

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 106774 Report

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

Pham number 106774 has 13 members, 3 are drafts.

Phages represented in each track:

• Track 1: Zainub 77

• Track 2 : Superstar 73

• Track 3 : R4\_70

Track 4 : Daudau\_67

• Track 5 : Omar\_71

• Track 6 : Haizum\_66, Tefunt\_66, Nishikigoi\_67

Track 7: BartholomewSD\_72, Alvy\_72

• Track 8 : Amethyst\_66

Track 9 : Diane\_67Track 10 : Puginator 78

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

The start number called the most often in the published annotations is 9, it was called in 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alvy\_72, Amethyst\_66, BartholomewSD\_72, Diane\_67, Haizum\_66, Nishikigoi\_67, Omar\_71, Puginator\_78, Superstar\_73, Tefunt\_66, Zainub\_77,

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

Daudau\_67,

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

• R4\_70,

# Summary by start number:

### Start 8:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: R4\_70 (BD2),

#### Start 9:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotation's of this start: 8 of 10
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Alvy\_72 (BD2), Amethyst\_66 (BD2), BartholomewSD\_72 (BD2), Diane\_67 (BD2), Haizum\_66 (BD2), Nishikigoi\_67 (BD2), Omar\_71 (BD2), Puginator\_78 (BD2), Superstar\_73 (BD2), Tefunt\_66 (BD2), Zainub\_77 (BD2),

### Start 12:

- Found in 5 of 13 (38.5%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Daudau\_67 (BD2),

## Summary by clusters:

There is one cluster represented in this pham: BD2

Info for manual annotations of cluster BD2:

- •Start number 8 was manually annotated 1 time for cluster BD2.
- •Start number 9 was manually annotated 8 times for cluster BD2.
- •Start number 12 was manually annotated 1 time for cluster BD2.

#### Gene Information:

Gene: Alvy\_72 Start: 46532, Stop: 46098, Start Num: 9

Candidate Starts for Alvy 72:

(6, 46631), (Start: 9 @46532 has 8 MA's), (11, 46511), (26, 46106),

Gene: Amethyst 66 Start: 43542, Stop: 43123, Start Num: 9

Candidate Starts for Amethyst 66:

(6, 43659), (Start: 9 @43542 has 8 MA's), (15, 43449), (25, 43131),

Gene: BartholomewSD\_72 Start: 45651, Stop: 45217, Start Num: 9

Candidate Starts for BartholomewSD 72:

(6, 45750), (Start: 9 @ 45651 has 8 MA's), (11, 45630), (26, 45225),

Gene: Daudau 67 Start: 44035, Stop: 43643, Start Num: 12

Candidate Starts for Daudau 67:

(1, 44479), (2, 44470), (3, 44458), (Start: 9 @44074 has 8 MA's), (11, 44047), (Start: 12 @44035 has 1 MA's), (13, 44020), (15, 43972), (16, 43969), (21, 43912), (25, 43651),

Gene: Diane\_67 Start: 44627, Stop: 44208, Start Num: 9

Candidate Starts for Diane 67:

(6, 44744), (Start: 9 @44627 has 8 MA's), (Start: 12 @44597 has 1 MA's), (15, 44534), (25, 44216),

Gene: Haizum 66 Start: 44350, Stop: 43937, Start Num: 9

Candidate Starts for Haizum 66:

(Start: 9 @44350 has 8 MA's), (Start: 12 @44320 has 1 MA's), (15, 44257), (25, 43945),

Gene: Nishikigoi\_67 Start: 44350, Stop: 43937, Start Num: 9

Candidate Starts for Nishikigoi\_67:

(Start: 9 @44350 has 8 MA's), (Start: 12 @44320 has 1 MA's), (15, 44257), (25, 43945),

Gene: Omar\_71 Start: 43283, Stop: 42861, Start Num: 9

Candidate Starts for Omar 71:

(7, 43343), (Start: 9 @ 43283 has 8 MA's), (15, 43190), (20, 43139),

Gene: Puginator\_78 Start: 45243, Stop: 44818, Start Num: 9

Candidate Starts for Puginator\_78:

(7, 45303), (Start: 9 @ 45243 has 8 MA's), (15, 45150), (25, 44829),

Gene: R4\_70 Start: 45075, Stop: 44656, Start Num: 8

Candidate Starts for R4\_70:

(6, 45189), (Start: 8 @ 45075 has 1 MA's), (11, 45051), (14, 45006), (15, 44976), (17, 44955), (18, 44952), (19, 44946), (22, 44907), (23, 44868), (25, 44670),

Gene: Superstar\_73 Start: 44533, Stop: 44114, Start Num: 9

Candidate Starts for Superstar 73:

(4, 44878), (5, 44635), (Start: 9 @44533 has 8 MA's), (10, 44524), (11, 44512), (16, 44434), (24, 44209), (25, 44122),

Gene: Tefunt\_66 Start: 44264, Stop: 43851, Start Num: 9

Candidate Starts for Tefunt\_66:

(Start: 9 @44264 has 8 MA's), (Start: 12 @44234 has 1 MA's), (15, 44171), (25, 43859),

Gene: Zainub\_77 Start: 45170, Stop: 44745, Start Num: 9

Candidate Starts for Zainub 77:

(Start: 9 @ 45170 has 8 MA's), (15, 45077), (25, 44756),