Pham 345828


1: Isca_84
2: Cat_75 + 1
3: Rockstar_76
4: Phantastic_88
5: DrManhattan_47 + 1
6: PandaPo_48 + 1
7: Reedo_47
8: Tallboi_47
9: Soondubu_41
10: SFuller_107
11: Jflix2_106
12: Madraxi_108
13: Yvonnetastic_202
14: JonJames_201
15: Cardigan_202
16: Guey18_81
17: Volt_79 + 3
18: Keelan_73
19: Honk_75
20: GardenState_70
21: Cen1621_67
22: IAmGroot_69
23: BooTeria_307 + 3
24: Ellewin_18 + 9
25: Panchaali_18 + 1
26: Stewart25555_17
27: Jankie_43 + 1
28: CallinAllBarbz_46
29: BaileyBlu_46
30: Yappy_138
31: Kumao_116

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 345828 Report

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

Pham number 345828 has 51 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Isca_84
• Track 2 : Cat_75, BabyRay_88
• Track 3 : Rockstar_76
• Track 4 : Phantastic_88
• Track 5 : DrManhattan_47, Adolin_48
• Track 6 : PandaPo_48, MissSwiss_48
• Track 7 : Reedo_47
• Track 8 : Tallboi_47
• Track 9 : Soondubu_41
• Track 10 : SFuller_107
• Track 11 : Jflix2_106
• Track 12 : Madraxi_108
• Track 13 : Yvonnetastic_202
• Track 14 : JonJames_201
• Track 15 : Cardigan_202
• Track 16 : Guey18_81
• Track 17 : Volt_79, Ronaldo_79, Ziko_79, Fryberger_75
• Track 18 : Keelan_73
• Track 19 : Honk_75
• Track 20 : GardenState_70
• Track 21 : Cen1621_67
• Track 22 : IAmGroot_69
• Track 23 : BooTeria_307, Emmetator_312, BooTeria_18, Emmetator_18
• Track 24 : Ellewin_18, KSunshine22_311, Ellewin_311, DunneganBoMo_313, Artu_18, WaddleDee_308, Artu_305, WaddleDee_17, DunneganBoMo_18, KSunshine22_19
• Track 25 : Panchaali_18, Panchaali_305
• Track 26 : Stewart25555_17
• Track 27 : Jankie_43, GrimEater_42
• Track 28 : CallinAllBarbz_46
• Track 29 : BaileyBlu_46
• Track 30 : Yappy_138
• Track 31 : Kumao_116

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

The start number called the most often in the published annotations is 6, it was called in 12 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artu_18, Artu_305, BooTeria_18, BooTeria_307, DunneganBoMo_18, DunneganBoMo_313, Ellewin_18, Ellewin_311, Emmetator_18, Emmetator_312, KSunshine22_19, KSunshine22_311, Panchaali_18, Panchaali_305, WaddleDee_17, WaddleDee_308,

Genes that have the "Most Annotated" start but do not call it:
• Stewart25555_17,

Genes that do not have the "Most Annotated" start:
• Adolin_48, BabyRay_88, BaileyBlu_46, CallinAllBarbz_46, Cardigan_202, Cat_75, Cen1621_67, DrManhattan_47, Fryberger_75, GardenState_70, GrimEater_42, Guey18_81, Honk_75, IAmGroot_69, Isca_84, Jankie_43, Jflix2_106, JonJames_201, Keelan_73, Kumao_116, Madraxi_108, MissSwiss_48, PandaPo_48, Phantastic_88, Reedo_47, Rockstar_76, Ronaldo_79, SFuller_107, Soondubu_41, Tallboi_47, Volt_79, Yappy_138, Yvonnetastic_202, Ziko_79,

Summary by start number:

Start 6:
• Found in 17 of 51 (33.3%) of genes in pham
• Manual Annotations of this start: 12 of 44
• Called 94.1% of time when present
• Phage (with cluster) where this start called: Artu_18 (FC), Artu_305 (FC), BooTeria_18 (FC), BooTeria_307 (FC), DunneganBoMo_18 (FC), DunneganBoMo_313 (FC), Ellewin_18 (FC), Ellewin_311 (FC), Emmetator_18 (FC), Emmetator_312 (FC), KSunshine22_19 (FC), KSunshine22_311 (FC), Panchaali_18 (FC), Panchaali_305 (FC), WaddleDee_17 (FC), WaddleDee_308 (FC),

Start 7:
• Found in 17 of 51 (33.3%) of genes in pham
• No Manual Annotations of this start.
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Stewart25555_17 (FC),

Start 8:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 44
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Phantastic_88 (A3), Rockstar_76 (A3),

Start 12:
• Found in 11 of 51 (21.6%) of genes in pham
• Manual Annotations of this start: 8 of 44
• Called 81.8% of time when present
• Phage (with cluster) where this start called: BabyRay_88 (A3), Cardigan_202 (DD), Cat_75 (A3), Isca_84 (A3), Jflix2_106 (CF), JonJames_201 (DD), Madraxi_108 (CF), SFuller_107 (CF), Yvonnetastic_202 (DD),

Start 13:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumao_116 (singleton),

Start 15:
• Found in 6 of 51 (11.8%) of genes in pham
• Manual Annotations of this start: 6 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fryberger_75 (DP), Guey18_81 (DP), Keelan_73 (DP), Ronaldo_79 (DP), Volt_79 (DP), Ziko_79 (DP),

Start 23:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Honk_75 (EH),

Start 24:
• Found in 2 of 51 (3.9%) of genes in pham
• Manual Annotations of this start: 2 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GrimEater_42 (FP), Jankie_43 (FP),

Start 25:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cen1621_67 (EH),

Start 27:
• Found in 2 of 51 (3.9%) of genes in pham
• Manual Annotations of this start: 2 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GardenState_70 (EH), IAmGroot_69 (EH),

Start 28:
• Found in 6 of 51 (11.8%) of genes in pham
• Manual Annotations of this start: 5 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adolin_48 (AZ1), DrManhattan_47 (AZ1), MissSwiss_48 (AZ1), PandaPo_48 (AZ1), Reedo_47 (AZ1), Tallboi_47 (AZ1),

Start 30:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 3 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BaileyBlu_46 (FP), CallinAllBarbz_46 (FP), Soondubu_41 (AZ6),

Start 35:

• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yappy_138 (singleton),

Summary by clusters:

There are 10 clusters represented in this pham: FP, singleton, EH, DD, CF, A3, FC, AZ6, AZ1, DP,

Info for manual annotations of cluster A3:
•Start number 8 was manually annotated 2 times for cluster A3.
•Start number 12 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster AZ1:
•Start number 28 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ6:
•Start number 30 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster CF:
•Start number 12 was manually annotated 3 times for cluster CF.

Info for manual annotations of cluster DD:
•Start number 12 was manually annotated 3 times for cluster DD.

Info for manual annotations of cluster DP:
•Start number 15 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EH:
•Start number 23 was manually annotated 1 time for cluster EH.
•Start number 25 was manually annotated 1 time for cluster EH.
•Start number 27 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster FC:
•Start number 6 was manually annotated 12 times for cluster FC.

Info for manual annotations of cluster FP:
•Start number 24 was manually annotated 2 times for cluster FP.
•Start number 30 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: Adolin_48 Start: 33121, Stop: 33456, Start Num: 28
Candidate Starts for Adolin_48:
(14, 33067), (Start: 28 @33121 has 5 MA's),

Gene: Artu_18 Start: 7846, Stop: 8343, Start Num: 6
Candidate Starts for Artu_18:
(Start: 6 @7846 has 12 MA's), (7, 7852), (40, 8044), (47, 8089), (62, 8215),

Gene: Artu_305 Start: 187000, Stop: 187497, Start Num: 6
Candidate Starts for Artu_305:
(Start: 6 @187000 has 12 MA's), (7, 187006), (40, 187198), (47, 187243), (62, 187369),

Gene: BabyRay_88 Start: 48407, Stop: 47991, Start Num: 12
Candidate Starts for BabyRay_88:
(1, 48647), (2, 48605), (3, 48551), (Start: 12 @48407 has 8 MA's), (20, 48371), (42, 48257), (59, 48134), (62, 48119), (66, 48089), (74, 48008),

Gene: BaileyBlu_46 Start: 33124, Stop: 33462, Start Num: 30
Candidate Starts for BaileyBlu_46:
(Start: 30 @33124 has 3 MA's), (45, 33235), (70, 33427),

Gene: BooTeria_307 Start: 187340, Stop: 187837, Start Num: 6
Candidate Starts for BooTeria_307:
(Start: 6 @187340 has 12 MA's), (7, 187346), (40, 187538), (47, 187583),

Gene: BooTeria_18 Start: 8431, Stop: 8928, Start Num: 6
Candidate Starts for BooTeria_18:
(Start: 6 @8431 has 12 MA's), (7, 8437), (40, 8629), (47, 8674),

Gene: CallinAllBarbz_46 Start: 33305, Stop: 33643, Start Num: 30
Candidate Starts for CallinAllBarbz_46:
(11, 33239), (Start: 30 @33305 has 3 MA's), (70, 33608),

Gene: Cardigan_202 Start: 98477, Stop: 98064, Start Num: 12
Candidate Starts for Cardigan_202:
(Start: 12 @98477 has 8 MA's), (16, 98456), (31, 98399), (32, 98384), (34, 98360), (36, 98351), (44, 98318), (49, 98273), (56, 98222), (59, 98195), (60, 98189),

Gene: Cat_75 Start: 46139, Stop: 45723, Start Num: 12
Candidate Starts for Cat_75:
(1, 46379), (2, 46337), (3, 46283), (Start: 12 @46139 has 8 MA's), (20, 46103), (42, 45989), (59, 45866), (62, 45851), (66, 45821), (74, 45740),

Gene: Cen1621_67 Start: 45156, Stop: 45494, Start Num: 25
Candidate Starts for Cen1621_67:
(18, 45129), (21, 45141), (Start: 25 @45156 has 1 MA's), (63, 45399),

Gene: DrManhattan_47 Start: 32688, Stop: 33023, Start Num: 28
Candidate Starts for DrManhattan_47:
(14, 32634), (Start: 28 @32688 has 5 MA's),

Gene: DunneganBoMo_313 Start: 187774, Stop: 188271, Start Num: 6
Candidate Starts for DunneganBoMo_313:
(Start: 6 @187774 has 12 MA's), (7, 187780), (40, 187972), (47, 188017), (62, 188143),

Gene: DunneganBoMo_18 Start: 8362, Stop: 8859, Start Num: 6
Candidate Starts for DunneganBoMo_18:
(Start: 6 @8362 has 12 MA's), (7, 8368), (40, 8560), (47, 8605), (62, 8731),

Gene: Ellewin_18 Start: 8450, Stop: 8947, Start Num: 6
Candidate Starts for Ellewin_18:

(Start: 6 @8450 has 12 MA's), (7, 8456), (40, 8648), (47, 8693), (62, 8819),

Gene: Ellewin_311 Start: 187564, Stop: 188061, Start Num: 6
Candidate Starts for Ellewin_311:
(Start: 6 @187564 has 12 MA's), (7, 187570), (40, 187762), (47, 187807), (62, 187933),

Gene: Emmetator_312 Start: 186566, Stop: 187063, Start Num: 6
Candidate Starts for Emmetator_312:
(Start: 6 @186566 has 12 MA's), (7, 186572), (40, 186764), (47, 186809),

Gene: Emmetator_18 Start: 8266, Stop: 8763, Start Num: 6
Candidate Starts for Emmetator_18:
(Start: 6 @8266 has 12 MA's), (7, 8272), (40, 8464), (47, 8509),

Gene: Fryberger_75 Start: 40522, Stop: 40130, Start Num: 15
Candidate Starts for Fryberger_75:
(9, 40564), (Start: 15 @40522 has 6 MA's), (19, 40507), (21, 40501), (36, 40414), (53, 40306), (57, 40273), (59, 40252), (61, 40240), (62, 40237), (63, 40231), (66, 40207), (72, 40135),

Gene: GardenState_70 Start: 42790, Stop: 43125, Start Num: 27
Candidate Starts for GardenState_70:
(Start: 27 @42790 has 2 MA's),

Gene: GrimEater_42 Start: 31771, Stop: 32124, Start Num: 24
Candidate Starts for GrimEater_42:
(Start: 24 @31771 has 2 MA's), (70, 32089),

Gene: Guey18_81 Start: 41893, Stop: 41501, Start Num: 15
Candidate Starts for Guey18_81:
(9, 41935), (Start: 15 @41893 has 6 MA's), (19, 41878), (21, 41872), (36, 41785), (37, 41779), (53, 41677), (57, 41644), (59, 41623), (62, 41608), (63, 41602), (66, 41578), (72, 41506),

Gene: Honk_75 Start: 46974, Stop: 47339, Start Num: 23
Candidate Starts for Honk_75:
(Start: 23 @46974 has 1 MA's), (39, 47064), (43, 47076), (68, 47274),

Gene: IAmGroot_69 Start: 43001, Stop: 43336, Start Num: 27
Candidate Starts for IAmGroot_69:
(17, 42962), (Start: 27 @43001 has 2 MA's),

Gene: Isca_84 Start: 47705, Stop: 47304, Start Num: 12
Candidate Starts for Isca_84:
(Start: 8 @47741 has 2 MA's), (Start: 12 @47705 has 8 MA's), (20, 47669), (33, 47588), (41, 47558), (46, 47531), (51, 47510), (56, 47471), (62, 47429), (66, 47399),

Gene: Jankie_43 Start: 31949, Stop: 32302, Start Num: 24
Candidate Starts for Jankie_43:
(Start: 24 @31949 has 2 MA's), (70, 32267),

Gene: Jflix2_106 Start: 61115, Stop: 60702, Start Num: 12
Candidate Starts for Jflix2_106:
(Start: 12 @61115 has 8 MA's), (26, 61058), (29, 61043), (62, 60818), (65, 60794), (67, 60785),

Gene: JonJames_201 Start: 99038, Stop: 98619, Start Num: 12
Candidate Starts for JonJames_201:
(Start: 12 @99038 has 8 MA's), (16, 99014), (Start: 23 @98984 has 1 MA's), (32, 98942), (34, 98918), (54, 98801), (55, 98792), (59, 98759), (60, 98753), (69, 98687),

Gene: KSunshine22_311 Start: 185876, Stop: 186373, Start Num: 6
Candidate Starts for KSunshine22_311:
(Start: 6 @185876 has 12 MA's), (7, 185882), (40, 186074), (47, 186119), (62, 186245),

Gene: KSunshine22_19 Start: 8975, Stop: 9472, Start Num: 6
Candidate Starts for KSunshine22_19:
(Start: 6 @8975 has 12 MA's), (7, 8981), (40, 9173), (47, 9218), (62, 9344),

Gene: Keelan_73 Start: 40361, Stop: 39963, Start Num: 15
Candidate Starts for Keelan_73:
(9, 40403), (Start: 15 @40361 has 6 MA's), (21, 40340), (36, 40253), (53, 40139), (59, 40085), (61, 40073), (64, 40061), (72, 39968),

Gene: Kumao_116 Start: 68785, Stop: 68384, Start Num: 13
Candidate Starts for Kumao_116:
(4, 68875), (5, 68869), (Start: 13 @68785 has 1 MA's), (20, 68752), (38, 68647), (52, 68572), (56, 68551), (58, 68527), (71, 68413), (72, 68407),

Gene: Madraxi_108 Start: 63145, Stop: 62732, Start Num: 12
Candidate Starts for Madraxi_108:
(Start: 12 @63145 has 8 MA's), (22, 63100), (26, 63088), (29, 63073), (38, 63004),

Gene: MissSwiss_48 Start: 33199, Stop: 33531, Start Num: 28
Candidate Starts for MissSwiss_48:
(Start: 28 @33199 has 5 MA's), (70, 33505),

Gene: Panchaali_18 Start: 7794, Stop: 8291, Start Num: 6
Candidate Starts for Panchaali_18:
(Start: 6 @7794 has 12 MA's), (7, 7800), (22, 7884), (40, 7992), (47, 8037),

Gene: Panchaali_305 Start: 186852, Stop: 187349, Start Num: 6
Candidate Starts for Panchaali_305:
(Start: 6 @186852 has 12 MA's), (7, 186858), (22, 186942), (40, 187050), (47, 187095),

Gene: PandaPo_48 Start: 33207, Stop: 33539, Start Num: 28
Candidate Starts for PandaPo_48:
(Start: 28 @33207 has 5 MA's), (70, 33513),

Gene: Phantastic_88 Start: 47859, Stop: 47422, Start Num: 8
Candidate Starts for Phantastic_88:
(Start: 8 @47859 has 2 MA's), (Start: 12 @47823 has 8 MA's), (20, 47787), (33, 47706), (41, 47676), (46, 47649), (51, 47628), (56, 47589), (62, 47547), (66, 47517),

Gene: Reedo_47 Start: 32807, Stop: 33139, Start Num: 28
Candidate Starts for Reedo_47:
(Start: 28 @32807 has 5 MA's),

Gene: Rockstar_76 Start: 45549, Stop: 45112, Start Num: 8

Candidate Starts for Rockstar_76:
(Start: 8 @45549 has 2 MA's), (Start: 12 @45513 has 8 MA's), (20, 45477), (33, 45396), (41, 45366), (46, 45339), (51, 45318), (62, 45237), (66, 45207),

Gene: Ronaldo_79 Start: 41666, Stop: 41274, Start Num: 15
Candidate Starts for Ronaldo_79:
(9, 41708), (Start: 15 @41666 has 6 MA's), (19, 41651), (21, 41645), (36, 41558), (53, 41450), (57, 41417), (59, 41396), (61, 41384), (62, 41381), (63, 41375), (66, 41351), (72, 41279),

Gene: SFuller_107 Start: 61855, Stop: 61442, Start Num: 12
Candidate Starts for SFuller_107:
(Start: 12 @61855 has 8 MA's), (22, 61810), (26, 61798), (60, 61567),

Gene: Soondubu_41 Start: 34415, Stop: 34756, Start Num: 30
Candidate Starts for Soondubu_41:
(Start: 30 @34415 has 3 MA's), (70, 34718),

Gene: Stewart25555_17 Start: 8261, Stop: 8752, Start Num: 7
Candidate Starts for Stewart25555_17:
(Start: 6 @8255 has 12 MA's), (7, 8261), (22, 8345), (40, 8453), (47, 8498), (58, 8606), (62, 8624),

Gene: Tallboi_47 Start: 35393, Stop: 35728, Start Num: 28
Candidate Starts for Tallboi_47:
(Start: 28 @35393 has 5 MA's), (73, 35717),

Gene: Volt_79 Start: 41830, Stop: 41438, Start Num: 15
Candidate Starts for Volt_79:
(9, 41872), (Start: 15 @41830 has 6 MA's), (19, 41815), (21, 41809), (36, 41722), (53, 41614), (57, 41581), (59, 41560), (61, 41548), (62, 41545), (63, 41539), (66, 41515), (72, 41443),

Gene: WaddleDee_308 Start: 186302, Stop: 186799, Start Num: 6
Candidate Starts for WaddleDee_308:
(Start: 6 @186302 has 12 MA's), (7, 186308), (40, 186500), (47, 186545), (62, 186671),

Gene: WaddleDee_17 Start: 8107, Stop: 8604, Start Num: 6
Candidate Starts for WaddleDee_17:
(Start: 6 @8107 has 12 MA's), (7, 8113), (40, 8305), (47, 8350), (62, 8476),

Gene: Yappy_138 Start: 65600, Stop: 65286, Start Num: 35
Candidate Starts for Yappy_138:
(Start: 35 @65600 has 1 MA's), (48, 65522), (50, 65513), (59, 65435), (71, 65324),

Gene: Yvonnetastic_202 Start: 96089, Stop: 95670, Start Num: 12
Candidate Starts for Yvonnetastic_202:
(10, 96095), (Start: 12 @96089 has 8 MA's), (16, 96065), (Start: 23 @96035 has 1 MA's), (32, 95993), (34, 95969), (54, 95852), (55, 95843), (59, 95810), (60, 95804), (69, 95738),

Gene: Ziko_79 Start: 41652, Stop: 41260, Start Num: 15
Candidate Starts for Ziko_79:
(9, 41694), (Start: 15 @41652 has 6 MA's), (19, 41637), (21, 41631), (36, 41544), (53, 41436), (57, 41403), (59, 41382), (61, 41370), (62, 41367), (63, 41361), (66, 41337), (72, 41265),