



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 158529 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158529 has 5 members, 0 are drafts.

Phages represented in each track:

- Track 1 : BlueNGold\_10, Forza\_11, Boopy\_11, Mareelih\_9
- Track 2 : Sixama\_14

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

The start number called the most often in the published annotations is 3, it was called in 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueNGold\_10, Boopy\_11, Forza\_11, Mareelih\_9,

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:

- Sixama\_14,

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

Start 3:

- Found in 4 of 5 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 4 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_10 (DS), Boopy\_11 (DS), Forza\_11 (DS), Mareelih\_9 (DS),

Start 4:

- Found in 1 of 5 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama\_14 (DS),

### **Summary by clusters:**

There is one cluster represented in this pham: DS

Info for manual annotations of cluster DS:

- Start number 3 was manually annotated 4 times for cluster DS.
- Start number 4 was manually annotated 1 time for cluster DS.

**Gene Information:**

Gene: BlueNGold\_10 Start: 4690, Stop: 4292, Start Num: 3

Candidate Starts for BlueNGold\_10:

(1, 4774), (2, 4747), (Start: 3 @4690 has 4 MA's), (5, 4558), (6, 4492), (7, 4468), (8, 4435), (9, 4423), (10, 4396), (11, 4378), (12, 4366), (13, 4354),

Gene: Boopy\_11 Start: 4701, Stop: 4303, Start Num: 3

Candidate Starts for Boopy\_11:

(1, 4785), (2, 4758), (Start: 3 @4701 has 4 MA's), (5, 4569), (6, 4503), (7, 4479), (8, 4446), (9, 4434), (10, 4407), (11, 4389), (12, 4377), (13, 4365),

Gene: Forza\_11 Start: 4741, Stop: 4343, Start Num: 3

Candidate Starts for Forza\_11:

(1, 4825), (2, 4798), (Start: 3 @4741 has 4 MA's), (5, 4609), (6, 4543), (7, 4519), (8, 4486), (9, 4474), (10, 4447), (11, 4429), (12, 4417), (13, 4405),

Gene: Mareelih\_9 Start: 4146, Stop: 3748, Start Num: 3

Candidate Starts for Mareelih\_9:

(1, 4230), (2, 4203), (Start: 3 @4146 has 4 MA's), (5, 4014), (6, 3948), (7, 3924), (8, 3891), (9, 3879), (10, 3852), (11, 3834), (12, 3822), (13, 3810),

Gene: Sixama\_14 Start: 5658, Stop: 5356, Start Num: 4

Candidate Starts for Sixama\_14:

(Start: 4 @5658 has 1 MA's), (7, 5460), (8, 5427), (10, 5388),