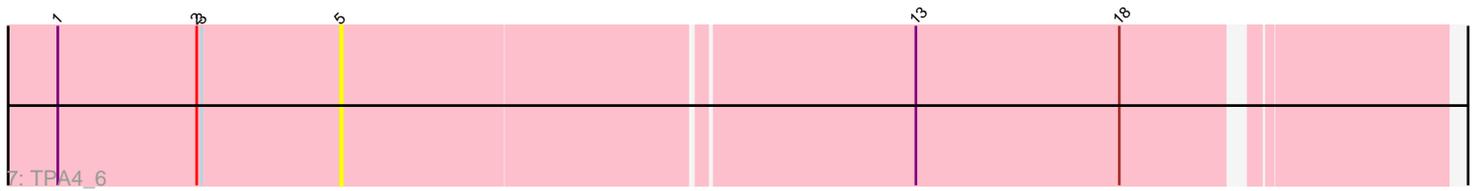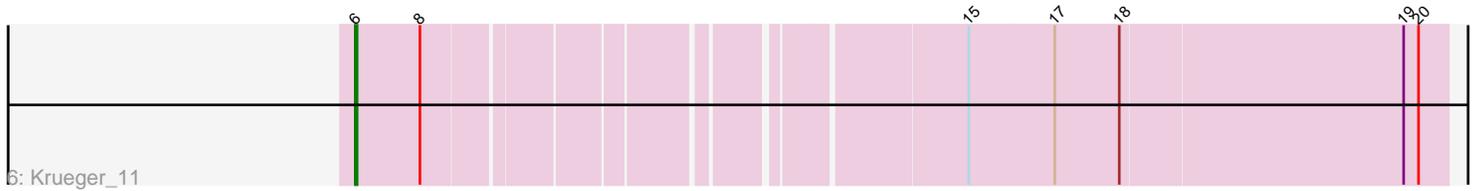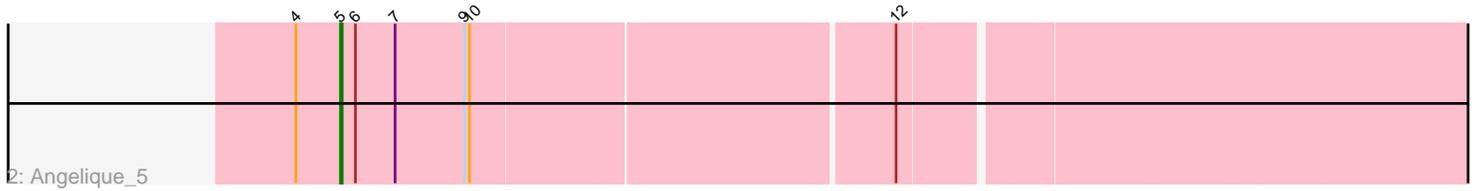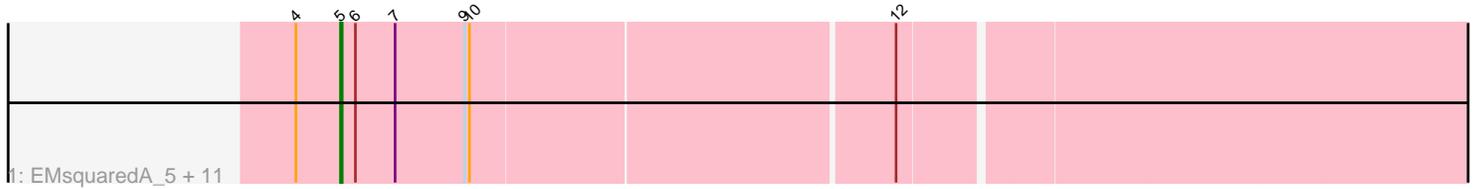# Pham 289793

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 289793 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289793 has 20 members, 1 are drafts.

Phages represented in each track:
• Track 1 : 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 2 : Angelique_5
• Track 3 : Bradissa_5
• Track 4 : BritBrat_5, Pollux_5
• Track 5 : Cashline_5
• Track 6 : Krueger_11
• Track 7 : TPA4_6
• Track 8 : 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 19 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:
• Krueger_11, LilSpotty_5,

**Summary by start number:**

Start 4:
• Found in 17 of 20 ( 85.0% ) of genes in pham
• Manual Annotations of this start: 2 of 19
• 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 20 ( 90.0% ) of genes in pham
• Manual Annotations of this start: 15 of 19
• Called 88.9% of time when present
• Phage (with cluster) where this start called: Angelique_5 (CY1), BeeGee_5 (CY5), Bradissa_5 (CY1), Cashline_5 (CY6), Confidence_5 (CY1), EMsquaredA_5 (CY1), EnalisNailo_5 (CY1), Floral_5 (CY1), Jablanski_5 (CY3), Lilas_5 (CY1), LonelyBoi_5 (CY7), Marteena_5 (CY1), Posh_5 (CY4), Pytheas_5 (CY3), TPA4_6 (singleton), Wrigley_5 (CY4),

Start 6:
• Found in 18 of 20 ( 90.0% ) of genes in pham
• Manual Annotations of this start: 1 of 19
• Called 5.6% of time when present
• Phage (with cluster) where this start called: Krueger_11 (K6),

Start 10:
• Found in 18 of 20 ( 90.0% ) of genes in pham
• Manual Annotations of this start: 1 of 19
• Called 5.6% of time when present
• Phage (with cluster) where this start called: LilSpotty_5 (singleton),

**Summary by clusters:**

There are 9 clusters represented in this pham: CY3, CY2, CY1, CY7, CY6, CY5, CY4, singleton, K6,

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.

Info for manual annotations of cluster CY3:
•Start number 5 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 5 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 5 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 5 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 5 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster K6:
•Start number 6 was manually annotated 1 time for cluster K6.

### 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), (Start: 6 @4604 has 1 MA's), (7, 4628), (9, 4670), (Start: 10 @4673 has 1 MA's), (12, 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), (Start: 6 @4607 has 1 MA's), (7, 4631), (9, 4673), (Start: 10 @4676 has 1 MA's), (12, 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), (Start: 6 @4611 has 1 MA's), (7, 4635), (9, 4677), (Start: 10 @4680 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4460 has 1 MA's), (9, 4526), (Start: 10 @4529 has 1 MA's), (12, 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), (Start: 6 @4607 has 1 MA's), (7, 4631), (9, 4673), (Start: 10 @4676 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4460 has 1 MA's), (7, 4484), (9, 4526), (Start: 10 @4529 has 1 MA's), (12, 4775),

Gene: Krueger_11 Start: 6185, Stop: 6796, Start Num: 6

Candidate Starts for Krueger_11:
(Start: 6 @6185 has 1 MA's), (8, 6224), (15, 6512), (17, 6563), (18, 6602), (19, 6770), (20, 6779),

Gene: LilSpotty_5 Start: 3945, Stop: 4496, Start Num: 10
Candidate Starts for LilSpotty_5:
(Start: 10 @3945 has 1 MA's), (11, 4059), (14, 4221), (16, 4269), (18, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4460 has 1 MA's), (7, 4484), (9, 4526), (Start: 10 @4529 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4613 has 1 MA's), (7, 4637), (9, 4679), (Start: 10 @4682 has 1 MA's), (12, 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), (Start: 6 @4607 has 1 MA's), (7, 4631), (9, 4673), (Start: 10 @4676 has 1 MA's), (12, 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), (Start: 6 @4460 has 1 MA's), (7, 4484), (9, 4526), (Start: 10 @4529 has 1 MA's), (12, 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), (13, 5649), (18, 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), (Start: 6 @4457 has 1 MA's), (7, 4481), (9, 4523), (Start: 10 @4526 has 1 MA's), (12, 4772),