Pham 284042

1: Mao1_50
2: Madeline_44 + 1
3: Yeezy_44
4: Shlim410_47 + 5
5: DobbysSock_39 + 7
6: Powerball_44
7: MichaelScott_47
8: Dorito_42
9: Aloeri_46 + 6
10: Toron_46
11: MooMoo_44 + 2

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 284042 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284042 has 32 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Mao1_50
• Track 2 : Madeline_44, Ohgeesy_47
• Track 3 : Yeezy_44
• Track 4 : Shlim410_47, Howe_49, Twinkle_48, Mcklovin_45, Adora_46, Hortense_49
• Track 5 : DobbysSock_39, Tuti_48, Sekhmet_47, Thimann_44, Samman98_47, Clark_46, Beenie_40, Invectra_48
• Track 6 : Powerball_44
• Track 7 : MichaelScott_47
• Track 8 : Dorito_42
• Track 9 : Aloeri_46, DocMcStuffins_45, Awesomesauce_46, Misha28_44, TootsiePop_44, ChickenDinner_45, Piper2020_46
• Track 10 : Toron_46
• Track 11 : MooMoo_44, LunaStella_45, TChen_47

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

The start number called the most often in the published annotations is 17, it was called in 10 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloeri_46, Awesomesauce_46, ChickenDinner_45, DocMcStuffins_45, LunaStella_45, Misha28_44, MooMoo_44, Piper2020_46, TChen_47, TootsiePop_44,

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

Genes that do not have the "Most Annotated" start:
• Adora_46, Beenie_40, Clark_46, DobbysSock_39, Dorito_42, Hortense_49, Howe_49, Invectra_48, Madeline_44, Mao1_50, Mcklovin_45, MichaelScott_47, Ohgeesy_47, Powerball_44, Samman98_47, Sekhmet_47, Shlim410_47, Thimann_44, Toron_46, Tuti_48, Twinkle_48, Yeezy_44,

Summary by start number:

Start 15:
• Found in 2 of 32 (6.2%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Dorito_42 (CZ4),

Start 16:
• Found in 1 of 32 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toron_46 (F6),

Start 17:
• Found in 10 of 32 (31.2%) of genes in pham
• Manual Annotations of this start: 10 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aloeri_46 (F1), Awesomesauce_46 (F1), ChickenDinner_45 (F1), DocMcStuffins_45 (F1), LunaStella_45 (F4), Misha28_44 (F1), MooMoo_44 (singleton), Piper2020_46 (F1), TChen_47 (F4), TootsiePop_44 (F1),

Start 20:
• Found in 10 of 32 (31.2%) of genes in pham
• Manual Annotations of this start: 9 of 30
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Adora_46 (CZ4), Hortense_49 (CZ4), Howe_49 (CZ4), Madeline_44 (CZ1), Mcklovin_45 (CZ4), Ohgeesy_47 (CZ), Shlim410_47 (CZ4), Twinkle_48 (CZ4), Yeezy_44 (CZ3),

Start 21:
• Found in 11 of 32 (34.4%) of genes in pham
• Manual Annotations of this start: 9 of 30
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Beenie_40 (CZ4), Clark_46 (CZ4), DobbysSock_39 (CZ4), Invectra_48 (CZ4), MichaelScott_47 (CZ4), Powerball_44 (CZ4), Samman98_47 (CZ4), Sekhmet_47 (CZ4), Thimann_44 (CZ4), Tuti_48 (CZ4),

Start 23:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mao1_50 (AD),

Summary by clusters:

There are 9 clusters represented in this pham: F1, singleton, F4, AD, F6, CZ3, CZ1, CZ4, CZ,

Info for manual annotations of cluster AD:
•Start number 23 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster CZ:
•Start number 20 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 20 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ3:
•Start number 20 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 15 was manually annotated 1 time for cluster CZ4.
•Start number 20 was manually annotated 6 times for cluster CZ4.
•Start number 21 was manually annotated 9 times for cluster CZ4.

Info for manual annotations of cluster F1:
•Start number 17 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster F4:
•Start number 17 was manually annotated 2 times for cluster F4.

Gene Information:

Gene: Adora_46 Start: 36099, Stop: 36974, Start Num: 20
Candidate Starts for Adora_46:
(1, 35676), (2, 35724), (3, 35745), (6, 35835), (7, 35844), (9, 35865), (10, 35892), (11, 35919), (18, 36087), (Start: 20 @36099 has 9 MA's), (25, 36174), (27, 36204), (32, 36255), (38, 36312), (41, 36369), (42, 36390), (46, 36429), (51, 36573), (52, 36636), (54, 36654), (55, 36657), (57, 36690), (63, 36843), (68, 36945), (69, 36963),

Gene: Aloeri_46 Start: 34616, Stop: 35476, Start Num: 17
Candidate Starts for Aloeri_46:
(14, 34577), (Start: 17 @34616 has 10 MA's), (24, 34700), (25, 34712), (26, 34718), (27, 34742), (30, 34781), (33, 34796), (44, 34946), (46, 34958), (47, 34979), (53, 35162), (59, 35291), (62, 35351), (65, 35399), (67, 35438),

Gene: Awesomesauce_46 Start: 33878, Stop: 34738, Start Num: 17
Candidate Starts for Awesomesauce_46:
(14, 33839), (Start: 17 @33878 has 10 MA's), (24, 33962), (25, 33974), (26, 33980), (27, 34004), (30, 34043), (33, 34058), (44, 34208), (46, 34220), (47, 34241), (53, 34424), (59, 34553), (62, 34613), (65, 34661), (67, 34700),

Gene: Beenie_40 Start: 33513, Stop: 34385, Start Num: 21
Candidate Starts for Beenie_40:
(Start: 21 @33513 has 9 MA's), (25, 33585), (27, 33615), (32, 33666), (38, 33723), (41, 33780), (42, 33801), (46, 33840), (51, 33984), (52, 34047), (54, 34065), (55, 34068), (57, 34101), (63, 34254), (68, 34356), (69, 34374),

Gene: ChickenDinner_45 Start: 34616, Stop: 35476, Start Num: 17
Candidate Starts for ChickenDinner_45:

(14, 34577), (Start: 17 @34616 has 10 MA's), (24, 34700), (25, 34712), (26, 34718), (27, 34742), (30, 34781), (33, 34796), (44, 34946), (46, 34958), (47, 34979), (53, 35162), (59, 35291), (62, 35351), (65, 35399), (67, 35438),

Gene: Clark_46 Start: 33330, Stop: 34202, Start Num: 21
Candidate Starts for Clark_46:
(Start: 21 @33330 has 9 MA's), (25, 33402), (27, 33432), (32, 33483), (38, 33540), (41, 33597), (42, 33618), (46, 33657), (51, 33801), (52, 33864), (54, 33882), (55, 33885), (57, 33918), (63, 34071), (68, 34173), (69, 34191),

Gene: DobbysSock_39 Start: 32172, Stop: 33044, Start Num: 21
Candidate Starts for DobbysSock_39:
(Start: 21 @32172 has 9 MA's), (25, 32244), (27, 32274), (32, 32325), (38, 32382), (41, 32439), (42, 32460), (46, 32499), (51, 32643), (52, 32706), (54, 32724), (55, 32727), (57, 32760), (63, 32913), (68, 33015), (69, 33033),

Gene: DocMcStuffins_45 Start: 34616, Stop: 35476, Start Num: 17
Candidate Starts for DocMcStuffins_45:
(14, 34577), (Start: 17 @34616 has 10 MA's), (24, 34700), (25, 34712), (26, 34718), (27, 34742), (30, 34781), (33, 34796), (44, 34946), (46, 34958), (47, 34979), (53, 35162), (59, 35291), (62, 35351), (65, 35399), (67, 35438),

Gene: Dorito_42 Start: 31766, Stop: 32689, Start Num: 15
Candidate Starts for Dorito_42:
(8, 31538), (12, 31610), (13, 31712), (Start: 15 @31766 has 1 MA's), (Start: 21 @31817 has 9 MA's), (25, 31889), (27, 31919), (32, 31970), (38, 32027), (41, 32084), (42, 32105), (46, 32144), (51, 32288), (52, 32351), (54, 32369), (55, 32372), (57, 32405), (63, 32558), (68, 32660), (69, 32678),

Gene: Hortense_49 Start: 37454, Stop: 38329, Start Num: 20
Candidate Starts for Hortense_49:
(1, 37031), (2, 37079), (3, 37100), (6, 37190), (7, 37199), (9, 37220), (10, 37247), (11, 37274), (18, 37442), (Start: 20 @37454 has 9 MA's), (25, 37529), (27, 37559), (32, 37610), (38, 37667), (41, 37724), (42, 37745), (46, 37784), (51, 37928), (52, 37991), (54, 38009), (55, 38012), (57, 38045), (63, 38198), (68, 38300), (69, 38318),

Gene: Howe_49 Start: 37454, Stop: 38329, Start Num: 20
Candidate Starts for Howe_49:
(1, 37031), (2, 37079), (3, 37100), (6, 37190), (7, 37199), (9, 37220), (10, 37247), (11, 37274), (18, 37442), (Start: 20 @37454 has 9 MA's), (25, 37529), (27, 37559), (32, 37610), (38, 37667), (41, 37724), (42, 37745), (46, 37784), (51, 37928), (52, 37991), (54, 38009), (55, 38012), (57, 38045), (63, 38198), (68, 38300), (69, 38318),

Gene: Invectra_48 Start: 34904, Stop: 35776, Start Num: 21
Candidate Starts for Invectra_48:
(Start: 21 @34904 has 9 MA's), (25, 34976), (27, 35006), (32, 35057), (38, 35114), (41, 35171), (42, 35192), (46, 35231), (51, 35375), (52, 35438), (54, 35456), (55, 35459), (57, 35492), (63, 35645), (68, 35747), (69, 35765),

Gene: LunaStella_45 Start: 34115, Stop: 34981, Start Num: 17
Candidate Starts for LunaStella_45:
(Start: 17 @34115 has 10 MA's), (24, 34199), (25, 34211), (26, 34217), (27, 34241), (28, 34259), (34, 34304), (35, 34307), (37, 34343), (40, 34385), (43, 34439), (45, 34448), (46, 34454), (47, 34475), (48, 34535), (49, 34553), (56, 34694), (58, 34736), (60, 34811), (64, 34874), (66, 34907),

Gene: Madeline_44 Start: 35552, Stop: 36421, Start Num: 20
Candidate Starts for Madeline_44:
(Start: 20 @35552 has 9 MA's), (27, 35657), (28, 35675), (36, 35744), (46, 35876), (51, 36020), (52, 36083), (55, 36104), (57, 36137),

Gene: Mao1_50 Start: 43092, Stop: 43892, Start Num: 23
Candidate Starts for Mao1_50:
(19, 43029), (Start: 20 @43035 has 9 MA's), (Start: 23 @43092 has 1 MA's), (25, 43110), (26, 43116), (27, 43140), (28, 43158), (30, 43179), (35, 43206), (38, 43248), (39, 43278), (41, 43305), (46, 43365), (58, 43647), (60, 43722), (64, 43785), (66, 43818), (69, 43881),

Gene: Mcklovin_45 Start: 38921, Stop: 39796, Start Num: 20
Candidate Starts for Mcklovin_45:
(1, 38498), (2, 38546), (3, 38567), (6, 38657), (7, 38666), (9, 38687), (10, 38714), (11, 38741), (18, 38909), (Start: 20 @38921 has 9 MA's), (25, 38996), (27, 39026), (32, 39077), (38, 39134), (41, 39191), (42, 39212), (46, 39251), (51, 39395), (52, 39458), (54, 39476), (55, 39479), (57, 39512), (63, 39665), (68, 39767), (69, 39785),

Gene: MichaelScott_47 Start: 34807, Stop: 35679, Start Num: 21
Candidate Starts for MichaelScott_47:
(8, 34528), (12, 34600), (13, 34702), (Start: 15 @34756 has 1 MA's), (Start: 21 @34807 has 9 MA's), (25, 34879), (27, 34909), (32, 34960), (38, 35017), (41, 35074), (42, 35095), (46, 35134), (51, 35278), (52, 35341), (54, 35359), (55, 35362), (57, 35395), (63, 35548), (68, 35650), (69, 35668),

Gene: Misha28_44 Start: 33883, Stop: 34743, Start Num: 17
Candidate Starts for Misha28_44:
(14, 33844), (Start: 17 @33883 has 10 MA's), (24, 33967), (25, 33979), (26, 33985), (27, 34009), (30, 34048), (33, 34063), (44, 34213), (46, 34225), (47, 34246), (53, 34429), (59, 34558), (62, 34618), (65, 34666), (67, 34705),

Gene: MooMoo_44 Start: 34391, Stop: 35257, Start Num: 17
Candidate Starts for MooMoo_44:
(Start: 17 @34391 has 10 MA's), (24, 34475), (25, 34487), (26, 34493), (27, 34517), (28, 34535), (34, 34580), (35, 34583), (37, 34619), (40, 34661), (43, 34715), (45, 34724), (46, 34730), (47, 34751), (48, 34811), (49, 34829), (56, 34970), (58, 35012), (60, 35087), (64, 35150), (66, 35183),

Gene: Ohgeesy_47 Start: 36347, Stop: 37216, Start Num: 20
Candidate Starts for Ohgeesy_47:
(Start: 20 @36347 has 9 MA's), (27, 36452), (28, 36470), (36, 36539), (46, 36671), (51, 36815), (52, 36878), (55, 36899), (57, 36932),

Gene: Piper2020_46 Start: 34599, Stop: 35459, Start Num: 17
Candidate Starts for Piper2020_46:
(14, 34560), (Start: 17 @34599 has 10 MA's), (24, 34683), (25, 34695), (26, 34701), (27, 34725), (30, 34764), (33, 34779), (44, 34929), (46, 34941), (47, 34962), (53, 35145), (59, 35274), (62, 35334), (65, 35382), (67, 35421),

Gene: Powerball_44 Start: 33674, Stop: 34546, Start Num: 21
Candidate Starts for Powerball_44:
(4, 33329), (5, 33368), (12, 33503), (Start: 21 @33674 has 9 MA's), (25, 33746), (27, 33776), (32, 33827), (38, 33884), (41, 33941), (42, 33962), (46, 34001), (47, 34022), (51, 34145), (55, 34229), (63, 34415), (69, 34535),

Gene: Samman98_47 Start: 33433, Stop: 34305, Start Num: 21
Candidate Starts for Samman98_47:
(Start: 21 @33433 has 9 MA's), (25, 33505), (27, 33535), (32, 33586), (38, 33643), (41, 33700), (42, 33721), (46, 33760), (51, 33904), (52, 33967), (54, 33985), (55, 33988), (57, 34021), (63, 34174), (68, 34276), (69, 34294),

Gene: Sekhmet_47 Start: 34333, Stop: 35205, Start Num: 21
Candidate Starts for Sekhmet_47:
(Start: 21 @34333 has 9 MA's), (25, 34405), (27, 34435), (32, 34486), (38, 34543), (41, 34600), (42, 34621), (46, 34660), (51, 34804), (52, 34867), (54, 34885), (55, 34888), (57, 34921), (63, 35074), (68, 35176), (69, 35194),

Gene: Shlim410_47 Start: 37454, Stop: 38329, Start Num: 20
Candidate Starts for Shlim410_47:
(1, 37031), (2, 37079), (3, 37100), (6, 37190), (7, 37199), (9, 37220), (10, 37247), (11, 37274), (18, 37442), (Start: 20 @37454 has 9 MA's), (25, 37529), (27, 37559), (32, 37610), (38, 37667), (41, 37724), (42, 37745), (46, 37784), (51, 37928), (52, 37991), (54, 38009), (55, 38012), (57, 38045), (63, 38198), (68, 38300), (69, 38318),

Gene: TChen_47 Start: 36066, Stop: 36932, Start Num: 17
Candidate Starts for TChen_47:
(Start: 17 @36066 has 10 MA's), (24, 36150), (25, 36162), (26, 36168), (27, 36192), (28, 36210), (34, 36255), (35, 36258), (37, 36294), (40, 36336), (43, 36390), (45, 36399), (46, 36405), (47, 36426), (48, 36486), (49, 36504), (56, 36645), (58, 36687), (60, 36762), (64, 36825), (66, 36858),

Gene: Thimann_44 Start: 32698, Stop: 33570, Start Num: 21
Candidate Starts for Thimann_44:
(Start: 21 @32698 has 9 MA's), (25, 32770), (27, 32800), (32, 32851), (38, 32908), (41, 32965), (42, 32986), (46, 33025), (51, 33169), (52, 33232), (54, 33250), (55, 33253), (57, 33286), (63, 33439), (68, 33541), (69, 33559),

Gene: TootsiePop_44 Start: 33883, Stop: 34743, Start Num: 17
Candidate Starts for TootsiePop_44:
(14, 33844), (Start: 17 @33883 has 10 MA's), (24, 33967), (25, 33979), (26, 33985), (27, 34009), (30, 34048), (33, 34063), (44, 34213), (46, 34225), (47, 34246), (53, 34429), (59, 34558), (62, 34618), (65, 34666), (67, 34705),

Gene: Toron_46 Start: 35382, Stop: 36251, Start Num: 16
Candidate Starts for Toron_46:
(16, 35382), (22, 35412), (24, 35466), (25, 35478), (26, 35484), (27, 35508), (31, 35553), (46, 35724), (48, 35805), (50, 35865), (56, 35964), (58, 36006), (60, 36081), (64, 36144), (66, 36177),

Gene: Tuti_48 Start: 34148, Stop: 35020, Start Num: 21
Candidate Starts for Tuti_48:
(Start: 21 @34148 has 9 MA's), (25, 34220), (27, 34250), (32, 34301), (38, 34358), (41, 34415), (42, 34436), (46, 34475), (51, 34619), (52, 34682), (54, 34700), (55, 34703), (57, 34736), (63, 34889), (68, 34991), (69, 35009),

Gene: Twinkle_48 Start: 38513, Stop: 39388, Start Num: 20
Candidate Starts for Twinkle_48:
(1, 38090), (2, 38138), (3, 38159), (6, 38249), (7, 38258), (9, 38279), (10, 38306), (11, 38333), (18, 38501), (Start: 20 @38513 has 9 MA's), (25, 38588), (27, 38618), (32, 38669), (38, 38726), (41,

38783), (42, 38804), (46, 38843), (51, 38987), (52, 39050), (54, 39068), (55, 39071), (57, 39104), (63, 39257), (68, 39359), (69, 39377),

Gene: Yeezy_44 Start: 33390, Stop: 34265, Start Num: 20
Candidate Starts for Yeezy_44:
(Start: 20 @33390 has 9 MA's), (24, 33453), (27, 33495), (29, 33516), (32, 33546), (39, 33633), (41, 33660), (42, 33681), (46, 33720), (51, 33864), (52, 33927), (55, 33948), (56, 33951), (57, 33981), (61, 34077),