

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 194438 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194438 has 15 members, 2 are drafts.

Phages represented in each track:

- Track 1: Gsput1 11
- Track 2 : Dardanus_15
- Track 3 : Schmidt_11
- Track 4 : Ghobes_7, Frizzle_7
- Track 5 : Archimedes_7
- Track 6 : Sapo_7
- Track 7: Adelaide 9, Bran 9
- Track 8 : Dina_9, SamW_9, Troy_9, Lederberg_9
- Track 9 : StAB 9
- Track 10 : Stiles_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 8 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Adelaide_9, Bran_9, Dina_9, Lederberg_9, SamW_9, StAB_9, Stiles_9, Troy_9,

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

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

• Archimedes_7, Dardanus_15, Frizzle_7, Ghobes_7, Gsput1_11, Sapo_7, Schmidt_11,

Summary by start number:

Start 3:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1_11 (CU2), Schmidt_11 (CU4),

Start 4:

- Found in 5 of 15 (33.3%) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_7 (DA), Dardanus_15 (CU3), Frizzle_7 (DA), Ghobes_7 (DA), Sapo_7 (DA),

Start 5:

- Found in 8 of 15 (53.3%) of genes in pham
- Manual Annotations of this start: 8 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adelaide_9 (EP), Bran_9 (EP), Dina_9 (EP), Lederberg_9 (EP), SamW_9 (EP), StAB_9 (EP), Stiles_9 (EP), Troy_9 (EP),

Summary by clusters:

There are 5 clusters represented in this pham: CU2, CU4, CU3, EP, DA,

Info for manual annotations of cluster CU3:

Start number 4 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

•Start number 3 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster DA:

•Start number 4 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster EP:

•Start number 5 was manually annotated 8 times for cluster EP.

Gene Information:

Gene: Adelaide_9 Start: 6873, Stop: 7217, Start Num: 5

Candidate Starts for Adelaide_9:

(1, 6582), (Start: 5 @6873 has 8 MA's), (9, 6939), (13, 6972), (15, 6984), (16, 6990), (18, 7002), (25, 7059), (31, 7122), (36, 7176), (38, 7197), (39, 7203),

Gene: Archimedes_7 Start: 6004, Stop: 6366, Start Num: 4

Candidate Starts for Archimedes 7:

(2, 5794), (Start: 4 @6004 has 4 MA's), (17, 6136), (19, 6151), (21, 6160), (37, 6334),

Gene: Bran_9 Start: 6878, Stop: 7222, Start Num: 5

Candidate Starts for Bran_9:

 $(1, 6587), (Start: 5 @6878 \ has 8 \ MA's), (9, 6944), (13, 6977), (15, 6989), (16, 6995), (18, 7007), (25, 7064), (31, 7127), (36, 7181), (38, 7202), (39, 7208),\\$

Gene: Dardanus 15 Start: 9541, Stop: 9897, Start Num: 4

Candidate Starts for Dardanus 15:

(Start: 4 @ 9541 has 4 MA's), (7, 9571), (8, 9586), (12, 9643), (16, 9664), (23, 9712), (26, 9736), (28, 9763), (35, 9841), (40, 9886),

Gene: Dina_9 Start: 6861, Stop: 7205, Start Num: 5

Candidate Starts for Dina 9:

(1, 6570), (Start: 5 @6861 has 8 MA's), (9, 6927), (13, 6960), (16, 6978), (18, 6990), (25, 7047), (31, 7110), (36, 7164), (38, 7185), (39, 7191),

Gene: Frizzle_7 Start: 6056, Stop: 6415, Start Num: 4

Candidate Starts for Frizzle 7:

(Start: 4 @ 6056 has 4 MA's), (20, 6203), (34, 6338),

Gene: Ghobes 7 Start: 6056, Stop: 6415, Start Num: 4

Candidate Starts for Ghobes 7:

(Start: 4 @ 6056 has 4 MA's), (20, 6203), (34, 6338),

Gene: Gsput1_11 Start: 7862, Stop: 8218, Start Num: 3

Candidate Starts for Gsput1_11:

(Start: 3 @7862 has 1 MA's), (6, 7886), (7, 7895), (8, 7907), (10, 7955), (11, 7958), (12, 7964), (24, 8039), (26, 8057), (27, 8072), (29, 8102), (30, 8111), (33, 8132), (34, 8141), (35, 8162), (36, 8177), (39, 8204),

Gene: Lederberg_9 Start: 6861, Stop: 7205, Start Num: 5

Candidate Starts for Lederberg_9:

(1, 6570), (Start: 5 @6861 has 8 MA's), (9, 6927), (13, 6960), (16, 6978), (18, 6990), (25, 7047), (31, 7110), (36, 7164), (38, 7185), (39, 7191),

Gene: SamW_9 Start: 6861, Stop: 7205, Start Num: 5

Candidate Starts for SamW_9:

(1, 6570), (Start: 5 @6861 has 8 MA's), (9, 6927), (13, 6960), (16, 6978), (18, 6990), (25, 7047), (31, 7110), (36, 7164), (38, 7185), (39, 7191),

Gene: Sapo_7 Start: 6047, Stop: 6409, Start Num: 4

Candidate Starts for Sapo_7:

(Start: 4 @6047 has 4 MA's), (6, 6068), (34, 6332),

Gene: Schmidt_11 Start: 7862, Stop: 8224, Start Num: 3

Candidate Starts for Schmidt 11:

(Start: 3 @7862 has 1 MA's), (7, 7895), (11, 7964), (14, 7979), (16, 7991), (17, 7997), (22, 8036), (27, 8078), (29, 8108), (32, 8135), (34, 8147), (36, 8183), (37, 8192),

Gene: StAB_9 Start: 6866, Stop: 7210, Start Num: 5

Candidate Starts for StAB 9:

(1, 6575), (Start: 5 @6866 has 8 MA's), (9, 6932), (13, 6965), (16, 6983), (18, 6995), (25, 7052), (30, 7106), (31, 7115), (36, 7169), (38, 7190), (39, 7196),

Gene: Stiles 9 Start: 6860, Stop: 7204, Start Num: 5

Candidate Starts for Stiles 9:

(1, 6569), (Start: 5 @6860 has 8 MA's), (9, 6926), (16, 6977), (18, 6989), (25, 7046), (30, 7100), (31, 7109), (36, 7163), (38, 7184), (39, 7190),

Gene: Troy_9 Start: 6861, Stop: 7205, Start Num: 5

Candidate Starts for Troy 9:

(1, 6570), (Start: 5 @6861 has 8 MA's), (9, 6927), (13, 6960), (16, 6978), (18, 6990), (25, 7047), (31, 7110), (36, 7164), (38, 7185), (39, 7191),