



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 296998 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296998 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Eyeball\_86
- Track 2 : ConceptII\_93, Sunshine924\_88, Anglerfish\_89
- Track 3 : Payneful\_73, NEHalo\_82, Rajelicia\_86, Ohno789\_89
- Track 4 : Frog hopper\_72, GMonster\_82
- Track 5 : CactusRose\_90, Paphu\_81, HarryOW\_85
- Track 6 : Gandalf20\_84
- Track 7 : Sorpresa\_85
- Track 8 : Topgun\_82, Wilkins\_83
- Track 9 : Puppet\_81
- Track 10 : MilleFeuille\_81

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

The start number called the most often in the published annotations is 1, it was called in 16 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anglerfish\_89, CactusRose\_90, ConceptII\_93, Eyeball\_86, Frog hopper\_72, GMonster\_82, HarryOW\_85, NEHalo\_82, Ohno789\_89, Paphu\_81, Payneful\_73, Rajelicia\_86, Sorpresa\_85, Sunshine924\_88, Topgun\_82, Wilkins\_83,

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

- Gandalf20\_84, MilleFeuille\_81,

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

- Puppet\_81,

### **Summary by start number:**

Start 1:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 16 of 17
- Called 88.9% of time when present

- Phage (with cluster) where this start called: Anglerfish\_89 (A1), CactusRose\_90 (A1), ConceptII\_93 (A1), Eyeball\_86 (A1), Froghopper\_72 (A1), GMonster\_82 (A1), HarryOW\_85 (A1), NEHalo\_82 (A1), Ohno789\_89 (A1), Paphu\_81 (A1), Payneful\_73 (A1), Rajelicia\_86 (A1), Sorpresa\_85 (A1), Sunshine924\_88 (A1), Topgun\_82 (A1), Wilkins\_83 (A1),

Start 2:

- Found in 19 of 19 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 15.8% of time when present
- Phage (with cluster) where this start called: Gandalf20\_84 (A1), MilleFeuille\_81 (A1), Puppet\_81 (A1),

### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 16 times for cluster A1.
- Start number 2 was manually annotated 1 time for cluster A1.

### Gene Information:

Gene: Anglerfish\_89 Start: 50429, Stop: 50283, Start Num: 1

Candidate Starts for Anglerfish\_89:

(Start: 1 @50429 has 16 MA's), (Start: 2 @50402 has 1 MA's), (3, 50381), (4, 50375), (5, 50318),

Gene: CactusRose\_90 Start: 49994, Stop: 49821, Start Num: 1

Candidate Starts for CactusRose\_90:

(Start: 1 @49994 has 16 MA's), (Start: 2 @49967 has 1 MA's), (3, 49946), (4, 49940), (6, 49850), (7, 49829),

Gene: ConceptII\_93 Start: 51306, Stop: 51157, Start Num: 1

Candidate Starts for ConceptII\_93:

(Start: 1 @51306 has 16 MA's), (Start: 2 @51279 has 1 MA's), (3, 51258), (4, 51252), (5, 51189),

Gene: Eyeball\_86 Start: 49179, Stop: 49030, Start Num: 1

Candidate Starts for Eyeball\_86:

(Start: 1 @49179 has 16 MA's), (Start: 2 @49152 has 1 MA's), (4, 49125), (5, 49062),

Gene: Froghopper\_72 Start: 45039, Stop: 44884, Start Num: 1

Candidate Starts for Froghopper\_72:

(Start: 1 @45039 has 16 MA's), (Start: 2 @45012 has 1 MA's), (4, 44985),

Gene: GMonster\_82 Start: 48312, Stop: 48157, Start Num: 1

Candidate Starts for GMonster\_82:

(Start: 1 @48312 has 16 MA's), (Start: 2 @48285 has 1 MA's), (4, 48258),

Gene: Gandalf20\_84 Start: 48924, Stop: 48802, Start Num: 2

Candidate Starts for Gandalf20\_84:

(Start: 1 @48951 has 16 MA's), (Start: 2 @48924 has 1 MA's), (4, 48897), (5, 48834),

Gene: HarryOW\_85 Start: 50108, Stop: 49935, Start Num: 1  
Candidate Starts for HarryOW\_85:  
(Start: 1 @50108 has 16 MA's), (Start: 2 @50081 has 1 MA's), (3, 50060), (4, 50054), (6, 49964), (7, 49943),

Gene: MilleFeuille\_81 Start: 48034, Stop: 47906, Start Num: 2  
Candidate Starts for MilleFeuille\_81:  
(Start: 1 @48061 has 16 MA's), (Start: 2 @48034 has 1 MA's), (3, 48013), (4, 48007), (5, 47944),

Gene: NEHalo\_82 Start: 48188, Stop: 48015, Start Num: 1  
Candidate Starts for NEHalo\_82:  
(Start: 1 @48188 has 16 MA's), (Start: 2 @48161 has 1 MA's), (4, 48134), (6, 48044), (7, 48023),

Gene: Ohno789\_89 Start: 50417, Stop: 50244, Start Num: 1  
Candidate Starts for Ohno789\_89:  
(Start: 1 @50417 has 16 MA's), (Start: 2 @50390 has 1 MA's), (4, 50363), (6, 50273), (7, 50252),

Gene: Paphu\_81 Start: 47874, Stop: 47701, Start Num: 1  
Candidate Starts for Paphu\_81:  
(Start: 1 @47874 has 16 MA's), (Start: 2 @47847 has 1 MA's), (3, 47826), (4, 47820), (6, 47730), (7, 47709),

Gene: Payneful\_73 Start: 45129, Stop: 44956, Start Num: 1  
Candidate Starts for Payneful\_73:  
(Start: 1 @45129 has 16 MA's), (Start: 2 @45102 has 1 MA's), (4, 45075), (6, 44985), (7, 44964),

Gene: Puppet\_81 Start: 49576, Stop: 49454, Start Num: 2  
Candidate Starts for Puppet\_81:  
(Start: 2 @49576 has 1 MA's), (4, 49549), (5, 49486),

Gene: Rajelicia\_86 Start: 51261, Stop: 51088, Start Num: 1  
Candidate Starts for Rajelicia\_86:  
(Start: 1 @51261 has 16 MA's), (Start: 2 @51234 has 1 MA's), (4, 51207), (6, 51117), (7, 51096),

Gene: Sorpresa\_85 Start: 49585, Stop: 49409, Start Num: 1  
Candidate Starts for Sorpresa\_85:  
(Start: 1 @49585 has 16 MA's), (Start: 2 @49558 has 1 MA's), (4, 49531), (6, 49441),

Gene: Sunshine924\_88 Start: 48484, Stop: 48335, Start Num: 1  
Candidate Starts for Sunshine924\_88:  
(Start: 1 @48484 has 16 MA's), (Start: 2 @48457 has 1 MA's), (3, 48436), (4, 48430), (5, 48367),

Gene: Topgun\_82 Start: 47338, Stop: 47189, Start Num: 1  
Candidate Starts for Topgun\_82:  
(Start: 1 @47338 has 16 MA's), (Start: 2 @47311 has 1 MA's), (5, 47221),

Gene: Wilkins\_83 Start: 47268, Stop: 47119, Start Num: 1  
Candidate Starts for Wilkins\_83:  
(Start: 1 @47268 has 16 MA's), (Start: 2 @47241 has 1 MA's), (5, 47151),