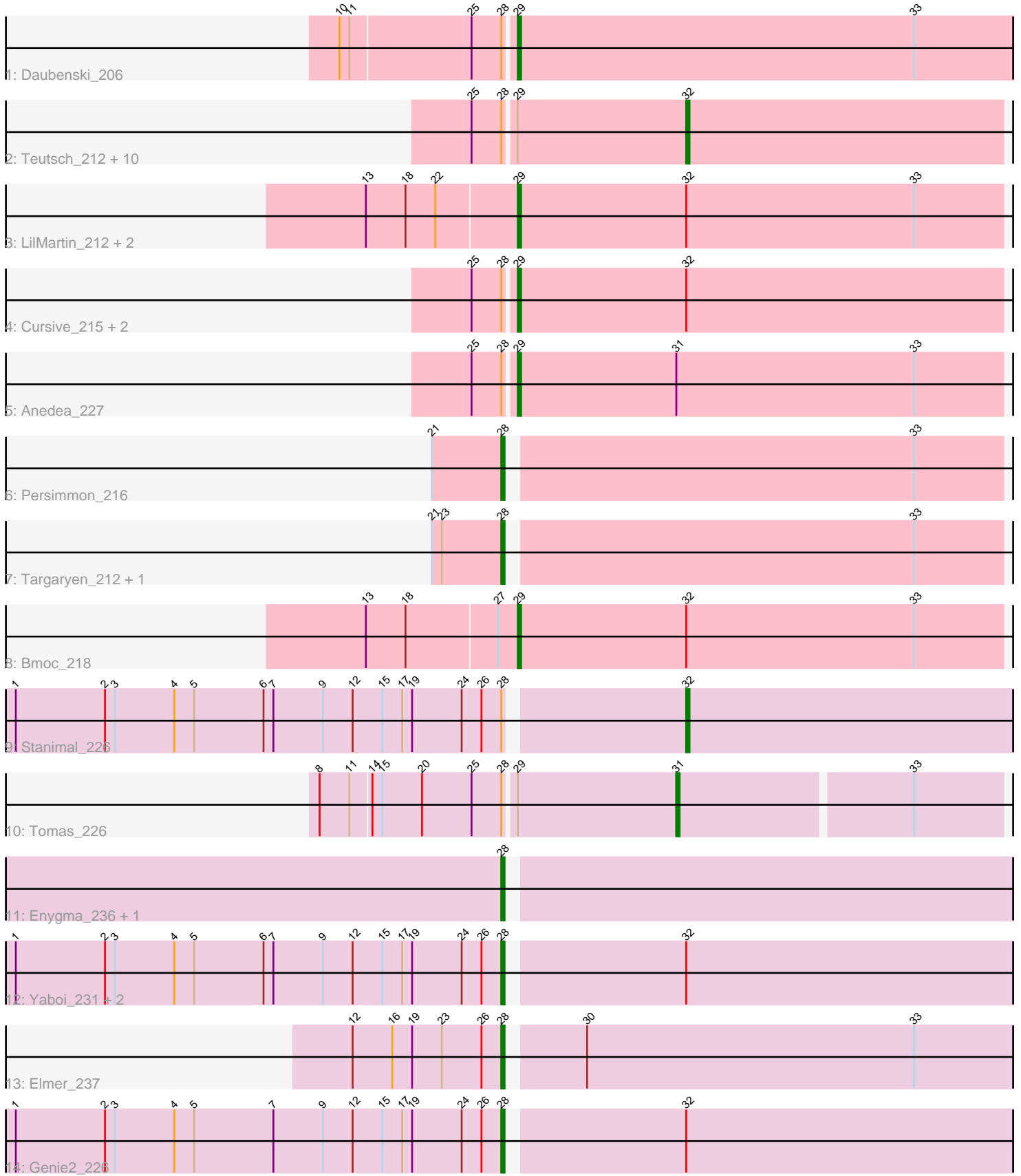


# Pham 194229



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 194229 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194229 has 32 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Daubenski\_206
- Track 2 : Teutsch\_212, Watermoore\_212, Tribute\_209, Larnav\_212, EGole\_216, Samisti12\_217, BlueOtter\_211, HangryHippo\_211, Peebs\_210, Pepperwood\_213, Cross\_212
- Track 3 : LilMartin\_212, Angela\_215, MulchMansion\_216
- Track 4 : Cursive\_215, Scheme\_216, Sushi23\_213
- Track 5 : Anedea\_227
- Track 6 : Persimmon\_216
- Track 7 : Targaryen\_212, Warpy\_216
- Track 8 : Bmoc\_218
- Track 9 : Stanimal\_226
- Track 10 : Tomas\_226
- Track 11 : Enygma\_236, Amabiko\_232
- Track 12 : Yaboi\_231, Sollertia\_227, BoomerJR\_226
- Track 13 : Elmer\_237
- Track 14 : Genie2\_226

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

The start number called the most often in the published annotations is 32, it was called in 12 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueOtter\_211, Cross\_212, EGole\_216, HangryHippo\_211, Larnav\_212, Peebs\_210, Pepperwood\_213, Samisti12\_217, Stanimal\_226, Teutsch\_212, Tribute\_209, Watermoore\_212,

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

- Angela\_215, Bmoc\_218, BoomerJR\_226, Cursive\_215, Genie2\_226, LilMartin\_212, MulchMansion\_216, Scheme\_216, Sollertia\_227, Sushi23\_213, Yaboi\_231,

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

- Amabiko\_232, Anedea\_227, Daubenski\_206, Elmer\_237, Enygma\_236, Persimmon\_216, Targaryen\_212, Tomas\_226, Warpy\_216,

## Summary by start number:

### Start 28:

- Found in 28 of 32 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 10 of 31
- Called 35.7% of time when present
- Phage (with cluster) where this start called: Amabiko\_232 (BE2), BoomerJR\_226 (BE2), Elmer\_237 (BE2), Enygma\_236 (BE2), Genie2\_226 (BE2), Persimmon\_216 (BE1), Sollertia\_227 (BE2), Targaryen\_212 (BE1), Warpy\_216 (BE1), Yaboi\_231 (BE2),

### Start 29:

- Found in 21 of 32 ( 65.6% ) of genes in pham
- Manual Annotations of this start: 8 of 31
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Anedea\_227 (BE1), Angela\_215 (BE1), Bmoc\_218 (BE1), Cursive\_215 (BE1), Daubenski\_206 (BE1), LilMartin\_212 (BE1), MulchMansion\_216 (BE1), Scheme\_216 (BE1), Sushi23\_213 (BE1),

### Start 31:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tomas\_226 (BE2),

### Start 32:

- Found in 23 of 32 ( 71.9% ) of genes in pham
- Manual Annotations of this start: 12 of 31
- Called 52.2% of time when present
- Phage (with cluster) where this start called: BlueOtter\_211 (BE1), Cross\_212 (BE1), EGole\_216 (BE1), HangryHippo\_211 (BE1), Larnav\_212 (BE1), Peebs\_210 (BE1), Pepperwood\_213 (BE1), Samisti12\_217 (BE1), Stanimal\_226 (BE2), Teutsch\_212 (BE1), Tribute\_209 (BE1), Watermoore\_212 (BE1),

## Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

### Info for manual annotations of cluster BE1:

- Start number 28 was manually annotated 3 times for cluster BE1.
- Start number 29 was manually annotated 8 times for cluster BE1.
- Start number 32 was manually annotated 11 times for cluster BE1.

### Info for manual annotations of cluster BE2:

- Start number 28 was manually annotated 7 times for cluster BE2.
- Start number 31 was manually annotated 1 time for cluster BE2.
- Start number 32 was manually annotated 1 time for cluster BE2.

## Gene Information:

Gene: Amabiko\_232 Start: 108326, Stop: 108538, Start Num: 28  
Candidate Starts for Amabiko\_232:  
(Start: 28 @108326 has 10 MA's),

Gene: Anedea\_227 Start: 108996, Stop: 109190, Start Num: 29  
Candidate Starts for Anedea\_227:  
(25, 108984), (Start: 28 @108993 has 10 MA's), (Start: 29 @108996 has 8 MA's), (Start: 31 @109044 has 1 MA's), (33, 109116),

Gene: Angela\_215 Start: 106346, Stop: 106540, Start Num: 29  
Candidate Starts for Angela\_215:  
(13, 106301), (18, 106313), (22, 106322), (Start: 29 @106346 has 8 MA's), (Start: 32 @106397 has 12 MA's), (33, 106466),

Gene: BlueOtter\_211 Start: 106797, Stop: 106940, Start Num: 32  
Candidate Starts for BlueOtter\_211:  
(25, 106734), (Start: 28 @106743 has 10 MA's), (Start: 29 @106746 has 8 MA's), (Start: 32 @106797 has 12 MA's),

Gene: Bmoc\_218 Start: 107192, Stop: 107386, Start Num: 29  
Candidate Starts for Bmoc\_218:  
(13, 107147), (18, 107159), (27, 107186), (Start: 29 @107192 has 8 MA's), (Start: 32 @107243 has 12 MA's), (33, 107312),

Gene: BoomerJR\_226 Start: 108638, Stop: 108850, Start Num: 28  
Candidate Starts for BoomerJR\_226:  
(1, 108491), (2, 108518), (3, 108521), (4, 108539), (5, 108545), (6, 108566), (7, 108569), (9, 108584), (12, 108593), (15, 108602), (17, 108608), (19, 108611), (24, 108626), (26, 108632), (Start: 28 @108638 has 10 MA's), (Start: 32 @108689 has 12 MA's),

Gene: Cross\_212 Start: 107442, Stop: 107585, Start Num: 32  
Candidate Starts for Cross\_212:  
(25, 107379), (Start: 28 @107388 has 10 MA's), (Start: 29 @107391 has 8 MA's), (Start: 32 @107442 has 12 MA's),

Gene: Cursive\_215 Start: 107075, Stop: 107269, Start Num: 29  
Candidate Starts for Cursive\_215:  
(25, 107063), (Start: 28 @107072 has 10 MA's), (Start: 29 @107075 has 8 MA's), (Start: 32 @107126 has 12 MA's),

Gene: Daubenski\_206 Start: 107436, Stop: 107639, Start Num: 29  
Candidate Starts for Daubenski\_206:  
(10, 107385), (11, 107388), (25, 107424), (Start: 28 @107433 has 10 MA's), (Start: 29 @107436 has 8 MA's), (33, 107556),

Gene: EGole\_216 Start: 109139, Stop: 109282, Start Num: 32  
Candidate Starts for EGole\_216:  
(25, 109076), (Start: 28 @109085 has 10 MA's), (Start: 29 @109088 has 8 MA's), (Start: 32 @109139 has 12 MA's),

Gene: Elmer\_237 Start: 112214, Stop: 112426, Start Num: 28  
Candidate Starts for Elmer\_237:

(12, 112169), (16, 112181), (19, 112187), (23, 112196), (26, 112208), (Start: 28 @112214 has 10 MA's), (30, 112235), (33, 112334),

Gene: Enygma\_236 Start: 111443, Stop: 111655, Start Num: 28  
Candidate Starts for Enygma\_236:  
(Start: 28 @111443 has 10 MA's),

Gene: Genie2\_226 Start: 108763, Stop: 108975, Start Num: 28  
Candidate Starts for Genie2\_226:  
(1, 108616), (2, 108643), (3, 108646), (4, 108664), (5, 108670), (7, 108694), (9, 108709), (12, 108718), (15, 108727), (17, 108733), (19, 108736), (24, 108751), (26, 108757), (Start: 28 @108763 has 10 MA's), (Start: 32 @108814 has 12 MA's),

Gene: HangryHippo\_211 Start: 106797, Stop: 106940, Start Num: 32  
Candidate Starts for HangryHippo\_211:  
(25, 106734), (Start: 28 @106743 has 10 MA's), (Start: 29 @106746 has 8 MA's), (Start: 32 @106797 has 12 MA's),

Gene: Larnav\_212 Start: 107258, Stop: 107401, Start Num: 32  
Candidate Starts for Larnav\_212:  
(25, 107195), (Start: 28 @107204 has 10 MA's), (Start: 29 @107207 has 8 MA's), (Start: 32 @107258 has 12 MA's),

Gene: LilMartin\_212 Start: 105710, Stop: 105904, Start Num: 29  
Candidate Starts for LilMartin\_212:  
(13, 105665), (18, 105677), (22, 105686), (Start: 29 @105710 has 8 MA's), (Start: 32 @105761 has 12 MA's), (33, 105830),

Gene: MulchMansion\_216 Start: 107344, Stop: 107538, Start Num: 29  
Candidate Starts for MulchMansion\_216:  
(13, 107299), (18, 107311), (22, 107320), (Start: 29 @107344 has 8 MA's), (Start: 32 @107395 has 12 MA's), (33, 107464),

Gene: Peebs\_210 Start: 107229, Stop: 107372, Start Num: 32  
Candidate Starts for Peebs\_210:  
(25, 107166), (Start: 28 @107175 has 10 MA's), (Start: 29 @107178 has 8 MA's), (Start: 32 @107229 has 12 MA's),

Gene: Pepperwood\_213 Start: 107461, Stop: 107604, Start Num: 32  
Candidate Starts for Pepperwood\_213:  
(25, 107398), (Start: 28 @107407 has 10 MA's), (Start: 29 @107410 has 8 MA's), (Start: 32 @107461 has 12 MA's),

Gene: Persimmon\_216 Start: 106493, Stop: 106687, Start Num: 28  
Candidate Starts for Persimmon\_216:  
(21, 106472), (Start: 28 @106493 has 10 MA's), (33, 106613),

Gene: Samisti12\_217 Start: 109088, Stop: 109231, Start Num: 32  
Candidate Starts for Samisti12\_217:  
(25, 109025), (Start: 28 @109034 has 10 MA's), (Start: 29 @109037 has 8 MA's), (Start: 32 @109088 has 12 MA's),

Gene: Scheme\_216 Start: 108682, Stop: 108876, Start Num: 29

Candidate Starts for Scheme\_216:

(25, 108670), (Start: 28 @108679 has 10 MA's), (Start: 29 @108682 has 8 MA's), (Start: 32 @108733 has 12 MA's),

Gene: Sollertia\_227 Start: 108752, Stop: 108964, Start Num: 28

Candidate Starts for Sollertia\_227:

(1, 108605), (2, 108632), (3, 108635), (4, 108653), (5, 108659), (6, 108680), (7, 108683), (9, 108698), (12, 108707), (15, 108716), (17, 108722), (19, 108725), (24, 108740), (26, 108746), (Start: 28 @108752 has 10 MA's), (Start: 32 @108803 has 12 MA's),

Gene: Stanimal\_226 Start: 109175, Stop: 109336, Start Num: 32

Candidate Starts for Stanimal\_226:

(1, 108977), (2, 109004), (3, 109007), (4, 109025), (5, 109031), (6, 109052), (7, 109055), (9, 109070), (12, 109079), (15, 109088), (17, 109094), (19, 109097), (24, 109112), (26, 109118), (Start: 28 @109124 has 10 MA's), (Start: 32 @109175 has 12 MA's),

Gene: Sushi23\_213 Start: 108044, Stop: 108238, Start Num: 29

Candidate Starts for Sushi23\_213:

(25, 108032), (Start: 28 @108041 has 10 MA's), (Start: 29 @108044 has 8 MA's), (Start: 32 @108095 has 12 MA's),

Gene: Targaryen\_212 Start: 108246, Stop: 108440, Start Num: 28

Candidate Starts for Targaryen\_212:

(21, 108225), (23, 108228), (Start: 28 @108246 has 10 MA's), (33, 108366),

Gene: Teutsch\_212 Start: 107917, Stop: 108060, Start Num: 32

Candidate Starts for Teutsch\_212:

(25, 107854), (Start: 28 @107863 has 10 MA's), (Start: 29 @107866 has 8 MA's), (Start: 32 @107917 has 12 MA's),

Gene: Tomas\_226 Start: 109189, Stop: 109332, Start Num: 31

Candidate Starts for Tomas\_226:

(8, 109084), (11, 109093), (14, 109099), (15, 109102), (20, 109114), (25, 109129), (Start: 28 @109138 has 10 MA's), (Start: 29 @109141 has 8 MA's), (Start: 31 @109189 has 1 MA's), (33, 109258),

Gene: Tribute\_209 Start: 108082, Stop: 108225, Start Num: 32

Candidate Starts for Tribute\_209:

(25, 108019), (Start: 28 @108028 has 10 MA's), (Start: 29 @108031 has 8 MA's), (Start: 32 @108082 has 12 MA's),

Gene: Warpy\_216 Start: 107155, Stop: 107349, Start Num: 28

Candidate Starts for Warpy\_216:

(21, 107134), (23, 107137), (Start: 28 @107155 has 10 MA's), (33, 107275),

Gene: Watermoore\_212 Start: 108440, Stop: 108583, Start Num: 32

Candidate Starts for Watermoore\_212:

(25, 108377), (Start: 28 @108386 has 10 MA's), (Start: 29 @108389 has 8 MA's), (Start: 32 @108440 has 12 MA's),

Gene: Yaboi\_231 Start: 108687, Stop: 108899, Start Num: 28

Candidate Starts for Yaboi\_231:

(1, 108540), (2, 108567), (3, 108570), (4, 108588), (5, 108594), (6, 108615), (7, 108618), (9, 108633), (12, 108642), (15, 108651), (17, 108657), (19, 108660), (24, 108675), (26, 108681), (Start: 28

@108687 has 10 MA's), (Start: 32 @108738 has 12 MA's),