

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 5730 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 5730 has 10 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Samora 49

Track 2 : Euratis\_48

Track 3: Shawty\_49

Track 4: Lilbooboo 48

• Track 5 : TG1 43

• Track 6 : Vash 47

• Track 7 : phiBT1 22

Track 8 : RemusLoopin 47

• Track 9 : Heather 48

Track 10 : Sebastisaurus\_46

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

The start number called the most often in the published annotations is 13, it was called in 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Euratis\_48, Heather\_48, RemusLoopin\_47, Sebastisaurus\_46, TG1\_43,

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

•

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

Lilbooboo\_48, Samora\_49, Shawty\_49, Vash\_47, phiBT1\_22,

## **Summary by start number:**

### Start 12:

- Found in 5 of 10 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 8

- Called 80.0% of time when present
- Phage (with cluster) where this start called: Lilbooboo\_48 (BB1), Samora\_49 (BB1), Shawty\_49 (BB1), phiBT1\_22 (BB1),

#### Start 13:

- Found in 5 of 10 (50.0%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Euratis\_48 (BB1), Heather\_48 (BB2), RemusLoopin\_47 (BB2), Sebastisaurus\_46 (BB2), TG1\_43 (BB1),

#### Start 14:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Vash\_47 (BB1),

# Summary by clusters:

There are 2 clusters represented in this pham: BB2, BB1,

Info for manual annotations of cluster BB1:

- •Start number 12 was manually annotated 2 times for cluster BB1.
- •Start number 13 was manually annotated 2 times for cluster BB1.
- •Start number 14 was manually annotated 1 time for cluster BB1.

Info for manual annotations of cluster BB2:

•Start number 13 was manually annotated 3 times for cluster BB2.

### Gene Information:

Gene: Euratis 48 Start: 33248, Stop: 33607, Start Num: 13

Candidate Starts for Euratis 48:

(Start: 13 @33248 has 5 MA's), (19, 33344), (23, 33410), (40, 33599),

Gene: Heather 48 Start: 34284, Stop: 34649, Start Num: 13

Candidate Starts for Heather 48:

(5, 34176), (6, 34185), (7, 34191), (8, 34215), (Start: 13 @34284 has 5 MA's), (15, 34311), (16, 34317), (19, 34377), (22, 34419), (26, 34494), (29, 34527), (30, 34569), (34, 34590), (36, 34611),

Gene: Lilbooboo 48 Start: 34471, Stop: 34830, Start Num: 12

Candidate Starts for Lilbooboo\_48:

(10, 34459), (Start: 12 @34471 has 2 MA's), (Start: 14 @34483 has 1 MA's), (15, 34501), (18, 34552), (20, 34600), (28, 34714), (36, 34798),

Gene: RemusLoopin\_47 Start: 35046, Stop: 35414, Start Num: 13

Candidate Starts for RemusLoopin 47:

(Start: 13 @35046 has 5 MA's), (19, 35139), (23, 35205), (26, 35256), (29, 35289), (30, 35331), (32, 35337), (34, 35352), (37, 35382),

Gene: Samora\_49 Start: 35351, Stop: 35710, Start Num: 12

Candidate Starts for Samora 49:

(1, 35177), (2, 35180), (3, 35219), (4, 35246), (Start: 12 @35351 has 2 MA's), (20, 35480), (28, 35594), (33, 35654),

Gene: Sebastisaurus\_46 Start: 35487, Stop: 35852, Start Num: 13

Candidate Starts for Sebastisaurus 46:

(Start: 13 @35487 has 5 MA's), (16, 35520), (19, 35580), (21, 35616), (26, 35697), (29, 35730), (30, 35772), (35, 35796), (36, 35814), (38, 35829),

Gene: Shawty\_49 Start: 34401, Stop: 34757, Start Num: 12

Candidate Starts for Shawty 49:

(Start: 12 @34401 has 2 MA's), (17, 34443), (19, 34497), (20, 34530), (27, 34641), (28, 34644), (34, 34707),

Gene: TG1\_43 Start: 33832, Stop: 34179, Start Num: 13

Candidate Starts for TG1\_43:

(Start: 13 @33832 has 5 MA's), (16, 33865), (17, 33871), (20, 33961), (22, 33970), (24, 34003), (25, 34027), (39, 34171), (41, 34174),

Gene: Vash\_47 Start: 34292, Stop: 34639, Start Num: 14

Candidate Starts for Vash\_47:

(11, 34265), (Start: 12 @34280 has 2 MA's), (Start: 14 @34292 has 1 MA's), (20, 34409), (28, 34523),

Gene: phiBT1\_22 Start: 35369, Stop: 35728, Start Num: 12

Candidate Starts for phiBT1\_22:

(9, 35336), (Start: 12 @35369 has 2 MA's), (20, 35498), (28, 35612), (31, 35660), (34, 35675), (36, 35696),