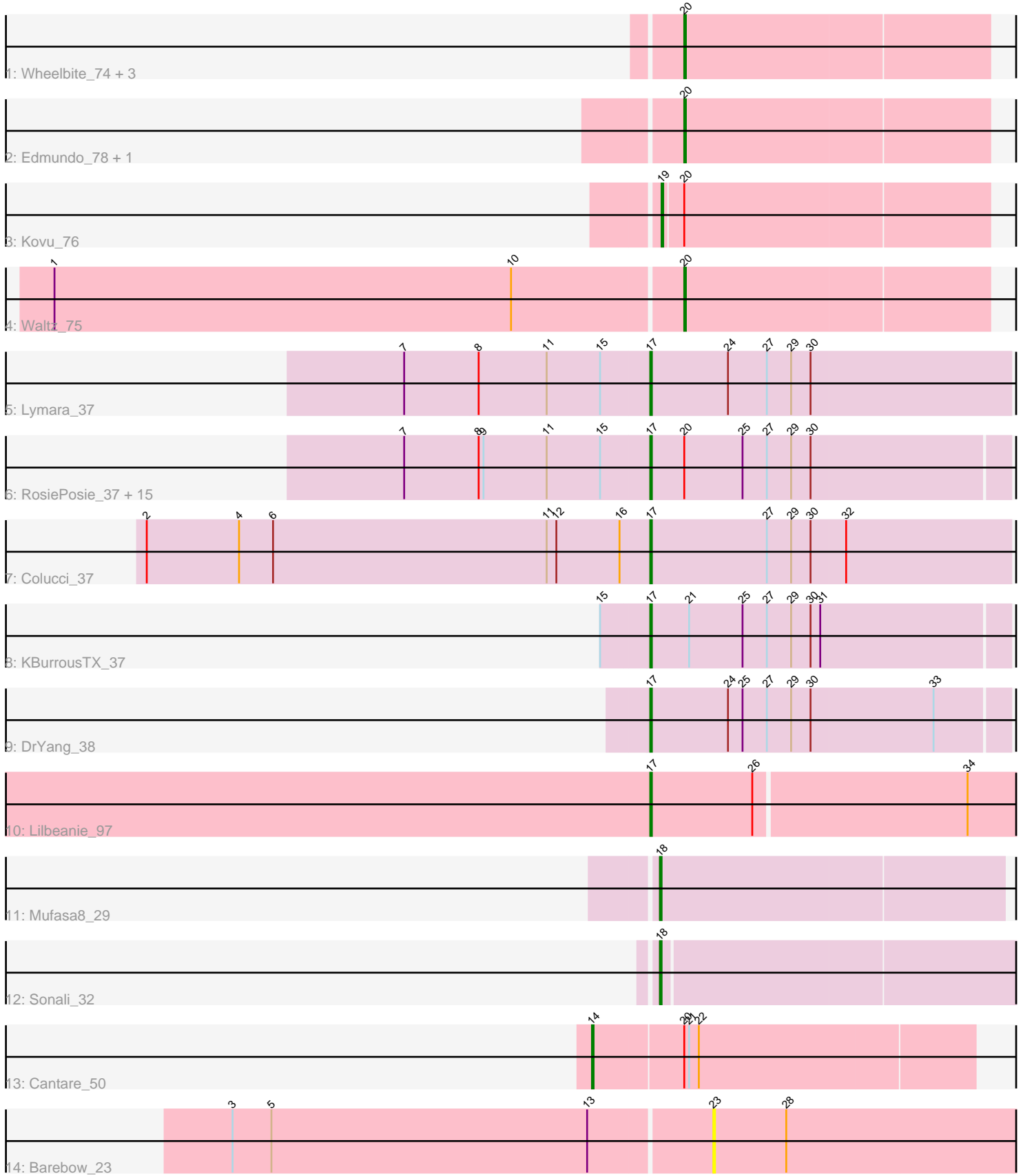


Pham 194219



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 194219 Report

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

Pham number 194219 has 33 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Wheelbite\_74, Salgado\_78, LiSara\_75, Laroye\_78
- Track 2 : Edmundo\_78, Shrooms\_76
- Track 3 : Kovu\_76
- Track 4 : Waltz\_75
- Track 5 : Lymara\_37
- Track 6 : RosiePosie\_37, EdgarPoe\_37, Mordred\_37, Tophat\_37, JayCookie\_37, HumptyDumpty\_37, Chocolat\_37, MoyaNatalis\_37, Kabreeze\_37, Conboy\_37, Linus\_37, Scavito\_37, Chipper1996\_370, PrincessTrina\_37, JaNo\_37, Chubster\_37
- Track 7 : Colucci\_37
- Track 8 : KBurroustX\_37
- Track 9 : DrYang\_38
- Track 10 : Lilbeanie\_97
- Track 11 : Mufasa8\_29
- Track 12 : Sonali\_32
- Track 13 : Cantare\_50
- Track 14 : Barebow\_23

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

The start number called the most often in the published annotations is 17, it was called in 20 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chipper1996\_370, Chocolat\_37, Chubster\_37, Colucci\_37, Conboy\_37, DrYang\_38, EdgarPoe\_37, HumptyDumpty\_37, JaNo\_37, JayCookie\_37, KBurroustX\_37, Kabreeze\_37, Lilbeanie\_97, Linus\_37, Lymara\_37, Mordred\_37, MoyaNatalis\_37, PrincessTrina\_37, RosiePosie\_37, Scavito\_37, Tophat\_37,

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

- 

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

- Barebow\_23, Cantare\_50, Edmundo\_78, Kovu\_76, Laroye\_78, LiSara\_75, Mufasa8\_29, Salgado\_78, Shrooms\_76, Sonali\_32, Waltz\_75, Wheelbite\_74,

## Summary by start number:

### Start 14:

- Found in 1 of 33 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare\_50 (singleton),

### Start 17:

- Found in 21 of 33 ( 63.6% ) of genes in pham
- Manual Annotations of this start: 20 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996\_370 (AR), Chocolat\_37 (AR), Chubster\_37 (AR), Colucci\_37 (AR), Conboy\_37 (AR), DrYang\_38 (AR), EdgarPoe\_37 (AR), HumptyDumpty\_37 (AR), JaNo\_37 (AR), JayCookie\_37 (AR), KBurrousTX\_37 (AR), Kabreeze\_37 (AR), Lilbeanie\_97 (DE5), Linus\_37 (AR), Lymara\_37 (AR), Mordred\_37 (AR), MoyaNatalis\_37 (AR), PrincessTrina\_37 (AR), RosiePosie\_37 (AR), Scavito\_37 (AR), Tophat\_37 (AR),

### Start 18:

- Found in 2 of 33 ( 6.1% ) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mufasa8\_29 (FG), Sonali\_32 (FG),

### Start 19:

- Found in 1 of 33 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kovu\_76 (AL),

### Start 20:

- Found in 25 of 33 ( 75.8% ) of genes in pham
- Manual Annotations of this start: 7 of 31
- Called 28.0% of time when present
- Phage (with cluster) where this start called: Edmundo\_78 (AL), Laroye\_78 (AL), LiSara\_75 (AL), Salgado\_78 (AL), Shrooms\_76 (AL), Waltz\_75 (AL), Wheelbite\_74 (AL),

### Start 23:

- Found in 1 of 33 ( 3.0% ) 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\_23 (singleton),

## Summary by clusters:

There are 5 clusters represented in this pham: singleton, AR, AL, DE5, FG,

Info for manual annotations of cluster AL:

- Start number 19 was manually annotated 1 time for cluster AL.
- Start number 20 was manually annotated 7 times for cluster AL.

Info for manual annotations of cluster AR:

•Start number 17 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster DE5:

•Start number 17 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster FG:

•Start number 18 was manually annotated 2 times for cluster FG.

### **Gene Information:**

Gene: Barebow\_23 Start: 17257, Stop: 17445, Start Num: 23

Candidate Starts for Barebow\_23:

(3, 16966), (5, 16990), (13, 17185), (23, 17257), (28, 17302),

Gene: Cantare\_50 Start: 45879, Stop: 46109, Start Num: 14

Candidate Starts for Cantare\_50:

(Start: 14 @45879 has 1 MA's), (Start: 20 @45933 has 7 MA's), (21, 45936), (22, 45942),

Gene: Chipper1996\_370 Start: 30385, Stop: 30167, Start Num: 17

Candidate Starts for Chipper1996\_370:

(7, 30535), (8, 30490), (9, 30487), (11, 30448), (15, 30415), (Start: 17 @30385 has 20 MA's), (Start: 20 @30364 has 7 MA's), (25, 30328), (27, 30313), (29, 30298), (30, 30286),

Gene: Chocolat\_37 Start: 30385, Stop: 30167, Start Num: 17

Candidate Starts for Chocolat\_37:

(7, 30535), (8, 30490), (9, 30487), (11, 30448), (15, 30415), (Start: 17 @30385 has 20 MA's), (Start: 20 @30364 has 7 MA's), (25, 30328), (27, 30313), (29, 30298), (30, 30286),

Gene: Chubster\_37 Start: 30157, Stop: 29939, Start Num: 17

Candidate Starts for Chubster\_37:

(7, 30307), (8, 30262), (9, 30259), (11, 30220), (15, 30187), (Start: 17 @30157 has 20 MA's), (Start: 20 @30136 has 7 MA's), (25, 30100), (27, 30085), (29, 30070), (30, 30058),

Gene: Colucci\_37 Start: 29963, Stop: 29742, Start Num: 17

Candidate Starts for Colucci\_37:

(2, 30272), (4, 30215), (6, 30194), (11, 30026), (12, 30020), (16, 29981), (Start: 17 @29963 has 20 MA's), (27, 29891), (29, 29876), (30, 29864), (32, 29843),

Gene: Conboy\_37 Start: 30384, Stop: 30166, Start Num: 17

Candidate Starts for Conboy\_37:

(7, 30534), (8, 30489), (9, 30486), (11, 30447), (15, 30414), (Start: 17 @30384 has 20 MA's), (Start: 20 @30363 has 7 MA's), (25, 30327), (27, 30312), (29, 30297), (30, 30285),

Gene: DrYang\_38 Start: 31723, Stop: 31505, Start Num: 17

Candidate Starts for DrYang\_38:

(Start: 17 @31723 has 20 MA's), (24, 31675), (25, 31666), (27, 31651), (29, 31636), (30, 31624), (33, 31549),

Gene: EdgarPoe\_37 Start: 30384, Stop: 30166, Start Num: 17

Candidate Starts for EdgarPoe\_37:

(7, 30534), (8, 30489), (9, 30486), (11, 30447), (15, 30414), (Start: 17 @30384 has 20 MA's), (Start: 20 @30363 has 7 MA's), (25, 30327), (27, 30312), (29, 30297), (30, 30285),

Gene: Edmundo\_78 Start: 47501, Stop: 47316, Start Num: 20

Candidate Starts for Edmundo\_78:

(Start: 20 @47501 has 7 MA's),

Gene: HumptyDumpty\_37 Start: 30383, Stop: 30165, Start Num: 17

Candidate Starts for HumptyDumpty\_37:

(7, 30533), (8, 30488), (9, 30485), (11, 30446), (15, 30413), (Start: 17 @30383 has 20 MA's), (Start: 20 @30362 has 7 MA's), (25, 30326), (27, 30311), (29, 30296), (30, 30284),

Gene: JaNo\_37 Start: 30383, Stop: 30165, Start Num: 17

Candidate Starts for JaNo\_37:

(7, 30533), (8, 30488), (9, 30485), (11, 30446), (15, 30413), (Start: 17 @30383 has 20 MA's), (Start: 20 @30362 has 7 MA's), (25, 30326), (27, 30311), (29, 30296), (30, 30284),

Gene: JayCookie\_37 Start: 30387, Stop: 30169, Start Num: 17

Candidate Starts for JayCookie\_37:

(7, 30537), (8, 30492), (9, 30489), (11, 30450), (15, 30417), (Start: 17 @30387 has 20 MA's), (Start: 20 @30366 has 7 MA's), (25, 30330), (27, 30315), (29, 30300), (30, 30288),

Gene: KBurrousTX\_37 Start: 31486, Stop: 31268, Start Num: 17

Candidate Starts for KBurrousTX\_37:

(15, 31513), (Start: 17 @31486 has 20 MA's), (21, 31462), (25, 31429), (27, 31414), (29, 31399), (30, 31387), (31, 31381),

Gene: Kabreeze\_37 Start: 30383, Stop: 30165, Start Num: 17

Candidate Starts for Kabreeze\_37:

(7, 30533), (8, 30488), (9, 30485), (11, 30446), (15, 30413), (Start: 17 @30383 has 20 MA's), (Start: 20 @30362 has 7 MA's), (25, 30326), (27, 30311), (29, 30296), (30, 30284),

Gene: Kovu\_76 Start: 47520, Stop: 47323, Start Num: 19

Candidate Starts for Kovu\_76:

(Start: 19 @47520 has 1 MA's), (Start: 20 @47508 has 7 MA's),

Gene: Laroye\_78 Start: 46919, Stop: 46734, Start Num: 20

Candidate Starts for Laroye\_78:

(Start: 20 @46919 has 7 MA's),

Gene: LiSara\_75 Start: 47053, Stop: 46868, Start Num: 20

Candidate Starts for LiSara\_75:

(Start: 20 @47053 has 7 MA's),

Gene: Lilbeanie\_97 Start: 58823, Stop: 59047, Start Num: 17

Candidate Starts for Lilbeanie\_97:

(Start: 17 @58823 has 20 MA's), (26, 58886), (34, 59015),

Gene: Linus\_37 Start: 30384, Stop: 30166, Start Num: 17

Candidate Starts for Linus\_37:

(7, 30534), (8, 30489), (9, 30486), (11, 30447), (15, 30414), (Start: 17 @30384 has 20 MA's), (Start: 20 @30363 has 7 MA's), (25, 30327), (27, 30312), (29, 30297), (30, 30285),

Gene: Lymara\_37 Start: 30202, Stop: 29981, Start Num: 17

Candidate Starts for Lymara\_37:

(7, 30352), (8, 30307), (11, 30265), (15, 30232), (Start: 17 @30202 has 20 MA's), (24, 30154), (27, 30130), (29, 30115), (30, 30103),

Gene: Mordred\_37 Start: 30383, Stop: 30165, Start Num: 17

Candidate Starts for Mordred\_37:

(7, 30533), (8, 30488), (9, 30485), (11, 30446), (15, 30413), (Start: 17 @30383 has 20 MA's), (Start: 20 @30362 has 7 MA's), (25, 30326), (27, 30311), (29, 30296), (30, 30284),

Gene: MoyaNatalis\_37 Start: 30387, Stop: 30169, Start Num: 17

Candidate Starts for MoyaNatalis\_37:

(7, 30537), (8, 30492), (9, 30489), (11, 30450), (15, 30417), (Start: 17 @30387 has 20 MA's), (Start: 20 @30366 has 7 MA's), (25, 30330), (27, 30315), (29, 30300), (30, 30288),

Gene: Mufasa8\_29 Start: 27032, Stop: 26823, Start Num: 18

Candidate Starts for Mufasa8\_29:

(Start: 18 @27032 has 2 MA's),

Gene: PrincessTrina\_37 Start: 30387, Stop: 30169, Start Num: 17

Candidate Starts for PrincessTrina\_37:

(7, 30537), (8, 30492), (9, 30489), (11, 30450), (15, 30417), (Start: 17 @30387 has 20 MA's), (Start: 20 @30366 has 7 MA's), (25, 30330), (27, 30315), (29, 30300), (30, 30288),

Gene: RosiePosie\_37 Start: 30386, Stop: 30168, Start Num: 17

Candidate Starts for RosiePosie\_37:

(7, 30536), (8, 30491), (9, 30488), (11, 30449), (15, 30416), (Start: 17 @30386 has 20 MA's), (Start: 20 @30365 has 7 MA's), (25, 30329), (27, 30314), (29, 30299), (30, 30287),

Gene: Salgado\_78 Start: 46723, Stop: 46538, Start Num: 20

Candidate Starts for Salgado\_78:

(Start: 20 @46723 has 7 MA's),

Gene: Scavito\_37 Start: 30384, Stop: 30166, Start Num: 17

Candidate Starts for Scavito\_37:

(7, 30534), (8, 30489), (9, 30486), (11, 30447), (15, 30414), (Start: 17 @30384 has 20 MA's), (Start: 20 @30363 has 7 MA's), (25, 30327), (27, 30312), (29, 30297), (30, 30285),

Gene: Shrooms\_76 Start: 45176, Stop: 44991, Start Num: 20

Candidate Starts for Shrooms\_76:

(Start: 20 @45176 has 7 MA's),

Gene: Sonali\_32 Start: 30335, Stop: 30120, Start Num: 18

Candidate Starts for Sonali\_32:

(Start: 18 @30335 has 2 MA's),

Gene: Tophat\_37 Start: 30385, Stop: 30167, Start Num: 17

Candidate Starts for Tophat\_37:

(7, 30535), (8, 30490), (9, 30487), (11, 30448), (15, 30415), (Start: 17 @30385 has 20 MA's), (Start: 20 @30364 has 7 MA's), (25, 30328), (27, 30313), (29, 30298), (30, 30286),

Gene: Waltz\_75 Start: 45186, Stop: 45001, Start Num: 20

Candidate Starts for Waltz\_75:  
(1, 45570), (10, 45288), (Start: 20 @45186 has 7 MA's),

Gene: Wheelbite\_74 Start: 46857, Stop: 46672, Start Num: 20  
Candidate Starts for Wheelbite\_74:  
(Start: 20 @46857 has 7 MA's),