

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 163968 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163968 has 18 members, 0 are drafts.

Phages represented in each track:

- Track 1: Phrappuccino\_41, Settecandela\_41
- Track 2 : Nergal\_41
- Track 3 : Curiosium\_47
- Track 4 : Milly\_47, DismalStressor\_47
- Track 5 : DismalFunk\_47, Marcoliusprime\_47
- Track 6 : BoostSeason\_47, Mufasa\_47
- Track 7 : ZoeJ 46
- Track 8 : TM4 42
- Track 9 : Findley 47
- Track 10 : Ellie\_42, Fefferhead\_44
- Track 11 : Aminay\_47
- Track 12 : Nebkiss\_69, Gaia\_69

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

The start number called the most often in the published annotations is 11, it was called in 5 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Curiosium\_47, Ellie\_42, Fefferhead\_44, Gaia\_69, Nebkiss\_69,

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

 Aminay\_47, BoostSeason\_47, DismalFunk\_47, DismalStressor\_47, Findley\_47, Marcoliusprime\_47, Milly\_47, Mufasa\_47, Phrappuccino\_41, Settecandela\_41, TM4\_42, ZoeJ\_46,

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

Nergal\_41,

## Summary by start number:

#### Start 1:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_47 (K7),

#### Start 3:

- Found in 3 of 18 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phrappuccino\_41 (AA), Settecandela\_41 (AA),

## Start 4:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TM4\_42 (K2),

#### Start 7:

- Found in 1 of 18 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal\_41 (AG),

#### Start 8:

- Found in 9 of 18 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 44.4% of time when present
- Phage (with cluster) where this start called: BoostSeason\_47 (K2), DismalFunk\_47 (K2), Marcoliusprime\_47 (K2), Mufasa\_47 (K2),

#### Start 9:

- Found in 9 of 18 (50.0%) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 44.4% of time when present
- Phage (with cluster) where this start called: DismalStressor\_47 (K2), Findley\_47 (K2), Milly\_47 (K2), ZoeJ\_46 (K2),

#### Start 11:

- Found in 17 of 18 (94.4%) of genes in pham
- Manual Annotations of this start: 5 of 18
- Called 29.4% of time when present
- Phage (with cluster) where this start called: Curiosium\_47 (K1), Ellie\_42 (K6), Fefferhead\_44 (K6), Gaia\_69 (X), Nebkiss\_69 (X),

## Summary by clusters:

There are 7 clusters represented in this pham: AA, AG, K2, K1, K7, K6, X,

Info for manual annotations of cluster AA:

•Start number 3 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AG:

•Start number 7 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

•Start number 11 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- •Start number 4 was manually annotated 1 time for cluster K2.
- •Start number 8 was manually annotated 4 times for cluster K2.
- •Start number 9 was manually annotated 4 times for cluster K2.

Info for manual annotations of cluster K6:

•Start number 11 was manually annotated 2 times for cluster K6.

Info for manual annotations of cluster K7:

•Start number 1 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster X:

•Start number 11 was manually annotated 2 times for cluster X.

### Gene Information:

Gene: Aminay 47 Start: 36566, Stop: 36913, Start Num: 1

Candidate Starts for Aminay\_47:

(Start: 1 @ 36566 has 1 MA's), (Start: 3 @ 36599 has 2 MA's), (5, 36608), (Start: 11 @ 36647 has 5

MA's), (22, 36845),

Gene: BoostSeason\_47 Start: 36788, Stop: 37108, Start Num: 8

Candidate Starts for BoostSeason\_47:

(Start: 8 @36788 has 4 MA's), (Start: 9 @36791 has 4 MA's), (Start: 11 @36800 has 5 MA's), (17, 36905), (20, 36968), (22, 36998), (24, 37049), (26, 37076), (28, 37091), (29, 37097),

Gene: Curiosium 47 Start: 34347, Stop: 34634, Start Num: 11

Candidate Starts for Curiosium 47:

(Start: 11 @34347 has 5 MA's), (13, 34401), (15, 34443), (17, 34452), (26, 34623), (27, 34626),

Gene: DismalFunk\_47 Start: 37222, Stop: 37542, Start Num: 8

Candidate Starts for DismalFunk\_47:

(Start: 8 @37222 has 4 MA's), (Start: 9 @37225 has 4 MA's), (Start: 11 @37234 has 5 MA's), (17, 37339), (20, 37402), (22, 37432), (26, 37510), (28, 37525), (29, 37531),

Gene: DismalStressor 47 Start: 37225, Stop: 37542, Start Num: 9

Candidate Starts for DismalStressor 47:

(Start: 8 @37222 has 4 MA's), (Start: 9 @37225 has 4 MA's), (Start: 11 @37234 has 5 MA's), (17, 37339), (20, 37402), (22, 37432), (26, 37510), (28, 37525), (29, 37531),

Gene: Ellie\_42 Start: 35424, Stop: 35666, Start Num: 11

Candidate Starts for Ellie\_42:

(Start: 11 @35424 has 5 MA's), (19, 35577),

Gene: Fefferhead 44 Start: 35375, Stop: 35617, Start Num: 11

Candidate Starts for Fefferhead 44:

(Start: 11 @35375 has 5 MA's), (19, 35528),

Gene: Findley\_47 Start: 37218, Stop: 37535, Start Num: 9

Candidate Starts for Findley 47:

(Start: 8 @37215 has 4 MA's), (Start: 9 @37218 has 4 MA's), (Start: 11 @37227 has 5 MA's), (17, 37332), (20, 37395), (22, 37425), (26, 37503), (28, 37518), (29, 37524),

Gene: Gaia\_69 Start: 45400, Stop: 45705, Start Num: 11

Candidate Starts for Gaia 69:

(Start: 11 @45400 has 5 MA's), (13, 45454), (14, 45487), (20, 45568), (23, 45616),

Gene: Marcoliusprime\_47 Start: 37222, Stop: 37542, Start Num: 8

Candidate Starts for Marcoliusprime 47:

(Start: 8 @37222 has 4 MA's), (Start: 9 @37225 has 4 MA's), (Start: 11 @37234 has 5 MA's), (17, 37339), (20, 37402), (22, 37432), (26, 37510), (28, 37525), (29, 37531),

Gene: Milly\_47 Start: 37198, Stop: 37515, Start Num: 9

Candidate Starts for Milly\_47:

(Start: 8 @37195 has 4 MA's), (Start: 9 @37198 has 4 MA's), (Start: 11 @37207 has 5 MA's), (17, 37312), (20, 37375), (22, 37405), (26, 37483), (28, 37498), (29, 37504),

Gene: Mufasa\_47 Start: 36779, Stop: 37099, Start Num: 8

Candidate Starts for Mufasa 47:

(Start: 8 @36779 has 4 MA's), (Start: 9 @36782 has 4 MA's), (Start: 11 @36791 has 5 MA's), (17, 36896), (20, 36959), (22, 36989), (24, 37040), (26, 37067), (28, 37082), (29, 37088),

Gene: Nebkiss\_69 Start: 44011, Stop: 44316, Start Num: 11

Candidate Starts for Nebkiss\_69:

(Start: 11 @44011 has 5 MA's), (13, 44065), (14, 44098), (20, 44179), (23, 44227),

Gene: Nergal\_41 Start: 33794, Stop: 34084, Start Num: 7

Candidate Starts for Nergal\_41:

(Start: 7 @ 33794 has 1 MA's), (10, 33809), (13, 33866), (14, 33899), (16, 33911), (17, 33917), (18, 33932), (21, 33983), (22, 34010), (23, 34028),

Gene: Phrappuccino 41 Start: 23047, Stop: 23388, Start Num: 3

Candidate Starts for Phrappuccino 41:

(Start: 3 @23047 has 2 MA's), (Start: 11 @23095 has 5 MA's), (12, 23110), (13, 23149), (20, 23266), (23, 23314), (25, 23344),

Gene: Settecandela\_41 Start: 23047, Stop: 23388, Start Num: 3

Candidate Starts for Settecandela\_41:

(Start: 3 @23047 has 2 MA's), (Start: 11 @23095 has 5 MA's), (12, 23110), (13, 23149), (20, 23266), (23, 23314), (25, 23344),

Gene: TM4 42 Start: 31544, Stop: 31900, Start Num: 4

Candidate Starts for TM4 42:

(Start: 4 @31544 has 1 MA's), (6, 31547), (Start: 8 @31571 has 4 MA's), (Start: 9 @31574 has 4 MA's), (Start: 11 @31583 has 5 MA's), (17, 31688), (20, 31751), (22, 31781), (24, 31832), (26, 31859), (29, 31889),

Gene: ZoeJ 46 Start: 36666, Stop: 36992, Start Num: 9

Candidate Starts for ZoeJ 46:

(2, 36615), (Start: 8 @ 36663 has 4 MA's), (Start: 9 @ 36666 has 4 MA's), (Start: 11 @ 36675 has 5 MA's), (17, 36780), (20, 36843), (22, 36873), (26, 36951), (29, 36981),