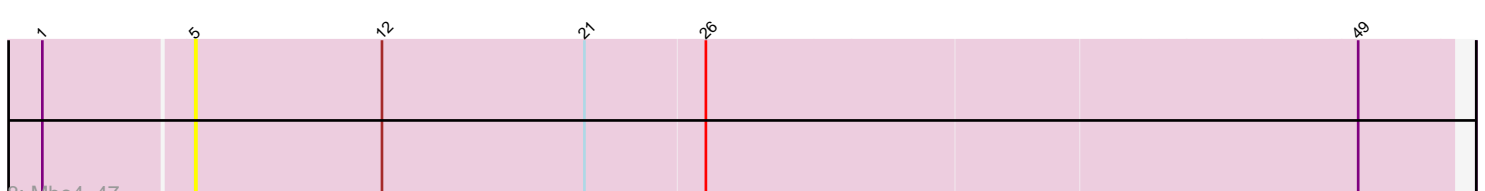
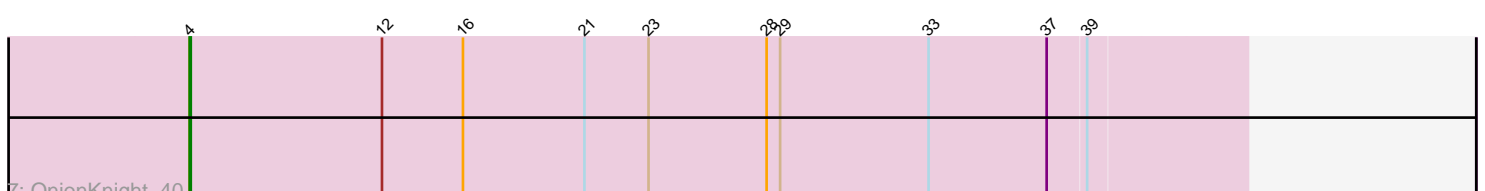
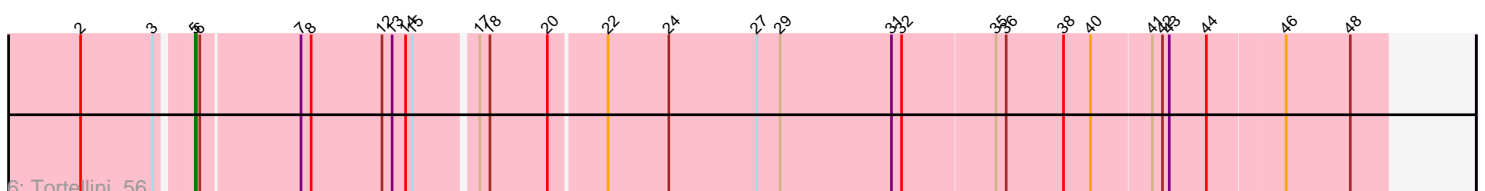
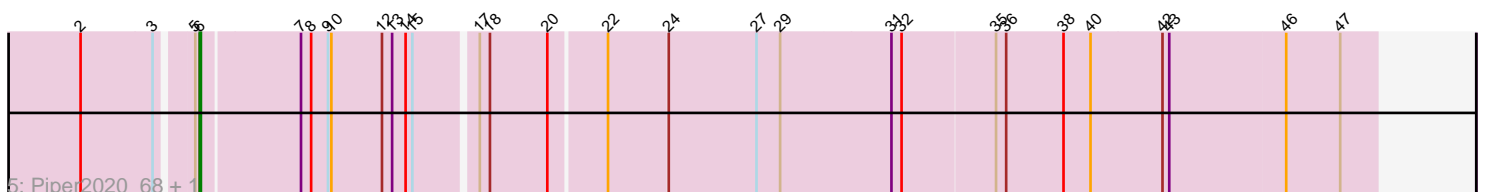
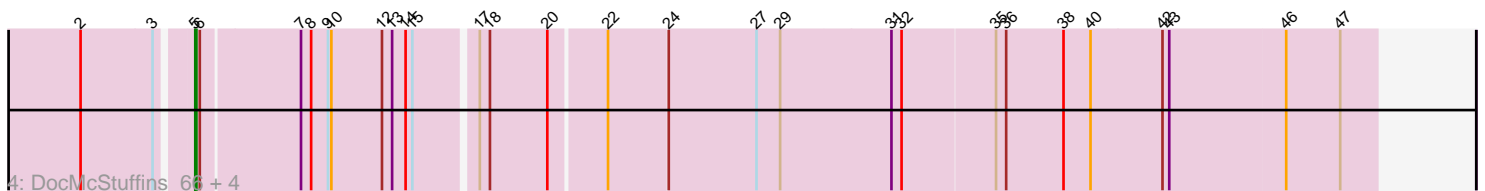
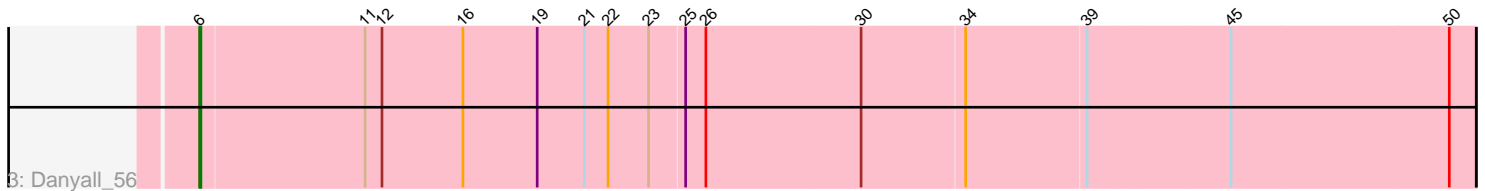
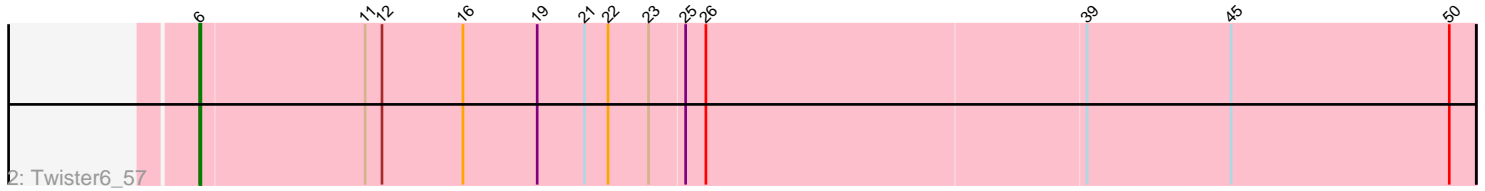
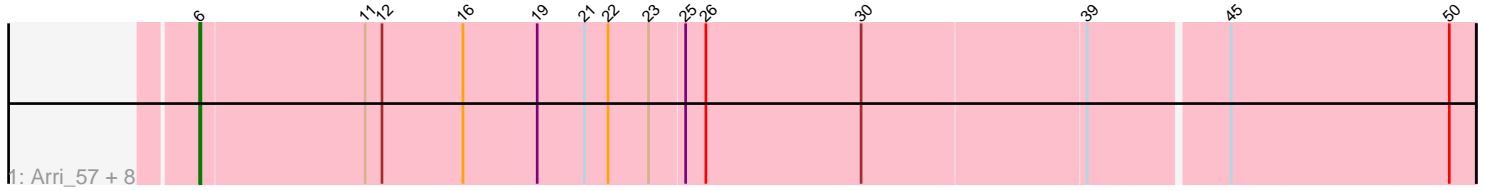


# Pham 162174



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 162174 Report

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

Pham number 162174 has 21 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Arri\_57, Bakery\_60, Shinji\_54, Mutzi\_54, Savbucketdawg\_54, Jambalaya\_54, Portcullis\_56, Fireball\_57, YungMoney\_57
- Track 2 : Twister6\_57
- Track 3 : Danyall\_56
- Track 4 : DocMcStuffins\_66, Misha28\_65, ChickenDinner\_69, Awesomesauce\_67, TootsiePop\_65
- Track 5 : Piper2020\_68, LilSpotty\_64
- Track 6 : Tortellini\_56
- Track 7 : OnionKnight\_40
- Track 8 : Mbo4\_47

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

The start number called the most often in the published annotations is 6, it was called in 12 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_57, Bakery\_60, Danyall\_56, Fireball\_57, Jambalaya\_54, LilSpotty\_64, Mutzi\_54, Piper2020\_68, Portcullis\_56, Savbucketdawg\_54, Shinji\_54, Twister6\_57, YungMoney\_57,

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

- Awesomesauce\_67, ChickenDinner\_69, DocMcStuffins\_66, Misha28\_65, TootsiePop\_65, Tortellini\_56,

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

- Mbo4\_47, OnionKnight\_40,

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

Start 4:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present

- Phage (with cluster) where this start called: OnionKnight\_40 (singleton),

Start 5:

- Found in 9 of 21 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 4 of 17
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Awesomesauce\_67 (F1), ChickenDinner\_69 (F1), DocMcStuffins\_66 (F1), Mbo4\_47 (singleton), Misha28\_65 (F1), TootsiePop\_65 (F1), Tortellini\_56 (P2),

Start 6:

- Found in 19 of 21 ( 90.5% ) of genes in pham
- Manual Annotations of this start: 12 of 17
- Called 68.4% of time when present
- Phage (with cluster) where this start called: Arri\_57 (DC1), Bakery\_60 (DC1), Danyall\_56 (DC1), Fireball\_57 (DC1), Jambalaya\_54 (DC1), LilSpotty\_64 (singleton), Mutzi\_54 (DC1), Piper2020\_68 (F1), Portcullis\_56 (DC1), Savbucketdawg\_54 (DC1), Shinji\_54 (DC1), Twister6\_57 (DC1), YungMoney\_57 (DC1),

### Summary by clusters:

There are 4 clusters represented in this pham: P2, F1, singleton, DC1,

Info for manual annotations of cluster DC1:

- Start number 6 was manually annotated 10 times for cluster DC1.

Info for manual annotations of cluster F1:

- Start number 5 was manually annotated 3 times for cluster F1.
- Start number 6 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster P2:

- Start number 5 was manually annotated 1 time for cluster P2.

### Gene Information:

Gene: Arri\_57 Start: 41875, Stop: 42978, Start Num: 6

Candidate Starts for Arri\_57:

(Start: 6 @41875 has 12 MA's), (11, 42019), (12, 42034), (16, 42106), (19, 42172), (21, 42214), (22, 42235), (23, 42271), (25, 42301), (26, 42319), (30, 42454), (39, 42649), (45, 42763), (50, 42955),

Gene: Awesomesauce\_67 Start: 40974, Stop: 41990, Start Num: 5

Candidate Starts for Awesomesauce\_67:

(2, 40884), (3, 40947), (Start: 5 @40974 has 4 MA's), (Start: 6 @40977 has 12 MA's), (7, 41061), (8, 41070), (9, 41085), (10, 41088), (12, 41133), (13, 41142), (14, 41154), (15, 41160), (17, 41211), (18, 41220), (20, 41271), (22, 41319), (24, 41370), (27, 41448), (29, 41469), (31, 41565), (32, 41574), (35, 41655), (36, 41664), (38, 41715), (40, 41739), (42, 41802), (43, 41808), (46, 41910), (47, 41958),

Gene: Bakery\_60 Start: 43055, Stop: 44167, Start Num: 6

Candidate Starts for Bakery\_60:

(Start: 6 @43055 has 12 MA's), (11, 43199), (12, 43214), (16, 43286), (19, 43352), (21, 43394), (22, 43415), (23, 43451), (25, 43481), (26, 43499), (30, 43634), (39, 43829), (45, 43952), (50, 44144),

Gene: ChickenDinner\_69 Start: 41891, Stop: 42907, Start Num: 5

Candidate Starts for ChickenDinner\_69:

(2, 41801), (3, 41864), (Start: 5 @41891 has 4 MA's), (Start: 6 @41894 has 12 MA's), (7, 41978), (8, 41987), (9, 42002), (10, 42005), (12, 42050), (13, 42059), (14, 42071), (15, 42077), (17, 42128), (18, 42137), (20, 42188), (22, 42236), (24, 42287), (27, 42365), (29, 42386), (31, 42482), (32, 42491), (35, 42572), (36, 42581), (38, 42632), (40, 42656), (42, 42719), (43, 42725), (46, 42827), (47, 42875),

Gene: Danyall\_56 Start: 41716, Stop: 42828, Start Num: 6

Candidate Starts for Danyall\_56:

(Start: 6 @41716 has 12 MA's), (11, 41860), (12, 41875), (16, 41947), (19, 42013), (21, 42055), (22, 42076), (23, 42112), (25, 42142), (26, 42160), (30, 42295), (34, 42385), (39, 42490), (45, 42613), (50, 42805),

Gene: DocMcStuffins\_66 Start: 41891, Stop: 42907, Start Num: 5

Candidate Starts for DocMcStuffins\_66:

(2, 41801), (3, 41864), (Start: 5 @41891 has 4 MA's), (Start: 6 @41894 has 12 MA's), (7, 41978), (8, 41987), (9, 42002), (10, 42005), (12, 42050), (13, 42059), (14, 42071), (15, 42077), (17, 42128), (18, 42137), (20, 42188), (22, 42236), (24, 42287), (27, 42365), (29, 42386), (31, 42482), (32, 42491), (35, 42572), (36, 42581), (38, 42632), (40, 42656), (42, 42719), (43, 42725), (46, 42827), (47, 42875),

Gene: Fireball\_57 Start: 42351, Stop: 43463, Start Num: 6

Candidate Starts for Fireball\_57:

(Start: 6 @42351 has 12 MA's), (11, 42495), (12, 42510), (16, 42582), (19, 42648), (21, 42690), (22, 42711), (23, 42747), (25, 42777), (26, 42795), (30, 42930), (39, 43125), (45, 43248), (50, 43440),

Gene: Jambalaya\_54 Start: 41514, Stop: 42626, Start Num: 6

Candidate Starts for Jambalaya\_54:

(Start: 6 @41514 has 12 MA's), (11, 41658), (12, 41673), (16, 41745), (19, 41811), (21, 41853), (22, 41874), (23, 41910), (25, 41940), (26, 41958), (30, 42093), (39, 42288), (45, 42411), (50, 42603),

Gene: LilSpotty\_64 Start: 39685, Stop: 40698, Start Num: 6

Candidate Starts for LilSpotty\_64:

(2, 39592), (3, 39655), (Start: 5 @39682 has 4 MA's), (Start: 6 @39685 has 12 MA's), (7, 39769), (8, 39778), (9, 39793), (10, 39796), (12, 39841), (13, 39850), (14, 39862), (15, 39868), (17, 39919), (18, 39928), (20, 39979), (22, 40027), (24, 40078), (27, 40156), (29, 40177), (31, 40273), (32, 40282), (35, 40363), (36, 40372), (38, 40423), (40, 40447), (42, 40510), (43, 40516), (46, 40618), (47, 40666),

Gene: Mbo4\_47 Start: 36823, Stop: 37917, Start Num: 5

Candidate Starts for Mbo4\_47:

(1, 36694), (Start: 5 @36823 has 4 MA's), (12, 36988), (21, 37168), (26, 37273), (49, 37834),

Gene: Misha28\_65 Start: 40979, Stop: 41995, Start Num: 5

Candidate Starts for Misha28\_65:

(2, 40889), (3, 40952), (Start: 5 @40979 has 4 MA's), (Start: 6 @40982 has 12 MA's), (7, 41066), (8, 41075), (9, 41090), (10, 41093), (12, 41138), (13, 41147), (14, 41159), (15, 41165), (17, 41216), (18, 41225), (20, 41276), (22, 41324), (24, 41375), (27, 41453), (29, 41474), (31, 41570), (32, 41579), (35, 41660), (36, 41669), (38, 41720), (40, 41744), (42, 41807), (43, 41813), (46, 41915), (47, 41963),

Gene: Mutzi\_54 Start: 42843, Stop: 43955, Start Num: 6

Candidate Starts for Mutzi\_54:

(Start: 6 @42843 has 12 MA's), (11, 42987), (12, 43002), (16, 43074), (19, 43140), (21, 43182), (22, 43203), (23, 43239), (25, 43269), (26, 43287), (30, 43422), (39, 43617), (45, 43740), (50, 43932),

Gene: OnionKnight\_40 Start: 29144, Stop: 30076, Start Num: 4

Candidate Starts for OnionKnight\_40:

(Start: 4 @29144 has 1 MA's), (12, 29315), (16, 29387), (21, 29495), (23, 29552), (28, 29657), (29, 29669), (33, 29801), (37, 29906), (39, 29939),

Gene: Piper2020\_68 Start: 41877, Stop: 42890, Start Num: 6

Candidate Starts for Piper2020\_68:

(2, 41784), (3, 41847), (Start: 5 @41874 has 4 MA's), (Start: 6 @41877 has 12 MA's), (7, 41961), (8, 41970), (9, 41985), (10, 41988), (12, 42033), (13, 42042), (14, 42054), (15, 42060), (17, 42111), (18, 42120), (20, 42171), (22, 42219), (24, 42270), (27, 42348), (29, 42369), (31, 42465), (32, 42474), (35, 42555), (36, 42564), (38, 42615), (40, 42639), (42, 42702), (43, 42708), (46, 42810), (47, 42858),

Gene: Portcullis\_56 Start: 41527, Stop: 42639, Start Num: 6

Candidate Starts for Portcullis\_56:

(Start: 6 @41527 has 12 MA's), (11, 41671), (12, 41686), (16, 41758), (19, 41824), (21, 41866), (22, 41887), (23, 41923), (25, 41953), (26, 41971), (30, 42106), (39, 42301), (45, 42424), (50, 42616),

Gene: Savbucketdawg\_54 Start: 41514, Stop: 42626, Start Num: 6

Candidate Starts for Savbucketdawg\_54:

(Start: 6 @41514 has 12 MA's), (11, 41658), (12, 41673), (16, 41745), (19, 41811), (21, 41853), (22, 41874), (23, 41910), (25, 41940), (26, 41958), (30, 42093), (39, 42288), (45, 42411), (50, 42603),

Gene: Shinji\_54 Start: 41277, Stop: 42389, Start Num: 6

Candidate Starts for Shinji\_54:

(Start: 6 @41277 has 12 MA's), (11, 41421), (12, 41436), (16, 41508), (19, 41574), (21, 41616), (22, 41637), (23, 41673), (25, 41703), (26, 41721), (30, 41856), (39, 42051), (45, 42174), (50, 42366),

Gene: TootsiePop\_65 Start: 40979, Stop: 41995, Start Num: 5

Candidate Starts for TootsiePop\_65:

(2, 40889), (3, 40952), (Start: 5 @40979 has 4 MA's), (Start: 6 @40982 has 12 MA's), (7, 41066), (8, 41075), (9, 41090), (10, 41093), (12, 41138), (13, 41147), (14, 41159), (15, 41165), (17, 41216), (18, 41225), (20, 41276), (22, 41324), (24, 41375), (27, 41453), (29, 41474), (31, 41570), (32, 41579), (35, 41660), (36, 41669), (38, 41720), (40, 41744), (42, 41807), (43, 41813), (46, 41915), (47, 41963),

Gene: Tortellini\_56 Start: 39946, Stop: 40965, Start Num: 5

Candidate Starts for Tortellini\_56:

(2, 39856), (3, 39919), (Start: 5 @39946 has 4 MA's), (Start: 6 @39949 has 12 MA's), (7, 40033), (8, 40042), (12, 40105), (13, 40114), (14, 40126), (15, 40132), (17, 40183), (18, 40192), (20, 40243), (22, 40291), (24, 40342), (27, 40420), (29, 40441), (31, 40537), (32, 40546), (35, 40627), (36, 40636), (38, 40687), (40, 40711), (41, 40762), (42, 40771), (43, 40777), (44, 40810), (46, 40876), (48, 40933),

Gene: Twister6\_57 Start: 41627, Stop: 42739, Start Num: 6

Candidate Starts for Twister6\_57:

(Start: 6 @41627 has 12 MA's), (11, 41771), (12, 41786), (16, 41858), (19, 41924), (21, 41966), (22, 41987), (23, 42023), (25, 42053), (26, 42071), (39, 42401), (45, 42524), (50, 42716),

Gene: YungMoney\_57 Start: 45385, Stop: 46497, Start Num: 6

Candidate Starts for YungMoney\_57:

(Start: 6 @45385 has 12 MA's), (11, 45529), (12, 45544), (16, 45616), (19, 45682), (21, 45724), (22, 45745), (23, 45781), (25, 45811), (26, 45829), (30, 45964), (39, 46159), (45, 46282), (50, 46474),