

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 7086 Report

This analysis was run 04/28/24 on database version 559.

Pham number 7086 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : LonelyBoi\_43

Track 2 : BatStarr\_44, TimTam\_44, Herod\_44

Track 3: Nymphadora\_44, Eviarto\_44

Track 4 : Hugley\_41Track 5 : Sidious\_43

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

The start number called the most often in the published annotations is 1, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BatStarr\_44, Herod\_44, Sidious\_43, TimTam\_44,

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

Eviarto\_44, Hugley\_41, LonelyBoi\_43, Nymphadora\_44,

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

Summary by start number:

#### Start 1:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BatStarr\_44 (CZ1), Herod\_44 (CZ1), Sidious\_43 (CZ7), TimTam\_44 (CZ1),

#### Start 2:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 37.5% of time when present

• Phage (with cluster) where this start called: Eviarto\_44 (CZ1), LonelyBoi\_43 (CY), Nymphadora\_44 (CZ1),

#### Start 3:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Hugley\_41 (CZ1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: CY, CZ1, CZ7,

Info for manual annotations of cluster CY:

•Start number 2 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CZ1:

- •Start number 1 was manually annotated 3 times for cluster CZ1.
- •Start number 2 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ7:

•Start number 1 was manually annotated 1 time for cluster CZ7.

### Gene Information:

Gene: BatStarr\_44 Start: 36083, Stop: 35130, Start Num: 1

Candidate Starts for BatStarr\_44:

(Start: 1 @36083 has 4 MA's), (Start: 2 @36080 has 3 MA's), (3, 36071), (4, 35975), (5, 35960), (8, 35876), (9, 35774), (12, 35657), (15, 35576), (20, 35510), (24, 35294), (25, 35291),

Gene: Eviarto 44 Start: 36056, Stop: 35106, Start Num: 2

Candidate Starts for Eviarto 44:

(Start: 1 @36059 has 4 MA's), (Start: 2 @36056 has 3 MA's), (3, 36047), (4, 35951), (5, 35936), (8, 35852), (9, 35750), (12, 35633), (15, 35552), (20, 35486), (24, 35270), (25, 35267),

Gene: Herod\_44 Start: 36083, Stop: 35130, Start Num: 1

Candidate Starts for Herod 44:

(Start: 1 @36083 has 4 MA's), (Start: 2 @36080 has 3 MA's), (3, 36071), (4, 35975), (5, 35960), (8, 35876), (9, 35774), (12, 35657), (15, 35576), (20, 35510), (24, 35294), (25, 35291),

Gene: Hugley 41 Start: 36070, Stop: 35129, Start Num: 3

Candidate Starts for Hugley\_41:

(Start: 1 @36082 has 4 MA's), (Start: 2 @36079 has 3 MA's), (3, 36070), (4, 35974), (5, 35959), (8, 35875), (9, 35773), (12, 35656), (15, 35575), (20, 35509), (24, 35293), (25, 35290),

Gene: LonelyBoi\_43 Start: 35978, Stop: 35157, Start Num: 2

Candidate Starts for LonelyBoi 43:

(Start: 1 @35981 has 4 MA's), (Start: 2 @35978 has 3 MA's), (3, 35969), (4, 35873), (5, 35858), (7, 35789), (9, 35672), (10, 35561), (12, 35552), (13, 35519), (18, 35420), (21, 35396), (22, 35372), (23, 35252), (26, 35219), (27, 35201),

Gene: Nymphadora\_44 Start: 36080, Stop: 35130, Start Num: 2

Candidate Starts for Nymphadora\_44:

(Start: 1 @36083 has 4 MA's), (Start: 2 @36080 has 3 MA's), (3, 36071), (4, 35975), (5, 35960), (8, 35876), (9, 35774), (12, 35657), (15, 35576), (20, 35510), (24, 35294), (25, 35291),

Gene: Sidious\_43 Start: 35205, Stop: 34258, Start Num: 1

Candidate Starts for Sidious\_43:

(Start: 1 @35205 has 4 MA's), (Start: 2 @35202 has 3 MA's), (3, 35193), (4, 35097), (5, 35082), (6, 35073), (8, 34998), (9, 34896), (11, 34785), (12, 34779), (14, 34701), (16, 34686), (17, 34662), (19, 34635), (24, 34443), (25, 34440), (28, 34281),

Gene: TimTam\_44 Start: 36083, Stop: 35130, Start Num: 1

Candidate Starts for TimTam\_44:

(Start: 1 @36083 has 4 MA's), (Start: 2 @36080 has 3 MA's), (3, 36071), (4, 35975), (5, 35960), (8, 35876), (9, 35774), (12, 35657), (15, 35576), (20, 35510), (24, 35294), (25, 35291),