



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 295439 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295439 has 7 members, 2 are drafts.

Phages represented in each track:

- Track 1 : RoseMarie\_95
- Track 2 : KleverKiS\_88
- Track 3 : SlimJimmy\_88
- Track 4 : Reindeer\_89
- Track 5 : Rey\_100
- Track 6 : Nanosmite\_94
- Track 7 : Kumao\_90

### ***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 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- KleverKiS\_88, Kumao\_90, Reindeer\_89, SlimJimmy\_88,

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:

- Nanosmite\_94, Rey\_100, RoseMarie\_95,

### **Summary by start number:**

Start 6:

- Found in 4 of 7 ( 57.1% ) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KleverKiS\_88 (M1), Kumao\_90 (singleton), Reindeer\_89 (M1), SlimJimmy\_88 (M1),

Start 8:

- Found in 5 of 7 ( 71.4% ) of genes in pham
- Manual Annotations of this start: 1 of 5

- Called 40.0% of time when present
- Phage (with cluster) where this start called: Nanosmite\_94 (M3), RoseMarie\_95 (M1),

Start 9:

- Found in 6 of 7 ( 85.7% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Rey\_100 (M2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: singleton, M1, M3, M2,

Info for manual annotations of cluster M1:

- Start number 6 was manually annotated 2 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 9 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster M3:

- Start number 8 was manually annotated 1 time for cluster M3.

### **Gene Information:**

Gene: KleverKiS\_88 Start: 53776, Stop: 54201, Start Num: 6

Candidate Starts for KleverKiS\_88:

(4, 53740), (5, 53764), (Start: 6 @53776 has 3 MA's), (Start: 8 @53794 has 1 MA's), (Start: 9 @53815 has 1 MA's), (11, 53848), (15, 53923), (21, 54049), (22, 54073), (28, 54142), (30, 54193),

Gene: Kumao\_90 Start: 56662, Stop: 57039, Start Num: 6

Candidate Starts for Kumao\_90:

(1, 56548), (2, 56593), (Start: 6 @56662 has 3 MA's), (7, 56677), (10, 56716), (13, 56773), (14, 56785), (16, 56851), (18, 56857), (23, 56938),

Gene: Nanosmite\_94 Start: 55068, Stop: 55520, Start Num: 8

Candidate Starts for Nanosmite\_94:

(Start: 8 @55068 has 1 MA's), (Start: 9 @55089 has 1 MA's), (11, 55122), (17, 55278), (23, 55371), (25, 55395), (27, 55416), (31, 55482), (32, 55503), (33, 55512),

Gene: Reindeer\_89 Start: 54768, Stop: 55172, Start Num: 6

Candidate Starts for Reindeer\_89:

(Start: 6 @54768 has 3 MA's), (Start: 8 @54786 has 1 MA's), (Start: 9 @54807 has 1 MA's), (11, 54840), (12, 54885), (19, 54990), (30, 55164),

Gene: Rey\_100 Start: 55491, Stop: 55916, Start Num: 9

Candidate Starts for Rey\_100:

(Start: 9 @55491 has 1 MA's), (11, 55524), (17, 55674), (20, 55728), (22, 55761), (26, 55812), (31, 55881), (33, 55908),

Gene: RoseMarie\_95 Start: 57317, Stop: 57724, Start Num: 8

Candidate Starts for RoseMarie\_95:

(Start: 8 @57317 has 1 MA's), (Start: 9 @57338 has 1 MA's), (11, 57371), (15, 57446), (24, 57608), (29, 57707), (30, 57716),

Gene: SlimJimmy\_88 Start: 54385, Stop: 54810, Start Num: 6

Candidate Starts for SlimJimmy\_88:

(3, 54316), (5, 54373), (Start: 6 @54385 has 3 MA's), (Start: 8 @54403 has 1 MA's), (Start: 9 @54424 has 1 MA's), (11, 54457), (15, 54532), (21, 54658), (22, 54682), (28, 54751), (30, 54802),