

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 4489 Report

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

Pham number 4489 has 16 members, 3 are drafts.

Phages represented in each track:

• Track 1: WheatThin_63, GrandSlam_66, Parada_64, Hamood_66, BetterKatz_64, Mulch 64, Ayotoya_65, Chop_66, Brylie_64, Nadeem_64

Track 2 : Pimento_68

Track 3 : Bock_66

Track 4: NancyRae_63, DelRio_65

Track 5 : Francois_64Track 6 : TPA4 67

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

The start number called the most often in the published annotations is 3, it was called in 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ayotoya_65, BetterKatz_64, Brylie_64, Chop_66, DelRio_65, Francois_64, GrandSlam_66, Hamood_66, Mulch_64, Nadeem_64, NancyRae_63, Parada_64, WheatThin 63,

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

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

• Bock_66, Pimento_68, TPA4_67,

Summary by start number:

Start 2:

- Found in 2 of 16 (12.5%) 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: Bock_66 (DI), Pimento_68 (DI),

Start 3:

• Found in 13 of 16 (81.2%) of genes in pham

- Manual Annotations of this start: 12 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_65 (DI), BetterKatz_64 (DI), Brylie_64 (DI), Chop_66 (DI), DelRio_65 (DI), Francois_64 (DI), GrandSlam_66 (DI), Hamood_66 (DI), Mulch_64 (DI), Nadeem_64 (DI), NancyRae_63 (DI), Parada_64 (DI), WheatThin_63 (DI),

Start 11:

- Found in 1 of 16 (6.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4_67 (singleton),

Summary by clusters:

There are 2 clusters represented in this pham: singleton, DI,

Info for manual annotations of cluster DI:

- •Start number 2 was manually annotated 1 time for cluster DI.
- •Start number 3 was manually annotated 12 times for cluster DI.

Gene Information:

Gene: Ayotoya_65 Start: 42875, Stop: 43186, Start Num: 3

Candidate Starts for Ayotoya_65:

(Start: 3 @ 42875 has 12 MA's), (5, 42962), (6, 43004),

Gene: BetterKatz_64 Start: 42074, Stop: 42385, Start Num: 3

Candidate Starts for BetterKatz_64:

(Start: 3 @ 42074 has 12 MA's), (5, 42161), (6, 42203),

Gene: Bock 66 Start: 42318, Stop: 42629, Start Num: 2

Candidate Starts for Bock 66:

(Start: 2 @ 42318 has 1 MA's), (5, 42405), (6, 42447),

Gene: Brylie_64 Start: 41897, Stop: 42208, Start Num: 3

Candidate Starts for Brylie 64:

(Start: 3 @41897 has 12 MA's), (5, 41984), (6, 42026),

Gene: Chop_66 Start: 43063, Stop: 43374, Start Num: 3

Candidate Starts for Chop 66:

(Start: 3 @ 43063 has 12 MA's), (5, 43150), (6, 43192),

Gene: DelRio 65 Start: 43084, Stop: 43395, Start Num: 3

Candidate Starts for DelRio_65:

(Start: 3 @43084 has 12 MA's), (4, 43147), (5, 43171), (6, 43213), (7, 43333),

Gene: Francois 64 Start: 42083, Stop: 42394, Start Num: 3

Candidate Starts for Francois 64:

(Start: 3 @42083 has 12 MA's), (4, 42146),

Gene: GrandSlam_66 Start: 43063, Stop: 43374, Start Num: 3

Candidate Starts for GrandSlam_66:

(Start: 3 @ 43063 has 12 MA's), (5, 43150), (6, 43192),

Gene: Hamood_66 Start: 43063, Stop: 43374, Start Num: 3

Candidate Starts for Hamood 66:

(Start: 3 @ 43063 has 12 MA's), (5, 43150), (6, 43192),

Gene: Mulch_64 Start: 41897, Stop: 42208, Start Num: 3

Candidate Starts for Mulch_64:

(Start: 3 @41897 has 12 MA's), (5, 41984), (6, 42026),

Gene: Nadeem_64 Start: 41885, Stop: 42196, Start Num: 3

Candidate Starts for Nadeem_64:

(Start: 3 @41885 has 12 MA's), (5, 41972), (6, 42014),

Gene: NancyRae 63 Start: 41835, Stop: 42146, Start Num: 3

Candidate Starts for NancyRae_63:

(Start: 3 @41835 has 12 MA's), (4, 41898), (5, 41922), (6, 41964), (7, 42084),

Gene: Parada_64 Start: 41897, Stop: 42208, Start Num: 3

Candidate Starts for Parada_64:

(Start: 3 @41897 has 12 MA's), (5, 41984), (6, 42026),

Gene: Pimento_68 Start: 42016, Stop: 42327, Start Num: 2

Candidate Starts for Pimento_68:

(Start: 2 @ 42016 has 1 MA's), (5, 42103), (6, 42145), (7, 42265),

Gene: TPA4_67 Start: 44981, Stop: 45280, Start Num: 11

Candidate Starts for TPA4_67:

 $(1,\,44555),\,(8,\,44951),\,(9,\,44963),\,(10,\,44972),\,(11,\,44981),\,(12,\,45041),\,(13,\,45119),\,(14,\,45140),\,(15,\,44981),\,(14,\,4$

45236),

Gene: WheatThin_63 Start: 41885, Stop: 42196, Start Num: 3

Candidate Starts for WheatThin_63:

(Start: 3 @41885 has 12 MA's), (5, 41972), (6, 42014),