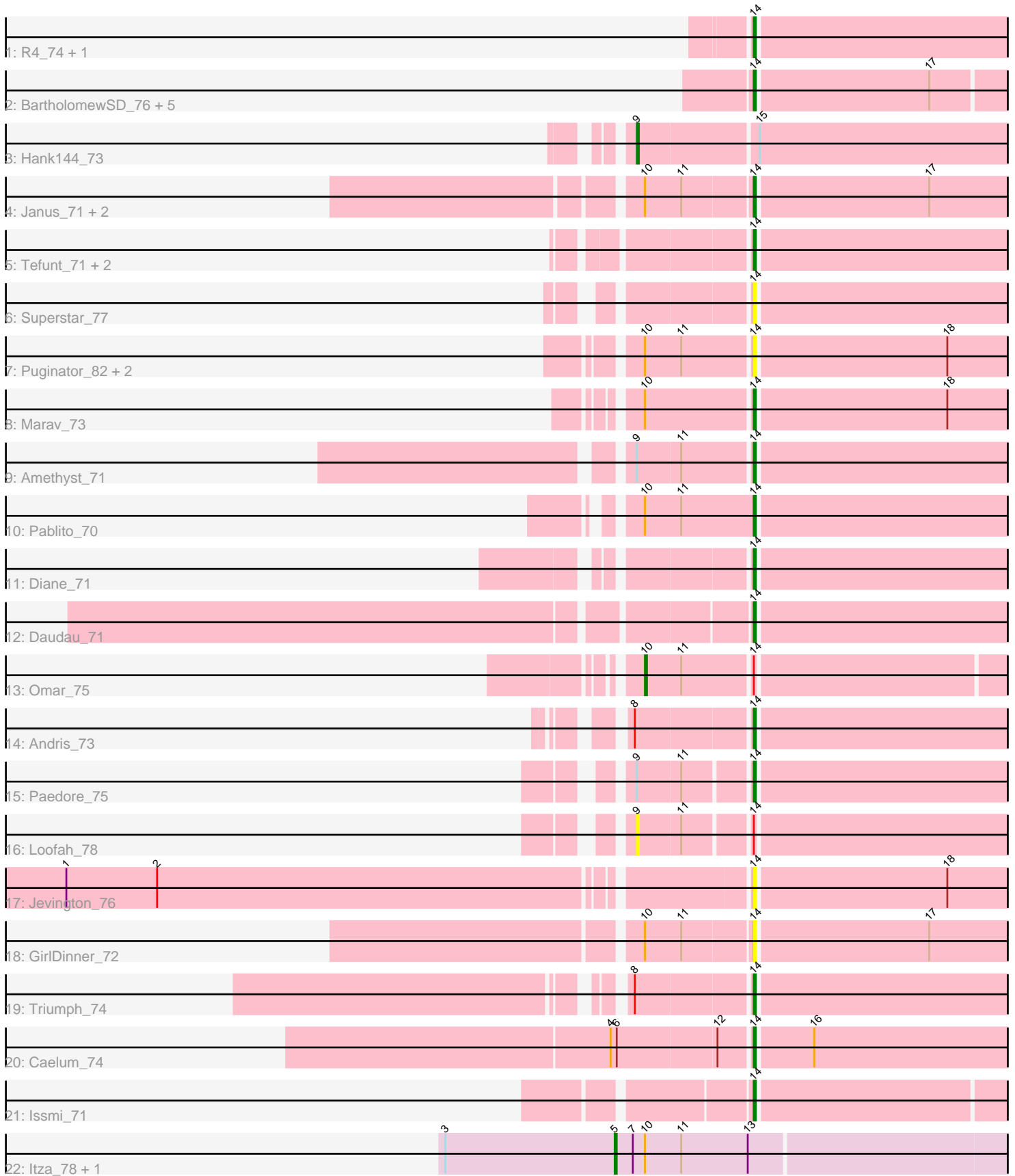


Pham 158048



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 158048 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158048 has 35 members, 7 are drafts.

Phages represented in each track:

- Track 1 : R4\_74, ELB20\_72
- Track 2 : BartholomewSD\_76, TrvxScott\_70, TinaBelcher\_71, Alvy\_76, Thestral\_73, Bowden\_71
- Track 3 : Hank144\_73
- Track 4 : Janus\_71, SqueakyClean\_71, Animus\_70
- Track 5 : Tefunt\_71, Nishikigoi\_72, Haizum\_71
- Track 6 : Superstar\_77
- Track 7 : Puginator\_82, Paolo\_77, Zainub\_81
- Track 8 : Marav\_73
- Track 9 : Amethyst\_71
- Track 10 : Pablito\_70
- Track 11 : Diane\_71
- Track 12 : Daudau\_71
- Track 13 : Omar\_75
- Track 14 : Andris\_73
- Track 15 : Paedore\_75
- Track 16 : Loofah\_78
- Track 17 : Jevington\_76
- Track 18 : GirlDinner\_72
- Track 19 : Triumph\_74
- Track 20 : Caelum\_74
- Track 21 : Issmi\_71
- Track 22 : Itza\_78, Urza\_77

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

The start number called the most often in the published annotations is 14, it was called in 24 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alvy\_76, Amethyst\_71, Andris\_73, Animus\_70, BartholomewSD\_76, Bowden\_71, Caelum\_74, Daudau\_71, Diane\_71, ELB20\_72, GirlDinner\_72, Haizum\_71, Issmi\_71, Janus\_71, Jevington\_76, Marav\_73, Nishikigoi\_72, Pablito\_70, Paedore\_75, Paolo\_77, Puginator\_82, R4\_74, SqueakyClean\_71, Superstar\_77,

Tefunt\_71, Thestral\_73, TinaBelcher\_71, Triumph\_74, TrvxScott\_70, Zainub\_81,

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

- Loofah\_78, Omar\_75,

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

- Hank144\_73, Itza\_78, Urza\_77,

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

Start 5:

- Found in 2 of 35 ( 5.7% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Itza\_78 (BD6), Urza\_77 (BD6),

Start 9:

- Found in 4 of 35 ( 11.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hank144\_73 (BD2), Loofah\_78 (BD2),

Start 10:

- Found in 12 of 35 ( 34.3% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Omar\_75 (BD2),

Start 14:

- Found in 32 of 35 ( 91.4% ) of genes in pham
- Manual Annotations of this start: 24 of 28
- Called 93.8% of time when present
- Phage (with cluster) where this start called: Alvy\_76 (BD2), Amethyst\_71 (BD2), Andris\_73 (BD2), Animus\_70 (BD2), BartholomewSD\_76 (BD2), Bowden\_71 (BD2), Caelum\_74 (BD2), Daudau\_71 (BD2), Diane\_71 (BD2), ELB20\_72 (BD2), GirlDinner\_72 (BD2), Haizum\_71 (BD2), Issmi\_71 (BD2), Janus\_71 (BD2), Jevington\_76 (BD2), Marav\_73 (BD2), Nishikigoi\_72 (BD2), Pablito\_70 (BD2), Paedore\_75 (BD2), Paolo\_77 (BD2), Puginator\_82 (BD2), R4\_74 (BD2), SqueakyClean\_71 (BD2), Superstar\_77 (BD2), Tefunt\_71 (BD2), Thestral\_73 (BD2), TinaBelcher\_71 (BD2), Triumph\_74 (BD2), TrvxScott\_70 (BD2), Zainub\_81 (BD2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BD6, BD2,

Info for manual annotations of cluster BD2:

- Start number 9 was manually annotated 1 time for cluster BD2.
- Start number 10 was manually annotated 1 time for cluster BD2.
- Start number 14 was manually annotated 24 times for cluster BD2.

Info for manual annotations of cluster BD6:

- Start number 5 was manually annotated 2 times for cluster BD6.

**Gene Information:**

Gene: Alvy\_76 Start: 47865, Stop: 47725, Start Num: 14

Candidate Starts for Alvy\_76:

(Start: 14 @47865 has 24 MA's), (17, 47781),

Gene: Amethyst\_71 Start: 45168, Stop: 45028, Start Num: 14

Candidate Starts for Amethyst\_71:

(Start: 9 @45222 has 1 MA's), (11, 45201), (Start: 14 @45168 has 24 MA's),

Gene: Andris\_73 Start: 46065, Stop: 45922, Start Num: 14

Candidate Starts for Andris\_73:

(8, 46119), (Start: 14 @46065 has 24 MA's),

Gene: Animus\_70 Start: 46420, Stop: 46277, Start Num: 14

Candidate Starts for Animus\_70:

(Start: 10 @46471 has 1 MA's), (11, 46453), (Start: 14 @46420 has 24 MA's), (17, 46336),

Gene: BartholomewSD\_76 Start: 46984, Stop: 46844, Start Num: 14

Candidate Starts for BartholomewSD\_76:

(Start: 14 @46984 has 24 MA's), (17, 46900),

Gene: Bowden\_71 Start: 47555, Stop: 47415, Start Num: 14

Candidate Starts for Bowden\_71:

(Start: 14 @47555 has 24 MA's), (17, 47471),

Gene: Caelum\_74 Start: 45822, Stop: 45679, Start Num: 14

Candidate Starts for Caelum\_74:

(4, 45888), (6, 45885), (12, 45837), (Start: 14 @45822 has 24 MA's), (16, 45795),

Gene: Daudau\_71 Start: 45398, Stop: 45255, Start Num: 14

Candidate Starts for Daudau\_71:

(Start: 14 @45398 has 24 MA's),

Gene: Diane\_71 Start: 45983, Stop: 45843, Start Num: 14

Candidate Starts for Diane\_71:

(Start: 14 @45983 has 24 MA's),

Gene: ELB20\_72 Start: 46277, Stop: 46134, Start Num: 14

Candidate Starts for ELB20\_72:

(Start: 14 @46277 has 24 MA's),

Gene: GirlDinner\_72 Start: 45914, Stop: 45771, Start Num: 14

Candidate Starts for GirlDinner\_72:

(Start: 10 @45965 has 1 MA's), (11, 45947), (Start: 14 @45914 has 24 MA's), (17, 45830),

Gene: Haizum\_71 Start: 45979, Stop: 45836, Start Num: 14

Candidate Starts for Haizum\_71:

(Start: 14 @45979 has 24 MA's),

Gene: Hank144\_73 Start: 46558, Stop: 46358, Start Num: 9

Candidate Starts for Hank144\_73:  
(Start: 9 @46558 has 1 MA's), (15, 46501),

Gene: Issmi\_71 Start: 46071, Stop: 45931, Start Num: 14  
Candidate Starts for Issmi\_71:  
(Start: 14 @46071 has 24 MA's),

Gene: Itza\_78 Start: 48438, Stop: 48241, Start Num: 5  
Candidate Starts for Itza\_78:  
(3, 48522), (Start: 5 @48438 has 2 MA's), (7, 48429), (Start: 10 @48423 has 1 MA's), (11, 48405),  
(13, 48372),

Gene: Janus\_71 Start: 46254, Stop: 46111, Start Num: 14  
Candidate Starts for Janus\_71:  
(Start: 10 @46305 has 1 MA's), (11, 46287), (Start: 14 @46254 has 24 MA's), (17, 46170),

Gene: Jevington\_76 Start: 45499, Stop: 45356, Start Num: 14  
Candidate Starts for Jevington\_76:  
(1, 45823), (2, 45778), (Start: 14 @45499 has 24 MA's), (18, 45406),

Gene: Loofah\_78 Start: 47476, Stop: 47282, Start Num: 9  
Candidate Starts for Loofah\_78:  
(Start: 9 @47476 has 1 MA's), (11, 47455), (Start: 14 @47425 has 24 MA's),

Gene: Marav\_73 Start: 45485, Stop: 45342, Start Num: 14  
Candidate Starts for Marav\_73:  
(Start: 10 @45536 has 1 MA's), (Start: 14 @45485 has 24 MA's), (18, 45392),

Gene: Nishikigoi\_72 Start: 45979, Stop: 45836, Start Num: 14  
Candidate Starts for Nishikigoi\_72:  
(Start: 14 @45979 has 24 MA's),

Gene: Omar\_75 Start: 44901, Stop: 44710, Start Num: 10  
Candidate Starts for Omar\_75:  
(Start: 10 @44901 has 1 MA's), (11, 44883), (Start: 14 @44850 has 24 MA's),

Gene: Pablito\_70 Start: 45083, Stop: 44940, Start Num: 14  
Candidate Starts for Pablito\_70:  
(Start: 10 @45137 has 1 MA's), (11, 45119), (Start: 14 @45083 has 24 MA's),

Gene: Paedore\_75 Start: 47594, Stop: 47451, Start Num: 14  
Candidate Starts for Paedore\_75:  
(Start: 9 @47645 has 1 MA's), (11, 47624), (Start: 14 @47594 has 24 MA's),

Gene: Paolo\_77 Start: 46762, Stop: 46619, Start Num: 14  
Candidate Starts for Paolo\_77:  
(Start: 10 @46813 has 1 MA's), (11, 46795), (Start: 14 @46762 has 24 MA's), (18, 46669),

Gene: Puginator\_82 Start: 46810, Stop: 46667, Start Num: 14  
Candidate Starts for Puginator\_82:  
(Start: 10 @46861 has 1 MA's), (11, 46843), (Start: 14 @46810 has 24 MA's), (18, 46717),

Gene: R4\_74 Start: 46437, Stop: 46294, Start Num: 14

Candidate Starts for R4\_74:  
(Start: 14 @46437 has 24 MA's),

Gene: SqueakyClean\_71 Start: 46432, Stop: 46289, Start Num: 14  
Candidate Starts for SqueakyClean\_71:  
(Start: 10 @46483 has 1 MA's), (11, 46465), (Start: 14 @46432 has 24 MA's), (17, 46348),

Gene: Superstar\_77 Start: 45863, Stop: 45720, Start Num: 14  
Candidate Starts for Superstar\_77:  
(Start: 14 @45863 has 24 MA's),

Gene: Tefunt\_71 Start: 45893, Stop: 45750, Start Num: 14  
Candidate Starts for Tefunt\_71:  
(Start: 14 @45893 has 24 MA's),

Gene: Thestral\_73 Start: 47582, Stop: 47442, Start Num: 14  
Candidate Starts for Thestral\_73:  
(Start: 14 @47582 has 24 MA's), (17, 47498),

Gene: TinaBelcher\_71 Start: 47444, Stop: 47304, Start Num: 14  
Candidate Starts for TinaBelcher\_71:  
(Start: 14 @47444 has 24 MA's), (17, 47360),

Gene: Triumph\_74 Start: 46553, Stop: 46410, Start Num: 14  
Candidate Starts for Triumph\_74:  
(8, 46607), (Start: 14 @46553 has 24 MA's),

Gene: TrvxScott\_70 Start: 47549, Stop: 47409, Start Num: 14  
Candidate Starts for TrvxScott\_70:  
(Start: 14 @47549 has 24 MA's), (17, 47465),

Gene: Urza\_77 Start: 48460, Stop: 48263, Start Num: 5  
Candidate Starts for Urza\_77:  
(3, 48544), (Start: 5 @48460 has 2 MA's), (7, 48451), (Start: 10 @48445 has 1 MA's), (11, 48427),  
(13, 48394),

Gene: Zainub\_81 Start: 46736, Stop: 46593, Start Num: 14  
Candidate Starts for Zainub\_81:  
(Start: 10 @46787 has 1 MA's), (11, 46769), (Start: 14 @46736 has 24 MA's), (18, 46643),