

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 4556 Report

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

Pham number 4556 has 16 members, 2 are drafts.

Phages represented in each track:

Track 1 : Parada_62, Brylie_62, WheatThin_61, Mulch_62, Nadeem_62

Track 2 : Pimento_65, Bock_63

Track 3 : BetterKatz 62

Track 4: Hamood_63, Chop_63, Ayotoya_63, GrandSlam_63

Track 5 : NancyRae_61Track 6 : Francois_62Track 7 : DelRio 63

Track 8 : Ruthy_60

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

The start number called the most often in the published annotations is 6, it was called in 13 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ayotoya_63, BetterKatz_62, Bock_63, Brylie_62, Chop_63, DelRio_63, Francois_62, GrandSlam_63, Hamood_63, Mulch_62, Nadeem_62, NancyRae_61, Parada_62, Pimento_65, WheatThin_61,

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

Genes that do not have the "Most Annotated" start: • Ruthy_60,

Summary by start number:

Start 6:

- Found in 15 of 16 (93.8%) of genes in pham
- Manual Annotations of this start: 13 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_63 (DI), BetterKatz_62 (DI), Bock_63 (DI), Brylie_62 (DI), Chop_63 (DI), DelRio_63 (DI), Francois_62 (DI), GrandSlam_63 (DI), Hamood_63 (DI), Mulch_62 (DI), Nadeem_62 (DI),

NancyRae_61 (DI), Parada_62 (DI), Pimento_65 (DI), WheatThin_61 (DI),

Start 7:

- Found in 8 of 16 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Ruthy_60 (DW),

Summary by clusters:

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

Info for manual annotations of cluster DI:

•Start number 6 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DW:

•Start number 7 was manually annotated 1 time for cluster DW.

Gene Information:

Gene: Ayotoya 63 Start: 41820, Stop: 42203, Start Num: 6

Candidate Starts for Ayotoya_63:

(4, 41772), (Start: 6 @41820 has 13 MA's), (Start: 7 @41850 has 1 MA's), (12, 41997), (13, 42000),

Gene: BetterKatz_62 Start: 40995, Stop: 41402, Start Num: 6

Candidate Starts for BetterKatz_62:

(3, 40938), (4, 40944), (5, 40953), (Start: 6 @40995 has 13 MA's), (8, 41046), (11, 41187), (12, 41196), (13, 41199),

Gene: Bock 63 Start: 41039, Stop: 41422, Start Num: 6

Candidate Starts for Bock 63:

(3, 40982), (4, 40988), (5, 40997), (Start: 6 @41039 has 13 MA's), (Start: 7 @41069 has 1 MA's), (12, 41216), (13, 41219),

Gene: Brylie_62 Start: 40821, Stop: 41225, Start Num: 6

Candidate Starts for Brylie_62:

(3, 40764), (4, 40770), (5, 40779), (Start: 6 @40821 has 13 MA's), (8, 40872), (12, 41019), (13, 41022),

Gene: Chop_63 Start: 41571, Stop: 41954, Start Num: 6

Candidate Starts for Chop 63:

(4, 41523), (Start: 6 @ 41571 has 13 MA's), (Start: 7 @ 41601 has 1 MA's), (12, 41748), (13, 41751),

Gene: DelRio 63 Start: 42008, Stop: 42412, Start Num: 6

Candidate Starts for DelRio 63:

(3, 41951), (4, 41957), (5, 41966), (Start: 6 @42008 has 13 MA's), (8, 42059), (10, 42167), (11, 42197), (12, 42206), (13, 42209),

Gene: Francois 62 Start: 41031, Stop: 41411, Start Num: 6

Candidate Starts for Francois 62:

(Start: 6 @41031 has 13 MA's), (Start: 7 @41061 has 1 MA's), (12, 41208), (13, 41211),

Gene: GrandSlam_63 Start: 41571, Stop: 41954, Start Num: 6

Candidate Starts for GrandSlam 63:

(4, 41523), (Start: 6 @41571 has 13 MA's), (Start: 7 @41601 has 1 MA's), (12, 41748), (13, 41751),

Gene: Hamood_63 Start: 41571, Stop: 41954, Start Num: 6

Candidate Starts for Hamood_63:

(4, 41523), (Start: 6 @41571 has 13 MA's), (Start: 7 @41601 has 1 MA's), (12, 41748), (13, 41751),

Gene: Mulch_62 Start: 40821, Stop: 41225, Start Num: 6

Candidate Starts for Mulch 62:

(3, 40764), (4, 40770), (5, 40779), (Start: 6 @40821 has 13 MA's), (8, 40872), (12, 41019), (13, 41022),

Gene: Nadeem_62 Start: 40809, Stop: 41213, Start Num: 6

Candidate Starts for Nadeem_62:

(3, 40752), (4, 40758), (5, 40767), (Start: 6 @40809 has 13 MA's), (8, 40860), (12, 41007), (13, 41010),

Gene: NancyRae_61 Start: 40759, Stop: 41163, Start Num: 6

Candidate Starts for NancyRae_61:

(3, 40702), (4, 40708), (5, 40717), (Start: 6 @40759 has 13 MA's), (8, 40810), (10, 40918), (12, 40957), (13, 40960),

Gene: Parada_62 Start: 40821, Stop: 41225, Start Num: 6

Candidate Starts for Parada_62:

(3, 40764), (4, 40770), (5, 40779), (Start: 6 @40821 has 13 MA's), (8, 40872), (12, 41019), (13, 41022),

Gene: Pimento_65 Start: 40737, Stop: 41120, Start Num: 6

Candidate Starts for Pimento_65:

(3, 40680), (4, 40686), (5, 40695), (Start: 6 @40737 has 13 MA's), (Start: 7 @40767 has 1 MA's), (12, 40914), (13, 40917),

Gene: Ruthy_60 Start: 43068, Stop: 43415, Start Num: 7

Candidate Starts for Ruthy 60:

(1, 42735), (2, 42795), (Start: 7 @ 43068 has 1 MA's), (9, 43143), (14, 43278), (15, 43374),

Gene: WheatThin_61 Start: 40809, Stop: 41213, Start Num: 6

Candidate Starts for WheatThin_61:

(3, 40752), (4, 40758), (5, 40767), (Start: 6 @40809 has 13 MA's), (8, 40860), (12, 41007), (13, 41010),