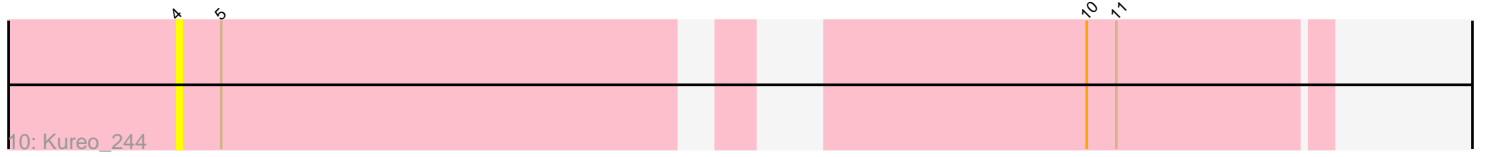
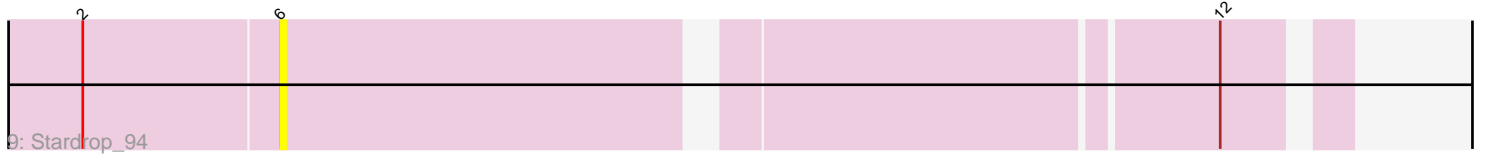
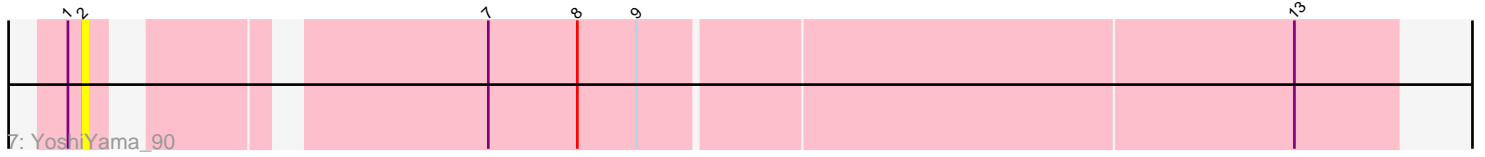
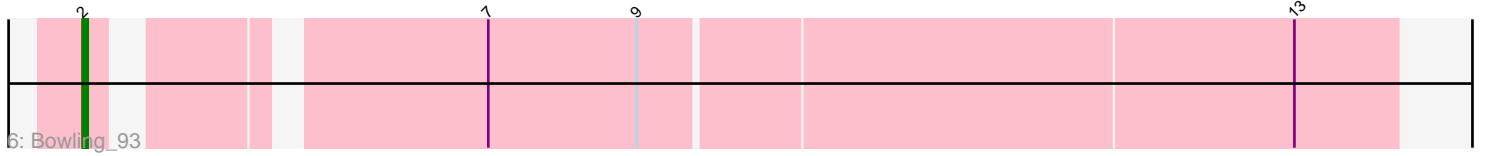
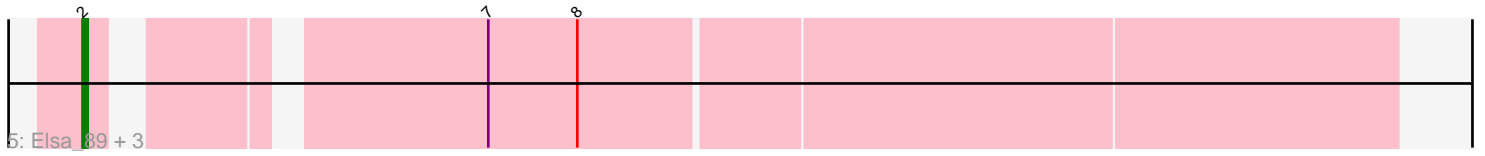
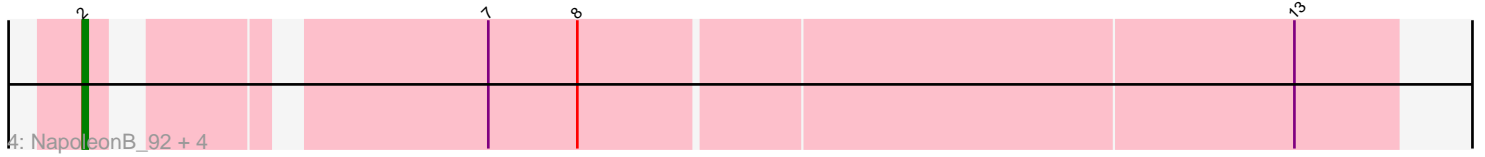
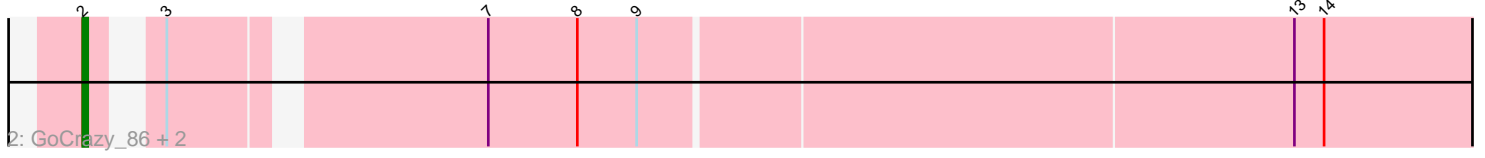
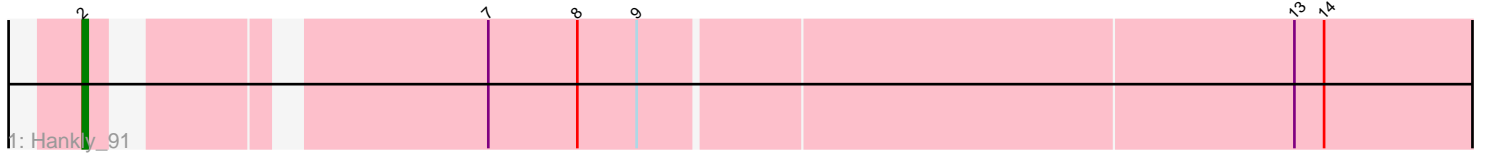


Pham 296870



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 296870 Report

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

Pham number 296870 has 26 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Hankly\_91
- Track 2 : GoCrazy\_86, Circum\_91, KeaneyLin\_88
- Track 3 : JEGGS\_90, Heisenberger\_90, Kardesai\_90, Benllo\_87, Cheesy\_92, Mooshroom\_91, Tribby\_93
- Track 4 : NapoleonB\_92, BenitoAntonio\_89, Xenomorph\_86, Dynamite\_91, Mudcat\_86
- Track 5 : Elsa\_89, Correa\_87, Arcadia\_89, Nason\_89
- Track 6 : Bowling\_93
- Track 7 : YoshiYama\_90
- Track 8 : GantcherGoblin\_87, Tenney120\_89
- Track 9 : Stardrop\_94
- Track 10 : Kureo\_244

### ***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 21 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia\_89, BenitoAntonio\_89, Benllo\_87, Bowling\_93, Cheesy\_92, Circum\_91, Correa\_87, Dynamite\_91, Elsa\_89, GoCrazy\_86, Hankly\_91, Heisenberger\_90, JEGGS\_90, Kardesai\_90, KeaneyLin\_88, Mooshroom\_91, Mudcat\_86, NapoleonB\_92, Nason\_89, Tribby\_93, Xenomorph\_86, YoshiYama\_90,

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

- Stardrop\_94,

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

- GantcherGoblin\_87, Kureo\_244, Tenney120\_89,

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

Start 2:

- Found in 23 of 26 ( 88.5% ) of genes in pham

- Manual Annotations of this start: 21 of 23
- Called 95.7% of time when present
- Phage (with cluster) where this start called: Arcadia\_89 (AM), BenitoAntonio\_89 (AM), Benllo\_87 (AM), Bowling\_93 (AM), Cheesy\_92 (AM), Circum\_91 (AM), Correa\_87 (AM), Dynamite\_91 (AM), Elsa\_89 (AM), GoCrazy\_86 (AM), Hankly\_91 (AM), Heisenberger\_90 (AM), JEGGS\_90 (AM), Kardesai\_90 (AM), KeaneyLin\_88 (AM), Mooshroom\_91 (AM), Mudcat\_86 (AM), NapoleonB\_92 (AM), Nason\_89 (AM), Tribby\_93 (AM), Xenomorph\_86 (AM), YoshiYama\_90 (AM),

Start 4:

- Found in 1 of 26 ( 3.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kureo\_244 (FK),

Start 6:

- Found in 3 of 26 ( 11.5% ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GantcherGoblin\_87 (AU6), Stardrop\_94 (AU6), Tenney120\_89 (AU6),

### **Summary by clusters:**

There are 3 clusters represented in this pham: FK, AM, AU6,

Info for manual annotations of cluster AM:

- Start number 2 was manually annotated 21 times for cluster AM.

Info for manual annotations of cluster AU6:

- Start number 6 was manually annotated 2 times for cluster AU6.

### **Gene Information:**

Gene: Arcadia\_89 Start: 52318, Stop: 52563, Start Num: 2

Candidate Starts for Arcadia\_89:

(Start: 2 @52318 has 21 MA's), (7, 52384), (8, 52402),

Gene: BenitoAntonio\_89 Start: 52042, Stop: 52281, Start Num: 2

Candidate Starts for BenitoAntonio\_89:

(Start: 2 @52042 has 21 MA's), (7, 52108), (8, 52126), (13, 52267),

Gene: Benllo\_87 Start: 52696, Stop: 52941, Start Num: 2

Candidate Starts for Benllo\_87:

(Start: 2 @52696 has 21 MA's), (7, 52762), (8, 52780), (9, 52792), (13, 52921),

Gene: Bowling\_93 Start: 53229, Stop: 53474, Start Num: 2

Candidate Starts for Bowling\_93:

(Start: 2 @53229 has 21 MA's), (7, 53295), (9, 53325), (13, 53454),

Gene: Cheesy\_92 Start: 52787, Stop: 53026, Start Num: 2

Candidate Starts for Cheesy\_92:

(Start: 2 @52787 has 21 MA's), (7, 52853), (8, 52871), (9, 52883), (13, 53012),

Gene: Circum\_91 Start: 52762, Stop: 53025, Start Num: 2

Candidate Starts for Circum\_91:

(Start: 2 @52762 has 21 MA's), (3, 52771), (7, 52828), (8, 52846), (9, 52858), (13, 52987), (14, 52993),

Gene: Correa\_87 Start: 51667, Stop: 51912, Start Num: 2

Candidate Starts for Correa\_87:

(Start: 2 @51667 has 21 MA's), (7, 51733), (8, 51751),

Gene: Dynamite\_91 Start: 52247, Stop: 52492, Start Num: 2

Candidate Starts for Dynamite\_91:

(Start: 2 @52247 has 21 MA's), (7, 52313), (8, 52331), (13, 52472),

Gene: Elsa\_89 Start: 52318, Stop: 52563, Start Num: 2

Candidate Starts for Elsa\_89:

(Start: 2 @52318 has 21 MA's), (7, 52384), (8, 52402),

Gene: GantcherGoblin\_87 Start: 50825, Stop: 51037, Start Num: 6

Candidate Starts for GantcherGoblin\_87:

(Start: 6 @50825 has 2 MA's), (7, 50867),

Gene: GoCrazy\_86 Start: 50946, Stop: 51209, Start Num: 2

Candidate Starts for GoCrazy\_86:

(Start: 2 @50946 has 21 MA's), (3, 50955), (7, 51012), (8, 51030), (9, 51042), (13, 51171), (14, 51177),

Gene: Hankly\_91 Start: 52131, Stop: 52394, Start Num: 2

Candidate Starts for Hankly\_91:

(Start: 2 @52131 has 21 MA's), (7, 52197), (8, 52215), (9, 52227), (13, 52356), (14, 52362),

Gene: Heisenberger\_90 Start: 52252, Stop: 52491, Start Num: 2

Candidate Starts for Heisenberger\_90:

(Start: 2 @52252 has 21 MA's), (7, 52318), (8, 52336), (9, 52348), (13, 52477),

Gene: JEGGS\_90 Start: 52331, Stop: 52570, Start Num: 2

Candidate Starts for JEGGS\_90:

(Start: 2 @52331 has 21 MA's), (7, 52397), (8, 52415), (9, 52427), (13, 52556),

Gene: Kardesai\_90 Start: 51735, Stop: 51980, Start Num: 2

Candidate Starts for Kardesai\_90:

(Start: 2 @51735 has 21 MA's), (7, 51801), (8, 51819), (9, 51831), (13, 51960),

Gene: KeaneyLin\_88 Start: 51984, Stop: 52247, Start Num: 2

Candidate Starts for KeaneyLin\_88:

(Start: 2 @51984 has 21 MA's), (3, 51993), (7, 52050), (8, 52068), (9, 52080), (13, 52209), (14, 52215),

Gene: Kureo\_244 Start: 107619, Stop: 107828, Start Num: 4

Candidate Starts for Kureo\_244:

(4, 107619), (5, 107628), (10, 107781), (11, 107787),

Gene: Mooshroom\_91 Start: 51735, Stop: 51980, Start Num: 2

Candidate Starts for Mooshroom\_91:

(Start: 2 @51735 has 21 MA's), (7, 51801), (8, 51819), (9, 51831), (13, 51960),

Gene: Mudcat\_86 Start: 53486, Stop: 53725, Start Num: 2

Candidate Starts for Mudcat\_86:

(Start: 2 @53486 has 21 MA's), (7, 53552), (8, 53570), (13, 53711),

Gene: NapoleonB\_92 Start: 52247, Stop: 52492, Start Num: 2

Candidate Starts for NapoleonB\_92:

(Start: 2 @52247 has 21 MA's), (7, 52313), (8, 52331), (13, 52472),

Gene: Nason\_89 Start: 52318, Stop: 52563, Start Num: 2

Candidate Starts for Nason\_89:

(Start: 2 @52318 has 21 MA's), (7, 52384), (8, 52402),

Gene: Stardrop\_94 Start: 52087, Stop: 52284, Start Num: 6

Candidate Starts for Stardrop\_94:

(Start: 2 @52048 has 21 MA's), (Start: 6 @52087 has 2 MA's), (12, 52264),

Gene: Tenney120\_89 Start: 51376, Stop: 51588, Start Num: 6

Candidate Starts for Tenney120\_89:

(Start: 6 @51376 has 2 MA's), (7, 51418),

Gene: Tribby\_93 Start: 53122, Stop: 53361, Start Num: 2

Candidate Starts for Tribby\_93:

(Start: 2 @53122 has 21 MA's), (7, 53188), (8, 53206), (9, 53218), (13, 53347),

Gene: Xenomorph\_86 Start: 52536, Stop: 52769, Start Num: 2

Candidate Starts for Xenomorph\_86:

(Start: 2 @52536 has 21 MA's), (7, 52602), (8, 52620), (13, 52761),

Gene: YoshiYama\_90 Start: 52893, Stop: 53138, Start Num: 2

Candidate Starts for YoshiYama\_90:

(1, 52890), (Start: 2 @52893 has 21 MA's), (7, 52959), (8, 52977), (9, 52989), (13, 53118),