

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 225339 Report

This analysis was run 03/28/25 on database version 593.

Pham number 225339 has 4 members, 0 are drafts.

Phages represented in each track:

- Track 1 : OneDirection\_33
- Track 2 : Holliday\_54
- Track 3 : Cheese Touch\_57
- Track 4 : Squiddly\_48

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

Genes that call this "Most Annotated" start: • Holliday\_54, Squiddly\_48,

Genes that have the "Most Annotated" start but do not call it: • CheeseTouch 57,

Genes that do not have the "Most Annotated" start: • OneDirection\_33,

### Summary by start number:

Start 1:

- Found in 2 of 4 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CheeseTouch\_57 (DN1),

Start 2:

- Found in 3 of 4 (75.0%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Holliday\_54 (DN1), Squiddly\_48 (DN2),

Start 8:

- Found in 1 of 4 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OneDirection\_33 (CZ6),

#### Summary by clusters:

There are 3 clusters represented in this pham: DN1, CZ6, DN2,

Info for manual annotations of cluster CZ6: •Start number 8 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DN1:Start number 1 was manually annotated 1 time for cluster DN1.Start number 2 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN2: •Start number 2 was manually annotated 1 time for cluster DN2.

#### Gene Information:

Gene: CheeseTouch\_57 Start: 33416, Stop: 32664, Start Num: 1 Candidate Starts for CheeseTouch\_57: (Start: 1 @33416 has 1 MA's), (Start: 2 @33401 has 2 MA's), (3, 33392), (5, 33338), (7, 33305), (9, 33260), (11, 33236), (12, 33221), (13, 33206), (14, 33197), (17, 33020), (20, 33002), (22, 32804),

Gene: Holliday\_54 Start: 36922, Stop: 36092, Start Num: 2 Candidate Starts for Holliday 54:

(Start: 1 @36937 has 1 MA's), (Start: 2 @36922 has 2 MA's), (3, 36913), (5, 36859), (7, 36826), (9, 36781), (11, 36757), (12, 36742), (13, 36727), (14, 36718), (17, 36541), (20, 36523), (22, 36325), (25, 36193), (26, 36178),

Gene: OneDirection\_33 Start: 27162, Stop: 26563, Start Num: 8 Candidate Starts for OneDirection\_33: (Start: 8 @27162 has 1 MA's), (10, 27144), (16, 26976), (22, 26715), (24, 26676),

Gene: Squiddly\_48 Start: 35540, Stop: 34824, Start Num: 2 Candidate Starts for Squiddly\_48: (Start: 2 @35540 has 2 MA's), (4, 35495), (6, 35465), (13, 35339), (14, 35330), (15, 35258), (18, 35147), (19, 35141), (20, 35135), (21, 34940), (23, 34931),