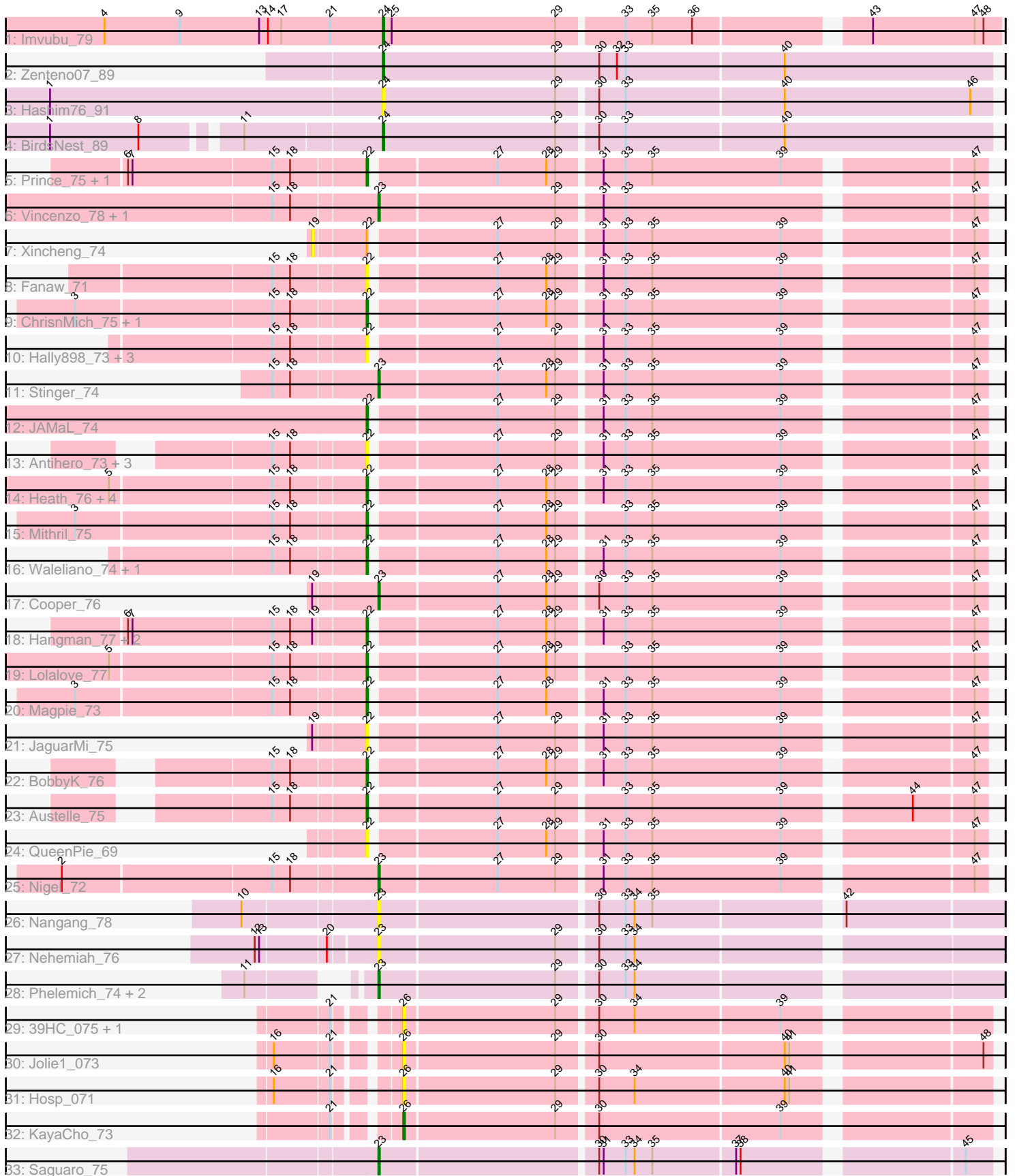


Pham 194074



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 194074 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194074 has 52 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Imvubu_79
- Track 2 : Zenteno07_89
- Track 3 : Hashim76_91
- Track 4 : BirdsNest_89
- Track 5 : Prince_75, Apex_77
- Track 6 : Vincenzo_78, AlanGrant_79
- Track 7 : Xincheng_74
- Track 8 : Fanaw_71
- Track 9 : ChrisnMich_75, Fortunato_75
- Track 10 : Hally898_73, Lambano_73, Poster_73, Nanao_74
- Track 11 : Stinger_74
- Track 12 : JAMaL_74
- Track 13 : Antihero_73, GinPorsche_73, Ahwei_73, Epah_73
- Track 14 : Heath_76, Zemanar_75, Frederick_77, RawrgerThat_75, Hydro_76
- Track 15 : Mithril_75
- Track 16 : Waleliano_74, BrownCNA_76
- Track 17 : Cooper_76
- Track 18 : Hangman_77, VioletZ_78, Mudslide_75
- Track 19 : Lolalove_77
- Track 20 : Magpie_73
- Track 21 : JaguarMi_75
- Track 22 : BobbyK_76
- Track 23 : Austelle_75
- Track 24 : QueenPie_69
- Track 25 : Nigel_72
- Track 26 : Nangang_78
- Track 27 : Nehemiah_76
- Track 28 : Phelemich_74, Mysterious_77, Reprobate_76
- Track 29 : 39HC_075, 40BC_075
- Track 30 : Jolie1_073
- Track 31 : Hosp_071
- Track 32 : KayaCho_73
- Track 33 : Saguaro_75

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

The start number called the most often in the published annotations is 22, it was called in 20 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei_73, Antihero_73, Apex_77, Austelle_75, BobbyK_76, BrownCNA_76, ChrisnMich_75, Epah_73, Fanaw_71, Fortunato_75, Frederick_77, GinPorsche_73, Hally898_73, Hangman_77, Heath_76, Hydro_76, JAMaL_74, JaguarMi_75, Lambano_73, Lolalove_77, Magpie_73, Mithril_75, Mudslide_75, Nanao_74, Poster_73, Prince_75, QueenPie_69, RawrgerThat_75, VioletZ_78, Waleliano_74, Zemanar_75,

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

- Xincheng_74,

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

- 39HC_075, 40BC_075, AlanGrant_79, BirdsNest_89, Cooper_76, Hashim76_91, Hosp_071, Imvubu_79, Jolie1_073, KayaCho_73, Mysterious_77, Nangang_78, Nehemiah_76, Nigel_72, Phelemich_74, Reprobate_76, Saguaro_75, Stinger_74, Vincenzo_78, Zenteno07_89,

Summary by start number:

Start 19:

- Found in 6 of 52 (11.5%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Xincheng_74 (B4),

Start 22:

- Found in 32 of 52 (61.5%) of genes in pham
- Manual Annotations of this start: 20 of 32
- Called 96.9% of time when present
- Phage (with cluster) where this start called: Ahwei_73 (B4), Antihero_73 (B4), Apex_77 (B4), Austelle_75 (B4), BobbyK_76 (B4), BrownCNA_76 (B4), ChrisnMich_75 (B4), Epah_73 (B4), Fanaw_71 (B4), Fortunato_75 (B4), Frederick_77 (B4), GinPorsche_73 (B4), Hally898_73 (B4), Hangman_77 (B4), Heath_76 (B4), Hydro_76 (B4), JAMaL_74 (B4), JaguarMi_75 (B4), Lambano_73 (B4), Lolalove_77 (B4), Magpie_73 (B4), Mithril_75 (B4), Mudslide_75 (B4), Nanao_74 (B4), Poster_73 (B4), Prince_75 (B4), QueenPie_69 (B4), RawrgerThat_75 (B4), VioletZ_78 (B4), Waleliano_74 (B4), Zemanar_75 (B4),

Start 23:

- Found in 11 of 52 (21.2%) of genes in pham
- Manual Annotations of this start: 8 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_79 (B4), Cooper_76 (B4), Mysterious_77 (B5), Nangang_78 (B5), Nehemiah_76 (B5), Nigel_72 (B4), Phelemich_74 (B5), Reprobate_76 (B5), Saguaro_75 (B7), Stinger_74 (B4), Vincenzo_78 (B4),

Start 24:

- Found in 4 of 52 (7.7%) of genes in pham

- Manual Annotations of this start: 3 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_89 (B13), Hashim76_91 (B13), Imvubu_79 (B10), Zenteno07_89 (B13),

Start 26:

- Found in 5 of 52 (9.6%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_075 (B6), 40BC_075 (B6), Hosp_071 (B6), Jolie1_073 (B6), KayaCho_73 (B6),

Summary by clusters:

There are 6 clusters represented in this pham: B4, B5, B6, B7, B13, B10,

Info for manual annotations of cluster B10:

- Start number 24 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:

- Start number 24 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B4:

- Start number 22 was manually annotated 20 times for cluster B4.
- Start number 23 was manually annotated 5 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 23 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 26 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 23 was manually annotated 1 time for cluster B7.

Gene Information:

Gene: 39HC_075 Start: 62227, Stop: 61859, Start Num: 26

Candidate Starts for 39HC_075:

(21, 62260), (Start: 26 @62227 has 1 MA's), (29, 62128), (30, 62104), (34, 62080), (39, 61984),

Gene: 40BC_075 Start: 62227, Stop: 61859, Start Num: 26

Candidate Starts for 40BC_075:

(21, 62260), (Start: 26 @62227 has 1 MA's), (29, 62128), (30, 62104), (34, 62080), (39, 61984),

Gene: Ahwei_73 Start: 62187, Stop: 61801, Start Num: 22

Candidate Starts for Ahwei_73:

(15, 62247), (18, 62235), (Start: 22 @62187 has 20 MA's), (27, 62109), (29, 62070), (31, 62043), (33, 62028), (35, 62010), (39, 61923), (47, 61809),

Gene: AlanGrant_79 Start: 64544, Stop: 64158, Start Num: 23

Candidate Starts for AlanGrant_79:

(15, 64610), (18, 64598), (Start: 23 @64544 has 8 MA's), (29, 64427), (31, 64400), (33, 64385), (47, 64166),

Gene: Antihero_73 Start: 62122, Stop: 61736, Start Num: 22

Candidate Starts for Antihero_73:

(15, 62182), (18, 62170), (Start: 22 @62122 has 20 MA's), (27, 62044), (29, 62005), (31, 61978), (33, 61963), (35, 61945), (39, 61858), (47, 61744),

Gene: Apex_77 Start: 63483, Stop: 63097, Start Num: 22

Candidate Starts for Apex_77:

(6, 63639), (7, 63636), (15, 63543), (18, 63531), (Start: 22 @63483 has 20 MA's), (27, 63405), (28, 63372), (29, 63366), (31, 63339), (33, 63324), (35, 63306), (39, 63219), (47, 63105),

Gene: Austelle_75 Start: 63800, Stop: 63414, Start Num: 22

Candidate Starts for Austelle_75:

(15, 63860), (18, 63848), (Start: 22 @63800 has 20 MA's), (27, 63722), (29, 63683), (33, 63641), (35, 63623), (39, 63536), (44, 63461), (47, 63422),

Gene: BirdsNest_89 Start: 65386, Stop: 64982, Start Num: 24

Candidate Starts for BirdsNest_89:

(1, 65590), (8, 65530), (11, 65473), (Start: 24 @65386 has 3 MA's), (29, 65269), (30, 65245), (33, 65227), (40, 65122),

Gene: BobbyK_76 Start: 62954, Stop: 62568, Start Num: 22

Candidate Starts for BobbyK_76:

(15, 63014), (18, 63002), (Start: 22 @62954 has 20 MA's), (27, 62876), (28, 62843), (29, 62837), (31, 62810), (33, 62795), (35, 62777), (39, 62690), (47, 62576),

Gene: BrownCNA_76 Start: 63158, Stop: 62772, Start Num: 22

Candidate Starts for BrownCNA_76:

(15, 63218), (18, 63206), (Start: 22 @63158 has 20 MA's), (27, 63080), (28, 63047), (29, 63041), (31, 63014), (33, 62999), (35, 62981), (39, 62894), (47, 62780),

Gene: ChrisnMich_75 Start: 62154, Stop: 61768, Start Num: 22

Candidate Starts for ChrisnMich_75:

(3, 62343), (15, 62214), (18, 62202), (Start: 22 @62154 has 20 MA's), (27, 62076), (28, 62043), (29, 62037), (31, 62010), (33, 61995), (35, 61977), (39, 61890), (47, 61776),

Gene: Cooper_76 Start: 62632, Stop: 62246, Start Num: 23

Candidate Starts for Cooper_76:

(19, 62671), (Start: 23 @62632 has 8 MA's), (27, 62554), (28, 62521), (29, 62515), (30, 62491), (33, 62473), (35, 62455), (39, 62368), (47, 62254),

Gene: Epah_73 Start: 62122, Stop: 61736, Start Num: 22

Candidate Starts for Epah_73:

(15, 62182), (18, 62170), (Start: 22 @62122 has 20 MA's), (27, 62044), (29, 62005), (31, 61978), (33, 61963), (35, 61945), (39, 61858), (47, 61744),

Gene: Fanaw_71 Start: 62994, Stop: 62608, Start Num: 22

Candidate Starts for Fanaw_71:

(15, 63054), (18, 63042), (Start: 22 @62994 has 20 MA's), (27, 62916), (28, 62883), (29, 62877), (31, 62850), (33, 62835), (35, 62817), (39, 62730), (47, 62616),

Gene: Fortunato_75 Start: 62924, Stop: 62538, Start Num: 22

Candidate Starts for Fortunato_75:

(3, 63113), (15, 62984), (18, 62972), (Start: 22 @62924 has 20 MA's), (27, 62846), (28, 62813), (29, 62807), (31, 62780), (33, 62765), (35, 62747), (39, 62660), (47, 62546),

Gene: Frederick_77 Start: 63228, Stop: 62842, Start Num: 22

Candidate Starts for Frederick_77:

(5, 63393), (15, 63288), (18, 63276), (Start: 22 @63228 has 20 MA's), (27, 63150), (28, 63117), (29, 63111), (31, 63084), (33, 63069), (35, 63051), (39, 62964), (47, 62850),

Gene: GinPorsche_73 Start: 62119, Stop: 61733, Start Num: 22

Candidate Starts for GinPorsche_73:

(15, 62179), (18, 62167), (Start: 22 @62119 has 20 MA's), (27, 62041), (29, 62002), (31, 61975), (33, 61960), (35, 61942), (39, 61855), (47, 61741),

Gene: Hally898_73 Start: 62200, Stop: 61814, Start Num: 22

Candidate Starts for Hally898_73:

(15, 62260), (18, 62248), (Start: 22 @62200 has 20 MA's), (27, 62122), (29, 62083), (31, 62056), (33, 62041), (35, 62023), (39, 61936), (47, 61822),

Gene: Hangman_77 Start: 63694, Stop: 63308, Start Num: 22

Candidate Starts for Hangman_77:

(6, 63850), (7, 63847), (15, 63754), (18, 63742), (19, 63727), (Start: 22 @63694 has 20 MA's), (27, 63616), (28, 63583), (29, 63577), (31, 63550), (33, 63535), (35, 63517), (39, 63430), (47, 63316),

Gene: Hashim76_91 Start: 65419, Stop: 65015, Start Num: 24

Candidate Starts for Hashim76_91:

(1, 65641), (Start: 24 @65419 has 3 MA's), (29, 65302), (30, 65278), (33, 65260), (40, 65155), (46, 65029),

Gene: Heath_76 Start: 63439, Stop: 63053, Start Num: 22

Candidate Starts for Heath_76:

(5, 63604), (15, 63499), (18, 63487), (Start: 22 @63439 has 20 MA's), (27, 63361), (28, 63328), (29, 63322), (31, 63295), (33, 63280), (35, 63262), (39, 63175), (47, 63061),

Gene: Hosp_071 Start: 59697, Stop: 59329, Start Num: 26

Candidate Starts for Hosp_071:

(16, 59766), (21, 59730), (Start: 26 @59697 has 1 MA's), (29, 59598), (30, 59574), (34, 59550), (40, 59451), (41, 59448),

Gene: Hydro_76 Start: 63357, Stop: 62971, Start Num: 22

Candidate Starts for Hydro_76:

(5, 63522), (15, 63417), (18, 63405), (Start: 22 @63357 has 20 MA's), (27, 63279), (28, 63246), (29, 63240), (31, 63213), (33, 63198), (35, 63180), (39, 63093), (47, 62979),

Gene: Imvubu_79 Start: 62691, Stop: 62296, Start Num: 24

Candidate Starts for Imvubu_79:

(4, 62880), (9, 62829), (13, 62775), (14, 62769), (17, 62760), (21, 62727), (Start: 24 @62691 has 3 MA's), (25, 62685), (29, 62574), (33, 62532), (35, 62514), (36, 62487), (43, 62382), (47, 62313), (48, 62307),

Gene: JAMaL_74 Start: 62677, Stop: 62291, Start Num: 22

Candidate Starts for JAMaL_74:

(Start: 22 @62677 has 20 MA's), (27, 62599), (29, 62560), (31, 62533), (33, 62518), (35, 62500), (39, 62413), (47, 62299),

Gene: JaguarMi_75 Start: 64365, Stop: 63979, Start Num: 22

Candidate Starts for JaguarMi_75:

(19, 64398), (Start: 22 @64365 has 20 MA's), (27, 64287), (29, 64248), (31, 64221), (33, 64206), (35, 64188), (39, 64101), (47, 63987),

Gene: Jolie1_073 Start: 61731, Stop: 61363, Start Num: 26

Candidate Starts for Jolie1_073:

(16, 61800), (21, 61764), (Start: 26 @61731 has 1 MA's), (29, 61632), (30, 61608), (40, 61485), (41, 61482), (48, 61368),

Gene: KayaCho_73 Start: 61898, Stop: 61530, Start Num: 26

Candidate Starts for KayaCho_73:

(21, 61931), (Start: 26 @61898 has 1 MA's), (29, 61799), (30, 61775), (39, 61655),

Gene: Lambano_73 Start: 62200, Stop: 61814, Start Num: 22

Candidate Starts for Lambano_73:

(15, 62260), (18, 62248), (Start: 22 @62200 has 20 MA's), (27, 62122), (29, 62083), (31, 62056), (33, 62041), (35, 62023), (39, 61936), (47, 61822),

Gene: Lolalove_77 Start: 63280, Stop: 62894, Start Num: 22

Candidate Starts for Lolalove_77:

(5, 63445), (15, 63340), (18, 63328), (Start: 22 @63280 has 20 MA's), (27, 63202), (28, 63169), (29, 63163), (33, 63121), (35, 63103), (39, 63016), (47, 62902),

Gene: Magpie_73 Start: 62892, Stop: 62506, Start Num: 22

Candidate Starts for Magpie_73:

(3, 63081), (15, 62952), (18, 62940), (Start: 22 @62892 has 20 MA's), (27, 62814), (28, 62781), (31, 62748), (33, 62733), (35, 62715), (39, 62628), (47, 62514),

Gene: Mithril_75 Start: 63279, Stop: 62893, Start Num: 22

Candidate Starts for Mithril_75:

(3, 63468), (15, 63339), (18, 63327), (Start: 22 @63279 has 20 MA's), (27, 63201), (28, 63168), (29, 63162), (33, 63120), (35, 63102), (39, 63015), (47, 62901),

Gene: Mudslide_75 Start: 63316, Stop: 62930, Start Num: 22

Candidate Starts for Mudslide_75:

(6, 63472), (7, 63469), (15, 63376), (18, 63364), (19, 63349), (Start: 22 @63316 has 20 MA's), (27, 63238), (28, 63205), (29, 63199), (31, 63172), (33, 63157), (35, 63139), (39, 63052), (47, 62938),

Gene: Mysterious_77 Start: 62158, Stop: 61763, Start Num: 23

Candidate Starts for Mysterious_77:

(11, 62212), (Start: 23 @62158 has 8 MA's), (29, 62041), (30, 62017), (33, 61999), (34, 61993),

Gene: Nanao_74 Start: 62190, Stop: 61804, Start Num: 22

Candidate Starts for Nanao_74:

(15, 62250), (18, 62238), (Start: 22 @62190 has 20 MA's), (27, 62112), (29, 62073), (31, 62046), (33, 62031), (35, 62013), (39, 61926), (47, 61812),

Gene: Nangang_78 Start: 62728, Stop: 62333, Start Num: 23

Candidate Starts for Nangang_78:

(10, 62809), (Start: 23 @62728 has 8 MA's), (30, 62587), (33, 62569), (34, 62563), (35, 62551), (42, 62437),

Gene: Nehemiah_76 Start: 62221, Stop: 61826, Start Num: 23

Candidate Starts for Nehemiah_76:

(12, 62290), (13, 62287), (20, 62245), (Start: 23 @62221 has 8 MA's), (29, 62104), (30, 62080), (33, 62062), (34, 62056),

Gene: Nigel_72 Start: 61700, Stop: 61314, Start Num: 23

Candidate Starts for Nigel_72:

(2, 61904), (15, 61766), (18, 61754), (Start: 23 @61700 has 8 MA's), (27, 61622), (29, 61583), (31, 61556), (33, 61541), (35, 61523), (39, 61436), (47, 61322),

Gene: Phelemich_74 Start: 62284, Stop: 61889, Start Num: 23

Candidate Starts for Phelemich_74:

(11, 62338), (Start: 23 @62284 has 8 MA's), (29, 62167), (30, 62143), (33, 62125), (34, 62119),

Gene: Poster_73 Start: 62191, Stop: 61805, Start Num: 22

Candidate Starts for Poster_73:

(15, 62251), (18, 62239), (Start: 22 @62191 has 20 MA's), (27, 62113), (29, 62074), (31, 62047), (33, 62032), (35, 62014), (39, 61927), (47, 61813),

Gene: Prince_75 Start: 63386, Stop: 63000, Start Num: 22

Candidate Starts for Prince_75:

(6, 63542), (7, 63539), (15, 63446), (18, 63434), (Start: 22 @63386 has 20 MA's), (27, 63308), (28, 63275), (29, 63269), (31, 63242), (33, 63227), (35, 63209), (39, 63122), (47, 63008),

Gene: QueenPie_69 Start: 61924, Stop: 61538, Start Num: 22

Candidate Starts for QueenPie_69:

(Start: 22 @61924 has 20 MA's), (27, 61846), (28, 61813), (29, 61807), (31, 61780), (33, 61765), (35, 61747), (39, 61660), (47, 61546),

Gene: RawrgerThat_75 Start: 62971, Stop: 62585, Start Num: 22

Candidate Starts for RawrgerThat_75:

(5, 63136), (15, 63031), (18, 63019), (Start: 22 @62971 has 20 MA's), (27, 62893), (28, 62860), (29, 62854), (31, 62827), (33, 62812), (35, 62794), (39, 62707), (47, 62593),

Gene: Reprobate_76 Start: 62289, Stop: 61894, Start Num: 23

Candidate Starts for Reprobate_76:

(11, 62343), (Start: 23 @62289 has 8 MA's), (29, 62172), (30, 62148), (33, 62130), (34, 62124),

Gene: Saguaro_75 Start: 62202, Stop: 61816, Start Num: 23

Candidate Starts for Saguaro_75:

(Start: 23 @62202 has 8 MA's), (30, 62061), (31, 62058), (33, 62043), (34, 62037), (35, 62025), (37, 61971), (38, 61968), (45, 61833),

Gene: Stinger_74 Start: 61821, Stop: 61435, Start Num: 23

Candidate Starts for Stinger_74:

(15, 61887), (18, 61875), (Start: 23 @61821 has 8 MA's), (27, 61743), (28, 61710), (29, 61704), (31, 61677), (33, 61662), (35, 61644), (39, 61557), (47, 61443),

Gene: Vincenzo_78 Start: 64574, Stop: 64188, Start Num: 23

Candidate Starts for Vincenzo_78:

(15, 64640), (18, 64628), (Start: 23 @64574 has 8 MA's), (29, 64457), (31, 64430), (33, 64415), (47, 64196),

Gene: VioletZ_78 Start: 63482, Stop: 63096, Start Num: 22

Candidate Starts for VioletZ_78:

(6, 63638), (7, 63635), (15, 63542), (18, 63530), (19, 63515), (Start: 22 @63482 has 20 MA's), (27, 63404), (28, 63371), (29, 63365), (31, 63338), (33, 63323), (35, 63305), (39, 63218), (47, 63104),

Gene: Waleliano_74 Start: 62911, Stop: 62525, Start Num: 22

Candidate Starts for Waleliano_74:

(15, 62971), (18, 62959), (Start: 22 @62911 has 20 MA's), (27, 62833), (28, 62800), (29, 62794), (31, 62767), (33, 62752), (35, 62734), (39, 62647), (47, 62533),

Gene: Xincheng_74 Start: 64349, Stop: 63930, Start Num: 19

Candidate Starts for Xincheng_74:

(19, 64349), (Start: 22 @64316 has 20 MA's), (27, 64238), (29, 64199), (31, 64172), (33, 64157), (35, 64139), (39, 64052), (47, 63938),

Gene: Zemanar_75 Start: 63148, Stop: 62762, Start Num: 22

Candidate Starts for Zemanar_75:

(5, 63313), (15, 63208), (18, 63196), (Start: 22 @63148 has 20 MA's), (27, 63070), (28, 63037), (29, 63031), (31, 63004), (33, 62989), (35, 62971), (39, 62884), (47, 62770),

Gene: Zenteno07_89 Start: 65034, Stop: 64624, Start Num: 24

Candidate Starts for Zenteno07_89:

(Start: 24 @65034 has 3 MA's), (29, 64917), (30, 64887), (32, 64875), (33, 64869), (40, 64764),