

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 164121 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164121 has 9 members, 0 are drafts.

Phages represented in each track:

• Track 1: Imvubu 69

Track 2 : LilMcDreamy\_70

Track 3 : Baee\_72

Track 4 : Suigeneris\_73

• Track 5 : Rich\_71

Track 6 : Donny\_73

• Track 7 : Serendipitous 70

• Track 8 : Funsized\_72

• Track 9 : Knocker\_72

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

The start number called the most often in the published annotations is 33, it was called in 2 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Funsized\_72, Knocker\_72,

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

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

• Baee\_72, Donny\_73, Imvubu\_69, LilMcDreamy\_70, Rich\_71, Serendipitous\_70, Suigeneris\_73,

# Summary by start number:

#### Start 22:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Rich\_71 (B5),

#### Start 27:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Donny\_73 (B5), Suigeneris\_73 (B5),

### Start 30:

- Found in 1 of 9 (11.1%) 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: LilMcDreamy\_70 (B12),

### Start 31:

- Found in 1 of 9 (11.1%) 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: Baee\_72 (B5),

#### Start 32:

- Found in 1 of 9 (11.1%) 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: Serendipitous\_70 (B5),

#### Start 33:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized 72 (B9), Knocker 72 (B9),

#### Start 36:

- Found in 2 of 9 (22.2%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Imvubu 69 (B10),

## Summary by clusters:

There are 4 clusters represented in this pham: B5, B12, B9, B10,

Info for manual annotations of cluster B10:

•Start number 36 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B12:

•Start number 30 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B5:

- •Start number 22 was manually annotated 1 time for cluster B5.
- •Start number 27 was manually annotated 2 times for cluster B5.
- •Start number 31 was manually annotated 1 time for cluster B5.
- •Start number 32 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster B9:

•Start number 33 was manually annotated 2 times for cluster B9.

## Gene Information:

Gene: Baee\_72 Start: 60813, Stop: 61436, Start Num: 31

Candidate Starts for Baee 72:

(8, 60642), (9, 60657), (18, 60714), (Start: 22 @60735 has 1 MA's), (Start: 31 @60813 has 1 MA's), (52, 61101), (53, 61134), (54, 61152), (59, 61227), (62, 61326),

Gene: Donny 73 Start: 59741, Stop: 60397, Start Num: 27

Candidate Starts for Donny\_73:

(5, 59549), (8, 59597), (26, 59732), (Start: 27 @59741 has 2 MA's), (42, 60035), (47, 60077), (48, 60092), (50, 60116), (51, 60128), (52, 60137), (54, 60188), (59, 60263), (62, 60368),

Gene: Funsized 72 Start: 61973, Stop: 62629, Start Num: 33

Candidate Starts for Funsized 72:

(4, 61688), (6, 61721), (7, 61751), (10, 61781), (12, 61790), (15, 61805), (16, 61811), (21, 61850), (Start: 22 @61853 has 1 MA's), (24, 61868), (Start: 33 @61973 has 2 MA's), (34, 62003), (35, 62021), (Start: 36 @62033 has 1 MA's), (39, 62114), (40, 62120), (47, 62240), (48, 62255), (51, 62291), (52, 62300), (56, 62384), (58, 62411), (63, 62534), (64, 62555), (66, 62600),

Gene: Imvubu\_69 Start: 58708, Stop: 59286, Start Num: 36

Candidate Starts for Imvubu\_69:

(8, 58453), (14, 58495), (17, 58507), (23, 58552), (25, 58582), (28, 58597), (29, 58609), (Start: 36 @58708 has 1 MA's), (37, 58768), (39, 58789), (40, 58795), (42, 58864), (47, 58915), (48, 58930), (49, 58933), (55, 59041), (60, 59170), (65, 59236),

Gene: Knocker\_72 Start: 61176, Stop: 61832, Start Num: 33

Candidate Starts for Knocker\_72:

(2, 60855), (3, 60861), (7, 60951), (8, 60960), (11, 60984), (14, 61008), (16, 61017), (17, 61020), (20, 61044), (21, 61056), (Start: 22 @61059 has 1 MA's), (23, 61065), (Start: 33 @61176 has 2 MA's), (34, 61206), (35, 61224), (37, 61296), (39, 61317), (40, 61323), (41, 61386), (45, 61404), (47, 61440), (48, 61455), (52, 61500), (56, 61584), (58, 61611), (60, 61707), (61, 61731),

Gene: LilMcDreamy\_70 Start: 59640, Stop: 60260, Start Num: 30

Candidate Starts for LilMcDreamy\_70:

(1, 59286), (8, 59457), (13, 59502), (19, 59538), (Start: 30 @59640 has 1 MA's), (38, 59748), (39, 59760), (40, 59766), (42, 59835), (44, 59841), (46, 59880), (47, 59886), (48, 59901), (57, 60042),

Gene: Rich 71 Start: 60783, Stop: 61481, Start Num: 22

Candidate Starts for Rich 71:

(6, 60651), (8, 60690), (10, 60708), (18, 60762), (Start: 22 @60783 has 1 MA's), (52, 61146), (53, 61179), (54, 61197), (59, 61272), (62, 61371),

Gene: Serendipitous\_70 Start: 59224, Stop: 59772, Start Num: 32

Candidate Starts for Serendipitous 70:

(8, 59041), (13, 59080), (Start: 22 @59134 has 1 MA's), (Start: 32 @59224 has 1 MA's), (43, 59407), (47, 59446), (48, 59461), (51, 59497), (52, 59506), (54, 59557), (59, 59632), (62, 59734),

Gene: Suigeneris\_73 Start: 59932, Stop: 60579, Start Num: 27

Candidate Starts for Suigeneris 73:

 $\begin{array}{l} (5,\,59740),\,(8,\,59788),\,(10,\,59806),\,(18,\,59860),\,(Start:\,22\,\,@59881\,\,has\,\,1\,\,MA's),\,(26,\,59923),\,(Start:\,27\,\,@59932\,\,has\,\,2\,\,MA's),\,(42,\,60220),\,(47,\,60262),\,(48,\,60277),\,(50,\,60301),\,(51,\,60313),\,(52,\,60322),\,(54,\,60373),\,(59,\,60448),\,(62,\,60553), \end{array}$