

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 155090 Report

This analysis was run 04/12/24 on database version 558.

Pham number 155090 has 16 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Huffy\_40, TZGordon\_41, DinoDaryn\_40
- Track 2 : Banquo\_39
- Track 3 : Goib\_41
- Track 4 : Splinter\_39, Vendetta\_39
- Track 5 : TinaLin 38
- Track 6 : Dardanus\_36
- Track 7 : Schmidt 34
- Track 8 : Catfish\_39
- Track 9: Bantam 66
- Track 10 : SpeedDemon\_680
- Track 11 : DatBoi 65
- Track 12 : Mollymur 65
- Track 13 : Daredevil 56

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

The start number called the most often in the published annotations is 19, it was called in 6 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• DinoDaryn\_40, Huffy\_40, Schmidt\_34, Splinter\_39, TZGordon\_41, Vendetta\_39,

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\_39, Bantam\_66, Catfish\_39, Dardanus\_36, Daredevil\_56, DatBoi\_65, Goib\_41, Mollymur\_65, SpeedDemon\_680, TinaLin\_38,

## Summary by start number:

#### Start 14:

- Found in 1 of 16 (6.2%) of genes in pham
- Manual Annotations of this start: 1 of 16

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Goib\_41 (CU1),

### Start 19:

- Found in 6 of 16 (37.5%) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DinoDaryn\_40 (CU1), Huffy\_40 (CU1), Schmidt\_34 (CU4), Splinter\_39 (CU1), TZGordon\_41 (CU1), Vendetta\_39 (CU1),

### Start 22:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish\_39 (CU5), Dardanus\_36 (CU3),

#### Start 23:

- Found in 5 of 16 (31.2%) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_66 (DL), Daredevil\_56 (DL), DatBoi\_65 (DL), Mollymur\_65 (DL), SpeedDemon\_680 (DL),

#### Start 25:

- Found in 2 of 16 (12.5%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo\_39 (CU1), TinaLin\_38 (CU1),

## **Summary by clusters:**

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

Info for manual annotations of cluster CU1:

- Start number 14 was manually annotated 1 time for cluster CU1.
- •Start number 19 was manually annotated 5 times for cluster CU1.
- •Start number 25 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

Start number 22 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

•Start number 19 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

•Start number 22 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DL:

•Start number 23 was manually annotated 5 times for cluster DL.

### Gene Information:

Gene: Banquo\_39 Start: 28265, Stop: 27882, Start Num: 25

Candidate Starts for Banquo 39:

(16, 28292), (21, 28280), (Start: 25 @28265 has 2 MA's), (35, 28184), (48, 28064), (55, 27956),

Gene: Bantam\_66 Start: 49725, Stop: 49360, Start Num: 23

Candidate Starts for Bantam 66:

(4, 49839), (18, 49743), (Start: 23 @49725 has 5 MA's), (26, 49710), (33, 49656), (39, 49584), (40, 49581), (43, 49548), (47, 49521), (50, 49494), (53, 49455), (56, 49368),

Gene: Catfish 39 Start: 29601, Stop: 29161, Start Num: 22

Candidate Starts for Catfish 39:

(Start: 22 @29601 has 2 MA's), (27, 29580), (34, 29517), (44, 29424), (51, 29361),

Gene: Dardanus\_36 Start: 26552, Stop: 26139, Start Num: 22

Candidate Starts for Dardanus\_36:

(2, 26678), (3, 26675), (10, 26630), (15, 26582), (Start: 22 @26552 has 2 MA's), (29, 26522), (37, 26420), (48, 26339), (52, 26309), (55, 26231),

Gene: Daredevil 56 Start: 45221, Stop: 44853, Start Num: 23

Candidate Starts for Daredevil\_56:

(17, 45236), (Start: 23 @ 45221 has 5 MA's), (30, 45194), (34, 45140), (36, 45119), (38, 45083), (40, 45077), (42, 45059), (43, 45044), (52, 44975), (56, 44861),

Gene: DatBoi\_65 Start: 49746, Stop: 49381, Start Num: 23

Candidate Starts for DatBoi 65:

(5, 49845), (6, 49842), (11, 49806), (Start: 23 @49746 has 5 MA's), (26, 49731), (40, 49602), (42, 49584), (43, 49569), (47, 49542), (50, 49515),

Gene: DinoDaryn\_40 Start: 28489, Stop: 28061, Start Num: 19

Candidate Starts for DinoDaryn\_40:

(Start: 19 @28489 has 6 MA's), (20, 28486), (31, 28438), (34, 28396), (40, 28339), (48, 28267), (57, 28096),

Gene: Goib 41 Start: 29185, Stop: 28757, Start Num: 14

Candidate Starts for Goib 41:

(Start: 14 @29185 has 1 MA's), (28, 29131), (34, 29068), (40, 29011), (48, 28939), (57, 28768),

Gene: Huffy\_40 Start: 28489, Stop: 28061, Start Num: 19

Candidate Starts for Huffy\_40:

(Start: 19 @28489 has 6 MA's), (20, 28486), (31, 28438), (34, 28396), (40, 28339), (48, 28267), (57, 28096),

Gene: Mollymur\_65 Start: 50001, Stop: 49633, Start Num: 23

Candidate Starts for Mollymur 65:

(13, 50049), (18, 50019), (Start: 23 @50001 has 5 MA's), (38, 49863), (39, 49860), (40, 49857), (43, 49824), (47, 49797), (50, 49770),

Gene: Schmidt\_34 Start: 25761, Stop: 25366, Start Num: 19

Candidate Starts for Schmidt\_34:

(8, 25836), (9, 25833), (12, 25797), (Start: 19 @25761 has 6 MA's), (20, 25758), (27, 25731), (34, 25668), (45, 25572), (46, 25560), (48, 25539), (49, 25530), (54, 25470),

Gene: SpeedDemon\_680 Start: 51957, Stop: 51592, Start Num: 23

Candidate Starts for SpeedDemon 680:

(1, 52089), (6, 52053), (7, 52047), (18, 51975), (Start: 23 @51957 has 5 MA's), (26, 51942), (33, 51888), (39, 51816), (40, 51813), (43, 51780), (47, 51753), (50, 51726), (53, 51687), (56, 51600),

Gene: Splinter\_39 Start: 29090, Stop: 28686, Start Num: 19

Candidate Starts for Splinter 39:

(Start: 19 @29090 has 6 MA's), (20, 29087), (31, 29039), (32, 29021), (34, 28997), (40, 28940), (48, 28868), (57, 28697),

Gene: TZGordon\_41 Start: 28404, Stop: 28000, Start Num: 19

Candidate Starts for TZGordon 41:

(Start: 19 @28404 has 6 MA's), (20, 28401), (31, 28353), (34, 28311), (40, 28254), (48, 28182), (57, 28011),

Gene: TinaLin\_38 Start: 27938, Stop: 27555, Start Num: 25

Candidate Starts for TinaLin\_38:

(16, 27965), (24, 27941), (Start: 25 @27938 has 2 MA's), (35, 27857), (41, 27806), (48, 27737),

Gene: Vendetta\_39 Start: 29090, Stop: 28686, Start Num: 19

Candidate Starts for Vendetta\_39:

(Start: 19 @29090 has 6 MA's), (20, 29087), (31, 29039), (32, 29021), (34, 28997), (40, 28940), (48, 28868), (57, 28697),