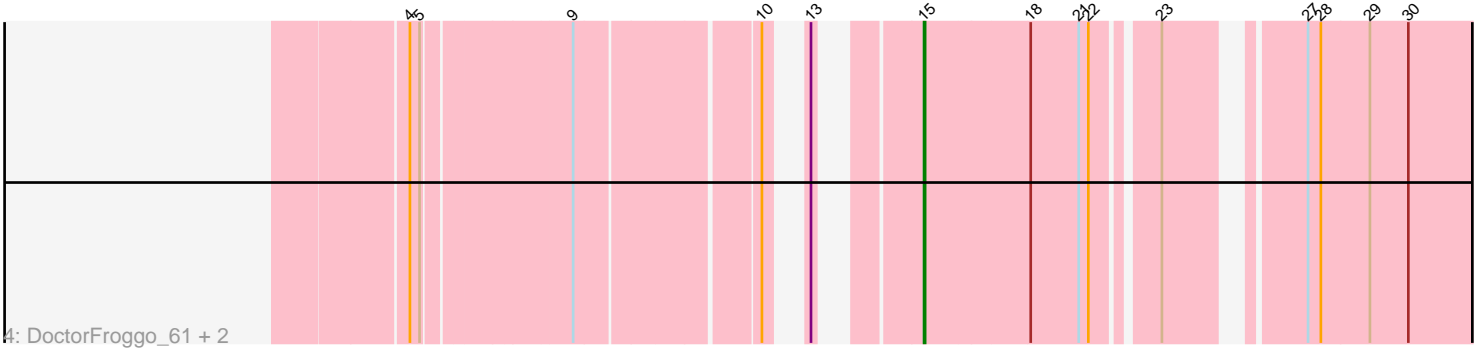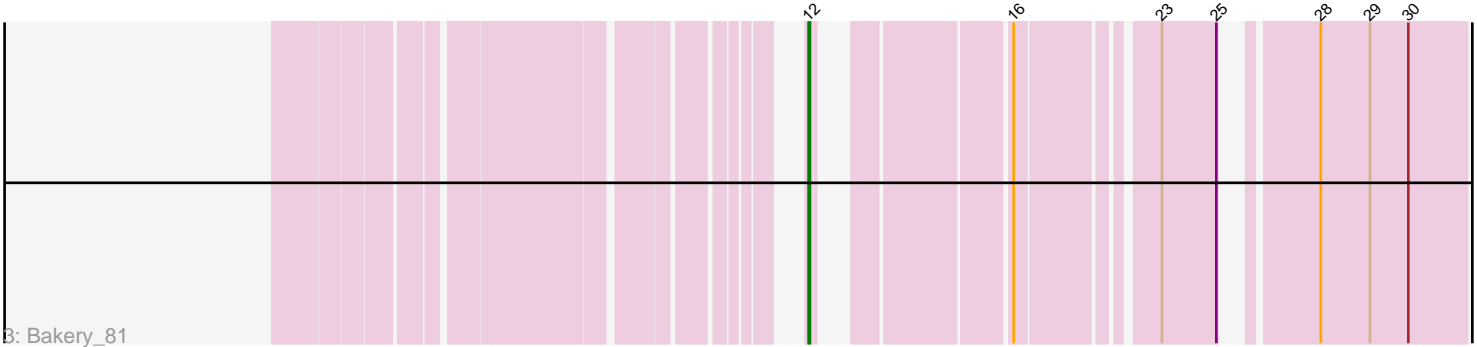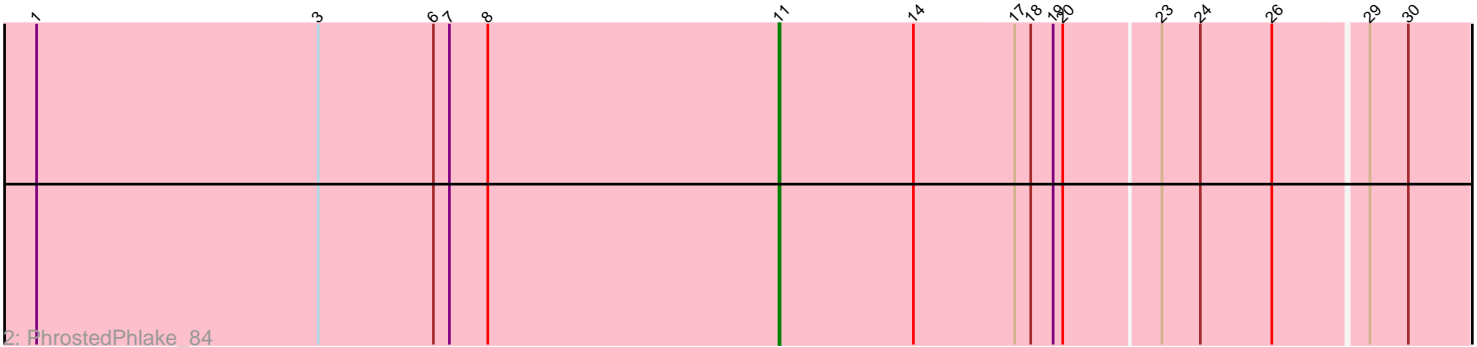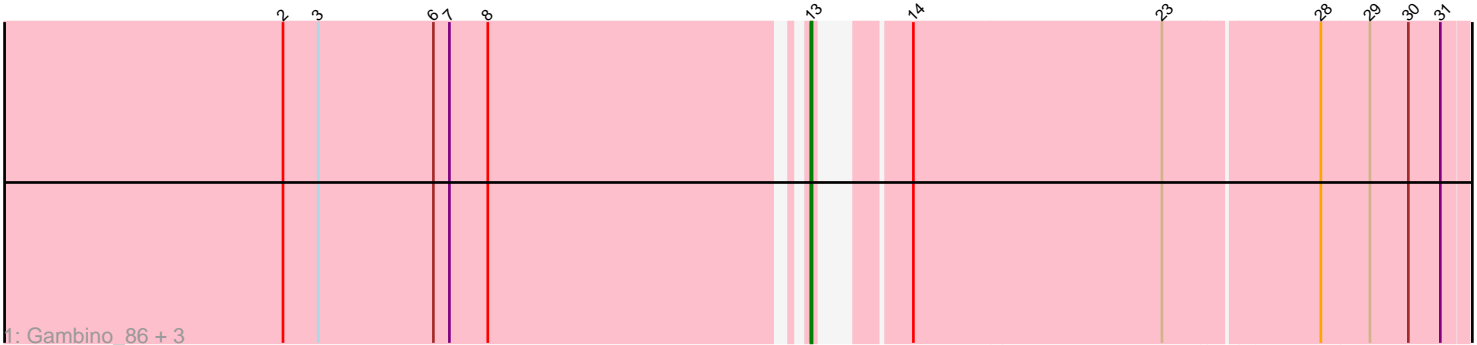# Pham 87729

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 87729 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87729 has 9 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Gambino_86, Azula_84, Blueberry_83, MissRona_84
• Track 2 : PhrostedPhlake_84
• Track 3 : Bakery_81
• Track 4 : DoctorFroggo_61, Delrey21_61, Verity_61


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

The start number called the most often in the published annotations is 13, it was called in 4 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Azula_84, Blueberry_83, Gambino_86, MissRona_84,

Genes that have the "Most Annotated" start but do not call it:
• Delrey21_61, DoctorFroggo_61, Verity_61,

Genes that do not have the "Most Annotated" start:
• Bakery_81, PhrostedPhlake_84,

**Summary by start number:**

Start 11:
• Found in 1 of 9 ( 11.1% ) of genes in pham
• Manual Annotations of this start: 1 of 9
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PhrostedPhlake_84 (CV),

Start 12:
• Found in 1 of 9 ( 11.1% ) of genes in pham
• Manual Annotations of this start: 1 of 9
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bakery_81 (DC1),

Start 13:

• Found in 7 of 9 ( 77.8% ) of genes in pham
• Manual Annotations of this start: 4 of 9
• Called 57.1% of time when present
• Phage (with cluster) where this start called: Azula_84 (CV), Blueberry_83 (CV), Gambino_86 (CV), MissRona_84 (CV),

Start 15:
• Found in 3 of 9 ( 33.3% ) of genes in pham
• Manual Annotations of this start: 3 of 9
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Delrey21_61 (DE4), DoctorFroggo_61 (DE4), Verity_61 (DE4),

**Summary by clusters:**

There are 3 clusters represented in this pham: DE4, CV, DC1,

Info for manual annotations of cluster CV:
•Start number 11 was manually annotated 1 time for cluster CV.
•Start number 13 was manually annotated 4 times for cluster CV.

Info for manual annotations of cluster DC1:
•Start number 12 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DE4:
•Start number 15 was manually annotated 3 times for cluster DE4.

*Gene Information:*
Gene: Azula_84 Start: 51871, Stop: 52428, Start Num: 13
Candidate Starts for Azula_84:
(2, 51403), (3, 51436), (6, 51544), (7, 51559), (8, 51595), (Start: 13 @51871 has 4 MA's), (14, 51925), (23, 52156), (28, 52294), (29, 52339), (30, 52375), (31, 52405),

Gene: Bakery_81 Start: 53740, Stop: 54225, Start Num: 12
Candidate Starts for Bakery_81:
(Start: 12 @53740 has 1 MA's), (16, 53872), (23, 53980), (25, 54031), (28, 54091), (29, 54136), (30, 54172),

Gene: Blueberry_83 Start: 51871, Stop: 52428, Start Num: 13
Candidate Starts for Blueberry_83:
(2, 51403), (3, 51436), (6, 51544), (7, 51559), (8, 51595), (Start: 13 @51871 has 4 MA's), (14, 51925), (23, 52156), (28, 52294), (29, 52339), (30, 52375), (31, 52405),

Gene: Delrey21_61 Start: 49065, Stop: 49541, Start Num: 15
Candidate Starts for Delrey21_61:
(4, 48696), (5, 48705), (9, 48828), (10, 48984), (Start: 13 @48999 has 4 MA's), (Start: 15 @49065 has 3 MA's), (18, 49158), (21, 49203), (22, 49212), (23, 49263), (27, 49365), (28, 49377), (29, 49422), (30, 49458),

Gene: DoctorFroggo_61 Start: 49065, Stop: 49541, Start Num: 15

Candidate Starts for DoctorFroggo_61:
(4, 48696), (5, 48705), (9, 48828), (10, 48984), (Start: 13 @48999 has 4 MA's), (Start: 15 @49065 has 3 MA's), (18, 49158), (21, 49203), (22, 49212), (23, 49263), (27, 49365), (28, 49377), (29, 49422), (30, 49458),

Gene: Gambino_86 Start: 51871, Stop: 52428, Start Num: 13
Candidate Starts for Gambino_86:
(2, 51403), (3, 51436), (6, 51544), (7, 51559), (8, 51595), (Start: 13 @51871 has 4 MA's), (14, 51925), (23, 52156), (28, 52294), (29, 52339), (30, 52375), (31, 52405),

Gene: MissRona_84 Start: 51872, Stop: 52429, Start Num: 13
Candidate Starts for MissRona_84:
(2, 51404), (3, 51437), (6, 51545), (7, 51560), (8, 51596), (Start: 13 @51872 has 4 MA's), (14, 51926), (23, 52157), (28, 52295), (29, 52340), (30, 52376), (31, 52406),

Gene: PhrostedPhlake_84 Start: 49844, Stop: 50467, Start Num: 11
Candidate Starts for PhrostedPhlake_84:
(1, 49148), (3, 49412), (6, 49520), (7, 49535), (8, 49571), (Start: 11 @49844 has 1 MA's), (14, 49970), (17, 50060), (18, 50075), (19, 50096), (20, 50105), (23, 50192), (24, 50228), (26, 50294), (29, 50375), (30, 50411),

Gene: Verity_61 Start: 49065, Stop: 49541, Start Num: 15
Candidate Starts for Verity_61:
(4, 48696), (5, 48705), (9, 48828), (10, 48984), (Start: 13 @48999 has 4 MA's), (Start: 15 @49065 has 3 MA's), (18, 49158), (21, 49203), (22, 49212), (23, 49263), (27, 49365), (28, 49377), (29, 49422), (30, 49458),