

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 107167 Report

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

Pham number 107167 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1: Karp\_257, Comrade\_253, Belfort\_258

Track 2 : Stigma\_255Track 3 : Moab\_259

Track 4 : SparkleGoddess\_257

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

The start number called the most often in the published annotations is 2, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Belfort\_258, Comrade\_253, Karp\_257, SparkleGoddess\_257,

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

• Stigma\_255,

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

• Moab 259,

## Summary by start number:

## Start 1:

- Found in 1 of 6 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Moab\_259 (BK1),

#### Start 2

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Belfort\_258 (BK1), Comrade\_253 (BK1), Karp\_257 (BK1), SparkleGoddess\_257 (BK1),

### Start 5:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Stigma\_255 (BK1),

## **Summary by clusters:**

There is one cluster represented in this pham: BK1

Info for manual annotations of cluster BK1:

- •Start number 1 was manually annotated 1 time for cluster BK1.
- •Start number 2 was manually annotated 4 times for cluster BK1.
- •Start number 5 was manually annotated 1 time for cluster BK1.

### Gene Information:

Gene: Belfort\_258 Start: 123596, Stop: 123877, Start Num: 2

Candidate Starts for Belfort\_258:

(Start: 2 @ 123596 has 4 MA's), (4, 123650), (Start: 5 @ 123668 has 1 MA's), (6, 123677), (8, 123692), (11, 123752), (12, 123761), (13, 123791), (14, 123821), (15, 123854),

Gene: Comrade\_253 Start: 123738, Stop: 124019, Start Num: 2

Candidate Starts for Comrade 253:

(Start: 2 @ 123738 has 4 MA's), (4, 123792), (Start: 5 @ 123810 has 1 MA's), (6, 123819), (8, 123834), (11, 123894), (12, 123903), (13, 123933), (14, 123963), (15, 123996),

Gene: Karp\_257 Start: 125193, Stop: 125474, Start Num: 2

Candidate Starts for Karp\_257:

(Start: 2 @125193 has 4 MA's), (4, 125247), (Start: 5 @125265 has 1 MA's), (6, 125274), (8, 125289), (11, 125349), (12, 125358), (13, 125388), (14, 125418), (15, 125451),

Gene: Moab 259 Start: 124604, Stop: 124921, Start Num: 1

Candidate Starts for Moab\_259:

(Start: 1 @ 124604 has 1 MA's), (3, 124655), (4, 124694), (Start: 5 @ 124712 has 1 MA's), (9, 124745), (10, 124775), (11, 124796), (12, 124805), (13, 124835), (14, 124865), (15, 124898),

Gene: SparkleGoddess 257 Start: 124469, Stop: 124750, Start Num: 2

Candidate Starts for SparkleGoddess 257:

(Start: 2 @ 124469 has 4 MA's), (4, 124523), (Start: 5 @ 124541 has 1 MA's), (6, 124550), (7, 124553), (8, 124565), (11, 124625), (12, 124634), (13, 124664), (14, 124694), (15, 124727),

Gene: Stigma\_255 Start: 124254, Stop: 124463, Start Num: 5

Candidate Starts for Stigma\_255:

(Start: 2 @124182 has 4 MA's), (4, 124236), (Start: 5 @124254 has 1 MA's), (6, 124263), (7, 124266), (8, 124278), (11, 124338), (12, 124347), (13, 124377), (14, 124407), (15, 124440),