Pham 164020


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 164020 Report

This analysis was run 04/28/24 on database version 559.
Pham number 164020 has 15 members, 3 are drafts.
Phages represented in each track:

- Track 1 : Daubenski_133
- Track 2 : Angela_134, MulchMansion_133
- Track 3 : LukeCāge_142, Enygma_1444, StarPlatinum_146
- Track 4 : Mugiwara-149
- Track 5 : Elmer_149
- Track 6 : Wofford_137
- Track 7 : Beuffert 176, Blueeyedbeauty_178
- Track 8 : Faust_175
- Track 9 : SeresāTree 177
- Track 10 : Limpid_177
- Track 11 : Annadreamy_170


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

The start number called the most often in the published annotations is 9 , it was called in 4 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beuffert_176, Blueeyedbeauty_178, Faust_175, Limpid_177, SeresaTree_177,

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

- Annadreamy_170, Daubenski_133,

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

- Angela_134, Elmer_149, Enygma_144, LukeCage_142, Mugiwara_149, MulchMānsion_133, S̄tarPlatinum_146, Wofford_137,


## Summary by start number:

Start 1:

- Found in 2 of 15 ( $13.3 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called $50.0 \%$ of time when present
- Phage (with cluster) where this start called: Annadreamy_170 (BK1),

Start 5:

- Found in 6 of 15 ( $40.0 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Elmer_149 (BE2), Enygma_144 (BE2),

LukeCage_142 (BE2), Mugiwara_149 (BE2), StarPTatinum_146 (BE2), Wofford_137 (BE2),

Start 9:

- Found in 7 of 15 ( $46.7 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called $71.4 \%$ of time when present
- Phage (with cluster) where this start called: Beuffert 176 (BK1),

Blueeyedbeauty_178 (BK1), Faust_175 (BK1), Limpid_177 (BK1), SeresaTree_177
(BK1),
Start 10:

- Found in 3 of 15 ( $20.0 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Angela_134 (BE1), Daubenski_133 (BE1), MulchMansion_133 (BE1),


## Summary by clusters:

There are 3 clusters represented in this pham: BE2, BE1, BK1,
Info for manual annotations of cluster BE1:
-Start number 10 was manually annotated 3 times for cluster BE1.
Info for manual annotations of cluster BE2:
-Start number 5 was manually annotated 4 times for cluster BE2.
Info for manual annotations of cluster BK1:
-Start number 1 was manually annotated 1 time for cluster BK1.
-Start number 9 was manually annotated 4 times for cluster BK1.

## Gene Information:

Gene: Angela_134 Start: 84163, Stop: 84348, Start Num: 10
Candidate Starts for Angela_134:
(Start: 10 @84163 has 3 MA''s), (15, 84307), (16, 84337),
Gene: Annadreamy_170 Start: 90617, Stop: 90901, Start Num: 1
Candidate Starts for Annadreamy_170:
(Start: 1 @90617 has 1 MA's), (Start: 9 @90695 has 4 MA's), (12, 90767), (16, 90890),
Gene: Beuffert_176 Start: 94875, Stop: 95081, Start Num: 9
Candidate Starts for Beuffert_176:
(Start: 9 @94875 has 4 MA's), (12, 94947), (16, 95070),

Gene: Blueeyedbeauty_178 Start: 94461, Stop: 94667, Start Num: 9
Candidate Starts for Blueeyedbeauty_178:
(Start: 9 @94461 has 4 MA's), (12, 94533), (16, 94656),
Gene: Daubenski_133 Start: 85647, Stop: 85832, Start Num: 10
Candidate Starts for Daubenski_133:
(3, 85572), (6, 85599), (Start: 9 @85626 has 4 MA's), (Start: 10 @85647 has 3 MA's), (15, 85791), (16, 85821),

Gene: Elmer_149 Start: 87055, Stop: 87294, Start Num: 5
Candidate Starts for Elmer_149:
(2, 87034), (4, 87037), (Start: 5 @87055 has 4 MA's), (8, 87073), (11, 87124), (13, 87163), (14, 87175), (15, 87253),

Gene: Enygma_144 Start: 87498, Stop: 87737, Start Num: 5
Candidate Starts for Enygma_144:
(4, 87480), (Start: 5 @87498 has 4 MA's), (7, 87507), (14, 87618), (15, 87696),
Gene: Faust_175 Start: 95852, Stop: 96058, Start Num: 9
Candidate Starts for Faust_175:
(Start: 9 @95852 has 4 MA's), (15, 96017), (16, 96047),
Gene: Limpid_177 Start: 96008, Stop: 96214, Start Num: 9
Candidate Starts for Limpid_177:
(Start: 1 @95930 has 1 MA's), (Start: 9 @96008 has 4 MA's), (12, 96080), (16, 96203),
Gene: LukeCage_142 Start: 86710, Stop: 86949, Start Num: 5
Candidate Starts for LukeCage_142:
(4, 86692), (Start: 5 @86710 has 4 MA's), (7, 86719), (14, 86830), (15, 86908),
Gene: Mugiwara_149 Start: 86535, Stop: 86774, Start Num: 5
Candidate Starts for Mugiwara_149:
(2, 86514), (4, 86517), (Start: 5 @86535 has 4 MA's), (14, 86655), (15, 86733),
Gene: MulchMansion_133 Start: 84111, Stop: 84296, Start Num: 10
Candidate Starts for MulchMansion_133:
(Start: 10 @84111 has 3 MA's), (15, 84255), (16, 84285),
Gene: SeresaTree_177 Start: 95237, Stop: 95443, Start Num: 9
Candidate Starts for SeresaTree_177:
(Start: 9 @95237 has 4 MA's), (12, 95309), (15, 95402), (16, 95432),
Gene: StarPlatinum_146 Start: 87153, Stop: 87392, Start Num: 5
Candidate Starts for StarPlatinum_146:
(4, 87135), (Start: 5 @87153 has 4 MA's), (7, 87162), (14, 87273), (15, 87351),
Gene: Wofford_137 Start: 87020, Stop: 87259, Start Num: 5
Candidate Starts for Wofford_137:
(4, 87002), (Start: 5 @87020 has 4 MA's), (8, 87038), (11, 87089), (13, 87128), (14, 87140), (15, 87218),

