

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 196891 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196891 has 18 members, 2 are drafts.

Phages represented in each track:

- Track 1: Daubenski 114
- Track 2: WhereRU\_140, Persimmon\_141
- Track 3: WhereRU\_158, Braelyn\_161, Persimmon\_159, Navo\_157
- Track 4 : Elmer 149
- Track 5 : Spilled 47
- Track 6 : JimJam\_171
- Track 7 : JimJam 149
- Track 8 : Mugiwara\_178
- Track 9 : Gibbi 50
- Track 10 : Tomas 48
- Track 11 : UNTPL 74
- Track 12 : Forrest 176
- Track 13: MeganTheeKilla 153
- Track 14 : Magritte\_112

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

The start number called the most often in the published annotations is 17, it was called in 4 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Braelyn\_161, Navo\_157, Persimmon\_159, WhereRU\_158,

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

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

• Daubenski\_114, Elmer\_149, Forrest\_176, Gibbi\_50, JimJam\_149, JimJam\_171, Magritte\_112, MeganTheeKilla\_153, Mugiwara\_178, Persimmon\_141, Spilled\_47, Tomas\_48, UNTPL\_74, WhereRU\_140,

## Summary by start number:

Start 11:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elmer\_149 (BE2),

## Start 12:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MeganTheeKilla\_153 (BK1),

## Start 15:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JimJam\_171 (BE2),

#### Start 17:

- Found in 4 of 18 (22.2%) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Braelyn\_161 (BE1), Navo\_157 (BE1), Persimmon\_159 (BE1), WhereRU\_158 (BE1),

### Start 18:

- Found in 4 of 18 (22.2%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Forrest\_176 (BK1), Magritte\_112 (singleton), UNTPL\_74 (BH),

#### Start 23:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tomas\_48 (BE2),

#### Start 24:

- Found in 4 of 18 (22.2%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daubenski\_114 (BE1), Gibbi\_50 (BE2), JimJam\_149 (BE2), Spilled\_47 (BE2),

### Start 27:

- Found in 4 of 18 (22.2%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Mugiwara 178 (BE2),

## Start 29:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 16

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Persimmon\_141 (BE1), WhereRU\_140 (BE1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: BE2, singleton, BE1, BH, BK1,

Info for manual annotations of cluster BE1:

- •Start number 17 was manually annotated 4 times for cluster BE1.
- •Start number 24 was manually annotated 1 time for cluster BE1.
- •Start number 29 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BE2:

- •Start number 11 was manually annotated 1 time for cluster BE2.
- •Start number 15 was manually annotated 1 time for cluster BE2.
- •Start number 23 was manually annotated 1 time for cluster BE2.
- •Start number 24 was manually annotated 2 times for cluster BE2.

Info for manual annotations of cluster BH:

•Start number 18 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster BK1:

- •Start number 12 was manually annotated 1 time for cluster BK1.
- •Start number 18 was manually annotated 1 time for cluster BK1.

### Gene Information:

Gene: Braelyn\_161 Start: 91079, Stop: 91384, Start Num: 17

Candidate Starts for Braelyn 161:

(Start: 17 @91079 has 4 MA's), (21, 91100), (25, 91112), (48, 91277), (52, 91301),

Gene: Daubenski 114 Start: 77002, Stop: 77292, Start Num: 24

Candidate Starts for Daubenski\_114:

 $(1,\,76717),\,(2,\,76738),\,(3,\,76753),\,(5,\,76777),\,(10,\,76873),\,(Start:\,24\,\,@\,77002\,\,has\,\,3\,\,MA's),\,(36,\,76717),\,(16,\,76873$ 

77092), (44, 77161), (52, 77191), (58, 77257),

Gene: Elmer\_149 Start: 88649, Stop: 88993, Start Num: 11

Candidate Starts for Elmer 149:

(4, 88460), (5, 88475), (6, 88508), (7, 88535), (8, 88550), (Start: 11 @88649 has 1 MA's), (28, 88733),

(44, 88856), (62, 88982),

Gene: Forrest\_176 Start: 93990, Stop: 94280, Start Num: 18

Candidate Starts for Forrest\_176:

(Start: 18 @93990 has 3 MA's), (26, 94017), (27, 94029), (33, 94074), (34, 94083), (38, 94113), (40, 94149), (59, 94269),

Gene: Gibbi 50 Start: 22359, Stop: 22634, Start Num: 24

Candidate Starts for Gibbi 50:

(Start: 24 @22359 has 3 MA's), (38, 22458), (39, 22464), (56, 22584),

Gene: JimJam\_171 Start: 92515, Stop: 92871, Start Num: 15

Candidate Starts for JimJam\_171:

(9, 92407), (Start: 15 @92515 has 1 MA's), (22, 92545), (37, 92647), (45, 92701), (47, 92704), (51, 92731), (63, 92860),

Gene: JimJam 149 Start: 86635, Stop: 86916, Start Num: 24

Candidate Starts for JimJam\_149:

(Start: 24 @86635 has 3 MA's), (46, 86797), (60, 86905),

Gene: Magritte\_112 Start: 72994, Stop: 73305, Start Num: 18

Candidate Starts for Magritte 112:

(Start: 18 @72994 has 3 MA's), (26, 73030), (27, 73042), (35, 73102), (43, 73168), (50, 73201), (53, 73228), (57, 73270),

Gene: MeganTheeKilla\_153 Start: 84120, Stop: 84458, Start Num: 12

Candidate Starts for MeganTheeKilla\_153:

(Start: 12 @84120 has 1 MA's), (13, 84123), (20, 84165), (31, 84234), (42, 84327), (44, 84333), (54, 84387), (61, 84450),

Gene: Mugiwara\_178 Start: 93339, Stop: 93584, Start Num: 27

Candidate Starts for Mugiwara\_178:

(Start: 18 @93300 has 3 MA's), (26, 93327), (27, 93339), (40, 93459), (55, 93546),

Gene: Navo\_157 Start: 90460, Stop: 90765, Start Num: 17

Candidate Starts for Navo\_157:

(Start: 17 @90460 has 4 MA's), (21, 90481), (25, 90493), (48, 90658), (52, 90682),

Gene: Persimmon 141 Start: 85415, Stop: 85672, Start Num: 29

Candidate Starts for Persimmon 141:

(14, 85337), (16, 85355), (Start: 29 @85415 has 2 MA's), (32, 85442), (49, 85553),

Gene: Persimmon\_159 Start: 89776, Stop: 90081, Start Num: 17

Candidate Starts for Persimmon 159:

(Start: 17 @89776 has 4 MA's), (21, 89797), (25, 89809), (48, 89974), (52, 89998),

Gene: Spilled\_47 Start: 22319, Stop: 22594, Start Num: 24

Candidate Starts for Spilled\_47:

(Start: 24 @22319 has 3 MA's), (30, 22355), (38, 22418), (39, 22424), (56, 22544),

Gene: Tomas\_48 Start: 24558, Stop: 24836, Start Num: 23

Candidate Starts for Tomas 48:

(19, 24552), (Start: 23 @24558 has 1 MA's), (30, 24597), (38, 24660), (39, 24666), (41, 24702),

Gene: UNTPL 74 Start: 50402, Stop: 50737, Start Num: 18

Candidate Starts for UNTPL 74:

(Start: 18 @50402 has 3 MA's), (26, 50423), (27, 50435), (47, 50576), (61, 50696), (63, 50732),

Gene: WhereRU\_140 Start: 86167, Stop: 86424, Start Num: 29

Candidate Starts for WhereRU\_140:

(14, 86089), (16, 86107), (Start: 29 @86167 has 2 MA's), (32, 86194), (49, 86305),

Gene: WhereRU 158 Start: 90528, Stop: 90833, Start Num: 17

Candidate Starts for WhereRU\_158:

(Start: 17 @90528 has 4 MA's), (21, 90549), (25, 90561), (48, 90726), (52, 90750),