



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 293370 Report

This analysis was run 04/18/26 on database version 643.

Pham number 293370 has 10 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Megatron06\_33, Damien\_31, Cborch11\_32, Konstantine\_36
- Track 2 : Thumb\_31, Oaker\_31, BobtimousPrime\_30, Phreeze\_31, Beckerton\_31
- Track 3 : Puissant\_30

### ***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 8 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beckerton\_31, BobtimousPrime\_30, Cborch11\_32, Damien\_31, Konstantine\_36, Megatron06\_33, Oaker\_31, Phreeze\_31, Puissant\_30, Thumb\_31,

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

- 

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

- 

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

Start 2:

- Found in 10 of 10 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beckerton\_31 (H1), BobtimousPrime\_30 (H1), Cborch11\_32 (H1), Damien\_31 (H1), Konstantine\_36 (H1), Megatron06\_33 (H1), Oaker\_31 (H1), Phreeze\_31 (H1), Puissant\_30 (H1), Thumb\_31 (H1),

### **Summary by clusters:**

There is one cluster represented in this pham: H1

Info for manual annotations of cluster H1:

- Start number 2 was manually annotated 8 times for cluster H1.

### **Gene Information:**

Gene: Beckerton\_31 Start: 30267, Stop: 31232, Start Num: 2

Candidate Starts for Beckerton\_31:

(1, 30216), (Start: 2 @30267 has 8 MA's), (3, 30339), (4, 30366), (5, 30408), (7, 30441), (8, 30567), (10, 30615), (11, 30756), (12, 30792), (15, 30894), (16, 30975), (17, 31008), (18, 31035), (19, 31053), (20, 31164), (21, 31182), (22, 31221),

Gene: BobtimousPrime\_30 Start: 30187, Stop: 31152, Start Num: 2

Candidate Starts for BobtimousPrime\_30:

(1, 30136), (Start: 2 @30187 has 8 MA's), (3, 30259), (4, 30286), (5, 30328), (7, 30361), (8, 30487), (10, 30535), (11, 30676), (12, 30712), (15, 30814), (16, 30895), (17, 30928), (18, 30955), (19, 30973), (20, 31084), (21, 31102), (22, 31141),

Gene: Cborch11\_32 Start: 29729, Stop: 30697, Start Num: 2

Candidate Starts for Cborch11\_32:

(1, 29678), (Start: 2 @29729 has 8 MA's), (3, 29801), (4, 29828), (5, 29870), (7, 29903), (8, 30029), (10, 30077), (11, 30221), (12, 30257), (15, 30359), (16, 30440), (17, 30473), (18, 30500), (19, 30518), (21, 30647), (22, 30686),

Gene: Damien\_31 Start: 29730, Stop: 30698, Start Num: 2

Candidate Starts for Damien\_31:

(1, 29679), (Start: 2 @29730 has 8 MA's), (3, 29802), (4, 29829), (5, 29871), (7, 29904), (8, 30030), (10, 30078), (11, 30222), (12, 30258), (15, 30360), (16, 30441), (17, 30474), (18, 30501), (19, 30519), (21, 30648), (22, 30687),

Gene: Konstantine\_36 Start: 30931, Stop: 31899, Start Num: 2

Candidate Starts for Konstantine\_36:

(1, 30880), (Start: 2 @30931 has 8 MA's), (3, 31003), (4, 31030), (5, 31072), (7, 31105), (8, 31231), (10, 31279), (11, 31423), (12, 31459), (15, 31561), (16, 31642), (17, 31675), (18, 31702), (19, 31720), (21, 31849), (22, 31888),

Gene: Megatron06\_33 Start: 30263, Stop: 31231, Start Num: 2

Candidate Starts for Megatron06\_33:

(1, 30212), (Start: 2 @30263 has 8 MA's), (3, 30335), (4, 30362), (5, 30404), (7, 30437), (8, 30563), (10, 30611), (11, 30755), (12, 30791), (15, 30893), (16, 30974), (17, 31007), (18, 31034), (19, 31052), (21, 31181), (22, 31220),

Gene: Oaker\_31 Start: 29987, Stop: 30955, Start Num: 2

Candidate Starts for Oaker\_31:

(1, 29936), (Start: 2 @29987 has 8 MA's), (3, 30059), (4, 30086), (5, 30128), (7, 30161), (8, 30287), (10, 30335), (11, 30479), (12, 30515), (15, 30617), (16, 30698), (17, 30731), (18, 30758), (19, 30776), (20, 30887), (21, 30905), (22, 30944),

Gene: Phreeze\_31 Start: 29730, Stop: 30698, Start Num: 2

Candidate Starts for Phreeze\_31:

(1, 29679), (Start: 2 @29730 has 8 MA's), (3, 29802), (4, 29829), (5, 29871), (7, 29904), (8, 30030), (10, 30078), (11, 30222), (12, 30258), (15, 30360), (16, 30441), (17, 30474), (18, 30501), (19, 30519), (20, 30630), (21, 30648), (22, 30687),

Gene: Puissant\_30 Start: 30199, Stop: 31167, Start Num: 2

Candidate Starts for Puissant\_30:

(Start: 2 @30199 has 8 MA's), (5, 30340), (6, 30367), (7, 30373), (9, 30508), (11, 30691), (12, 30727), (13, 30778), (14, 30826), (18, 30970), (19, 30988), (20, 31099), (21, 31117),

Gene: Thumb\_31 Start: 29730, Stop: 30695, Start Num: 2

Candidate Starts for Thumb\_31:

(1, 29679), (Start: 2 @29730 has 8 MA's), (3, 29802), (4, 29829), (5, 29871), (7, 29904), (8, 30030), (10, 30078), (11, 30219), (12, 30255), (15, 30357), (16, 30438), (17, 30471), (18, 30498), (19, 30516), (20, 30627), (21, 30645), (22, 30684),