

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 7244 Report

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

Pham number 7244 has 9 members, 2 are drafts.

Phages represented in each track:

Track 1 : Papyrus_100

Track 2 : MontyDev_99, Nilo_102

Track 3 : Zenon_102Track 4 : Yelo 96

• Track 5 : Weiss13 100, Candle 95

Track 6 : Rope_99Track 7 : Riparian 101

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

The start number called the most often in the published annotations is 12, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Candle_95, Papyrus_100, Rope_99, Weiss13_100, Zenon_102,

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

MontyDev_99, Nilo_102, Riparian_101, Yelo_96,

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

Summary by start number:

Start 6:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MontyDev_99 (R), Nilo_102 (R), Riparian_101 (R),

Start 12:

- Found in 9 of 9 (100.0%) of genes in pham
- Manual Annotations of this start: 5 of 7

- Called 55.6% of time when present
- Phage (with cluster) where this start called: Candle_95 (R), Papyrus_100 (R), Rope_99 (R), Weiss13_100 (R), Zenon_102 (R),

Start 13:

- Found in 9 of 9 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Yelo_96 (R),

Summary by clusters:

There is one cluster represented in this pham: R

Info for manual annotations of cluster R:

- •Start number 6 was manually annotated 2 times for cluster R.
- •Start number 12 was manually annotated 5 times for cluster R.

Gene Information:

Gene: Candle_95 Start: 70931, Stop: 71266, Start Num: 12

Candidate Starts for Candle 95:

(Start: 12 @70931 has 5 MA's), (13, 71018), (14, 71051), (15, 71066), (16, 71150),

Gene: MontyDev_99 Start: 70690, Stop: 71130, Start Num: 6

Candidate Starts for MontyDev_99:

(2, 70549), (Start: 6 @70690 has 2 MA's), (7, 70717), (9, 70747), (10, 70750), (Start: 12 @70795 has 5 MA's), (13, 70882), (14, 70915), (15, 70930), (16, 71014),

Gene: Nilo_102 Start: 71192, Stop: 71632, Start Num: 6

Candidate Starts for Nilo 102:

(2, 71051), (Start: 6 @71192 has 2 MA's), (7, 71219), (9, 71249), (10, 71252), (Start: 12 @71297 has 5 MA's), (13, 71384), (14, 71417), (15, 71432), (16, 71516),

Gene: Papyrus_100 Start: 70240, Stop: 70575, Start Num: 12

Candidate Starts for Papyrus 100:

(4, 70105), (5, 70111), (8, 70171), (11, 70198), (Start: 12 @70240 has 5 MA's), (13, 70327), (14, 70360), (15, 70375), (16, 70459),

Gene: Riparian_101 Start: 70639, Stop: 71079, Start Num: 6

Candidate Starts for Riparian 101:

(1, 70465), (2, 70498), (Start: 6 @70639 has 2 MA's), (7, 70666), (9, 70696), (10, 70699), (Start: 12 @70744 has 5 MA's), (13, 70831), (14, 70864), (15, 70879), (16, 70963),

Gene: Rope_99 Start: 70548, Stop: 70883, Start Num: 12

Candidate Starts for Rope_99:

(1, 70269), (2, 70302), (Start: 6 @70443 has 2 MA's), (7, 70470), (9, 70500), (10, 70503), (Start: 12 @70548 has 5 MA's), (13, 70635), (14, 70668), (15, 70683), (16, 70767),

Gene: Weiss13 100 Start: 70981, Stop: 71316, Start Num: 12

Candidate Starts for Weiss13_100:

(Start: 12 @70981 has 5 MA's), (13, 71068), (14, 71101), (15, 71116), (16, 71200),

Gene: Yelo_96 Start: 71065, Stop: 71313, Start Num: 13

Candidate Starts for Yelo_96:

 $(2,70732), (Start: 6 @ 70873 \ has 2 \ MA's), (7,70900), (9,70930), (10,70933), (Start: 12 @ 70978 \ has 12 WA's), (2,70732), (2,70930), (2,7$

5 MA's), (13, 71065), (14, 71098), (15, 71113), (16, 71197),

Gene: Zenon_102 Start: 71271, Stop: 71606, Start Num: 12

Candidate Starts for Zenon_102:

 $(2,71025),\,(3,71046),\,(Start:\,6\,\,@71166\,\,has\,\,2\,\,MA's),\,(7,71193),\,(9,71223),\,(10,71226),\,(Start:\,12,71025),\,(10,71226),\,(10$

@71271 has 5 MA's), (13, 71358), (14, 71391), (15, 71406), (16, 71490),