

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 87041 Report

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

Pham number 87041 has 15 members, 2 are drafts.

Phages represented in each track:

- Track 1: Parada\_61, Mulch\_61, Brylie\_61, WheatThin\_60, Nadeem\_61
- Track 2 : Pimento\_64
- Track 3: BetterKatz\_61
- Track 4: Hamood\_62, Chop\_62, Ayotoya\_62, GrandSlam\_62
- Track 5 : NancyRae 60
- Track 6 : DelRio 62
- Track 7 : Bock 62
- Track 8 : François 61

# 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 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ayotoya\_62, BetterKatz\_61, Brylie\_61, Chop\_62, DelRio\_62, Francois\_61, GrandSlam\_62, Hamood\_62, Mulch\_61, Nadeem\_61, NancyRae\_60, Parada\_61, WheatThin\_60,

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

Bock\_62, Pimento\_64,

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

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## Summary by start number:

#### Start 13:

- 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: Bock\_62 (DI),

#### Start 14:

- Found in 15 of 15 (100.0%) of genes in pham
- Manual Annotations of this start: 12 of 13
- Called 86.7% of time when present
- Phage (with cluster) where this start called: Ayotoya\_62 (DI), BetterKatz\_61 (DI), Brylie\_61 (DI), Chop\_62 (DI), DelRio\_62 (DI), Francois\_61 (DI), GrandSlam\_62 (DI), Hamood\_62 (DI), Mulch\_61 (DI), Nadeem\_61 (DI), NancyRae\_60 (DI), Parada\_61 (DI), WheatThin\_60 (DI),

#### Start 15:

- Found in 15 of 15 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Pimento\_64 (DI),

### Summary by clusters:

There is one cluster represented in this pham: DI

Info for manual annotations of cluster DI:

- •Start number 13 was manually annotated 1 time for cluster DI.
- •Start number 14 was manually annotated 12 times for cluster DI.

### Gene Information:

Gene: Ayotoya\_62 Start: 41497, Stop: 41823, Start Num: 14 Candidate Starts for Ayotoya\_62: (5, 41086), (9, 41257), (11, 41305), (Start: 14 @41497 has 12 MA's), (15, 41503), (16, 41530), (17, 41581), (18, 41725), (19, 41734),

Gene: BetterKatz 61 Start: 40651, Stop: 40998, Start Num: 14

Candidate Starts for BetterKatz 61:

(Start: 14 @40651 has 12 MA's), (15, 40657), (16, 40684), (17, 40735), (18, 40879), (20, 40963),

Gene: Bock\_62 Start: 40692, Stop: 41042, Start Num: 13

Candidate Starts for Bock 62:

(3, 40176), (4, 40284), (7, 40329), (9, 40440), (10, 40470), (11, 40485), (Start: 13 @40692 has 1 MA's), (Start: 14 @40695 has 12 MA's), (15, 40701), (16, 40728), (17, 40779), (18, 40923), (19, 40932), (20, 41007),

Gene: Brylie\_61 Start: 40477, Stop: 40824, Start Num: 14

Candidate Starts for Brylie\_61:

(1, 39889), (5, 40066), (9, 40237), (11, 40285), (Start: 14 @40477 has 12 MA's), (15, 40483), (16, 40510), (17, 40561), (18, 40705), (20, 40789),

Gene: Chop\_62 Start: 41248, Stop: 41574, Start Num: 14

Candidate Starts for Chop\_62:

(5, 40837), (9, 41008), (11, 41056), (Start: 14 @41248 has 12 MA's), (15, 41254), (16, 41281), (17, 41332), (18, 41476), (19, 41485),

Gene: DelRio\_62 Start: 41664, Stop: 42011, Start Num: 14

Candidate Starts for DelRio\_62:

(5, 41247), (8, 41391), (9, 41418), (11, 41460), (12, 41532), (Start: 14 @41664 has 12 MA's), (15, 41670), (16, 41697), (17, 41748), (18, 41892), (20, 41976),

Gene: Francois\_61 Start: 40705, Stop: 41034, Start Num: 14

Candidate Starts for Francois 61:

(4, 40288), (6, 40330), (7, 40333), (9, 40459), (10, 40489), (11, 40504), (Start: 14 @ 40705 has 12 MA's), (15, 40711), (16, 40738), (17, 40789),

Gene: GrandSlam\_62 Start: 41248, Stop: 41574, Start Num: 14

Candidate Starts for GrandSlam 62:

(5, 40837), (9, 41008), (11, 41056), (Start: 14 @41248 has 12 MA's), (15, 41254), (16, 41281), (17, 41332), (18, 41476), (19, 41485),

Gene: Hamood 62 Start: 41248, Stop: 41574, Start Num: 14

Candidate Starts for Hamood\_62:

(5, 40837), (9, 41008), (11, 41056), (Start: 14 @41248 has 12 MA's), (15, 41254), (16, 41281), (17, 41332), (18, 41476), (19, 41485),

Gene: Mulch 61 Start: 40477, Stop: 40824, Start Num: 14

Candidate Starts for Mulch\_61:

(1, 39889), (5, 40066), (9, 40237), (11, 40285), (Start: 14 @40477 has 12 MA's), (15, 40483), (16, 40510), (17, 40561), (18, 40705), (20, 40789),

Gene: Nadeem\_61 Start: 40465, Stop: 40812, Start Num: 14

Candidate Starts for Nadeem 61:

(1, 39877), (5, 40054), (9, 40225), (11, 40273), (Start: 14 @40465 has 12 MA's), (15, 40471), (16, 40498), (17, 40549), (18, 40693), (20, 40777),

Gene: NancyRae\_60 Start: 40415, Stop: 40762, Start Num: 14

Candidate Starts for NancyRae\_60:

(2, 39881), (3, 39911), (4, 40019), (7, 40064), (9, 40175), (11, 40223), (Start: 14 @ 40415 has 12 MA's), (15, 40421), (17, 40499), (18, 40643), (20, 40727),

Gene: Parada 61 Start: 40477, Stop: 40824, Start Num: 14

Candidate Starts for Parada 61:

(1, 39889), (5, 40066), (9, 40237), (11, 40285), (Start: 14 @40477 has 12 MA's), (15, 40483), (16, 40510), (17, 40561), (18, 40705), (20, 40789),

Gene: Pimento\_64 Start: 40399, Stop: 40740, Start Num: 15

Candidate Starts for Pimento\_64:

(5, 39976), (8, 40120), (9, 40147), (11, 40189), (12, 40261), (Start: 14 @40393 has 12 MA's), (15, 40399), (16, 40426), (17, 40477), (18, 40621), (20, 40705),

Gene: WheatThin 60 Start: 40465, Stop: 40812, Start Num: 14

Candidate Starts for WheatThin 60:

(1, 39877), (5, 40054), (9, 40225), (11, 40273), (Start: 14 @40465 has 12 MA's), (15, 40471), (16, 40498), (17, 40549), (18, 40693), (20, 40777),