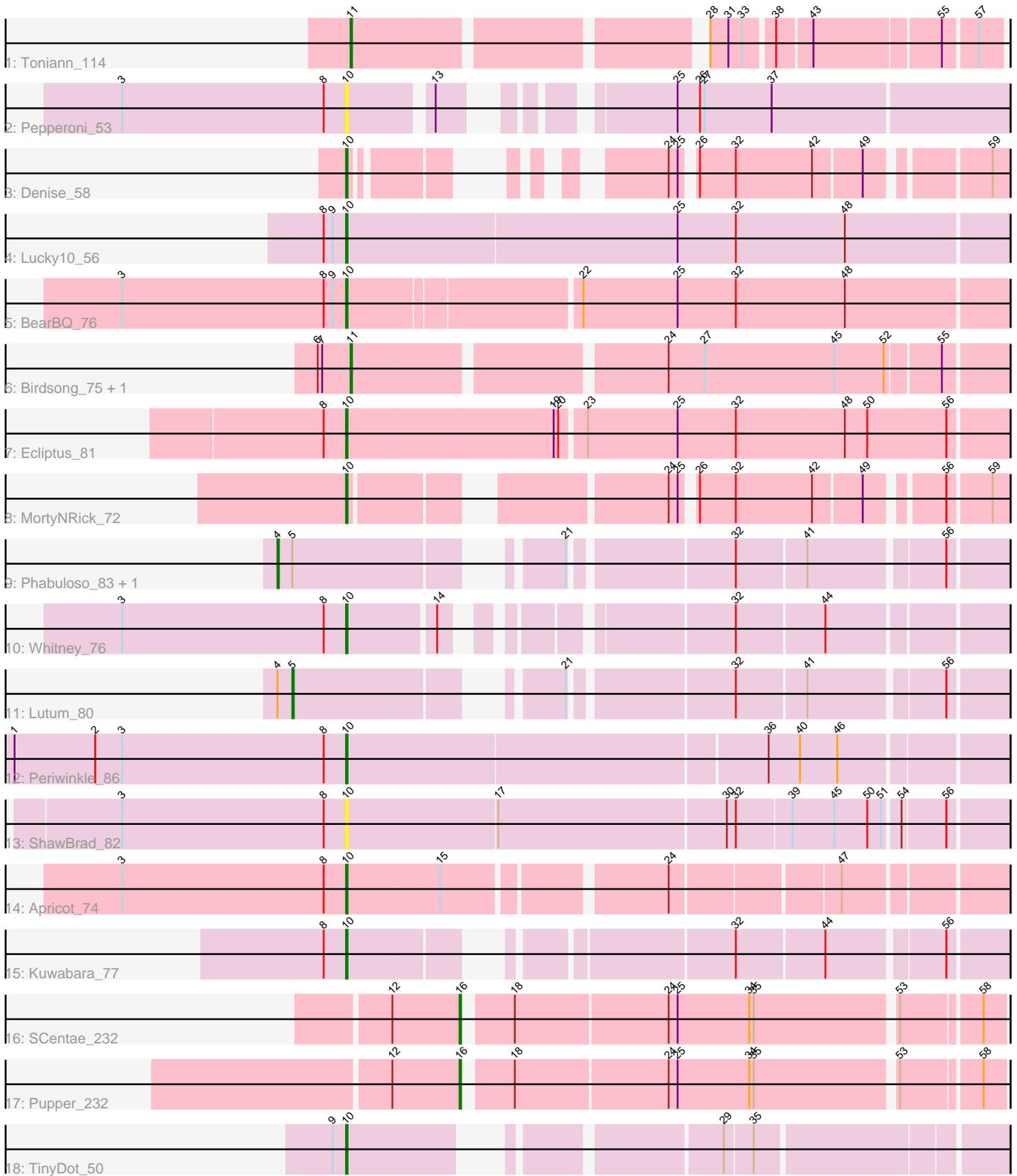


Pham 284207



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 284207 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284207 has 20 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Toniann\_114
- Track 2 : Pepperoni\_53
- Track 3 : Denise\_58
- Track 4 : Lucky10\_56
- Track 5 : BearBQ\_76
- Track 6 : Birdsong\_75, Asapag\_76
- Track 7 : Ecliptus\_81
- Track 8 : MortyNRick\_72
- Track 9 : Phabuloso\_83, CheeseTouch\_83
- Track 10 : Whitney\_76
- Track 11 : Lutum\_80
- Track 12 : Periwinkle\_86
- Track 13 : ShawBrad\_82
- Track 14 : Apricot\_74
- Track 15 : Kuwabara\_77
- Track 16 : SCentae\_232
- Track 17 : Pupper\_232
- Track 18 : TinyDot\_50

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

The start number called the most often in the published annotations is 10, it was called in 10 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_74, BearBQ\_76, Denise\_58, Ecliptus\_81, Kuwabara\_77, Lucky10\_56, MortyNRick\_72, Pepperoni\_53, Periwinkle\_86, ShawBrad\_82, TinyDot\_50, Whitney\_76,

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

- 

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

- Asapag\_76, Birdsong\_75, CheeseTouch\_83, Lutum\_80, Phabuloso\_83, Pupper\_232, SCentae\_232, Toniann\_114,

### Summary by start number:

#### Start 4:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 66.7% of time when present
- Phage (with cluster) where this start called: CheeseTouch\_83 (DN1), Phabuloso\_83 (DN1),

#### Start 5:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Lutum\_80 (DN1),

#### Start 10:

- Found in 12 of 20 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 10 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_74 (DN3), BearBQ\_76 (DN), Denise\_58 (CZ5), Ecliptus\_81 (DN), Kuwabara\_77 (DN4), Lucky10\_56 (DH), MortyNRick\_72 (DN), Pepperoni\_53 (CZ), Periwinkle\_86 (DN1), ShawBrad\_82 (DN1), TinyDot\_50 (singleton), Whitney\_76 (DN1),

#### Start 11:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 3 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asapag\_76 (DN1), Birdsong\_75 (DN), Toniann\_114 (CQ1),

#### Start 16:

- Found in 2 of 20 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pupper\_232 (DO), SCentae\_232 (DO),

### Summary by clusters:

There are 10 clusters represented in this pham: DN, DO, singleton, DH, CZ, CZ5, DN4, DN1, DN3, CQ1,

Info for manual annotations of cluster CQ1:

- Start number 11 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CZ5:

- Start number 10 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster DH:

- Start number 10 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 10 was manually annotated 3 times for cluster DN.
- Start number 11 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 4 was manually annotated 2 times for cluster DN1.
- Start number 5 was manually annotated 1 time for cluster DN1.
- Start number 10 was manually annotated 2 times for cluster DN1.
- Start number 11 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 10 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 10 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DO:

- Start number 16 was manually annotated 2 times for cluster DO.

### ***Gene Information:***

Gene: Apricot\_74 Start: 43240, Stop: 43638, Start Num: 10

Candidate Starts for Apricot\_74:

(3, 43090), (8, 43225), (Start: 10 @43240 has 10 MA's), (15, 43300), (24, 43435), (47, 43540),

Gene: Asapag\_76 Start: 44092, Stop: 44502, Start Num: 11

Candidate Starts for Asapag\_76:

(6, 44074), (7, 44077), (Start: 11 @44092 has 3 MA's), (24, 44284), (27, 44308), (45, 44395), (52, 44428), (55, 44461),

Gene: BearBQ\_76 Start: 45954, Stop: 46376, Start Num: 10

Candidate Starts for BearBQ\_76:

(3, 45804), (8, 45939), (9, 45945), (Start: 10 @45954 has 10 MA's), (22, 46098), (25, 46161), (32, 46200), (48, 46272),

Gene: Birdsong\_75 Start: 43828, Stop: 44238, Start Num: 11

Candidate Starts for Birdsong\_75:

(6, 43810), (7, 43813), (Start: 11 @43828 has 3 MA's), (24, 44020), (27, 44044), (45, 44131), (52, 44164), (55, 44197),

Gene: CheeseTouch\_83 Start: 41580, Stop: 41996, Start Num: 4

Candidate Starts for CheeseTouch\_83:

(Start: 4 @41580 has 2 MA's), (Start: 5 @41589 has 1 MA's), (21, 41730), (32, 41829), (41, 41874), (56, 41958),

Gene: Denise\_58 Start: 36910, Stop: 37233, Start Num: 10

Candidate Starts for Denise\_58:

(Start: 10 @36910 has 10 MA's), (24, 37036), (25, 37042), (26, 37048), (32, 37072), (42, 37123), (49, 37153), (59, 37222),

Gene: Ecliptus\_81 Start: 46577, Stop: 47005, Start Num: 10

Candidate Starts for Ecliptus\_81:

(8, 46562), (Start: 10 @46577 has 10 MA's), (19, 46712), (20, 46715), (23, 46730), (25, 46790), (32, 46829), (48, 46901), (50, 46916), (56, 46967),

Gene: Kuwabara\_77 Start: 45958, Stop: 46332, Start Num: 10

Candidate Starts for Kuwabara\_77:

(8, 45943), (Start: 10 @45958 has 10 MA's), (32, 46165), (44, 46222), (56, 46294),

Gene: Lucky10\_56 Start: 36216, Stop: 36647, Start Num: 10

Candidate Starts for Lucky10\_56:

(8, 36201), (9, 36207), (Start: 10 @36216 has 10 MA's), (25, 36432), (32, 36471), (48, 36543),

Gene: Lutum\_80 Start: 45247, Stop: 45654, Start Num: 5

Candidate Starts for Lutum\_80:

(Start: 4 @45238 has 2 MA's), (Start: 5 @45247 has 1 MA's), (21, 45388), (32, 45487), (41, 45532), (56, 45616),

Gene: MortyNRick\_72 Start: 45215, Stop: 45589, Start Num: 10

Candidate Starts for MortyNRick\_72:

(Start: 10 @45215 has 10 MA's), (24, 45392), (25, 45398), (26, 45404), (32, 45428), (42, 45479), (49, 45509), (56, 45551), (59, 45578),

Gene: Pepperoni\_53 Start: 34740, Stop: 35117, Start Num: 10

Candidate Starts for Pepperoni\_53:

(3, 34590), (8, 34725), (Start: 10 @34740 has 10 MA's), (13, 34788), (25, 34899), (26, 34914), (27, 34917), (37, 34962),

Gene: Periwinkle\_86 Start: 47025, Stop: 47444, Start Num: 10

Candidate Starts for Periwinkle\_86:

(1, 46803), (2, 46857), (3, 46875), (8, 47010), (Start: 10 @47025 has 10 MA's), (36, 47295), (40, 47316), (46, 47340),

Gene: Phabuloso\_83 Start: 45995, Stop: 46411, Start Num: 4

Candidate Starts for Phabuloso\_83:

(Start: 4 @45995 has 2 MA's), (Start: 5 @46004 has 1 MA's), (21, 46145), (32, 46244), (41, 46289), (56, 46373),

Gene: Pupper\_232 Start: 149879, Stop: 150214, Start Num: 16

Candidate Starts for Pupper\_232:

(12, 149834), (Start: 16 @149879 has 2 MA's), (18, 149906), (24, 150005), (25, 150011), (34, 150059), (35, 150062), (53, 150152), (58, 150200),

Gene: SCentae\_232 Start: 150365, Stop: 150700, Start Num: 16

Candidate Starts for SCentae\_232:

(12, 150320), (Start: 16 @150365 has 2 MA's), (18, 150392), (24, 150491), (25, 150497), (34, 150545), (35, 150548), (53, 150638), (58, 150686),

Gene: ShawBrad\_82 Start: 44564, Stop: 44983, Start Num: 10

Candidate Starts for ShawBrad\_82:

(3, 44414), (8, 44549), (Start: 10 @44564 has 10 MA's), (17, 44660), (30, 44810), (32, 44816), (39, 44852), (45, 44879), (50, 44900), (51, 44909), (54, 44918), (56, 44945),

Gene: TinyDot\_50 Start: 32374, Stop: 32745, Start Num: 10

Candidate Starts for TinyDot\_50:

(9, 32365), (Start: 10 @32374 has 10 MA's), (29, 32572), (35, 32590),

Gene: Toniann\_114 Start: 66005, Stop: 66385, Start Num: 11

Candidate Starts for Toniann\_114:

(Start: 11 @66005 has 3 MA's), (28, 66212), (31, 66224), (33, 66233), (38, 66251), (43, 66272), (55, 66350), (57, 66371),

Gene: Whitney\_76 Start: 45790, Stop: 46164, Start Num: 10

Candidate Starts for Whitney\_76:

(3, 45640), (8, 45775), (Start: 10 @45790 has 10 MA's), (14, 45844), (32, 45997), (44, 46054),