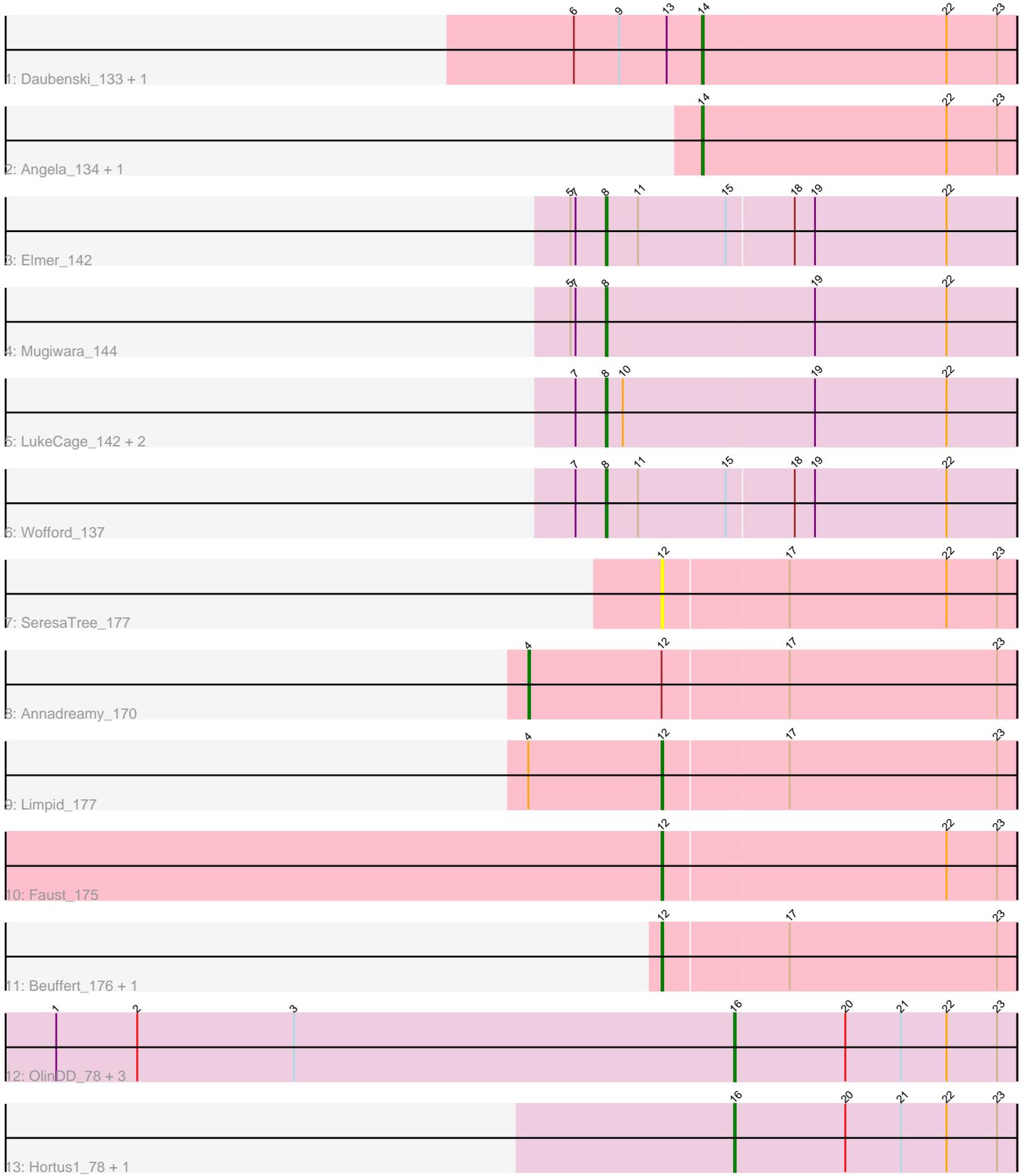


Pham 282457



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 282457 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282457 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Daubenski\_133, Cadmus\_130
- Track 2 : Angela\_134, MulchMansion\_133
- Track 3 : Elmer\_142
- Track 4 : Mugiwaru\_144
- Track 5 : LukeCage\_142, Enygma\_144, StarPlatinum\_146
- Track 6 : Wofford\_137
- Track 7 : SeresaTree\_177
- Track 8 : Annadreamy\_170
- Track 9 : Limpid\_177
- Track 10 : Faust\_175
- Track 11 : Beuffert\_176, Blueeyedbeauty\_178
- Track 12 : OlinDD\_78, Tandem\_78, Pioneer3\_78, Platte\_77
- Track 13 : Hortus1\_78, Alleb\_118

### ***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 6 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Elmer\_142, Enygma\_144, LukeCage\_142, Mugiwaru\_144, StarPlatinum\_146, Wofford\_137,

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

- 

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

- Alleb\_118, Angela\_134, Annadreamy\_170, Beuffert\_176, Blueeyedbeauty\_178, Cadmus\_130, Daubenski\_133, Faust\_175, Hortus1\_78, Limpid\_177, MulchMansion\_133, OlinDD\_78, Pioneer3\_78, Platte\_77, SeresaTree\_177, Tandem\_78,

### **Summary by start number:**

Start 4:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_170 (BK1),

Start 8:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elmer\_142 (BE2), Enygma\_144 (BE2), LukeCage\_142 (BE2), Mugiwara\_144 (BE2), StarPlatinum\_146 (BE2), Wofford\_137 (BE2),

Start 12:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 83.3% 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 14:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angela\_134 (BE1), Cadmus\_130 (BE1), Daubenski\_133 (BE1), MulchMansion\_133 (BE1),

Start 16:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb\_118 (ED1), Hortus1\_78 (ED1), OlinDD\_78 (ED1), Pioneer3\_78 (ED1), Platte\_77 (ED1), Tandem\_78 (ED1),

**Summary by clusters:**

There are 4 clusters represented in this pham: BE2, ED1, BK1, BE1,

Info for manual annotations of cluster BE1:

- Start number 14 was manually annotated 4 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 8 was manually annotated 6 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 4 was manually annotated 1 time for cluster BK1.
- Start number 12 was manually annotated 4 times for cluster BK1.

Info for manual annotations of cluster ED1:

- Start number 16 was manually annotated 6 times for cluster ED1.

**Gene Information:**

Gene: Alleb\_118 Start: 49069, Stop: 48902, Start Num: 16

Candidate Starts for Alleb\_118:

(Start: 16 @49069 has 6 MA's), (20, 49003), (21, 48970), (22, 48943), (23, 48913),

Gene: Angela\_134 Start: 84163, Stop: 84348, Start Num: 14

Candidate Starts for Angela\_134:

(Start: 14 @84163 has 4 MA's), (22, 84307), (23, 84337),

Gene: Annadreamy\_170 Start: 90617, Stop: 90901, Start Num: 4

Candidate Starts for Annadreamy\_170:

(Start: 4 @90617 has 1 MA's), (Start: 12 @90695 has 4 MA's), (17, 90767), (23, 90890),

Gene: Beuffert\_176 Start: 94875, Stop: 95081, Start Num: 12

Candidate Starts for Beuffert\_176:

(Start: 12 @94875 has 4 MA's), (17, 94947), (23, 95070),

Gene: Blueeyedbeauty\_178 Start: 94461, Stop: 94667, Start Num: 12

Candidate Starts for Blueeyedbeauty\_178:

(Start: 12 @94461 has 4 MA's), (17, 94533), (23, 94656),

Gene: Cadmus\_130 Start: 84411, Stop: 84596, Start Num: 14

Candidate Starts for Cadmus\_130:

(6, 84336), (9, 84363), (13, 84390), (Start: 14 @84411 has 4 MA's), (22, 84555), (23, 84585),

Gene: Daubenski\_133 Start: 85647, Stop: 85832, Start Num: 14

Candidate Starts for Daubenski\_133:

(6, 85572), (9, 85599), (13, 85626), (Start: 14 @85647 has 4 MA's), (22, 85791), (23, 85821),

Gene: Elmer\_142 Start: 87055, Stop: 87294, Start Num: 8

Candidate Starts for Elmer\_142:

(5, 87034), (7, 87037), (Start: 8 @87055 has 6 MA's), (11, 87073), (15, 87124), (18, 87163), (19, 87175), (22, 87253),

Gene: Enygma\_144 Start: 87498, Stop: 87737, Start Num: 8

Candidate Starts for Enygma\_144:

(7, 87480), (Start: 8 @87498 has 6 MA's), (10, 87507), (19, 87618), (22, 87696),

Gene: Faust\_175 Start: 95852, Stop: 96058, Start Num: 12

Candidate Starts for Faust\_175:

(Start: 12 @95852 has 4 MA's), (22, 96017), (23, 96047),

Gene: Hortus1\_78 Start: 49643, Stop: 49476, Start Num: 16

Candidate Starts for Hortus1\_78:

(Start: 16 @49643 has 6 MA's), (20, 49577), (21, 49544), (22, 49517), (23, 49487),

Gene: Limpid\_177 Start: 96008, Stop: 96214, Start Num: 12

Candidate Starts for Limpid\_177:

(Start: 4 @95930 has 1 MA's), (Start: 12 @96008 has 4 MA's), (17, 96080), (23, 96203),

Gene: LukeCage\_142 Start: 86710, Stop: 86949, Start Num: 8  
Candidate Starts for LukeCage\_142:  
(7, 86692), (Start: 8 @86710 has 6 MA's), (10, 86719), (19, 86830), (22, 86908),

Gene: Mugiwara\_144 Start: 86535, Stop: 86774, Start Num: 8  
Candidate Starts for Mugiwara\_144:  
(5, 86514), (7, 86517), (Start: 8 @86535 has 6 MA's), (19, 86655), (22, 86733),

Gene: MulchMansion\_133 Start: 84111, Stop: 84296, Start Num: 14  
Candidate Starts for MulchMansion\_133:  
(Start: 14 @84111 has 4 MA's), (22, 84255), (23, 84285),

Gene: OlinDD\_78 Start: 49642, Stop: 49475, Start Num: 16  
Candidate Starts for OlinDD\_78:  
(1, 50044), (2, 49996), (3, 49903), (Start: 16 @49642 has 6 MA's), (20, 49576), (21, 49543), (22, 49516), (23, 49486),

Gene: Pioneer3\_78 Start: 49440, Stop: 49273, Start Num: 16  
Candidate Starts for Pioneer3\_78:  
(1, 49842), (2, 49794), (3, 49701), (Start: 16 @49440 has 6 MA's), (20, 49374), (21, 49341), (22, 49314), (23, 49284),

Gene: Platte\_77 Start: 49208, Stop: 49041, Start Num: 16  
Candidate Starts for Platte\_77:  
(1, 49610), (2, 49562), (3, 49469), (Start: 16 @49208 has 6 MA's), (20, 49142), (21, 49109), (22, 49082), (23, 49052),

Gene: SeresaTree\_177 Start: 95237, Stop: 95443, Start Num: 12  
Candidate Starts for SeresaTree\_177:  
(Start: 12 @95237 has 4 MA's), (17, 95309), (22, 95402), (23, 95432),

Gene: StarPlatinum\_146 Start: 87153, Stop: 87392, Start Num: 8  
Candidate Starts for StarPlatinum\_146:  
(7, 87135), (Start: 8 @87153 has 6 MA's), (10, 87162), (19, 87273), (22, 87351),

Gene: Tandem\_78 Start: 49520, Stop: 49353, Start Num: 16  
Candidate Starts for Tandem\_78:  
(1, 49922), (2, 49874), (3, 49781), (Start: 16 @49520 has 6 MA's), (20, 49454), (21, 49421), (22, 49394), (23, 49364),

Gene: Wofford\_137 Start: 87020, Stop: 87259, Start Num: 8  
Candidate Starts for Wofford\_137:  
(7, 87002), (Start: 8 @87020 has 6 MA's), (11, 87038), (15, 87089), (18, 87128), (19, 87140), (22, 87218),