

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 87914 Report

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

Pham number 87914 has 11 members, 4 are drafts.

Phages represented in each track:

Track 1 : Eileen\_23, Peas\_23

• Track 2 : Pucara\_23

Track 3: Judy\_24

Track 4 : Bridgette\_23

• Track 5 : Karkharias 23

Track 6 : Nandita\_23

Track 7 : Vibaki\_25

Track 8 : JanetJ\_23

Track 9: EvenBluerMoon\_29, Aoka\_23

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

The start number called the most often in the published annotations is 4, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bridgette\_23, Eileen\_23, Judy\_24, Nandita\_23, Peas\_23,

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

Karkharias\_23, Pucara\_23,

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

Aoka\_23, EvenBluerMoon\_29, JanetJ\_23, Vibaki\_25,

## Summary by start number:

#### Start 3:

- Found in 4 of 11 (36.4%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aoka\_23 (FO), EvenBluerMoon\_29 (FO), JanetJ\_23 (FO), Vibaki\_25 (FL),

#### Start 4:

- Found in 7 of 11 (63.6%) of genes in pham
- Manual Annotations of this start: 5 of 7
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Bridgette\_23 (FA), Eileen\_23 (FA), Judy\_24 (FA), Nandita\_23 (FF), Peas\_23 (FA),

## Start 5:

- Found in 7 of 11 (63.6%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Pucara\_23 (FA),

### Start 9:

- Found in 7 of 11 (63.6%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Karkharias\_23 (FA),

# **Summary by clusters:**

There are 4 clusters represented in this pham: FA, FL, FF, FO,

Info for manual annotations of cluster FA:

•Start number 4 was manually annotated 4 times for cluster FA.

Info for manual annotations of cluster FF:

•Start number 4 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FL:

•Start number 3 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FO:

Start number 3 was manually annotated 1 time for cluster FO.

### Gene Information:

Gene: Aoka 23 Start: 21429, Stop: 21839, Start Num: 3

Candidate Starts for Aoka 23:

(1, 21387), (Start: 3 @21429 has 2 MA's), (10, 21504), (12, 21516), (18, 21663), (22, 21720), (26, 21765), (28, 21798),

Gene: Bridgette\_23 Start: 18606, Stop: 19028, Start Num: 4

Candidate Starts for Bridgette\_23:

(2, 18558), (Start: 4 @18606 has 5 MA's), (5, 18624), (8, 18672), (9, 18681), (11, 18699), (14, 18735), (15, 18762), (16, 18789), (17, 18810), (21, 18888), (25, 18945), (27, 18972), (28, 18987),

Gene: Eileen 23 Start: 18544, Stop: 18966, Start Num: 4

Candidate Starts for Eileen 23:

(2, 18496), (Start: 4 @18544 has 5 MA's), (5, 18562), (8, 18610), (9, 18619), (11, 18637), (14, 18673), (15, 18700), (16, 18727), (17, 18748), (25, 18883), (27, 18910), (28, 18925),

Gene: EvenBluerMoon\_29 Start: 21464, Stop: 21874, Start Num: 3

Candidate Starts for EvenBluerMoon\_29:

(1, 21422), (Start: 3 @21464 has 2 MA's), (10, 21539), (12, 21551), (18, 21698), (22, 21755), (26, 21800), (28, 21833),

Gene: JanetJ\_23 Start: 21553, Stop: 21978, Start Num: 3

Candidate Starts for JanetJ\_23:

(1, 21514), (Start: 3 @21553 has 2 MA's), (12, 21652), (19, 21829), (22, 21856), (28, 21934), (29, 21967),

Gene: Judy 24 Start: 18856, Stop: 19278, Start Num: 4

Candidate Starts for Judy\_24:

(Start: 4 @18856 has 5 MA's), (5, 18874), (8, 18922), (9, 18931), (11, 18949), (14, 18985), (15, 19012), (16, 19039), (17, 19060), (23, 19183), (25, 19195), (27, 19222), (28, 19237),

Gene: Karkharias\_23 Start: 18621, Stop: 18968, Start Num: 9

Candidate Starts for Karkharias\_23:

(2, 18498), (Start: 4 @18546 has 5 MA's), (5, 18564), (8, 18612), (9, 18621), (11, 18639), (14, 18675), (15, 18702), (16, 18729), (17, 18750), (25, 18885), (27, 18912), (28, 18927),

Gene: Nandita\_23 Start: 17798, Stop: 18220, Start Num: 4

Candidate Starts for Nandita\_23:

(Start: 4 @ 17798 has 5 MA's), (5, 17816), (8, 17864), (9, 17873), (11, 17891), (13, 17897), (14, 17927), (15, 17954), (16, 17981), (17, 18002), (25, 18137), (27, 18164), (28, 18179),

Gene: Peas\_23 Start: 18544, Stop: 18966, Start Num: 4

Candidate Starts for Peas\_23:

(2, 18496), (Start: 4 @ 18544 has 5 MA's), (5, 18562), (8, 18610), (9, 18619), (11, 18637), (14, 18673), (15, 18700), (16, 18727), (17, 18748), (25, 18883), (27, 18910), (28, 18925),

Gene: Pucara\_23 Start: 18561, Stop: 18965, Start Num: 5

Candidate Starts for Pucara 23:

(2, 18495), (Start: 4 @18543 has 5 MA's), (5, 18561), (6, 18597), (8, 18609), (9, 18618), (11, 18636), (14, 18672), (15, 18699), (16, 18726), (17, 18747), (25, 18882), (27, 18909), (28, 18924),

Gene: Vibaki\_25 Start: 24558, Stop: 24980, Start Num: 3

Candidate Starts for Vibaki\_25:

(Start: 3 @24558 has 2 MA's), (6, 24609), (7, 24612), (18, 24801), (20, 24834), (24, 24891), (28, 24936),