

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 216626 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216626 has 18 members, 6 are drafts.

Phages represented in each track:

• Track 1: Ranunculus 106

• Track 2 : Wilde\_106, Tank\_103

• Track 3 : Rizwana 99

• Track 4 : Forrestell\_117, DogYard\_116, NyleyClemson\_121, MellowYellow\_120, Kubulix\_115, Pureglobe5\_119, Beagle\_123, Pointis\_114

• Track 5 : Odyssey395\_117

Track 6 : Ollypop\_112

Track 7: RazzB 117

• Track 8 : BruhMoment 110

• Track 9 : AWGoat\_102

Track 10 : SilentRX\_100

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

The start number called the most often in the published annotations is 8, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beagle\_123, DogYard\_116, Forrestell\_117, Kubulix\_115, MellowYellow\_120, NyleyClemson\_121, Pointis\_114, Pureglobe5\_119, Ranunculus\_106, RazzB\_117,

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

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

AWGoat\_102, BruhMoment\_110, Odyssey395\_117, Ollypop\_112, Rizwana\_99, SilentRX\_100, Tank\_103, Wilde\_106,

# Summary by start number:

# Start 2:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present

Phage (with cluster) where this start called: Odyssey395\_117 (AP2),

#### Start 8:

- Found in 10 of 18 (55.6%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_123 (AP2), DogYard\_116 (AP2), Forrestell\_117 (AP2), Kubulix\_115 (AP2), MellowYellow\_120 (AP2), NyleyClemson\_121 (AP2), Pointis\_114 (AP2), Pureglobe5\_119 (AP2), Ranunculus\_106 (AP), RazzB\_117 (AP2),

### Start 9:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_102 (AP4), SilentRX\_100 (AP4),

# Start 11:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment\_110 (AP3),

#### Start 12:

- Found in 2 of 18 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tank\_103 (AP1), Wilde\_106 (AP1),

#### Start 13:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana\_99 (AP1),

#### Start 14:

- Found in 12 of 18 (66.7%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Ollypop\_112 (AP2),

# **Summary by clusters:**

There are 5 clusters represented in this pham: AP2, AP, AP1, AP4, AP3,

Info for manual annotations of cluster AP:

•Start number 8 was manually annotated 1 time for cluster AP.

# Info for manual annotations of cluster AP1:

- •Start number 12 was manually annotated 2 times for cluster AP1.
- •Start number 13 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- •Start number 2 was manually annotated 1 time for cluster AP2.
- •Start number 8 was manually annotated 4 times for cluster AP2.

Info for manual annotations of cluster AP3:

•Start number 11 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

•Start number 9 was manually annotated 2 times for cluster AP4.

## Gene Information:

Gene: AWGoat\_102 Start: 63771, Stop: 63343, Start Num: 9

Candidate Starts for AWGoat 102:

(Start: 9 @63771 has 2 MA's), (20, 63564), (24, 63471), (25, 63447), (26, 63438),

Gene: Beagle\_123 Start: 68025, Stop: 67552, Start Num: 8

Candidate Starts for Beagle 123:

(Start: 8 @68025 has 5 MA's), (14, 67932), (22, 67764), (24, 67689), (26, 67656), (27, 67626), (31, 67602), (33, 67578),

Gene: BruhMoment\_110 Start: 65254, Stop: 64826, Start Num: 11

Candidate Starts for BruhMoment 110:

(Start: 11 @65254 has 1 MA's), (15, 65173), (16, 65092), (24, 64972), (25, 64948), (26, 64939), (27, 64909), (33, 64861),

Gene: DogYard\_116 Start: 66663, Stop: 66190, Start Num: 8

Candidate Starts for DogYard\_116:

(Start: 8 @66663 has 5 MA's), (14, 66570), (22, 66402), (24, 66327), (26, 66294), (27, 66264), (31, 66240), (33, 66216),

Gene: Forrestell 117 Start: 66315, Stop: 65842, Start Num: 8

Candidate Starts for Forrestell 117:

(Start: 8 @66315 has 5 MA's), (14, 66222), (22, 66054), (24, 65979), (26, 65946), (27, 65916), (31, 65892), (33, 65868),

Gene: Kubulix 115 Start: 66353, Stop: 65880, Start Num: 8

Candidate Starts for Kubulix 115:

(Start: 8 @66353 has 5 MA's), (14, 66260), (22, 66092), (24, 66017), (26, 65984), (27, 65954), (31, 65930), (33, 65906),

Gene: MellowYellow\_120 Start: 67698, Stop: 67225, Start Num: 8

Candidate Starts for MellowYellow\_120:

(Start: 8 @67698 has 5 MA's), (14, 67605), (22, 67437), (24, 67362), (26, 67329), (27, 67299), (31, 67275), (33, 67251),

Gene: NyleyClemson 121 Start: 67328, Stop: 66855, Start Num: 8

Candidate Starts for NylevClemson 121:

(Start: 8 @67328 has 5 MA's), (14, 67235), (22, 67067), (24, 66992), (26, 66959), (27, 66929), (31, 66905), (33, 66881),

Gene: Odyssey395\_117 Start: 66479, Stop: 65880, Start Num: 2

Candidate Starts for Odyssey395\_117:

(1, 66578), (Start: 2 @66479 has 1 MA's), (4, 66449), (5, 66428), (7, 66410), (10, 66299), (14, 66260), (22, 66092), (24, 66017), (26, 65984), (27, 65954), (31, 65930), (33, 65906),

Gene: Ollypop\_112 Start: 67774, Stop: 67349, Start Num: 14

Candidate Starts for Ollypop\_112:

(14, 67774), (18, 67639), (19, 67627), (25, 67507), (26, 67498), (27, 67468), (31, 67444), (33, 67420),

Gene: Pointis\_114 Start: 66251, Stop: 65778, Start Num: 8

Candidate Starts for Pointis 114:

(Start: 8 @ 66251 has 5 MA's), (14, 66158), (22, 65990), (24, 65915), (26, 65882), (27, 65852), (31, 65828), (33, 65804),

Gene: Pureglobe5\_119 Start: 67301, Stop: 66828, Start Num: 8

Candidate Starts for Pureglobe5\_119:

(Start: 8 @67301 has 5 MA's), (14, 67208), (22, 67040), (24, 66965), (26, 66932), (27, 66902), (31, 66878), (33, 66854),

Gene: Ranunculus\_106 Start: 67292, Stop: 66819, Start Num: 8

Candidate Starts for Ranunculus\_106:

(3, 67385), (6, 67349), (Start: 8 @ 67292 has 5 MA's), (10, 67235), (14, 67196), (18, 67067), (23, 66959), (25, 66932), (26, 66923), (29, 66875), (33, 66848),

Gene: RazzB\_117 Start: 66904, Stop: 66431, Start Num: 8

Candidate Starts for RazzB\_117:

(Start: 8 @ 66904 has 5 MA's), (10, 66850), (14, 66811), (22, 66643), (24, 66568), (26, 66535), (27, 66505), (31, 66481), (33, 66457),

Gene: Rizwana\_99 Start: 63693, Stop: 63283, Start Num: 13

Candidate Starts for Rizwana\_99:

(Start: 13 @63693 has 1 MA's), (20, 63519), (25, 63396), (27, 63354),

Gene: SilentRX 100 Start: 63639, Stop: 63253, Start Num: 9

Candidate Starts for SilentRX\_100:

(Start: 9 @63639 has 2 MA's), (20, 63474), (21, 63465), (25, 63357), (30, 63300), (33, 63273),

Gene: Tank\_103 Start: 65602, Stop: 65189, Start Num: 12

Candidate Starts for Tank\_103:

(Start: 12 @65602 has 2 MA's), (17, 65458), (26, 65293), (28, 65245), (32, 65221),

Gene: Wilde\_106 Start: 66120, Stop: 65707, Start Num: 12

Candidate Starts for Wilde 106:

(Start: 12 @66120 has 2 MA's), (17, 65976), (26, 65811), (28, 65763), (32, 65739),