

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 135956 Report

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

Pham number 135956 has 15 members, 2 are drafts.

Phages represented in each track:

Track 1 : BetterKatz\_68

Track 2: Hamood\_70, Chop\_70, GrandSlam\_70, Ayotoya\_69

Track 3: Parada\_68, Mulch\_68, Brylie\_68

• Track 4 : Bock 70

Track 5: WheatThin\_67, Nadeem\_68

Track 6: Francois\_68
Track 7: NancyRae\_67
Track 8: Pimento\_72
Track 9: DelRio 69

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

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

Genes that call this "Most Annotated" start:

 Ayotoya\_69, BetterKatz\_68, Bock\_70, Brylie\_68, Chop\_70, DelRio\_69, Francois\_68, GrandSlam\_70, Hamood\_70, Mulch\_68, Nadeem\_68, NancyRae\_67, Parada\_68, WheatThin\_67,

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

Pimento\_72,

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

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## Summary by start number:

### Start 14:

- Found in 15 of 15 (100.0%) of genes in pham
- Manual Annotations of this start: 13 of 13
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Ayotoya\_69 (DI), BetterKatz\_68 (DI), Bock\_70 (DI), Brylie\_68 (DI), Chop\_70 (DI), DelRio\_69 (DI), Francois\_68 (DI),

GrandSlam\_70 (DI), Hamood\_70 (DI), Mulch\_68 (DI), Nadeem\_68 (DI), NancyRae\_67 (DI), Parada\_68 (DI), WheatThin\_67 (DI),

#### Start 15:

- Found in 14 of 15 (93.3%) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Pimento\_72 (DI),

## **Summary by clusters:**

There is one cluster represented in this pham: DI

Info for manual annotations of cluster DI:

•Start number 14 was manually annotated 13 times for cluster DI.

### Gene Information:

Gene: Ayotoya\_69 Start: 44611, Stop: 44847, Start Num: 14

Candidate Starts for Ayotoya\_69:

(4, 44338), (5, 44389), (11, 44554), (12, 44560), (13, 44569), (Start: 14 @44611 has 13 MA's), (15, 44632), (16, 44818),

Gene: BetterKatz\_68 Start: 43711, Stop: 43947, Start Num: 14

Candidate Starts for BetterKatz 68:

(6, 43465), (7, 43537), (8, 43585), (9, 43588), (10, 43594), (Start: 14 @43711 has 13 MA's), (15, 43732), (16, 43918), (17, 43942),

Gene: Bock\_70 Start: 43955, Stop: 44191, Start Num: 14

Candidate Starts for Bock 70:

(Start: 14 @43955 has 13 MA's), (15, 43976), (16, 44162),

Gene: Brylie 68 Start: 43534, Stop: 43770, Start Num: 14

Candidate Starts for Brylie\_68:

(6, 43288), (7, 43360), (8, 43408), (9, 43411), (10, 43417), (Start: 14 @43534 has 13 MA's), (15, 43555), (16, 43741),

Gene: Chop 70 Start: 44799, Stop: 45035, Start Num: 14

Candidate Starts for Chop 70:

(4, 44526), (5, 44577), (11, 44742), (12, 44748), (13, 44757), (Start: 14 @44799 has 13 MA's), (15, 44820), (16, 45006),

Gene: DelRio\_69 Start: 44721, Stop: 44957, Start Num: 14

Candidate Starts for DelRio 69:

(1, 44037), (2, 44139), (6, 44475), (7, 44547), (10, 44604), (Start: 14 @44721 has 13 MA's), (15, 44742), (16, 44928),

Gene: Francois 68 Start: 43819, Stop: 44055, Start Num: 14

Candidate Starts for Francois 68:

(4, 43546), (5, 43597), (11, 43762), (12, 43768), (13, 43777), (Start: 14 @43819 has 13 MA's), (16, 44026),

Gene: GrandSlam\_70 Start: 44799, Stop: 45035, Start Num: 14

Candidate Starts for GrandSlam 70:

(4, 44526), (5, 44577), (11, 44742), (12, 44748), (13, 44757), (Start: 14 @44799 has 13 MA's), (15, 44820), (16, 45006),

Gene: Hamood\_70 Start: 44799, Stop: 45035, Start Num: 14

Candidate Starts for Hamood 70:

(4, 44526), (5, 44577), (11, 44742), (12, 44748), (13, 44757), (Start: 14 @44799 has 13 MA's), (15, 44820), (16, 45006),

Gene: Mulch 68 Start: 43534, Stop: 43770, Start Num: 14

Candidate Starts for Mulch 68:

(6, 43288), (7, 43360), (8, 43408), (9, 43411), (10, 43417), (Start: 14 @43534 has 13 MA's), (15, 43555), (16, 43741),

Gene: Nadeem\_68 Start: 43522, Stop: 43758, Start Num: 14

Candidate Starts for Nadeem\_68:

(3, 43156), (6, 43276), (7, 43348), (8, 43396), (9, 43399), (10, 43405), (Start: 14 @43522 has 13 MA's), (15, 43543), (16, 43729),

Gene: NancyRae\_67 Start: 43571, Stop: 43807, Start Num: 14

Candidate Starts for NancyRae\_67:

(4, 43298), (5, 43349), (11, 43514), (13, 43529), (Start: 14 @43571 has 13 MA's), (15, 43592), (16, 43778),

Gene: Parada\_68 Start: 43534, Stop: 43770, Start Num: 14

Candidate Starts for Parada 68:

(6, 43288), (7, 43360), (8, 43408), (9, 43411), (10, 43417), (Start: 14 @43534 has 13 MA's), (15, 43555), (16, 43741),

Gene: Pimento\_72 Start: 43674, Stop: 43889, Start Num: 15

Candidate Starts for Pimento 72:

(7, 43479), (10, 43536), (Start: 14 @43653 has 13 MA's), (15, 43674), (16, 43860),

Gene: WheatThin\_67 Start: 43522, Stop: 43758, Start Num: 14

Candidate Starts for WheatThin\_67:

(3, 43156), (6, 43276), (7, 43348), (8, 43396), (9, 43399), (10, 43405), (Start: 14 @43522 has 13 MA's), (15, 43543), (16, 43729),