Pham 345830


1: Sparky_72 + 1
2: Kovu_51
3: ApoKipo_52
4: TaylorSipht_61
5: Chicken_61
6: Bibble12_73 + 1
7: Antrice_70
8: Cygnet_68
9: LittleTokyo_62
10: Zhuangyuan_71
11: Renna12_68
12: YoungHarleezy_84
13: Isolde_84
14: ThayneTheZag_89
15: Hyzer_71
16: Herod_66 + 3
17: ArchiDore_61
18: Ruthy_61
19: Glorp_90 + 3
20: PhedwardCullen_86 + 3
21: NoodlelyBoi_88 + 1
22: Quhwah_92 + 2
23: Ganandorf_86 + 1
24: Rockwell_88
25: Zapato_87
26: Ariadne_96 + 1
27: Metamorphoo_88
28: Yeti_90
29: DoRead_68
30: NewHope4_66
31: JeanClaude_44
32: AirForce1_60
33: BellaJr_79
34: Bubbykins_82
35: Eyre_53

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 345830 Report

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

Pham number 345830 has 51 members, 8 are drafts.

Phages represented in each track:
- Track 1 : Sparky_72, Farewell_73
- Track 2 : Kovu_51
- Track 3 : ApoKipo_52
- Track 4 : TaylorSipht_61
- Track 5 : Chicken_61
- Track 6 : Bibble12_73, Cote_73
- Track 7 : Antrice_70
- Track 8 : Cygnet_68
- Track 9 : LittleTokyo_62
- Track 10 : Zhuangyuan_71
- Track 11 : Renna12_68
- Track 12 : YoungHarleezy_84
- Track 13 : Isolde_84
- Track 14 : ThayneTheZag_89
- Track 15 : Hyzer_71
- Track 16 : Herod_66, Bosnia_63, Hugley_64, Jalleen_63
- Track 17 : ArchiDore_61
- Track 18 : Ruthy_61
- Track 19 : Glorp_90, PierreOrion_88, Phrancesco_89, Lucretia_88
- Track 20 : PhedwardCullen_86, Phorgeous_87, Honeyfin_87, CrazyRich_86
- Track 21 : NoodlelyBoi_88, SirFrank_87
- Track 22 : Quhwah_92, EarickHC_89, KaiHaiDragon_89
- Track 23 : Ganandorf_86, Antares_89
- Track 24 : Rockwell_88
- Track 25 : Zapato_87
- Track 26 : Ariadne_96, Smarties_96
- Track 27 : Metamorphoo_88
- Track 28 : Yeti_90
- Track 29 : DoRead_68
- Track 30 : NewHope4_66
- Track 31 : JeanClaude_44
- Track 32 : AirForce1_60
- Track 33 : BellaJr_79
- Track 34 : Bubbykins_82
- Track 35 : Eyre_53

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

The start number called the most often in the published annotations is 45, it was called in 13 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ApoKipo_52, ArchiDore_61, Bosnia_63, DoRead_68, Eyre_53, Herod_66, Hugley_64, Hyzer_71, Isolde_84, Jalleen_63, JeanClaude_44, Kovu_51, NewHope4_66, Ruthy_61, ThayneTheZag_89, YoungHarleezy_84,

Genes that have the "Most Annotated" start but do not call it:
• BellaJr_79,

Genes that do not have the "Most Annotated" start:
• AirForce1_60, Antares_89, Antrice_70, Ariadne_96, Bibble12_73, Bubbykins_82, Chicken_61, Cote_73, CrazyRich_86, Cygnet_68, EarickHC_89, Farewell_73, Ganandorf_86, Glorp_90, Honeyfin_87, KaiHaiDragon_89, LittleTokyo_62, Lucretia_88, Metamorphoo_88, NoodlelyBoi_88, PhedwardCullen_86, Phorgeous_87, Phrancesco_89, PierreOrion_88, Quhwah_92, Renna12_68, Rockwell_88, SirFrank_87, Smarties_96, Sparky_72, TaylorSipht_61, Yeti_90, Zapato_87, Zhuangyuan_71,

Summary by start number:

Start 36:
• Found in 10 of 51 (19.6%) of genes in pham
• Manual Annotations of this start: 8 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antares_89 (EC), Ganandorf_86 (EC), Glorp_90 (EC), Lucretia_88 (EC), NoodlelyBoi_88 (EC), Phrancesco_89 (EC), PierreOrion_88 (EC), Rockwell_88 (EC), SirFrank_87 (EC), Yeti_90 (EC),

Start 37:
• Found in 11 of 51 (21.6%) of genes in pham
• Manual Annotations of this start: 10 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ariadne_96 (EC), CrazyRich_86 (EC), EarickHC_89 (EC), Honeyfin_87 (EC), KaiHaiDragon_89 (EC), Metamorphoo_88 (EC), PhedwardCullen_86 (EC), Phorgeous_87 (EC), Quhwah_92 (EC), Smarties_96 (EC), Zapato_87 (EC),

Start 38:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Chicken_61 (AS1), TaylorSipht_61 (AS1),

Start 39:
• Found in 3 of 51 (5.9%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 66.7% of time when present

• Phage (with cluster) where this start called: Farewell_73 (AF), Sparky_72 (AF),

Start 40:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bubbykins_82 (UNK),

Start 41:
• Found in 4 of 51 (7.8%) of genes in pham
• Manual Annotations of this start: 3 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antrice_70 (AS2), Bibble12_73 (AS2), Cote_73 (AS2), LittleTokyo_62 (AS2),

Start 42:
• Found in 2 of 51 (3.9%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cygnet_68 (AS2), Zhuangyuan_71 (AS2),

Start 43:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Renna12_68 (AS3),

Start 44:
• Found in 1 of 51 (2.0%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AirForce1_60 (FL),

Start 45:
• Found in 17 of 51 (33.3%) of genes in pham
• Manual Annotations of this start: 13 of 43
• Called 94.1% of time when present
• Phage (with cluster) where this start called: ApoKipo_52 (AL), ArchiDore_61 (DW), Bosnia_63 (CZ1), DoRead_68 (F1), Eyre_53 (singleton), Herod_66 (CZ1), Hugley_64 (CZ1), Hyzer_71 (CZ1), Isolde_84 (AY), Jalleen_63 (CZ2), JeanClaude_44 (FB), Kovu_51 (AL), NewHope4_66 (F1), Ruthy_61 (DW), ThayneTheZag_89 (AY), YoungHarleezy_84 (AY),

Start 48:
• Found in 22 of 51 (43.1%) of genes in pham
• No Manual Annotations of this start.
• Called 4.5% of time when present
• Phage (with cluster) where this start called: BellaJr_79 (FN),

Summary by clusters:

There are 16 clusters represented in this pham: AS3, AS2, singleton, AF, CZ2, CZ1, AS1, EC, AL, FB, F1, AY, DW, UNK, FL, FN,

Info for manual annotations of cluster AF:
•Start number 39 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AL:
•Start number 45 was manually annotated 2 times for cluster AL.

Info for manual annotations of cluster AS1:
•Start number 38 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 41 was manually annotated 3 times for cluster AS2.
•Start number 42 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 43 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:
•Start number 45 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster CZ1:
•Start number 45 was manually annotated 3 times for cluster CZ1.

Info for manual annotations of cluster DW:
•Start number 45 was manually annotated 2 times for cluster DW.

Info for manual annotations of cluster EC:
•Start number 36 was manually annotated 8 times for cluster EC.
•Start number 37 was manually annotated 10 times for cluster EC.

Info for manual annotations of cluster F1:
•Start number 45 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FL:
•Start number 44 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster UNK:
•Start number 40 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: AirForce1_60 Start: 39127, Stop: 39405, Start Num: 44
Candidate Starts for AirForce1_60:
(21, 39022), (22, 39028), (32, 39088), (Start: 39 @39115 has 2 MA's), (Start: 44 @39127 has 1 MA's), (48, 39151), (50, 39181), (55, 39226), (59, 39271), (62, 39295), (79, 39373),

Gene: Antares_89 Start: 52402, Stop: 52716, Start Num: 36
Candidate Starts for Antares_89:
(Start: 36 @52402 has 8 MA's), (57, 52543), (63, 52609), (68, 52627),

Gene: Antrice_70 Start: 37564, Stop: 37842, Start Num: 41
Candidate Starts for Antrice_70:
(5, 37342), (6, 37375), (9, 37390), (13, 37432), (14, 37435), (23, 37483), (34, 37540), (Start: 41 @37564 has 3 MA's),

Gene: ApoKipo_52 Start: 29546, Stop: 29857, Start Num: 45
Candidate Starts for ApoKipo_52:
(35, 29525), (Start: 45 @29546 has 13 MA's), (49, 29570), (51, 29600), (53, 29606), (64, 29726), (84, 29840),

Gene: ArchiDore_61 Start: 43561, Stop: 43887, Start Num: 45
Candidate Starts for ArchiDore_61:
(2, 43264), (3, 43273), (16, 43435), (33, 43525), (Start: 45 @43561 has 13 MA's), (79, 43825),

Gene: Ariadne_96 Start: 52784, Stop: 53098, Start Num: 37
Candidate Starts for Ariadne_96:
(Start: 37 @52784 has 10 MA's), (46, 52820), (48, 52826), (57, 52925), (63, 52991), (68, 53009),

Gene: BellaJr_79 Start: 46632, Stop: 46961, Start Num: 48
Candidate Starts for BellaJr_79:
(Start: 45 @46611 has 13 MA's), (48, 46632), (54, 46689), (74, 46830), (75, 46839),

Gene: Bibble12_73 Start: 37647, Stop: 37922, Start Num: 41
Candidate Starts for Bibble12_73:
(23, 37563), (Start: 41 @37647 has 3 MA's), (48, 37674), (58, 37779), (70, 37851),

Gene: Bosnia_63 Start: 44870, Stop: 45205, Start Num: 45
Candidate Starts for Bosnia_63:
(7, 44720), (8, 44723), (26, 44798), (28, 44801), (Start: 45 @44870 has 13 MA's), (61, 45023),

Gene: Bubbykins_82 Start: 52075, Stop: 52365, Start Num: 40
Candidate Starts for Bubbykins_82:
(Start: 40 @52075 has 1 MA's), (54, 52153), (56, 52183),

Gene: Chicken_61 Start: 38096, Stop: 38404, Start Num: 38
Candidate Starts for Chicken_61:
(17, 38000), (19, 38003), (31, 38045), (Start: 38 @38096 has 2 MA's), (71, 38321), (73, 38327), (83, 38393),

Gene: Cote_73 Start: 37990, Stop: 38265, Start Num: 41
Candidate Starts for Cote_73:
(23, 37906), (Start: 41 @37990 has 3 MA's), (48, 38017), (58, 38122), (70, 38194),

Gene: CrazyRich_86 Start: 51658, Stop: 51972, Start Num: 37
Candidate Starts for CrazyRich_86:
(Start: 37 @51658 has 10 MA's), (48, 51700), (57, 51799), (63, 51865), (68, 51883), (81, 51949),

Gene: Cygnet_68 Start: 37914, Stop: 38189, Start Num: 42
Candidate Starts for Cygnet_68:

(Start: 42 @37914 has 2 MA's),

Gene: DoRead_68 Start: 42042, Stop: 42344, Start Num: 45
Candidate Starts for DoRead_68:
(4, 41814), (12, 41925), (Start: 45 @42042 has 13 MA's), (47, 42060), (71, 42252), (78, 42294),

Gene: EarickHC_89 Start: 52032, Stop: 52346, Start Num: 37
Candidate Starts for EarickHC_89:
(Start: 37 @52032 has 10 MA's), (48, 52074), (57, 52173), (63, 52239), (68, 52257),

Gene: Eyre_53 Start: 35776, Stop: 36111, Start Num: 45
Candidate Starts for Eyre_53:
(26, 35710), (Start: 45 @35776 has 13 MA's), (61, 35929), (85, 36085),

Gene: Farewell_73 Start: 49038, Stop: 49364, Start Num: 39
Candidate Starts for Farewell_73:
(Start: 39 @49038 has 2 MA's), (79, 49311),

Gene: Ganandorf_86 Start: 51533, Stop: 51847, Start Num: 36
Candidate Starts for Ganandorf_86:
(Start: 36 @51533 has 8 MA's), (57, 51674), (63, 51740), (68, 51758),

Gene: Glorp_90 Start: 52154, Stop: 52468, Start Num: 36
Candidate Starts for Glorp_90:
(Start: 36 @52154 has 8 MA's), (48, 52196), (57, 52295), (63, 52361), (68, 52379),

Gene: Herod_66 Start: 45224, Stop: 45559, Start Num: 45
Candidate Starts for Herod_66:
(7, 45074), (8, 45077), (26, 45152), (28, 45155), (Start: 45 @45224 has 13 MA's), (61, 45377),

Gene: Honeyfin_87 Start: 51488, Stop: 51802, Start Num: 37
Candidate Starts for Honeyfin_87:
(Start: 37 @51488 has 10 MA's), (48, 51530), (57, 51629), (63, 51695), (68, 51713), (81, 51779),

Gene: Hugley_64 Start: 45204, Stop: 45539, Start Num: 45
Candidate Starts for Hugley_64:
(7, 45054), (8, 45057), (26, 45132), (28, 45135), (Start: 45 @45204 has 13 MA's), (61, 45357),

Gene: Hyzer_71 Start: 46977, Stop: 47315, Start Num: 45
Candidate Starts for Hyzer_71:
(Start: 45 @46977 has 13 MA's), (61, 47130),

Gene: Isolde_84 Start: 48274, Stop: 48624, Start Num: 45
Candidate Starts for Isolde_84:
(1, 47677), (23, 48181), (25, 48187), (29, 48196), (Start: 45 @48274 has 13 MA's), (54, 48352), (74, 48493), (75, 48502), (82, 48550),

Gene: Jalleen_63 Start: 39042, Stop: 39377, Start Num: 45
Candidate Starts for Jalleen_63:
(7, 38892), (8, 38895), (26, 38970), (28, 38973), (Start: 45 @39042 has 13 MA's), (61, 39195),

Gene: JeanClaude_44 Start: 26657, Stop: 26929, Start Num: 45
Candidate Starts for JeanClaude_44:

(Start: 45 @26657 has 13 MA's), (60, 26807), (79, 26906),

Gene: KaiHaiDragon_89 Start: 52032, Stop: 52346, Start Num: 37
Candidate Starts for KaiHaiDragon_89:
(Start: 37 @52032 has 10 MA's), (48, 52074), (57, 52173), (63, 52239), (68, 52257),

Gene: Kovu_51 Start: 29765, Stop: 30076, Start Num: 45
Candidate Starts for Kovu_51:
(11, 29594), (Start: 45 @29765 has 13 MA's), (49, 29792), (51, 29822), (53, 29828), (66, 29951), (67, 29957), (83, 30041),

Gene: LittleTokyo_62 Start: 35151, Stop: 35429, Start Num: 41
Candidate Starts for LittleTokyo_62:
(Start: 38 @35142 has 2 MA's), (Start: 41 @35151 has 3 MA's), (75, 35376), (76, 35379), (77, 35388),

Gene: Lucretia_88 Start: 52019, Stop: 52333, Start Num: 36
Candidate Starts for Lucretia_88:
(Start: 36 @52019 has 8 MA's), (48, 52061), (57, 52160), (63, 52226), (68, 52244),

Gene: Metamorphoo_88 Start: 52513, Stop: 52830, Start Num: 37
Candidate Starts for Metamorphoo_88:
(Start: 37 @52513 has 10 MA's), (57, 52648), (69, 52735), (71, 52744), (80, 52795),

Gene: NewHope4_66 Start: 42166, Stop: 42468, Start Num: 45
Candidate Starts for NewHope4_66:
(Start: 45 @42166 has 13 MA's), (47, 42184), (71, 42376), (78, 42418),

Gene: NoodlelyBoi_88 Start: 52313, Stop: 52636, Start Num: 36
Candidate Starts for NoodlelyBoi_88:
(Start: 36 @52313 has 8 MA's), (48, 52355), (52, 52394), (57, 52454), (63, 52520), (65, 52526), (68, 52538),

Gene: PhedwardCullen_86 Start: 51405, Stop: 51719, Start Num: 37
Candidate Starts for PhedwardCullen_86:
(Start: 37 @51405 has 10 MA's), (48, 51447), (57, 51546), (63, 51612), (68, 51630), (81, 51696),

Gene: Phorgeous_87 Start: 51529, Stop: 51843, Start Num: 37
Candidate Starts for Phorgeous_87:
(Start: 37 @51529 has 10 MA's), (48, 51571), (57, 51670), (63, 51736), (68, 51754), (81, 51820),

Gene: Phrancesco_89 Start: 52295, Stop: 52609, Start Num: 36
Candidate Starts for Phrancesco_89:
(Start: 36 @52295 has 8 MA's), (48, 52337), (57, 52436), (63, 52502), (68, 52520),

Gene: PierreOrion_88 Start: 52004, Stop: 52318, Start Num: 36
Candidate Starts for PierreOrion_88:
(Start: 36 @52004 has 8 MA's), (48, 52046), (57, 52145), (63, 52211), (68, 52229),

Gene: Quhwah_92 Start: 52589, Stop: 52903, Start Num: 37
Candidate Starts for Quhwah_92:
(Start: 37 @52589 has 10 MA's), (48, 52631), (57, 52730), (63, 52796), (68, 52814),

Gene: Renna12_68 Start: 37756, Stop: 38031, Start Num: 43

Candidate Starts for Renna12_68:
(3, 37471), (10, 37582), (18, 37642), (20, 37648), (24, 37669), (27, 37678), (30, 37684), (Start: 43 @37756 has 1 MA's), (48, 37780),

Gene: Rockwell_88 Start: 52221, Stop: 52535, Start Num: 36
Candidate Starts for Rockwell_88:
(Start: 36 @52221 has 8 MA's), (46, 52257), (48, 52263), (57, 52362), (68, 52446),

Gene: Ruthy_61 Start: 43412, Stop: 43750, Start Num: 45
Candidate Starts for Ruthy_61:
(2, 43145), (3, 43154), (33, 43376), (Start: 45 @43412 has 13 MA's), (61, 43565),

Gene: SirFrank_87 Start: 51899, Stop: 52222, Start Num: 36
Candidate Starts for SirFrank_87:
(Start: 36 @51899 has 8 MA's), (48, 51941), (52, 51980), (57, 52040), (63, 52106), (65, 52112), (68, 52124),

Gene: Smarties_96 Start: 52781, Stop: 53095, Start Num: 37
Candidate Starts for Smarties_96:
(Start: 37 @52781 has 10 MA's), (46, 52817), (48, 52823), (57, 52922), (63, 52988), (68, 53006),

Gene: Sparky_72 Start: 50632, Stop: 50958, Start Num: 39
Candidate Starts for Sparky_72:
(Start: 39 @50632 has 2 MA's), (79, 50905),

Gene: TaylorSipht_61 Start: 37405, Stop: 37719, Start Num: 38
Candidate Starts for TaylorSipht_61:
(15, 37285), (17, 37306), (19, 37309), (31, 37351), (Start: 38 @37405 has 2 MA's), (72, 37633),

Gene: ThayneTheZag_89 Start: 47969, Stop: 48319, Start Num: 45
Candidate Starts for ThayneTheZag_89:
(23, 47876), (25, 47882), (29, 47891), (Start: 45 @47969 has 13 MA's), (74, 48188), (75, 48197),

Gene: Yeti_90 Start: 51725, Stop: 52039, Start Num: 36
Candidate Starts for Yeti_90:
(Start: 36 @51725 has 8 MA's), (48, 51767), (57, 51866), (63, 51932), (68, 51950), (81, 52016),

Gene: YoungHarleezy_84 Start: 47912, Stop: 48262, Start Num: 45
Candidate Starts for YoungHarleezy_84:
(23, 47819), (25, 47825), (29, 47834), (Start: 45 @47912 has 13 MA's), (54, 47990), (74, 48131), (75, 48140),

Gene: Zapato_87 Start: 51752, Stop: 52078, Start Num: 37
Candidate Starts for Zapato_87:
(Start: 37 @51752 has 10 MA's), (57, 51893), (65, 51965),

Gene: Zhuangyuan_71 Start: 38148, Stop: 38423, Start Num: 42
Candidate Starts for Zhuangyuan_71:
(Start: 42 @38148 has 2 MA's),