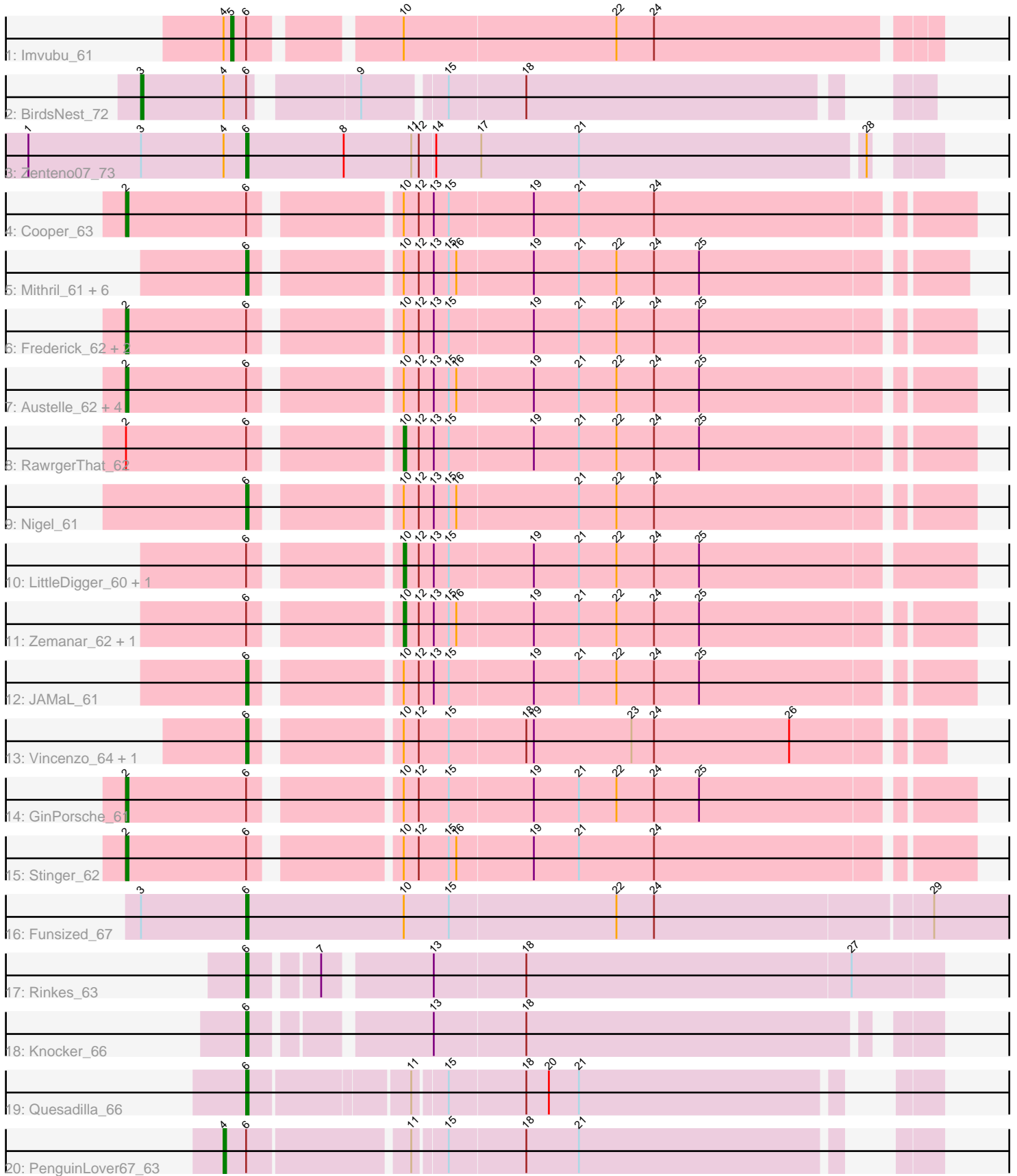


Pham 305182



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 305182 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305182 has 35 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Imvubu\_61
- Track 2 : BirdsNest\_72
- Track 3 : Zenteno07\_73
- Track 4 : Cooper\_63
- Track 5 : Mithril\_61, BrownCNA\_63, VioletZ\_63, Fortunato\_62, Waleliano\_61, Lolalove\_62, Hangman\_61
- Track 6 : Frederick\_62, BobbyK\_62, ChrisnMich\_61
- Track 7 : Austelle\_62, Mudslide\_61, Hydro\_61, Prince\_61, Apex\_62
- Track 8 : RawrgerThat\_62
- Track 9 : Nigel\_61
- Track 10 : LittleDigger\_60, Renkei\_60
- Track 11 : Zemanar\_62, Heath\_60
- Track 12 : JAMaL\_61
- Track 13 : Vincenzo\_64, AlanGrant\_65
- Track 14 : GinPorsche\_61
- Track 15 : Stinger\_62
- Track 16 : Funsized\_67
- Track 17 : Rinkes\_63
- Track 18 : Knocker\_66
- Track 19 : Quesadilla\_66
- Track 20 : PenguinLover67\_63

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

The start number called the most often in the published annotations is 6, it was called in 16 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlanGrant\_65, BrownCNA\_63, Fortunato\_62, Funsized\_67, Hangman\_61, JAMaL\_61, Knocker\_66, Lolalove\_62, Mithril\_61, Nigel\_61, Quesadilla\_66, Rinkes\_63, Vincenzo\_64, VioletZ\_63, Waleliano\_61, Zenteno07\_73,

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

- Apex\_62, Austelle\_62, BirdsNest\_72, BobbyK\_62, ChrisnMich\_61, Cooper\_63, Frederick\_62, GinPorsche\_61, Heath\_60, Hydro\_61, Imvubu\_61, LittleDigger\_60, Mudslide\_61, PenguinLover67\_63, Prince\_61, RawrgerThat\_62, Renkei\_60, Stinger\_62, Zemanar\_62,

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

- 

### Summary by start number:

Start 2:

- Found in 12 of 35 ( 34.3% ) of genes in pham
- Manual Annotations of this start: 11 of 35
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Apex\_62 (B4), Austelle\_62 (B4), BobbyK\_62 (B4), ChrisnMich\_61 (B4), Cooper\_63 (B4), Frederick\_62 (B4), GinPorsche\_61 (B4), Hydro\_61 (B4), Mudslide\_61 (B4), Prince\_61 (B4), Stinger\_62 (B4),

Start 3:

- Found in 3 of 35 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BirdsNest\_72 (B13),

Start 4:

- Found in 4 of 35 ( 11.4% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 25.0% of time when present
- Phage (with cluster) where this start called: PenguinLover67\_63 (B9),

Start 5:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu\_61 (B10),

Start 6:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 16 of 35
- Called 45.7% of time when present
- Phage (with cluster) where this start called: AlanGrant\_65 (B4), BrownCNA\_63 (B4), Fortunato\_62 (B4), Funsized\_67 (B9), Hangman\_61 (B4), JAMaL\_61 (B4), Knocker\_66 (B9), Lolalove\_62 (B4), Mithril\_61 (B4), Nigel\_61 (B4), Quesadilla\_66 (B9), Rinkes\_63 (B9), Vincenzo\_64 (B4), VioletZ\_63 (B4), Waleliano\_61 (B4), Zenteno07\_73 (B13),

Start 10:

- Found in 29 of 35 ( 82.9% ) of genes in pham
- Manual Annotations of this start: 5 of 35
- Called 17.2% of time when present
- Phage (with cluster) where this start called: Heath\_60 (B4), LittleDigger\_60 (B4), RawrgerThat\_62 (B4), Renkei\_60 (B4), Zemanar\_62 (B4),

## Summary by clusters:

There are 4 clusters represented in this pham: B4, B9, B10, B13,

Info for manual annotations of cluster B10:

- Start number 5 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:

- Start number 3 was manually annotated 1 time for cluster B13.
- Start number 6 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B4:

- Start number 2 was manually annotated 11 times for cluster B4.
- Start number 6 was manually annotated 11 times for cluster B4.
- Start number 10 was manually annotated 5 times for cluster B4.

Info for manual annotations of cluster B9:

- Start number 4 was manually annotated 1 time for cluster B9.
- Start number 6 was manually annotated 4 times for cluster B9.

## Gene Information:

Gene: AlanGrant\_65 Start: 59138, Stop: 59395, Start Num: 6

Candidate Starts for AlanGrant\_65:

(Start: 6 @59138 has 16 MA's), (Start: 10 @59189 has 5 MA's), (12, 59195), (15, 59207), (18, 59237), (19, 59240), (23, 59279), (24, 59288), (26, 59342),

Gene: Apex\_62 Start: 58091, Stop: 58408, Start Num: 2

Candidate Starts for Apex\_62:

(Start: 2 @58091 has 11 MA's), (Start: 6 @58139 has 16 MA's), (Start: 10 @58190 has 5 MA's), (12, 58196), (13, 58202), (15, 58208), (16, 58211), (19, 58241), (21, 58259), (22, 58274), (24, 58289), (25, 58307),

Gene: Austelle\_62 Start: 58545, Stop: 58862, Start Num: 2

Candidate Starts for Austelle\_62:

(Start: 2 @58545 has 11 MA's), (Start: 6 @58593 has 16 MA's), (Start: 10 @58644 has 5 MA's), (12, 58650), (13, 58656), (15, 58662), (16, 58665), (19, 58695), (21, 58713), (22, 58728), (24, 58743), (25, 58761),

Gene: BirdsNest\_72 Start: 58539, Stop: 58814, Start Num: 3

Candidate Starts for BirdsNest\_72:

(Start: 3 @58539 has 1 MA's), (Start: 4 @58572 has 1 MA's), (Start: 6 @58581 has 16 MA's), (9, 58617), (15, 58647), (18, 58677),

Gene: BobbyK\_62 Start: 57853, Stop: 58170, Start Num: 2

Candidate Starts for BobbyK\_62:

(Start: 2 @57853 has 11 MA's), (Start: 6 @57901 has 16 MA's), (Start: 10 @57952 has 5 MA's), (12, 57958), (13, 57964), (15, 57970), (19, 58003), (21, 58021), (22, 58036), (24, 58051), (25, 58069),

Gene: BrownCNA\_63 Start: 58302, Stop: 58568, Start Num: 6

Candidate Starts for BrownCNA\_63:

(Start: 6 @58302 has 16 MA's), (Start: 10 @58353 has 5 MA's), (12, 58359), (13, 58365), (15, 58371), (16, 58374), (19, 58404), (21, 58422), (22, 58437), (24, 58452), (25, 58470),

Gene: ChrisnMich\_61 Start: 56895, Stop: 57212, Start Num: 2

Candidate Starts for ChrisnMich\_61:

(Start: 2 @56895 has 11 MA's), (Start: 6 @56943 has 16 MA's), (Start: 10 @56994 has 5 MA's), (12, 57000), (13, 57006), (15, 57012), (19, 57045), (21, 57063), (22, 57078), (24, 57093), (25, 57111),

Gene: Cooper\_63 Start: 57347, Stop: 57664, Start Num: 2

Candidate Starts for Cooper\_63:

(Start: 2 @57347 has 11 MA's), (Start: 6 @57395 has 16 MA's), (Start: 10 @57446 has 5 MA's), (12, 57452), (13, 57458), (15, 57464), (19, 57497), (21, 57515), (24, 57545),

Gene: Fortunato\_62 Start: 58000, Stop: 58269, Start Num: 6

Candidate Starts for Fortunato\_62:

(Start: 6 @58000 has 16 MA's), (Start: 10 @58051 has 5 MA's), (12, 58057), (13, 58063), (15, 58069), (16, 58072), (19, 58102), (21, 58120), (22, 58135), (24, 58150), (25, 58168),

Gene: Frederick\_62 Start: 57795, Stop: 58112, Start Num: 2

Candidate Starts for Frederick\_62:

(Start: 2 @57795 has 11 MA's), (Start: 6 @57843 has 16 MA's), (Start: 10 @57894 has 5 MA's), (12, 57900), (13, 57906), (15, 57912), (19, 57945), (21, 57963), (22, 57978), (24, 57993), (25, 58011),

Gene: Funsized\_67 Start: 60141, Stop: 60473, Start Num: 6

Candidate Starts for Funsized\_67:

(Start: 3 @60099 has 1 MA's), (Start: 6 @60141 has 16 MA's), (Start: 10 @60204 has 5 MA's), (15, 60222), (22, 60288), (24, 60303), (29, 60411),

Gene: GinPorsche\_61 Start: 56881, Stop: 57198, Start Num: 2

Candidate Starts for GinPorsche\_61:

(Start: 2 @56881 has 11 MA's), (Start: 6 @56929 has 16 MA's), (Start: 10 @56980 has 5 MA's), (12, 56986), (15, 56998), (19, 57031), (21, 57049), (22, 57064), (24, 57079), (25, 57097),

Gene: Hangman\_61 Start: 58042, Stop: 58311, Start Num: 6

Candidate Starts for Hangman\_61:

(Start: 6 @58042 has 16 MA's), (Start: 10 @58093 has 5 MA's), (12, 58099), (13, 58105), (15, 58111), (16, 58114), (19, 58144), (21, 58162), (22, 58177), (24, 58192), (25, 58210),

Gene: Heath\_60 Start: 57720, Stop: 57938, Start Num: 10

Candidate Starts for Heath\_60:

(Start: 6 @57669 has 16 MA's), (Start: 10 @57720 has 5 MA's), (12, 57726), (13, 57732), (15, 57738), (16, 57741), (19, 57771), (21, 57789), (22, 57804), (24, 57819), (25, 57837),

Gene: Hydro\_61 Start: 57932, Stop: 58249, Start Num: 2

Candidate Starts for Hydro\_61:

(Start: 2 @57932 has 11 MA's), (Start: 6 @57980 has 16 MA's), (Start: 10 @58031 has 5 MA's), (12, 58037), (13, 58043), (15, 58049), (16, 58052), (19, 58082), (21, 58100), (22, 58115), (24, 58130), (25, 58148),

Gene: Imvubu\_61 Start: 56360, Stop: 56623, Start Num: 5

Candidate Starts for Imvubu\_61:

(Start: 4 @56357 has 1 MA's), (Start: 5 @56360 has 1 MA's), (Start: 6 @56366 has 16 MA's), (Start: 10 @56417 has 5 MA's), (22, 56501), (24, 56516),

Gene: JAMaL\_61 Start: 58031, Stop: 58300, Start Num: 6

Candidate Starts for JAMaL\_61:

(Start: 6 @58031 has 16 MA's), (Start: 10 @58082 has 5 MA's), (12, 58088), (13, 58094), (15, 58100), (19, 58133), (21, 58151), (22, 58166), (24, 58181), (25, 58199),

Gene: Knocker\_66 Start: 59276, Stop: 59527, Start Num: 6

Candidate Starts for Knocker\_66:

(Start: 6 @59276 has 16 MA's), (13, 59339), (18, 59375),

Gene: LittleDigger\_60 Start: 57005, Stop: 57226, Start Num: 10

Candidate Starts for LittleDigger\_60:

(Start: 6 @56954 has 16 MA's), (Start: 10 @57005 has 5 MA's), (12, 57011), (13, 57017), (15, 57023), (19, 57056), (21, 57074), (22, 57089), (24, 57104), (25, 57122),

Gene: Lolalove\_62 Start: 58003, Stop: 58272, Start Num: 6

Candidate Starts for Lolalove\_62:

(Start: 6 @58003 has 16 MA's), (Start: 10 @58054 has 5 MA's), (12, 58060), (13, 58066), (15, 58072), (16, 58075), (19, 58105), (21, 58123), (22, 58138), (24, 58153), (25, 58171),

Gene: Mithril\_61 Start: 58157, Stop: 58423, Start Num: 6

Candidate Starts for Mithril\_61:

(Start: 6 @58157 has 16 MA's), (Start: 10 @58208 has 5 MA's), (12, 58214), (13, 58220), (15, 58226), (16, 58229), (19, 58259), (21, 58277), (22, 58292), (24, 58307), (25, 58325),

Gene: Mudslide\_61 Start: 58184, Stop: 58498, Start Num: 2

Candidate Starts for Mudslide\_61:

(Start: 2 @58184 has 11 MA's), (Start: 6 @58232 has 16 MA's), (Start: 10 @58283 has 5 MA's), (12, 58289), (13, 58295), (15, 58301), (16, 58304), (19, 58334), (21, 58352), (22, 58367), (24, 58382), (25, 58400),

Gene: Nigel\_61 Start: 57023, Stop: 57292, Start Num: 6

Candidate Starts for Nigel\_61:

(Start: 6 @57023 has 16 MA's), (Start: 10 @57074 has 5 MA's), (12, 57080), (13, 57086), (15, 57092), (16, 57095), (21, 57143), (22, 57158), (24, 57173),

Gene: PenguinLover67\_63 Start: 57825, Stop: 58076, Start Num: 4

Candidate Starts for PenguinLover67\_63:

(Start: 4 @57825 has 1 MA's), (Start: 6 @57834 has 16 MA's), (11, 57894), (15, 57906), (18, 57936), (21, 57957),

Gene: Prince\_61 Start: 58088, Stop: 58405, Start Num: 2

Candidate Starts for Prince\_61:

(Start: 2 @58088 has 11 MA's), (Start: 6 @58136 has 16 MA's), (Start: 10 @58187 has 5 MA's), (12, 58193), (13, 58199), (15, 58205), (16, 58208), (19, 58238), (21, 58256), (22, 58271), (24, 58286), (25, 58304),

Gene: Quesadilla\_66 Start: 58228, Stop: 58470, Start Num: 6

Candidate Starts for Quesadilla\_66:

(Start: 6 @58228 has 16 MA's), (11, 58288), (15, 58300), (18, 58330), (20, 58339), (21, 58351),

Gene: RawrgerThat\_62 Start: 58029, Stop: 58247, Start Num: 10

Candidate Starts for RawrgerThat\_62:

(Start: 2 @57930 has 11 MA's), (Start: 6 @57978 has 16 MA's), (Start: 10 @58029 has 5 MA's), (12, 58035), (13, 58041), (15, 58047), (19, 58080), (21, 58098), (22, 58113), (24, 58128), (25, 58146),

Gene: Renkei\_60 Start: 56999, Stop: 57220, Start Num: 10

Candidate Starts for Renkei\_60:

(Start: 6 @56948 has 16 MA's), (Start: 10 @56999 has 5 MA's), (12, 57005), (13, 57011), (15, 57017), (19, 57050), (21, 57068), (22, 57083), (24, 57098), (25, 57116),

Gene: Rinkes\_63 Start: 57811, Stop: 58074, Start Num: 6

Candidate Starts for Rinkes\_63:

(Start: 6 @57811 has 16 MA's), (7, 57835), (13, 57874), (18, 57910), (27, 58039),

Gene: Stinger\_62 Start: 56901, Stop: 57218, Start Num: 2

Candidate Starts for Stinger\_62:

(Start: 2 @56901 has 11 MA's), (Start: 6 @56949 has 16 MA's), (Start: 10 @57000 has 5 MA's), (12, 57006), (15, 57018), (16, 57021), (19, 57051), (21, 57069), (24, 57099),

Gene: Vincenzo\_64 Start: 59168, Stop: 59425, Start Num: 6

Candidate Starts for Vincenzo\_64:

(Start: 6 @59168 has 16 MA's), (Start: 10 @59219 has 5 MA's), (12, 59225), (15, 59237), (18, 59267), (19, 59270), (23, 59309), (24, 59318), (26, 59372),

Gene: VioletZ\_63 Start: 58094, Stop: 58360, Start Num: 6

Candidate Starts for VioletZ\_63:

(Start: 6 @58094 has 16 MA's), (Start: 10 @58145 has 5 MA's), (12, 58151), (13, 58157), (15, 58163), (16, 58166), (19, 58196), (21, 58214), (22, 58229), (24, 58244), (25, 58262),

Gene: Waleliano\_61 Start: 58034, Stop: 58300, Start Num: 6

Candidate Starts for Waleliano\_61:

(Start: 6 @58034 has 16 MA's), (Start: 10 @58085 has 5 MA's), (12, 58091), (13, 58097), (15, 58103), (16, 58106), (19, 58136), (21, 58154), (22, 58169), (24, 58184), (25, 58202),

Gene: Zemanar\_62 Start: 57920, Stop: 58138, Start Num: 10

Candidate Starts for Zemanar\_62:

(Start: 6 @57869 has 16 MA's), (Start: 10 @57920 has 5 MA's), (12, 57926), (13, 57932), (15, 57938), (16, 57941), (19, 57971), (21, 57989), (22, 58004), (24, 58019), (25, 58037),

Gene: Zenteno07\_73 Start: 58751, Stop: 59014, Start Num: 6

Candidate Starts for Zenteno07\_73:

(1, 58664), (Start: 3 @58709 has 1 MA's), (Start: 4 @58742 has 1 MA's), (Start: 6 @58751 has 16 MA's), (8, 58790), (11, 58817), (12, 58820), (14, 58826), (17, 58844), (21, 58883), (28, 58994),