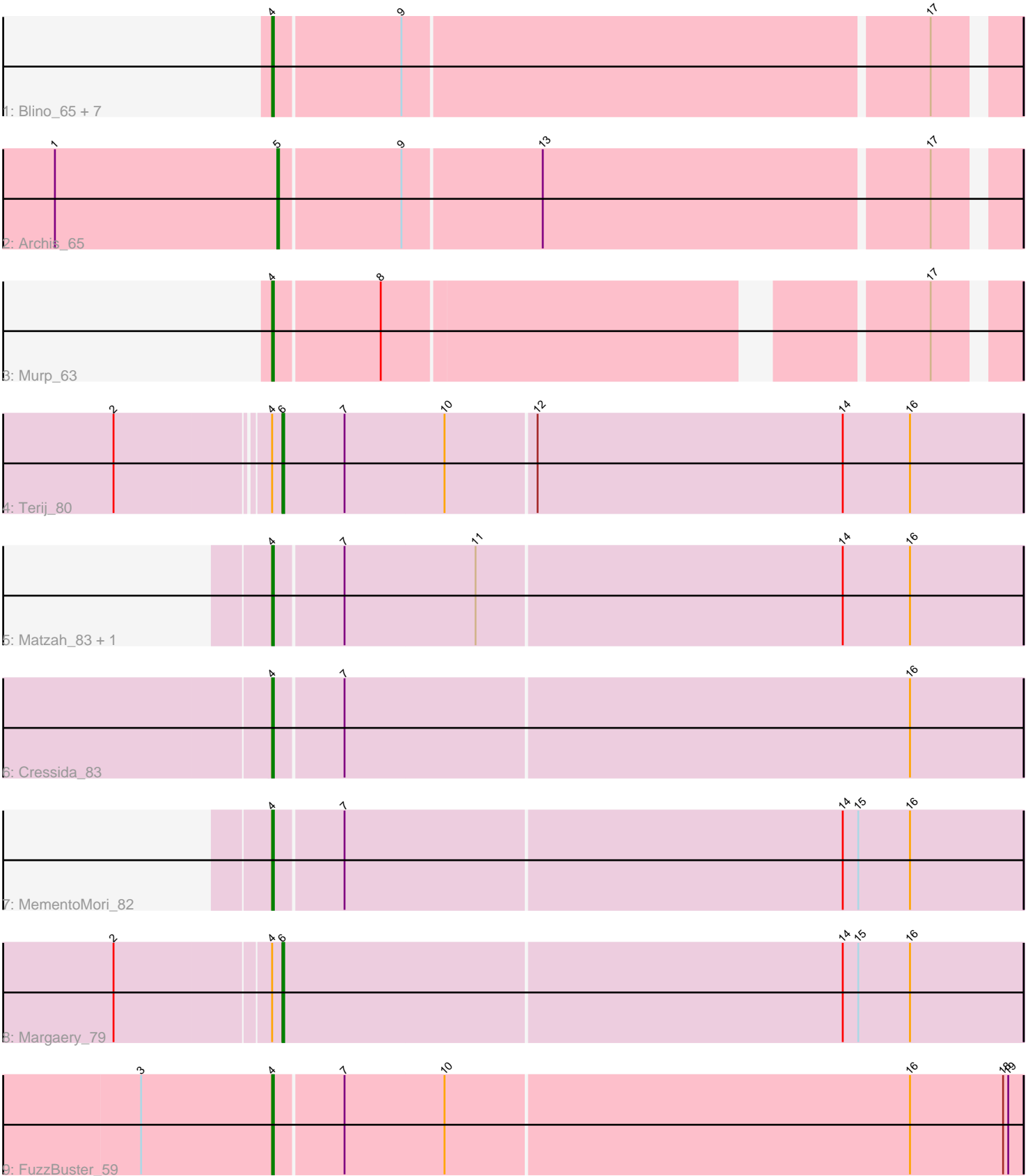


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 4260 Report

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

Pham number 4260 has 17 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Blino\_65, Azula\_65, Gambino\_67, Blueberry\_64, JuJu\_70, Hitter\_64, MissRona\_65, CarolAnn\_64
- Track 2 : Archis\_65
- Track 3 : Murp\_63
- Track 4 : Terij\_80
- Track 5 : Matzah\_83, Cinna\_81
- Track 6 : Cressida\_83
- Track 7 : MementoMori\_82
- Track 8 : Margaery\_79
- Track 9 : FuzzBuster\_59

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

The start number called the most often in the published annotations is 4, it was called in 14 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Azula\_65, Blino\_65, Blueberry\_64, CarolAnn\_64, Cinna\_81, Cressida\_83, FuzzBuster\_59, Gambino\_67, Hitter\_64, JuJu\_70, Matzah\_83, MementoMori\_82, MissRona\_65, Murp\_63,

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

- Margaery\_79, Terij\_80,

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

- Archis\_65,

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

Start 4:

- Found in 16 of 17 ( 94.1% ) of genes in pham
- Manual Annotations of this start: 14 of 17
- Called 87.5% of time when present

- Phage (with cluster) where this start called: Azula\_65 (CV), Blino\_65 (CV), Blueberry\_64 (CV), CarolAnn\_64 (CV), Cinna\_81 (EI), Cressida\_83 (EI), FuzzBuster\_59 (singleton), Gambino\_67 (CV), Hitter\_64 (CV), JuJu\_70 (CV), Matzah\_83 (EI), MementoMori\_82 (EI), MissRona\_65 (CV), Murp\_63 (CV),

Start 5:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archis\_65 (CV),

Start 6:

- Found in 2 of 17 ( 11.8% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Margaery\_79 (EI), Terij\_80 (EI),

### **Summary by clusters:**

There are 3 clusters represented in this pham: singleton, EI, CV,

Info for manual annotations of cluster CV:

- Start number 4 was manually annotated 9 times for cluster CV.
- Start number 5 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster EI:

- Start number 4 was manually annotated 4 times for cluster EI.
- Start number 6 was manually annotated 2 times for cluster EI.

### **Gene Information:**

Gene: Archis\_65 Start: 40469, Stop: 40876, Start Num: 5

Candidate Starts for Archis\_65:

(1, 40340), (Start: 5 @40469 has 1 MA's), (9, 40538), (13, 40616), (17, 40835),

Gene: Azula\_65 Start: 43417, Stop: 43827, Start Num: 4

Candidate Starts for Azula\_65:

(Start: 4 @43417 has 14 MA's), (9, 43489), (17, 43786),

Gene: Blino\_65 Start: 45443, Stop: 45853, Start Num: 4

Candidate Starts for Blino\_65:

(Start: 4 @45443 has 14 MA's), (9, 45515), (17, 45812),

Gene: Blueberry\_64 Start: 43417, Stop: 43827, Start Num: 4

Candidate Starts for Blueberry\_64:

(Start: 4 @43417 has 14 MA's), (9, 43489), (17, 43786),

Gene: CarolAnn\_64 Start: 45442, Stop: 45852, Start Num: 4

Candidate Starts for CarolAnn\_64:

(Start: 4 @45442 has 14 MA's), (9, 45514), (17, 45811),

Gene: Cinna\_81 Start: 49820, Stop: 50248, Start Num: 4

Candidate Starts for Cinna\_81:

(Start: 4 @49820 has 14 MA's), (7, 49859), (11, 49934), (14, 50144), (16, 50183),

Gene: Cressida\_83 Start: 50119, Stop: 50547, Start Num: 4

Candidate Starts for Cressida\_83:

(Start: 4 @50119 has 14 MA's), (7, 50158), (16, 50482),

Gene: FuzzBuster\_59 Start: 35009, Stop: 34581, Start Num: 4

Candidate Starts for FuzzBuster\_59:

(3, 35084), (Start: 4 @35009 has 14 MA's), (7, 34970), (10, 34913), (16, 34646), (18, 34592), (19, 34589),

Gene: Gambino\_67 Start: 43417, Stop: 43827, Start Num: 4

Candidate Starts for Gambino\_67:

(Start: 4 @43417 has 14 MA's), (9, 43489), (17, 43786),

Gene: Hitter\_64 Start: 40684, Stop: 41094, Start Num: 4

Candidate Starts for Hitter\_64:

(Start: 4 @40684 has 14 MA's), (9, 40756), (17, 41053),

Gene: JuJu\_70 Start: 44849, Stop: 45259, Start Num: 4

Candidate Starts for JuJu\_70:

(Start: 4 @44849 has 14 MA's), (9, 44921), (17, 45218),

Gene: Margaery\_79 Start: 49568, Stop: 49993, Start Num: 6

Candidate Starts for Margaery\_79:

(2, 49475), (Start: 4 @49562 has 14 MA's), (Start: 6 @49568 has 2 MA's), (14, 49889), (15, 49898), (16, 49928),

Gene: Matzah\_83 Start: 49875, Stop: 50303, Start Num: 4

Candidate Starts for Matzah\_83:

(Start: 4 @49875 has 14 MA's), (7, 49914), (11, 49989), (14, 50199), (16, 50238),

Gene: MementoMori\_82 Start: 49560, Stop: 49988, Start Num: 4

Candidate Starts for MementoMori\_82:

(Start: 4 @49560 has 14 MA's), (7, 49599), (14, 49884), (15, 49893), (16, 49923),

Gene: MissRona\_65 Start: 43418, Stop: 43828, Start Num: 4

Candidate Starts for MissRona\_65:

(Start: 4 @43418 has 14 MA's), (9, 43490), (17, 43787),

Gene: Murp\_63 Start: 43541, Stop: 43930, Start Num: 4

Candidate Starts for Murp\_63:

(Start: 4 @43541 has 14 MA's), (8, 43601), (17, 43889),

Gene: Terij\_80 Start: 49207, Stop: 49632, Start Num: 6

Candidate Starts for Terij\_80:

(2, 49117), (Start: 4 @49201 has 14 MA's), (Start: 6 @49207 has 2 MA's), (7, 49243), (10, 49300), (12, 49351), (14, 49528), (16, 49567),