

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 106759 Report

This analysis was run 04/28/24 on database version 559.

Pham number 106759 has 11 members, 2 are drafts.

Phages represented in each track:

• Track 1 : ODay 93

• Track 2 : Ecliptus\_91, Apricot\_84

Track 3 : MortyNRick\_78

Track 4 : Horus\_86

Track 5 : Frickyeah\_92

Track 6 : Leroy\_85, Periwinkle\_94

Track 7 : Phistory\_82

Track 8 : LitninMcQueen\_89

Track 9 : Spooky\_88

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

The start number called the most often in the published annotations is 3, it was called in 7 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Apricot\_84, Ecliptus\_91, Leroy\_85, MortyNRick\_78, ODay\_93, Periwinkle\_94, Phistory\_82, Spooky\_88,

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

Frickyeah\_92, Horus\_86, LitninMcQueen\_89,

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

### Summary by start number:

#### Start 2

- Found in 9 of 11 (81.8%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Horus\_86 (DN1), LitninMcQueen\_89 (DN1),

#### Start 3:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 9
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Apricot\_84 (DN3), Ecliptus\_91 (DN), Leroy\_85 (DN1), MortyNRick\_78 (DN), ODay\_93 (DN), Periwinkle\_94 (DN1), Phistory\_82 (DN1), Spooky\_88 (DN2),

#### Start 6:

- Found in 7 of 11 (63.6%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Frickyeah\_92 (DN1),

### Summary by clusters:

There are 4 clusters represented in this pham: DN, DN1, DN3, DN2,

Info for manual annotations of cluster DN:

•Start number 3 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- •Start number 2 was manually annotated 2 times for cluster DN1.
- •Start number 3 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN2:

•Start number 3 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:

•Start number 3 was manually annotated 1 time for cluster DN3.

#### Gene Information:

Gene: Apricot\_84 Start: 46207, Stop: 46650, Start Num: 3

Candidate Starts for Apricot\_84:

(Start: 3 @46207 has 7 MA's), (10, 46381), (13, 46477), (14, 46501), (15, 46510), (21, 46546), (23, 46555).

Gene: Ecliptus 91 Start: 49913, Stop: 50356, Start Num: 3

Candidate Starts for Ecliptus 91:

(Start: 3 @49913 has 7 MA's), (10, 50087), (13, 50183), (14, 50207), (15, 50216), (21, 50252), (23, 50261),

Gene: Frickyeah\_92 Start: 48610, Stop: 48948, Start Num: 6

Candidate Starts for Frickyeah\_92:

(Start: 2 @48550 has 2 MA's), (Start: 3 @48553 has 7 MA's), (6, 48610), (8, 48634), (26, 48889), (27, 48892), (28, 48904),

Gene: Horus\_86 Start: 48825, Stop: 49223, Start Num: 2

Candidate Starts for Horus 86:

(Start: 2 @48825 has 2 MA's), (Start: 3 @48828 has 7 MA's), (6, 48885), (8, 48909), (26, 49164), (27, 49167), (28, 49179),

Gene: Leroy\_85 Start: 47023, Stop: 47418, Start Num: 3

Candidate Starts for Leroy\_85:

(Start: 2 @47020 has 2 MA's), (Start: 3 @47023 has 7 MA's), (6, 47080), (8, 47104), (26, 47359), (27, 47362), (28, 47374),

Gene: LitninMcQueen\_89 Start: 48138, Stop: 48506, Start Num: 2

Candidate Starts for LitninMcQueen\_89:

(Start: 2 @48138 has 2 MA's), (Start: 3 @48141 has 7 MA's), (6, 48198), (8, 48222), (10, 48285), (12, 48309), (17, 48399), (21, 48423), (25, 48453),

Gene: MortyNRick\_78 Start: 46661, Stop: 47086, Start Num: 3

Candidate Starts for MortyNRick\_78:

(Start: 2 @46658 has 2 MA's), (Start: 3 @46661 has 7 MA's), (4, 46676), (9, 46781), (10, 46835), (27, 47030), (28, 47042),

Gene: ODay 93 Start: 50443, Stop: 50856, Start Num: 3

Candidate Starts for ODay\_93:

(Start: 2 @50440 has 2 MA's), (Start: 3 @50443 has 7 MA's), (6, 50500), (8, 50524), (10, 50587), (13, 50683), (15, 50716), (16, 50719), (20, 50743), (21, 50752), (29, 50845),

Gene: Periwinkle\_94 Start: 49830, Stop: 50225, Start Num: 3

Candidate Starts for Periwinkle 94:

(Start: 2 @49827 has 2 MA's), (Start: 3 @49830 has 7 MA's), (6, 49887), (8, 49911), (26, 50166), (27, 50169), (28, 50181),

Gene: Phistory\_82 Start: 45926, Stop: 46321, Start Num: 3

Candidate Starts for Phistory\_82:

(Start: 2 @45923 has 2 MA's), (Start: 3 @45926 has 7 MA's), (6, 45983), (8, 46007), (26, 46262), (27, 46265), (28, 46277),

Gene: Spooky 88 Start: 49198, Stop: 49584, Start Num: 3

Candidate Starts for Spooky\_88:

(1, 49153), (Start: 2 @49195 has 2 MA's), (Start: 3 @49198 has 7 MA's), (5, 49243), (7, 49267), (11, 49372), (12, 49375), (17, 49471), (18, 49474), (19, 49477), (22, 49501), (24, 49504),