



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 284259 Report

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

Pham number 284259 has 17 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Zeina\_67
- Track 2 : TrixiePhattel\_66
- Track 3 : Natasha\_63
- Track 4 : RustyBoy\_64
- Track 5 : Iter\_27, Ascela\_27
- Track 6 : Cassia\_27
- Track 7 : ObiToo\_29
- Track 8 : Crewmate\_30
- Track 9 : Pumpkins\_27
- Track 10 : MaGuCo\_60
- Track 11 : Kureo\_115, Paella\_117, Elver\_117, Marianna39\_115, JeNeSaisPas\_112, Gandionco\_114

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

The start number called the most often in the published annotations is 12, it was called in 10 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ascela\_27, Cassia\_27, Crewmate\_30, Elver\_117, Gandionco\_114, Iter\_27, JeNeSaisPas\_112, Kureo\_115, MaGuCo\_60, Marianna39\_115, ObiToo\_29, Paella\_117, Pumpkins\_27, Zeina\_67,

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:

- Natasha\_63, RustyBoy\_64, TrixiePhattel\_66,

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

Start 9:

- Found in 2 of 17 ( 11.8% ) of genes in pham
- Manual Annotations of this start: 2 of 13

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Natasha\_63 (AW), RustyBoy\_64 (AW),

Start 11:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TrixiePhattel\_66 (AU6),

Start 12:

- Found in 14 of 17 ( 82.4% ) of genes in pham
- Manual Annotations of this start: 10 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela\_27 (AZ1), Cassia\_27 (AZ1), Crewmate\_30 (AZ1), Elver\_117 (FK), Gandionco\_114 (FK), Iter\_27 (AZ1), JeNeSaisPas\_112 (FK), Kureo\_115 (FK), MaGuCo\_60 (AZ2), Marianna39\_115 (FK), ObiToo\_29 (AZ1), Paella\_117 (FK), Pumpkins\_27 (AZ1), Zeina\_67 (AU6),

### **Summary by clusters:**

There are 5 clusters represented in this pham: AZ1, AZ2, FK, AW, AU6,

Info for manual annotations of cluster AU6:

- Start number 11 was manually annotated 1 time for cluster AU6.
- Start number 12 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 9 was manually annotated 2 times for cluster AW.

Info for manual annotations of cluster AZ1:

- Start number 12 was manually annotated 6 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 12 was manually annotated 1 time for cluster AZ2.

Info for manual annotations of cluster FK:

- Start number 12 was manually annotated 2 times for cluster FK.

### **Gene Information:**

Gene: Ascela\_27 Start: 22290, Stop: 22442, Start Num: 12

Candidate Starts for Ascela\_27:

(1, 22122), (Start: 12 @22290 has 10 MA's), (21, 22422),

Gene: Cassia\_27 Start: 22739, Stop: 22894, Start Num: 12

Candidate Starts for Cassia\_27:

(Start: 12 @22739 has 10 MA's), (16, 22820),

Gene: Crewmate\_30 Start: 23033, Stop: 23152, Start Num: 12

Candidate Starts for Crewmate\_30:

(1, 22868), (Start: 12 @23033 has 10 MA's),

Gene: Elver\_117 Start: 65001, Stop: 65186, Start Num: 12

Candidate Starts for Elver\_117:

(3, 64941), (5, 64950), (6, 64956), (7, 64962), (Start: 12 @65001 has 10 MA's), (15, 65076), (17, 65094),

Gene: Gandionco\_114 Start: 63813, Stop: 63998, Start Num: 12

Candidate Starts for Gandionco\_114:

(3, 63753), (5, 63762), (6, 63768), (7, 63774), (Start: 12 @63813 has 10 MA's), (15, 63888), (17, 63906),

Gene: Iter\_27 Start: 22290, Stop: 22442, Start Num: 12

Candidate Starts for Iter\_27:

(1, 22122), (Start: 12 @22290 has 10 MA's), (21, 22422),

Gene: JeNeSaisPas\_112 Start: 64419, Stop: 64604, Start Num: 12

Candidate Starts for JeNeSaisPas\_112:

(3, 64359), (5, 64368), (6, 64374), (7, 64380), (Start: 12 @64419 has 10 MA's), (15, 64494), (17, 64512),

Gene: Kureo\_115 Start: 64009, Stop: 64194, Start Num: 12

Candidate Starts for Kureo\_115:

(3, 63949), (5, 63958), (6, 63964), (7, 63970), (Start: 12 @64009 has 10 MA's), (15, 64084), (17, 64102),

Gene: MaGuCo\_60 Start: 42542, Stop: 42691, Start Num: 12

Candidate Starts for MaGuCo\_60:

(Start: 12 @42542 has 10 MA's), (18, 42650),

Gene: Marianna39\_115 Start: 64424, Stop: 64609, Start Num: 12

Candidate Starts for Marianna39\_115:

(3, 64364), (5, 64373), (6, 64379), (7, 64385), (Start: 12 @64424 has 10 MA's), (15, 64499), (17, 64517),

Gene: Natasha\_63 Start: 41159, Stop: 41341, Start Num: 9

Candidate Starts for Natasha\_63:

(Start: 9 @41159 has 2 MA's), (15, 41258), (17, 41276), (19, 41306),

Gene: ObiToo\_29 Start: 22773, Stop: 22892, Start Num: 12

Candidate Starts for ObiToo\_29:

(1, 22605), (Start: 12 @22773 has 10 MA's),

Gene: Paella\_117 Start: 65589, Stop: 65774, Start Num: 12

Candidate Starts for Paella\_117:

(3, 65529), (5, 65538), (6, 65544), (7, 65550), (Start: 12 @65589 has 10 MA's), (15, 65664), (17, 65682),

Gene: Pumpkins\_27 Start: 23159, Stop: 23314, Start Num: 12

Candidate Starts for Pumpkins\_27:

(1, 22991), (Start: 12 @23159 has 10 MA's),

Gene: RustyBoy\_64 Start: 41358, Stop: 41540, Start Num: 9

Candidate Starts for RustyBoy\_64:

(Start: 9 @41358 has 2 MA's), (15, 41457), (17, 41475), (19, 41505),

Gene: TrixiePhattel\_66 Start: 42308, Stop: 42451, Start Num: 11

Candidate Starts for TrixiePhattel\_66:

(10, 42299), (Start: 11 @42308 has 1 MA's), (13, 42341), (14, 42347), (17, 42404), (20, 42443),

Gene: Zeina\_67 Start: 42828, Stop: 42944, Start Num: 12

Candidate Starts for Zeina\_67:

(2, 42765), (4, 42777), (8, 42795), (Start: 12 @42828 has 10 MA's), (13, 42858), (14, 42864),