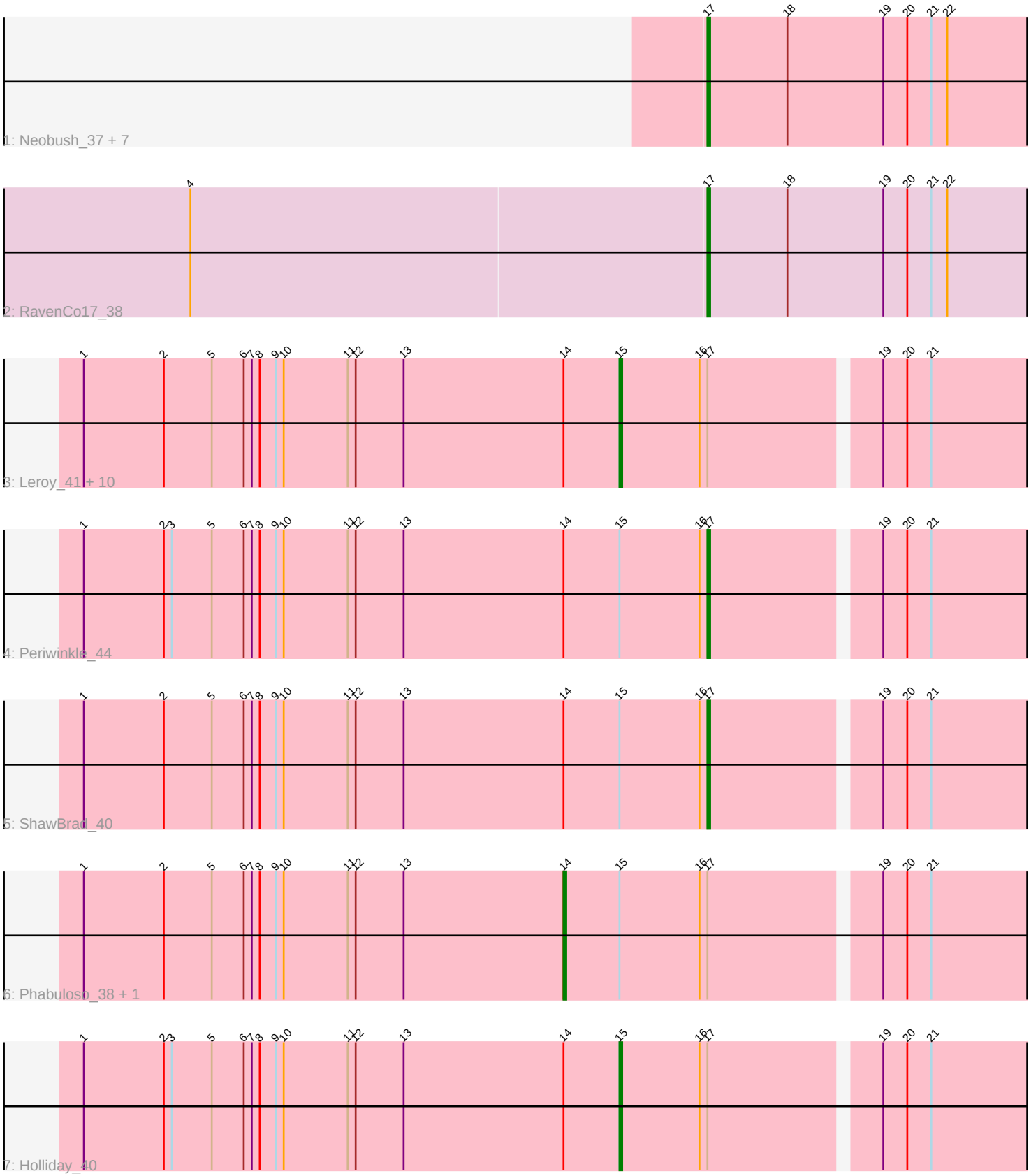
# Pham 344321


1: Neobush_37 + 7
2: RavenCo17_38
3: Leroy_41 + 10
4: Periwinkle_44
5: ShawBrad_40
6: Phabuloso_38 + 1
7: Holliday_40

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 344321 Report

This analysis was run 11/14/26 on database version 672.

Pham number 344321 has 25 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Neobush_37, Tayonia_37, Antonio_37, Manasvini_37, Kita_38, Suscepit_37, Dillpickles_39, 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 23 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, Dillpickles_39, Kita_38, Manasvini_37, Neobush_37, RavenCo17_38, Suscepit_37, Tayonia_37, Trumpet_37,

**Summary by start number:**

Start 14:
• Found in 16 of 25 ( 64.0% ) of genes in pham
• Manual Annotations of this start: 2 of 23
• 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 25 ( 64.0% ) of genes in pham
• Manual Annotations of this start: 11 of 23
• 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 25 of 25 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 10 of 23
• Called 44.0% of time when present
• Phage (with cluster) where this start called: Antonio_37 (CZ1), Dillpickles_39 (CZ1), Kita_38 (CZ1), Manasvini_37 (CZ1), Neobush_37 (CZ1), Periwinkle_44 (DN1), RavenCo17_38 (CZ8), ShawBrad_40 (DN1), Suscepit_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 2 times 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 10 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 10 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 10 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 10 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 10 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 10 MA's), (19, 27421), (20, 27412), (21, 27403),

Gene: Dillpickles_39 Start: 29800, Stop: 29630, Start Num: 17
Candidate Starts for Dillpickles_39:
(Start: 17 @29800 has 10 MA's), (18, 29770), (19, 29734), (20, 29725), (21, 29716), (22, 29710),

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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 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 10 MA's), (18, 29727), (19, 29691), (20, 29682), (21, 29673), (22, 29667),