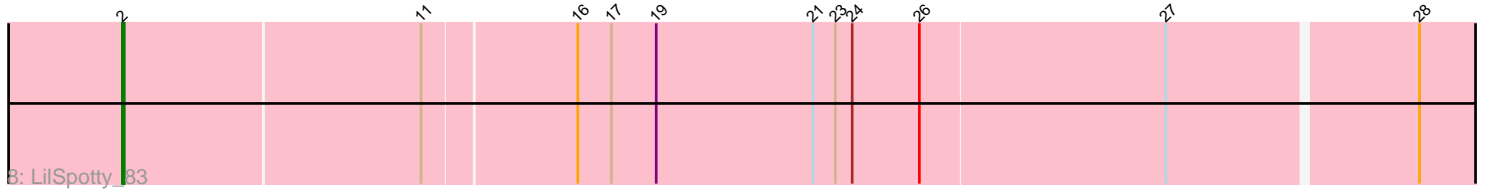
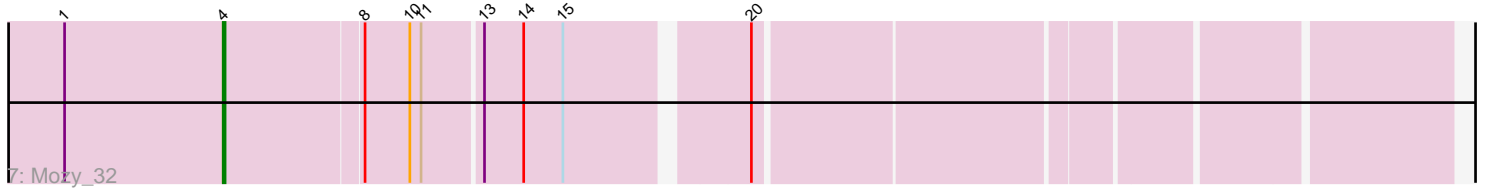
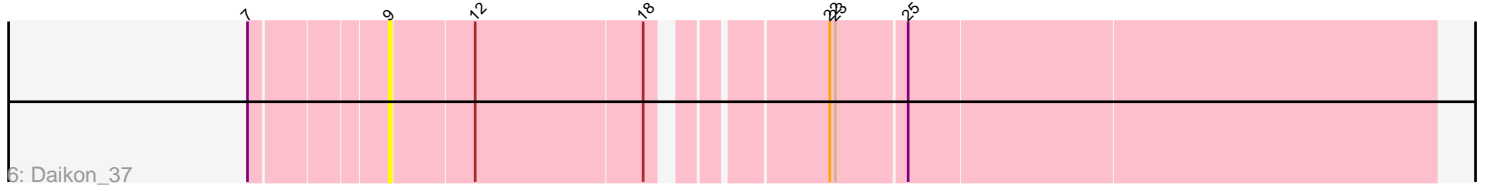
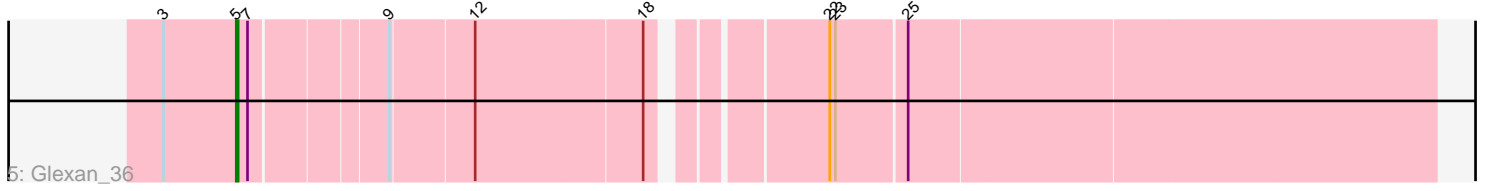
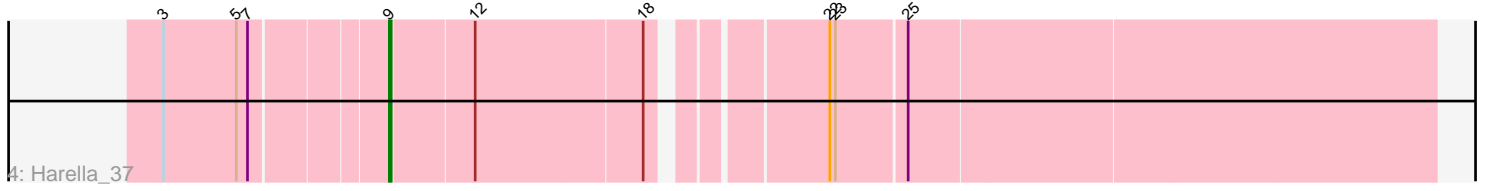
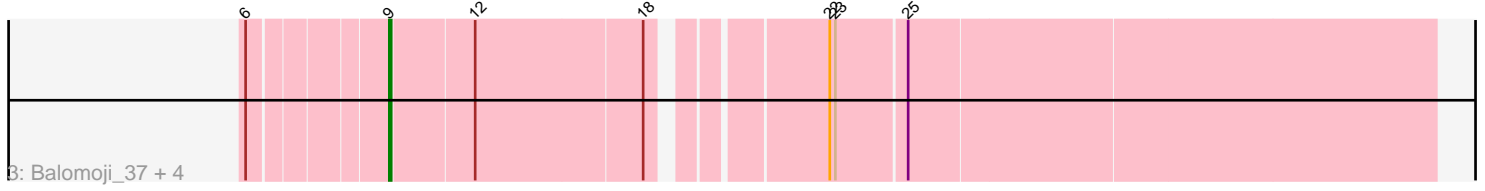
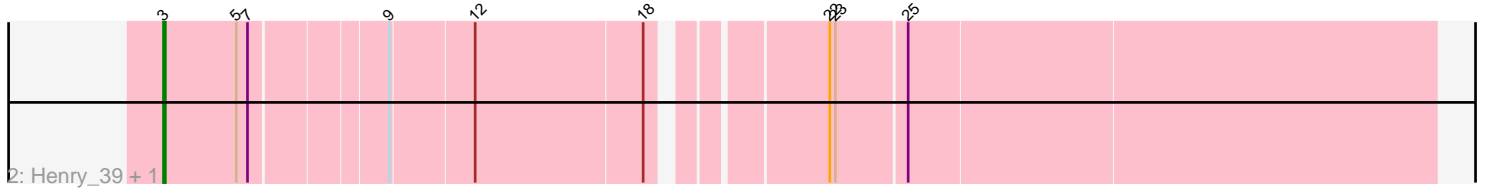
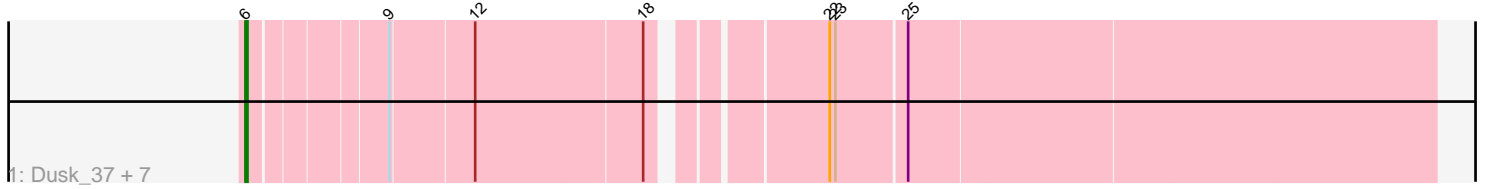


# Pham 296971



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 296971 Report

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

Pham number 296971 has 20 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Dusk\_37, ABCat\_37, BadStone\_37, DrDrey\_39, ShamWow\_38, Tuco\_39, Myrale\_38, BilboSwaggins\_38
- Track 2 : Henry\_39, Gator\_36
- Track 3 : Balomoji\_37, Toto\_38, Pumpkin\_40, Teaspoon\_39, Marshmallow\_38
- Track 4 : Harella\_37
- Track 5 : Glexan\_36
- Track 6 : Daikon\_37
- Track 7 : Mozy\_32
- Track 8 : LilSpotty\_83

### ***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 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABCat\_37, BadStone\_37, BilboSwaggins\_38, DrDrey\_39, Dusk\_37, Myrale\_38, ShamWow\_38, Tuco\_39,

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

- Balomoji\_37, Marshmallow\_38, Pumpkin\_40, Teaspoon\_39, Toto\_38,

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

- Daikon\_37, Gator\_36, Glexan\_36, Harella\_37, Henry\_39, LilSpotty\_83, Mozy\_32,

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

Start 2:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilSpotty\_83 (singleton),

Start 3:

- Found in 4 of 20 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gator\_36 (E), Henry\_39 (E),

#### Start 4:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mozy\_32 (F1),

#### Start 5:

- Found in 4 of 20 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Glexan\_36 (E),

#### Start 6:

- Found in 13 of 20 ( 65.0% ) of genes in pham
- Manual Annotations of this start: 8 of 19
- Called 61.5% of time when present
- Phage (with cluster) where this start called: ABCat\_37 (E), BadStone\_37 (E), BilboSwaggins\_38 (E), DrDrey\_39 (E), Dusk\_37 (E), Myrale\_38 (E), ShamWow\_38 (E), Tuco\_39 (E),

#### Start 9:

- Found in 18 of 20 ( 90.0% ) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 38.9% of time when present
- Phage (with cluster) where this start called: Balomoji\_37 (E), Daikon\_37 (E), Harella\_37 (E), Marshmallow\_38 (E), Pumpkin\_40 (E), Teaspoon\_39 (E), Toto\_38 (E),

### **Summary by clusters:**

There are 3 clusters represented in this pham: F1, singleton, E,

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

- Start number 3 was manually annotated 2 times for cluster E.
- Start number 5 was manually annotated 1 time for cluster E.
- Start number 6 was manually annotated 8 times for cluster E.
- Start number 9 was manually annotated 6 times for cluster E.

#### Info for manual annotations of cluster F1:

- Start number 4 was manually annotated 1 time for cluster F1.

### **Gene Information:**

Gene: ABCat\_37 Start: 34121, Stop: 33534, Start Num: 6

Candidate Starts for ABCat\_37:

(Start: 6 @34121 has 8 MA's), (Start: 9 @34055 has 6 MA's), (12, 34013), (18, 33926), (22, 33848), (23, 33845), (25, 33809),

Gene: BadStone\_37 Start: 34121, Stop: 33534, Start Num: 6

Candidate Starts for BadStone\_37:

(Start: 6 @34121 has 8 MA's), (Start: 9 @34055 has 6 MA's), (12, 34013), (18, 33926), (22, 33848), (23, 33845), (25, 33809),

Gene: Balomoji\_37 Start: 33789, Stop: 33268, Start Num: 9

Candidate Starts for Balomoji\_37:

(Start: 6 @33855 has 8 MA's), (Start: 9 @33789 has 6 MA's), (12, 33747), (18, 33660), (22, 33582), (23, 33579), (25, 33543),

Gene: BilboSwaggins\_38 Start: 34129, Stop: 33542, Start Num: 6

Candidate Starts for BilboSwaggins\_38:

(Start: 6 @34129 has 8 MA's), (Start: 9 @34063 has 6 MA's), (12, 34021), (18, 33934), (22, 33856), (23, 33853), (25, 33817),

Gene: Daikon\_37 Start: 33801, Stop: 33280, Start Num: 9

Candidate Starts for Daikon\_37:

(7, 33867), (Start: 9 @33801 has 6 MA's), (12, 33759), (18, 33672), (22, 33594), (23, 33591), (25, 33555),

Gene: DrDrey\_39 Start: 34621, Stop: 34034, Start Num: 6

Candidate Starts for DrDrey\_39:

(Start: 6 @34621 has 8 MA's), (Start: 9 @34555 has 6 MA's), (12, 34513), (18, 34426), (22, 34348), (23, 34345), (25, 34309),

Gene: Dusk\_37 Start: 33781, Stop: 33194, Start Num: 6

Candidate Starts for Dusk\_37:

(Start: 6 @33781 has 8 MA's), (Start: 9 @33715 has 6 MA's), (12, 33673), (18, 33586), (22, 33508), (23, 33505), (25, 33469),

Gene: Gator\_36 Start: 33782, Stop: 33150, Start Num: 3

Candidate Starts for Gator\_36:

(Start: 3 @33782 has 2 MA's), (Start: 5 @33743 has 1 MA's), (7, 33737), (Start: 9 @33671 has 6 MA's), (12, 33629), (18, 33542), (22, 33464), (23, 33461), (25, 33425),

Gene: Glexan\_36 Start: 33731, Stop: 33138, Start Num: 5

Candidate Starts for Glexan\_36:

(Start: 3 @33770 has 2 MA's), (Start: 5 @33731 has 1 MA's), (7, 33725), (Start: 9 @33659 has 6 MA's), (12, 33617), (18, 33530), (22, 33452), (23, 33449), (25, 33413),

Gene: Harella\_37 Start: 34175, Stop: 33654, Start Num: 9

Candidate Starts for Harella\_37:

(Start: 3 @34286 has 2 MA's), (Start: 5 @34247 has 1 MA's), (7, 34241), (Start: 9 @34175 has 6 MA's), (12, 34133), (18, 34046), (22, 33968), (23, 33965), (25, 33929),

Gene: Henry\_39 Start: 34174, Stop: 33542, Start Num: 3

Candidate Starts for Henry\_39:

(Start: 3 @34174 has 2 MA's), (Start: 5 @34135 has 1 MA's), (7, 34129), (Start: 9 @34063 has 6 MA's), (12, 34021), (18, 33934), (22, 33856), (23, 33853), (25, 33817),

Gene: LilSpotty\_83 Start: 48505, Stop: 49212, Start Num: 2

Candidate Starts for LilSpotty\_83:

(Start: 2 @48505 has 1 MA's), (11, 48661), (16, 48739), (17, 48757), (19, 48781), (21, 48865), (23, 48877), (24, 48886), (26, 48922), (27, 49051), (28, 49180),

Gene: Marshmallow\_38 Start: 34061, Stop: 33540, Start Num: 9

Candidate Starts for Marshmallow\_38:

(Start: 6 @34127 has 8 MA's), (Start: 9 @34061 has 6 MA's), (12, 34019), (18, 33932), (22, 33854), (23, 33851), (25, 33815),

Gene: Mozy\_32 Start: 27800, Stop: 28405, Start Num: 4

Candidate Starts for Mozy\_32:

(1, 27716), (Start: 4 @27800 has 1 MA's), (8, 27872), (10, 27896), (11, 27902), (13, 27932), (14, 27953), (15, 27974), (20, 28061),

Gene: Myrale\_38 Start: 33992, Stop: 33405, Start Num: 6

Candidate Starts for Myrale\_38:

(Start: 6 @33992 has 8 MA's), (Start: 9 @33926 has 6 MA's), (12, 33884), (18, 33797), (22, 33719), (23, 33716), (25, 33680),

Gene: Pumpkin\_40 Start: 34140, Stop: 33619, Start Num: 9

Candidate Starts for Pumpkin\_40:

(Start: 6 @34206 has 8 MA's), (Start: 9 @34140 has 6 MA's), (12, 34098), (18, 34011), (22, 33933), (23, 33930), (25, 33894),

Gene: ShamWow\_38 Start: 34129, Stop: 33542, Start Num: 6

Candidate Starts for ShamWow\_38:

(Start: 6 @34129 has 8 MA's), (Start: 9 @34063 has 6 MA's), (12, 34021), (18, 33934), (22, 33856), (23, 33853), (25, 33817),

Gene: Teaspoon\_39 Start: 34016, Stop: 33495, Start Num: 9

Candidate Starts for Teaspoon\_39:

(Start: 6 @34082 has 8 MA's), (Start: 9 @34016 has 6 MA's), (12, 33974), (18, 33887), (22, 33809), (23, 33806), (25, 33770),

Gene: Toto\_38 Start: 34063, Stop: 33542, Start Num: 9

Candidate Starts for Toto\_38:

(Start: 6 @34129 has 8 MA's), (Start: 9 @34063 has 6 MA's), (12, 34021), (18, 33934), (22, 33856), (23, 33853), (25, 33817),

Gene: Tuco\_39 Start: 34637, Stop: 34050, Start Num: 6

Candidate Starts for Tuco\_39:

(Start: 6 @34637 has 8 MA's), (Start: 9 @34571 has 6 MA's), (12, 34529), (18, 34442), (22, 34364), (23, 34361), (25, 34325),