

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 87618 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87618 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : Mercedes\_27

• Track 2 : Schimmels 22 52

Track 3 : Morrigan\_52

Track 4 : Jemerald\_54, Juicer\_54

Track 5 : Chepli\_52

• Track 6 : Luna18\_52, KatChan\_51

Track 7: Mabodamaca\_58, SuMoo\_62

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

The start number called the most often in the published annotations is 8, it was called in 4 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Mabodamaca\_58, Mercedes\_27, Morrigan\_52, Schimmels22\_52, SuMoo\_62,

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

Chepli\_52, KatChan\_51, Luna18\_52,

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

Jemerald\_54, Juicer\_54,

## Summary by start number:

#### Start 4:

- Found in 3 of 10 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Chepli\_52 (EA6),

### Start 5:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 66.7% of time when present

Phage (with cluster) where this start called: KatChan\_51 (EA6), Luna18\_52 (EA6),

#### Start 8:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 4 of 9
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Mabodamaca\_58 (EH), Mercedes\_27 (EA), Morrigan\_52 (EA6), Schimmels22\_52 (EA11), SuMoo\_62 (EH),

### Start 9:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jemerald 54 (EA6), Juicer 54 (EA6),

## **Summary by clusters:**

There are 4 clusters represented in this pham: EA, EA11, EH, EA6,

Info for manual annotations of cluster EA:

•Start number 8 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:

•Start number 8 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EA6:

- •Start number 4 was manually annotated 1 time for cluster EA6.
- •Start number 5 was manually annotated 2 times for cluster EA6.
- •Start number 8 was manually annotated 1 time for cluster EA6.
- •Start number 9 was manually annotated 2 times for cluster EA6.

Info for manual annotations of cluster EH:

•Start number 8 was manually annotated 1 time for cluster EH.

### Gene Information:

Gene: Chepli\_52 Start: 35506, Stop: 35297, Start Num: 4

Candidate Starts for Chepli\_52:

(Start: 4 @35506 has 1 MA's), (Start: 5 @35491 has 2 MA's), (6, 35485), (Start: 8 @35470 has 4 MA's),

Gene: Jemerald\_54 Start: 37488, Stop: 37333, Start Num: 9

Candidate Starts for Jemerald\_54:

(2, 37602), (3, 37557), (7, 37527), (Start: 9 @ 37488 has 2 MA's),

Gene: Juicer 54 Start: 37488, Stop: 37333, Start Num: 9

Candidate Starts for Juicer 54:

(2, 37602), (3, 37557), (7, 37527), (Start: 9 @ 37488 has 2 MA's),

Gene: KatChan 51 Start: 35503, Stop: 35309, Start Num: 5

Candidate Starts for KatChan\_51:

(Start: 4 @35518 has 1 MA's), (Start: 5 @35503 has 2 MA's), (6, 35497), (Start: 8 @35482 has 4 MA's),

Gene: Luna18\_52 Start: 35503, Stop: 35309, Start Num: 5

Candidate Starts for Luna18\_52:

(Start: 4 @35518 has 1 MA's), (Start: 5 @35503 has 2 MA's), (6, 35497), (Start: 8 @35482 has 4 MA's),

Gene: Mabodamaca\_58 Start: 39882, Stop: 40055, Start Num: 8

Candidate Starts for Mabodamaca\_58:

(1, 39804), (Start: 8 @ 39882 has 4 MA's), (11, 40017),

Gene: Mercedes\_27 Start: 19254, Stop: 19081, Start Num: 8

Candidate Starts for Mercedes\_27: (Start: 8 @19254 has 4 MA's),

Gene: Morrigan\_52 Start: 35328, Stop: 35161, Start Num: 8

Candidate Starts for Morrigan\_52:

(6, 35343), (Start: 8 @ 35328 has 4 MA's),

Gene: Schimmels22\_52 Start: 36492, Stop: 36319, Start Num: 8

Candidate Starts for Schimmels22\_52: (Start: 8 @36492 has 4 MA's), (10, 36381),

Gene: SuMoo\_62 Start: 39784, Stop: 39957, Start Num: 8

Candidate Starts for SuMoo\_62:

(1, 39706), (Start: 8 @ 39784 has 4 MA's), (11, 39919),