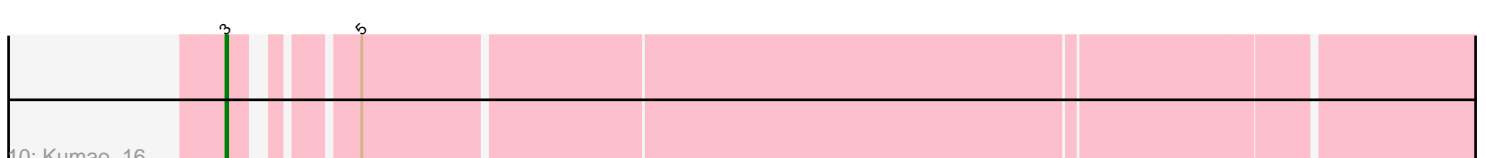
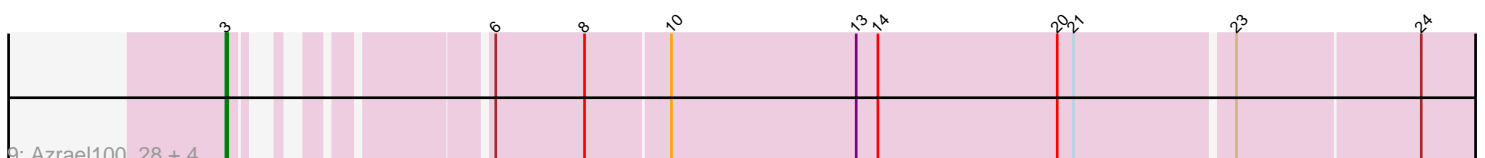
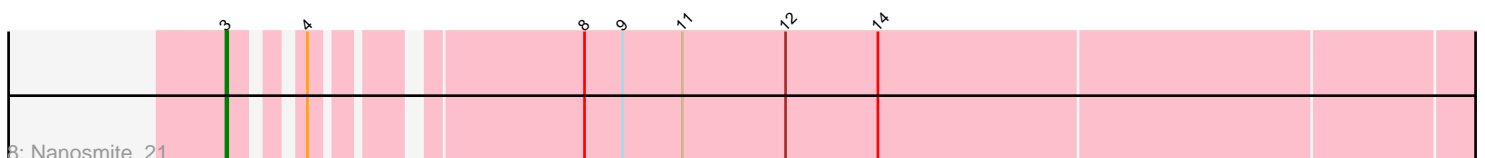
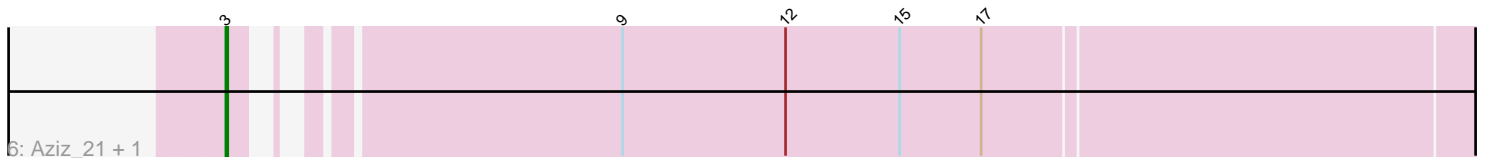
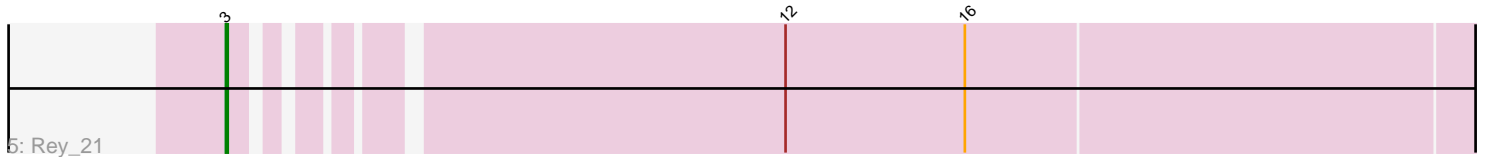
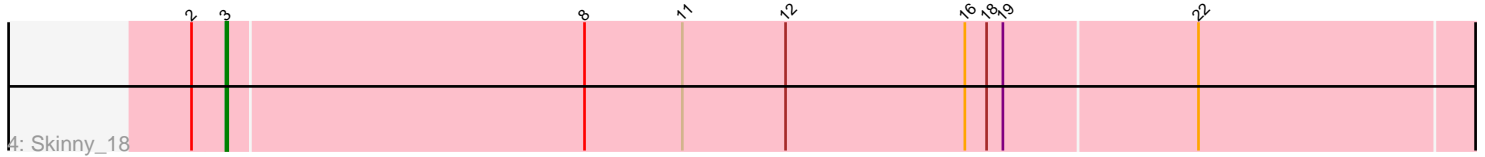
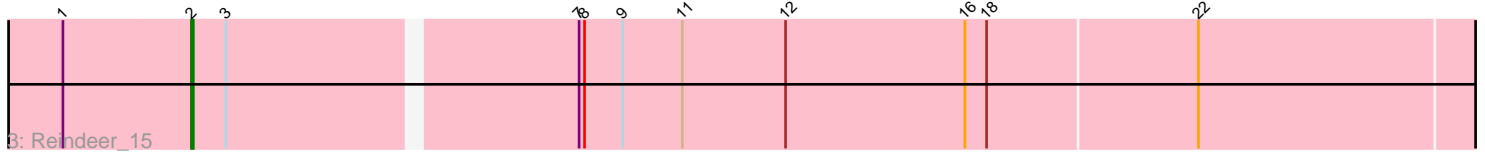
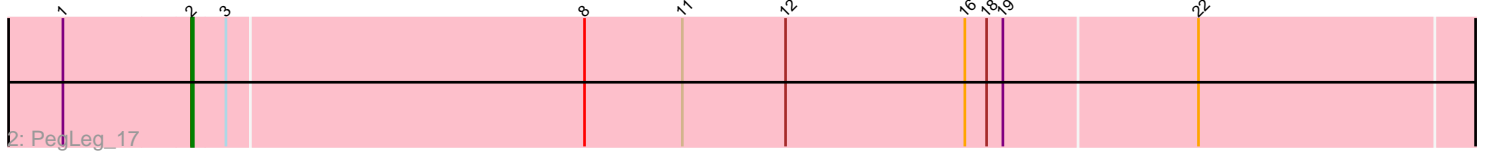
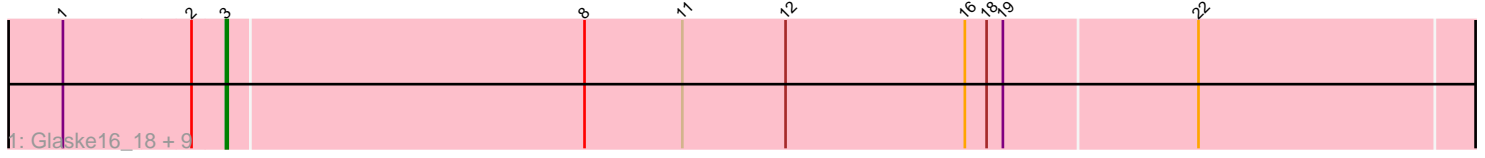


# Pham 158123



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 158123 Report

This analysis was run 04/22/24 on database version 561.

Pham number 158123 has 26 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Glaske16\_18, Bricole\_17, Dulcita\_18, IPhane7\_17, SlimJimmy\_16, Bongo\_17, Diminimus\_18, LilhomieP\_16, TyDawg\_17, Auspice\_17
- Track 2 : PegLeg\_17
- Track 3 : Reindeer\_15
- Track 4 : Skinny\_18
- Track 5 : Rey\_21
- Track 6 : Aziz\_21, GenevaB15\_21
- Track 7 : MrMagoo\_21, Estes\_22, GardenSalsa\_21
- Track 8 : Nanosmite\_21
- Track 9 : Azrael100\_28, EniyanLRS\_26, Cosmo\_29, MaryV\_29, Wildcat\_29
- Track 10 : Kumao\_16

### ***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 24 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_17, Aziz\_21, Azrael100\_28, Bongo\_17, Bricole\_17, Cosmo\_29, Diminimus\_18, Dulcita\_18, EniyanLRS\_26, Estes\_22, GardenSalsa\_21, GenevaB15\_21, Glaske16\_18, IPhane7\_17, Kumao\_16, LilhomieP\_16, MaryV\_29, MrMagoo\_21, Nanosmite\_21, Rey\_21, Skinny\_18, SlimJimmy\_16, TyDawg\_17, Wildcat\_29,

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

- PegLeg\_17, Reindeer\_15,

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

- 

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

Start 2:

- Found in 13 of 26 ( 50.0% ) of genes in pham

- Manual Annotations of this start: 2 of 26
- Called 15.4% of time when present
- Phage (with cluster) where this start called: PegLeg\_17 (M1), Reindeer\_15 (M1),

Start 3:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 24 of 26
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Auspice\_17 (M1), Aziz\_21 (M2), Azrael100\_28 (V), Bongo\_17 (M1), Bricole\_17 (M1), Cosmo\_29 (V), Diminimus\_18 (M1), Dulcita\_18 (M1), EniyanLRS\_26 (V), Estes\_22 (M2), GardenSalsa\_21 (M2), GenevaB15\_21 (M2), Glaske16\_18 (M1), IPhone7\_17 (M1), Kumao\_16 (singleton), LilhomieP\_16 (M1), MaryV\_29 (V), MrMagoo\_21 (M2), Nanosmite\_21 (M3), Rey\_21 (M2), Skinny\_18 (M1), SlimJimmy\_16 (M1), TyDawg\_17 (M1), Wildcat\_29 (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 2 was manually annotated 2 times for cluster M1.
- Start number 3 was manually annotated 11 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 3 was manually annotated 6 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 3 was manually annotated 5 times for cluster V.

### Gene Information:

Gene: Auspice\_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for Auspice\_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: Aziz\_21 Start: 9693, Stop: 10367, Start Num: 3

Candidate Starts for Aziz\_21:

(Start: 3 @9693 has 24 MA's), (9, 9870), (12, 9960), (15, 10023), (17, 10068),

Gene: Azrael100\_28 Start: 12267, Stop: 12920, Start Num: 3

Candidate Starts for Azrael100\_28:

(Start: 3 @12267 has 24 MA's), (6, 12366), (8, 12414), (10, 12459), (13, 12561), (14, 12573), (20, 12672), (21, 12681), (23, 12765), (24, 12864),

Gene: Bongo\_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for Bongo\_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: Bricole\_17 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Bricole\_17:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: Cosmo\_29 Start: 12274, Stop: 12927, Start Num: 3

Candidate Starts for Cosmo\_29:

(Start: 3 @12274 has 24 MA's), (6, 12373), (8, 12421), (10, 12466), (13, 12568), (14, 12580), (20, 12679), (21, 12688), (23, 12772), (24, 12871),

Gene: Diminimus\_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Diminimus\_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: Dulcita\_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Dulcita\_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: EniyanLRS\_26 Start: 11965, Stop: 12621, Start Num: 3

Candidate Starts for EniyanLRS\_26:

(Start: 3 @11965 has 24 MA's), (6, 12067), (8, 12115), (10, 12160), (13, 12262), (14, 12274), (20, 12373), (21, 12382), (23, 12466), (24, 12565),

Gene: Estes\_22 Start: 9832, Stop: 10506, Start Num: 3

Candidate Starts for Estes\_22:

(Start: 3 @9832 has 24 MA's), (9, 10009), (12, 10099), (17, 10207),

Gene: GardenSalsa\_21 Start: 9666, Stop: 10340, Start Num: 3

Candidate Starts for GardenSalsa\_21:

(Start: 3 @9666 has 24 MA's), (9, 9843), (12, 9933), (17, 10041),

Gene: GenevaB15\_21 Start: 9693, Stop: 10367, Start Num: 3

Candidate Starts for GenevaB15\_21:

(Start: 3 @9693 has 24 MA's), (9, 9870), (12, 9960), (15, 10023), (17, 10068),

Gene: Glaske16\_18 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for Glaske16\_18:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: IPHane7\_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for IPHane7\_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: Kumao\_16 Start: 8489, Stop: 9151, Start Num: 3

Candidate Starts for Kumao\_16:

(Start: 3 @8489 has 24 MA's), (5, 8540),

Gene: LilhomieP\_16 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for LilhomieP\_16:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: MaryV\_29 Start: 12237, Stop: 12893, Start Num: 3

Candidate Starts for MaryV\_29:

(Start: 3 @12237 has 24 MA's), (6, 12339), (8, 12387), (10, 12432), (13, 12534), (14, 12546), (20, 12645), (21, 12654), (23, 12738), (24, 12837),

Gene: MrMagoo\_21 Start: 9666, Stop: 10340, Start Num: 3

Candidate Starts for MrMagoo\_21:

(Start: 3 @9666 has 24 MA's), (9, 9843), (12, 9933), (17, 10041),

Gene: Nanosmite\_21 Start: 9886, Stop: 10557, Start Num: 3

Candidate Starts for Nanosmite\_21:

(Start: 3 @9886 has 24 MA's), (4, 9913), (8, 10039), (9, 10060), (11, 10093), (12, 10150), (14, 10201),

Gene: PegLeg\_17 Start: 9074, Stop: 9808, Start Num: 2

Candidate Starts for PegLeg\_17:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: Reindeer\_15 Start: 8937, Stop: 9662, Start Num: 2

Candidate Starts for Reindeer\_15:

(1, 8868), (Start: 2 @8937 has 2 MA's), (Start: 3 @8955 has 24 MA's), (7, 9138), (8, 9141), (9, 9162), (11, 9195), (12, 9252), (16, 9351), (18, 9363), (22, 9477),

Gene: Rey\_21 Start: 9898, Stop: 10575, Start Num: 3

Candidate Starts for Rey\_21:

(Start: 3 @9898 has 24 MA's), (12, 10165), (16, 10264),

Gene: Skinny\_18 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for Skinny\_18:

(Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: SlimJimmy\_16 Start: 9092, Stop: 9808, Start Num: 3

Candidate Starts for SlimJimmy\_16:

(1, 9005), (Start: 2 @9074 has 2 MA's), (Start: 3 @9092 has 24 MA's), (8, 9287), (11, 9341), (12, 9398), (16, 9497), (18, 9509), (19, 9518), (22, 9623),

Gene: TyDawg\_17 Start: 9093, Stop: 9809, Start Num: 3

Candidate Starts for TyDawg\_17:

(1, 9006), (Start: 2 @9075 has 2 MA's), (Start: 3 @9093 has 24 MA's), (8, 9288), (11, 9342), (12, 9399), (16, 9498), (18, 9510), (19, 9519), (22, 9624),

Gene: Wildcat\_29 Start: 12247, Stop: 12903, Start Num: 3

Candidate Starts for Wildcat\_29:

(Start: 3 @12247 has 24 MA's), (6, 12349), (8, 12397), (10, 12442), (13, 12544), (14, 12556), (20, 12655), (21, 12664), (23, 12748), (24, 12847),