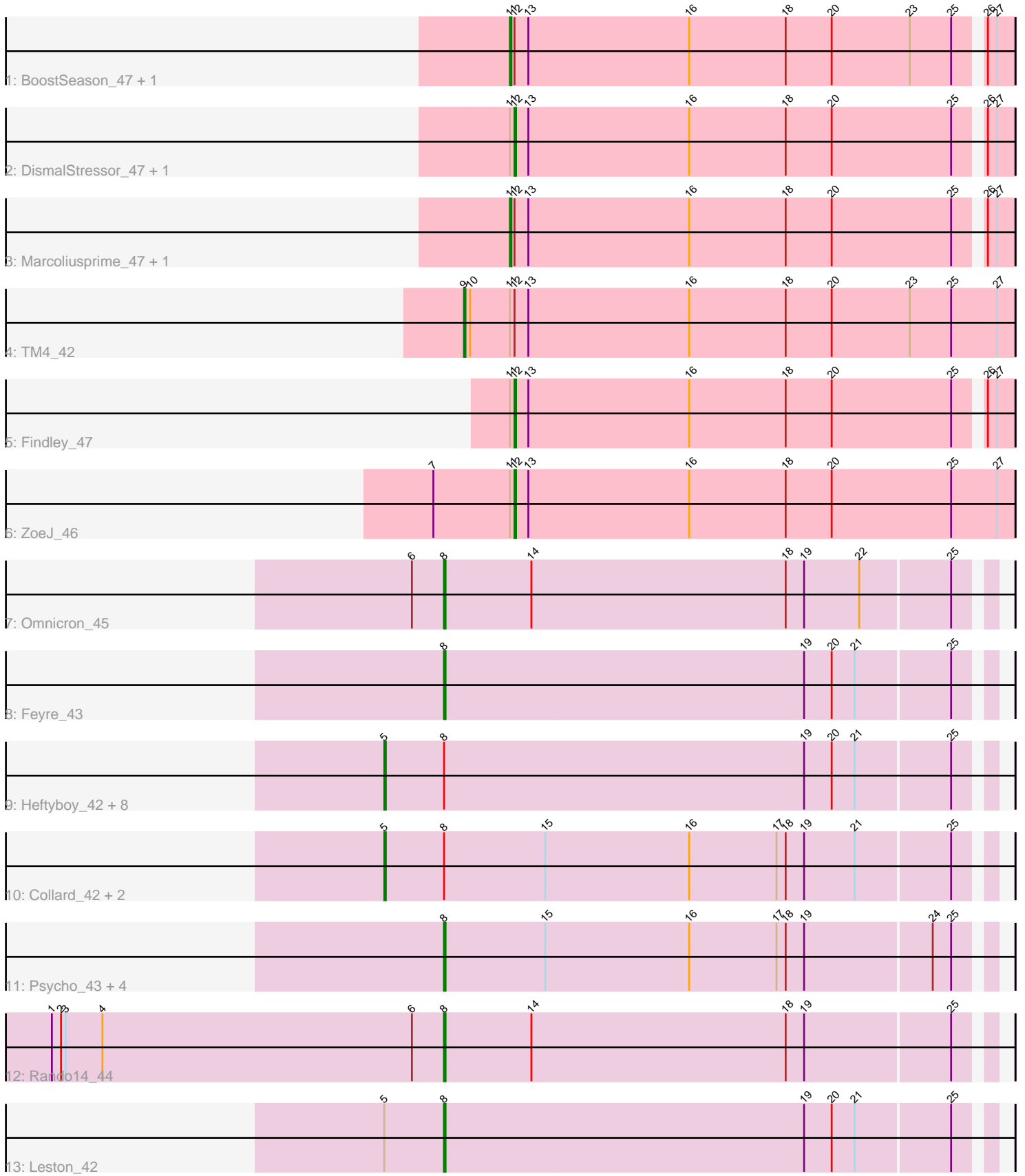


# Pham 158069



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 158069 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158069 has 30 members, 1 are drafts.

Phages represented in each track:

- Track 1 : BoostSeason\_47, Mufasa\_47
- Track 2 : DismalStressor\_47, Milly\_47
- Track 3 : Marcoliusprime\_47, DismalFunk\_47
- Track 4 : TM4\_42
- Track 5 : Findley\_47
- Track 6 : ZoeJ\_46
- Track 7 : Omnicron\_45
- Track 8 : Feyre\_43
- Track 9 : Heftyboy\_42, Paola\_42, Miryou\_45, Thyatira\_44, Guillsminger\_43, Gengar\_42, Waterfoul\_43, OkiRoe\_42, SoSeph\_42
- Track 10 : Collard\_42, Kratio\_41, InvictusManeo\_42
- Track 11 : Psycho\_43, AlleyCat\_43, Edugator\_42, Larva\_43, Dadosky\_43
- Track 12 : Rando14\_44
- Track 13 : Leston\_42

### ***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 11 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Collard\_42, Gengar\_42, Guillsminger\_43, Heftyboy\_42, InvictusManeo\_42, Kratio\_41, Miryou\_45, OkiRoe\_42, Paola\_42, SoSeph\_42, Thyatira\_44, Waterfoul\_43,

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

- Leston\_42,

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

- AlleyCat\_43, BoostSeason\_47, Dadosky\_43, DismalFunk\_47, DismalStressor\_47, Edugator\_42, Feyre\_43, Findley\_47, Larva\_43, Marcoliusprime\_47, Milly\_47, Mufasa\_47, Omnicron\_45, Psycho\_43, Rando14\_44, TM4\_42, ZoeJ\_46,

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

Start 5:

- Found in 13 of 30 ( 43.3% ) of genes in pham
- Manual Annotations of this start: 11 of 29
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Collard\_42 (K5), Gengar\_42 (K5), Guillsminger\_43 (K5), Heftyboy\_42 (K5), InvictusManeo\_42 (K5), Kratio\_41 (K5), Miryou\_45 (K5), OkiRoe\_42 (K5), Paola\_42 (K5), SoSeph\_42 (K5), Thyatira\_44 (K5), Waterfoul\_43 (K5),

Start 8:

- Found in 21 of 30 ( 70.0% ) of genes in pham
- Manual Annotations of this start: 9 of 29
- Called 42.9% of time when present
- Phage (with cluster) where this start called: AlleyCat\_43 (K5), Dadosky\_43 (K5), Edugator\_42 (K5), Feyre\_43 (K5), Larva\_43 (K5), Leston\_42 (K5), Omnicron\_45 (K5), Psycho\_43 (K5), Rando14\_44 (K5),

Start 9:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TM4\_42 (K2),

Start 11:

- Found in 9 of 30 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 4 of 29
- 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 12:

- Found in 9 of 30 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 4 of 29
- 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),

**Summary by clusters:**

There are 2 clusters represented in this pham: K2, K5,

Info for manual annotations of cluster K2:

- Start number 9 was manually annotated 1 time for cluster K2.
- Start number 11 was manually annotated 4 times for cluster K2.
- Start number 12 was manually annotated 4 times for cluster K2.

Info for manual annotations of cluster K5:

- Start number 5 was manually annotated 11 times for cluster K5.
- Start number 8 was manually annotated 9 times for cluster K5.

**Gene Information:**

Gene: AlleyCat\_43 Start: 34517, Stop: 34864, Start Num: 8

Candidate Starts for AlleyCat\_43:

(Start: 8 @34517 has 9 MA's), (15, 34583), (16, 34676), (17, 34733), (18, 34739), (19, 34751), (24, 34832), (25, 34844),

Gene: BoostSeason\_47 Start: 36788, Stop: 37108, Start Num: 11

Candidate Starts for BoostSeason\_47:

(Start: 11 @36788 has 4 MA's), (Start: 12 @36791 has 4 MA's), (13, 36800), (16, 36905), (18, 36968), (20, 36998), (23, 37049), (25, 37076), (26, 37091), (27, 37097),

Gene: Collard\_42 Start: 34585, Stop: 34971, Start Num: 5

Candidate Starts for Collard\_42:

(Start: 5 @34585 has 11 MA's), (Start: 8 @34624 has 9 MA's), (15, 34690), (16, 34783), (17, 34840), (18, 34846), (19, 34858), (21, 34891), (25, 34951),

Gene: Dadosky\_43 Start: 34519, Stop: 34866, Start Num: 8

Candidate Starts for Dadosky\_43:

(Start: 8 @34519 has 9 MA's), (15, 34585), (16, 34678), (17, 34735), (18, 34741), (19, 34753), (24, 34834), (25, 34846),

Gene: DismalFunk\_47 Start: 37222, Stop: 37542, Start Num: 11

Candidate Starts for DismalFunk\_47:

(Start: 11 @37222 has 4 MA's), (Start: 12 @37225 has 4 MA's), (13, 37234), (16, 37339), (18, 37402), (20, 37432), (25, 37510), (26, 37525), (27, 37531),

Gene: DismalStressor\_47 Start: 37225, Stop: 37542, Start Num: 12

Candidate Starts for DismalStressor\_47:

(Start: 11 @37222 has 4 MA's), (Start: 12 @37225 has 4 MA's), (13, 37234), (16, 37339), (18, 37402), (20, 37432), (25, 37510), (26, 37525), (27, 37531),

Gene: Edugator\_42 Start: 34944, Stop: 35291, Start Num: 8

Candidate Starts for Edugator\_42:

(Start: 8 @34944 has 9 MA's), (15, 35010), (16, 35103), (17, 35160), (18, 35166), (19, 35178), (24, 35259), (25, 35271),

Gene: Feyre\_43 Start: 35869, Stop: 36216, Start Num: 8

Candidate Starts for Feyre\_43:

(Start: 8 @35869 has 9 MA's), (19, 36103), (20, 36121), (21, 36136), (25, 36196),

Gene: Findley\_47 Start: 37218, Stop: 37535, Start Num: 12

Candidate Starts for Findley\_47:

(Start: 11 @37215 has 4 MA's), (Start: 12 @37218 has 4 MA's), (13, 37227), (16, 37332), (18, 37395), (20, 37425), (25, 37503), (26, 37518), (27, 37524),

Gene: Gengar\_42 Start: 34445, Stop: 34831, Start Num: 5

Candidate Starts for Gengar\_42:

(Start: 5 @34445 has 11 MA's), (Start: 8 @34484 has 9 MA's), (19, 34718), (20, 34736), (21, 34751), (25, 34811),

Gene: Guillsminger\_43 Start: 34416, Stop: 34802, Start Num: 5

Candidate Starts for Guillsminger\_43:

(Start: 5 @34416 has 11 MA's), (Start: 8 @34455 has 9 MA's), (19, 34689), (20, 34707), (21, 34722), (25, 34782),

Gene: Heftyboy\_42 Start: 34566, Stop: 34952, Start Num: 5

Candidate Starts for Heftyboy\_42:

(Start: 5 @34566 has 11 MA's), (Start: 8 @34605 has 9 MA's), (19, 34839), (20, 34857), (21, 34872), (25, 34932),

Gene: InvictusManeo\_42 Start: 34628, Stop: 35014, Start Num: 5

Candidate Starts for InvictusManeo\_42:

(Start: 5 @34628 has 11 MA's), (Start: 8 @34667 has 9 MA's), (15, 34733), (16, 34826), (17, 34883), (18, 34889), (19, 34901), (21, 34934), (25, 34994),

Gene: Kratio\_41 Start: 34179, Stop: 34565, Start Num: 5

Candidate Starts for Kratio\_41:

(Start: 5 @34179 has 11 MA's), (Start: 8 @34218 has 9 MA's), (15, 34284), (16, 34377), (17, 34434), (18, 34440), (19, 34452), (21, 34485), (25, 34545),

Gene: Larva\_43 Start: 34386, Stop: 34733, Start Num: 8

Candidate Starts for Larva\_43:

(Start: 8 @34386 has 9 MA's), (15, 34452), (16, 34545), (17, 34602), (18, 34608), (19, 34620), (24, 34701), (25, 34713),

Gene: Leston\_42 Start: 34584, Stop: 34931, Start Num: 8

Candidate Starts for Leston\_42:

(Start: 5 @34545 has 11 MA's), (Start: 8 @34584 has 9 MA's), (19, 34818), (20, 34836), (21, 34851), (25, 34911),

Gene: Marcoliusprime\_47 Start: 37222, Stop: 37542, Start Num: 11

Candidate Starts for Marcoliusprime\_47:

(Start: 11 @37222 has 4 MA's), (Start: 12 @37225 has 4 MA's), (13, 37234), (16, 37339), (18, 37402), (20, 37432), (25, 37510), (26, 37525), (27, 37531),

Gene: Milly\_47 Start: 37198, Stop: 37515, Start Num: 12

Candidate Starts for Milly\_47:

(Start: 11 @37195 has 4 MA's), (Start: 12 @37198 has 4 MA's), (13, 37207), (16, 37312), (18, 37375), (20, 37405), (25, 37483), (26, 37498), (27, 37504),

Gene: Miryou\_45 Start: 36748, Stop: 37134, Start Num: 5

Candidate Starts for Miryou\_45:

(Start: 5 @36748 has 11 MA's), (Start: 8 @36787 has 9 MA's), (19, 37021), (20, 37039), (21, 37054), (25, 37114),

Gene: Mufasa\_47 Start: 36779, Stop: 37099, Start Num: 11

Candidate Starts for Mufasa\_47:

(Start: 11 @36779 has 4 MA's), (Start: 12 @36782 has 4 MA's), (13, 36791), (16, 36896), (18, 36959), (20, 36989), (23, 37040), (25, 37067), (26, 37082), (27, 37088),

Gene: OkiRoe\_42 Start: 34418, Stop: 34804, Start Num: 5

Candidate Starts for OkiRoe\_42:

(Start: 5 @34418 has 11 MA's), (Start: 8 @34457 has 9 MA's), (19, 34691), (20, 34709), (21, 34724), (25, 34784),

Gene: Omnicron\_45 Start: 34067, Stop: 34414, Start Num: 8

Candidate Starts for Omnicron\_45:

(6, 34046), (Start: 8 @34067 has 9 MA's), (14, 34124), (18, 34289), (19, 34301), (22, 34337), (25, 34394),

Gene: Paola\_42 Start: 34416, Stop: 34802, Start Num: 5

Candidate Starts for Paola\_42:

(Start: 5 @34416 has 11 MA's), (Start: 8 @34455 has 9 MA's), (19, 34689), (20, 34707), (21, 34722), (25, 34782),

Gene: Psycho\_43 Start: 34516, Stop: 34863, Start Num: 8

Candidate Starts for Psycho\_43:

(Start: 8 @34516 has 9 MA's), (15, 34582), (16, 34675), (17, 34732), (18, 34738), (19, 34750), (24, 34831), (25, 34843),

Gene: Rando14\_44 Start: 33637, Stop: 33984, Start Num: 8

Candidate Starts for Rando14\_44:

(1, 33382), (2, 33388), (3, 33391), (4, 33415), (6, 33616), (Start: 8 @33637 has 9 MA's), (14, 33694), (18, 33859), (19, 33871), (25, 33964),

Gene: SoSeph\_42 Start: 34566, Stop: 34952, Start Num: 5

Candidate Starts for SoSeph\_42:

(Start: 5 @34566 has 11 MA's), (Start: 8 @34605 has 9 MA's), (19, 34839), (20, 34857), (21, 34872), (25, 34932),

Gene: TM4\_42 Start: 31544, Stop: 31900, Start Num: 9

Candidate Starts for TM4\_42:

(Start: 9 @31544 has 1 MA's), (10, 31547), (Start: 11 @31571 has 4 MA's), (Start: 12 @31574 has 4 MA's), (13, 31583), (16, 31688), (18, 31751), (20, 31781), (23, 31832), (25, 31859), (27, 31889),

Gene: Thyatira\_44 Start: 36765, Stop: 37151, Start Num: 5

Candidate Starts for Thyatira\_44:

(Start: 5 @36765 has 11 MA's), (Start: 8 @36804 has 9 MA's), (19, 37038), (20, 37056), (21, 37071), (25, 37131),

Gene: Waterfoul\_43 Start: 34659, Stop: 35045, Start Num: 5

Candidate Starts for Waterfoul\_43:

(Start: 5 @34659 has 11 MA's), (Start: 8 @34698 has 9 MA's), (19, 34932), (20, 34950), (21, 34965), (25, 35025),

Gene: ZoeJ\_46 Start: 36666, Stop: 36992, Start Num: 12

Candidate Starts for ZoeJ\_46:

(7, 36615), (Start: 11 @36663 has 4 MA's), (Start: 12 @36666 has 4 MA's), (13, 36675), (16, 36780), (18, 36843), (20, 36873), (25, 36951), (27, 36981),