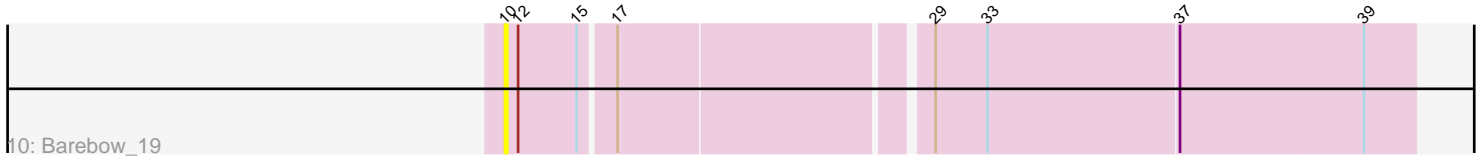
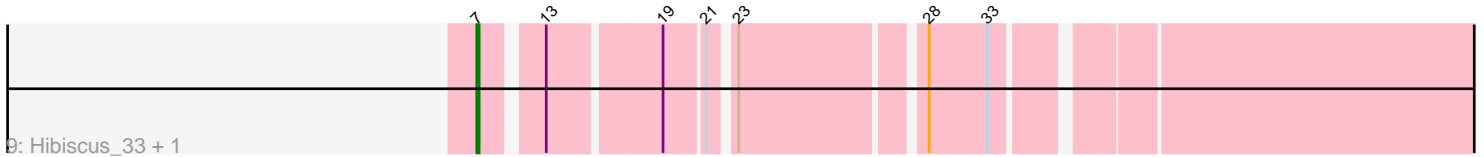
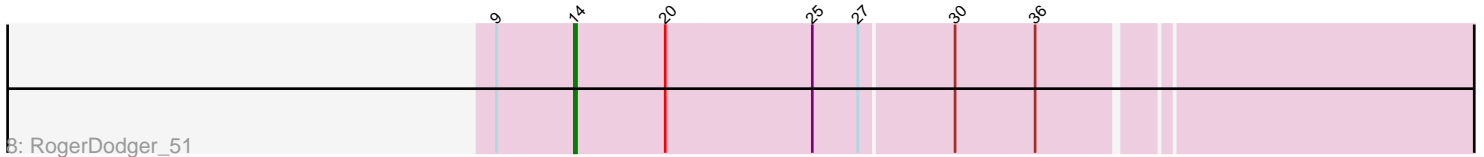
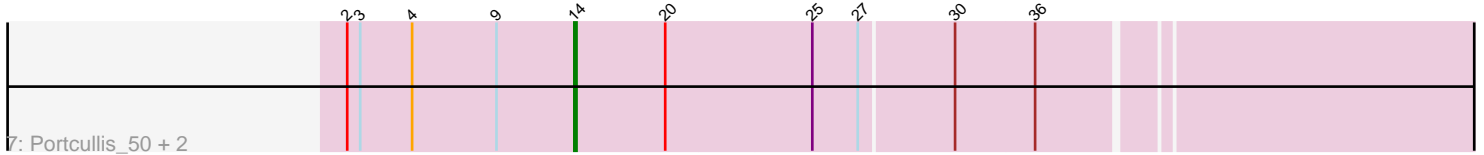
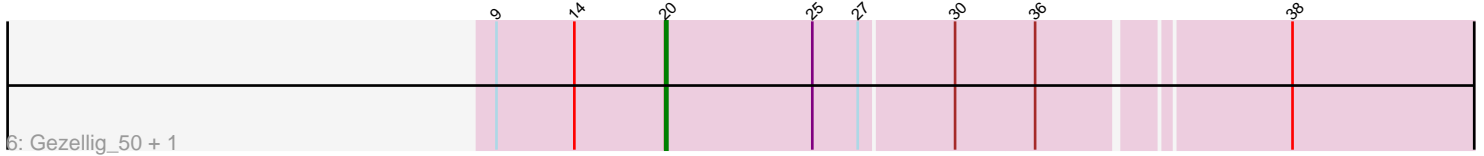
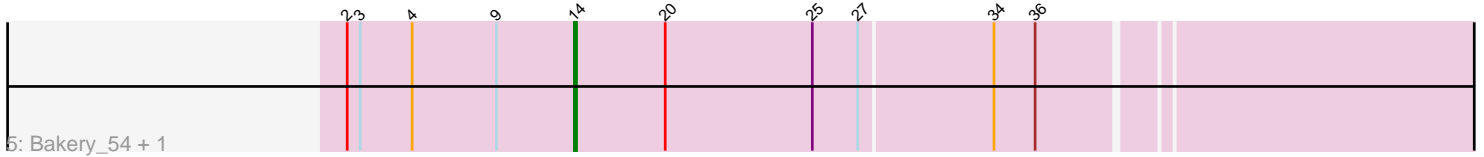
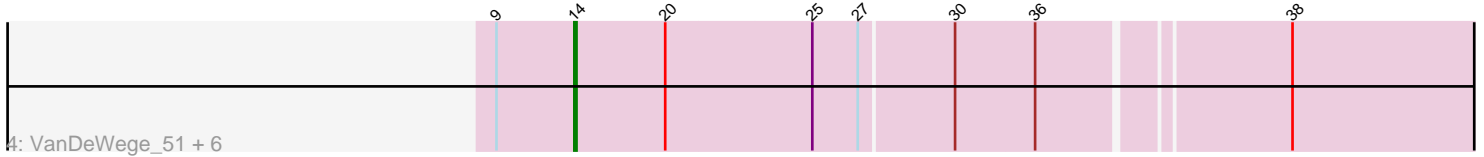
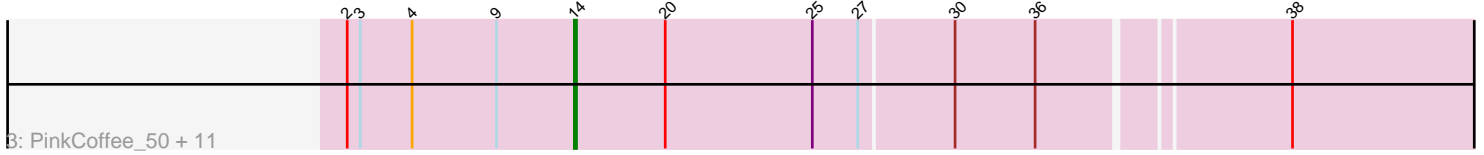
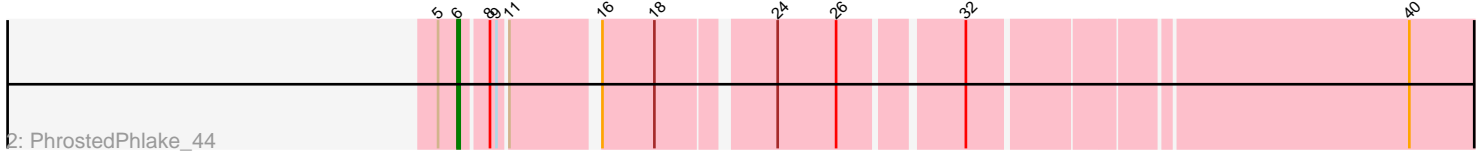
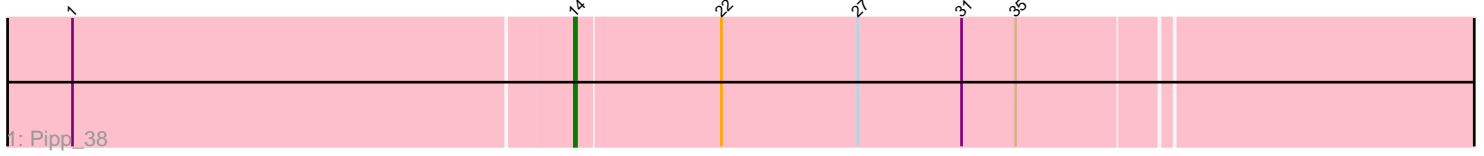


# Pham 194231



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 194231 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194231 has 32 members, 4 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, 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
- Track 5 : Bakery\_54, Arri\_51
- Track 6 : Gezellig\_50, Wizard\_47
- Track 7 : Portcullis\_50, Danyall\_50, Twister6\_50
- Track 8 : RogerDodger\_51
- Track 9 : Hibiscus\_33, Heinz\_33
- Track 10 : 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 14, it was called in 25 of the 28 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, Evamon\_47, Fugax\_51, Halo3\_49, Jambalaya\_48, 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:

- Gezellig\_50, Wizard\_47,

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

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

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

Start 6:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhrostedPhlake\_44 (CV),

Start 7:

- Found in 2 of 32 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heinz\_33 (DY), Hibiscus\_33 (DY),

Start 10:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barebow\_19 (singleton),

Start 14:

- Found in 28 of 32 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 25 of 28
- Called 92.9% 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), Evamon\_47 (DC1), Fugax\_51 (DC1), Halo3\_49 (DC1), Jambalaya\_48 (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 20:

- Found in 27 of 32 ( 84.4% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 7.4% of time when present
- Phage (with cluster) where this start called: Gezellig\_50 (DC1), Wizard\_47 (DC1),

**Summary by clusters:**

There are 4 clusters represented in this pham: singleton, DY, CV, DC1,

Info for manual annotations of cluster CV:

- Start number 6 was manually annotated 1 time for cluster CV.
- Start number 14 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DC1:

- Start number 14 was manually annotated 24 times for cluster DC1.
- Start number 20 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DY:

- Start number 7 was manually annotated 1 time for cluster DY.

**Gene Information:**

Gene: Arri\_51 Start: 39948, Stop: 39535, Start Num: 14

Candidate Starts for Arri\_51:

(2, 40053), (3, 40047), (4, 40023), (9, 39984), (Start: 14 @39948 has 25 MA's), (Start: 20 @39906 has 1 MA's), (25, 39840), (27, 39819), (34, 39759), (36, 39741),

Gene: Bakery\_54 Start: 41089, Stop: 40676, Start Num: 14

Candidate Starts for Bakery\_54:

(2, 41194), (3, 41188), (4, 41164), (9, 41125), (Start: 14 @41089 has 25 MA's), (Start: 20 @41047 has 1 MA's), (25, 40981), (27, 40960), (34, 40900), (36, 40882),

Gene: Barb\_50 Start: 40067, Stop: 39654, Start Num: 14

Candidate Starts for Barb\_50:

(2, 40172), (3, 40166), (4, 40142), (9, 40103), (Start: 14 @40067 has 25 MA's), (Start: 20 @40025 has 1 MA's), (25, 39959), (27, 39938), (30, 39896), (36, 39860), (38, 39752),

Gene: Barebow\_19 Start: 15697, Stop: 15296, Start Num: 10

Candidate Starts for Barebow\_19:

(10, 15697), (12, 15691), (15, 15664), (17, 15649), (29, 15514), (33, 15490), (37, 15403), (39, 15319),

Gene: ClamChowder\_50 Start: 40067, Stop: 39654, Start Num: 14

Candidate Starts for ClamChowder\_50:

(2, 40172), (3, 40166), (4, 40142), (9, 40103), (Start: 14 @40067 has 25 MA's), (Start: 20 @40025 has 1 MA's), (25, 39959), (27, 39938), (30, 39896), (36, 39860), (38, 39752),

Gene: CoveyB\_51 Start: 39766, Stop: 39353, Start Num: 14

Candidate Starts for CoveyB\_51:

(9, 39802), (Start: 14 @39766 has 25 MA's), (Start: 20 @39724 has 1 MA's), (25, 39658), (27, 39637), (30, 39595), (36, 39559), (38, 39451),

Gene: Danyall\_50 Start: 39768, Stop: 39355, Start Num: 14

Candidate Starts for Danyall\_50:

(2, 39873), (3, 39867), (4, 39843), (9, 39804), (Start: 14 @39768 has 25 MA's), (Start: 20 @39726 has 1 MA's), (25, 39660), (27, 39639), (30, 39597), (36, 39561),

Gene: Evamon\_47 Start: 39787, Stop: 39374, Start Num: 14

Candidate Starts for Evamon\_47:

(2, 39892), (3, 39886), (4, 39862), (9, 39823), (Start: 14 @39787 has 25 MA's), (Start: 20 @39745 has 1 MA's), (25, 39679), (27, 39658), (30, 39616), (36, 39580), (38, 39472),

Gene: Fugax\_51 Start: 40059, Stop: 39646, Start Num: 14

Candidate Starts for Fugax\_51:

(2, 40164), (3, 40158), (4, 40134), (9, 40095), (Start: 14 @40059 has 25 MA's), (Start: 20 @40017 has 1 MA's), (25, 39951), (27, 39930), (30, 39888), (36, 39852), (38, 39744),

Gene: Gezellig\_50 Start: 39877, Stop: 39506, Start Num: 20

Candidate Starts for Gezellig\_50:

(9, 39955), (Start: 14 @39919 has 25 MA's), (Start: 20 @39877 has 1 MA's), (25, 39811), (27, 39790), (30, 39748), (36, 39712), (38, 39604),

Gene: Halo3\_49 Start: 40504, Stop: 40091, Start Num: 14

Candidate Starts for Halo3\_49:

(9, 40540), (Start: 14 @40504 has 25 MA's), (Start: 20 @40462 has 1 MA's), (25, 40396), (27, 40375), (30, 40333), (36, 40297), (38, 40189),

Gene: Heinz\_33 Start: 25504, Stop: 25082, Start Num: 7

Candidate Starts for Heinz\_33:

(Start: 7 @25504 has 1 MA's), (13, 25480), (19, 25432), (21, 25417), (23, 25408), (28, 25330), (33, 25303),

Gene: Hibiscus\_33 Start: 25453, Stop: 25031, Start Num: 7

Candidate Starts for Hibiscus\_33:

(Start: 7 @25453 has 1 MA's), (13, 25429), (19, 25381), (21, 25366), (23, 25357), (28, 25279), (33, 25252),

Gene: Jambalaya\_48 Start: 39566, Stop: 39153, Start Num: 14

Candidate Starts for Jambalaya\_48:

(9, 39602), (Start: 14 @39566 has 25 MA's), (Start: 20 @39524 has 1 MA's), (25, 39458), (27, 39437), (30, 39395), (36, 39359), (38, 39251),

Gene: KimmyK\_49 Start: 40501, Stop: 40088, Start Num: 14

Candidate Starts for KimmyK\_49:

(2, 40606), (3, 40600), (4, 40576), (9, 40537), (Start: 14 @40501 has 25 MA's), (Start: 20 @40459 has 1 MA's), (25, 40393), (27, 40372), (30, 40330), (36, 40294), (38, 40186),

Gene: Mutzi\_48 Start: 40895, Stop: 40482, Start Num: 14

Candidate Starts for Mutzi\_48:

(9, 40931), (Start: 14 @40895 has 25 MA's), (Start: 20 @40853 has 1 MA's), (25, 40787), (27, 40766), (30, 40724), (36, 40688), (38, 40580),

Gene: Nubi\_48 Start: 39892, Stop: 39479, Start Num: 14

Candidate Starts for Nubi\_48:

(2, 39997), (3, 39991), (4, 39967), (9, 39928), (Start: 14 @39892 has 25 MA's), (Start: 20 @39850 has 1 MA's), (25, 39784), (27, 39763), (30, 39721), (36, 39685), (38, 39577),

Gene: Phlop\_47 Start: 39973, Stop: 39560, Start Num: 14

Candidate Starts for Phlop\_47:

(2, 40078), (3, 40072), (4, 40048), (9, 40009), (Start: 14 @39973 has 25 MA's), (Start: 20 @39931 has 1 MA's), (25, 39865), (27, 39844), (30, 39802), (36, 39766), (38, 39658),

Gene: PhrostedPhlake\_44 Start: 32850, Stop: 32413, Start Num: 6

Candidate Starts for PhrostedPhlake\_44:

(5, 32859), (Start: 6 @32850 has 1 MA's), (8, 32838), (9, 32835), (11, 32832), (16, 32796), (18, 32772), (24, 32724), (26, 32697), (32, 32646), (40, 32457),

Gene: PinkCoffee\_50 Start: 40076, Stop: 39663, Start Num: 14

Candidate Starts for PinkCoffee\_50:

(2, 40181), (3, 40175), (4, 40151), (9, 40112), (Start: 14 @40076 has 25 MA's), (Start: 20 @40034 has 1 MA's), (25, 39968), (27, 39947), (30, 39905), (36, 39869), (38, 39761),

Gene: Pipp\_38 Start: 31416, Stop: 30997, Start Num: 14

Candidate Starts for Pipp\_38:

(1, 31644), (Start: 14 @31416 has 25 MA's), (22, 31350), (27, 31287), (31, 31239), (35, 31215),

Gene: Portcullis\_50 Start: 39579, Stop: 39166, Start Num: 14

Candidate Starts for Portcullis\_50:

(2, 39684), (3, 39678), (4, 39654), (9, 39615), (Start: 14 @39579 has 25 MA's), (Start: 20 @39537 has 1 MA's), (25, 39471), (27, 39450), (30, 39408), (36, 39372),

Gene: PullumCavea\_47 Start: 39973, Stop: 39560, Start Num: 14

Candidate Starts for PullumCavea\_47:

(2, 40078), (3, 40072), (4, 40048), (9, 40009), (Start: 14 @39973 has 25 MA's), (Start: 20 @39931 has 1 MA's), (25, 39865), (27, 39844), (30, 39802), (36, 39766), (38, 39658),

Gene: RogerDodger\_51 Start: 40116, Stop: 39703, Start Num: 14

Candidate Starts for RogerDodger\_51:

(9, 40152), (Start: 14 @40116 has 25 MA's), (Start: 20 @40074 has 1 MA's), (25, 40008), (27, 39987), (30, 39945), (36, 39909),

Gene: Salvador\_47 Start: 39785, Stop: 39372, Start Num: 14

Candidate Starts for Salvador\_47:

(2, 39890), (3, 39884), (4, 39860), (9, 39821), (Start: 14 @39785 has 25 MA's), (Start: 20 @39743 has 1 MA's), (25, 39677), (27, 39656), (30, 39614), (36, 39578), (38, 39470),

Gene: Savbucketdawg\_48 Start: 39566, Stop: 39153, Start Num: 14

Candidate Starts for Savbucketdawg\_48:

(9, 39602), (Start: 14 @39566 has 25 MA's), (Start: 20 @39524 has 1 MA's), (25, 39458), (27, 39437), (30, 39395), (36, 39359), (38, 39251),

Gene: SmokingBunny\_48 Start: 39878, Stop: 39465, Start Num: 14

Candidate Starts for SmokingBunny\_48:

(2, 39983), (3, 39977), (4, 39953), (9, 39914), (Start: 14 @39878 has 25 MA's), (Start: 20 @39836 has 1 MA's), (25, 39770), (27, 39749), (30, 39707), (36, 39671), (38, 39563),

Gene: Togo\_47 Start: 39878, Stop: 39465, Start Num: 14

Candidate Starts for Togo\_47:

(2, 39983), (3, 39977), (4, 39953), (9, 39914), (Start: 14 @39878 has 25 MA's), (Start: 20 @39836 has 1 MA's), (25, 39770), (27, 39749), (30, 39707), (36, 39671), (38, 39563),

Gene: Twister6\_50 Start: 39679, Stop: 39266, Start Num: 14

Candidate Starts for Twister6\_50:

(2, 39784), (3, 39778), (4, 39754), (9, 39715), (Start: 14 @39679 has 25 MA's), (Start: 20 @39637 has 1 MA's), (25, 39571), (27, 39550), (30, 39508), (36, 39472),

Gene: Valary\_50 Start: 40721, Stop: 40308, Start Num: 14

Candidate Starts for Valary\_50:

(9, 40757), (Start: 14 @40721 has 25 MA's), (Start: 20 @40679 has 1 MA's), (25, 40613), (27, 40592), (30, 40550), (36, 40514), (38, 40406),

Gene: VanDeWege\_51 Start: 40013, Stop: 39600, Start Num: 14

Candidate Starts for VanDeWege\_51:

(9, 40049), (Start: 14 @40013 has 25 MA's), (Start: 20 @39971 has 1 MA's), (25, 39905), (27, 39884), (30, 39842), (36, 39806), (38, 39698),

Gene: Wizard\_47 Start: 39877, Stop: 39506, Start Num: 20

Candidate Starts for Wizard\_47:

(9, 39955), (Start: 14 @39919 has 25 MA's), (Start: 20 @39877 has 1 MA's), (25, 39811), (27, 39790), (30, 39748), (36, 39712), (38, 39604),

