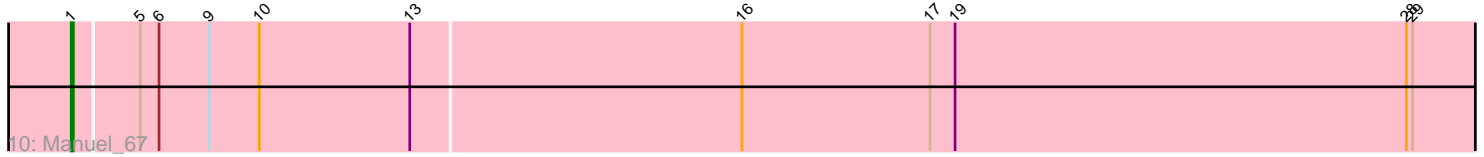
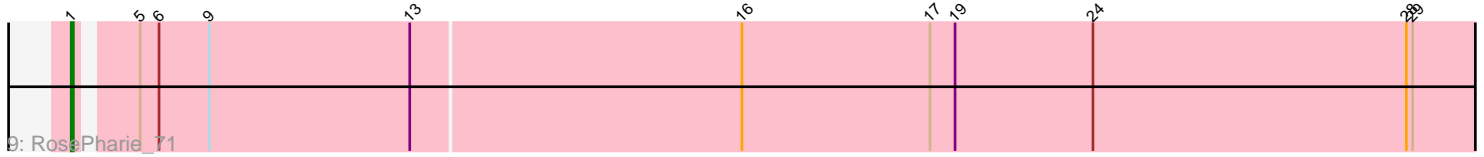
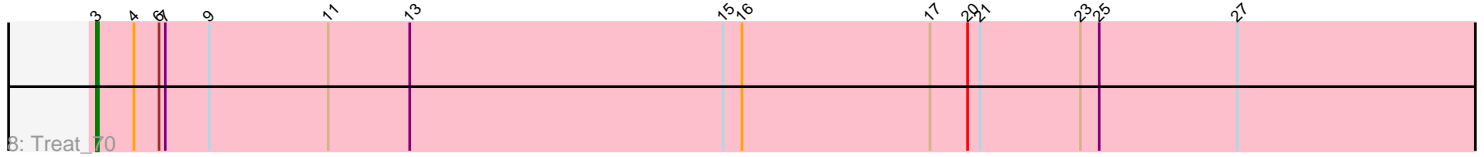
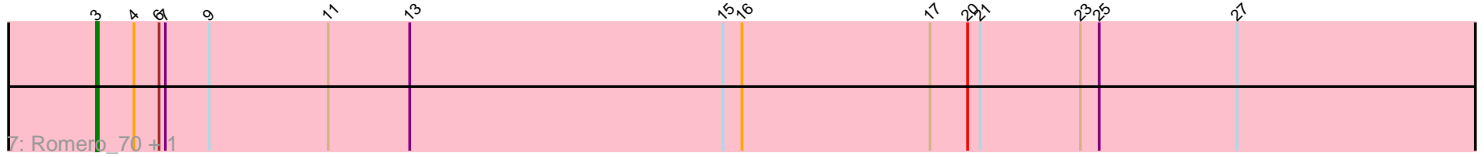
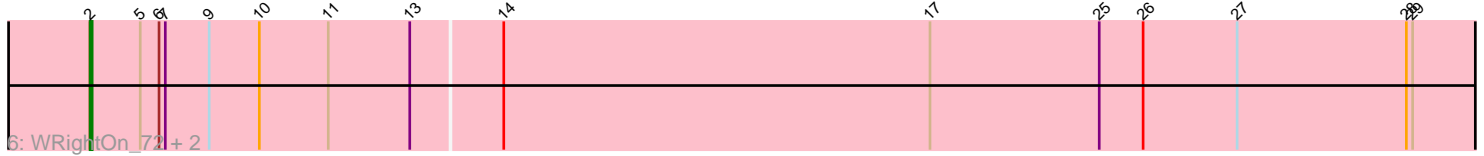
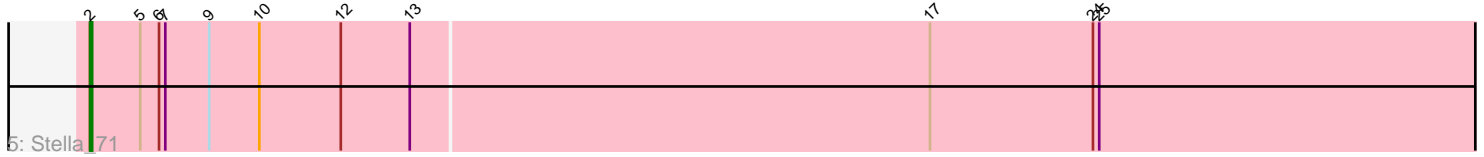
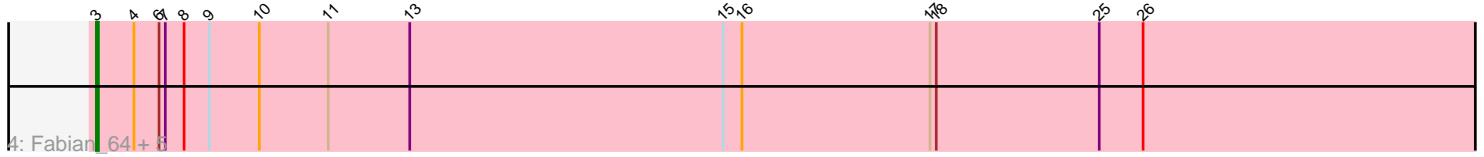
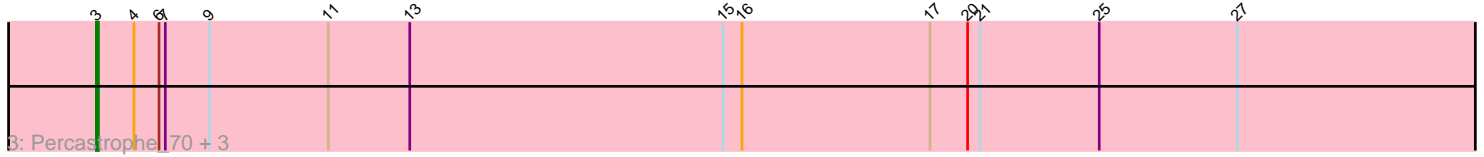
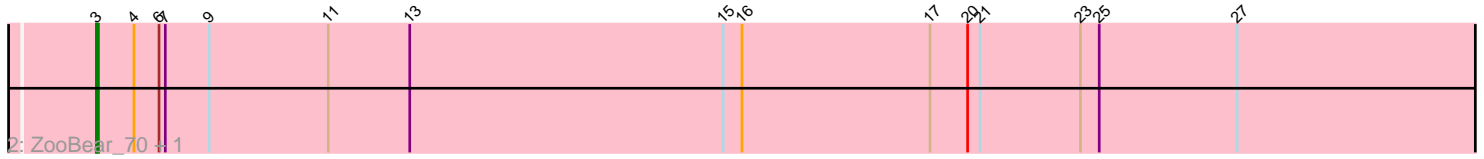
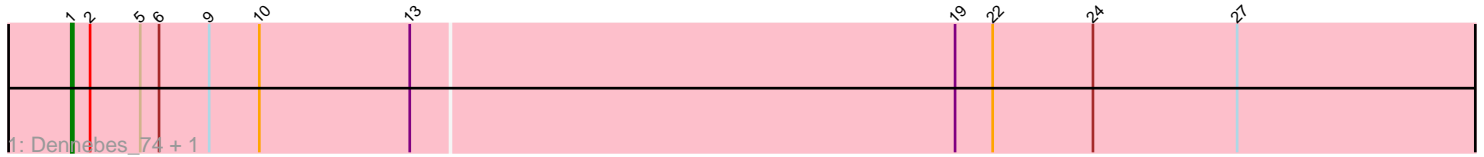


# Pham 4047



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 4047 Report

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

Pham number 4047 has 23 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Dennebes\_74, Rideau\_73
- Track 2 : ZooBear\_70, HaugeAnator\_70
- Track 3 : Percastrophe\_70, ToriToki\_70, Immanuel3\_69, JPandJE\_70
- Track 4 : Fabian\_64, Geostin\_61, Gremlin23\_66, RetrieverFever\_66, Vorvolakos\_67, FlowerPower\_66
- Track 5 : Stella\_71
- Track 6 : WRightOn\_72, Zeigle\_68, Kumquat\_68
- Track 7 : Romero\_70, Olacious\_70
- Track 8 : Treat\_70
- Track 9 : RosePharie\_71
- Track 10 : Manuel\_67

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

The start number called the most often in the published annotations is 3, it was called in 14 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Fabian\_64, FlowerPower\_66, Geostin\_61, Gremlin23\_66, HaugeAnator\_70, Immanuel3\_69, JPandJE\_70, Olacious\_70, Percastrophe\_70, RetrieverFever\_66, Romero\_70, ToriToki\_70, Treat\_70, Vorvolakos\_67, ZooBear\_70,

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

- 

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

- Dennebes\_74, Kumquat\_68, Manuel\_67, Rideau\_73, RosePharie\_71, Stella\_71, WRightOn\_72, Zeigle\_68,

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

Start 1:

- Found in 4 of 23 ( 17.4% ) of genes in pham
- Manual Annotations of this start: 3 of 21

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dennebes\_74 (BF), Manuel\_67 (BF), Rideau\_73 (BF), RosePharie\_71 (BF),

Start 2:

- Found in 6 of 23 ( 26.1% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Kumquat\_68 (BF), Stella\_71 (BF), WRightOn\_72 (BF), Zeigle\_68 (BF),

Start 3:

- Found in 15 of 23 ( 65.2% ) of genes in pham
- Manual Annotations of this start: 14 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fabian\_64 (BF), FlowerPower\_66 (BF), Geostin\_61 (BF), Gremlin23\_66 (BF), HaugeAnator\_70 (BF), Immanuel3\_69 (BF), JPandJE\_70 (BF), Olicious\_70 (BF), Percastrophe\_70 (BF), RetrieverFever\_66 (BF), Romero\_70 (BF), ToriToki\_70 (BF), Treat\_70 (BF), Vorvolakos\_67 (BF), ZooBear\_70 (BF),

### Summary by clusters:

There is one cluster represented in this pham: BF

Info for manual annotations of cluster BF:

- Start number 1 was manually annotated 3 times for cluster BF.
- Start number 2 was manually annotated 4 times for cluster BF.
- Start number 3 was manually annotated 14 times for cluster BF.

### Gene Information:

Gene: Dennebes\_74 Start: 36296, Stop: 36988, Start Num: 1

Candidate Starts for Dennebes\_74:

(Start: 1 @36296 has 3 MA's), (Start: 2 @36305 has 4 MA's), (5, 36329), (6, 36338), (9, 36362), (10, 36386), (13, 36458), (19, 36716), (22, 36734), (24, 36782), (27, 36851),

Gene: Fabian\_64 Start: 35510, Stop: 36193, Start Num: 3

Candidate Starts for Fabian\_64:

(Start: 3 @35510 has 14 MA's), (4, 35528), (6, 35540), (7, 35543), (8, 35552), (9, 35564), (10, 35588), (11, 35621), (13, 35660), (15, 35810), (16, 35819), (17, 35909), (18, 35912), (25, 35990), (26, 36011),

Gene: FlowerPower\_66 Start: 35510, Stop: 36193, Start Num: 3

Candidate Starts for FlowerPower\_66:

(Start: 3 @35510 has 14 MA's), (4, 35528), (6, 35540), (7, 35543), (8, 35552), (9, 35564), (10, 35588), (11, 35621), (13, 35660), (15, 35810), (16, 35819), (17, 35909), (18, 35912), (25, 35990), (26, 36011),

Gene: Geostin\_61 Start: 35510, Stop: 36193, Start Num: 3

Candidate Starts for Geostin\_61:

(Start: 3 @35510 has 14 MA's), (4, 35528), (6, 35540), (7, 35543), (8, 35552), (9, 35564), (10, 35588), (11, 35621), (13, 35660), (15, 35810), (16, 35819), (17, 35909), (18, 35912), (25, 35990), (26, 36011),

Gene: Gremlin23\_66 Start: 35510, Stop: 36193, Start Num: 3

Candidate Starts for Gremlin23\_66:

(Start: 3 @35510 has 14 MA's), (4, 35528), (6, 35540), (7, 35543), (8, 35552), (9, 35564), (10, 35588), (11, 35621), (13, 35660), (15, 35810), (16, 35819), (17, 35909), (18, 35912), (25, 35990), (26, 36011),

Gene: HaugeAnator\_70 Start: 36191, Stop: 36874, Start Num: 3

Candidate Starts for HaugeAnator\_70:

(Start: 3 @36191 has 14 MA's), (4, 36209), (6, 36221), (7, 36224), (9, 36245), (11, 36302), (13, 36341), (15, 36491), (16, 36500), (17, 36590), (20, 36608), (21, 36614), (23, 36662), (25, 36671), (27, 36737),

Gene: Immanuel3\_69 Start: 36197, Stop: 36880, Start Num: 3

Candidate Starts for Immanuel3\_69:

(Start: 3 @36197 has 14 MA's), (4, 36215), (6, 36227), (7, 36230), (9, 36251), (11, 36308), (13, 36347), (15, 36497), (16, 36506), (17, 36596), (20, 36614), (21, 36620), (25, 36677), (27, 36743),

Gene: JPandJE\_70 Start: 36712, Stop: 37395, Start Num: 3

Candidate Starts for JPandJE\_70:

(Start: 3 @36712 has 14 MA's), (4, 36730), (6, 36742), (7, 36745), (9, 36766), (11, 36823), (13, 36862), (15, 37012), (16, 37021), (17, 37111), (20, 37129), (21, 37135), (25, 37192), (27, 37258),

Gene: Kumquat\_68 Start: 35379, Stop: 36062, Start Num: 2

Candidate Starts for Kumquat\_68:

(Start: 2 @35379 has 4 MA's), (5, 35403), (6, 35412), (7, 35415), (9, 35436), (10, 35460), (11, 35493), (13, 35532), (14, 35574), (17, 35778), (25, 35859), (26, 35880), (27, 35925), (28, 36006), (29, 36009),

Gene: Manuel\_67 Start: 35702, Stop: 36391, Start Num: 1

Candidate Starts for Manuel\_67:

(Start: 1 @35702 has 3 MA's), (5, 35732), (6, 35741), (9, 35765), (10, 35789), (13, 35861), (16, 36017), (17, 36107), (19, 36119), (28, 36335), (29, 36338),

Gene: Olicious\_70 Start: 36194, Stop: 36877, Start Num: 3

Candidate Starts for Olicious\_70:

(Start: 3 @36194 has 14 MA's), (4, 36212), (6, 36224), (7, 36227), (9, 36248), (11, 36305), (13, 36344), (15, 36494), (16, 36503), (17, 36593), (20, 36611), (21, 36617), (23, 36665), (25, 36674), (27, 36740),

Gene: Percastrophe\_70 Start: 36126, Stop: 36809, Start Num: 3

Candidate Starts for Percastrophe\_70:

(Start: 3 @36126 has 14 MA's), (4, 36144), (6, 36156), (7, 36159), (9, 36180), (11, 36237), (13, 36276), (15, 36426), (16, 36435), (17, 36525), (20, 36543), (21, 36549), (25, 36606), (27, 36672),

Gene: RetrieverFever\_66 Start: 35510, Stop: 36193, Start Num: 3

Candidate Starts for RetrieverFever\_66:

(Start: 3 @35510 has 14 MA's), (4, 35528), (6, 35540), (7, 35543), (8, 35552), (9, 35564), (10, 35588), (11, 35621), (13, 35660), (15, 35810), (16, 35819), (17, 35909), (18, 35912), (25, 35990), (26, 36011),

Gene: Rideau\_73 Start: 36187, Stop: 36879, Start Num: 1

Candidate Starts for Rideau\_73:

(Start: 1 @36187 has 3 MA's), (Start: 2 @36196 has 4 MA's), (5, 36220), (6, 36229), (9, 36253), (10, 36277), (13, 36349), (19, 36607), (22, 36625), (24, 36673), (27, 36742),

Gene: Romero\_70 Start: 36187, Stop: 36870, Start Num: 3

Candidate Starts for Romero\_70:

(Start: 3 @36187 has 14 MA's), (4, 36205), (6, 36217), (7, 36220), (9, 36241), (11, 36298), (13, 36337), (15, 36487), (16, 36496), (17, 36586), (20, 36604), (21, 36610), (23, 36658), (25, 36667), (27, 36733),

Gene: RosePharie\_71 Start: 36183, Stop: 36866, Start Num: 1

Candidate Starts for RosePharie\_71:

(Start: 1 @36183 has 3 MA's), (5, 36207), (6, 36216), (9, 36240), (13, 36336), (16, 36492), (17, 36582), (19, 36594), (24, 36660), (28, 36810), (29, 36813),

Gene: Stella\_71 Start: 36654, Stop: 37337, Start Num: 2

Candidate Starts for Stella\_71:

(Start: 2 @36654 has 4 MA's), (5, 36678), (6, 36687), (7, 36690), (9, 36711), (10, 36735), (12, 36774), (13, 36807), (17, 37053), (24, 37131), (25, 37134),

Gene: ToriToki\_70 Start: 36190, Stop: 36873, Start Num: 3

Candidate Starts for ToriToki\_70:

(Start: 3 @36190 has 14 MA's), (4, 36208), (6, 36220), (7, 36223), (9, 36244), (11, 36301), (13, 36340), (15, 36490), (16, 36499), (17, 36589), (20, 36607), (21, 36613), (25, 36670), (27, 36736),

Gene: Treat\_70 Start: 36071, Stop: 36754, Start Num: 3

Candidate Starts for Treat\_70:

(Start: 3 @36071 has 14 MA's), (4, 36089), (6, 36101), (7, 36104), (9, 36125), (11, 36182), (13, 36221), (15, 36371), (16, 36380), (17, 36470), (20, 36488), (21, 36494), (23, 36542), (25, 36551), (27, 36617),

Gene: Vorvolakos\_67 Start: 35509, Stop: 36192, Start Num: 3

Candidate Starts for Vorvolakos\_67:

(Start: 3 @35509 has 14 MA's), (4, 35527), (6, 35539), (7, 35542), (8, 35551), (9, 35563), (10, 35587), (11, 35620), (13, 35659), (15, 35809), (16, 35818), (17, 35908), (18, 35911), (25, 35989), (26, 36010),

Gene: WRightOn\_72 Start: 35535, Stop: 36218, Start Num: 2

Candidate Starts for WRightOn\_72:

(Start: 2 @35535 has 4 MA's), (5, 35559), (6, 35568), (7, 35571), (9, 35592), (10, 35616), (11, 35649), (13, 35688), (14, 35730), (17, 35934), (25, 36015), (26, 36036), (27, 36081), (28, 36162), (29, 36165),

Gene: Zeigle\_68 Start: 35379, Stop: 36062, Start Num: 2

Candidate Starts for Zeigle\_68:

(Start: 2 @35379 has 4 MA's), (5, 35403), (6, 35412), (7, 35415), (9, 35436), (10, 35460), (11, 35493), (13, 35532), (14, 35574), (17, 35778), (25, 35859), (26, 35880), (27, 35925), (28, 36006), (29, 36009),

Gene: ZooBear\_70 Start: 36191, Stop: 36874, Start Num: 3

Candidate Starts for ZooBear\_70:

(Start: 3 @36191 has 14 MA's), (4, 36209), (6, 36221), (7, 36224), (9, 36245), (11, 36302), (13, 36341), (15, 36491), (16, 36500), (17, 36590), (20, 36608), (21, 36614), (23, 36662), (25, 36671), (27, 36737),