

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 225034 Report

This analysis was run 03/28/25 on database version 593.

Pham number 225034 has 12 members, 3 are drafts.

Phages represented in each track:

Track 1: Gorpy_68, Sakai_67

• Track 2 : Auxilium 65

• Track 3 : Bhageatrice_75

• Track 4 : Tiff81_65

Track 5: Malisha 75

Track 6 : Kumotta_53

Track 7: MargaretKali 49

Track 8 : Zucker_65

• Track 9 : Bauer 63

Track 10 : BlackSpider_59

• Track 11 : REQ2_58

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 8 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Auxilium_65, Bauer_63, Bhageatrice_75, BlackSpider_59, Gorpy_68, Kumotta_53, Malisha_75, REQ2_58, Sakai_67, Tiff81_65, Zucker_65,

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

MargaretKali_49,

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

Summary by start number:

Start 9:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MargaretKali_49 (FB),

Start 10:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 8 of 9
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Auxilium_65 (AY), Bauer_63 (FN), Bhageatrice_75 (AY), BlackSpider_59 (FN), Gorpy_68 (AY), Kumotta_53 (FB), Malisha_75 (DN), REQ2_58 (singleton), Sakai_67 (AY), Tiff81_65 (AY), Zucker_65 (FN),

Summary by clusters:

There are 5 clusters represented in this pham: AY, DN, FB, singleton, FN,

Info for manual annotations of cluster AY:

•Start number 10 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster DN:

•Start number 10 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster FB:

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

Info for manual annotations of cluster FN:

•Start number 10 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: Auxilium_65 Start: 34126, Stop: 34722, Start Num: 10

Candidate Starts for Auxilium_65:

(2, 33883), (4, 33916), (7, 33985), (Start: 10 @34126 has 8 MA's), (16, 34216), (19, 34264), (21, 34297), (26, 34357), (27, 34381), (31, 34417), (32, 34426), (40, 34501), (43, 34597),

Gene: Bauer_63 Start: 34908, Stop: 35459, Start Num: 10

Candidate Starts for Bauer_63:

(7, 34770), (Start: 10 @34908 has 8 MA's), (21, 35076), (25, 35124), (27, 35160), (28, 35178), (32, 35205), (39, 35274),

Gene: Bhageatrice_75 Start: 39430, Stop: 39975, Start Num: 10

Candidate Starts for Bhageatrice 75:

(3, 39196), (7, 39292), (Start: 10 @39430 has 8 MA's), (14, 39478), (21, 39598), (27, 39682), (28, 39700), (32, 39727), (34, 39754), (44, 39901),

Gene: BlackSpider_59 Start: 33768, Stop: 34319, Start Num: 10

Candidate Starts for BlackSpider_59:

(7, 33630), (Start: 10 @33768 has 8 MA's), (21, 33936), (27, 34020), (28, 34038), (32, 34065), (34, 34092),

Gene: Gorpy 68 Start: 37238, Stop: 37783, Start Num: 10

Candidate Starts for Gorpy_68:

(3, 37004), (7, 37100), (Start: 10 @37238 has 8 MA's), (14, 37286), (21, 37406), (27, 37490), (29, 37511), (32, 37535), (41, 37640), (44, 37709),

Gene: Kumotta_53 Start: 31213, Stop: 31815, Start Num: 10

Candidate Starts for Kumotta_53:

(8, 31156), (Start: 9 @31198 has 1 MA's), (Start: 10 @31213 has 8 MA's), (13, 31252), (20, 31360), (21, 31381), (32, 31510), (36, 31549), (43, 31690),

Gene: Malisha_75 Start: 46665, Stop: 47252, Start Num: 10

Candidate Starts for Malisha_75:

(1, 46359), (4, 46461), (5, 46482), (7, 46530), (Start: 10 @46665 has 8 MA's), (11, 46671), (12, 46674), (15, 46740), (16, 46755), (18, 46782), (21, 46836), (22, 46845), (23, 46851), (24, 46878), (25, 46884), (27, 46920), (29, 46941), (30, 46950), (32, 46965), (33, 46986), (35, 46998), (36, 47004), (38, 47031), (39, 47034), (42, 47118),

Gene: MargaretKali_49 Start: 29816, Stop: 30433, Start Num: 9

Candidate Starts for MargaretKali_49:

(8, 29774), (Start: 9 @29816 has 1 MA's), (Start: 10 @29831 has 8 MA's), (13, 29870), (20, 29978), (21, 29999), (32, 30128), (36, 30167), (43, 30308),

Gene: REQ2_58 Start: 39206, Stop: 39829, Start Num: 10

Candidate Starts for REQ2_58:

(3, 38975), (4, 39002), (6, 39041), (7, 39071), (Start: 10 @39206 has 8 MA's), (18, 39323), (21, 39377), (26, 39437), (34, 39533), (39, 39575),

Gene: Sakai_67 Start: 35949, Stop: 36494, Start Num: 10

Candidate Starts for Sakai_67:

(3, 35715), (7, 35811), (Start: 10 @35949 has 8 MA's), (14, 35997), (21, 36117), (27, 36201), (29, 36222), (32, 36246), (41, 36351), (44, 36420),

Gene: Tiff81_65 Start: 34896, Stop: 35441, Start Num: 10

Candidate Starts for Tiff81_65:

(3, 34662), (7, 34758), (Start: 10 @34896 has 8 MA's), (21, 35064), (27, 35148), (28, 35166), (32, 35193), (34, 35220), (44, 35367),

Gene: Zucker_65 Start: 37002, Stop: 37598, Start Num: 10

Candidate Starts for Zucker_65:

(Start: 10 @37002 has 8 MA's), (16, 37092), (17, 37110), (19, 37140), (21, 37173), (26, 37233), (27, 37257), (32, 37302), (37, 37356), (43, 37473),