

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 216694 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216694 has 14 members, 0 are drafts.

Phages represented in each track:

Track 1 : Podrick_65, Usavi_66, Squid_65, Buckeye_66

• Track 2 : Fang_67, Gyarad_0065, Vortex_65, OliverWalter_64

Track 3 : Surely_66, TomBombadil_66

Track 4 : Nacho_0068Track 5 : KLucky39_100

Track 6 : Bonanza_51Track 7 : Azrael100 86

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 5 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Buckeye_66, Nacho_0068, Podrick_65, Squid_65, Usavi_66,

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

• Fang_67, Gyarad_0065, KLucky39_100, OliverWalter_64, Surely_66, TomBombadil_66, Vortex_65,

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

Azrael100_86, Bonanza_51,

Summary by start number:

Start 5:

- Found in 12 of 14 (85.7%) of genes in pham
- Manual Annotations of this start: 5 of 14
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Buckeye_66 (B1), Nacho_0068 (B1), Podrick_65 (B1), Squid_65 (B1), Usavi_66 (B1),

Start 6:

• Found in 12 of 14 (85.7%) of genes in pham

- Manual Annotations of this start: 4 of 14
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Fang_67 (B1), Gyarad_0065 (B1), OliverWalter_64 (B1), Vortex_65 (B1),

Start 7:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_86 (V),

Start 8:

- Found in 12 of 14 (85.7%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Surely_66 (B1), TomBombadil_66 (B1),

Start 9

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bonanza_51 (CA),

Start 11:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 50.0% of time when present
- Phage (with cluster) where this start called: KLucky39_100 (B1),

Summary by clusters:

There are 3 clusters represented in this pham: CA, B1, V,

Info for manual annotations of cluster B1:

- •Start number 5 was manually annotated 5 times for cluster B1.
- •Start number 6 was manually annotated 4 times for cluster B1.
- •Start number 8 was manually annotated 2 times for cluster B1.
- •Start number 11 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster CA:

•Start number 9 was manually annotated 1 time for cluster CA.

Info for manual annotations of cluster V:

•Start number 7 was manually annotated 1 time for cluster V.

Gene Information:

Gene: Azrael100 86 Start: 53580, Stop: 53879, Start Num: 7

Candidate Starts for Azrael100 86:

(1, 53400), (3, 53514), (4, 53532), (Start: 7 @53580 has 1 MA's), (12, 53718), (13, 53721), (15, 53778), (17, 53808), (18, 53814),

Gene: Bonanza_51 Start: 36554, Stop: 36330, Start Num: 9

Candidate Starts for Bonanza_51:

(2, 36746), (Start: 9 @ 36554 has 1 MA's), (10, 36512), (14, 36431), (19, 36356),

Gene: Buckeye_66 Start: 56706, Stop: 56368, Start Num: 5

Candidate Starts for Buckeye_66:

(Start: 5 @56706 has 5 MA's), (Start: 6 @56685 has 4 MA's), (Start: 8 @56658 has 2 MA's), (10, 56601), (12, 56544), (16, 56487),

Gene: Fang 67 Start: 56134, Stop: 55817, Start Num: 6

Candidate Starts for Fang_67:

(Start: 5 @56155 has 5 MA's), (Start: 6 @56134 has 4 MA's), (Start: 8 @56107 has 2 MA's), (10, 56050), (12, 55993), (16, 55936),

Gene: Gyarad_0065 Start: 55454, Stop: 55137, Start Num: 6

Candidate Starts for Gyarad_0065:

(Start: 5 @55475 has 5 MA's), (Start: 6 @55454 has 4 MA's), (Start: 8 @55427 has 2 MA's), (10, 55370), (12, 55313), (16, 55256),

Gene: KLucky39_100 Start: 55360, Stop: 55136, Start Num: 11

Candidate Starts for KLucky39_100:

(Start: 5 @55474 has 5 MA's), (Start: 6 @55453 has 4 MA's), (Start: 8 @55426 has 2 MA's), (10, 55369), (Start: 11 @55360 has 1 MA's), (16, 55255),

Gene: Nacho_0068 Start: 56644, Stop: 56306, Start Num: 5

Candidate Starts for Nacho_0068:

(Start: 5 @56644 has 5 MA's), (Start: 6 @56623 has 4 MA's), (Start: 8 @56596 has 2 MA's), (10, 56539), (Start: 11 @56530 has 1 MA's), (16, 56425),

Gene: OliverWalter_64 Start: 55908, Stop: 55591, Start Num: 6

Candidate Starts for OliverWalter 64:

(Start: 5 @55929 has 5 MA's), (Start: 6 @55908 has 4 MA's), (Start: 8 @55881 has 2 MA's), (10, 55824), (12, 55767), (16, 55710),

Gene: Podrick_65 Start: 55695, Stop: 55357, Start Num: 5

Candidate Starts for Podrick_65:

(Start: 5 @55695 has 5 MA's), (Start: 6 @55674 has 4 MA's), (Start: 8 @55647 has 2 MA's), (10, 55590), (12, 55533), (16, 55476),

Gene: Squid 65 Start: 55898, Stop: 55560, Start Num: 5

Candidate Starts for Squid_65:

(Start: 5 @55898 has 5 MA's), (Start: 6 @55877 has 4 MA's), (Start: 8 @55850 has 2 MA's), (10, 55793), (12, 55736), (16, 55679),

Gene: Surely_66 Start: 56140, Stop: 55850, Start Num: 8

Candidate Starts for Surely_66:

(Start: 5 @56188 has 5 MA's), (Start: 6 @56167 has 4 MA's), (Start: 8 @56140 has 2 MA's), (10, 56083), (12, 56026), (16, 55969),

Gene: TomBombadil_66 Start: 56124, Stop: 55834, Start Num: 8

Candidate Starts for TomBombadil 66:

(Start: 5 @56172 has 5 MA's), (Start: 6 @56151 has 4 MA's), (Start: 8 @56124 has 2 MA's), (10, 56067), (12, 56010), (16, 55953),

Gene: Usavi_66 Start: 56267, Stop: 55929, Start Num: 5

Candidate Starts for Usavi_66:

(Start: 5 @56267 has 5 MA's), (Start: 6 @56246 has 4 MA's), (Start: 8 @56219 has 2 MA's), (10, 56162), (12, 56105), (16, 56048),

Gene: Vortex_65 Start: 55861, Stop: 55544, Start Num: 6

Candidate Starts for Vortex_65:

(Start: 5 @55882 has 5 MA's), (Start: 6 @55861 has 4 MA's), (Start: 8 @55834 has 2 MA's), (10, 55777), (12, 55720), (16, 55663),