

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 88526 Report

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

Pham number 88526 has 8 members, 4 are drafts.

Phages represented in each track:

Track 1 : Ranunculus\_79Track 2 : Odyssey395 88

Track 3 : Beagle\_90, Pureglobe5\_88

Track 4 : MellowYellow\_85

Track 5 : Pointis\_84Track 6 : SilentRX\_64Track 7 : AWGoat 64

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

The start number called the most often in the published annotations is 7, it was called in 3 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beagle\_90, MellowYellow\_85, Odyssey395\_88, Pureglobe5\_88,

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

Pointis\_84,

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

AWGoat\_64, Ranunculus\_79, SilentRX\_64,

### Summary by start number:

#### Start 6:

- Found in 2 of 8 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_64 (AP4), SilentRX\_64 (AP4),

#### Start 7:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 3 of 4
- Called 80.0% of time when present

• Phage (with cluster) where this start called: Beagle\_90 (AP2), MellowYellow\_85 (AP2), Odyssey395\_88 (AP2), Pureglobe5\_88 (AP2),

#### Start 10:

- Found in 6 of 8 (75.0%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Ranunculus\_79 (AP),

### Start 12:

- Found in 4 of 8 (50.0%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Pointis 84 (AP2),

### Summary by clusters:

There are 3 clusters represented in this pham: AP2, AP, AP4,

Info for manual annotations of cluster AP2:

•Start number 7 was manually annotated 3 times for cluster AP2.

Info for manual annotations of cluster AP4:

Start number 6 was manually annotated 1 time for cluster AP4.

#### Gene Information:

Gene: AWGoat\_64 Start: 45285, Stop: 44725, Start Num: 6

Candidate Starts for AWGoat 64:

(1, 45384), (Start: 6 @45285 has 1 MA's), (9, 45237), (11, 45174), (13, 45087), (14, 45075), (16, 45027), (17, 45021), (19, 45003), (20, 44925), (24, 44847), (26, 44808), (27, 44805), (28, 44802), (30, 44793),

Gene: Beagle\_90 Start: 51932, Stop: 51468, Start Num: 7

Candidate Starts for Beagle\_90:

(Start: 7 @51932 has 3 MA's), (10, 51911), (12, 51845), (15, 51791), (17, 51761), (21, 51656), (22, 51644), (23, 51611), (27, 51548), (30, 51536), (31, 51533), (32, 51521), (33, 51497), (34, 51485),

Gene: MellowYellow\_85 Start: 51546, Stop: 51082, Start Num: 7

Candidate Starts for MellowYellow 85:

(2, 51666), (4, 51624), (5, 51600), (Start: 7 @51546 has 3 MA's), (10, 51525), (15, 51405), (16, 51381), (17, 51375), (21, 51270), (23, 51225), (27, 51162), (30, 51150), (31, 51147), (32, 51135), (33, 51111), (34, 51099),

Gene: Odyssey395 88 Start: 51326, Stop: 50862, Start Num: 7

Candidate Starts for Odyssey395 88:

(Start: 7 @51326 has 3 MA's), (10, 51305), (12, 51239), (15, 51185), (17, 51155), (21, 51050), (22, 51038), (23, 51005), (30, 50930), (31, 50927), (32, 50915), (33, 50891), (34, 50879),

Gene: Pointis\_84 Start: 51144, Stop: 50767, Start Num: 12

Candidate Starts for Pointis 84:

(Start: 7 @51231 has 3 MA's), (10, 51210), (12, 51144), (15, 51090), (16, 51066), (17, 51060), (21, 50955), (22, 50943), (23, 50910), (27, 50847), (30, 50835), (31, 50832), (32, 50820), (33, 50796), (34, 50784),

Gene: Pureglobe5\_88 Start: 51878, Stop: 51414, Start Num: 7 Candidate Starts for Pureglobe5\_88:

(Start: 7 @51878 has 3 MA's), (10, 51857), (12, 51791), (15, 51737), (17, 51707), (21, 51602), (22, 51590), (23, 51557), (27, 51494), (30, 51482), (31, 51479), (32, 51467), (33, 51443), (34, 51431),

Gene: Ranunculus\_79 Start: 53087, Stop: 52644, Start Num: 10 Candidate Starts for Ranunculus\_79: (2, 53225), (3, 53201), (5, 53159), (8, 53102), (10, 53087), (17, 52937), (18, 52928), (21, 52832), (22, 52820), (25, 52739), (29, 52715), (30, 52712), (31, 52709),

Gene: SilentRX\_64 Start: 46122, Stop: 45652, Start Num: 6 Candidate Starts for SilentRX\_64: (Start: 6 @46122 has 1 MA's), (9, 46110), (13, 46023), (14, 46011), (16, 45963), (17, 45957), (19, 45939), (20, 45861), (27, 45741), (35, 45660),