

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 159566 Report

This analysis was run 05/04/24 on database version 560.

Pham number 159566 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : Gadjet\_85, Pipefish\_86

Track 2 : Bernardo\_85

Track 3 : Araxxi\_22

• Track 4 : DoTi 22

• Track 5 : PauloDiaboli 342

Track 6 : A3Wally\_342

• Track 7 : Baudelaire 72, Aegeus 72

Track 8 : Serenabean 74

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

The start number called the most often in the published annotations is 7, it was called in 4 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

A3Wally\_342, Gadjet\_85, PauloDiaboli\_342, Pipefish\_86,

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

Bernardo\_85,

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

Aegeus\_72, Araxxi\_22, Baudelaire\_72, DoTi\_22, Serenabean\_74,

## Summary by start number:

#### Start 6:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araxxi\_22 (EM1), DoTi\_22 (EM1),

### Start 7:

- Found in 5 of 10 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 9

- Called 80.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_342 (GD1), Gadjet\_85 (B3), PauloDiaboli\_342 (GD1), Pipefish\_86 (B3),

#### Start 8:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus\_72 (L5), Baudelaire\_72 (L5),

### Start 12:

- Found in 1 of 10 (10.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Serenabean\_74 (singleton),

#### Start 18:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Bernardo\_85 (B3),

### Summary by clusters:

There are 5 clusters represented in this pham: GD1, singleton, L5, EM1, B3,

Info for manual annotations of cluster B3:

- •Start number 7 was manually annotated 2 times for cluster B3.
- •Start number 18 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster EM1:

•Start number 6 was manually annotated 2 times for cluster EM1.

Info for manual annotations of cluster GD1:

Start number 7 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster L5:

•Start number 8 was manually annotated 2 times for cluster L5.

#### Gene Information:

Gene: A3Wally\_342 Start: 176311, Stop: 176649, Start Num: 7

Candidate Starts for A3Wally\_342:

(Start: 7 @176311 has 4 MA's), (10, 176332), (13, 176344), (14, 176347), (15, 176356), (17, 176362), (19, 176389), (23, 176470), (26, 176563), (27, 176569), (31, 176620),

Gene: Aegeus 72 Start: 46824, Stop: 47111, Start Num: 8

Candidate Starts for Aegeus 72:

(Start: 8 @ 46824 has 2 MA's), (16, 46863), (20, 46896), (27, 47061),

Gene: Araxxi\_22 Start: 16801, Stop: 16511, Start Num: 6

Candidate Starts for Araxxi 22:

(Start: 6 @16801 has 2 MA's), (9, 16783), (11, 16777), (21, 16687), (24, 16639), (25, 16627), (26, 16570), (28, 16552),

Gene: Baudelaire\_72 Start: 46824, Stop: 47111, Start Num: 8

Candidate Starts for Baudelaire 72:

(Start: 8 @ 46824 has 2 MA's), (16, 46863), (20, 46896), (27, 47061),

Gene: Bernardo\_85 Start: 62136, Stop: 61870, Start Num: 18

Candidate Starts for Bernardo 85:

(2, 62325), (3, 62301), (4, 62292), (Start: 7 @62202 has 4 MA's), (10, 62181), (14, 62166), (Start: 18 @62136 has 1 MA's), (20, 62118), (24, 62019), (30, 61893),

Gene: DoTi\_22 Start: 16882, Stop: 16592, Start Num: 6

Candidate Starts for DoTi\_22:

(Start: 6 @16882 has 2 MA's), (9, 16864), (11, 16858), (21, 16768), (24, 16720), (25, 16708), (28, 16633),

Gene: Gadjet 85 Start: 62385, Stop: 62053, Start Num: 7

Candidate Starts for Gadjet\_85:

(2, 62508), (3, 62484), (4, 62475), (Start: 7 @ 62385 has 4 MA's), (10, 62364), (14, 62349), (Start: 18 @ 62319 has 1 MA's), (20, 62301), (24, 62202), (29, 62085), (30, 62076),

Gene: PauloDiaboli\_342 Start: 173467, Stop: 173805, Start Num: 7

Candidate Starts for PauloDiaboli 342:

(Start: 7 @ 173467 has 4 MA's), (10, 173488), (14, 173503), (15, 173512), (17, 173518), (19, 173545), (23, 173626), (26, 173719), (27, 173725), (31, 173776),

Gene: Pipefish\_86 Start: 63131, Stop: 62799, Start Num: 7

Candidate Starts for Pipefish\_86:

(2, 63254), (3, 63230), (4, 63221), (Start: 7 @63131 has 4 MA's), (10, 63110), (14, 63095), (Start: 18 @63065 has 1 MA's), (20, 63047), (24, 62948), (29, 62831), (30, 62822),

Gene: Serenabean 74 Start: 47658, Stop: 47942, Start Num: 12

Candidate Starts for Serenabean 74:

(1, 47508), (5, 47562), (12, 47658), (17, 47685), (22, 47793),