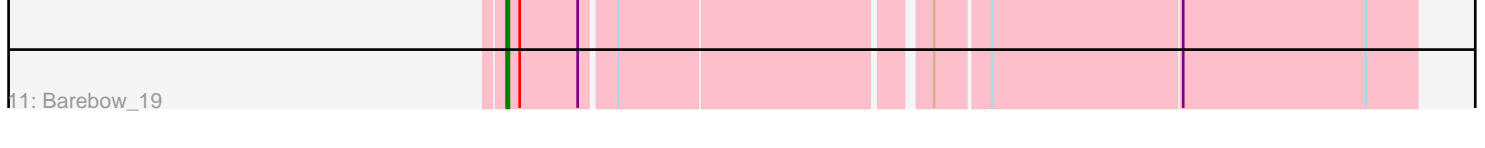
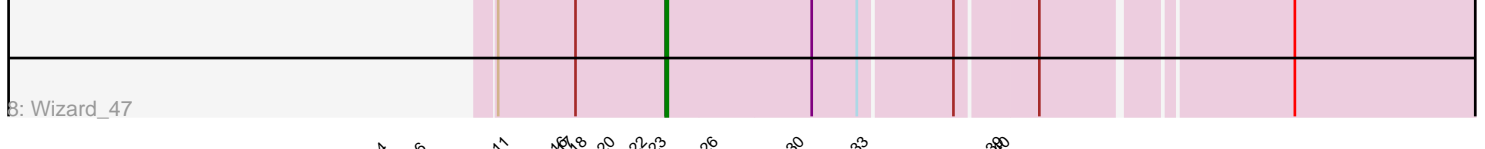
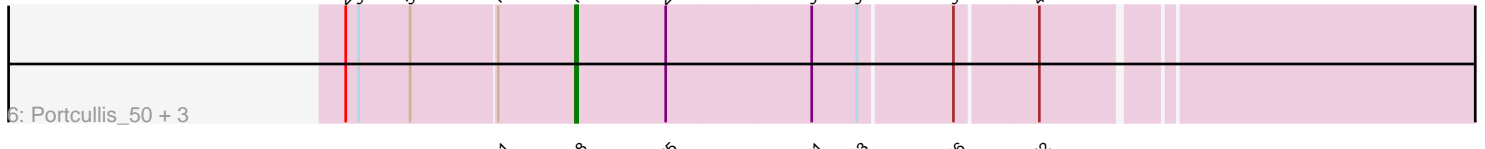
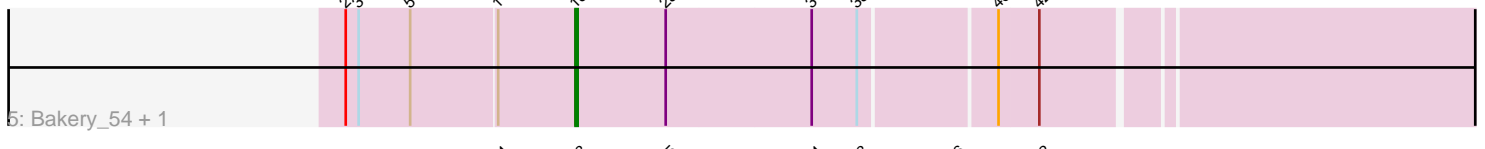
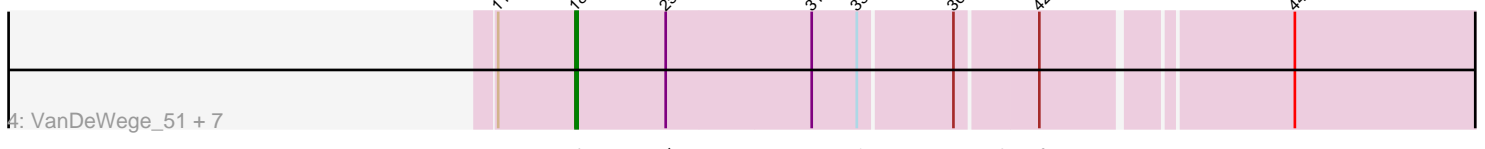
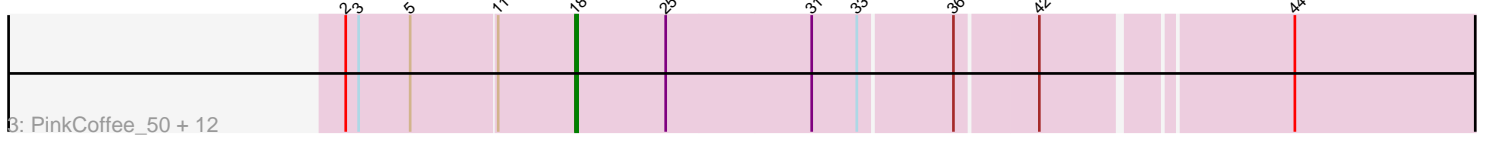
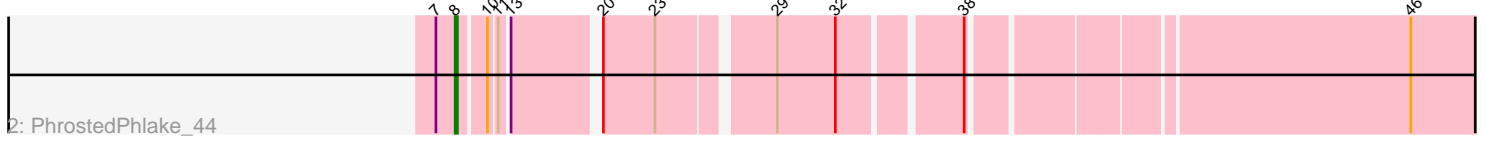
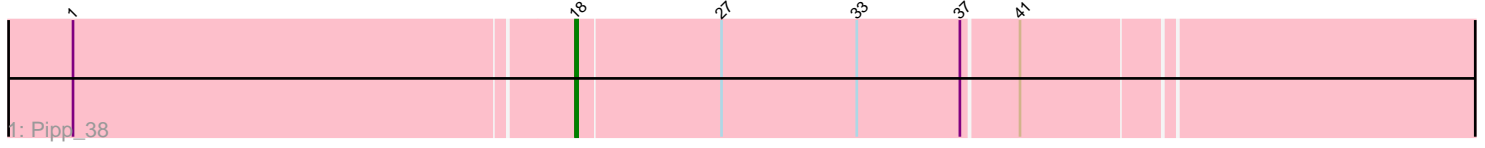


# Pham 305181



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 305181 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305181 has 35 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Pipp\_38
- Track 2 : PhrostedPhlake\_44
- Track 3 : PinkCoffee\_50, Togo\_47, Evamon\_47, ClamChowder\_50, Fugax\_51, Phlop\_47, PullumCavea\_47, Egi03\_48, Nubi\_48, Barb\_50, SmokingBunny\_48, Salvador\_47, KimmyK\_49
- Track 4 : VanDeWege\_51, Savbucketdawg\_48, Halo3\_49, Mutzi\_48, Jambalaya\_48, CoveyB\_51, Valary\_50, Gezellig\_47
- Track 5 : Bakery\_54, Arri\_51
- Track 6 : Portcullis\_50, Danyall\_50, Twister6\_50, JohnPork\_51
- Track 7 : RogerDodger\_51
- Track 8 : Wizard\_47
- Track 9 : Phishy\_37
- Track 10 : Heinz\_32, Hibiscus\_33
- Track 11 : Barebow\_19

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

The start number called the most often in the published annotations is 18, it was called in 28 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_51, Bakery\_54, Barb\_50, ClamChowder\_50, CoveyB\_51, Danyall\_50, Egi03\_48, Evamon\_47, Fugax\_51, Gezellig\_47, Halo3\_49, Jambalaya\_48, JohnPork\_51, KimmyK\_49, Mutzi\_48, Nubi\_48, Phlop\_47, PinkCoffee\_50, Pipp\_38, Portcullis\_50, PullumCavea\_47, RogerDodger\_51, Salvador\_47, Savbucketdawg\_48, SmokingBunny\_48, Togo\_47, Twister6\_50, Valary\_50, VanDeWege\_51,

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

- Phishy\_37, Wizard\_47,

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

- Barebow\_19, Heinz\_32, Hibiscus\_33, PhrostedPhlake\_44,

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

Start 8:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhrostedPhlake\_44 (CV),

Start 9:

- Found in 2 of 35 ( 5.7% ) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heinz\_32 (DY), Hibiscus\_33 (DY),

Start 12:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barebow\_19 (singleton),

Start 16:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phishy\_37 (DT),

Start 18:

- Found in 31 of 35 ( 88.6% ) of genes in pham
- Manual Annotations of this start: 28 of 34
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Arri\_51 (DC1), Bakery\_54 (DC1), Barb\_50 (DC1), ClamChowder\_50 (DC1), CoveyB\_51 (DC1), Danyall\_50 (DC1), Egi03\_48 (DC1), Evamon\_47 (DC1), Fugax\_51 (DC1), Gezellig\_47 (DC1), Halo3\_49 (DC1), Jambalaya\_48 (DC1), JohnPork\_51 (DC1), KimmyK\_49 (DC1), Mutzi\_48 (DC1), Nubi\_48 (DC1), Phlop\_47 (DC1), PinkCoffee\_50 (DC1), Pipp\_38 (CV), Portcullis\_50 (DC1), PullumCavea\_47 (DC1), RogerDodger\_51 (DC1), Salvador\_47 (DC1), Savbucketdawg\_48 (DC1), SmokingBunny\_48 (DC1), Togo\_47 (DC1), Twister6\_50 (DC1), Valary\_50 (DC1), VanDeWege\_51 (DC1),

Start 25:

- Found in 29 of 35 ( 82.9% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Wizard\_47 (DC1),

**Summary by clusters:**

There are 5 clusters represented in this pham: singleton, DY, CV, DT, DC1,

Info for manual annotations of cluster CV:

- Start number 8 was manually annotated 1 time for cluster CV.
- Start number 18 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DC1:

- Start number 18 was manually annotated 27 times for cluster DC1.
- Start number 25 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DT:

- Start number 16 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster DY:

- Start number 9 was manually annotated 2 times for cluster DY.

### **Gene Information:**

Gene: Arri\_51 Start: 39948, Stop: 39535, Start Num: 18

Candidate Starts for Arri\_51:

(2, 40053), (3, 40047), (5, 40023), (11, 39984), (Start: 18 @39948 has 28 MA's), (Start: 25 @39906 has 1 MA's), (31, 39840), (33, 39819), (40, 39759), (42, 39741),

Gene: Bakery\_54 Start: 41089, Stop: 40676, Start Num: 18

Candidate Starts for Bakery\_54:

(2, 41194), (3, 41188), (5, 41164), (11, 41125), (Start: 18 @41089 has 28 MA's), (Start: 25 @41047 has 1 MA's), (31, 40981), (33, 40960), (40, 40900), (42, 40882),

Gene: Barb\_50 Start: 40067, Stop: 39654, Start Num: 18

Candidate Starts for Barb\_50:

(2, 40172), (3, 40166), (5, 40142), (11, 40103), (Start: 18 @40067 has 28 MA's), (Start: 25 @40025 has 1 MA's), (31, 39959), (33, 39938), (36, 39896), (42, 39860), (44, 39752),

Gene: Barebow\_19 Start: 15697, Stop: 15296, Start Num: 12

Candidate Starts for Barebow\_19:

(Start: 12 @15697 has 1 MA's), (14, 15691), (19, 15664), (21, 15649), (35, 15514), (39, 15490), (43, 15403), (45, 15319),

Gene: ClamChowder\_50 Start: 40067, Stop: 39654, Start Num: 18

Candidate Starts for ClamChowder\_50:

(2, 40172), (3, 40166), (5, 40142), (11, 40103), (Start: 18 @40067 has 28 MA's), (Start: 25 @40025 has 1 MA's), (31, 39959), (33, 39938), (36, 39896), (42, 39860), (44, 39752),

Gene: CoveyB\_51 Start: 39766, Stop: 39353, Start Num: 18

Candidate Starts for CoveyB\_51:

(11, 39802), (Start: 18 @39766 has 28 MA's), (Start: 25 @39724 has 1 MA's), (31, 39658), (33, 39637), (36, 39595), (42, 39559), (44, 39451),

Gene: Danyall\_50 Start: 39768, Stop: 39355, Start Num: 18

Candidate Starts for Danyall\_50:

(2, 39873), (3, 39867), (5, 39843), (11, 39804), (Start: 18 @39768 has 28 MA's), (Start: 25 @39726 has 1 MA's), (31, 39660), (33, 39639), (36, 39597), (42, 39561),

Gene: Egi03\_48 Start: 39548, Stop: 39135, Start Num: 18

Candidate Starts for Egi03\_48:

(2, 39653), (3, 39647), (5, 39623), (11, 39584), (Start: 18 @39548 has 28 MA's), (Start: 25 @39506 has 1 MA's), (31, 39440), (33, 39419), (36, 39377), (42, 39341), (44, 39233),

Gene: Evamon\_47 Start: 39787, Stop: 39374, Start Num: 18  
Candidate Starts for Evamon\_47:  
(2, 39892), (3, 39886), (5, 39862), (11, 39823), (Start: 18 @39787 has 28 MA's), (Start: 25 @39745 has 1 MA's), (31, 39679), (33, 39658), (36, 39616), (42, 39580), (44, 39472),

Gene: Fugax\_51 Start: 40059, Stop: 39646, Start Num: 18  
Candidate Starts for Fugax\_51:  
(2, 40164), (3, 40158), (5, 40134), (11, 40095), (Start: 18 @40059 has 28 MA's), (Start: 25 @40017 has 1 MA's), (31, 39951), (33, 39930), (36, 39888), (42, 39852), (44, 39744),

Gene: Gezellig\_47 Start: 39919, Stop: 39506, Start Num: 18  
Candidate Starts for Gezellig\_47:  
(11, 39955), (Start: 18 @39919 has 28 MA's), (Start: 25 @39877 has 1 MA's), (31, 39811), (33, 39790), (36, 39748), (42, 39712), (44, 39604),

Gene: Halo3\_49 Start: 40504, Stop: 40091, Start Num: 18  
Candidate Starts for Halo3\_49:  
(11, 40540), (Start: 18 @40504 has 28 MA's), (Start: 25 @40462 has 1 MA's), (31, 40396), (33, 40375), (36, 40333), (42, 40297), (44, 40189),

Gene: Heinz\_32 Start: 25504, Stop: 25082, Start Num: 9  
Candidate Starts for Heinz\_32:  
(Start: 9 @25504 has 2 MA's), (15, 25480), (24, 25432), (26, 25417), (28, 25408), (34, 25330), (39, 25303),

Gene: Hibiscus\_33 Start: 25453, Stop: 25031, Start Num: 9  
Candidate Starts for Hibiscus\_33:  
(Start: 9 @25453 has 2 MA's), (15, 25429), (24, 25381), (26, 25366), (28, 25357), (34, 25279), (39, 25252),

Gene: Jambalaya\_48 Start: 39566, Stop: 39153, Start Num: 18  
Candidate Starts for Jambalaya\_48:  
(11, 39602), (Start: 18 @39566 has 28 MA's), (Start: 25 @39524 has 1 MA's), (31, 39458), (33, 39437), (36, 39395), (42, 39359), (44, 39251),

Gene: JohnPork\_51 Start: 39579, Stop: 39166, Start Num: 18  
Candidate Starts for JohnPork\_51:  
(2, 39684), (3, 39678), (5, 39654), (11, 39615), (Start: 18 @39579 has 28 MA's), (Start: 25 @39537 has 1 MA's), (31, 39471), (33, 39450), (36, 39408), (42, 39372),

Gene: KimmyK\_49 Start: 40501, Stop: 40088, Start Num: 18  
Candidate Starts for KimmyK\_49:  
(2, 40606), (3, 40600), (5, 40576), (11, 40537), (Start: 18 @40501 has 28 MA's), (Start: 25 @40459 has 1 MA's), (31, 40393), (33, 40372), (36, 40330), (42, 40294), (44, 40186),

Gene: Mutzi\_48 Start: 40895, Stop: 40482, Start Num: 18  
Candidate Starts for Mutzi\_48:  
(11, 40931), (Start: 18 @40895 has 28 MA's), (Start: 25 @40853 has 1 MA's), (31, 40787), (33, 40766), (36, 40724), (42, 40688), (44, 40580),

Gene: Nubi\_48 Start: 39892, Stop: 39479, Start Num: 18  
Candidate Starts for Nubi\_48:

(2, 39997), (3, 39991), (5, 39967), (11, 39928), (Start: 18 @39892 has 28 MA's), (Start: 25 @39850 has 1 MA's), (31, 39784), (33, 39763), (36, 39721), (42, 39685), (44, 39577),

Gene: Phishy\_37 Start: 31530, Stop: 31159, Start Num: 16

Candidate Starts for Phishy\_37:

(4, 31611), (6, 31593), (11, 31557), (Start: 16 @31530 has 1 MA's), (17, 31527), (Start: 18 @31521 has 28 MA's), (20, 31509), (22, 31494), (23, 31485), (26, 31461), (30, 31422), (33, 31392), (39, 31329), (40, 31326),

Gene: Phlop\_47 Start: 39973, Stop: 39560, Start Num: 18

Candidate Starts for Phlop\_47:

(2, 40078), (3, 40072), (5, 40048), (11, 40009), (Start: 18 @39973 has 28 MA's), (Start: 25 @39931 has 1 MA's), (31, 39865), (33, 39844), (36, 39802), (42, 39766), (44, 39658),

Gene: PhrostedPhlake\_44 Start: 32850, Stop: 32413, Start Num: 8

Candidate Starts for PhrostedPhlake\_44:

(7, 32859), (Start: 8 @32850 has 1 MA's), (10, 32838), (11, 32835), (13, 32832), (20, 32796), (23, 32772), (29, 32724), (32, 32697), (38, 32646), (46, 32457),

Gene: PinkCoffee\_50 Start: 40076, Stop: 39663, Start Num: 18

Candidate Starts for PinkCoffee\_50:

(2, 40181), (3, 40175), (5, 40151), (11, 40112), (Start: 18 @40076 has 28 MA's), (Start: 25 @40034 has 1 MA's), (31, 39968), (33, 39947), (36, 39905), (42, 39869), (44, 39761),

Gene: Pipp\_38 Start: 31416, Stop: 30997, Start Num: 18

Candidate Starts for Pipp\_38:

(1, 31644), (Start: 18 @31416 has 28 MA's), (27, 31350), (33, 31287), (37, 31239), (41, 31215),

Gene: Portcullis\_50 Start: 39579, Stop: 39166, Start Num: 18

Candidate Starts for Portcullis\_50:

(2, 39684), (3, 39678), (5, 39654), (11, 39615), (Start: 18 @39579 has 28 MA's), (Start: 25 @39537 has 1 MA's), (31, 39471), (33, 39450), (36, 39408), (42, 39372),

Gene: PullumCavea\_47 Start: 39973, Stop: 39560, Start Num: 18

Candidate Starts for PullumCavea\_47:

(2, 40078), (3, 40072), (5, 40048), (11, 40009), (Start: 18 @39973 has 28 MA's), (Start: 25 @39931 has 1 MA's), (31, 39865), (33, 39844), (36, 39802), (42, 39766), (44, 39658),

Gene: RogerDodger\_51 Start: 40116, Stop: 39703, Start Num: 18

Candidate Starts for RogerDodger\_51:

(11, 40152), (Start: 18 @40116 has 28 MA's), (Start: 25 @40074 has 1 MA's), (31, 40008), (33, 39987), (36, 39945), (42, 39909),

Gene: Salvador\_47 Start: 39785, Stop: 39372, Start Num: 18

Candidate Starts for Salvador\_47:

(2, 39890), (3, 39884), (5, 39860), (11, 39821), (Start: 18 @39785 has 28 MA's), (Start: 25 @39743 has 1 MA's), (31, 39677), (33, 39656), (36, 39614), (42, 39578), (44, 39470),

Gene: Savbucketdawg\_48 Start: 39566, Stop: 39153, Start Num: 18

Candidate Starts for Savbucketdawg\_48:

(11, 39602), (Start: 18 @39566 has 28 MA's), (Start: 25 @39524 has 1 MA's), (31, 39458), (33, 39437), (36, 39395), (42, 39359), (44, 39251),

Gene: SmokingBunny\_48 Start: 39878, Stop: 39465, Start Num: 18

Candidate Starts for SmokingBunny\_48:

(2, 39983), (3, 39977), (5, 39953), (11, 39914), (Start: 18 @39878 has 28 MA's), (Start: 25 @39836 has 1 MA's), (31, 39770), (33, 39749), (36, 39707), (42, 39671), (44, 39563),

Gene: Togo\_47 Start: 39878, Stop: 39465, Start Num: 18

Candidate Starts for Togo\_47:

(2, 39983), (3, 39977), (5, 39953), (11, 39914), (Start: 18 @39878 has 28 MA's), (Start: 25 @39836 has 1 MA's), (31, 39770), (33, 39749), (36, 39707), (42, 39671), (44, 39563),

Gene: Twister6\_50 Start: 39679, Stop: 39266, Start Num: 18

Candidate Starts for Twister6\_50:

(2, 39784), (3, 39778), (5, 39754), (11, 39715), (Start: 18 @39679 has 28 MA's), (Start: 25 @39637 has 1 MA's), (31, 39571), (33, 39550), (36, 39508), (42, 39472),

Gene: Valary\_50 Start: 40721, Stop: 40308, Start Num: 18

Candidate Starts for Valary\_50:

(11, 40757), (Start: 18 @40721 has 28 MA's), (Start: 25 @40679 has 1 MA's), (31, 40613), (33, 40592), (36, 40550), (42, 40514), (44, 40406),

Gene: VanDeWege\_51 Start: 40013, Stop: 39600, Start Num: 18

Candidate Starts for VanDeWege\_51:

(11, 40049), (Start: 18 @40013 has 28 MA's), (Start: 25 @39971 has 1 MA's), (31, 39905), (33, 39884), (36, 39842), (42, 39806), (44, 39698),

Gene: Wizard\_47 Start: 39877, Stop: 39506, Start Num: 25

Candidate Starts for Wizard\_47:

(11, 39955), (Start: 18 @39919 has 28 MA's), (Start: 25 @39877 has 1 MA's), (31, 39811), (33, 39790), (36, 39748), (42, 39712), (44, 39604),