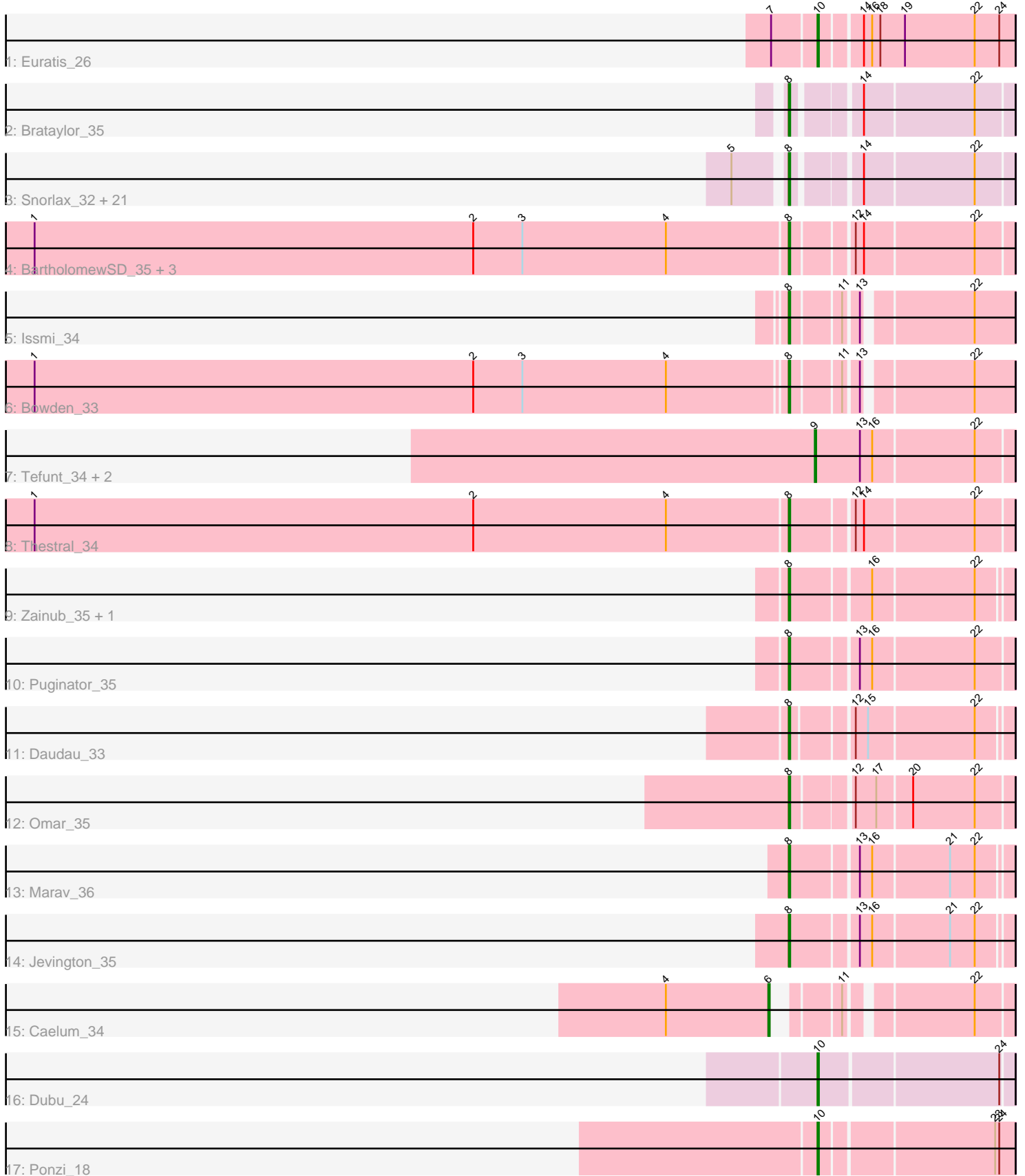


Pham 301504



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 301504 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301504 has 44 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Euratis\_26
- Track 2 : Brataylor\_35
- Track 3 : Snorlax\_32, Werner\_32, Dwayne\_32, Dattran\_34, Zemlya\_34, Chucky\_32, Whatever\_32, BarryBee\_35, Celeste\_33, OzzyJ\_33, Emaanora\_35, Maneekul\_32, TagePhighter\_34, Lorelei\_33, Asten\_32, Nabi\_33, Danzina\_34, SarahRose\_32, Rana\_33, Triste\_32, Hippo\_32, Yasdnil\_32
- Track 4 : BartholomewSD\_35, Alvy\_35, TrvxScott\_32, TinaBelcher\_33
- Track 5 : Issmi\_34
- Track 6 : Bowden\_33
- Track 7 : Tefunt\_34, Nishikigoi\_34, Haizum\_34
- Track 8 : Thestral\_34
- Track 9 : Zainub\_35, Paolo\_35
- Track 10 : Puginator\_35
- Track 11 : Daudau\_33
- Track 12 : Omar\_35
- Track 13 : Marav\_36
- Track 14 : Jevington\_35
- Track 15 : Caelum\_34
- Track 16 : Dubu\_24
- Track 17 : Ponzi\_18

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

The start number called the most often in the published annotations is 8, it was called in 37 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alvy\_35, Asten\_32, BarryBee\_35, BartholomewSD\_35, Bowden\_33, Brataylor\_35, Celeste\_33, Chucky\_32, Danzina\_34, Dattran\_34, Daudau\_33, Dwayne\_32, Emaanora\_35, Hippo\_32, Issmi\_34, Jevington\_35, Lorelei\_33, Maneekul\_32, Marav\_36, Nabi\_33, Omar\_35, OzzyJ\_33, Paolo\_35, Puginator\_35, Rana\_33, SarahRose\_32, Snorlax\_32, TagePhighter\_34, Thestral\_34, TinaBelcher\_33, Triste\_32, TrvxScott\_32, Werner\_32, Whatever\_32, Yasdnil\_32, Zainub\_35, Zemlya\_34,

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

- 

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

- Caelum\_34, Dubu\_24, Euratis\_26, Haizum\_34, Nishikigoi\_34, Ponzi\_18, Tefunt\_34,

### Summary by start number:

Start 6:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caelum\_34 (BD2),

Start 8:

- Found in 37 of 44 ( 84.1% ) of genes in pham
- Manual Annotations of this start: 37 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alvy\_35 (BD2), Asten\_32 (BD1), BarryBee\_35 (BD1), BartholomewSD\_35 (BD2), Bowden\_33 (BD2), Brataylor\_35 (BD1), Celeste\_33 (BD1), Chucky\_32 (BD1), Danzina\_34 (BD1), Dattran\_34 (BD1), Daudau\_33 (BD2), Dwayne\_32 (BD1), Emaanora\_35 (BD1), Hippo\_32 (BD1), Issmi\_34 (BD2), Jevington\_35 (BD2), Lorelei\_33 (BD1), Maneekul\_32 (BD1), Marav\_36 (BD2), Nabi\_33 (BD1), Omar\_35 (BD2), OzzyJ\_33 (BD1), Paolo\_35 (BD2), Puginator\_35 (BD2), Rana\_33 (BD1), SarahRose\_32 (BD1), Snorlax\_32 (BD1), TagePighter\_34 (BD1), Thestral\_34 (BD2), TinaBelcher\_33 (BD2), Triste\_32 (BD1), TrvxScott\_32 (BD2), Werner\_32 (BD1), Whatever\_32 (BD1), Yasdniil\_32 (BD1), Zainub\_35 (BD2), Zemlya\_34 (BD1),

Start 9:

- Found in 3 of 44 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Haizum\_34 (BD2), Nishikigoi\_34 (BD2), Tefunt\_34 (BD2),

Start 10:

- Found in 3 of 44 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dubu\_24 (BJ), Euratis\_26 (BB1), Ponzi\_18 (singleton),

### Summary by clusters:

There are 5 clusters represented in this pham: singleton, BD1, BB1, BJ, BD2,

Info for manual annotations of cluster BB1:

- Start number 10 was manually annotated 1 time for cluster BB1.

Info for manual annotations of cluster BD1:

- Start number 8 was manually annotated 23 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 6 was manually annotated 1 time for cluster BD2.
- Start number 8 was manually annotated 14 times for cluster BD2.
- Start number 9 was manually annotated 3 times for cluster BD2.

Info for manual annotations of cluster BJ:

- Start number 10 was manually annotated 1 time for cluster BJ.

**Gene Information:**

Gene: Alvy\_35 Start: 26324, Stop: 26473, Start Num: 8

Candidate Starts for Alvy\_35:

(1, 25775), (2, 26096), (3, 26132), (4, 26237), (Start: 8 @26324 has 37 MA's), (12, 26363), (14, 26369), (22, 26447),

Gene: Asten\_32 Start: 25363, Stop: 25509, Start Num: 8

Candidate Starts for Asten\_32:

(5, 25330), (Start: 8 @25363 has 37 MA's), (14, 25405), (22, 25483),

Gene: BarryBee\_35 Start: 25373, Stop: 25519, Start Num: 8

Candidate Starts for BarryBee\_35:

(5, 25340), (Start: 8 @25373 has 37 MA's), (14, 25415), (22, 25493),

Gene: BartholomewSD\_35 Start: 26324, Stop: 26473, Start Num: 8

Candidate Starts for BartholomewSD\_35:

(1, 25775), (2, 26096), (3, 26132), (4, 26237), (Start: 8 @26324 has 37 MA's), (12, 26363), (14, 26369), (22, 26447),

Gene: Bowden\_33 Start: 26236, Stop: 26379, Start Num: 8

Candidate Starts for Bowden\_33:

(1, 25690), (2, 26011), (3, 26047), (4, 26152), (Start: 8 @26236 has 37 MA's), (11, 26269), (13, 26278), (22, 26350),

Gene: Brataylor\_35 Start: 26337, Stop: 26483, Start Num: 8

Candidate Starts for Brataylor\_35:

(Start: 8 @26337 has 37 MA's), (14, 26379), (22, 26457),

Gene: Caelum\_34 Start: 25951, Stop: 26091, Start Num: 6

Candidate Starts for Caelum\_34:

(4, 25876), (Start: 6 @25951 has 1 MA's), (11, 25984), (22, 26065),

Gene: Celeste\_33 Start: 25806, Stop: 25952, Start Num: 8

Candidate Starts for Celeste\_33:

(5, 25773), (Start: 8 @25806 has 37 MA's), (14, 25848), (22, 25926),

Gene: Chucky\_32 Start: 25377, Stop: 25523, Start Num: 8

Candidate Starts for Chucky\_32:

(5, 25344), (Start: 8 @25377 has 37 MA's), (14, 25419), (22, 25497),

Gene: Danzina\_34 Start: 26107, Stop: 26253, Start Num: 8

Candidate Starts for Danzina\_34:  
(5, 26074), (Start: 8 @26107 has 37 MA's), (14, 26149), (22, 26227),

Gene: Dattran\_34 Start: 25913, Stop: 26059, Start Num: 8  
Candidate Starts for Dattran\_34:  
(5, 25880), (Start: 8 @25913 has 37 MA's), (14, 25955), (22, 26033),

Gene: Daudau\_33 Start: 26067, Stop: 26213, Start Num: 8  
Candidate Starts for Daudau\_33:  
(Start: 8 @26067 has 37 MA's), (12, 26106), (15, 26115), (22, 26190),

Gene: Dubu\_24 Start: 20714, Stop: 20848, Start Num: 10  
Candidate Starts for Dubu\_24:  
(Start: 10 @20714 has 3 MA's), (24, 20840),

Gene: Dwayne\_32 Start: 25364, Stop: 25510, Start Num: 8  
Candidate Starts for Dwayne\_32:  
(5, 25331), (Start: 8 @25364 has 37 MA's), (14, 25406), (22, 25484),

Gene: Emaanora\_35 Start: 25322, Stop: 25468, Start Num: 8  
Candidate Starts for Emaanora\_35:  
(5, 25289), (Start: 8 @25322 has 37 MA's), (14, 25364), (22, 25442),

Gene: Euratis\_26 Start: 21061, Stop: 21198, Start Num: 10  
Candidate Starts for Euratis\_26:  
(7, 21031), (Start: 10 @21061 has 3 MA's), (14, 21088), (16, 21094), (18, 21100), (19, 21118), (22, 21169), (24, 21187),

Gene: Haizum\_34 Start: 26029, Stop: 26169, Start Num: 9  
Candidate Starts for Haizum\_34:  
(Start: 9 @26029 has 3 MA's), (13, 26062), (16, 26071), (22, 26143),

Gene: Hippo\_32 Start: 25373, Stop: 25519, Start Num: 8  
Candidate Starts for Hippo\_32:  
(5, 25340), (Start: 8 @25373 has 37 MA's), (14, 25415), (22, 25493),

Gene: Issmi\_34 Start: 26654, Stop: 26797, Start Num: 8  
Candidate Starts for Issmi\_34:  
(Start: 8 @26654 has 37 MA's), (11, 26687), (13, 26696), (22, 26768),

Gene: Jevington\_35 Start: 26437, Stop: 26586, Start Num: 8  
Candidate Starts for Jevington\_35:  
(Start: 8 @26437 has 37 MA's), (13, 26482), (16, 26491), (21, 26545), (22, 26563),

Gene: Lorelei\_33 Start: 25869, Stop: 26015, Start Num: 8  
Candidate Starts for Lorelei\_33:  
(5, 25836), (Start: 8 @25869 has 37 MA's), (14, 25911), (22, 25989),

Gene: Maneekul\_32 Start: 25394, Stop: 25540, Start Num: 8  
Candidate Starts for Maneekul\_32:  
(5, 25361), (Start: 8 @25394 has 37 MA's), (14, 25436), (22, 25514),

Gene: Marav\_36 Start: 26761, Stop: 26910, Start Num: 8

Candidate Starts for Marav\_36:

(Start: 8 @26761 has 37 MA's), (13, 26806), (16, 26815), (21, 26869), (22, 26887),

Gene: Nabi\_33 Start: 25869, Stop: 26015, Start Num: 8

Candidate Starts for Nabi\_33:

(5, 25836), (Start: 8 @25869 has 37 MA's), (14, 25911), (22, 25989),

Gene: Nishikigoi\_34 Start: 26029, Stop: 26169, Start Num: 9

Candidate Starts for Nishikigoi\_34:

(Start: 9 @26029 has 3 MA's), (13, 26062), (16, 26071), (22, 26143),

Gene: Omar\_35 Start: 26267, Stop: 26416, Start Num: 8

Candidate Starts for Omar\_35:

(Start: 8 @26267 has 37 MA's), (12, 26306), (17, 26321), (20, 26345), (22, 26390),

Gene: OzzyJ\_33 Start: 25364, Stop: 25510, Start Num: 8

Candidate Starts for OzzyJ\_33:

(5, 25331), (Start: 8 @25364 has 37 MA's), (14, 25406), (22, 25484),

Gene: Paolo\_35 Start: 26603, Stop: 26752, Start Num: 8

Candidate Starts for Paolo\_35:

(Start: 8 @26603 has 37 MA's), (16, 26657), (22, 26729),

Gene: Ponzi\_18 Start: 10418, Stop: 10284, Start Num: 10

Candidate Starts for Ponzi\_18:

(Start: 10 @10418 has 3 MA's), (23, 10298), (24, 10295),

Gene: Puginator\_35 Start: 26621, Stop: 26773, Start Num: 8

Candidate Starts for Puginator\_35:

(Start: 8 @26621 has 37 MA's), (13, 26666), (16, 26675), (22, 26747),

Gene: Rana\_33 Start: 25869, Stop: 26015, Start Num: 8

Candidate Starts for Rana\_33:

(5, 25836), (Start: 8 @25869 has 37 MA's), (14, 25911), (22, 25989),

Gene: SarahRose\_32 Start: 25373, Stop: 25519, Start Num: 8

Candidate Starts for SarahRose\_32:

(5, 25340), (Start: 8 @25373 has 37 MA's), (14, 25415), (22, 25493),

Gene: Snorlax\_32 Start: 25376, Stop: 25522, Start Num: 8

Candidate Starts for Snorlax\_32:

(5, 25343), (Start: 8 @25376 has 37 MA's), (14, 25418), (22, 25496),

Gene: TagePighther\_34 Start: 25376, Stop: 25522, Start Num: 8

Candidate Starts for TagePighther\_34:

(5, 25343), (Start: 8 @25376 has 37 MA's), (14, 25418), (22, 25496),

Gene: Tefunt\_34 Start: 26032, Stop: 26172, Start Num: 9

Candidate Starts for Tefunt\_34:

(Start: 9 @26032 has 3 MA's), (13, 26065), (16, 26074), (22, 26146),

Gene: Thestral\_34 Start: 26225, Stop: 26377, Start Num: 8

Candidate Starts for Thestral\_34:

(1, 25676), (2, 25997), (4, 26138), (Start: 8 @26225 has 37 MA's), (12, 26267), (14, 26273), (22, 26351),

Gene: TinaBelcher\_33 Start: 26172, Stop: 26324, Start Num: 8

Candidate Starts for TinaBelcher\_33:

(1, 25623), (2, 25944), (3, 25980), (4, 26085), (Start: 8 @26172 has 37 MA's), (12, 26214), (14, 26220), (22, 26298),

Gene: Triste\_32 Start: 25364, Stop: 25510, Start Num: 8

Candidate Starts for Triste\_32:

(5, 25331), (Start: 8 @25364 has 37 MA's), (14, 25406), (22, 25484),

Gene: TrvxScott\_32 Start: 26218, Stop: 26370, Start Num: 8

Candidate Starts for TrvxScott\_32:

(1, 25669), (2, 25990), (3, 26026), (4, 26131), (Start: 8 @26218 has 37 MA's), (12, 26260), (14, 26266), (22, 26344),

Gene: Werner\_32 Start: 25374, Stop: 25520, Start Num: 8

Candidate Starts for Werner\_32:

(5, 25341), (Start: 8 @25374 has 37 MA's), (14, 25416), (22, 25494),

Gene: Whatever\_32 Start: 25374, Stop: 25520, Start Num: 8

Candidate Starts for Whatever\_32:

(5, 25341), (Start: 8 @25374 has 37 MA's), (14, 25416), (22, 25494),

Gene: Yasdnii\_32 Start: 25422, Stop: 25568, Start Num: 8

Candidate Starts for Yasdnii\_32:

(5, 25389), (Start: 8 @25422 has 37 MA's), (14, 25464), (22, 25542),

Gene: Zainub\_35 Start: 26564, Stop: 26713, Start Num: 8

Candidate Starts for Zainub\_35:

(Start: 8 @26564 has 37 MA's), (16, 26618), (22, 26690),

Gene: Zemlya\_34 Start: 25913, Stop: 26059, Start Num: 8

Candidate Starts for Zemlya\_34:

(5, 25880), (Start: 8 @25913 has 37 MA's), (14, 25955), (22, 26033),