Pham 283947

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 283947 Report

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

Pham number 283947 has 43 members, 18 are drafts.

Phages represented in each track:
• Track 1 : Cooper_65
• Track 2 : Poster_62, Nanao_63, Lambano_62, Epah_62, Antihero_62, GinPorsche_62, Hally898_62, Ahwei_62
• Track 3 : Frederick_66, Renkei_62, Hydro_65, BobbyK_65, LittleDigger_62, Hangman_65, JoyceMaria_64
• Track 4 : JaguarMi_65, Fanaw_61, Xincheng_64
• Track 5 : Austelle_64, VioletZ_66
• Track 6 : BrownCNA_66, Mithril_64, Lolalove_66
• Track 7 : Heath_64
• Track 8 : Nigel_63
• Track 9 : Mudslide_64, Waleliano_64
• Track 10 : RawrgerThat_65
• Track 11 : Prince_63
• Track 12 : ChrisnMich_64
• Track 13 : Apex_65
• Track 14 : Zemanar_64
• Track 15 : Stinger_64
• Track 16 : Fortunato_65
• Track 17 : JAMaL_64
• Track 18 : Magpie_62
• Track 19 : KayaCho_64
• Track 20 : Hosp_062
• Track 21 : ForDig_65
• Track 22 : 39HC_064, 40BC_064
• Track 23 : Jolie1_064

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 23 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ahwei_62, Antihero_62, Apex_65, Austelle_64, BobbyK_65, BrownCNA_66, ChrisnMich_64, Cooper_65, Epah_62, Fanaw_61, Fortunato_65, Frederick_66,

GinPorsche_62, Hally898_62, Hangman_65, Heath_64, Hydro_65, JAMaL_64, JaguarMi_65, JoyceMaria_64, Lambano_62, LittleDigger_62, Lolalove_66, Magpie_62, Mithril_64, Mudslide_64, Nanao_63, Nigel_63, Poster_62, Prince_63, RawrgerThat_65, Renkei_62, Stinger_64, VioletZ_66, Waleliano_64, Xincheng_64, Zemanar_64,

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

Genes that do not have the "Most Annotated" start:
• 39HC_064, 40BC_064, ForDig_65, Hosp_062, Jolie1_064, KayaCho_64,

Summary by start number:

Start 2:
• Found in 5 of 43 (11.6%) of genes in pham
• Manual Annotations of this start: 2 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 39HC_064 (B6), 40BC_064 (B6), ForDig_65 (B6), Jolie1_064 (B6), KayaCho_64 (B6),

Start 3:
• Found in 1 of 43 (2.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hosp_062 (B6),

Start 8:
• Found in 37 of 43 (86.0%) of genes in pham
• Manual Annotations of this start: 23 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ahwei_62 (B4), Antihero_62 (B4), Apex_65 (B4), Austelle_64 (B4), BobbyK_65 (B4), BrownCNA_66 (B4), ChrisnMich_64 (B4), Cooper_65 (B4), Epah_62 (B4), Fanaw_61 (B4), Fortunato_65 (B4), Frederick_66 (B4), GinPorsche_62 (B4), Hally898_62 (B4), Hangman_65 (B4), Heath_64 (B4), Hydro_65 (B4), JAMaL_64 (B4), JaguarMi_65 (B4), JoyceMaria_64 (B4), Lambano_62 (B4), LittleDigger_62 (B4), Lolalove_66 (B4), Magpie_62 (B4), Mithril_64 (B4), Mudslide_64 (B4), Nanao_63 (B4), Nigel_63 (B4), Poster_62 (B4), Prince_63 (B4), RawrgerThat_65 (B4), Renkei_62 (B4), Stinger_64 (B4), VioletZ_66 (B4), Waleliano_64 (B4), Xincheng_64 (B4), Zemanar_64 (B4),

Summary by clusters:

There are 2 clusters represented in this pham: B4, B6,

Info for manual annotations of cluster B4:
•Start number 8 was manually annotated 23 times for cluster B4.

Info for manual annotations of cluster B6:
•Start number 2 was manually annotated 2 times for cluster B6.

Gene Information:

Gene: 39HC_064 Start: 57054, Stop: 57509, Start Num: 2
Candidate Starts for 39HC_064:
(Start: 2 @57054 has 2 MA's), (18, 57222), (22, 57252), (23, 57255), (27, 57294), (34, 57345), (36, 57351), (47, 57420),

Gene: 40BC_064 Start: 57054, Stop: 57509, Start Num: 2
Candidate Starts for 40BC_064:
(Start: 2 @57054 has 2 MA's), (18, 57222), (22, 57252), (23, 57255), (27, 57294), (34, 57345), (36, 57351), (47, 57420),

Gene: Ahwei_62 Start: 57673, Stop: 58074, Start Num: 8
Candidate Starts for Ahwei_62:
(4, 57598), (5, 57601), (Start: 8 @57673 has 23 MA's), (11, 57712), (22, 57784), (23, 57787), (25, 57814), (28, 57835), (31, 57850), (37, 57904), (40, 57934), (43, 57958), (48, 58000), (49, 58006), (50, 58009),

Gene: Antihero_62 Start: 57671, Stop: 58072, Start Num: 8
Candidate Starts for Antihero_62:
(4, 57596), (5, 57599), (Start: 8 @57671 has 23 MA's), (11, 57710), (22, 57782), (23, 57785), (25, 57812), (28, 57833), (31, 57848), (37, 57902), (40, 57932), (43, 57956), (48, 57998), (49, 58004), (50, 58007),

Gene: Apex_65 Start: 58788, Stop: 59168, Start Num: 8
Candidate Starts for Apex_65:
(Start: 8 @58788 has 23 MA's), (11, 58827), (15, 58857), (16, 58860), (22, 58899), (23, 58902), (28, 58950), (29, 58956), (33, 58971), (35, 58983), (41, 59031), (43, 59040),

Gene: Austelle_64 Start: 59242, Stop: 59613, Start Num: 8
Candidate Starts for Austelle_64:
(Start: 8 @59242 has 23 MA's), (11, 59281), (17, 59314), (20, 59335), (22, 59356), (23, 59359), (28, 59407), (29, 59413), (33, 59428), (37, 59440), (43, 59497), (50, 59548),

Gene: BobbyK_65 Start: 58550, Stop: 58954, Start Num: 8
Candidate Starts for BobbyK_65:
(Start: 8 @58550 has 23 MA's), (11, 58589), (17, 58622), (20, 58643), (22, 58664), (23, 58667), (25, 58694), (28, 58715), (31, 58730), (37, 58784), (40, 58814), (43, 58838), (50, 58889),

Gene: BrownCNA_66 Start: 58951, Stop: 59331, Start Num: 8
Candidate Starts for BrownCNA_66:
(Start: 8 @58951 has 23 MA's), (11, 58990), (22, 59062), (23, 59065), (25, 59092), (26, 59095), (28, 59113), (29, 59119), (33, 59134), (35, 59146), (41, 59194), (43, 59203),

Gene: ChrisnMich_64 Start: 57655, Stop: 58056, Start Num: 8
Candidate Starts for ChrisnMich_64:
(Start: 8 @57655 has 23 MA's), (11, 57694), (22, 57766), (23, 57769), (25, 57796), (28, 57817), (31, 57832), (37, 57886), (40, 57916), (43, 57940), (48, 57982), (49, 57988), (50, 57991),

Gene: Cooper_65 Start: 58044, Stop: 58496, Start Num: 8
Candidate Starts for Cooper_65:
(Start: 8 @58044 has 23 MA's), (20, 58143), (21, 58146), (22, 58164), (23, 58167), (26, 58197), (28, 58215), (29, 58221), (32, 58233), (33, 58236), (34, 58245), (35, 58248), (39, 58302), (43, 58347), (44,

58380), (45, 58383), (46, 58401), (50, 58425), (51, 58452),

Gene: Epah_62 Start: 57671, Stop: 58072, Start Num: 8
Candidate Starts for Epah_62:
(4, 57596), (5, 57599), (Start: 8 @57671 has 23 MA's), (11, 57710), (22, 57782), (23, 57785), (25, 57812), (28, 57833), (31, 57848), (37, 57902), (40, 57932), (43, 57956), (48, 57998), (49, 58004), (50, 58007),

Gene: Fanaw_61 Start: 58629, Stop: 59027, Start Num: 8
Candidate Starts for Fanaw_61:
(Start: 8 @58629 has 23 MA's), (14, 58695), (19, 58713), (22, 58743), (23, 58746), (28, 58794), (29, 58800), (33, 58815), (35, 58827), (42, 58872), (43, 58878), (45, 58914), (46, 58932), (50, 58956), (51, 58983),

Gene: ForDig_65 Start: 57245, Stop: 57769, Start Num: 2
Candidate Starts for ForDig_65:
(Start: 2 @57245 has 2 MA's), (22, 57449), (23, 57452), (24, 57473), (25, 57476), (27, 57482), (38, 57578), (47, 57680),

Gene: Fortunato_65 Start: 58649, Stop: 59032, Start Num: 8
Candidate Starts for Fortunato_65:
(Start: 8 @58649 has 23 MA's), (9, 58676), (13, 58715), (18, 58733), (22, 58763), (23, 58766), (25, 58793), (26, 58796), (28, 58814), (35, 58847), (41, 58895), (43, 58904),

Gene: Frederick_66 Start: 58650, Stop: 59054, Start Num: 8
Candidate Starts for Frederick_66:
(Start: 8 @58650 has 23 MA's), (11, 58689), (17, 58722), (20, 58743), (22, 58764), (23, 58767), (25, 58794), (28, 58815), (31, 58830), (37, 58884), (40, 58914), (43, 58938), (50, 58989),

Gene: GinPorsche_62 Start: 57671, Stop: 58072, Start Num: 8
Candidate Starts for GinPorsche_62:
(4, 57596), (5, 57599), (Start: 8 @57671 has 23 MA's), (11, 57710), (22, 57782), (23, 57785), (25, 57812), (28, 57833), (31, 57848), (37, 57902), (40, 57932), (43, 57956), (48, 57998), (49, 58004), (50, 58007),

Gene: Hally898_62 Start: 57686, Stop: 58087, Start Num: 8
Candidate Starts for Hally898_62:
(4, 57611), (5, 57614), (Start: 8 @57686 has 23 MA's), (11, 57725), (22, 57797), (23, 57800), (25, 57827), (28, 57848), (31, 57863), (37, 57917), (40, 57947), (43, 57971), (48, 58013), (49, 58019), (50, 58022),

Gene: Hangman_65 Start: 58849, Stop: 59253, Start Num: 8
Candidate Starts for Hangman_65:
(Start: 8 @58849 has 23 MA's), (11, 58888), (17, 58921), (20, 58942), (22, 58963), (23, 58966), (25, 58993), (28, 59014), (31, 59029), (37, 59083), (40, 59113), (43, 59137), (50, 59188),

Gene: Heath_64 Start: 58476, Stop: 58880, Start Num: 8
Candidate Starts for Heath_64:
(Start: 8 @58476 has 23 MA's), (11, 58515), (17, 58548), (20, 58569), (22, 58590), (23, 58593), (25, 58620), (28, 58641), (31, 58656), (37, 58710), (40, 58740), (50, 58815),

Gene: Hosp_062 Start: 55163, Stop: 55570, Start Num: 3
Candidate Starts for Hosp_062:

(3, 55163), (7, 55250), (18, 55331), (22, 55361), (23, 55364), (27, 55403), (34, 55454), (36, 55460), (45, 55502),

Gene: Hydro_65 Start: 58787, Stop: 59191, Start Num: 8
Candidate Starts for Hydro_65:
(Start: 8 @58787 has 23 MA's), (11, 58826), (17, 58859), (20, 58880), (22, 58901), (23, 58904), (25, 58931), (28, 58952), (31, 58967), (37, 59021), (40, 59051), (43, 59075), (50, 59126),

Gene: JAMaL_64 Start: 58680, Stop: 59081, Start Num: 8
Candidate Starts for JAMaL_64:
(Start: 8 @58680 has 23 MA's), (11, 58719), (22, 58791), (23, 58794), (25, 58821), (28, 58842), (31, 58857), (37, 58911), (40, 58941), (43, 58965), (50, 59016),

Gene: JaguarMi_65 Start: 59865, Stop: 60263, Start Num: 8
Candidate Starts for JaguarMi_65:
(Start: 8 @59865 has 23 MA's), (14, 59931), (19, 59949), (22, 59979), (23, 59982), (28, 60030), (29, 60036), (33, 60051), (35, 60063), (42, 60108), (43, 60114), (45, 60150), (46, 60168), (50, 60192), (51, 60219),

Gene: Jolie1_064 Start: 57168, Stop: 57692, Start Num: 2
Candidate Starts for Jolie1_064:
(1, 57132), (Start: 2 @57168 has 2 MA's), (11, 57288), (22, 57372), (23, 57375), (24, 57396), (27, 57405), (38, 57501), (45, 57582), (47, 57603),

Gene: JoyceMaria_64 Start: 58732, Stop: 59136, Start Num: 8
Candidate Starts for JoyceMaria_64:
(Start: 8 @58732 has 23 MA's), (11, 58771), (17, 58804), (20, 58825), (22, 58846), (23, 58849), (25, 58876), (28, 58897), (31, 58912), (37, 58966), (40, 58996), (43, 59020), (50, 59071),

Gene: KayaCho_64 Start: 57186, Stop: 57644, Start Num: 2
Candidate Starts for KayaCho_64:
(Start: 2 @57186 has 2 MA's), (22, 57390), (23, 57393), (24, 57414), (25, 57417), (27, 57423), (34, 57474), (47, 57549),

Gene: Lambano_62 Start: 57686, Stop: 58087, Start Num: 8
Candidate Starts for Lambano_62:
(4, 57611), (5, 57614), (Start: 8 @57686 has 23 MA's), (11, 57725), (22, 57797), (23, 57800), (25, 57827), (28, 57848), (31, 57863), (37, 57917), (40, 57947), (43, 57971), (48, 58013), (49, 58019), (50, 58022),

Gene: LittleDigger_62 Start: 57606, Stop: 58010, Start Num: 8
Candidate Starts for LittleDigger_62:
(Start: 8 @57606 has 23 MA's), (11, 57645), (17, 57678), (20, 57699), (22, 57720), (23, 57723), (25, 57750), (28, 57771), (31, 57786), (37, 57840), (40, 57870), (43, 57894), (50, 57945),

Gene: Lolalove_66 Start: 58810, Stop: 59190, Start Num: 8
Candidate Starts for Lolalove_66:
(Start: 8 @58810 has 23 MA's), (11, 58849), (22, 58921), (23, 58924), (25, 58951), (26, 58954), (28, 58972), (29, 58978), (33, 58993), (35, 59005), (41, 59053), (43, 59062),

Gene: Magpie_62 Start: 58576, Stop: 58944, Start Num: 8
Candidate Starts for Magpie_62:

(Start: 8 @58576 has 23 MA's), (11, 58615), (17, 58648), (20, 58669), (22, 58690), (23, 58693), (28, 58741), (29, 58747), (33, 58762), (37, 58774), (40, 58804), (43, 58828), (50, 58879),

Gene: Mithril_64 Start: 58806, Stop: 59186, Start Num: 8
Candidate Starts for Mithril_64:
(Start: 8 @58806 has 23 MA's), (11, 58845), (22, 58917), (23, 58920), (25, 58947), (26, 58950), (28, 58968), (29, 58974), (33, 58989), (35, 59001), (41, 59049), (43, 59058),

Gene: Mudslide_64 Start: 58881, Stop: 59282, Start Num: 8
Candidate Starts for Mudslide_64:
(Start: 8 @58881 has 23 MA's), (11, 58920), (22, 58992), (23, 58995), (25, 59022), (26, 59025), (28, 59043), (29, 59049), (33, 59064), (35, 59076), (42, 59127), (43, 59133), (44, 59166), (45, 59169), (46, 59187), (50, 59211),

Gene: Nanao_63 Start: 57676, Stop: 58077, Start Num: 8
Candidate Starts for Nanao_63:
(4, 57601), (5, 57604), (Start: 8 @57676 has 23 MA's), (11, 57715), (22, 57787), (23, 57790), (25, 57817), (28, 57838), (31, 57853), (37, 57907), (40, 57937), (43, 57961), (48, 58003), (49, 58009), (50, 58012),

Gene: Nigel_63 Start: 57675, Stop: 58109, Start Num: 8
Candidate Starts for Nigel_63:
(6, 57636), (Start: 8 @57675 has 23 MA's), (11, 57714), (12, 57738), (20, 57765), (22, 57786), (23, 57789), (25, 57816), (28, 57837), (37, 57906), (40, 57936), (42, 57954), (43, 57960), (44, 57993), (45, 57996), (50, 58038), (51, 58065),

Gene: Poster_62 Start: 57677, Stop: 58078, Start Num: 8
Candidate Starts for Poster_62:
(4, 57602), (5, 57605), (Start: 8 @57677 has 23 MA's), (11, 57716), (22, 57788), (23, 57791), (25, 57818), (28, 57839), (31, 57854), (37, 57908), (40, 57938), (43, 57962), (48, 58004), (49, 58010), (50, 58013),

Gene: Prince_63 Start: 58785, Stop: 59183, Start Num: 8
Candidate Starts for Prince_63:
(Start: 8 @58785 has 23 MA's), (11, 58824), (20, 58878), (22, 58899), (23, 58902), (28, 58950), (33, 58971), (35, 58983), (42, 59028), (43, 59034), (45, 59070), (46, 59088), (50, 59112), (51, 59139),

Gene: RawrgerThat_65 Start: 58627, Stop: 59010, Start Num: 8
Candidate Starts for RawrgerThat_65:
(Start: 8 @58627 has 23 MA's), (10, 58660), (13, 58693), (18, 58711), (22, 58741), (23, 58744), (28, 58792), (29, 58798), (33, 58813), (35, 58825), (41, 58873), (43, 58882),

Gene: Renkei_62 Start: 57600, Stop: 58004, Start Num: 8
Candidate Starts for Renkei_62:
(Start: 8 @57600 has 23 MA's), (11, 57639), (17, 57672), (20, 57693), (22, 57714), (23, 57717), (25, 57744), (28, 57765), (31, 57780), (37, 57834), (40, 57864), (43, 57888), (50, 57939),

Gene: Stinger_64 Start: 57598, Stop: 58032, Start Num: 8
Candidate Starts for Stinger_64:
(Start: 8 @57598 has 23 MA's), (11, 57637), (12, 57661), (20, 57688), (22, 57709), (23, 57712), (25, 57739), (28, 57760), (30, 57769), (37, 57829), (40, 57859), (42, 57877), (43, 57883), (44, 57916), (45, 57919), (46, 57937), (50, 57961), (51, 57988),

Gene: VioletZ_66 Start: 58743, Stop: 59114, Start Num: 8
Candidate Starts for VioletZ_66:
(Start: 8 @58743 has 23 MA's), (11, 58782), (17, 58815), (20, 58836), (22, 58857), (23, 58860), (28, 58908), (29, 58914), (33, 58929), (37, 58941), (43, 58998), (50, 59049),

Gene: Waleliano_64 Start: 58683, Stop: 59084, Start Num: 8
Candidate Starts for Waleliano_64:
(Start: 8 @58683 has 23 MA's), (11, 58722), (22, 58794), (23, 58797), (25, 58824), (26, 58827), (28, 58845), (29, 58851), (33, 58866), (35, 58878), (42, 58929), (43, 58935), (44, 58968), (45, 58971), (46, 58989), (50, 59013),

Gene: Xincheng_64 Start: 59816, Stop: 60214, Start Num: 8
Candidate Starts for Xincheng_64:
(Start: 8 @59816 has 23 MA's), (14, 59882), (19, 59900), (22, 59930), (23, 59933), (28, 59981), (29, 59987), (33, 60002), (35, 60014), (42, 60059), (43, 60065), (45, 60101), (46, 60119), (50, 60143), (51, 60170),

Gene: Zemanar_64 Start: 58518, Stop: 58901, Start Num: 8
Candidate Starts for Zemanar_64:
(Start: 8 @58518 has 23 MA's), (11, 58557), (20, 58617), (22, 58638), (23, 58641), (28, 58689), (29, 58695), (33, 58710), (35, 58722), (42, 58767), (43, 58773),