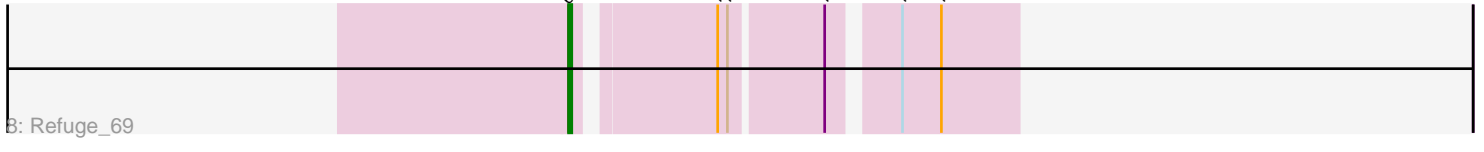
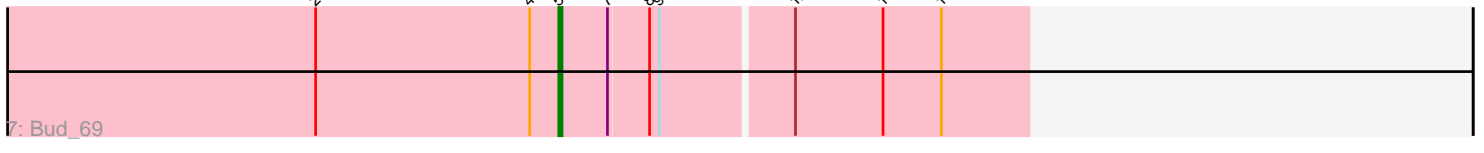
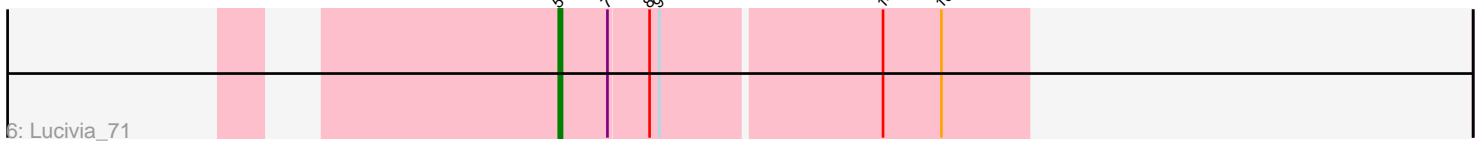
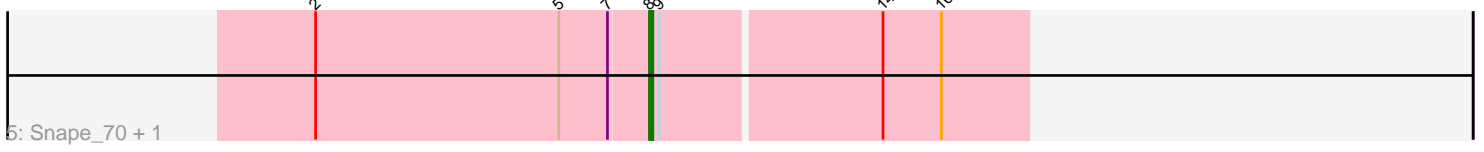
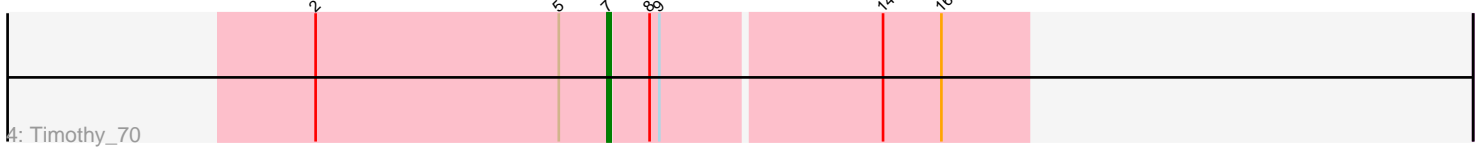
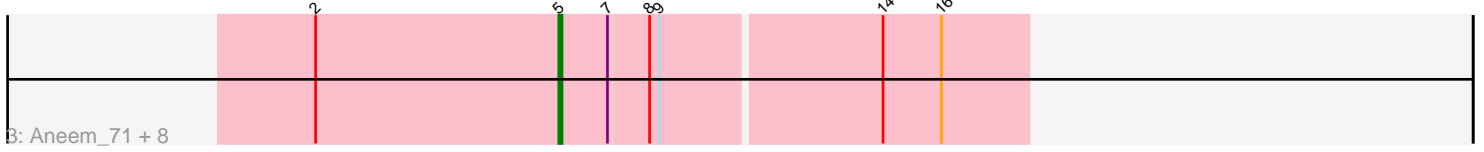
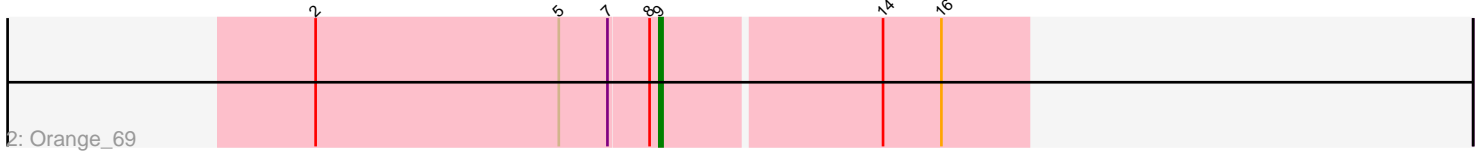
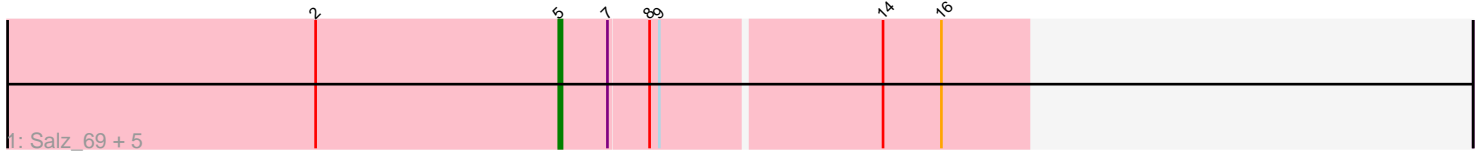


Pham 191502



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 191502 Report

This analysis was run 11/02/24 on database version 579.

Pham number 191502 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Salz_69, Hutc2_69, Petersenfast_68, Gilberta_71, Sham4_70, Bachome_72
- Track 2 : Orange_69
- Track 3 : Aneem_71, MaCh_70, Fibonacci_70, Ebony_70, Flaverint_71, Munch_70, Bowtie_71, Et2Brutus_69, Mabel_70
- Track 4 : Timothy_70
- Track 5 : Snape_70, Mulciber_69
- Track 6 : Lucivia_71
- Track 7 : Bud_69
- Track 8 : Refuge_69
- Track 9 : Zimmer_69
- Track 10 : DarthPhader_69

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 16 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem_71, Bachome_72, Bowtie_71, Bud_69, Ebony_70, Et2Brutus_69, Fibonacci_70, Flaverint_71, Gilberta_71, Hutc2_69, Lucivia_71, MaCh_70, Mabel_70, Munch_70, Petersenfast_68, Salz_69, Sham4_70,

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

- Mulciber_69, Orange_69, Snape_70, Timothy_70,

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

- DarthPhader_69, Refuge_69, Zimmer_69,

Summary by start number:

Start 5:

- Found in 21 of 24 (87.5%) of genes in pham
- Manual Annotations of this start: 16 of 23

- Called 81.0% of time when present
- Phage (with cluster) where this start called: Aneem_71 (A11), Bachome_72 (A11), Bowtie_71 (A11), Bud_69 (A11), Ebony_70 (A11), Et2Brutus_69 (A11), Fibonacci_70 (A11), Flaverint_71 (A11), Gilberta_71 (A11), Hutc2_69 (A11), Lucivia_71 (A11), MaCh_70 (A11), Mabel_70 (A11), Munch_70 (A11), Petersenfast_68 (A11), Salz_69 (A11), Sham4_70 (A11),

Start 6:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DARTHPhader_69 (A12), Refuge_69 (A12),

Start 7:

- Found in 21 of 24 (87.5%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Timothy_70 (A11),

Start 8:

- Found in 22 of 24 (91.7%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Mulciber_69 (A11), Snape_70 (A11),

Start 9:

- Found in 21 of 24 (87.5%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Orange_69 (A11),

Start 18:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zimmer_69 (A12),

Summary by clusters:

There are 2 clusters represented in this pham: A11, A12,

Info for manual annotations of cluster A11:

- Start number 5 was manually annotated 16 times for cluster A11.
- Start number 7 was manually annotated 1 time for cluster A11.
- Start number 8 was manually annotated 2 times for cluster A11.
- Start number 9 was manually annotated 1 time for cluster A11.

Info for manual annotations of cluster A12:

- Start number 6 was manually annotated 2 times for cluster A12.
- Start number 18 was manually annotated 1 time for cluster A12.

Gene Information:

Gene: Aneem_71 Start: 42172, Stop: 42032, Start Num: 5

Candidate Starts for Aneem_71:

(2, 42247), (Start: 5 @42172 has 16 MA's), (Start: 7 @42157 has 1 MA's), (Start: 8 @42145 has 2 MA's), (Start: 9 @42142 has 1 MA's), (14, 42076), (16, 42058),

Gene: Bachome_72 Start: 42168, Stop: 42028, Start Num: 5

Candidate Starts for Bachome_72:

(2, 42243), (Start: 5 @42168 has 16 MA's), (Start: 7 @42153 has 1 MA's), (Start: 8 @42141 has 2 MA's), (Start: 9 @42138 has 1 MA's), (14, 42072), (16, 42054),

Gene: Bowtie_71 Start: 42179, Stop: 42039, Start Num: 5

Candidate Starts for Bowtie_71:

(2, 42254), (Start: 5 @42179 has 16 MA's), (Start: 7 @42164 has 1 MA's), (Start: 8 @42152 has 2 MA's), (Start: 9 @42149 has 1 MA's), (14, 42083), (16, 42065),

Gene: Bud_69 Start: 41726, Stop: 41586, Start Num: 5

Candidate Starts for Bud_69:

(2, 41801), (4, 41735), (Start: 5 @41726 has 16 MA's), (Start: 7 @41711 has 1 MA's), (Start: 8 @41699 has 2 MA's), (Start: 9 @41696 has 1 MA's), (12, 41657), (14, 41630), (16, 41612),

Gene: DarthPhader_69 Start: 43789, Stop: 43667, Start Num: 6

Candidate Starts for DarthPhader_69:

(1, 43927), (Start: 6 @43789 has 2 MA's), (Start: 8 @43771 has 2 MA's), (10, 43750), (11, 43747), (13, 43720), (15, 43702), (16, 43690),

Gene: Ebony_70 Start: 41743, Stop: 41603, Start Num: 5

Candidate Starts for Ebony_70:

(2, 41818), (Start: 5 @41743 has 16 MA's), (Start: 7 @41728 has 1 MA's), (Start: 8 @41716 has 2 MA's), (Start: 9 @41713 has 1 MA's), (14, 41647), (16, 41629),

Gene: Et2Brutus_69 Start: 41706, Stop: 41566, Start Num: 5

Candidate Starts for Et2Brutus_69:

(2, 41781), (Start: 5 @41706 has 16 MA's), (Start: 7 @41691 has 1 MA's), (Start: 8 @41679 has 2 MA's), (Start: 9 @41676 has 1 MA's), (14, 41610), (16, 41592),

Gene: Fibonacci_70 Start: 41712, Stop: 41572, Start Num: 5

Candidate Starts for Fibonacci_70:

(2, 41787), (Start: 5 @41712 has 16 MA's), (Start: 7 @41697 has 1 MA's), (Start: 8 @41685 has 2 MA's), (Start: 9 @41682 has 1 MA's), (14, 41616), (16, 41598),

Gene: Flaverint_71 Start: 42170, Stop: 42030, Start Num: 5

Candidate Starts for Flaverint_71:

(2, 42245), (Start: 5 @42170 has 16 MA's), (Start: 7 @42155 has 1 MA's), (Start: 8 @42143 has 2 MA's), (Start: 9 @42140 has 1 MA's), (14, 42074), (16, 42056),

Gene: Gilberta_71 Start: 42163, Stop: 42023, Start Num: 5

Candidate Starts for Gilberta_71:

(2, 42238), (Start: 5 @42163 has 16 MA's), (Start: 7 @42148 has 1 MA's), (Start: 8 @42136 has 2 MA's), (Start: 9 @42133 has 1 MA's), (14, 42067), (16, 42049),

Gene: Hutc2_69 Start: 41712, Stop: 41572, Start Num: 5

Candidate Starts for Hutc2_69:

(2, 41787), (Start: 5 @41712 has 16 MA's), (Start: 7 @41697 has 1 MA's), (Start: 8 @41685 has 2 MA's), (Start: 9 @41682 has 1 MA's), (14, 41616), (16, 41598),

Gene: Lucivia_71 Start: 42221, Stop: 42081, Start Num: 5

Candidate Starts for Lucivia_71:

(Start: 5 @42221 has 16 MA's), (Start: 7 @42206 has 1 MA's), (Start: 8 @42194 has 2 MA's), (Start: 9 @42191 has 1 MA's), (14, 42125), (16, 42107),

Gene: MaCh_70 Start: 42167, Stop: 42027, Start Num: 5

Candidate Starts for MaCh_70:

(2, 42242), (Start: 5 @42167 has 16 MA's), (Start: 7 @42152 has 1 MA's), (Start: 8 @42140 has 2 MA's), (Start: 9 @42137 has 1 MA's), (14, 42071), (16, 42053),

Gene: Mabel_70 Start: 42168, Stop: 42028, Start Num: 5

Candidate Starts for Mabel_70:

(2, 42243), (Start: 5 @42168 has 16 MA's), (Start: 7 @42153 has 1 MA's), (Start: 8 @42141 has 2 MA's), (Start: 9 @42138 has 1 MA's), (14, 42072), (16, 42054),

Gene: Mulciber_69 Start: 41682, Stop: 41569, Start Num: 8

Candidate Starts for Mulciber_69:

(2, 41784), (Start: 5 @41709 has 16 MA's), (Start: 7 @41694 has 1 MA's), (Start: 8 @41682 has 2 MA's), (Start: 9 @41679 has 1 MA's), (14, 41613), (16, 41595),

Gene: Munch_70 Start: 42172, Stop: 42032, Start Num: 5

Candidate Starts for Munch_70:

(2, 42247), (Start: 5 @42172 has 16 MA's), (Start: 7 @42157 has 1 MA's), (Start: 8 @42145 has 2 MA's), (Start: 9 @42142 has 1 MA's), (14, 42076), (16, 42058),

Gene: Orange_69 Start: 41691, Stop: 41581, Start Num: 9

Candidate Starts for Orange_69:

(2, 41796), (Start: 5 @41721 has 16 MA's), (Start: 7 @41706 has 1 MA's), (Start: 8 @41694 has 2 MA's), (Start: 9 @41691 has 1 MA's), (14, 41625), (16, 41607),

Gene: Petersenfast_68 Start: 41720, Stop: 41580, Start Num: 5

Candidate Starts for Petersenfast_68:

(2, 41795), (Start: 5 @41720 has 16 MA's), (Start: 7 @41705 has 1 MA's), (Start: 8 @41693 has 2 MA's), (Start: 9 @41690 has 1 MA's), (14, 41624), (16, 41606),

Gene: Refuge_69 Start: 43844, Stop: 43722, Start Num: 6

Candidate Starts for Refuge_69:

(Start: 6 @43844 has 2 MA's), (10, 43805), (11, 43802), (13, 43775), (15, 43757), (16, 43745),

Gene: Salz_69 Start: 41635, Stop: 41495, Start Num: 5

Candidate Starts for Salz_69:

(2, 41710), (Start: 5 @41635 has 16 MA's), (Start: 7 @41620 has 1 MA's), (Start: 8 @41608 has 2 MA's), (Start: 9 @41605 has 1 MA's), (14, 41539), (16, 41521),

Gene: Sham4_70 Start: 41719, Stop: 41579, Start Num: 5

Candidate Starts for Sham4_70:

(2, 41794), (Start: 5 @41719 has 16 MA's), (Start: 7 @41704 has 1 MA's), (Start: 8 @41692 has 2 MA's), (Start: 9 @41689 has 1 MA's), (14, 41623), (16, 41605),

Gene: Snape_70 Start: 41684, Stop: 41571, Start Num: 8

Candidate Starts for Snape_70:

(2, 41786), (Start: 5 @41711 has 16 MA's), (Start: 7 @41696 has 1 MA's), (Start: 8 @41684 has 2 MA's), (Start: 9 @41681 has 1 MA's), (14, 41615), (16, 41597),

Gene: Timothy_70 Start: 41673, Stop: 41548, Start Num: 7

Candidate Starts for Timothy_70:

(2, 41763), (Start: 5 @41688 has 16 MA's), (Start: 7 @41673 has 1 MA's), (Start: 8 @41661 has 2 MA's), (Start: 9 @41658 has 1 MA's), (14, 41592), (16, 41574),

Gene: Zimmer_69 Start: 43555, Stop: 43433, Start Num: 18

Candidate Starts for Zimmer_69:

(3, 43729), (17, 43576), (Start: 18 @43555 has 1 MA's), (19, 43516), (20, 43513), (21, 43486), (22, 43456),