



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 194282 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194282 has 26 members, 0 are drafts.

Phages represented in each track:

- Track 1 : SlimJimmy\_23, Reindeer\_22, Bricole\_24
- Track 2 : LilhomieP\_23, PegLeg\_24, Auspice\_24, TyDawg\_24, Glaske16\_25, IPhane7\_24, Dulcita\_25, Diminimus\_25, Bongo\_25, Skinny\_25
- Track 3 : Aziz\_28, GenevaB15\_28, MrMagoo\_28, GardenSalsa\_28
- Track 4 : Rey\_29
- Track 5 : Estes\_29
- Track 6 : Nanosmite\_28
- Track 7 : Cosmo\_36, Azrael100\_35
- Track 8 : MaryV\_36, Wildcat\_36, EniyanLRS\_33
- Track 9 : Kumao\_24

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

The start number called the most often in the published annotations is 7, it was called in 20 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_24, Aziz\_28, Bongo\_25, Bricole\_24, Diminimus\_25, Dulcita\_25, Estes\_29, GardenSalsa\_28, GenevaB15\_28, Glaske16\_25, IPhane7\_24, LilhomieP\_23, MrMagoo\_28, Nanosmite\_28, PegLeg\_24, Reindeer\_22, Rey\_29, Skinny\_25, SlimJimmy\_23, TyDawg\_24,

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:

- Azrael100\_35, Cosmo\_36, EniyanLRS\_33, Kumao\_24, MaryV\_36, Wildcat\_36,

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

Start 6:

- Found in 5 of 26 ( 19.2% ) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Azrael100\_35 (V), Cosmo\_36 (V), EniyanLRS\_33 (V), MaryV\_36 (V), Wildcat\_36 (V),

Start 7:

- Found in 20 of 26 ( 76.9% ) of genes in pham
- Manual Annotations of this start: 20 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_24 (M1), Aziz\_28 (M2), Bongo\_25 (M1), Bricole\_24 (M1), Diminimus\_25 (M1), Dulcita\_25 (M1), Estes\_29 (M2), GardenSalsa\_28 (M2), GenevaB15\_28 (M2), Glaske16\_25 (M1), IPhone7\_24 (M1), LilhomieP\_23 (M1), MrMagoo\_28 (M2), Nanosmite\_28 (M3), PegLeg\_24 (M1), Reindeer\_22 (M1), Rey\_29 (M2), Skinny\_25 (M1), SlimJimmy\_23 (M1), TyDawg\_24 (M1),

Start 8:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_24 (singleton),

### **Summary by clusters:**

There are 5 clusters represented in this pham: singleton, M2, M1, M3, V,

Info for manual annotations of cluster M1:

- Start number 7 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 7 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 7 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 6 was manually annotated 5 times for cluster V.

### **Gene Information:**

Gene: Auspice\_24 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for Auspice\_24:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: Aziz\_28 Start: 14380, Stop: 14721, Start Num: 7

Candidate Starts for Aziz\_28:

(Start: 7 @14380 has 20 MA's), (10, 14407), (14, 14434), (16, 14449), (17, 14485), (24, 14611), (26, 14665), (27, 14668), (29, 14683),

Gene: Azrael100\_35 Start: 16947, Stop: 17291, Start Num: 6

Candidate Starts for Azrael100\_35:

(4, 16911), (5, 16929), (Start: 6 @16947 has 5 MA's), (9, 16965), (11, 16995), (13, 17010), (21, 17085), (23, 17160), (28, 17244), (29, 17253), (30, 17271),

Gene: Bongo\_25 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for Bongo\_25:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: Bricole\_24 Start: 13802, Stop: 14125, Start Num: 7

Candidate Starts for Bricole\_24:

(Start: 7 @13802 has 20 MA's), (14, 13853), (29, 14087),

Gene: Cosmo\_36 Start: 16954, Stop: 17298, Start Num: 6

Candidate Starts for Cosmo\_36:

(4, 16918), (5, 16936), (Start: 6 @16954 has 5 MA's), (9, 16972), (11, 17002), (13, 17017), (21, 17092), (23, 17167), (28, 17251), (29, 17260), (30, 17278),

Gene: Diminimus\_25 Start: 13803, Stop: 14138, Start Num: 7

Candidate Starts for Diminimus\_25:

(3, 13749), (Start: 7 @13803 has 20 MA's), (12, 13845), (13, 13857), (29, 14100),

Gene: Dulcita\_25 Start: 13803, Stop: 14138, Start Num: 7

Candidate Starts for Dulcita\_25:

(3, 13749), (Start: 7 @13803 has 20 MA's), (12, 13845), (13, 13857), (29, 14100),

Gene: EniyanLRS\_33 Start: 16652, Stop: 16996, Start Num: 6

Candidate Starts for EniyanLRS\_33:

(Start: 6 @16652 has 5 MA's), (9, 16670), (11, 16700), (13, 16715), (21, 16790), (23, 16865), (28, 16949), (29, 16958), (30, 16976),

Gene: Estes\_29 Start: 14517, Stop: 14858, Start Num: 7

Candidate Starts for Estes\_29:

(Start: 7 @14517 has 20 MA's), (14, 14571), (16, 14586), (17, 14622), (24, 14748), (26, 14802), (27, 14805), (29, 14820),

Gene: GardenSalsa\_28 Start: 14353, Stop: 14694, Start Num: 7

Candidate Starts for GardenSalsa\_28:

(Start: 7 @14353 has 20 MA's), (10, 14380), (14, 14407), (16, 14422), (17, 14458), (24, 14584), (26, 14638), (27, 14641), (29, 14656),

Gene: GenevaB15\_28 Start: 14380, Stop: 14721, Start Num: 7

Candidate Starts for GenevaB15\_28:

(Start: 7 @14380 has 20 MA's), (10, 14407), (14, 14434), (16, 14449), (17, 14485), (24, 14611), (26, 14665), (27, 14668), (29, 14683),

Gene: Glaske16\_25 Start: 13803, Stop: 14138, Start Num: 7

Candidate Starts for Glaske16\_25:

(3, 13749), (Start: 7 @13803 has 20 MA's), (12, 13845), (13, 13857), (29, 14100),

Gene: IPhone7\_24 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for IPhone7\_24:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: Kumao\_24 Start: 13644, Stop: 13994, Start Num: 8

Candidate Starts for Kumao\_24:

(1, 13566), (2, 13581), (Start: 8 @13644 has 1 MA's), (14, 13710), (15, 13731), (20, 13788), (22, 13815), (25, 13920), (26, 13938), (29, 13956), (30, 13974),

Gene: LilhomieP\_23 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for LilhomieP\_23:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: MaryV\_36 Start: 16924, Stop: 17268, Start Num: 6

Candidate Starts for MaryV\_36:

(Start: 6 @16924 has 5 MA's), (9, 16942), (11, 16972), (13, 16987), (21, 17062), (23, 17137), (28, 17221), (29, 17230), (30, 17248),

Gene: MrMagoo\_28 Start: 14353, Stop: 14694, Start Num: 7

Candidate Starts for MrMagoo\_28:

(Start: 7 @14353 has 20 MA's), (10, 14380), (14, 14407), (16, 14422), (17, 14458), (24, 14584), (26, 14638), (27, 14641), (29, 14656),

Gene: Nanosmite\_28 Start: 14576, Stop: 14908, Start Num: 7

Candidate Starts for Nanosmite\_28:

(3, 14522), (Start: 7 @14576 has 20 MA's), (29, 14870),

Gene: PegLeg\_24 Start: 13803, Stop: 14138, Start Num: 7

Candidate Starts for PegLeg\_24:

(3, 13749), (Start: 7 @13803 has 20 MA's), (12, 13845), (13, 13857), (29, 14100),

Gene: Reindeer\_22 Start: 13656, Stop: 13979, Start Num: 7

Candidate Starts for Reindeer\_22:

(Start: 7 @13656 has 20 MA's), (14, 13707), (29, 13941),

Gene: Rey\_29 Start: 14582, Stop: 14929, Start Num: 7

Candidate Starts for Rey\_29:

(Start: 7 @14582 has 20 MA's), (14, 14642), (18, 14717), (19, 14720), (26, 14873), (27, 14876), (29, 14891),

Gene: Skinny\_25 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for Skinny\_25:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: SlimJimmy\_23 Start: 13802, Stop: 14125, Start Num: 7

Candidate Starts for SlimJimmy\_23:

(Start: 7 @13802 has 20 MA's), (14, 13853), (29, 14087),

Gene: TyDawg\_24 Start: 13804, Stop: 14139, Start Num: 7

Candidate Starts for TyDawg\_24:

(3, 13750), (Start: 7 @13804 has 20 MA's), (12, 13846), (13, 13858), (29, 14101),

Gene: Wildcat\_36 Start: 16934, Stop: 17278, Start Num: 6

Candidate Starts for Wildcat\_36:

(Start: 6 @16934 has 5 MA's), (9, 16952), (11, 16982), (13, 16997), (21, 17072), (23, 17147), (28, 17231), (29, 17240), (30, 17258),