

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 171863 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171863 has 14 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: Forza\_35, Mareelih\_34, Boopy\_36, BlueNGold\_34

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

The start number called the most often in the published annotations is 14, it was called in 13 of the 13 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:

### Summary by start number:

#### Start 14

- Found in 14 of 14 (100.0%) of genes in pham
- Manual Annotations of this start: 13 of 13
- 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 6 clusters represented in this pham: DN, DH, CZ6, CZ5, CZ, DS,

Info for manual annotations of cluster CZ:

•Start number 14 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

•Start number 14 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

•Start number 14 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DH:

•Start number 14 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

•Start number 14 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DS:

•Start number 14 was manually annotated 4 times for cluster DS.

### Gene Information:

Gene: BlueNGold\_34 Start: 12004, Stop: 11792, Start Num: 14

Candidate Starts for BlueNGold 34:

(Start: 14 @12004 has 13 MA's), (15, 11923), (18, 11848),

Gene: Boopy 36 Start: 12016, Stop: 11804, Start Num: 14

Candidate Starts for Boopy 36:

(Start: 14 @ 12016 has 13 MA's), (15, 11935), (18, 11860),

Gene: Denise\_62 Start: 38064, Stop: 38264, Start Num: 14

Candidate Starts for Denise 62:

(8, 37998), (11, 38019), (Start: 14 @ 38064 has 13 MA's), (15, 38142), (17, 38211), (18, 38217),

Gene: Faith5x5\_60 Start: 36501, Stop: 36701, Start Num: 14

Candidate Starts for Faith5x5 60:

(7, 36393), (10, 36447), (12, 36462), (Start: 14 @36501 has 13 MA's), (15, 36579), (17, 36648), (18, 36654),

Gene: Forza 35 Start: 11932, Stop: 11720, Start Num: 14

Candidate Starts for Forza\_35:

(Start: 14 @11932 has 13 MA's), (15, 11851), (18, 11776),

Gene: Lton 62 Start: 36905, Stop: 37102, Start Num: 14

Candidate Starts for Lton 62:

(4, 36698), (7, 36797), (Start: 14 @ 36905 has 13 MA's), (15, 36983), (16, 36989), (17, 37052), (18, 37058),

Gene: Lucky10\_62 Start: 39494, Stop: 39694, Start Num: 14

Candidate Starts for Lucky10\_62:

(4, 39287), (7, 39386), (Start: 14 @39494 has 13 MA's), (15, 39572), (16, 39578), (17, 39641), (18, 39647),

Gene: Malisha\_87 Start: 51224, Stop: 51424, Start Num: 14

Candidate Starts for Malisha 87:

(Start: 14 @51224 has 13 MA's), (15, 51302), (17, 51371), (18, 51377),

Gene: Mareelih 34 Start: 11461, Stop: 11249, Start Num: 14

Candidate Starts for Mareelih 34:

(Start: 14 @11461 has 13 MA's), (15, 11380), (18, 11305),

Gene: Moosehead\_66 Start: 38078, Stop: 38278, Start Num: 14

Candidate Starts for Moosehead\_66:

(7, 37970), (12, 38039), (Start: 14 @ 38078 has 13 MA's), (15, 38156), (17, 38225), (18, 38231),

Gene: Morkie 65 Start: 38053, Stop: 38250, Start Num: 14

Candidate Starts for Morkie\_65:

(7, 37945), (12, 38014), (Start: 14 @ 38053 has 13 MA's), (15, 38131), (17, 38200), (18, 38206),

Gene: OneDirection\_59 Start: 35467, Stop: 35664, Start Num: 14

Candidate Starts for OneDirection\_59:

(4, 35260), (7, 35359), (Start: 14 @35467 has 13 MA's), (15, 35545), (16, 35551), (17, 35614), (18, 35620),

Gene: Pepperoni 58 Start: 36513, Stop: 36713, Start Num: 14

Candidate Starts for Pepperoni\_58:

(5, 36378), (6, 36381), (9, 36447), (13, 36504), (Start: 14 @36513 has 13 MA's), (15, 36591), (17, 36660), (18, 36666),

Gene: PhorbesPhlower\_63 Start: 37457, Stop: 37654, Start Num: 14

Candidate Starts for PhorbesPhlower 63:

(1, 37157), (2, 37232), (3, 37244), (Start: 14 @37457 has 13 MA's), (15, 37535), (17, 37604), (18, 37610),