

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 191553 Report

This analysis was run 11/02/24 on database version 579.

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 191553 has 19 members, 4 are drafts.

Phages represented in each track:

- Track 1 : AbbyDaisy_86
- Track 2 : ThayneTheZag_90
- Track 3 : Ragga_85
- Track 4: Wolfstar 67
- Track 5: Tandem_62, Pioneer3_62
- Track 6 : Alleb_63
- Track 7 : DejaVu 66, PhillyPhilly 64, Pavlo 64
- Track 8: Lupine 63
- Track 9 : Hubbs 65
- Track 10 : Roman 66
- Track 11 : Jacko 65
- Track 12 : Zucker 82
- Track 13 : Ibantik 34
- Track 14: Success 28
- Track 15 : Ponzi_28
- Track 16 : Yappy_24

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

The start number called the most often in the published annotations is 15, it was called in 12 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alleb_63, DejaVu_66, Hubbs_65, Jacko_65, Lupine_63, Pavlo_64, PhillyPhilly_64, Pioneer3_62, Ponzi_28, Roman_66, Tandem_62, Wolfstar_67, Zucker_82,

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

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

• AbbyDaisy_86, Ibantik_34, Raqqa_85, Success_28, ThayneTheZag_90, Yappy_24,

Summary by start number:

Start 9:

- Found in 1 of 19 (5.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik_34 (singleton),

Start 15:

- Found in 13 of 19 (68.4%) of genes in pham
- Manual Annotations of this start: 12 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb_63 (ED1), DejaVu_66 (ED1), Hubbs_65 (ED1), Jacko_65 (ED1), Lupine_63 (ED1), Pavlo_64 (ED1), PhillyPhilly_64 (ED1), Pioneer3_62 (ED1), Ponzi_28 (singleton), Roman_66 (ED1), Tandem_62 (ED1), Wolfstar_67 (ED), Zucker_82 (FN),

Start 16:

- Found in 5 of 19 (26.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 60.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_86 (AY), Raqqa_85 (AY), ThayneTheZag_90 (AY),

Start 17:

- Found in 5 of 19 (26.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Success 28 (singleton),

Start 24:

- Found in 1 of 19 (5.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yappy_24 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: AY, ED, singleton, ED1, FN,

Info for manual annotations of cluster AY:

•Start number 16 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster ED:

•Start number 15 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

•Start number 15 was manually annotated 10 times for cluster ED1.

Info for manual annotations of cluster FN:

•Start number 15 was manually annotated 1 time for cluster FN.

Gene Information:

Gene: AbbyDaisy_86 Start: 49683, Stop: 50093, Start Num: 16

Candidate Starts for AbbyDaisy 86:

(Start: 16 @49683 has 1 MA's), (29, 49761), (34, 49791), (36, 49815), (43, 49884), (54, 50025), (57, 50076),

Gene: Alleb 63 Start: 38335, Stop: 37907, Start Num: 15

Candidate Starts for Alleb_63:

(14, 38347), (Start: 15 @38335 has 12 MA's), (18, 38314), (43, 38128), (50, 38041),

Gene: DejaVu_66 Start: 38300, Stop: 37887, Start Num: 15

Candidate Starts for DejaVu 66:

(14, 38312), (Start: 15 @38300 has 12 MA's), (Start: 17 @38285 has 1 MA's), (26, 38237), (30,

38216), (32, 38213),

Gene: Hubbs_65 Start: 38508, Stop: 38095, Start Num: 15

Candidate Starts for Hubbs 65:

 $(14,\,38520),\,(Start:\,15\,\,@\,38508\,\,has\,\,12\,\,MA's),\,(26,\,38445),\,(30,\,38424),\,(32,\,38421),\,(45,\,38271),\,(47,\,38520),\,(31,\,38424),\,(32,\,38421),\,(33,\,38421),\,(34,\,38271),\,(34,\,$

38253),

Gene: Ibantik_34 Start: 16596, Stop: 16135, Start Num: 9

Candidate Starts for Ibantik 34:

(Start: 9 @ 16596 has 1 MA's), (11, 16572), (21, 16518), (37, 16407), (49, 16260), (55, 16194),

Gene: Jacko_65 Start: 37248, Stop: 36841, Start Num: 15

Candidate Starts for Jacko_65:

(Start: 15 @37248 has 12 MA's), (26, 37191), (28, 37176), (43, 37062),

Gene: Lupine 63 Start: 37714, Stop: 37301, Start Num: 15

Candidate Starts for Lupine 63:

(14, 37726), (Start: 15 @37714 has 12 MA's), (20, 37687), (26, 37651), (30, 37630), (43, 37516), (45, 37477),

Gene: Pavlo 64 Start: 38359, Stop: 37946, Start Num: 15

Candidate Starts for Pavlo 64:

(14, 38371), (Start: 15 @38359 has 12 MA's), (Start: 17 @38344 has 1 MA's), (26, 38296), (30, 38275), (32, 38272),

Gene: PhillyPhilly 64 Start: 37893, Stop: 37480, Start Num: 15

Candidate Starts for PhillyPhilly_64:

 $(14,\,37905),\,(Start:\,15\,\,@\,37893\,\,has\,\,12\,\,MA's),\,(Start:\,17\,\,@\,37878\,\,has\,\,1\,\,MA's),\,(26,\,37830),\,(30,\,37893),\,(30,\,378$

37809), (32, 37806),

Gene: Pioneer3 62 Start: 38332, Stop: 37904, Start Num: 15

Candidate Starts for Pioneer3 62:

(14, 38344), (Start: 15 @38332 has 12 MA's), (43, 38125), (50, 38038),

Gene: Ponzi 28 Start: 16304, Stop: 15894, Start Num: 15

Candidate Starts for Ponzi_28:

(1, 16676), (5, 16490), (Start: 15 @16304 has 12 MA's), (19, 16280), (52, 15995),

Gene: Ragga_85 Start: 47700, Stop: 48110, Start Num: 16

Candidate Starts for Raqqa_85:

(6, 47547), (12, 47676), (Start: 16 @ 47700 has 1 MA's), (27, 47772), (32, 47781), (33, 47787), (34, 47808),

Gene: Roman 66 Start: 38562, Stop: 38149, Start Num: 15

Candidate Starts for Roman_66:

(8, 38655), (10, 38589), (13, 38574), (Start: 15 @38562 has 12 MA's), (Start: 17 @38547 has 1 MA's), (26, 38499), (30, 38478), (32, 38475), (50, 38277),

Gene: Success_28 Start: 18270, Stop: 17863, Start Num: 17

Candidate Starts for Success_28:

(4, 18471), (Start: 17 @18270 has 1 MA's), (38, 18123), (39, 18111), (42, 18096), (48, 17997), (51, 17973), (57, 17877),

Gene: Tandem_62 Start: 38430, Stop: 38002, Start Num: 15

Candidate Starts for Tandem 62:

(14, 38442), (Start: 15 @38430 has 12 MA's), (43, 38223), (50, 38136),

Gene: ThayneTheZag_90 Start: 48316, Stop: 48714, Start Num: 16

Candidate Starts for ThayneTheZag_90: (7, 48217), (Start: 16 @48316 has 1 MA's),

Gene: Wolfstar_67 Start: 39602, Stop: 39174, Start Num: 15

Candidate Starts for Wolfstar_67:

(2, 39830), (3, 39827), (14, 39614), (Start: 15 @39602 has 12 MA's), (Start: 16 @39593 has 1 MA's), (26, 39539), (40, 39434), (41, 39431), (50, 39305),

Gene: Yappy_24 Start: 6707, Stop: 7054, Start Num: 24

Candidate Starts for Yappy_24:

(23, 6704), (24, 6707), (25, 6722), (31, 6749), (43, 6857), (44, 6869), (45, 6893), (46, 6899), (53, 6992), (56, 7034),

Gene: Zucker_82 Start: 48335, Stop: 48733, Start Num: 15

Candidate Starts for Zucker_82:

(Start: 15 @48335 has 12 MA's), (Start: 16 @48344 has 1 MA's), (22, 48374), (35, 48473), (43, 48524),