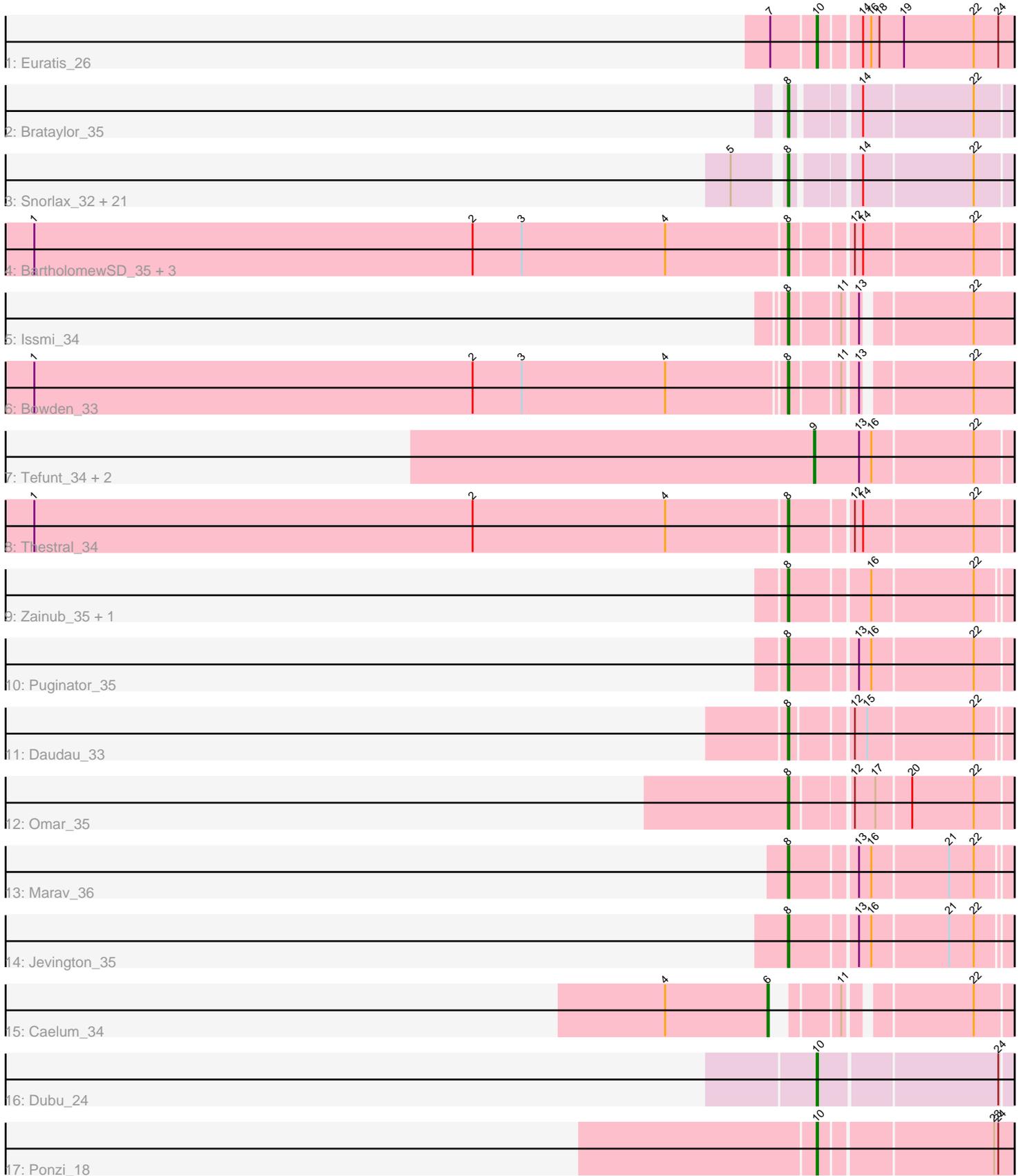# Pham 282294

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 282294 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282294 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), TagePhighter_34 (BD1), Thestral_34 (BD2), TinaBelcher_33 (BD2), Triste_32 (BD1), TrvxScott_32 (BD2), Werner_32 (BD1), Whatever_32 (BD1), Yasdnil_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: TagePhighter_34 Start: 25376, Stop: 25522, Start Num: 8
Candidate Starts for TagePhighter_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: Yasdnil_32 Start: 25422, Stop: 25568, Start Num: 8
Candidate Starts for Yasdnil_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),