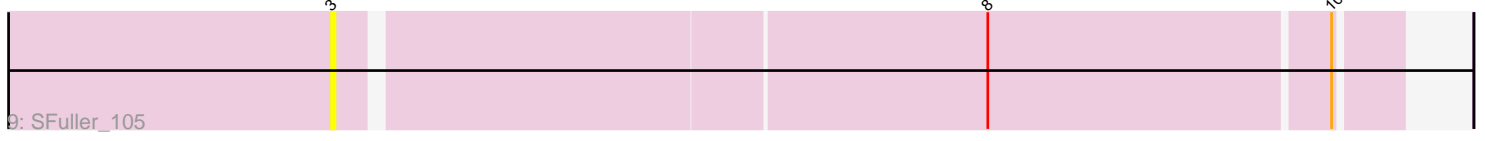
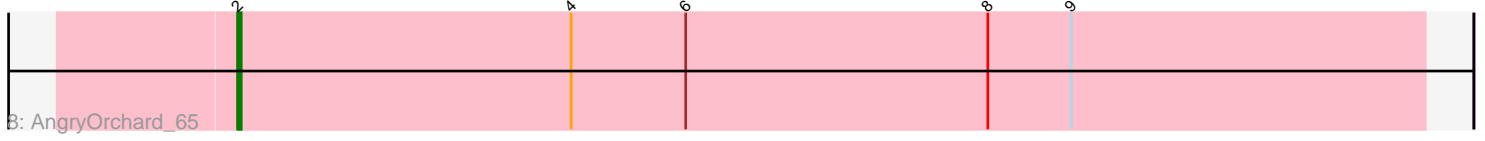
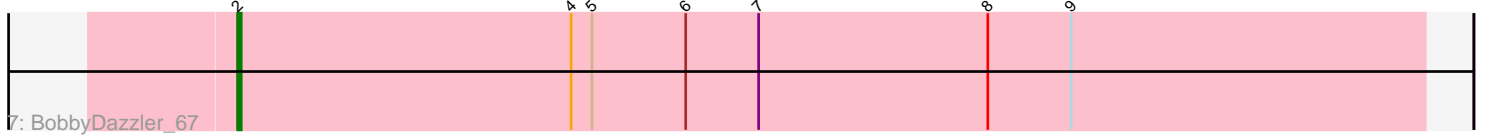
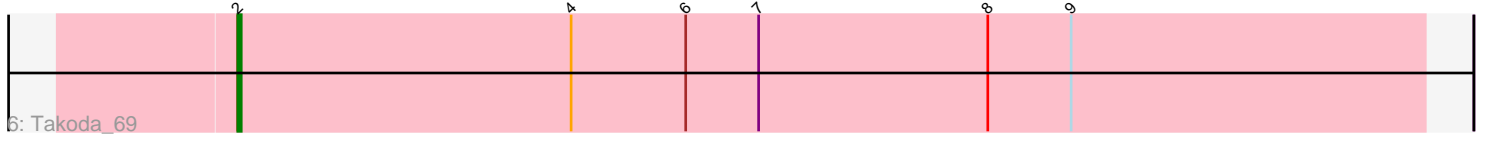
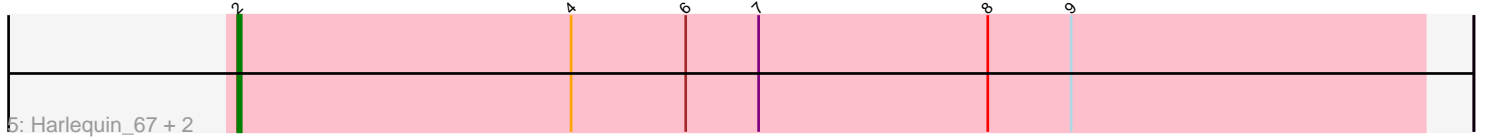
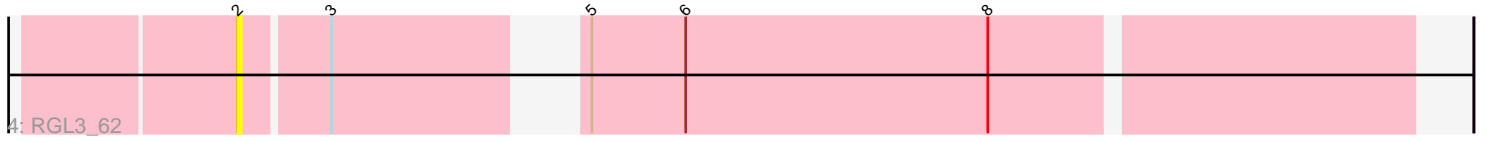
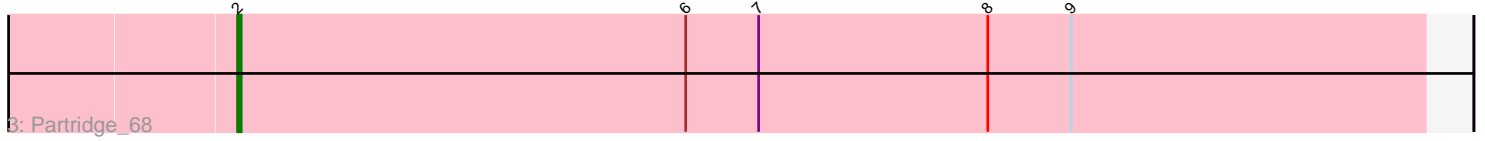
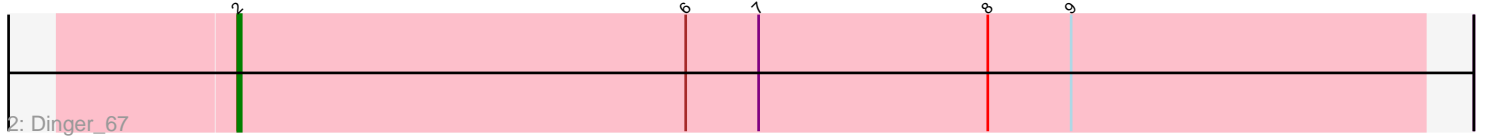
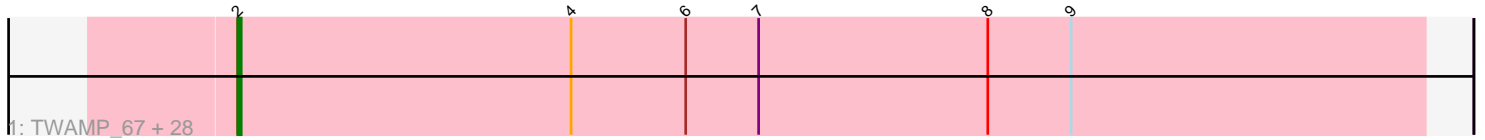


Pham 298594



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 298594 Report

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

Pham number 298594 has 41 members, 3 are drafts.

Phages represented in each track:

- Track 1 : TWAMP\_67, Gollum\_67, Hiro\_67, Yogi\_68, Alatin\_66, Espica\_68, RER2\_61, Bonanza\_68, Alpacados\_66, UhSalsa\_67, Rasputin\_67, Bradshaw\_67, AppleCloud\_64, StCroix\_66, Shuman\_68, Swann\_67, Belenaria\_68, Nancinator\_66, Phrankenstein\_67, Yoncess\_66, RexFury\_66, CosmicSans\_67, Naiad\_66, Lillie\_67, Natosaleda\_66, Rhodalysa\_67, Krishelle\_67, PhailMary\_64, Erik\_67
- Track 2 : Dinger\_67
- Track 3 : Partridge\_68
- Track 4 : RGL3\_62
- Track 5 : Harlequin\_67, Jester\_66, Bryce\_66
- Track 6 : Takoda\_69
- Track 7 : BobbyDazzler\_67
- Track 8 : AngryOrchard\_65
- Track 9 : SFuller\_105
- Track 10 : Jflix2\_105
- Track 11 : Madraxi\_107

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

The start number called the most often in the published annotations is 2, it was called in 36 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alatin\_66, Alpacados\_66, AngryOrchard\_65, AppleCloud\_64, Belenaria\_68, BobbyDazzler\_67, Bonanza\_68, Bradshaw\_67, Bryce\_66, CosmicSans\_67, Dinger\_67, Erik\_67, Espica\_68, Gollum\_67, Harlequin\_67, Hiro\_67, Jester\_66, Krishelle\_67, Lillie\_67, Naiad\_66, Nancinator\_66, Natosaleda\_66, Partridge\_68, PhailMary\_64, Phrankenstein\_67, RER2\_61, RGL3\_62, Rasputin\_67, RexFury\_66, Rhodalysa\_67, Shuman\_68, StCroix\_66, Swann\_67, TWAMP\_67, Takoda\_69, UhSalsa\_67, Yogi\_68, Yoncess\_66,

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

- 

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

- Jflix2\_105, Madraxi\_107, SFuller\_105,

### Summary by start number:

#### Start 2:

- Found in 38 of 41 ( 92.7% ) of genes in pham
- Manual Annotations of this start: 36 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alatin\_66 (CA), Alpacados\_66 (CA), AngryOrchard\_65 (CA), AppleCloud\_64 (CA), Belenaria\_68 (CA), BobbyDazzler\_67 (CA), Bonanza\_68 (CA), Bradshaw\_67 (CA), Bryce\_66 (CA), CosmicSans\_67 (CA), Dinger\_67 (CA), Erik\_67 (CA), Espica\_68 (CA), Gollum\_67 (CA), Harlequin\_67 (CA), Hiro\_67 (CA), Jester\_66 (CA), Krishelle\_67 (CA), Lillie\_67 (CA), Naiad\_66 (CA), Nancinator\_66 (CA), Natosaleda\_66 (CA), Partridge\_68 (CA), PhailMary\_64 (CA), Phrankenstien\_67 (CA), RER2\_61 (CA), RGL3\_62 (CA), Rasputin\_67 (CA), RexFury\_66 (CA), Rhodalysa\_67 (CA), Shuman\_68 (CA), StCroix\_66 (CA), Swann\_67 (CA), TWAMP\_67 (CA), Takoda\_69 (CA), UhSalsa\_67 (CA), Yogi\_68 (CA), Yoncess\_66 (CA),

#### Start 3:

- Found in 4 of 41 ( 9.8% ) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Jflix2\_105 (CF), Madraxi\_107 (CF), SFuller\_105 (CF),

### Summary by clusters:

There are 2 clusters represented in this pham: CA, CF,

Info for manual annotations of cluster CA:

- Start number 2 was manually annotated 36 times for cluster CA.

Info for manual annotations of cluster CF:

- Start number 3 was manually annotated 2 times for cluster CF.

### Gene Information:

Gene: Alatin\_66 Start: 44950, Stop: 44609, Start Num: 2

Candidate Starts for Alatin\_66:

(Start: 2 @44950 has 36 MA's), (4, 44854), (6, 44821), (7, 44800), (8, 44734), (9, 44710),

Gene: Alpacados\_66 Start: 44773, Stop: 44432, Start Num: 2

Candidate Starts for Alpacados\_66:

(Start: 2 @44773 has 36 MA's), (4, 44677), (6, 44644), (7, 44623), (8, 44557), (9, 44533),

Gene: AngryOrchard\_65 Start: 44992, Stop: 44651, Start Num: 2

Candidate Starts for AngryOrchard\_65:

(Start: 2 @44992 has 36 MA's), (4, 44896), (6, 44863), (8, 44776), (9, 44752),

Gene: AppleCloud\_64 Start: 44667, Stop: 44326, Start Num: 2

Candidate Starts for AppleCloud\_64:

(Start: 2 @44667 has 36 MA's), (4, 44571), (6, 44538), (7, 44517), (8, 44451), (9, 44427),

Gene: Belenaria\_68 Start: 44815, Stop: 44474, Start Num: 2

Candidate Starts for Belenaria\_68:

(Start: 2 @44815 has 36 MA's), (4, 44719), (6, 44686), (7, 44665), (8, 44599), (9, 44575),

Gene: BobbyDazzler\_67 Start: 44921, Stop: 44580, Start Num: 2

Candidate Starts for BobbyDazzler\_67:

(Start: 2 @44921 has 36 MA's), (4, 44825), (5, 44819), (6, 44792), (7, 44771), (8, 44705), (9, 44681),

Gene: Bonanza\_68 Start: 45225, Stop: 44884, Start Num: 2

Candidate Starts for Bonanza\_68:

(Start: 2 @45225 has 36 MA's), (4, 45129), (6, 45096), (7, 45075), (8, 45009), (9, 44985),

Gene: Bradshaw\_67 Start: 44883, Stop: 44542, Start Num: 2

Candidate Starts for Bradshaw\_67:

(Start: 2 @44883 has 36 MA's), (4, 44787), (6, 44754), (7, 44733), (8, 44667), (9, 44643),

Gene: Bryce\_66 Start: 44629, Stop: 44288, Start Num: 2

Candidate Starts for Bryce\_66:

(Start: 2 @44629 has 36 MA's), (4, 44533), (6, 44500), (7, 44479), (8, 44413), (9, 44389),

Gene: CosmicSans\_67 Start: 44874, Stop: 44533, Start Num: 2

Candidate Starts for CosmicSans\_67:

(Start: 2 @44874 has 36 MA's), (4, 44778), (6, 44745), (7, 44724), (8, 44658), (9, 44634),

Gene: Dinger\_67 Start: 45010, Stop: 44669, Start Num: 2

Candidate Starts for Dinger\_67:

(Start: 2 @45010 has 36 MA's), (6, 44881), (7, 44860), (8, 44794), (9, 44770),

Gene: Erik\_67 Start: 44705, Stop: 44364, Start Num: 2

Candidate Starts for Erik\_67:

(Start: 2 @44705 has 36 MA's), (4, 44609), (6, 44576), (7, 44555), (8, 44489), (9, 44465),

Gene: Espica\_68 Start: 44815, Stop: 44474, Start Num: 2

Candidate Starts for Espica\_68:

(Start: 2 @44815 has 36 MA's), (4, 44719), (6, 44686), (7, 44665), (8, 44599), (9, 44575),

Gene: Gollum\_67 Start: 44816, Stop: 44475, Start Num: 2

Candidate Starts for Gollum\_67:

(Start: 2 @44816 has 36 MA's), (4, 44720), (6, 44687), (7, 44666), (8, 44600), (9, 44576),

Gene: Harlequin\_67 Start: 44664, Stop: 44323, Start Num: 2

Candidate Starts for Harlequin\_67:

(Start: 2 @44664 has 36 MA's), (4, 44568), (6, 44535), (7, 44514), (8, 44448), (9, 44424),

Gene: Hiro\_67 Start: 45135, Stop: 44794, Start Num: 2

Candidate Starts for Hiro\_67:

(Start: 2 @45135 has 36 MA's), (4, 45039), (6, 45006), (7, 44985), (8, 44919), (9, 44895),

Gene: Jester\_66 Start: 44595, Stop: 44254, Start Num: 2

Candidate Starts for Jester\_66:

(Start: 2 @44595 has 36 MA's), (4, 44499), (6, 44466), (7, 44445), (8, 44379), (9, 44355),

Gene: Jflix2\_105 Start: 60673, Stop: 60356, Start Num: 3

Candidate Starts for Jflix2\_105:

(Start: 3 @60673 has 2 MA's), (8, 60493), (11, 60379), (12, 60373),

Gene: Krishelle\_67 Start: 45243, Stop: 44902, Start Num: 2

Candidate Starts for Krishelle\_67:

(Start: 2 @45243 has 36 MA's), (4, 45147), (6, 45114), (7, 45093), (8, 45027), (9, 45003),

Gene: Lillie\_67 Start: 44874, Stop: 44533, Start Num: 2

Candidate Starts for Lillie\_67:

(Start: 2 @44874 has 36 MA's), (4, 44778), (6, 44745), (7, 44724), (8, 44658), (9, 44634),

Gene: Madraxi\_107 Start: 62702, Stop: 62415, Start Num: 3

Candidate Starts for Madraxi\_107:

(1, 62765), (Start: 3 @62702 has 2 MA's), (8, 62513),

Gene: Naiad\_66 Start: 44896, Stop: 44555, Start Num: 2

Candidate Starts for Naiad\_66:

(Start: 2 @44896 has 36 MA's), (4, 44800), (6, 44767), (7, 44746), (8, 44680), (9, 44656),

Gene: Nancinator\_66 Start: 44213, Stop: 43872, Start Num: 2

Candidate Starts for Nancinator\_66:

(Start: 2 @44213 has 36 MA's), (4, 44117), (6, 44084), (7, 44063), (8, 43997), (9, 43973),

Gene: Natosaleda\_66 Start: 44814, Stop: 44473, Start Num: 2

Candidate Starts for Natosaleda\_66:

(Start: 2 @44814 has 36 MA's), (4, 44718), (6, 44685), (7, 44664), (8, 44598), (9, 44574),

Gene: Partridge\_68 Start: 45356, Stop: 45015, Start Num: 2

Candidate Starts for Partridge\_68:

(Start: 2 @45356 has 36 MA's), (6, 45227), (7, 45206), (8, 45140), (9, 45116),

Gene: PhailMary\_64 Start: 43891, Stop: 43550, Start Num: 2

Candidate Starts for PhailMary\_64:

(Start: 2 @43891 has 36 MA's), (4, 43795), (6, 43762), (7, 43741), (8, 43675), (9, 43651),

Gene: Phrankenstein\_67 Start: 44820, Stop: 44479, Start Num: 2

Candidate Starts for Phrankenstein\_67:

(Start: 2 @44820 has 36 MA's), (4, 44724), (6, 44691), (7, 44670), (8, 44604), (9, 44580),

Gene: RER2\_61 Start: 41746, Stop: 41405, Start Num: 2

Candidate Starts for RER2\_61:

(Start: 2 @41746 has 36 MA's), (4, 41650), (6, 41617), (7, 41596), (8, 41530), (9, 41506),

Gene: RGL3\_62 Start: 43307, Stop: 42999, Start Num: 2

Candidate Starts for RGL3\_62:

(Start: 2 @43307 has 36 MA's), (Start: 3 @43283 has 2 MA's), (5, 43229), (6, 43202), (8, 43115),

Gene: Rasputin\_67 Start: 44844, Stop: 44503, Start Num: 2

Candidate Starts for Rasputin\_67:

(Start: 2 @44844 has 36 MA's), (4, 44748), (6, 44715), (7, 44694), (8, 44628), (9, 44604),

Gene: RexFury\_66 Start: 44904, Stop: 44563, Start Num: 2  
Candidate Starts for RexFury\_66:  
(Start: 2 @44904 has 36 MA's), (4, 44808), (6, 44775), (7, 44754), (8, 44688), (9, 44664),

Gene: Rhodalysa\_67 Start: 44874, Stop: 44533, Start Num: 2  
Candidate Starts for Rhodalysa\_67:  
(Start: 2 @44874 has 36 MA's), (4, 44778), (6, 44745), (7, 44724), (8, 44658), (9, 44634),

Gene: SFuller\_105 Start: 61412, Stop: 61119, Start Num: 3  
Candidate Starts for SFuller\_105:  
(Start: 3 @61412 has 2 MA's), (8, 61232), (10, 61136),

Gene: Shuman\_68 Start: 44825, Stop: 44484, Start Num: 2  
Candidate Starts for Shuman\_68:  
(Start: 2 @44825 has 36 MA's), (4, 44729), (6, 44696), (7, 44675), (8, 44609), (9, 44585),

Gene: StCroix\_66 Start: 44896, Stop: 44555, Start Num: 2  
Candidate Starts for StCroix\_66:  
(Start: 2 @44896 has 36 MA's), (4, 44800), (6, 44767), (7, 44746), (8, 44680), (9, 44656),

Gene: Swann\_67 Start: 44872, Stop: 44531, Start Num: 2  
Candidate Starts for Swann\_67:  
(Start: 2 @44872 has 36 MA's), (4, 44776), (6, 44743), (7, 44722), (8, 44656), (9, 44632),

Gene: TWAMP\_67 Start: 44874, Stop: 44533, Start Num: 2  
Candidate Starts for TWAMP\_67:  
(Start: 2 @44874 has 36 MA's), (4, 44778), (6, 44745), (7, 44724), (8, 44658), (9, 44634),

Gene: Takoda\_69 Start: 45200, Stop: 44859, Start Num: 2  
Candidate Starts for Takoda\_69:  
(Start: 2 @45200 has 36 MA's), (4, 45104), (6, 45071), (7, 45050), (8, 44984), (9, 44960),

Gene: UhSalsa\_67 Start: 44815, Stop: 44474, Start Num: 2  
Candidate Starts for UhSalsa\_67:  
(Start: 2 @44815 has 36 MA's), (4, 44719), (6, 44686), (7, 44665), (8, 44599), (9, 44575),

Gene: Yogi\_68 Start: 45225, Stop: 44884, Start Num: 2  
Candidate Starts for Yogi\_68:  
(Start: 2 @45225 has 36 MA's), (4, 45129), (6, 45096), (7, 45075), (8, 45009), (9, 44985),

Gene: Yoncess\_66 Start: 44633, Stop: 44292, Start Num: 2  
Candidate Starts for Yoncess\_66:  
(Start: 2 @44633 has 36 MA's), (4, 44537), (6, 44504), (7, 44483), (8, 44417), (9, 44393),