

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 223469 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223469 has 18 members, 4 are drafts.

Phages represented in each track:

- Track 1: Roney\_35, Magel\_36, NoPickles\_35, Tanis\_35, Gill\_35, Capybara\_35
- Track 2: Kerry\_35, Gravy\_35, Odesza\_35
- Track 3: Captrips\_35, JulesRay\_37, Dancer\_37
- Track 4 : FortCran\_35, Artorias\_35
- Track 5 : OhMyWard 37
- Track 6 : Trufflozitus\_38
- Track 7 : Avazak 35
- Track 8 : Mossy\_39

## 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 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Artorias\_35, Captrips\_35, Capybara\_35, Dancer\_37, FortCran\_35, Gill\_35, JulesRay\_37, Magel\_36, NoPickles\_35, Roney\_35, Tanis\_35, Trufflozitus\_38,

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

• Avazak\_35, Gravy\_35, Kerry\_35, Mossy\_39, Odesza\_35, OhMyWard\_37,

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

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### **Summary by start number:**

#### Start 3:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mossy\_39 (DJ), OhMyWard\_37 (DJ),

#### Start 4:

• Found in 14 of 18 (77.8%) of genes in pham

- Manual Annotations of this start: 4 of 14
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Avazak\_35 (DJ), Gravy\_35 (DJ), Kerry\_35 (DJ), Odesza\_35 (DJ),

#### Start 5:

- Found in 18 of 18 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Artorias\_35 (DJ), Captrips\_35 (DJ), Capybara\_35 (DJ), Dancer\_37 (DJ), FortCran\_35 (DJ), Gill\_35 (DJ), JulesRay\_37 (DJ), Magel\_36 (DJ), NoPickles\_35 (DJ), Roney\_35 (DJ), Tanis\_35 (DJ), Trufflozitus\_38 (DJ),

### Summary by clusters:

There is one cluster represented in this pham: DJ

Info for manual annotations of cluster DJ:

- Start number 3 was manually annotated 2 times for cluster DJ.
- •Start number 4 was manually annotated 4 times for cluster DJ.
- Start number 5 was manually annotated 8 times for cluster DJ.

#### Gene Information:

Gene: Artorias\_35 Start: 29163, Stop: 29462, Start Num: 5

Candidate Starts for Artorias\_35:

(Start: 5 @ 29163 has 8 MA's), (6, 29202), (7, 29205), (8, 29268), (14, 29457),

Gene: Avazak\_35 Start: 29155, Stop: 29469, Start Num: 4

Candidate Starts for Avazak 35:

(Start: 4 @29155 has 4 MA's), (Start: 5 @29170 has 8 MA's), (6, 29209), (10, 29308), (11, 29311), (13, 29431), (14, 29464),

Gene: Captrips\_35 Start: 29199, Stop: 29498, Start Num: 5

Candidate Starts for Captrips\_35:

(Start: 4 @29184 has 4 MA's), (Start: 5 @29199 has 8 MA's), (6, 29238), (7, 29241), (8, 29304), (14, 29493),

Gene: Capybara\_35 Start: 29274, Stop: 29573, Start Num: 5

Candidate Starts for Capybara 35:

(Start: 4 @29259 has 4 MA's), (Start: 5 @29274 has 8 MA's), (6, 29313), (7, 29316), (8, 29379), (13, 29535), (14, 29568),

Gene: Dancer\_37 Start: 28899, Stop: 29198, Start Num: 5

Candidate Starts for Dancer\_37:

(Start: 4 @28884 has 4 MA's), (Start: 5 @28899 has 8 MA's), (6, 28938), (7, 28941), (8, 29004), (14, 29193),

Gene: FortCran 35 Start: 29163, Stop: 29462, Start Num: 5

Candidate Starts for FortCran\_35:

(Start: 5 @29163 has 8 MA's), (6, 29202), (7, 29205), (8, 29268), (14, 29457),

Gene: Gill\_35 Start: 29286, Stop: 29585, Start Num: 5

Candidate Starts for Gill\_35:

(Start: 4 @29271 has 4 MA's), (Start: 5 @29286 has 8 MA's), (6, 29325), (7, 29328), (8, 29391), (13, 29547), (14, 29580),

Gene: Gravy\_35 Start: 29271, Stop: 29585, Start Num: 4

Candidate Starts for Gravy\_35:

(Start: 4 @29271 has 4 MA's), (Start: 5 @29286 has 8 MA's), (6, 29325), (7, 29328), (8, 29391), (13, 29547), (14, 29580),

Gene: JulesRay\_37 Start: 29193, Stop: 29492, Start Num: 5

Candidate Starts for JulesRay\_37:

(Start: 4 @29178 has 4 MA's), (Start: 5 @29193 has 8 MA's), (6, 29232), (7, 29235), (8, 29298), (14, 29487),

Gene: Kerry\_35 Start: 29271, Stop: 29585, Start Num: 4

Candidate Starts for Kerry 35:

(Start: 4 @29271 has 4 MA's), (Start: 5 @29286 has 8 MA's), (6, 29325), (7, 29328), (8, 29391), (13, 29547), (14, 29580),

Gene: Magel\_36 Start: 29194, Stop: 29493, Start Num: 5

Candidate Starts for Magel\_36:

(Start: 4 @29179 has 4 MA's), (Start: 5 @29194 has 8 MA's), (6, 29233), (7, 29236), (8, 29299), (13, 29455), (14, 29488),

Gene: Mossy 39 Start: 33363, Stop: 33692, Start Num: 3

Candidate Starts for Mossy 39:

(Start: 3 @33363 has 2 MA's), (Start: 5 @33399 has 8 MA's), (9, 33516), (12, 33630),

Gene: NoPickles\_35 Start: 28918, Stop: 29217, Start Num: 5

Candidate Starts for NoPickles 35:

(Start: 4 @28903 has 4 MA's), (Start: 5 @28918 has 8 MA's), (6, 28957), (7, 28960), (8, 29023), (13, 29179), (14, 29212),

Gene: Odesza\_35 Start: 29271, Stop: 29585, Start Num: 4

Candidate Starts for Odesza\_35:

(Start: 4 @29271 has 4 MA's), (Start: 5 @29286 has 8 MA's), (6, 29325), (7, 29328), (8, 29391), (13, 29547), (14, 29580),

Gene: OhMyWard\_37 Start: 32706, Stop: 33035, Start Num: 3

Candidate Starts for OhMyWard 37:

(1, 32664), (2, 32673), (Start: 3 @32706 has 2 MA's), (Start: 5 @32742 has 8 MA's), (9, 32859), (12, 32973),

Gene: Roney\_35 Start: 29286, Stop: 29585, Start Num: 5

Candidate Starts for Roney\_35:

(Start: 4 @29271 has 4 MA's), (Start: 5 @29286 has 8 MA's), (6, 29325), (7, 29328), (8, 29391), (13, 29547), (14, 29580),

Gene: Tanis 35 Start: 29136, Stop: 29435, Start Num: 5

Candidate Starts for Tanis\_35:

(Start: 4 @29121 has 4 MA's), (Start: 5 @29136 has 8 MA's), (6, 29175), (7, 29178), (8, 29241), (13, 29397), (14, 29430),

Gene: Trufflozitus\_38 Start: 29192, Stop: 29491, Start Num: 5

Candidate Starts for Trufflozitus\_38:

(Start: 4 @29177 has 4 MA's), (Start: 5 @29192 has 8 MA's), (6, 29231), (10, 29330), (11, 29333), (13, 29453), (14, 29486),