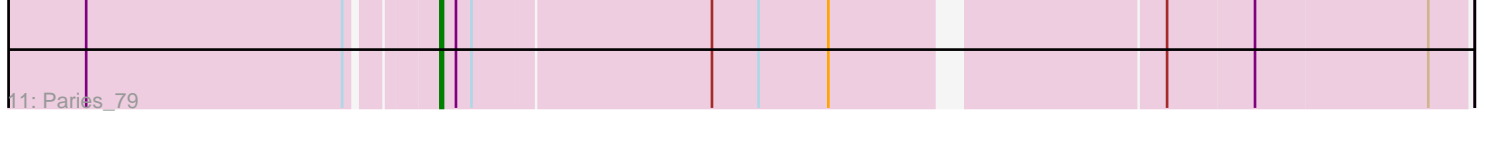
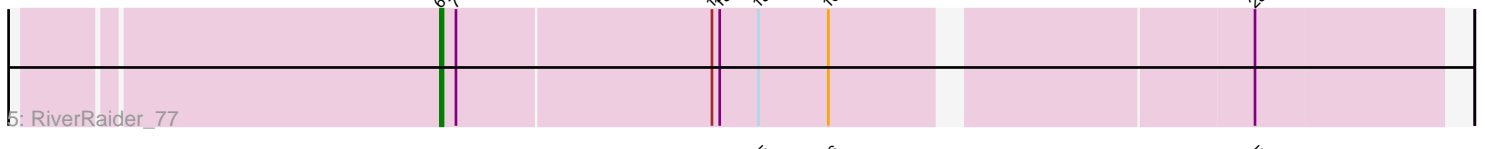
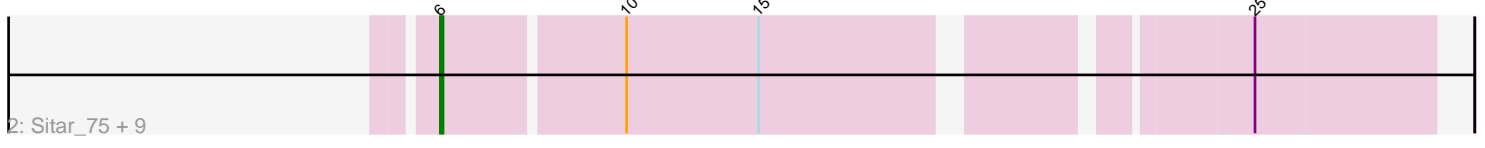
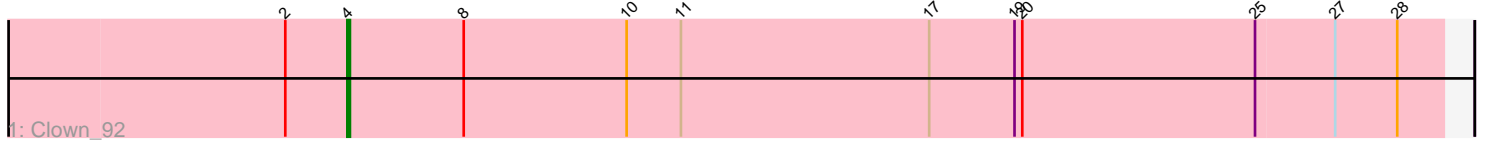


Pham 308820



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 308820 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308820 has 44 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Clown\_92
- Track 2 : Sitar\_75, Sanjuju\_74, Stultus\_71, Brawn1\_73, Keitabear\_74, Angelicage\_74, Lennon\_75, Ailee\_73, Jabberwocky\_74, Bibwit\_74
- Track 3 : Gustavo\_78, StorminNorm\_77, Stichling\_72, Gaea\_77, Ashertheman\_76, Bizzy\_77, YorkOnyx\_76, Ribeye\_76, LilHam\_70, Kwobi\_78, SchottB\_74, Kroos\_76, Flatwoods\_76, Tangerine\_77, Tycho\_75, Baumdotcom\_74, Saronaya\_78, JKSyngboy\_74, Derg\_70
- Track 4 : Barsten\_77, Kamashten\_76, Thing3\_76, Shivanishola\_76, Galadriel\_76
- Track 5 : RiverRaider\_77
- Track 6 : Love\_81, McCrothy\_74
- Track 7 : Baddon\_74
- Track 8 : Sedona\_74, McKinley\_78
- Track 9 : Fitzgerald\_74
- Track 10 : MoontowerMania\_75
- Track 11 : Paries\_79

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

The start number called the most often in the published annotations is 6, it was called in 33 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ailee\_73, Angelicage\_74, Ashertheman\_76, Baddon\_74, Baumdotcom\_74, Bibwit\_74, Bizzy\_77, Brawn1\_73, Derg\_70, Fitzgerald\_74, Flatwoods\_76, Gaea\_77, Gustavo\_78, JKSyngboy\_74, Jabberwocky\_74, Keitabear\_74, Kroos\_76, Kwobi\_78, Lennon\_75, LilHam\_70, McKinley\_78, Paries\_79, Ribeye\_76, RiverRaider\_77, Sanjuju\_74, Saronaya\_78, SchottB\_74, Sedona\_74, Sitar\_75, Stichling\_72, StorminNorm\_77, Stultus\_71, Tangerine\_77, Tycho\_75, YorkOnyx\_76,

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

- 

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

- Barsten\_77, Clown\_92, Galadriel\_76, Kamashten\_76, Love\_81, McCrothy\_74, MoontowerMania\_75, Shivanishola\_76, Thing3\_76,

### Summary by start number:

#### Start 4:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_92 (DC2),

#### Start 6:

- Found in 35 of 44 ( 79.5% ) of genes in pham
- Manual Annotations of this start: 33 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ailee\_73 (DE1), Angelicage\_74 (DE1), Ashertheman\_76 (DE1), Baddon\_74 (DE1), Baumdotcom\_74 (DE1), Bibwit\_74 (DE1), Bizzy\_77 (DE1), Brawn1\_73 (DE1), Derg\_70 (DE1), Fitzgerald\_74 (DE1), Flatwoods\_76 (DE1), Gaea\_77 (DE1), Gustavo\_78 (DE1), JKSyngboy\_74 (DE1), Jabberwocky\_74 (DE1), Keitabear\_74 (DE1), Kroos\_76 (DE1), Kwobi\_78 (DE1), Lennon\_75 (DE1), LilHam\_70 (DE1), McKinley\_78 (DE1), Paries\_79 (DE1), Ribeye\_76 (DE1), RiverRaider\_77 (DE1), Sanjuju\_74 (DE1), Saronaya\_78 (DE1), SchottB\_74 (DE1), Sedona\_74 (DE1), Sitar\_75 (DE1), Stichling\_72 (DE1), StorminNorm\_77 (DE1), Stultus\_71 (DE1), Tangerine\_77 (DE1), Tycho\_75 (DE1), YorkOnyx\_76 (DE1),

#### Start 7:

- Found in 10 of 44 ( 22.7% ) of genes in pham
- Manual Annotations of this start: 7 of 41
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Barsten\_77 (DE1), Galadriel\_76 (DE1), Kamashten\_76 (DE1), Love\_81 (DE1), McCrothy\_74 (DE1), MoontowerMania\_75 (DE1), Shivanishola\_76 (DE1), Thing3\_76 (DE1),

### Summary by clusters:

There are 2 clusters represented in this pham: DE1, DC2,

Info for manual annotations of cluster DC2:

- Start number 4 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 6 was manually annotated 33 times for cluster DE1.
- Start number 7 was manually annotated 7 times for cluster DE1.

### Gene Information:

Gene: Ailee\_73 Start: 54620, Stop: 54970, Start Num: 6

Candidate Starts for Ailee\_73:

(Start: 6 @54620 has 33 MA's), (10, 54686), (15, 54737), (25, 54902),

Gene: Angelicage\_74 Start: 55559, Stop: 55915, Start Num: 6  
Candidate Starts for Angelicage\_74:  
(Start: 6 @55559 has 33 MA's), (10, 55625), (15, 55676), (25, 55841),

Gene: Ashertheman\_76 Start: 54155, Stop: 54517, Start Num: 6  
Candidate Starts for Ashertheman\_76:  
(5, 54140), (Start: 6 @54155 has 33 MA's), (15, 54272), (18, 54350), (22, 54395), (25, 54440),

Gene: Baddon\_74 Start: 54810, Stop: 55175, Start Num: 6  
Candidate Starts for Baddon\_74:  
(5, 54795), (Start: 6 @54810 has 33 MA's), (15, 54927), (18, 55005), (22, 55050), (25, 55095), (29, 55161),

Gene: Barsten\_77 Start: 55588, Stop: 55959, Start Num: 7  
Candidate Starts for Barsten\_77:  
(Start: 7 @55588 has 7 MA's), (15, 55702), (16, 55729), (25, 55879), (29, 55945),

Gene: Baumdotcom\_74 Start: 54126, Stop: 54488, Start Num: 6  
Candidate Starts for Baumdotcom\_74:  
(5, 54111), (Start: 6 @54126 has 33 MA's), (15, 54243), (18, 54321), (22, 54366), (25, 54411),

Gene: Bibwit\_74 Start: 54261, Stop: 54611, Start Num: 6  
Candidate Starts for Bibwit\_74:  
(Start: 6 @54261 has 33 MA's), (10, 54327), (15, 54378), (25, 54543),

Gene: Bizzy\_77 Start: 54039, Stop: 54404, Start Num: 6  
Candidate Starts for Bizzy\_77:  
(5, 54024), (Start: 6 @54039 has 33 MA's), (15, 54156), (18, 54234), (22, 54279), (25, 54324),

Gene: Brawn1\_73 Start: 54404, Stop: 54760, Start Num: 6  
Candidate Starts for Brawn1\_73:  
(Start: 6 @54404 has 33 MA's), (10, 54470), (15, 54521), (25, 54686),

Gene: Clown\_92 Start: 57279, Stop: 56857, Start Num: 4  
Candidate Starts for Clown\_92:  
(2, 57303), (Start: 4 @57279 has 1 MA's), (8, 57234), (10, 57171), (11, 57150), (17, 57054), (19, 57021), (20, 57018), (25, 56928), (27, 56898), (28, 56874),

Gene: Derg\_70 Start: 52842, Stop: 53204, Start Num: 6  
Candidate Starts for Derg\_70:  
(5, 52827), (Start: 6 @52842 has 33 MA's), (15, 52959), (18, 53037), (22, 53082), (25, 53127),

Gene: Fitzgerald\_74 Start: 55407, Stop: 55757, Start Num: 6  
Candidate Starts for Fitzgerald\_74:  
(Start: 6 @55407 has 33 MA's), (10, 55473), (14, 55518), (15, 55524), (25, 55689),

Gene: Flatwoods\_76 Start: 53348, Stop: 53710, Start Num: 6  
Candidate Starts for Flatwoods\_76:  
(5, 53333), (Start: 6 @53348 has 33 MA's), (15, 53465), (18, 53543), (22, 53588), (25, 53633),

Gene: Gaea\_77 Start: 53935, Stop: 54297, Start Num: 6  
Candidate Starts for Gaea\_77:  
(5, 53920), (Start: 6 @53935 has 33 MA's), (15, 54052), (18, 54130), (22, 54175), (25, 54220),

Gene: Galadriel\_76 Start: 55496, Stop: 55867, Start Num: 7

Candidate Starts for Galadriel\_76:

(Start: 7 @55496 has 7 MA's), (15, 55610), (16, 55637), (25, 55787), (29, 55853),

Gene: Gustavo\_78 Start: 54920, Stop: 55282, Start Num: 6

Candidate Starts for Gustavo\_78:

(5, 54905), (Start: 6 @54920 has 33 MA's), (15, 55037), (18, 55115), (22, 55160), (25, 55205),

Gene: JKSyngboy\_74 Start: 54834, Stop: 55196, Start Num: 6

Candidate Starts for JKSyngboy\_74:

(5, 54819), (Start: 6 @54834 has 33 MA's), (15, 54951), (18, 55029), (22, 55074), (25, 55119),

Gene: Jabberwocky\_74 Start: 55633, Stop: 55989, Start Num: 6

Candidate Starts for Jabberwocky\_74:

(Start: 6 @55633 has 33 MA's), (10, 55699), (15, 55750), (25, 55915),

Gene: Kamashten\_76 Start: 55390, Stop: 55761, Start Num: 7

Candidate Starts for Kamashten\_76:

(Start: 7 @55390 has 7 MA's), (15, 55504), (16, 55531), (25, 55681), (29, 55747),

Gene: Keitabear\_74 Start: 56182, Stop: 56532, Start Num: 6

Candidate Starts for Keitabear\_74:

(Start: 6 @56182 has 33 MA's), (10, 56248), (15, 56299), (25, 56464),

Gene: Kroos\_76 Start: 54474, Stop: 54836, Start Num: 6

Candidate Starts for Kroos\_76:

(5, 54459), (Start: 6 @54474 has 33 MA's), (15, 54591), (18, 54669), (22, 54714), (25, 54759),

Gene: Kwobi\_78 Start: 54739, Stop: 55101, Start Num: 6

Candidate Starts for Kwobi\_78:

(5, 54724), (Start: 6 @54739 has 33 MA's), (15, 54856), (18, 54934), (22, 54979), (25, 55024),

Gene: Lennon\_75 Start: 56283, Stop: 56633, Start Num: 6

Candidate Starts for Lennon\_75:

(Start: 6 @56283 has 33 MA's), (10, 56349), (15, 56400), (25, 56565),

Gene: LilHam\_70 Start: 51821, Stop: 52183, Start Num: 6

Candidate Starts for LilHam\_70:

(5, 51806), (Start: 6 @51821 has 33 MA's), (15, 51938), (18, 52016), (22, 52061), (25, 52106),

Gene: Love\_81 Start: 56197, Stop: 56556, Start Num: 7

Candidate Starts for Love\_81:

(Start: 7 @56197 has 7 MA's), (15, 56311), (16, 56338), (25, 56488),

Gene: McCrothy\_74 Start: 56062, Stop: 56427, Start Num: 7

Candidate Starts for McCrothy\_74:

(Start: 7 @56062 has 7 MA's), (15, 56176), (16, 56203), (25, 56353),

Gene: McKinley\_78 Start: 55346, Stop: 55708, Start Num: 6

Candidate Starts for McKinley\_78:

(Start: 6 @55346 has 33 MA's), (10, 55412), (15, 55463), (25, 55628), (29, 55694),

Gene: MoontowerMania\_75 Start: 55975, Stop: 56328, Start Num: 7  
Candidate Starts for MoontowerMania\_75:  
(Start: 7 @55975 has 7 MA's), (15, 56089), (21, 56200), (23, 56215), (25, 56248), (26, 56254), (29, 56314),

Gene: Paries\_79 Start: 56413, Stop: 56790, Start Num: 6  
Candidate Starts for Paries\_79:  
(1, 56284), (3, 56383), (Start: 6 @56413 has 33 MA's), (Start: 7 @56419 has 7 MA's), (9, 56425), (12, 56515), (15, 56533), (16, 56560), (24, 56677), (25, 56710), (29, 56776),

Gene: Ribeye\_76 Start: 54081, Stop: 54443, Start Num: 6  
Candidate Starts for Ribeye\_76:  
(5, 54066), (Start: 6 @54081 has 33 MA's), (15, 54198), (18, 54276), (22, 54321), (25, 54366),

Gene: RiverRaider\_77 Start: 53411, Stop: 53779, Start Num: 6  
Candidate Starts for RiverRaider\_77:  
(Start: 6 @53411 has 33 MA's), (Start: 7 @53417 has 7 MA's), (12, 53513), (13, 53516), (15, 53531), (16, 53558), (25, 53708),

Gene: Sanjuju\_74 Start: 55497, Stop: 55853, Start Num: 6  
Candidate Starts for Sanjuju\_74:  
(Start: 6 @55497 has 33 MA's), (10, 55563), (15, 55614), (25, 55779),

Gene: Saronaya\_78 Start: 54920, Stop: 55282, Start Num: 6  
Candidate Starts for Saronaya\_78:  
(5, 54905), (Start: 6 @54920 has 33 MA's), (15, 55037), (18, 55115), (22, 55160), (25, 55205),

Gene: SchottB\_74 Start: 54541, Stop: 54903, Start Num: 6  
Candidate Starts for SchottB\_74:  
(5, 54526), (Start: 6 @54541 has 33 MA's), (15, 54658), (18, 54736), (22, 54781), (25, 54826),

Gene: Sedona\_74 Start: 56067, Stop: 56429, Start Num: 6  
Candidate Starts for Sedona\_74:  
(Start: 6 @56067 has 33 MA's), (10, 56133), (15, 56184), (25, 56349), (29, 56415),

Gene: Shivanishola\_76 Start: 53843, Stop: 54214, Start Num: 7  
Candidate Starts for Shivanishola\_76:  
(Start: 7 @53843 has 7 MA's), (15, 53957), (16, 53984), (25, 54134), (29, 54200),

Gene: Sitar\_75 Start: 56041, Stop: 56391, Start Num: 6  
Candidate Starts for Sitar\_75:  
(Start: 6 @56041 has 33 MA's), (10, 56107), (15, 56158), (25, 56323),

Gene: Stichling\_72 Start: 53498, Stop: 53860, Start Num: 6  
Candidate Starts for Stichling\_72:  
(5, 53483), (Start: 6 @53498 has 33 MA's), (15, 53615), (18, 53693), (22, 53738), (25, 53783),

Gene: StorminNorm\_77 Start: 54711, Stop: 55073, Start Num: 6  
Candidate Starts for StorminNorm\_77:  
(5, 54696), (Start: 6 @54711 has 33 MA's), (15, 54828), (18, 54906), (22, 54951), (25, 54996),

Gene: Stultus\_71 Start: 54288, Stop: 54638, Start Num: 6  
Candidate Starts for Stultus\_71:

(Start: 6 @54288 has 33 MA's), (10, 54354), (15, 54405), (25, 54570),

Gene: Tangerine\_77 Start: 54214, Stop: 54576, Start Num: 6

Candidate Starts for Tangerine\_77:

(5, 54199), (Start: 6 @54214 has 33 MA's), (15, 54331), (18, 54409), (22, 54454), (25, 54499),

Gene: Thing3\_76 Start: 55390, Stop: 55761, Start Num: 7

Candidate Starts for Thing3\_76:

(Start: 7 @55390 has 7 MA's), (15, 55504), (16, 55531), (25, 55681), (29, 55747),

Gene: Tycho\_75 Start: 54030, Stop: 54392, Start Num: 6

Candidate Starts for Tycho\_75:

(5, 54015), (Start: 6 @54030 has 33 MA's), (15, 54147), (18, 54225), (22, 54270), (25, 54315),

Gene: YorkOnyx\_76 Start: 54058, Stop: 54420, Start Num: 6

Candidate Starts for YorkOnyx\_76:

(5, 54043), (Start: 6 @54058 has 33 MA's), (15, 54175), (18, 54253), (22, 54298), (25, 54343),