

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 146344 Report

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

Pham number 146344 has 5 members, 0 are drafts.

Phages represented in each track:

Track 1: WilliamStrong 22

• Track 2 : Fireman 44

Track 3: RobsFeet 45

Track 4 : Metamorphoo\_44

Track 5 : Tyrumbra\_42

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

The start number called the most often in the published annotations is 3, it was called in 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Metamorphoo\_44, RobsFeet\_45, Tyrumbra\_42, WilliamStrong\_22,

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

Fireman\_44,

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

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## Summary by start number:

### Start 3:

- Found in 5 of 5 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 5
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Metamorphoo\_44 (EC), RobsFeet\_45 (EC), Tyrumbra\_42 (EC), WilliamStrong\_22 (EA6),

#### Start 4.

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Fireman 44 (EC).

## Summary by clusters:

There are 2 clusters represented in this pham: EC, EA6,

Info for manual annotations of cluster EA6:

•Start number 3 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EC:

- •Start number 3 was manually annotated 3 times for cluster EC.
- •Start number 4 was manually annotated 1 time for cluster EC.

### Gene Information:

Gene: Fireman\_44 Start: 31484, Stop: 32410, Start Num: 4

Candidate Starts for Fireman\_44:

(1, 31346), (Start: 3 @31469 has 4 MA's), (Start: 4 @31484 has 1 MA's), (5, 31517), (6, 31550), (9, 31652), (11, 31814), (12, 31874), (13, 31982), (14, 32036), (16, 32180), (17, 32240), (19, 32324), (22, 32399),

Gene: Metamorphoo\_44 Start: 30731, Stop: 31672, Start Num: 3

Candidate Starts for Metamorphoo\_44:

(2, 30614), (Start: 3 @30731 has 4 MA's), (Start: 4 @30746 has 1 MA's), (5, 30779), (6, 30812), (8, 30830), (9, 30914), (11, 31076), (13, 31244), (14, 31298), (16, 31442), (17, 31502), (19, 31586), (22, 31661),

Gene: RobsFeet\_45 Start: 31012, Stop: 31953, Start Num: 3

Candidate Starts for RobsFeet\_45:

(Start: 3 @31012 has 4 MA's), (Start: 4 @31027 has 1 MA's), (5, 31060), (6, 31093), (9, 31195), (11, 31357), (12, 31417), (13, 31525), (14, 31579), (16, 31723), (17, 31783), (19, 31867), (22, 31942),

Gene: Tyrumbra 42 Start: 30812, Stop: 31753, Start Num: 3

Candidate Starts for Tyrumbra 42:

(Start: 3 @30812 has 4 MA's), (Start: 4 @30827 has 1 MA's), (5, 30860), (6, 30893), (9, 30995), (11, 31157), (13, 31325), (14, 31379), (16, 31523), (19, 31667), (22, 31742),

Gene: WilliamStrong 22 Start: 18396, Stop: 19301, Start Num: 3

Candidate Starts for WilliamStrong 22:

(Start: 3 @ 18396 has 4 MA's), (5, 18441), (7, 18483), (8, 18492), (10, 18585), (13, 18897), (15,

19089), (18, 19146), (19, 19215), (20, 19221), (21, 19248),