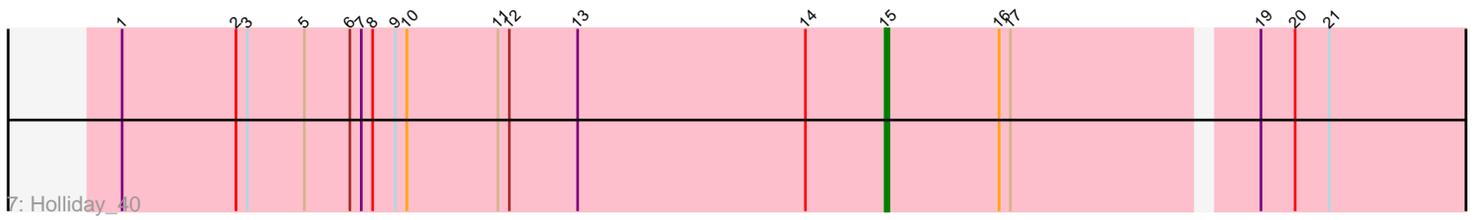
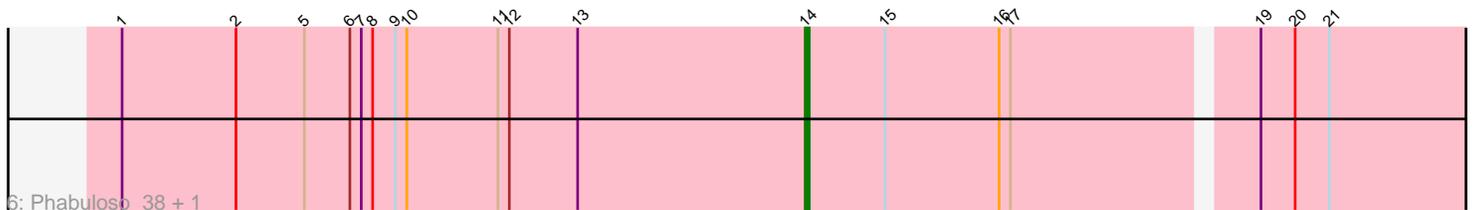
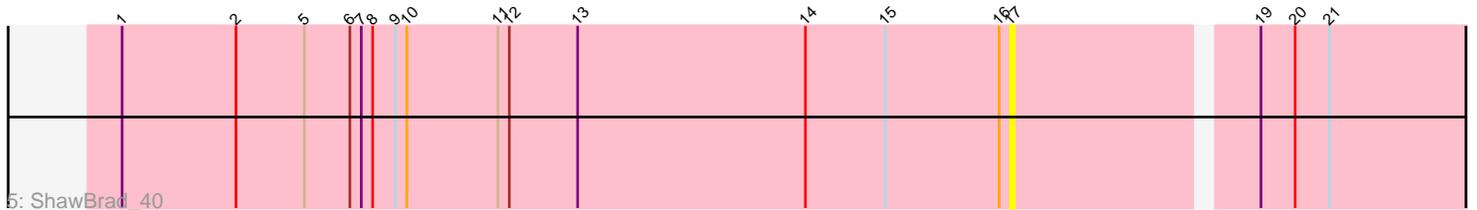
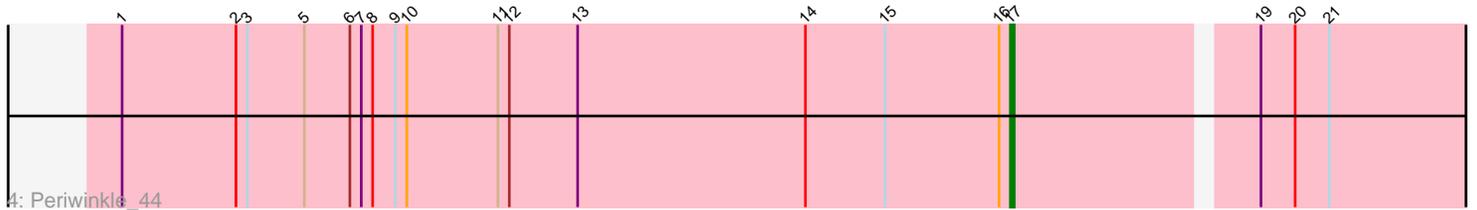
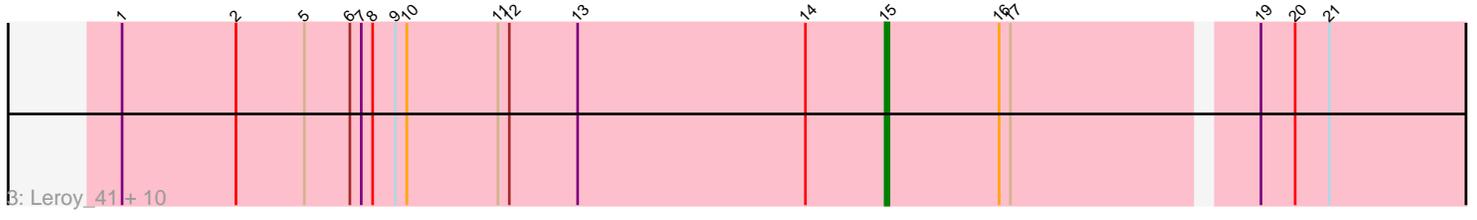
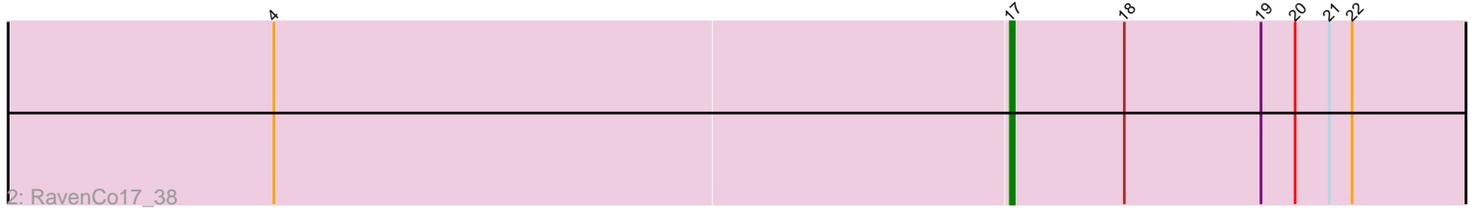
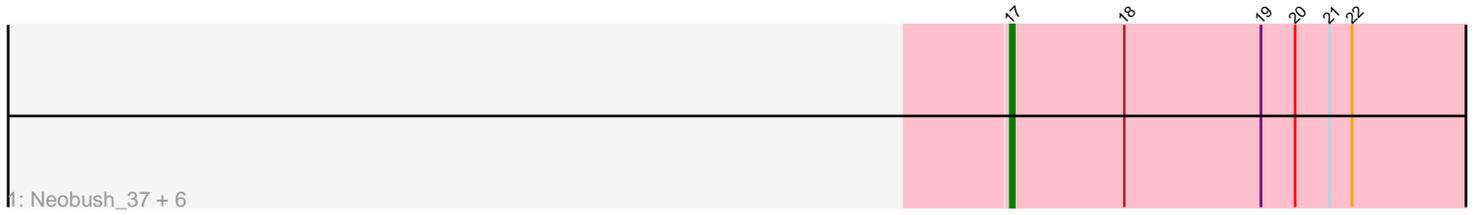


# Pham 289715



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 289715 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289715 has 24 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Neobush\_37, Tayonia\_37, Antonio\_37, Manasvini\_37, Kita\_38, Suscepit\_37, Trumpet\_37
- Track 2 : RavenCo17\_38
- Track 3 : Leroy\_41, CheeseTouch\_39, Horus\_41, Getalong\_42, BENtherdunthat\_40, Lutum\_41, Frickyeah\_41, Asapag\_41, ODay\_44, Kenna\_40, Apricot\_40
- Track 4 : Periwinkle\_44
- Track 5 : ShawBrad\_40
- Track 6 : Phabuloso\_38, BearBQ\_40
- Track 7 : Holliday\_40

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

The start number called the most often in the published annotations is 15, it was called in 11 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_40, Asapag\_41, BENtherdunthat\_40, CheeseTouch\_39, Frickyeah\_41, Getalong\_42, Holliday\_40, Horus\_41, Kenna\_40, Leroy\_41, Lutum\_41, ODay\_44,

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

- BearBQ\_40, Periwinkle\_44, Phabuloso\_38, ShawBrad\_40,

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

- Antonio\_37, Kita\_38, Manasvini\_37, Neobush\_37, RavenCo17\_38, Suscepit\_37, Tayonia\_37, Trumpet\_37,

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

Start 14:

- Found in 16 of 24 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 12.5% of time when present
- Phage (with cluster) where this start called: BearBQ\_40 (DN), Phabuloso\_38 (DN1),

Start 15:

- Found in 16 of 24 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 11 of 22
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Apricot\_40 (DN3), Asapag\_41 (DN1), BENTherdunthat\_40 (DN1), CheeseTouch\_39 (DN1), Frickyeah\_41 (DN1), Getalong\_42 (DN1), Holliday\_40 (DN1), Horus\_41 (DN1), Kenna\_40 (DN1), Leroy\_41 (DN1), Lutum\_41 (DN1), ODay\_44 (DN),

Start 17:

- Found in 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 9 of 22
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Antonio\_37 (CZ1), Kita\_38 (CZ1), Manasvini\_37 (CZ1), Neobush\_37 (CZ1), Periwinkle\_44 (DN1), RavenCo17\_38 (CZ8), ShawBrad\_40 (DN1), Suscept\_37 (CZ1), Tayonia\_37 (CZ1), Trumpet\_37 (CZ1),

**Summary by clusters:**

There are 5 clusters represented in this pham: DN, CZ8, CZ1, DN1, DN3,

Info for manual annotations of cluster CZ1:

- Start number 17 was manually annotated 7 times for cluster CZ1.

Info for manual annotations of cluster CZ8:

- Start number 17 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DN:

- Start number 14 was manually annotated 1 time for cluster DN.
- Start number 15 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 14 was manually annotated 1 time for cluster DN1.
- Start number 15 was manually annotated 9 times for cluster DN1.
- Start number 17 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 15 was manually annotated 1 time for cluster DN3.

**Gene Information:**

Gene: Antonio\_37 Start: 29756, Stop: 29586, Start Num: 17

Candidate Starts for Antonio\_37:

(Start: 17 @29756 has 9 MA's), (18, 29726), (19, 29690), (20, 29681), (21, 29672), (22, 29666),

Gene: Apricot\_40 Start: 29360, Stop: 29169, Start Num: 15

Candidate Starts for Apricot\_40:

(1, 29561), (2, 29531), (5, 29513), (6, 29501), (7, 29498), (8, 29495), (9, 29489), (10, 29486), (11, 29462), (12, 29459), (13, 29441), (Start: 14 @29381 has 2 MA's), (Start: 15 @29360 has 11 MA's),

(16, 29330), (Start: 17 @29327 has 9 MA's), (19, 29267), (20, 29258), (21, 29249),

Gene: Asapag\_41 Start: 30952, Stop: 30761, Start Num: 15

Candidate Starts for Asapag\_41:

(1, 31153), (2, 31123), (5, 31105), (6, 31093), (7, 31090), (8, 31087), (9, 31081), (10, 31078), (11, 31054), (12, 31051), (13, 31033), (Start: 14 @30973 has 2 MA's), (Start: 15 @30952 has 11 MA's), (16, 30922), (Start: 17 @30919 has 9 MA's), (19, 30859), (20, 30850), (21, 30841),

Gene: BENtherdunthat\_40 Start: 29163, Stop: 28972, Start Num: 15

Candidate Starts for BENtherdunthat\_40:

(1, 29364), (2, 29334), (5, 29316), (6, 29304), (7, 29301), (8, 29298), (9, 29292), (10, 29289), (11, 29265), (12, 29262), (13, 29244), (Start: 14 @29184 has 2 MA's), (Start: 15 @29163 has 11 MA's), (16, 29133), (Start: 17 @29130 has 9 MA's), (19, 29070), (20, 29061), (21, 29052),

Gene: BearBQ\_40 Start: 30608, Stop: 30396, Start Num: 14

Candidate Starts for BearBQ\_40:

(1, 30788), (2, 30758), (5, 30740), (6, 30728), (7, 30725), (8, 30722), (9, 30716), (10, 30713), (11, 30689), (12, 30686), (13, 30668), (Start: 14 @30608 has 2 MA's), (Start: 15 @30587 has 11 MA's), (16, 30557), (Start: 17 @30554 has 9 MA's), (19, 30494), (20, 30485), (21, 30476),

Gene: CheeseTouch\_39 Start: 27514, Stop: 27323, Start Num: 15

Candidate Starts for CheeseTouch\_39:

(1, 27715), (2, 27685), (5, 27667), (6, 27655), (7, 27652), (8, 27649), (9, 27643), (10, 27640), (11, 27616), (12, 27613), (13, 27595), (Start: 14 @27535 has 2 MA's), (Start: 15 @27514 has 11 MA's), (16, 27484), (Start: 17 @27481 has 9 MA's), (19, 27421), (20, 27412), (21, 27403),

Gene: Frickyeah\_41 Start: 29053, Stop: 28862, Start Num: 15

Candidate Starts for Frickyeah\_41:

(1, 29254), (2, 29224), (5, 29206), (6, 29194), (7, 29191), (8, 29188), (9, 29182), (10, 29179), (11, 29155), (12, 29152), (13, 29134), (Start: 14 @29074 has 2 MA's), (Start: 15 @29053 has 11 MA's), (16, 29023), (Start: 17 @29020 has 9 MA's), (19, 28960), (20, 28951), (21, 28942),

Gene: Getalong\_42 Start: 31773, Stop: 31582, Start Num: 15

Candidate Starts for Getalong\_42:

(1, 31974), (2, 31944), (5, 31926), (6, 31914), (7, 31911), (8, 31908), (9, 31902), (10, 31899), (11, 31875), (12, 31872), (13, 31854), (Start: 14 @31794 has 2 MA's), (Start: 15 @31773 has 11 MA's), (16, 31743), (Start: 17 @31740 has 9 MA's), (19, 31680), (20, 31671), (21, 31662),

Gene: Holliday\_40 Start: 29628, Stop: 29437, Start Num: 15

Candidate Starts for Holliday\_40:

(1, 29829), (2, 29799), (3, 29796), (5, 29781), (6, 29769), (7, 29766), (8, 29763), (9, 29757), (10, 29754), (11, 29730), (12, 29727), (13, 29709), (Start: 14 @29649 has 2 MA's), (Start: 15 @29628 has 11 MA's), (16, 29598), (Start: 17 @29595 has 9 MA's), (19, 29535), (20, 29526), (21, 29517),

Gene: Horus\_41 Start: 30974, Stop: 30783, Start Num: 15

Candidate Starts for Horus\_41:

(1, 31175), (2, 31145), (5, 31127), (6, 31115), (7, 31112), (8, 31109), (9, 31103), (10, 31100), (11, 31076), (12, 31073), (13, 31055), (Start: 14 @30995 has 2 MA's), (Start: 15 @30974 has 11 MA's), (16, 30944), (Start: 17 @30941 has 9 MA's), (19, 30881), (20, 30872), (21, 30863),

Gene: Kenna\_40 Start: 29964, Stop: 29773, Start Num: 15

Candidate Starts for Kenna\_40:

(1, 30165), (2, 30135), (5, 30117), (6, 30105), (7, 30102), (8, 30099), (9, 30093), (10, 30090), (11, 30066), (12, 30063), (13, 30045), (Start: 14 @29985 has 2 MA's), (Start: 15 @29964 has 11 MA's), (16, 29934), (Start: 17 @29931 has 9 MA's), (19, 29871), (20, 29862), (21, 29853),

Gene: Kita\_38 Start: 29765, Stop: 29595, Start Num: 17

Candidate Starts for Kita\_38:

(Start: 17 @29765 has 9 MA's), (18, 29735), (19, 29699), (20, 29690), (21, 29681), (22, 29675),

Gene: Leroy\_41 Start: 30975, Stop: 30784, Start Num: 15

Candidate Starts for Leroy\_41:

(1, 31176), (2, 31146), (5, 31128), (6, 31116), (7, 31113), (8, 31110), (9, 31104), (10, 31101), (11, 31077), (12, 31074), (13, 31056), (Start: 14 @30996 has 2 MA's), (Start: 15 @30975 has 11 MA's), (16, 30945), (Start: 17 @30942 has 9 MA's), (19, 30882), (20, 30873), (21, 30864),

Gene: Lutum\_41 Start: 29964, Stop: 29773, Start Num: 15

Candidate Starts for Lutum\_41:

(1, 30165), (2, 30135), (5, 30117), (6, 30105), (7, 30102), (8, 30099), (9, 30093), (10, 30090), (11, 30066), (12, 30063), (13, 30045), (Start: 14 @29985 has 2 MA's), (Start: 15 @29964 has 11 MA's), (16, 29934), (Start: 17 @29931 has 9 MA's), (19, 29871), (20, 29862), (21, 29853),

Gene: Manasvini\_37 Start: 29757, Stop: 29587, Start Num: 17

Candidate Starts for Manasvini\_37:

(Start: 17 @29757 has 9 MA's), (18, 29727), (19, 29691), (20, 29682), (21, 29673), (22, 29667),

Gene: Neobush\_37 Start: 29750, Stop: 29586, Start Num: 17

Candidate Starts for Neobush\_37:

(Start: 17 @29750 has 9 MA's), (18, 29720), (19, 29684), (20, 29675), (21, 29666), (22, 29660),

Gene: ODay\_44 Start: 31438, Stop: 31247, Start Num: 15

Candidate Starts for ODay\_44:

(1, 31639), (2, 31609), (5, 31591), (6, 31579), (7, 31576), (8, 31573), (9, 31567), (10, 31564), (11, 31540), (12, 31537), (13, 31519), (Start: 14 @31459 has 2 MA's), (Start: 15 @31438 has 11 MA's), (16, 31408), (Start: 17 @31405 has 9 MA's), (19, 31345), (20, 31336), (21, 31327),

Gene: Periwinkle\_44 Start: 31386, Stop: 31228, Start Num: 17

Candidate Starts for Periwinkle\_44:

(1, 31620), (2, 31590), (3, 31587), (5, 31572), (6, 31560), (7, 31557), (8, 31554), (9, 31548), (10, 31545), (11, 31521), (12, 31518), (13, 31500), (Start: 14 @31440 has 2 MA's), (Start: 15 @31419 has 11 MA's), (16, 31389), (Start: 17 @31386 has 9 MA's), (19, 31326), (20, 31317), (21, 31308),

Gene: Phabuloso\_38 Start: 29697, Stop: 29485, Start Num: 14

Candidate Starts for Phabuloso\_38:

(1, 29877), (2, 29847), (5, 29829), (6, 29817), (7, 29814), (8, 29811), (9, 29805), (10, 29802), (11, 29778), (12, 29775), (13, 29757), (Start: 14 @29697 has 2 MA's), (Start: 15 @29676 has 11 MA's), (16, 29646), (Start: 17 @29643 has 9 MA's), (19, 29583), (20, 29574), (21, 29565),

Gene: RavenCo17\_38 Start: 30576, Stop: 30412, Start Num: 17

Candidate Starts for RavenCo17\_38:

(4, 30768), (Start: 17 @30576 has 9 MA's), (18, 30546), (19, 30510), (20, 30501), (21, 30492), (22, 30486),

Gene: ShawBrad\_40 Start: 29505, Stop: 29347, Start Num: 17

Candidate Starts for ShawBrad\_40:

(1, 29739), (2, 29709), (5, 29691), (6, 29679), (7, 29676), (8, 29673), (9, 29667), (10, 29664), (11, 29640), (12, 29637), (13, 29619), (Start: 14 @29559 has 2 MA's), (Start: 15 @29538 has 11 MA's), (16, 29508), (Start: 17 @29505 has 9 MA's), (19, 29445), (20, 29436), (21, 29427),

Gene: Suscepit\_37 Start: 29757, Stop: 29587, Start Num: 17

Candidate Starts for Suscepit\_37:

(Start: 17 @29757 has 9 MA's), (18, 29727), (19, 29691), (20, 29682), (21, 29673), (22, 29667),

Gene: Tayonia\_37 Start: 29756, Stop: 29586, Start Num: 17

Candidate Starts for Tayonia\_37:

(Start: 17 @29756 has 9 MA's), (18, 29726), (19, 29690), (20, 29681), (21, 29672), (22, 29666),

Gene: Trumpet\_37 Start: 29757, Stop: 29587, Start Num: 17

Candidate Starts for Trumpet\_37:

(Start: 17 @29757 has 9 MA's), (18, 29727), (19, 29691), (20, 29682), (21, 29673), (22, 29667),