Pham 163900


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 163900 Report

This analysis was run 04/28/24 on database version 559.
Pham number 163900 has 24 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Dalilpop_6
- Track 2 : GRU1_89, Flapper_6
- Track 3 : GTE5_88
- Track 4 : Turuncu_6
- Track 5 : Patio_7
- Track 6 : Lollipōp1437_6, Float294_6, Skysand_6, Ennea_6
- Track 7 : Pleakley_5, Fury_5
- Track 8 : SketchMex_38, Biskit_40
- Track 9 : Mayweather_43, Lauer_36
- Track 10 : Troje_40
- Track 11 : CherryonLim_41
- Track 12 : GenevaB15_59, Aziz_59
- Track 13 : MrMagoo_61, GardenSalsa_61
- Track 14 : Estes_61
- Track 15 : Rey_ $\overline{6}$


## 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 7 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
-Dalilpop_6, Ennea_6, Flapper_6, Float294_6, GRU1_89, Lollipop1437_6, Patio_7,
Skysand_6,
Genes that have the "Most Annotated" start but do not call it:

- GTE5_88, Turuncu_6,

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

- Aziz_59, Biskit_40, CherryonLim_41, Estes_61, Fury_5, GardenSalsa_61, GenevaB15_59, Lauer_36, Maywēather_43, MrMagoo_61, Pleakley_5, Rey_60, SketchMex_38, Troje_40,


## Summary by start number:

Start 4:

- Found in 6 of 24 ( $25.0 \%$ ) of genes in pham
- Manual Annotations of this start: 6 of 22
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Aziz_59 (M2), Estes 61 (M2),

GardenSalsa_61 (M2), GenevaB15_59 (M2), MrMagoo_61 (M2), Rey_60 (M2),
Start 5:

- Found in 2 of 24 ( $8.3 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Fury_5 (CR5), Pleakley_5 (CR5),

Start 6:

- Found in 1 of 24 ( $4.2 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Troje_40 (CT),

Start 8:

- Found in 3 of 24 ( $12.5 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: CherryonLim_41 (CT), Lauer_36 (CT), Mayweather_43 (CT),

Start 9:

- Found in 10 of 24 ( $41.7 \%$ ) of genes in pham
- Manual Annotations of this start: 7 of 22
- Called $80.0 \%$ of time when present
- Phage (with cluster) where this start called: Dalilpop_6 (CR1), Ennea_6 (CR3), Flapper_6 (CR1), Float294_6 (CR3), GRU1_89 (CR1), Lollipop1437_6 (CR3), Patio_7 (CR3), Skysand_6 (CR3),

Start 11:

- Found in 8 of 24 ( $33.3 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Biskit_40 (CT), GTE5_88 (CR1),

SketchMex_38 (CT), Turuncu_6 (CR1),

## Summary by clusters:

There are 5 clusters represented in this pham: CR3, CT, CR1, CR5, M2,
Info for manual annotations of cluster CR1:

- Start number 9 was manually annotated 2 times for cluster CR1.
- Start number 11 was manually annotated 1 time for cluster CR1.

Info for manual annotations of cluster CR3:

- Start number 9 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR5:

- Start number 5 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CT:

- Start number 6 was manually annotated 1 time for cluster CT.
- Start number 8 was manually annotated 3 times for cluster CT.
- Start number 11 was manually annotated 2 times for cluster CT.

Info for manual annotations of cluster M2:

- Start number 4 was manually annotated 6 times for cluster M2.


## Gene Information:

Gene: Aziz_59 Start: 40149, Stop: 40421, Start Num: 4 Candidate Starts for Aziz_59:
(2, 40026), (Start: 4 @40149 has 6 MA's), (12, 40212), (18, 40269), (21, 40320), (29, 40380),
Gene: Biskit_40 Start: 27315, Stop: 27118, Start Num: 11
Candidate Starts for Biskit_40:
(Start: 11 @27315 has 3 MA's), (16, 27267), (19, 27237), (20, 27219), (21, 27213), (23, 27189), (28, 27165), (31, 27147), (33, 27129),

Gene: CherryonLim_41 Start: 29932, Stop: 29723, Start Num: 8
Candidate Starts for CherryonLim_41:
(7, 29935), (Start: 8 @29932 has 3 MA's), (13, 29896), (15, 29875), (17, 29863), (25, 29773), (27, 29764), (29, 29749),

Gene: Dalilpop_6 Start: 4569, Stop: 4790, Start Num: 9
Candidate Starts for Dalilpop_6:
(Start: 9 @4569 has 7 MA's), (Start: 11 @4581 has 3 MA's), (14, 4617), (26, 4728), (29, 4746), (30, 4749),

Gene: Ennea_6 Start: 4376, Stop: 4606, Start Num: 9
Candidate Starts for Ennea_6:
(Start: 9 @4376 has 7 MA's), (21, 4490), (22, 4496), (24, 4520), (26, 4535), (30, 4556),
Gene: Estes_61 Start: 40406, Stop: 40678, Start Num: 4
Candidate Starts for Estes_61:
(1, 40280), (2, 40283), (Start: 4 @40406 has 6 MA's), (12, 40469), (18, 40526), (21, 40577), (24, 40604), (29, 40637),

Gene: Flapper_6 Start: 3864, Stop: 4085, Start Num: 9
Candidate Starts for Flapper_6:
(Start: 9 @3864 has 7 MA's), (Start: 11 @3876 has 3 MA's), (14, 3912), (26, 4023), (30, 4044),
Gene: Float294_6 Start: 4362, Stop: 4592, Start Num: 9 Candidate Starts for Float294_6:
(Start: 9 @4362 has 7 MA's), (21, 4476), (22, 4482), (24, 4506), (26, 4521), (30, 4542),
Gene: Fury_5 Start: 2948, Stop: 3193, Start Num: 5
Candidate Starts for Fury_5:
(3, 2900), (Start: 5 @2948 has 2 MA's), (10, 2972), (20, 3077), (21, 3083), (32, 3155),
Gene: GRU1_89 Start: 62882, Stop: 63103, Start Num: 9
Candidate Starts for GRU1_89:
(Start: 9 @62882 has 7 MA's), (Start: 11 @62894 has 3 MA's), (14, 62930), (26, 63041), (30, 63062),
Gene: GTE5_88 Start: 63789, Stop: 63998, Start Num: 11
Candidate Starts for GTE5_88:
(Start: 9 @63777 has 7 MA's), (Start: 11 @63789 has 3 MA's), (14, 63825), (26, 63936), (30, 63957),
Gene: GardenSalsa_61 Start: 40556, Stop: 40828, Start Num: 4
Candidate Starts for GardenSalsa_61:
(2, 40433), (Start: 4 @40556 has 6 MA's), (12, 40619), (18, 40676), (21, 40727), (24, 40754), (29, 40787),

Gene: GenevaB15_59 Start: 40149, Stop: 40421, Start Num: 4
Candidate Starts for GenevaB15_59:
(2, 40026), (Start: 4 @40149 has 6 MA's), (12, 40212), (18, 40269), (21, 40320), (29, 40380),
Gene: Lauer_36 Start: 29997, Stop: 29788, Start Num: 8
Candidate Starts for Lauer_36:
(7, 30000), (Start: 8 @29997 has 3 MA's), (13, 29961), (15, 29940), (17, 29928), (25, 29838), (27, 29829), (29, 29814),

Gene: Lollipop1437_6 Start: 4364, Stop: 4594, Start Num: 9
Candidate Starts for Lollipop1437_6:
(Start: 9 @4364 has 7 MA's), (21, 4478), (22, 4484), (24, 4508), (26, 4523), (30, 4544),
Gene: Mayweather_43 Start: 29791, Stop: 29582, Start Num: 8
Candidate Starts for Mayweather_43:
(7, 29794), (Start: 8 @29791 has 3 MA's), (13, 29755), (15, 29734), (17, 29722), (25, 29632), (27, 29623), (29, 29608),

Gene: MrMagoo_61 Start: 40556, Stop: 40828, Start Num: 4
Candidate Starts for MrMagoo_61:
(2, 40433), (Start: 4 @40556 has 6 MA's), (12, 40619), (18, 40676), (21, 40727), (24, 40754), (29, 40787),

Gene: Patio_7 Start: 5032, Stop: 5262, Start Num: 9
Candidate Starts for Patio_7:
(Start: 9 @ 5032 has 7 MA's), $(21,5146),(22,5152),(23,5173),(24,5176),(26,5191),(30,5212)$,
Gene: Pleakley_5 Start: 2948, Stop: 3193, Start Num: 5
Candidate Starts for Pleakley_5:
(3, 2900), (Start: 5 @2948 has 2 MA's), (10, 2972), (20, 3077), (21, 3083), (32, 3155),
Gene: Rey_60 Start: 40431, Stop: 40703, Start Num: 4
Candidate Starts for Rey_60:
(2, 40308), (Start: 4 @40431 has 6 MA's), (12, 40494), (18, 40551), (21, 40602),
Gene: SketchMex_38 Start: 27315, Stop: 27118, Start Num: 11 Candidate Starts for SketchMex_38:
(Start: 11 @27315 has 3 MA's), (16, 27267), (19, 27237), (20, 27219), (21, 27213), (23, 27189), (28, 27165), (31, 27147), (33, 27129),

Gene: Skysand_6 Start: 4364, Stop: 4594, Start Num: 9 Candidate Starts for Skysand_6:
(Start: 9 @4364 has 7 MA's), (21, 4478), (22, 4484), (24, 4508), (26, 4523), (30, 4544),
Gene: Troje_40 Start: 27694, Stop: 27467, Start Num: 6
Candidate Starts for Troje_40:
(Start: 6 @27694 has 1 MA's), (Start: 11 @27664 has 3 MA's), (16, 27616), (19, 27586), (20, 27568), (21, 27562), (23, 27538), (28, 27514), (31, 27496),

Gene: Turuncu_6 Start: 3772, Stop: 3981, Start Num: 11
Candidate Starts for Turuncu_6:
(Start: 9 @3760 has 7 MA's), (Start: 11 @3772 has 3 MA's), (14, 3808), (26, 3919), (29, 3937), (30, 3940),

