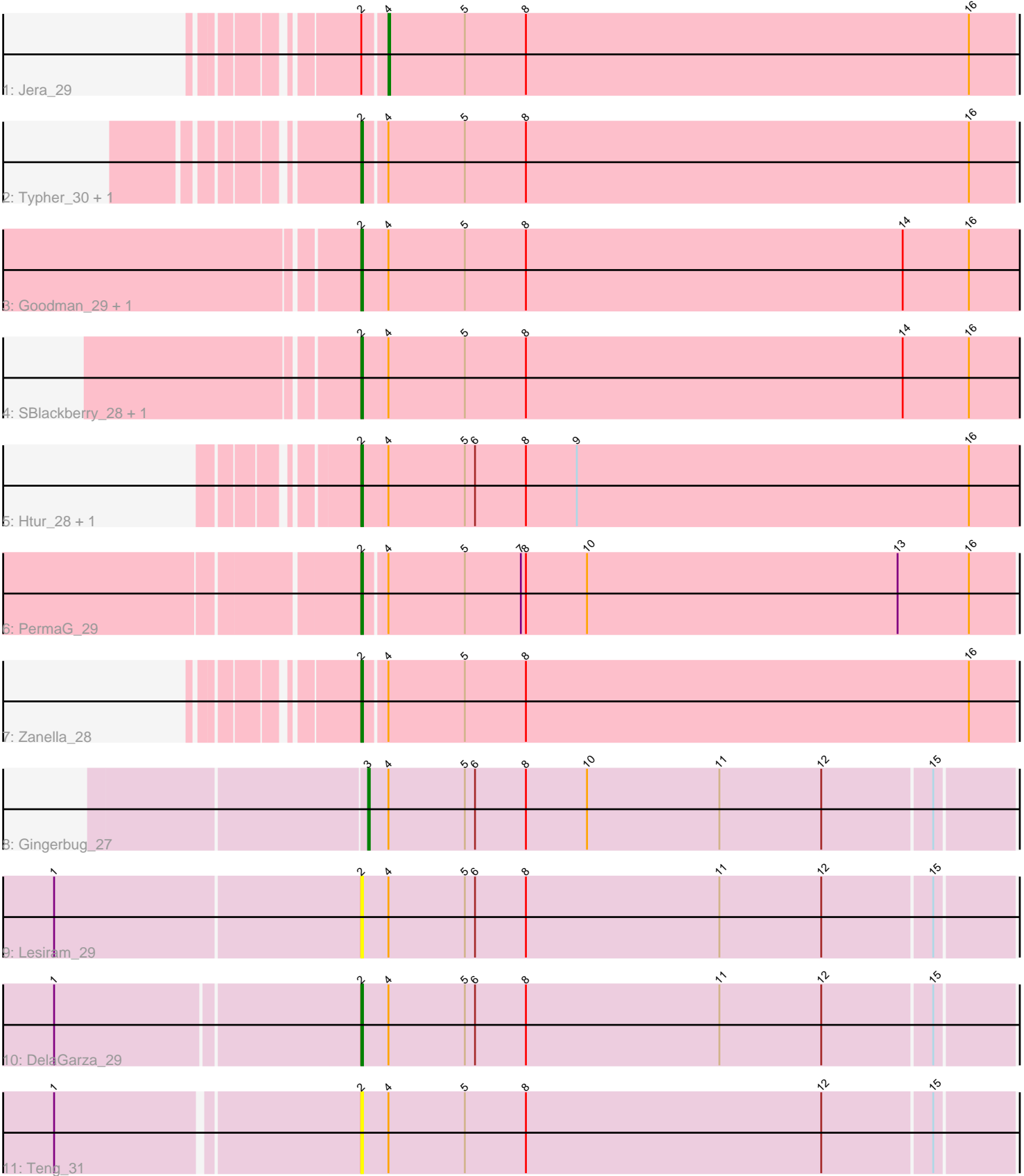


Pham 158260



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 158260 Report

This analysis was run 04/28/24 on database version 559.

Pham number 158260 has 15 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Jera\_29
- Track 2 : Typher\_30, TurboVicky\_28
- Track 3 : Goodman\_29, Johann\_29
- Track 4 : SBlackberry\_28, Cicada\_30
- Track 5 : Htur\_28, Rasovi\_28
- Track 6 : PermaG\_29
- Track 7 : Zanella\_28
- Track 8 : Gingerbug\_27
- Track 9 : Lesiram\_29
- Track 10 : DelaGarza\_29
- Track 11 : Teng\_31

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

The start number called the most often in the published annotations is 2, it was called in 10 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Cicada\_30, DelaGarza\_29, Goodman\_29, Htur\_28, Johann\_29, Lesiram\_29, PermaG\_29, Rasovi\_28, SBlackberry\_28, Teng\_31, TurboVicky\_28, Typher\_30, Zanella\_28,

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

- Jera\_29,

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

- Gingerbug\_27,

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

Start 2:

- Found in 14 of 15 ( 93.3% ) of genes in pham
- Manual Annotations of this start: 10 of 12
- Called 92.9% of time when present

- Phage (with cluster) where this start called: Cicada\_30 (EJ), DelaGarza\_29 (GF), Goodman\_29 (EJ), Htur\_28 (EJ), Johann\_29 (EJ), Lesiram\_29 (GF), PermaG\_29 (EJ), Rasovi\_28 (EJ), SBlackberry\_28 (EJ), Teng\_31 (GF), TurboVicky\_28 (EJ), Typher\_30 (EJ), Zanella\_28 (EJ),

Start 3:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gingerbug\_27 (GF),

Start 4:

- Found in 15 of 15 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Jera\_29 (EJ),

### **Summary by clusters:**

There are 2 clusters represented in this pham: GF, EJ,

Info for manual annotations of cluster EJ:

- Start number 2 was manually annotated 9 times for cluster EJ.
- Start number 4 was manually annotated 1 time for cluster EJ.

Info for manual annotations of cluster GF:

- Start number 2 was manually annotated 1 time for cluster GF.
- Start number 3 was manually annotated 1 time for cluster GF.

### **Gene Information:**

Gene: Cicada\_30 Start: 21626, Stop: 22015, Start Num: 2

Candidate Starts for Cicada\_30:

(Start: 2 @21626 has 10 MA's), (Start: 4 @21641 has 1 MA's), (5, 21686), (8, 21722), (14, 21944), (16, 21983),

Gene: DelaGarza\_29 Start: 20008, Stop: 20385, Start Num: 2

Candidate Starts for DelaGarza\_29:

(1, 19834), (Start: 2 @20008 has 10 MA's), (Start: 4 @20023 has 1 MA's), (5, 20068), (6, 20074), (8, 20104), (11, 20218), (12, 20278), (15, 20341),

Gene: Gingerbug\_27 Start: 20129, Stop: 20503, Start Num: 3

Candidate Starts for Gingerbug\_27:

(Start: 3 @20129 has 1 MA's), (Start: 4 @20141 has 1 MA's), (5, 20186), (6, 20192), (8, 20222), (10, 20258), (11, 20336), (12, 20396), (15, 20459),

Gene: Goodman\_29 Start: 21539, Stop: 21928, Start Num: 2

Candidate Starts for Goodman\_29:

(Start: 2 @21539 has 10 MA's), (Start: 4 @21554 has 1 MA's), (5, 21599), (8, 21635), (14, 21857), (16, 21896),

Gene: Htur\_28 Start: 21613, Stop: 22002, Start Num: 2

Candidate Starts for Htur\_28:

(Start: 2 @21613 has 10 MA's), (Start: 4 @21628 has 1 MA's), (5, 21673), (6, 21679), (8, 21709), (9, 21739), (16, 21970),

Gene: Jera\_29 Start: 20691, Stop: 21059, Start Num: 4

Candidate Starts for Jera\_29:

(Start: 2 @20679 has 10 MA's), (Start: 4 @20691 has 1 MA's), (5, 20736), (8, 20772), (16, 21033),

Gene: Johann\_29 Start: 21539, Stop: 21928, Start Num: 2

Candidate Starts for Johann\_29:

(Start: 2 @21539 has 10 MA's), (Start: 4 @21554 has 1 MA's), (5, 21599), (8, 21635), (14, 21857), (16, 21896),

Gene: Lesiram\_29 Start: 19980, Stop: 20357, Start Num: 2

Candidate Starts for Lesiram\_29:

(1, 19803), (Start: 2 @19980 has 10 MA's), (Start: 4 @19995 has 1 MA's), (5, 20040), (6, 20046), (8, 20076), (11, 20190), (12, 20250), (15, 20313),

Gene: PermaG\_29 Start: 21583, Stop: 21963, Start Num: 2

Candidate Starts for PermaG\_29:

(Start: 2 @21583 has 10 MA's), (Start: 4 @21595 has 1 MA's), (5, 21640), (7, 21673), (8, 21676), (10, 21712), (13, 21895), (16, 21937),

Gene: Rasovi\_28 Start: 21613, Stop: 22002, Start Num: 2

Candidate Starts for Rasovi\_28:

(Start: 2 @21613 has 10 MA's), (Start: 4 @21628 has 1 MA's), (5, 21673), (6, 21679), (8, 21709), (9, 21739), (16, 21970),

Gene: SBlackberry\_28 Start: 21404, Stop: 21793, Start Num: 2

Candidate Starts for SBlackberry\_28:

(Start: 2 @21404 has 10 MA's), (Start: 4 @21419 has 1 MA's), (5, 21464), (8, 21500), (14, 21722), (16, 21761),

Gene: Teng\_31 Start: 20024, Stop: 20401, Start Num: 2

Candidate Starts for Teng\_31:

(1, 19853), (Start: 2 @20024 has 10 MA's), (Start: 4 @20039 has 1 MA's), (5, 20084), (8, 20120), (12, 20294), (15, 20357),

Gene: TurboVicky\_28 Start: 21435, Stop: 21815, Start Num: 2

Candidate Starts for TurboVicky\_28:

(Start: 2 @21435 has 10 MA's), (Start: 4 @21447 has 1 MA's), (5, 21492), (8, 21528), (16, 21789),

Gene: Typher\_30 Start: 21564, Stop: 21944, Start Num: 2

Candidate Starts for Typher\_30:

(Start: 2 @21564 has 10 MA's), (Start: 4 @21576 has 1 MA's), (5, 21621), (8, 21657), (16, 21918),

Gene: Zanella\_28 Start: 21434, Stop: 21814, Start Num: 2

Candidate Starts for Zanella\_28:

(Start: 2 @21434 has 10 MA's), (Start: 4 @21446 has 1 MA's), (5, 21491), (8, 21527), (16, 21788),