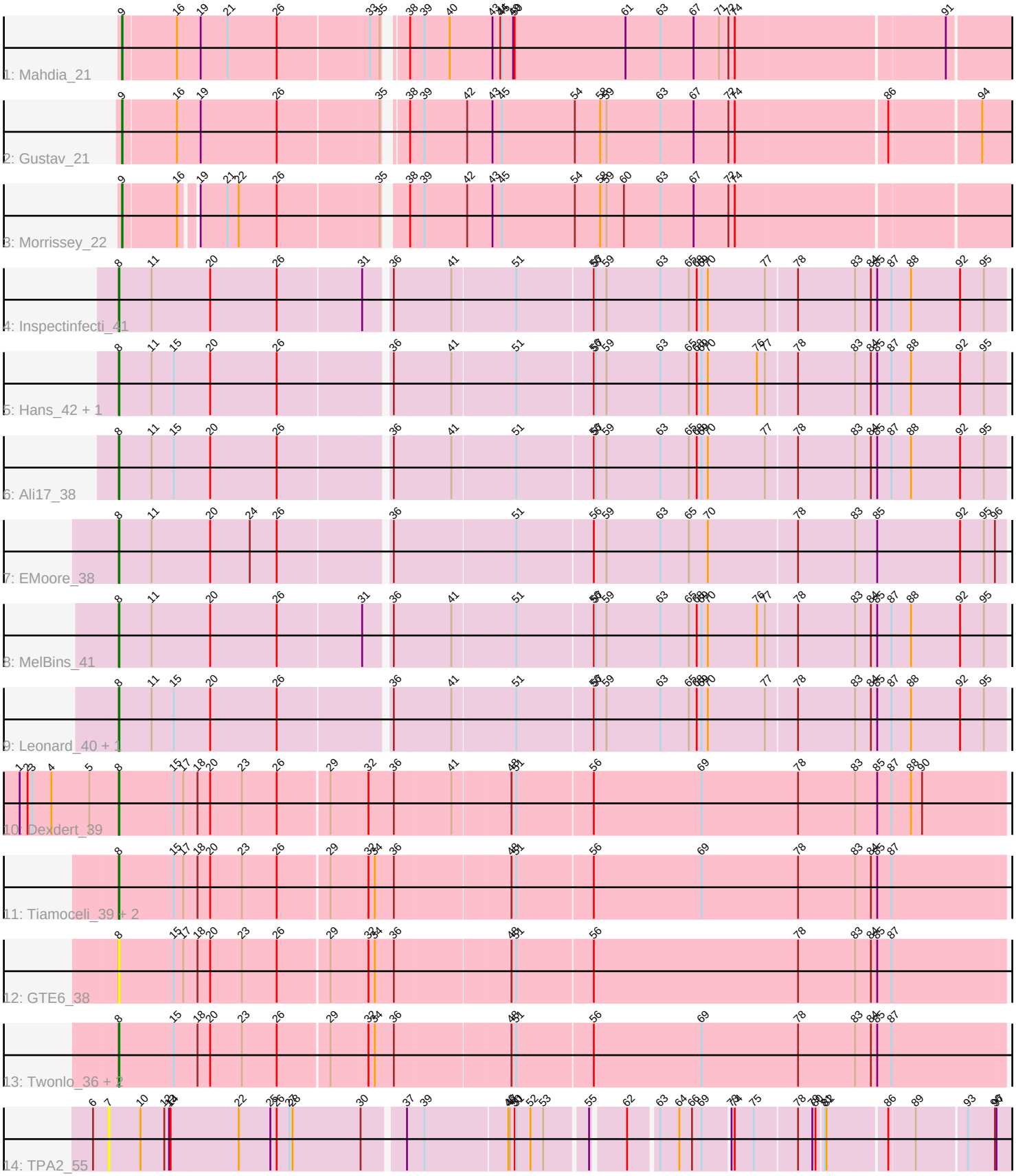
Pham 295110


1: Mahdia_21
2: Gustav_21
3: Morrissey_22
4: Inspectinfecti_41
5: Hans_42 + 1
6: Ali17_38
7: EMoore_38
8: MelBins_41
9: Leonard_40 + 1
10: Dexdert_39
11: Tiamoceli_39 + 2
12: GTE6_38
13: Twonlo_36 + 2
14: TPA2_55

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 295110 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295110 has 20 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Mahdia_21
• Track 2 : Gustav_21
• Track 3 : Morrissey_22
• Track 4 : Inspectinfecti_41
• Track 5 : Hans_42, Phauci_33
• Track 6 : Ali17_38
• Track 7 : EMoore_38
• Track 8 : MelBins_41
• Track 9 : Leonard_40, Phinally_40
• Track 10 : Dexdert_39
• Track 11 : Tiamoceli_39, Chickadee_38, Kwekel_38
• Track 12 : GTE6_38
• Track 13 : Twonlo_36, RoadKill_36, EdmundFerry_37
• Track 14 : TPA2_55

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

The start number called the most often in the published annotations is 8, it was called in 15 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ali17_38, Chickadee_38, Dexdert_39, EMoore_38, EdmundFerry_37, GTE6_38, Hans_42, Inspectinfecti_41, Kwekel_38, Leonard_40, MelBins_41, Phauci_33, Phinally_40, RoadKill_36, Tiamoceli_39, Twonlo_36,

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

Genes that do not have the "Most Annotated" start:
• Gustav_21, Mahdia_21, Morrissey_22, TPA2_55,

Summary by start number:

Start 7:

• Found in 1 of 20 (5.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TPA2_55 (singleton),

Start 8:
• Found in 16 of 20 (80.0%) of genes in pham
• Manual Annotations of this start: 15 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ali17_38 (DE2), Chickadee_38 (DE3), Dexdert_39 (DE3), EMoore_38 (DE2), EdmundFerry_37 (DE3), GTE6_38 (DE3), Hans_42 (DE2), Inspectinfecti_41 (DE2), Kwekel_38 (DE3), Leonard_40 (DE2), MelBins_41 (DE2), Phauci_33 (DE2), Phinally_40 (DE2), RoadKill_36 (DE3), Tiamoceli_39 (DE3), Twonlo_36 (DE3),

Start 9:
• Found in 3 of 20 (15.0%) of genes in pham
• Manual Annotations of this start: 3 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gustav_21 (CD), Mahdia_21 (CD), Morrissey_22 (CD),

Summary by clusters:

There are 4 clusters represented in this pham: singleton, DE3, DE2, CD,

Info for manual annotations of cluster CD:
•Start number 9 was manually annotated 3 times for cluster CD.

Info for manual annotations of cluster DE2:
•Start number 8 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:
•Start number 8 was manually annotated 7 times for cluster DE3.

Gene Information:

Gene: Ali17_38 Start: 35417, Stop: 37030, Start Num: 8
Candidate Starts for Ali17_38:
(Start: 8 @35417 has 15 MA's), (11, 35477), (15, 35519), (20, 35588), (26, 35714), (36, 35909), (41, 36014), (51, 36125), (56, 36266), (57, 36269), (59, 36290), (63, 36392), (65, 36446), (68, 36458), (69, 36467), (70, 36479), (77, 36584), (78, 36641), (83, 36749), (84, 36779), (85, 36791), (87, 36818), (88, 36854), (92, 36947), (95, 36992),

Gene: Chickadee_38 Start: 33890, Stop: 35524, Start Num: 8
Candidate Starts for Chickadee_38:
(Start: 8 @33890 has 15 MA's), (15, 33992), (17, 34010), (18, 34037), (20, 34061), (23, 34121), (26, 34187), (29, 34280), (32, 34349), (34, 34361), (36, 34397), (48, 34604), (51, 34613), (56, 34754), (69, 34955), (78, 35135), (83, 35243), (84, 35273), (85, 35285), (87, 35312),

Gene: Dexdert_39 Start: 34152, Stop: 35783, Start Num: 8

Candidate Starts for Dexdert_39:
(1, 33966), (2, 33981), (3, 33990), (4, 34026), (5, 34098), (Start: 8 @34152 has 15 MA's), (15, 34254), (17, 34272), (18, 34299), (20, 34323), (23, 34383), (26, 34449), (29, 34542), (32, 34611), (36, 34659), (41, 34764), (48, 34866), (51, 34875), (56, 35016), (69, 35217), (78, 35397), (83, 35505), (85, 35547), (87, 35574), (88, 35610), (90, 35631),

Gene: EMoore_38 Start: 36591, Stop: 38207, Start Num: 8
Candidate Starts for EMoore_38:
(Start: 8 @36591 has 15 MA's), (11, 36651), (20, 36762), (24, 36837), (26, 36888), (36, 37083), (51, 37299), (56, 37440), (59, 37464), (63, 37566), (65, 37620), (70, 37653), (78, 37815), (83, 37923), (85, 37965), (92, 38121), (95, 38166), (96, 38187),

Gene: EdmundFerry_37 Start: 33919, Stop: 35553, Start Num: 8
Candidate Starts for EdmundFerry_37:
(Start: 8 @33919 has 15 MA's), (15, 34021), (18, 34066), (20, 34090), (23, 34150), (26, 34216), (29, 34309), (32, 34378), (34, 34390), (36, 34426), (48, 34633), (51, 34642), (56, 34783), (69, 34984), (78, 35164), (83, 35272), (84, 35302), (85, 35314), (87, 35341),

Gene: GTE6_38 Start: 34411, Stop: 36045, Start Num: 8
Candidate Starts for GTE6_38:
(Start: 8 @34411 has 15 MA's), (15, 34513), (17, 34531), (18, 34558), (20, 34582), (23, 34642), (26, 34708), (29, 34801), (32, 34870), (34, 34882), (36, 34918), (48, 35125), (51, 35134), (56, 35275), (78, 35656), (83, 35764), (84, 35794), (85, 35806), (87, 35833),

Gene: Gustav_21 Start: 17436, Stop: 19031, Start Num: 9
Candidate Starts for Gustav_21:
(Start: 9 @17436 has 3 MA's), (16, 17535), (19, 17580), (26, 17724), (35, 17907), (38, 17934), (39, 17958), (42, 18039), (43, 18087), (45, 18105), (54, 18243), (58, 18291), (59, 18303), (63, 18402), (67, 18465), (72, 18531), (74, 18543), (86, 18819), (94, 18981),

Gene: Hans_42 Start: 36057, Stop: 37670, Start Num: 8
Candidate Starts for Hans_42:
(Start: 8 @36057 has 15 MA's), (11, 36117), (15, 36159), (20, 36228), (26, 36354), (36, 36549), (41, 36654), (51, 36765), (56, 36906), (57, 36909), (59, 36930), (63, 37032), (65, 37086), (68, 37098), (69, 37107), (70, 37119), (76, 37209), (77, 37224), (78, 37281), (83, 37389), (84, 37419), (85, 37431), (87, 37458), (88, 37494), (92, 37587), (95, 37632),

Gene: Inspectinfecti_41 Start: 36503, Stop: 38116, Start Num: 8
Candidate Starts for Inspectinfecti_41:
(Start: 8 @36503 has 15 MA's), (11, 36563), (20, 36674), (26, 36800), (31, 36953), (36, 36995), (41, 37100), (51, 37211), (56, 37352), (57, 37355), (59, 37376), (63, 37478), (65, 37532), (68, 37544), (69, 37553), (70, 37565), (77, 37670), (78, 37727), (83, 37835), (84, 37865), (85, 37877), (87, 37904), (88, 37940), (92, 38033), (95, 38078),

Gene: Kwekel_38 Start: 33851, Stop: 35485, Start Num: 8
Candidate Starts for Kwekel_38:
(Start: 8 @33851 has 15 MA's), (15, 33953), (17, 33971), (18, 33998), (20, 34022), (23, 34082), (26, 34148), (29, 34241), (32, 34310), (34, 34322), (36, 34358), (48, 34565), (51, 34574), (56, 34715), (69, 34916), (78, 35096), (83, 35204), (84, 35234), (85, 35246), (87, 35273),

Gene: Leonard_40 Start: 36143, Stop: 37756, Start Num: 8
Candidate Starts for Leonard_40:

(Start: 8 @36143 has 15 MA's), (11, 36203), (15, 36245), (20, 36314), (26, 36440), (36, 36635), (41, 36740), (51, 36851), (56, 36992), (57, 36995), (59, 37016), (63, 37118), (65, 37172), (68, 37184), (69, 37193), (70, 37205), (77, 37310), (78, 37367), (83, 37475), (84, 37505), (85, 37517), (87, 37544), (88, 37580), (92, 37673), (95, 37718),

Gene: Mahdia_21 Start: 17103, Stop: 18704, Start Num: 9
Candidate Starts for Mahdia_21:
(Start: 9 @17103 has 3 MA's), (16, 17202), (19, 17247), (21, 17298), (26, 17391), (33, 17559), (35, 17577), (38, 17604), (39, 17628), (40, 17676), (43, 17757), (44, 17772), (45, 17775), (49, 17796), (50, 17799), (61, 18009), (63, 18072), (67, 18135), (71, 18183), (72, 18201), (74, 18213), (91, 18591),

Gene: MelBins_41 Start: 36289, Stop: 37902, Start Num: 8
Candidate Starts for MelBins_41:
(Start: 8 @36289 has 15 MA's), (11, 36349), (20, 36460), (26, 36586), (31, 36739), (36, 36781), (41, 36886), (51, 36997), (56, 37138), (57, 37141), (59, 37162), (63, 37264), (65, 37318), (68, 37330), (69, 37339), (70, 37351), (76, 37441), (77, 37456), (78, 37513), (83, 37621), (84, 37651), (85, 37663), (87, 37690), (88, 37726), (92, 37819), (95, 37864),

Gene: Morrissey_22 Start: 18327, Stop: 19910, Start Num: 9
Candidate Starts for Morrissey_22:
(Start: 9 @18327 has 3 MA's), (16, 18426), (19, 18450), (21, 18501), (22, 18522), (26, 18594), (35, 18780), (38, 18813), (39, 18837), (42, 18918), (43, 18966), (45, 18984), (54, 19122), (58, 19170), (59, 19182), (60, 19215), (63, 19281), (67, 19344), (72, 19410), (74, 19422),

Gene: Phauci_33 Start: 32992, Stop: 34605, Start Num: 8
Candidate Starts for Phauci_33:
(Start: 8 @32992 has 15 MA's), (11, 33052), (15, 33094), (20, 33163), (26, 33289), (36, 33484), (41, 33589), (51, 33700), (56, 33841), (57, 33844), (59, 33865), (63, 33967), (65, 34021), (68, 34033), (69, 34042), (70, 34054), (76, 34144), (77, 34159), (78, 34216), (83, 34324), (84, 34354), (85, 34366), (87, 34393), (88, 34429), (92, 34522), (95, 34567),

Gene: Phinally_40 Start: 36140, Stop: 37753, Start Num: 8
Candidate Starts for Phinally_40:
(Start: 8 @36140 has 15 MA's), (11, 36200), (15, 36242), (20, 36311), (26, 36437), (36, 36632), (41, 36737), (51, 36848), (56, 36989), (57, 36992), (59, 37013), (63, 37115), (65, 37169), (68, 37181), (69, 37190), (70, 37202), (77, 37307), (78, 37364), (83, 37472), (84, 37502), (85, 37514), (87, 37541), (88, 37577), (92, 37670), (95, 37715),

Gene: RoadKill_36 Start: 33414, Stop: 35048, Start Num: 8
Candidate Starts for RoadKill_36:
(Start: 8 @33414 has 15 MA's), (15, 33516), (18, 33561), (20, 33585), (23, 33645), (26, 33711), (29, 33804), (32, 33873), (34, 33885), (36, 33921), (48, 34128), (51, 34137), (56, 34278), (69, 34479), (78, 34659), (83, 34767), (84, 34797), (85, 34809), (87, 34836),

Gene: TPA2_55 Start: 41077, Stop: 42684, Start Num: 7
Candidate Starts for TPA2_55:
(6, 41047), (7, 41077), (10, 41137), (12, 41182), (13, 41191), (14, 41194), (22, 41320), (25, 41377), (26, 41389), (27, 41413), (28, 41419), (30, 41548), (37, 41620), (39, 41653), (46, 41803), (47, 41806), (50, 41815), (51, 41818), (52, 41845), (53, 41869), (55, 41944), (62, 41998), (63, 42049), (64, 42085), (66, 42109), (69, 42124), (73, 42169), (74, 42175), (75, 42211), (78, 42289), (79, 42316), (80, 42322), (81, 42334), (82, 42337), (86, 42442), (89, 42490), (93, 42580), (96, 42631), (97, 42634),

Gene: Tiamoceli_39 Start: 34747, Stop: 36381, Start Num: 8

Candidate Starts for Tiamoceli_39:
(Start: 8 @34747 has 15 MA's), (15, 34849), (17, 34867), (18, 34894), (20, 34918), (23, 34978), (26, 35044), (29, 35137), (32, 35206), (34, 35218), (36, 35254), (48, 35461), (51, 35470), (56, 35611), (69, 35812), (78, 35992), (83, 36100), (84, 36130), (85, 36142), (87, 36169),

Gene: Twonlo_36 Start: 33365, Stop: 34999, Start Num: 8
Candidate Starts for Twonlo_36:
(Start: 8 @33365 has 15 MA's), (15, 33467), (18, 33512), (20, 33536), (23, 33596), (26, 33662), (29, 33755), (32, 33824), (34, 33836), (36, 33872), (48, 34079), (51, 34088), (56, 34229), (69, 34430), (78, 34610), (83, 34718), (84, 34748), (85, 34760), (87, 34787),