Pham 87503



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 87503 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87503 has 10 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Aoka_38
- Track 2 : Mangethe_53, Phegasus_53, Majeke_53, Zilizebeth_53
- Track 3 : StevieRay 53
- Track 4 : GreaseLigh̄tnin_54, Bunnies_54, Ksquared_53
- Track 5 : Pine5_04


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

Genes that call this "Most Annotated" start:

- Bunnies_54, GreaseLightnin_54, Ksquared_53, Majeke_53, Mangethe_53,

Phegasus_53, StevieRay_53, Zilizebeth_53,
Genes that have the "Most Annotated" start but do not call it:
-

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

- Aoka_38, Pine5_04,


## Summary by start number:

Start 2:

- Found in 1 of 10 ( $10.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Aoka_38 (FO),

Start 3:

- Found in 1 of 10 ( $10.0 \%$ ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0\% of time when present
- Phage (with cluster) where this start called: Pine5_04 (singleton),

Start 4:

- Found in 8 of 10 ( $80.0 \%$ ) of genes in pham
- Manual Annotations of this start: 8 of 9
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Bunnies_54 (P1), GreaseLightnin 54 (P1), Ksquared_53 (P1), Majeke_53 (P1), Mangethe_53 (P1), Phegasus_53 (P1), StevieRay_53 (P1), Zilizebeth_53 (P1),


## Summary by clusters:

There are 3 clusters represented in this pham: singleton, P1, FO,
Info for manual annotations of cluster FO:

- Start number 2 was manually annotated 1 time for cluster FO.

Info for manual annotations of cluster P1:

- Start number 4 was manually annotated 8 times for cluster P1.


## Gene Information:

Gene: Aoka_38 Start: 29034, Stop: 29561, Start Num: 2
Candidate Starts for Aoka_38:
(Start: 2 @29034 has 1 MA's), (6, 29127), (11, 29241), (12, 29250), (16, 29412), (19, 29463), (20, 29475), (22, 29493), (23, 29517), (25, 29547),

Gene: Bunnies_54 Start: 36143, Stop: 36700, Start Num: 4
Candidate Starts for Bunnies_54:
(1, 36077), (Start: 4 @36143 has 8 MA's), (7, 36230), (8, 36305), (9, 36332), (10, 36338), (13, 36362),
(14, 36371), (17, 36542), (20, 36590),
Gene: GreaseLightnin_54 Start: 36372, Stop: 36929, Start Num: 4
Candidate Starts for GreaseLightnin_54:
(1, 36306), (Start: 4 @36372 has 8 MA's), (7, 36459), (8, 36534), (9, 36561), (10, 36567), (13, 36591), (14, 36600), (17, 36771), (20, 36819),

Gene: Ksquared_53 Start: 36143, Stop: 36700, Start Num: 4
Candidate Starts for Ksquared_53:
(1, 36077), (Start: 4 @36143 has 8 MA's), (7, 36230), (8, 36305), (9, 36332), (10, 36338), (13, 36362),
(14, 36371), (17, 36542), (20, 36590),
Gene: Majeke_53 Start: 35932, Stop: 36489, Start Num: 4
Candidate Starts for Majeke_53:
(1, 35863), (Start: 4 @35932 has 8 MA's), (5, 35980), (8, 36094), (9, 36121), (17, 36331), (20, 36379), $(24,36439)$,

Gene: Mangethe_53 Start: 35932, Stop: 36489, Start Num: 4
Candidate Starts for Mangethe_53:
(1, 35863), (Start: 4 @35932 has 8 MA's), (5, 35980), (8, 36094), (9, 36121), (17, 36331), (20, 36379), $(24,36439)$,

Gene: Phegasus_53 Start: 35899, Stop: 36456, Start Num: 4
Candidate Starts for Phegasus_53:
(1, 35830), (Start: 4 @35899 has 8 MA's), (5, 35947), (8, 36061), (9, 36088), (17, 36298), (20, 36346), $(24,36406)$,

Gene: Pine5_04 Start: 3875, Stop: 3342, Start Num: 3
Candidate Starts for Pine5_04:
$(3,3875),(6,3788),(9,3683),(13,3653),(15,3587),(18,3473),(21,3413)$,
Gene: StevieRay_53 Start: 36095, Stop: 36625, Start Num: 4
Candidate Starts for StevieRay_53:
(1, 36029), (Start: 4 @36095 has 8 MA's), (7, 36182), (8, 36257), (9, 36284), (17, 36494), (20, 36542), (24, 36602),

Gene: Zilizebeth_53 Start: 35923, Stop: 36480, Start Num: 4
Candidate Starts for Zilizebeth_53:
(1, 35854), (Start: 4 @35923 has 8 MA's), (5, 35971), (8, 36085), (9, 36112), (17, 36322), (20, 36370), (24, 36430),

