

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 225092 Report

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

Pham number 225092 has 10 members, 2 are drafts.

Phages represented in each track:

• Track 1: Imvubu 60

Track 2 : Suigeneris\_67, Acadian\_66, Donny\_67

Track 3: EastView9101\_65, SirJeffery\_65

Track 4 : Rita130\_65Track 5 : Saguaro\_63Track 6 : Rinkes\_62

Track 7 : Knocker\_65

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

The start number called the most often in the published annotations is 9, it was called in 3 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Acadian\_66, Donny\_67, Suigeneris\_67,

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

EastView9101\_65, Rita130\_65, SirJeffery\_65,

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

Imvubu\_60, Knocker\_65, Rinkes\_62, Saguaro\_63,

### Summary by start number:

#### Start 2:

- Found in 1 of 10 (10.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rinkes\_62 (B9),

### Start 5:

- Found in 1 of 10 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present

Phage (with cluster) where this start called: Saguaro\_63 (B7),

### Start 7:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Imvubu\_60 (B10), Knocker\_65 (B9),

#### Start 9:

- Found in 6 of 10 (60.0%) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Acadian\_66 (B5), Donny\_67 (B5), Suigeneris\_67 (B5),

### Start 10:

- Found in 6 of 10 (60.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: EastView9101\_65 (B5), Rita130\_65 (B5), SirJeffery\_65 (B5),

## Summary by clusters:

There are 4 clusters represented in this pham: B5, B7, B9, B10,

Info for manual annotations of cluster B10:

•Start number 7 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B5:

- •Start number 9 was manually annotated 3 times for cluster B5.
- •Start number 10 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster B7:

•Start number 5 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B9:

- •Start number 2 was manually annotated 1 time for cluster B9.
- •Start number 7 was manually annotated 1 time for cluster B9.

## Gene Information:

Gene: Acadian\_66 Start: 57500, Stop: 58237, Start Num: 9

Candidate Starts for Acadian\_66:

 $(Start: 9 @57500 \ has 3 \ MA's), (Start: 10 @57527 \ has 1 \ MA's), (15, 57551), (21, 57665), (26, 57722), (32, 57794), (34, 57833), (37, 57842), (43, 57887), (49, 57992), (51, 58001), (62, 58145), (67, 58214), (67, 58214), (67, 58214), (68, 58145)$ 

Gene: Donny 67 Start: 57544, Stop: 58281, Start Num: 9

Candidate Starts for Donny 67:

(Start: 9 @57544 has 3 MA's), (Start: 10 @57571 has 1 MA's), (15, 57595), (21, 57709), (26, 57766), (32, 57838), (34, 57877), (37, 57886), (43, 57931), (49, 58036), (51, 58045), (62, 58189), (67, 58258),

Gene: EastView9101\_65 Start: 57271, Stop: 57981, Start Num: 10

Candidate Starts for EastView9101\_65:

(Start: 9 @57244 has 3 MA's), (Start: 10 @57271 has 1 MA's), (15, 57295), (21, 57409), (26, 57466), (32, 57538), (34, 57577), (37, 57586), (43, 57631), (49, 57736), (51, 57745), (62, 57889), (67, 57958),

Gene: Imvubu 60 Start: 55578, Stop: 56336, Start Num: 7

Candidate Starts for Imvubu 60:

(Start: 7 @55578 has 2 MA's), (11, 55644), (16, 55677), (25, 55833), (28, 55863), (29, 55884), (32, 55902), (36, 55947), (39, 55956), (41, 55980), (44, 55998), (45, 56007), (52, 56112), (54, 56130), (55, 56172), (58, 56208), (62, 56253), (66, 56313),

Gene: Knocker\_65 Start: 58505, Stop: 59257, Start Num: 7

Candidate Starts for Knocker 65:

(Start: 7 @ 58505 has 2 MA's), (11, 58562), (19, 58619), (20, 58637), (24, 58748), (25, 58751), (27, 58775), (29, 58802), (31, 58817), (32, 58820), (38, 58871), (40, 58880), (41, 58898), (42, 58901), (45, 58925), (46, 58943), (47, 58955), (48, 59015), (50, 59024), (51, 59027), (54, 59048), (56, 59096), (59, 59138), (65, 59216),

Gene: Rinkes\_62 Start: 56905, Stop: 57795, Start Num: 2

Candidate Starts for Rinkes 62:

(Start: 2 @56905 has 1 MA's), (3, 56917), (Start: 7 @57037 has 2 MA's), (13, 57112), (20, 57172), (23, 57256), (28, 57316), (30, 57340), (32, 57355), (33, 57382), (35, 57394), (38, 57406), (39, 57409), (40, 57415), (42, 57436), (44, 57451), (45, 57460), (46, 57478), (47, 57490), (51, 57562), (55, 57625), (56, 57631), (57, 57658), (59, 57673), (63, 57724), (67, 57772),

Gene: Rita130\_65 Start: 57468, Stop: 58178, Start Num: 10

Candidate Starts for Rita130 65:

(Start: 9 @57441 has 3 MA's), (Start: 10 @57468 has 1 MA's), (15, 57492), (21, 57606), (26, 57663), (32, 57735), (34, 57774), (37, 57783), (43, 57828), (48, 57930), (51, 57942), (62, 58086), (67, 58155),

Gene: Saguaro\_63 Start: 56656, Stop: 57513, Start Num: 5

Candidate Starts for Saguaro 63:

(1, 56566), (4, 56644), (Start: 5 @56656 has 1 MA's), (6, 56725), (8, 56770), (12, 56818), (14, 56824), (17, 56845), (18, 56863), (22, 56953), (31, 57067), (32, 57070), (39, 57124), (44, 57166), (45, 57175), (53, 57289), (54, 57298), (60, 57409), (61, 57415), (64, 57448),

Gene: SirJeffery\_65 Start: 57604, Stop: 58314, Start Num: 10

Candidate Starts for SirJeffery\_65:

(Start: 9 @57577 has 3 MA's), (Start: 10 @57604 has 1 MA's), (15, 57628), (21, 57742), (26, 57799), (32, 57871), (34, 57910), (37, 57919), (43, 57964), (49, 58069), (51, 58078), (62, 58222), (67, 58291),

Gene: Suigeneris\_67 Start: 57719, Stop: 58456, Start Num: 9

Candidate Starts for Suigeneris 67:

(Start: 9 @57719 has 3 MA's), (Start: 10 @57746 has 1 MA's), (15, 57770), (21, 57884), (26, 57941), (32, 58013), (34, 58052), (37, 58061), (43, 58106), (49, 58211), (51, 58220), (62, 58364), (67, 58433),