

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 170658 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170658 has 6 members, 0 are drafts.

Phages represented in each track:

• Track 1: LunaBlu 71, Beakin 69

• Track 2 : Galactic 68

Track 3: FreddyB\_77, DillTech15\_70

Track 4 : Mutaforma13\_74

## 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 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Beakin\_69, Galactic\_68, LunaBlu\_71, Mutaforma13\_74,

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:

DillTech15\_70, FreddyB\_77,

### Summary by start number:

### Start 5:

- Found in 4 of 6 (66.7%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beakin\_69 (F1), Galactic\_68 (F1), LunaBlu\_71 (F1), Mutaforma13\_74 (F1),

#### Start 8:

- Found in 6 of 6 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 33.3% of time when present
- Phage (with cluster) where this start called: DillTech15\_70 (F1), FreddyB\_77 (F1),

### **Summary by clusters:**

There is one cluster represented in this pham: F1

Info for manual annotations of cluster F1:

- •Start number 5 was manually annotated 4 times for cluster F1.
- •Start number 8 was manually annotated 2 times for cluster F1.

#### Gene Information:

Gene: Beakin 69 Start: 41835, Stop: 42035, Start Num: 5

Candidate Starts for Beakin\_69:

(1, 41712), (2, 41754), (Start: 5 @41835 has 4 MA's), (6, 41850), (7, 41871), (Start: 8 @41880 has 2 MA's), (9, 41952), (10, 42000), (11, 42024),

Gene: DillTech15\_70 Start: 43740, Stop: 43895, Start Num: 8

Candidate Starts for DillTech15\_70:

(3, 43680), (4, 43686), (7, 43731), (Start: 8 @43740 has 2 MA's), (9, 43812), (10, 43860), (11, 43884),

Gene: FreddyB 77 Start: 46840, Stop: 46995, Start Num: 8

Candidate Starts for FreddyB\_77:

(3, 46780), (4, 46786), (7, 46831), (Start: 8 @46840 has 2 MA's), (9, 46912), (10, 46960), (11, 46984),

Gene: Galactic\_68 Start: 45071, Stop: 45235, Start Num: 5

Candidate Starts for Galactic 68:

(1, 44948), (2, 44990), (Start: 5 @45071 has 4 MA's), (6, 45086), (7, 45107), (Start: 8 @45116 has 2 MA's), (9, 45188),

Gene: LunaBlu\_71 Start: 45730, Stop: 45930, Start Num: 5

Candidate Starts for LunaBlu 71:

(1, 45607), (2, 45649), (Start: 5 @45730 has 4 MA's), (6, 45745), (7, 45766), (Start: 8 @45775 has 2 MA's), (9, 45847), (10, 45895), (11, 45919),

Gene: Mutaforma13\_74 Start: 46444, Stop: 46644, Start Num: 5

Candidate Starts for Mutaforma13\_74:

(1, 46321), (2, 46363), (Start: 5 @ 46444 has 4 MA's), (6, 46459), (7, 46480), (Start: 8 @ 46489 has 2 MA's), (9, 46561), (10, 46609), (11, 46633),