

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 223736 Report

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

Pham number 223736 has 7 members, 3 are drafts.

Phages represented in each track:

Track 1 : Sarge\_25Track 2 : Bauer\_27

Track 3 : BlackSpider\_26Track 4 : CocoCinnamon 30

Track 5 : Maja\_25Track 6 : Hum25\_25Track 7 : ArV2 23

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

Genes that call this "Most Annotated" start:

Bauer\_27, BlackSpider\_26, Hum25\_25, Sarge\_25,

Genes that have the "Most Annotated" start but do not call it:

• ArV2\_23,

Genes that do not have the "Most Annotated" start:

CocoCinnamon\_30, Maja\_25,

## Summary by start number:

#### Start 1:

- 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: ArV2\_23 (singleton),

### Start 2:

- Found in 2 of 7 (28.6%) 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: CocoCinnamon\_30 (FO), Maja\_25 (FO),

#### Start 3:

- Found in 5 of 7 (71.4%) of genes in pham
- Manual Annotations of this start: 3 of 4
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bauer\_27 (FN), BlackSpider\_26 (FN), Hum25\_25 (FQ), Sarge\_25 (FB),

## **Summary by clusters:**

There are 5 clusters represented in this pham: FQ, singleton, FB, FN, FO,

Info for manual annotations of cluster FB:

•Start number 3 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FN:

•Start number 3 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FO:

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

Info for manual annotations of cluster FQ:

•Start number 3 was manually annotated 1 time for cluster FQ.

### Gene Information:

Gene: ArV2 23 Start: 18080, Stop: 18754, Start Num: 1

Candidate Starts for ArV2 23:

(1, 18080), (Start: 3 @18119 has 3 MA's), (4, 18161), (7, 18197), (11, 18239), (17, 18302), (21, 18356), (23, 18362), (24, 18380), (26, 18467), (27, 18470), (29, 18542),

Gene: Bauer 27 Start: 20577, Stop: 21209, Start Num: 3

Candidate Starts for Bauer\_27:

(Start: 3 @20577 has 3 MA's), (5, 20646), (6, 20649), (12, 20703), (22, 20820), (24, 20838), (25, 20853), (32, 21036), (33, 21072), (37, 21126),

Gene: BlackSpider 26 Start: 20434, Stop: 21099, Start Num: 3

Candidate Starts for BlackSpider 26:

(Start: 3 @20434 has 3 MA's), (10, 20545), (12, 20563), (15, 20596), (18, 20626), (19, 20638), (22, 20683), (24, 20701), (29, 20863), (31, 20899), (33, 20962), (37, 21016),

Gene: CocoCinnamon\_30 Start: 20280, Stop: 21011, Start Num: 2

Candidate Starts for CocoCinnamon\_30:

(Start: 2 @20280 has 1 MA's), (6, 20379), (12, 20433), (14, 20460), (16, 20481), (18, 20496), (28, 20688), (29, 20739), (38, 20892),

Gene: Hum25 25 Start: 18076, Stop: 18852, Start Num: 3

Candidate Starts for Hum25 25:

(Start: 3 @18076 has 3 MA's), (6, 18148), (9, 18178), (13, 18217), (15, 18235), (24, 18337), (25, 18352), (29, 18499), (39, 18673), (40, 18676), (42, 18841), (43, 18844),

Gene: Maja\_25 Start: 19125, Stop: 19856, Start Num: 2

Candidate Starts for Maja\_25:

(Start: 2 @19125 has 1 MA's), (6, 19224), (8, 19239), (12, 19278), (16, 19326), (18, 19341), (28,

19533), (29, 19584), (34, 19716), (36, 19725), (41, 19800),

Gene: Sarge\_25 Start: 18543, Stop: 19154, Start Num: 3

Candidate Starts for Sarge\_25:

(Start: 3 @18543 has 3 MA's), (15, 18702), (18, 18732), (20, 18759), (24, 18804), (30, 18990), (35,

19098),