

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 158488 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158488 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : BluSpix\_6Track 2 : Parliament 5

Track 3 : Smairt\_37

Track 4 : ChosenOne\_28

Track 5 : Kostya\_29Track 6 : UncleRicky 23

## 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 2 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Kostya\_29, Parliament\_5,

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

BluSpix\_6, ChosenOne\_28, Smairt\_37, UncleRicky\_23,

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

# Summary by start number:

### Start 2:

- Found in 1 of 6 (16.7%) 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: Smairt\_37 (A1),

#### Start 3:

- Found in 1 of 6 (16.7%) 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: UncleRicky\_23 (F1).

#### Start 4:

- Found in 3 of 6 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: ChosenOne\_28 (E),

### Start 8:

- Found in 1 of 6 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BluSpix\_6 (A1),

## Start 9:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Kostya 29 (E), Parliament 5 (A1),

## **Summary by clusters:**

There are 3 clusters represented in this pham: A1, F1, E,

Info for manual annotations of cluster A1:

- •Start number 2 was manually annotated 1 time for cluster A1.
- •Start number 9 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster E:

- •Start number 4 was manually annotated 1 time for cluster E.
- •Start number 9 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster F1:

•Start number 3 was manually annotated 1 time for cluster F1.

## Gene Information:

Gene: BluSpix\_6 Start: 3595, Stop: 4062, Start Num: 8

Candidate Starts for BluSpix 6:

(6, 3565), (8, 3595), (Start: 9 @3625 has 2 MA's), (13, 3721), (20, 3754), (26, 3841), (31, 3901), (33, 3943),

Gene: ChosenOne\_28 Start: 27173, Stop: 27688, Start Num: 4

Candidate Starts for ChosenOne\_28:

(Start: 4 @27173 has 1 MA's), (7, 27203), (Start: 9 @27242 has 2 MA's), (10, 27251), (24, 27422), (28, 27488), (29, 27494), (32, 27551), (35, 27593), (38, 27623),

Gene: Kostya 29 Start: 28044, Stop: 28469, Start Num: 9

Candidate Starts for Kostva 29:

(1, 27855), (Start: 4 @27975 has 1 MA's), (5, 27981), (Start: 9 @28044 has 2 MA's), (11, 28101), (14, 28143), (19, 28170), (28, 28284), (35, 28386),

Gene: Parliament\_5 Start: 3442, Stop: 3873, Start Num: 9

Candidate Starts for Parliament\_5:

(Start: 9 @3442 has 2 MA's), (11, 3496), (12, 3499), (15, 3541), (22, 3595), (25, 3640), (26, 3655), (28, 3679), (29, 3685), (34, 3760),

Gene: Smairt\_37 Start: 28913, Stop: 29458, Start Num: 2

Candidate Starts for Smairt\_37:

(Start: 2 @28913 has 1 MA's), (Start: 4 @28955 has 1 MA's), (Start: 9 @29024 has 2 MA's), (10, 29033), (16, 29135), (17, 29147), (21, 29159), (27, 29249), (28, 29267), (32, 29330), (36, 29375), (37, 29384), (40, 29447),

Gene: UncleRicky\_23 Start: 23775, Stop: 24299, Start Num: 3

Candidate Starts for UncleRicky\_23:

(Start: 3 @23775 has 1 MA's), (6, 23808), (Start: 9 @23868 has 2 MA's), (11, 23925), (13, 23964), (18, 23997), (23, 24045), (30, 24135), (39, 24273),