

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 164085 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164085 has 11 members, 3 are drafts.

Phages represented in each track:

• Track 1 : Tank 37, Wilde 37

• Track 2: Rizwana 35

Track 3: Beagle\_46, Pointis\_43, Pureglobe5\_46

Track 4 : Odyssey395\_47

• Track 5 : Mellow Yellow 38

Track 6 : BruhMoment\_42

Track 7 : AWGoat\_36

• Track 8 : SilentRX 37

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

The start number called the most often in the published annotations is 6, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beagle\_46, BruhMoment\_42, MellowYellow\_38, Odyssey395\_47, Pointis\_43, Pureglobe5\_46,

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

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

AWGoat\_36, Rizwana\_35, SilentRX\_37, Tank\_37, Wilde\_37,

## Summary by start number:

#### Start 6:

- Found in 6 of 11 (54.5%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_46 (AP2), BruhMoment\_42 (AP3), MellowYellow\_38 (AP2), Odyssey395\_47 (AP2), Pointis\_43 (AP2), Pureglobe5\_46 (AP2),

#### Start 7:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SilentRX\_37 (AP4),

#### Start 8:

- Found in 3 of 11 (27.3%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Rizwana\_35 (AP1),

#### Start 9:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tank\_37 (AP1), Wilde\_37 (AP1),

### Start 12:

- Found in 1 of 11 (9.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_36 (AP4),

## **Summary by clusters:**

There are 4 clusters represented in this pham: AP2, AP3, AP1, AP4,

Info for manual annotations of cluster AP1:

- •Start number 8 was manually annotated 1 time for cluster AP1.
- •Start number 9 was manually annotated 2 times for cluster AP1.

Info for manual annotations of cluster AP2:

•Start number 6 was manually annotated 3 times for cluster AP2.

Info for manual annotations of cluster AP3:

•Start number 6 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

•Start number 7 was manually annotated 1 time for cluster AP4.

### Gene Information:

Gene: AWGoat\_36 Start: 33480, Stop: 33779, Start Num: 12

Candidate Starts for AWGoat 36:

(Start: 7 @ 33444 has 1 MA's), (12, 33480), (17, 33549), (18, 33552), (19, 33561), (27, 33675), (32, 33729), (33, 33732), (34, 33741),

Gene: Beagle\_46 Start: 34747, Stop: 35091, Start Num: 6

Candidate Starts for Beagle 46:

(3, 34687), (5, 34723), (Start: 6 @ 34747 has 4 MA's), (11, 34783), (16, 34855), (20, 34885), (25, 34930), (27, 34987), (28, 34990), (33, 35044),

Gene: BruhMoment\_42 Start: 36111, Stop: 36455, Start Num: 6

Candidate Starts for BruhMoment\_42:

(1, 35940), (2, 35952), (Start: 6 @ 36111 has 4 MA's), (18, 36228), (22, 36267), (23, 36270), (24, 36276), (27, 36351), (31, 36396), (33, 36408),

Gene: MellowYellow\_38 Start: 33482, Stop: 33826, Start Num: 6

Candidate Starts for MellowYellow 38:

(3, 33422), (Start: 6 @33482 has 4 MA's), (11, 33518), (14, 33545), (16, 33590), (20, 33620), (25, 33665), (27, 33722), (28, 33725), (33, 33779),

Gene: Odyssey395\_47 Start: 34766, Stop: 35110, Start Num: 6

Candidate Starts for Odyssey395\_47:

(3, 34706), (4, 34715), (5, 34742), (Start: 6 @34766 has 4 MA's), (11, 34802), (16, 34874), (20, 34904), (25, 34949), (27, 35006), (28, 35009), (33, 35063),

Gene: Pointis 43 Start: 34764, Stop: 35108, Start Num: 6

Candidate Starts for Pointis\_43:

(3, 34704), (5, 34740), (Start: 6 @ 34764 has 4 MA's), (11, 34800), (16, 34872), (20, 34902), (25, 34947), (27, 35004), (28, 35007), (33, 35061),

Gene: Pureglobe5\_46 Start: 34947, Stop: 35291, Start Num: 6

Candidate Starts for Pureglobe5\_46:

(3, 34887), (5, 34923), (Start: 6 @ 34947 has 4 MA's), (11, 34983), (16, 35055), (20, 35085), (25, 35130), (27, 35187), (28, 35190), (33, 35244),

Gene: Rizwana\_35 Start: 34988, Stop: 35311, Start Num: 8

Candidate Starts for Rizwana\_35:

(Start: 8 @34988 has 1 MA's), (10, 34997), (15, 35054), (21, 35120), (22, 35123), (26, 35162), (29, 35216), (30, 35222), (31, 35252),

Gene: SilentRX 37 Start: 34506, Stop: 34829, Start Num: 7

Candidate Starts for SilentRX 37:

(Start: 7 @34506 has 1 MA's), (13, 34551), (15, 34572), (17, 34599), (18, 34602), (19, 34611), (33, 34782), (34, 34791),

Gene: Tank\_37 Start: 35024, Stop: 35344, Start Num: 9

Candidate Starts for Tank\_37:

(Start: 8 @35021 has 1 MA's), (Start: 9 @35024 has 2 MA's), (15, 35087), (18, 35117), (26, 35195), (29, 35249), (31, 35285), (33, 35297),

Gene: Wilde 37 Start: 34866, Stop: 35186, Start Num: 9

Candidate Starts for Wilde 37:

(Start: 8 @34863 has 1 MA's), (Start: 9 @34866 has 2 MA's), (15, 34929), (18, 34959), (26, 35037), (29, 35091), (31, 35127), (33, 35139),