

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 158353 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158353 has 11 members, 1 are drafts.

Phages represented in each track:

• Track 1: Vendetta 69, Splinter 69

Track 2: Huffy\_69, TZGordon\_70, DinoDaryn\_69

Track 3: TinaLin\_68, Banquo\_68

Track 4 : Goib\_69
Track 5 : Gsput1\_61
Track 6 : Dardanus\_63

Track 7 : Schmidt\_63

# 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 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Banquo\_68, DinoDaryn\_69, Goib\_69, Huffy\_69, TZGordon\_70, TinaLin\_68,

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

Gsput1\_61, Splinter\_69, Vendetta\_69,

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

Dardanus\_63, Schmidt\_63,

# **Summary by start number:**

#### Start 8:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dardanus\_63 (CU3), Schmidt\_63 (CU4),

### Start 9:

- Found in 9 of 11 (81.8%) of genes in pham
- Manual Annotations of this start: 6 of 10
- Called 66.7% of time when present

• Phage (with cluster) where this start called: Banquo\_68 (CU1), DinoDaryn\_69 (CU1), Goib\_69 (CU1), Huffy\_69 (CU1), TZGordon\_70 (CU1), TinaLin\_68 (CU1),

### Start 11:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Splinter\_69 (CU1), Vendetta\_69 (CU1),

## Start 12:

- Found in 1 of 11 (9.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1\_61 (CU2),

## Summary by clusters:

There are 4 clusters represented in this pham: CU4, CU3, CU2, CU1,

Info for manual annotations of cluster CU1:

- •Start number 9 was manually annotated 6 times for cluster CU1.
- •Start number 11 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

•Start number 8 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

•Start number 8 was manually annotated 1 time for cluster CU4.

#### Gene Information:

Gene: Banquo 68 Start: 41213, Stop: 41536, Start Num: 9

Candidate Starts for Banquo\_68:

(1, 40946), (3, 41144), (Start: 9 @41213 has 6 MA's), (Start: 11 @41240 has 2 MA's), (13, 41297), (14, 41303), (22, 41408), (26, 41453), (28, 41492),

Gene: Dardanus 63 Start: 39624, Stop: 39992, Start Num: 8

Candidate Starts for Dardanus 63:

(2, 39534), (4, 39561), (5, 39564), (Start: 8 @39624 has 2 MA's), (Start: 11 @39651 has 2 MA's), (22, 39855), (27, 39915),

Gene: DinoDaryn\_69 Start: 41479, Stop: 41826, Start Num: 9

Candidate Starts for DinoDaryn\_69:

(Start: 9 @41479 has 6 MA's), (Start: 11 @41506 has 2 MA's), (14, 41563), (16, 41596), (26, 41731), (27, 41746), (28, 41770), (29, 41779),

Gene: Goib 69 Start: 42589, Stop: 42924, Start Num: 9

Candidate Starts for Goib 69:

(Start: 9 @ 42589 has 6 MA's), (Start: 11 @ 42616 has 2 MA's), (13, 42673), (16, 42712), (26, 42829), (27, 42844), (28, 42868), (29, 42877),

Gene: Gsput1\_61 Start: 40315, Stop: 40578, Start Num: 12

Candidate Starts for Gsput1\_61:

(6, 40255), (7, 40267), (Start: 9 @40273 has 6 MA's), (10, 40297), (Start: 11 @40300 has 2 MA's), (12, 40315), (14, 40363), (17, 40402), (22, 40471), (23, 40480), (25, 40495), (27, 40531),

Gene: Huffy\_69 Start: 41479, Stop: 41826, Start Num: 9

Candidate Starts for Huffy\_69:

(Start: 9 @41479 has 6 MA's), (Start: 11 @41506 has 2 MA's), (14, 41563), (16, 41596), (26, 41731), (27, 41746), (28, 41770), (29, 41779),

Gene: Schmidt\_63 Start: 39059, Stop: 39370, Start Num: 8

Candidate Starts for Schmidt\_63:

(5, 38996), (Start: 8 @39059 has 2 MA's), (Start: 11 @39086 has 2 MA's), (15, 39128), (18, 39179), (19, 39206), (20, 39215), (21, 39227), (24, 39251), (27, 39293),

Gene: Splinter\_69 Start: 42588, Stop: 42908, Start Num: 11

Candidate Starts for Splinter\_69:

(Start: 9 @42561 has 6 MA's), (Start: 11 @42588 has 2 MA's), (14, 42645), (16, 42678), (26, 42813), (27, 42828), (28, 42852), (29, 42861),

Gene: TZGordon\_70 Start: 41449, Stop: 41796, Start Num: 9

Candidate Starts for TZGordon\_70:

(Start: 9 @41449 has 6 MA's), (Start: 11 @41476 has 2 MA's), (14, 41533), (16, 41566), (26, 41701), (27, 41716), (28, 41740), (29, 41749),

Gene: TinaLin\_68 Start: 41133, Stop: 41456, Start Num: 9

Candidate Starts for TinaLin 68:

(1, 40866), (3, 41064), (Start: 9 @41133 has 6 MA's), (Start: 11 @41160 has 2 MA's), (13, 41217), (14, 41223), (22, 41328), (26, 41373), (28, 41412),

Gene: Vendetta\_69 Start: 42588, Stop: 42908, Start Num: 11

Candidate Starts for Vendetta 69:

(Start: 9 @ 42561 has 6 MA's), (Start: 11 @ 42588 has 2 MA's), (14, 42645), (16, 42678), (26, 42813), (27, 42828), (28, 42852), (29, 42861),