Pham 347866


1: BritBrat_55
2: Birdsong_58 + 4
3: Malisha_66
4: Malisha_62 + 1
5: Budski_65
6: BotCity_61
7: BearBQ_56
8: Ecliptus_61 + 1
9: MortyNRick_54
10: ODay_64 + 1
11: Kamaru_57 + 1
12: Whitney_59
13: BENtherdunthat_62
14: ShawBrad_64
15: Leroy_60
16: Periwinkle_70
17: Phabuloso_60
18: Horus_59
19: Phistory_59
20: CheeseTouch_63
21: Spooky_55
22: Apricot_60 + 1
23: Kuwabara_58
24: PhaoMing_45
25: GAL1_45

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 347866 Report

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

Pham number 347866 has 34 members, 3 are drafts.

Phages represented in each track:
• Track 1 : BritBrat_55
• Track 2 : Birdsong_58, Asapag_58, Kenna_58, Getalong_61, Lutum_63
• Track 3 : Malisha_66
• Track 4 : Malisha_62, Squiddly_58
• Track 5 : Budski_65
• Track 6 : BotCity_61
• Track 7 : BearBQ_56
• Track 8 : Ecliptus_61, Frickyeah_64
• Track 9 : MortyNRick_54
• Track 10 : ODay_64, Holliday_61
• Track 11 : Kamaru_57, LitninMcQueen_56
• Track 12 : Whitney_59
• Track 13 : BENtherdunthat_62
• Track 14 : ShawBrad_64
• Track 15 : Leroy_60
• Track 16 : Periwinkle_70
• Track 17 : Phabuloso_60
• Track 18 : Horus_59
• Track 19 : Phistory_59
• Track 20 : CheeseTouch_63
• Track 21 : Spooky_55
• Track 22 : Apricot_60, Crater_60
• Track 23 : Kuwabara_58
• Track 24 : PhaoMing_45
• Track 25 : GAL1_45

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

The start number called the most often in the published annotations is 20, it was called in 30 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apricot_60, Asapag_58, BENtherdunthat_62, BearBQ_56, Birdsong_58, BotCity_61, Budski_65, CheeseTouch_63, Crater_60, Ecliptus_61, Frickyeah_64, GAL1_45,

Getalong_61, Holliday_61, Horus_59, Kamaru_57, Kenna_58, Kuwabara_58, Leroy_60, LitninMcQueen_56, Lutum_63, Malisha_62, Malisha_66, MortyNRick_54, ODay_64, Periwinkle_70, Phabuloso_60, Phistory_59, ShawBrad_64, Spooky_55, Squiddly_58, Whitney_59,

Genes that have the "Most Annotated" start but do not call it:
• BritBrat_55, PhaoMing_45,

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

Summary by start number:

Start 20:
• Found in 34 of 34 (100.0%) of genes in pham
• Manual Annotations of this start: 30 of 31
• Called 94.1% of time when present
• Phage (with cluster) where this start called: Apricot_60 (DN3), Asapag_58 (DN1), BENtherdunthat_62 (DN1), BearBQ_56 (DN), Birdsong_58 (DN), BotCity_61 (DN), Budski_65 (DN), CheeseTouch_63 (DN1), Crater_60 (DN3), Ecliptus_61 (DN), Frickyeah_64 (DN1), GAL1_45 (singleton), Getalong_61 (DN1), Holliday_61 (DN1), Horus_59 (DN1), Kamaru_57 (DN1), Kenna_58 (DN1), Kuwabara_58 (DN4), Leroy_60 (DN1), LitninMcQueen_56 (DN1), Lutum_63 (DN1), Malisha_62 (DN), Malisha_66 (DN), MortyNRick_54 (DN), ODay_64 (DN), Periwinkle_70 (DN1), Phabuloso_60 (DN1), Phistory_59 (DN1), ShawBrad_64 (DN1), Spooky_55 (DN2), Squiddly_58 (DN2), Whitney_59 (DN1),

Start 21:
• Found in 26 of 34 (76.5%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 7.7% of time when present
• Phage (with cluster) where this start called: BritBrat_55 (CY2), PhaoMing_45 (UNK),

Summary by clusters:

There are 8 clusters represented in this pham: DN, CY2, singleton, DN4, DN1, DN3, DN2, UNK,

Info for manual annotations of cluster CY2:
•Start number 21 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:
•Start number 20 was manually annotated 9 times for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 20 was manually annotated 16 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 20 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:
•Start number 20 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 20 was manually annotated 1 time for cluster DN4.

Gene Information:

Gene: Apricot_60 Start: 38264, Stop: 38503, Start Num: 20
Candidate Starts for Apricot_60:
(2, 38111), (3, 38120), (6, 38168), (7, 38174), (Start: 20 @38264 has 30 MA's), (Start: 21 @38273 has 1 MA's), (23, 38279), (27, 38324), (28, 38330), (31, 38366), (34, 38375), (42, 38438), (43, 38444),

Gene: Asapag_58 Start: 37842, Stop: 38081, Start Num: 20
Candidate Starts for Asapag_58:
(10, 37779), (Start: 20 @37842 has 30 MA's), (Start: 21 @37851 has 1 MA's), (28, 37908), (31, 37944), (33, 37950), (34, 37953), (42, 38016), (43, 38022),

Gene: BENtherdunthat_62 Start: 39104, Stop: 39361, Start Num: 20
Candidate Starts for BENtherdunthat_62:
(Start: 20 @39104 has 30 MA's), (26, 39143), (39, 39278), (41, 39284), (45, 39305), (46, 39311),

Gene: BearBQ_56 Start: 39471, Stop: 39710, Start Num: 20
Candidate Starts for BearBQ_56:
(15, 39444), (Start: 20 @39471 has 30 MA's), (Start: 21 @39480 has 1 MA's), (23, 39486), (27, 39531), (28, 39537), (31, 39573), (33, 39579), (34, 39582), (42, 39645), (43, 39651),

Gene: Birdsong_58 Start: 38063, Stop: 38302, Start Num: 20
Candidate Starts for Birdsong_58:
(10, 38000), (Start: 20 @38063 has 30 MA's), (Start: 21 @38072 has 1 MA's), (28, 38129), (31, 38165), (33, 38171), (34, 38174), (42, 38237), (43, 38243),

Gene: BotCity_61 Start: 39287, Stop: 39526, Start Num: 20
Candidate Starts for BotCity_61:
(10, 39224), (Start: 20 @39287 has 30 MA's), (Start: 21 @39296 has 1 MA's), (27, 39347), (28, 39353), (32, 39392), (33, 39395), (34, 39398), (42, 39461), (43, 39467),

Gene: BritBrat_55 Start: 39331, Stop: 39576, Start Num: 21
Candidate Starts for BritBrat_55:
(9, 39250), (11, 39256), (Start: 20 @39322 has 30 MA's), (Start: 21 @39331 has 1 MA's), (22, 39334), (23, 39337), (29, 39400), (35, 39472), (37, 39484), (39, 39496), (44, 39517), (45, 39523), (46, 39529), (47, 39535), (48, 39559),

Gene: Budski_65 Start: 40250, Stop: 40489, Start Num: 20
Candidate Starts for Budski_65:
(10, 40187), (Start: 20 @40250 has 30 MA's), (Start: 21 @40259 has 1 MA's), (27, 40310), (28, 40316), (30, 40346), (31, 40352), (32, 40355), (33, 40358), (34, 40361), (42, 40424), (43, 40430),

Gene: CheeseTouch_63 Start: 35514, Stop: 35771, Start Num: 20
Candidate Starts for CheeseTouch_63:
(Start: 20 @35514 has 30 MA's), (25, 35550), (26, 35553), (32, 35631), (39, 35688), (41, 35694), (46, 35721), (47, 35727), (49, 35757),

Gene: Crater_60 Start: 38659, Stop: 38898, Start Num: 20
Candidate Starts for Crater_60:
(2, 38506), (3, 38515), (6, 38563), (7, 38569), (Start: 20 @38659 has 30 MA's), (Start: 21 @38668 has 1 MA's), (23, 38674), (27, 38719), (28, 38725), (31, 38761), (34, 38770), (42, 38833), (43, 38839),

Gene: Ecliptus_61 Start: 40444, Stop: 40701, Start Num: 20
Candidate Starts for Ecliptus_61:
(Start: 20 @40444 has 30 MA's), (24, 40468), (25, 40480), (26, 40483), (32, 40561), (41, 40624), (46, 40651), (47, 40657), (49, 40687),

Gene: Frickyeah_64 Start: 38511, Stop: 38768, Start Num: 20
Candidate Starts for Frickyeah_64:
(Start: 20 @38511 has 30 MA's), (24, 38535), (25, 38547), (26, 38550), (32, 38628), (41, 38691), (46, 38718), (47, 38724), (49, 38754),

Gene: GAL1_45 Start: 34356, Stop: 34607, Start Num: 20
Candidate Starts for GAL1_45:
(12, 34302), (17, 34338), (Start: 20 @34356 has 30 MA's), (Start: 21 @34365 has 1 MA's), (27, 34416), (34, 34467), (36, 34500), (38, 34509), (40, 34521), (42, 34530), (43, 34536),

Gene: Getalong_61 Start: 40094, Stop: 40333, Start Num: 20
Candidate Starts for Getalong_61:
(10, 40031), (Start: 20 @40094 has 30 MA's), (Start: 21 @40103 has 1 MA's), (28, 40160), (31, 40196), (33, 40202), (34, 40205), (42, 40268), (43, 40274),

Gene: Holliday_61 Start: 39829, Stop: 40068, Start Num: 20
Candidate Starts for Holliday_61:
(18, 39823), (Start: 20 @39829 has 30 MA's), (Start: 21 @39838 has 1 MA's), (28, 39895), (32, 39934), (33, 39937), (34, 39940), (42, 40003), (43, 40009),

Gene: Horus_59 Start: 39218, Stop: 39457, Start Num: 20
Candidate Starts for Horus_59:
(Start: 20 @39218 has 30 MA's), (Start: 21 @39227 has 1 MA's), (23, 39233), (28, 39284), (32, 39323), (33, 39326), (34, 39329), (42, 39392), (43, 39398),

Gene: Kamaru_57 Start: 38326, Stop: 38565, Start Num: 20
Candidate Starts for Kamaru_57:
(Start: 20 @38326 has 30 MA's), (Start: 21 @38335 has 1 MA's), (27, 38386), (28, 38392), (30, 38422), (31, 38428), (32, 38431), (33, 38434), (34, 38437), (42, 38500), (43, 38506),

Gene: Kenna_58 Start: 38295, Stop: 38534, Start Num: 20
Candidate Starts for Kenna_58:
(10, 38232), (Start: 20 @38295 has 30 MA's), (Start: 21 @38304 has 1 MA's), (28, 38361), (31, 38397), (33, 38403), (34, 38406), (42, 38469), (43, 38475),

Gene: Kuwabara_58 Start: 39769, Stop: 40038, Start Num: 20
Candidate Starts for Kuwabara_58:
(8, 39682), (Start: 20 @39769 has 30 MA's), (24, 39793), (25, 39805), (26, 39808), (32, 39886), (39, 39943), (41, 39949), (45, 39970), (46, 39976), (47, 39982), (49, 40024),

Gene: Leroy_60 Start: 38595, Stop: 38834, Start Num: 20
Candidate Starts for Leroy_60:

(19, 38589), (Start: 20 @38595 has 30 MA's), (Start: 21 @38604 has 1 MA's), (28, 38661), (32, 38700), (33, 38703), (34, 38706), (42, 38769), (43, 38775),

Gene: LitninMcQueen_56 Start: 38073, Stop: 38312, Start Num: 20
Candidate Starts for LitninMcQueen_56:
(Start: 20 @38073 has 30 MA's), (Start: 21 @38082 has 1 MA's), (27, 38133), (28, 38139), (30, 38169), (31, 38175), (32, 38178), (33, 38181), (34, 38184), (42, 38247), (43, 38253),

Gene: Lutum_63 Start: 39459, Stop: 39698, Start Num: 20
Candidate Starts for Lutum_63:
(10, 39396), (Start: 20 @39459 has 30 MA's), (Start: 21 @39468 has 1 MA's), (28, 39525), (31, 39561), (33, 39567), (34, 39570), (42, 39633), (43, 39639),

Gene: Malisha_66 Start: 41157, Stop: 41402, Start Num: 20
Candidate Starts for Malisha_66:
(5, 41055), (12, 41103), (Start: 20 @41157 has 30 MA's), (Start: 21 @41166 has 1 MA's), (22, 41169), (23, 41172), (34, 41268), (36, 41301), (38, 41310), (40, 41322), (42, 41331), (43, 41337),

Gene: Malisha_62 Start: 40279, Stop: 40536, Start Num: 20
Candidate Starts for Malisha_62:
(Start: 20 @40279 has 30 MA's), (24, 40303), (25, 40315), (26, 40318), (32, 40396), (41, 40459), (46, 40486), (47, 40492),

Gene: MortyNRick_54 Start: 39510, Stop: 39749, Start Num: 20
Candidate Starts for MortyNRick_54:
(Start: 20 @39510 has 30 MA's), (Start: 21 @39519 has 1 MA's), (23, 39525), (27, 39570), (28, 39576), (31, 39612), (33, 39618), (34, 39621), (42, 39684), (43, 39690),

Gene: ODay_64 Start: 40499, Stop: 40738, Start Num: 20
Candidate Starts for ODay_64:
(18, 40493), (Start: 20 @40499 has 30 MA's), (Start: 21 @40508 has 1 MA's), (28, 40565), (32, 40604), (33, 40607), (34, 40610), (42, 40673), (43, 40679),

Gene: Periwinkle_70 Start: 41840, Stop: 42097, Start Num: 20
Candidate Starts for Periwinkle_70:
(Start: 20 @41840 has 30 MA's), (24, 41864), (25, 41876), (26, 41879), (32, 41957), (39, 42014), (41, 42020), (46, 42047),

Gene: Phabuloso_60 Start: 38504, Stop: 38743, Start Num: 20
Candidate Starts for Phabuloso_60:
(6, 38408), (7, 38414), (13, 38459), (14, 38471), (16, 38480), (Start: 20 @38504 has 30 MA's), (Start: 21 @38513 has 1 MA's), (27, 38564), (28, 38570), (42, 38678), (43, 38684),

Gene: PhaoMing_45 Start: 35454, Stop: 35690, Start Num: 21
Candidate Starts for PhaoMing_45:
(Start: 20 @35445 has 30 MA's), (Start: 21 @35454 has 1 MA's), (22, 35457), (23, 35460), (31, 35547), (33, 35553), (36, 35589), (40, 35610), (42, 35619), (43, 35625),

Gene: Phistory_59 Start: 37758, Stop: 37997, Start Num: 20
Candidate Starts for Phistory_59:
(1, 37596), (4, 37629), (Start: 20 @37758 has 30 MA's), (Start: 21 @37767 has 1 MA's), (23, 37773), (27, 37818), (28, 37824), (30, 37854), (31, 37860), (33, 37866), (34, 37869), (42, 37932), (43, 37938),

Gene: ShawBrad_64 Start: 38921, Stop: 39160, Start Num: 20
Candidate Starts for ShawBrad_64:
(Start: 20 @38921 has 30 MA's), (Start: 21 @38930 has 1 MA's), (28, 38987), (42, 39095), (43, 39101),

Gene: Spooky_55 Start: 37854, Stop: 38102, Start Num: 20
Candidate Starts for Spooky_55:
(5, 37752), (12, 37800), (Start: 20 @37854 has 30 MA's), (Start: 21 @37863 has 1 MA's), (22, 37866), (23, 37869), (34, 37965), (36, 37998), (38, 38007), (40, 38019), (42, 38028), (43, 38034), (48, 38085),

Gene: Squiddly_58 Start: 39792, Stop: 40049, Start Num: 20
Candidate Starts for Squiddly_58:
(Start: 20 @39792 has 30 MA's), (24, 39816), (25, 39828), (26, 39831), (32, 39909), (41, 39972), (46, 39999), (47, 40005),

Gene: Whitney_59 Start: 40077, Stop: 40322, Start Num: 20
Candidate Starts for Whitney_59:
(Start: 20 @40077 has 30 MA's), (Start: 21 @40086 has 1 MA's), (28, 40143), (34, 40188), (42, 40251), (43, 40257),