

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 216702 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216702 has 13 members, 3 are drafts.

Phages represented in each track:

• Track 1 : Ajin\_10

Track 2 : DannyDe\_9

• Track 3 : Rie18\_10

Track 4 : Sparcetus\_10, Bramble\_10

Track 5 : Kors\_10, RikSengupta\_10

Track 6 : LordBart\_10Track 7 : TinyMiny 10

Track 8 : Johann\_2, Goodman\_2

Track 9 : Cicada\_2

Track 10 : Count\_104

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

The start number called the most often in the published annotations is 2, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ajin\_10, Bramble\_10, Count\_104, DannyDe\_9, Kors\_10, LordBart\_10, Rie18\_10, RikSengupta\_10, Sparcetus\_10, TinyMiny\_10,

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

Genes that do not have the "Most Annotated" start: • Cicada\_2, Goodman\_2, Johann\_2,

# Summary by start number:

#### Start 2:

- Found in 10 of 13 (76.9%) of genes in pham
- Manual Annotation's of this start: 7 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ajin\_10 (EF), Bramble\_10 (EF), Count\_104 (EL), DannyDe\_9 (EF), Kors\_10 (EF), LordBart\_10 (EF), Rie18\_10 (EF),

RikSengupta\_10 (EF), Sparcetus\_10 (EF), TinyMiny\_10 (EF),

Start 3:

- Found in 3 of 13 (23.1%) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cicada\_2 (EJ), Goodman\_2 (EJ), Johann\_2 (EJ),

### **Summary by clusters:**

There are 3 clusters represented in this pham: EL, EF, EJ,

Info for manual annotations of cluster EF:

•Start number 2 was manually annotated 6 times for cluster EF.

Info for manual annotations of cluster EJ:

•Start number 3 was manually annotated 3 times for cluster EJ.

Info for manual annotations of cluster EL:

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

#### Gene Information:

Gene: Ajin 10 Start: 2721, Stop: 2960, Start Num: 2

Candidate Starts for Ajin\_10:

(Start: 2 @2721 has 7 MA's), (7, 2808), (8, 2820), (9, 2823), (10, 2826), (15, 2865), (17, 2874), (24, 2949),

Gene: Bramble 10 Start: 2645, Stop: 2893, Start Num: 2

Candidate Starts for Bramble 10:

(1, 2633), (Start: 2 @2645 has 7 MA's), (6, 2735), (10, 2759), (11, 2762), (12, 2777), (17, 2807), (18, 2819), (20, 2855), (24, 2882),

Gene: Cicada\_2 Start: 600, Stop: 875, Start Num: 3

Candidate Starts for Cicada 2:

(Start: 3 @ 600 has 3 MA's), (4, 672), (9, 708), (11, 714), (19, 801), (23, 831), (25, 846),

Gene: Count 104 Start: 65046, Stop: 65294, Start Num: 2

Candidate Starts for Count 104:

(Start: 2 @65046 has 7 MA's), (5, 65124), (9, 65157), (13, 65184), (14, 65190),

Gene: DannyDe\_9 Start: 2605, Stop: 2853, Start Num: 2

Candidate Starts for DannyDe\_9:

(Start: 2 @ 2605 has 7 MA's), (10, 2719), (11, 2722), (12, 2737), (17, 2767), (20, 2815), (24, 2842),

Gene: Goodman 2 Start: 600, Stop: 875, Start Num: 3

Candidate Starts for Goodman 2:

(Start: 3 @ 600 has 3 MA's), (4, 672), (9, 708), (11, 714), (19, 801), (22, 822), (23, 831), (25, 846),

Gene: Johann\_2 Start: 600, Stop: 875, Start Num: 3

Candidate Starts for Johann\_2:

(Start: 3 @ 600 has 3 MA's), (4, 672), (9, 708), (11, 714), (19, 801), (22, 822), (23, 831), (25, 846),

Gene: Kors\_10 Start: 2754, Stop: 2993, Start Num: 2

Candidate Starts for Kors\_10:

(1, 2742), (Start: 2 @2754 has 7 MA's), (7, 2841), (8, 2853), (9, 2856), (10, 2859), (15, 2898), (17, 2907), (21, 2958), (24, 2982),

Gene: LordBart\_10 Start: 2727, Stop: 2966, Start Num: 2

Candidate Starts for LordBart\_10:

(Start: 2 @2727 has 7 MA's), (7, 2814), (8, 2826), (9, 2829), (10, 2832), (15, 2871), (17, 2880), (21, 2931), (24, 2955),

Gene: Rie18\_10 Start: 2797, Stop: 3036, Start Num: 2

Candidate Starts for Rie18\_10:

(Start: 2 @ 2797 has 7 MA's), (6, 2878), (10, 2902), (11, 2905), (16, 2947), (17, 2950), (24, 3025),

Gene: RikSengupta\_10 Start: 2824, Stop: 3063, Start Num: 2

Candidate Starts for RikSengupta 10:

(1, 2812), (Start: 2 @2824 has 7 MA's), (7, 2911), (8, 2923), (9, 2926), (10, 2929), (15, 2968), (17, 2977), (21, 3028), (24, 3052),

Gene: Sparcetus 10 Start: 2651, Stop: 2899, Start Num: 2

Candidate Starts for Sparcetus\_10:

(1, 2639), (Start: 2 @2651 has 7 MA's), (6, 2741), (10, 2765), (11, 2768), (12, 2783), (17, 2813), (18, 2825), (20, 2861), (24, 2888),

Gene: TinyMiny 10 Start: 2658, Stop: 2897, Start Num: 2

Candidate Starts for TinyMiny\_10:

(Start: 2 @2658 has 7 MA's), (7, 2745), (8, 2757), (9, 2760), (10, 2763), (15, 2802), (17, 2811), (21, 2862), (24, 2886),