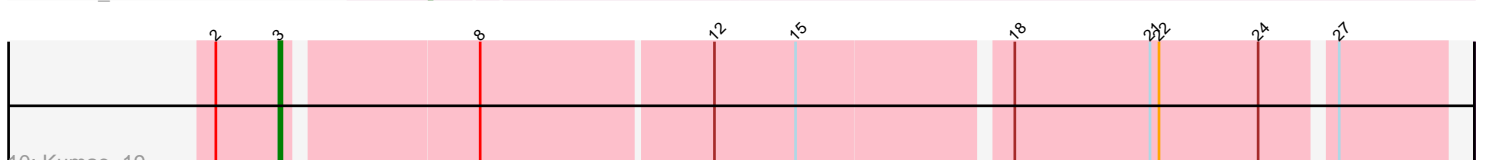
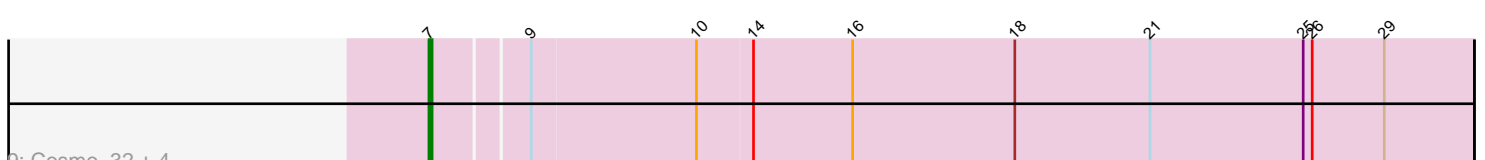
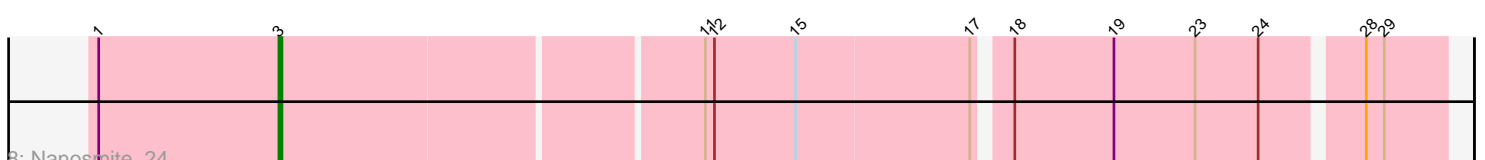
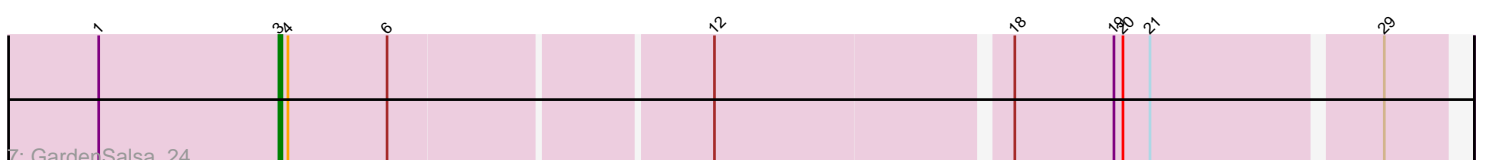
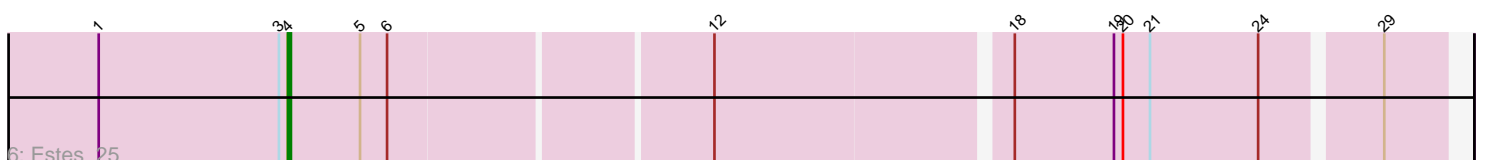
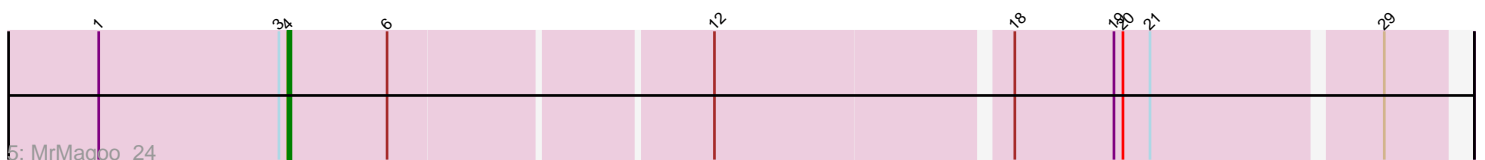
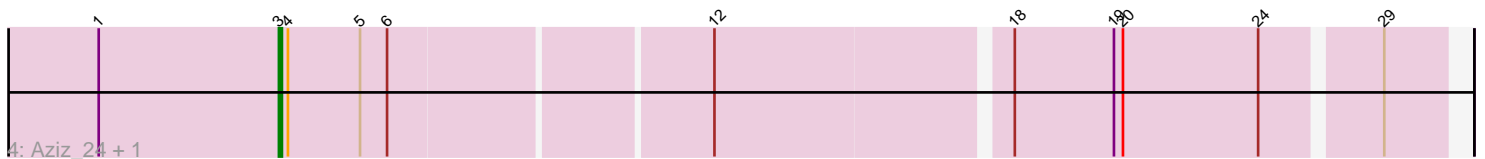
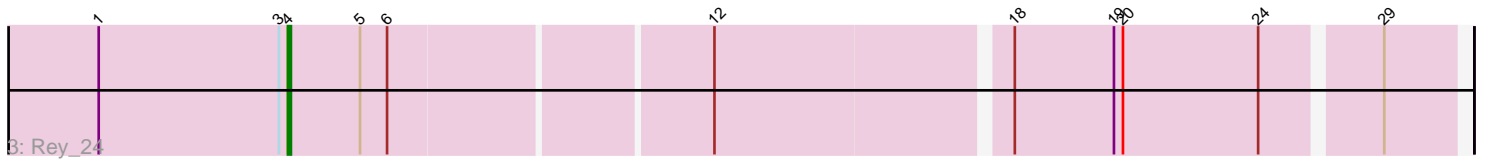
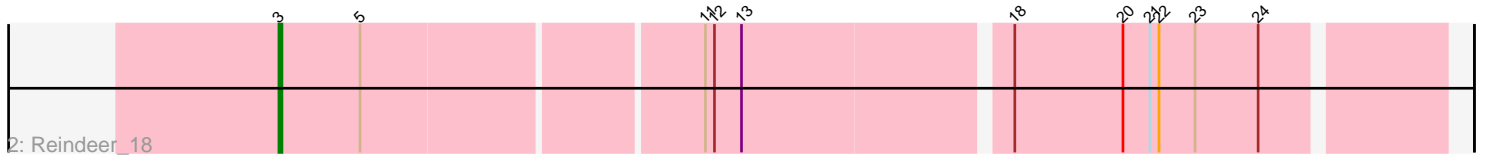
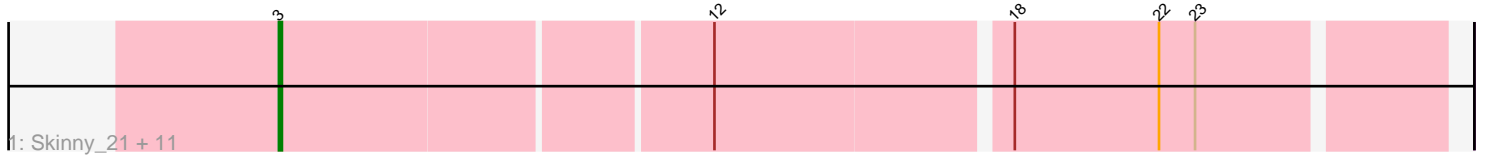


Pham 196771



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 196771 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196771 has 26 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Skinny\_21, PegLeg\_20, Auspice\_20, Glaske16\_21, Bricole\_20, SlimJimmy\_19, TyDawg\_20, IPhane7\_20, Dulcita\_21, Diminimus\_21, LilhomieP\_19, Bongo\_20
- Track 2 : Reindeer\_18
- Track 3 : Rey\_24
- Track 4 : Aziz\_24, GenevaB15\_24
- Track 5 : MrMagoo\_24
- Track 6 : Estes\_25
- Track 7 : GardenSalsa\_24
- Track 8 : Nanosmite\_24
- Track 9 : Cosmo\_32, MaryV\_32, Wildcat\_32, Azrael100\_31, EniyanLRS\_29
- Track 10 : Kumao\_19

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

The start number called the most often in the published annotations is 3, it was called in 18 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_20, Aziz\_24, Bongo\_20, Bricole\_20, Diminimus\_21, Dulcita\_21, GardenSalsa\_24, GenevaB15\_24, Glaske16\_21, IPhane7\_20, Kumao\_19, LilhomieP\_19, Nanosmite\_24, PegLeg\_20, Reindeer\_18, Skinny\_21, SlimJimmy\_19, TyDawg\_20,

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

- Estes\_25, MrMagoo\_24, Rey\_24,

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

- Azrael100\_31, Cosmo\_32, EniyanLRS\_29, MaryV\_32, Wildcat\_32,

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

Start 3:

- Found in 21 of 26 ( 80.8% ) of genes in pham

- Manual Annotations of this start: 18 of 26
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Auspice\_20 (M1), Aziz\_24 (M2), Bongo\_20 (M1), Bricole\_20 (M1), Diminimus\_21 (M1), Dulcita\_21 (M1), GardenSalsa\_24 (M2), GenevaB15\_24 (M2), Glaske16\_21 (M1), IPhane7\_20 (M1), Kumao\_19 (singleton), LilhomieP\_19 (M1), Nanosmite\_24 (M3), PegLeg\_20 (M1), Reindeer\_18 (M1), Skinny\_21 (M1), SlimJimmy\_19 (M1), TyDawg\_20 (M1),

#### Start 4:

- Found in 6 of 26 ( 23.1% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Estes\_25 (M2), MrMagoo\_24 (M2), Rey\_24 (M2),

#### Start 7:

- 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\_31 (V), Cosmo\_32 (V), EniyanLRS\_29 (V), MaryV\_32 (V), Wildcat\_32 (V),

### **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 3 was manually annotated 13 times for cluster M1.

#### Info for manual annotations of cluster M2:

- Start number 3 was manually annotated 3 times for cluster M2.
- Start number 4 was manually annotated 3 times for cluster M2.

#### Info for manual annotations of cluster M3:

- Start number 3 was manually annotated 1 time for cluster M3.

#### Info for manual annotations of cluster V:

- Start number 7 was manually annotated 5 times for cluster V.

### **Gene Information:**

Gene: Auspice\_20 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for Auspice\_20:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: Aziz\_24 Start: 12073, Stop: 12441, Start Num: 3

Candidate Starts for Aziz\_24:

(1, 12013), (Start: 3 @12073 has 18 MA's), (Start: 4 @12076 has 3 MA's), (5, 12100), (6, 12109), (12, 12211), (18, 12304), (19, 12337), (20, 12340), (24, 12385), (29, 12421),

Gene: Azrael100\_31 Start: 14635, Stop: 14976, Start Num: 7

Candidate Starts for Azrael100\_31:

(Start: 7 @14635 has 5 MA's), (9, 14665), (10, 14719), (14, 14737), (16, 14770), (18, 14824), (21, 14869), (25, 14920), (26, 14923), (29, 14947),

Gene: Bongo\_20 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for Bongo\_20:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: Bricole\_20 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for Bricole\_20:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: Cosmo\_32 Start: 14642, Stop: 14983, Start Num: 7

Candidate Starts for Cosmo\_32:

(Start: 7 @14642 has 5 MA's), (9, 14672), (10, 14726), (14, 14744), (16, 14777), (18, 14831), (21, 14876), (25, 14927), (26, 14930), (29, 14954),

Gene: Diminimus\_21 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for Diminimus\_21:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: Dulcita\_21 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for Dulcita\_21:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: EniyanLRS\_29 Start: 14336, Stop: 14677, Start Num: 7

Candidate Starts for EniyanLRS\_29:

(Start: 7 @14336 has 5 MA's), (9, 14366), (10, 14420), (14, 14438), (16, 14471), (18, 14525), (21, 14570), (25, 14621), (26, 14624), (29, 14648),

Gene: Estes\_25 Start: 12213, Stop: 12578, Start Num: 4

Candidate Starts for Estes\_25:

(1, 12150), (Start: 3 @12210 has 18 MA's), (Start: 4 @12213 has 3 MA's), (5, 12237), (6, 12246), (12, 12348), (18, 12441), (19, 12474), (20, 12477), (21, 12486), (24, 12522), (29, 12558),

Gene: GardenSalsa\_24 Start: 12046, Stop: 12414, Start Num: 3

Candidate Starts for GardenSalsa\_24:

(1, 11986), (Start: 3 @12046 has 18 MA's), (Start: 4 @12049 has 3 MA's), (6, 12082), (12, 12184), (18, 12277), (19, 12310), (20, 12313), (21, 12322), (29, 12394),

Gene: GenevaB15\_24 Start: 12073, Stop: 12441, Start Num: 3

Candidate Starts for GenevaB15\_24:

(1, 12013), (Start: 3 @12073 has 18 MA's), (Start: 4 @12076 has 3 MA's), (5, 12100), (6, 12109), (12, 12211), (18, 12304), (19, 12337), (20, 12340), (24, 12385), (29, 12421),

Gene: Glaske16\_21 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for Glaske16\_21:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: IPhone7\_20 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for IPhone7\_20:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: Kumao\_19 Start: 10846, Stop: 11211, Start Num: 3

Candidate Starts for Kumao\_19:

(2, 10825), (Start: 3 @10846 has 18 MA's), (8, 10906), (12, 10981), (15, 11008), (18, 11074), (21, 11119), (22, 11122), (24, 11155), (27, 11176),

Gene: LilhomieP\_19 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for LilhomieP\_19:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: MaryV\_32 Start: 14608, Stop: 14949, Start Num: 7

Candidate Starts for MaryV\_32:

(Start: 7 @14608 has 5 MA's), (9, 14638), (10, 14692), (14, 14710), (16, 14743), (18, 14797), (21, 14842), (25, 14893), (26, 14896), (29, 14920),

Gene: MrMagoo\_24 Start: 12049, Stop: 12414, Start Num: 4

Candidate Starts for MrMagoo\_24:

(1, 11986), (Start: 3 @12046 has 18 MA's), (Start: 4 @12049 has 3 MA's), (6, 12082), (12, 12184), (18, 12277), (19, 12310), (20, 12313), (21, 12322), (29, 12394),

Gene: Nanosmite\_24 Start: 12264, Stop: 12632, Start Num: 3

Candidate Starts for Nanosmite\_24:

(1, 12204), (Start: 3 @12264 has 18 MA's), (11, 12399), (12, 12402), (15, 12429), (17, 12486), (18, 12495), (19, 12528), (23, 12555), (24, 12576), (28, 12606), (29, 12612),

Gene: PegLeg\_20 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for PegLeg\_20:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: Reindeer\_18 Start: 11362, Stop: 11730, Start Num: 3

Candidate Starts for Reindeer\_18:

(Start: 3 @11362 has 18 MA's), (5, 11389), (11, 11497), (12, 11500), (13, 11509), (18, 11593), (20, 11629), (21, 11638), (22, 11641), (23, 11653), (24, 11674),

Gene: Rey\_24 Start: 12284, Stop: 12652, Start Num: 4

Candidate Starts for Rey\_24:

(1, 12221), (Start: 3 @12281 has 18 MA's), (Start: 4 @12284 has 3 MA's), (5, 12308), (6, 12317), (12, 12419), (18, 12512), (19, 12545), (20, 12548), (24, 12593), (29, 12629),

Gene: Skinny\_21 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for Skinny\_21:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: SlimJimmy\_19 Start: 11509, Stop: 11877, Start Num: 3

Candidate Starts for SlimJimmy\_19:

(Start: 3 @11509 has 18 MA's), (12, 11647), (18, 11740), (22, 11788), (23, 11800),

Gene: TyDawg\_20 Start: 11510, Stop: 11878, Start Num: 3

Candidate Starts for TyDawg\_20:

(Start: 3 @11510 has 18 MA's), (12, 11648), (18, 11741), (22, 11789), (23, 11801),

Gene: Wildcat\_32 Start: 14618, Stop: 14959, Start Num: 7

Candidate Starts for Wildcat\_32:

(Start: 7 @14618 has 5 MA's), (9, 14648), (10, 14702), (14, 14720), (16, 14753), (18, 14807), (21, 14852), (25, 14903), (26, 14906), (29, 14930),