

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 225193 Report

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

Pham number 225193 has 7 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Phendrix 108

• Track 2: BlueNGold\_123, Forza\_124, Mareelih\_122, Boopy\_124

Track 3 : GMA2\_52Track 4 : Sixama\_122

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

The start number called the most often in the published annotations is 6, it was called in 5 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BlueNGold\_123, Boopy\_124, Forza\_124, Mareelih\_122, Sixama\_122,

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:

• GMA2\_52, Phendrix\_108,

## Summary by start number:

### Start 2:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phendrix\_108 (DK),

#### Start 5:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2\_52 (DS),

### Start 6:

- Found in 5 of 7 (71.4%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_123 (DS), Boopy\_124 (DS), Forza\_124 (DS), Mareelih\_122 (DS), Sixama\_122 (DS),

## **Summary by clusters:**

There are 2 clusters represented in this pham: DS, DK,

Info for manual annotations of cluster DK:

•Start number 2 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

•Start number 6 was manually annotated 5 times for cluster DS.

### Gene Information:

Gene: BlueNGold 123 Start: 79020, Stop: 78475, Start Num: 6

Candidate Starts for BlueNGold\_123:

(Start: 6 @79020 has 5 MA's), (8, 78942), (10, 78894), (15, 78804), (19, 78774), (20, 78765), (21, 78762), (26, 78609), (31, 78567), (34, 78519), (37, 78486),

Gene: Boopy\_124 Start: 79032, Stop: 78487, Start Num: 6

Candidate Starts for Boopy\_124:

(Start: 6 @79032 has 5 MA's), (8, 78954), (10, 78906), (15, 78816), (19, 78786), (20, 78777), (21, 78774), (26, 78621), (31, 78579), (34, 78531), (37, 78498),

Gene: Forza\_124 Start: 78948, Stop: 78403, Start Num: 6

Candidate Starts for Forza 124:

(Start: 6 @78948 has 5 MA's), (8, 78870), (10, 78822), (15, 78732), (19, 78702), (20, 78693), (21, 78690), (26, 78537), (31, 78495), (34, 78447), (37, 78414),

Gene: GMA2\_52 Start: 53375, Stop: 52827, Start Num: 5

Candidate Starts for GMA2\_52:

(4, 53411), (5, 53375), (9, 53270), (12, 53228), (13, 53216), (17, 53144), (22, 53060), (23, 53039), (25, 52979), (28, 52949), (35, 52865), (36, 52844),

Gene: Mareelih 122 Start: 78450, Stop: 77905, Start Num: 6

Candidate Starts for Mareelih 122:

(Start: 6 @78450 has 5 MA's), (8, 78372), (10, 78324), (15, 78234), (19, 78204), (20, 78195), (21, 78192), (26, 78039), (31, 77997), (34, 77949), (37, 77916),

Gene: Phendrix\_108 Start: 70145, Stop: 69552, Start Num: 2

Candidate Starts for Phendrix 108:

(Start: 2 @70145 has 1 MA's), (3, 70136), (7, 70085), (11, 69953), (16, 69866), (17, 69863), (27, 69677), (29, 69662), (30, 69641), (32, 69635), (33, 69626),

Gene: Sixama 122 Start: 78458, Stop: 77907, Start Num: 6

Candidate Starts for Sixama 122:

 $\begin{array}{l} (1,\,78548),\,(Start:\,6\,\,@\,78458\,\,has\,\,5\,\,MA's),\,(8,\,78380),\,(12,\,78311),\,(14,\,78260),\,(17,\,78230),\,(18,\,78224),\,(23,\,78125),\,(24,\,78122),\,(26,\,78041),\,(27,\,78038),\,(31,\,77999),\,(34,\,77951), \end{array}$