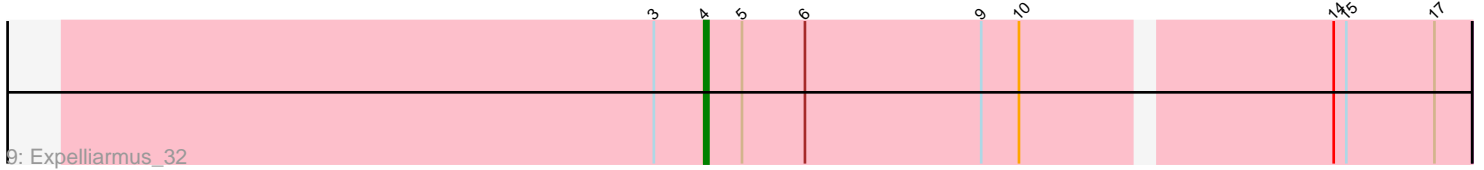
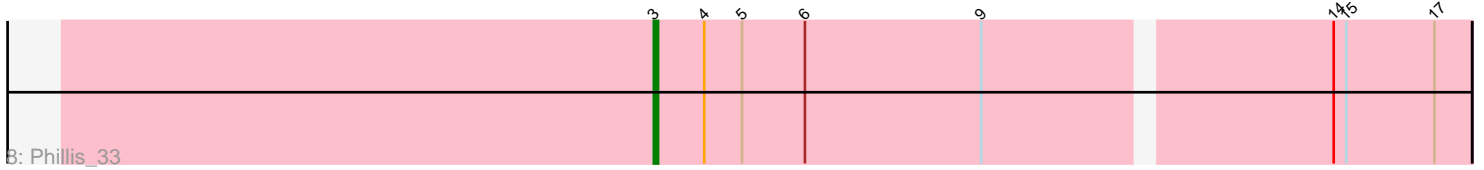
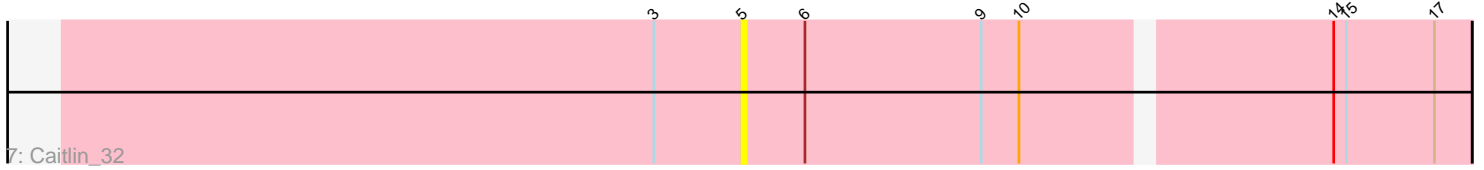
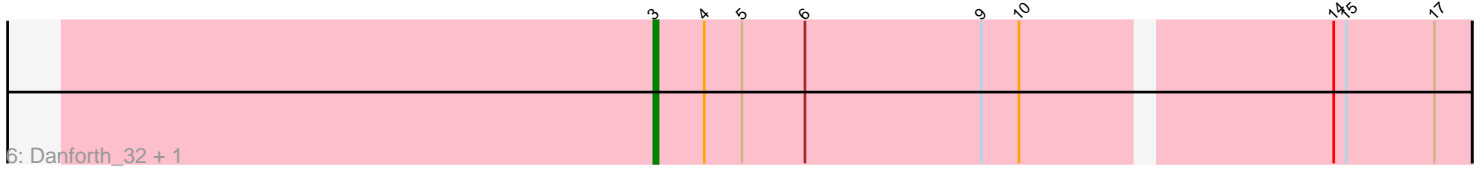
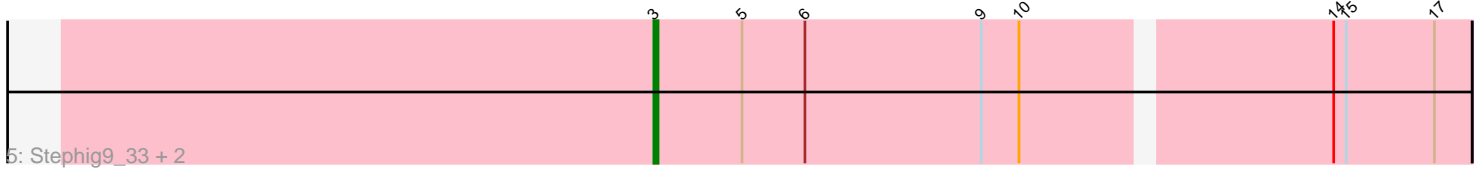
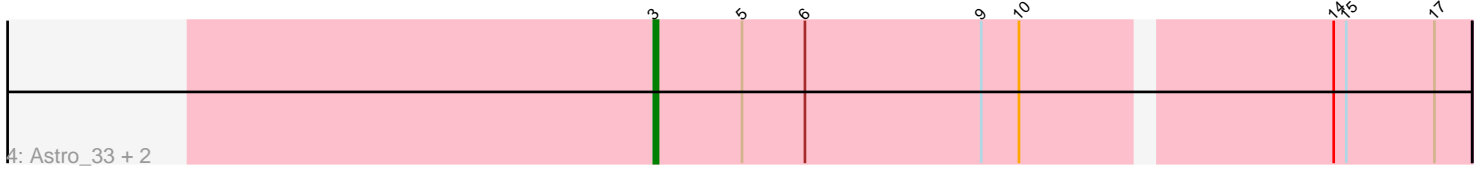
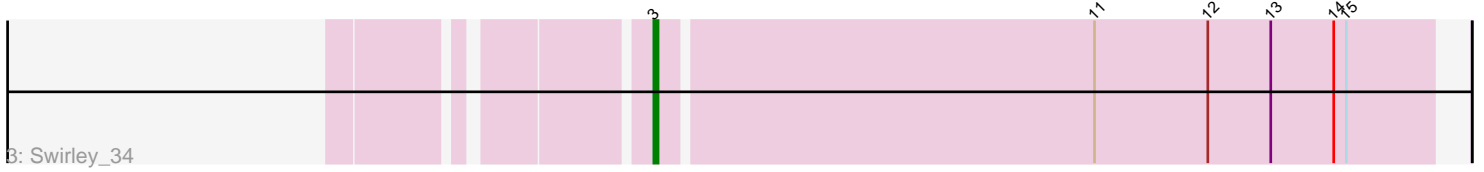
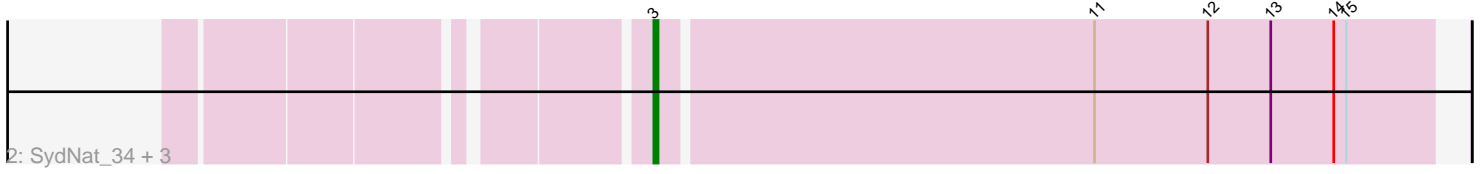
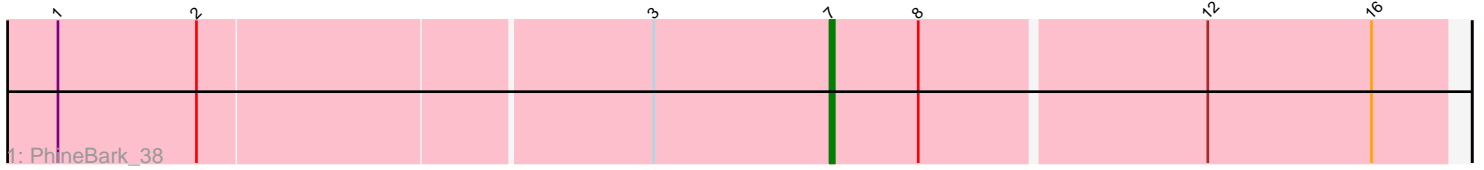


Pham 298873



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 298873 Report

This analysis was run 06/08/26 on database version 649.

Pham number 298873 has 17 members, 1 are drafts.

Phages represented in each track:

- Track 1 : PhineBark\_38
- Track 2 : SydNat\_34, Zolita\_33, Ghouboy\_34, Micasa\_34
- Track 3 : Swirley\_34
- Track 4 : Astro\_33, Groundhog\_32, Smeadley\_33
- Track 5 : Stephig9\_33, Dixon\_33, NearlyHeadless\_33
- Track 6 : Danforth\_32, Roary\_33
- Track 7 : Caitlin\_32
- Track 8 : Phillis\_33
- Track 9 : Expelliarmus\_32

### ***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 14 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Astro\_33, Danforth\_32, Dixon\_33, Ghouboy\_34, Groundhog\_32, Micasa\_34, NearlyHeadless\_33, Phillis\_33, Roary\_33, Smeadley\_33, Stephig9\_33, Swirley\_34, SydNat\_34, Zolita\_33,

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

- Caitlin\_32, Expelliarmus\_32, PhineBark\_38,

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

- 

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

Start 3:

- Found in 17 of 17 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 14 of 16
- Called 82.4% of time when present
- Phage (with cluster) where this start called: Astro\_33 (A8), Danforth\_32 (A8), Dixon\_33 (A8), Ghouboy\_34 (A5), Groundhog\_32 (A8), Micasa\_34 (A5),

NearlyHeadless\_33 (A8), Phillis\_33 (A8), Roary\_33 (A8), Smeadley\_33 (A8), Stepbig9\_33 (A8), Swirley\_34 (A5), SydNat\_34 (A5), Zolita\_33 (A5),

Start 4:

- Found in 4 of 17 ( 23.5% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Expelliarmus\_32 (A8),

Start 5:

- Found in 11 of 17 ( 64.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Caitlin\_32 (A8),

Start 7:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhineBark\_38 (A1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: A1, A8, A5,

Info for manual annotations of cluster A1:

- Start number 7 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A5:

- Start number 3 was manually annotated 5 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 3 was manually annotated 9 times for cluster A8.
- Start number 4 was manually annotated 1 time for cluster A8.

### **Gene Information:**

Gene: Astro\_33 Start: 26479, Stop: 26291, Start Num: 3

Candidate Starts for Astro\_33:

(Start: 3 @26479 has 14 MA's), (5, 26458), (6, 26443), (9, 26401), (10, 26392), (14, 26323), (15, 26320), (17, 26299),

Gene: Caitlin\_32 Start: 26451, Stop: 26284, Start Num: 5

Candidate Starts for Caitlin\_32:

(Start: 3 @26472 has 14 MA's), (5, 26451), (6, 26436), (9, 26394), (10, 26385), (14, 26316), (15, 26313), (17, 26292),

Gene: Danforth\_32 Start: 26364, Stop: 26176, Start Num: 3

Candidate Starts for Danforth\_32:

(Start: 3 @26364 has 14 MA's), (Start: 4 @26352 has 1 MA's), (5, 26343), (6, 26328), (9, 26286), (10, 26277), (14, 26208), (15, 26205), (17, 26184),

Gene: Dixon\_33 Start: 26473, Stop: 26285, Start Num: 3

Candidate Starts for Dixon\_33:

(Start: 3 @26473 has 14 MA's), (5, 26452), (6, 26437), (9, 26395), (10, 26386), (14, 26317), (15, 26314), (17, 26293),

Gene: Expelliarmus\_32 Start: 26338, Stop: 26162, Start Num: 4

Candidate Starts for Expelliarmus\_32:

(Start: 3 @26350 has 14 MA's), (Start: 4 @26338 has 1 MA's), (5, 26329), (6, 26314), (9, 26272), (10, 26263), (14, 26194), (15, 26191), (17, 26170),

Gene: Ghoulboy\_34 Start: 27580, Stop: 27398, Start Num: 3

Candidate Starts for Ghoulboy\_34:

(Start: 3 @27580 has 14 MA's), (11, 27478), (12, 27451), (13, 27436), (14, 27421), (15, 27418),

Gene: Groundhog\_32 Start: 26444, Stop: 26256, Start Num: 3

Candidate Starts for Groundhog\_32:

(Start: 3 @26444 has 14 MA's), (5, 26423), (6, 26408), (9, 26366), (10, 26357), (14, 26288), (15, 26285), (17, 26264),

Gene: Micasa\_34 Start: 27303, Stop: 27121, Start Num: 3

Candidate Starts for Micasa\_34:

(Start: 3 @27303 has 14 MA's), (11, 27201), (12, 27174), (13, 27159), (14, 27144), (15, 27141),

Gene: NearlyHeadless\_33 Start: 26403, Stop: 26215, Start Num: 3

Candidate Starts for NearlyHeadless\_33:

(Start: 3 @26403 has 14 MA's), (5, 26382), (6, 26367), (9, 26325), (10, 26316), (14, 26247), (15, 26244), (17, 26223),

Gene: Phillis\_33 Start: 26429, Stop: 26241, Start Num: 3

Candidate Starts for Phillis\_33:

(Start: 3 @26429 has 14 MA's), (Start: 4 @26417 has 1 MA's), (5, 26408), (6, 26393), (9, 26351), (14, 26273), (15, 26270), (17, 26249),

Gene: PhineBark\_38 Start: 32352, Stop: 32209, Start Num: 7

Candidate Starts for PhineBark\_38:

(1, 32532), (2, 32499), (Start: 3 @32394 has 14 MA's), (Start: 7 @32352 has 1 MA's), (8, 32331), (12, 32265), (16, 32226),

Gene: Roary\_33 Start: 26349, Stop: 26161, Start Num: 3

Candidate Starts for Roary\_33:

(Start: 3 @26349 has 14 MA's), (Start: 4 @26337 has 1 MA's), (5, 26328), (6, 26313), (9, 26271), (10, 26262), (14, 26193), (15, 26190), (17, 26169),

Gene: Smeadley\_33 Start: 26472, Stop: 26284, Start Num: 3

Candidate Starts for Smeadley\_33:

(Start: 3 @26472 has 14 MA's), (5, 26451), (6, 26436), (9, 26394), (10, 26385), (14, 26316), (15, 26313), (17, 26292),

Gene: Stephig9\_33 Start: 26377, Stop: 26189, Start Num: 3

Candidate Starts for Stephig9\_33:

(Start: 3 @26377 has 14 MA's), (5, 26356), (6, 26341), (9, 26299), (10, 26290), (14, 26221), (15, 26218), (17, 26197),

Gene: Swirley\_34 Start: 27310, Stop: 27128, Start Num: 3

Candidate Starts for Swirley\_34:

(Start: 3 @27310 has 14 MA's), (11, 27208), (12, 27181), (13, 27166), (14, 27151), (15, 27148),

Gene: SydNat\_34 Start: 27589, Stop: 27407, Start Num: 3

Candidate Starts for SydNat\_34:

(Start: 3 @27589 has 14 MA's), (11, 27487), (12, 27460), (13, 27445), (14, 27430), (15, 27427),

Gene: Zolita\_33 Start: 27593, Stop: 27411, Start Num: 3

Candidate Starts for Zolita\_33:

(Start: 3 @27593 has 14 MA's), (11, 27491), (12, 27464), (13, 27449), (14, 27434), (15, 27431),