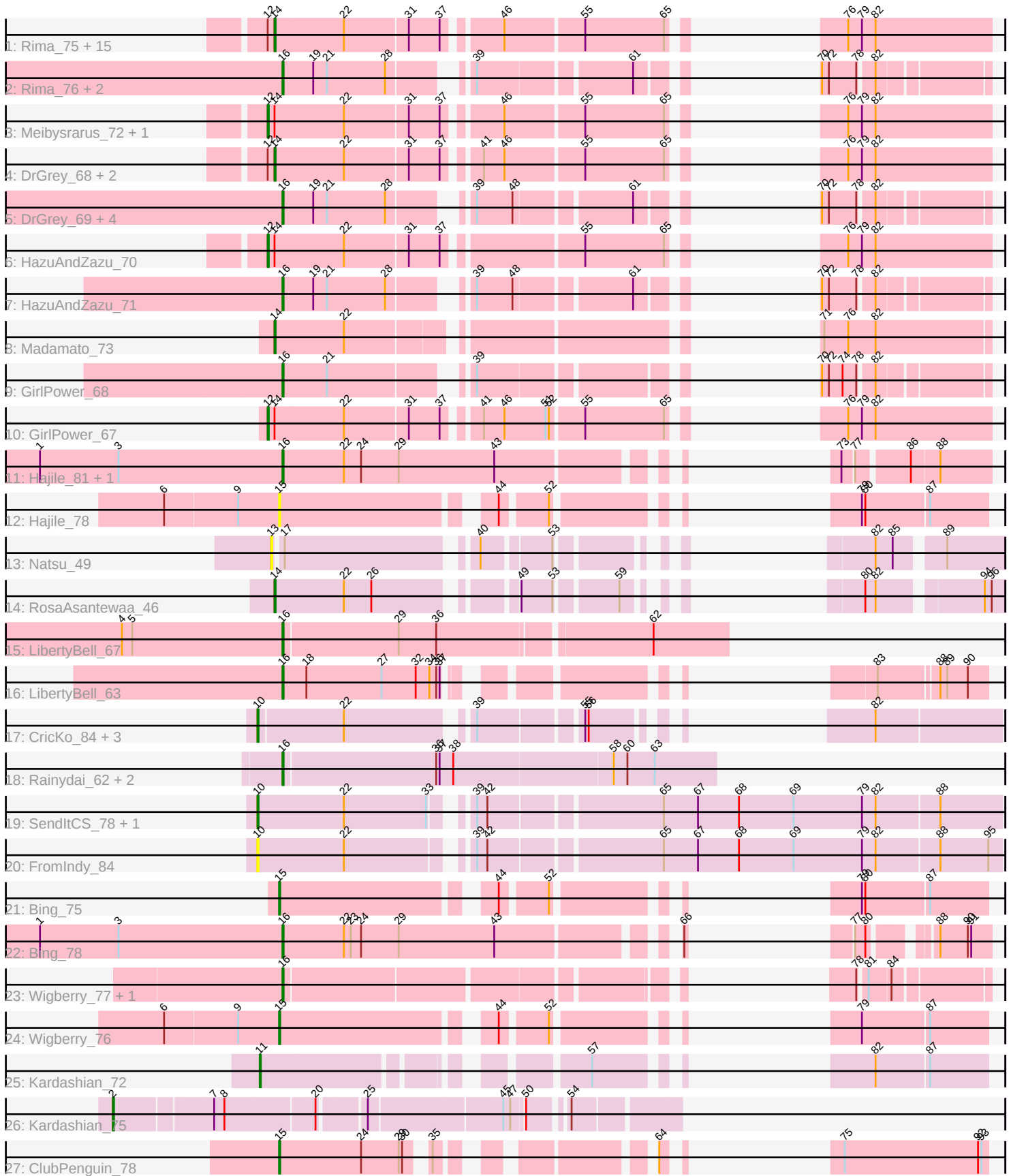


Pham 330888



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 330888 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330888 has 59 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Rima_75, TaidaOne_75, Esketit_70, TonyStarch_73, Spectropatronm_73, FidgetOrca_76, Soshi_71, Jaylociraptor_74, Maya_74, Hoshi_75, Espio_70, OlympicHelado_76, Namo_76, Indigenous_76, CherryBlossom_74, IceWarrior_74
- Track 2 : Rima_76, Namo_77, IceWarrior_75
- Track 3 : Meibysrarus_72, TieDye_70
- Track 4 : DrGrey_68, FrodoSwaggins_70, Popy_70
- Track 5 : DrGrey_69, FrodoSwaggins_71, Espio_71, Soshi_72, Popy_71
- Track 6 : HazuAndZazu_70
- Track 7 : HazuAndZazu_71
- Track 8 : Madamato_73
- Track 9 : GirlPower_68
- Track 10 : GirlPower_67
- Track 11 : Hajile_81, Wigberry_79
- Track 12 : Hajile_78
- Track 13 : Natsu_49
- Track 14 : RosaAsantewaa_46
- Track 15 : LibertyBell_67
- Track 16 : LibertyBell_63
- Track 17 : CricKo_84, Rainydai_81, Regigigas_84, Thiqqums_84
- Track 18 : Rainydai_62, CricKo_64, Thiqqums_64
- Track 19 : SendItCS_78, Miek_80
- Track 20 : FromIndy_84
- Track 21 : Bing_75
- Track 22 : Bing_78
- Track 23 : Wigberry_77, Hajile_79
- Track 24 : Wigberry_76
- Track 25 : Kardashian_72
- Track 26 : Kardashian_75
- Track 27 : ClubPenguin_78

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

The start number called the most often in the published annotations is 14, it was called in 21 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CherryBlossom_74, DrGrey_68, Esketit_70, Espio_70, FidgetOrca_76, FrodoSwaggins_70, Hoshi_75, IceWarrior_74, Indigenous_76, Jaylociraptor_74, Madamato_73, Maya_74, Namo_76, OlympicHelado_76, Popy_70, Rima_75, RosaAsantewaa_46, Soshi_71, Spectropatronm_73, TaidaOne_75, TonyStarch_73,

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

- GirlPower_67, HazuAndZazu_70, Meibysrarus_72, TieDye_70,

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

- Bing_75, Bing_78, ClubPenguin_78, CricKo_64, CricKo_84, DrGrey_69, Espio_71, FrodoSwaggins_71, FromIndy_84, GirlPower_68, Hajile_78, Hajile_79, Hajile_81, HazuAndZazu_71, IceWarrior_75, Kardashian_72, Kardashian_75, LibertyBell_63, LibertyBell_67, Miek_80, Namo_77, Natsu_49, Popy_71, Rainydai_62, Rainydai_81, Regigigas_84, Rima_76, SendItCS_78, Soshi_72, Thiqqums_64, Thiqqums_84, Wigberry_76, Wigberry_77, Wigberry_79,

Summary by start number:

Start 2:

- Found in 1 of 59 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kardashian_75 (BI6),

Start 10:

- Found in 7 of 59 (11.9%) of genes in pham
- Manual Annotations of this start: 5 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CricKo_84 (BI4), FromIndy_84 (BI4), Miek_80 (BI4), Rainydai_81 (BI4), Regigigas_84 (BI4), SendItCS_78 (BI4), Thiqqums_84 (BI4),

Start 11:

- Found in 1 of 59 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kardashian_72 (BI6),

Start 12:

- Found in 23 of 59 (39.0%) of genes in pham
- Manual Annotations of this start: 4 of 53
- Called 17.4% of time when present
- Phage (with cluster) where this start called: GirlPower_67 (BI1), HazuAndZazu_70 (BI1), Meibysrarus_72 (BI1), TieDye_70 (BI1),

Start 13:

- Found in 1 of 59 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Natsu_49 (BI2),

Start 14:

- Found in 25 of 59 (42.4%) of genes in pham
- Manual Annotations of this start: 21 of 53
- Called 84.0% of time when present
- Phage (with cluster) where this start called: CherryBlossom_74 (BI1), DrGrey_68 (BI1), Esketit_70 (BI1), Espio_70 (BI1), FidgetOrca_76 (BI1), FrodoSwaggins_70 (BI1), Hoshi_75 (BI1), IceWarrior_74 (BI1), Indigenous_76 (BI1), Jaylociraptor_74 (BI1), Madamoto_73 (BI1), Maya_74 (BI1), Namo_76 (BI1), OlympicHelado_76 (BI1), Popy_70 (BI1), Rima_75 (BI1), RosaAsantewaa_46 (BI2), Soshi_71 (BI1), Spectropatronm_73 (BI1), TaidaOne_75 (BI1), TonyStarch_73 (BI1),

Start 15:

- Found in 4 of 59 (6.8%) of genes in pham
- Manual Annotations of this start: 3 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bing_75 (BI5), ClubPenguin_78 (BI7), Hajile_78 (BI1), Wigberry_76 (BI5),

Start 16:

- Found in 20 of 59 (33.9%) of genes in pham
- Manual Annotations of this start: 18 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bing_78 (BI5), CricKo_64 (BI4), DrGrey_69 (BI1), Espio_71 (BI1), FrodoSwaggins_71 (BI1), GirlPower_68 (BI1), Hajile_79 (BI1), Hajile_81 (BI1), HazuAndZazu_71 (BI1), IceWarrior_75 (BI1), LibertyBell_63 (BI3), LibertyBell_67 (BI3), Namo_77 (BI1), Popy_71 (BI1), Rainydai_62 (BI4), Rima_76 (BI1), Soshi_72 (BI1), Thiqqums_64 (BI4), Wigberry_77 (BI5), Wigberry_79 (BI5),

Summary by clusters:

There are 7 clusters represented in this pham: BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster BI1:

- Start number 12 was manually annotated 4 times for cluster BI1.
- Start number 14 was manually annotated 20 times for cluster BI1.
- Start number 16 was manually annotated 10 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 14 was manually annotated 1 time for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 16 was manually annotated 2 times for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 10 was manually annotated 5 times for cluster BI4.
- Start number 16 was manually annotated 3 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 15 was manually annotated 2 times for cluster BI5.
- Start number 16 was manually annotated 3 times for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 2 was manually annotated 1 time for cluster BI6.
- Start number 11 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 15 was manually annotated 1 time for cluster BI7.

Gene Information:

Gene: Bing_75 Start: 46505, Stop: 46933, Start Num: 15

Candidate Starts for Bing_75:

(Start: 15 @46505 has 3 MA's), (44, 46673), (52, 46709), (79, 46826), (80, 46829), (87, 46883),

Gene: Bing_78 Start: 47851, Stop: 48282, Start Num: 16

Candidate Starts for Bing_78:

(1, 47638), (3, 47707), (Start: 16 @47851 has 18 MA's), (22, 47905), (23, 47911), (24, 47920), (29, 47953), (43, 48037), (66, 48166), (77, 48187), (80, 48196), (88, 48238), (90, 48262), (91, 48265),

Gene: CherryBlossom_74 Start: 45929, Stop: 46408, Start Num: 14

Candidate Starts for CherryBlossom_74:

(Start: 12 @45923 has 4 MA's), (Start: 14 @45929 has 21 MA's), (22, 45989), (31, 46043), (37, 46070), (46, 46112), (55, 46178), (65, 46247), (76, 46283), (79, 46295), (82, 46307),

Gene: ClubPenguin_78 Start: 46389, Stop: 46793, Start Num: 15

Candidate Starts for ClubPenguin_78:

(Start: 15 @46389 has 3 MA's), (24, 46461), (29, 46494), (30, 46497), (35, 46509), (64, 46644), (75, 46668), (92, 46785), (93, 46788),

Gene: CricKo_84 Start: 49056, Stop: 49514, Start Num: 10

Candidate Starts for CricKo_84:

(Start: 10 @49056 has 5 MA's), (22, 49128), (39, 49224), (55, 49305), (56, 49308), (82, 49407),

Gene: CricKo_64 Start: 42071, Stop: 42442, Start Num: 16

Candidate Starts for CricKo_64:

(Start: 16 @42071 has 18 MA's), (36, 42203), (37, 42206), (38, 42218), (58, 42353), (60, 42365), (63, 42389),

Gene: DrGrey_68 Start: 45889, Stop: 46368, Start Num: 14

Candidate Starts for DrGrey_68:

(Start: 12 @45883 has 4 MA's), (Start: 14 @45889 has 21 MA's), (22, 45949), (31, 46003), (37, 46030), (41, 46054), (46, 46072), (55, 46138), (65, 46207), (76, 46243), (79, 46255), (82, 46267),

Gene: DrGrey_69 Start: 46443, Stop: 46874, Start Num: 16

Candidate Starts for DrGrey_69:

(Start: 16 @46443 has 18 MA's), (19, 46470), (21, 46482), (28, 46533), (39, 46584), (48, 46614), (61, 46707), (70, 46743), (72, 46749), (78, 46773), (82, 46785),

Gene: Esketit_70 Start: 45030, Stop: 45509, Start Num: 14

Candidate Starts for Esketit_70:

(Start: 12 @45024 has 4 MA's), (Start: 14 @45030 has 21 MA's), (22, 45090), (31, 45144), (37, 45171), (46, 45213), (55, 45279), (65, 45348), (76, 45384), (79, 45396), (82, 45408),

Gene: Espio_71 Start: 46838, Stop: 47269, Start Num: 16

Candidate Starts for Espio_71:

(Start: 16 @46838 has 18 MA's), (19, 46865), (21, 46877), (28, 46928), (39, 46979), (48, 47009), (61, 47102), (70, 47138), (72, 47144), (78, 47168), (82, 47180),

Gene: Espio_70 Start: 46284, Stop: 46763, Start Num: 14

Candidate Starts for Espio_70:

(Start: 12 @46278 has 4 MA's), (Start: 14 @46284 has 21 MA's), (22, 46344), (31, 46398), (37, 46425), (46, 46467), (55, 46533), (65, 46602), (76, 46638), (79, 46650), (82, 46662),

Gene: FidgetOrca_76 Start: 46480, Stop: 46959, Start Num: 14

Candidate Starts for FidgetOrca_76:

(Start: 12 @46474 has 4 MA's), (Start: 14 @46480 has 21 MA's), (22, 46540), (31, 46594), (37, 46621), (46, 46663), (55, 46729), (65, 46798), (76, 46834), (79, 46846), (82, 46858),

Gene: FrodoSwaggins_70 Start: 46283, Stop: 46762, Start Num: 14

Candidate Starts for FrodoSwaggins_70:

(Start: 12 @46277 has 4 MA's), (Start: 14 @46283 has 21 MA's), (22, 46343), (31, 46397), (37, 46424), (41, 46448), (46, 46466), (55, 46532), (65, 46601), (76, 46637), (79, 46649), (82, 46661),

Gene: FrodoSwaggins_71 Start: 46837, Stop: 47268, Start Num: 16

Candidate Starts for FrodoSwaggins_71:

(Start: 16 @46837 has 18 MA's), (19, 46864), (21, 46876), (28, 46927), (39, 46978), (48, 47008), (61, 47101), (70, 47137), (72, 47143), (78, 47167), (82, 47179),

Gene: FromIndy_84 Start: 48690, Stop: 49301, Start Num: 10

Candidate Starts for FromIndy_84:

(Start: 10 @48690 has 5 MA's), (22, 48765), (39, 48858), (42, 48867), (65, 49008), (67, 49038), (68, 49074), (69, 49122), (79, 49182), (82, 49194), (88, 49248), (95, 49290),

Gene: GirlPower_68 Start: 46386, Stop: 46817, Start Num: 16

Candidate Starts for GirlPower_68:

(Start: 16 @46386 has 18 MA's), (21, 46425), (39, 46527), (70, 46686), (72, 46692), (74, 46704), (78, 46716), (82, 46728),

Gene: GirlPower_67 Start: 45827, Stop: 46312, Start Num: 12

Candidate Starts for GirlPower_67:

(Start: 12 @45827 has 4 MA's), (Start: 14 @45833 has 21 MA's), (22, 45893), (31, 45947), (37, 45974), (41, 45998), (46, 46016), (51, 46052), (52, 46055), (55, 46082), (65, 46151), (76, 46187), (79, 46199), (82, 46211),

Gene: Hajile_81 Start: 47803, Stop: 48249, Start Num: 16

Candidate Starts for Hajile_81:

(1, 47590), (3, 47659), (Start: 16 @47803 has 18 MA's), (22, 47857), (24, 47872), (29, 47905), (43, 47989), (73, 48130), (77, 48139), (86, 48181), (88, 48205),

Gene: Hajile_79 Start: 47017, Stop: 47454, Start Num: 16

Candidate Starts for Hajile_79:

(Start: 16 @47017 has 18 MA's), (78, 47353), (81, 47359), (84, 47377),

Gene: Hajile_78 Start: 46364, Stop: 46792, Start Num: 15

Candidate Starts for Hajile_78:

(6, 46265), (9, 46328), (Start: 15 @46364 has 3 MA's), (44, 46532), (52, 46568), (79, 46685), (80, 46688), (87, 46742),

Gene: HazuAndZazu_70 Start: 45945, Stop: 46430, Start Num: 12

Candidate Starts for HazuAndZazu_70:

(Start: 12 @45945 has 4 MA's), (Start: 14 @45951 has 21 MA's), (22, 46011), (31, 46065), (37, 46092), (55, 46200), (65, 46269), (76, 46305), (79, 46317), (82, 46329),

Gene: HazuAndZazu_71 Start: 46504, Stop: 46935, Start Num: 16

Candidate Starts for HazuAndZazu_71:

(Start: 16 @46504 has 18 MA's), (19, 46531), (21, 46543), (28, 46594), (39, 46645), (48, 46675), (61, 46768), (70, 46804), (72, 46810), (78, 46834), (82, 46846),

Gene: Hoshi_75 Start: 46093, Stop: 46572, Start Num: 14

Candidate Starts for Hoshi_75:

(Start: 12 @46087 has 4 MA's), (Start: 14 @46093 has 21 MA's), (22, 46153), (31, 46207), (37, 46234), (46, 46276), (55, 46342), (65, 46411), (76, 46447), (79, 46459), (82, 46471),

Gene: IceWarrior_75 Start: 46335, Stop: 46766, Start Num: 16

Candidate Starts for IceWarrior_75:

(Start: 16 @46335 has 18 MA's), (19, 46362), (21, 46374), (28, 46425), (39, 46476), (61, 46599), (70, 46635), (72, 46641), (78, 46665), (82, 46677),

Gene: IceWarrior_74 Start: 45781, Stop: 46260, Start Num: 14

Candidate Starts for IceWarrior_74:

(Start: 12 @45775 has 4 MA's), (Start: 14 @45781 has 21 MA's), (22, 45841), (31, 45895), (37, 45922), (46, 45964), (55, 46030), (65, 46099), (76, 46135), (79, 46147), (82, 46159),

Gene: Indigenous_76 Start: 46484, Stop: 46963, Start Num: 14

Candidate Starts for Indigenous_76:

(Start: 12 @46478 has 4 MA's), (Start: 14 @46484 has 21 MA's), (22, 46544), (31, 46598), (37, 46625), (46, 46667), (55, 46733), (65, 46802), (76, 46838), (79, 46850), (82, 46862),

Gene: Jaylociraptor_74 Start: 46065, Stop: 46544, Start Num: 14

Candidate Starts for Jaylociraptor_74:

(Start: 12 @46059 has 4 MA's), (Start: 14 @46065 has 21 MA's), (22, 46125), (31, 46179), (37, 46206), (46, 46248), (55, 46314), (65, 46383), (76, 46419), (79, 46431), (82, 46443),

Gene: Kardashian_72 Start: 46780, Stop: 47208, Start Num: 11

Candidate Starts for Kardashian_72:

(Start: 11 @46780 has 1 MA's), (57, 47014), (82, 47113), (87, 47158),

Gene: Kardashian_75 Start: 48276, Stop: 48716, Start Num: 2

Candidate Starts for Kardashian_75:

(Start: 2 @48276 has 1 MA's), (7, 48357), (8, 48366), (20, 48441), (25, 48477), (45, 48588), (47, 48594), (50, 48603), (54, 48630),

Gene: LibertyBell_67 Start: 43991, Stop: 44365, Start Num: 16

Candidate Starts for LibertyBell_67:

(4, 43850), (5, 43859), (Start: 16 @43991 has 18 MA's), (29, 44090), (36, 44123), (62, 44300),

Gene: LibertyBell_63 Start: 41838, Stop: 42254, Start Num: 16

Candidate Starts for LibertyBell_63:

(Start: 16 @41838 has 18 MA's), (18, 41859), (27, 41925), (32, 41955), (34, 41967), (36, 41973), (37, 41976), (83, 42165), (88, 42213), (89, 42219), (90, 42237),

Gene: Madamoto_73 Start: 45668, Stop: 46138, Start Num: 14

Candidate Starts for Madamoto_73:

(Start: 14 @45668 has 21 MA's), (22, 45728), (71, 45995), (76, 46016), (82, 46040),

Gene: Maya_74 Start: 46079, Stop: 46558, Start Num: 14

Candidate Starts for Maya_74:

(Start: 12 @46073 has 4 MA's), (Start: 14 @46079 has 21 MA's), (22, 46139), (31, 46193), (37, 46220), (46, 46262), (55, 46328), (65, 46397), (76, 46433), (79, 46445), (82, 46457),

Gene: Meibysrarus_72 Start: 45457, Stop: 45942, Start Num: 12

Candidate Starts for Meibysrarus_72:

(Start: 12 @45457 has 4 MA's), (Start: 14 @45463 has 21 MA's), (22, 45523), (31, 45577), (37, 45604), (46, 45646), (55, 45712), (65, 45781), (76, 45817), (79, 45829), (82, 45841),

Gene: Miek_80 Start: 47872, Stop: 48483, Start Num: 10

Candidate Starts for Miek_80:

(Start: 10 @47872 has 5 MA's), (22, 47947), (33, 48019), (39, 48040), (42, 48049), (65, 48190), (67, 48220), (68, 48256), (69, 48304), (79, 48364), (82, 48376), (88, 48430),

Gene: Namo_77 Start: 46997, Stop: 47428, Start Num: 16

Candidate Starts for Namo_77:

(Start: 16 @46997 has 18 MA's), (19, 47024), (21, 47036), (28, 47087), (39, 47138), (61, 47261), (70, 47297), (72, 47303), (78, 47327), (82, 47339),

Gene: Namo_76 Start: 46443, Stop: 46922, Start Num: 14

Candidate Starts for Namo_76:

(Start: 12 @46437 has 4 MA's), (Start: 14 @46443 has 21 MA's), (22, 46503), (31, 46557), (37, 46584), (46, 46626), (55, 46692), (65, 46761), (76, 46797), (79, 46809), (82, 46821),

Gene: Natsu_49 Start: 35600, Stop: 36028, Start Num: 13

Candidate Starts for Natsu_49:

(13, 35600), (17, 35606), (40, 35756), (53, 35810), (82, 35927), (85, 35942), (89, 35978),

Gene: OlympicHelado_76 Start: 46555, Stop: 47034, Start Num: 14

Candidate Starts for OlympicHelado_76:

(Start: 12 @46549 has 4 MA's), (Start: 14 @46555 has 21 MA's), (22, 46615), (31, 46669), (37, 46696), (46, 46738), (55, 46804), (65, 46873), (76, 46909), (79, 46921), (82, 46933),

Gene: Popy_70 Start: 46283, Stop: 46762, Start Num: 14

Candidate Starts for Popy_70:

(Start: 12 @46277 has 4 MA's), (Start: 14 @46283 has 21 MA's), (22, 46343), (31, 46397), (37, 46424), (41, 46448), (46, 46466), (55, 46532), (65, 46601), (76, 46637), (79, 46649), (82, 46661),

Gene: Popy_71 Start: 46837, Stop: 47268, Start Num: 16

Candidate Starts for Popy_71:

(Start: 16 @46837 has 18 MA's), (19, 46864), (21, 46876), (28, 46927), (39, 46978), (48, 47008), (61, 47101), (70, 47137), (72, 47143), (78, 47167), (82, 47179),

Gene: Rainydai_62 Start: 42071, Stop: 42442, Start Num: 16

Candidate Starts for Rainydai_62:

(Start: 16 @42071 has 18 MA's), (36, 42203), (37, 42206), (38, 42218), (58, 42353), (60, 42365), (63, 42389),

Gene: Rainydai_81 Start: 49056, Stop: 49514, Start Num: 10

Candidate Starts for Rainydai_81:

(Start: 10 @49056 has 5 MA's), (22, 49128), (39, 49224), (55, 49305), (56, 49308), (82, 49407),

Gene: Regigigas_84 Start: 48668, Stop: 49126, Start Num: 10

Candidate Starts for Regigigas_84:

(Start: 10 @48668 has 5 MA's), (22, 48740), (39, 48836), (55, 48917), (56, 48920), (82, 49019),

Gene: Rima_75 Start: 46443, Stop: 46922, Start Num: 14

Candidate Starts for Rima_75:

(Start: 12 @46437 has 4 MA's), (Start: 14 @46443 has 21 MA's), (22, 46503), (31, 46557), (37, 46584), (46, 46626), (55, 46692), (65, 46761), (76, 46797), (79, 46809), (82, 46821),

Gene: Rima_76 Start: 46997, Stop: 47428, Start Num: 16

Candidate Starts for Rima_76:

(Start: 16 @46997 has 18 MA's), (19, 47024), (21, 47036), (28, 47087), (39, 47138), (61, 47261), (70, 47297), (72, 47303), (78, 47327), (82, 47339),

Gene: RosaAsantewaa_46 Start: 35392, Stop: 35820, Start Num: 14

Candidate Starts for RosaAsantewaa_46:

(Start: 14 @35392 has 21 MA's), (22, 35452), (26, 35476), (49, 35578), (53, 35605), (59, 35653), (80, 35713), (82, 35722), (94, 35803), (96, 35809),

Gene: SendItCS_78 Start: 47860, Stop: 48471, Start Num: 10

Candidate Starts for SendItCS_78:

(Start: 10 @47860 has 5 MA's), (22, 47935), (33, 48007), (39, 48028), (42, 48037), (65, 48178), (67, 48208), (68, 48244), (69, 48292), (79, 48352), (82, 48364), (88, 48418),

Gene: Soshi_71 Start: 46148, Stop: 46627, Start Num: 14

Candidate Starts for Soshi_71:

(Start: 12 @46142 has 4 MA's), (Start: 14 @46148 has 21 MA's), (22, 46208), (31, 46262), (37, 46289), (46, 46331), (55, 46397), (65, 46466), (76, 46502), (79, 46514), (82, 46526),

Gene: Soshi_72 Start: 46702, Stop: 47133, Start Num: 16

Candidate Starts for Soshi_72:

(Start: 16 @46702 has 18 MA's), (19, 46729), (21, 46741), (28, 46792), (39, 46843), (48, 46873), (61, 46966), (70, 47002), (72, 47008), (78, 47032), (82, 47044),

Gene: Spectropatronm_73 Start: 46072, Stop: 46551, Start Num: 14

Candidate Starts for Spectropatronm_73:

(Start: 12 @46066 has 4 MA's), (Start: 14 @46072 has 21 MA's), (22, 46132), (31, 46186), (37, 46213), (46, 46255), (55, 46321), (65, 46390), (76, 46426), (79, 46438), (82, 46450),

Gene: TaidaOne_75 Start: 46968, Stop: 47447, Start Num: 14

Candidate Starts for TaidaOne_75:

(Start: 12 @46962 has 4 MA's), (Start: 14 @46968 has 21 MA's), (22, 47028), (31, 47082), (37, 47109), (46, 47151), (55, 47217), (65, 47286), (76, 47322), (79, 47334), (82, 47346),

Gene: Thiqqums_64 Start: 42071, Stop: 42442, Start Num: 16

Candidate Starts for Thiqqums_64:

(Start: 16 @42071 has 18 MA's), (36, 42203), (37, 42206), (38, 42218), (58, 42353), (60, 42365), (63, 42389),

Gene: Thiqqums_84 Start: 49056, Stop: 49514, Start Num: 10

Candidate Starts for Thiqqums_84:

(Start: 10 @49056 has 5 MA's), (22, 49128), (39, 49224), (55, 49305), (56, 49308), (82, 49407),

Gene: TieDye_70 Start: 45387, Stop: 45872, Start Num: 12

Candidate Starts for TieDye_70:

(Start: 12 @45387 has 4 MA's), (Start: 14 @45393 has 21 MA's), (22, 45453), (31, 45507), (37, 45534), (46, 45576), (55, 45642), (65, 45711), (76, 45747), (79, 45759), (82, 45771),

Gene: TonyStarch_73 Start: 45835, Stop: 46314, Start Num: 14

Candidate Starts for TonyStarch_73:

(Start: 12 @45829 has 4 MA's), (Start: 14 @45835 has 21 MA's), (22, 45895), (31, 45949), (37, 45976), (46, 46018), (55, 46084), (65, 46153), (76, 46189), (79, 46201), (82, 46213),

Gene: Wigberry_77 Start: 47020, Stop: 47457, Start Num: 16

Candidate Starts for Wigberry_77:

(Start: 16 @47020 has 18 MA's), (78, 47356), (81, 47362), (84, 47380),

Gene: Wigberry_76 Start: 46367, Stop: 46795, Start Num: 15

Candidate Starts for Wigberry_76:

(6, 46268), (9, 46331), (Start: 15 @46367 has 3 MA's), (44, 46535), (52, 46571), (79, 46688), (87, 46745),

Gene: Wigberry_79 Start: 47806, Stop: 48252, Start Num: 16

Candidate Starts for Wigberry_79:

(1, 47593), (3, 47662), (Start: 16 @47806 has 18 MA's), (22, 47860), (24, 47875), (29, 47908), (43, 47992), (73, 48133), (77, 48142), (86, 48184), (88, 48208),