

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 87938 Report

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

Pham number 87938 has 10 members, 2 are drafts.

Phages represented in each track:

Track 1 : PeggyLeg03\_24, Constance\_24

Track 2 : Shoya\_20

Track 3 : BrayBeast\_21

Track 4 : Sarge\_21

Track 5: Ryan\_24, Zaheer\_24

• Track 6 : Popper\_22

Track 7 : BlackSpider\_22

Track 8 : MrSmee\_21

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

The start number called the most often in the published annotations is 12, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BrayBeast\_21, MrSmee\_21, Popper\_22, Sarge\_21, Shoya\_20,

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

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

• BlackSpider\_22, Constance\_24, PeggyLeg03\_24, Ryan\_24, Zaheer\_24,

# Summary by start number:

#### Start 10:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ryan\_24 (FF), Zaheer\_24 (FF),

#### Start 11:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 2 of 8

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackSpider\_22 (FN), Constance\_24 (FA), PeggyLeg03\_24 (FA),

#### Start 12:

- Found in 5 of 10 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast\_21 (FB), MrSmee\_21 (UNK), Popper\_22 (FF), Sarge\_21 (FB), Shoya\_20 (FB),

### **Summary by clusters:**

There are 5 clusters represented in this pham: FA, FB, UNK, FN, FF,

Info for manual annotations of cluster FA:

•Start number 11 was manually annotated 2 times for cluster FA.

Info for manual annotations of cluster FB:

•Start number 12 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FF:

- •Start number 10 was manually annotated 2 times for cluster FF.
- •Start number 12 was manually annotated 1 time for cluster FF.

#### Gene Information:

Gene: BlackSpider 22 Start: 18049, Stop: 19008, Start Num: 11

Candidate Starts for BlackSpider 22:

(Start: 11 @18049 has 2 MA's), (15, 18142), (16, 18145), (17, 18148), (23, 18169), (32, 18391), (33, 18418), (35, 18514), (38, 18634), (41, 18652), (48, 18862), (50, 18997),

Gene: BrayBeast\_21 Start: 16427, Stop: 17380, Start Num: 12

Candidate Starts for BrayBeast\_21:

(2, 16355), (6, 16385), (8, 16421), (Start: 12 @16427 has 4 MA's), (17, 16523), (19, 16529), (26, 16559), (27, 16565), (31, 16721), (32, 16766), (35, 16889), (36, 16922), (42, 17039), (44, 17054), (50, 17369),

Gene: Constance 24 Start: 18878, Stop: 19768, Start Num: 11

Candidate Starts for Constance\_24:

(3, 18818), (6, 18836), (Start: 11 @18878 has 2 MA's), (19, 18974), (45, 19547),

Gene: MrSmee\_21 Start: 16139, Stop: 17095, Start Num: 12

Candidate Starts for MrSmee\_21:

(9, 16133), (Start: 12 @16139 has 4 MA's), (14, 16217), (15, 16229), (16, 16232), (24, 16259), (25, 16268), (32, 16478), (33, 16505), (35, 16601), (38, 16721), (41, 16739), (48, 16949), (50, 17084),

Gene: PeggyLeg03 24 Start: 18878, Stop: 19768, Start Num: 11

Candidate Starts for PeggyLeg03\_24:

(3, 18818), (6, 18836), (Start: 11 @18878 has 2 MA's), (19, 18974), (45, 19547),

Gene: Popper\_22 Start: 17632, Stop: 18537, Start Num: 12

Candidate Starts for Popper\_22:

(6, 17587), (Start: 12 @17632 has 4 MA's), (21, 17743), (28, 17782), (34, 17998), (35, 18088), (41, 18208), (43, 18214), (46, 18352), (49, 18505),

Gene: Ryan 24 Start: 18293, Stop: 19222, Start Num: 10

Candidate Starts for Ryan\_24:

(5, 18251), (7, 18260), (Start: 10 @18293 has 2 MA's), (13, 18350), (20, 18407), (22, 18416), (34, 18665), (35, 18755), (41, 18878),

Gene: Sarge\_21 Start: 16338, Stop: 17294, Start Num: 12

Candidate Starts for Sarge\_21:

(6, 16296), (8, 16332), (Start: 12 @16338 has 4 MA's), (19, 16452), (29, 16524), (30, 16593), (35, 16812), (37, 16893), (39, 16944), (40, 16947), (47, 17133), (50, 17283),

Gene: Shoya\_20 Start: 15977, Stop: 16933, Start Num: 12

Candidate Starts for Shoya\_20:

(1, 15881), (2, 15902), (4, 15926), (Start: 12 @15977 has 4 MA's), (16, 16070), (17, 16073), (18, 16076), (26, 16109), (31, 16271), (32, 16316), (35, 16439), (41, 16577), (45, 16682), (48, 16787), (50, 16922),

Gene: Zaheer\_24 Start: 18382, Stop: 19311, Start Num: 10

Candidate Starts for Zaheer\_24:

(5, 18340), (7, 18349), (Start: 10 @18382 has 2 MA's), (13, 18439), (20, 18496), (22, 18505), (34, 18754), (35, 18844), (41, 18967),