F2), ChotaBhai_42 (E), Clarkson_11 (S), Corazon_10 (S), Cornie_84 (F5), Demsculpinboyz_60 (F2), Eish_52 (F1), Elph10_43 (E), Fajezeel_62 (A1), FeliMaine_11 (S), Filuzino_81 (F1), Froghopper_59 (A1), Fushigi_74 (A1), Gandolph_52 (F1), Greg_62 (A1), Homines_52 (A1), Huphle puff_11 (S), IrishSherpFalk_82 (F1), Jabbawokkie_90 (F2), Job42_82 (F1), JoieB_11 (S), Lesedi_57 (A1), Lilac_46 (E), Lilbit_11 (S), Lilizi_43 (E), LittleLaf_10 (S), Maxxinista_45 (E), Mindy_43 (E), Miniwave_41 (E), Murphy_45 (E), NoSleep_45 (E), OlympiaSaint_51 (F1), OwlsT2W_50 (F1), Pinkcreek_11 (C1), Plumbus_53 (F1), Pollywog_51 (F1), Pringar_10 (S), Ramsey_52 (F1), RiverMonster_44 (E), ScoobyDoobyDoo_3 (C2), SirDuracell_41 (E), Spartacus_88 (F1), Stark_45 (E), Stellammi_130 (UNK), Topiatin_86 (F1), Tweety_50 (F1), WillSterrel_81 (F1), Zapner_89 (F2),

Start 40:

- Found in 8 of 222 (3.6%) of genes in pham
- Manual Annotations of this start: 7 of 199
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Bipolar_50 (F1), Donkeykong_54 (F1), JalFarm20_61 (F1), Phanphagia_48 (F1), Shauna1_48 (F1), ShroomBoi_53 (F1), SuperGrey_53 (F1),

Start 41:

- Found in 8 of 222 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 12.5% of time when present
- Phage (with cluster) where this start called: KristaRAM_52 (F1),

Start 43:

- Found in 16 of 222 (7.2%) of genes in pham
- Manual Annotations of this start: 1 of 199
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Pat3_41 (E),

Start 46:

- Found in 54 of 222 (24.3%) of genes in pham
- Manual Annotations of this start: 36 of 199
- Called 70.4% of time when present
- Phage (with cluster) where this start called: Blexus_49 (F1), BlueCrab_48 (F1), BodEinwohner17_52 (F1), Boomer_53 (F1), DaWorst_52 (F1), Daenerys_46 (F1), Deb65_47 (F1), Doomphist_50 (F1), Doug_53 (F1), EmiMonkey_48 (F1), Empress_50 (F1), Geralt_47 (F1), IbOuu_51 (F1), Job42_51 (F1), JoeyJr_47 (F1), KingMidas_51 (F1), Leperchaun_44 (F1), Nimbo_46 (F1), Oksu_55 (F1), OldBen_49 (F1), PHappiness_47 (F1), PMC_45 (F1), Pacc40_46 (F1), Phasih_48 (F1), PhilipPhlop_50 (F1), Poenanya_50 (F1), Polka14_48 (F1), Radiance_51 (F1), RitaG_47 (F1), Rockne_49 (F1), RockyHorror_51 (F1), Sandalphon_53 (F1), Scottish_50 (F1), Spikelee_57 (F1), Spoonbill_49 (F1), Stap_50 (F1), Vivum_53 (F1), Zerg_50 (F1),

Start 60:

- Found in 151 of 222 (68.0%) of genes in pham
- Manual Annotations of this start: 84 of 199
- Called 65.6% of time when present
- Phage (with cluster) where this start called: Akhila_79 (F1), Ariel_72 (J), Ariel_74 (J), BadAgartude_18 (C1), Bagrid_73 (J), Balomaji_41 (E), Batiatus_82 (F1), Beem_72 (J), Beem_74 (J), BigPhil_75 (F1), Bipolar_85 (F1), BronnyJames_69 (J), Brookers_77 (F1), Cali_18 (C1), Cerasum_76 (F1), Che8_87 (F1), Coco12_79 (F1), Courthouse_71 (J), Daikon_43 (E), Dallas_71 (J), Dallas_73 (J), DmpstrDiver_72 (J), DmpstrDiver_74 (J), Donkeykong_87 (F1), Ejimix_72 (J), Ejimix_74 (J), Enzomatic_92 (F1), EricMillard_73 (J), FairyPath_41 (E), Flypotenuse_37 (E), Gator_40 (E), Glexan_40 (E), Halley_74 (J), Halley_76 (J), Harella_42 (E), HokkenD_65 (J), HokkenD_67 (J), Hughesyang_71 (J), Hughesyang_73 (J), Jant_83 (F1), JuicyJay_71 (J), JuicyJay_73 (J), Kalah2_67 (J), Kalah2_69 (J), Kingsley_86 (F1), Klein_72 (J), KristaRAM_80 (F1), Kumao_60 (singleton), Latretium_83 (F1), LilBib_61 (A1), LittleE_76 (J), Lucky2013_70 (J), Lucky2013_72 (J), LunaBlu_85 (F1), MadMen_88 (F1), Marker_88 (F1), Marleymoo_66 (J), MiaZeal_73 (J), MiaZeal_75 (J), MilanaBonita_78 (F1), Minerva_78 (J), Mozy_89 (F1), Ms6_83 (F1), Mwanjiwa_85 (F1), NewHope4_85 (F1), NihilNomen_73 (J), NihilNomen_75 (J), Odette_71 (J), Odette_73 (J), Ogopogo_88 (F1), Phoebus_75 (J), Phoebus_77 (J), Polo2Bam_91 (F1), Porcelain_72 (J), Porcelain_74 (J), Quallification_42 (E), Rearden_67 (J), Redno2_69 (J), Redno2_71 (J), Sarma624_81 (F1), Schatzie_67 (J), Schatzie_69 (J), SeaLumen_88 (F1), Shaboozey_68 (J), Soul22_83 (F2), Sprinklers_17 (C1), Squint_73 (J), Squint_75 (J), Superphikiman_70 (J), Superphikiman_72 (J), Tchotchke_77 (F1), ThreeRngTarjay_70 (J), ThreeRngTarjay_72 (J), Traaww1_39 (E), Velveteen_76 (F1), Wanda_76 (J), Yeet_70 (J), Zelink_70 (J), Zelink_72 (J),

Start 61:

- Found in 1 of 222 (0.5%) 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: Cheesepuff_88 (F1),

Summary by clusters:

There are 13 clusters represented in this pham: F1, singleton, E, F5, F, J, F2, A1, S, B1, C2, C1, UNK,

Info for manual annotations of cluster A1:

- Start number 33 was manually annotated 12 times for cluster A1.
- Start number 39 was manually annotated 8 times for cluster A1.
- Start number 60 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster B1:

- Start number 38 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster C1:

- Start number 39 was manually annotated 1 time for cluster C1.
- Start number 60 was manually annotated 3 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 39 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster E:

- Start number 39 was manually annotated 14 times for cluster E.
- Start number 43 was manually annotated 1 time for cluster E.
- Start number 60 was manually annotated 8 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 27 was manually annotated 2 times for cluster F1.
- Start number 35 was manually annotated 1 time for cluster F1.
- Start number 39 was manually annotated 13 times for cluster F1.
- Start number 40 was manually annotated 7 times for cluster F1.
- Start number 41 was manually annotated 1 time for cluster F1.
- Start number 46 was manually annotated 36 times for cluster F1.
- Start number 60 was manually annotated 21 times for cluster F1.
- Start number 61 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 39 was manually annotated 4 times for cluster F2.
- Start number 60 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F5:

- Start number 39 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster J:

- Start number 60 was manually annotated 49 times for cluster J.

Info for manual annotations of cluster S:

- Start number 38 was manually annotated 1 time for cluster S.
- Start number 39 was manually annotated 9 times for cluster S.

Info for manual annotations of cluster UNK:

- Start number 39 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Acme_63 Start: 41329, Stop: 40964, Start Num: 39

Candidate Starts for Acme_63:

(7, 41530), (28, 41386), (30, 41383), (Start: 39 @41329 has 52 MA's), (Start: 60 @41212 has 84 MA's), (62, 41194), (67, 41170), (72, 41146), (78, 41101),

Gene: Akhila_79 Start: 48285, Stop: 48626, Start Num: 60

Candidate Starts for Akhila_79:

(Start: 60 @48285 has 84 MA's), (70, 48333), (77, 48393), (84, 48426), (111, 48555), (113, 48558), (118, 48588), (122, 48612),

Gene: Amao_43 Start: 34812, Stop: 34333, Start Num: 39

Candidate Starts for Amao_43:

(20, 34905), (32, 34860), (Start: 39 @34812 has 52 MA's), (62, 34674), (67, 34650), (72, 34626), (78, 34581), (93, 34515), (114, 34416), (124, 34344),

Gene: Ariel_74 Start: 47072, Stop: 46704, Start Num: 60

Candidate Starts for Ariel_74:

(Start: 60 @47072 has 84 MA's), (70, 47024), (77, 46964), (84, 46931), (91, 46886), (94, 46880), (113, 46781), (118, 46742), (122, 46718),

Gene: Ariel_72 Start: 46298, Stop: 45933, Start Num: 60

Candidate Starts for Ariel_72:

(Start: 60 @46298 has 84 MA's), (68, 46256), (83, 46160), (97, 46091), (104, 46052),

Gene: BadAgartude_18 Start: 5785, Stop: 6153, Start Num: 60

Candidate Starts for BadAgartude_18:

(Start: 60 @5785 has 84 MA's), (70, 5833), (77, 5893), (84, 5926), (91, 5971), (94, 5977), (113, 6076), (118, 6115), (122, 6139),

Gene: Bagrid_73 Start: 50489, Stop: 50121, Start Num: 60

Candidate Starts for Bagrid_73:

(Start: 60 @50489 has 84 MA's), (70, 50441), (77, 50381), (84, 50348), (91, 50303), (94, 50297), (113, 50198), (118, 50159), (122, 50135),

Gene: Balomoji_41 Start: 35435, Stop: 35067, Start Num: 60

Candidate Starts for Balomoji_41:

(Start: 60 @35435 has 84 MA's), (70, 35387), (77, 35327), (84, 35294), (91, 35249), (94, 35243), (113, 35144), (118, 35105), (122, 35081),

Gene: Batiatus_82 Start: 49370, Stop: 49711, Start Num: 60

Candidate Starts for Batiatus_82:

(Start: 60 @49370 has 84 MA's), (70, 49418), (77, 49478), (84, 49511), (111, 49640), (113, 49643), (118, 49673), (122, 49697),

Gene: Beanstalk_80 Start: 48314, Stop: 48784, Start Num: 39

Candidate Starts for Beanstalk_80:

(28, 48257), (Start: 39 @48314 has 52 MA's), (49, 48347), (58, 48398), (84, 48557), (91, 48602), (94, 48608), (113, 48707), (118, 48746), (122, 48770),

Gene: Beelzebub_13 Start: 3753, Stop: 4160, Start Num: 39

Candidate Starts for Beelzebub_13:

(Start: 39 @3753 has 52 MA's), (Start: 43 @3765 has 1 MA's), (62, 3891), (67, 3915), (72, 3939), (76, 3972), (108, 4137),

Gene: Beem_74 Start: 51349, Stop: 50981, Start Num: 60

Candidate Starts for Beem_74:

(Start: 60 @51349 has 84 MA's), (70, 51301), (77, 51241), (84, 51208), (91, 51163), (94, 51157), (113, 51058), (118, 51019), (122, 50995),

Gene: Beem_72 Start: 50575, Stop: 50210, Start Num: 60

Candidate Starts for Beem_72:

(Start: 60 @50575 has 84 MA's), (68, 50533), (83, 50437), (97, 50368), (104, 50329),

Gene: BigBubba_42 Start: 34670, Stop: 34191, Start Num: 39

Candidate Starts for BigBubba_42:

(1, 35006), (2, 35003), (3, 34997), (4, 34988), (10, 34829), (15, 34799), (Start: 39 @34670 has 52 MA's), (Start: 60 @34550 has 84 MA's), (62, 34532), (67, 34508), (72, 34484), (78, 34439), (93, 34373), (114, 34274), (124, 34202),

Gene: BigPaolini_39 Start: 30429, Stop: 30067, Start Num: 33

Candidate Starts for BigPaolini_39:

(8, 30567), (14, 30534), (Start: 33 @30429 has 12 MA's), (77, 30186), (80, 30165), (81, 30159), (82, 30156),

Gene: BigPhil_75 Start: 45204, Stop: 45548, Start Num: 60

Candidate Starts for BigPhil_75:

(Start: 60 @45204 has 84 MA's), (70, 45252), (77, 45312), (118, 45510), (122, 45534),

Gene: Bipolar_85 Start: 50898, Stop: 51242, Start Num: 60

Candidate Starts for Bipolar_85:

(Start: 60 @50898 has 84 MA's), (70, 50946), (77, 51006), (118, 51204), (122, 51228),

Gene: Bipolar_50 Start: 37100, Stop: 37534, Start Num: 40

Candidate Starts for Bipolar_50:

(Start: 40 @37100 has 7 MA's), (Start: 41 @37103 has 1 MA's), (Start: 46 @37130 has 36 MA's), (53, 37157), (56, 37181), (84, 37340), (110, 37469), (112, 37472), (118, 37502), (121, 37523),

Gene: Blarby_90 Start: 47520, Stop: 47888, Start Num: 39

Candidate Starts for Blarby_90:

(31, 47484), (Start: 39 @47520 has 52 MA's), (62, 47655), (67, 47679), (72, 47703), (78, 47748), (80, 47766), (92, 47814),

Gene: Blexus_49 Start: 36674, Stop: 37057, Start Num: 46

Candidate Starts for Blexus_49:

(Start: 46 @36674 has 36 MA's), (50, 36683), (Start: 60 @36746 has 84 MA's), (64, 36770), (84, 36887), (98, 36953), (107, 36989), (118, 37028),

Gene: BlueCrab_48 Start: 36400, Stop: 36783, Start Num: 46

Candidate Starts for BlueCrab_48:

(Start: 46 @36400 has 36 MA's), (50, 36409), (Start: 60 @36472 has 84 MA's), (64, 36496), (84, 36613), (98, 36679), (107, 36715), (118, 36754),

Gene: BodEinwohner17_52 Start: 36616, Stop: 36999, Start Num: 46

Candidate Starts for BodEinwohner17_52:

(Start: 46 @36616 has 36 MA's), (50, 36625), (Start: 60 @36688 has 84 MA's), (64, 36712), (84, 36829), (98, 36895), (107, 36931), (118, 36970),

Gene: Boomer_53 Start: 37849, Stop: 38232, Start Num: 46

Candidate Starts for Boomer_53:

(Start: 46 @37849 has 36 MA's), (50, 37858), (Start: 60 @37921 has 84 MA's), (64, 37945), (84, 38062), (98, 38128), (107, 38164), (118, 38203),

Gene: BronnyJames_69 Start: 45688, Stop: 45320, Start Num: 60

Candidate Starts for BronnyJames_69:

(Start: 60 @45688 has 84 MA's), (70, 45640), (77, 45580), (84, 45547), (91, 45502), (94, 45496), (113, 45397), (118, 45358), (122, 45334),

Gene: Brookers_77 Start: 48155, Stop: 48499, Start Num: 60

Candidate Starts for Brookers_77:

(Start: 60 @48155 has 84 MA's), (70, 48203), (77, 48263), (118, 48461), (122, 48485),

Gene: Bxb1_55 Start: 39572, Stop: 39207, Start Num: 39

Candidate Starts for Bxb1_55:

(7, 39773), (28, 39629), (30, 39626), (Start: 39 @39572 has 52 MA's), (Start: 60 @39455 has 84 MA's), (62, 39437), (67, 39413), (72, 39389), (78, 39344),

Gene: Cali_18 Start: 6761, Stop: 7129, Start Num: 60

Candidate Starts for Cali_18:

(Start: 60 @6761 has 84 MA's), (70, 6809), (77, 6869), (84, 6902), (91, 6947), (94, 6953), (113, 7052), (118, 7091), (122, 7115),

Gene: Cerasum_76 Start: 45222, Stop: 45566, Start Num: 60

Candidate Starts for Cerasum_76:

(Start: 60 @45222 has 84 MA's), (70, 45270), (77, 45330), (118, 45528), (122, 45552),

Gene: Che8_87 Start: 50151, Stop: 50519, Start Num: 60

Candidate Starts for Che8_87:

(Start: 60 @50151 has 84 MA's), (70, 50199), (77, 50259), (84, 50292), (91, 50337), (94, 50343), (113, 50442), (118, 50481), (122, 50505),

Gene: Che9d_57 Start: 36146, Stop: 36583, Start Num: 39

Candidate Starts for Che9d_57:

(Start: 39 @36146 has 52 MA's), (57, 36230), (59, 36239), (65, 36275), (76, 36347), (84, 36389), (96, 36449),

Gene: Cheesepuff_88 Start: 48668, Stop: 49036, Start Num: 61

Candidate Starts for Cheesepuff_88:

(Start: 61 @48668 has 1 MA's), (70, 48716), (77, 48776), (84, 48809), (91, 48854), (94, 48860), (113, 48959), (118, 48998), (122, 49022),

Gene: Cheesepuff_94 Start: 50399, Stop: 50833, Start Num: 35

Candidate Starts for Cheesepuff_94:

(25, 50369), (29, 50378), (Start: 35 @50399 has 1 MA's), (Start: 39 @50432 has 52 MA's), (Start: 43 @50444 has 1 MA's), (55, 50507), (Start: 60 @50522 has 84 MA's), (66, 50549), (69, 50555), (75, 50600), (77, 50612), (87, 50666), (102, 50723), (115, 50789),

Gene: ChotaBhai_42 Start: 34264, Stop: 33785, Start Num: 39

Candidate Starts for ChotaBhai_42:

(34, 34303), (Start: 39 @34264 has 52 MA's), (Start: 43 @34252 has 1 MA's), (62, 34126), (63, 34117), (67, 34102), (72, 34078), (78, 34033), (93, 33967), (114, 33868), (124, 33796),

Gene: Clarkson_11 Start: 3529, Stop: 3936, Start Num: 39

Candidate Starts for Clarkson_11:

(Start: 39 @3529 has 52 MA's), (Start: 43 @3541 has 1 MA's), (62, 3667), (67, 3691), (72, 3715), (76, 3748), (108, 3913),

Gene: Coco12_79 Start: 49279, Stop: 49623, Start Num: 60

Candidate Starts for Coco12_79:

(Start: 60 @49279 has 84 MA's), (70, 49327), (77, 49387), (118, 49585), (122, 49609),

Gene: Corazon_10 Start: 3482, Stop: 3889, Start Num: 39

Candidate Starts for Corazon_10:

(Start: 39 @3482 has 52 MA's), (Start: 43 @3494 has 1 MA's), (62, 3620), (67, 3644), (72, 3668), (76, 3701), (108, 3866),

Gene: Cornie_84 Start: 49125, Stop: 49526, Start Num: 39

Candidate Starts for Cornie_84:

(5, 48918), (6, 48927), (9, 48951), (11, 48969), (25, 49062), (29, 49071), (Start: 35 @49092 has 1 MA's), (Start: 39 @49125 has 52 MA's), (Start: 43 @49137 has 1 MA's), (55, 49200), (Start: 60 @49215 has 84 MA's), (66, 49242), (69, 49248), (75, 49293), (77, 49305), (87, 49359), (102, 49416), (115, 49482),

Gene: Courthouse_71 Start: 46710, Stop: 46342, Start Num: 60

Candidate Starts for Courthouse_71:

(Start: 60 @46710 has 84 MA's), (77, 46602), (84, 46569), (91, 46524), (94, 46518), (113, 46419), (118, 46380), (122, 46356),

Gene: Cueyllyss_40 Start: 32157, Stop: 31795, Start Num: 33

Candidate Starts for Cueyllyss_40:

(8, 32295), (14, 32262), (Start: 33 @32157 has 12 MA's), (77, 31914), (80, 31893), (81, 31887), (82, 31884),

Gene: DaWorst_52 Start: 37475, Stop: 37858, Start Num: 46

Candidate Starts for DaWorst_52:

(Start: 46 @37475 has 36 MA's), (50, 37484), (Start: 60 @37547 has 84 MA's), (64, 37571), (84, 37688), (98, 37754), (107, 37790), (118, 37829),

Gene: Daenerys_46 Start: 35343, Stop: 35726, Start Num: 46

Candidate Starts for Daenerys_46:

(Start: 46 @35343 has 36 MA's), (50, 35352), (Start: 60 @35415 has 84 MA's), (64, 35439), (84, 35556), (98, 35622), (107, 35658), (118, 35697),

Gene: Daikon_43 Start: 35456, Stop: 35088, Start Num: 60

Candidate Starts for Daikon_43:

(Start: 60 @35456 has 84 MA's), (70, 35408), (77, 35348), (84, 35315), (91, 35270), (94, 35264), (113, 35165), (118, 35126), (122, 35102),

Gene: Dallas_73 Start: 50270, Stop: 49902, Start Num: 60

Candidate Starts for Dallas_73:

(Start: 60 @50270 has 84 MA's), (70, 50222), (77, 50162), (84, 50129), (91, 50084), (94, 50078), (113, 49979), (118, 49940), (122, 49916),

Gene: Dallas_71 Start: 49496, Stop: 49131, Start Num: 60

Candidate Starts for Dallas_71:

(Start: 60 @49496 has 84 MA's), (68, 49454), (83, 49358), (97, 49289), (104, 49250),

Gene: Deb65_47 Start: 35312, Stop: 35695, Start Num: 46

Candidate Starts for Deb65_47:

(Start: 46 @35312 has 36 MA's), (50, 35321), (Start: 60 @35384 has 84 MA's), (64, 35408), (84, 35525), (98, 35591), (107, 35627), (118, 35666),

Gene: Demsculpinboyz_60 Start: 36255, Stop: 36692, Start Num: 39

Candidate Starts for Demsculpinboyz_60:

(Start: 39 @36255 has 52 MA's), (57, 36339), (59, 36348), (65, 36384), (76, 36456), (84, 36498), (96, 36558),

Gene: DmpstrDiver_74 Start: 50697, Stop: 50329, Start Num: 60

Candidate Starts for DmpstrDiver_74:

(Start: 60 @50697 has 84 MA's), (70, 50649), (77, 50589), (84, 50556), (91, 50511), (94, 50505), (113, 50406), (118, 50367), (122, 50343),

Gene: DmpstrDiver_72 Start: 49923, Stop: 49558, Start Num: 60

Candidate Starts for DmpstrDiver_72:

(Start: 60 @49923 has 84 MA's), (68, 49881), (83, 49785), (97, 49716), (104, 49677),

Gene: Donkeykong_54 Start: 39346, Stop: 39780, Start Num: 40

Candidate Starts for Donkeykong_54:

(Start: 40 @39346 has 7 MA's), (Start: 41 @39349 has 1 MA's), (Start: 46 @39376 has 36 MA's), (53, 39403), (56, 39427), (84, 39586), (110, 39715), (112, 39718), (118, 39748), (121, 39769),

Gene: Donkeykong_87 Start: 51001, Stop: 51345, Start Num: 60

Candidate Starts for Donkeykong_87:

(22, 50827), (23, 50833), (Start: 60 @51001 has 84 MA's), (70, 51049), (77, 51109), (118, 51307), (122, 51331),

Gene: Doom_40 Start: 32350, Stop: 31988, Start Num: 33

Candidate Starts for Doom_40:

(8, 32488), (14, 32455), (Start: 33 @32350 has 12 MA's), (77, 32107), (80, 32086), (81, 32080), (82, 32077),

Gene: Doomphist_50 Start: 37614, Stop: 37997, Start Num: 46

Candidate Starts for Doomphist_50:

(Start: 46 @37614 has 36 MA's), (50, 37623), (Start: 60 @37686 has 84 MA's), (64, 37710), (84, 37827), (98, 37893), (107, 37929), (118, 37968),

Gene: Doug_53 Start: 37732, Stop: 38115, Start Num: 46

Candidate Starts for Doug_53:

(Start: 46 @37732 has 36 MA's), (50, 37741), (Start: 60 @37804 has 84 MA's), (64, 37828), (84, 37945), (98, 38011), (107, 38047), (118, 38086),

Gene: Eish_52 Start: 37152, Stop: 37565, Start Num: 39

Candidate Starts for Eish_52:

(Start: 39 @37152 has 52 MA's), (Start: 46 @37185 has 36 MA's), (53, 37212), (56, 37236), (84, 37395), (98, 37461), (107, 37497), (118, 37536),

Gene: Ejimix_72 Start: 51361, Stop: 50996, Start Num: 60

Candidate Starts for Ejimix_72:

(Start: 60 @51361 has 84 MA's), (68, 51319), (83, 51223), (97, 51154), (104, 51115),

Gene: Ejimix_74 Start: 52138, Stop: 51770, Start Num: 60

Candidate Starts for Ejimix_74:

(Start: 60 @52138 has 84 MA's), (70, 52090), (77, 52030), (84, 51997), (91, 51952), (94, 51946), (113, 51847), (118, 51808), (122, 51784),

Gene: Elph10_43 Start: 34783, Stop: 34379, Start Num: 39

Candidate Starts for Elph10_43:

(Start: 39 @34783 has 52 MA's), (62, 34648), (67, 34624), (72, 34600), (78, 34555), (103, 34432),

Gene: EmiMonkey_48 Start: 37891, Stop: 38274, Start Num: 46

Candidate Starts for EmiMonkey_48:

(Start: 46 @37891 has 36 MA's), (50, 37900), (Start: 60 @37963 has 84 MA's), (64, 37987), (84, 38104), (98, 38170), (107, 38206), (118, 38245),

Gene: Empress_50 Start: 36757, Stop: 37140, Start Num: 46

Candidate Starts for Empress_50:

(Start: 46 @36757 has 36 MA's), (50, 36766), (Start: 60 @36829 has 84 MA's), (64, 36853), (84, 36970), (98, 37036), (107, 37072), (118, 37111),

Gene: Enzomatic_92 Start: 47700, Stop: 48044, Start Num: 60

Candidate Starts for Enzomatic_92:

(Start: 60 @47700 has 84 MA's), (70, 47748), (77, 47808), (118, 48006), (122, 48030),

Gene: EricMillard_73 Start: 51342, Stop: 50974, Start Num: 60

Candidate Starts for EricMillard_73:

(Start: 60 @51342 has 84 MA's), (70, 51294), (77, 51234), (84, 51201), (91, 51156), (94, 51150), (113, 51051), (118, 51012), (122, 50988),

Gene: Eyeball_40 Start: 31827, Stop: 31465, Start Num: 33

Candidate Starts for Eyeball_40:

(8, 31965), (14, 31932), (Start: 33 @31827 has 12 MA's), (77, 31584), (80, 31563), (81, 31557), (82, 31554),

Gene: FairyPath_41 Start: 35211, Stop: 34846, Start Num: 60

Candidate Starts for FairyPath_41:

(Start: 60 @35211 has 84 MA's), (68, 35169), (83, 35073), (97, 35004), (104, 34965),

Gene: Fajezeel_62 Start: 40619, Stop: 40254, Start Num: 39

Candidate Starts for Fajezeel_62:

(7, 40820), (28, 40676), (30, 40673), (Start: 39 @40619 has 52 MA's), (Start: 60 @40502 has 84 MA's), (62, 40484), (67, 40460), (72, 40436), (78, 40391),

Gene: FeliMaine_11 Start: 3530, Stop: 3937, Start Num: 39

Candidate Starts for FeliMaine_11:

(Start: 39 @3530 has 52 MA's), (Start: 43 @3542 has 1 MA's), (62, 3668), (67, 3692), (72, 3716), (76, 3749), (108, 3914),

Gene: Filuzino_81 Start: 50456, Stop: 50911, Start Num: 39

Candidate Starts for Filuzino_81:

(21, 50363), (Start: 39 @50456 has 52 MA's), (Start: 43 @50468 has 1 MA's), (55, 50531), (Start: 60 @50546 has 84 MA's), (66, 50573), (69, 50579), (76, 50627), (84, 50669), (105, 50780), (117, 50849), (123, 50891),

Gene: Florinda_63 Start: 39217, Stop: 39705, Start Num: 27

Candidate Starts for Florinda_63:

(Start: 27 @39217 has 2 MA's), (32, 39226), (44, 39301), (47, 39310), (54, 39346), (64, 39418), (69, 39439), (84, 39535), (98, 39601), (107, 39637), (118, 39676),

Gene: Flypotenuse_37 Start: 34187, Stop: 33819, Start Num: 60

Candidate Starts for Flypotenuse_37:

(Start: 60 @34187 has 84 MA's), (70, 34139), (77, 34079), (84, 34046), (91, 34001), (94, 33995), (113, 33896), (118, 33857), (122, 33833),

Gene: Fringe_55 Start: 47885, Stop: 47511, Start Num: 38

Candidate Starts for Fringe_55:

(Start: 38 @47885 has 2 MA's), (62, 47735), (67, 47711), (72, 47687), (76, 47654), (92, 47573),

Gene: Frogopper_59 Start: 39967, Stop: 39602, Start Num: 39

Candidate Starts for Frogopper_59:

(7, 40168), (28, 40024), (30, 40021), (Start: 39 @39967 has 52 MA's), (Start: 60 @39850 has 84 MA's), (62, 39832), (67, 39808), (72, 39784), (78, 39739),

Gene: Fushigi_74 Start: 44956, Stop: 44495, Start Num: 39

Candidate Starts for Fushigi_74:

(18, 45070), (Start: 39 @44956 has 52 MA's), (62, 44821), (67, 44797), (72, 44773), (78, 44728), (118, 44533), (122, 44509),

Gene: Gandalph_52 Start: 36543, Stop: 36980, Start Num: 39

Candidate Starts for Gandalph_52:

(Start: 39 @36543 has 52 MA's), (Start: 46 @36576 has 36 MA's), (53, 36603), (56, 36627), (84, 36786), (91, 36831), (118, 36954),

Gene: Gator_40 Start: 35326, Stop: 34958, Start Num: 60

Candidate Starts for Gator_40:

(Start: 60 @35326 has 84 MA's), (70, 35278), (77, 35218), (84, 35185), (91, 35140), (94, 35134), (113, 35035), (118, 34996), (122, 34972),

Gene: Geralt_47 Start: 35311, Stop: 35694, Start Num: 46

Candidate Starts for Geralt_47:

(Start: 46 @35311 has 36 MA's), (50, 35320), (Start: 60 @35383 has 84 MA's), (64, 35407), (84, 35524), (98, 35590), (107, 35626), (118, 35665),

Gene: Glexan_40 Start: 35314, Stop: 34946, Start Num: 60

Candidate Starts for Glexan_40:

(Start: 60 @35314 has 84 MA's), (70, 35266), (77, 35206), (84, 35173), (91, 35128), (94, 35122), (113, 35023), (118, 34984), (122, 34960),

Gene: Graduation_42 Start: 32744, Stop: 32382, Start Num: 33

Candidate Starts for Graduation_42:

(8, 32882), (14, 32849), (Start: 33 @32744 has 12 MA's), (77, 32501), (80, 32480), (81, 32474), (82, 32471),

Gene: Greg_62 Start: 40619, Stop: 40254, Start Num: 39

Candidate Starts for Greg_62:

(7, 40820), (28, 40676), (30, 40673), (Start: 39 @40619 has 52 MA's), (Start: 60 @40502 has 84 MA's), (62, 40484), (67, 40460), (72, 40436), (78, 40391),

Gene: Halley_74 Start: 50575, Stop: 50210, Start Num: 60

Candidate Starts for Halley_74:

(Start: 60 @50575 has 84 MA's), (68, 50533), (83, 50437), (97, 50368), (104, 50329),

Gene: Halley_76 Start: 51349, Stop: 50981, Start Num: 60

Candidate Starts for Halley_76:

(Start: 60 @51349 has 84 MA's), (70, 51301), (77, 51241), (84, 51208), (91, 51163), (94, 51157), (113, 51058), (118, 51019), (122, 50995),

Gene: Harella_42 Start: 35830, Stop: 35462, Start Num: 60

Candidate Starts for Harella_42:

(Start: 60 @35830 has 84 MA's), (70, 35782), (77, 35722), (84, 35689), (91, 35644), (94, 35638), (113, 35539), (118, 35500), (122, 35476),

Gene: HokkenD_65 Start: 48844, Stop: 48479, Start Num: 60

Candidate Starts for HokkenD_65:

(Start: 60 @48844 has 84 MA's), (68, 48802), (83, 48706), (97, 48637), (104, 48598),

Gene: HokkenD_67 Start: 49618, Stop: 49250, Start Num: 60

Candidate Starts for HokkenD_67:

(Start: 60 @49618 has 84 MA's), (70, 49570), (77, 49510), (84, 49477), (91, 49432), (94, 49426), (113, 49327), (118, 49288), (122, 49264),

Gene: Homines_52 Start: 36648, Stop: 36226, Start Num: 39

Candidate Starts for Homines_52:

(21, 36741), (Start: 39 @36648 has 52 MA's), (Start: 43 @36636 has 1 MA's), (55, 36573), (Start: 60 @36558 has 84 MA's), (66, 36531), (69, 36525), (76, 36477), (84, 36435), (105, 36324), (117, 36255),

Gene: Hughesyang_73 Start: 51308, Stop: 50940, Start Num: 60

Candidate Starts for Hughesyang_73:

(Start: 60 @51308 has 84 MA's), (70, 51260), (77, 51200), (84, 51167), (91, 51122), (94, 51116), (113, 51017), (118, 50978), (122, 50954),

Gene: Hughesyang_71 Start: 50504, Stop: 50139, Start Num: 60

Candidate Starts for Hughesyang_71:

(Start: 60 @50504 has 84 MA's), (68, 50462), (83, 50366), (97, 50297), (104, 50258),

Gene: Huphlepuuff_11 Start: 3259, Stop: 3666, Start Num: 39

Candidate Starts for Huphlepuuff_11:

(Start: 39 @3259 has 52 MA's), (Start: 43 @3271 has 1 MA's), (62, 3397), (67, 3421), (72, 3445), (76, 3478), (108, 3643),

Gene: lLeeKay_42 Start: 32194, Stop: 31832, Start Num: 33

Candidate Starts for lLeeKay_42:

(8, 32332), (14, 32299), (Start: 33 @32194 has 12 MA's), (77, 31951), (80, 31930), (81, 31924), (82, 31921),

Gene: lbOuu_51 Start: 37593, Stop: 37976, Start Num: 46

Candidate Starts for lbOuu_51:

(Start: 46 @37593 has 36 MA's), (50, 37602), (Start: 60 @37665 has 84 MA's), (64, 37689), (84, 37806), (98, 37872), (107, 37908), (118, 37947),

Gene: IrishSherpFalk_82 Start: 49608, Stop: 50033, Start Num: 39

Candidate Starts for IrishSherpFalk_82:

(Start: 39 @49608 has 52 MA's), (76, 49803), (84, 49845), (96, 49905), (99, 49914), (106, 49950), (118, 49995), (122, 50019),

Gene: Jabbawokkie_90 Start: 47440, Stop: 47808, Start Num: 39

Candidate Starts for Jabbawokkie_90:

(31, 47404), (Start: 39 @47440 has 52 MA's), (62, 47575), (67, 47599), (72, 47623), (78, 47668), (80, 47686), (92, 47734),

Gene: JalFarm20_61 Start: 39841, Stop: 40275, Start Num: 40

Candidate Starts for JalFarm20_61:

(Start: 40 @39841 has 7 MA's), (Start: 41 @39844 has 1 MA's), (Start: 46 @39871 has 36 MA's), (53, 39898), (56, 39922), (84, 40081), (110, 40210), (112, 40213), (118, 40243), (121, 40264),

Gene: Jant_83 Start: 47663, Stop: 48031, Start Num: 60

Candidate Starts for Jant_83:

(Start: 60 @47663 has 84 MA's), (70, 47711), (77, 47771), (84, 47804), (91, 47849), (94, 47855), (113, 47954), (118, 47993), (122, 48017),

Gene: Job42_51 Start: 38265, Stop: 38648, Start Num: 46

Candidate Starts for Job42_51:

(Start: 46 @38265 has 36 MA's), (50, 38274), (Start: 60 @38337 has 84 MA's), (64, 38361), (98, 38544), (107, 38580), (118, 38619),

Gene: Job42_82 Start: 51811, Stop: 52257, Start Num: 39

Candidate Starts for Job42_82:

(Start: 39 @51811 has 52 MA's), (77, 52015), (80, 52036), (81, 52042), (82, 52045), (84, 52048), (90, 52087), (92, 52093), (101, 52129), (116, 52228), (119, 52243),

Gene: JoeyJr_47 Start: 35511, Stop: 35894, Start Num: 46

Candidate Starts for JoeyJr_47:

(Start: 46 @35511 has 36 MA's), (50, 35520), (Start: 60 @35583 has 84 MA's), (64, 35607), (84, 35724), (98, 35790), (107, 35826), (118, 35865),

Gene: JoieB_11 Start: 3478, Stop: 3885, Start Num: 39

Candidate Starts for JoieB_11:

(Start: 39 @3478 has 52 MA's), (Start: 43 @3490 has 1 MA's), (62, 3616), (67, 3640), (72, 3664), (76, 3697), (108, 3862),

Gene: JuicyJay_71 Start: 51709, Stop: 51344, Start Num: 60
Candidate Starts for JuicyJay_71:
(Start: 60 @51709 has 84 MA's), (68, 51667), (83, 51571), (97, 51502), (104, 51463),

Gene: JuicyJay_73 Start: 52483, Stop: 52115, Start Num: 60
Candidate Starts for JuicyJay_73:
(Start: 60 @52483 has 84 MA's), (70, 52435), (77, 52375), (84, 52342), (91, 52297), (94, 52291), (113, 52192), (118, 52153), (122, 52129),

Gene: KBG_41 Start: 33134, Stop: 32772, Start Num: 33
Candidate Starts for KBG_41:
(14, 33239), (Start: 33 @33134 has 12 MA's), (77, 32891), (80, 32870), (81, 32864), (82, 32861),

Gene: Kalah2_67 Start: 49868, Stop: 49503, Start Num: 60
Candidate Starts for Kalah2_67:
(Start: 60 @49868 has 84 MA's), (68, 49826), (83, 49730), (97, 49661), (104, 49622),

Gene: Kalah2_69 Start: 50642, Stop: 50274, Start Num: 60
Candidate Starts for Kalah2_69:
(Start: 60 @50642 has 84 MA's), (70, 50594), (77, 50534), (84, 50501), (91, 50456), (94, 50450), (113, 50351), (118, 50312), (122, 50288),

Gene: KingMidas_51 Start: 37173, Stop: 37556, Start Num: 46
Candidate Starts for KingMidas_51:
(Start: 46 @37173 has 36 MA's), (50, 37182), (Start: 60 @37245 has 84 MA's), (64, 37269), (84, 37386), (98, 37452), (107, 37488), (118, 37527),

Gene: Kingsley_86 Start: 51886, Stop: 52230, Start Num: 60
Candidate Starts for Kingsley_86:
(Start: 60 @51886 has 84 MA's), (70, 51934), (77, 51994), (118, 52192), (122, 52216),

Gene: Klein_72 Start: 49891, Stop: 49526, Start Num: 60
Candidate Starts for Klein_72:
(Start: 60 @49891 has 84 MA's), (68, 49849), (83, 49753), (97, 49684), (104, 49645),

Gene: KristaRAM_80 Start: 48204, Stop: 48548, Start Num: 60
Candidate Starts for KristaRAM_80:
(Start: 60 @48204 has 84 MA's), (70, 48252), (77, 48312), (118, 48510), (122, 48534),

Gene: KristaRAM_52 Start: 38472, Stop: 38903, Start Num: 41
Candidate Starts for KristaRAM_52:
(Start: 40 @38469 has 7 MA's), (Start: 41 @38472 has 1 MA's), (Start: 46 @38499 has 36 MA's), (53, 38526), (56, 38550), (84, 38709), (110, 38838), (112, 38841), (118, 38871), (121, 38892),

Gene: Kumao_60 Start: 43284, Stop: 43625, Start Num: 60
Candidate Starts for Kumao_60:
(Start: 60 @43284 has 84 MA's), (70, 43332), (77, 43392), (84, 43425), (111, 43554), (113, 43557), (118, 43587), (122, 43611),

Gene: Latretium_83 Start: 48583, Stop: 48948, Start Num: 60
Candidate Starts for Latretium_83:
(Start: 60 @48583 has 84 MA's), (68, 48625), (83, 48721), (97, 48790), (104, 48829),

Gene: Leperchaun_44 Start: 34741, Stop: 35124, Start Num: 46

Candidate Starts for Leperchaun_44:

(Start: 46 @34741 has 36 MA's), (50, 34750), (Start: 60 @34813 has 84 MA's), (64, 34837), (84, 34954), (98, 35020), (107, 35056), (118, 35095),

Gene: Lesedi_57 Start: 39252, Stop: 38887, Start Num: 39

Candidate Starts for Lesedi_57:

(7, 39453), (28, 39309), (30, 39306), (Start: 39 @39252 has 52 MA's), (Start: 60 @39135 has 84 MA's), (62, 39117), (67, 39093), (72, 39069), (78, 39024),

Gene: Licorice_42 Start: 33025, Stop: 32663, Start Num: 33

Candidate Starts for Licorice_42:

(8, 33163), (14, 33130), (Start: 33 @33025 has 12 MA's), (77, 32782), (80, 32761), (81, 32755), (82, 32752),

Gene: LilBib_61 Start: 42376, Stop: 42032, Start Num: 60

Candidate Starts for LilBib_61:

(17, 42586), (19, 42577), (51, 42433), (52, 42430), (Start: 60 @42376 has 84 MA's), (70, 42328), (77, 42268), (118, 42070), (122, 42046),

Gene: Lilac_46 Start: 35189, Stop: 34785, Start Num: 39

Candidate Starts for Lilac_46:

(Start: 39 @35189 has 52 MA's), (62, 35054), (67, 35030), (72, 35006), (78, 34961), (103, 34838),

Gene: Lilbit_11 Start: 3530, Stop: 3937, Start Num: 39

Candidate Starts for Lilbit_11:

(Start: 39 @3530 has 52 MA's), (Start: 43 @3542 has 1 MA's), (62, 3668), (67, 3692), (72, 3716), (76, 3749), (108, 3914),

Gene: Lilizi_43 Start: 34863, Stop: 34459, Start Num: 39

Candidate Starts for Lilizi_43:

(Start: 39 @34863 has 52 MA's), (62, 34728), (67, 34704), (72, 34680), (78, 34635), (103, 34512),

Gene: LittleE_76 Start: 50154, Stop: 49810, Start Num: 60

Candidate Starts for LittleE_76:

(Start: 60 @50154 has 84 MA's), (70, 50106), (77, 50046), (118, 49848), (122, 49824),

Gene: LittleLaf_10 Start: 3259, Stop: 3666, Start Num: 39

Candidate Starts for LittleLaf_10:

(Start: 39 @3259 has 52 MA's), (Start: 43 @3271 has 1 MA's), (62, 3397), (67, 3421), (72, 3445), (76, 3478), (108, 3643),

Gene: Lucky2013_72 Start: 47088, Stop: 46720, Start Num: 60

Candidate Starts for Lucky2013_72:

(Start: 60 @47088 has 84 MA's), (70, 47040), (77, 46980), (84, 46947), (91, 46902), (94, 46896), (113, 46797), (118, 46758), (122, 46734),

Gene: Lucky2013_70 Start: 46314, Stop: 45949, Start Num: 60

Candidate Starts for Lucky2013_70:

(Start: 60 @46314 has 84 MA's), (68, 46272), (83, 46176), (97, 46107), (104, 46068),

Gene: LunaBlu_85 Start: 49751, Stop: 50095, Start Num: 60

Candidate Starts for LunaBlu_85:

(Start: 60 @49751 has 84 MA's), (70, 49799), (77, 49859), (118, 50057), (122, 50081),

Gene: LunarLander_41 Start: 32151, Stop: 31789, Start Num: 33

Candidate Starts for LunarLander_41:

(8, 32289), (14, 32256), (Start: 33 @32151 has 12 MA's), (77, 31908), (80, 31887), (81, 31881), (82, 31878),

Gene: MadMen_88 Start: 49877, Stop: 50221, Start Num: 60

Candidate Starts for MadMen_88:

(Start: 60 @49877 has 84 MA's), (70, 49925), (77, 49985), (118, 50183), (122, 50207),

Gene: Marker_88 Start: 49677, Stop: 50045, Start Num: 60

Candidate Starts for Marker_88:

(Start: 60 @49677 has 84 MA's), (70, 49725), (77, 49785), (84, 49818), (91, 49863), (94, 49869), (113, 49968), (118, 50007),

Gene: Marleymoo_66 Start: 48687, Stop: 48322, Start Num: 60

Candidate Starts for Marleymoo_66:

(45, 48771), (Start: 60 @48687 has 84 MA's), (68, 48645), (83, 48549), (97, 48480), (104, 48441),

Gene: Maxxinista_45 Start: 35159, Stop: 34755, Start Num: 39

Candidate Starts for Maxxinista_45:

(Start: 39 @35159 has 52 MA's), (62, 35024), (67, 35000), (72, 34976), (78, 34931), (103, 34808),

Gene: MiaZeal_75 Start: 47744, Stop: 47376, Start Num: 60

Candidate Starts for MiaZeal_75:

(Start: 60 @47744 has 84 MA's), (70, 47696), (77, 47636), (84, 47603), (91, 47558), (94, 47552), (113, 47453), (118, 47414), (122, 47390),

Gene: MiaZeal_73 Start: 46970, Stop: 46605, Start Num: 60

Candidate Starts for MiaZeal_73:

(Start: 60 @46970 has 84 MA's), (68, 46928), (83, 46832), (97, 46763), (104, 46724),

Gene: MilanaBonita_78 Start: 48285, Stop: 48626, Start Num: 60

Candidate Starts for MilanaBonita_78:

(Start: 60 @48285 has 84 MA's), (70, 48333), (77, 48393), (84, 48426), (111, 48555), (113, 48558), (118, 48588), (122, 48612),

Gene: Mindy_43 Start: 34793, Stop: 34317, Start Num: 39

Candidate Starts for Mindy_43:

(37, 34808), (Start: 39 @34793 has 52 MA's), (62, 34658), (67, 34634), (72, 34610), (78, 34565), (93, 34499), (114, 34400), (115, 34388), (124, 34328),

Gene: Minerva_78 Start: 51991, Stop: 51626, Start Num: 60

Candidate Starts for Minerva_78:

(Start: 60 @51991 has 84 MA's), (68, 51949), (83, 51853), (97, 51784), (104, 51745),

Gene: Miniwave_41 Start: 35246, Stop: 34860, Start Num: 39

Candidate Starts for Miniwave_41:

(36, 35261), (Start: 39 @35246 has 52 MA's), (62, 35111), (67, 35087), (72, 35063), (78, 35018), (85, 34979),

Gene: Mozy_89 Start: 48614, Stop: 48958, Start Num: 60

Candidate Starts for Mozy_89:

(Start: 60 @48614 has 84 MA's), (70, 48662), (77, 48722), (118, 48920), (122, 48944),

Gene: Ms6_83 Start: 45978, Stop: 46319, Start Num: 60

Candidate Starts for Ms6_83:

(Start: 60 @45978 has 84 MA's), (70, 46026), (77, 46086), (84, 46119), (111, 46248), (113, 46251), (118, 46281), (122, 46305),

Gene: Murphy_45 Start: 35671, Stop: 35267, Start Num: 39

Candidate Starts for Murphy_45:

(Start: 39 @35671 has 52 MA's), (62, 35536), (67, 35512), (72, 35488), (78, 35443), (103, 35320),

Gene: Mwanjiwa_85 Start: 50053, Stop: 50421, Start Num: 60

Candidate Starts for Mwanjiwa_85:

(Start: 60 @50053 has 84 MA's), (70, 50101), (77, 50161), (84, 50194), (91, 50239), (94, 50245), (113, 50344), (118, 50383), (122, 50407),

Gene: NewHope4_85 Start: 47846, Stop: 48190, Start Num: 60

Candidate Starts for NewHope4_85:

(Start: 60 @47846 has 84 MA's), (70, 47894), (77, 47954), (118, 48152), (122, 48176),

Gene: NihilNomen_75 Start: 51436, Stop: 51068, Start Num: 60

Candidate Starts for NihilNomen_75:

(Start: 60 @51436 has 84 MA's), (70, 51388), (77, 51328), (84, 51295), (91, 51250), (94, 51244), (113, 51145), (118, 51106), (122, 51082),

Gene: NihilNomen_73 Start: 50662, Stop: 50297, Start Num: 60

Candidate Starts for NihilNomen_73:

(Start: 60 @50662 has 84 MA's), (68, 50620), (83, 50524), (97, 50455), (104, 50416),

Gene: Nimbo_46 Start: 35314, Stop: 35697, Start Num: 46

Candidate Starts for Nimbo_46:

(Start: 46 @35314 has 36 MA's), (50, 35323), (Start: 60 @35386 has 84 MA's), (64, 35410), (84, 35527), (98, 35593), (107, 35629), (118, 35668),

Gene: NoSleep_45 Start: 35431, Stop: 35027, Start Num: 39

Candidate Starts for NoSleep_45:

(Start: 39 @35431 has 52 MA's), (62, 35296), (67, 35272), (72, 35248), (78, 35203), (103, 35080),

Gene: Odette_71 Start: 49705, Stop: 49340, Start Num: 60

Candidate Starts for Odette_71:

(Start: 60 @49705 has 84 MA's), (68, 49663), (83, 49567), (97, 49498), (104, 49459),

Gene: Odette_73 Start: 50479, Stop: 50111, Start Num: 60

Candidate Starts for Odette_73:

(Start: 60 @50479 has 84 MA's), (70, 50431), (77, 50371), (84, 50338), (91, 50293), (94, 50287), (113, 50188), (118, 50149), (122, 50125),

Gene: Ogopogo_88 Start: 49094, Stop: 49438, Start Num: 60

Candidate Starts for Ogopogo_88:

(Start: 60 @49094 has 84 MA's), (70, 49142), (77, 49202), (118, 49400), (122, 49424),

Gene: Oksu_55 Start: 38799, Stop: 39179, Start Num: 46

Candidate Starts for Oksu_55:

(Start: 46 @38799 has 36 MA's), (50, 38808), (Start: 60 @38871 has 84 MA's), (64, 38895), (84, 39012), (98, 39078), (107, 39114), (118, 39153),

Gene: OldBen_49 Start: 37029, Stop: 37412, Start Num: 46

Candidate Starts for OldBen_49:

(Start: 46 @37029 has 36 MA's), (50, 37038), (Start: 60 @37101 has 84 MA's), (64, 37125), (84, 37242), (98, 37308), (107, 37344), (118, 37383),

Gene: OlympiaSaint_51 Start: 36873, Stop: 37310, Start Num: 39

Candidate Starts for OlympiaSaint_51:

(Start: 39 @36873 has 52 MA's), (Start: 46 @36906 has 36 MA's), (53, 36933), (56, 36957), (84, 37116), (110, 37245), (112, 37248), (118, 37278), (121, 37299),

Gene: OwlsT2W_50 Start: 36873, Stop: 37304, Start Num: 39

Candidate Starts for OwlsT2W_50:

(Start: 39 @36873 has 52 MA's), (Start: 46 @36906 has 36 MA's), (53, 36933), (56, 36957), (79, 37095), (84, 37116), (91, 37161), (118, 37284),

Gene: PHappiness_47 Start: 35287, Stop: 35670, Start Num: 46

Candidate Starts for PHappiness_47:

(Start: 46 @35287 has 36 MA's), (50, 35296), (Start: 60 @35359 has 84 MA's), (64, 35383), (84, 35500), (98, 35566), (107, 35602), (118, 35641),

Gene: PMC_45 Start: 36085, Stop: 36468, Start Num: 46

Candidate Starts for PMC_45:

(Start: 46 @36085 has 36 MA's), (50, 36094), (Start: 60 @36157 has 84 MA's), (64, 36181), (84, 36298), (98, 36364), (107, 36400), (118, 36439),

Gene: Pacc40_46 Start: 35361, Stop: 35744, Start Num: 46

Candidate Starts for Pacc40_46:

(Start: 46 @35361 has 36 MA's), (50, 35370), (Start: 60 @35433 has 84 MA's), (64, 35457), (84, 35574), (98, 35640), (107, 35676), (118, 35715),

Gene: Pat3_41 Start: 33929, Stop: 33462, Start Num: 43

Candidate Starts for Pat3_41:

(Start: 39 @33941 has 52 MA's), (Start: 43 @33929 has 1 MA's), (62, 33803), (63, 33794), (67, 33779), (72, 33755), (78, 33710), (93, 33644), (114, 33545), (124, 33473),

Gene: Phanphagia_48 Start: 36801, Stop: 37235, Start Num: 40

Candidate Starts for Phanphagia_48:

(Start: 40 @36801 has 7 MA's), (Start: 41 @36804 has 1 MA's), (Start: 46 @36831 has 36 MA's), (53, 36858), (56, 36882), (84, 37041), (110, 37170), (112, 37173), (118, 37203), (121, 37224),

Gene: Phasih_48 Start: 36631, Stop: 37014, Start Num: 46

Candidate Starts for Phasih_48:

(Start: 46 @36631 has 36 MA's), (50, 36640), (Start: 60 @36703 has 84 MA's), (64, 36727), (84, 36844), (98, 36910), (107, 36946), (118, 36985),

Gene: PhlipPhlop_50 Start: 37891, Stop: 38274, Start Num: 46

Candidate Starts for PhlipPhlop_50:

(Start: 46 @37891 has 36 MA's), (50, 37900), (Start: 60 @37963 has 84 MA's), (64, 37987), (84, 38104), (98, 38170), (107, 38206), (118, 38245),

Gene: Phlippers_38 Start: 32612, Stop: 32250, Start Num: 33

Candidate Starts for Phlippers_38:

(8, 32750), (14, 32717), (Start: 33 @32612 has 12 MA's), (77, 32369), (80, 32348), (81, 32342), (82, 32339),

Gene: Phoebus_77 Start: 52618, Stop: 52250, Start Num: 60

Candidate Starts for Phoebus_77:

(Start: 60 @52618 has 84 MA's), (70, 52570), (77, 52510), (84, 52477), (91, 52432), (94, 52426), (113, 52327), (118, 52288), (122, 52264),

Gene: Phoebus_75 Start: 51844, Stop: 51479, Start Num: 60

Candidate Starts for Phoebus_75:

(Start: 60 @51844 has 84 MA's), (68, 51802), (83, 51706), (97, 51637), (104, 51598),

Gene: Pinkcreek_11 Start: 4628, Stop: 5008, Start Num: 39

Candidate Starts for Pinkcreek_11:

(31, 4592), (Start: 39 @4628 has 52 MA's), (62, 4763), (67, 4787), (72, 4811), (76, 4844), (86, 4904), (88, 4907), (100, 4937),

Gene: Plumbus_53 Start: 37073, Stop: 37519, Start Num: 39

Candidate Starts for Plumbus_53:

(Start: 39 @37073 has 52 MA's), (Start: 46 @37106 has 36 MA's), (53, 37133), (56, 37157), (84, 37316), (103, 37415), (118, 37493),

Gene: Poenanya_50 Start: 37614, Stop: 37997, Start Num: 46

Candidate Starts for Poenanya_50:

(Start: 46 @37614 has 36 MA's), (50, 37623), (Start: 60 @37686 has 84 MA's), (64, 37710), (84, 37827), (98, 37893), (107, 37929), (118, 37968),

Gene: Polka14_48 Start: 35964, Stop: 36347, Start Num: 46

Candidate Starts for Polka14_48:

(Start: 46 @35964 has 36 MA's), (50, 35973), (Start: 60 @36036 has 84 MA's), (64, 36060), (84, 36177), (98, 36243), (107, 36279), (118, 36318),

Gene: Pollywog_51 Start: 37317, Stop: 37757, Start Num: 39

Candidate Starts for Pollywog_51:

(Start: 39 @37317 has 52 MA's), (Start: 46 @37350 has 36 MA's), (53, 37377), (56, 37401), (79, 37539), (84, 37560), (91, 37605), (118, 37728), (120, 37746),

Gene: Polo2Bam_91 Start: 47700, Stop: 48044, Start Num: 60

Candidate Starts for Polo2Bam_91:

(Start: 60 @47700 has 84 MA's), (70, 47748), (77, 47808), (118, 48006), (122, 48030),

Gene: Porcelain_72 Start: 46970, Stop: 46605, Start Num: 60

Candidate Starts for Porcelain_72:

(Start: 60 @46970 has 84 MA's), (68, 46928), (83, 46832), (97, 46763), (104, 46724),

Gene: Porcelain_74 Start: 47744, Stop: 47376, Start Num: 60

Candidate Starts for Porcelain_74:

(Start: 60 @47744 has 84 MA's), (70, 47696), (77, 47636), (84, 47603), (91, 47558), (94, 47552), (113, 47453), (118, 47414), (122, 47390),

Gene: Pringar_10 Start: 3084, Stop: 3491, Start Num: 39
Candidate Starts for Pringar_10:
(Start: 39 @3084 has 52 MA's), (Start: 43 @3096 has 1 MA's), (62, 3222), (67, 3246), (72, 3270), (76, 3303), (108, 3468),

Gene: Puppet_40 Start: 32097, Stop: 31735, Start Num: 33
Candidate Starts for Puppet_40:
(8, 32235), (14, 32202), (Start: 33 @32097 has 12 MA's), (77, 31854), (80, 31833), (81, 31827), (82, 31824),

Gene: Quallification_42 Start: 35222, Stop: 34857, Start Num: 60
Candidate Starts for Quallification_42:
(Start: 60 @35222 has 84 MA's), (68, 35180), (83, 35084), (97, 35015), (104, 34976),

Gene: Quico_60 Start: 39037, Stop: 39525, Start Num: 27
Candidate Starts for Quico_60:
(Start: 27 @39037 has 2 MA's), (32, 39046), (44, 39121), (47, 39130), (54, 39166), (64, 39238), (69, 39259), (84, 39355), (98, 39421), (107, 39457), (118, 39496),

Gene: Radiance_51 Start: 37201, Stop: 37584, Start Num: 46
Candidate Starts for Radiance_51:
(Start: 46 @37201 has 36 MA's), (50, 37210), (Start: 60 @37273 has 84 MA's), (64, 37297), (84, 37414), (98, 37480), (107, 37516), (118, 37555),

Gene: Ramsey_52 Start: 37825, Stop: 38238, Start Num: 39
Candidate Starts for Ramsey_52:
(Start: 39 @37825 has 52 MA's), (Start: 46 @37858 has 36 MA's), (53, 37885), (56, 37909), (84, 38068), (98, 38134), (107, 38170), (118, 38209),

Gene: Rearden_67 Start: 46500, Stop: 46132, Start Num: 60
Candidate Starts for Rearden_67:
(Start: 60 @46500 has 84 MA's), (70, 46452), (77, 46392), (84, 46359), (91, 46314), (94, 46308), (113, 46209), (118, 46170), (122, 46146),

Gene: RedRaider77_11 Start: 3531, Stop: 3950, Start Num: 38
Candidate Starts for RedRaider77_11:
(Start: 38 @3531 has 2 MA's), (62, 3681), (67, 3705), (72, 3729), (74, 3756), (75, 3759),

Gene: Redno2_69 Start: 47458, Stop: 47093, Start Num: 60
Candidate Starts for Redno2_69:
(Start: 60 @47458 has 84 MA's), (68, 47416), (83, 47320), (97, 47251), (104, 47212),

Gene: Redno2_71 Start: 48232, Stop: 47864, Start Num: 60
Candidate Starts for Redno2_71:
(Start: 60 @48232 has 84 MA's), (70, 48184), (77, 48124), (84, 48091), (91, 48046), (94, 48040), (113, 47941), (118, 47902), (122, 47878),

Gene: RitaG_47 Start: 35632, Stop: 36015, Start Num: 46
Candidate Starts for RitaG_47:
(Start: 46 @35632 has 36 MA's), (50, 35641), (Start: 60 @35704 has 84 MA's), (64, 35728), (84, 35845), (98, 35911), (107, 35947), (118, 35986),

Gene: RiverMonster_44 Start: 35447, Stop: 35043, Start Num: 39

Candidate Starts for RiverMonster_44:

(Start: 39 @35447 has 52 MA's), (62, 35312), (67, 35288), (72, 35264), (78, 35219), (103, 35096),

Gene: Rockne_49 Start: 36085, Stop: 36468, Start Num: 46

Candidate Starts for Rockne_49:

(Start: 46 @36085 has 36 MA's), (50, 36094), (Start: 60 @36157 has 84 MA's), (64, 36181), (84, 36298), (98, 36364), (107, 36400), (118, 36439),

Gene: RockyHorror_51 Start: 36489, Stop: 36872, Start Num: 46

Candidate Starts for RockyHorror_51:

(Start: 46 @36489 has 36 MA's), (50, 36498), (Start: 60 @36561 has 84 MA's), (64, 36585), (84, 36702), (98, 36768), (107, 36804), (118, 36843),

Gene: Sandalphon_53 Start: 37808, Stop: 38191, Start Num: 46

Candidate Starts for Sandalphon_53:

(Start: 46 @37808 has 36 MA's), (50, 37817), (Start: 60 @37880 has 84 MA's), (64, 37904), (84, 38021), (98, 38087), (107, 38123), (118, 38162),

Gene: Sarma624_81 Start: 45898, Stop: 46242, Start Num: 60

Candidate Starts for Sarma624_81:

(Start: 60 @45898 has 84 MA's), (70, 45946), (77, 46006), (118, 46204), (122, 46228),

Gene: Schatzie_69 Start: 50226, Stop: 49858, Start Num: 60

Candidate Starts for Schatzie_69:

(Start: 60 @50226 has 84 MA's), (70, 50178), (77, 50118), (84, 50085), (91, 50040), (94, 50034), (113, 49935), (118, 49896), (122, 49872),

Gene: Schatzie_67 Start: 49452, Stop: 49087, Start Num: 60

Candidate Starts for Schatzie_67:

(Start: 60 @49452 has 84 MA's), (68, 49410), (83, 49314), (97, 49245), (104, 49206),

Gene: ScoobyDoobyDoo_3 Start: 606, Stop: 1007, Start Num: 39

Candidate Starts for ScoobyDoobyDoo_3:

(Start: 39 @606 has 52 MA's), (55, 681), (Start: 60 @696 has 84 MA's), (66, 723), (69, 729), (75, 774), (77, 786), (87, 840), (102, 897), (115, 963),

Gene: Scottish_50 Start: 36644, Stop: 37027, Start Num: 46

Candidate Starts for Scottish_50:

(Start: 46 @36644 has 36 MA's), (50, 36653), (Start: 60 @36716 has 84 MA's), (64, 36740), (84, 36857), (98, 36923), (107, 36959), (118, 36998),

Gene: SeaLumen_88 Start: 47700, Stop: 48044, Start Num: 60

Candidate Starts for SeaLumen_88:

(Start: 60 @47700 has 84 MA's), (70, 47748), (77, 47808), (118, 48006), (122, 48030),

Gene: Shaboozey_68 Start: 45709, Stop: 45341, Start Num: 60

Candidate Starts for Shaboozey_68:

(Start: 60 @45709 has 84 MA's), (70, 45661), (77, 45601), (84, 45568), (91, 45523), (94, 45517), (113, 45418), (118, 45379), (122, 45355),

Gene: Shauna1_48 Start: 36782, Stop: 37216, Start Num: 40

Candidate Starts for Shauna1_48:

(Start: 40 @36782 has 7 MA's), (Start: 41 @36785 has 1 MA's), (Start: 46 @36812 has 36 MA's), (53, 36839), (56, 36863), (84, 37022), (110, 37151), (112, 37154), (118, 37184), (121, 37205),

Gene: ShroomBoi_53 Start: 37239, Stop: 37649, Start Num: 40

Candidate Starts for ShroomBoi_53:

(Start: 40 @37239 has 7 MA's), (Start: 41 @37242 has 1 MA's), (Start: 46 @37269 has 36 MA's), (53, 37296), (56, 37320), (84, 37479), (98, 37545), (107, 37581), (118, 37620),

Gene: SirDuracell_41 Start: 33680, Stop: 33204, Start Num: 39

Candidate Starts for SirDuracell_41:

(Start: 39 @33680 has 52 MA's), (Start: 60 @33563 has 84 MA's), (62, 33545), (67, 33521), (72, 33497), (78, 33452), (93, 33386), (114, 33287), (124, 33215),

Gene: Smairt_41 Start: 32245, Stop: 31883, Start Num: 33

Candidate Starts for Smairt_41:

(8, 32383), (14, 32350), (Start: 33 @32245 has 12 MA's), (77, 32002), (80, 31981), (81, 31975), (82, 31972),

Gene: Soul22_83 Start: 47464, Stop: 47808, Start Num: 60

Candidate Starts for Soul22_83:

(Start: 60 @47464 has 84 MA's), (70, 47512), (77, 47572), (118, 47770), (122, 47794),

Gene: Spartacus_88 Start: 51839, Stop: 52264, Start Num: 39

Candidate Starts for Spartacus_88:

(Start: 39 @51839 has 52 MA's), (76, 52034), (84, 52076), (96, 52136), (99, 52145), (106, 52181), (118, 52226), (122, 52250),

Gene: Spikelee_57 Start: 38384, Stop: 38767, Start Num: 46

Candidate Starts for Spikelee_57:

(Start: 46 @38384 has 36 MA's), (50, 38393), (Start: 60 @38456 has 84 MA's), (64, 38480), (84, 38597), (98, 38663), (107, 38699), (118, 38738),

Gene: Spoonbill_49 Start: 35586, Stop: 35969, Start Num: 46

Candidate Starts for Spoonbill_49:

(Start: 46 @35586 has 36 MA's), (50, 35595), (Start: 60 @35658 has 84 MA's), (64, 35682), (84, 35799), (98, 35865), (107, 35901), (118, 35940),

Gene: Sprinklers_17 Start: 5187, Stop: 5555, Start Num: 60

Candidate Starts for Sprinklers_17:

(Start: 60 @5187 has 84 MA's), (70, 5235), (77, 5295), (84, 5328), (91, 5373), (94, 5379), (113, 5478), (118, 5517), (122, 5541),

Gene: Squint_73 Start: 47089, Stop: 46724, Start Num: 60

Candidate Starts for Squint_73:

(Start: 60 @47089 has 84 MA's), (68, 47047), (83, 46951), (97, 46882), (104, 46843),

Gene: Squint_75 Start: 47863, Stop: 47495, Start Num: 60

Candidate Starts for Squint_75:

(Start: 60 @47863 has 84 MA's), (70, 47815), (77, 47755), (84, 47722), (91, 47677), (94, 47671), (113, 47572), (118, 47533), (122, 47509),

Gene: Stap_50 Start: 36387, Stop: 36770, Start Num: 46

Candidate Starts for Stap_50:

(Start: 46 @36387 has 36 MA's), (50, 36396), (Start: 60 @36459 has 84 MA's), (64, 36483), (84, 36600), (98, 36666), (107, 36702), (118, 36741),

Gene: Stark_45 Start: 35450, Stop: 35046, Start Num: 39

Candidate Starts for Stark_45:

(36, 35465), (Start: 39 @35450 has 52 MA's), (62, 35315), (67, 35291), (72, 35267), (78, 35222), (103, 35099),

Gene: Stellammi_130 Start: 61513, Stop: 61869, Start Num: 39

Candidate Starts for Stellammi_130:

(12, 61351), (24, 61444), (26, 61447), (Start: 39 @61513 has 52 MA's), (42, 61522), (48, 61555), (71, 61687), (73, 61702), (76, 61723), (89, 61798), (95, 61822), (101, 61852),

Gene: SuperGrey_53 Start: 38208, Stop: 38642, Start Num: 40

Candidate Starts for SuperGrey_53:

(Start: 40 @38208 has 7 MA's), (Start: 41 @38211 has 1 MA's), (Start: 46 @38238 has 36 MA's), (53, 38265), (56, 38289), (84, 38448), (110, 38577), (112, 38580), (118, 38610), (121, 38631),

Gene: Superphikiman_72 Start: 46954, Stop: 46586, Start Num: 60

Candidate Starts for Superphikiman_72:

(Start: 60 @46954 has 84 MA's), (70, 46906), (77, 46846), (84, 46813), (91, 46768), (94, 46762), (113, 46663), (118, 46624), (122, 46600),

Gene: Superphikiman_70 Start: 46180, Stop: 45815, Start Num: 60

Candidate Starts for Superphikiman_70:

(Start: 60 @46180 has 84 MA's), (68, 46138), (83, 46042), (97, 45973), (104, 45934),

Gene: Tchotchke_77 Start: 47983, Stop: 48327, Start Num: 60

Candidate Starts for Tchotchke_77:

(Start: 60 @47983 has 84 MA's), (70, 48031), (77, 48091), (109, 48253), (118, 48289), (122, 48313),

Gene: ThreeRngTarjay_70 Start: 50738, Stop: 50373, Start Num: 60

Candidate Starts for ThreeRngTarjay_70:

(Start: 60 @50738 has 84 MA's), (68, 50696), (83, 50600), (97, 50531), (104, 50492),

Gene: ThreeRngTarjay_72 Start: 51510, Stop: 51142, Start Num: 60

Candidate Starts for ThreeRngTarjay_72:

(Start: 60 @51510 has 84 MA's), (70, 51462), (77, 51402), (84, 51369), (91, 51324), (94, 51318), (113, 51219), (118, 51180), (122, 51156),

Gene: Topgun_39 Start: 31551, Stop: 31189, Start Num: 33

Candidate Starts for Topgun_39:

(8, 31689), (14, 31656), (Start: 33 @31551 has 12 MA's), (77, 31308), (80, 31287), (81, 31281), (82, 31278),

Gene: Topiatin_56 Start: 38155, Stop: 38643, Start Num: 27

Candidate Starts for Topiatin_56:

(Start: 27 @38155 has 2 MA's), (32, 38164), (44, 38239), (47, 38248), (54, 38284), (64, 38356), (69, 38377), (84, 38473), (98, 38539), (107, 38575), (118, 38614),

Gene: Topiatin_86 Start: 49943, Stop: 50392, Start Num: 39

Candidate Starts for Topiatin_86:

(13, 49784), (16, 49814), (Start: 39 @49943 has 52 MA's), (Start: 43 @49955 has 1 MA's), (Start: 60 @50063 has 84 MA's), (62, 50081), (67, 50105), (72, 50129), (75, 50159), (77, 50171), (87, 50225), (102, 50282), (115, 50348),

Gene: Traaww1_39 Start: 34655, Stop: 34287, Start Num: 60

Candidate Starts for Traaww1_39:

(Start: 60 @34655 has 84 MA's), (70, 34607), (77, 34547), (84, 34514), (91, 34469), (94, 34463), (113, 34364), (118, 34325), (122, 34301),

Gene: Tweety_50 Start: 37155, Stop: 37592, Start Num: 39

Candidate Starts for Tweety_50:

(Start: 39 @37155 has 52 MA's), (Start: 46 @37188 has 36 MA's), (53, 37215), (56, 37239), (79, 37377), (84, 37398), (96, 37458),

Gene: Velveteen_76 Start: 45898, Stop: 46242, Start Num: 60

Candidate Starts for Velveteen_76:

(Start: 60 @45898 has 84 MA's), (70, 45946), (77, 46006), (118, 46204), (122, 46228),

Gene: Vivum_53 Start: 37408, Stop: 37791, Start Num: 46

Candidate Starts for Vivum_53:

(Start: 46 @37408 has 36 MA's), (50, 37417), (Start: 60 @37480 has 84 MA's), (64, 37504), (84, 37621), (98, 37687), (107, 37723), (118, 37762),

Gene: Wanda_76 Start: 50200, Stop: 49835, Start Num: 60

Candidate Starts for Wanda_76:

(Start: 60 @50200 has 84 MA's), (68, 50158), (83, 50062), (97, 49993), (104, 49954),

Gene: Wilkins_39 Start: 31484, Stop: 31122, Start Num: 33

Candidate Starts for Wilkins_39:

(8, 31622), (14, 31589), (Start: 33 @31484 has 12 MA's), (77, 31241), (80, 31220), (81, 31214), (82, 31211),

Gene: WillSterrel_81 Start: 49641, Stop: 50066, Start Num: 39

Candidate Starts for WillSterrel_81:

(Start: 39 @49641 has 52 MA's), (76, 49836), (84, 49878), (96, 49938), (99, 49947), (106, 49983), (118, 50028), (122, 50052),

Gene: Yeet_70 Start: 49727, Stop: 49359, Start Num: 60

Candidate Starts for Yeet_70:

(Start: 60 @49727 has 84 MA's), (70, 49679), (77, 49619), (84, 49586), (91, 49541), (94, 49535), (113, 49436), (118, 49397),

Gene: Zapner_89 Start: 47534, Stop: 47902, Start Num: 39

Candidate Starts for Zapner_89:

(31, 47498), (Start: 39 @47534 has 52 MA's), (62, 47669), (67, 47693), (72, 47717), (78, 47762), (80, 47780), (92, 47828),

Gene: Zelink_70 Start: 51051, Stop: 50686, Start Num: 60

Candidate Starts for Zelink_70:

(Start: 60 @51051 has 84 MA's), (68, 51009), (83, 50913), (97, 50844), (104, 50805),

Gene: Zelink_72 Start: 51822, Stop: 51454, Start Num: 60

Candidate Starts for Zelink_72:

(Start: 60 @51822 has 84 MA's), (70, 51774), (77, 51714), (84, 51681), (91, 51636), (94, 51630), (113, 51531), (118, 51492), (122, 51468),

Gene: Zerg_50 Start: 36598, Stop: 36981, Start Num: 46

Candidate Starts for Zerg_50:

(Start: 46 @36598 has 36 MA's), (50, 36607), (Start: 60 @36670 has 84 MA's), (64, 36694), (84, 36811), (98, 36877), (107, 36913), (118, 36952),