

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 6273 Report

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

Pham number 6273 has 9 members, 1 are drafts.

Phages represented in each track:

Track 1: Gustav 60

• Track 2 : Puppers\_53, Widow\_53

Track 3 : Mahdia\_54Track 4 : Morrissey 56

• Track 5 : Upyo\_57

Track 6 : Jojo24\_60Track 7 : Heinz 59

Track 8 : Reyja\_62

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

The start number called the most often in the published annotations is 9, it was called in 6 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Gustav\_60, Mahdia\_54, Morrissey\_56, Puppers\_53, Upyo\_57, Widow\_53,

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

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

• Heinz\_59, Jojo24\_60, Reyja\_62,

## Summary by start number:

#### Start 8:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jojo24\_60 (DY),

#### Start 9:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 6 of 8

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav\_60 (CD), Mahdia\_54 (CD), Morrissey\_56 (CD), Puppers\_53 (CD), Upyo\_57 (CD), Widow\_53 (CD),

#### Start 10:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Reyja\_62 (DY),

### Start 12:

- Found in 4 of 9 (44.4%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Heinz\_59 (DY),

### Summary by clusters:

There are 2 clusters represented in this pham: CD, DY,

Info for manual annotations of cluster CD:

•Start number 9 was manually annotated 6 times for cluster CD.

Info for manual annotations of cluster DY:

- •Start number 8 was manually annotated 1 time for cluster DY.
- Start number 10 was manually annotated 1 time for cluster DY.

### Gene Information:

Gene: Gustav 60 Start: 40805, Stop: 40545, Start Num: 9

Candidate Starts for Gustav 60:

(Start: 9 @40805 has 6 MA's), (12, 40775), (14, 40742), (18, 40670), (19, 40652), (20, 40628), (21, 40610),

Gene: Heinz\_59 Start: 38489, Stop: 38713, Start Num: 12

Candidate Starts for Heinz 59:

(6, 38396), (Start: 10 @38462 has 1 MA's), (11, 38480), (12, 38489), (13, 38501), (17, 38546), (20, 38636), (21, 38654),

Gene: Jojo24\_60 Start: 38991, Stop: 39281, Start Num: 8

Candidate Starts for Jojo24 60:

(Start: 8 @ 38991 has 1 MA's), (11, 39015), (13, 39036), (17, 39081), (20, 39171), (21, 39189),

Gene: Mahdia 54 Start: 39346, Stop: 39086, Start Num: 9

Candidate Starts for Mahdia 54:

(Start: 9 @39346 has 6 MA's), (16, 39277), (17, 39259), (18, 39211), (20, 39169), (21, 39151), (22, 39139),

Gene: Morrissey\_56 Start: 41030, Stop: 40770, Start Num: 9

Candidate Starts for Morrissey 56:

(1, 41354), (2, 41297), (Start: 9 @41030 has 6 MA's), (14, 40967), (18, 40895), (20, 40853), (21, 40835),

Gene: Puppers\_53 Start: 38480, Stop: 38214, Start Num: 9

Candidate Starts for Puppers\_53:

(3, 38609), (4, 38579), (7, 38531), (Start: 9 @38480 has 6 MA's), (12, 38453), (17, 38396), (20, 38306), (21, 38288), (23, 38246),

Gene: Reyja\_62 Start: 39969, Stop: 40220, Start Num: 10

Candidate Starts for Reyja\_62:

(5, 39879), (6, 39903), (Start: 10 @39969 has 1 MA's), (13, 40008), (17, 40053), (20, 40143), (21, 40161),

Gene: Upyo\_57 Start: 41033, Stop: 40782, Start Num: 9

Candidate Starts for Upyo\_57:

(Start: 9 @41033 has 6 MA's), (15, 40967), (16, 40964), (20, 40856), (21, 40838),

Gene: Widow\_53 Start: 39021, Stop: 38755, Start Num: 9

Candidate Starts for Widow 53:

 $(3, 39150), (4, 39120), (7, 39072), (Start: 9 @ 39021 \ has 6 \ MA's), (12, 38994), (17, 38937), (20, 39150$ 

38847), (21, 38829), (23, 38787),