

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 158294 Report

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

Pham number 158294 has 13 members, 0 are drafts.

Phages represented in each track:

• Track 1 : SV1 54

• Track 2: Picard 55

Track 3 : Mojorita\_55

Track 4 : ToastyFinz\_51

Track 5 : Darolandstone\_54

• Track 6 : Ignacio\_57, Cumberbatch\_58, Vondra\_56, HFrancette\_58

Track 7 : Piccadilly\_57, Eastland\_57

Track 8 : AxeJC\_57, Eklok\_57

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

The start number called the most often in the published annotations is 5, it was called in 8 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AxeJC\_57, Cumberbatch\_58, Eastland\_57, Eklok\_57, HFrancette\_58, Ignacio\_57, Piccadilly\_57, Vondra\_56,

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

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

Darolandstone\_54, Mojorita\_55, Picard\_55, SV1\_54, ToastyFinz\_51,

### Summary by start number:

#### Start 5:

- Found in 8 of 13 (61.5%) of genes in pham
- Manual Annotations of this start: 8 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC\_57 (BP), Cumberbatch\_58 (BP), Eastland\_57 (BP), Eklok\_57 (BP), HFrancette\_58 (BP), Ignacio\_57 (BP), Piccadilly\_57 (BP), Vondra\_56 (BP),

#### Start 7:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darolandstone\_54 (BC2),

#### Start 8:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Mojorita\_55 (BC1), Picard\_55 (BC1), SV1\_54 (BC1), ToastyFinz\_51 (BC1),

## **Summary by clusters:**

There are 3 clusters represented in this pham: BP, BC1, BC2,

Info for manual annotations of cluster BC1:

•Start number 8 was manually annotated 4 times for cluster BC1.

Info for manual annotations of cluster BC2:

•Start number 7 was manually annotated 1 time for cluster BC2.

Info for manual annotations of cluster BP:

•Start number 5 was manually annotated 8 times for cluster BP.

### Gene Information:

Gene: AxeJC\_57 Start: 36632, Stop: 37060, Start Num: 5

Candidate Starts for AxeJC 57:

(Start: 5 @ 36632 has 8 MA's), (Start: 8 @ 36698 has 4 MA's), (10, 36797), (11, 36803), (15, 36863), (20, 36962), (22, 36983),

Gene: Cumberbatch\_58 Start: 36449, Stop: 36880, Start Num: 5

Candidate Starts for Cumberbatch\_58:

(Start: 5 @ 36449 has 8 MA's), (Start: 8 @ 36515 has 4 MA's), (11, 36623), (20, 36782), (22, 36803),

Gene: Darolandstone 54 Start: 39645, Stop: 40043, Start Num: 7

Candidate Starts for Darolandstone 54:

(6, 39627), (Start: 7 @ 39645 has 1 MA's), (11, 39762), (12, 39768), (16, 39849),

Gene: Eastland\_57 Start: 36409, Stop: 36840, Start Num: 5

Candidate Starts for Eastland\_57:

(Start: 5 @ 36409 has 8 MA's), (Start: 8 @ 36475 has 4 MA's), (9, 36514), (11, 36583), (22, 36763),

Gene: Eklok 57 Start: 36276, Stop: 36704, Start Num: 5

Candidate Starts for Eklok 57:

(Start: 5 @36276 has 8 MA's), (Start: 8 @36342 has 4 MA's), (10, 36441), (11, 36447), (15, 36507), (20, 36606), (22, 36627),

Gene: HFrancette\_58 Start: 37097, Stop: 37528, Start Num: 5

Candidate Starts for HFrancette 58:

(Start: 5 @ 37097 has 8 MA's), (Start: 8 @ 37163 has 4 MA's), (11, 37271), (20, 37430), (22, 37451),

Gene: Ignacio\_57 Start: 37000, Stop: 37431, Start Num: 5

Candidate Starts for Ignacio\_57:

(Start: 5 @ 37000 has 8 MA's), (Start: 8 @ 37066 has 4 MA's), (11, 37174), (20, 37333), (22, 37354),

Gene: Mojorita 55 Start: 37280, Stop: 37717, Start Num: 8

Candidate Starts for Mojorita\_55:

(1, 36869), (2, 36983), (3, 37025), (4, 37139), (Start: 8 @37280 has 4 MA's), (11, 37382), (15, 37442), (17, 37472), (18, 37529), (21, 37562),

Gene: Picard\_55 Start: 38307, Stop: 38744, Start Num: 8

Candidate Starts for Picard\_55:

(Start: 8 @ 38307 has 4 MA's), (11, 38409), (15, 38469), (17, 38499), (18, 38556), (21, 38589),

Gene: Piccadilly\_57 Start: 36408, Stop: 36839, Start Num: 5

Candidate Starts for Piccadilly\_57:

(Start: 5 @ 36408 has 8 MA's), (Start: 8 @ 36474 has 4 MA's), (9, 36513), (11, 36582), (22, 36762),

Gene: SV1\_54 Start: 36332, Stop: 36841, Start Num: 8

Candidate Starts for SV1\_54:

(4, 36185), (Start: 8 @36332 has 4 MA's), (11, 36434), (13, 36452), (15, 36494), (17, 36524), (21, 36602), (25, 36821),

Gene: ToastyFinz\_51 Start: 38468, Stop: 38905, Start Num: 8

Candidate Starts for ToastyFinz\_51:

(Start: 8 @38468 has 4 MA's), (11, 38570), (14, 38600), (15, 38630), (18, 38717), (19, 38720), (23, 38858), (24, 38885),

Gene: Vondra\_56 Start: 35994, Stop: 36425, Start Num: 5

Candidate Starts for Vondra\_56:

(Start: 5 @ 35994 has 8 MA's), (Start: 8 @ 36060 has 4 MA's), (11, 36168), (20, 36327), (22, 36348),