

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 165400 Report

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

Pham number 165400 has 12 members, 4 are drafts.

Phages represented in each track:

Track 1 : Raqqa_9, AbbyDaisy_9

• Track 2 : E6_10, B22_9, G4_9

• Track 3 : Doucette_9

Track 4 : BlackSpider_9

Track 5 : Zucker_10, Bauer_11

Track 6 : MrSmee_8Track 7 : Spartoi_7Track 8 : GMA4 9

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

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

Genes that call this "Most Annotated" start:

AbbyDaisy_9, B22_9, Doucette_9, E6_10, G4_9, MrSmee_8, Raqqa_9,

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

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

Bauer_11, BlackSpider_9, GMA4_9, Spartoi_7, Zucker_10,

Summary by start number:

Start 3:

- Found in 3 of 12 (25.0%) 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: Bauer_11 (FN), BlackSpider_9 (FN), Zucker_10 (FN),

Start 4:

• Found in 1 of 12 (8.3%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA4_9 (singleton),

Start 5:

- Found in 7 of 12 (58.3%) 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: AbbyDaisy_9 (AY), B22_9 (BW), Doucette_9 (BW), E6_10 (BW), G4_9 (BW), MrSmee_8 (UNK), Ragga_9 (AY),

Start 6:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spartoi_7 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: AY, UNK, singleton, BW, FN,

Info for manual annotations of cluster AY:

•Start number 5 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BW:

•Start number 5 was manually annotated 4 times for cluster BW.

Info for manual annotations of cluster FN:

•Start number 3 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: AbbyDaisy_9 Start: 6279, Stop: 6755, Start Num: 5

Candidate Starts for AbbyDaisy_9:

(Start: 5 @6279 has 5 MA's), (14, 6396), (17, 6420), (24, 6462), (26, 6477), (38, 6636), (42, 6660),

Gene: B22 9 Start: 6731, Stop: 7111, Start Num: 5

Candidate Starts for B22 9:

(1, 6602), (2, 6617), (Start: 5 @ 6731 has 5 MA's), (10, 6797), (13, 6851), (22, 6908), (25, 6923), (26, 6925), (20, 6924), (20, 6928), (26, 7097)

6935), (29, 6974), (30, 6980), (35, 7037),

Gene: Bauer_11 Start: 7722, Stop: 8126, Start Num: 3

Candidate Starts for Bauer_11:

 $(Start: 3 @7722 \ has 2 \ MA's), (15, 7875), (16, 7878), (18, 7890), (24, 7926), (25, 7929), (31, 8010), (33, 8022), (34, 8043), (36, 8070), \\$

Gene: BlackSpider 9 Start: 6761, Stop: 7165, Start Num: 3

Candidate Starts for BlackSpider 9:

(Start: 3 @6761 has 2 MA's), (24, 6965), (25, 6968), (26, 6980), (31, 7049), (34, 7082), (36, 7109),

Gene: Doucette_9 Start: 6791, Stop: 7171, Start Num: 5

Candidate Starts for Doucette_9:

(1, 6662), (2, 6677), (Start: 5 @6791 has 5 MA's), (8, 6836), (10, 6857), (13, 6911), (22, 6968), (25, 6983), (26, 6995), (29, 7034), (30, 7040), (35, 7097),

Gene: E6_10 Start: 6842, Stop: 7222, Start Num: 5

Candidate Starts for E6_10:

(1, 6713), (2, 6728), (Start: 5 @6842 has 5 MA's), (10, 6908), (13, 6962), (22, 7019), (25, 7034), (26, 7046), (29, 7085), (30, 7091), (35, 7148),

Gene: G4 9 Start: 6779, Stop: 7159, Start Num: 5

Candidate Starts for G4 9:

(1, 6650), (2, 6665), (Start: 5 @ 6779 has 5 MA's), (10, 6845), (13, 6899), (22, 6956), (25, 6971), (26, 6983), (29, 7022), (30, 7028), (35, 7085),

Gene: GMA4_9 Start: 7458, Stop: 7847, Start Num: 4

Candidate Starts for GMA4 9:

(4, 7458), (7, 7506), (9, 7536), (11, 7560), (17, 7620), (19, 7626), (20, 7635), (23, 7650), (27, 7677), (40, 7827), (41, 7833),

Gene: MrSmee_8 Start: 5444, Stop: 5920, Start Num: 5

Candidate Starts for MrSmee_8:

(Start: 5 @ 5444 has 5 MA's), (15, 5573), (24, 5627), (25, 5630), (26, 5642), (28, 5663),

Gene: Ragga_9 Start: 6587, Stop: 7063, Start Num: 5

Candidate Starts for Ragga_9:

(Start: 5 @ 6587 has 5 MA's), (14, 6704), (17, 6728), (24, 6770), (26, 6785), (38, 6944), (42, 6968),

Gene: Spartoi_7 Start: 5626, Stop: 6006, Start Num: 6

Candidate Starts for Spartoi_7:

(Start: 6 @ 5626 has 1 MA's), (8, 5662), (10, 5683), (12, 5734), (21, 5791), (25, 5809), (27, 5833), (32, 5890), (37, 5953), (39, 5986),

Gene: Zucker 10 Start: 7035, Stop: 7439, Start Num: 3

Candidate Starts for Zucker_10:

(Start: 3 @7035 has 2 MA's), (15, 7188), (16, 7191), (18, 7203), (24, 7239), (25, 7242), (31, 7323), (33, 7335), (34, 7356), (36, 7383),