

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 197074 Report

This analysis was run 12/09/24 on database version 580.

Pham number 197074 has 9 members, 1 are drafts.

Phages represented in each track:

Track 1 : Mareelih\_31, BlueNGold\_31, Boopy\_33, Forza\_32

• Track 2: Toron 85

Track 3: MiaZeal\_161, Porcelain\_158, Lucky2013\_154

• Track 4 : Omega\_170

## 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 8 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BlueNGold\_31, Boopy\_33, Forza\_32, Lucky2013\_154, Mareelih\_31, MiaZeal\_161, Omega\_170, Porcelain\_158,

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:

• Toron 85.

# Summary by start number:

### Start 2:

- Found in 8 of 9 (88.9%) of genes in pham
- Manual Annotations of this start: 8 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_31 (DS), Boopy\_33 (DS), Forza\_32 (DS), Lucky2013\_154 (J), Mareelih\_31 (DS), MiaZeal\_161 (J), Omega\_170 (J), Porcelain\_158 (J),

### Start 3:

- Found in 1 of 9 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

Phage (with cluster) where this start called: Toron\_85 (F6),

## **Summary by clusters:**

There are 3 clusters represented in this pham: J, DS, F6,

Info for manual annotations of cluster DS:

•Start number 2 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster J:

•Start number 2 was manually annotated 4 times for cluster J.

### Gene Information:

Gene: BlueNGold 31 Start: 11220, Stop: 10870, Start Num: 2

Candidate Starts for BlueNGold\_31:

(Start: 2 @11220 has 8 MA's), (4, 11202), (5, 11184), (9, 11133), (12, 11067), (15, 10992), (16, 10983), (19, 10944),

Gene: Boopy\_33 Start: 11232, Stop: 10882, Start Num: 2

Candidate Starts for Boopy\_33:

(Start: 2 @11232 has 8 MA's), (4, 11214), (5, 11196), (9, 11145), (12, 11079), (15, 11004), (16, 10995), (19, 10956),

Gene: Forza\_32 Start: 11148, Stop: 10798, Start Num: 2

Candidate Starts for Forza\_32:

(Start: 2 @11148 has 8 MA's), (4, 11130), (5, 11112), (9, 11061), (12, 10995), (15, 10920), (16, 10911), (19, 10872),

Gene: Lucky2013 154 Start: 81047, Stop: 81454, Start Num: 2

Candidate Starts for Lucky2013 154:

(Start: 2 @81047 has 8 MA's), (10, 81155), (11, 81200), (13, 81239), (14, 81272), (21, 81413),

Gene: Mareelih\_31 Start: 10677, Stop: 10327, Start Num: 2

Candidate Starts for Mareelih\_31:

(Start: 2 @ 10677 has 8 MA's), (4, 10659), (5, 10641), (9, 10590), (12, 10524), (15, 10449), (16, 10440), (19, 10401),

Gene: MiaZeal\_161 Start: 82194, Stop: 82601, Start Num: 2

Candidate Starts for MiaZeal 161:

(Start: 2 @82194 has 8 MA's), (10, 82302), (11, 82347), (13, 82386), (14, 82419), (21, 82560),

Gene: Omega 170 Start: 87510, Stop: 87914, Start Num: 2

Candidate Starts for Omega\_170:

(Start: 2 @87510 has 8 MA's), (6, 87555), (10, 87618), (11, 87663), (13, 87702), (14, 87735), (20, 87855),

Gene: Porcelain 158 Start: 81993, Stop: 82400, Start Num: 2

Candidate Starts for Porcelain 158:

(Start: 2 @81993 has 8 MA's), (10, 82101), (11, 82146), (13, 82185), (14, 82218), (21, 82359),

Gene: Toron\_85 Start: 51169, Stop: 51453, Start Num: 3 Candidate Starts for Toron\_85:

 $(1, 51154), (3, 51169), (7, \overline{5}1232), (8, 51241), (15, 51409), (17, 51430), (18, 51439),$