# Pham 123146

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2: Archis_69 + 2					
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4: ZiggyZoo_68		6		N6	
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5: Cashline_64					
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6: Floral_67 + 2			n n	› <sub>ኇ፝</sub> ፝፠	40
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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 123146 Report

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

Pham number 123146 has 19 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Wisp 67, Obliviate 65
- Track 2 : Archis 69, Malachai 67, Begonia 67
- Track 3 : UmaThurman\_68
- Track 4 : ZiggyZoo\_68
- Track 5 : Cashline\_64
  Track 6 : Floral\_67, Pollux\_69, EdnaMode\_59
- Track 7 : Bradissa 62
- Track 8 : Hyzer 76
- Track 9 : Vasanti 61
- Track 10 : Clown 70
- Track 11 : DumpsterDude 65
- Track 12 : Malibo 68
- Track 13 : Ruthy\_65
- Track 14 : TinyDot\_54

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

The start number called the most often in the published annotations is 23, it was called in 8 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Archis\_69, Begonia\_67, Hyzer\_76, Malachai\_67, Malibo\_68, Obliviate\_65, UmaThurman\_68, Vasanti\_61, Wisp\_67, ZiggyZoo\_68,

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

Genes that do not have the "Most Annotated" start: Bradissa\_62, Cashline\_64, Clown\_70, DumpsterDude\_65, EdnaMode\_59, Floral\_67, Pollux\_69, Ruthy\_65, TinyDot\_54,

## Summary by start number:

Start 20:

- Found in 5 of 19 (26.3%) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Bradissa\_62 (CY1), Cashline\_64 (CY), EdnaMode 59 (CZ2), Floral 67 (CY1), Pollux 69 (CY1),

#### Start 21:

- Found in 1 of 19 (5.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_70 (DC2),

#### Start 22:

- Found in 1 of 19 (5.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TinyDot\_54 (singleton),

#### Start 23:

- Found in 10 of 19 (52.6%) of genes in pham
- Manual Annotation's of this start: 8 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Archis\_69 (CV), Begonia\_67 (CV), Hyzer\_76 (CZ1), Malachai\_67 (CV), Malibo\_68 (DW), Obliviate\_65 (CV),

UmaThurman\_68 (CV), Vasanti\_61 (CZ2), Wisp\_67 (CV), ZiggyZoo\_68 (CV),

Start 24:

- Found in 2 of 19 (10.5%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present

• Phage (with cluster) where this start called: DumpsterDude\_65 (DW), Ruthy\_65 (DW),

#### Summary by clusters:

There are 8 clusters represented in this pham: CY1, CZ2, CZ1, singleton, CY, DW, DC2, CV,

Info for manual annotations of cluster CV: •Start number 23 was manually annotated 6 times for cluster CV.

Info for manual annotations of cluster CY: •Start number 20 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CY1: •Start number 20 was manually annotated 3 times for cluster CY1.

Info for manual annotations of cluster CZ2: •Start number 23 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DC2: •Start number 21 was manually annotated 1 time for cluster DC2. Info for manual annotations of cluster DW:Start number 23 was manually annotated 1 time for cluster DW.Start number 24 was manually annotated 2 times for cluster DW.

#### Gene Information:

Gene: Archis\_69 Start: 41921, Stop: 42187, Start Num: 23 Candidate Starts for Archis\_69: (5, 41693), (10, 41729), (18, 41861), (Start: 23 @41921 has 8 MA's), (28, 41972), (34, 42059), (36, 42068),

Gene: Begonia\_67 Start: 45214, Stop: 45483, Start Num: 23 Candidate Starts for Begonia\_67: (5, 44986), (10, 45022), (18, 45154), (Start: 23 @45214 has 8 MA's), (28, 45265), (34, 45352), (36, 45361),

Gene: Bradissa\_62 Start: 45039, Stop: 45371, Start Num: 20 Candidate Starts for Bradissa\_62: (Start: 20 @45039 has 4 MA's), (28, 45102), (33, 45186), (34, 45189), (35, 45195), (40, 45327),

Gene: Cashline\_64 Start: 45838, Stop: 46170, Start Num: 20 Candidate Starts for Cashline\_64: (15, 45757), (Start: 20 @45838 has 4 MA's), (34, 45988), (35, 45994), (40, 46126),

Gene: Clown\_70 Start: 48323, Stop: 48616, Start Num: 21 Candidate Starts for Clown\_70: (7, 48101), (8, 48104), (14, 48200), (Start: 21 @48323 has 1 MA's), (26, 48350), (27, 48362), (29, 48392), (34, 48476),

Gene: DumpsterDude\_65 Start: 48344, Stop: 48607, Start Num: 24 Candidate Starts for DumpsterDude\_65: (9, 48143), (13, 48206), (17, 48263), (Start: 24 @48344 has 2 MA's), (34, 48476), (38, 48581),

Gene: EdnaMode\_59 Start: 39827, Stop: 40159, Start Num: 20 Candidate Starts for EdnaMode\_59: (15, 39746), (Start: 20 @39827 has 4 MA's), (28, 39890), (34, 39977), (35, 39983), (40, 40115),

Gene: Floral\_67 Start: 46996, Stop: 47328, Start Num: 20 Candidate Starts for Floral\_67: (15, 46915), (Start: 20 @46996 has 4 MA's), (28, 47059), (34, 47146), (35, 47152), (40, 47284),

Gene: Hyzer\_76 Start: 50995, Stop: 51294, Start Num: 23 Candidate Starts for Hyzer\_76: (11, 50821), (12, 50833), (Start: 23 @50995 has 8 MA's), (32, 51118), (34, 51139),

Gene: Malachai\_67 Start: 45214, Stop: 45483, Start Num: 23 Candidate Starts for Malachai\_67: (5, 44986), (10, 45022), (18, 45154), (Start: 23 @45214 has 8 MA's), (28, 45265), (34, 45352), (36, 45361), Gene: Malibo 68 Start: 45756, Stop: 46043, Start Num: 23 Candidate Starts for Malibo\_68: (1, 45306), (2, 45321), (3, 45327), (4, 45474), (11, 45582), (12, 45594), (Start: 23 @45756 has 8 MA's), (34, 45900), (37, 45918), (39, 46014), Gene: Obliviate 65 Start: 41567, Stop: 41860, Start Num: 23 Candidate Starts for Obliviate\_65: (5, 41339), (10, 41375), (18, 41507), (19, 41513), (Start: 23 @41567 has 8 MA's), (28, 41618), (34, 41705), Gene: Pollux 69 Start: 46996, Stop: 47328, Start Num: 20 Candidate Starts for Pollux 69: (15, 46915), (Start: 20 @46996 has 4 MA's), (28, 47059), (34, 47146), (35, 47152), (40, 47284), Gene: Ruthy\_65 Start: 46522, Stop: 46785, Start Num: 24 Candidate Starts for Ruthy\_65: (9, 46321), (13, 46384), (17, 46441), (Start: 24 @46522 has 2 MA's), (34, 46654), Gene: TinyDot 54 Start: 34255, Stop: 34533, Start Num: 22 Candidate Starts for TinyDot\_54: (16, 34180), (22, 34255), (25, 34270), (30, 34321), (31, 34363), (34, 34390), (35, 34396), Gene: UmaThurman 68 Start: 43634, Stop: 43903, Start Num: 23 Candidate Starts for UmaThurman\_68: (Start: 23 @43634 has 8 MA's), (34, 43772), (36, 43781), Gene: Vasanti\_61 Start: 41346, Stop: 41621, Start Num: 23 Candidate Starts for Vasanti 61: (11, 41172), (12, 41184), (Start: 23 @41346 has 8 MA's), (34, 41490), Gene: Wisp\_67 Start: 43332, Stop: 43601, Start Num: 23 Candidate Starts for Wisp 67: (5, 43104), (10, 43140), (18, 43272), (19, 43278), (Start: 23 @43332 has 8 MA's), (28, 43383), (34, 43470), Gene: ZiggyZoo\_68 Start: 44385, Stop: 44651, Start Num: 23

Gene: ZiggyZoo\_68 Start: 44385, Stop: 44651, Start Num: 23 Candidate Starts for ZiggyZoo\_68: (5, 44157), (6, 44160), (10, 44193), (18, 44325), (Start: 23 @44385 has 8 MA's), (28, 44436), (34, 44523), (36, 44532),