

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 158507 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158507 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : JacoRen57 14

• Track 2 : 8UZL_17, Muddy_17

Track 3 : NoShow_15Track 4 : Nergal 19

Track 5 : MalagasyRose_21

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

The start number called the most often in the published annotations is 8, it was called in 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

8UZL_17, JacoRen57_14, Muddy_17, NoShow_15,

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

Nergal_19,

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

MalagasyRose_21,

Summary by start number:

Start 4:

- 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: Nergal_19 (AG),

Start 5:

- 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: MalagasyRose 21 (AG),

Start 8:

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 80.0% of time when present
- Phage (with cluster) where this start called: 8UZL_17 (AB), JacoRen57_14 (AB), Muddy_17 (AB), NoShow_15 (AB),

Summary by clusters:

There are 2 clusters represented in this pham: AB, AG,

Info for manual annotations of cluster AB:

•Start number 8 was manually annotated 3 times for cluster AB.

Info for manual annotations of cluster AG:

- Start number 4 was manually annotated 1 time for cluster AG.
- •Start number 5 was manually annotated 1 time for cluster AG.

Gene Information:

Gene: 8UZL_17 Start: 10640, Stop: 11439, Start Num: 8

Candidate Starts for 8UZL 17:

(2, 10523), (3, 10532), (6, 10592), (Start: 8 @10640 has 3 MA's), (11, 10751), (15, 10787), (16, 10790), (17, 10796), (18, 10841), (19, 10847), (24, 10931), (25, 10934), (27, 10958), (31, 11015), (32, 11048), (33, 11060), (34, 11066), (38, 11129), (39, 11138), (41, 11270), (43, 11321), (44, 11327), (45, 11345), (52, 11432),

Gene: JacoRen57_14 Start: 9095, Stop: 9897, Start Num: 8

Candidate Starts for JacoRen57 14:

(Start: 8 @ 9095 has 3 MA's), (10, 9131), (16, 9245), (17, 9251), (18, 9296), (22, 9338), (25, 9389), (27, 9413), (28, 9428), (33, 9515), (34, 9521), (35, 9533), (43, 9776), (47, 9827),

Gene: MalagasyRose_21 Start: 11606, Stop: 12456, Start Num: 5

Candidate Starts for MalagasyRose_21:

(1, 11561), (Start: 5 @11606 has 1 MA's), (9, 11684), (12, 11792), (13, 11798), (16, 11825), (20, 11900), (22, 11918), (26, 11990), (29, 12026), (36, 12137), (37, 12143), (39, 12167), (40, 12230), (41, 12293), (42, 12308), (49, 12422), (50, 12431), (51, 12446),

Gene: Muddy 17 Start: 10848, Stop: 11647, Start Num: 8

Candidate Starts for Muddy 17:

 $\begin{array}{l} (2,\,10731),\,(3,\,10740),\,(6,\,10800),\,(Start:\,8\,\,@\,10848\,\,has\,\,3\,\,MA's),\,(11,\,10959),\,(15,\,10995),\,(16,\,10998),\,(17,\,11004),\,(18,\,11049),\,(19,\,11055),\,(24,\,11139),\,(25,\,11142),\,(27,\,11166),\,(31,\,11223),\,(32,\,11256),\,(33,\,11268),\,(34,\,11274),\,(38,\,11337),\,(39,\,11346),\,(41,\,11478),\,(43,\,11529),\,(44,\,11535),\,(45,\,11553),\,(52,\,11640), \end{array}$

Gene: Nergal 19 Start: 12091, Stop: 12935, Start Num: 4

Candidate Starts for Nergal 19:

(2, 12052), (Start: 4 @ 12091 has 1 MA's), (7, 12154), (Start: 8 @ 12163 has 3 MA's), (12, 12271), (13, 12277), (14, 12298), (20, 12379), (21, 12388), (23, 12433), (26, 12469), (29, 12505), (30, 12517), (44, 12835), (46, 12862), (48, 12880),

Gene: NoShow_15 Start: 9392, Stop: 10209, Start Num: 8

Candidate Starts for NoShow_15:

(Start: 8 @ 9392 has 3 MA's), (18, 9599), (21, 9632), (22, 9641), (25, 9692), (27, 9716), (28, 9731), (43,

10079), (44, 10085),