

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 168583 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168583 has 18 members, 2 are drafts.

Phages represented in each track:

Track 1 : Hestia_43

Track 2 : Eileen_35

Track 3: Judy_40, Constance_39, Peas_36, ChuckDuck_40, Bridgette_39, GlobiWarming 39

Track 4 : Shoya_37

Track 5 : BrayBeast_34

Track 6: MargaretKali 31, Kumotta 31

Track 7 : Bauer_41, Sarge_30

• Track 8 : Zucker 40

Track 9 : BlackSpider_37

Track 10 : Maja_30

Track 11 : Spartoi_38

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

The start number called the most often in the published annotations is 10, it was called in 9 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bridgette_39, ChuckDuck_40, Constance_39, Eileen_35, GlobiWarming_39, Judy_40, Kumotta_31, MargaretKali_31, Peas_36, Zucker_40,

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

Maja_30,

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

Bauer_41, BlackSpider_37, BrayBeast_34, Hestia_43, Sarge_30, Shoya_37, Spartoi_38,

Summary by start number:

Start 4:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 16

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Maja_30 (FO),

Start 5:

- Found in 1 of 18 (5.6%) 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: BrayBeast_34 (FB),

Start 9:

- Found in 6 of 18 (33.3%) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Bauer_41 (FN), BlackSpider_37 (FN), Hestia_43 (AY), Sarge_30 (FB), Shoya_37 (FB),

Start 10:

- Found in 11 of 18 (61.1%) of genes in pham
- Manual Annotation's of this start: 9 of 16
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Bridgette_39 (FA), ChuckDuck_40 (FA), Constance_39 (FA), Eileen_35 (FA), GlobiWarming_39 (FA), Judy_40 (FA), Kumotta_31 (FB), MargaretKali_31 (FB), Peas_36 (FA), Zucker_40 (FN),

Start 11:

- Found in 1 of 18 (5.6%) 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: Spartoi 38 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, FA, FB, AY, FN, FO,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster FA:

•Start number 10 was manually annotated 6 times for cluster FA.

Info for manual annotations of cluster FB:

- •Start number 5 was manually annotated 1 time for cluster FB.
- •Start number 9 was manually annotated 2 times for cluster FB.
- •Start number 10 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- •Start number 9 was manually annotated 1 time for cluster FN.
- •Start number 10 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FO:

•Start number 4 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Bauer_41 Start: 28925, Stop: 28644, Start Num: 9

Candidate Starts for Bauer 41:

(Start: 9 @28925 has 4 MA's), (12, 28916), (13, 28901), (18, 28832), (25, 28721), (31, 28682),

Gene: BlackSpider_37 Start: 28105, Stop: 27839, Start Num: 9

Candidate Starts for BlackSpider_37:

(3, 28165), (7, 28114), (Start: 9 @28105 has 4 MA's), (12, 28096), (14, 28039), (16, 28027), (20, 27964), (26, 27898), (32, 27853),

Gene: BrayBeast_34 Start: 25453, Stop: 25148, Start Num: 5

Candidate Starts for BrayBeast_34:

(Start: 5 @25453 has 1 MA's), (Start: 9 @25423 has 4 MA's), (12, 25414), (13, 25399), (14, 25357), (18, 25330), (27, 25204),

Gene: Bridgette_39 Start: 28174, Stop: 27884, Start Num: 10

Candidate Starts for Bridgette_39:

(Start: 10 @28174 has 9 MA's), (12, 28168), (16, 28099), (21, 28012), (28, 27955), (32, 27925),

Gene: ChuckDuck 40 Start: 27998, Stop: 27708, Start Num: 10

Candidate Starts for ChuckDuck_40:

(Start: 10 @27998 has 9 MA's), (12, 27992), (16, 27923), (21, 27836), (28, 27779), (32, 27749),

Gene: Constance_39 Start: 28327, Stop: 28037, Start Num: 10

Candidate Starts for Constance_39:

(Start: 10 @28327 has 9 MA's), (12, 28321), (16, 28252), (21, 28165), (28, 28108), (32, 28078),

Gene: Eileen_35 Start: 26405, Stop: 26115, Start Num: 10

Candidate Starts for Eileen_35:

(Start: 10 @26405 has 9 MA's), (12, 26399), (16, 26330), (28, 26186), (32, 26156), (34, 26123),

Gene: GlobiWarming_39 Start: 27581, Stop: 27291, Start Num: 10

Candidate Starts for GlobiWarming_39:

(Start: 10 @27581 has 9 MA's), (12, 27575), (16, 27506), (21, 27419), (28, 27362), (32, 27332),

Gene: Hestia_43 Start: 28715, Stop: 28437, Start Num: 9

Candidate Starts for Hestia 43:

(6, 28733), (Start: 9 @ 28715 has 4 MA's), (12, 28706), (22, 28544), (24, 28520),

Gene: Judy_40 Start: 28493, Stop: 28203, Start Num: 10

Candidate Starts for Judy_40:

(Start: 10 @28493 has 9 MA's), (12, 28487), (16, 28418), (21, 28331), (28, 28274), (32, 28244),

Gene: Kumotta 31 Start: 25315, Stop: 25025, Start Num: 10

Candidate Starts for Kumotta_31:

(Start: 10 @25315 has 9 MA's), (12, 25309), (19, 25192), (26, 25111), (29, 25090),

Gene: Maja_30 Start: 25873, Stop: 25589, Start Num: 4

Candidate Starts for Maja_30:

(Start: 4 @25873 has 1 MA's), (8, 25825), (Start: 10 @25819 has 9 MA's), (12, 25813), (15, 25750), (16, 25744), (18, 25729), (20, 25681), (25, 25618),

Gene: MargaretKali_31 Start: 24950, Stop: 24660, Start Num: 10

Candidate Starts for MargaretKali_31:

(Start: 10 @24950 has 9 MA's), (12, 24944), (19, 24827), (26, 24746), (29, 24725),

Gene: Peas_36 Start: 28552, Stop: 28262, Start Num: 10

Candidate Starts for Peas 36:

(Start: 10 @28552 has 9 MA's), (12, 28546), (16, 28477), (21, 28390), (28, 28333), (32, 28303),

Gene: Sarge_30 Start: 23262, Stop: 22981, Start Num: 9

Candidate Starts for Sarge_30:

(Start: 9 @ 23262 has 4 MA's), (12, 23253), (13, 23238), (18, 23169), (25, 23058), (31, 23019),

Gene: Shoya_37 Start: 25648, Stop: 25358, Start Num: 9

Candidate Starts for Shoya_37:

(Start: 4 @25699 has 1 MA's), (Start: 9 @25648 has 4 MA's), (12, 25639), (16, 25570), (21, 25483), (28, 25426),

Gene: Spartoi_38 Start: 26641, Stop: 26366, Start Num: 11

Candidate Starts for Spartoi_38:

(Start: 11 @26641 has 1 MA's), (23, 26470), (30, 26416), (33, 26380),

Gene: Zucker_40 Start: 29401, Stop: 29171, Start Num: 10

Candidate Starts for Zucker_40:

(1, 29494), (2, 29464), (Start: 10 @29401 has 9 MA's), (12, 29395), (16, 29326), (17, 29323), (19, 29278), (20, 29263),