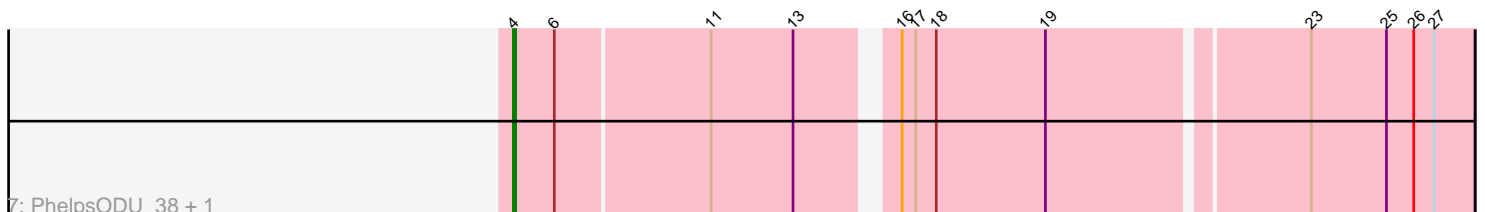
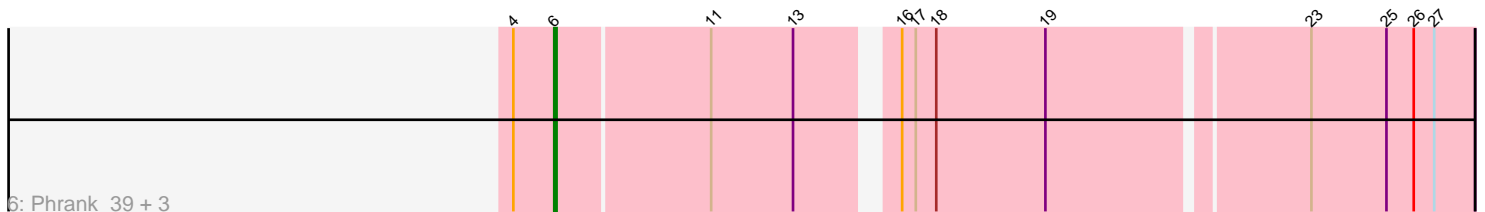
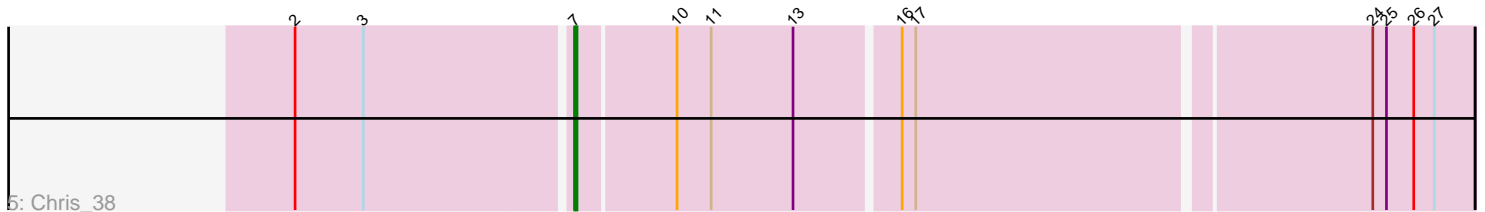
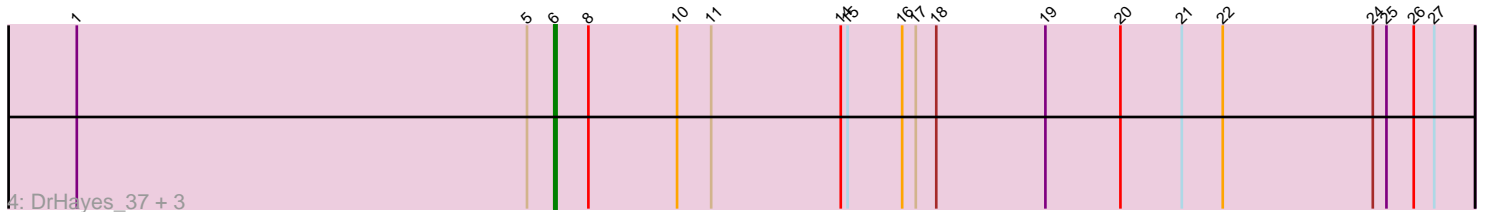
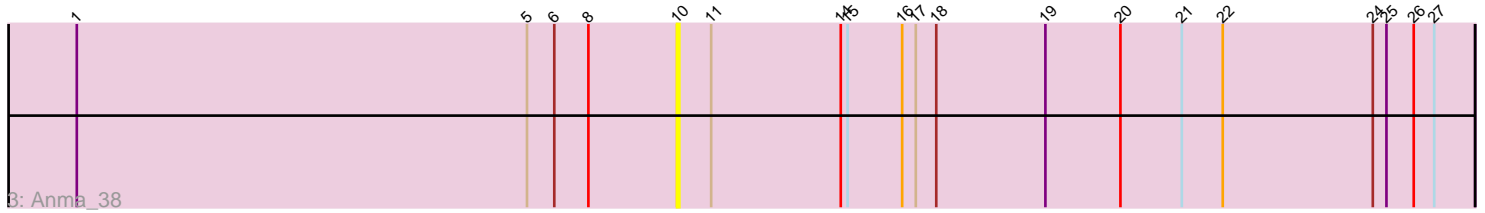
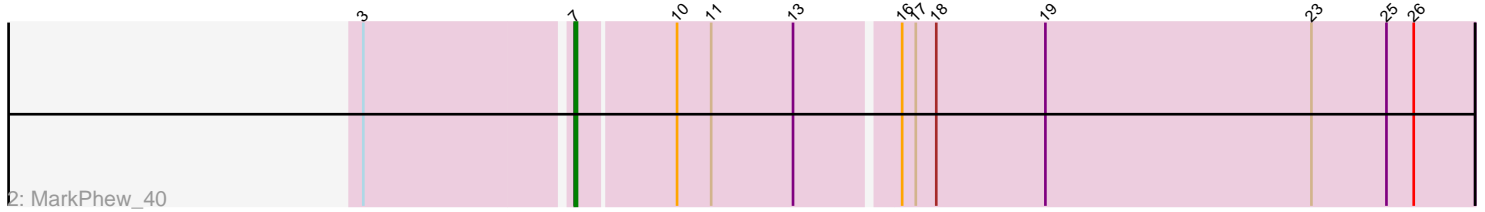
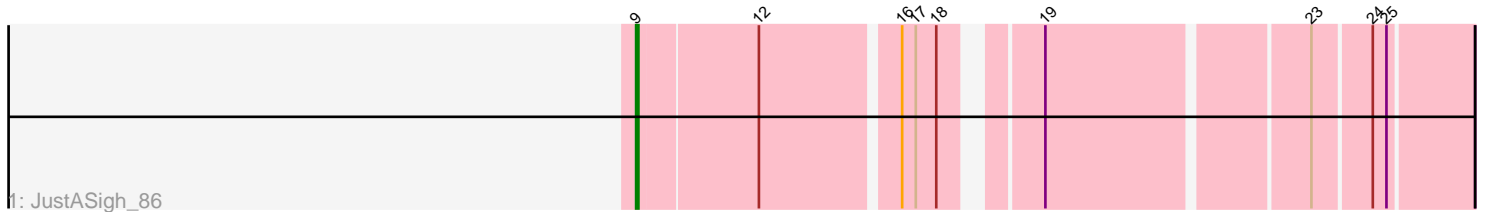


# Pham 295219



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 295219 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295219 has 14 members, 1 are drafts.

Phages represented in each track:

- Track 1 : JustASigh\_86
- Track 2 : MarkPhew\_40
- Track 3 : Anma\_38
- Track 4 : DrHayes\_37, Urkel\_37, TiniBug\_37, SamuelLPlaqson\_37
- Track 5 : Chris\_38
- Track 6 : Phrank\_39, Cain\_39, Tierra\_39, Bryler\_39
- Track 7 : PhelpsODU\_38, Unicorn\_38

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

The start number called the most often in the published annotations is 6, it was called in 8 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bryler\_39, Cain\_39, DrHayes\_37, Phrank\_39, SamuelLPlaqson\_37, Tierra\_39, TiniBug\_37, Urkel\_37,

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

- Anma\_38, PhelpsODU\_38, Unicorn\_38,

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

- Chris\_38, JustASigh\_86, MarkPhew\_40,

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

Start 4:

- Found in 6 of 14 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 33.3% of time when present
- Phage (with cluster) where this start called: PhelpsODU\_38 (K6), Unicorn\_38 (K6),

Start 6:

- Found in 11 of 14 ( 78.6% ) of genes in pham
- Manual Annotations of this start: 8 of 13

- Called 72.7% of time when present
- Phage (with cluster) where this start called: Bryler\_39 (K6), Cain\_39 (K6), DrHayes\_37 (K1), Phrank\_39 (K6), SamuelLPlaqson\_37 (K1), Tierra\_39 (K6), TiniBug\_37 (K1), Urkel\_37 (K1),

#### Start 7:

- Found in 2 of 14 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chris\_38 (K1), MarkPhew\_40 (K1),

#### Start 9:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JustASigh\_86 (AH),

#### Start 10:

- Found in 7 of 14 ( 50.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Anma\_38 (K1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: AH, K1, K6,

Info for manual annotations of cluster AH:

- Start number 9 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster K1:

- Start number 6 was manually annotated 4 times for cluster K1.
- Start number 7 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K6:

- Start number 4 was manually annotated 2 times for cluster K6.
- Start number 6 was manually annotated 4 times for cluster K6.

### **Gene Information:**

Gene: Anma\_38 Start: 30185, Stop: 30535, Start Num: 10

Candidate Starts for Anma\_38:

(1, 29921), (5, 30119), (Start: 6 @30131 has 8 MA's), (8, 30146), (10, 30185), (11, 30200), (14, 30257), (15, 30260), (16, 30284), (17, 30290), (18, 30299), (19, 30347), (20, 30380), (21, 30407), (22, 30425), (24, 30491), (25, 30497), (26, 30509), (27, 30518),

Gene: Bryler\_39 Start: 29886, Stop: 30266, Start Num: 6

Candidate Starts for Bryler\_39:

(Start: 4 @29868 has 2 MA's), (Start: 6 @29886 has 8 MA's), (11, 29952), (13, 29988), (16, 30024), (17, 30030), (18, 30039), (19, 30087), (23, 30195), (25, 30228), (26, 30240), (27, 30249),

Gene: Cain\_39 Start: 29874, Stop: 30254, Start Num: 6

Candidate Starts for Cain\_39:

(Start: 4 @29856 has 2 MA's), (Start: 6 @29874 has 8 MA's), (11, 29940), (13, 29976), (16, 30012), (17, 30018), (18, 30027), (19, 30075), (23, 30183), (25, 30216), (26, 30228), (27, 30237),

Gene: Chris\_38 Start: 30013, Stop: 30390, Start Num: 7

Candidate Starts for Chris\_38:

(2, 29896), (3, 29926), (Start: 7 @30013 has 2 MA's), (10, 30055), (11, 30070), (13, 30106), (16, 30148), (17, 30154), (24, 30346), (25, 30352), (26, 30364), (27, 30373),

Gene: DrHayes\_37 Start: 30131, Stop: 30535, Start Num: 6

Candidate Starts for DrHayes\_37:

(1, 29921), (5, 30119), (Start: 6 @30131 has 8 MA's), (8, 30146), (10, 30185), (11, 30200), (14, 30257), (15, 30260), (16, 30284), (17, 30290), (18, 30299), (19, 30347), (20, 30380), (21, 30407), (22, 30425), (24, 30491), (25, 30497), (26, 30509), (27, 30518),

Gene: JustASigh\_86 Start: 51554, Stop: 51225, Start Num: 9

Candidate Starts for JustASigh\_86:

(Start: 9 @51554 has 1 MA's), (12, 51503), (16, 51446), (17, 51440), (18, 51431), (19, 51398), (23, 51290), (24, 51266), (25, 51260),

Gene: MarkPhew\_40 Start: 30085, Stop: 30471, Start Num: 7

Candidate Starts for MarkPhew\_40:

(3, 29998), (Start: 7 @30085 has 2 MA's), (10, 30127), (11, 30142), (13, 30178), (16, 30220), (17, 30226), (18, 30235), (19, 30283), (23, 30400), (25, 30433), (26, 30445),

Gene: PhelpsODU\_38 Start: 29894, Stop: 30292, Start Num: 4

Candidate Starts for PhelpsODU\_38:

(Start: 4 @29894 has 2 MA's), (Start: 6 @29912 has 8 MA's), (11, 29978), (13, 30014), (16, 30050), (17, 30056), (18, 30065), (19, 30113), (23, 30221), (25, 30254), (26, 30266), (27, 30275),

Gene: Phrank\_39 Start: 29863, Stop: 30243, Start Num: 6

Candidate Starts for Phrank\_39:

(Start: 4 @29845 has 2 MA's), (Start: 6 @29863 has 8 MA's), (11, 29929), (13, 29965), (16, 30001), (17, 30007), (18, 30016), (19, 30064), (23, 30172), (25, 30205), (26, 30217), (27, 30226),

Gene: SamuelLPlaqson\_37 Start: 30131, Stop: 30535, Start Num: 6

Candidate Starts for SamuelLPlaqson\_37:

(1, 29921), (5, 30119), (Start: 6 @30131 has 8 MA's), (8, 30146), (10, 30185), (11, 30200), (14, 30257), (15, 30260), (16, 30284), (17, 30290), (18, 30299), (19, 30347), (20, 30380), (21, 30407), (22, 30425), (24, 30491), (25, 30497), (26, 30509), (27, 30518),

Gene: Tierra\_39 Start: 30583, Stop: 30963, Start Num: 6

Candidate Starts for Tierra\_39:

(Start: 4 @30565 has 2 MA's), (Start: 6 @30583 has 8 MA's), (11, 30649), (13, 30685), (16, 30721), (17, 30727), (18, 30736), (19, 30784), (23, 30892), (25, 30925), (26, 30937), (27, 30946),

Gene: TiniBug\_37 Start: 30127, Stop: 30531, Start Num: 6

Candidate Starts for TiniBug\_37:

(1, 29917), (5, 30115), (Start: 6 @30127 has 8 MA's), (8, 30142), (10, 30181), (11, 30196), (14, 30253), (15, 30256), (16, 30280), (17, 30286), (18, 30295), (19, 30343), (20, 30376), (21, 30403), (22, 30421), (24, 30487), (25, 30493), (26, 30505), (27, 30514),

Gene: Unicorn\_38 Start: 29894, Stop: 30292, Start Num: 4

Candidate Starts for Unicorn\_38:

(Start: 4 @29894 has 2 MA's), (Start: 6 @29912 has 8 MA's), (11, 29978), (13, 30014), (16, 30050), (17, 30056), (18, 30065), (19, 30113), (23, 30221), (25, 30254), (26, 30266), (27, 30275),

Gene: Urkel\_37 Start: 30131, Stop: 30535, Start Num: 6

Candidate Starts for Urkel\_37:

(1, 29921), (5, 30119), (Start: 6 @30131 has 8 MA's), (8, 30146), (10, 30185), (11, 30200), (14, 30257), (15, 30260), (16, 30284), (17, 30290), (18, 30299), (19, 30347), (20, 30380), (21, 30407), (22, 30425), (24, 30491), (25, 30497), (26, 30509), (27, 30518),