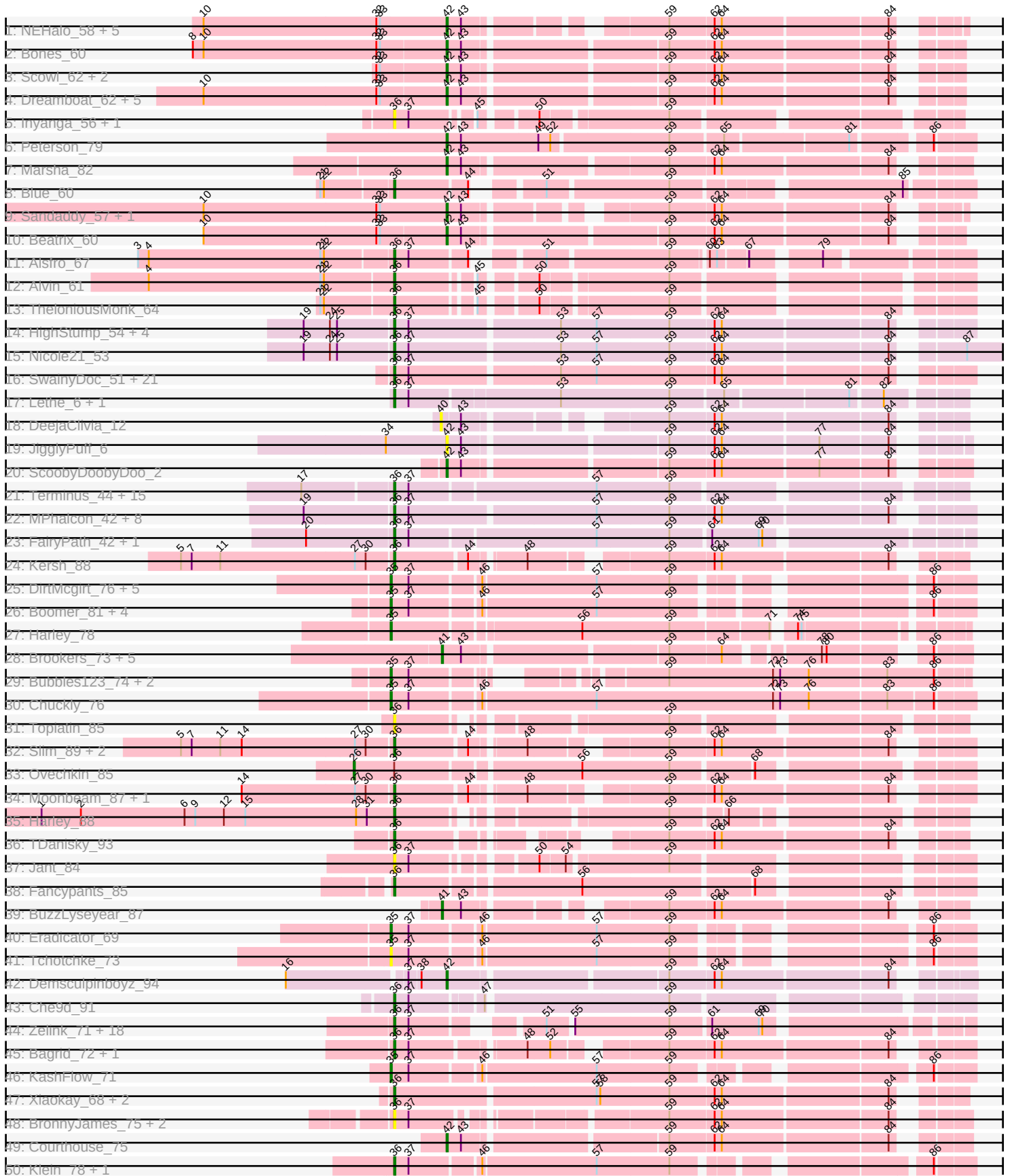
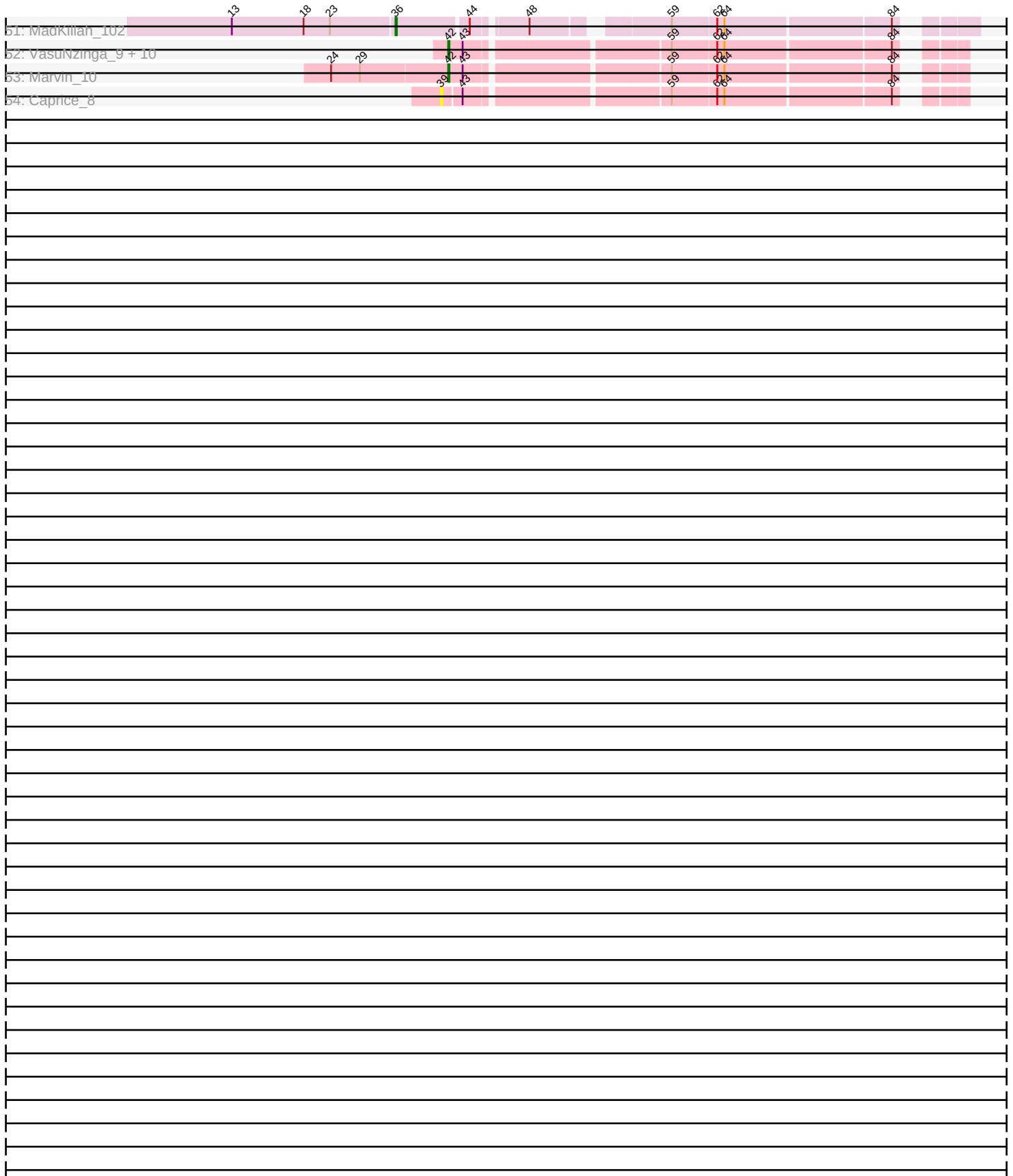


Pham 280135



Pham 280135



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 280135 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280135 has 171 members, 31 are drafts.

Phages represented in each track:

- Track 1 : NEHalo_58, GageAP_62, AFIS_57, Blackflame_57, SpikeBT_59, Makemake_63
- Track 2 : Bones_60
- Track 3 : Scowl_62, StrongArm_59, Bexan_58
- Track 4 : Dreamboat_62, Cueylyss_61, Ohno789_61, Graduation_65, PherrisBueller_60, Jasper_61
- Track 5 : Inyanga_56, Iqorha_56
- Track 6 : Peterson_79
- Track 7 : Marsha_82
- Track 8 : Blue_60
- Track 9 : Sandaddy_57, Sorpresa_58
- Track 10 : Beatrix_60
- Track 11 : Alsfro_67
- Track 12 : Alvin_61
- Track 13 : TheloniousMonk_64
- Track 14 : HighStump_54, Longacauda_53, Iridessa_53, Legolas_54, Orwigg_52
- Track 15 : Nicole21_53
- Track 16 : SwainyDoc_51, DaddyDaniels_54, Chentzyk_51, Rita1961_51, Kronus_50, Childish_52, Phayeta_52, MmasiCarm_51, Obutu_51, Soile_53, Mortcellus_50, Brilliant_54, Kahve_52, Casbah_50, Mulaychimus_51, Ben11_50, Gervas_51, HenryJackson_52, Marlia_51, Craff_55, TinyTerror_51, SlippinJimmy_52
- Track 17 : Lethe_6, Bigswole_5
- Track 18 : DeejaClivia_12
- Track 19 : JigglyPuff_6
- Track 20 : ScoobyDoobyDoo_2
- Track 21 : Terminus_44, Kostya_43, PhatBacter_45, xkcd_46, Nimrod_45, Phaux_44, Murica_44, Palpatine_45, BigBubba_43, Petra64142_47, HufflyPuff_44, FireRed_45, Greep_46, Misfit_44, Policronamos_45, BugsBunny_43
- Track 22 : MPhalcon_42, Nala_43, StormChicken_44, MISSy_42, Becksu_43, Rimmer_43, Buck_43, TeamEdward_44, Youngblood_44
- Track 23 : FairyPath_42, Quallification_43
- Track 24 : Kersh_88
- Track 25 : DirtMcgirt_76, UncleRicky_76, Drago_74, Lucia_77, Enby_78, Lorde_77
- Track 26 : Boomer_81, Llij_73, Rockne_78, Phatniss_74, PMC_74
- Track 27 : Harley_78
- Track 28 : Brookers_73, Cerasum_72, Velveteen_73, Sarma624_77, BigPhil_72, Coco12_75

- Track 29 : Bubbles123_74, IrishSherpFalk_79, WillSterrel_78
- Track 30 : Chuckly_76
- Track 31 : Topiatin_85
- Track 32 : Slim_89, Emmaloid_89, Sabbb_88
- Track 33 : Ovechkin_85
- Track 34 : Moonbeam_87, Rialto_90
- Track 35 : Harley_88
- Track 36 : TDanisky_93
- Track 37 : Jant_84
- Track 38 : Fancypants_85
- Track 39 : BuzzLyseyear_87
- Track 40 : Eradicator_69
- Track 41 : Tchotchke_73
- Track 42 : Demsculpinboyz_94
- Track 43 : Che9d_91
- Track 44 : Zelink_71, Schatzie_68, Kalah2_68, Redno2_70, Ejimix_73, Squint_74, Beem_73, JuicyJay_72, NihilNomen_74, Halley_75, Phoebus_76, Odette_72, HokkenD_66, Porcelain_73, DmpstrDiver_73, MiaZeal_74, Superphikiman_71, Dallas_72, Ariel_73
- Track 45 : Bagrid_72, EricMillard_72
- Track 46 : KashFlow_71
- Track 47 : Xiaokay_68, Thibault_65, Constella_64
- Track 48 : BronnyJames_75, Nibley_68, Shaboozey_74
- Track 49 : Courthouse_75
- Track 50 : Klein_78, Wanda_82
- Track 51 : MadKillah_102
- Track 52 : VasuNzinga_9, Latretium_78, MrPhizzler_54, BoogieWoogie_53, RedRaider77_10, DolOn_56, Rimu_53, Fringe_56, Khan1_53, Gwilliam_53, Lumine_53
- Track 53 : Marvin_10
- Track 54 : Caprice_8

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

The start number called the most often in the published annotations is 36, it was called in 84 of the 140 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alsfro_67, Alvin_61, Ariel_73, Bagrid_72, Becksu_43, Beem_73, Ben11_50, BigBubba_43, Bigswole_5, Blue_60, Brilliant_54, BronnyJames_75, Buck_43, BugsBunny_43, Casbah_50, Che9d_91, Chentzyk_51, Childish_52, Constella_64, Craff_55, DaddyDaniels_54, Dallas_72, DmpstrDiver_73, Ejimix_73, Emmaloid_89, EricMillard_72, FairyPath_42, Fancypants_85, FireRed_45, Gervas_51, Greep_46, Halley_75, Harley_88, HenryJackson_52, HighStump_54, HokkenD_66, HuffyPuff_44, Inyanga_56, Iqorha_56, Iridessa_53, Jant_84, JuicyJay_72, Kahve_52, Kalah2_68, Kersh_88, Klein_78, Kostya_43, Kronus_50, Legolas_54, Lethe_6, Longacauda_53, MISSy_42, MPhalcon_42, MadKillah_102, Marlia_51, MiaZeal_74, Misfit_44, MmasiCarm_51, Moonbeam_87, Mortcellus_50, Mulaychimus_51, Murica_44, Nala_43, Nibley_68, Nicole21_53, NihilNomen_74, Nimrod_45, Obutu_51, Odette_72, Orwigg_52, Palpatine_45, Petra64142_47,

PhatBacter_45, Phaux_44, Phayeta_52, Phoebus_76, Policronamos_45, Porcelain_73, Quallification_43, Redno2_70, Rialto_90, Rimmer_43, Rita1961_51, Sabbb_88, Schatzie_68, Shaboozey_74, Slim_89, SlippinJimmy_52, Soile_53, Squint_74, StormChicken_44, Superphikiman_71, SwainyDoc_51, TDanisky_93, TeamEdward_44, Terminus_44, TheloniousMonk_64, Thibault_65, TinyTerror_51, Topiatin_85, Wanda_82, Xiaokay_68, Youngblood_44, Zelink_71, xkcd_46,

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

- Ovechkin_85,

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

- AFIS_57, Beatrix_60, Bexan_58, BigPhil_72, Blackflame_57, Bones_60, BoogieWoogie_53, Boomer_81, Brookers_73, Bubbles123_74, BuzzLyseyear_87, Caprice_8, Cerasum_72, Chuckly_76, Coco12_75, Courthouse_75, Cueylyss_61, DeejaClivia_12, Demsculpinboyz_94, DirtMcgirt_76, DolOn_56, Drago_74, Dreamboat_62, Enby_78, Eradicator_69, Fringe_56, GageAP_62, Graduation_65, Gwilliam_53, Harley_78, IrishSherpFalk_79, Jasper_61, JigglyPuff_6, KashFlow_71, Khan1_53, Latretium_78, Llij_73, Lorde_77, Lucia_77, Lumine_53, Makemake_63, Marsha_82, Marvin_10, MrPhizzler_54, NEHalo_58, Ohno789_61, PMC_74, Peterson_79, Phatniss_74, PherrisBuell_60, RedRaider77_10, Rimu_53, Rockne_78, Sandaddy_57, Sarma624_77, ScoobyDooDoo_2, Scowl_62, Sorpresa_58, SpikeBT_59, StrongArm_59, Tchotchke_73, UncleRicky_76, VasuNzinga_9, Velveteen_73, WillSterrel_78,

Summary by start number:

Start 26:

- Found in 1 of 171 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ovechkin_85 (F1),

Start 35:

- Found in 19 of 171 (11.1%) of genes in pham
- Manual Annotations of this start: 17 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boomer_81 (F1), Bubbles123_74 (F1), Chuckly_76 (F1), DirtMcgirt_76 (F1), Drago_74 (F1), Enby_78 (F1), Eradicator_69 (F1), Harley_78 (F1), IrishSherpFalk_79 (F1), KashFlow_71 (J), Llij_73 (F1), Lorde_77 (F1), Lucia_77 (F1), PMC_74 (F1), Phatniss_74 (F1), Rockne_78 (F1), Tchotchke_73 (F1), UncleRicky_76 (F1), WillSterrel_78 (F1),

Start 36:

- Found in 106 of 171 (62.0%) of genes in pham
- Manual Annotations of this start: 84 of 140
- Called 99.1% of time when present
- Phage (with cluster) where this start called: Alsfro_67 (A1), Alvin_61 (A1), Ariel_73 (J), Bagrid_72 (J), Becksu_43 (E), Beem_73 (J), Ben11_50 (B3), BigBubba_43 (E), Bigswole_5 (C1), Blue_60 (A1), Brilliant_54 (B1), BronnyJames_75 (J), Buck_43 (E), BugsBunny_43 (E), Casbah_50 (B3), Che9d_91 (F2), Chentzyk_51 (B3), Childish_52 (B1), Constella_64 (J), Craff_55 (B1), DaddyDaniels_54 (B1), Dallas_72 (J), DmpstrDiver_73 (J), Ejimix_73 (J), Emmaloid_89 (F1), EricMillard_72 (J), FairyPath_42 (E), Fancypants_85 (F1), FireRed_45 (E), Gervas_51 (B3), Greep_46

(E), Halley_75 (J), Harley_88 (F1), HenryJackson_52 (B1), HighStump_54 (B1), HokkenD_66 (J), HuffyPuff_44 (E), Inyanga_56 (A1), Iqorha_56 (A1), Iridessa_53 (B1), Jant_84 (F1), JuicyJay_72 (J), Kahve_52 (B1), Kalah2_68 (J), Kersh_88 (F1), Klein_78 (J), Kostya_43 (E), Kronus_50 (B3), Legolas_54 (B1), Lethe_6 (C1), Longacauda_53 (B1), MISSy_42 (E), MPhalcon_42 (E), MadKillah_102 (O), Marlia_51 (B3), MiaZeal_74 (J), Misfit_44 (E), MmasiCarm_51 (B3), Moonbeam_87 (F1), Mortcellus_50 (B3), Mulaychimus_51 (B3), Murica_44 (E), Nala_43 (E), Nibley_68 (J), Nicole21_53 (B1), NihilNomen_74 (J), Nimrod_45 (E), Obutu_51 (B3), Odette_72 (J), Orwigg_52 (B1), Palpatine_45 (E), Petra64142_47 (E), PhatBacter_45 (E), Phaux_44 (E), Phayeta_52 (B3), Phoebus_76 (J), Policronamos_45 (E), Porcelain_73 (J), Qualification_43 (E), Redno2_70 (J), Rialto_90 (F1), Rimmer_43 (E), Rita1961_51 (B3), Sabb_88 (F1), Schatzie_68 (J), Shaboozey_74 (J), Slim_89 (F1), SlippinJimmy_52 (B3), Soile_53 (B1), Squint_74 (J), StormChicken_44 (E), Superphikiman_71 (J), SwainyDoc_51 (B3), TDanisky_93 (F1), TeamEdward_44 (E), Terminus_44 (E), TheloniousMonk_64 (A1), Thibault_65 (J), TinyTerror_51 (B3), Topiatin_85 (F1), Wanda_82 (J), Xiaokay_68 (J), Youngblood_44 (E), Zelink_71 (J), xkcd_46 (E),

Start 39:

- Found in 1 of 171 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caprice_8 (S),

Start 40:

- Found in 1 of 171 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DeejaClivia_12 (C1),

Start 41:

- Found in 7 of 171 (4.1%) of genes in pham
- Manual Annotations of this start: 7 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigPhil_72 (F1), Brookers_73 (F1), BuzzLyseyear_87 (F1), Cerasum_72 (F1), Coco12_75 (F1), Sarma624_77 (F1), Velveteen_73 (F1),

Start 42:

- Found in 37 of 171 (21.6%) of genes in pham
- Manual Annotations of this start: 31 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AFIS_57 (A1), Beatrix_60 (A1), Bexan_58 (A1), Blackflame_57 (A1), Bones_60 (A1), BoogieWoogie_53 (B1), Courthouse_75 (J), Cueylyss_61 (A1), Demsculpinboyz_94 (F2), DoIOn_56 (B1), Dreamboat_62 (A1), Fringe_56 (B1), GageAP_62 (A1), Graduation_65 (A1), Gwilliam_53 (B1), Jasper_61 (A1), JigglyPuff_6 (C1), Khan1_53 (B1), Latretium_78 (F1), Lumine_53 (B1), Makemake_63 (A1), Marsha_82 (A1), Marvin_10 (S), MrPhizzler_54 (B1), NEHalo_58 (A1), Ohno789_61 (A1), Peterson_79 (A1), PherrisBuell_60 (A1), RedRaider77_10 (S), Rimu_53 (B1), Sandaddy_57 (A1), ScoobyDoobyDoo_2 (C2), Scowl_62 (A1), Sorpresa_58 (A1), SpikeBT_59 (A1), StrongArm_59 (A1), VasuNzinga_9 (S),

Summary by clusters:

There are 11 clusters represented in this pham: F1, F2, E, J, O, A1, S, B1, B3, C2, C1,

Info for manual annotations of cluster A1:

- Start number 36 was manually annotated 4 times for cluster A1.
- Start number 42 was manually annotated 19 times for cluster A1.

Info for manual annotations of cluster B1:

- Start number 36 was manually annotated 13 times for cluster B1.
- Start number 42 was manually annotated 5 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 36 was manually annotated 11 times for cluster B3.

Info for manual annotations of cluster C1:

- Start number 36 was manually annotated 2 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 42 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster E:

- Start number 36 was manually annotated 20 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 26 was manually annotated 1 time for cluster F1.
- Start number 35 was manually annotated 16 times for cluster F1.
- Start number 36 was manually annotated 9 times for cluster F1.
- Start number 41 was manually annotated 7 times for cluster F1.
- Start number 42 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 36 was manually annotated 1 time for cluster F2.
- Start number 42 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster J:

- Start number 35 was manually annotated 1 time for cluster J.
- Start number 36 was manually annotated 23 times for cluster J.
- Start number 42 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster O:

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

Info for manual annotations of cluster S:

- Start number 42 was manually annotated 3 times for cluster S.

Gene Information:

Gene: AFIS_57 Start: 39716, Stop: 39357, Start Num: 42

Candidate Starts for AFIS_57:

(10, 39917), (32, 39773), (33, 39770), (Start: 42 @39716 has 31 MA's), (43, 39704), (59, 39569), (62, 39533), (64, 39527), (84, 39395),

Gene: Alsfro_67 Start: 41490, Stop: 41089, Start Num: 36

Candidate Starts for Alsfro_67:

(3, 41700), (4, 41691), (21, 41547), (22, 41544), (Start: 36 @41490 has 84 MA's), (37, 41478), (44, 41433), (51, 41394), (59, 41298), (60, 41271), (63, 41265), (67, 41244), (79, 41196),

Gene: Alvin_61 Start: 40955, Stop: 40545, Start Num: 36

Candidate Starts for Alvin_61:

(4, 41156), (21, 41012), (22, 41009), (Start: 36 @40955 has 84 MA's), (45, 40898), (50, 40859), (59, 40763),

Gene: Ariel_73 Start: 46707, Stop: 46291, Start Num: 36

Candidate Starts for Ariel_73:

(Start: 36 @46707 has 84 MA's), (37, 46695), (51, 46611), (55, 46593), (59, 46515), (61, 46485), (69, 46446), (70, 46443),

Gene: Bagrid_72 Start: 50124, Stop: 49711, Start Num: 36

Candidate Starts for Bagrid_72:

(Start: 36 @50124 has 84 MA's), (37, 50112), (48, 50028), (52, 50010), (59, 49932), (62, 49896), (64, 49890), (84, 49758),

Gene: Beatrix_60 Start: 41870, Stop: 41490, Start Num: 42

Candidate Starts for Beatrix_60:

(10, 42071), (32, 41927), (33, 41924), (Start: 42 @41870 has 31 MA's), (43, 41858), (59, 41702), (62, 41666), (64, 41660), (84, 41528),

Gene: Becksu_43 Start: 35704, Stop: 35261, Start Num: 36

Candidate Starts for Becksu_43:

(19, 35776), (Start: 36 @35704 has 84 MA's), (37, 35692), (57, 35542), (59, 35482), (62, 35446), (64, 35440), (84, 35308),

Gene: Beem_73 Start: 50984, Stop: 50568, Start Num: 36

Candidate Starts for Beem_73:

(Start: 36 @50984 has 84 MA's), (37, 50972), (51, 50888), (55, 50870), (59, 50792), (61, 50762), (69, 50723), (70, 50720),

Gene: Ben11_50 Start: 45429, Stop: 44986, Start Num: 36

Candidate Starts for Ben11_50:

(Start: 36 @45429 has 84 MA's), (37, 45417), (53, 45297), (57, 45267), (59, 45207), (62, 45171), (64, 45165), (84, 45033),

Gene: Bexan_58 Start: 41649, Stop: 41269, Start Num: 42

Candidate Starts for Bexan_58:

(32, 41706), (33, 41703), (Start: 42 @41649 has 31 MA's), (43, 41637), (59, 41481), (62, 41445), (64, 41439), (84, 41307),

Gene: BigBubba_43 Start: 35101, Stop: 34667, Start Num: 36

Candidate Starts for BigBubba_43:

(17, 35173), (Start: 36 @35101 has 84 MA's), (37, 35089), (57, 34939), (59, 34879),

Gene: BigPhil_72 Start: 44249, Stop: 44626, Start Num: 41

Candidate Starts for BigPhil_72:

(Start: 41 @44249 has 7 MA's), (43, 44264), (59, 44420), (64, 44462), (78, 44528), (80, 44531), (86, 44600),

Gene: Bigswole_5 Start: 1613, Stop: 2053, Start Num: 36

Candidate Starts for Bigswole_5:

(Start: 36 @1613 has 84 MA's), (37, 1625), (53, 1745), (59, 1835), (65, 1877), (81, 1973), (82, 1997),

Gene: Blackflame_57 Start: 40484, Stop: 40125, Start Num: 42

Candidate Starts for Blackflame_57:

(10, 40685), (32, 40541), (33, 40538), (Start: 42 @40484 has 31 MA's), (43, 40472), (59, 40337), (62, 40301), (64, 40295), (84, 40163),

Gene: Blue_60 Start: 41591, Stop: 41178, Start Num: 36

Candidate Starts for Blue_60:

(21, 41648), (22, 41645), (Start: 36 @41591 has 84 MA's), (44, 41534), (51, 41495), (59, 41399), (85, 41228),

Gene: Bones_60 Start: 41965, Stop: 41585, Start Num: 42

Candidate Starts for Bones_60:

(8, 42175), (10, 42166), (32, 42022), (33, 42019), (Start: 42 @41965 has 31 MA's), (43, 41953), (59, 41797), (62, 41761), (64, 41755), (84, 41623),

Gene: BoogieWoogie_53 Start: 47371, Stop: 46982, Start Num: 42

Candidate Starts for BoogieWoogie_53:

(Start: 42 @47371 has 31 MA's), (43, 47359), (59, 47203), (62, 47167), (64, 47161), (84, 47029),

Gene: Boomer_81 Start: 48708, Stop: 49136, Start Num: 35

Candidate Starts for Boomer_81:

(Start: 35 @48708 has 17 MA's), (37, 48723), (46, 48777), (57, 48870), (59, 48930), (86, 49107),

Gene: Brilliant_54 Start: 47338, Stop: 46895, Start Num: 36

Candidate Starts for Brilliant_54:

(Start: 36 @47338 has 84 MA's), (37, 47326), (53, 47206), (57, 47176), (59, 47116), (62, 47080), (64, 47074), (84, 46942),

Gene: BronnyJames_75 Start: 47278, Stop: 46868, Start Num: 36

Candidate Starts for BronnyJames_75:

(Start: 36 @47278 has 84 MA's), (37, 47266), (59, 47086), (62, 47050), (64, 47044), (84, 46912),

Gene: Brookers_73 Start: 47200, Stop: 47577, Start Num: 41

Candidate Starts for Brookers_73:

(Start: 41 @47200 has 7 MA's), (43, 47215), (59, 47371), (64, 47413), (78, 47479), (80, 47482), (86, 47551),

Gene: Bubbles123_74 Start: 48058, Stop: 48471, Start Num: 35

Candidate Starts for Bubbles123_74:

(Start: 35 @48058 has 17 MA's), (37, 48073), (59, 48229), (72, 48316), (73, 48322), (76, 48346), (83, 48409), (86, 48448),

Gene: Buck_43 Start: 35755, Stop: 35318, Start Num: 36

Candidate Starts for Buck_43:

(19, 35827), (Start: 36 @35755 has 84 MA's), (37, 35743), (57, 35593), (59, 35533), (62, 35497), (64, 35491), (84, 35359),

Gene: BugsBunny_43 Start: 35586, Stop: 35152, Start Num: 36

Candidate Starts for BugsBunny_43:

(17, 35658), (Start: 36 @35586 has 84 MA's), (37, 35574), (57, 35424), (59, 35364),

Gene: BuzzLyseyear_87 Start: 51492, Stop: 51857, Start Num: 41

Candidate Starts for BuzzLyseyear_87:

(Start: 41 @51492 has 7 MA's), (43, 51507), (59, 51642), (62, 51678), (64, 51684), (84, 51816),

Gene: Caprice_8 Start: 2539, Stop: 2922, Start Num: 39

Candidate Starts for Caprice_8:

(39, 2539), (43, 2554), (59, 2710), (62, 2746), (64, 2752), (84, 2884),

Gene: Casbah_50 Start: 45459, Stop: 45016, Start Num: 36

Candidate Starts for Casbah_50:

(Start: 36 @45459 has 84 MA's), (37, 45447), (53, 45327), (57, 45297), (59, 45237), (62, 45201), (64, 45195), (84, 45063),

Gene: Cerasum_72 Start: 44267, Stop: 44644, Start Num: 41

Candidate Starts for Cerasum_72:

(Start: 41 @44267 has 7 MA's), (43, 44282), (59, 44438), (64, 44480), (78, 44546), (80, 44549), (86, 44618),

Gene: Che9d_91 Start: 48600, Stop: 49028, Start Num: 36

Candidate Starts for Che9d_91:

(Start: 36 @48600 has 84 MA's), (37, 48612), (47, 48666), (59, 48810),

Gene: Chentzyk_51 Start: 45971, Stop: 45528, Start Num: 36

Candidate Starts for Chentzyk_51:

(Start: 36 @45971 has 84 MA's), (37, 45959), (53, 45839), (57, 45809), (59, 45749), (62, 45713), (64, 45707), (84, 45575),

Gene: Childish_52 Start: 47365, Stop: 46922, Start Num: 36

Candidate Starts for Childish_52:

(Start: 36 @47365 has 84 MA's), (37, 47353), (53, 47233), (57, 47203), (59, 47143), (62, 47107), (64, 47101), (84, 46969),

Gene: Chuckly_76 Start: 45511, Stop: 45978, Start Num: 35

Candidate Starts for Chuckly_76:

(Start: 35 @45511 has 17 MA's), (37, 45526), (46, 45580), (57, 45673), (72, 45820), (73, 45826), (76, 45850), (83, 45913), (86, 45949),

Gene: Coco12_75 Start: 48324, Stop: 48701, Start Num: 41

Candidate Starts for Coco12_75:

(Start: 41 @48324 has 7 MA's), (43, 48339), (59, 48495), (64, 48537), (78, 48603), (80, 48606), (86, 48675),

Gene: Constella_64 Start: 46367, Stop: 45930, Start Num: 36

Candidate Starts for Constella_64:

(Start: 36 @46367 has 84 MA's), (57, 46205), (58, 46202), (59, 46145), (62, 46109), (64, 46103), (84, 45971),

Gene: Courthouse_75 Start: 48166, Stop: 47780, Start Num: 42

Candidate Starts for Courthouse_75:

(Start: 42 @48166 has 31 MA's), (43, 48154), (59, 47998), (62, 47962), (64, 47956), (84, 47824),

Gene: Craff_55 Start: 47790, Stop: 47347, Start Num: 36

Candidate Starts for Craff_55:

(Start: 36 @47790 has 84 MA's), (37, 47778), (53, 47658), (57, 47628), (59, 47568), (62, 47532), (64, 47526), (84, 47394),

Gene: Cueyllyss_61 Start: 42165, Stop: 41785, Start Num: 42

Candidate Starts for Cueyllyss_61:

(10, 42366), (32, 42222), (33, 42219), (Start: 42 @42165 has 31 MA's), (43, 42153), (59, 41997), (62, 41961), (64, 41955), (84, 41823),

Gene: DaddyDaniels_54 Start: 47322, Stop: 46879, Start Num: 36

Candidate Starts for DaddyDaniels_54:

(Start: 36 @47322 has 84 MA's), (37, 47310), (53, 47190), (57, 47160), (59, 47100), (62, 47064), (64, 47058), (84, 46926),

Gene: Dallas_72 Start: 49905, Stop: 49489, Start Num: 36

Candidate Starts for Dallas_72:

(Start: 36 @49905 has 84 MA's), (37, 49893), (51, 49809), (55, 49791), (59, 49713), (61, 49683), (69, 49644), (70, 49641),

Gene: DeejaClivia_12 Start: 3961, Stop: 4326, Start Num: 40

Candidate Starts for DeejaClivia_12:

(40, 3961), (43, 3976), (59, 4111), (62, 4147), (64, 4153), (84, 4285),

Gene: Demsculpinboyz_94 Start: 48157, Stop: 48546, Start Num: 42

Candidate Starts for Demsculpinboyz_94:

(16, 48034), (37, 48127), (38, 48136), (Start: 42 @48157 has 31 MA's), (59, 48325), (62, 48361), (64, 48367), (84, 48499),

Gene: DirtMcgirt_76 Start: 45318, Stop: 45746, Start Num: 35

Candidate Starts for DirtMcgirt_76:

(Start: 35 @45318 has 17 MA's), (37, 45333), (46, 45387), (57, 45480), (59, 45540), (86, 45717),

Gene: DmpstrDiver_73 Start: 50332, Stop: 49916, Start Num: 36

Candidate Starts for DmpstrDiver_73:

(Start: 36 @50332 has 84 MA's), (37, 50320), (51, 50236), (55, 50218), (59, 50140), (61, 50110), (69, 50071), (70, 50068),

Gene: DolOn_56 Start: 48048, Stop: 47668, Start Num: 42

Candidate Starts for DolOn_56:

(Start: 42 @48048 has 31 MA's), (43, 48036), (59, 47880), (62, 47844), (64, 47838), (84, 47706),

Gene: Drago_74 Start: 45321, Stop: 45749, Start Num: 35

Candidate Starts for Drago_74:

(Start: 35 @45321 has 17 MA's), (37, 45336), (46, 45390), (57, 45483), (59, 45543), (86, 45720),

Gene: Dreamboat_62 Start: 40065, Stop: 39685, Start Num: 42

Candidate Starts for Dreamboat_62:

(10, 40266), (32, 40122), (33, 40119), (Start: 42 @40065 has 31 MA's), (43, 40053), (59, 39897), (62, 39861), (64, 39855), (84, 39723),

Gene: Ejimix_73 Start: 51773, Stop: 51354, Start Num: 36

Candidate Starts for Ejimix_73:

(Start: 36 @51773 has 84 MA's), (37, 51761), (51, 51677), (55, 51659), (59, 51581), (61, 51551), (69, 51512), (70, 51509),

Gene: Emmaloid_89 Start: 50002, Stop: 50415, Start Num: 36

Candidate Starts for Emmaloid_89:

(5, 49828), (7, 49837), (11, 49861), (14, 49879), (27, 49972), (30, 49981), (Start: 36 @50002 has 84 MA's), (44, 50059), (48, 50098), (59, 50194), (62, 50230), (64, 50236), (84, 50368),

Gene: Enby_78 Start: 45597, Stop: 46025, Start Num: 35

Candidate Starts for Enby_78:

(Start: 35 @45597 has 17 MA's), (37, 45612), (46, 45666), (57, 45759), (59, 45819), (86, 45996),

Gene: Eradicator_69 Start: 46041, Stop: 46469, Start Num: 35

Candidate Starts for Eradicator_69:

(Start: 35 @46041 has 17 MA's), (37, 46056), (46, 46110), (57, 46203), (59, 46263), (86, 46440),

Gene: EricMillard_72 Start: 50977, Stop: 50564, Start Num: 36

Candidate Starts for EricMillard_72:

(Start: 36 @50977 has 84 MA's), (37, 50965), (48, 50881), (52, 50863), (59, 50785), (62, 50749), (64, 50743), (84, 50611),

Gene: FairyPath_42 Start: 35650, Stop: 35204, Start Num: 36

Candidate Starts for FairyPath_42:

(20, 35722), (Start: 36 @35650 has 84 MA's), (37, 35638), (57, 35488), (59, 35428), (61, 35398), (69, 35359), (70, 35356),

Gene: Fancypants_85 Start: 50404, Stop: 50835, Start Num: 36

Candidate Starts for Fancypants_85:

(Start: 36 @50404 has 84 MA's), (56, 50548), (68, 50683),

Gene: FireRed_45 Start: 36025, Stop: 35591, Start Num: 36

Candidate Starts for FireRed_45:

(17, 36097), (Start: 36 @36025 has 84 MA's), (37, 36013), (57, 35863), (59, 35803),

Gene: Fringe_56 Start: 48267, Stop: 47878, Start Num: 42

Candidate Starts for Fringe_56:

(Start: 42 @48267 has 31 MA's), (43, 48255), (59, 48099), (62, 48063), (64, 48057), (84, 47925),

Gene: GageAP_62 Start: 41383, Stop: 41024, Start Num: 42

Candidate Starts for GageAP_62:

(10, 41584), (32, 41440), (33, 41437), (Start: 42 @41383 has 31 MA's), (43, 41371), (59, 41236), (62, 41200), (64, 41194), (84, 41062),

Gene: Gervas_51 Start: 45588, Stop: 45145, Start Num: 36

Candidate Starts for Gervas_51:

(Start: 36 @45588 has 84 MA's), (37, 45576), (53, 45456), (57, 45426), (59, 45366), (62, 45330), (64, 45324), (84, 45192),

Gene: Graduation_65 Start: 42237, Stop: 41857, Start Num: 42

Candidate Starts for Graduation_65:

(10, 42438), (32, 42294), (33, 42291), (Start: 42 @42237 has 31 MA's), (43, 42225), (59, 42069), (62, 42033), (64, 42027), (84, 41895),

Gene: Greep_46 Start: 36317, Stop: 35883, Start Num: 36

Candidate Starts for Greep_46:

(17, 36389), (Start: 36 @36317 has 84 MA's), (37, 36305), (57, 36155), (59, 36095),

Gene: Gwilliam_53 Start: 47683, Stop: 47303, Start Num: 42

Candidate Starts for Gwilliam_53:

(Start: 42 @47683 has 31 MA's), (43, 47671), (59, 47515), (62, 47479), (64, 47473), (84, 47341),

Gene: Halley_75 Start: 50984, Stop: 50568, Start Num: 36

Candidate Starts for Halley_75:

(Start: 36 @50984 has 84 MA's), (37, 50972), (51, 50888), (55, 50870), (59, 50792), (61, 50762), (69, 50723), (70, 50720),

Gene: Harley_78 Start: 47547, Stop: 47975, Start Num: 35

Candidate Starts for Harley_78:

(Start: 35 @47547 has 17 MA's), (56, 47694), (59, 47766), (71, 47844), (74, 47856), (75, 47859),

Gene: Harley_88 Start: 50437, Stop: 50829, Start Num: 36

Candidate Starts for Harley_88:

(1, 50143), (2, 50176), (6, 50263), (9, 50272), (12, 50296), (15, 50314), (28, 50407), (31, 50416), (Start: 36 @50437 has 84 MA's), (59, 50623), (66, 50665),

Gene: HenryJackson_52 Start: 47354, Stop: 46911, Start Num: 36

Candidate Starts for HenryJackson_52:

(Start: 36 @47354 has 84 MA's), (37, 47342), (53, 47222), (57, 47192), (59, 47132), (62, 47096), (64, 47090), (84, 46958),

Gene: HighStump_54 Start: 47890, Stop: 47447, Start Num: 36

Candidate Starts for HighStump_54:

(19, 47962), (24, 47941), (25, 47935), (Start: 36 @47890 has 84 MA's), (37, 47878), (53, 47758), (57, 47728), (59, 47668), (62, 47632), (64, 47626), (84, 47494),

Gene: HokkenD_66 Start: 49253, Stop: 48837, Start Num: 36

Candidate Starts for HokkenD_66:

(Start: 36 @49253 has 84 MA's), (37, 49241), (51, 49157), (55, 49139), (59, 49061), (61, 49031), (69, 48992), (70, 48989),

Gene: HuffyPuff_44 Start: 35981, Stop: 35547, Start Num: 36

Candidate Starts for HuffyPuff_44:

(17, 36053), (Start: 36 @35981 has 84 MA's), (37, 35969), (57, 35819), (59, 35759),

Gene: Inyanga_56 Start: 40763, Stop: 40362, Start Num: 36

Candidate Starts for Inyanga_56:

(Start: 36 @40763 has 84 MA's), (37, 40751), (45, 40706), (50, 40667), (59, 40571),

Gene: Iqorha_56 Start: 40762, Stop: 40361, Start Num: 36

Candidate Starts for Iqorha_56:

(Start: 36 @40762 has 84 MA's), (37, 40750), (45, 40705), (50, 40666), (59, 40570),

Gene: Iridessa_53 Start: 47334, Stop: 46891, Start Num: 36

Candidate Starts for Iridessa_53:

(19, 47406), (24, 47385), (25, 47379), (Start: 36 @47334 has 84 MA's), (37, 47322), (53, 47202), (57, 47172), (59, 47112), (62, 47076), (64, 47070), (84, 46938),

Gene: IrishSherpFalk_79 Start: 48781, Stop: 49194, Start Num: 35

Candidate Starts for IrishSherpFalk_79:

(Start: 35 @48781 has 17 MA's), (37, 48796), (59, 48952), (72, 49039), (73, 49045), (76, 49069), (83, 49132), (86, 49171),

Gene: Jant_84 Start: 48028, Stop: 48438, Start Num: 36

Candidate Starts for Jant_84:

(Start: 36 @48028 has 84 MA's), (37, 48040), (50, 48124), (54, 48142), (59, 48220),

Gene: Jasper_61 Start: 39951, Stop: 39571, Start Num: 42

Candidate Starts for Jasper_61:

(10, 40152), (32, 40008), (33, 40005), (Start: 42 @39951 has 31 MA's), (43, 39939), (59, 39783), (62, 39747), (64, 39741), (84, 39609),

Gene: JigglyPuff_6 Start: 1982, Stop: 2365, Start Num: 42

Candidate Starts for JigglyPuff_6:

(34, 1931), (Start: 42 @1982 has 31 MA's), (43, 1994), (59, 2150), (62, 2186), (64, 2192), (77, 2270), (84, 2324),

Gene: JuicyJay_72 Start: 52118, Stop: 51702, Start Num: 36

Candidate Starts for JuicyJay_72:

(Start: 36 @52118 has 84 MA's), (37, 52106), (51, 52022), (55, 52004), (59, 51926), (61, 51896), (69, 51857), (70, 51854),

Gene: Kahve_52 Start: 47351, Stop: 46908, Start Num: 36

Candidate Starts for Kahve_52:

(Start: 36 @47351 has 84 MA's), (37, 47339), (53, 47219), (57, 47189), (59, 47129), (62, 47093), (64, 47087), (84, 46955),

Gene: Kalah2_68 Start: 50277, Stop: 49861, Start Num: 36

Candidate Starts for Kalah2_68:

(Start: 36 @50277 has 84 MA's), (37, 50265), (51, 50181), (55, 50163), (59, 50085), (61, 50055), (69, 50016), (70, 50013),

Gene: KashFlow_71 Start: 46755, Stop: 46327, Start Num: 35

Candidate Starts for KashFlow_71:

(Start: 35 @46755 has 17 MA's), (37, 46740), (46, 46686), (57, 46593), (59, 46533), (86, 46356),

Gene: Kersh_88 Start: 52115, Stop: 52522, Start Num: 36

Candidate Starts for Kersh_88:

(5, 51941), (7, 51950), (11, 51974), (27, 52085), (30, 52094), (Start: 36 @52115 has 84 MA's), (44, 52172), (48, 52211), (59, 52307), (62, 52343), (64, 52349), (84, 52481),

Gene: Khan1_53 Start: 47307, Stop: 46918, Start Num: 42

Candidate Starts for Khan1_53:

(Start: 42 @47307 has 31 MA's), (43, 47295), (59, 47139), (62, 47103), (64, 47097), (84, 46965),

Gene: Klein_78 Start: 51350, Stop: 50925, Start Num: 36
Candidate Starts for Klein_78:
(Start: 36 @51350 has 84 MA's), (37, 51338), (46, 51284), (57, 51191), (59, 51131), (86, 50954),

Gene: Kostya_43 Start: 35472, Stop: 35038, Start Num: 36
Candidate Starts for Kostya_43:
(17, 35544), (Start: 36 @35472 has 84 MA's), (37, 35460), (57, 35310), (59, 35250),

Gene: Kronus_50 Start: 46191, Stop: 45748, Start Num: 36
Candidate Starts for Kronus_50:
(Start: 36 @46191 has 84 MA's), (37, 46179), (53, 46059), (57, 46029), (59, 45969), (62, 45933), (64, 45927), (84, 45795),

Gene: Latretium_78 Start: 47174, Stop: 47560, Start Num: 42
Candidate Starts for Latretium_78:
(Start: 42 @47174 has 31 MA's), (43, 47186), (59, 47342), (62, 47378), (64, 47384), (84, 47516),

Gene: Legolas_54 Start: 47787, Stop: 47344, Start Num: 36
Candidate Starts for Legolas_54:
(19, 47859), (24, 47838), (25, 47832), (Start: 36 @47787 has 84 MA's), (37, 47775), (53, 47655), (57, 47625), (59, 47565), (62, 47529), (64, 47523), (84, 47391),

Gene: Lethe_6 Start: 1613, Stop: 2053, Start Num: 36
Candidate Starts for Lethe_6:
(Start: 36 @1613 has 84 MA's), (37, 1625), (53, 1745), (59, 1835), (65, 1877), (81, 1973), (82, 1997),

Gene: Llij_73 Start: 45475, Stop: 45903, Start Num: 35
Candidate Starts for Llij_73:
(Start: 35 @45475 has 17 MA's), (37, 45490), (46, 45544), (57, 45637), (59, 45697), (86, 45874),

Gene: Longacauda_53 Start: 47750, Stop: 47307, Start Num: 36
Candidate Starts for Longacauda_53:
(19, 47822), (24, 47801), (25, 47795), (Start: 36 @47750 has 84 MA's), (37, 47738), (53, 47618), (57, 47588), (59, 47528), (62, 47492), (64, 47486), (84, 47354),

Gene: Lorde_77 Start: 44762, Stop: 45190, Start Num: 35
Candidate Starts for Lorde_77:
(Start: 35 @44762 has 17 MA's), (37, 44777), (46, 44831), (57, 44924), (59, 44984), (86, 45161),

Gene: Lucia_77 Start: 45610, Stop: 46038, Start Num: 35
Candidate Starts for Lucia_77:
(Start: 35 @45610 has 17 MA's), (37, 45625), (46, 45679), (57, 45772), (59, 45832), (86, 46009),

Gene: Lumine_53 Start: 47538, Stop: 47155, Start Num: 42
Candidate Starts for Lumine_53:
(Start: 42 @47538 has 31 MA's), (43, 47526), (59, 47370), (62, 47334), (64, 47328), (84, 47196),

Gene: MISSy_42 Start: 35034, Stop: 34591, Start Num: 36
Candidate Starts for MISSy_42:
(19, 35106), (Start: 36 @35034 has 84 MA's), (37, 35022), (57, 34872), (59, 34812), (62, 34776), (64, 34770), (84, 34638),

Gene: MPhalcon_42 Start: 35027, Stop: 34584, Start Num: 36

Candidate Starts for MPhalcon_42:

(19, 35099), (Start: 36 @35027 has 84 MA's), (37, 35015), (57, 34865), (59, 34805), (62, 34769), (64, 34763), (84, 34631),

Gene: MadKillah_102 Start: 61818, Stop: 61405, Start Num: 36

Candidate Starts for MadKillah_102:

(13, 61950), (18, 61890), (23, 61869), (Start: 36 @61818 has 84 MA's), (44, 61761), (48, 61722), (59, 61626), (62, 61590), (64, 61584), (84, 61452),

Gene: Makemake_63 Start: 42339, Stop: 41959, Start Num: 42

Candidate Starts for Makemake_63:

(10, 42540), (32, 42396), (33, 42393), (Start: 42 @42339 has 31 MA's), (43, 42327), (59, 42171), (62, 42135), (64, 42129), (84, 41997),

Gene: Marlia_51 Start: 45592, Stop: 45149, Start Num: 36

Candidate Starts for Marlia_51:

(Start: 36 @45592 has 84 MA's), (37, 45580), (53, 45460), (57, 45430), (59, 45370), (62, 45334), (64, 45328), (84, 45196),

Gene: Marsha_82 Start: 50494, Stop: 50108, Start Num: 42

Candidate Starts for Marsha_82:

(Start: 42 @50494 has 31 MA's), (43, 50482), (59, 50326), (62, 50290), (64, 50284), (84, 50152),

Gene: Marvin_10 Start: 3597, Stop: 3977, Start Num: 42

Candidate Starts for Marvin_10:

(24, 3501), (29, 3525), (Start: 42 @3597 has 31 MA's), (43, 3609), (59, 3765), (62, 3801), (64, 3807), (84, 3939),

Gene: MiaZeal_74 Start: 47379, Stop: 46963, Start Num: 36

Candidate Starts for MiaZeal_74:

(Start: 36 @47379 has 84 MA's), (37, 47367), (51, 47283), (55, 47265), (59, 47187), (61, 47157), (69, 47118), (70, 47115),

Gene: Misfit_44 Start: 36046, Stop: 35612, Start Num: 36

Candidate Starts for Misfit_44:

(17, 36118), (Start: 36 @36046 has 84 MA's), (37, 36034), (57, 35884), (59, 35824),

Gene: MmasiCarm_51 Start: 45638, Stop: 45195, Start Num: 36

Candidate Starts for MmasiCarm_51:

(Start: 36 @45638 has 84 MA's), (37, 45626), (53, 45506), (57, 45476), (59, 45416), (62, 45380), (64, 45374), (84, 45242),

Gene: Moonbeam_87 Start: 50558, Stop: 50971, Start Num: 36

Candidate Starts for Moonbeam_87:

(14, 50435), (27, 50528), (30, 50537), (Start: 36 @50558 has 84 MA's), (44, 50615), (48, 50654), (59, 50750), (62, 50786), (64, 50792), (84, 50924),

Gene: Mortcellus_50 Start: 46245, Stop: 45802, Start Num: 36

Candidate Starts for Mortcellus_50:

(Start: 36 @46245 has 84 MA's), (37, 46233), (53, 46113), (57, 46083), (59, 46023), (62, 45987), (64, 45981), (84, 45849),

Gene: MrPhizzler_54 Start: 47284, Stop: 46895, Start Num: 42

Candidate Starts for MrPhizzler_54:

(Start: 42 @47284 has 31 MA's), (43, 47272), (59, 47116), (62, 47080), (64, 47074), (84, 46942),

Gene: Mulaychimus_51 Start: 45574, Stop: 45131, Start Num: 36

Candidate Starts for Mulaychimus_51:

(Start: 36 @45574 has 84 MA's), (37, 45562), (53, 45442), (57, 45412), (59, 45352), (62, 45316), (64, 45310), (84, 45178),

Gene: Murica_44 Start: 35981, Stop: 35547, Start Num: 36

Candidate Starts for Murica_44:

(17, 36053), (Start: 36 @35981 has 84 MA's), (37, 35969), (57, 35819), (59, 35759),

Gene: NEHalo_58 Start: 40784, Stop: 40425, Start Num: 42

Candidate Starts for NEHalo_58:

(10, 40985), (32, 40841), (33, 40838), (Start: 42 @40784 has 31 MA's), (43, 40772), (59, 40637), (62, 40601), (64, 40595), (84, 40463),

Gene: Nala_43 Start: 35539, Stop: 35096, Start Num: 36

Candidate Starts for Nala_43:

(19, 35611), (Start: 36 @35539 has 84 MA's), (37, 35527), (57, 35377), (59, 35317), (62, 35281), (64, 35275), (84, 35143),

Gene: Nibley_68 Start: 46367, Stop: 45957, Start Num: 36

Candidate Starts for Nibley_68:

(Start: 36 @46367 has 84 MA's), (37, 46355), (59, 46175), (62, 46139), (64, 46133), (84, 46001),

Gene: Nicole21_53 Start: 47623, Stop: 47051, Start Num: 36

Candidate Starts for Nicole21_53:

(19, 47695), (24, 47674), (25, 47668), (Start: 36 @47623 has 84 MA's), (37, 47611), (53, 47491), (57, 47461), (59, 47401), (62, 47365), (64, 47359), (84, 47227), (87, 47185),

Gene: NihilNomen_74 Start: 51071, Stop: 50655, Start Num: 36

Candidate Starts for NihilNomen_74:

(Start: 36 @51071 has 84 MA's), (37, 51059), (51, 50975), (55, 50957), (59, 50879), (61, 50849), (69, 50810), (70, 50807),

Gene: Nimrod_45 Start: 36239, Stop: 35805, Start Num: 36

Candidate Starts for Nimrod_45:

(17, 36311), (Start: 36 @36239 has 84 MA's), (37, 36227), (57, 36077), (59, 36017),

Gene: Obutu_51 Start: 45593, Stop: 45150, Start Num: 36

Candidate Starts for Obutu_51:

(Start: 36 @45593 has 84 MA's), (37, 45581), (53, 45461), (57, 45431), (59, 45371), (62, 45335), (64, 45329), (84, 45197),

Gene: Odette_72 Start: 50114, Stop: 49698, Start Num: 36

Candidate Starts for Odette_72:

(Start: 36 @50114 has 84 MA's), (37, 50102), (51, 50018), (55, 50000), (59, 49922), (61, 49892), (69, 49853), (70, 49850),

Gene: Ohno789_61 Start: 41528, Stop: 41148, Start Num: 42

Candidate Starts for Ohno789_61:

(10, 41729), (32, 41585), (33, 41582), (Start: 42 @41528 has 31 MA's), (43, 41516), (59, 41360), (62, 41324), (64, 41318), (84, 41186),

Gene: Orwigg_52 Start: 47308, Stop: 46766, Start Num: 36

Candidate Starts for Orwigg_52:

(19, 47380), (24, 47359), (25, 47353), (Start: 36 @47308 has 84 MA's), (37, 47296), (53, 47176), (57, 47146), (59, 47086), (62, 47050), (64, 47044), (84, 46912),

Gene: Ovechkin_85 Start: 49845, Stop: 50309, Start Num: 26

Candidate Starts for Ovechkin_85:

(Start: 26 @49845 has 1 MA's), (Start: 36 @49878 has 84 MA's), (56, 50022), (59, 50094), (68, 50157),

Gene: PMC_74 Start: 46932, Stop: 47360, Start Num: 35

Candidate Starts for PMC_74:

(Start: 35 @46932 has 17 MA's), (37, 46947), (46, 47001), (57, 47094), (59, 47154), (86, 47331),

Gene: Palpatine_45 Start: 36011, Stop: 35577, Start Num: 36

Candidate Starts for Palpatine_45:

(17, 36083), (Start: 36 @36011 has 84 MA's), (37, 35999), (57, 35849), (59, 35789),

Gene: Peterson_79 Start: 49024, Stop: 48623, Start Num: 42

Candidate Starts for Peterson_79:

(Start: 42 @49024 has 31 MA's), (43, 49012), (49, 48949), (52, 48940), (59, 48847), (65, 48805), (81, 48709), (86, 48652),

Gene: Petra64142_47 Start: 36475, Stop: 36041, Start Num: 36

Candidate Starts for Petra64142_47:

(17, 36547), (Start: 36 @36475 has 84 MA's), (37, 36463), (57, 36313), (59, 36253),

Gene: PhatBacter_45 Start: 36025, Stop: 35591, Start Num: 36

Candidate Starts for PhatBacter_45:

(17, 36097), (Start: 36 @36025 has 84 MA's), (37, 36013), (57, 35863), (59, 35803),

Gene: Phatniss_74 Start: 46570, Stop: 46998, Start Num: 35

Candidate Starts for Phatniss_74:

(Start: 35 @46570 has 17 MA's), (37, 46585), (46, 46639), (57, 46732), (59, 46792), (86, 46969),

Gene: Phaux_44 Start: 36023, Stop: 35589, Start Num: 36

Candidate Starts for Phaux_44:

(17, 36095), (Start: 36 @36023 has 84 MA's), (37, 36011), (57, 35861), (59, 35801),

Gene: Phayeta_52 Start: 45475, Stop: 45032, Start Num: 36

Candidate Starts for Phayeta_52:

(Start: 36 @45475 has 84 MA's), (37, 45463), (53, 45343), (57, 45313), (59, 45253), (62, 45217), (64, 45211), (84, 45079),

Gene: PherrisBueller_60 Start: 39602, Stop: 39222, Start Num: 42

Candidate Starts for PherrisBueller_60:

(10, 39803), (32, 39659), (33, 39656), (Start: 42 @39602 has 31 MA's), (43, 39590), (59, 39434), (62, 39398), (64, 39392), (84, 39260),

Gene: Phoebus_76 Start: 52253, Stop: 51837, Start Num: 36

Candidate Starts for Phoebus_76:

(Start: 36 @52253 has 84 MA's), (37, 52241), (51, 52157), (55, 52139), (59, 52061), (61, 52031), (69, 51992), (70, 51989),

Gene: Policronamos_45 Start: 36023, Stop: 35589, Start Num: 36

Candidate Starts for Policronamos_45:

(17, 36095), (Start: 36 @36023 has 84 MA's), (37, 36011), (57, 35861), (59, 35801),

Gene: Porcelain_73 Start: 47379, Stop: 46963, Start Num: 36

Candidate Starts for Porcelain_73:

(Start: 36 @47379 has 84 MA's), (37, 47367), (51, 47283), (55, 47265), (59, 47187), (61, 47157), (69, 47118), (70, 47115),

Gene: Quallification_43 Start: 35661, Stop: 35215, Start Num: 36

Candidate Starts for Quallification_43:

(20, 35733), (Start: 36 @35661 has 84 MA's), (37, 35649), (57, 35499), (59, 35439), (61, 35409), (69, 35370), (70, 35367),

Gene: RedRaider77_10 Start: 3149, Stop: 3538, Start Num: 42

Candidate Starts for RedRaider77_10:

(Start: 42 @3149 has 31 MA's), (43, 3161), (59, 3317), (62, 3353), (64, 3359), (84, 3491),

Gene: Redno2_70 Start: 47867, Stop: 47451, Start Num: 36

Candidate Starts for Redno2_70:

(Start: 36 @47867 has 84 MA's), (37, 47855), (51, 47771), (55, 47753), (59, 47675), (61, 47645), (69, 47606), (70, 47603),

Gene: Rialto_90 Start: 50654, Stop: 51067, Start Num: 36

Candidate Starts for Rialto_90:

(14, 50531), (27, 50624), (30, 50633), (Start: 36 @50654 has 84 MA's), (44, 50711), (48, 50750), (59, 50846), (62, 50882), (64, 50888), (84, 51020),

Gene: Rimmer_43 Start: 35365, Stop: 34928, Start Num: 36

Candidate Starts for Rimmer_43:

(19, 35437), (Start: 36 @35365 has 84 MA's), (37, 35353), (57, 35203), (59, 35143), (62, 35107), (64, 35101), (84, 34969),

Gene: Rimu_53 Start: 47304, Stop: 46915, Start Num: 42

Candidate Starts for Rimu_53:

(Start: 42 @47304 has 31 MA's), (43, 47292), (59, 47136), (62, 47100), (64, 47094), (84, 46962),

Gene: Rita1961_51 Start: 45594, Stop: 45151, Start Num: 36

Candidate Starts for Rita1961_51:

(Start: 36 @45594 has 84 MA's), (37, 45582), (53, 45462), (57, 45432), (59, 45372), (62, 45336), (64, 45330), (84, 45198),

Gene: Rockne_78 Start: 46944, Stop: 47372, Start Num: 35

Candidate Starts for Rockne_78:

(Start: 35 @46944 has 17 MA's), (37, 46959), (46, 47013), (57, 47106), (59, 47166), (86, 47343),

Gene: Sabbb_88 Start: 48209, Stop: 48622, Start Num: 36

Candidate Starts for Sabbb_88:

(5, 48035), (7, 48044), (11, 48068), (14, 48086), (27, 48179), (30, 48188), (Start: 36 @48209 has 84 MA's), (44, 48266), (48, 48305), (59, 48401), (62, 48437), (64, 48443), (84, 48575),

Gene: Sandaddy_57 Start: 40445, Stop: 40086, Start Num: 42

Candidate Starts for Sandaddy_57:

(10, 40646), (32, 40502), (33, 40499), (Start: 42 @40445 has 31 MA's), (43, 40433), (59, 40298), (62, 40262), (64, 40256), (84, 40124),

Gene: Sarma624_77 Start: 44943, Stop: 45320, Start Num: 41

Candidate Starts for Sarma624_77:

(Start: 41 @44943 has 7 MA's), (43, 44958), (59, 45114), (64, 45156), (78, 45222), (80, 45225), (86, 45294),

Gene: Schatzie_68 Start: 49861, Stop: 49445, Start Num: 36

Candidate Starts for Schatzie_68:

(Start: 36 @49861 has 84 MA's), (37, 49849), (51, 49765), (55, 49747), (59, 49669), (61, 49639), (69, 49600), (70, 49597),

Gene: ScoobyDoobyDoo_2 Start: 227, Stop: 613, Start Num: 42

Candidate Starts for ScoobyDoobyDoo_2:

(Start: 42 @227 has 31 MA's), (43, 239), (59, 395), (62, 431), (64, 437), (77, 515), (84, 569),

Gene: Scowl_62 Start: 40833, Stop: 40453, Start Num: 42

Candidate Starts for Scowl_62:

(32, 40890), (33, 40887), (Start: 42 @40833 has 31 MA's), (43, 40821), (59, 40665), (62, 40629), (64, 40623), (84, 40491),

Gene: Shaboozey_74 Start: 47299, Stop: 46889, Start Num: 36

Candidate Starts for Shaboozey_74:

(Start: 36 @47299 has 84 MA's), (37, 47287), (59, 47107), (62, 47071), (64, 47065), (84, 46933),

Gene: Slim_89 Start: 49993, Stop: 50406, Start Num: 36

Candidate Starts for Slim_89:

(5, 49819), (7, 49828), (11, 49852), (14, 49870), (27, 49963), (30, 49972), (Start: 36 @49993 has 84 MA's), (44, 50050), (48, 50089), (59, 50185), (62, 50221), (64, 50227), (84, 50359),

Gene: SlippinJimmy_52 Start: 46376, Stop: 45933, Start Num: 36

Candidate Starts for SlippinJimmy_52:

(Start: 36 @46376 has 84 MA's), (37, 46364), (53, 46244), (57, 46214), (59, 46154), (62, 46118), (64, 46112), (84, 45980),

Gene: Soile_53 Start: 47351, Stop: 46908, Start Num: 36

Candidate Starts for Soile_53:

(Start: 36 @47351 has 84 MA's), (37, 47339), (53, 47219), (57, 47189), (59, 47129), (62, 47093), (64, 47087), (84, 46955),

Gene: Sorpresa_58 Start: 40447, Stop: 40088, Start Num: 42

Candidate Starts for Sorpresa_58:

(10, 40648), (32, 40504), (33, 40501), (Start: 42 @40447 has 31 MA's), (43, 40435), (59, 40300), (62, 40264), (64, 40258), (84, 40126),

Gene: SpikeBT_59 Start: 40641, Stop: 40282, Start Num: 42

Candidate Starts for SpikeBT_59:

(10, 40842), (32, 40698), (33, 40695), (Start: 42 @40641 has 31 MA's), (43, 40629), (59, 40494), (62, 40458), (64, 40452), (84, 40320),

Gene: Squint_74 Start: 47498, Stop: 47082, Start Num: 36

Candidate Starts for Squint_74:

(Start: 36 @47498 has 84 MA's), (37, 47486), (51, 47402), (55, 47384), (59, 47306), (61, 47276), (69, 47237), (70, 47234),

Gene: StormChicken_44 Start: 35973, Stop: 35536, Start Num: 36

Candidate Starts for StormChicken_44:

(19, 36045), (Start: 36 @35973 has 84 MA's), (37, 35961), (57, 35811), (59, 35751), (62, 35715), (64, 35709), (84, 35577),

Gene: StrongArm_59 Start: 41777, Stop: 41397, Start Num: 42

Candidate Starts for StrongArm_59:

(32, 41834), (33, 41831), (Start: 42 @41777 has 31 MA's), (43, 41765), (59, 41609), (62, 41573), (64, 41567), (84, 41435),

Gene: Superphikiman_71 Start: 46589, Stop: 46173, Start Num: 36

Candidate Starts for Superphikiman_71:

(Start: 36 @46589 has 84 MA's), (37, 46577), (51, 46493), (55, 46475), (59, 46397), (61, 46367), (69, 46328), (70, 46325),

Gene: SwainyDoc_51 Start: 45606, Stop: 45163, Start Num: 36

Candidate Starts for SwainyDoc_51:

(Start: 36 @45606 has 84 MA's), (37, 45594), (53, 45474), (57, 45444), (59, 45384), (62, 45348), (64, 45342), (84, 45210),

Gene: TDanisky_93 Start: 48927, Stop: 49307, Start Num: 36

Candidate Starts for TDanisky_93:

(Start: 36 @48927 has 84 MA's), (59, 49092), (62, 49128), (64, 49134), (84, 49266),

Gene: Tchotchke_73 Start: 46858, Stop: 47286, Start Num: 35

Candidate Starts for Tchotchke_73:

(Start: 35 @46858 has 17 MA's), (37, 46873), (46, 46927), (57, 47020), (59, 47080), (86, 47257),

Gene: TeamEdward_44 Start: 35970, Stop: 35533, Start Num: 36

Candidate Starts for TeamEdward_44:

(19, 36042), (Start: 36 @35970 has 84 MA's), (37, 35958), (57, 35808), (59, 35748), (62, 35712), (64, 35706), (84, 35574),

Gene: Terminus_44 Start: 36046, Stop: 35612, Start Num: 36

Candidate Starts for Terminus_44:

(17, 36118), (Start: 36 @36046 has 84 MA's), (37, 36034), (57, 35884), (59, 35824),

Gene: TheloniousMonk_64 Start: 43165, Stop: 42755, Start Num: 36

Candidate Starts for TheloniousMonk_64:

(21, 43222), (22, 43219), (Start: 36 @43165 has 84 MA's), (45, 43108), (50, 43069), (59, 42973),

Gene: Thibault_65 Start: 47312, Stop: 46869, Start Num: 36

Candidate Starts for Thibault_65:

(Start: 36 @47312 has 84 MA's), (57, 47150), (58, 47147), (59, 47090), (62, 47054), (64, 47048), (84, 46916),

Gene: TinyTerror_51 Start: 45641, Stop: 45198, Start Num: 36

Candidate Starts for TinyTerror_51:

(Start: 36 @45641 has 84 MA's), (37, 45629), (53, 45509), (57, 45479), (59, 45419), (62, 45383), (64, 45377), (84, 45245),

Gene: Topiatin_85 Start: 49548, Stop: 49946, Start Num: 36

Candidate Starts for Topiatin_85:

(Start: 36 @49548 has 84 MA's), (59, 49734),

Gene: UncleRicky_76 Start: 46818, Stop: 47246, Start Num: 35

Candidate Starts for UncleRicky_76:

(Start: 35 @46818 has 17 MA's), (37, 46833), (46, 46887), (57, 46980), (59, 47040), (86, 47217),

Gene: VasuNzinga_9 Start: 2804, Stop: 3184, Start Num: 42

Candidate Starts for VasuNzinga_9:

(Start: 42 @2804 has 31 MA's), (43, 2816), (59, 2972), (62, 3008), (64, 3014), (84, 3146),

Gene: Velveteen_73 Start: 44943, Stop: 45320, Start Num: 41

Candidate Starts for Velveteen_73:

(Start: 41 @44943 has 7 MA's), (43, 44958), (59, 45114), (64, 45156), (78, 45222), (80, 45225), (86, 45294),

Gene: Wanda_82 Start: 51659, Stop: 51234, Start Num: 36

Candidate Starts for Wanda_82:

(Start: 36 @51659 has 84 MA's), (37, 51647), (46, 51593), (57, 51500), (59, 51440), (86, 51263),

Gene: WillSterrel_78 Start: 48814, Stop: 49227, Start Num: 35

Candidate Starts for WillSterrel_78:

(Start: 35 @48814 has 17 MA's), (37, 48829), (59, 48985), (72, 49072), (73, 49078), (76, 49102), (83, 49165), (86, 49204),

Gene: Xiaokay_68 Start: 48228, Stop: 47791, Start Num: 36

Candidate Starts for Xiaokay_68:

(Start: 36 @48228 has 84 MA's), (57, 48066), (58, 48063), (59, 48006), (62, 47970), (64, 47964), (84, 47832),

Gene: Youngblood_44 Start: 35976, Stop: 35539, Start Num: 36

Candidate Starts for Youngblood_44:

(19, 36048), (Start: 36 @35976 has 84 MA's), (37, 35964), (57, 35814), (59, 35754), (62, 35718), (64, 35712), (84, 35580),

Gene: Zelink_71 Start: 51457, Stop: 51044, Start Num: 36

Candidate Starts for Zelink_71:

(Start: 36 @51457 has 84 MA's), (37, 51445), (51, 51361), (55, 51343), (59, 51265), (61, 51235), (69, 51196), (70, 51193),

Gene: xkcd_46 Start: 36166, Stop: 35732, Start Num: 36

Candidate Starts for xkcd_46:

(17, 36238), (Start: 36 @36166 has 84 MA's), (37, 36154), (57, 36004), (59, 35944),