

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 173282 Report

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

Pham number 173282 has 16 members, 0 are drafts.

Phages represented in each track:

- Track 1 : A6\_01, Carlyle\_1, BK1\_01
- Track 2 : Tasp14\_1
- Track 3 : Alsfro\_1
- Track 4 : Blue 2
- Track 5 : Seabastian\_99, AlpineSix\_90, Jinglebell\_98, Modragons\_96, OfUltron\_99
- Track 6 : Blexus\_87
- Track 7 : ShroomBoi 89
- Track 8 : Soul22 92
- Track 9: Nebkiss\_116, Gaia\_115

## 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 8 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AlpineSix\_90, Blexus\_87, Jinglebell\_98, Modragons\_96, OfUltron\_99, Seabastian\_99, ShroomBoi\_89, Soul22\_92,

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

A6\_01, Alsfro\_1, BK1\_01, Blue\_2, Carlyle\_1, Tasp14\_1,

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

Gaia 115, Nebkiss 116,

# Summary by start number:

#### Start 3

- Found in 5 of 16 (31.2%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Alsfro\_1 (A1), Tasp14\_1 (A1),

#### Start 5:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_115 (X), Nebkiss\_116 (X),

### Start 6:

- Found in 14 of 16 (87.5%) of genes in pham
- Manual Annotations of this start: 8 of 16
- Called 57.1% of time when present
- Phage (with cluster) where this start called: AlpineSix\_90 (F1), Blexus\_87 (F1), Jinglebell\_98 (F1), Modragons\_96 (F1), OfUltron\_99 (F1), Seabastian\_99 (F1), ShroomBoi\_89 (F1), Soul22\_92 (F2),

### Start 8:

- Found in 6 of 16 (37.5%) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 66.7% of time when present
- Phage (with cluster) where this start called: A6\_01 (A1), BK1\_01 (A1), Blue\_2 (A1), Carlyle\_1 (A1),

## **Summary by clusters:**

There are 4 clusters represented in this pham: A1, F1, F2, X,

Info for manual annotations of cluster A1:

- •Start number 3 was manually annotated 2 times for cluster A1.
- •Start number 8 was manually annotated 4 times for cluster A1.

Info for manual annotations of cluster F1:

•Start number 6 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster F2:

•Start number 6 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster X:

•Start number 5 was manually annotated 2 times for cluster X.

#### Gene Information:

Gene: A6\_01 Start: 595, Stop: 771, Start Num: 8

Candidate Starts for A6 01:

(Start: 3 @532 has 2 MA's), (4, 568), (Start: 6 @577 has 8 MA's), (Start: 8 @595 has 4 MA's), (9, 616), (12, 706), (13, 724),

Gene: AlpineSix\_90 Start: 50889, Stop: 51125, Start Num: 6

Candidate Starts for AlpineSix\_90:

(1, 50829), (2, 50838), (Start: 6 @50889 has 8 MA's), (11, 50943), (13, 51027), (16, 51084),

Gene: Alsfro 1 Start: 542, Stop: 781, Start Num: 3

Candidate Starts for Alsfro 1:

(Start: 3 @542 has 2 MA's), (4, 578), (Start: 6 @587 has 8 MA's), (Start: 8 @605 has 4 MA's), (9, 626), (12, 716), (13, 734),

Gene: BK1\_01 Start: 595, Stop: 771, Start Num: 8

Candidate Starts for BK1\_01:

(Start: 3 @532 has 2 MA's), (4, 568), (Start: 6 @577 has 8 MA's), (Start: 8 @595 has 4 MA's), (9, 616), (12, 706), (13, 724),

Gene: Blexus\_87 Start: 51299, Stop: 51529, Start Num: 6

Candidate Starts for Blexus\_87:

(1, 51239), (2, 51248), (Start: 6 @51299 has 8 MA's), (11, 51353), (13, 51437), (16, 51494),

Gene: Blue\_2 Start: 1059, Stop: 1235, Start Num: 8

Candidate Starts for Blue\_2:

(4, 1032), (Start: 6 @1041 has 8 MA's), (Start: 8 @1059 has 4 MA's), (9, 1080), (10, 1098), (11, 1104), (13, 1188), (14, 1215),

Gene: Carlyle\_1 Start: 605, Stop: 781, Start Num: 8

Candidate Starts for Carlyle 1:

(Start: 3 @542 has 2 MA's), (4, 578), (Start: 6 @587 has 8 MA's), (Start: 8 @605 has 4 MA's), (9, 626), (12, 716), (13, 734),

Gene: Gaia\_115 Start: 65557, Stop: 65751, Start Num: 5

Candidate Starts for Gaia\_115:

(Start: 5 @65557 has 2 MA's), (13, 65704), (15, 65737),

Gene: Jinglebell\_98 Start: 52786, Stop: 53022, Start Num: 6

Candidate Starts for Jinglebell 98:

(1, 52726), (2, 52735), (Start: 6 @52786 has 8 MA's), (11, 52840), (13, 52924), (16, 52981),

Gene: Modragons\_96 Start: 52630, Stop: 52866, Start Num: 6

Candidate Starts for Modragons 96:

(1, 52570), (2, 52579), (Start: 6 @52630 has 8 MA's), (11, 52684), (13, 52768), (16, 52825),

Gene: Nebkiss\_116 Start: 64483, Stop: 64677, Start Num: 5

Candidate Starts for Nebkiss\_116:

(Start: 5 @64483 has 2 MA's), (13, 64630), (15, 64663),

Gene: OfUltron\_99 Start: 52786, Stop: 53022, Start Num: 6

Candidate Starts for OfUltron\_99:

(1, 52726), (2, 52735), (Start: 6 @52786 has 8 MA's), (11, 52840), (13, 52924), (16, 52981),

Gene: Seabastian\_99 Start: 52787, Stop: 53023, Start Num: 6

Candidate Starts for Seabastian 99:

(1, 52727), (2, 52736), (Start: 6 @52787 has 8 MA's), (11, 52841), (13, 52925), (16, 52982),

Gene: ShroomBoi\_89 Start: 51000, Stop: 51233, Start Num: 6

Candidate Starts for ShroomBoi\_89:

(1, 50940), (2, 50949), (Start: 6 @51000 has 8 MA's), (11, 51054), (13, 51138), (16, 51195),

Gene: Soul22\_92 Start: 49297, Stop: 49563, Start Num: 6

Candidate Starts for Soul22 92:

(1, 49237), (2, 49246), (Start: 6 @49297 has 8 MA's), (7, 49309), (10, 49381), (13, 49471), (16, 49528),

Gene: Tasp14\_1 Start: 534, Stop: 773, Start Num: 3

Candidate Starts for Tasp14\_1:

(Start: 3 @534 has 2 MA's), (4, 570), (Start: 6 @579 has 8 MA's), (Start: 8 @597 has 4 MA's), (9, 618),

(10, 636), (11, 642), (13, 726), (14, 753),