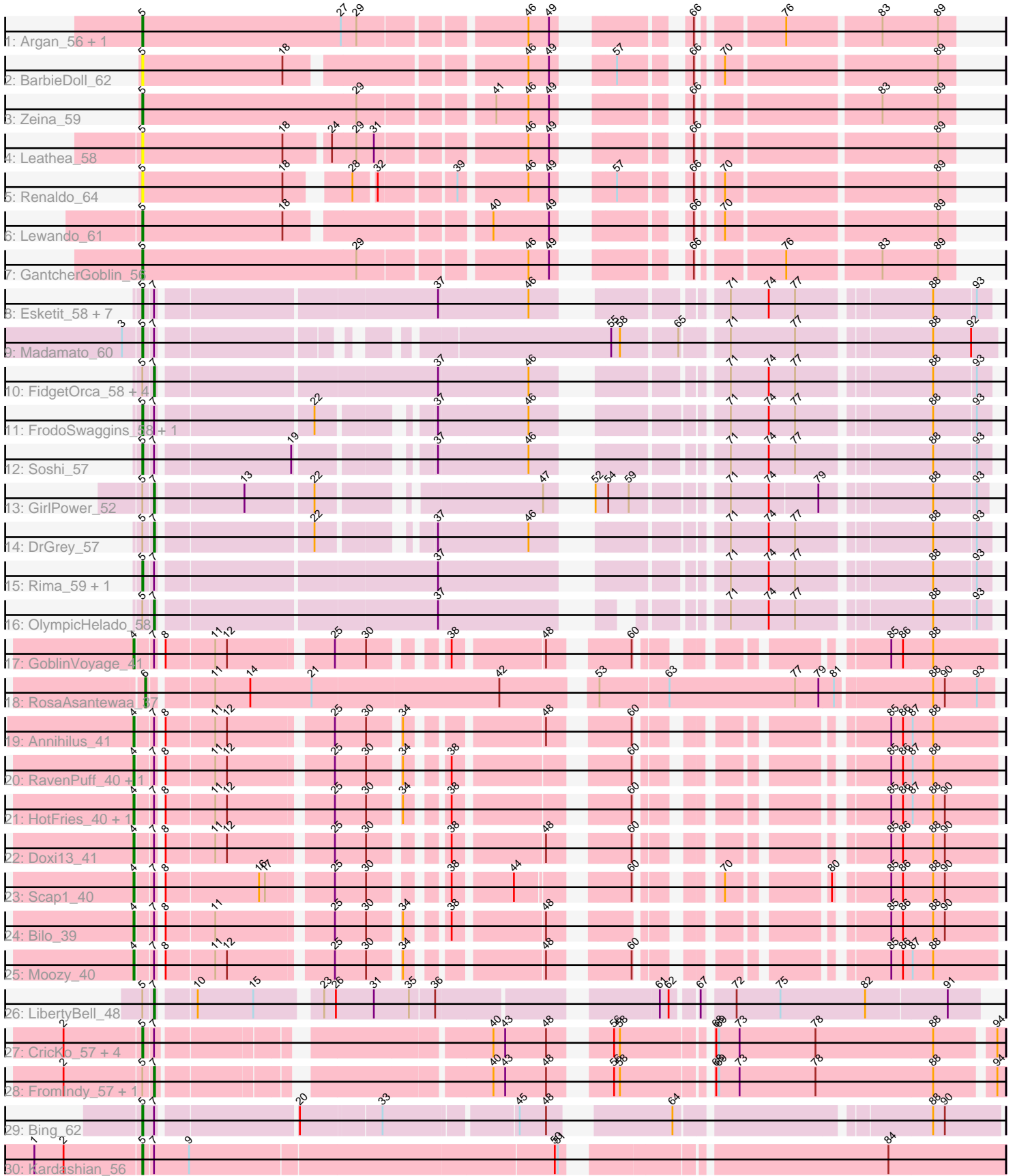


Pham 171524



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 171524 Report

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

Pham number 171524 has 51 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Argan_56, Uzumaki_55
- Track 2 : BarbieDoll_62
- Track 3 : Zeina_59
- Track 4 : Leathea_58
- Track 5 : Renaldo_64
- Track 6 : Lewando_61
- Track 7 : GantcherGoblin_56
- Track 8 : Esketit_58, TaidaOne_58, Meibysrarus_56, TonyStarch_57, Hoshi_57, Maya_58, TieDye_57, IceWarrior_57
- Track 9 : Madamato_60
- Track 10 : FidgetOrca_58, Jaylociraptor_58, Indigenous_58, Spectropatronm_58, CherryBlossom_58
- Track 11 : FrodoSwaggins_58, Popy_58
- Track 12 : Soshi_57
- Track 13 : GirlPower_52
- Track 14 : DrGrey_57
- Track 15 : Rima_59, Namu_59
- Track 16 : OlympicHelado_58
- Track 17 : GoblinVoyage_41
- Track 18 : RosaAsantewaa_37
- Track 19 : Annihilus_41
- Track 20 : RavenPuff_40, PherryCruz_40
- Track 21 : HotFries_40, SheRa_41
- Track 22 : Doxi13_41
- Track 23 : Scap1_40
- Track 24 : Bilo_39
- Track 25 : Moozy_40
- Track 26 : LibertyBell_48
- Track 27 : CricKo_57, Thiqqums_57, SendItCS_53, Regigigas_58, Miek_54
- Track 28 : FromIndy_57, Rainydai_55
- Track 29 : Bing_62
- Track 30 : Kardashian_56

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

The start number called the most often in the published annotations is 5, it was called in 25 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Argan_56, BarbieDoll_62, Bing_62, CricKo_57, Esketit_58, FrodoSwaggins_58, GantcherGoblin_56, Hoshi_57, IceWarrior_57, Kardashian_56, Leathea_58, Lewando_61, Madamato_60, Maya_58, Meibysrarus_56, Miek_54, NamO_59, Popy_58, Regigigas_58, Renaldo_64, Rima_59, SendItCS_53, Soshi_57, TaidaOne_58, Thiqqums_57, TieDye_57, TonyStarch_57, Uzumaki_55, Zeina_59,

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

- CherryBlossom_58, DrGrey_57, FidgetOrca_58, FromIndy_57, GirlPower_52, Indigenous_58, Jaylociraptor_58, LibertyBell_48, OlympicHelado_58, RainyDai_55, SpectroPatronm_58,

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

- Annihilus_41, Bilo_39, Doxi13_41, GoblinVoyage_41, HotFries_40, Moozy_40, PherryCruz_40, RavenPuff_40, RosaAsantewaa_37, Scap1_40, SheRa_41,

Summary by start number:

Start 4:

- Found in 10 of 51 (19.6%) of genes in pham
- Manual Annotations of this start: 10 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annihilus_41 (BI2), Bilo_39 (BI2), Doxi13_41 (BI2), GoblinVoyage_41 (BI2), HotFries_40 (BI2), Moozy_40 (BI2), PherryCruz_40 (BI2), RavenPuff_40 (BI2), Scap1_40 (BI2), SheRa_41 (BI2),

Start 5:

- Found in 40 of 51 (78.4%) of genes in pham
- Manual Annotations of this start: 25 of 46
- Called 72.5% of time when present
- Phage (with cluster) where this start called: Argan_56 (AU6), BarbieDoll_62 (AU6), Bing_62 (BI5), CricKo_57 (BI4), Esketit_58 (BI1), FrodoSwaggins_58 (BI1), GantcherGoblin_56 (AU6), Hoshi_57 (BI1), IceWarrior_57 (BI1), Kardashian_56 (BI6), Leathea_58 (AU6), Lewando_61 (AU6), Madamato_60 (BI1), Maya_58 (BI1), Meibysrarus_56 (BI1), Miek_54 (BI4), NamO_59 (BI1), Popy_58 (BI1), Regigigas_58 (BI4), Renaldo_64 (AU6), Rima_59 (BI1), SendItCS_53 (BI4), Soshi_57 (BI1), TaidaOne_58 (BI1), Thiqqums_57 (BI4), TieDye_57 (BI1), TonyStarch_57 (BI1), Uzumaki_55 (AU6), Zeina_59 (AU6),

Start 6:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RosaAsantewaa_37 (BI2),

Start 7:

- Found in 42 of 51 (82.4%) of genes in pham
- Manual Annotations of this start: 10 of 46
- Called 26.2% of time when present

- Phage (with cluster) where this start called: CherryBlossom_58 (BI1), DrGrey_57 (BI1), FidgetOrca_58 (BI1), FromIndy_57 (BI4), GirlPower_52 (BI1), Indigenous_58 (BI1), Jaylociraptor_58 (BI1), LibertyBell_48 (BI3), OlympicHelado_58 (BI1), Rainydai_55 (BI4), Spectropatronm_58 (BI1),

Summary by clusters:

There are 7 clusters represented in this pham: AU6, BI6, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AU6:

- Start number 5 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster BI1:

- Start number 5 was manually annotated 14 times for cluster BI1.
- Start number 7 was manually annotated 8 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 4 was manually annotated 10 times for cluster BI2.
- Start number 6 was manually annotated 1 time for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 7 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 5 was manually annotated 4 times for cluster BI4.
- Start number 7 was manually annotated 1 time for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 5 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 5 was manually annotated 1 time for cluster BI6.

Gene Information:

Gene: Annihilus_41 Start: 29092, Stop: 29790, Start Num: 4

Candidate Starts for Annihilus_41:

(Start: 4 @29092 has 10 MA's), (Start: 7 @29107 has 10 MA's), (8, 29110), (11, 29158), (12, 29170), (25, 29266), (30, 29296), (34, 29323), (48, 29437), (60, 29500), (85, 29683), (86, 29695), (87, 29704), (88, 29725),

Gene: Argan_56 Start: 35931, Stop: 36647, Start Num: 5

Candidate Starts for Argan_56:

(Start: 5 @35931 has 25 MA's), (27, 36135), (29, 36150), (46, 36303), (49, 36324), (66, 36411), (76, 36483), (83, 36573), (89, 36630),

Gene: BarbieDoll_62 Start: 37638, Stop: 38342, Start Num: 5

Candidate Starts for BarbieDoll_62:

(Start: 5 @37638 has 25 MA's), (18, 37782), (46, 37998), (49, 38019), (57, 38052), (66, 38106), (70, 38121), (89, 38325),

Gene: Bilo_39 Start: 29209, Stop: 29907, Start Num: 4

Candidate Starts for Bilo_39:

(Start: 4 @29209 has 10 MA's), (Start: 7 @29224 has 10 MA's), (8, 29227), (11, 29275), (25, 29383), (30, 29413), (34, 29440), (38, 29470), (48, 29554), (85, 29800), (86, 29812), (88, 29842), (90, 29854),

Gene: Bing_62 Start: 37589, Stop: 38362, Start Num: 5

Candidate Starts for Bing_62:

(Start: 5 @37589 has 25 MA's), (Start: 7 @37601 has 10 MA's), (20, 37733), (33, 37811), (45, 37937), (48, 37964), (64, 38060), (88, 38294), (90, 38306),

Gene: CherryBlossom_58 Start: 36769, Stop: 37482, Start Num: 7

Candidate Starts for CherryBlossom_58:

(Start: 5 @36760 has 25 MA's), (Start: 7 @36769 has 10 MA's), (37, 37006), (46, 37096), (71, 37237), (74, 37276), (77, 37303), (88, 37426), (93, 37468),

Gene: CricKo_57 Start: 35630, Stop: 36406, Start Num: 5

Candidate Starts for CricKo_57:

(2, 35552), (Start: 5 @35630 has 25 MA's), (Start: 7 @35639 has 10 MA's), (40, 35936), (43, 35948), (48, 35990), (56, 36035), (58, 36041), (68, 36122), (69, 36125), (73, 36146), (78, 36224), (88, 36344), (94, 36398),

Gene: Doxi13_41 Start: 29065, Stop: 29763, Start Num: 4

Candidate Starts for Doxi13_41:

(Start: 4 @29065 has 10 MA's), (Start: 7 @29080 has 10 MA's), (8, 29083), (11, 29131), (12, 29143), (25, 29239), (30, 29269), (38, 29326), (48, 29410), (60, 29473), (85, 29656), (86, 29668), (88, 29698), (90, 29710),

Gene: DrGrey_57 Start: 37134, Stop: 37850, Start Num: 7

Candidate Starts for DrGrey_57:

(Start: 5 @37125 has 25 MA's), (Start: 7 @37134 has 10 MA's), (22, 37281), (37, 37371), (46, 37461), (71, 37605), (74, 37644), (77, 37671), (88, 37794), (93, 37836),

Gene: Esketit_58 Start: 36870, Stop: 37625, Start Num: 5

Candidate Starts for Esketit_58:

(Start: 5 @36870 has 25 MA's), (Start: 7 @36879 has 10 MA's), (37, 37149), (46, 37239), (71, 37380), (74, 37419), (77, 37446), (88, 37569), (93, 37611),

Gene: FidgetOrca_58 Start: 36869, Stop: 37615, Start Num: 7

Candidate Starts for FidgetOrca_58:

(Start: 5 @36860 has 25 MA's), (Start: 7 @36869 has 10 MA's), (37, 37139), (46, 37229), (71, 37370), (74, 37409), (77, 37436), (88, 37559), (93, 37601),

Gene: FrodoSwaggins_58 Start: 37519, Stop: 38244, Start Num: 5

Candidate Starts for FrodoSwaggins_58:

(Start: 5 @37519 has 25 MA's), (Start: 7 @37528 has 10 MA's), (22, 37675), (37, 37765), (46, 37855), (71, 37999), (74, 38038), (77, 38065), (88, 38188), (93, 38230),

Gene: FromIndy_57 Start: 35245, Stop: 36012, Start Num: 7

Candidate Starts for FromIndy_57:

(2, 35158), (Start: 5 @35236 has 25 MA's), (Start: 7 @35245 has 10 MA's), (40, 35542), (43, 35554), (48, 35596), (56, 35641), (58, 35647), (68, 35728), (69, 35731), (73, 35752), (78, 35830), (88, 35950), (94, 36004),

Gene: GantcherGoblin_56 Start: 36006, Stop: 36722, Start Num: 5

Candidate Starts for GantcherGoblin_56:

(Start: 5 @36006 has 25 MA's), (29, 36225), (46, 36378), (49, 36399), (66, 36486), (76, 36558), (83, 36648), (89, 36705),

Gene: GirlPower_52 Start: 37115, Stop: 37828, Start Num: 7

Candidate Starts for GirlPower_52:

(Start: 5 @37106 has 25 MA's), (Start: 7 @37115 has 10 MA's), (13, 37196), (22, 37262), (47, 37460), (52, 37475), (54, 37487), (59, 37508), (71, 37589), (74, 37628), (79, 37676), (88, 37775), (93, 37817),

Gene: GoblinVoyage_41 Start: 29065, Stop: 29763, Start Num: 4

Candidate Starts for GoblinVoyage_41:

(Start: 4 @29065 has 10 MA's), (Start: 7 @29080 has 10 MA's), (8, 29083), (11, 29131), (12, 29143), (25, 29239), (30, 29269), (38, 29326), (48, 29410), (60, 29473), (85, 29656), (86, 29668), (88, 29698),

Gene: Hoshi_57 Start: 36467, Stop: 37222, Start Num: 5

Candidate Starts for Hoshi_57:

(Start: 5 @36467 has 25 MA's), (Start: 7 @36476 has 10 MA's), (37, 36746), (46, 36836), (71, 36977), (74, 37016), (77, 37043), (88, 37166), (93, 37208),

Gene: HotFries_40 Start: 29110, Stop: 29808, Start Num: 4

Candidate Starts for HotFries_40:

(Start: 4 @29110 has 10 MA's), (Start: 7 @29125 has 10 MA's), (8, 29128), (11, 29176), (12, 29188), (25, 29284), (30, 29314), (34, 29341), (38, 29371), (60, 29518), (85, 29701), (86, 29713), (87, 29722), (88, 29743), (90, 29755),

Gene: IceWarrior_57 Start: 36546, Stop: 37301, Start Num: 5

Candidate Starts for IceWarrior_57:

(Start: 5 @36546 has 25 MA's), (Start: 7 @36555 has 10 MA's), (37, 36825), (46, 36915), (71, 37056), (74, 37095), (77, 37122), (88, 37245), (93, 37287),

Gene: Indigenous_58 Start: 36873, Stop: 37619, Start Num: 7

Candidate Starts for Indigenous_58:

(Start: 5 @36864 has 25 MA's), (Start: 7 @36873 has 10 MA's), (37, 37143), (46, 37233), (71, 37374), (74, 37413), (77, 37440), (88, 37563), (93, 37605),

Gene: Jaylociraptor_58 Start: 36872, Stop: 37618, Start Num: 7

Candidate Starts for Jaylociraptor_58:

(Start: 5 @36863 has 25 MA's), (Start: 7 @36872 has 10 MA's), (37, 37142), (46, 37232), (71, 37373), (74, 37412), (77, 37439), (88, 37562), (93, 37604),

Gene: Kardashian_56 Start: 37105, Stop: 37929, Start Num: 5

Candidate Starts for Kardashian_56:

(1, 36997), (2, 37027), (Start: 5 @37105 has 25 MA's), (Start: 7 @37114 has 10 MA's), (9, 37150), (50, 37513), (51, 37516), (84, 37810),

Gene: Leathea_58 Start: 35757, Stop: 36464, Start Num: 5

Candidate Starts for Leathea_58:

(Start: 5 @35757 has 25 MA's), (18, 35901), (24, 35943), (29, 35967), (31, 35985), (46, 36120), (49, 36141), (66, 36228), (89, 36447),

Gene: Lewando_61 Start: 37710, Stop: 38414, Start Num: 5

Candidate Starts for Lewando_61:

(Start: 5 @37710 has 25 MA's), (18, 37854), (40, 38034), (49, 38091), (66, 38178), (70, 38193), (89, 38397),

Gene: LibertyBell_48 Start: 32956, Stop: 33711, Start Num: 7

Candidate Starts for LibertyBell_48:

(Start: 5 @32947 has 25 MA's), (Start: 7 @32956 has 10 MA's), (10, 32989), (15, 33046), (23, 33103), (26, 33115), (31, 33154), (35, 33190), (36, 33214), (61, 33409), (62, 33418), (67, 33439), (72, 33466), (75, 33511), (82, 33598), (91, 33679),

Gene: Madamoto_60 Start: 37006, Stop: 37764, Start Num: 5

Candidate Starts for Madamoto_60:

(3, 36988), (Start: 5 @37006 has 25 MA's), (Start: 7 @37015 has 10 MA's), (55, 37408), (58, 37417), (65, 37471), (71, 37510), (77, 37576), (88, 37699), (92, 37738),

Gene: Maya_58 Start: 36877, Stop: 37632, Start Num: 5

Candidate Starts for Maya_58:

(Start: 5 @36877 has 25 MA's), (Start: 7 @36886 has 10 MA's), (37, 37156), (46, 37246), (71, 37387), (74, 37426), (77, 37453), (88, 37576), (93, 37618),

Gene: Meibysrarus_56 Start: 36240, Stop: 36995, Start Num: 5

Candidate Starts for Meibysrarus_56:

(Start: 5 @36240 has 25 MA's), (Start: 7 @36249 has 10 MA's), (37, 36519), (46, 36609), (71, 36750), (74, 36789), (77, 36816), (88, 36939), (93, 36981),

Gene: Miek_54 Start: 34955, Stop: 35731, Start Num: 5

Candidate Starts for Miek_54:

(2, 34877), (Start: 5 @34955 has 25 MA's), (Start: 7 @34964 has 10 MA's), (40, 35261), (43, 35273), (48, 35315), (56, 35360), (58, 35366), (68, 35447), (69, 35450), (73, 35471), (78, 35549), (88, 35669), (94, 35723),

Gene: Moozy_40 Start: 29067, Stop: 29765, Start Num: 4

Candidate Starts for Moozy_40:

(Start: 4 @29067 has 10 MA's), (Start: 7 @29082 has 10 MA's), (8, 29085), (11, 29133), (12, 29145), (25, 29241), (30, 29271), (34, 29298), (48, 29412), (60, 29475), (85, 29658), (86, 29670), (87, 29679), (88, 29700),

Gene: Namo_59 Start: 37214, Stop: 37969, Start Num: 5

Candidate Starts for Namo_59:

(Start: 5 @37214 has 25 MA's), (Start: 7 @37223 has 10 MA's), (37, 37493), (71, 37724), (74, 37763), (77, 37790), (88, 37913), (93, 37955),

Gene: OlympicHelado_58 Start: 36900, Stop: 37625, Start Num: 7

Candidate Starts for OlympicHelado_58:

(Start: 5 @36891 has 25 MA's), (Start: 7 @36900 has 10 MA's), (37, 37170), (71, 37380), (74, 37419), (77, 37446), (88, 37569), (93, 37611),

Gene: PherryCruz_40 Start: 29061, Stop: 29759, Start Num: 4

Candidate Starts for PherryCruz_40:

(Start: 4 @29061 has 10 MA's), (Start: 7 @29076 has 10 MA's), (8, 29079), (11, 29127), (12, 29139), (25, 29235), (30, 29265), (34, 29292), (38, 29322), (60, 29469), (85, 29652), (86, 29664), (87, 29673), (88, 29694),

Gene: Popy_58 Start: 37519, Stop: 38244, Start Num: 5

Candidate Starts for Popy_58:

(Start: 5 @37519 has 25 MA's), (Start: 7 @37528 has 10 MA's), (22, 37675), (37, 37765), (46, 37855), (71, 37999), (74, 38038), (77, 38065), (88, 38188), (93, 38230),

Gene: Rainydai_55 Start: 35639, Stop: 36406, Start Num: 7

Candidate Starts for Rainydai_55:

(2, 35552), (Start: 5 @35630 has 25 MA's), (Start: 7 @35639 has 10 MA's), (40, 35936), (43, 35948), (48, 35990), (56, 36035), (58, 36041), (68, 36122), (69, 36125), (73, 36146), (78, 36224), (88, 36344), (94, 36398),

Gene: RavenPuff_40 Start: 29061, Stop: 29759, Start Num: 4

Candidate Starts for RavenPuff_40:

(Start: 4 @29061 has 10 MA's), (Start: 7 @29076 has 10 MA's), (8, 29079), (11, 29127), (12, 29139), (25, 29235), (30, 29265), (34, 29292), (38, 29322), (60, 29469), (85, 29652), (86, 29664), (87, 29673), (88, 29694),

Gene: Regigigas_58 Start: 35631, Stop: 36407, Start Num: 5

Candidate Starts for Regigigas_58:

(2, 35553), (Start: 5 @35631 has 25 MA's), (Start: 7 @35640 has 10 MA's), (40, 35937), (43, 35949), (48, 35991), (56, 36036), (58, 36042), (68, 36123), (69, 36126), (73, 36147), (78, 36225), (88, 36345), (94, 36399),

Gene: Renaldo_64 Start: 37949, Stop: 38638, Start Num: 5

Candidate Starts for Renaldo_64:

(Start: 5 @37949 has 25 MA's), (18, 38093), (28, 38144), (32, 38162), (39, 38231), (46, 38294), (49, 38315), (57, 38348), (66, 38402), (70, 38417), (89, 38621),

Gene: Rima_59 Start: 37214, Stop: 37969, Start Num: 5

Candidate Starts for Rima_59:

(Start: 5 @37214 has 25 MA's), (Start: 7 @37223 has 10 MA's), (37, 37493), (71, 37724), (74, 37763), (77, 37790), (88, 37913), (93, 37955),

Gene: RosaAsantewaa_37 Start: 28089, Stop: 28907, Start Num: 6

Candidate Starts for RosaAsantewaa_37:

(Start: 6 @28089 has 1 MA's), (11, 28146), (14, 28182), (21, 28245), (42, 28434), (53, 28515), (63, 28584), (77, 28713), (79, 28737), (81, 28752), (88, 28845), (90, 28857), (93, 28890),

Gene: Scap1_40 Start: 28953, Stop: 29648, Start Num: 4

Candidate Starts for Scap1_40:

(Start: 4 @28953 has 10 MA's), (Start: 7 @28968 has 10 MA's), (8, 28971), (16, 29064), (17, 29070), (25, 29127), (30, 29157), (38, 29214), (44, 29268), (60, 29358), (70, 29412), (80, 29496), (85, 29541), (86, 29553), (88, 29583), (90, 29595),

Gene: SendItCS_53 Start: 34943, Stop: 35719, Start Num: 5

Candidate Starts for SendItCS_53:

(2, 34865), (Start: 5 @34943 has 25 MA's), (Start: 7 @34952 has 10 MA's), (40, 35249), (43, 35261), (48, 35303), (56, 35348), (58, 35354), (68, 35435), (69, 35438), (73, 35459), (78, 35537), (88, 35657), (94, 35711),

Gene: SheRa_41 Start: 29108, Stop: 29806, Start Num: 4

Candidate Starts for SheRa_41:

(Start: 4 @29108 has 10 MA's), (Start: 7 @29123 has 10 MA's), (8, 29126), (11, 29174), (12, 29186), (25, 29282), (30, 29312), (34, 29339), (38, 29369), (60, 29516), (85, 29699), (86, 29711), (87, 29720),

(88, 29741), (90, 29753),

Gene: Soshi_57 Start: 37138, Stop: 37860, Start Num: 5

Candidate Starts for Soshi_57:

(Start: 5 @37138 has 25 MA's), (Start: 7 @37147 has 10 MA's), (19, 37276), (37, 37384), (46, 37474), (71, 37615), (74, 37654), (77, 37681), (88, 37804), (93, 37846),

Gene: Spectropatronm_58 Start: 36879, Stop: 37625, Start Num: 7

Candidate Starts for Spectropatronm_58:

(Start: 5 @36870 has 25 MA's), (Start: 7 @36879 has 10 MA's), (37, 37149), (46, 37239), (71, 37380), (74, 37419), (77, 37446), (88, 37569), (93, 37611),

Gene: TaidaOne_58 Start: 37373, Stop: 38128, Start Num: 5

Candidate Starts for TaidaOne_58:

(Start: 5 @37373 has 25 MA's), (Start: 7 @37382 has 10 MA's), (37, 37652), (46, 37742), (71, 37883), (74, 37922), (77, 37949), (88, 38072), (93, 38114),

Gene: Thiqqums_57 Start: 35630, Stop: 36406, Start Num: 5

Candidate Starts for Thiqqums_57:

(2, 35552), (Start: 5 @35630 has 25 MA's), (Start: 7 @35639 has 10 MA's), (40, 35936), (43, 35948), (48, 35990), (56, 36035), (58, 36041), (68, 36122), (69, 36125), (73, 36146), (78, 36224), (88, 36344), (94, 36398),

Gene: TieDye_57 Start: 36461, Stop: 37204, Start Num: 5

Candidate Starts for TieDye_57:

(Start: 5 @36461 has 25 MA's), (Start: 7 @36470 has 10 MA's), (37, 36728), (46, 36818), (71, 36959), (74, 36998), (77, 37025), (88, 37148), (93, 37190),

Gene: TonyStarch_57 Start: 36612, Stop: 37367, Start Num: 5

Candidate Starts for TonyStarch_57:

(Start: 5 @36612 has 25 MA's), (Start: 7 @36621 has 10 MA's), (37, 36891), (46, 36981), (71, 37122), (74, 37161), (77, 37188), (88, 37311), (93, 37353),

Gene: Uzumaki_55 Start: 36107, Stop: 36823, Start Num: 5

Candidate Starts for Uzumaki_55:

(Start: 5 @36107 has 25 MA's), (27, 36311), (29, 36326), (46, 36479), (49, 36500), (66, 36587), (76, 36659), (83, 36749), (89, 36806),

Gene: Zeina_59 Start: 36674, Stop: 37390, Start Num: 5

Candidate Starts for Zeina_59:

(Start: 5 @36674 has 25 MA's), (29, 36893), (41, 37013), (46, 37046), (49, 37067), (66, 37154), (83, 37316), (89, 37373),