Pham 291504

1: Phabba_184
2: Birdsong_56 + 4
3: Budski_63
4: BotCity_59
5: Whitney_56
6: Apricot_58 + 1
7: Spartan_37
8: Philus_50 + 8
9: Xavia_42 + 1
10: GMA4_34

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 291504 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291504 has 24 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Phabba_184
• Track 2 : Birdsong_56, Asapag_56, Kenna_56, Lutum_61, Getalong_59
• Track 3 : Budski_63
• Track 4 : BotCity_59
• Track 5 : Whitney_56
• Track 6 : Apricot_58, Crater_58
• Track 7 : Spartan_37
• Track 8 : Philus_50, Saal_49, BobaPhett_49, Mattes_50, Gorge_51, ByChance_37, James_50, SwagPigglett_52, DRBy19_49
• Track 9 : Xavia_42, Tortellini_40
• Track 10 : GMA4_34

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

The start number called the most often in the published annotations is 5, it was called in 10 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apricot_58, Asapag_56, Birdsong_56, BotCity_59, Budski_63, Crater_58, Getalong_59, Kenna_56, Lutum_61, Whitney_56,

Genes that have the "Most Annotated" start but do not call it:
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Genes that do not have the "Most Annotated" start:
• BobaPhett_49, ByChance_37, DRBy19_49, GMA4_34, Gorge_51, James_50, Mattes_50, Phabba_184, Philus_50, Saal_49, Spartan_37, SwagPigglett_52, Tortellini_40, Xavia_42,

Summary by start number:

Start 3:
• Found in 10 of 24 (41.7%) of genes in pham
• Manual Annotations of this start: 9 of 22

• Called 100.0% of time when present
• Phage (with cluster) where this start called: BobaPhett_49 (F1), ByChance_37 (F1), DRBy19_49 (F1), Gorge_51 (F1), James_50 (F1), Mattes_50 (F1), Philus_50 (F1), Saal_49 (F1), Spartan_37 (ES), SwagPigglett_52 (F1),

Start 4:
• Found in 1 of 24 (4.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA4_34 (singleton),

Start 5:
• Found in 10 of 24 (41.7%) of genes in pham
• Manual Annotations of this start: 10 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_58 (DN3), Asapag_56 (DN1), Birdsong_56 (DN), BotCity_59 (DN), Budski_63 (DN), Crater_58 (DN3), Getalong_59 (DN1), Kenna_56 (DN1), Lutum_61 (DN1), Whitney_56 (DN1),

Start 6:
• Found in 2 of 24 (8.3%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tortellini_40 (P2), Xavia_42 (P3),

Start 7:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phabba_184 (C2),

Summary by clusters:

There are 9 clusters represented in this pham: DN, F1, singleton, P3, P2, DN1, DN3, C2, ES,

Info for manual annotations of cluster C2:
•Start number 7 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster DN:
•Start number 5 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 5 was manually annotated 5 times for cluster DN1.

Info for manual annotations of cluster DN3:
•Start number 5 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster F1:
•Start number 3 was manually annotated 9 times for cluster F1.

Info for manual annotations of cluster P2:

•Start number 6 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 6 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: Apricot_58 Start: 37168, Stop: 37944, Start Num: 5
Candidate Starts for Apricot_58:
(Start: 5 @37168 has 10 MA's), (15, 37342), (17, 37372), (24, 37420), (51, 37678), (58, 37771),

Gene: Asapag_56 Start: 36674, Stop: 37453, Start Num: 5
Candidate Starts for Asapag_56:
(Start: 5 @36674 has 10 MA's), (24, 36929), (51, 37187), (58, 37280), (62, 37376),

Gene: Birdsong_56 Start: 36895, Stop: 37674, Start Num: 5
Candidate Starts for Birdsong_56:
(Start: 5 @36895 has 10 MA's), (24, 37150), (51, 37408), (58, 37501), (62, 37597),

Gene: BobaPhett_49 Start: 36795, Stop: 37598, Start Num: 3
Candidate Starts for BobaPhett_49:
(Start: 3 @36795 has 9 MA's), (8, 36834), (10, 36870), (12, 36909), (13, 36939), (15, 36978), (22, 37041), (23, 37044), (25, 37068), (26, 37071), (27, 37095), (29, 37113), (30, 37122), (33, 37143), (47, 37299), (48, 37302), (52, 37350), (53, 37359), (56, 37386), (61, 37488), (62, 37521), (63, 37524), (65, 37533), (66, 37539), (69, 37572), (71, 37587),

Gene: BotCity_59 Start: 38122, Stop: 38898, Start Num: 5
Candidate Starts for BotCity_59:
(Start: 5 @38122 has 10 MA's), (11, 38224), (17, 38326), (24, 38374), (51, 38632), (58, 38725), (62, 38821),

Gene: Budski_63 Start: 39082, Stop: 39861, Start Num: 5
Candidate Starts for Budski_63:
(Start: 5 @39082 has 10 MA's), (24, 39337), (39, 39451), (42, 39472), (51, 39595), (58, 39688), (62, 39784),

Gene: ByChance_37 Start: 29879, Stop: 30682, Start Num: 3
Candidate Starts for ByChance_37:
(Start: 3 @29879 has 9 MA's), (8, 29918), (10, 29954), (12, 29993), (13, 30023), (15, 30062), (22, 30125), (23, 30128), (25, 30152), (26, 30155), (27, 30179), (29, 30197), (30, 30206), (33, 30227), (47, 30383), (48, 30386), (52, 30434), (53, 30443), (56, 30470), (61, 30572), (62, 30605), (63, 30608), (65, 30617), (66, 30623), (69, 30656), (71, 30671),

Gene: Crater_58 Start: 37563, Stop: 38339, Start Num: 5
Candidate Starts for Crater_58:
(Start: 5 @37563 has 10 MA's), (15, 37737), (17, 37767), (24, 37815), (51, 38073), (58, 38166),

Gene: DRBy19_49 Start: 35582, Stop: 36385, Start Num: 3
Candidate Starts for DRBy19_49:
(Start: 3 @35582 has 9 MA's), (8, 35621), (10, 35657), (12, 35696), (13, 35726), (15, 35765), (22, 35828), (23, 35831), (25, 35855), (26, 35858), (27, 35882), (29, 35900), (30, 35909), (33, 35930), (47,

36086), (48, 36089), (52, 36137), (53, 36146), (56, 36173), (61, 36275), (62, 36308), (63, 36311), (65, 36320), (66, 36326), (69, 36359), (71, 36374),

Gene: GMA4_34 Start: 28046, Stop: 28852, Start Num: 4
Candidate Starts for GMA4_34:
(4, 28046), (11, 28157), (12, 28160), (18, 28265), (19, 28271), (24, 28304), (26, 28322), (27, 28346), (31, 28388), (36, 28412), (45, 28517), (54, 28616), (55, 28634), (60, 28709), (64, 28772), (73, 28835), (75, 28841),

Gene: Getalong_59 Start: 38926, Stop: 39705, Start Num: 5
Candidate Starts for Getalong_59:
(Start: 5 @38926 has 10 MA's), (24, 39181), (51, 39439), (58, 39532), (62, 39628),

Gene: Gorge_51 Start: 35716, Stop: 36519, Start Num: 3
Candidate Starts for Gorge_51:
(Start: 3 @35716 has 9 MA's), (8, 35755), (10, 35791), (12, 35830), (13, 35860), (15, 35899), (22, 35962), (23, 35965), (25, 35989), (26, 35992), (27, 36016), (29, 36034), (30, 36043), (33, 36064), (47, 36220), (48, 36223), (52, 36271), (53, 36280), (56, 36307), (61, 36409), (62, 36442), (63, 36445), (65, 36454), (66, 36460), (69, 36493), (71, 36508),

Gene: James_50 Start: 35673, Stop: 36476, Start Num: 3
Candidate Starts for James_50:
(Start: 3 @35673 has 9 MA's), (8, 35712), (10, 35748), (12, 35787), (13, 35817), (15, 35856), (22, 35919), (23, 35922), (25, 35946), (26, 35949), (27, 35973), (29, 35991), (30, 36000), (33, 36021), (47, 36177), (48, 36180), (52, 36228), (53, 36237), (56, 36264), (61, 36366), (62, 36399), (63, 36402), (65, 36411), (66, 36417), (69, 36450), (71, 36465),

Gene: Kenna_56 Start: 37127, Stop: 37906, Start Num: 5
Candidate Starts for Kenna_56:
(Start: 5 @37127 has 10 MA's), (24, 37382), (51, 37640), (58, 37733), (62, 37829),

Gene: Lutum_61 Start: 38291, Stop: 39070, Start Num: 5
Candidate Starts for Lutum_61:
(Start: 5 @38291 has 10 MA's), (24, 38546), (51, 38804), (58, 38897), (62, 38993),

Gene: Mattes_50 Start: 35673, Stop: 36476, Start Num: 3
Candidate Starts for Mattes_50:
(Start: 3 @35673 has 9 MA's), (8, 35712), (10, 35748), (12, 35787), (13, 35817), (15, 35856), (22, 35919), (23, 35922), (25, 35946), (26, 35949), (27, 35973), (29, 35991), (30, 36000), (33, 36021), (47, 36177), (48, 36180), (52, 36228), (53, 36237), (56, 36264), (61, 36366), (62, 36399), (63, 36402), (65, 36411), (66, 36417), (69, 36450), (71, 36465),

Gene: Phabba_184 Start: 96671, Stop: 95853, Start Num: 7
Candidate Starts for Phabba_184:
(Start: 7 @96671 has 1 MA's), (11, 96584), (18, 96479), (23, 96449), (24, 96440), (26, 96422), (27, 96398), (29, 96380), (32, 96347), (36, 96314), (37, 96311), (43, 96239), (46, 96182), (54, 96110), (57, 96056), (64, 95948), (65, 95942), (70, 95894), (72, 95885), (74, 95876),

Gene: Philus_50 Start: 35558, Stop: 36361, Start Num: 3
Candidate Starts for Philus_50:
(Start: 3 @35558 has 9 MA's), (8, 35597), (10, 35633), (12, 35672), (13, 35702), (15, 35741), (22, 35804), (23, 35807), (25, 35831), (26, 35834), (27, 35858), (29, 35876), (30, 35885), (33, 35906), (47, 36062), (48, 36065), (52, 36113), (53, 36122), (56, 36149), (61, 36251), (62, 36284), (63, 36287), (65,

36296), (66, 36302), (69, 36335), (71, 36350),

Gene: Saal_49 Start: 35536, Stop: 36339, Start Num: 3
Candidate Starts for Saal_49:
(Start: 3 @35536 has 9 MA's), (8, 35575), (10, 35611), (12, 35650), (13, 35680), (15, 35719), (22, 35782), (23, 35785), (25, 35809), (26, 35812), (27, 35836), (29, 35854), (30, 35863), (33, 35884), (47, 36040), (48, 36043), (52, 36091), (53, 36100), (56, 36127), (61, 36229), (62, 36262), (63, 36265), (65, 36274), (66, 36280), (69, 36313), (71, 36328),

Gene: Spartan_37 Start: 33069, Stop: 33911, Start Num: 3
Candidate Starts for Spartan_37:
(Start: 3 @33069 has 9 MA's), (14, 33240), (18, 33300), (20, 33321), (23, 33330), (24, 33339), (28, 33393), (29, 33399), (38, 33444), (40, 33474), (41, 33477), (44, 33519), (49, 33594), (50, 33606), (51, 33612), (54, 33639),

Gene: SwagPigglett_52 Start: 36591, Stop: 37367, Start Num: 3
Candidate Starts for SwagPigglett_52:
(Start: 3 @36591 has 9 MA's), (8, 36630), (10, 36666), (12, 36705), (13, 36735), (15, 36774), (22, 36810), (23, 36813), (25, 36837), (26, 36840), (27, 36864), (29, 36882), (30, 36891), (33, 36912), (47, 37068), (48, 37071), (52, 37119), (53, 37128), (56, 37155), (61, 37257), (62, 37290), (63, 37293), (65, 37302), (66, 37308), (69, 37341), (71, 37356),

Gene: Tortellini_40 Start: 34462, Stop: 35259, Start Num: 6
Candidate Starts for Tortellini_40:
(Start: 6 @34462 has 2 MA's), (10, 34528), (12, 34567), (13, 34597), (16, 34636), (22, 34699), (23, 34702), (25, 34726), (26, 34729), (27, 34753), (29, 34771), (30, 34780), (34, 34804), (35, 34825), (54, 35017), (59, 35104), (67, 35209), (68, 35212),

Gene: Whitney_56 Start: 38733, Stop: 39512, Start Num: 5
Candidate Starts for Whitney_56:
(1, 38580), (2, 38643), (Start: 5 @38733 has 10 MA's), (9, 38784), (21, 38973), (24, 38988), (39, 39102), (51, 39246), (58, 39339), (62, 39435),

Gene: Xavia_42 Start: 35045, Stop: 35842, Start Num: 6
Candidate Starts for Xavia_42:
(Start: 6 @35045 has 2 MA's), (10, 35111), (12, 35150), (13, 35180), (16, 35219), (22, 35282), (23, 35285), (25, 35309), (26, 35312), (27, 35336), (29, 35354), (30, 35363), (34, 35387), (35, 35408), (54, 35600), (59, 35687), (67, 35792), (68, 35795),