



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 311697 Report

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

Pham number 311697 has 50 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Yank\_5, Guntur\_5, Inspire2\_5, LouisXIV\_5, TinoCrisci\_5, Sandman\_5, Moloch\_5, Muttie\_5, Jessica\_6, CGermain\_5, TymAbreu\_5, Courtney3\_5, Hunnie\_5, Maggie\_5, Ronnie\_5, Toulouse\_4, Chestnut\_5, Seume\_5, Arby\_5, Stratus\_5, Copper\_5, Link\_5, Azathoth\_5, Massimo\_5, Dewayne\_5, Prospero\_5, Sourignavong\_6, Decurro\_5, Mariposa\_5
- Track 2 : Taj14\_5
- Track 3 : SerialPhiller\_3, StrawberryLem\_3, Kels\_3, Arielagos\_3, FirePit\_3, Eyoseyas\_3, Ximeno\_3
- Track 4 : Laila\_6, Swenson\_5, ElectricPheel\_6, Lore\_5, Blair\_5, Elkhorn\_5, StewieGriff\_5
- Track 5 : KylieMac\_6, Saphira\_5
- Track 6 : Vinye\_5
- Track 7 : Smilerella\_3, MoRicky\_3
- Track 8 : BigBoyz\_2

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

The start number called the most often in the published annotations is 7, it was called in 45 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_5, Arielagos\_3, Azathoth\_5, BigBoyz\_2, Blair\_5, CGermain\_5, Chestnut\_5, Copper\_5, Courtney3\_5, Decurro\_5, Dewayne\_5, ElectricPheel\_6, Elkhorn\_5, Eyoseyas\_3, FirePit\_3, Guntur\_5, Hunnie\_5, Inspire2\_5, Jessica\_6, Kels\_3, KylieMac\_6, Laila\_6, Link\_5, Lore\_5, LouisXIV\_5, Maggie\_5, Mariposa\_5, Massimo\_5, Moloch\_5, Muttie\_5, Prospero\_5, Ronnie\_5, Sandman\_5, Saphira\_5, SerialPhiller\_3, Seume\_5, Sourignavong\_6, StewieGriff\_5, Stratus\_5, StrawberryLem\_3, Swenson\_5, Taj14\_5, TinoCrisci\_5, Toulouse\_4, TymAbreu\_5, Vinye\_5, Ximeno\_3, Yank\_5,

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

- MoRicky\_3, Smilerella\_3,

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

- 

### Summary by start number:

#### Start 6:

- Found in 2 of 50 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 2 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MoRicky\_3 (GH), Smilerella\_3 (GH),

#### Start 7:

- Found in 50 of 50 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 45 of 47
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Arby\_5 (AN), Arielagos\_3 (AN), Azathoth\_5 (AN), BigBoyz\_2 (GH), Blair\_5 (AN), CGermain\_5 (AN), Chestnut\_5 (AN), Copper\_5 (AN), Courtney3\_5 (AN), Decurro\_5 (AN), Dewayne\_5 (AN), ElectricPheel\_6 (AN), Elkhorn\_5 (AN), Eyoseyas\_3 (AN), FirePit\_3 (AN), Guntur\_5 (AN), Hunnie\_5 (AN), Inspire2\_5 (AN), Jessica\_6 (AN), Kels\_3 (AN), KylieMac\_6 (AN), Laila\_6 (AN), Link\_5 (AN), Lore\_5 (AN), LouisXIV\_5 (AN), Maggie\_5 (AN), Mariposa\_5 (AN), Massimo\_5 (AN), Moloch\_5 (AN), Muttie\_5 (AN), Prospero\_5 (AN), Ronnie\_5 (AN), Sandman\_5 (AN), Saphira\_5 (AN), SerialPhiller\_3 (AN), Seume\_5 (AN), Sourignavong\_6 (AN), StewieGriff\_5 (AN), Stratus\_5 (AN), StrawberryLem\_3 (AN), Swenson\_5 (AN), Taj14\_5 (AN), TinoCrisci\_5 (AN), Toulouse\_4 (AN), TymAbreu\_5 (AN), Vinye\_5 (AN), Ximeno\_3 (AN), Yank\_5 (AN),

### Summary by clusters:

There are 2 clusters represented in this pham: GH, AN,

#### Info for manual annotations of cluster AN:

- Start number 7 was manually annotated 44 times for cluster AN.

#### Info for manual annotations of cluster GH:

- Start number 6 was manually annotated 2 times for cluster GH.
- Start number 7 was manually annotated 1 time for cluster GH.

### Gene Information:

Gene: Arby\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Arby\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Arielagos\_3 Start: 1923, Stop: 2123, Start Num: 7

Candidate Starts for Arielagos\_3:

(Start: 7 @1923 has 45 MA's), (9, 1956), (12, 1971),

Gene: Azathoth\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Azathoth\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: BigBoyz\_2 Start: 1665, Stop: 1859, Start Num: 7  
Candidate Starts for BigBoyz\_2:  
(1, 1134), (2, 1224), (3, 1227), (4, 1230), (Start: 7 @1665 has 45 MA's), (20, 1854),

Gene: Blair\_5 Start: 2294, Stop: 2497, Start Num: 7  
Candidate Starts for Blair\_5:  
(Start: 7 @2294 has 45 MA's), (11, 2333), (12, 2342), (13, 2363), (18, 2441),

Gene: CGermain\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for CGermain\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Chestnut\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Chestnut\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Copper\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Copper\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Courtney3\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Courtney3\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Decurro\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Decurro\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Dewayne\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Dewayne\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: ElectricPheel\_6 Start: 2368, Stop: 2571, Start Num: 7  
Candidate Starts for ElectricPheel\_6:  
(Start: 7 @2368 has 45 MA's), (11, 2407), (12, 2416), (13, 2437), (18, 2515),

Gene: Elkhorn\_5 Start: 2294, Stop: 2497, Start Num: 7  
Candidate Starts for Elkhorn\_5:  
(Start: 7 @2294 has 45 MA's), (11, 2333), (12, 2342), (13, 2363), (18, 2441),

Gene: Eyoseyas\_3 Start: 1923, Stop: 2123, Start Num: 7  
Candidate Starts for Eyoseyas\_3:  
(Start: 7 @1923 has 45 MA's), (9, 1956), (12, 1971),

Gene: FirePit\_3 Start: 1923, Stop: 2123, Start Num: 7  
Candidate Starts for FirePit\_3:  
(Start: 7 @1923 has 45 MA's), (9, 1956), (12, 1971),

Gene: Guntur\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Guntur\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Hunnie\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Hunnie\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Inspire2\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Inspire2\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Jessica\_6 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Jessica\_6:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Kels\_3 Start: 1848, Stop: 2048, Start Num: 7  
Candidate Starts for Kels\_3:  
(Start: 7 @1848 has 45 MA's), (9, 1881), (12, 1896),

Gene: KylieMac\_6 Start: 2281, Stop: 2484, Start Num: 7  
Candidate Starts for KylieMac\_6:  
(Start: 7 @2281 has 45 MA's), (12, 2329), (13, 2350), (18, 2428),

Gene: Laila\_6 Start: 2294, Stop: 2497, Start Num: 7  
Candidate Starts for Laila\_6:  
(Start: 7 @2294 has 45 MA's), (11, 2333), (12, 2342), (13, 2363), (18, 2441),

Gene: Link\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Link\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Lore\_5 Start: 2294, Stop: 2497, Start Num: 7  
Candidate Starts for Lore\_5:  
(Start: 7 @2294 has 45 MA's), (11, 2333), (12, 2342), (13, 2363), (18, 2441),

Gene: LouisXIV\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for LouisXIV\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Maggie\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Maggie\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Mariposa\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Mariposa\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Massimo\_5 Start: 2292, Stop: 2495, Start Num: 7  
Candidate Starts for Massimo\_5:  
(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: MoRicky\_3 Start: 1801, Stop: 2037, Start Num: 6  
Candidate Starts for MoRicky\_3:  
(Start: 6 @1801 has 2 MA's), (Start: 7 @1816 has 45 MA's), (15, 1897), (19, 1978), (21, 2032),

Gene: Moloch\_5 Start: 2366, Stop: 2569, Start Num: 7  
Candidate Starts for Moloch\_5:

(5, 2306), (Start: 7 @2366 has 45 MA's), (10, 2402), (12, 2414), (18, 2513),

Gene: Muttlie\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Muttlie\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Prospero\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Prospero\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Ronnie\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Ronnie\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Sandman\_5 Start: 2366, Stop: 2569, Start Num: 7

Candidate Starts for Sandman\_5:

(5, 2306), (Start: 7 @2366 has 45 MA's), (10, 2402), (12, 2414), (18, 2513),

Gene: Saphira\_5 Start: 2294, Stop: 2497, Start Num: 7

Candidate Starts for Saphira\_5:

(Start: 7 @2294 has 45 MA's), (12, 2342), (13, 2363), (18, 2441),

Gene: SerialPhiller\_3 Start: 1923, Stop: 2123, Start Num: 7

Candidate Starts for SerialPhiller\_3:

(Start: 7 @1923 has 45 MA's), (9, 1956), (12, 1971),

Gene: Seume\_5 Start: 2088, Stop: 2291, Start Num: 7

Candidate Starts for Seume\_5:

(5, 2028), (Start: 7 @2088 has 45 MA's), (10, 2124), (12, 2136), (18, 2235),

Gene: Smilerella\_3 Start: 1801, Stop: 2037, Start Num: 6

Candidate Starts for Smilerella\_3:

(Start: 6 @1801 has 2 MA's), (Start: 7 @1816 has 45 MA's), (15, 1897), (19, 1978), (21, 2032),

Gene: Sourignavong\_6 Start: 2393, Stop: 2596, Start Num: 7

Candidate Starts for Sourignavong\_6:

(5, 2333), (Start: 7 @2393 has 45 MA's), (10, 2429), (12, 2441), (18, 2540),

Gene: StewieGriff\_5 Start: 2294, Stop: 2497, Start Num: 7

Candidate Starts for StewieGriff\_5:

(Start: 7 @2294 has 45 MA's), (11, 2333), (12, 2342), (13, 2363), (18, 2441),

Gene: Stratus\_5 Start: 2366, Stop: 2569, Start Num: 7

Candidate Starts for Stratus\_5:

(5, 2306), (Start: 7 @2366 has 45 MA's), (10, 2402), (12, 2414), (18, 2513),

Gene: StrawberryLem\_3 Start: 1848, Stop: 2048, Start Num: 7

Candidate Starts for StrawberryLem\_3:

(Start: 7 @1848 has 45 MA's), (9, 1881), (12, 1896),

Gene: Swenson\_5 Start: 2417, Stop: 2620, Start Num: 7

Candidate Starts for Swenson\_5:

(Start: 7 @2417 has 45 MA's), (11, 2456), (12, 2465), (13, 2486), (18, 2564),

Gene: Taj14\_5 Start: 2273, Stop: 2476, Start Num: 7

Candidate Starts for Taj14\_5:

(Start: 7 @2273 has 45 MA's), (9, 2306), (11, 2312), (12, 2321), (13, 2342), (18, 2420),

Gene: TinoCrisci\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for TinoCrisci\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Toulouse\_4 Start: 2088, Stop: 2291, Start Num: 7

Candidate Starts for Toulouse\_4:

(5, 2028), (Start: 7 @2088 has 45 MA's), (10, 2124), (12, 2136), (18, 2235),

Gene: TymAbreu\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for TymAbreu\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),

Gene: Vinye\_5 Start: 2289, Stop: 2489, Start Num: 7

Candidate Starts for Vinye\_5:

(Start: 7 @2289 has 45 MA's), (8, 2319), (9, 2322), (10, 2325), (14, 2358), (16, 2370), (17, 2424),

Gene: Ximeno\_3 Start: 1923, Stop: 2123, Start Num: 7

Candidate Starts for Ximeno\_3:

(Start: 7 @1923 has 45 MA's), (9, 1956), (12, 1971),

Gene: Yank\_5 Start: 2292, Stop: 2495, Start Num: 7

Candidate Starts for Yank\_5:

(5, 2232), (Start: 7 @2292 has 45 MA's), (10, 2328), (12, 2340), (18, 2439),