Pham 162447


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 162447 Report

This analysis was run 04/28/24 on database version 559.
Pham number 162447 has 8 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Gibbles_61, PatrickStar_63, Orchid_62, Kampe_63
- Track 2 : RobinSparkles_66
- Track 3 : Camerico_68
- Track 4 : Mbo2_54
- Track 5 : Reynāuld_57


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

The start number called the most often in the published annotations is 4, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Camerico_68, Gibbles_61, Kampe_63, Orchid_62, PatrickStar_63,

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

- RobinSparkles_66,

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

- Mbo2_54, Reynauld_57,


## Summary by start number:

Start 2:

- Found in 5 of 8 ( $62.5 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called $20.0 \%$ of time when present
- Phage (with cluster) where this start called: RobinSparkles_66 (CX),

Start 3:

- Found in 1 of 8 ( $12.5 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Mbo2_54 (singleton),

Start 4:

- Found in 6 of 8 (75.0\%) of genes in pham
- Manual Annotations of this start: 5 of 7
- Called $83.3 \%$ of time when present
- Phage (with cluster) where this start called: Camerico_68 (DF), Gibbles_61 (CX),

Kampe_63 (CX), Orchid_62 (CX), PatrickStar_63 (CX),
Start 5:

- Found in 7 of 8 ( $87.5 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called $14.3 \%$ of time when present
- Phage (with cluster) where this start called: Reynauld_57 (singleton),


## Summary by clusters:

There are 3 clusters represented in this pham: DF, singleton, CX,
Info for manual annotations of cluster CX:

- Start number 2 was manually annotated 1 time for cluster CX.
- Start number 4 was manually annotated 4 times for cluster CX.

Info for manual annotations of cluster DF:

- Start number 4 was manually annotated 1 time for cluster DF.


## Gene Information:

Gene: Camerico_68 Start: 56949, Stop: 56140, Start Num: 4
Candidate Starts for Camerico_68:
(Start: 4 @56949 has 5 MA's), (Start: 5 @56943 has 1 MA's), (13, 56766), (14, 56730), (15, 56718),
$(16,56715),(19,56622),(21,56613),(25,56499),(29,56463),(30,56379)$,
Gene: Gibbles_61 Start: 53371, Stop: 52601, Start Num: 4
Candidate Starts for Gibbles_61:
(Start: 2 @ 53407 has 1 MA's), (Start: 4 @ 53371 has 5 MA's), (Start: 5 @ 53365 has 1 MA's), (6, $53299),(7,53284),(10,53215),(14,53152),(18,53092),(24,52957),(27,52909),(37,52612)$,

Gene: Kampe_63 Start: 53354, Stop: 52584, Start Num: 4
Candidate Starts for Kampe_63:
(Start: 2 @53390 has 1 MA's), (Start: 4 @53354 has 5 MA's), (Start: 5 @53348 has 1 MA's), (6, 53282), (7, 53267), (10, 53198), (14, 53135), (18, 53075), (24, 52940), (27, 52892), (37, 52595),

Gene: Mbo2_54 Start: 44149, Stop: 43304, Start Num: 3 Candidate Starts for Mbo2_54:
(3, 44149), (6, 44074), (11, 43990), (14, 43933), (16, 43918), (17, 43894), (22, 43798), (23, 43744), (26, 43696), (28, 43684), (31, 43543), (32, 43495), (33, 43474), (34, 43408), (35, 43387),

Gene: Orchid_62 Start: 53355, Stop: 52585, Start Num: 4
Candidate Starts for Orchid_62:
(Start: 2 @53391 has 1 MA's), (Start: 4 @53355 has 5 MA's), (Start: 5 @53349 has 1 MA's), (6, $53283),(7,53268),(10,53199),(14,53136),(18,53076),(24,52941),(27,52893),(37,52596)$,

Gene: PatrickStar_63 Start: 53354, Stop: 52584, Start Num: 4
Candidate Starts for PatrickStar_63:
(Start: 2 @ 53390 has 1 MA's), (Start: 4 @ 53354 has 5 MA's), (Start: 5 @ 53348 has 1 MA's), (6, $53282)$, (7, 53267), (10, 53198), (14, 53135), (18, 53075), $(24,52940)$, $(27,52892),(37,52595)$,

Gene: Reynauld_57 Start: 51608, Stop: 50766, Start Num: 5
Candidate Starts for Reynauld_57:
(1, 51695), (Start: 5 @51608 has 1 MA's), (8, 51518), (9, 51500), (12, 51449), (14, 51389), (20, 51278), $(24,51182),(36,50777)$,

Gene: RobinSparkles_66 Start: 53942, Stop: 53136, Start Num: 2
Candidate Starts for RobinSparkles_66:
(Start: 2 @53942 has 1 MA's), (Start: 4 @53906 has 5 MA's), (Start: 5 @53900 has 1 MA's), (6, $53834)$, (7, 53819), (10, 53750), (14, 53687), (18, 53627), $(24,53492),(27,53444),(37,53147)$,

