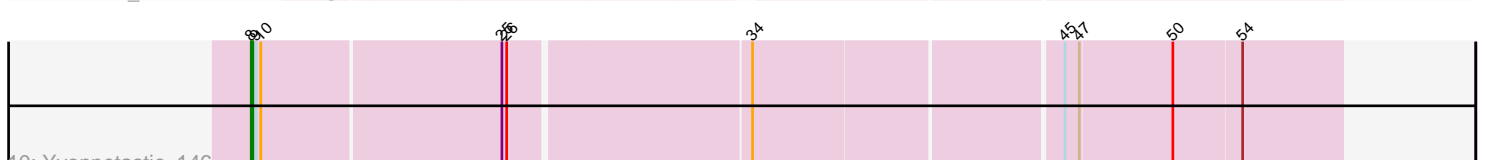
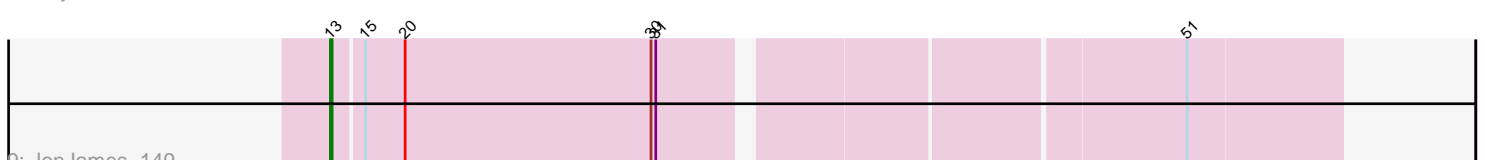
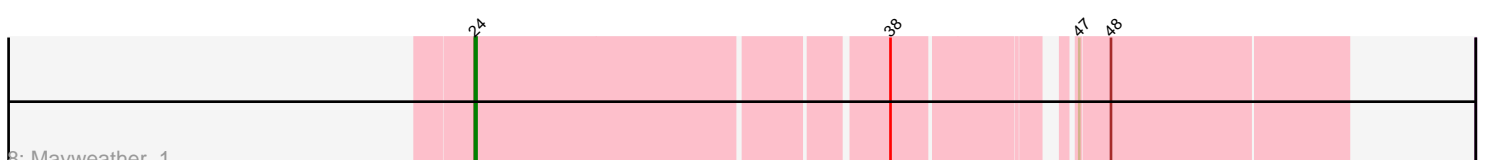
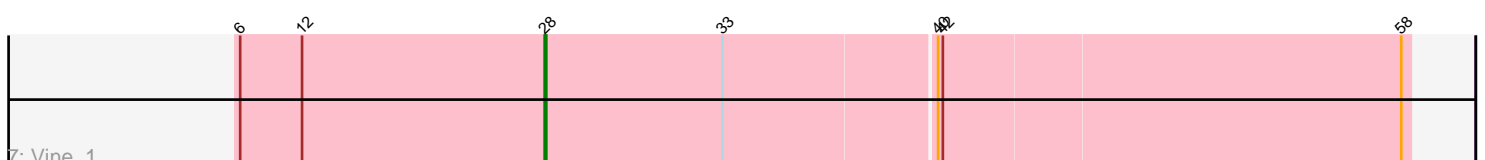
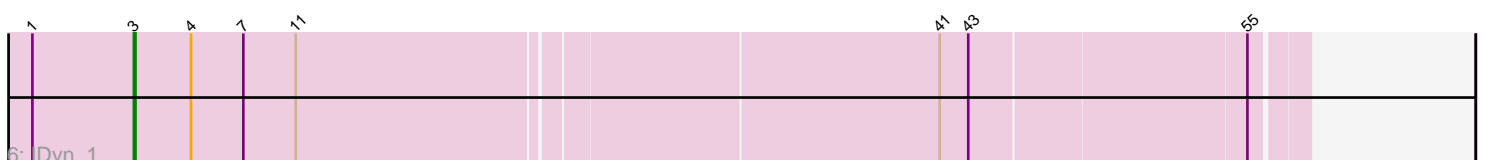
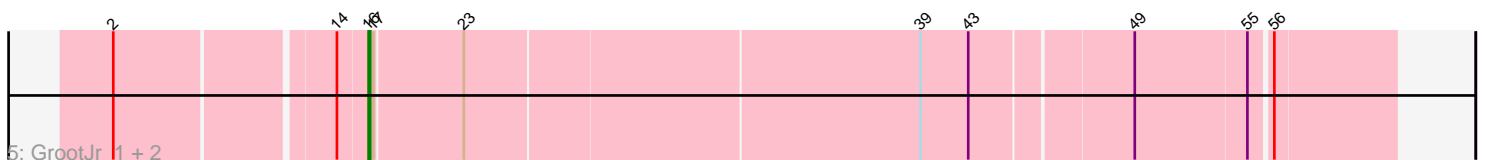
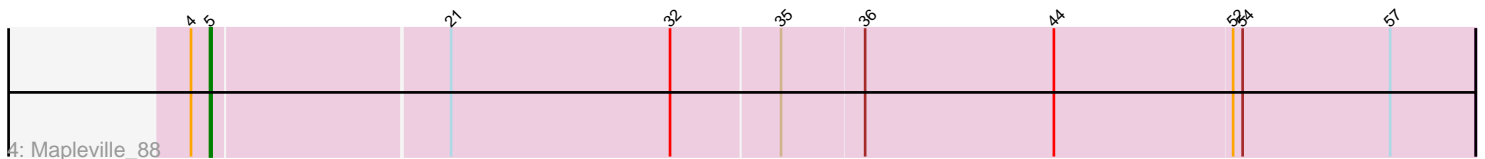
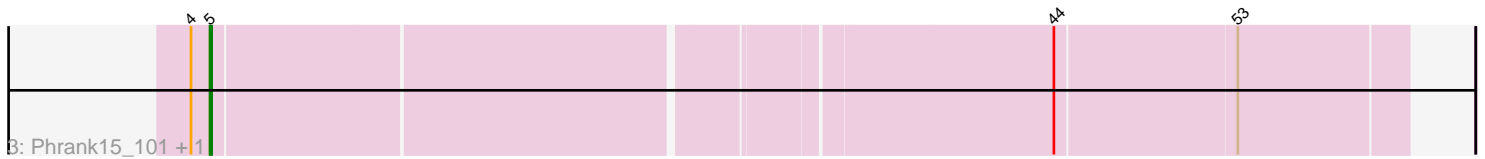
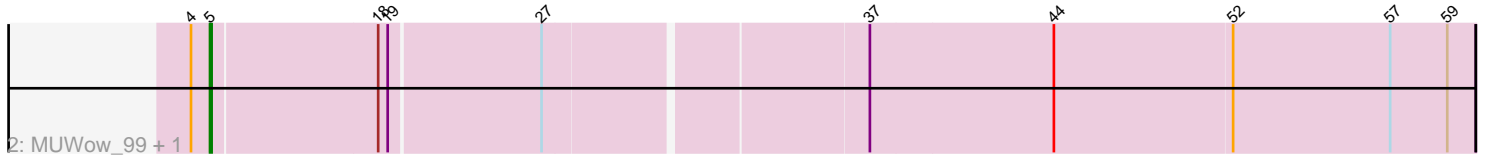
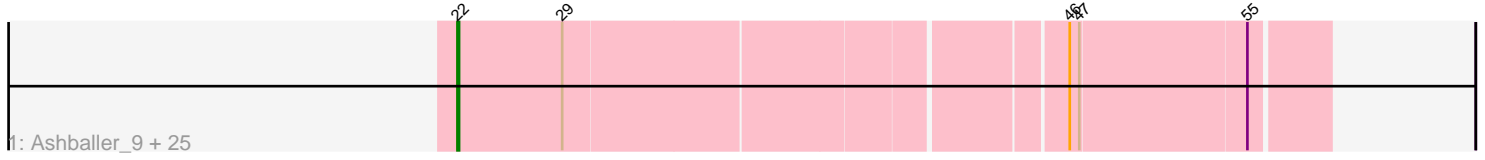


Pham 305151



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 305151 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305151 has 39 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Ashballer\_9, Rubeus\_11, Fajezeel\_12, Jerm2\_11, PattyP\_12, Rufus\_11, Pippin\_12, Rutherferd\_12, DreamCatcher\_13, Museum\_12, Fushigi\_11, Bruns\_9, GageAP\_12, Marge\_11, Greg\_12, Kenmech\_13, Niza\_12, Treddle\_12, SpikeBT\_12, Gyzlar\_12, Sibs6\_12, Mkhuseleli\_10, Monet\_12, Acme\_12, Burton\_11, BigMau\_12
- Track 2 : MUWow\_99, Anekin\_96
- Track 3 : Phrank15\_101, CosmicBrownie\_94
- Track 4 : Mapleville\_88
- Track 5 : GrootJr\_1, NatB6\_1, NovumRegina\_1
- Track 6 : IDyn\_1
- Track 7 : Vine\_1
- Track 8 : Mayweather\_1
- Track 9 : JonJames\_149
- Track 10 : Yvonnetastic\_146

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

The start number called the most often in the published annotations is 22, it was called in 25 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acme\_12, Ashballer\_9, BigMau\_12, Bruns\_9, Burton\_11, DreamCatcher\_13, Fajezeel\_12, Fushigi\_11, GageAP\_12, Greg\_12, Gyzlar\_12, Jerm2\_11, Kenmech\_13, Marge\_11, Mkhuseleli\_10, Monet\_12, Museum\_12, Niza\_12, PattyP\_12, Pippin\_12, Rubeus\_11, Rufus\_11, Rutherferd\_12, Sibs6\_12, SpikeBT\_12, Treddle\_12,

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

- 

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

- Anekin\_96, CosmicBrownie\_94, GrootJr\_1, IDyn\_1, JonJames\_149, MUWow\_99, Mapleville\_88, Mayweather\_1, NatB6\_1, NovumRegina\_1, Phrank15\_101, Vine\_1, Yvonnetastic\_146,

## Summary by start number:

### Start 3:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IDyn\_1 (CR4),

### Start 5:

- Found in 5 of 39 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 4 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anekin\_96 (AY), CosmicBrownie\_94 (AY), MUWow\_99 (AY), Mapleville\_88 (AY), Phrank15\_101 (AY),

### Start 8:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnestic\_146 (DD),

### Start 13:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames\_149 (DD),

### Start 16:

- Found in 3 of 39 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GrootJr\_1 (CR2), NatB6\_1 (CR2), NovumRegina\_1 (CR2),

### Start 22:

- Found in 26 of 39 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 25 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acme\_12 (A1), Ashballer\_9 (A1), BigMau\_12 (A1), Bruns\_9 (A1), Burton\_11 (A1), DreamCatcher\_13 (A1), Fajezeel\_12 (A1), Fushigi\_11 (A1), GageAP\_12 (A1), Greg\_12 (A1), Gyzlar\_12 (A1), Jerm2\_11 (A1), Kenmech\_13 (A1), Marge\_11 (A1), Mkhuseleli\_10 (A1), Monet\_12 (A1), Museum\_12 (A1), Niza\_12 (A1), PattyP\_12 (A1), Pippin\_12 (A1), Rubeus\_11 (A1), Rufus\_11 (A1), Rutherford\_12 (A1), Sibs6\_12 (A1), SpikeBT\_12 (A1), Treddle\_12 (A1),

### Start 24:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mayweather\_1 (CT),

### Start 28:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vine\_1 (CT),

### **Summary by clusters:**

There are 6 clusters represented in this pham: CR2, CR4, DD, A1, AY, CT,

Info for manual annotations of cluster A1:

- Start number 22 was manually annotated 25 times for cluster A1.

Info for manual annotations of cluster AY:

- Start number 5 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster CR2:

- Start number 16 was manually annotated 3 times for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 3 was manually annotated 1 time for cluster CR4.

Info for manual annotations of cluster CT:

- Start number 24 was manually annotated 1 time for cluster CT.
- Start number 28 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster DD:

- Start number 8 was manually annotated 1 time for cluster DD.
- Start number 13 was manually annotated 1 time for cluster DD.

### **Gene Information:**

Gene: Acme\_12 Start: 6852, Stop: 7370, Start Num: 22

Candidate Starts for Acme\_12:

(Start: 22 @6852 has 25 MA's), (29, 6918), (46, 7215), (47, 7221), (55, 7323),

Gene: Anekin\_96 Start: 52648, Stop: 53418, Start Num: 5

Candidate Starts for Anekin\_96:

(4, 52636), (Start: 5 @52648 has 4 MA's), (18, 52750), (19, 52756), (27, 52849), (37, 53041), (44, 53155), (52, 53266), (57, 53365), (59, 53401),

Gene: Ashballer\_9 Start: 6492, Stop: 7010, Start Num: 22

Candidate Starts for Ashballer\_9:

(Start: 22 @6492 has 25 MA's), (29, 6558), (46, 6855), (47, 6861), (55, 6963),

Gene: BigMau\_12 Start: 6719, Stop: 7237, Start Num: 22

Candidate Starts for BigMau\_12:

(Start: 22 @6719 has 25 MA's), (29, 6785), (46, 7082), (47, 7088), (55, 7190),

Gene: Bruns\_9 Start: 6422, Stop: 6940, Start Num: 22

Candidate Starts for Bruns\_9:

(Start: 22 @6422 has 25 MA's), (29, 6488), (46, 6785), (47, 6791), (55, 6893),

Gene: Burton\_11 Start: 6622, Stop: 7140, Start Num: 22  
Candidate Starts for Burton\_11:  
(Start: 22 @6622 has 25 MA's), (29, 6688), (46, 6985), (47, 6991), (55, 7093),

Gene: CosmicBrownie\_94 Start: 50910, Stop: 51626, Start Num: 5  
Candidate Starts for CosmicBrownie\_94:  
(4, 50898), (Start: 5 @50910 has 4 MA's), (44, 51411), (53, 51522),

Gene: DreamCatcher\_13 Start: 7699, Stop: 8217, Start Num: 22  
Candidate Starts for DreamCatcher\_13:  
(Start: 22 @7699 has 25 MA's), (29, 7765), (46, 8062), (47, 8068), (55, 8170),

Gene: Fajezeel\_12 Start: 6818, Stop: 7336, Start Num: 22  
Candidate Starts for Fajezeel\_12:  
(Start: 22 @6818 has 25 MA's), (29, 6884), (46, 7181), (47, 7187), (55, 7289),

Gene: Fushigi\_11 Start: 6909, Stop: 7427, Start Num: 22  
Candidate Starts for Fushigi\_11:  
(Start: 22 @6909 has 25 MA's), (29, 6975), (46, 7272), (47, 7278), (55, 7380),

Gene: GageAP\_12 Start: 7234, Stop: 7752, Start Num: 22  
Candidate Starts for GageAP\_12:  
(Start: 22 @7234 has 25 MA's), (29, 7300), (46, 7597), (47, 7603), (55, 7705),

Gene: Greg\_12 Start: 6818, Stop: 7336, Start Num: 22  
Candidate Starts for Greg\_12:  
(Start: 22 @6818 has 25 MA's), (29, 6884), (46, 7181), (47, 7187), (55, 7289),

Gene: GrootJr\_1 Start: 214, Stop: 828, Start Num: 16  
Candidate Starts for GrootJr\_1:  
(2, 67), (14, 196), (Start: 16 @214 has 3 MA's), (17, 217), (23, 271), (39, 547), (43, 577), (49, 673), (55, 742), (56, 754),

Gene: Gyzlar\_12 Start: 7448, Stop: 7966, Start Num: 22  
Candidate Starts for Gyzlar\_12:  
(Start: 22 @7448 has 25 MA's), (29, 7514), (46, 7811), (47, 7817), (55, 7919),

Gene: IDyn\_1 Start: 79, Stop: 786, Start Num: 3  
Candidate Starts for IDyn\_1:  
(1, 16), (Start: 3 @79 has 1 MA's), (4, 115), (7, 148), (11, 181), (41, 568), (43, 586), (55, 754),

Gene: Jerm2\_11 Start: 6719, Stop: 7237, Start Num: 22  
Candidate Starts for Jerm2\_11:  
(Start: 22 @6719 has 25 MA's), (29, 6785), (46, 7082), (47, 7088), (55, 7190),

Gene: JonJames\_149 Start: 83143, Stop: 83742, Start Num: 13  
Candidate Starts for JonJames\_149:  
(Start: 13 @83143 has 1 MA's), (15, 83161), (20, 83185), (30, 83338), (31, 83341), (51, 83647),

Gene: Kenmech\_13 Start: 7591, Stop: 8109, Start Num: 22  
Candidate Starts for Kenmech\_13:  
(Start: 22 @7591 has 25 MA's), (29, 7657), (46, 7954), (47, 7960), (55, 8062),

Gene: MUWow\_99 Start: 54213, Stop: 54983, Start Num: 5

Candidate Starts for MUWow\_99:

(4, 54201), (Start: 5 @54213 has 4 MA's), (18, 54315), (19, 54321), (27, 54414), (37, 54606), (44, 54720), (52, 54831), (57, 54930), (59, 54966),

Gene: Mapleville\_88 Start: 50610, Stop: 51389, Start Num: 5

Candidate Starts for Mapleville\_88:

(4, 50598), (Start: 5 @50610 has 4 MA's), (21, 50754), (32, 50892), (35, 50958), (36, 51009), (44, 51126), (52, 51237), (54, 51243), (57, 51336),

Gene: Marge\_11 Start: 6955, Stop: 7473, Start Num: 22

Candidate Starts for Marge\_11:

(Start: 22 @6955 has 25 MA's), (29, 7021), (46, 7318), (47, 7324), (55, 7426),

Gene: Mayweather\_1 Start: 38, Stop: 541, Start Num: 24

Candidate Starts for Mayweather\_1:

(Start: 24 @38 has 1 MA's), (38, 284), (47, 377), (48, 395),

Gene: Mkhuseli\_10 Start: 6576, Stop: 7094, Start Num: 22

Candidate Starts for Mkhuseli\_10:

(Start: 22 @6576 has 25 MA's), (29, 6642), (46, 6939), (47, 6945), (55, 7047),

Gene: Monet\_12 Start: 7472, Stop: 7990, Start Num: 22

Candidate Starts for Monet\_12:

(Start: 22 @7472 has 25 MA's), (29, 7538), (46, 7835), (47, 7841), (55, 7943),

Gene: Museum\_12 Start: 6561, Stop: 7079, Start Num: 22

Candidate Starts for Museum\_12:

(Start: 22 @6561 has 25 MA's), (29, 6627), (46, 6924), (47, 6930), (55, 7032),

Gene: NatB6\_1 Start: 214, Stop: 828, Start Num: 16

Candidate Starts for NatB6\_1:

(2, 67), (14, 196), (Start: 16 @214 has 3 MA's), (17, 217), (23, 271), (39, 547), (43, 577), (49, 673), (55, 742), (56, 754),

Gene: Niza\_12 Start: 7581, Stop: 8099, Start Num: 22

Candidate Starts for Niza\_12:

(Start: 22 @7581 has 25 MA's), (29, 7647), (46, 7944), (47, 7950), (55, 8052),

Gene: NovumRegina\_1 Start: 214, Stop: 828, Start Num: 16

Candidate Starts for NovumRegina\_1:

(2, 67), (14, 196), (Start: 16 @214 has 3 MA's), (17, 217), (23, 271), (39, 547), (43, 577), (49, 673), (55, 742), (56, 754),

Gene: PattyP\_12 Start: 6770, Stop: 7288, Start Num: 22

Candidate Starts for PattyP\_12:

(Start: 22 @6770 has 25 MA's), (29, 6836), (46, 7133), (47, 7139), (55, 7241),

Gene: Phrank15\_101 Start: 52549, Stop: 53265, Start Num: 5

Candidate Starts for Phrank15\_101:

(4, 52537), (Start: 5 @52549 has 4 MA's), (44, 53050), (53, 53161),

Gene: Pippin\_12 Start: 6820, Stop: 7338, Start Num: 22  
Candidate Starts for Pippin\_12:  
(Start: 22 @6820 has 25 MA's), (29, 6886), (46, 7183), (47, 7189), (55, 7291),

Gene: Rubeus\_11 Start: 6578, Stop: 7096, Start Num: 22  
Candidate Starts for Rubeus\_11:  
(Start: 22 @6578 has 25 MA's), (29, 6644), (46, 6941), (47, 6947), (55, 7049),

Gene: Rufus\_11 Start: 6635, Stop: 7153, Start Num: 22  
Candidate Starts for Rufus\_11:  
(Start: 22 @6635 has 25 MA's), (29, 6701), (46, 6998), (47, 7004), (55, 7106),

Gene: Rutherferd\_12 Start: 7096, Stop: 7614, Start Num: 22  
Candidate Starts for Rutherferd\_12:  
(Start: 22 @7096 has 25 MA's), (29, 7162), (46, 7459), (47, 7465), (55, 7567),

Gene: Sibs6\_12 Start: 6771, Stop: 7289, Start Num: 22  
Candidate Starts for Sibs6\_12:  
(Start: 22 @6771 has 25 MA's), (29, 6837), (46, 7134), (47, 7140), (55, 7242),

Gene: SpikeBT\_12 Start: 7407, Stop: 7925, Start Num: 22  
Candidate Starts for SpikeBT\_12:  
(Start: 22 @7407 has 25 MA's), (29, 7473), (46, 7770), (47, 7776), (55, 7878),

Gene: Treddle\_12 Start: 7473, Stop: 7991, Start Num: 22  
Candidate Starts for Treddle\_12:  
(Start: 22 @7473 has 25 MA's), (29, 7539), (46, 7836), (47, 7842), (55, 7944),

Gene: Vine\_1 Start: 257, Stop: 790, Start Num: 28  
Candidate Starts for Vine\_1:  
(6, 65), (12, 104), (Start: 28 @257 has 1 MA's), (33, 368), (40, 497), (42, 500), (58, 785),

Gene: Yvonnetastic\_146 Start: 79771, Stop: 80427, Start Num: 8  
Candidate Starts for Yvonnetastic\_146:  
(Start: 8 @79771 has 1 MA's), (9, 79774), (10, 79777), (25, 79924), (26, 79927), (34, 80071), (45, 80257), (47, 80266), (50, 80323), (54, 80365),