

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 5194 Report

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

Pham number 5194 has 12 members, 1 are drafts.

Phages represented in each track:

• Track 1: TZGordon\_63, Vendetta\_62, Huffy\_62, Splinter\_62, Goib\_63,

DinoDaryn 62

Track 2 : Banquo\_61Track 3 : TinaLin 61

• Track 4 : Gsput1\_54

Track 5 : Dardanus\_56Track 6 : Schmidt\_56

Track 7 : Catfish\_62

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

The start number called the most often in the published annotations is 7, it was called in 6 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

DinoDaryn\_62, Goib\_63, Huffy\_62, Splinter\_62, TZGordon\_63, Vendetta\_62,

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

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

• Banquo\_61, Catfish\_62, Dardanus\_56, Gsput1\_54, Schmidt\_56, TinaLin\_61,

### Summary by start number:

#### Start 7:

- Found in 6 of 12 (50.0%) of genes in pham
- Manual Annotations of this start: 6 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DinoDaryn\_62 (CU1), Goib\_63 (CU1), Huffy\_62 (CU1), Splinter\_62 (CU1), TZGordon\_63 (CU1), Vendetta\_62 (CU1),

#### Start 9:

• Found in 3 of 12 (25.0%) of genes in pham

- Manual Annotations of this start: 3 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo\_61 (CU1), Schmidt\_56 (CU4), TinaLin\_61 (CU1),

#### Start 10:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Dardanus\_56 (CU3), Gsput1\_54 (CU2),

#### Start 11:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish\_62 (CU5),

### Summary by clusters:

There are 5 clusters represented in this pham: CU5, CU4, CU3, CU2, CU1,

Info for manual annotations of cluster CU1:

- •Start number 7 was manually annotated 6 times for cluster CU1.
- •Start number 9 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

•Start number 10 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

•Start number 9 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

•Start number 11 was manually annotated 1 time for cluster CU5.

### Gene Information:

Gene: Banquo\_61 Start: 38579, Stop: 38908, Start Num: 9

Candidate Starts for Banquo 61:

(Start: 9 @ 38579 has 3 MA's), (14, 38684), (23, 38861), (25, 38873),

Gene: Catfish\_62 Start: 40601, Stop: 40936, Start Num: 11

Candidate Starts for Catfish\_62:

(5, 40466), (6, 40499), (8, 40553), (Start: 11 @40601 has 1 MA's), (14, 40703), (16, 40730), (24, 40889), (26, 40916), (27, 40925),

Gene: Dardanus 56 Start: 36839, Stop: 37162, Start Num: 10

Candidate Starts for Dardanus 56:

(Start: 10 @36839 has 1 MA's), (13, 36908), (14, 36944), (16, 36971), (20, 37079), (24, 37130), (25, 37133),

Gene: DinoDaryn\_62 Start: 38634, Stop: 39005, Start Num: 7

Candidate Starts for DinoDaryn 62:

(1, 38391), (2, 38445), (3, 38451), (4, 38499), (Start: 7 @38634 has 6 MA's), (Start: 10 @38664 has 1 MA's), (14, 38778), (15, 38784), (16, 38805), (17, 38835), (19, 38898), (25, 38967),

Gene: Goib 63 Start: 39750, Stop: 40121, Start Num: 7

Candidate Starts for Goib 63:

(1, 39507), (2, 39561), (3, 39567), (4, 39615), (Start: 7 @39750 has 6 MA's), (Start: 10 @39780 has 1 MA's), (14, 39894), (15, 39900), (16, 39921), (17, 39951), (19, 40014), (25, 40083),

Gene: Gsput1 54 Start: 37265, Stop: 37585, Start Num: 10

Candidate Starts for Gsput1 54:

(Start: 10 @37265 has 1 MA's), (14, 37370), (18, 37463), (19, 37490), (25, 37559),

Gene: Huffy\_62 Start: 38634, Stop: 39005, Start Num: 7

Candidate Starts for Huffy\_62:

(1, 38391), (2, 38445), (3, 38451), (4, 38499), (Start: 7 @38634 has 6 MA's), (Start: 10 @38664 has 1 MA's), (14, 38778), (15, 38784), (16, 38805), (17, 38835), (19, 38898), (25, 38967),

Gene: Schmidt\_56 Start: 36267, Stop: 36620, Start Num: 9

Candidate Starts for Schmidt 56:

(Start: 9 @ 36267 has 3 MA's), (12, 36279), (15, 36381), (19, 36495), (22, 36534), (25, 36564),

Gene: Splinter\_62 Start: 39721, Stop: 40083, Start Num: 7

Candidate Starts for Splinter\_62:

(1, 39478), (2, 39532), (3, 39538), (4, 39586), (Start: 7 @39721 has 6 MA's), (Start: 10 @39751 has 1 MA's), (14, 39865), (15, 39871), (16, 39892), (17, 39922), (19, 39985), (25, 40054),

Gene: TZGordon\_63 Start: 38610, Stop: 38981, Start Num: 7

Candidate Starts for TZGordon\_63:

(1, 38367), (2, 38421), (3, 38427), (4, 38475), (Start: 7 @38610 has 6 MA's), (Start: 10 @38640 has 1 MA's), (14, 38754), (15, 38760), (16, 38781), (17, 38811), (19, 38874), (25, 38943),

Gene: TinaLin 61 Start: 38502, Stop: 38828, Start Num: 9

Candidate Starts for TinaLin 61:

(Start: 9 @ 38502 has 3 MA's), (14, 38607), (21, 38763), (25, 38793),

Gene: Vendetta\_62 Start: 39721, Stop: 40083, Start Num: 7

Candidate Starts for Vendetta\_62:

(1, 39478), (2, 39532), (3, 39538), (4, 39586), (Start: 7 @39721 has 6 MA's), (Start: 10 @39751 has 1 MA's), (14, 39865), (15, 39871), (16, 39892), (17, 39922), (19, 39985), (25, 40054),