



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 158330 Report

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

Pham number 158330 has 11 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Typher\_31
- Track 2 : SBlackberry\_29, Cicada\_31
- Track 3 : TurboVicky\_29
- Track 4 : Jera\_30
- Track 5 : Htur\_29
- Track 6 : Goodman\_30, Johann\_30
- Track 7 : PermaG\_30
- Track 8 : Rasovi\_29
- Track 9 : Zanella\_29

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

The start number called the most often in the published annotations is 3, it was called in 5 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Jera\_30, PermaG\_30, TurboVicky\_29, Typher\_31, Zanella\_29,

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

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

- Cicada\_31, Goodman\_30, Htur\_29, Johann\_30, Rasovi\_29, SBlackberry\_29,

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

Start 3:

- Found in 5 of 11 ( 45.5% ) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jera\_30 (EJ), PermaG\_30 (EJ), TurboVicky\_29 (EJ), Typher\_31 (EJ), Zanella\_29 (EJ),

Start 4:

- Found in 6 of 11 ( 54.5% ) of genes in pham
- Manual Annotations of this start: 5 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cicada\_31 (EJ), Goodman\_30 (EJ), Htur\_29 (EJ), Johann\_30 (EJ), Rasovi\_29 (EJ), SBlackberry\_29 (EJ),

### Summary by clusters:

There is one cluster represented in this pham: EJ

Info for manual annotations of cluster EJ:

- Start number 3 was manually annotated 5 times for cluster EJ.
- Start number 4 was manually annotated 5 times for cluster EJ.

### Gene Information:

Gene: Cicada\_31 Start: 22012, Stop: 22719, Start Num: 4

Candidate Starts for Cicada\_31:

(1, 21469), (2, 21919), (Start: 4 @22012 has 5 MA's), (6, 22045), (7, 22048), (11, 22111), (12, 22120), (13, 22126), (14, 22129), (15, 22132), (19, 22180), (20, 22210), (23, 22345), (24, 22435), (25, 22495), (27, 22600), (28, 22603), (29, 22618),

Gene: Goodman\_30 Start: 21925, Stop: 22632, Start Num: 4

Candidate Starts for Goodman\_30:

(2, 21832), (Start: 4 @21925 has 5 MA's), (6, 21958), (7, 21961), (11, 22024), (13, 22039), (14, 22042), (15, 22045), (19, 22093), (20, 22123), (21, 22126), (23, 22258), (25, 22408), (27, 22513), (28, 22516), (29, 22531),

Gene: Htur\_29 Start: 21999, Stop: 22724, Start Num: 4

Candidate Starts for Htur\_29:

(2, 21906), (Start: 4 @21999 has 5 MA's), (5, 22026), (6, 22032), (7, 22035), (9, 22062), (11, 22098), (14, 22116), (15, 22119), (16, 22143), (21, 22200), (22, 22287), (23, 22332), (25, 22473), (26, 22566), (27, 22605), (28, 22608), (29, 22623),

Gene: Jera\_30 Start: 21056, Stop: 21766, Start Num: 3

Candidate Starts for Jera\_30:

(2, 20969), (Start: 3 @21056 has 5 MA's), (10, 21131), (11, 21158), (12, 21167), (15, 21179), (20, 21257), (21, 21260), (22, 21347), (23, 21392), (25, 21524), (27, 21647), (28, 21650), (29, 21665),

Gene: Johann\_30 Start: 21925, Stop: 22632, Start Num: 4

Candidate Starts for Johann\_30:

(2, 21832), (Start: 4 @21925 has 5 MA's), (6, 21958), (7, 21961), (11, 22024), (13, 22039), (14, 22042), (15, 22045), (19, 22093), (20, 22123), (21, 22126), (23, 22258), (25, 22408), (27, 22513), (28, 22516), (29, 22531),

Gene: PermaG\_30 Start: 21960, Stop: 22667, Start Num: 3

Candidate Starts for PermaG\_30:

(2, 21873), (Start: 3 @21960 has 5 MA's), (8, 22020), (10, 22032), (11, 22059), (15, 22080), (17, 22119), (18, 22122), (20, 22158), (21, 22161), (25, 22434), (27, 22548), (28, 22551), (29, 22566),

Gene: Rasovi\_29 Start: 21999, Stop: 22724, Start Num: 4

Candidate Starts for Rasovi\_29:

(2, 21906), (Start: 4 @21999 has 5 MA's), (5, 22026), (6, 22032), (9, 22062), (11, 22098), (14, 22116), (15, 22119), (16, 22143), (21, 22200), (22, 22287), (23, 22332), (25, 22473), (26, 22566), (27, 22605), (28, 22608), (29, 22623),

Gene: SBlackberry\_29 Start: 21790, Stop: 22497, Start Num: 4

Candidate Starts for SBlackberry\_29:

(1, 21247), (2, 21697), (Start: 4 @21790 has 5 MA's), (6, 21823), (7, 21826), (11, 21889), (12, 21898), (13, 21904), (14, 21907), (15, 21910), (19, 21958), (20, 21988), (23, 22123), (24, 22213), (25, 22273), (27, 22378), (28, 22381), (29, 22396),

Gene: TurboVicky\_29 Start: 21812, Stop: 22513, Start Num: 3

Candidate Starts for TurboVicky\_29:

(2, 21725), (Start: 3 @21812 has 5 MA's), (11, 21914), (12, 21923), (15, 21935), (20, 22013), (21, 22016), (23, 22148), (25, 22271), (27, 22394), (28, 22397), (29, 22412),

Gene: Typher\_31 Start: 21941, Stop: 22642, Start Num: 3

Candidate Starts for Typher\_31:

(2, 21854), (Start: 3 @21941 has 5 MA's), (10, 22016), (11, 22043), (12, 22052), (15, 22064), (20, 22142), (21, 22145), (22, 22232), (23, 22277), (25, 22400), (27, 22523), (28, 22526), (29, 22541),

Gene: Zanella\_29 Start: 21811, Stop: 22521, Start Num: 3

Candidate Starts for Zanella\_29:

(2, 21724), (Start: 3 @21811 has 5 MA's), (11, 21913), (12, 21922), (15, 21934), (20, 22012), (21, 22015), (22, 22102), (23, 22147), (25, 22279), (27, 22402), (28, 22405), (29, 22420),