



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 28020 Report

This analysis was run 04/05/24 on database version 557.

Pham number 28020 has 8 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Nova\_69, Mopey\_71, Troll4\_69, Giuseppe\_71, Gumball\_69, PLOT\_69
- Track 2 : Erk16\_69
- Track 3 : Hawkeye\_81

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

The start number called the most often in the published annotations is 5, it was called in 7 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Erk16\_69, Giuseppe\_71, Gumball\_69, Mopey\_71, Nova\_69, PLOT\_69, Troll4\_69,

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:

- Hawkeye\_81,

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

Start 4:

- Found in 1 of 8 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye\_81 (D2),

Start 5:

- Found in 7 of 8 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 7 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Erk16\_69 (D1), Giuseppe\_71 (D1), Gumball\_69 (D1), Mopey\_71 (D1), Nova\_69 (D1), PLOT\_69 (D1), Troll4\_69 (D1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: D2, D1,

Info for manual annotations of cluster D1:

- Start number 5 was manually annotated 7 times for cluster D1.

Info for manual annotations of cluster D2:

- Start number 4 was manually annotated 1 time for cluster D2.

### ***Gene Information:***

Gene: Erk16\_69 Start: 54815, Stop: 54991, Start Num: 5

Candidate Starts for Erk16\_69:

(1, 54701), (2, 54713), (3, 54782), (Start: 5 @54815 has 7 MA's), (8, 54854), (11, 54923), (12, 54932),

Gene: Giuseppe\_71 Start: 54627, Stop: 54803, Start Num: 5

Candidate Starts for Giuseppe\_71:

(3, 54594), (Start: 5 @54627 has 7 MA's), (8, 54666), (11, 54735), (12, 54744),

Gene: Gumball\_69 Start: 55169, Stop: 55345, Start Num: 5

Candidate Starts for Gumball\_69:

(3, 55136), (Start: 5 @55169 has 7 MA's), (8, 55208), (11, 55277), (12, 55286),

Gene: Hawkeye\_81 Start: 56490, Stop: 56693, Start Num: 4

Candidate Starts for Hawkeye\_81:

(Start: 4 @56490 has 1 MA's), (6, 56514), (7, 56523), (9, 56538), (10, 56559), (13, 56625), (14, 56667),

Gene: Mopey\_71 Start: 54653, Stop: 54829, Start Num: 5

Candidate Starts for Mopey\_71:

(3, 54620), (Start: 5 @54653 has 7 MA's), (8, 54692), (11, 54761), (12, 54770),

Gene: Nova\_69 Start: 55192, Stop: 55368, Start Num: 5

Candidate Starts for Nova\_69:

(3, 55159), (Start: 5 @55192 has 7 MA's), (8, 55231), (11, 55300), (12, 55309),

Gene: PLOT\_69 Start: 54653, Stop: 54829, Start Num: 5

Candidate Starts for PLOT\_69:

(3, 54620), (Start: 5 @54653 has 7 MA's), (8, 54692), (11, 54761), (12, 54770),

Gene: Troll4\_69 Start: 54809, Stop: 54985, Start Num: 5

Candidate Starts for Troll4\_69:

(3, 54776), (Start: 5 @54809 has 7 MA's), (8, 54848), (11, 54917), (12, 54926),