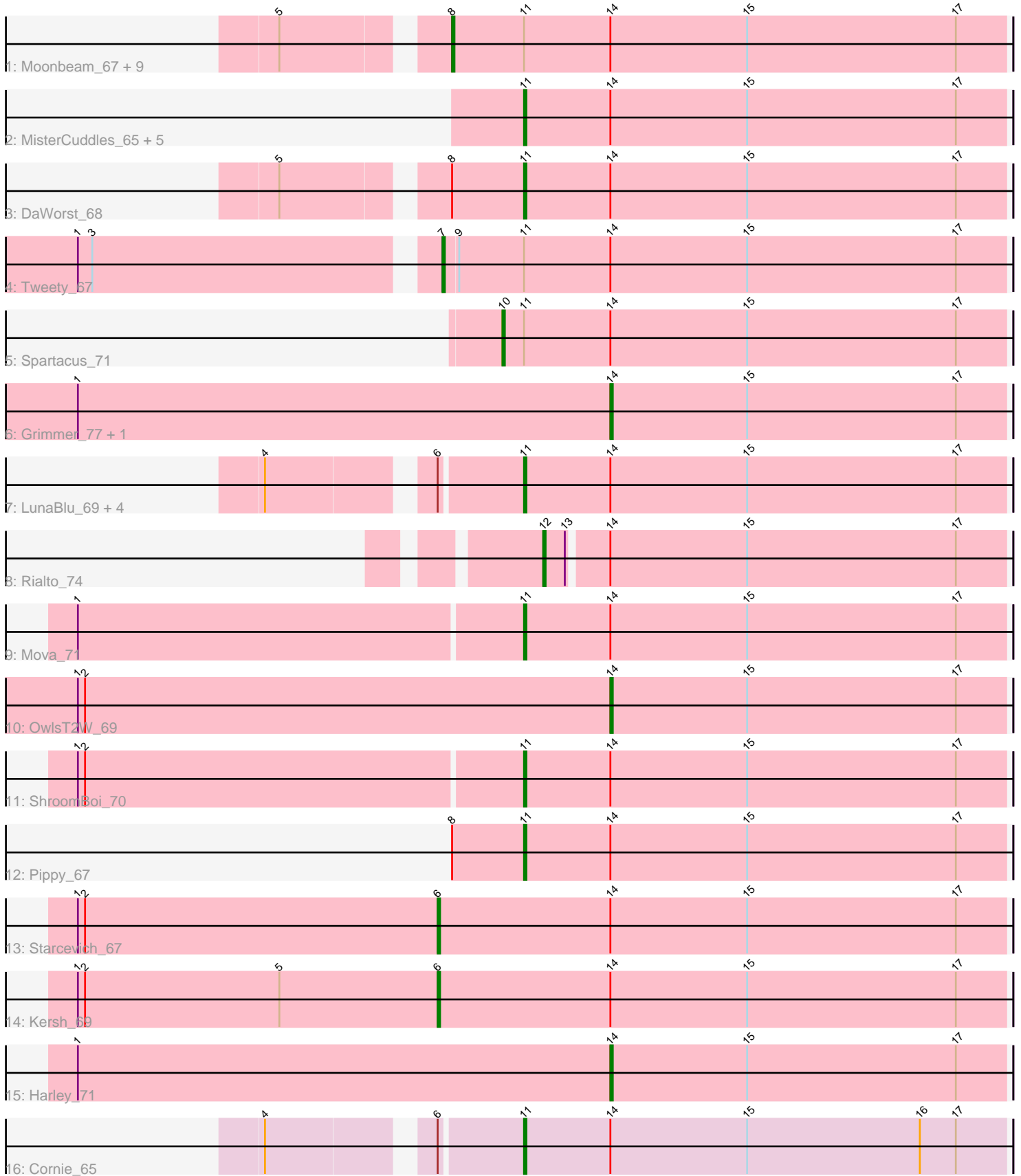


Pham 203147



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 203147 Report

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

Pham number 203147 has 35 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Moonbeam\_67, ByChance\_61, Crumble\_63, Fancypants\_71, Emma\_70, ShowerHandel\_71, Zizzle\_72, BobaPhett\_72, Burwell21\_66, Whouxphf\_65
- Track 2 : MisterCuddles\_65, Ruby\_63, Girr\_65, LilMoolah\_66, Alexphander\_71, Nivrat\_64
- Track 3 : DaWorst\_68
- Track 4 : Tweety\_67
- Track 5 : Spartacus\_71
- Track 6 : Grimmer\_77, Mahavrat\_64
- Track 7 : LunaBlu\_69, Galactic\_66, Eish\_70, XFactor\_65, Zerg\_67
- Track 8 : Rialto\_74
- Track 9 : Mova\_71
- Track 10 : OwlsT2W\_69
- Track 11 : ShroomBoi\_70
- Track 12 : Pippy\_67
- Track 13 : Starcevich\_67
- Track 14 : Kersh\_69
- Track 15 : Harley\_71
- Track 16 : Cornie\_65

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

The start number called the most often in the published annotations is 11, it was called in 16 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alexphander\_71, Cornie\_65, DaWorst\_68, Eish\_70, Galactic\_66, Girr\_65, LilMoolah\_66, LunaBlu\_69, MisterCuddles\_65, Mova\_71, Nivrat\_64, Pippy\_67, Ruby\_63, ShroomBoi\_70, XFactor\_65, Zerg\_67,

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

- BobaPhett\_72, Burwell21\_66, ByChance\_61, Crumble\_63, Emma\_70, Fancypants\_71, Moonbeam\_67, ShowerHandel\_71, Spartacus\_71, Tweety\_67, Whouxphf\_65, Zizzle\_72,

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

- Grimmer\_77, Harley\_71, Kersh\_69, Mahavrat\_64, OwlsT2W\_69, Rialto\_74, Starcevich\_67,

### Summary by start number:

Start 6:

- Found in 8 of 35 ( 22.9% ) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kersh\_69 (F1), Starcevich\_67 (F1),

Start 7:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tweety\_67 (F1),

Start 8:

- Found in 12 of 35 ( 34.3% ) of genes in pham
- Manual Annotations of this start: 10 of 34
- Called 83.3% of time when present
- Phage (with cluster) where this start called: BobaPhett\_72 (F1), Burwell21\_66 (F1), ByChance\_61 (F1), Crumble\_63 (F1), Emma\_70 (F1), Fancypants\_71 (F1), Moonbeam\_67 (F1), ShowerHandel\_71 (F1), Whouxphf\_65 (F1), Zizzle\_72 (F1),

Start 10:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spartacus\_71 (F1),

Start 11:

- Found in 28 of 35 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 16 of 34
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Alexphander\_71 (F1), Cornie\_65 (F5), DaWorst\_68 (F1), Eish\_70 (F1), Galactic\_66 (F1), Girr\_65 (F1), LilMoolah\_66 (F1), LunaBlu\_69 (F1), MisterCuddles\_65 (F1), Mova\_71 (F1), Nivrat\_64 (F1), Pippy\_67 (F1), Ruby\_63 (F1), ShroomBoi\_70 (F1), XFactor\_65 (F1), Zerg\_67 (F1),

Start 12:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rialto\_74 (F1),

Start 14:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 34
- Called 11.4% of time when present
- Phage (with cluster) where this start called: Grimmer\_77 (F1), Harley\_71 (F1), Mahavrat\_64 (F1), OwlsT2W\_69 (F1),

## Summary by clusters:

There are 2 clusters represented in this pham: F1, F5,

Info for manual annotations of cluster F1:

- Start number 6 was manually annotated 2 times for cluster F1.
- Start number 7 was manually annotated 1 time for cluster F1.
- Start number 8 was manually annotated 10 times for cluster F1.
- Start number 10 was manually annotated 1 time for cluster F1.
- Start number 11 was manually annotated 15 times for cluster F1.
- Start number 12 was manually annotated 1 time for cluster F1.
- Start number 14 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F5:

- Start number 11 was manually annotated 1 time for cluster F5.

## **Gene Information:**

Gene: Alexphander\_71 Start: 45177, Stop: 45377, Start Num: 11

Candidate Starts for Alexphander\_71:

(Start: 11 @45177 has 16 MA's), (Start: 14 @45213 has 3 MA's), (15, 45270), (17, 45357),

Gene: BobaPhett\_72 Start: 47714, Stop: 47944, Start Num: 8

Candidate Starts for BobaPhett\_72:

(5, 47654), (Start: 8 @47714 has 10 MA's), (Start: 11 @47744 has 16 MA's), (Start: 14 @47780 has 3 MA's), (15, 47837), (17, 47924),

Gene: Burwell21\_66 Start: 45036, Stop: 45266, Start Num: 8

Candidate Starts for Burwell21\_66:

(5, 44976), (Start: 8 @45036 has 10 MA's), (Start: 11 @45066 has 16 MA's), (Start: 14 @45102 has 3 MA's), (15, 45159), (17, 45246),

Gene: ByChance\_61 Start: 41056, Stop: 41289, Start Num: 8

Candidate Starts for ByChance\_61:

(5, 40996), (Start: 8 @41056 has 10 MA's), (Start: 11 @41086 has 16 MA's), (Start: 14 @41122 has 3 MA's), (15, 41179), (17, 41266),

Gene: Cornie\_65 Start: 43837, Stop: 44037, Start Num: 11

Candidate Starts for Cornie\_65:

(4, 43744), (Start: 6 @43804 has 2 MA's), (Start: 11 @43837 has 16 MA's), (Start: 14 @43873 has 3 MA's), (15, 43930), (16, 44002), (17, 44017),

Gene: Crumble\_63 Start: 41011, Stop: 41244, Start Num: 8

Candidate Starts for Crumble\_63:

(5, 40951), (Start: 8 @41011 has 10 MA's), (Start: 11 @41041 has 16 MA's), (Start: 14 @41077 has 3 MA's), (15, 41134), (17, 41221),

Gene: DaWorst\_68 Start: 44644, Stop: 44844, Start Num: 11

Candidate Starts for DaWorst\_68:

(5, 44554), (Start: 8 @44614 has 10 MA's), (Start: 11 @44644 has 16 MA's), (Start: 14 @44680 has 3 MA's), (15, 44737), (17, 44824),

Gene: Eish\_70 Start: 45432, Stop: 45632, Start Num: 11

Candidate Starts for Eish\_70:

(4, 45339), (Start: 6 @45399 has 2 MA's), (Start: 11 @45432 has 16 MA's), (Start: 14 @45468 has 3 MA's), (15, 45525), (17, 45612),

Gene: Emma\_70 Start: 44637, Stop: 44867, Start Num: 8

Candidate Starts for Emma\_70:

(5, 44577), (Start: 8 @44637 has 10 MA's), (Start: 11 @44667 has 16 MA's), (Start: 14 @44703 has 3 MA's), (15, 44760), (17, 44847),

Gene: Fancypants\_71 Start: 45649, Stop: 45879, Start Num: 8

Candidate Starts for Fancypants\_71:

(5, 45589), (Start: 8 @45649 has 10 MA's), (Start: 11 @45679 has 16 MA's), (Start: 14 @45715 has 3 MA's), (15, 45772), (17, 45859),

Gene: Galactic\_66 Start: 44728, Stop: 44928, Start Num: 11

Candidate Starts for Galactic\_66:

(4, 44635), (Start: 6 @44695 has 2 MA's), (Start: 11 @44728 has 16 MA's), (Start: 14 @44764 has 3 MA's), (15, 44821), (17, 44908),

Gene: Girr\_65 Start: 44587, Stop: 44787, Start Num: 11

Candidate Starts for Girr\_65:

(Start: 11 @44587 has 16 MA's), (Start: 14 @44623 has 3 MA's), (15, 44680), (17, 44767),

Gene: Grimmer\_77 Start: 45506, Stop: 45670, Start Num: 14

Candidate Starts for Grimmer\_77:

(1, 45284), (Start: 14 @45506 has 3 MA's), (15, 45563), (17, 45650),

Gene: Harley\_71 Start: 45252, Stop: 45416, Start Num: 14

Candidate Starts for Harley\_71:

(1, 45030), (Start: 14 @45252 has 3 MA's), (15, 45309), (17, 45396),

Gene: Kersh\_69 Start: 47054, Stop: 47290, Start Num: 6

Candidate Starts for Kersh\_69:

(1, 46904), (2, 46907), (5, 46988), (Start: 6 @47054 has 2 MA's), (Start: 14 @47126 has 3 MA's), (15, 47183), (17, 47270),

Gene: LilMoolah\_66 Start: 45244, Stop: 45444, Start Num: 11

Candidate Starts for LilMoolah\_66:

(Start: 11 @45244 has 16 MA's), (Start: 14 @45280 has 3 MA's), (15, 45337), (17, 45424),

Gene: LunaBlu\_69 Start: 45387, Stop: 45587, Start Num: 11

Candidate Starts for LunaBlu\_69:

(4, 45294), (Start: 6 @45354 has 2 MA's), (Start: 11 @45387 has 16 MA's), (Start: 14 @45423 has 3 MA's), (15, 45480), (17, 45567),

Gene: Mahavrat\_64 Start: 43075, Stop: 43239, Start Num: 14

Candidate Starts for Mahavrat\_64:

(1, 42853), (Start: 14 @43075 has 3 MA's), (15, 43132), (17, 43219),

Gene: MisterCuddles\_65 Start: 44587, Stop: 44787, Start Num: 11  
Candidate Starts for MisterCuddles\_65:  
(Start: 11 @44587 has 16 MA's), (Start: 14 @44623 has 3 MA's), (15, 44680), (17, 44767),

Gene: Moonbeam\_67 Start: 44566, Stop: 44796, Start Num: 8  
Candidate Starts for Moonbeam\_67:  
(5, 44506), (Start: 8 @44566 has 10 MA's), (Start: 11 @44596 has 16 MA's), (Start: 14 @44632 has 3 MA's), (15, 44689), (17, 44776),

Gene: Mova\_71 Start: 44506, Stop: 44706, Start Num: 11  
Candidate Starts for Mova\_71:  
(1, 44323), (Start: 11 @44506 has 16 MA's), (Start: 14 @44542 has 3 MA's), (15, 44599), (17, 44686),

Gene: Nivrat\_64 Start: 45117, Stop: 45317, Start Num: 11  
Candidate Starts for Nivrat\_64:  
(Start: 11 @45117 has 16 MA's), (Start: 14 @45153 has 3 MA's), (15, 45210), (17, 45297),

Gene: OwlsT2W\_69 Start: 44736, Stop: 44900, Start Num: 14  
Candidate Starts for OwlsT2W\_69:  
(1, 44514), (2, 44517), (Start: 14 @44736 has 3 MA's), (15, 44793), (17, 44880),

Gene: Pippy\_67 Start: 44354, Stop: 44554, Start Num: 11  
Candidate Starts for Pippy\_67:  
(Start: 8 @44324 has 10 MA's), (Start: 11 @44354 has 16 MA's), (Start: 14 @44390 has 3 MA's), (15, 44447), (17, 44534),

Gene: Rialto\_74 Start: 46079, Stop: 46267, Start Num: 12  
Candidate Starts for Rialto\_74:  
(Start: 12 @46079 has 1 MA's), (13, 46088), (Start: 14 @46103 has 3 MA's), (15, 46160), (17, 46247),

Gene: Ruby\_63 Start: 44588, Stop: 44788, Start Num: 11  
Candidate Starts for Ruby\_63:  
(Start: 11 @44588 has 16 MA's), (Start: 14 @44624 has 3 MA's), (15, 44681), (17, 44768),

Gene: ShowerHandel\_71 Start: 44996, Stop: 45229, Start Num: 8  
Candidate Starts for ShowerHandel\_71:  
(5, 44936), (Start: 8 @44996 has 10 MA's), (Start: 11 @45026 has 16 MA's), (Start: 14 @45062 has 3 MA's), (15, 45119), (17, 45206),

Gene: ShroomBoi\_70 Start: 45075, Stop: 45275, Start Num: 11  
Candidate Starts for ShroomBoi\_70:  
(1, 44892), (2, 44895), (Start: 11 @45075 has 16 MA's), (Start: 14 @45111 has 3 MA's), (15, 45168), (17, 45255),

Gene: Spartacus\_71 Start: 46163, Stop: 46372, Start Num: 10  
Candidate Starts for Spartacus\_71:  
(Start: 10 @46163 has 1 MA's), (Start: 11 @46172 has 16 MA's), (Start: 14 @46208 has 3 MA's), (15, 46265), (17, 46352),

Gene: Starcevich\_67 Start: 45325, Stop: 45561, Start Num: 6  
Candidate Starts for Starcevich\_67:  
(1, 45175), (2, 45178), (Start: 6 @45325 has 2 MA's), (Start: 14 @45397 has 3 MA's), (15, 45454), (17, 45541),

Gene: Tweety\_67 Start: 44108, Stop: 44341, Start Num: 7

Candidate Starts for Tweety\_67:

(1, 43967), (3, 43973), (Start: 7 @44108 has 1 MA's), (9, 44114), (Start: 11 @44141 has 16 MA's), (Start: 14 @44177 has 3 MA's), (15, 44234), (17, 44321),

Gene: Whouxphf\_65 Start: 44903, Stop: 45133, Start Num: 8

Candidate Starts for Whouxphf\_65:

(5, 44843), (Start: 8 @44903 has 10 MA's), (Start: 11 @44933 has 16 MA's), (Start: 14 @44969 has 3 MA's), (15, 45026), (17, 45113),

Gene: XFactor\_65 Start: 43727, Stop: 43927, Start Num: 11

Candidate Starts for XFactor\_65:

(4, 43634), (Start: 6 @43694 has 2 MA's), (Start: 11 @43727 has 16 MA's), (Start: 14 @43763 has 3 MA's), (15, 43820), (17, 43907),

Gene: Zerg\_67 Start: 44571, Stop: 44771, Start Num: 11

Candidate Starts for Zerg\_67:

(4, 44478), (Start: 6 @44538 has 2 MA's), (Start: 11 @44571 has 16 MA's), (Start: 14 @44607 has 3 MA's), (15, 44664), (17, 44751),

Gene: Zizzle\_72 Start: 46629, Stop: 46862, Start Num: 8

Candidate Starts for Zizzle\_72:

(5, 46569), (Start: 8 @46629 has 10 MA's), (Start: 11 @46659 has 16 MA's), (Start: 14 @46695 has 3 MA's), (15, 46752), (17, 46839),