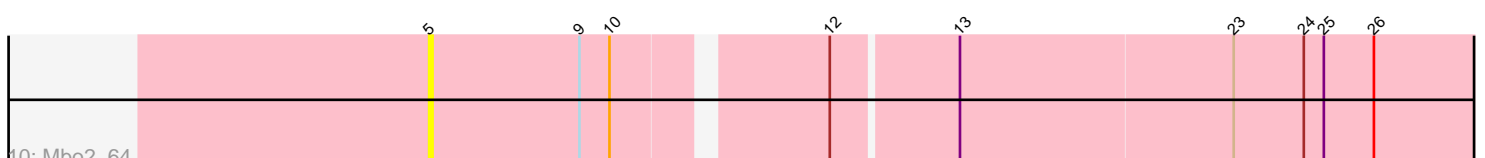
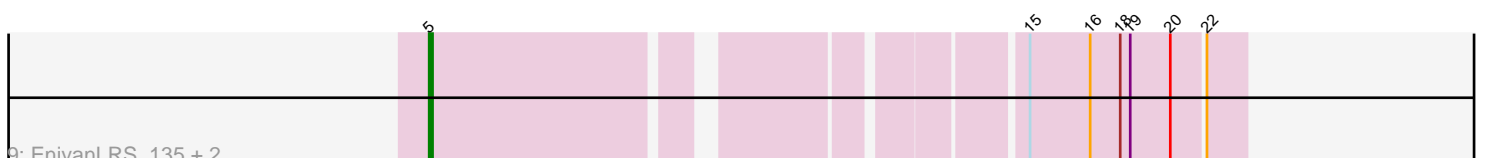
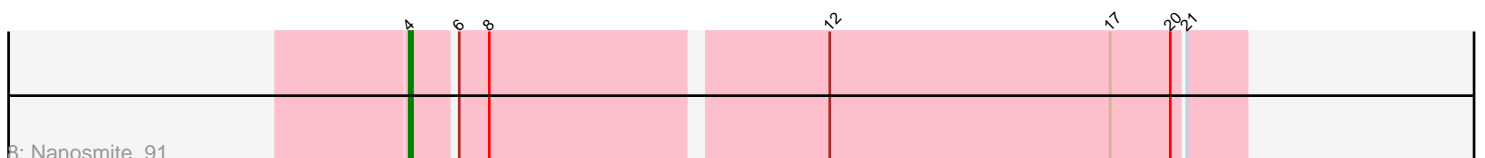
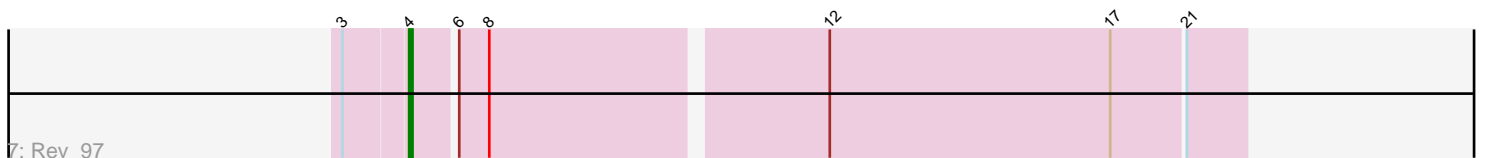
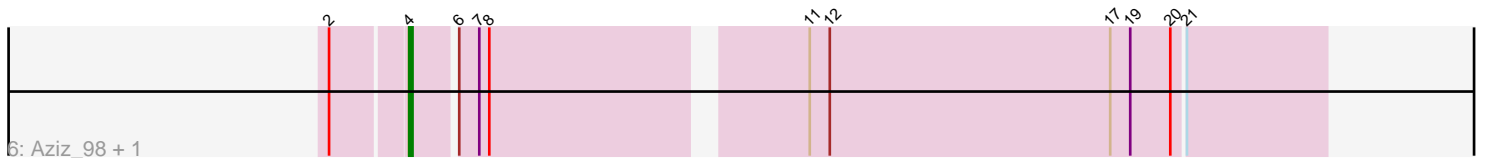
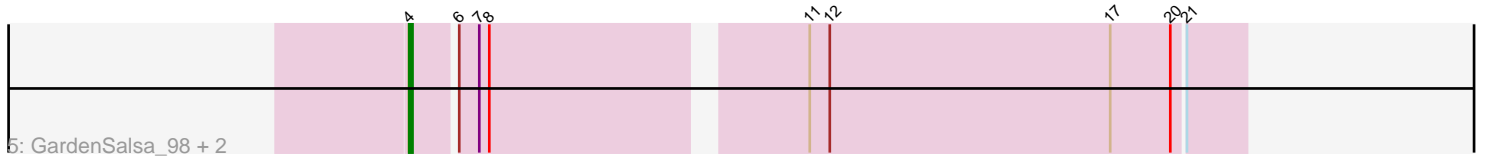
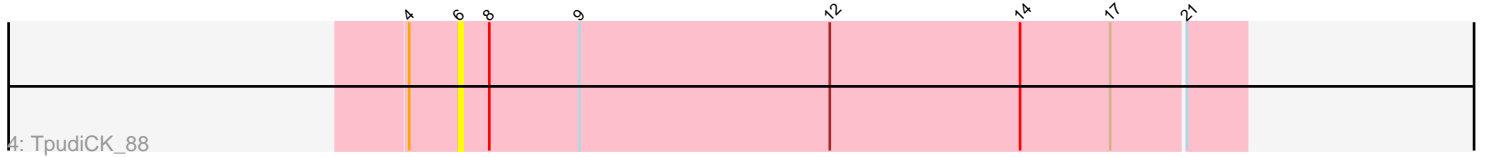
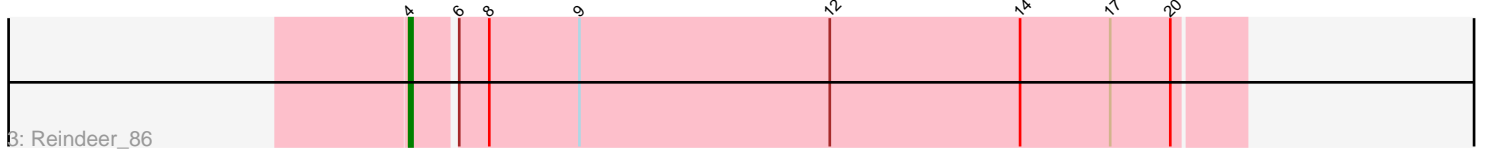
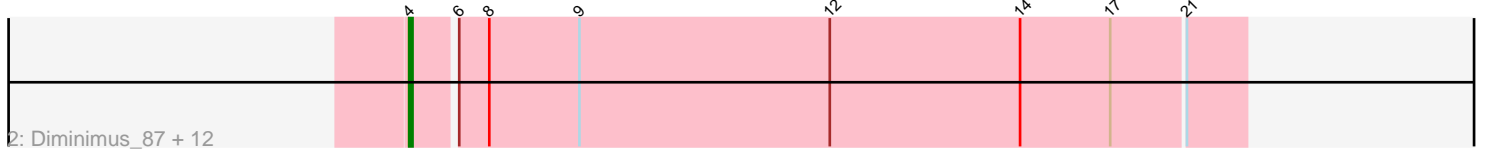
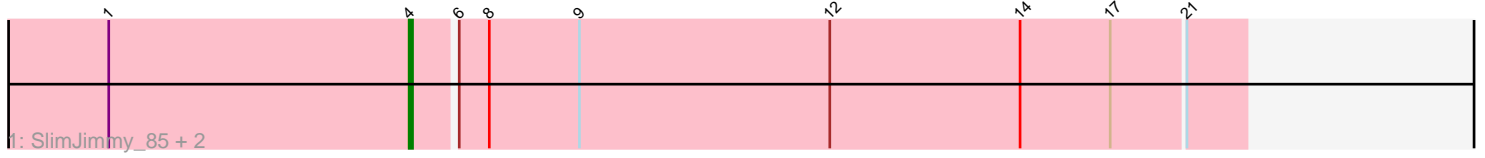


Pham 296818



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 296818 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296818 has 29 members, 4 are drafts.

Phages represented in each track:

- Track 1 : SlimJimmy\_85, KleverKiS\_85, Glaske16\_87
- Track 2 : Diminimus\_87, PegLeg\_85, Auspice\_86, Izel\_87, Dulcita\_87, LilhomieP\_86, FreakyGoo\_88, RoseMarie\_92, TyDawg\_86, Bongo\_86, IPhane7\_85, Skinny\_90, Bricole\_85
- Track 3 : Reindeer\_86
- Track 4 : TpudiCK\_88
- Track 5 : GardenSalsa\_98, Estes\_97, MrMagoo\_99
- Track 6 : Aziz\_98, GenevaB15\_100
- Track 7 : Rey\_97
- Track 8 : Nanosmite\_91
- Track 9 : EniyanLRS\_135, Cosmo\_142, Azrael100\_134
- Track 10 : Mbo2\_64

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

The start number called the most often in the published annotations is 4, it was called in 22 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auspice\_86, Aziz\_98, Bongo\_86, Bricole\_85, Diminimus\_87, Dulcita\_87, Estes\_97, FreakyGoo\_88, GardenSalsa\_98, GenevaB15\_100, Glaske16\_87, IPhane7\_85, Izel\_87, KleverKiS\_85, LilhomieP\_86, MrMagoo\_99, Nanosmite\_91, PegLeg\_85, Reindeer\_86, Rey\_97, RoseMarie\_92, Skinny\_90, SlimJimmy\_85, TyDawg\_86,

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

- TpudiCK\_88,

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

- Azrael100\_134, Cosmo\_142, EniyanLRS\_135, Mbo2\_64,

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

Start 4:

- Found in 25 of 29 ( 86.2% ) of genes in pham

- Manual Annotations of this start: 22 of 25
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Auspice\_86 (M1), Aziz\_98 (M2), Bongo\_86 (M1), Bricole\_85 (M1), Diminimus\_87 (M1), Dulcita\_87 (M1), Estes\_97 (M2), FreakyGoo\_88 (M1), GardenSalsa\_98 (M2), GenevaB15\_100 (M2), Glaske16\_87 (M1), IPhane7\_85 (M1), Izel\_87 (M1), KleverKiS\_85 (M1), LilhomieP\_86 (M1), MrMagoo\_99 (M2), Nanosmite\_91 (M3), PegLeg\_85 (M1), Reindeer\_86 (M1), Rey\_97 (M2), RoseMarie\_92 (M1), Skinny\_90 (M1), SlimJimmy\_85 (M1), TyDawg\_86 (M1),

Start 5:

- Found in 4 of 29 ( 13.8% ) of genes in pham
- Manual Annotations of this start: 3 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_134 (V), Cosmo\_142 (V), EniyanLRS\_135 (V), Mbo2\_64 (singleton),

Start 6:

- Found in 25 of 29 ( 86.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 4.0% of time when present
- Phage (with cluster) where this start called: TpudiCK\_88 (M1),

### **Summary by clusters:**

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

Info for manual annotations of cluster M1:

- Start number 4 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 4 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 4 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

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

### **Gene Information:**

Gene: Auspice\_86 Start: 53172, Stop: 53417, Start Num: 4

Candidate Starts for Auspice\_86:

(Start: 4 @53172 has 22 MA's), (6, 53184), (8, 53193), (9, 53220), (12, 53295), (14, 53352), (17, 53379), (21, 53400),

Gene: Aziz\_98 Start: 55391, Stop: 55651, Start Num: 4

Candidate Starts for Aziz\_98:

(2, 55370), (Start: 4 @55391 has 22 MA's), (6, 55403), (7, 55409), (8, 55412), (11, 55499), (12, 55505), (17, 55589), (19, 55595), (20, 55607), (21, 55610),

Gene: Azrael100\_134 Start: 66616, Stop: 66834, Start Num: 5  
Candidate Starts for Azrael100\_134:  
(Start: 5 @66616 has 3 MA's), (15, 66772), (16, 66790), (18, 66799), (19, 66802), (20, 66814), (22, 66823),

Gene: Bongo\_86 Start: 53176, Stop: 53421, Start Num: 4  
Candidate Starts for Bongo\_86:  
(Start: 4 @53176 has 22 MA's), (6, 53188), (8, 53197), (9, 53224), (12, 53299), (14, 53356), (17, 53383), (21, 53404),

Gene: Bricole\_85 Start: 52940, Stop: 53185, Start Num: 4  
Candidate Starts for Bricole\_85:  
(Start: 4 @52940 has 22 MA's), (6, 52952), (8, 52961), (9, 52988), (12, 53063), (14, 53120), (17, 53147), (21, 53168),

Gene: Cosmo\_142 Start: 66908, Stop: 67126, Start Num: 5  
Candidate Starts for Cosmo\_142:  
(Start: 5 @66908 has 3 MA's), (15, 67064), (16, 67082), (18, 67091), (19, 67094), (20, 67106), (22, 67115),

Gene: Diminimus\_87 Start: 53171, Stop: 53416, Start Num: 4  
Candidate Starts for Diminimus\_87:  
(Start: 4 @53171 has 22 MA's), (6, 53183), (8, 53192), (9, 53219), (12, 53294), (14, 53351), (17, 53378), (21, 53399),

Gene: Dulcita\_87 Start: 53172, Stop: 53417, Start Num: 4  
Candidate Starts for Dulcita\_87:  
(Start: 4 @53172 has 22 MA's), (6, 53184), (8, 53193), (9, 53220), (12, 53295), (14, 53352), (17, 53379), (21, 53400),

Gene: EniyanLRS\_135 Start: 67127, Stop: 67345, Start Num: 5  
Candidate Starts for EniyanLRS\_135:  
(Start: 5 @67127 has 3 MA's), (15, 67283), (16, 67301), (18, 67310), (19, 67313), (20, 67325), (22, 67334),

Gene: Estes\_97 Start: 54982, Stop: 55218, Start Num: 4  
Candidate Starts for Estes\_97:  
(Start: 4 @54982 has 22 MA's), (6, 54994), (7, 55000), (8, 55003), (11, 55090), (12, 55096), (17, 55180), (20, 55198), (21, 55201),

Gene: FreakyGoo\_88 Start: 53651, Stop: 53896, Start Num: 4  
Candidate Starts for FreakyGoo\_88:  
(Start: 4 @53651 has 22 MA's), (6, 53663), (8, 53672), (9, 53699), (12, 53774), (14, 53831), (17, 53858), (21, 53879),

Gene: GardenSalsa\_98 Start: 55342, Stop: 55578, Start Num: 4  
Candidate Starts for GardenSalsa\_98:  
(Start: 4 @55342 has 22 MA's), (6, 55354), (7, 55360), (8, 55363), (11, 55450), (12, 55456), (17, 55540), (20, 55558), (21, 55561),

Gene: GenevaB15\_100 Start: 55391, Stop: 55651, Start Num: 4  
Candidate Starts for GenevaB15\_100:

(2, 55370), (Start: 4 @55391 has 22 MA's), (6, 55403), (7, 55409), (8, 55412), (11, 55499), (12, 55505), (17, 55589), (19, 55595), (20, 55607), (21, 55610),

Gene: Glaske16\_87 Start: 53344, Stop: 53589, Start Num: 4

Candidate Starts for Glaske16\_87:

(1, 53254), (Start: 4 @53344 has 22 MA's), (6, 53356), (8, 53365), (9, 53392), (12, 53467), (14, 53524), (17, 53551), (21, 53572),

Gene: IPhone7\_85 Start: 53176, Stop: 53421, Start Num: 4

Candidate Starts for IPhone7\_85:

(Start: 4 @53176 has 22 MA's), (6, 53188), (8, 53197), (9, 53224), (12, 53299), (14, 53356), (17, 53383), (21, 53404),

Gene: Izel\_87 Start: 53171, Stop: 53416, Start Num: 4

Candidate Starts for Izel\_87:

(Start: 4 @53171 has 22 MA's), (6, 53183), (8, 53192), (9, 53219), (12, 53294), (14, 53351), (17, 53378), (21, 53399),

Gene: KleverKiS\_85 Start: 53042, Stop: 53287, Start Num: 4

Candidate Starts for KleverKiS\_85:

(1, 52952), (Start: 4 @53042 has 22 MA's), (6, 53054), (8, 53063), (9, 53090), (12, 53165), (14, 53222), (17, 53249), (21, 53270),

Gene: LilhomieP\_86 Start: 53655, Stop: 53900, Start Num: 4

Candidate Starts for LilhomieP\_86:

(Start: 4 @53655 has 22 MA's), (6, 53667), (8, 53676), (9, 53703), (12, 53778), (14, 53835), (17, 53862), (21, 53883),

Gene: Mbo2\_64 Start: 49444, Stop: 49133, Start Num: 5

Candidate Starts for Mbo2\_64:

(Start: 5 @49444 has 3 MA's), (9, 49399), (10, 49390), (12, 49333), (13, 49297), (23, 49216), (24, 49195), (25, 49189), (26, 49174),

Gene: MrMagoo\_99 Start: 55342, Stop: 55578, Start Num: 4

Candidate Starts for MrMagoo\_99:

(Start: 4 @55342 has 22 MA's), (6, 55354), (7, 55360), (8, 55363), (11, 55450), (12, 55456), (17, 55540), (20, 55558), (21, 55561),

Gene: Nanosmite\_91 Start: 54259, Stop: 54498, Start Num: 4

Candidate Starts for Nanosmite\_91:

(Start: 4 @54259 has 22 MA's), (6, 54271), (8, 54280), (12, 54376), (17, 54460), (20, 54478), (21, 54481),

Gene: PegLeg\_85 Start: 52916, Stop: 53161, Start Num: 4

Candidate Starts for PegLeg\_85:

(Start: 4 @52916 has 22 MA's), (6, 52928), (8, 52937), (9, 52964), (12, 53039), (14, 53096), (17, 53123), (21, 53144),

Gene: Reindeer\_86 Start: 53665, Stop: 53910, Start Num: 4

Candidate Starts for Reindeer\_86:

(Start: 4 @53665 has 22 MA's), (6, 53677), (8, 53686), (9, 53713), (12, 53788), (14, 53845), (17, 53872), (20, 53890),

Gene: Rey\_97 Start: 54655, Stop: 54894, Start Num: 4

Candidate Starts for Rey\_97:

(3, 54637), (Start: 4 @54655 has 22 MA's), (6, 54667), (8, 54676), (12, 54772), (17, 54856), (21, 54877),

Gene: RoseMarie\_92 Start: 56574, Stop: 56819, Start Num: 4

Candidate Starts for RoseMarie\_92:

(Start: 4 @56574 has 22 MA's), (6, 56586), (8, 56595), (9, 56622), (12, 56697), (14, 56754), (17, 56781), (21, 56802),

Gene: Skinny\_90 Start: 54084, Stop: 54329, Start Num: 4

Candidate Starts for Skinny\_90:

(Start: 4 @54084 has 22 MA's), (6, 54096), (8, 54105), (9, 54132), (12, 54207), (14, 54264), (17, 54291), (21, 54312),

Gene: SlimJimmy\_85 Start: 53621, Stop: 53866, Start Num: 4

Candidate Starts for SlimJimmy\_85:

(1, 53531), (Start: 4 @53621 has 22 MA's), (6, 53633), (8, 53642), (9, 53669), (12, 53744), (14, 53801), (17, 53828), (21, 53849),

Gene: TpudiCK\_88 Start: 53188, Stop: 53421, Start Num: 6

Candidate Starts for TpudiCK\_88:

(Start: 4 @53176 has 22 MA's), (6, 53188), (8, 53197), (9, 53224), (12, 53299), (14, 53356), (17, 53383), (21, 53404),

Gene: TyDawg\_86 Start: 53179, Stop: 53424, Start Num: 4

Candidate Starts for TyDawg\_86:

(Start: 4 @53179 has 22 MA's), (6, 53191), (8, 53200), (9, 53227), (12, 53302), (14, 53359), (17, 53386), (21, 53407),