

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 164248 Report

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

Pham number 164248 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : Bipper\_48, Cracklewink\_48

Track 2 : Typha\_48

Track 3 : Hilltopfarm\_48Track 4 : Min1 69

• Track 5 : Gilgamesh 87

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

The start number called the most often in the published annotations is 1, it was called in 2 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bipper\_48, Cracklewink\_48,

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

•

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

Gilgamesh\_87, Hilltopfarm\_48, Min1\_69, Typha\_48,

### Summary by start number:

### Start 1:

- Found in 2 of 6 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper\_48 (Y), Cracklewink\_48 (Y),

### Start 7:

- Found in 1 of 6 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gilgamesh\_87 (singleton),

#### Start 9:

- Found in 1 of 6 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Min1\_69 (singleton),

#### Start 10:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Hilltopfarm\_48 (Y), Typha\_48 (Y),

## **Summary by clusters:**

There are 2 clusters represented in this pham: Y, singleton,

Info for manual annotations of cluster Y:

- •Start number 1 was manually annotated 2 times for cluster Y.
- •Start number 10 was manually annotated 2 times for cluster Y.

#### Gene Information:

Gene: Bipper\_48 Start: 36333, Stop: 36854, Start Num: 1

Candidate Starts for Bipper\_48:

(Start: 1 @36333 has 2 MA's), (4, 36360), (5, 36384), (Start: 10 @36477 has 2 MA's), (13, 36528), (16, 36552), (18, 36609), (19, 36612), (20, 36621), (22, 36654), (26, 36696), (29, 36750), (30, 36789), (31, 36792), (33, 36810), (34, 36813), (35, 36816), (36, 36819),

Gene: Cracklewink\_48 Start: 36328, Stop: 36849, Start Num: 1

Candidate Starts for Cracklewink 48:

(Start: 1 @36328 has 2 MA's), (4, 36355), (5, 36379), (Start: 10 @36472 has 2 MA's), (13, 36523), (16, 36547), (18, 36604), (19, 36607), (20, 36616), (22, 36649), (26, 36691), (29, 36745), (30, 36784), (31, 36787), (33, 36805), (34, 36808), (35, 36811), (36, 36814),

Gene: Gilgamesh\_87 Start: 81772, Stop: 82185, Start Num: 7

Candidate Starts for Gilgamesh 87:

(Start: 7 @81772 has 1 MA's), (8, 81799), (Start: 10 @81817 has 2 MA's), (12, 81859), (15, 81886), (16, 81892), (23, 82018), (24, 82024), (28, 82087), (30, 82129), (33, 82150), (36, 82159),

Gene: Hilltopfarm 48 Start: 36442, Stop: 36843, Start Num: 10

Candidate Starts for Hilltopfarm 48:

(2, 36319), (3, 36322), (6, 36361), (Start: 10 @36442 has 2 MA's), (11, 36466), (13, 36493), (14, 36499), (16, 36517), (17, 36532), (18, 36574), (22, 36619), (30, 36754), (32, 36766), (33, 36775),

Gene: Min1\_69 Start: 40462, Stop: 40127, Start Num: 9

Candidate Starts for Min1\_69:

(9, 40462), (Start: 10 @40447 has 2 MA's), (16, 40372), (17, 40357), (25, 40255), (27, 40237), (30, 40174), (34, 40150),

Gene: Typha\_48 Start: 36313, Stop: 36714, Start Num: 10

Candidate Starts for Typha\_48:

(2, 36199), (3, 36202), (6, 36241), (Start: 10 @36313 has 2 MA's), (11, 36337), (13, 36364), (14, 36370), (16, 36388), (17, 36403), (18, 36445), (21, 36475), (22, 36490), (26, 36532), (30, 36625), (32, 36637), (33, 36646),