

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 170638 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170638 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1: A3Wally 245, PauloDiaboli 245

Track 2 : Big4\_227
Track 3 : Zooman\_211
Track 4 : Cece 214

Track 5 : Pumpernickel\_229

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Big4\_227, Cece\_214, Pumpernickel\_229, Zooman\_211,

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

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

A3Wally\_245, PauloDiaboli\_245,

## Summary by start number:

#### Start 3:

- Found in 2 of 6 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_245 (GD1), PauloDiaboli\_245 (GD1),

#### Start 4:

- Found in 4 of 6 (66.7%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Big4\_227 (GD2), Cece\_214 (GD3), Pumpernickel\_229 (GD4), Zooman\_211 (GD2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: GD1, GD2, GD3, GD4,

Info for manual annotations of cluster GD1:

•Start number 3 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 4 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

•Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 4 was manually annotated 1 time for cluster GD4.

#### Gene Information:

Gene: A3Wally 245 Start: 136573, Stop: 137667, Start Num: 3

Candidate Starts for A3Wally\_245:

(Start: 3 @ 136573 has 2 MA's), (10, 136786), (11, 136801), (13, 136828), (15, 136864), (19, 136984), (21, 137011), (24, 137122), (25, 137128), (32, 137254), (33, 137257), (43, 137602),

Gene: Big4\_227 Start: 130843, Stop: 131916, Start Num: 4

Candidate Starts for Big4\_227:

(1, 130786), (Start: 4 @130843 has 4 MA's), (12, 131098), (13, 131101), (15, 131137), (16, 131182), (26, 131410), (27, 131413), (30, 131515), (32, 131536), (40, 131791),

Gene: Cece 214 Start: 131006, Stop: 132100, Start Num: 4

Candidate Starts for Cece 214:

(2, 130982), (Start: 4 @131006 has 4 MA's), (9, 131186), (10, 131219), (12, 131258), (15, 131297), (17, 131354), (23, 131543), (26, 131573), (27, 131576), (29, 131606), (31, 131681), (32, 131696), (33, 131699), (35, 131732), (37, 131756), (38, 131828), (39, 131921),

Gene: PauloDiaboli 245 Start: 133773, Stop: 134867, Start Num: 3

Candidate Starts for PauloDiaboli 245:

(Start: 3 @ 133773 has 2 MA's), (10, 133986), (11, 134001), (13, 134028), (15, 134064), (19, 134184), (21, 134211), (24, 134322), (25, 134328), (32, 134454), (33, 134457), (43, 134802),

Gene: Pumpernickel\_229 Start: 135524, Stop: 136747, Start Num: 4

Candidate Starts for Pumpernickel 229:

(Start: 4 @135524 has 4 MA's), (5, 135602), (6, 135635), (7, 135656), (8, 135680), (14, 135797), (18, 135923), (20, 135959), (22, 136022), (23, 136064), (26, 136094), (27, 136097), (28, 136115), (31, 136193), (32, 136208), (34, 136217), (36, 136250), (41, 136508), (42, 136541), (44, 136688),

Gene: Zooman 211 Start: 129709, Stop: 130782, Start Num: 4

Candidate Starts for Zooman 211:

 $\begin{array}{l} \hbox{(1, 129652), (Start: 4 @129709 has 4 MA's), (12, 129964), (13, 129967), (15, 130003), (16, 130048), \\ \hbox{(26, 130276), (27, 130279), (30, 130381), (32, 130402), (40, 130657),} \end{array}$