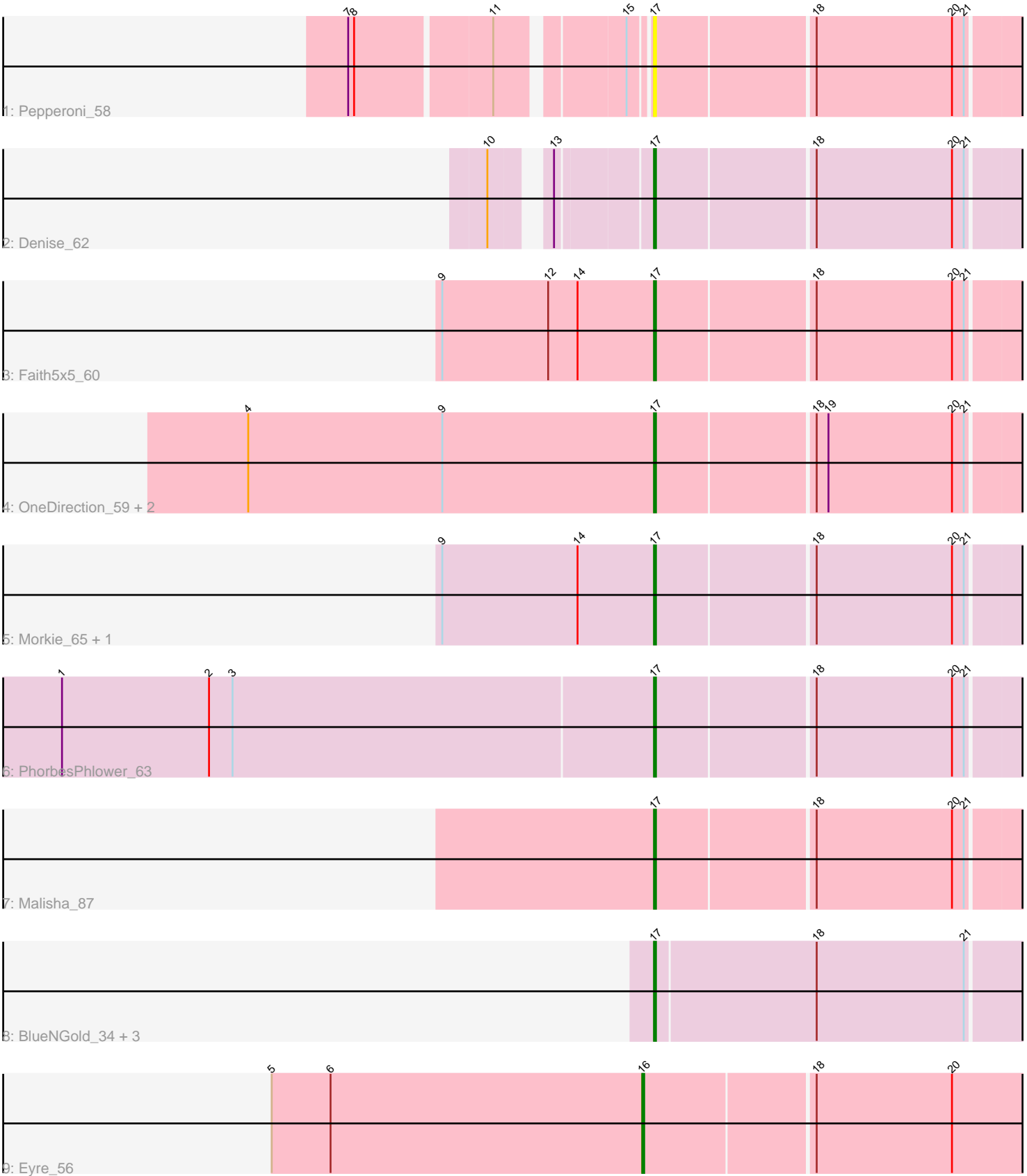


Pham 164019



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 164019 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164019 has 15 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Pepperoni\_58
- Track 2 : Denise\_62
- Track 3 : Faith5x5\_60
- Track 4 : OneDirection\_59, Lucky10\_62, Lton\_62
- Track 5 : Morkie\_65, Moosehead\_66
- Track 6 : PhorbesPhlower\_63
- Track 7 : Malisha\_87
- Track 8 : BlueNGold\_34, Mareelih\_34, Boopy\_36, Forza\_35
- Track 9 : Eyre\_56

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

The start number called the most often in the published annotations is 17, it was called in 13 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueNGold\_34, Boopy\_36, Denise\_62, Faith5x5\_60, Forza\_35, Lton\_62, Lucky10\_62, Malisha\_87, Mareelih\_34, Moosehead\_66, Morkie\_65, OneDirection\_59, Pepperoni\_58, PhorbesPhlower\_63,

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

- 

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

- Eyre\_56,

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

Start 16:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eyre\_56 (singleton),

Start 17:

- Found in 14 of 15 ( 93.3% ) of genes in pham
- Manual Annotations of this start: 13 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_34 (DS), Boopy\_36 (DS), Denise\_62 (CZ5), Faith5x5\_60 (CZ6), Forza\_35 (DS), Lton\_62 (CZ), Lucky10\_62 (DH), Malisha\_87 (DN), Mareelih\_34 (DS), Moosehead\_66 (CZ6), Morkie\_65 (DH), OneDirection\_59 (CZ6), Pepperoni\_58 (CZ), PhorbesPhlower\_63 (DH),

### **Summary by clusters:**

There are 7 clusters represented in this pham: DN, singleton, DH, CZ6, CZ5, CZ, DS,

Info for manual annotations of cluster CZ:

- Start number 17 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

- Start number 17 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 17 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 17 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 17 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DS:

- Start number 17 was manually annotated 4 times for cluster DS.

### **Gene Information:**

Gene: BlueNGold\_34 Start: 12004, Stop: 11792, Start Num: 17

Candidate Starts for BlueNGold\_34:

(Start: 17 @12004 has 13 MA's), (18, 11923), (21, 11848),

Gene: Boopy\_36 Start: 12016, Stop: 11804, Start Num: 17

Candidate Starts for Boopy\_36:

(Start: 17 @12016 has 13 MA's), (18, 11935), (21, 11860),

Gene: Denise\_62 Start: 38064, Stop: 38264, Start Num: 17

Candidate Starts for Denise\_62:

(10, 37998), (13, 38019), (Start: 17 @38064 has 13 MA's), (18, 38142), (20, 38211), (21, 38217),

Gene: Eyre\_56 Start: 36826, Stop: 37053, Start Num: 16

Candidate Starts for Eyre\_56:

(5, 36637), (6, 36667), (Start: 16 @36826 has 1 MA's), (18, 36910), (20, 36979),

Gene: Faith5x5\_60 Start: 36501, Stop: 36701, Start Num: 17

Candidate Starts for Faith5x5\_60:

(9, 36393), (12, 36447), (14, 36462), (Start: 17 @36501 has 13 MA's), (18, 36579), (20, 36648), (21, 36654),

Gene: Forza\_35 Start: 11932, Stop: 11720, Start Num: 17  
Candidate Starts for Forza\_35:  
(Start: 17 @11932 has 13 MA's), (18, 11851), (21, 11776),

Gene: Lton\_62 Start: 36905, Stop: 37102, Start Num: 17  
Candidate Starts for Lton\_62:  
(4, 36698), (9, 36797), (Start: 17 @36905 has 13 MA's), (18, 36983), (19, 36989), (20, 37052), (21, 37058),

Gene: Lucky10\_62 Start: 39494, Stop: 39694, Start Num: 17  
Candidate Starts for Lucky10\_62:  
(4, 39287), (9, 39386), (Start: 17 @39494 has 13 MA's), (18, 39572), (19, 39578), (20, 39641), (21, 39647),

Gene: Malisha\_87 Start: 51224, Stop: 51424, Start Num: 17  
Candidate Starts for Malisha\_87:  
(Start: 17 @51224 has 13 MA's), (18, 51302), (20, 51371), (21, 51377),

Gene: Mareelih\_34 Start: 11461, Stop: 11249, Start Num: 17  
Candidate Starts for Mareelih\_34:  
(Start: 17 @11461 has 13 MA's), (18, 11380), (21, 11305),

Gene: Moosehead\_66 Start: 38078, Stop: 38278, Start Num: 17  
Candidate Starts for Moosehead\_66:  
(9, 37970), (14, 38039), (Start: 17 @38078 has 13 MA's), (18, 38156), (20, 38225), (21, 38231),

Gene: Morkie\_65 Start: 38053, Stop: 38250, Start Num: 17  
Candidate Starts for Morkie\_65:  
(9, 37945), (14, 38014), (Start: 17 @38053 has 13 MA's), (18, 38131), (20, 38200), (21, 38206),

Gene: OneDirection\_59 Start: 35467, Stop: 35664, Start Num: 17  
Candidate Starts for OneDirection\_59:  
(4, 35260), (9, 35359), (Start: 17 @35467 has 13 MA's), (18, 35545), (19, 35551), (20, 35614), (21, 35620),

Gene: Pepperoni\_58 Start: 36513, Stop: 36713, Start Num: 17  
Candidate Starts for Pepperoni\_58:  
(7, 36378), (8, 36381), (11, 36447), (15, 36504), (Start: 17 @36513 has 13 MA's), (18, 36591), (20, 36660), (21, 36666),

Gene: PhorbesPhlower\_63 Start: 37457, Stop: 37654, Start Num: 17  
Candidate Starts for PhorbesPhlower\_63:  
(1, 37157), (2, 37232), (3, 37244), (Start: 17 @37457 has 13 MA's), (18, 37535), (20, 37604), (21, 37610),