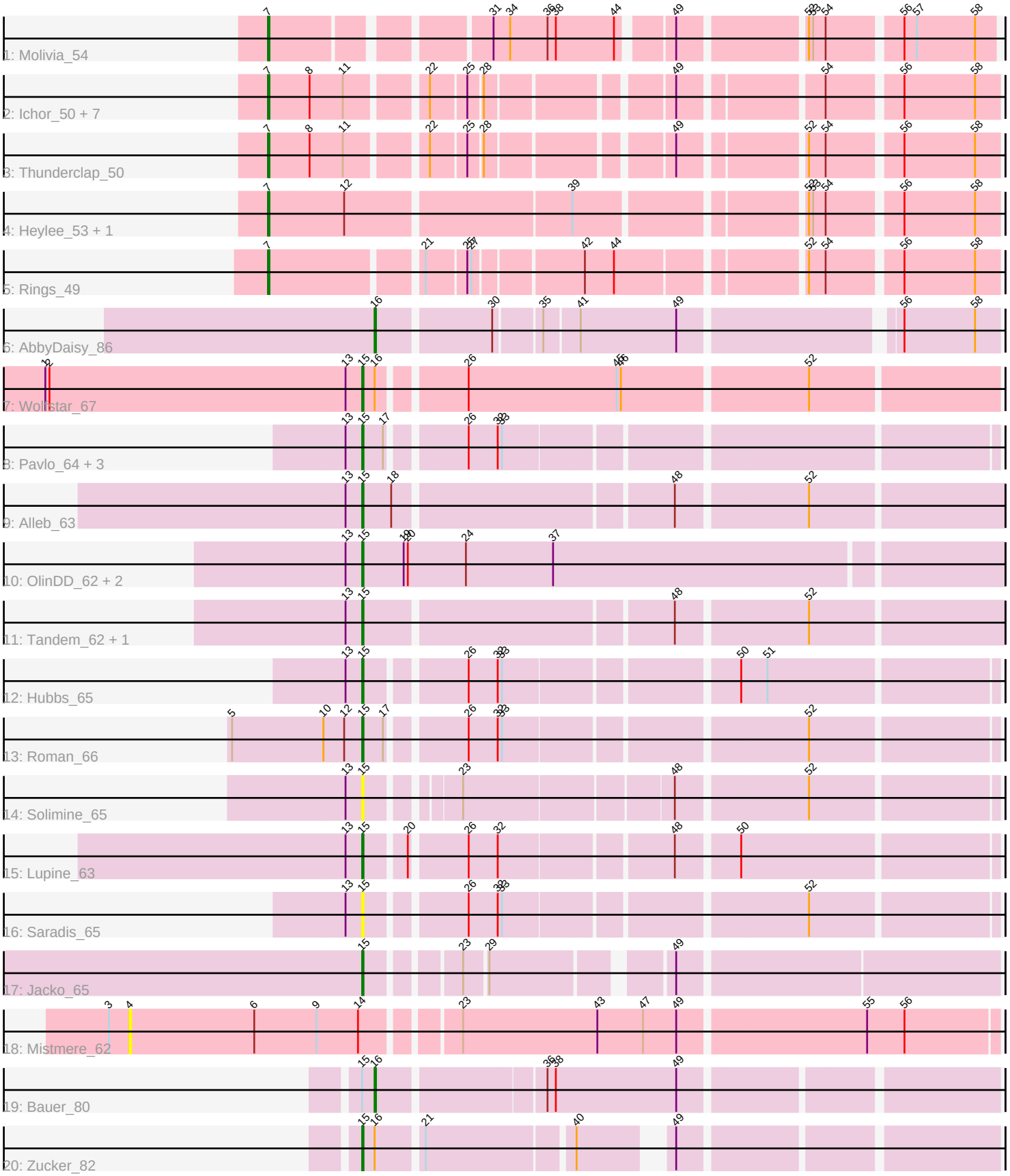
Pham 311823


1: Molivia_54
2: Ichor_50 + 7
3: Thunderclap_50
4: Heylee_53 + 1
5: Rings_49
6: AbbyDaisy_86
7: Wollstar_67
8: Pavlo_64 + 3
9: Alleb_63
10: OlinDD_62 + 2
11: Tandem_62 + 1
12: Hubbs_65
13: Roman_66
14: Solimine_65
15: Lupine_63
16: Saradis_65
17: Jacko_65
18: Mistmere_62
19: Bauer_80
20: Zucker_82

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 311823 Report

This analysis was run 06/27/26 on database version 652.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 311823 has 34 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Molivia_54
• Track 2 : Ichor_50, Anansi_50, Amigo_50, SorJuana_50, Yeezus_50, Jaek_50, Boersma_52, Gorgeous_50
• Track 3 : Thunderclap_50
• Track 4 : Heylee_53, Amavida_53
• Track 5 : Rings_49
• Track 6 : AbbyDaisy_86
• Track 7 : Wolfstar_67
• Track 8 : Pavlo_64, PhillyPhilly_64, DejaVu_66, Uterion_67
• Track 9 : Alleb_63
• Track 10 : OlinDD_62, Platte_62, Hortus1_62
• Track 11 : Tandem_62, Pioneer3_62
• Track 12 : Hubbs_65
• Track 13 : Roman_66
• Track 14 : Solimine_65
• Track 15 : Lupine_63
• Track 16 : Saradis_65
• Track 17 : Jacko_65
• Track 18 : Mistmere_62
• Track 19 : Bauer_80
• Track 20 : Zucker_82

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 15 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alleb_63, DejaVu_66, Hortus1_62, Hubbs_65, Jacko_65, Lupine_63, OlinDD_62, Pavlo_64, PhillyPhilly_64, Pioneer3_62, Platte_62, Roman_66, Saradis_65,

Solimine_65, Tandem_62, Uterion_67, Wolfstar_67, Zucker_82,

Genes that have the "Most Annotated" start but do not call it:
• Bauer_80,

Genes that do not have the "Most Annotated" start:
• AbbyDaisy_86, Amavida_53, Amigo_50, Anansi_50, Boersma_52, Gorgeous_50, Heylee_53, Ichor_50, Jaek_50, Mistmere_62, Molivia_54, Rings_49, SorJuana_50, Thunderclap_50, Yeezus_50,

Summary by start number:

Start 4:
• Found in 1 of 34 (2.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mistmere_62 (ED3),

Start 7:
• Found in 13 of 34 (38.2%) of genes in pham
• Manual Annotations of this start: 13 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amavida_53 (AQ), Amigo_50 (AQ), Anansi_50 (AQ), Boersma_52 (AQ), Gorgeous_50 (AQ), Heylee_53 (AQ), Ichor_50 (AQ), Jaek_50 (AQ), Molivia_54 (AQ), Rings_49 (AQ), SorJuana_50 (AQ), Thunderclap_50 (AQ), Yeezus_50 (AQ),

Start 15:
• Found in 19 of 34 (55.9%) of genes in pham
• Manual Annotations of this start: 15 of 30
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Alleb_63 (ED1), DejaVu_66 (ED1), Hortus1_62 (ED1), Hubbs_65 (ED1), Jacko_65 (ED1), Lupine_63 (ED1), OlinDD_62 (ED1), Pavlo_64 (ED1), PhillyPhilly_64 (ED1), Pioneer3_62 (ED1), Platte_62 (ED1), Roman_66 (ED1), Saradis_65 (ED1), Solimine_65 (ED1), Tandem_62 (ED1), Uterion_67 (ED1), Wolfstar_67 (ED), Zucker_82 (FN),

Start 16:
• Found in 4 of 34 (11.8%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_86 (AY), Bauer_80 (FN),

Summary by clusters:

There are 6 clusters represented in this pham: ED, AQ, ED3, ED1, AY, FN,

Info for manual annotations of cluster AQ:
•Start number 7 was manually annotated 13 times for cluster AQ.

Info for manual annotations of cluster AY:
•Start number 16 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster ED:
•Start number 15 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 15 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster FN:
•Start number 15 was manually annotated 1 time for cluster FN.
•Start number 16 was manually annotated 1 time for cluster FN.

Gene Information:

Gene: AbbyDaisy_86 Start: 49683, Stop: 50093, Start Num: 16
Candidate Starts for AbbyDaisy_86:
(Start: 16 @49683 has 2 MA's), (30, 49761), (35, 49791), (41, 49815), (49, 49884), (56, 50025), (58, 50076),

Gene: Alleb_63 Start: 38335, Stop: 37907, Start Num: 15
Candidate Starts for Alleb_63:
(13, 38347), (Start: 15 @38335 has 15 MA's), (18, 38314), (48, 38128), (52, 38041),

Gene: Amavida_53 Start: 33620, Stop: 33138, Start Num: 7
Candidate Starts for Amavida_53:
(Start: 7 @33620 has 13 MA's), (12, 33566), (39, 33413), (52, 33266), (53, 33263), (54, 33254), (56, 33206), (58, 33155),

Gene: Amigo_50 Start: 33507, Stop: 33049, Start Num: 7
Candidate Starts for Amigo_50:
(Start: 7 @33507 has 13 MA's), (8, 33477), (11, 33453), (22, 33405), (25, 33381), (28, 33372), (49, 33255), (54, 33165), (56, 33117), (58, 33066),

Gene: Anansi_50 Start: 33442, Stop: 32984, Start Num: 7
Candidate Starts for Anansi_50:
(Start: 7 @33442 has 13 MA's), (8, 33412), (11, 33388), (22, 33340), (25, 33316), (28, 33307), (49, 33190), (54, 33100), (56, 33052), (58, 33001),

Gene: Bauer_80 Start: 44429, Stop: 44842, Start Num: 16
Candidate Starts for Bauer_80:
(Start: 15 @44420 has 15 MA's), (Start: 16 @44429 has 2 MA's), (36, 44540), (38, 44546), (49, 44633),

Gene: Boersma_52 Start: 33507, Stop: 33049, Start Num: 7
Candidate Starts for Boersma_52:
(Start: 7 @33507 has 13 MA's), (8, 33477), (11, 33453), (22, 33405), (25, 33381), (28, 33372), (49, 33255), (54, 33165), (56, 33117), (58, 33066),

Gene: DejaVu_66 Start: 38300, Stop: 37887, Start Num: 15
Candidate Starts for DejaVu_66:
(13, 38312), (Start: 15 @38300 has 15 MA's), (17, 38285), (26, 38237), (32, 38216), (33, 38213),

Gene: Gorgeous_50 Start: 33442, Stop: 32984, Start Num: 7

Candidate Starts for Gorgeous_50:
(Start: 7 @33442 has 13 MA's), (8, 33412), (11, 33388), (22, 33340), (25, 33316), (28, 33307), (49, 33190), (54, 33100), (56, 33052), (58, 33001),

Gene: Heylee_53 Start: 33620, Stop: 33138, Start Num: 7
Candidate Starts for Heylee_53:
(Start: 7 @33620 has 13 MA's), (12, 33566), (39, 33413), (52, 33266), (53, 33263), (54, 33254), (56, 33206), (58, 33155),

Gene: Hortus1_62 Start: 38511, Stop: 38062, Start Num: 15
Candidate Starts for Hortus1_62:
(13, 38523), (Start: 15 @38511 has 15 MA's), (19, 38481), (20, 38478), (24, 38436), (37, 38373),

Gene: Hubbs_65 Start: 38508, Stop: 38095, Start Num: 15
Candidate Starts for Hubbs_65:
(13, 38520), (Start: 15 @38508 has 15 MA's), (26, 38445), (32, 38424), (33, 38421), (50, 38271), (51, 38253),

Gene: Ichor_50 Start: 33507, Stop: 33049, Start Num: 7
Candidate Starts for Ichor_50:
(Start: 7 @33507 has 13 MA's), (8, 33477), (11, 33453), (22, 33405), (25, 33381), (28, 33372), (49, 33255), (54, 33165), (56, 33117), (58, 33066),

Gene: Jacko_65 Start: 37248, Stop: 36841, Start Num: 15
Candidate Starts for Jacko_65:
(Start: 15 @37248 has 15 MA's), (23, 37191), (29, 37176), (49, 37062),

Gene: Jaek_50 Start: 33507, Stop: 33049, Start Num: 7
Candidate Starts for Jaek_50:
(Start: 7 @33507 has 13 MA's), (8, 33477), (11, 33453), (22, 33405), (25, 33381), (28, 33372), (49, 33255), (54, 33165), (56, 33117), (58, 33066),

Gene: Lupine_63 Start: 37714, Stop: 37301, Start Num: 15
Candidate Starts for Lupine_63:
(13, 37726), (Start: 15 @37714 has 15 MA's), (20, 37687), (26, 37651), (32, 37630), (48, 37516), (50, 37477),

Gene: Mistmere_62 Start: 37142, Stop: 36543, Start Num: 4
Candidate Starts for Mistmere_62:
(3, 37157), (4, 37142), (6, 37052), (9, 37007), (14, 36977), (23, 36917), (43, 36821), (47, 36788), (49, 36764), (55, 36635), (56, 36608),

Gene: Molivia_54 Start: 32524, Stop: 32063, Start Num: 7
Candidate Starts for Molivia_54:
(Start: 7 @32524 has 13 MA's), (31, 32389), (34, 32377), (36, 32350), (38, 32344), (44, 32302), (49, 32269), (52, 32188), (53, 32185), (54, 32176), (56, 32128), (57, 32119), (58, 32077),

Gene: OlinDD_62 Start: 38510, Stop: 38061, Start Num: 15
Candidate Starts for OlinDD_62:
(13, 38522), (Start: 15 @38510 has 15 MA's), (19, 38480), (20, 38477), (24, 38435), (37, 38372),

Gene: Pavlo_64 Start: 38359, Stop: 37946, Start Num: 15
Candidate Starts for Pavlo_64:

(13, 38371), (Start: 15 @38359 has 15 MA's), (17, 38344), (26, 38296), (32, 38275), (33, 38272),

Gene: PhillyPhilly_64 Start: 37893, Stop: 37480, Start Num: 15
Candidate Starts for PhillyPhilly_64:
(13, 37905), (Start: 15 @37893 has 15 MA's), (17, 37878), (26, 37830), (32, 37809), (33, 37806),

Gene: Pioneer3_62 Start: 38332, Stop: 37904, Start Num: 15
Candidate Starts for Pioneer3_62:
(13, 38344), (Start: 15 @38332 has 15 MA's), (48, 38125), (52, 38038),

Gene: Platte_62 Start: 38303, Stop: 37854, Start Num: 15
Candidate Starts for Platte_62:
(13, 38315), (Start: 15 @38303 has 15 MA's), (19, 38273), (20, 38270), (24, 38228), (37, 38165),

Gene: Rings_49 Start: 33579, Stop: 33109, Start Num: 7
Candidate Starts for Rings_49:
(Start: 7 @33579 has 13 MA's), (21, 33480), (25, 33453), (27, 33450), (42, 33378), (44, 33357), (52, 33237), (54, 33225), (56, 33177), (58, 33126),

Gene: Roman_66 Start: 38562, Stop: 38149, Start Num: 15
Candidate Starts for Roman_66:
(5, 38655), (10, 38589), (12, 38574), (Start: 15 @38562 has 15 MA's), (17, 38547), (26, 38499), (32, 38478), (33, 38475), (52, 38277),

Gene: Saradis_65 Start: 37952, Stop: 37539, Start Num: 15
Candidate Starts for Saradis_65:
(13, 37964), (Start: 15 @37952 has 15 MA's), (26, 37889), (32, 37868), (33, 37865), (52, 37667),

Gene: Solimine_65 Start: 38360, Stop: 37953, Start Num: 15
Candidate Starts for Solimine_65:
(13, 38372), (Start: 15 @38360 has 15 MA's), (23, 38306), (48, 38168), (52, 38081),

Gene: SorJuana_50 Start: 33442, Stop: 32984, Start Num: 7
Candidate Starts for SorJuana_50:
(Start: 7 @33442 has 13 MA's), (8, 33412), (11, 33388), (22, 33340), (25, 33316), (28, 33307), (49, 33190), (54, 33100), (56, 33052), (58, 33001),

Gene: Tandem_62 Start: 38430, Stop: 38002, Start Num: 15
Candidate Starts for Tandem_62:
(13, 38442), (Start: 15 @38430 has 15 MA's), (48, 38223), (52, 38136),

Gene: Thunderclap_50 Start: 33536, Stop: 33078, Start Num: 7
Candidate Starts for Thunderclap_50:
(Start: 7 @33536 has 13 MA's), (8, 33506), (11, 33482), (22, 33434), (25, 33410), (28, 33401), (49, 33284), (52, 33206), (54, 33194), (56, 33146), (58, 33095),

Gene: Uterion_67 Start: 38461, Stop: 38048, Start Num: 15
Candidate Starts for Uterion_67:
(13, 38473), (Start: 15 @38461 has 15 MA's), (17, 38446), (26, 38398), (32, 38377), (33, 38374),

Gene: Wolfstar_67 Start: 39602, Stop: 39174, Start Num: 15
Candidate Starts for Wolfstar_67:

(1, 39830), (2, 39827), (13, 39614), (Start: 15 @39602 has 15 MA's), (Start: 16 @39593 has 2 MA's), (26, 39539), (45, 39434), (46, 39431), (52, 39305),

Gene: Yeezus_50 Start: 33506, Stop: 33048, Start Num: 7
Candidate Starts for Yeezus_50:
(Start: 7 @33506 has 13 MA's), (8, 33476), (11, 33452), (22, 33404), (25, 33380), (28, 33371), (49, 33254), (54, 33164), (56, 33116), (58, 33065),

Gene: Zucker_82 Start: 48335, Stop: 48733, Start Num: 15
Candidate Starts for Zucker_82:
(Start: 15 @48335 has 15 MA's), (Start: 16 @48344 has 2 MA's), (21, 48374), (40, 48473), (49, 48524),