

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 196888 Report

This analysis was run 12/09/24 on database version 580.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 196888 has 17 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Vash 30
- Track 2 : Shawty\_30
- Track 3 : TG1 29
- Track 4 : Euratis\_31
- Track 5 : Lilbooboo 30
- Track 6 : phiBT1\_7
- Track 7 : Samora\_32
- Track 8 : Heather\_33
- Track 9 : RemusLoopin\_32
- Track 10 : Sebastisaurus\_32
- Track 11 : Rowa 39
- Track 12 : BAKA\_50, DmpstrDiver\_47, Minerva\_52, Duke13\_49, Optimus\_51, Wanda 52

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

The start number called the most often in the published annotations is 16, it was called in 6 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Euratis\_31, Lilbooboo\_30, Samora\_32, Shawty\_30, TG1\_29, Vash\_30, phiBT1\_7,

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

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

• BAKA\_50, DmpstrDiver\_47, Duke13\_49, Heather\_33, Minerva\_52, Optimus\_51, RemusLoopin\_32, Rowa\_39, Sebastisaurus\_32, Wanda\_52,

# Summary by start number:

#### Start 1:

- Found in 6 of 17 (35.3%) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA\_50 (J), DmpstrDiver\_47 (J), Duke13 49 (J), Minerva 52 (J), Optimus 51 (J), Wanda 52 (J),

### Start 6:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sebastisaurus\_32 (BB2),

### Start 7:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Heather\_33 (BB2),

### Start 8:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 66.7% of time when present
- Phage (with cluster) where this start called: RemusLoopin\_32 (BB2), Rowa\_39 (BL),

#### Start 16:

- Found in 7 of 17 (41.2%) of genes in pham
- Manual Annotations of this start: 6 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Euratis\_31 (BB1), Lilbooboo\_30 (BB1), Samora\_32 (BB1), Shawty\_30 (BB1), TG1\_29 (BB1), Vash\_30 (BB1), phiBT1\_7 (BB1),

# **Summary by clusters:**

There are 4 clusters represented in this pham: BL, J, BB2, BB1,

Info for manual annotations of cluster BB1:

Start number 16 was manually annotated 6 times for cluster BB1.

Info for manual annotations of cluster BB2:

- •Start number 6 was manually annotated 1 time for cluster BB2.
- •Start number 7 was manually annotated 1 time for cluster BB2.
- •Start number 8 was manually annotated 1 time for cluster BB2.

Info for manual annotations of cluster BL:

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

Info for manual annotations of cluster J:

•Start number 1 was manually annotated 6 times for cluster J.

## Gene Information:

Gene: BAKA 50 Start: 40286, Stop: 40870, Start Num: 1

Candidate Starts for BAKA 50:

(Start: 1 @ 40286 has 6 MA's), (2, 40328), (17, 40499), (18, 40514), (25, 40739), (29, 40802),

Gene: DmpstrDiver\_47 Start: 39715, Stop: 40299, Start Num: 1

Candidate Starts for DmpstrDiver\_47:

(Start: 1 @ 39715 has 6 MA's), (2, 39757), (17, 39928), (18, 39943), (25, 40168), (29, 40231),

Gene: Duke13\_49 Start: 40033, Stop: 40617, Start Num: 1

Candidate Starts for Duke13\_49:

(Start: 1 @ 40033 has 6 MA's), (2, 40075), (17, 40246), (18, 40261), (25, 40486), (29, 40549),

Gene: Euratis\_31 Start: 22823, Stop: 23176, Start Num: 16

Candidate Starts for Euratis 31:

(10, 22784), (11, 22790), (12, 22796), (Start: 16 @22823 has 6 MA's), (19, 22910), (20, 22961), (22, 22994), (26, 23096), (27, 23099),

Gene: Heather\_33 Start: 23706, Stop: 24128, Start Num: 7

Candidate Starts for Heather 33:

(3, 23640), (5, 23691), (Start: 7 @23706 has 1 MA's), (22, 23940), (23, 23991), (26, 24042), (28, 24069), (30, 24123),

Gene: Lilbooboo\_30 Start: 22871, Stop: 23233, Start Num: 16

Candidate Starts for Lilbooboo 30:

(14, 22853), (Start: 16 @ 22871 has 6 MA's), (22, 23042), (24, 23102), (26, 23144),

Gene: Minerva\_52 Start: 41582, Stop: 42166, Start Num: 1

Candidate Starts for Minerva\_52:

(Start: 1 @41582 has 6 MA's), (2, 41624), (17, 41795), (18, 41810), (25, 42035), (29, 42098),

Gene: Optimus\_51 Start: 41167, Stop: 41751, Start Num: 1

Candidate Starts for Optimus\_51:

(Start: 1 @41167 has 6 MA's), (2, 41209), (17, 41380), (18, 41395), (25, 41620), (29, 41683),

Gene: RemusLoopin\_32 Start: 23906, Stop: 24322, Start Num: 8

Candidate Starts for RemusLoopin 32:

(4, 23837), (Start: 6 @23894 has 1 MA's), (Start: 7 @23897 has 1 MA's), (Start: 8 @23906 has 2 MA's), (9, 23912), (22, 24134), (23, 24185), (26, 24236), (30, 24317),

Gene: Rowa\_39 Start: 26669, Stop: 27115, Start Num: 8

Candidate Starts for Rowa\_39:

(Start: 8 @ 26669 has 2 MA's), (9, 26675), (24, 26957),

Gene: Samora\_32 Start: 23469, Stop: 23831, Start Num: 16

Candidate Starts for Samora 32:

(14, 23457), (15, 23460), (Start: 16 @23469 has 6 MA's), (22, 23640), (24, 23700), (26, 23742),

Gene: Sebastisaurus\_32 Start: 23688, Stop: 24116, Start Num: 6

Candidate Starts for Sebastisaurus\_32:

(4, 23631), (Start: 6 @23688 has 1 MA's), (Start: 7 @23691 has 1 MA's), (Start: 8 @23700 has 2 MA's), (9, 23706), (22, 23928), (26, 24030), (30, 24111),

Gene: Shawty\_30 Start: 23340, Stop: 23774, Start Num: 16

Candidate Starts for Shawty\_30:

(14, 23328), (15, 23331), (Start: 16 @23340 has 6 MA's), (22, 23514), (24, 23574), (26, 23616), (28,

23643),

Gene: TG1\_29 Start: 22916, Stop: 23344, Start Num: 16

Candidate Starts for TG1\_29:

(13, 22892), (Start: 16 @22916 has 6 MA's), (21, 23063), (22, 23087), (26, 23189), (31, 23297),

Gene: Vash\_30 Start: 22721, Stop: 23083, Start Num: 16

Candidate Starts for Vash 30:

(Start: 16 @22721 has 6 MA's), (22, 22892), (24, 22952), (26, 22994),

Gene: Wanda\_52 Start: 40059, Stop: 40643, Start Num: 1

Candidate Starts for Wanda\_52:

(Start: 1 @ 40059 has 6 MA's), (2, 40101), (17, 40272), (18, 40287), (25, 40512), (29, 40575),

Gene: phiBT1\_7 Start: 24178, Stop: 24540, Start Num: 16

Candidate Starts for phiBT1\_7:

(14, 24166), (15, 24169), (Start: 16 @24178 has 6 MA's), (22, 24349), (24, 24409), (26, 24451),