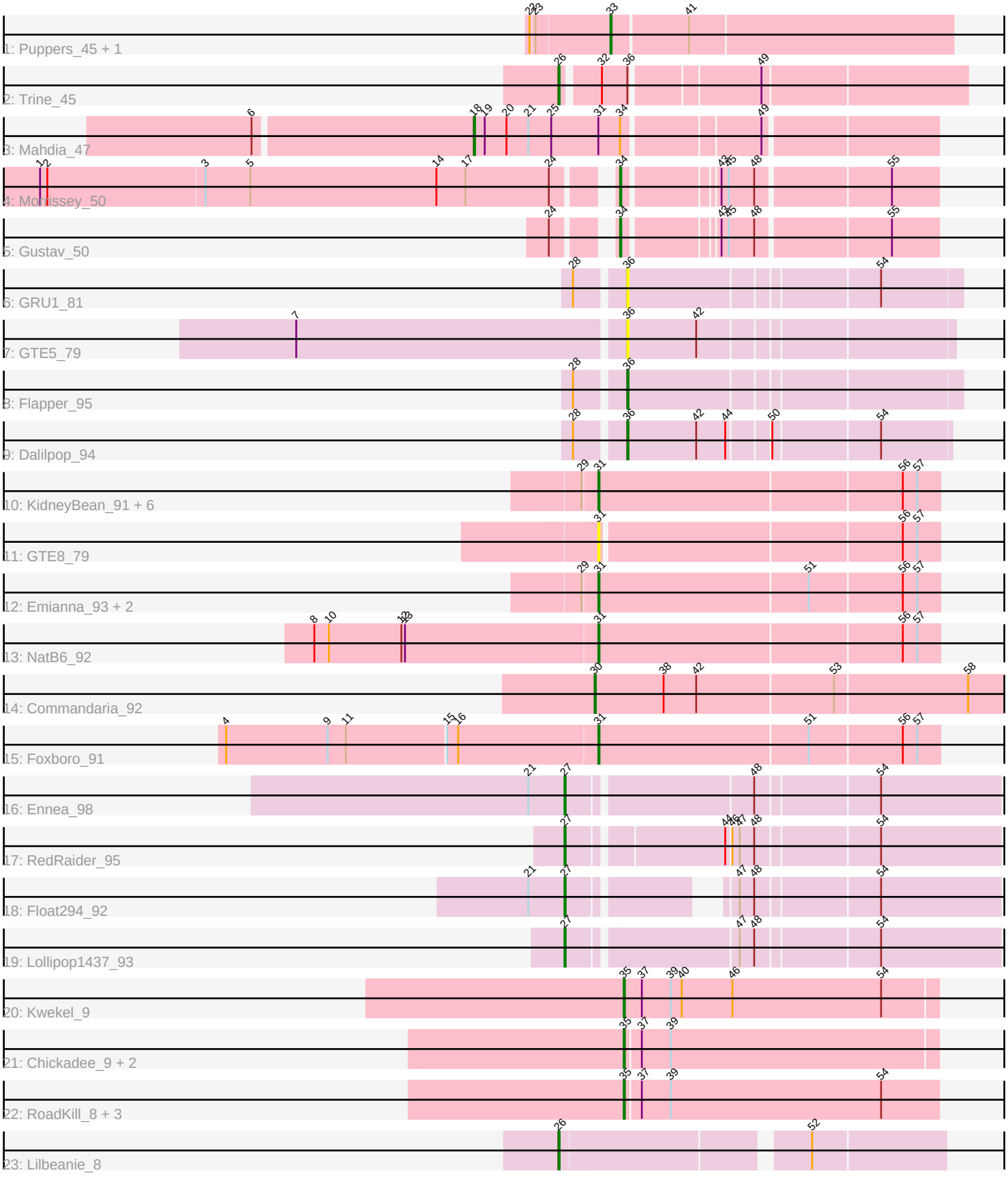
Pham 344201


1: Puppers_45 + 1
2: Trine_45
3: Mahdia_47
4: Morrissey_50
5: Gustav_50
6: GRU1_81
7: GTE5_79
8: Flapper_95
9: Dalilpop_94
10: KidneyBean_91 + 6
11: GTE8_79
12: Emianna_93 + 2
13: NatB6_92
14: Commandaria_92
15: Foxboro_91
16: Ennea_98
17: RedRaider_95
18: Float294_92
19: Lollipop1437_93
20: Kwekel_9
21: Chickadee_9 + 2
22: RoadKill_8 + 3
23: Lilbeanie_8

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 344201 Report

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

Pham number 344201 has 37 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Puppers_45, Widow_46
• Track 2 : Trine_45
• Track 3 : Mahdia_47
• Track 4 : Morrissey_50
• Track 5 : Gustav_50
• Track 6 : GRU1_81
• Track 7 : GTE5_79
• Track 8 : Flapper_95
• Track 9 : Dalilpop_94
• Track 10 : KidneyBean_91, Arti_89, Wheezy_90, GrootJr_93, Phomeo_90, Tracker_91, NovumRegina_91
• Track 11 : GTE8_79
• Track 12 : Emianna_93, Jifall16_91, Kurt_93
• Track 13 : NatB6_92
• Track 14 : Commandaria_92
• Track 15 : Foxboro_91
• Track 16 : Ennea_98
• Track 17 : RedRaider_95
• Track 18 : Float294_92
• Track 19 : Lollipop1437_93
• Track 20 : Kwekel_9
• Track 21 : Chickadee_9, GTE6_10, Tiamoceli_10
• Track 22 : RoadKill_8, Twonlo_8, EdmundFerry_8, Dexdert_10
• Track 23 : Lilbeanie_8

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

The start number called the most often in the published annotations is 31, it was called in 12 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_89, Emianna_93, Foxboro_91, GTE8_79, GrootJr_93, Jifall16_91, KidneyBean_91, Kurt_93, NatB6_92, NovumRegina_91, Phomeo_90, Tracker_91, Wheezy_90,

Genes that have the "Most Annotated" start but do not call it:
• Mahdia_47,

Genes that do not have the "Most Annotated" start:
• Chickadee_9, Commandaria_92, Dalilpop_94, Dexdert_10, EdmundFerry_8, Ennea_98, Flapper_95, Float294_92, GRU1_81, GTE5_79, GTE6_10, Gustav_50, Kwekel_9, Lilbeanie_8, Lollipop1437_93, Morrissey_50, Puppers_45, RedRaider_95, RoadKill_8, Tiamoceli_10, Trine_45, Twonlo_8, Widow_46,

Summary by start number:

Start 18:
• Found in 1 of 37 (2.7%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mahdia_47 (CD),

Start 26:
• Found in 2 of 37 (5.4%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lilbeanie_8 (DE5), Trine_45 (CD),

Start 27:
• Found in 4 of 37 (10.8%) of genes in pham
• Manual Annotations of this start: 4 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ennea_98 (CR3), Float294_92 (CR3), Lollipop1437_93 (CR3), RedRaider_95 (CR3),

Start 30:
• Found in 1 of 37 (2.7%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Commandaria_92 (CR2),

Start 31:
• Found in 14 of 37 (37.8%) of genes in pham
• Manual Annotations of this start: 12 of 33
• Called 92.9% of time when present
• Phage (with cluster) where this start called: Arti_89 (CR2), Emianna_93 (CR2), Foxboro_91 (CR2), GTE8_79 (CR2), GrootJr_93 (CR2), Jifall16_91 (CR2), KidneyBean_91 (CR2), Kurt_93 (CR2), NatB6_92 (CR2), NovumRegina_91 (CR2), Phomeo_90 (CR2), Tracker_91 (CR2), Wheezy_90 (CR2),

Start 33:
• Found in 2 of 37 (5.4%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Puppers_45 (CD), Widow_46 (CD),

Start 34:

• Found in 3 of 37 (8.1%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Gustav_50 (CD), Morrissey_50 (CD),

Start 35:
• Found in 8 of 37 (21.6%) of genes in pham
• Manual Annotations of this start: 7 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chickadee_9 (DE3), Dexdert_10 (DE3), EdmundFerry_8 (DE3), GTE6_10 (DE3), Kwekel_9 (DE3), RoadKill_8 (DE3), Tiamoceli_10 (DE3), Twonlo_8 (DE3),

Start 36:
• Found in 5 of 37 (13.5%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Dalilpop_94 (CR1), Flapper_95 (CR1), GRU1_81 (CR1), GTE5_79 (CR1),

Summary by clusters:

There are 6 clusters represented in this pham: CR2, CR3, CR1, DE3, DE5, CD,

Info for manual annotations of cluster CD:
•Start number 18 was manually annotated 1 time for cluster CD.
•Start number 26 was manually annotated 1 time for cluster CD.
•Start number 33 was manually annotated 2 times for cluster CD.
•Start number 34 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CR1:
•Start number 36 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 30 was manually annotated 1 time for cluster CR2.
•Start number 31 was manually annotated 12 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 27 was manually annotated 4 times for cluster CR3.

Info for manual annotations of cluster DE3:
•Start number 35 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE5:
•Start number 26 was manually annotated 1 time for cluster DE5.

Gene Information:

Gene: Arti_89 Start: 65186, Stop: 65461, Start Num: 31
Candidate Starts for Arti_89:
(29, 65174), (Start: 31 @65186 has 12 MA's), (56, 65432), (57, 65444),

Gene: Chickadee_9 Start: 4117, Stop: 4371, Start Num: 35
Candidate Starts for Chickadee_9:
(Start: 35 @4117 has 7 MA's), (37, 4129), (39, 4153),

Gene: Commandaria_92 Start: 66542, Stop: 66904, Start Num: 30
Candidate Starts for Commandaria_92:
(Start: 30 @66542 has 1 MA's), (38, 66599), (42, 66626), (53, 66737), (58, 66845),

Gene: Dalilpop_94 Start: 65641, Stop: 65892, Start Num: 36
Candidate Starts for Dalilpop_94:
(28, 65605), (Start: 36 @65641 has 2 MA's), (42, 65698), (44, 65722), (50, 65752), (54, 65836),

Gene: Dexdert_10 Start: 4578, Stop: 4823, Start Num: 35
Candidate Starts for Dexdert_10:
(Start: 35 @4578 has 7 MA's), (37, 4590), (39, 4605), (54, 4779),

Gene: EdmundFerry_8 Start: 4127, Stop: 4381, Start Num: 35
Candidate Starts for EdmundFerry_8:
(Start: 35 @4127 has 7 MA's), (37, 4139), (39, 4163), (54, 4337),

Gene: Emianna_93 Start: 66881, Stop: 67156, Start Num: 31
Candidate Starts for Emianna_93:
(29, 66869), (Start: 31 @66881 has 12 MA's), (51, 67052), (56, 67127), (57, 67139),

Gene: Ennea_98 Start: 66466, Stop: 66801, Start Num: 27
Candidate Starts for Ennea_98:
(21, 66436), (Start: 27 @66466 has 4 MA's), (48, 66607), (54, 66703),

Gene: Flapper_95 Start: 66149, Stop: 66409, Start Num: 36
Candidate Starts for Flapper_95:
(28, 66113), (Start: 36 @66149 has 2 MA's),

Gene: Float294_92 Start: 66408, Stop: 66716, Start Num: 27
Candidate Starts for Float294_92:
(21, 66378), (Start: 27 @66408 has 4 MA's), (47, 66510), (48, 66522), (54, 66618),

Gene: Foxboro_91 Start: 66505, Stop: 66780, Start Num: 31
Candidate Starts for Foxboro_91:
(4, 66205), (9, 66289), (11, 66304), (15, 66385), (16, 66394), (Start: 31 @66505 has 12 MA's), (51, 66676), (56, 66751), (57, 66763),

Gene: GRU1_81 Start: 57721, Stop: 57981, Start Num: 36
Candidate Starts for GRU1_81:
(28, 57685), (Start: 36 @57721 has 2 MA's), (54, 57916),

Gene: GTE5_79 Start: 58002, Stop: 58256, Start Num: 36
Candidate Starts for GTE5_79:
(7, 57738), (Start: 36 @58002 has 2 MA's), (42, 58059),

Gene: GTE6_10 Start: 4626, Stop: 4880, Start Num: 35
Candidate Starts for GTE6_10:
(Start: 35 @4626 has 7 MA's), (37, 4638), (39, 4662),

Gene: GTE8_79 Start: 58496, Stop: 58765, Start Num: 31
Candidate Starts for GTE8_79:
(Start: 31 @58496 has 12 MA's), (56, 58736), (57, 58748),

Gene: GrootJr_93 Start: 65899, Stop: 66174, Start Num: 31
Candidate Starts for GrootJr_93:
(29, 65887), (Start: 31 @65899 has 12 MA's), (56, 66145), (57, 66157),

Gene: Gustav_50 Start: 37089, Stop: 36850, Start Num: 34
Candidate Starts for Gustav_50:
(24, 37125), (Start: 34 @37089 has 2 MA's), (43, 37020), (45, 37014), (48, 36993), (55, 36888),

Gene: Jifall16_91 Start: 66148, Stop: 66423, Start Num: 31
Candidate Starts for Jifall16_91:
(29, 66136), (Start: 31 @66148 has 12 MA's), (51, 66319), (56, 66394), (57, 66406),

Gene: KidneyBean_91 Start: 66479, Stop: 66754, Start Num: 31
Candidate Starts for KidneyBean_91:
(29, 66467), (Start: 31 @66479 has 12 MA's), (56, 66725), (57, 66737),

Gene: Kurt_93 Start: 66896, Stop: 67171, Start Num: 31
Candidate Starts for Kurt_93:
(29, 66884), (Start: 31 @66896 has 12 MA's), (51, 67067), (56, 67142), (57, 67154),

Gene: Kwekel_9 Start: 4121, Stop: 4378, Start Num: 35
Candidate Starts for Kwekel_9:
(Start: 35 @4121 has 7 MA's), (37, 4136), (39, 4160), (40, 4169), (46, 4211), (54, 4334),

Gene: Lilbeanie_8 Start: 3584, Stop: 3880, Start Num: 26
Candidate Starts for Lilbeanie_8:
(Start: 26 @3584 has 2 MA's), (52, 3773),

Gene: Lollipop1437_93 Start: 66146, Stop: 66481, Start Num: 27
Candidate Starts for Lollipop1437_93:
(Start: 27 @66146 has 4 MA's), (47, 66275), (48, 66287), (54, 66383),

Gene: Mahdia_47 Start: 35973, Stop: 35611, Start Num: 18
Candidate Starts for Mahdia_47:
(6, 36150), (Start: 18 @35973 has 1 MA's), (19, 35964), (20, 35946), (21, 35928), (25, 35910), (Start: 31 @35871 has 12 MA's), (Start: 34 @35853 has 2 MA's), (49, 35748),

Gene: Morrissey_50 Start: 38409, Stop: 38170, Start Num: 34
Candidate Starts for Morrissey_50:
(1, 38862), (2, 38856), (3, 38727), (5, 38691), (14, 38538), (17, 38514), (24, 38445), (Start: 34 @38409 has 2 MA's), (43, 38340), (45, 38334), (48, 38313), (55, 38208),

Gene: NatB6_92 Start: 65769, Stop: 66044, Start Num: 31
Candidate Starts for NatB6_92:
(8, 65538), (10, 65550), (12, 65610), (13, 65613), (Start: 31 @65769 has 12 MA's), (56, 66015), (57, 66027),

Gene: NovumRegina_91 Start: 65898, Stop: 66173, Start Num: 31

Candidate Starts for NovumRegina_91:
(29, 65886), (Start: 31 @65898 has 12 MA's), (56, 66144), (57, 66156),

Gene: Phomeo_90 Start: 66149, Stop: 66424, Start Num: 31
Candidate Starts for Phomeo_90:
(29, 66137), (Start: 31 @66149 has 12 MA's), (56, 66395), (57, 66407),

Gene: Puppers_45 Start: 35534, Stop: 35259, Start Num: 33
Candidate Starts for Puppers_45:
(22, 35597), (23, 35594), (Start: 33 @35534 has 2 MA's), (41, 35474),

Gene: RedRaider_95 Start: 67268, Stop: 67600, Start Num: 27
Candidate Starts for RedRaider_95:
(Start: 27 @67268 has 4 MA's), (44, 67385), (46, 67388), (47, 67394), (48, 67406), (54, 67502),

Gene: RoadKill_8 Start: 3935, Stop: 4192, Start Num: 35
Candidate Starts for RoadKill_8:
(Start: 35 @3935 has 7 MA's), (37, 3947), (39, 3971), (54, 4145),

Gene: Tiamoceli_10 Start: 4971, Stop: 5225, Start Num: 35
Candidate Starts for Tiamoceli_10:
(Start: 35 @4971 has 7 MA's), (37, 4983), (39, 5007),

Gene: Tracker_91 Start: 65324, Stop: 65599, Start Num: 31
Candidate Starts for Tracker_91:
(29, 65312), (Start: 31 @65324 has 12 MA's), (56, 65570), (57, 65582),

Gene: Trine_45 Start: 35791, Stop: 35480, Start Num: 26
Candidate Starts for Trine_45:
(Start: 26 @35791 has 2 MA's), (32, 35764), (Start: 36 @35743 has 2 MA's), (49, 35644),

Gene: Twonlo_8 Start: 3935, Stop: 4192, Start Num: 35
Candidate Starts for Twonlo_8:
(Start: 35 @3935 has 7 MA's), (37, 3947), (39, 3971), (54, 4145),

Gene: Wheezy_90 Start: 65712, Stop: 65987, Start Num: 31
Candidate Starts for Wheezy_90:
(29, 65700), (Start: 31 @65712 has 12 MA's), (56, 65958), (57, 65970),

Gene: Widow_46 Start: 36178, Stop: 35903, Start Num: 33
Candidate Starts for Widow_46:
(22, 36241), (23, 36238), (Start: 33 @36178 has 2 MA's), (41, 36118),