Pham 88160


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 88160 Report

This analysis was run 04/05/24 on database version 557.
Pham number 88160 has 6 members, 1 are drafts.
Phages represented in each track:

- Track 1 : Lupine_77
- Track 2 : Bugger_64
- Track 3 : Lifes_6 $\overline{3}$, Cassita_67, LeeroyJenkins_70
- Track 4 : WaterT_65


## 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 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bugger_64, Cassita_67, LeeroyJenkins_70, Lifes_63, WaterT_65,

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

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

- Lupine_77,


## Summary by start number:

Start 2:

- Found in 1 of 6 ( $16.7 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Lupine_77 (ED1),

Start 4:

- Found in 5 of 6 ( 83.3\%) of genes in pham
- Manual Annotations of this start: 4 of 5
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Bugger_64 (GB), Cassita_67 (GB), LeeroyJenkins_70 (GB), Lifes_63 (GB), WaterT_65 (GB),


## Summary by clusters:

There are 2 clusters represented in this pham: ED1, GB,
Info for manual annotations of cluster ED1:
-Start number 2 was manually annotated 1 time for cluster ED1.
Info for manual annotations of cluster GB:
-Start number 4 was manually annotated 4 times for cluster GB.

## Gene Information:

Gene: Bugger_64 Start: 38116, Stop: 37484, Start Num: 4
Candidate Starts for Bugger_64:
(3, 38119), (Start: 4 @38116 has 4 MA's), (6, 38086), (7, 38068), (10, 38056), (11, 37984), (13,
37969), (16, 37906), (17, 37903), (20, 37879), (23, 37804), (24, 37801), (25, 37702), (26, 37615), (27, 37606), (28, 37531),

Gene: Cassita_67 Start: 38892, Stop: 38269, Start Num: 4
Candidate Starts for Cassita_67:
(Start: 4 @38892 has 4 MA's), (7, 38844), (11, 38760), (15, 38715), (16, 38682), (17, 38679), (18, $38670)$, (19, 38661), (20, 38655), (21, 38619), (25, 38478), (26, 38391), (27, 38382), (28, 38307),

Gene: LeeroyJenkins_70 Start: 39980, Stop: 39357, Start Num: 4
Candidate Starts for LeeroyJenkins_70:
(Start: 4 @39980 has 4 MA's), (7, 39932), (11, 39848), (15, 39803), (16, 39770), (17, 39767), (18, 39758), (19, 39749), (20, 39743), (21, 39707), (25, 39566), (26, 39479), (27, 39470), (28, 39395),

Gene: Lifes_63 Start: 36824, Stop: 36201, Start Num: 4
Candidate Starts for Lifes_63:
(Start: 4 @36824 has 4 MA's), (7, 36776), (11, 36692), (15, 36647), (16, 36614), (17, 36611), (18, 36602), (19, 36593), (20, 36587), (21, 36551), (25, 36410), (26, 36323), (27, 36314), (28, 36239),

Gene: Lupine_77 Start: 47746, Stop: 47105, Start Num: 2 Candidate Starts for Lupine_77:
(1, 47821), (Start: 2 @47746 has 1 MA's), (3, 47740), (5, 47731), (8, 47683), (9, 47680), (11, 47605), (12, 47596), (14, 47569), (15, 47560), (16, 47527), (18, 47515), (19, 47506), (22, 47428), (26, 47236), (29, 47140),

Gene: WaterT_65 Start: 38924, Stop: 38292, Start Num: 4
Candidate Starts for WaterT_65:
(3, 38927), (Start: 4 @38924 has 4 MA's), (6, 38894), (7, 38876), (10, 38864), (11, 38792), (16, $38714)$, (17, 38711), (20, 38687), (23, 38612), (24, 38609), (26, 38423), (27, 38414), (28, 38339),

