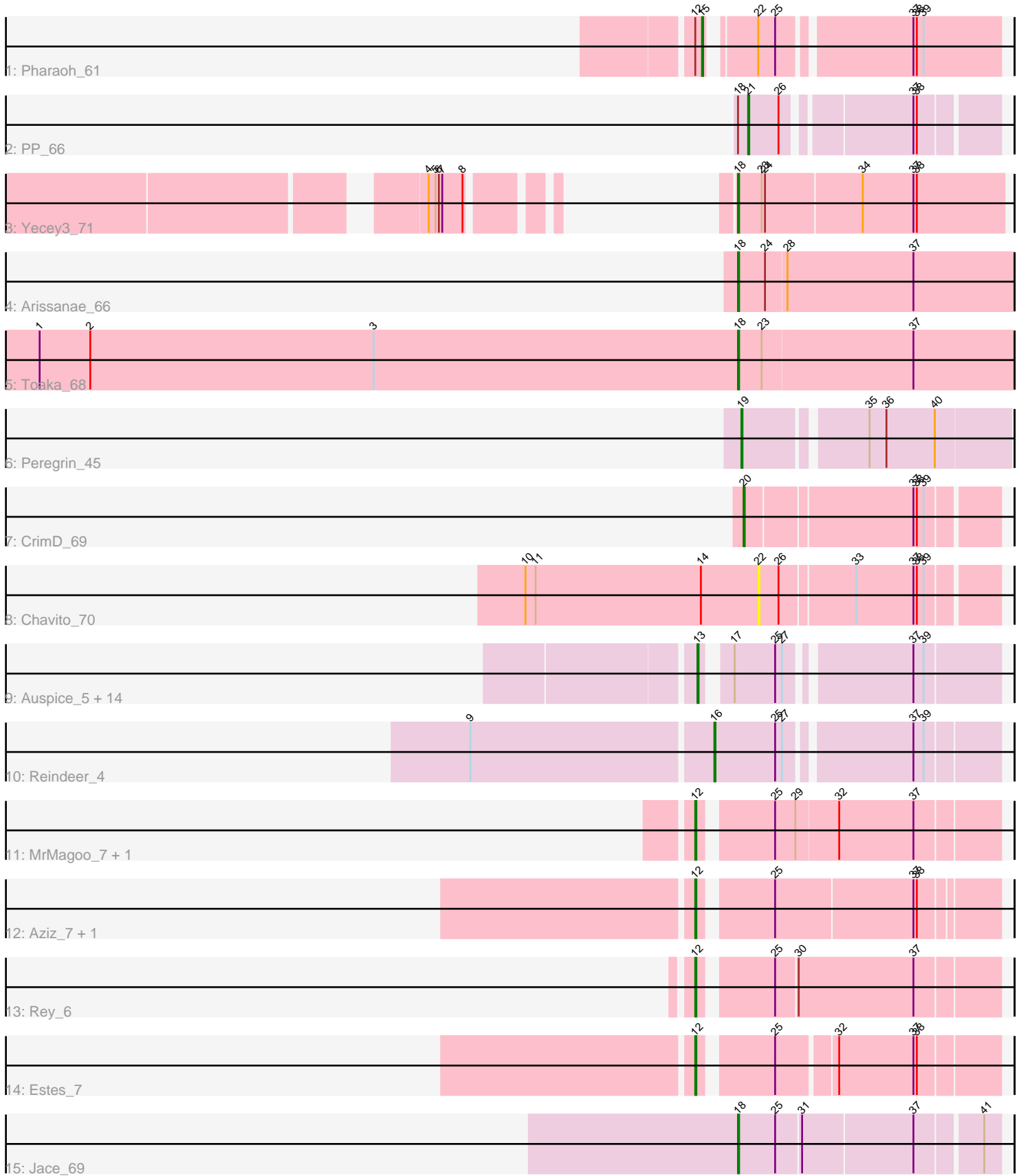


Pham 216421



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 216421 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216421 has 31 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh\_61
- Track 2 : PP\_66
- Track 3 : Yecey3\_71
- Track 4 : Arissanae\_66
- Track 5 : Toaka\_68
- Track 6 : Peregrin\_45
- Track 7 : CrimD\_69
- Track 8 : Chavito\_70
- Track 9 : Auspice\_5, FreakyGoo\_5, Diminimus\_6, TyDawg\_5, Dulcita\_6, PegLeg\_5, Bongo\_5, Izel\_5, KleverKiS\_5, LilhomieP\_5, Glaske16\_6, SlimJimmy\_5, Bricole\_5, Skinny\_6, IPhane7\_5
- Track 10 : Reindeer\_4
- Track 11 : MrMagoo\_7, GardenSalsa\_7
- Track 12 : Aziz\_7, GenevaB15\_7
- Track 13 : Rey\_6
- Track 14 : Estes\_7
- Track 15 : Jace\_69

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

The start number called the most often in the published annotations is 13, it was called in 12 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_5, Bongo\_5, Bricole\_5, Diminimus\_6, Dulcita\_6, FreakyGoo\_5, Glaske16\_6, IPhane7\_5, Izel\_5, KleverKiS\_5, LilhomieP\_5, PegLeg\_5, Skinny\_6, SlimJimmy\_5, TyDawg\_5,

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

- 

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

- Arissanae\_66, Aziz\_7, Chavito\_70, CrimD\_69, Estes\_7, GardenSalsa\_7, GenevaB15\_7, Jace\_69, MrMagoo\_7, PP\_66, Peregrin\_45, Pharaoh\_61,

Reindeer\_4, Rey\_6, Toaka\_68, Yecey3\_71,

### Summary by start number:

#### Start 12:

- Found in 7 of 31 ( 22.6% ) of genes in pham
- Manual Annotations of this start: 6 of 27
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Aziz\_7 (M2), Estes\_7 (M2), GardenSalsa\_7 (M2), GenevaB15\_7 (M2), MrMagoo\_7 (M2), Rey\_6 (M2),

#### Start 13:

- Found in 15 of 31 ( 48.4% ) of genes in pham
- Manual Annotations of this start: 12 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_5 (M1), Bongo\_5 (M1), Bricole\_5 (M1), Diminimus\_6 (M1), Dulcita\_6 (M1), FreakyGoo\_5 (M1), Glaske16\_6 (M1), IPhone7\_5 (M1), Izel\_5 (M1), KleverKiS\_5 (M1), LilhomieP\_5 (M1), PegLeg\_5 (M1), Skinny\_6 (M1), SlimJimmy\_5 (M1), TyDawg\_5 (M1),

#### Start 15:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh\_61 (A12),

#### Start 16:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Reindeer\_4 (M1),

#### Start 18:

- Found in 5 of 31 ( 16.1% ) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Arissanae\_66 (A9), Jace\_69 (singleton), Toaka\_68 (A9), Yecey3\_71 (A9),

#### Start 19:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Peregrin\_45 (CB),

#### Start 20:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CrimD\_69 (K1),

#### Start 21:

- Found in 1 of 31 ( 3.2% ) of genes in pham

- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP\_66 (A7),

Start 22:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chavito\_70 (K1),

### **Summary by clusters:**

There are 8 clusters represented in this pham: singleton, A12, CB, K1, M1, A7, M2, A9,

Info for manual annotations of cluster A12:

- Start number 15 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A7:

- Start number 21 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:

- Start number 18 was manually annotated 3 times for cluster A9.

Info for manual annotations of cluster CB:

- Start number 19 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster K1:

- Start number 20 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster M1:

- Start number 13 was manually annotated 12 times for cluster M1.
- Start number 16 was manually annotated 1 time for cluster M1.

Info for manual annotations of cluster M2:

- Start number 12 was manually annotated 6 times for cluster M2.

### **Gene Information:**

Gene: Arissanae\_66 Start: 41220, Stop: 40978, Start Num: 18

Candidate Starts for Arissanae\_66:

(Start: 18 @41220 has 4 MA's), (24, 41196), (28, 41178), (37, 41067),

Gene: Auspice\_5 Start: 2366, Stop: 2133, Start Num: 13

Candidate Starts for Auspice\_5:

(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: Aziz\_7 Start: 2636, Stop: 2391, Start Num: 12

Candidate Starts for Aziz\_7:

(Start: 12 @2636 has 6 MA's), (25, 2579), (37, 2459), (38, 2456),

Gene: Bongo\_5 Start: 2366, Stop: 2133, Start Num: 13  
Candidate Starts for Bongo\_5:  
(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: Bricole\_5 Start: 2365, Stop: 2132, Start Num: 13  
Candidate Starts for Bricole\_5:  
(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Chavito\_70 Start: 44900, Stop: 45100, Start Num: 22  
Candidate Starts for Chavito\_70:  
(10, 44693), (11, 44702), (14, 44849), (22, 44900), (26, 44918), (33, 44981), (37, 45032), (38, 45035),  
(39, 45041),

Gene: CrimD\_69 Start: 44683, Stop: 44892, Start Num: 20  
Candidate Starts for CrimD\_69:  
(Start: 20 @44683 has 1 MA's), (37, 44824), (38, 44827), (39, 44833),

Gene: Diminimus\_6 Start: 2365, Stop: 2132, Start Num: 13  
Candidate Starts for Diminimus\_6:  
(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Dulcita\_6 Start: 2365, Stop: 2132, Start Num: 13  
Candidate Starts for Dulcita\_6:  
(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Estes\_7 Start: 2641, Stop: 2399, Start Num: 12  
Candidate Starts for Estes\_7:  
(Start: 12 @2641 has 6 MA's), (25, 2584), (32, 2536), (37, 2470), (38, 2467),

Gene: FreakyGoo\_5 Start: 2366, Stop: 2133, Start Num: 13  
Candidate Starts for FreakyGoo\_5:  
(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: GardenSalsa\_7 Start: 2660, Stop: 2412, Start Num: 12  
Candidate Starts for GardenSalsa\_7:  
(Start: 12 @2660 has 6 MA's), (25, 2603), (29, 2585), (32, 2549), (37, 2483),

Gene: GenevaB15\_7 Start: 2636, Stop: 2391, Start Num: 12  
Candidate Starts for GenevaB15\_7:  
(Start: 12 @2636 has 6 MA's), (25, 2579), (37, 2459), (38, 2456),

Gene: Glaske16\_6 Start: 2365, Stop: 2132, Start Num: 13  
Candidate Starts for Glaske16\_6:  
(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: IPHane7\_5 Start: 2366, Stop: 2133, Start Num: 13  
Candidate Starts for IPHane7\_5:  
(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: Izel\_5 Start: 2365, Stop: 2132, Start Num: 13  
Candidate Starts for Izel\_5:  
(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Jace\_69 Start: 40976, Stop: 41194, Start Num: 18

Candidate Starts for Jace\_69:

(Start: 18 @40976 has 4 MA's), (25, 41009), (31, 41030), (37, 41126), (41, 41180),

Gene: KleverKiS\_5 Start: 2362, Stop: 2132, Start Num: 13

Candidate Starts for KleverKiS\_5:

(Start: 13 @2362 has 12 MA's), (17, 2344), (25, 2308), (27, 2302), (37, 2203), (39, 2194),

Gene: LilhomieP\_5 Start: 2366, Stop: 2133, Start Num: 13

Candidate Starts for LilhomieP\_5:

(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: MrMagoo\_7 Start: 2660, Stop: 2412, Start Num: 12

Candidate Starts for MrMagoo\_7:

(Start: 12 @2660 has 6 MA's), (25, 2603), (29, 2585), (32, 2549), (37, 2483),

Gene: PP\_66 Start: 45311, Stop: 45114, Start Num: 21

Candidate Starts for PP\_66:

(Start: 18 @45320 has 4 MA's), (Start: 21 @45311 has 1 MA's), (26, 45284), (37, 45182), (38, 45179),

Gene: PegLeg\_5 Start: 2365, Stop: 2132, Start Num: 13

Candidate Starts for PegLeg\_5:

(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Peregrin\_45 Start: 15804, Stop: 15583, Start Num: 19

Candidate Starts for Peregrin\_45:

(Start: 19 @15804 has 1 MA's), (35, 15705), (36, 15690), (40, 15648),

Gene: Pharaoh\_61 Start: 40405, Stop: 40172, Start Num: 15

Candidate Starts for Pharaoh\_61:

(Start: 12 @40411 has 6 MA's), (Start: 15 @40405 has 1 MA's), (22, 40372), (25, 40357), (37, 40249), (38, 40246), (39, 40240),

Gene: Reindeer\_4 Start: 2200, Stop: 1967, Start Num: 16

Candidate Starts for Reindeer\_4:

(9, 2410), (Start: 16 @2200 has 1 MA's), (25, 2146), (27, 2140), (37, 2038), (39, 2029),

Gene: Rey\_6 Start: 2648, Stop: 2400, Start Num: 12

Candidate Starts for Rey\_6:

(Start: 12 @2648 has 6 MA's), (25, 2591), (30, 2573), (37, 2471),

Gene: Skinny\_6 Start: 2365, Stop: 2132, Start Num: 13

Candidate Starts for Skinny\_6:

(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: SlimJimmy\_5 Start: 2365, Stop: 2132, Start Num: 13

Candidate Starts for SlimJimmy\_5:

(Start: 13 @2365 has 12 MA's), (17, 2347), (25, 2311), (27, 2305), (37, 2206), (39, 2197),

Gene: Toaka\_68 Start: 40924, Stop: 40682, Start Num: 18

Candidate Starts for Toaka\_68:

(1, 41545), (2, 41500), (3, 41248), (Start: 18 @40924 has 4 MA's), (23, 40903), (37, 40771),

Gene: TyDawg\_5 Start: 2366, Stop: 2133, Start Num: 13

Candidate Starts for TyDawg\_5:

(Start: 13 @2366 has 12 MA's), (17, 2348), (25, 2312), (27, 2306), (37, 2207), (39, 2198),

Gene: Yecey3\_71 Start: 41130, Stop: 40897, Start Num: 18

Candidate Starts for Yecey3\_71:

(4, 41235), (5, 41229), (6, 41226), (7, 41223), (8, 41205), (Start: 18 @41130 has 4 MA's), (23, 41109),  
(24, 41106), (34, 41022), (37, 40977), (38, 40974),