

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 87464 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87464 has 15 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Magel\_5, Capybara\_5, Gravy\_5, Gill\_5, Kerry\_5, Roney\_5
- Track 2 : Perkunas 7
- Track 3 : Artorias\_5, FortCran\_5
- Track 4 : Odesza\_5, Tanis\_5
- Track 5 : Conley\_5Track 6 : Avazak\_5, Captrips\_5
- Track 7 : Petito 5

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

The start number called the most often in the published annotations is 1, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Capybara\_5, Gill\_5, Gravy\_5, Kerry\_5, Magel\_5, Odesza\_5, Roney\_5, Tanis\_5,

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

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

Artorias\_5, Avazak\_5, Captrips\_5, Conley\_5, FortCran\_5, Perkunas\_7, Petito\_5,

## **Summary by start number:**

#### Start 1:

- Found in 8 of 15 (53.3%) of genes in pham
- Manual Annotations of this start: 7 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Capybara\_5 (DJ), Gill\_5 (DJ), Gravy\_5 (DJ), Kerry\_5 (DJ), Magel\_5 (DJ), Odesza\_5 (DJ), Roney\_5 (DJ), Tanis\_5 (DJ),

#### Start 2:

- Found in 7 of 15 (46.7%) of genes in pham
- Manual Annotations of this start: 3 of 10

- Called 85.7% of time when present
- Phage (with cluster) where this start called: Artorias\_5 (DJ), Avazak\_5 (DJ), Captrips\_5 (DJ), Conley\_5 (DJ), FortCran\_5 (DJ), Perkunas\_7 (DJ),

#### Start 4:

- Found in 3 of 15 (20.0%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Petito\_5 (DJ),

### **Summary by clusters:**

There is one cluster represented in this pham: DJ

Info for manual annotations of cluster DJ:

- Start number 1 was manually annotated 7 times for cluster DJ.
- •Start number 2 was manually annotated 3 times for cluster DJ.

### Gene Information:

Gene: Artorias\_5 Start: 2130, Stop: 2579, Start Num: 2

Candidate Starts for Artorias\_5:

(Start: 2 @2130 has 3 MA's), (8, 2292), (9, 2343), (10, 2382), (12, 2427), (13, 2442), (15, 2499), (16, 2511), (17, 2547), (18, 2553),

Gene: Avazak\_5 Start: 2130, Stop: 2579, Start Num: 2

Candidate Starts for Avazak\_5:

(Start: 2 @2130 has 3 MA's), (8, 2292), (9, 2343), (10, 2382), (12, 2427), (15, 2499), (16, 2511), (17, 2547), (18, 2553),

Gene: Captrips 5 Start: 2130, Stop: 2579, Start Num: 2

Candidate Starts for Captrips 5:

(Start: 2 @2130 has 3 MA's), (8, 2292), (9, 2343), (10, 2382), (12, 2427), (15, 2499), (16, 2511), (17, 2547), (18, 2553),

Gene: Capybara\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Capybara 5:

(Start: 1 @1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Conley\_5 Start: 2131, Stop: 2595, Start Num: 2

Candidate Starts for Conley\_5:

(Start: 2 @2131 has 3 MA's), (4, 2161), (7, 2254), (11, 2389), (12, 2428), (13, 2443), (17, 2563), (18, 2569),

Gene: FortCran\_5 Start: 2130, Stop: 2579, Start Num: 2

Candidate Starts for FortCran 5:

(Start: 2 @2130 has 3 MA's), (8, 2292), (9, 2343), (10, 2382), (12, 2427), (13, 2442), (15, 2499), (16, 2511), (17, 2547), (18, 2553),

Gene: Gill\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Gill 5:

(Start: 1 @ 1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Gravy\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Gravy\_5:

(Start: 1 @1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Kerry\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Kerry 5:

(Start: 1 @1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Magel\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Magel\_5:

(Start: 1 @1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Odesza\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Odesza 5:

(Start: 1 @1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251),

Gene: Perkunas\_7 Start: 2649, Stop: 3098, Start Num: 2

Candidate Starts for Perkunas\_7:

(Start: 2 @2649 has 3 MA's), (4, 2679), (8, 2811), (12, 2946), (13, 2961), (15, 3018), (16, 3030), (18, 3072),

Gene: Petito\_5 Start: 2355, Stop: 2789, Start Num: 4

Candidate Starts for Petito\_5:

(Start: 2 @2325 has 3 MA's), (4, 2355), (7, 2448), (11, 2583), (12, 2622), (13, 2637), (17, 2757), (18, 2763),

Gene: Roney\_5 Start: 1834, Stop: 2283, Start Num: 1

Candidate Starts for Roney\_5:

(Start: 1 @ 1834 has 7 MA's), (3, 1852), (5, 1900), (6, 1906), (8, 1996), (12, 2131), (13, 2146), (14, 2182), (15, 2203), (17, 2251), (18, 2257),

Gene: Tanis\_5 Start: 1684, Stop: 2133, Start Num: 1

Candidate Starts for Tanis 5:

(Start: 1 @1684 has 7 MA's), (3, 1702), (5, 1750), (6, 1756), (8, 1846), (12, 1981), (13, 1996), (14, 2032), (15, 2053), (17, 2101),