Pham 156781







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 156781 Report

This analysis was run 04/12/24 on database version 558.
Pham number 156781 has 13 members, 6 are drafts.
Phages represented in each track:

- Track 1 : Hillester_50, RadFad_50
- Track 2 : Faja_49
- Track 3 : BenchScraper_47
- Track 4 : MidnightRain_50
- Track 5 : Globfish 48
- Track 6 : Aikyam_46
- Track 7 : Sarge_44
- Track 8 : TripleJ_73
- Track 9 : Zucker_38
- Track 10 : Bauer_58
- Track 11 : Pitbull_69
- Track 12 : Khuang_35


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

The start number called the most often in the published annotations is 9 , it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bauer_58, Faja_49, Globfish_48, Khuang_35, MidnightRain_50, TripleJ_73, Zucker_38,

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

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

- Aikyam_46, BenchScraper_47, Hillester_50, Pitbull_69, RadFad_50, Sarge_44,


## Summary by start number:

Start 2:

- Found in 1 of 13 ( $7.7 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Aikyam_46 (AY),

Start 6:

- Found in 3 of 13 ( $23.1 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: BenchScraper_47 (AY), Hillester_50 (AY), RadFad_50 (AY),

Start 9:

- Found in 7 of 13 ( $53.8 \%$ ) of genes in pham
- Manual Annotations of this start: 5 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Bauer_58 (FN), Faja 49 (AY), Globfish_48 (AY), Khuang_35 (UNK), MidnightRain_50 (AY), TripleJ_73 (FJ), Zucker_38 (FN),

Start 12:

- Found in 1 of 13 (7.7\%) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Pitbull_69 (FQ),

Start 19:

- Found in 1 of 13 (7.7\% ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Sarge_44 (FB),


## Summary by clusters:

There are 6 clusters represented in this pham: FQ, FB, AY, FJ, UNK, FN,
Info for manual annotations of cluster AY:

- Start number 6 was manually annotated 1 time for cluster AY.
- Start number 9 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster FB:

- Start number 19 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FJ:
-Start number 9 was manually annotated 1 time for cluster FJ.
Info for manual annotations of cluster FN:

- Start number 9 was manually annotated 2 times for cluster FN.


## Gene Information:

Gene: Aikyam_46 Start: 27868, Stop: 28284, Start Num: 2

Candidate Starts for Aikyam_46:
(2, 27868), (3, 27877), (10, 27982), (26, 28168), (28, 28234),
Gene: Bauer_58 Start: 32955, Stop: 33227, Start Num: 9
Candidate Starts for Bauer 58:
(Start: 9 @32955 has 5 MA's), (13, 32964), (15, 32997), (22, 33093), (25, 33135), (28, 33198), (31, 33207), (32, 33210),

Gene: BenchScraper_47 Start: 29609, Stop: 30001, Start Num: 6
Candidate Starts for BenchScraper_47:
(1, 29546), (Start: 6 @29609 has 1 MA's), (11, 29678), (16, 29732), (29, 29927), (33, 29945),
Gene: Faja_49 Start: 31772, Stop: 32071, Start Num: 9
Candidate Starts for Faja_49:
$(5,31706),(8,31736),($ Start: 9 @31772 has 5 MA's), (13, 31781), (23, 31919), (26, 31955), (28, 32021),

Gene: Globfish_48 Start: 30153, Stop: 30452, Start Num: 9
Candidate Starts for Globfish_48:
(Start: 9 @30153 has 5 MA's), $(13,30162),(26,30336),(28,30402)$,
Gene: Hillester_50 Start: 30882, Stop: 31274, Start Num: 6
Candidate Starts for Hillester_50:
(Start: 6 @30882 has 1 MA's), (7, 30891), (11, 30951), (16, 31005), (29, 31200), (33, 31218),
Gene: Khuang_35 Start: 24689, Stop: 24417, Start Num: 9
Candidate Starts for Khuang_35:
(Start: 9 @24689 has 5 MA's), (13, 24680), (22, 24551), (25, 24509), (28, 24446), (31, 24437), (32, 24434),

Gene: MidnightRain_50 Start: 31295, Stop: 31621, Start Num: 9
Candidate Starts for MidnightRain_50:
(Start: 9 @31295 has 5 MA's), (13, 31304), (18, 31382), (20, 31397), (24, 31460), (37, 31604),
Gene: Pitbull_69 Start: 37588, Stop: 37938, Start Num: 12
Candidate Starts for Pitbull_69:
$(12,37588),(18,37669),(21,37711),(22,37723),(24,37756),(27,37834),(29,37843),(30,37846)$,
(36, 37888), (38, 37921),
Gene: RadFad_50 Start: 30882, Stop: 31274, Start Num: 6
Candidate Starts for RadFad_50:
(Start: 6 @30882 has 1 MA's), (7, 30891), (11, 30951), (16, 31005), (29, 31200), (33, 31218),
Gene: Sarge_44 Start: 27015, Stop: 27275, Start Num: 19
Candidate Starts for Sarge_44:
(4, 26832), (14, 26961), (17, 27000), (Start: 19 @27015 has 1 MA's), (25, 27111), (27, 27177),
Gene: TripleJ_73 Start: 41236, Stop: 41535, Start Num: 9
Candidate Starts for TripleJ_73:
(Start: 9 @41236 has 5 MA's), (13, 41245), (22, 41374), (26, 41419), (28, 41485), (35, 41518),
Gene: Zucker_38 Start: 28357, Stop: 28737, Start Num: 9
Candidate Starts for Zucker_38:
(Start: 9 @28357 has 5 MA's), (13, 28366), (34, 28639), (39, 28720),

