



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 2174 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2174 has 45 members, 8 are drafts.

Phages represented in each track:

- Track 1 : LonelyBoi\_36
- Track 2 : Belphegor\_4
- Track 3 : Rofo\_8, Jabberwocky\_7, Kamashten\_8, Bibwit\_8, Shivanishola\_7, Brandonk123\_9, Sedona\_9, Ailee\_8, Vivi2\_6, Love\_9, Keitabear\_8, Stultus\_7, Sanjuju\_7, Lennon\_8, Kewpiedoll\_8, Sitar\_8, Thing3\_8, Nordenberg\_3, Angelicage\_8
- Track 4 : Baddon\_8, JKSyngboy\_7
- Track 5 : Paries\_8
- Track 6 : Affeca\_8, Galadriel\_9, Fitzgerald\_7, Fosterous\_6, Charming\_6, McKinley\_8, BobBob\_6, Tangent\_6
- Track 7 : Derg\_6
- Track 8 : Ali17\_7, Inspectinfecti\_10, Leonard\_9, Phinally\_9
- Track 9 : MelBins\_9, Hans\_11
- Track 10 : Natkenzie\_8, Sampson\_8, Scioto\_8, Tardus\_8, ViaConlectus\_8, Abblin\_8

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

The start number called the most often in the published annotations is 3, it was called in 37 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abblin\_8, Affeca\_8, Ailee\_8, Ali17\_7, Angelicage\_8, Baddon\_8, Belphegor\_4, Bibwit\_8, BobBob\_6, Brandonk123\_9, Charming\_6, Fitzgerald\_7, Fosterous\_6, Galadriel\_9, Hans\_11, Inspectinfecti\_10, JKSyngboy\_7, Jabberwocky\_7, Kamashten\_8, Keitabear\_8, Kewpiedoll\_8, Lennon\_8, Leonard\_9, LonelyBoi\_36, Love\_9, McKinley\_8, MelBins\_9, Natkenzie\_8, Nordenberg\_3, Paries\_8, Phinally\_9, Rofo\_8, Sampson\_8, Sanjuju\_7, Scioto\_8, Sedona\_9, Shivanishola\_7, Sitar\_8, Stultus\_7, Tangent\_6, Tardus\_8, Thing3\_8, ViaConlectus\_8, Vivi2\_6,

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

- Derg\_6,

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

-

## Summary by start number:

### Start 2:

- Found in 3 of 45 ( 6.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Derg\_6 (DE1),

### Start 3:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 37 of 37
- Called 97.8% of time when present
- Phage (with cluster) where this start called: Abblin\_8 (DE4), Affeca\_8 (DE1), Ailee\_8 (DE1), Ali17\_7 (DE2), Angelicage\_8 (DE1), Baddon\_8 (DE1), Belphegor\_4 (DE), Bibwit\_8 (DE1), BobBob\_6 (DE1), Brandonk123\_9 (DE1), Charming\_6 (DE1), Fitzgerald\_7 (DE1), Fosterous\_6 (DE1), Galadriel\_9 (DE1), Hans\_11 (DE2), Inspectinfecti\_10 (DE2), JKSyngboy\_7 (DE1), Jabberwocky\_7 (DE1), Kamashten\_8 (DE1), Keitabear\_8 (DE1), Kewpiedoll\_8 (DE1), Lennon\_8 (DE1), Leonard\_9 (DE2), LonelyBoi\_36 (CY), Love\_9 (DE1), McKinley\_8 (DE1), MelBins\_9 (DE2), Natkenzie\_8 (DE4), Nordenberg\_3 (DE1), Paries\_8 (DE1), Phinally\_9 (DE2), Rofo\_8 (DE1), Sampson\_8 (DE4), Sanjuju\_7 (DE1), Scioto\_8 (DE4), Sedona\_9 (DE1), Shivanishola\_7 (DE1), Sitar\_8 (DE1), Stultus\_7 (DE1), Tangent\_6 (DE1), Tardus\_8 (DE4), Thing3\_8 (DE1), ViaConlectus\_8 (DE4), Vivi2\_6 (DE1),

## Summary by clusters:

There are 5 clusters represented in this pham: DE1, DE2, DE, DE4, CY,

### Info for manual annotations of cluster CY:

- Start number 3 was manually annotated 1 time for cluster CY.

### Info for manual annotations of cluster DE1:

- Start number 3 was manually annotated 28 times for cluster DE1.

### Info for manual annotations of cluster DE2:

- Start number 3 was manually annotated 5 times for cluster DE2.

### Info for manual annotations of cluster DE4:

- Start number 3 was manually annotated 3 times for cluster DE4.

## Gene Information:

Gene: Abblin\_8 Start: 5127, Stop: 5288, Start Num: 3

Candidate Starts for Abblin\_8:

(1, 5109), (Start: 3 @5127 has 37 MA's), (4, 5172), (5, 5187), (7, 5259),

Gene: Affeca\_8 Start: 5002, Stop: 5163, Start Num: 3

Candidate Starts for Affeca\_8:

(Start: 3 @5002 has 37 MA's), (6, 5083),

Gene: Ailee\_8 Start: 5844, Stop: 6017, Start Num: 3  
Candidate Starts for Ailee\_8:  
(Start: 3 @5844 has 37 MA's), (7, 5979), (8, 5982),

Gene: Ali17\_7 Start: 5038, Stop: 5202, Start Num: 3  
Candidate Starts for Ali17\_7:  
(Start: 3 @5038 has 37 MA's), (7, 5170),

Gene: Angelicage\_8 Start: 5411, Stop: 5584, Start Num: 3  
Candidate Starts for Angelicage\_8:  
(Start: 3 @5411 has 37 MA's), (7, 5546), (8, 5549),

Gene: Baddon\_8 Start: 5336, Stop: 5497, Start Num: 3  
Candidate Starts for Baddon\_8:  
(2, 5330), (Start: 3 @5336 has 37 MA's), (6, 5417),

Gene: Belphegor\_4 Start: 2515, Stop: 2679, Start Num: 3  
Candidate Starts for Belphegor\_4:  
(Start: 3 @2515 has 37 MA's),

Gene: Bibwit\_8 Start: 5677, Stop: 5850, Start Num: 3  
Candidate Starts for Bibwit\_8:  
(Start: 3 @5677 has 37 MA's), (7, 5812), (8, 5815),

Gene: BobBob\_6 Start: 4346, Stop: 4507, Start Num: 3  
Candidate Starts for BobBob\_6:  
(Start: 3 @4346 has 37 MA's), (6, 4427),

Gene: Brandonk123\_9 Start: 4684, Stop: 4857, Start Num: 3  
Candidate Starts for Brandonk123\_9:  
(Start: 3 @4684 has 37 MA's), (7, 4819), (8, 4822),

Gene: Charming\_6 Start: 4346, Stop: 4507, Start Num: 3  
Candidate Starts for Charming\_6:  
(Start: 3 @4346 has 37 MA's), (6, 4427),

Gene: Derg\_6 Start: 3943, Stop: 4113, Start Num: 2  
Candidate Starts for Derg\_6:  
(2, 3943), (Start: 3 @3949 has 37 MA's), (6, 4030),

Gene: Fitzgerald\_7 Start: 5272, Stop: 5433, Start Num: 3  
Candidate Starts for Fitzgerald\_7:  
(Start: 3 @5272 has 37 MA's), (6, 5353),

Gene: Fosterous\_6 Start: 4346, Stop: 4507, Start Num: 3  
Candidate Starts for Fosterous\_6:  
(Start: 3 @4346 has 37 MA's), (6, 4427),

Gene: Galadriel\_9 Start: 4375, Stop: 4536, Start Num: 3  
Candidate Starts for Galadriel\_9:  
(Start: 3 @4375 has 37 MA's), (6, 4456),

Gene: Hans\_11 Start: 5576, Stop: 5740, Start Num: 3  
Candidate Starts for Hans\_11:  
(Start: 3 @5576 has 37 MA's), (6, 5657),

Gene: Inspectinfecti\_10 Start: 6095, Stop: 6259, Start Num: 3  
Candidate Starts for Inspectinfecti\_10:  
(Start: 3 @6095 has 37 MA's), (7, 6227),

Gene: JKSyngboy\_7 Start: 5139, Stop: 5300, Start Num: 3  
Candidate Starts for JKSyngboy\_7:  
(2, 5133), (Start: 3 @5139 has 37 MA's), (6, 5220),

Gene: Jabberwocky\_7 Start: 5263, Stop: 5436, Start Num: 3  
Candidate Starts for Jabberwocky\_7:  
(Start: 3 @5263 has 37 MA's), (7, 5398), (8, 5401),

Gene: Kamashten\_8 Start: 4685, Stop: 4858, Start Num: 3  
Candidate Starts for Kamashten\_8:  
(Start: 3 @4685 has 37 MA's), (7, 4820), (8, 4823),

Gene: Keitabear\_8 Start: 6319, Stop: 6492, Start Num: 3  
Candidate Starts for Keitabear\_8:  
(Start: 3 @6319 has 37 MA's), (7, 6454), (8, 6457),

Gene: Kewpiedoll\_8 Start: 4533, Stop: 4706, Start Num: 3  
Candidate Starts for Kewpiedoll\_8:  
(Start: 3 @4533 has 37 MA's), (7, 4668), (8, 4671),

Gene: Lennon\_8 Start: 5525, Stop: 5698, Start Num: 3  
Candidate Starts for Lennon\_8:  
(Start: 3 @5525 has 37 MA's), (7, 5660), (8, 5663),

Gene: Leonard\_9 Start: 5690, Stop: 5854, Start Num: 3  
Candidate Starts for Leonard\_9:  
(Start: 3 @5690 has 37 MA's), (7, 5822),

Gene: LonelyBoi\_36 Start: 30972, Stop: 31145, Start Num: 3  
Candidate Starts for LonelyBoi\_36:  
(Start: 3 @30972 has 37 MA's), (7, 31107),

Gene: Love\_9 Start: 4684, Stop: 4857, Start Num: 3  
Candidate Starts for Love\_9:  
(Start: 3 @4684 has 37 MA's), (7, 4819), (8, 4822),

Gene: McKinley\_8 Start: 5527, Stop: 5688, Start Num: 3  
Candidate Starts for McKinley\_8:  
(Start: 3 @5527 has 37 MA's), (6, 5608),

Gene: MelBins\_9 Start: 5691, Stop: 5855, Start Num: 3  
Candidate Starts for MelBins\_9:  
(Start: 3 @5691 has 37 MA's), (6, 5772),

Gene: Natkenzie\_8 Start: 5127, Stop: 5288, Start Num: 3

Candidate Starts for Natkenzie\_8:

(1, 5109), (Start: 3 @5127 has 37 MA's), (4, 5172), (5, 5187), (7, 5259),

Gene: Nordenberg\_3 Start: 2951, Stop: 3124, Start Num: 3

Candidate Starts for Nordenberg\_3:

(Start: 3 @2951 has 37 MA's), (7, 3086), (8, 3089),

Gene: Paries\_8 Start: 4376, Stop: 4537, Start Num: 3

Candidate Starts for Paries\_8:

(Start: 3 @4376 has 37 MA's),

Gene: Phinally\_9 Start: 5687, Stop: 5851, Start Num: 3

Candidate Starts for Phinally\_9:

(Start: 3 @5687 has 37 MA's), (7, 5819),

Gene: Rofo\_8 Start: 5353, Stop: 5526, Start Num: 3

Candidate Starts for Rofo\_8:

(Start: 3 @5353 has 37 MA's), (7, 5488), (8, 5491),

Gene: Sampson\_8 Start: 5127, Stop: 5288, Start Num: 3

Candidate Starts for Sampson\_8:

(1, 5109), (Start: 3 @5127 has 37 MA's), (4, 5172), (5, 5187), (7, 5259),

Gene: Sanjuju\_7 Start: 5301, Stop: 5474, Start Num: 3

Candidate Starts for Sanjuju\_7:

(Start: 3 @5301 has 37 MA's), (7, 5436), (8, 5439),

Gene: Scioto\_8 Start: 5127, Stop: 5288, Start Num: 3

Candidate Starts for Scioto\_8:

(1, 5109), (Start: 3 @5127 has 37 MA's), (4, 5172), (5, 5187), (7, 5259),

Gene: Sedona\_9 Start: 6319, Stop: 6492, Start Num: 3

Candidate Starts for Sedona\_9:

(Start: 3 @6319 has 37 MA's), (7, 6454), (8, 6457),

Gene: Shivanishola\_7 Start: 5363, Stop: 5536, Start Num: 3

Candidate Starts for Shivanishola\_7:

(Start: 3 @5363 has 37 MA's), (7, 5498), (8, 5501),

Gene: Sitar\_8 Start: 5525, Stop: 5698, Start Num: 3

Candidate Starts for Sitar\_8:

(Start: 3 @5525 has 37 MA's), (7, 5660), (8, 5663),

Gene: Stultus\_7 Start: 5353, Stop: 5526, Start Num: 3

Candidate Starts for Stultus\_7:

(Start: 3 @5353 has 37 MA's), (7, 5488), (8, 5491),

Gene: Tangent\_6 Start: 4346, Stop: 4507, Start Num: 3

Candidate Starts for Tangent\_6:

(Start: 3 @4346 has 37 MA's), (6, 4427),

Gene: Tardus\_8 Start: 3963, Stop: 4124, Start Num: 3

Candidate Starts for Tardus\_8:

(1, 3945), (Start: 3 @3963 has 37 MA's), (4, 4008), (5, 4023), (7, 4095),

Gene: Thing3\_8 Start: 4685, Stop: 4858, Start Num: 3

Candidate Starts for Thing3\_8:

(Start: 3 @4685 has 37 MA's), (7, 4820), (8, 4823),

Gene: ViaConlectus\_8 Start: 5127, Stop: 5288, Start Num: 3

Candidate Starts for ViaConlectus\_8:

(1, 5109), (Start: 3 @5127 has 37 MA's), (4, 5172), (5, 5187), (7, 5259),

Gene: Vivi2\_6 Start: 4342, Stop: 4515, Start Num: 3

Candidate Starts for Vivi2\_6:

(Start: 3 @4342 has 37 MA's), (7, 4477), (8, 4480),