

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 162479 Report

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

Pham number 162479 has 7 members, 2 are drafts.

Phages represented in each track:

Track 1: Indlovu\_24
Track 2: 40BC\_022
Track 3: 39HC\_022
Track 4: Saguaro\_27
Track 5: Thonko\_25
Track 6: CRB2 29

Track 7 : PenguinLover67 28

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

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

Genes that call this "Most Annotated" start:

• 40BC\_022, CRB2\_29, Saguaro\_27,

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

• 39HC\_022,

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

Indlovu\_24, PenguinLover67\_28, Thonko\_25,

# Summary by start number:

#### Start 3:

- Found in 2 of 7 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 39HC\_022 (B6),

### Start 5:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 75.0% of time when present

• Phage (with cluster) where this start called: 40BC\_022 (B6), CRB2\_29 (B9), Saguaro\_27 (B7),

## Start 6:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Thonko\_25 (B8),

### Start 10:

- Found in 1 of 7 (14.3%) 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: PenguinLover67\_28 (B9),

#### Start 11:

- Found in 1 of 7 (14.3%) 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: Indlovu\_24 (B11),

## Summary by clusters:

There are 5 clusters represented in this pham: B6, B7, B8, B9, B11,

Info for manual annotations of cluster B11:

•Start number 11 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B7:

•Start number 5 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

•Start number 6 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- •Start number 5 was manually annotated 1 time for cluster B9.
- •Start number 10 was manually annotated 1 time for cluster B9.

#### Gene Information:

Gene: 39HC\_022 Start: 18307, Stop: 19038, Start Num: 3

Candidate Starts for 39HC\_022:

(3, 18307), (4, 18340), (Start: 5 @18370 has 2 MA's), (8, 18397), (14, 18490), (15, 18496), (17, 18514), (18, 18589), (23, 18709), (29, 18865), (32, 18928), (35, 18943), (37, 18979), (39, 19003),

Gene: 40BC 022 Start: 18370, Stop: 19038, Start Num: 5

Candidate Starts for 40BC 022:

(3, 18307), (4, 18340), (Start: 5 @18370 has 2 MA's), (8, 18397), (14, 18490), (15, 18496), (17, 18514), (18, 18589), (23, 18709), (29, 18865), (32, 18928), (35, 18943), (37, 18979), (39, 19003),

Gene: CRB2\_29 Start: 21997, Stop: 22677, Start Num: 5

Candidate Starts for CRB2\_29:

(Start: 5 @21997 has 2 MA's), (13, 22096), (16, 22132), (20, 22300), (32, 22549), (35, 22564), (36, 22591), (37, 22600), (39, 22624), (40, 22627),

Gene: Indlovu\_24 Start: 19514, Stop: 20113, Start Num: 11

Candidate Starts for Indlovu\_24:

(Start: 6 @19475 has 1 MA's), (Start: 11 @19514 has 1 MA's), (19, 19715), (21, 19730), (26, 19787), (32, 19982), (35, 19997), (36, 20024), (40, 20060),

Gene: PenguinLover67\_28 Start: 21391, Stop: 22002, Start Num: 10

Candidate Starts for PenguinLover67\_28:

(1, 21145), (2, 21208), (7, 21358), (9, 21370), (Start: 10 @21391 has 1 MA's), (19, 21610), (21, 21625), (25, 21682), (26, 21688), (32, 21883), (35, 21898), (36, 21925), (37, 21934), (40, 21961),

Gene: Saguaro\_27 Start: 21191, Stop: 21841, Start Num: 5

Candidate Starts for Saguaro\_27:

(Start: 5 @21191 has 2 MA's), (27, 21521), (29, 21647), (32, 21710), (35, 21725), (40, 21788),

Gene: Thonko\_25 Start: 17603, Stop: 18328, Start Num: 6

Candidate Starts for Thonko\_25:

(1, 17396), (Start: 6 @17603 has 1 MA's), (12, 17663), (22, 17936), (24, 17969), (28, 18044), (30,

18134), (31, 18140), (32, 18176), (33, 18179), (34, 18188), (35, 18191), (38, 18236),