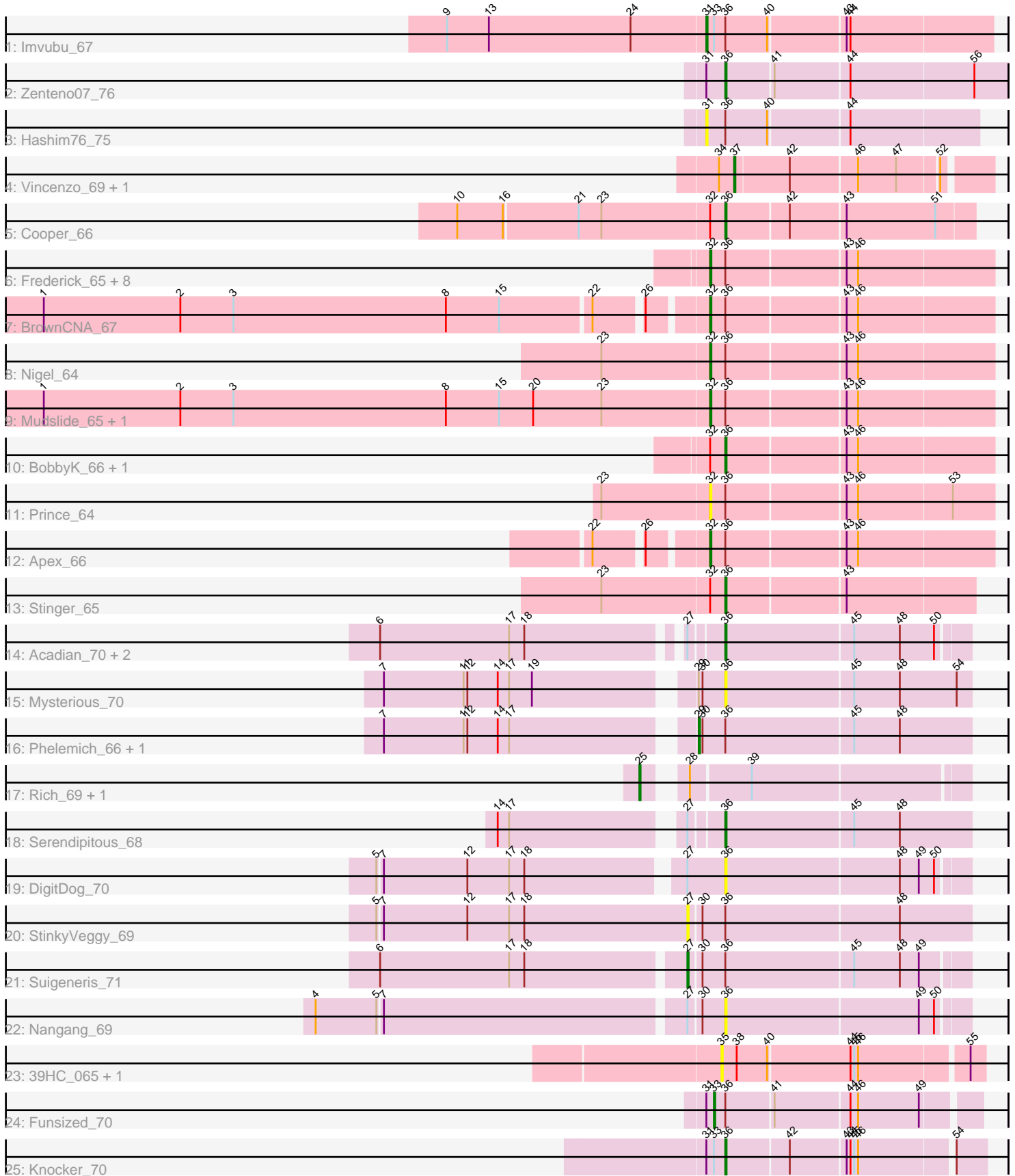


Pham 170114



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 170114 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170114 has 41 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Imvubu_67
- Track 2 : Zenteno07_76
- Track 3 : Hashim76_75
- Track 4 : Vincenzo_69, AlanGrant_70
- Track 5 : Cooper_66
- Track 6 : Frederick_65, Poster_63, Nanao_64, Hydro_66, JAMaL_65, Heath_65, Hangman_66, Magpie_63, Ahwei_63
- Track 7 : BrownCNA_67
- Track 8 : Nigel_64
- Track 9 : Mudslide_65, Waleliano_65
- Track 10 : BobbyK_66, ChrisnMich_65
- Track 11 : Prince_64
- Track 12 : Apex_66
- Track 13 : Stinger_65
- Track 14 : Acadian_70, EastView9101_71, SirJeffery_69
- Track 15 : Mysterious_70
- Track 16 : Phelemich_66, Reprobate_68
- Track 17 : Rich_69, Bae_70
- Track 18 : Serendipitous_68
- Track 19 : DigitDog_70
- Track 20 : StinkyVeggy_69
- Track 21 : Suigeneris_71
- Track 22 : Nangang_69
- Track 23 : 39HC_065, 40BC_065
- Track 24 : Funsized_70
- Track 25 : Knocker_70

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

The start number called the most often in the published annotations is 32, it was called in 10 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ahwei_63, Apex_66, BrownCNA_67, Frederick_65, Hangman_66, Heath_65, Hydro_66, JAMaL_65, Magpie_63, Mudslide_65, Nanao_64, Nigel_64, Poster_63, Prince_64, Waleliano_65,

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

- BobbyK_66, ChrisnMich_65, Cooper_66, Stinger_65,

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

- 39HC_065, 40BC_065, Acadian_70, AlanGrant_70, Bae_70, DigitDog_70, EastView9101_71, Funsized_70, Hashim76_75, Imvubu_67, Knocker_70, Mysterious_70, Nangang_69, Phelemich_66, Reprobate_68, Rich_69, Serendipitous_68, SirJeffery_69, StinkyVeggy_69, Suigeneris_71, Vincenzo_69, Zenteno07_76,

Summary by start number:

Start 25:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bae_70 (B5), Rich_69 (B5),

Start 27:

- Found in 8 of 41 (19.5%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 25.0% of time when present
- Phage (with cluster) where this start called: StinkyVeggy_69 (B5), Suigeneris_71 (B5),

Start 29:

- Found in 3 of 41 (7.3%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phelemich_66 (B5), Reprobate_68 (B5),

Start 31:

- Found in 5 of 41 (12.2%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Hashim76_75 (B13), Imvubu_67 (B10),

Start 32:

- Found in 19 of 41 (46.3%) of genes in pham
- Manual Annotations of this start: 10 of 27
- Called 78.9% of time when present
- Phage (with cluster) where this start called: Ahwei_63 (B4), Apex_66 (B4), BrownCNA_67 (B4), Frederick_65 (B4), Hangman_66 (B4), Heath_65 (B4), Hydro_66 (B4), JAMaL_65 (B4), Magpie_63 (B4), Mudslide_65 (B4), Nanao_64 (B4), Nigel_64 (B4), Poster_63 (B4), Prince_64 (B4), Waleliano_65 (B4),

Start 33:

- Found in 3 of 41 (7.3%) of genes in pham
- Manual Annotations of this start: 1 of 27

- Called 33.3% of time when present
- Phage (with cluster) where this start called: Funsized_70 (B9),

Start 35:

- Found in 2 of 41 (4.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_065 (B6), 40BC_065 (B6),

Start 36:

- Found in 35 of 41 (85.4%) of genes in pham
- Manual Annotations of this start: 8 of 27
- Called 37.1% of time when present
- Phage (with cluster) where this start called: Acadian_70 (B5), BobbyK_66 (B4), ChrisnMich_65 (B4), Cooper_66 (B4), DigitDog_70 (B5), EastView9101_71 (B5), Knocker_70 (B9), Mysterious_70 (B5), Nangang_69 (B5), Serendipitous_68 (B5), SirJeffery_69 (B5), Stinger_65 (B4), Zenteno07_76 (B13),

Start 37:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_70 (B4), Vincenzo_69 (B4),

Summary by clusters:

There are 6 clusters represented in this pham: B4, B5, B6, B13, B10, B9,

Info for manual annotations of cluster B10:

- Start number 31 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:

- Start number 36 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B4:

- Start number 32 was manually annotated 10 times for cluster B4.
- Start number 36 was manually annotated 4 times for cluster B4.
- Start number 37 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 25 was manually annotated 2 times for cluster B5.
- Start number 27 was manually annotated 1 time for cluster B5.
- Start number 29 was manually annotated 2 times for cluster B5.
- Start number 36 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster B9:

- Start number 33 was manually annotated 1 time for cluster B9.
- Start number 36 was manually annotated 1 time for cluster B9.

Gene Information:

Gene: 39HC_065 Start: 57490, Stop: 57687, Start Num: 35
Candidate Starts for 39HC_065:
(35, 57490), (38, 57502), (40, 57526), (44, 57589), (45, 57592), (46, 57595), (55, 57676),

Gene: 40BC_065 Start: 57490, Stop: 57687, Start Num: 35
Candidate Starts for 40BC_065:
(35, 57490), (38, 57502), (40, 57526), (44, 57589), (45, 57592), (46, 57595), (55, 57676),

Gene: Acadian_70 Start: 58936, Stop: 59121, Start Num: 36
Candidate Starts for Acadian_70:
(6, 58687), (17, 58789), (18, 58801), (Start: 27 @58912 has 1 MA's), (Start: 36 @58936 has 8 MA's),
(45, 59035), (48, 59071), (50, 59098),

Gene: Ahwei_63 Start: 58052, Stop: 58267, Start Num: 32
Candidate Starts for Ahwei_63:
(Start: 32 @58052 has 10 MA's), (Start: 36 @58064 has 8 MA's), (43, 58154), (46, 58163),

Gene: AlanGrant_70 Start: 60610, Stop: 60798, Start Num: 37
Candidate Starts for AlanGrant_70:
(34, 60598), (Start: 37 @60610 has 2 MA's), (42, 60652), (46, 60703), (47, 60733), (52, 60763),

Gene: Apex_66 Start: 59146, Stop: 59361, Start Num: 32
Candidate Starts for Apex_66:
(22, 59071), (26, 59104), (Start: 32 @59146 has 10 MA's), (Start: 36 @59158 has 8 MA's), (43,
59248), (46, 59257),

Gene: Bae_70 Start: 59961, Stop: 60203, Start Num: 25
Candidate Starts for Bae_70:
(Start: 25 @59961 has 2 MA's), (28, 59982), (39, 60027),

Gene: BobbyK_66 Start: 58944, Stop: 59147, Start Num: 36
Candidate Starts for BobbyK_66:
(Start: 32 @58932 has 10 MA's), (Start: 36 @58944 has 8 MA's), (43, 59034), (46, 59043),

Gene: BrownCNA_67 Start: 59309, Stop: 59524, Start Num: 32
Candidate Starts for BrownCNA_67:
(1, 58805), (2, 58913), (3, 58955), (8, 59123), (15, 59165), (22, 59234), (26, 59267), (Start: 32
@59309 has 10 MA's), (Start: 36 @59321 has 8 MA's), (43, 59411), (46, 59420),

Gene: ChrisnMich_65 Start: 58046, Stop: 58249, Start Num: 36
Candidate Starts for ChrisnMich_65:
(Start: 32 @58034 has 10 MA's), (Start: 36 @58046 has 8 MA's), (43, 58136), (46, 58145),

Gene: Cooper_66 Start: 58486, Stop: 58674, Start Num: 36
Candidate Starts for Cooper_66:
(10, 58279), (16, 58315), (21, 58372), (23, 58390), (Start: 32 @58474 has 10 MA's), (Start: 36
@58486 has 8 MA's), (42, 58534), (43, 58576), (51, 58645),

Gene: DigitDog_70 Start: 59079, Stop: 59264, Start Num: 36
Candidate Starts for DigitDog_70:
(5, 58821), (7, 58824), (12, 58890), (17, 58923), (18, 58935), (Start: 27 @59049 has 1 MA's), (Start:
36 @59079 has 8 MA's), (48, 59214), (49, 59229), (50, 59241),

Gene: EastView9101_71 Start: 58680, Stop: 58865, Start Num: 36
Candidate Starts for EastView9101_71:
(6, 58431), (17, 58533), (18, 58545), (Start: 27 @58656 has 1 MA's), (Start: 36 @58680 has 8 MA's),
(45, 58779), (48, 58815), (50, 58842),

Gene: Frederick_65 Start: 59032, Stop: 59247, Start Num: 32
Candidate Starts for Frederick_65:
(Start: 32 @59032 has 10 MA's), (Start: 36 @59044 has 8 MA's), (43, 59134), (46, 59143),

Gene: Funsized_70 Start: 61025, Stop: 61222, Start Num: 33
Candidate Starts for Funsized_70:
(Start: 31 @61019 has 1 MA's), (Start: 33 @61025 has 1 MA's), (Start: 36 @61034 has 8 MA's), (41,
61070), (44, 61127), (46, 61133), (49, 61181),

Gene: Hangman_66 Start: 59231, Stop: 59446, Start Num: 32
Candidate Starts for Hangman_66:
(Start: 32 @59231 has 10 MA's), (Start: 36 @59243 has 8 MA's), (43, 59333), (46, 59342),

Gene: Hashim76_75 Start: 59146, Stop: 59352, Start Num: 31
Candidate Starts for Hashim76_75:
(Start: 31 @59146 has 1 MA's), (Start: 36 @59161 has 8 MA's), (40, 59194), (44, 59254),

Gene: Heath_65 Start: 58858, Stop: 59073, Start Num: 32
Candidate Starts for Heath_65:
(Start: 32 @58858 has 10 MA's), (Start: 36 @58870 has 8 MA's), (43, 58960), (46, 58969),

Gene: Hydro_66 Start: 59169, Stop: 59384, Start Num: 32
Candidate Starts for Hydro_66:
(Start: 32 @59169 has 10 MA's), (Start: 36 @59181 has 8 MA's), (43, 59271), (46, 59280),

Gene: Imvubu_67 Start: 57772, Stop: 57990, Start Num: 31
Candidate Starts for Imvubu_67:
(9, 57571), (13, 57604), (24, 57715), (Start: 31 @57772 has 1 MA's), (Start: 33 @57778 has 1 MA's),
(Start: 36 @57787 has 8 MA's), (40, 57820), (43, 57877), (44, 57880),

Gene: JAMaL_65 Start: 59059, Stop: 59274, Start Num: 32
Candidate Starts for JAMaL_65:
(Start: 32 @59059 has 10 MA's), (Start: 36 @59071 has 8 MA's), (43, 59161), (46, 59170),

Gene: Knocker_70 Start: 60207, Stop: 60398, Start Num: 36
Candidate Starts for Knocker_70:
(Start: 31 @60192 has 1 MA's), (Start: 33 @60198 has 1 MA's), (Start: 36 @60207 has 8 MA's), (42,
60255), (43, 60297), (44, 60300), (45, 60303), (46, 60306), (54, 60375),

Gene: Magpie_63 Start: 58922, Stop: 59137, Start Num: 32
Candidate Starts for Magpie_63:
(Start: 32 @58922 has 10 MA's), (Start: 36 @58934 has 8 MA's), (43, 59024), (46, 59033),

Gene: Mudslide_65 Start: 59260, Stop: 59475, Start Num: 32
Candidate Starts for Mudslide_65:
(1, 58735), (2, 58843), (3, 58885), (8, 59053), (15, 59095), (20, 59122), (23, 59176), (Start: 32
@59260 has 10 MA's), (Start: 36 @59272 has 8 MA's), (43, 59362), (46, 59371),

Gene: Mysterious_70 Start: 58999, Stop: 59190, Start Num: 36
Candidate Starts for Mysterious_70:
(7, 58750), (11, 58813), (12, 58816), (14, 58840), (17, 58849), (19, 58867), (Start: 29 @58978 has 2 MA's), (30, 58981), (Start: 36 @58999 has 8 MA's), (45, 59098), (48, 59134), (54, 59179),

Gene: Nanao_64 Start: 58055, Stop: 58270, Start Num: 32
Candidate Starts for Nanao_64:
(Start: 32 @58055 has 10 MA's), (Start: 36 @58067 has 8 MA's), (43, 58157), (46, 58166),

Gene: Nangang_69 Start: 59078, Stop: 59263, Start Num: 36
Candidate Starts for Nangang_69:
(4, 58769), (5, 58817), (7, 58820), (Start: 27 @59051 has 1 MA's), (30, 59060), (Start: 36 @59078 has 8 MA's), (49, 59228), (50, 59240),

Gene: Nigel_64 Start: 58087, Stop: 58302, Start Num: 32
Candidate Starts for Nigel_64:
(23, 58003), (Start: 32 @58087 has 10 MA's), (Start: 36 @58099 has 8 MA's), (43, 58189), (46, 58198),

Gene: Phelemich_66 Start: 58810, Stop: 59022, Start Num: 29
Candidate Starts for Phelemich_66:
(7, 58582), (11, 58645), (12, 58648), (14, 58672), (17, 58681), (Start: 29 @58810 has 2 MA's), (30, 58813), (Start: 36 @58831 has 8 MA's), (45, 58930), (48, 58966),

Gene: Poster_63 Start: 58056, Stop: 58271, Start Num: 32
Candidate Starts for Poster_63:
(Start: 32 @58056 has 10 MA's), (Start: 36 @58068 has 8 MA's), (43, 58158), (46, 58167),

Gene: Prince_64 Start: 59161, Stop: 59376, Start Num: 32
Candidate Starts for Prince_64:
(23, 59077), (Start: 32 @59161 has 10 MA's), (Start: 36 @59173 has 8 MA's), (43, 59263), (46, 59272), (53, 59344),

Gene: Reprobate_68 Start: 58815, Stop: 59027, Start Num: 29
Candidate Starts for Reprobate_68:
(7, 58587), (11, 58650), (12, 58653), (14, 58677), (17, 58686), (Start: 29 @58815 has 2 MA's), (30, 58818), (Start: 36 @58836 has 8 MA's), (45, 58935), (48, 58971),

Gene: Rich_69 Start: 60021, Stop: 60251, Start Num: 25
Candidate Starts for Rich_69:
(Start: 25 @60021 has 2 MA's), (28, 60042), (39, 60087),

Gene: Serendipitous_68 Start: 58411, Stop: 58602, Start Num: 36
Candidate Starts for Serendipitous_68:
(14, 58255), (17, 58264), (Start: 27 @58387 has 1 MA's), (Start: 36 @58411 has 8 MA's), (45, 58510), (48, 58546),

Gene: SirJeffery_69 Start: 59013, Stop: 59198, Start Num: 36
Candidate Starts for SirJeffery_69:
(6, 58764), (17, 58866), (18, 58878), (Start: 27 @58989 has 1 MA's), (Start: 36 @59013 has 8 MA's), (45, 59112), (48, 59148), (50, 59175),

Gene: Stinger_65 Start: 58022, Stop: 58210, Start Num: 36

Candidate Starts for Stinger_65:

(23, 57926), (Start: 32 @58010 has 10 MA's), (Start: 36 @58022 has 8 MA's), (43, 58112),

Gene: StinkyVeggy_69 Start: 58864, Stop: 59082, Start Num: 27

Candidate Starts for StinkyVeggy_69:

(5, 58621), (7, 58624), (12, 58690), (17, 58723), (18, 58735), (Start: 27 @58864 has 1 MA's), (30, 58873), (Start: 36 @58891 has 8 MA's), (48, 59026),

Gene: Suigeneris_71 Start: 59137, Stop: 59349, Start Num: 27

Candidate Starts for Suigeneris_71:

(6, 58903), (17, 59005), (18, 59017), (Start: 27 @59137 has 1 MA's), (30, 59146), (Start: 36 @59164 has 8 MA's), (45, 59263), (48, 59299), (49, 59314),

Gene: Vincenzo_69 Start: 60640, Stop: 60828, Start Num: 37

Candidate Starts for Vincenzo_69:

(34, 60628), (Start: 37 @60640 has 2 MA's), (42, 60682), (46, 60733), (47, 60763), (52, 60793),

Gene: Waleliano_65 Start: 59062, Stop: 59277, Start Num: 32

Candidate Starts for Waleliano_65:

(1, 58537), (2, 58645), (3, 58687), (8, 58855), (15, 58897), (20, 58924), (23, 58978), (Start: 32 @59062 has 10 MA's), (Start: 36 @59074 has 8 MA's), (43, 59164), (46, 59173),

Gene: Zenteno07_76 Start: 59367, Stop: 59582, Start Num: 36

Candidate Starts for Zenteno07_76:

(Start: 31 @59352 has 1 MA's), (Start: 36 @59367 has 8 MA's), (41, 59403), (44, 59460), (56, 59556),