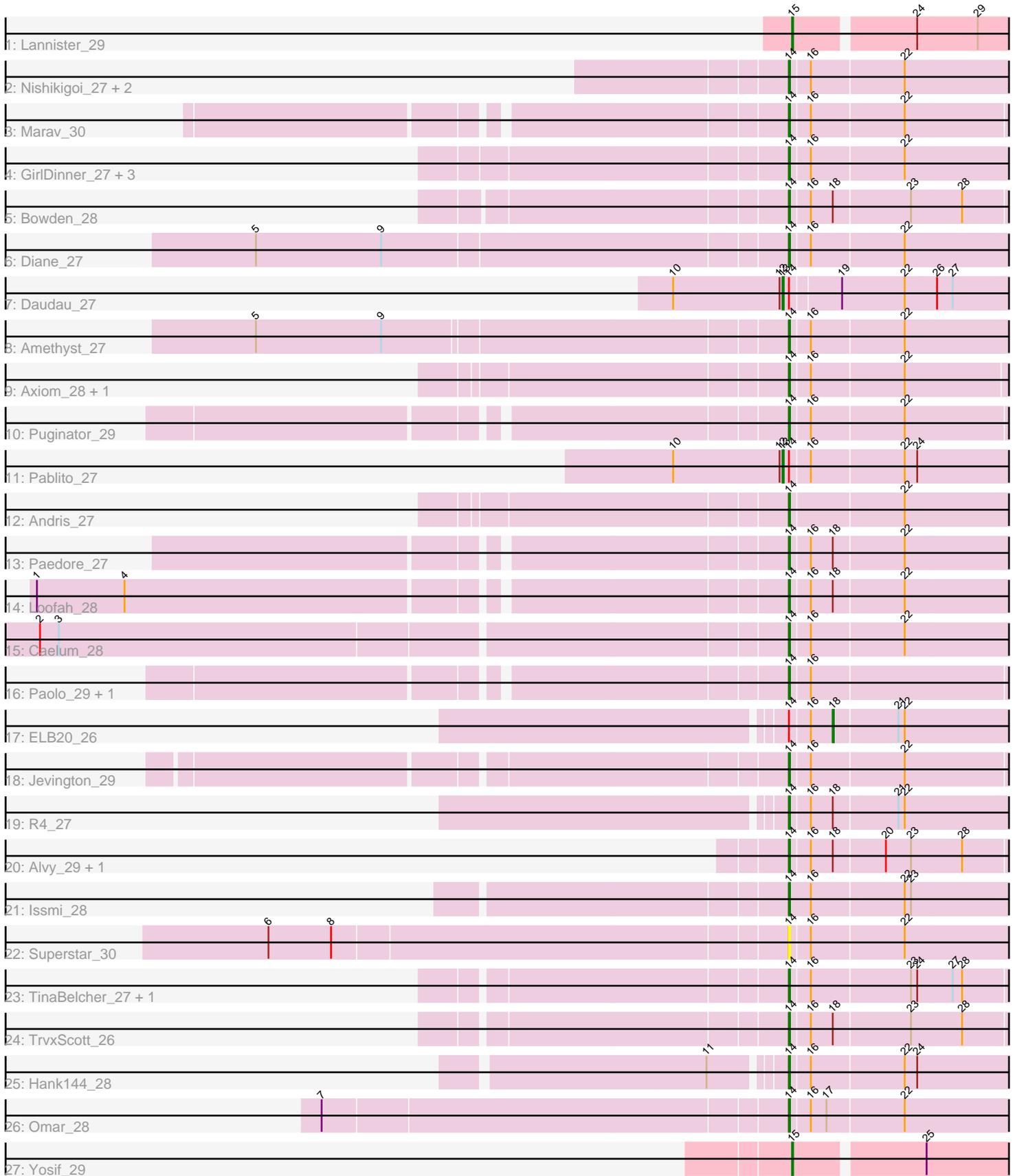


Pham 291346



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 291346 Report

This analysis was run 03/28/26 on database version 641.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 291346 has 36 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Lannister\_29
- Track 2 : Nishikigoi\_27, Haizum\_27, Tefunt\_27
- Track 3 : Marav\_30
- Track 4 : GirlDinner\_27, SqueakyClean\_28, Janus\_28, Animus\_28
- Track 5 : Bowden\_28
- Track 6 : Diane\_27
- Track 7 : Daudau\_27
- Track 8 : Amethyst\_27
- Track 9 : Axiom\_28, Triumph\_29
- Track 10 : Puginator\_29
- Track 11 : Pablito\_27
- Track 12 : Andris\_27
- Track 13 : Paedore\_27
- Track 14 : Loofah\_28
- Track 15 : Caelum\_28
- Track 16 : Paolo\_29, Zainub\_29
- Track 17 : ELB20\_26
- Track 18 : Jevington\_29
- Track 19 : R4\_27
- Track 20 : Alvy\_29, BartholomewSD\_29
- Track 21 : Issmi\_28
- Track 22 : Superstar\_30
- Track 23 : TinaBelcher\_27, Thestral\_28
- Track 24 : TrvxScott\_26
- Track 25 : Hank144\_28
- Track 26 : Omar\_28
- Track 27 : Yosif\_29

***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 30 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alvy\_29, Amethyst\_27, Andris\_27, Animus\_28, Axiom\_28, BartholomewSD\_29, Bowden\_28, Caelum\_28, Diane\_27, GirlDinner\_27, Haizum\_27, Hank144\_28, Issmi\_28, Janus\_28, Jevington\_29, Loofah\_28, Marav\_30, Nishikigoi\_27, Omar\_28, Paedore\_27, Paolo\_29, Puginator\_29, R4\_27, SqueakyClean\_28, Superstar\_30, Tefunt\_27, Thestral\_28, TinaBelcher\_27, Triumph\_29, TrvxScott\_26, Zainub\_29,

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

- Daudau\_27, ELB20\_26, Pablito\_27,

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

- Lannister\_29, Yosif\_29,

### Summary by start number:

Start 13:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daudau\_27 (BD2), Pablito\_27 (BD2),

Start 14:

- Found in 34 of 36 ( 94.4% ) of genes in pham
- Manual Annotations of this start: 30 of 35
- Called 91.2% of time when present
- Phage (with cluster) where this start called: Alvy\_29 (BD2), Amethyst\_27 (BD2), Andris\_27 (BD2), Animus\_28 (BD2), Axiom\_28 (BD2), BartholomewSD\_29 (BD2), Bowden\_28 (BD2), Caelum\_28 (BD2), Diane\_27 (BD2), GirlDinner\_27 (BD2), Haizum\_27 (BD2), Hank144\_28 (BD2), Issmi\_28 (BD2), Janus\_28 (BD2), Jevington\_29 (BD2), Loofah\_28 (BD2), Marav\_30 (BD2), Nishikigoi\_27 (BD2), Omar\_28 (BD2), Paedore\_27 (BD2), Paolo\_29 (BD2), Puginator\_29 (BD2), R4\_27 (BD2), SqueakyClean\_28 (BD2), Superstar\_30 (BD2), Tefunt\_27 (BD2), Thestral\_28 (BD2), TinaBelcher\_27 (BD2), Triumph\_29 (BD2), TrvxScott\_26 (BD2), Zainub\_29 (BD2),

Start 15:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lannister\_29 (BD1), Yosif\_29 (BD3),

Start 18:

- Found in 8 of 36 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 12.5% of time when present
- Phage (with cluster) where this start called: ELB20\_26 (BD2),

### Summary by clusters:

There are 3 clusters represented in this pham: BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 15 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 13 was manually annotated 2 times for cluster BD2.
- Start number 14 was manually annotated 30 times for cluster BD2.
- Start number 18 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 15 was manually annotated 1 time for cluster BD3.

### ***Gene Information:***

Gene: Alvy\_29 Start: 22860, Stop: 23069, Start Num: 14

Candidate Starts for Alvy\_29:

(Start: 14 @22860 has 30 MA's), (16, 22878), (Start: 18 @22899 has 1 MA's), (20, 22947), (23, 22971), (28, 23019),

Gene: Amethyst\_27 Start: 22528, Stop: 22740, Start Num: 14

Candidate Starts for Amethyst\_27:

(5, 22036), (9, 22156), (Start: 14 @22528 has 30 MA's), (16, 22546), (22, 22633),

Gene: Andris\_27 Start: 22516, Stop: 22728, Start Num: 14

Candidate Starts for Andris\_27:

(Start: 14 @22516 has 30 MA's), (22, 22621),

Gene: Animus\_28 Start: 22858, Stop: 23064, Start Num: 14

Candidate Starts for Animus\_28:

(Start: 14 @22858 has 30 MA's), (16, 22876), (22, 22963),

Gene: Axiom\_28 Start: 22683, Stop: 22886, Start Num: 14

Candidate Starts for Axiom\_28:

(Start: 14 @22683 has 30 MA's), (16, 22701), (22, 22788),

Gene: BartholomewSD\_29 Start: 22860, Stop: 23069, Start Num: 14

Candidate Starts for BartholomewSD\_29:

(Start: 14 @22860 has 30 MA's), (16, 22878), (Start: 18 @22899 has 1 MA's), (20, 22947), (23, 22971), (28, 23019),

Gene: Bowden\_28 Start: 22785, Stop: 22994, Start Num: 14

Candidate Starts for Bowden\_28:

(Start: 14 @22785 has 30 MA's), (16, 22803), (Start: 18 @22824 has 1 MA's), (23, 22896), (28, 22944),

Gene: Caelum\_28 Start: 22499, Stop: 22711, Start Num: 14

Candidate Starts for Caelum\_28:

(2, 21806), (3, 21824), (Start: 14 @22499 has 30 MA's), (16, 22517), (22, 22604),

Gene: Daudau\_27 Start: 22524, Stop: 22754, Start Num: 13

Candidate Starts for Daudau\_27:

(10, 22419), (12, 22521), (Start: 13 @22524 has 2 MA's), (Start: 14 @22530 has 30 MA's), (19, 22575), (22, 22635), (26, 22665), (27, 22680),

Gene: Diane\_27 Start: 22864, Stop: 23076, Start Num: 14

Candidate Starts for Diane\_27:

(5, 22369), (9, 22489), (Start: 14 @22864 has 30 MA's), (16, 22882), (22, 22969),

Gene: ELB20\_26 Start: 22980, Stop: 23153, Start Num: 18

Candidate Starts for ELB20\_26:

(Start: 14 @22941 has 30 MA's), (16, 22959), (Start: 18 @22980 has 1 MA's), (21, 23040), (22, 23046),

Gene: GirlDinner\_27 Start: 22520, Stop: 22726, Start Num: 14

Candidate Starts for GirlDinner\_27:

(Start: 14 @22520 has 30 MA's), (16, 22538), (22, 22625),

Gene: Haizum\_27 Start: 22538, Stop: 22750, Start Num: 14

Candidate Starts for Haizum\_27:

(Start: 14 @22538 has 30 MA's), (16, 22556), (22, 22643),

Gene: Hank144\_28 Start: 22954, Stop: 23166, Start Num: 14

Candidate Starts for Hank144\_28:

(11, 22891), (Start: 14 @22954 has 30 MA's), (16, 22972), (22, 23059), (24, 23071),

Gene: Issmi\_28 Start: 23141, Stop: 23353, Start Num: 14

Candidate Starts for Issmi\_28:

(Start: 14 @23141 has 30 MA's), (16, 23162), (22, 23249), (23, 23255),

Gene: Janus\_28 Start: 22858, Stop: 23064, Start Num: 14

Candidate Starts for Janus\_28:

(Start: 14 @22858 has 30 MA's), (16, 22876), (22, 22963),

Gene: Jevington\_29 Start: 23193, Stop: 23402, Start Num: 14

Candidate Starts for Jevington\_29:

(Start: 14 @23193 has 30 MA's), (16, 23211), (22, 23298),

Gene: Lannister\_29 Start: 22999, Stop: 23220, Start Num: 15

Candidate Starts for Lannister\_29:

(Start: 15 @22999 has 2 MA's), (24, 23107), (29, 23164),

Gene: Loofah\_28 Start: 22838, Stop: 23050, Start Num: 14

Candidate Starts for Loofah\_28:

(1, 22157), (4, 22241), (Start: 14 @22838 has 30 MA's), (16, 22856), (Start: 18 @22877 has 1 MA's), (22, 22943),

Gene: Marav\_30 Start: 23529, Stop: 23738, Start Num: 14

Candidate Starts for Marav\_30:

(Start: 14 @23529 has 30 MA's), (16, 23547), (22, 23634),

Gene: Nishikigoi\_27 Start: 22538, Stop: 22750, Start Num: 14

Candidate Starts for Nishikigoi\_27:

(Start: 14 @22538 has 30 MA's), (16, 22556), (22, 22643),

Gene: Omar\_28 Start: 22805, Stop: 23014, Start Num: 14

Candidate Starts for Omar\_28:

(7, 22373), (Start: 14 @22805 has 30 MA's), (16, 22823), (17, 22838), (22, 22910),

Gene: Pablito\_27 Start: 22406, Stop: 22624, Start Num: 13

Candidate Starts for Pablito\_27:

(10, 22301), (12, 22403), (Start: 13 @22406 has 2 MA's), (Start: 14 @22412 has 30 MA's), (16, 22430), (22, 22517), (24, 22529),

Gene: Paedore\_27 Start: 22838, Stop: 23050, Start Num: 14

Candidate Starts for Paedore\_27:

(Start: 14 @22838 has 30 MA's), (16, 22856), (Start: 18 @22877 has 1 MA's), (22, 22943),

Gene: Paolo\_29 Start: 23192, Stop: 23401, Start Num: 14

Candidate Starts for Paolo\_29:

(Start: 14 @23192 has 30 MA's), (16, 23210),

Gene: Puginator\_29 Start: 23207, Stop: 23416, Start Num: 14

Candidate Starts for Puginator\_29:

(Start: 14 @23207 has 30 MA's), (16, 23225), (22, 23312),

Gene: R4\_27 Start: 22952, Stop: 23164, Start Num: 14

Candidate Starts for R4\_27:

(Start: 14 @22952 has 30 MA's), (16, 22970), (Start: 18 @22991 has 1 MA's), (21, 23051), (22, 23057),

Gene: SqueakyClean\_28 Start: 22784, Stop: 22990, Start Num: 14

Candidate Starts for SqueakyClean\_28:

(Start: 14 @22784 has 30 MA's), (16, 22802), (22, 22889),

Gene: Superstar\_30 Start: 23733, Stop: 23945, Start Num: 14

Candidate Starts for Superstar\_30:

(6, 23250), (8, 23310), (Start: 14 @23733 has 30 MA's), (16, 23751), (22, 23838),

Gene: Tefunt\_27 Start: 22541, Stop: 22753, Start Num: 14

Candidate Starts for Tefunt\_27:

(Start: 14 @22541 has 30 MA's), (16, 22559), (22, 22646),

Gene: Thestral\_28 Start: 22774, Stop: 22983, Start Num: 14

Candidate Starts for Thestral\_28:

(Start: 14 @22774 has 30 MA's), (16, 22792), (23, 22885), (24, 22891), (27, 22924), (28, 22933),

Gene: TinaBelcher\_27 Start: 22721, Stop: 22930, Start Num: 14

Candidate Starts for TinaBelcher\_27:

(Start: 14 @22721 has 30 MA's), (16, 22739), (23, 22832), (24, 22838), (27, 22871), (28, 22880),

Gene: Triumph\_29 Start: 22699, Stop: 22902, Start Num: 14

Candidate Starts for Triumph\_29:

(Start: 14 @22699 has 30 MA's), (16, 22717), (22, 22804),

Gene: TrvxScott\_26 Start: 22767, Stop: 22976, Start Num: 14

Candidate Starts for TrvxScott\_26:

(Start: 14 @22767 has 30 MA's), (16, 22785), (Start: 18 @22806 has 1 MA's), (23, 22878), (28, 22926),

Gene: Yosif\_29 Start: 23870, Stop: 24091, Start Num: 15

Candidate Starts for Yosif\_29:  
(Start: 15 @23870 has 2 MA's), (25, 23987),

Gene: Zainub\_29 Start: 23156, Stop: 23365, Start Num: 14  
Candidate Starts for Zainub\_29:  
(Start: 14 @23156 has 30 MA's), (16, 23174),