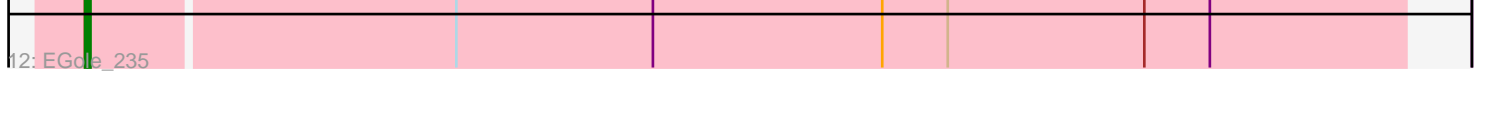
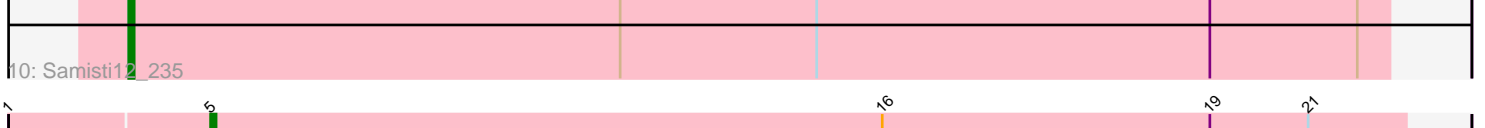
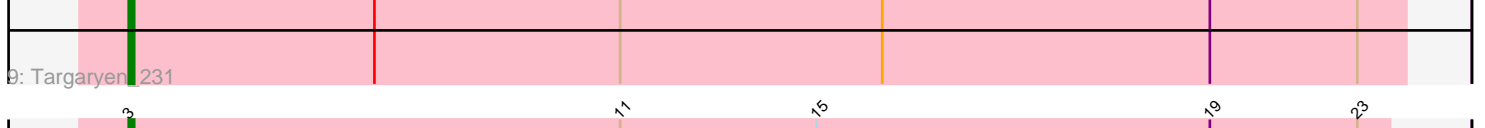
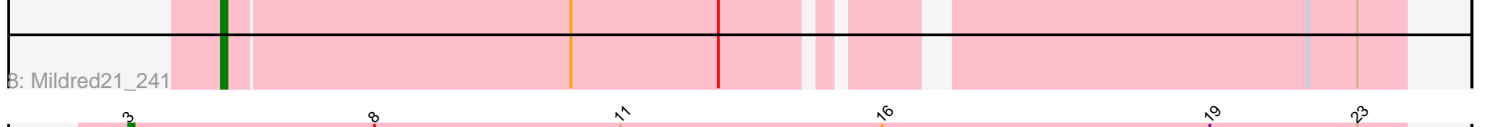
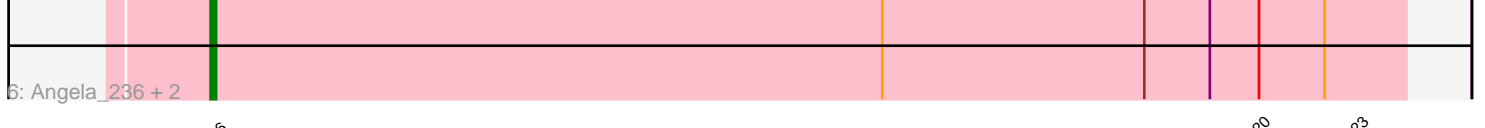
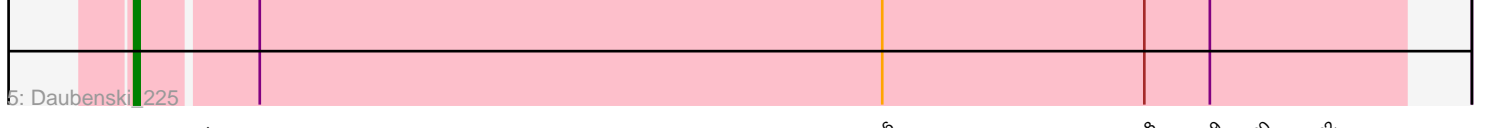
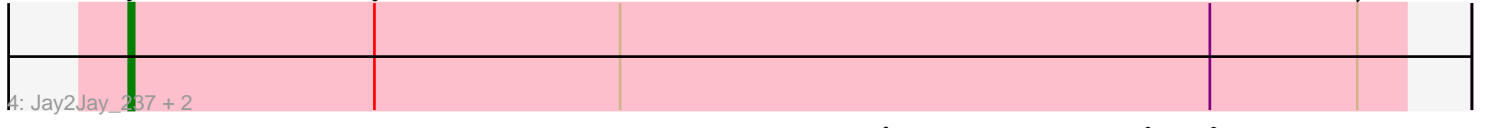
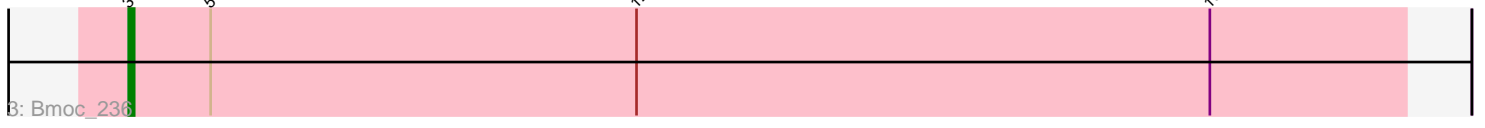
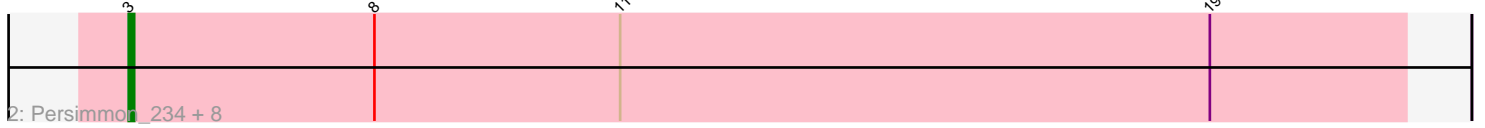


Pham 171610



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 171610 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171610 has 39 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Sushi23\_232, Lululemon\_231, HangryHippo\_232, Leo04\_231, Larnav\_238, Tribute\_227, Cursive\_234, Watermoore\_230, Peebs\_228, Pepperwood\_231, Teutsch\_230, PacManQ\_232, BlueOtter\_232, Cross\_230
- Track 2 : Persimmon\_234, WhereRU\_237, Navo\_225, Braelyn\_227, Liandry\_231, PinkiePie\_231, Squillium\_234, NootNoot\_228, Bartholomune\_231
- Track 3 : Bmoc\_236
- Track 4 : Jay2Jay\_237, Evy\_221, Warpy\_234
- Track 5 : Daubenski\_225
- Track 6 : Angela\_236, LilMartin\_232, MulchMansion\_236
- Track 7 : LilMartin\_230, Angela\_234, MulchMansion\_234
- Track 8 : Mildred21\_241
- Track 9 : Targaryen\_231
- Track 10 : Samisti12\_235
- Track 11 : Mildred21\_243
- Track 12 : EGole\_235

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

The start number called the most often in the published annotations is 3, it was called in 14 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bartholomune\_231, Bmoc\_236, Braelyn\_227, Evy\_221, Jay2Jay\_237, Liandry\_231, Navo\_225, NootNoot\_228, Persimmon\_234, PinkiePie\_231, Samisti12\_235, Squillium\_234, Targaryen\_231, Warpy\_234, WhereRU\_237,

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

- 

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

- Angela\_234, Angela\_236, BlueOtter\_232, Cross\_230, Cursive\_234, Daubenski\_225, EGole\_235, HangryHippo\_232, Larnav\_238, Leo04\_231, LilMartin\_230, LilMartin\_232, Lululemon\_231, Mildred21\_241, Mildred21\_243, MulchMansion\_234, MulchMansion\_236, PacManQ\_232, Peebs\_228,

Pepperwood\_231, Sushi23\_232, Teutsch\_230, Tribute\_227, Watermoore\_230,

### Summary by start number:

#### Start 2:

- Found in 15 of 39 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 10 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueOtter\_232 (BE1), Cross\_230 (BE1), Cursive\_234 (BE1), EGole\_235 (BE1), HangryHippo\_232 (BE1), Larnav\_238 (BE1), Leo04\_231 (BE1), Lululemon\_231 (BE1), PacManQ\_232 (BE1), Peebs\_228 (BE1), Pepperwood\_231 (BE1), Sushi23\_232 (BE1), Teutsch\_230 (BE1), Tribute\_227 (BE1), Watermoore\_230 (BE1),

#### Start 3:

- Found in 15 of 39 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 14 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bartholomune\_231 (BE1), Bmoc\_236 (BE1), Braelyn\_227 (BE1), Evy\_221 (BE1), Jay2Jay\_237 (BE1), Liandry\_231 (BE1), Navo\_225 (BE1), NootNoot\_228 (BE1), Persimmon\_234 (BE1), PinkiePie\_231 (BE1), Samisti12\_235 (BE1), Squillium\_234 (BE1), Targaryen\_231 (BE1), Warpy\_234 (BE1), WhereRU\_237 (BE1),

#### Start 4:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daubenski\_225 (BE1),

#### Start 5:

- Found in 5 of 39 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Angela\_236 (BE1), LilMartin\_232 (BE1), Mildred21\_243 (BE1), MulchMansion\_236 (BE1),

#### Start 6:

- Found in 4 of 39 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angela\_234 (BE1), LilMartin\_230 (BE1), Mildred21\_241 (BE1), MulchMansion\_234 (BE1),

### Summary by clusters:

There is one cluster represented in this pham: BE1

#### Info for manual annotations of cluster BE1:

- Start number 2 was manually annotated 10 times for cluster BE1.
- Start number 3 was manually annotated 14 times for cluster BE1.
- Start number 4 was manually annotated 1 time for cluster BE1.
- Start number 5 was manually annotated 4 times for cluster BE1.

- Start number 6 was manually annotated 4 times for cluster BE1.

### **Gene Information:**

Gene: Angela\_236 Start: 115493, Stop: 115711, Start Num: 5

Candidate Starts for Angela\_236:

(Start: 5 @115493 has 4 MA's), (16, 115616), (18, 115664), (19, 115676), (20, 115685), (22, 115697),

Gene: Angela\_234 Start: 115083, Stop: 115298, Start Num: 6

Candidate Starts for Angela\_234:

(Start: 6 @115083 has 4 MA's), (20, 115260), (23, 115278),

Gene: Bartholomune\_231 Start: 114849, Stop: 115082, Start Num: 3

Candidate Starts for Bartholomune\_231:

(Start: 3 @114849 has 14 MA's), (8, 114894), (11, 114939), (19, 115047),

Gene: BlueOtter\_232 Start: 114987, Stop: 115226, Start Num: 2

Candidate Starts for BlueOtter\_232:

(Start: 2 @114987 has 10 MA's), (9, 115053), (16, 115131), (17, 115143), (18, 115179), (19, 115191),

Gene: Bmoc\_236 Start: 115531, Stop: 115764, Start Num: 3

Candidate Starts for Bmoc\_236:

(Start: 3 @115531 has 14 MA's), (Start: 5 @115546 has 4 MA's), (12, 115624), (19, 115729),

Gene: Braelyn\_227 Start: 114496, Stop: 114729, Start Num: 3

Candidate Starts for Braelyn\_227:

(Start: 3 @114496 has 14 MA's), (8, 114541), (11, 114586), (19, 114694),

Gene: Cross\_230 Start: 115632, Stop: 115871, Start Num: 2

Candidate Starts for Cross\_230:

(Start: 2 @115632 has 10 MA's), (9, 115698), (16, 115776), (17, 115788), (18, 115824), (19, 115836),

Gene: Cursive\_234 Start: 115739, Stop: 115978, Start Num: 2

Candidate Starts for Cursive\_234:

(Start: 2 @115739 has 10 MA's), (9, 115805), (16, 115883), (17, 115895), (18, 115931), (19, 115943),

Gene: Daubenski\_225 Start: 116112, Stop: 116342, Start Num: 4

Candidate Starts for Daubenski\_225:

(Start: 4 @116112 has 1 MA's), (7, 116133), (16, 116247), (18, 116295), (19, 116307),

Gene: EGole\_235 Start: 117823, Stop: 118062, Start Num: 2

Candidate Starts for EGole\_235:

(Start: 2 @117823 has 10 MA's), (9, 117889), (13, 117925), (16, 117967), (17, 117979), (18, 118015), (19, 118027),

Gene: Evy\_221 Start: 115809, Stop: 116042, Start Num: 3

Candidate Starts for Evy\_221:

(Start: 3 @115809 has 14 MA's), (8, 115854), (11, 115899), (19, 116007), (23, 116034),

Gene: HangryHippo\_232 Start: 114987, Stop: 115226, Start Num: 2

Candidate Starts for HangryHippo\_232:

(Start: 2 @114987 has 10 MA's), (9, 115053), (16, 115131), (17, 115143), (18, 115179), (19, 115191),

Gene: Jay2Jay\_237 Start: 115964, Stop: 116197, Start Num: 3

Candidate Starts for Jay2Jay\_237:

(Start: 3 @115964 has 14 MA's), (8, 116009), (11, 116054), (19, 116162), (23, 116189),

Gene: Larnav\_238 Start: 115905, Stop: 116144, Start Num: 2

Candidate Starts for Larnav\_238:

(Start: 2 @115905 has 10 MA's), (9, 115971), (16, 116049), (17, 116061), (18, 116097), (19, 116109),

Gene: Leo04\_231 Start: 116013, Stop: 116252, Start Num: 2

Candidate Starts for Leo04\_231:

(Start: 2 @116013 has 10 MA's), (9, 116079), (16, 116157), (17, 116169), (18, 116205), (19, 116217),

Gene: Liandry\_231 Start: 115385, Stop: 115618, Start Num: 3

Candidate Starts for Liandry\_231:

(Start: 3 @115385 has 14 MA's), (8, 115430), (11, 115475), (19, 115583),

Gene: LilMartin\_230 Start: 114023, Stop: 114238, Start Num: 6

Candidate Starts for LilMartin\_230:

(Start: 6 @114023 has 4 MA's), (20, 114200), (23, 114218),

Gene: LilMartin\_232 Start: 114433, Stop: 114651, Start Num: 5

Candidate Starts for LilMartin\_232:

(Start: 5 @114433 has 4 MA's), (16, 114556), (18, 114604), (19, 114616), (20, 114625), (22, 114637),

Gene: Lululemon\_231 Start: 114792, Stop: 115031, Start Num: 2

Candidate Starts for Lululemon\_231:

(Start: 2 @114792 has 10 MA's), (9, 114858), (16, 114936), (17, 114948), (18, 114984), (19, 114996),

Gene: Mildred21\_241 Start: 114172, Stop: 114375, Start Num: 6

Candidate Starts for Mildred21\_241:

(Start: 6 @114172 has 4 MA's), (10, 114235), (14, 114262), (21, 114358), (23, 114367),

Gene: Mildred21\_243 Start: 114583, Stop: 114801, Start Num: 5

Candidate Starts for Mildred21\_243:

(1, 114547), (Start: 5 @114583 has 4 MA's), (16, 114706), (19, 114766), (21, 114784),

Gene: MulchMansion\_236 Start: 116067, Stop: 116285, Start Num: 5

Candidate Starts for MulchMansion\_236:

(Start: 5 @116067 has 4 MA's), (16, 116190), (18, 116238), (19, 116250), (20, 116259), (22, 116271),

Gene: MulchMansion\_234 Start: 115657, Stop: 115872, Start Num: 6

Candidate Starts for MulchMansion\_234:

(Start: 6 @115657 has 4 MA's), (20, 115834), (23, 115852),

Gene: Navo\_225 Start: 113700, Stop: 113933, Start Num: 3

Candidate Starts for Navo\_225:

(Start: 3 @113700 has 14 MA's), (8, 113745), (11, 113790), (19, 113898),

Gene: NootNoot\_228 Start: 114230, Stop: 114463, Start Num: 3

Candidate Starts for NootNoot\_228:

(Start: 3 @114230 has 14 MA's), (8, 114275), (11, 114320), (19, 114428),

Gene: PacManQ\_232 Start: 114792, Stop: 115031, Start Num: 2  
Candidate Starts for PacManQ\_232:  
(Start: 2 @114792 has 10 MA's), (9, 114858), (16, 114936), (17, 114948), (18, 114984), (19, 114996),

Gene: Peebs\_228 Start: 115876, Stop: 116115, Start Num: 2  
Candidate Starts for Peebs\_228:  
(Start: 2 @115876 has 10 MA's), (9, 115942), (16, 116020), (17, 116032), (18, 116068), (19, 116080),

Gene: Pepperwood\_231 Start: 115684, Stop: 115923, Start Num: 2  
Candidate Starts for Pepperwood\_231:  
(Start: 2 @115684 has 10 MA's), (9, 115750), (16, 115828), (17, 115840), (18, 115876), (19, 115888),

Gene: Persimmon\_234 Start: 114718, Stop: 114951, Start Num: 3  
Candidate Starts for Persimmon\_234:  
(Start: 3 @114718 has 14 MA's), (8, 114763), (11, 114808), (19, 114916),

Gene: PinkiePie\_231 Start: 115385, Stop: 115618, Start Num: 3  
Candidate Starts for PinkiePie\_231:  
(Start: 3 @115385 has 14 MA's), (8, 115430), (11, 115475), (19, 115583),

Gene: Samisti12\_235 Start: 117277, Stop: 117507, Start Num: 3  
Candidate Starts for Samisti12\_235:  
(Start: 3 @117277 has 14 MA's), (11, 117367), (15, 117403), (19, 117475), (23, 117502),

Gene: Squillium\_234 Start: 115387, Stop: 115620, Start Num: 3  
Candidate Starts for Squillium\_234:  
(Start: 3 @115387 has 14 MA's), (8, 115432), (11, 115477), (19, 115585),

Gene: Sushi23\_232 Start: 116742, Stop: 116981, Start Num: 2  
Candidate Starts for Sushi23\_232:  
(Start: 2 @116742 has 10 MA's), (9, 116808), (16, 116886), (17, 116898), (18, 116934), (19, 116946),

Gene: Targaryen\_231 Start: 116917, Stop: 117150, Start Num: 3  
Candidate Starts for Targaryen\_231:  
(Start: 3 @116917 has 14 MA's), (8, 116962), (11, 117007), (16, 117055), (19, 117115), (23, 117142),

Gene: Teutsch\_230 Start: 116107, Stop: 116346, Start Num: 2  
Candidate Starts for Teutsch\_230:  
(Start: 2 @116107 has 10 MA's), (9, 116173), (16, 116251), (17, 116263), (18, 116299), (19, 116311),

Gene: Tribute\_227 Start: 116272, Stop: 116511, Start Num: 2  
Candidate Starts for Tribute\_227:  
(Start: 2 @116272 has 10 MA's), (9, 116338), (16, 116416), (17, 116428), (18, 116464), (19, 116476),

Gene: Warpy\_234 Start: 115402, Stop: 115635, Start Num: 3  
Candidate Starts for Warpy\_234:  
(Start: 3 @115402 has 14 MA's), (8, 115447), (11, 115492), (19, 115600), (23, 115627),

Gene: Watermoore\_230 Start: 116630, Stop: 116869, Start Num: 2  
Candidate Starts for Watermoore\_230:  
(Start: 2 @116630 has 10 MA's), (9, 116696), (16, 116774), (17, 116786), (18, 116822), (19, 116834),

Gene: WhereRU\_237 Start: 114879, Stop: 115112, Start Num: 3  
Candidate Starts for WhereRU\_237:  
(Start: 3 @114879 has 14 MA's), (8, 114924), (11, 114969), (19, 115077),