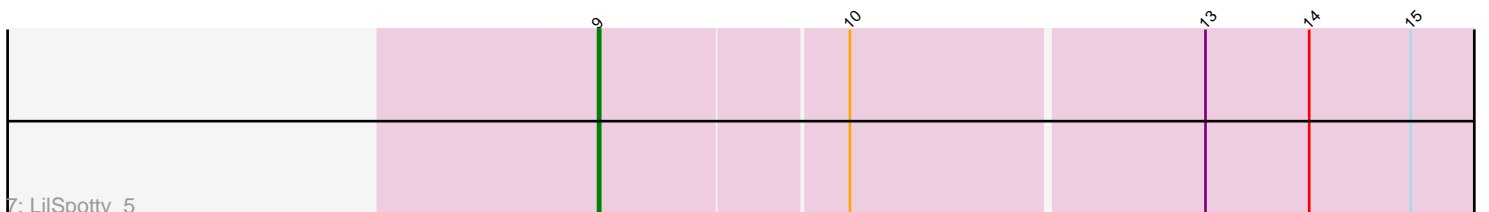
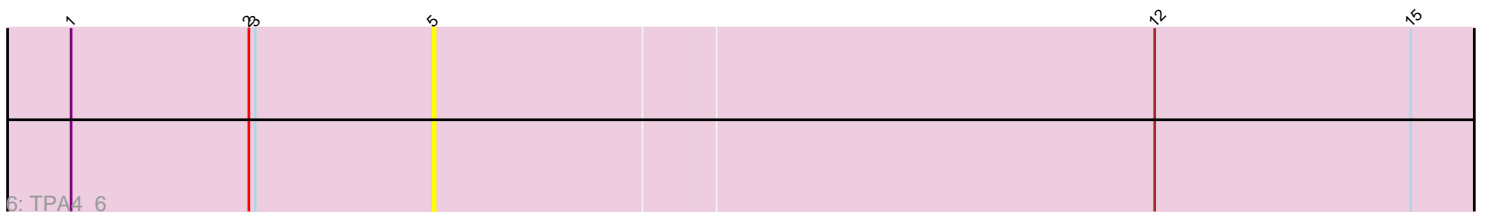
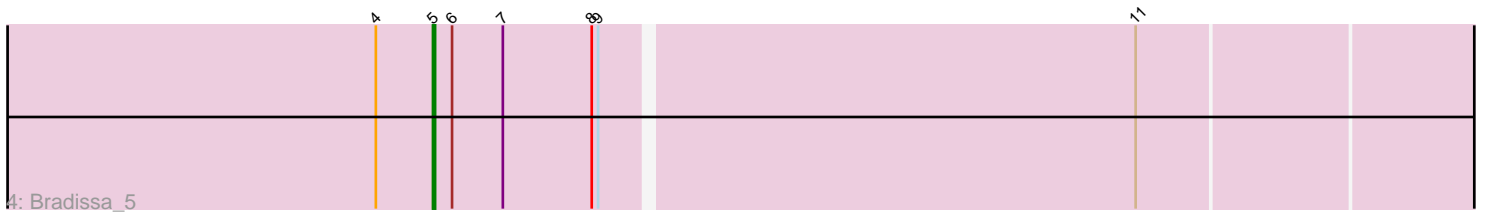
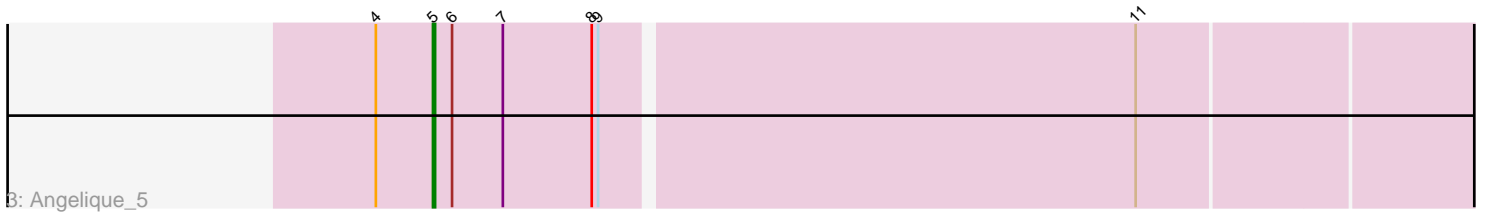


Pham 170336



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 170336 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170336 has 19 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Cashline\_5
- Track 2 : EMSquaredA\_5, Posh\_5, LonelyBoi\_5, Floral\_5, EnalisNailo\_5, Confidence\_5, BeeGee\_5, Lilas\_5, Jablanski\_5, Marteena\_5, Wrigley\_5, Pytheas\_5
- Track 3 : Angelique\_5
- Track 4 : Bradissa\_5
- Track 5 : BritBrat\_5, Pollux\_5
- Track 6 : TPA4\_6
- Track 7 : LilSpotty\_5

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

The start number called the most often in the published annotations is 5, it was called in 15 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angelique\_5, BeeGee\_5, Bradissa\_5, Cashline\_5, Confidence\_5, EMSquaredA\_5, EnalisNailo\_5, Floral\_5, Jablanski\_5, Lilas\_5, LonelyBoi\_5, Marteena\_5, Posh\_5, Pytheas\_5, TPA4\_6, Wrigley\_5,

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

- BritBrat\_5, Pollux\_5,

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

- LilSpotty\_5,

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

Start 4:

- Found in 17 of 19 ( 89.5% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 11.8% of time when present
- Phage (with cluster) where this start called: BritBrat\_5 (CY2), Pollux\_5 (CY1),

Start 5:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 15 of 18
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Angelique\_5 (CY1), BeeGee\_5 (CY), Bradissa\_5 (CY1), Cashline\_5 (CY), Confidence\_5 (CY1), EMSquaredA\_5 (CY1), EnalisNailo\_5 (CY1), Floral\_5 (CY1), Jablanski\_5 (CY), Lilas\_5 (CY1), LonelyBoi\_5 (CY), Marteena\_5 (CY1), Posh\_5 (CY), Pytheas\_5 (CY), TPA4\_6 (singleton), Wrigley\_5 (CY),

Start 9:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 5.6% of time when present
- Phage (with cluster) where this start called: LilSpotty\_5 (singleton),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CY1, CY2, CY, singleton,

Info for manual annotations of cluster CY:

- Start number 5 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 4 was manually annotated 1 time for cluster CY1.
- Start number 5 was manually annotated 8 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 4 was manually annotated 1 time for cluster CY2.

### **Gene Information:**

Gene: Angelique\_5 Start: 4595, Stop: 5251, Start Num: 5

Candidate Starts for Angelique\_5:

(Start: 4 @4568 has 2 MA's), (Start: 5 @4595 has 15 MA's), (6, 4604), (7, 4628), (8, 4670), (Start: 9 @4673 has 1 MA's), (11, 4919),

Gene: BeeGee\_5 Start: 4598, Stop: 5254, Start Num: 5

Candidate Starts for BeeGee\_5:

(Start: 4 @4571 has 2 MA's), (Start: 5 @4598 has 15 MA's), (6, 4607), (7, 4631), (8, 4673), (Start: 9 @4676 has 1 MA's), (11, 4922),

Gene: Bradissa\_5 Start: 4602, Stop: 5258, Start Num: 5

Candidate Starts for Bradissa\_5:

(Start: 4 @4575 has 2 MA's), (Start: 5 @4602 has 15 MA's), (6, 4611), (7, 4635), (8, 4677), (Start: 9 @4680 has 1 MA's), (11, 4926),

Gene: BritBrat\_5 Start: 4577, Stop: 5260, Start Num: 4

Candidate Starts for BritBrat\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: Cashline\_5 Start: 4451, Stop: 5107, Start Num: 5

Candidate Starts for Cashline\_5:

(Start: 4 @4424 has 2 MA's), (Start: 5 @4451 has 15 MA's), (6, 4460), (8, 4526), (Start: 9 @4529 has 1 MA's), (11, 4775),

Gene: Confidence\_5 Start: 4598, Stop: 5254, Start Num: 5

Candidate Starts for Confidence\_5:

(Start: 4 @4571 has 2 MA's), (Start: 5 @4598 has 15 MA's), (6, 4607), (7, 4631), (8, 4673), (Start: 9 @4676 has 1 MA's), (11, 4922),

Gene: EMSquaredA\_5 Start: 4604, Stop: 5260, Start Num: 5

Candidate Starts for EMSquaredA\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: EnalisNailo\_5 Start: 4604, Stop: 5260, Start Num: 5

Candidate Starts for EnalisNailo\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: Floral\_5 Start: 4604, Stop: 5260, Start Num: 5

Candidate Starts for Floral\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: Jablanski\_5 Start: 4451, Stop: 5107, Start Num: 5

Candidate Starts for Jablanski\_5:

(Start: 4 @4424 has 2 MA's), (Start: 5 @4451 has 15 MA's), (6, 4460), (7, 4484), (8, 4526), (Start: 9 @4529 has 1 MA's), (11, 4775),

Gene: LilSpotty\_5 Start: 3945, Stop: 4496, Start Num: 9

Candidate Starts for LilSpotty\_5:

(Start: 9 @3945 has 1 MA's), (10, 4059), (13, 4221), (14, 4269), (15, 4317),

Gene: Lilas\_5 Start: 4604, Stop: 5260, Start Num: 5

Candidate Starts for Lilas\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: LonelyBoi\_5 Start: 4451, Stop: 5107, Start Num: 5

Candidate Starts for LonelyBoi\_5:

(Start: 4 @4424 has 2 MA's), (Start: 5 @4451 has 15 MA's), (6, 4460), (7, 4484), (8, 4526), (Start: 9 @4529 has 1 MA's), (11, 4775),

Gene: Marteena\_5 Start: 4604, Stop: 5260, Start Num: 5

Candidate Starts for Marteena\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: Pollux\_5 Start: 4577, Stop: 5260, Start Num: 4

Candidate Starts for Pollux\_5:

(Start: 4 @4577 has 2 MA's), (Start: 5 @4604 has 15 MA's), (6, 4613), (7, 4637), (8, 4679), (Start: 9 @4682 has 1 MA's), (11, 4928),

Gene: Posh\_5 Start: 4598, Stop: 5254, Start Num: 5

Candidate Starts for Posh\_5:

(Start: 4 @4571 has 2 MA's), (Start: 5 @4598 has 15 MA's), (6, 4607), (7, 4631), (8, 4673), (Start: 9 @4676 has 1 MA's), (11, 4922),

Gene: Pytheas\_5 Start: 4451, Stop: 5107, Start Num: 5

Candidate Starts for Pytheas\_5:

(Start: 4 @4424 has 2 MA's), (Start: 5 @4451 has 15 MA's), (6, 4460), (7, 4484), (8, 4526), (Start: 9 @4529 has 1 MA's), (11, 4775),

Gene: TPA4\_6 Start: 5313, Stop: 5945, Start Num: 5

Candidate Starts for TPA4\_6:

(1, 5142), (2, 5226), (3, 5229), (Start: 5 @5313 has 15 MA's), (12, 5649), (15, 5769),

Gene: Wrigley\_5 Start: 4448, Stop: 5104, Start Num: 5

Candidate Starts for Wrigley\_5:

(Start: 4 @4421 has 2 MA's), (Start: 5 @4448 has 15 MA's), (6, 4457), (7, 4481), (8, 4523), (Start: 9 @4526 has 1 MA's), (11, 4772),