

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 138312 Report

This analysis was run 03/30/24 on database version 556.

Pham number 138312 has 15 members, 2 are drafts.

Phages represented in each track:

- Track 1: Brylie_60, Parada_60, Mulch_60, WheatThin_59, Nadeem_60
- Track 2 : BetterKatz_60
- Track 3 : Bock_61
- Track 4: Hamood_61, Chop_61, Ayotoya_61, GrandSlam_61
- Track 5 : NancyRae 59
- Track 6 : Pimento 63
- Track 7 : DelRio 61
- Track 8 : Francois 60

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

The start number called the most often in the published annotations is 1, it was called in 9 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ayotoya_61, Brylie_60, Chop_61, DelRio_61, GrandSlam_61, Hamood_61, Mulch 60, Nadeem 60, Parada 60, WheatThin 59,

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

Pimento 63.

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

BetterKatz_60, Bock_61, Francois_60, NancyRae_59,

Summary by start number:

Start 1:

- Found in 11 of 15 (73.3%) of genes in pham
- Manual Annotations of this start: 9 of 13
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Ayotoya_61 (DI), Brylie_60 (DI), Chop_61 (DI), DelRio_61 (DI), GrandSlam_61 (DI), Hamood_61 (DI), Mulch_60 (DI), Nadeem_60 (DI), Parada_60 (DI), WheatThin_59 (DI),

Start 2:

- Found in 10 of 15 (66.7%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Pimento_63 (DI),

Start 5:

- Found in 1 of 15 (6.7%) 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: Francois_60 (DI),

Start 6:

- Found in 12 of 15 (80.0%) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BetterKatz_60 (DI), Bock_61 (DI), NancyRae_59 (DI),

Summary by clusters:

There is one cluster represented in this pham: DI

Info for manual annotations of cluster DI:

- •Start number 1 was manually annotated 9 times for cluster DI.
- •Start number 5 was manually annotated 1 time for cluster DI.
- •Start number 6 was manually annotated 3 times for cluster DI.

Gene Information:

Gene: Ayotoya 61 Start: 41093, Stop: 41497, Start Num: 1

Candidate Starts for Ayotoya 61:

(Start: 1 @41093 has 9 MA's), (2, 41102), (3, 41105), (4, 41126), (Start: 6 @41153 has 3 MA's), (10, 41231), (11, 41252), (15, 41369), (16, 41375), (17, 41429), (18, 41444), (19, 41447), (20, 41453),

Gene: BetterKatz_60 Start: 40307, Stop: 40651, Start Num: 6

Candidate Starts for BetterKatz 60:

(Start: 6 @40307 has 3 MA's), (10, 40385), (16, 40529), (17, 40583), (18, 40598), (19, 40601), (20, 40607).

Gene: Bock 61 Start: 40336, Stop: 40695, Start Num: 6

Candidate Starts for Bock_61:

(Start: 6 @ 40336 has 3 MA's), (8, 40384), (9, 40408), (11, 40435), (13, 40480), (15, 40549), (16, 40555), (17, 40609), (18, 40633), (19, 40636), (20, 40642), (21, 40690),

Gene: Brylie_60 Start: 40073, Stop: 40477, Start Num: 1

Candidate Starts for Brylie 60:

(Start: 1 @40073 has 9 MA's), (2, 40082), (3, 40085), (4, 40106), (Start: 6 @40133 has 3 MA's), (10, 40211), (15, 40349), (16, 40355), (17, 40409), (18, 40424), (19, 40427), (20, 40433),

Gene: Chop_61 Start: 40844, Stop: 41248, Start Num: 1

Candidate Starts for Chop 61:

(Start: 1 @40844 has 9 MA's), (2, 40853), (3, 40856), (4, 40877), (Start: 6 @40904 has 3 MA's), (10, 40982), (11, 41003), (15, 41120), (16, 41126), (17, 41180), (18, 41195), (19, 41198), (20, 41204),

Gene: DelRio_61 Start: 41254, Stop: 41664, Start Num: 1

Candidate Starts for DelRio 61:

(Start: 1 @41254 has 9 MA's), (3, 41266), (4, 41287), (7, 41326), (9, 41386), (12, 41434), (13, 41455), (14, 41488), (15, 41524), (16, 41530), (17, 41584), (18, 41611), (20, 41620),

Gene: François 60 Start: 40340, Stop: 40705, Start Num: 5

Candidate Starts for Francois 60:

(Start: 5 @ 40340 has 1 MA's), (8, 40403), (9, 40427), (11, 40454), (13, 40499), (15, 40568), (16, 40574), (17, 40628), (18, 40652), (19, 40655), (20, 40661),

Gene: GrandSlam_61 Start: 40844, Stop: 41248, Start Num: 1

Candidate Starts for GrandSlam_61:

(Start: 1 @40844 has 9 MA's), (2, 40853), (3, 40856), (4, 40877), (Start: 6 @40904 has 3 MA's), (10, 40982), (11, 41003), (15, 41120), (16, 41126), (17, 41180), (18, 41195), (19, 41198), (20, 41204),

Gene: Hamood_61 Start: 40844, Stop: 41248, Start Num: 1

Candidate Starts for Hamood_61:

(Start: 1 @40844 has 9 MA's), (2, 40853), (3, 40856), (4, 40877), (Start: 6 @40904 has 3 MA's), (10, 40982), (11, 41003), (15, 41120), (16, 41126), (17, 41180), (18, 41195), (19, 41198), (20, 41204),

Gene: Mulch_60 Start: 40073, Stop: 40477, Start Num: 1

Candidate Starts for Mulch_60:

(Start: 1 @40073 has 9 MA's), (2, 40082), (3, 40085), (4, 40106), (Start: 6 @40133 has 3 MA's), (10, 40211), (15, 40349), (16, 40355), (17, 40409), (18, 40424), (19, 40427), (20, 40433),

Gene: Nadeem_60 Start: 40061, Stop: 40465, Start Num: 1

Candidate Starts for Nadeem_60:

(Start: 1 @40061 has 9 MA's), (2, 40070), (3, 40073), (4, 40094), (Start: 6 @40121 has 3 MA's), (10, 40199), (15, 40337), (16, 40343), (17, 40397), (18, 40412), (19, 40415), (20, 40421),

Gene: NancyRae_59 Start: 40071, Stop: 40415, Start Num: 6

Candidate Starts for NancyRae 59:

(Start: 6 @ 40071 has 3 MA's), (10, 40149), (15, 40287), (16, 40293), (17, 40347), (18, 40362), (19, 40365), (20, 40371),

Gene: Parada_60 Start: 40073, Stop: 40477, Start Num: 1

Candidate Starts for Parada 60:

(Start: 1 @40073 has 9 MA's), (2, 40082), (3, 40085), (4, 40106), (Start: 6 @40133 has 3 MA's), (10, 40211), (15, 40349), (16, 40355), (17, 40409), (18, 40424), (19, 40427), (20, 40433),

Gene: Pimento 63 Start: 39992, Stop: 40393, Start Num: 2

Candidate Starts for Pimento_63:

(Start: 1 @39983 has 9 MA's), (2, 39992), (3, 39995), (4, 40016), (7, 40055), (9, 40115), (12, 40163), (13, 40184), (14, 40217), (15, 40253), (16, 40259), (17, 40313), (18, 40340), (20, 40349),

Gene: WheatThin 59 Start: 40061, Stop: 40465, Start Num: 1

Candidate Starts for WheatThin 59:

(Start: 1 @40061 has 9 MA's), (2, 40070), (3, 40073), (4, 40094), (Start: 6 @40121 has 3 MA's), (10, 40199), (15, 40337), (16, 40343), (17, 40397), (18, 40412), (19, 40415), (20, 40421),