

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 162247 Report

This analysis was run 05/04/24 on database version 560.

Pham number 162247 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Omega\_129Track 2 : Schatzie\_119
- Track 3: KashFlow\_115, Porcelain\_118, Hannaconda\_109
- Track 4 : Dove\_115
- Track 5 : Odette 125
- Track 6: Halena\_64, DirkDirk\_63, LeBron\_65, Zaria\_67, Calm\_67
- Track 7 : Acquire49\_66
- Track 8 : Silverleaf\_66
- Track 9 : DyoEdafos\_69
- Track 10 : Chaser\_63

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

The start number called the most often in the published annotations is 10, it was called in 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Acquire49\_66, Calm\_67, Chaser\_63, DirkDirk\_63, DyoEdafos\_69, Halena\_64, LeBron\_65, Zaria\_67,

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

Silverleaf\_66,

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

• Dove\_115, Hannaconda\_109, KashFlow\_115, Odette\_125, Omega\_129, Porcelain\_118, Schatzie\_119,

## Summary by start number:

## Start 7:

- Found in 5 of 16 (31.2%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Odette 125 (J).

#### Start 8:

- Found in 2 of 16 (12.5%) 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: Silverleaf\_66 (L1),

## Start 9:

- Found in 7 of 16 (43.8%) of genes in pham
- Manual Annotations of this start: 5 of 14
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Dove\_115 (J), Hannaconda\_109 (J), KashFlow\_115 (J), Omega\_129 (J), Porcelain\_118 (J), Schatzie\_119 (J),

## Start 10:

- Found in 9 of 16 (56.2%) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Acquire49\_66 (L1), Calm\_67 (L1), Chaser\_63 (L4), DirkDirk\_63 (L1), DyoEdafos\_69 (L4), Halena\_64 (L1), LeBron\_65 (L1), Zaria\_67 (L1),

## Summary by clusters:

There are 3 clusters represented in this pham: L4, J, L1,

Info for manual annotations of cluster J:

•Start number 9 was manually annotated 5 times for cluster J.

Info for manual annotations of cluster L1:

- •Start number 8 was manually annotated 1 time for cluster L1.
- •Start number 10 was manually annotated 6 times for cluster L1.

Info for manual annotations of cluster L4:

•Start number 10 was manually annotated 2 times for cluster L4.

## Gene Information:

Gene: Acquire49 66 Start: 45197, Stop: 45448, Start Num: 10

Candidate Starts for Acquire49 66:

(5, 45080), (6, 45107), (Start: 8 @ 45176 has 1 MA's), (Start: 10 @ 45197 has 8 MA's), (12, 45221), (15, 45302), (17, 45365), (20, 45440),

Gene: Calm\_67 Start: 44988, Stop: 45239, Start Num: 10

Candidate Starts for Calm 67:

(Start: 10 @44988 has 8 MA's), (15, 45093), (17, 45156), (20, 45231),

Gene: Chaser 63 Start: 45157, Stop: 45438, Start Num: 10

Candidate Starts for Chaser 63:

(1, 44980), (4, 45013), (5, 45040), (Start: 10 @45157 has 8 MA's), (13, 45184), (18, 45343),

Gene: DirkDirk\_63 Start: 44398, Stop: 44649, Start Num: 10

Candidate Starts for DirkDirk\_63:

(Start: 10 @44398 has 8 MA's), (15, 44503), (17, 44566), (20, 44641),

Gene: Dove\_115 Start: 64129, Stop: 64350, Start Num: 9

Candidate Starts for Dove 115:

(5, 64018), (Start: 9 @64129 has 5 MA's), (11, 64153), (19, 64333),

Gene: DyoEdafos\_69 Start: 45646, Stop: 45909, Start Num: 10

Candidate Starts for DyoEdafos 69:

(5, 45529), (Start: 10 @45646 has 8 MA's), (13, 45673), (18, 45832),

Gene: Halena\_64 Start: 44435, Stop: 44686, Start Num: 10

Candidate Starts for Halena 64:

(Start: 10 @44435 has 8 MA's), (15, 44540), (17, 44603), (20, 44678),

Gene: Hannaconda 109 Start: 62823, Stop: 63035, Start Num: 9

Candidate Starts for Hannaconda\_109:

(2, 62661), (3, 62670), (7, 62778), (Start: 9 @62823 has 5 MA's), (15, 62943),

Gene: KashFlow\_115 Start: 65328, Stop: 65540, Start Num: 9

Candidate Starts for KashFlow\_115:

(2, 65166), (3, 65175), (7, 65283), (Start: 9 @65328 has 5 MA's), (15, 65448),

Gene: LeBron\_65 Start: 44439, Stop: 44690, Start Num: 10

Candidate Starts for LeBron\_65:

(Start: 10 @44439 has 8 MA's), (15, 44544), (17, 44607), (20, 44682),

Gene: Odette\_125 Start: 69428, Stop: 69694, Start Num: 7

Candidate Starts for Odette\_125:

(2, 69311), (3, 69320), (7, 69428), (Start: 9 @69473 has 5 MA's), (11, 69497), (19, 69677),

Gene: Omega\_129 Start: 69312, Stop: 69524, Start Num: 9

Candidate Starts for Omega 129:

(Start: 9 @69312 has 5 MA's), (12, 69351), (14, 69369), (16, 69465), (17, 69492),

Gene: Porcelain\_118 Start: 65153, Stop: 65365, Start Num: 9

Candidate Starts for Porcelain\_118:

(2, 64991), (3, 65000), (7, 65108), (Start: 9 @65153 has 5 MA's), (15, 65273),

Gene: Schatzie 119 Start: 68356, Stop: 68577, Start Num: 9

Candidate Starts for Schatzie\_119:

(2, 68194), (3, 68203), (7, 68311), (Start: 9 @68356 has 5 MA's), (19, 68560),

Gene: Silverleaf 66 Start: 45037, Stop: 45309, Start Num: 8

Candidate Starts for Silverleaf\_66:

(Start: 8 @ 45037 has 1 MA's), (Start: 10 @ 45058 has 8 MA's), (15, 45163), (17, 45226), (20, 45301),

Gene: Zaria\_67 Start: 44988, Stop: 45239, Start Num: 10

Candidate Starts for Zaria\_67:

(Start: 10 @44988 has 8 MA's), (15, 45093), (17, 45156), (20, 45231),