

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 203469 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203469 has 13 members, 6 are drafts.

Phages represented in each track:

Track 1 : SororFago 63 Track 2 : MajorMajor 62

Track 3: TipsytheTRex\_60, Serenity\_63

Track 4: Bradman\_62, Quokka\_61

• Track 5 : Superchunk 62, Caraxes 63

Track 6 : Jsquared\_63Track 7 : Ph8s\_64

• Track 8 : Odin 62

• Track 9 : SwirlSquare 68

Track 10 : Koduck 63

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

The start number called the most often in the published annotations is 10, it was called in 6 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Bradman\_62, Caraxes\_63, Jsquared\_63, Koduck\_63, Odin\_62, Ph8s\_64, Quokka\_61, Serenity\_63, Superchunk\_62, SwirlSquare\_68, TipsytheTRex\_60,

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

MajorMajor\_62,

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

SororFago\_63,

## Summary by start number:

### Start 9:

- Found in 4 of 13 (30.8%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: MajorMajor 62 (A2).

#### Start 10:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Bradman\_62 (A2), Caraxes\_63 (A2),
  Jsquared\_63 (A2), Koduck\_63 (A2), Odin\_62 (A2), Ph8s\_64 (A2), Quokka\_61 (A2),
  Serenity\_63 (A2), Superchunk\_62 (A2), SwirlSquare\_68 (A2), TipsytheTRex\_60 (A2),

### Start 11:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SororFago\_63 (A14),

# Summary by clusters:

There are 2 clusters represented in this pham: A14, A2,

Info for manual annotations of cluster A14:

•Start number 11 was manually annotated 1 time for cluster A14.

Info for manual annotations of cluster A2:

•Start number 10 was manually annotated 6 times for cluster A2.

## Gene Information:

Gene: Bradman\_62 Start: 39200, Stop: 39054, Start Num: 10

Candidate Starts for Bradman\_62:

(6, 39230), (9, 39215), (Start: 10 @39200 has 6 MA's), (13, 39182), (15, 39164), (17, 39137), (18, 39134), (19, 39131),

Gene: Caraxes 63 Start: 38676, Stop: 38521, Start Num: 10

Candidate Starts for Caraxes 63:

(1, 39000), (2, 38934), (3, 38928), (4, 38712), (5, 38709), (Start: 10 @ 38676 has 6 MA's), (13, 38658), (14, 38652), (17, 38613), (18, 38610), (19, 38607),

Gene: Jsquared 63 Start: 39358, Stop: 39215, Start Num: 10

Candidate Starts for Jsquared 63:

(6, 39388), (9, 39373), (Start: 10 @39358 has 6 MA's), (13, 39340), (15, 39322), (16, 39310), (17, 39295), (18, 39292), (19, 39289),

Gene: Koduck\_63 Start: 39295, Stop: 39152, Start Num: 10

Candidate Starts for Koduck\_63:

(6, 39316), (Start: 10 @39295 has 6 MA's), (13, 39277), (17, 39232), (18, 39229), (19, 39226),

Gene: MajorMajor\_62 Start: 39215, Stop: 39054, Start Num: 9

Candidate Starts for MajorMajor 62:

(6, 39230), (9, 39215), (Start: 10 @39200 has 6 MA's), (13, 39182), (15, 39164), (17, 39137), (18, 39134), (19, 39131),

Gene: Odin\_62 Start: 39060, Stop: 38905, Start Num: 10

Candidate Starts for Odin 62:

(4, 39096), (5, 39093), (Start: 10 @39060 has 6 MA's), (13, 39042), (14, 39036), (17, 38997), (18, 38994), (19, 38991),

Gene: Ph8s\_64 Start: 39243, Stop: 39100, Start Num: 10

Candidate Starts for Ph8s 64:

(7, 39267), (8, 39264), (Start: 10 @39243 has 6 MA's), (12, 39231), (13, 39225), (17, 39180), (19, 39174),

Gene: Quokka\_61 Start: 39200, Stop: 39054, Start Num: 10

Candidate Starts for Quokka 61:

(6, 39230), (9, 39215), (Start: 10 @39200 has 6 MA's), (13, 39182), (15, 39164), (17, 39137), (18, 39134), (19, 39131),

Gene: Serenity\_63 Start: 39413, Stop: 39267, Start Num: 10

Candidate Starts for Serenity\_63:

(Start: 10 @39413 has 6 MA's), (13, 39395), (17, 39350), (18, 39347), (19, 39344),

Gene: SororFago 63 Start: 40687, Stop: 40544, Start Num: 11

Candidate Starts for SororFago\_63: (Start: 11 @40687 has 1 MA's),

Gene: Superchunk 62 Start: 38676, Stop: 38521, Start Num: 10

Candidate Starts for Superchunk\_62:

(1, 39000), (2, 38934), (3, 38928), (4, 38712), (5, 38709), (Start: 10 @38676 has 6 MA's), (13, 38658), (14, 38652), (17, 38613), (18, 38610), (19, 38607),

Gene: SwirlSquare 68 Start: 39598, Stop: 39446, Start Num: 10

Candidate Starts for SwirlSquare\_68:

(5, 39631), (Start: 10 @39598 has 6 MA's), (13, 39580), (17, 39535), (18, 39532), (19, 39529), (20, 39454),

Gene: TipsytheTRex 60 Start: 39483, Stop: 39337, Start Num: 10

Candidate Starts for TipsytheTRex 60:

(Start: 10 @39483 has 6 MA's), (13, 39465), (17, 39420), (18, 39417), (19, 39414),