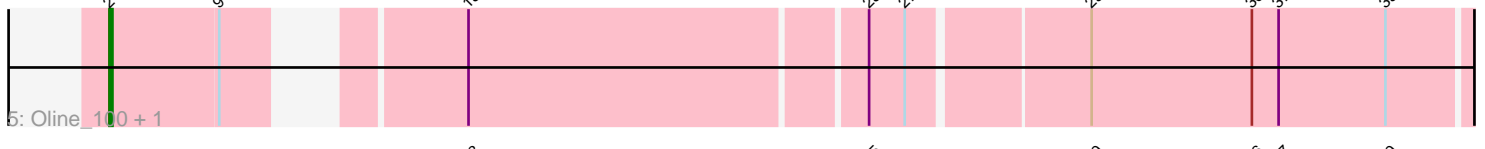
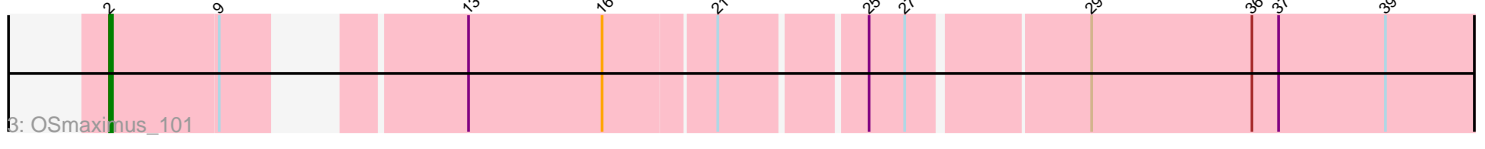


Pham 216426



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 216426 Report

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

Pham number 216426 has 31 members, 2 are drafts.

Phages represented in each track:

- Track 1 : PhrankReynolds\_99, Lopsy\_97, Chunky\_99, Derpp\_100, Apizium\_99, Mcshane\_103, Schueller\_99, BatteryCK\_99, MichaelPhcott\_99, Phergie\_101, TyrionL\_101, PhenghisKhan\_101, Zonia\_101, CharlieGBrown\_99, Soile\_102, AngelCake\_97, Labeouficaum\_101
- Track 2 : Eremos\_98, HSavage\_98, MiniBoss\_96, AltPhacts\_98
- Track 3 : OSmaximus\_101
- Track 4 : Rimu\_104
- Track 5 : Oline\_100, MelsMeow\_99
- Track 6 : KingVeVeVe\_99
- Track 7 : Imvubu\_93
- Track 8 : Saguaro\_85
- Track 9 : Knocker\_90
- Track 10 : Funsized\_90
- Track 11 : Rinkes\_88

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

The start number called the most often in the published annotations is 9, it was called in 21 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AltPhacts\_98, AngelCake\_97, Apizium\_99, BatteryCK\_99, CharlieGBrown\_99, Chunky\_99, Derpp\_100, Eremos\_98, HSavage\_98, KingVeVeVe\_99, Labeouficaum\_101, Lopsy\_97, Mcshane\_103, MichaelPhcott\_99, MiniBoss\_96, PhenghisKhan\_101, Phergie\_101, PhrankReynolds\_99, Schueller\_99, Soile\_102, TyrionL\_101, Zonia\_101,

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

- MelsMeow\_99, OSmaximus\_101, Oline\_100,

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

- Funsized\_90, Imvubu\_93, Knocker\_90, Rimu\_104, Rinkes\_88, Saguaro\_85,

### **Summary by start number:**

Start 1:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Saguaro\_85 (B7),

Start 2:

- Found in 20 of 31 ( 64.5% ) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 15.0% of time when present
- Phage (with cluster) where this start called: MelsMeow\_99 (B1), OSmaximus\_101 (B1), Oline\_100 (B1),

Start 5:

- 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: Rimu\_104 (B1),

Start 9:

- Found in 25 of 31 ( 80.6% ) of genes in pham
- Manual Annotations of this start: 21 of 29
- Called 88.0% of time when present
- Phage (with cluster) where this start called: AltPhacts\_98 (B1), AngelCake\_97 (B1), Apizium\_99 (B1), BatteryCK\_99 (B1), CharlieGBrown\_99 (B1), Chunky\_99 (B1), Derpp\_100 (B1), Eremos\_98 (B1), HSavage\_98 (B1), KingVeVeVe\_99 (B1), Labeouficaum\_101 (B1), Lopsy\_97 (B1), Mcshane\_103 (B1), MichaelPhcott\_99 (B1), MiniBoss\_96 (B1), PhenghisKhan\_101 (B1), Phergie\_101 (B1), PhrankReynolds\_99 (B1), Schueller\_99 (B1), Soile\_102 (B1), TyrionL\_101 (B1), Zonia\_101 (B1),

Start 10:

- Found in 3 of 31 ( 9.7% ) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Funsized\_90 (B9), Rinkes\_88 (B9),

Start 11:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Knocker\_90 (B9),

Start 12:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu\_93 (B10),

**Summary by clusters:**

There are 4 clusters represented in this pham: B7, B1, B10, B9,

Info for manual annotations of cluster B1:

- Start number 2 was manually annotated 3 times for cluster B1.
- Start number 9 was manually annotated 21 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 12 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B7:

- Start number 1 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B9:

- Start number 10 was manually annotated 2 times for cluster B9.
- Start number 11 was manually annotated 1 time for cluster B9.

### **Gene Information:**

Gene: AltPhacts\_98 Start: 67737, Stop: 67345, Start Num: 9

Candidate Starts for AltPhacts\_98:

(Start: 9 @67737 has 21 MA's), (13, 67680), (25, 67551), (27, 67539), (29, 67482), (36, 67428), (37, 67419), (39, 67383),

Gene: AngelCake\_97 Start: 68156, Stop: 67764, Start Num: 9

Candidate Starts for AngelCake\_97:

(Start: 2 @68192 has 3 MA's), (Start: 9 @68156 has 21 MA's), (13, 68099), (25, 67970), (27, 67958), (29, 67901), (36, 67847), (37, 67838), (39, 67802),

Gene: Apizium\_99 Start: 67685, Stop: 67293, Start Num: 9

Candidate Starts for Apizium\_99:

(Start: 2 @67721 has 3 MA's), (Start: 9 @67685 has 21 MA's), (13, 67628), (25, 67499), (27, 67487), (29, 67430), (36, 67376), (37, 67367), (39, 67331),

Gene: BatteryCK\_99 Start: 67967, Stop: 67575, Start Num: 9

Candidate Starts for BatteryCK\_99:

(Start: 2 @68003 has 3 MA's), (Start: 9 @67967 has 21 MA's), (13, 67910), (25, 67781), (27, 67769), (29, 67712), (36, 67658), (37, 67649), (39, 67613),

Gene: CharlieGBrown\_99 Start: 68062, Stop: 67670, Start Num: 9

Candidate Starts for CharlieGBrown\_99:

(Start: 2 @68098 has 3 MA's), (Start: 9 @68062 has 21 MA's), (13, 68005), (25, 67876), (27, 67864), (29, 67807), (36, 67753), (37, 67744), (39, 67708),

Gene: Chunky\_99 Start: 67707, Stop: 67291, Start Num: 9

Candidate Starts for Chunky\_99:

(Start: 2 @67743 has 3 MA's), (Start: 9 @67707 has 21 MA's), (13, 67626), (25, 67497), (27, 67485), (29, 67428), (36, 67374), (37, 67365), (39, 67329),

Gene: Derpp\_100 Start: 68095, Stop: 67703, Start Num: 9

Candidate Starts for Derpp\_100:

(Start: 2 @68131 has 3 MA's), (Start: 9 @68095 has 21 MA's), (13, 68038), (25, 67909), (27, 67897), (29, 67840), (36, 67786), (37, 67777), (39, 67741),

Gene: Eremos\_98 Start: 68156, Stop: 67764, Start Num: 9  
Candidate Starts for Eremos\_98:  
(Start: 9 @68156 has 21 MA's), (13, 68099), (25, 67970), (27, 67958), (29, 67901), (36, 67847), (37, 67838), (39, 67802),

Gene: Funsized\_90 Start: 69980, Stop: 69603, Start Num: 10  
Candidate Starts for Funsized\_90:  
(4, 70028), (Start: 10 @69980 has 2 MA's), (19, 69869), (22, 69845), (24, 69833), (28, 69782), (31, 69728), (33, 69716), (34, 69710),

Gene: HSavage\_98 Start: 67667, Stop: 67275, Start Num: 9  
Candidate Starts for HSavage\_98:  
(Start: 9 @67667 has 21 MA's), (13, 67610), (25, 67481), (27, 67469), (29, 67412), (36, 67358), (37, 67349), (39, 67313),

Gene: Imvubu\_93 Start: 66861, Stop: 66478, Start Num: 12  
Candidate Starts for Imvubu\_93:  
(Start: 12 @66861 has 1 MA's), (18, 66768), (20, 66750), (23, 66720), (24, 66717), (30, 66618), (31, 66606), (35, 66573),

Gene: KingVeVeVe\_99 Start: 67723, Stop: 67331, Start Num: 9  
Candidate Starts for KingVeVeVe\_99:  
(Start: 9 @67723 has 21 MA's), (13, 67666), (25, 67537), (29, 67468), (36, 67414), (37, 67405), (39, 67369),

Gene: Knocker\_90 Start: 68842, Stop: 68459, Start Num: 11  
Candidate Starts for Knocker\_90:  
(Start: 1 @68917 has 1 MA's), (3, 68893), (7, 68884), (Start: 11 @68842 has 1 MA's), (17, 68761), (18, 68749), (19, 68734), (20, 68731), (22, 68710), (24, 68698), (32, 68578), (35, 68554), (38, 68515),

Gene: Labeouficaum\_101 Start: 68095, Stop: 67703, Start Num: 9  
Candidate Starts for Labeouficaum\_101:  
(Start: 2 @68131 has 3 MA's), (Start: 9 @68095 has 21 MA's), (13, 68038), (25, 67909), (27, 67897), (29, 67840), (36, 67786), (37, 67777), (39, 67741),

Gene: Lopsy\_97 Start: 67909, Stop: 67517, Start Num: 9  
Candidate Starts for Lopsy\_97:  
(Start: 2 @67945 has 3 MA's), (Start: 9 @67909 has 21 MA's), (13, 67852), (25, 67723), (27, 67711), (29, 67654), (36, 67600), (37, 67591), (39, 67555),

Gene: Mcshane\_103 Start: 68387, Stop: 67995, Start Num: 9  
Candidate Starts for Mcshane\_103:  
(Start: 2 @68423 has 3 MA's), (Start: 9 @68387 has 21 MA's), (13, 68330), (25, 68201), (27, 68189), (29, 68132), (36, 68078), (37, 68069), (39, 68033),

Gene: MelsMeow\_99 Start: 68057, Stop: 67629, Start Num: 2  
Candidate Starts for MelsMeow\_99:  
(Start: 2 @68057 has 3 MA's), (Start: 9 @68021 has 21 MA's), (13, 67964), (25, 67835), (27, 67823), (29, 67766), (36, 67712), (37, 67703), (39, 67667),

Gene: MichaelPhcott\_99 Start: 67952, Stop: 67560, Start Num: 9  
Candidate Starts for MichaelPhcott\_99:

(Start: 2 @67988 has 3 MA's), (Start: 9 @67952 has 21 MA's), (13, 67895), (25, 67766), (27, 67754), (29, 67697), (36, 67643), (37, 67634), (39, 67598),

Gene: MiniBoss\_96 Start: 67067, Stop: 66675, Start Num: 9

Candidate Starts for MiniBoss\_96:

(Start: 9 @67067 has 21 MA's), (13, 67010), (25, 66881), (27, 66869), (29, 66812), (36, 66758), (37, 66749), (39, 66713),

Gene: OSmaximus\_101 Start: 68612, Stop: 68184, Start Num: 2

Candidate Starts for OSmaximus\_101:

(Start: 2 @68612 has 3 MA's), (Start: 9 @68576 has 21 MA's), (13, 68519), (16, 68474), (21, 68438), (25, 68393), (27, 68381), (29, 68324), (36, 68270), (37, 68261), (39, 68225),

Gene: Oline\_100 Start: 68214, Stop: 67786, Start Num: 2

Candidate Starts for Oline\_100:

(Start: 2 @68214 has 3 MA's), (Start: 9 @68178 has 21 MA's), (13, 68121), (25, 67992), (27, 67980), (29, 67923), (36, 67869), (37, 67860), (39, 67824),

Gene: PhenghisKhan\_101 Start: 68185, Stop: 67793, Start Num: 9

Candidate Starts for PhenghisKhan\_101:

(Start: 2 @68221 has 3 MA's), (Start: 9 @68185 has 21 MA's), (13, 68128), (25, 67999), (27, 67987), (29, 67930), (36, 67876), (37, 67867), (39, 67831),

Gene: Phergie\_101 Start: 68174, Stop: 67782, Start Num: 9

Candidate Starts for Phergie\_101:

(Start: 2 @68210 has 3 MA's), (Start: 9 @68174 has 21 MA's), (13, 68117), (25, 67988), (27, 67976), (29, 67919), (36, 67865), (37, 67856), (39, 67820),

Gene: PhrankReynolds\_99 Start: 68179, Stop: 67787, Start Num: 9

Candidate Starts for PhrankReynolds\_99:

(Start: 2 @68215 has 3 MA's), (Start: 9 @68179 has 21 MA's), (13, 68122), (25, 67993), (27, 67981), (29, 67924), (36, 67870), (37, 67861), (39, 67825),

Gene: Rimu\_104 Start: 68526, Stop: 68098, Start Num: 5

Candidate Starts for Rimu\_104:

(5, 68526), (6, 68523), (8, 68520), (13, 68433), (25, 68304), (27, 68292), (29, 68235), (36, 68181), (37, 68172), (39, 68136),

Gene: Rinkes\_88 Start: 68809, Stop: 68432, Start Num: 10

Candidate Starts for Rinkes\_88:

(Start: 10 @68809 has 2 MA's), (19, 68698), (22, 68674), (24, 68662), (28, 68611), (31, 68557), (34, 68539),

Gene: Saguaro\_85 Start: 66656, Stop: 66207, Start Num: 1

Candidate Starts for Saguaro\_85:

(Start: 1 @66656 has 1 MA's), (5, 66626), (Start: 10 @66587 has 2 MA's), (14, 66539), (15, 66521), (18, 66497), (19, 66482), (20, 66479), (22, 66458), (24, 66446), (26, 66422), (38, 66263),

Gene: Schueller\_99 Start: 68272, Stop: 67880, Start Num: 9

Candidate Starts for Schueller\_99:

(Start: 2 @68308 has 3 MA's), (Start: 9 @68272 has 21 MA's), (13, 68215), (25, 68086), (27, 68074), (29, 68017), (36, 67963), (37, 67954), (39, 67918),

Gene: Soile\_102 Start: 68555, Stop: 68139, Start Num: 9

Candidate Starts for Soile\_102:

(Start: 2 @68591 has 3 MA's), (Start: 9 @68555 has 21 MA's), (13, 68474), (25, 68345), (27, 68333), (29, 68276), (36, 68222), (37, 68213), (39, 68177),

Gene: TyrionL\_101 Start: 68095, Stop: 67703, Start Num: 9

Candidate Starts for TyrionL\_101:

(Start: 2 @68131 has 3 MA's), (Start: 9 @68095 has 21 MA's), (13, 68038), (25, 67909), (27, 67897), (29, 67840), (36, 67786), (37, 67777), (39, 67741),

Gene: Zonia\_101 Start: 68729, Stop: 68337, Start Num: 9

Candidate Starts for Zonia\_101:

(Start: 2 @68765 has 3 MA's), (Start: 9 @68729 has 21 MA's), (13, 68672), (25, 68543), (27, 68531), (29, 68474), (36, 68420), (37, 68411), (39, 68375),