Pham 107353


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 107353 Report

This analysis was run 03/30/24 on database version 556.
Pham number 107353 has 6 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Faust_49
- Track 2 : SeresāTree 48
- Track 3 : BillNye_44, C̄ircinus_46
- Track 4 : Wakanda 45
- Track 5 : Muntaha_45


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

The start number called the most often in the published annotations is 2 , it was called in 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Faust_49, Muntaha_45, Wakanda_45,

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

- BillNye_44, Circinus_46, SeresaTree_48,

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

## Summary by start number:

Start 1:

- Found in 2 of 6 ( 33.3\% ) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: BillNye_44 (BK2), Circinus_46 (BK2),

Start 2:

- Found in 6 of $6(100.0 \%)$ of genes in pham
- Manual Annotations of this start: 3 of 5
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Faust_49 (BK1), Muntaha_45 (BK2), Wakanda_45 (BK2),

Start 3:

- Found in 6 of 6 ( $100.0 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called $16.7 \%$ of time when present
- Phage (with cluster) where this start called: SeresaTree_48 (BK1),


## Summary by clusters:

There are 2 clusters represented in this pham: BK1, BK2,
Info for manual annotations of cluster BK1:
-Start number 2 was manually annotated 1 time for cluster BK1.
Info for manual annotations of cluster BK2:

- Start number 1 was manually annotated 2 times for cluster BK2.
-Start number 2 was manually annotated 2 times for cluster BK2.


## Gene Information:

Gene: BillNye_44 Start: 44523, Stop: 45212, Start Num: 1
Candidate Starts for BillNye_44:
(Start: 1 @44523 has 2 MA's), (Start: 2 @44529 has 3 MA's), (3, 44550), (6, 44574), (8, 44655), (9, 44673), (10, 44676), (15, 44820), (20, 45006), (23, 45075), (24, 45078), (25, 45108),

Gene: Circinus_46 Start: 44662, Stop: 45351, Start Num: 1
Candidate Starts for Circinus_46:
(Start: 1 @44662 has 2 MA's), (Start: 2 @44668 has 3 MA's), (3, 44689), (6, 44713), (8, 44794), (9, 44812), (10, 44815), (15, 44959), (20, 45145), (23, 45214), (24, 45217), (25, 45247),

Gene: Faust_49 Start: 42596, Stop: 43243, Start Num: 2
Candidate Starts for Faust_49:
(Start: 2 @42596 has 3 MA's), (3, 42617), (11, 42737), (12, 42782), (16, 42869), (17, 42899), (19, 42932), (21, 43049), (22, 43088),

Gene: Muntaha_45 Start: 42938, Stop: 43612, Start Num: 2
Candidate Starts for Muntaha_45:
(Start: 2 @42938 has 3 MA's), (3, 42959), (4, 42968), (5, 42977), (7, 43043), (8, 43064), (9, 43082), (10, 43085), (13, 43154), (18, 43274), (20, 43406), (24, 43478), (25, 43508),

Gene: SeresaTree_48 Start: 42007, Stop: 42633, Start Num: 3
Candidate Starts for SeresaTree_48:
(Start: 2 @41986 has 3 MA's), (3, 42007), (11, 42127), (12, 42172), (16, 42259), (17, 42289), (21, 42439), (22, 42478),

Gene: Wakanda_45 Start: 42876, Stop: 43550, Start Num: 2
Candidate Starts for Wakanda_45:
(Start: 2 @42876 has 3 MA's), (3, 42897), (4, 42906), (5, 42915), (7, 42981), (9, 43020), (10, 43023), (14, 43140), (18, 43212), (20, 43344), (24, 43416), (25, 43446),

