

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 88816 Report

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

Pham number 88816 has 8 members, 3 are drafts.

Phages represented in each track:

Track 1 : Seahorse\_36

• Track 2 : BillyTP\_36

• Track 3 : Auxilium\_33

Track 4 : Aikyam\_32

Track 5 : MidnightRain\_37

Track 6 : Oregano\_32Track 7 : Annalisa 30

Track 8 : Gudmit\_32

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

The start number called the most often in the published annotations is 9, it was called in 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Aikyam\_32, Auxilium\_33, BillyTP\_36, Gudmit\_32, MidnightRain\_37, Seahorse\_36,

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

• Annalisa\_30, Oregano\_32,

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

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# Summary by start number:

#### Start 8:

- Found in 2 of 8 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Annalisa\_30 (CZ4),

#### Start 9:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 5

- Called 75.0% of time when present
- Phage (with cluster) where this start called: Aikyam\_32 (AY), Auxilium\_33 (AY), BillyTP\_36 (AY), Gudmit\_32 (singleton), MidnightRain\_37 (AY), Seahorse\_36 (AY),

#### Start 10:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Oregano\_32 (CZ4),

### **Summary by clusters:**

There are 3 clusters represented in this pham: AY, singleton, CZ4,

Info for manual annotations of cluster AY:

•Start number 9 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster CZ4:

•Start number 10 was manually annotated 1 time for cluster CZ4.

#### Gene Information:

Gene: Aikyam\_32 Start: 21872, Stop: 22222, Start Num: 9

Candidate Starts for Aikyam 32:

(Start: 9 @21872 has 4 MA's), (12, 21923), (14, 21962), (15, 21974), (18, 22046), (20, 22172), (21, 22184),

Gene: Annalisa\_30 Start: 25611, Stop: 25961, Start Num: 8

Candidate Starts for Annalisa 30:

(5, 25557), (6, 25581), (8, 25611), (Start: 9 @25626 has 4 MA's), (12, 25677), (13, 25707), (16, 25770), (17, 25797), (19, 25896),

Gene: Auxilium 33 Start: 21574, Stop: 21924, Start Num: 9

Candidate Starts for Auxilium\_33:

(7, 21547), (Start: 9 @21574 has 4 MA's), (12, 21625), (15, 21676), (18, 21748), (20, 21874), (21, 21886),

Gene: BillyTP\_36 Start: 24770, Stop: 25120, Start Num: 9

Candidate Starts for BillyTP\_36:

(Start: 9 @ 24770 has 4 MA's), (14, 24860), (15, 24872), (18, 24944), (20, 25070), (21, 25082),

Gene: Gudmit\_32 Start: 24256, Stop: 24591, Start Num: 9

Candidate Starts for Gudmit\_32:

(5, 24187), (6, 24211), (8, 24241), (Start: 9 @24256 has 4 MA's), (12, 24307), (13, 24337), (16, 24400), (17, 24427), (19, 24526),

Gene: MidnightRain 37 Start: 24842, Stop: 25192, Start Num: 9

Candidate Starts for MidnightRain 37:

(1, 24647), (3, 24674), (4, 24716), (Start: 9 @24842 has 4 MA's), (12, 24893), (14, 24932), (15, 24944), (18, 25016), (20, 25142), (21, 25154),

Gene: Oregano\_32 Start: 26380, Stop: 26694, Start Num: 10

Candidate Starts for Oregano\_32:

(1, 26173), (2, 26182), (Start: 9 @26359 has 4 MA's), (Start: 10 @26380 has 1 MA's), (11, 26407),

(15, 26473), (16, 26503), (17, 26530), (18, 26545),

Gene: Seahorse\_36 Start: 25553, Stop: 25873, Start Num: 9

Candidate Starts for Seahorse\_36:

(Start: 9 @25553 has 4 MA's), (15, 25655), (18, 25727),