

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 4917 Report

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

Pham number 4917 has 13 members, 0 are drafts.

Phages represented in each track:

- Track 1: Ariadne 48, Smarties 48
- Track 2: Gina\_41, Teamocil\_41
- Track 3 : Megan\_34
- Track 4: Jayden 41
- Track 5 : Nicole 72 35
- Track 6 : BonaeVitae\_15
- Track 7 : Naby\_15
- Track 8 : Kozie\_36
- Track 9 : Margaery\_35
- Track 10 : Terij\_36
- Track 11 : Zooman 86

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

The start number called the most often in the published annotations is 11, it was called in 10 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ariadne\_48, Gina\_41, Jayden\_41, Kozie\_36, Margaery\_35, Megan\_34, Nicole72\_35, Smarties\_48, Teamocil\_41, Terij\_36,

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:

BonaeVitae\_15, Naby\_15, Zooman\_86,

## Summary by start number:

### Start 7:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zooman\_86 (GD2),

#### Start 11:

- Found in 10 of 13 (76.9%) of genes in pham
- Manual Annotations of this start: 10 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariadne\_48 (EC), Gina\_41 (EC), Jayden\_41 (EC), Kozie\_36 (EI), Margaery\_35 (EI), Megan\_34 (EC), Nicole72\_35 (EC), Smarties\_48 (EC), Teamocil\_41 (EC), Terij\_36 (EI),

### Start 12:

- Found in 2 of 13 (15.4%) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BonaeVitae\_15 (EE), Naby\_15 (EE),

## Summary by clusters:

There are 4 clusters represented in this pham: EE, GD2, EI, EC,

Info for manual annotations of cluster EC:

•Start number 11 was manually annotated 7 times for cluster EC.

Info for manual annotations of cluster EE:

•Start number 12 was manually annotated 2 times for cluster EE.

Info for manual annotations of cluster EI:

•Start number 11 was manually annotated 3 times for cluster El.

Info for manual annotations of cluster GD2:

•Start number 7 was manually annotated 1 time for cluster GD2.

#### Gene Information:

Gene: Ariadne\_48 Start: 30582, Stop: 31367, Start Num: 11

Candidate Starts for Ariadne\_48:

(Start: 11 @30582 has 10 MA's), (20, 30783), (30, 31029), (40, 31128), (42, 31161), (46, 31209), (47, 31215),

Gene: BonaeVitae\_15 Start: 11864, Stop: 12643, Start Num: 12

Candidate Starts for BonaeVitae 15:

(Start: 12 @11864 has 2 MA's), (18, 12002), (20, 12047), (22, 12065), (24, 12131), (35, 12356), (43, 12446), (46, 12482), (52, 12527), (56, 12608), (57, 12632),

Gene: Gina\_41 Start: 28466, Stop: 29254, Start Num: 11

Candidate Starts for Gina 41:

(Start: 11 @28466 has 10 MA's), (20, 28667), (26, 28787), (32, 28931), (40, 29012), (46, 29096), (50, 29117),

Gene: Jayden\_41 Start: 29208, Stop: 29975, Start Num: 11

Candidate Starts for Jayden 41:

(1, 28401), (2, 28464), (3, 28524), (4, 28695), (6, 28881), (Start: 11 @29208 has 10 MA's), (16, 29319), (20, 29409), (25, 29502), (28, 29547), (29, 29571), (31, 29670), (33, 29679), (34, 29709), (38, 29745), (44, 29808), (45, 29820), (46, 29823), (49, 29844), (52, 29868),

Gene: Kozie\_36 Start: 28386, Stop: 29153, Start Num: 11

Candidate Starts for Kozie 36:

(5, 27966), (Start: 11 @28386 has 10 MA's), (20, 28587), (24, 28671), (31, 28848), (33, 28857), (34, 28887), (45, 28998), (46, 29001), (49, 29022), (52, 29046), (55, 29100), (56, 29118),

Gene: Margaery\_35 Start: 28076, Stop: 28834, Start Num: 11

Candidate Starts for Margaery 35:

(9, 28052), (Start: 11 @28076 has 10 MA's), (13, 28124), (17, 28178), (29, 28424), (31, 28529), (33, 28538), (34, 28568), (37, 28601), (48, 28694), (49, 28703), (53, 28739),

Gene: Megan\_34 Start: 29539, Stop: 30327, Start Num: 11

Candidate Starts for Megan\_34:

(Start: 11 @29539 has 10 MA's), (18, 29695), (20, 29740), (29, 29902), (32, 30004), (34, 30040), (40, 30085), (46, 30169), (51, 30208),

Gene: Naby\_15 Start: 11864, Stop: 12640, Start Num: 12

Candidate Starts for Naby\_15:

(Start: 12 @11864 has 2 MA's), (18, 12002), (20, 12047), (22, 12065), (24, 12131), (29, 12209), (35, 12356), (43, 12446), (46, 12482), (52, 12527), (56, 12605), (57, 12629),

Gene: Nicole72\_35 Start: 30456, Stop: 31244, Start Num: 11

Candidate Starts for Nicole72\_35:

(Start: 11 @30456 has 10 MA's), (16, 30567), (19, 30636), (29, 30819), (46, 31086),

Gene: Smarties\_48 Start: 30582, Stop: 31367, Start Num: 11

Candidate Starts for Smarties\_48:

(Start: 11 @30582 has 10 MA's), (20, 30783), (30, 31029), (40, 31128), (42, 31161), (46, 31209), (47, 31215),

Gene: Teamocil 41 Start: 28565, Stop: 29353, Start Num: 11

Candidate Starts for Teamocil 41:

(Start: 11 @28565 has 10 MA's), (20, 28766), (26, 28886), (32, 29030), (40, 29111), (46, 29195), (50, 29216),

Gene: Terij\_36 Start: 27601, Stop: 28356, Start Num: 11

Candidate Starts for Terij\_36:

(3, 26893), (6, 27274), (Start: 11 @27601 has 10 MA's), (14, 27670), (15, 27676), (19, 27763), (21, 27787), (29, 27946), (31, 28051), (33, 28060), (34, 28090), (37, 28123), (39, 28132), (48, 28216), (57, 28345),

Gene: Zooman 86 Start: 64032, Stop: 64898, Start Num: 7

Candidate Starts for Zooman 86:

(Start: 7 @ 64032 has 1 MA's), (8, 64035), (10, 64098), (20, 64329), (23, 64401), (27, 64461), (29, 64491), (36, 64644), (37, 64668), (41, 64695), (50, 64785), (54, 64857),