

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 87533 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 87533 has 9 members, 0 are drafts.

Phages represented in each track:

• Track 1 : SV1 29

• Track 2 : Picard_32, Mojorita_32

• Track 3 : SoJo 31

Track 4 : Darolandstone_31

• Track 5 : Raleigh_31

Track 6: Ididsumtinwong_33, Bioscum_33

Track 7 : PapayaSalad_32

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

The start number called the most often in the published annotations is 11, it was called in 4 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bioscum_33, Darolandstone_31, Ididsumtinwong_33, Raleigh_31,

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

PapayaSalad_32,

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

Mojorita_32, Picard_32, SV1_29, SoJo_31,

Summary by start number:

Start 10:

- Found in 4 of 9 (44.4%) of genes in pham
- Manual Annotations of this start: 4 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mojorita_32 (BC1), Picard_32 (BC1), SV1_29 (BC1), SoJo_31 (BC1),

Start 11:

- Found in 5 of 9 (55.6%) of genes in pham
- Manual Annotations of this start: 4 of 9
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bioscum_33 (BC3), Darolandstone_31 (BC2), Ididsumtinwong_33 (BC3), Raleigh_31 (BC2),

Start 12:

- Found in 3 of 9 (33.3%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 33.3% of time when present
- Phage (with cluster) where this start called: PapayaSalad_32 (BC3),

Summary by clusters:

There are 3 clusters represented in this pham: BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

•Start number 10 was manually annotated 4 times for cluster BC1.

Info for manual annotations of cluster BC2:

•Start number 11 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- •Start number 11 was manually annotated 2 times for cluster BC3.
- •Start number 12 was manually annotated 1 time for cluster BC3.

Gene Information:

Gene: Bioscum_33 Start: 23831, Stop: 23391, Start Num: 11

Candidate Starts for Bioscum 33:

(Start: 11 @23831 has 4 MA's), (Start: 12 @23768 has 1 MA's), (25, 23450),

Gene: Darolandstone_31 Start: 25446, Stop: 25000, Start Num: 11

Candidate Starts for Darolandstone_31:

(1, 25641), (8, 25521), (Start: 11 @25446 has 4 MA's), (16, 25257), (22, 25131), (24, 25068), (25, 25062),

Gene: Ididsumtinwong_33 Start: 23831, Stop: 23391, Start Num: 11

Candidate Starts for Ididsumtinwong 33:

(Start: 11 @23831 has 4 MA's), (Start: 12 @23768 has 1 MA's), (25, 23450),

Gene: Mojorita_32 Start: 24247, Stop: 23783, Start Num: 10

Candidate Starts for Mojorita_32:

(Start: 10 @24247 has 4 MA's), (14, 24070), (19, 23983), (20, 23980), (25, 23839),

Gene: PapayaSalad 32 Start: 24077, Stop: 23700, Start Num: 12

Candidate Starts for PapayaSalad 32:

(Start: 11 @24140 has 4 MA's), (Start: 12 @24077 has 1 MA's), (25, 23759),

Gene: Picard_32 Start: 24445, Stop: 23981, Start Num: 10

Candidate Starts for Picard_32:

(Start: 10 @24445 has 4 MA's), (14, 24268), (19, 24181), (20, 24178), (25, 24037),

Gene: Raleigh_31 Start: 25958, Stop: 25512, Start Num: 11

Candidate Starts for Raleigh_31:

 $(2, 26141), (3, 26135), (4, 26126), (5, 26120), (8, 26033), (Start: 11 @ 25958 \ has \ 4 \ MA's), (16, 25769), (16, 26120), (16, 2612$

(21, 25682), (22, 25643), (24, 25580), (25, 25574),

Gene: SV1_29 Start: 23178, Stop: 22711, Start Num: 10

Candidate Starts for SV1_29:

(6, 23301), (7, 23265), (9, 23220), (Start: 10 @23178 has 4 MA's), (14, 23001), (19, 22914), (23, 22782), (25, 22770),

Gene: SoJo_31 Start: 25601, Stop: 25134, Start Num: 10

Candidate Starts for SoJo_31:

(Start: 10 @25601 has 4 MA's), (13, 25427), (15, 25403), (17, 25355), (18, 25340), (24, 25199), (25,

25193),