



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 281017 Report

This analysis was run 02/07/26 on database version 634.

Pham number 281017 has 14 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Gorko\_13, CinnamonToast\_14, Butterball\_13, Sombrero\_13, RemRem\_14, Monty\_12, Worcestershire\_13, Msay19\_14, FelixAlejandro\_14, Exiguo\_13, Poland\_14, BillyBobJr\_14
- Track 2 : CathyBurgh\_13
- Track 3 : Crete\_14

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

The start number called the most often in the published annotations is 6, it was called in 10 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BillyBobJr\_14, Butterball\_13, CathyBurgh\_13, CinnamonToast\_14, Exiguo\_13, FelixAlejandro\_14, Gorko\_13, Monty\_12, Msay19\_14, Poland\_14, RemRem\_14, Sombrero\_13, Worcestershire\_13,

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

- Crete\_14,

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

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

Start 6:

- Found in 14 of 14 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 10 of 10
- Called 92.9% of time when present
- Phage (with cluster) where this start called: BillyBobJr\_14 (CS2), Butterball\_13 (CS2), CathyBurgh\_13 (CS2), CinnamonToast\_14 (CS2), Exiguo\_13 (CS2), FelixAlejandro\_14 (CS2), Gorko\_13 (CS2), Monty\_12 (CS2), Msay19\_14 (CS2), Poland\_14 (CS2), RemRem\_14 (CS2), Sombrero\_13 (CS2), Worcestershire\_13 (CS2),

Start 7:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crete\_14 (CS2),

### **Summary by clusters:**

There is one cluster represented in this pham: CS2

Info for manual annotations of cluster CS2:

- Start number 6 was manually annotated 10 times for cluster CS2.

### **Gene Information:**

Gene: BillyBobJr\_14 Start: 12516, Stop: 12767, Start Num: 6

Candidate Starts for BillyBobJr\_14:

(5, 12462), (Start: 6 @12516 has 10 MA's), (8, 12597), (9, 12660), (10, 12738),

Gene: Butterball\_13 Start: 12480, Stop: 12731, Start Num: 6

Candidate Starts for Butterball\_13:

(5, 12426), (Start: 6 @12480 has 10 MA's), (8, 12561), (9, 12624), (10, 12702),

Gene: CathyBurgh\_13 Start: 13352, Stop: 13603, Start Num: 6

Candidate Starts for CathyBurgh\_13:

(5, 13298), (Start: 6 @13352 has 10 MA's), (8, 13433), (9, 13496), (10, 13574),

Gene: CinnamonToast\_14 Start: 12516, Stop: 12767, Start Num: 6

Candidate Starts for CinnamonToast\_14:

(5, 12462), (Start: 6 @12516 has 10 MA's), (8, 12597), (9, 12660), (10, 12738),

Gene: Crete\_14 Start: 12782, Stop: 12988, Start Num: 7

Candidate Starts for Crete\_14:

(1, 12380), (2, 12398), (3, 12566), (4, 12587), (5, 12683), (Start: 6 @12737 has 10 MA's), (7, 12782), (9, 12881), (10, 12959),

Gene: Exiguo\_13 Start: 12492, Stop: 12743, Start Num: 6

Candidate Starts for Exiguo\_13:

(5, 12438), (Start: 6 @12492 has 10 MA's), (8, 12573), (9, 12636), (10, 12714),

Gene: FelixAlejandro\_14 Start: 12678, Stop: 12929, Start Num: 6

Candidate Starts for FelixAlejandro\_14:

(5, 12624), (Start: 6 @12678 has 10 MA's), (8, 12759), (9, 12822), (10, 12900),

Gene: Gorko\_13 Start: 12484, Stop: 12735, Start Num: 6

Candidate Starts for Gorko\_13:

(5, 12430), (Start: 6 @12484 has 10 MA's), (8, 12565), (9, 12628), (10, 12706),

Gene: Monty\_12 Start: 12496, Stop: 12747, Start Num: 6

Candidate Starts for Monty\_12:

(5, 12442), (Start: 6 @12496 has 10 MA's), (8, 12577), (9, 12640), (10, 12718),

Gene: Msay19\_14 Start: 12670, Stop: 12921, Start Num: 6

Candidate Starts for Msay19\_14:

(5, 12616), (Start: 6 @12670 has 10 MA's), (8, 12751), (9, 12814), (10, 12892),

Gene: Poland\_14 Start: 12646, Stop: 12897, Start Num: 6

Candidate Starts for Poland\_14:

(5, 12592), (Start: 6 @12646 has 10 MA's), (8, 12727), (9, 12790), (10, 12868),

Gene: RemRem\_14 Start: 12492, Stop: 12743, Start Num: 6

Candidate Starts for RemRem\_14:

(5, 12438), (Start: 6 @12492 has 10 MA's), (8, 12573), (9, 12636), (10, 12714),

Gene: Sombrero\_13 Start: 12526, Stop: 12777, Start Num: 6

Candidate Starts for Sombrero\_13:

(5, 12472), (Start: 6 @12526 has 10 MA's), (8, 12607), (9, 12670), (10, 12748),

Gene: Worcestershire\_13 Start: 12494, Stop: 12745, Start Num: 6

Candidate Starts for Worcestershire\_13:

(5, 12440), (Start: 6 @12494 has 10 MA's), (8, 12575), (9, 12638), (10, 12716),