

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 132628 Report

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

Pham number 132628 has 7 members, 0 are drafts.

Phages represented in each track:

Track 1 : JustASigh\_88

Track 2 : PhrostedPhlake\_39

Track 3: Bipper\_42, Cracklewink\_42Track 4: Typha 42, Hilltopfarm 42

• Track 5 : Eyre\_31

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bipper\_42, Cracklewink\_42, Hilltopfarm\_42, Typha\_42,

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

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

Eyre\_31, JustASigh\_88, PhrostedPhlake\_39,

## Summary by start number:

### Start 3:

- Found in 3 of 7 (42.9%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Eyre\_31 (singleton), PhrostedPhlake\_39 (CV),

#### Start 4:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Bipper\_42 (Y), Cracklewink\_42 (Y), Hilltopfarm\_42 (Y), Typha\_42 (Y),

#### Start 5:

- Found in 3 of 7 (42.9%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 33.3% of time when present
- Phage (with cluster) where this start called: JustASigh\_88 (AH),

### **Summary by clusters:**

There are 4 clusters represented in this pham: Y, AH, singleton, CV,

Info for manual annotations of cluster AH:

•Start number 5 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster CV:

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

Info for manual annotations of cluster Y:

•Start number 4 was manually annotated 4 times for cluster Y.

#### Gene Information:

Gene: Bipper 42 Start: 33066, Stop: 33305, Start Num: 4

Candidate Starts for Bipper\_42:

(Start: 4 @ 33066 has 4 MA's), (9, 33138), (12, 33186), (14, 33225), (15, 33267), (16, 33270),

Gene: Cracklewink\_42 Start: 33045, Stop: 33284, Start Num: 4

Candidate Starts for Cracklewink 42:

(Start: 4 @ 33045 has 4 MA's), (9, 33117), (12, 33165), (14, 33204), (15, 33246), (16, 33249),

Gene: Eyre 31 Start: 25127, Stop: 24861, Start Num: 3

Candidate Starts for Eyre\_31:

(Start: 3 @25127 has 2 MA's), (Start: 5 @25091 has 1 MA's), (6, 25076), (8, 25034), (17, 24893),

Gene: Hilltopfarm\_42 Start: 33288, Stop: 33040, Start Num: 4

Candidate Starts for Hilltopfarm 42:

(Start: 4 @33288 has 4 MA's), (7, 33243), (9, 33216), (10, 33195), (11, 33192), (12, 33174), (13, 33138), (15, 33093), (16, 33090), (17, 33078),

Gene: JustASigh\_88 Start: 52122, Stop: 51898, Start Num: 5

Candidate Starts for JustASigh\_88:

(1, 52203), (Start: 3 @52158 has 2 MA's), (Start: 5 @52122 has 1 MA's), (7, 52080), (9, 52053), (10, 52029), (17, 51921),

Gene: PhrostedPhlake 39 Start: 30253, Stop: 29987, Start Num: 3

Candidate Starts for PhrostedPhlake 39:

(1, 30298), (2, 30292), (Start: 3 @30253 has 2 MA's), (Start: 5 @30217 has 1 MA's), (6, 30202), (8, 30160), (17, 30019),

Gene: Typha\_42 Start: 33257, Stop: 33009, Start Num: 4

Candidate Starts for Typha\_42:

(Start: 4 @33257 has 4 MA's), (7, 33212), (9, 33185), (10, 33164), (11, 33161), (12, 33143), (13,

33107), (15, 33062), (16, 33059), (17, 33047),