

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 86811 Report

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

Pham number 86811 has 21 members, 3 are drafts.

Phages represented in each track:

- Track 1: Triumph 78
- Track 2 : BartholomewSD\_80, Alvy\_80
- Track 3: Thestral\_77, Bowden\_75, TrvxScott\_74, TinaBelcher\_75
- Track 4 : Paolo\_78, Zainub\_83
- Track 5 : Haizum 74, Nishikigoi 75
- Track 6 : Puginator\_83
- Track 7 : Omar 77
- Track 8 : Andris 76
- Track 9 : Daudau 74
- Track 10 : Diane 73
- Track 11 : Tefunt 74
- Track 12 : Caelum 78
- Track 13 : Issmi 73
- Track 14 : GreenWeasel\_73
- Track 15 : BroPlease 71

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

The start number called the most often in the published annotations is 3, it was called in 6 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alvy\_80, BartholomewSD\_80, Bowden\_75, Paolo\_78, Thestral\_77, TinaBelcher\_75, TrvxScott\_74, Zainub\_83,

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

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

• Andris\_76, BroPlease\_71, Caelum\_78, Daudau\_74, Diane\_73, GreenWeasel\_73, Haizum\_74, Issmi\_73, Nishikigoi\_75, Omar\_77, Puginator\_83, Tefunt\_74, Triumph\_78,

## Summary by start number:

#### Start 1:

- Found in 2 of 21 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Daudau\_74 (BD2),

### Start 3:

- Found in 8 of 21 (38.1%) of genes in pham
- Manual Annotations of this start: 6 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alvy\_80 (BD2), BartholomewSD\_80 (BD2), Bowden\_75 (BD2), Paolo\_78 (BD2), Thestral\_77 (BD2), TinaBelcher\_75 (BD2), TrvxScott\_74 (BD2), Zainub\_83 (BD2),

#### Start 4:

- Found in 1 of 21 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puginator\_83 (BD2),

#### Start 6:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Diane\_73 (BD2),

### Start 8:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caelum 78 (BD2),

## Start 12:

- Found in 4 of 21 (19.0%) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andris\_76 (BD2), BroPlease\_71 (BD4), GreenWeasel\_73 (BD4), Triumph\_78 (BD2),

### Start 13:

- Found in 16 of 21 (76.2%) of genes in pham
- Manual Annotations of this start: 5 of 18
- Called 31.2% of time when present
- Phage (with cluster) where this start called: Haizum\_74 (BD2), Issmi\_73 (BD2), Nishikigoi\_75 (BD2), Omar\_77 (BD2), Tefunt\_74 (BD2),

## Summary by clusters:

There are 2 clusters represented in this pham: BD4, BD2,

Info for manual annotations of cluster BD2:

•Start number 1 was manually annotated 1 time for cluster BD2.

- •Start number 3 was manually annotated 6 times for cluster BD2.
- •Start number 6 was manually annotated 1 time for cluster BD2.
- •Start number 8 was manually annotated 1 time for cluster BD2.
- •Start number 12 was manually annotated 2 times for cluster BD2.
- •Start number 13 was manually annotated 5 times for cluster BD2.

Info for manual annotations of cluster BD4:

•Start number 12 was manually annotated 2 times for cluster BD4.

### Gene Information:

Gene: Alvy\_80 Start: 48999, Stop: 48628, Start Num: 3

Candidate Starts for Alvy\_80:

(Start: 3 @48999 has 6 MA's), (Start: 13 @48921 has 5 MA's), (18, 48873), (19, 48858), (21, 48798), (26, 48675),

Gene: Andris\_76 Start: 46916, Stop: 46623, Start Num: 12

Candidate Starts for Andris 76:

(7, 46964), (11, 46919), (Start: 12 @ 46916 has 4 MA's), (26, 46667),

Gene: BartholomewSD\_80 Start: 48118, Stop: 47747, Start Num: 3

Candidate Starts for BartholomewSD 80:

(Start: 3 @48118 has 6 MA's), (Start: 13 @48040 has 5 MA's), (18, 47992), (19, 47977), (21, 47917), (26, 47794),

Gene: Bowden\_75 Start: 48692, Stop: 48321, Start Num: 3

Candidate Starts for Bowden\_75:

(Start: 3 @48692 has 6 MA's), (Start: 13 @48614 has 5 MA's), (18, 48566), (19, 48551), (24, 48458), (26, 48368),

Gene: BroPlease 71 Start: 46117, Stop: 45767, Start Num: 12

Candidate Starts for BroPlease 71:

(Start: 1 @46225 has 1 MA's), (Start: 12 @46117 has 4 MA's), (15, 46105), (18, 46063), (19, 46048), (23, 45979), (24, 45955),

Gene: Caelum 78 Start: 47002, Stop: 46661, Start Num: 8

Candidate Starts for Caelum 78:

(Start: 8 @ 47002 has 1 MA's), (Start: 13 @ 46957 has 5 MA's), (18, 46909), (19, 46894),

Gene: Daudau\_74 Start: 46498, Stop: 46091, Start Num: 1

Candidate Starts for Daudau 74:

(Start: 1 @46498 has 1 MA's), (5, 46444), (Start: 13 @46390 has 5 MA's), (18, 46342), (19, 46327), (26, 46138),

Gene: Diane\_73 Start: 46788, Stop: 46444, Start Num: 6

Candidate Starts for Diane 73:

(Start: 6 @ 46788 has 1 MA's), (11, 46740), (15, 46728), (21, 46614), (22, 46608),

Gene: GreenWeasel\_73 Start: 46118, Stop: 45768, Start Num: 12

Candidate Starts for GreenWeasel 73:

(2, 46223), (Start: 12 @46118 has 4 MA's), (15, 46106), (18, 46064), (19, 46049), (23, 45980), (24, 45956).

Gene: Haizum\_74 Start: 46973, Stop: 46674, Start Num: 13

Candidate Starts for Haizum\_74:

(Start: 13 @46973 has 5 MA's), (18, 46925), (19, 46910), (21, 46850), (22, 46844), (26, 46721),

Gene: Issmi 73 Start: 46671, Stop: 46375, Start Num: 13

Candidate Starts for Issmi\_73:

(Start: 13 @46671 has 5 MA's), (18, 46623), (19, 46608), (20, 46596), (25, 46425),

Gene: Nishikigoi 75 Start: 46973, Stop: 46674, Start Num: 13

Candidate Starts for Nishikigoi\_75:

(Start: 13 @ 46973 has 5 MA's), (18, 46925), (19, 46910), (21, 46850), (22, 46844), (26, 46721),

Gene: Omar\_77 Start: 45438, Stop: 45142, Start Num: 13

Candidate Starts for Omar 77:

(Start: 13 @45438 has 5 MA's), (16, 45423), (18, 45390), (19, 45375), (24, 45282),

Gene: Paolo\_78 Start: 47215, Stop: 46853, Start Num: 3

Candidate Starts for Paolo 78:

(Start: 3 @47215 has 6 MA's), (9, 47182), (10, 47173), (Start: 13 @47146 has 5 MA's), (18, 47098), (19, 47083), (22, 47017), (26, 46900),

Gene: Puginator\_83 Start: 47286, Stop: 46927, Start Num: 4

Candidate Starts for Puginator\_83:

(4, 47286), (Start: 13 @47220 has 5 MA's), (14, 47217), (18, 47172), (19, 47157), (22, 47091), (23, 47088), (26, 46974),

Gene: Tefunt\_74 Start: 46887, Stop: 46588, Start Num: 13

Candidate Starts for Tefunt\_74:

(Start: 13 @46887 has 5 MA's), (17, 46845), (18, 46839), (19, 46824), (21, 46764), (22, 46758), (26, 46635),

Gene: Thestral\_77 Start: 48719, Stop: 48348, Start Num: 3

Candidate Starts for Thestral 77:

(Start: 3 @48719 has 6 MA's), (Start: 13 @48641 has 5 MA's), (18, 48593), (19, 48578), (24, 48485), (26, 48395),

Gene: TinaBelcher\_75 Start: 48581, Stop: 48210, Start Num: 3

Candidate Starts for TinaBelcher\_75:

(Start: 3 @48581 has 6 MA's), (Start: 13 @48503 has 5 MA's), (18, 48455), (19, 48440), (24, 48347), (26, 48257),

Gene: Triumph 78 Start: 47686, Stop: 47393, Start Num: 12

Candidate Starts for Triumph\_78:

(7, 47734), (Start: 12 @47686 has 4 MA's), (26, 47437),

Gene: TrvxScott\_74 Start: 48686, Stop: 48315, Start Num: 3

Candidate Starts for TrvxScott 74:

(Start: 3 @48686 has 6 MA's), (Start: 13 @48608 has 5 MA's), (18, 48560), (19, 48545), (24, 48452), (26, 48362),

Gene: Zainub\_83 Start: 47395, Stop: 47033, Start Num: 3

Candidate Starts for Zainub\_83:

(Start: 3 @47395 has 6 MA's), (9, 47362), (10, 47353), (Start: 13 @47326 has 5 MA's), (18, 47278),

(19, 47263), (22, 47197), (26, 47080),