

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 27913 Report

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

Pham number 27913 has 15 members, 4 are drafts.

Phages represented in each track:

- Track 1: Artorias 56, FortCran 60
- Track 2 : Gravy\_55, Gill\_56, Tanis\_56, Kerry\_55, Roney\_56, Magel\_57
- Track 3 : Perkunas\_58
- Track 4 : Captrips\_57
- Track 5 : Schwartz33 57
- Track 6: Avazak\_57
- Track 7 : Odesza 55
- Track 8 : Fazel 60
- Track 9 : Secretariat\_55

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

The start number called the most often in the published annotations is 5, it was called in 7 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Captrips\_57, Gill\_56, Gravy\_55, Kerry\_55, Magel\_57, Odesza\_55, Perkunas\_58, Roney\_56, Tanis\_56,

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

Artorias\_56, Avazak\_57, FortCran\_60,

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

Fazel\_60, Schwartz33\_57, Secretariat\_55,

## Summary by start number:

#### Start 1

- Found in 4 of 15 (26.7%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Artorias\_56 (DJ), Avazak\_57 (DJ), FortCran\_60 (DJ),

#### Start 2:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schwartz33\_57 (DJ), Secretariat\_55 (DJ),

### Start 5:

- Found in 12 of 15 (80.0%) of genes in pham
- Manual Annotations of this start: 7 of 11
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Captrips\_57 (DJ), Gill\_56 (DJ), Gravy\_55 (DJ), Kerry\_55 (DJ), Magel\_57 (DJ), Odesza\_55 (DJ), Perkunas\_58 (DJ), Roney\_56 (DJ), Tanis\_56 (DJ),

#### Start 8:

- Found in 13 of 15 (86.7%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Fazel\_60 (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 2 times for cluster DJ.
- •Start number 2 was manually annotated 2 times for cluster DJ.
- •Start number 5 was manually annotated 7 times for cluster DJ.

### Gene Information:

Gene: Artorias 56 Start: 38245, Stop: 38580, Start Num: 1

Candidate Starts for Artorias\_56:

(Start: 1 @38245 has 2 MA's), (3, 38278), (Start: 5 @38290 has 7 MA's), (8, 38338), (12, 38479), (14, 38512), (16, 38533),

Gene: Avazak 57 Start: 38572, Stop: 38907, Start Num: 1

Candidate Starts for Avazak 57:

(Start: 1 @38572 has 2 MA's), (3, 38605), (Start: 5 @38617 has 7 MA's), (8, 38665), (12, 38806), (14, 38839), (16, 38860), (18, 38872),

Gene: Captrips\_57 Start: 37765, Stop: 38055, Start Num: 5

Candidate Starts for Captrips\_57:

(Start: 1 @37720 has 2 MA's), (3, 37753), (Start: 5 @37765 has 7 MA's), (7, 37786), (8, 37813), (12, 37954), (14, 37987), (16, 38008), (19, 38050),

Gene: Fazel 60 Start: 38126, Stop: 38347, Start Num: 8

Candidate Starts for Fazel 60:

(4, 38072), (6, 38078), (8, 38126), (11, 38252), (12, 38267), (14, 38300), (16, 38321), (17, 38327), (18, 38333),

Gene: FortCran\_60 Start: 38245, Stop: 38580, Start Num: 1

Candidate Starts for FortCran\_60:

(Start: 1 @38245 has 2 MA's), (3, 38278), (Start: 5 @38290 has 7 MA's), (8, 38338), (12, 38479), (14, 38512), (16, 38533),

Gene: Gill\_56 Start: 38128, Stop: 38403, Start Num: 5

Candidate Starts for Gill 56:

(Start: 5 @38128 has 7 MA's), (7, 38146), (8, 38173), (9, 38179), (17, 38374),

Gene: Gravy\_55 Start: 37801, Stop: 38076, Start Num: 5

Candidate Starts for Gravy 55:

(Start: 5 @ 37801 has 7 MA's), (7, 37819), (8, 37846), (9, 37852), (17, 38047),

Gene: Kerry\_55 Start: 37801, Stop: 38076, Start Num: 5

Candidate Starts for Kerry\_55:

(Start: 5 @ 37801 has 7 MA's), (7, 37819), (8, 37846), (9, 37852), (17, 38047),

Gene: Magel 57 Start: 38044, Stop: 38319, Start Num: 5

Candidate Starts for Magel\_57:

(Start: 5 @ 38044 has 7 MA's), (7, 38062), (8, 38089), (9, 38095), (17, 38290),

Gene: Odesza 55 Start: 37988, Stop: 38263, Start Num: 5

Candidate Starts for Odesza\_55:

(Start: 5 @ 37988 has 7 MA's), (7, 38006), (8, 38033), (9, 38039),

Gene: Perkunas\_58 Start: 38254, Stop: 38544, Start Num: 5

Candidate Starts for Perkunas 58:

(Start: 5 @38254 has 7 MA's), (7, 38275), (8, 38302), (10, 38425), (12, 38443), (14, 38476), (16, 38497), (18, 38509),

Gene: Roney\_56 Start: 38154, Stop: 38429, Start Num: 5

Candidate Starts for Roney 56:

(Start: 5 @ 38154 has 7 MA's), (7, 38172), (8, 38199), (9, 38205), (17, 38400),

Gene: Schwartz33\_57 Start: 38403, Stop: 38690, Start Num: 2

Candidate Starts for Schwartz33\_57:

(Start: 2 @ 38403 has 2 MA's), (13, 38631), (14, 38643), (15, 38661), (16, 38664), (17, 38670),

Gene: Secretariat\_55 Start: 37326, Stop: 37634, Start Num: 2

Candidate Starts for Secretariat 55:

(Start: 2 @37326 has 2 MA's), (15, 37584), (17, 37593), (18, 37599),

Gene: Tanis 56 Start: 37974, Stop: 38249, Start Num: 5

Candidate Starts for Tanis 56:

(Start: 5 @ 37974 has 7 MA's), (7, 37992), (8, 38019), (9, 38025), (17, 38220),