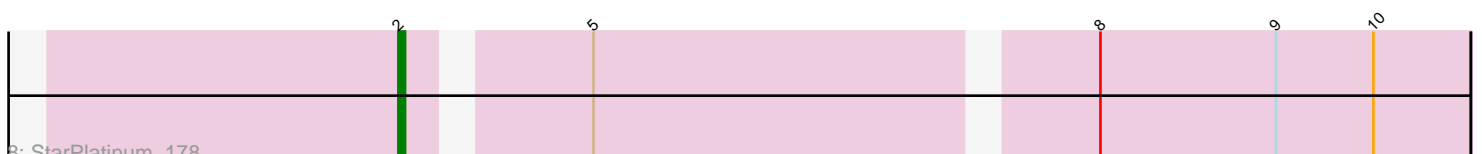
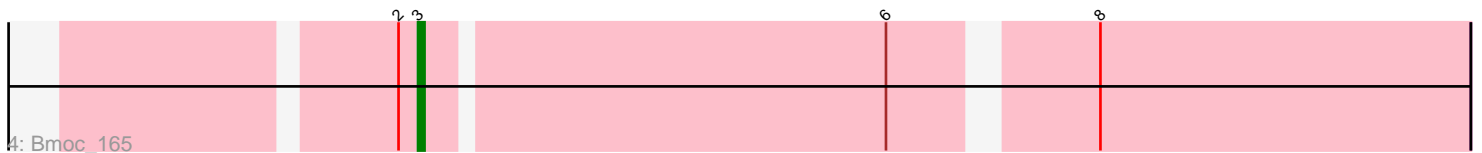
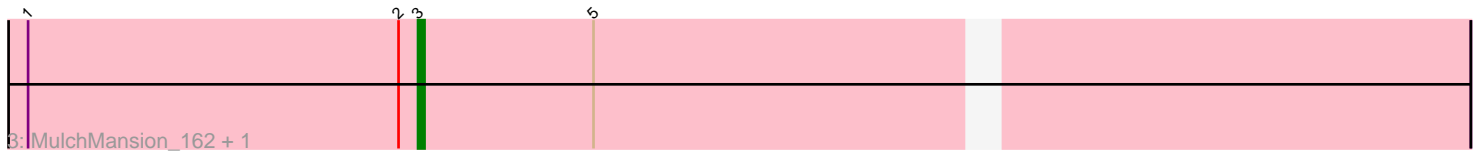
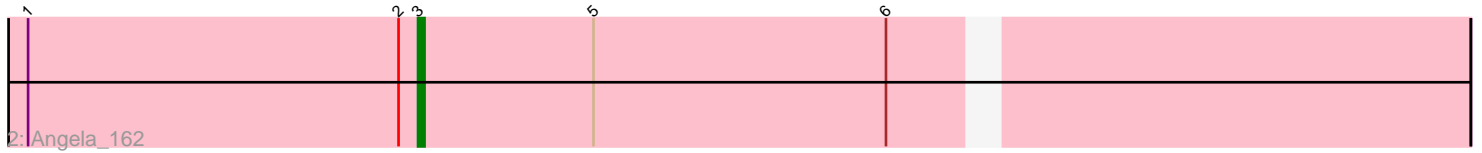
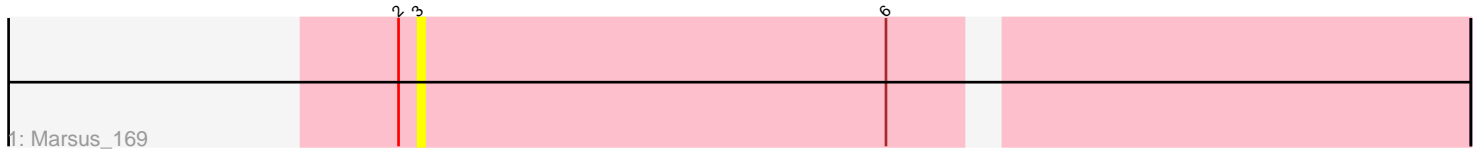


Pham 200427



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 200427 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200427 has 36 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Marsus\_169
- Track 2 : Angela\_162
- Track 3 : MulchMansion\_162, LilMartin\_160
- Track 4 : Bmoc\_165
- Track 5 : Anedea\_163
- Track 6 : Riptide\_159
- Track 7 : Genie2\_169, Karimac\_171, Bordeaux\_170, BoomerJR\_169, Stanimal\_168, Wipeout\_165, Birchlyn\_171, Rikishi\_179, TomSawyer\_176, IchabodCrane\_167, Amabiko\_174, Yaboi\_171, CeilingFan\_181, Spelly\_175, JimJam\_178, Battuta\_171, Quaran19\_172, Gibbi\_180, Starbow\_169, KentuckyRacer\_176, LukeCage\_171, MindFlayer\_167, SaltySpittoon\_172, Sollertia\_169, PumpkinSpice\_174, Spilled\_177
- Track 8 : StarPlatinum\_178
- Track 9 : Mugiwara\_179
- Track 10 : Enygma\_174

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

The start number called the most often in the published annotations is 4, it was called in 23 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_174, Battuta\_171, Birchlyn\_171, BoomerJR\_169, Bordeaux\_170, CeilingFan\_181, Genie2\_169, Gibbi\_180, IchabodCrane\_167, JimJam\_178, Karimac\_171, KentuckyRacer\_176, LukeCage\_171, MindFlayer\_167, PumpkinSpice\_174, Quaran19\_172, Rikishi\_179, SaltySpittoon\_172, Sollertia\_169, Spelly\_175, Spilled\_177, Stanimal\_168, Starbow\_169, TomSawyer\_176, Wipeout\_165, Yaboi\_171,

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

- 

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

- Anedea\_163, Angela\_162, Bmoc\_165, Enygma\_174, LilMartin\_160, Marsus\_169, Mugiwara\_179, MulchMansion\_162, Riptide\_159, StarPlatinum\_178,

### Summary by start number:

#### Start 2:

- Found in 10 of 36 ( 27.8% ) of genes in pham
- Manual Annotations of this start: 3 of 30
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Anedea\_163 (BE1), Enygma\_174 (BE2), StarPlatinum\_178 (BE2),

#### Start 3:

- Found in 7 of 36 ( 19.4% ) of genes in pham
- Manual Annotations of this start: 4 of 30
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Angela\_162 (BE1), Bmoc\_165 (BE1), LilMartin\_160 (BE1), Marsus\_169 (BE1), MulchMansion\_162 (BE1), Riptide\_159 (BE1),

#### Start 4:

- Found in 26 of 36 ( 72.2% ) of genes in pham
- Manual Annotations of this start: 23 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amabiko\_174 (BE2), Battuta\_171 (BE2), Birchlyn\_171 (BE2), BoomerJR\_169 (BE2), Bordeaux\_170 (BE2), CeilingFan\_181 (BE2), Genie2\_169 (BE2), Gibbi\_180 (BE2), IchabodCrane\_167 (BE2), JimJam\_178 (BE2), Karimac\_171 (BE2), KentuckyRacer\_176 (BE2), LukeCage\_171 (BE2), MindFlayer\_167 (BE2), PumpkinSpice\_174 (BE2), Quarant19\_172 (BE2), Rikishi\_179 (BE2), SaltySpittoon\_172 (BE2), Sollertia\_169 (BE2), Spelly\_175 (BE2), Spilled\_177 (BE2), Stanimal\_168 (BE2), Starbow\_169 (BE2), TomSawyer\_176 (BE2), Wipeout\_165 (BE2), Yaboi\_171 (BE2),

#### Start 5:

- Found in 8 of 36 ( 22.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Mugiwara\_179 (BE2),

### Summary by clusters:

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

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

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

#### Info for manual annotations of cluster BE2:

- Start number 2 was manually annotated 2 times for cluster BE2.
- Start number 4 was manually annotated 23 times for cluster BE2.

**Gene Information:**

Gene: Amabiko\_174 Start: 92371, Stop: 92517, Start Num: 4

Candidate Starts for Amabiko\_174:

(Start: 4 @92371 has 23 MA's),

Gene: Anedea\_163 Start: 90802, Stop: 90957, Start Num: 2

Candidate Starts for Anedea\_163:

(Start: 2 @90802 has 3 MA's), (Start: 3 @90805 has 4 MA's), (5, 90829), (6, 90874), (7, 90898),

Gene: Angela\_162 Start: 91184, Stop: 91339, Start Num: 3

Candidate Starts for Angela\_162:

(1, 91124), (Start: 2 @91181 has 3 MA's), (Start: 3 @91184 has 4 MA's), (5, 91211), (6, 91256),

Gene: Battuta\_171 Start: 92153, Stop: 92299, Start Num: 4

Candidate Starts for Battuta\_171:

(Start: 4 @92153 has 23 MA's),

Gene: Birchlyn\_171 Start: 90010, Stop: 90156, Start Num: 4

Candidate Starts for Birchlyn\_171:

(Start: 4 @90010 has 23 MA's),

Gene: Bmoc\_165 Start: 91374, Stop: 91526, Start Num: 3

Candidate Starts for Bmoc\_165:

(Start: 2 @91371 has 3 MA's), (Start: 3 @91374 has 4 MA's), (6, 91443), (8, 91470),

Gene: BoomerJR\_169 Start: 92442, Stop: 92588, Start Num: 4

Candidate Starts for BoomerJR\_169:

(Start: 4 @92442 has 23 MA's),

Gene: Bordeaux\_170 Start: 92660, Stop: 92806, Start Num: 4

Candidate Starts for Bordeaux\_170:

(Start: 4 @92660 has 23 MA's),

Gene: CeilingFan\_181 Start: 92894, Stop: 93040, Start Num: 4

Candidate Starts for CeilingFan\_181:

(Start: 4 @92894 has 23 MA's),

Gene: Enygma\_174 Start: 95024, Stop: 95182, Start Num: 2

Candidate Starts for Enygma\_174:

(Start: 2 @95024 has 3 MA's), (5, 95048), (10, 95168),

Gene: Genie2\_169 Start: 92556, Stop: 92702, Start Num: 4

Candidate Starts for Genie2\_169:

(Start: 4 @92556 has 23 MA's),

Gene: Gibbi\_180 Start: 92948, Stop: 93094, Start Num: 4

Candidate Starts for Gibbi\_180:

(Start: 4 @92948 has 23 MA's),

Gene: IchabodCrane\_167 Start: 92072, Stop: 92218, Start Num: 4

Candidate Starts for IchabodCrane\_167:

(Start: 4 @92072 has 23 MA's),

Gene: JimJam\_178 Start: 93993, Stop: 94139, Start Num: 4  
Candidate Starts for JimJam\_178:  
(Start: 4 @93993 has 23 MA's),

Gene: Karimac\_171 Start: 92617, Stop: 92763, Start Num: 4  
Candidate Starts for Karimac\_171:  
(Start: 4 @92617 has 23 MA's),

Gene: KentuckyRacer\_176 Start: 93739, Stop: 93885, Start Num: 4  
Candidate Starts for KentuckyRacer\_176:  
(Start: 4 @93739 has 23 MA's),

Gene: LilMartin\_160 Start: 90830, Stop: 90985, Start Num: 3  
Candidate Starts for LilMartin\_160:  
(1, 90770), (Start: 2 @90827 has 3 MA's), (Start: 3 @90830 has 4 MA's), (5, 90857),

Gene: LukeCage\_171 Start: 93627, Stop: 93773, Start Num: 4  
Candidate Starts for LukeCage\_171:  
(Start: 4 @93627 has 23 MA's),

Gene: Marsus\_169 Start: 91379, Stop: 91534, Start Num: 3  
Candidate Starts for Marsus\_169:  
(Start: 2 @91376 has 3 MA's), (Start: 3 @91379 has 4 MA's), (6, 91451),

Gene: MindFlayer\_167 Start: 91979, Stop: 92125, Start Num: 4  
Candidate Starts for MindFlayer\_167:  
(Start: 4 @91979 has 23 MA's),

Gene: Mugiwara\_179 Start: 93609, Stop: 93743, Start Num: 5  
Candidate Starts for Mugiwara\_179:  
(Start: 2 @93585 has 3 MA's), (5, 93609), (10, 93729),

Gene: MulchMansion\_162 Start: 91446, Stop: 91601, Start Num: 3  
Candidate Starts for MulchMansion\_162:  
(1, 91386), (Start: 2 @91443 has 3 MA's), (Start: 3 @91446 has 4 MA's), (5, 91473),

Gene: PumpkinSpice\_174 Start: 93200, Stop: 93346, Start Num: 4  
Candidate Starts for PumpkinSpice\_174:  
(Start: 4 @93200 has 23 MA's),

Gene: Quaran19\_172 Start: 92639, Stop: 92785, Start Num: 4  
Candidate Starts for Quaran19\_172:  
(Start: 4 @92639 has 23 MA's),

Gene: Rikishi\_179 Start: 92752, Stop: 92898, Start Num: 4  
Candidate Starts for Rikishi\_179:  
(Start: 4 @92752 has 23 MA's),

Gene: Riptide\_159 Start: 89445, Stop: 89597, Start Num: 3  
Candidate Starts for Riptide\_159:  
(Start: 2 @89442 has 3 MA's), (Start: 3 @89445 has 4 MA's), (5, 89469), (6, 89514), (7, 89538),

Gene: SaltySpittoon\_172 Start: 92183, Stop: 92329, Start Num: 4  
Candidate Starts for SaltySpittoon\_172:  
(Start: 4 @92183 has 23 MA's),

Gene: Sollertia\_169 Start: 92556, Stop: 92702, Start Num: 4  
Candidate Starts for Sollertia\_169:  
(Start: 4 @92556 has 23 MA's),

Gene: Spelly\_175 Start: 92112, Stop: 92258, Start Num: 4  
Candidate Starts for Spelly\_175:  
(Start: 4 @92112 has 23 MA's),

Gene: Spilled\_177 Start: 92925, Stop: 93071, Start Num: 4  
Candidate Starts for Spilled\_177:  
(Start: 4 @92925 has 23 MA's),

Gene: Stanimal\_168 Start: 92917, Stop: 93063, Start Num: 4  
Candidate Starts for Stanimal\_168:  
(Start: 4 @92917 has 23 MA's),

Gene: StarPlatinum\_178 Start: 94656, Stop: 94808, Start Num: 2  
Candidate Starts for StarPlatinum\_178:  
(Start: 2 @94656 has 3 MA's), (5, 94680), (8, 94752), (9, 94779), (10, 94794),

Gene: Starbow\_169 Start: 92156, Stop: 92302, Start Num: 4  
Candidate Starts for Starbow\_169:  
(Start: 4 @92156 has 23 MA's),

Gene: TomSawyer\_176 Start: 93844, Stop: 93990, Start Num: 4  
Candidate Starts for TomSawyer\_176:  
(Start: 4 @93844 has 23 MA's),

Gene: Wipeout\_165 Start: 93188, Stop: 93334, Start Num: 4  
Candidate Starts for Wipeout\_165:  
(Start: 4 @93188 has 23 MA's),

Gene: Yaboi\_171 Start: 92491, Stop: 92637, Start Num: 4  
Candidate Starts for Yaboi\_171:  
(Start: 4 @92491 has 23 MA's),