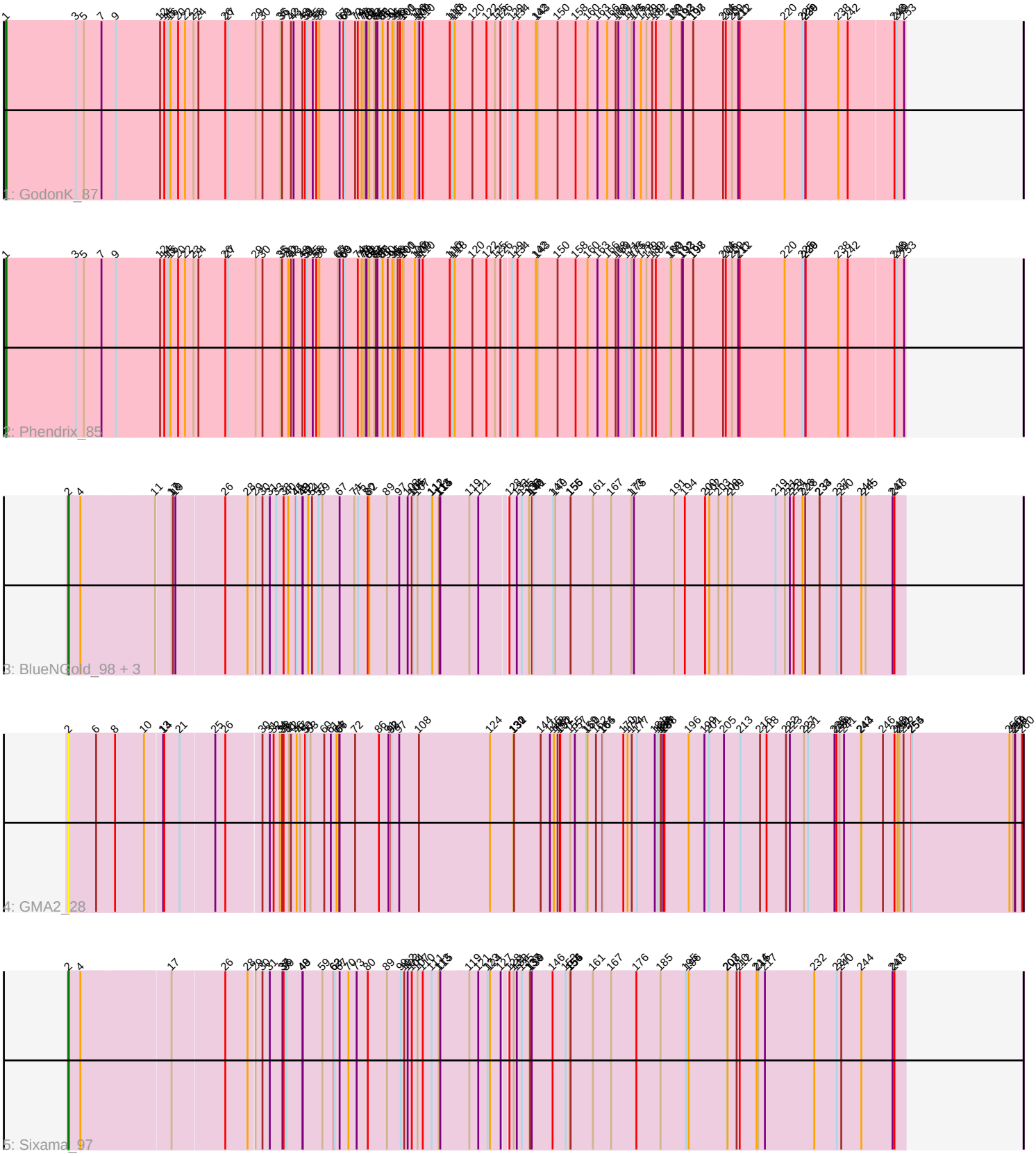
Pham 348307



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 348307 Report

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

Pham number 348307 has 8 members, 1 are drafts.

Phages represented in each track:
• Track 1 : GodonK_87
• Track 2 : Phendrix_85
• Track 3 : BlueNGold_98, Mareelih_97, Boopy_99, Forza_99
• Track 4 : GMA2_28
• Track 5 : Sixama_97

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

The start number called the most often in the published annotations is 2, it was called in 5 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueNGold_98, Boopy_99, Forza_99, GMA2_28, Mareelih_97, Sixama_97,

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

Genes that do not have the "Most Annotated" start:
• GodonK_87, Phendrix_85,

Summary by start number:

Start 1:
• Found in 2 of 8 (25.0%) of genes in pham
• Manual Annotations of this start: 2 of 7
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GodonK_87 (DK), Phendrix_85 (DK),

Start 2:
• Found in 6 of 8 (75.0%) of genes in pham
• Manual Annotations of this start: 5 of 7
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_98 (DS), Boopy_99 (DS), Forza_99 (DS), GMA2_28 (DS), Mareelih_97 (DS), Sixama_97 (DS),

Summary by clusters:

There are 2 clusters represented in this pham: DS, DK,

Info for manual annotations of cluster DK:
•Start number 1 was manually annotated 2 times for cluster DK.

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

Gene Information:

Gene: BlueNGold_98 Start: 53078, Stop: 59074, Start Num: 2
Candidate Starts for BlueNGold_98:
(Start: 2 @53078 has 5 MA's), (4, 53168), (11, 53714), (17, 53825), (18, 53837), (19, 53855), (26, 54215), (28, 54389), (29, 54431), (30, 54485), (31, 54527), (33, 54578), (38, 54635), (40, 54671), (44, 54731), (45, 54734), (48, 54782), (49, 54785), (52, 54827), (54, 54857), (57, 54908), (59, 54938), (67, 55067), (71, 55181), (75, 55211), (80, 55286), (82, 55298), (89, 55436), (97, 55532), (103, 55595), (104, 55625), (105, 55634), (107, 55667), (111, 55763), (112, 55769), (113, 55817), (114, 55823), (115, 55829), (119, 56036), (121, 56090), (128, 56270), (133, 56324), (135, 56357), (136, 56402), (137, 56405), (140, 56426), (141, 56432), (147, 56543), (149, 56558), (155, 56675), (156, 56678), (161, 56852), (167, 56984), (173, 57110), (175, 57131), (191, 57425), (194, 57497), (200, 57641), (202, 57674), (203, 57734), (208, 57800), (209, 57833), (219, 58148), (221, 58220), (223, 58259), (224, 58289), (226, 58355), (228, 58373), (233, 58457), (234, 58460), (237, 58589), (240, 58613), (244, 58754), (245, 58781), (247, 58976), (248, 58991),

Gene: Boopy_99 Start: 53090, Stop: 59086, Start Num: 2
Candidate Starts for Boopy_99:
(Start: 2 @53090 has 5 MA's), (4, 53180), (11, 53726), (17, 53837), (18, 53849), (19, 53867), (26, 54227), (28, 54401), (29, 54443), (30, 54497), (31, 54539), (33, 54590), (38, 54647), (40, 54683), (44, 54743), (45, 54746), (48, 54794), (49, 54797), (52, 54839), (54, 54869), (57, 54920), (59, 54950), (67, 55079), (71, 55193), (75, 55223), (80, 55298), (82, 55310), (89, 55448), (97, 55544), (103, 55607), (104, 55637), (105, 55646), (107, 55679), (111, 55775), (112, 55781), (113, 55829), (114, 55835), (115, 55841), (119, 56048), (121, 56102), (128, 56282), (133, 56336), (135, 56369), (136, 56414), (137, 56417), (140, 56438), (141, 56444), (147, 56555), (149, 56570), (155, 56687), (156, 56690), (161, 56864), (167, 56996), (173, 57122), (175, 57143), (191, 57437), (194, 57509), (200, 57653), (202, 57686), (203, 57746), (208, 57812), (209, 57845), (219, 58160), (221, 58232), (223, 58271), (224, 58301), (226, 58367), (228, 58385), (233, 58469), (234, 58472), (237, 58601), (240, 58625), (244, 58766), (245, 58793), (247, 58988), (248, 59003),

Gene: Forza_99 Start: 53006, Stop: 59002, Start Num: 2
Candidate Starts for Forza_99:
(Start: 2 @53006 has 5 MA's), (4, 53096), (11, 53642), (17, 53753), (18, 53765), (19, 53783), (26, 54143), (28, 54317), (29, 54359), (30, 54413), (31, 54455), (33, 54506), (38, 54563), (40, 54599), (44, 54659), (45, 54662), (48, 54710), (49, 54713), (52, 54755), (54, 54785), (57, 54836), (59, 54866), (67, 54995), (71, 55109), (75, 55139), (80, 55214), (82, 55226), (89, 55364), (97, 55460), (103, 55523), (104, 55553), (105, 55562), (107, 55595), (111, 55691), (112, 55697), (113, 55745), (114, 55751), (115, 55757), (119, 55964), (121, 56018), (128, 56198), (133, 56252), (135, 56285), (136, 56330), (137, 56333), (140, 56354), (141, 56360), (147, 56471), (149, 56486), (155, 56603), (156, 56606), (161, 56780), (167, 56912), (173, 57038), (175, 57059), (191, 57353), (194, 57425), (200, 57569),

(202, 57602), (203, 57662), (208, 57728), (209, 57761), (219, 58076), (221, 58148), (223, 58187), (224, 58217), (226, 58283), (228, 58301), (233, 58385), (234, 58388), (237, 58517), (240, 58541), (244, 58682), (245, 58709), (247, 58904), (248, 58919),

Gene: GMA2_28 Start: 23414, Stop: 30640, Start Num: 2
Candidate Starts for GMA2_28:
(Start: 2 @23414 has 5 MA's), (6, 23612), (8, 23747), (10, 23933), (13, 24047), (14, 24056), (21, 24176), (25, 24425), (26, 24503), (30, 24773), (31, 24815), (32, 24845), (34, 24893), (36, 24911), (38, 24923), (41, 24965), (42, 24980), (46, 25025), (47, 25052), (50, 25091), (51, 25103), (53, 25133), (60, 25241), (61, 25292), (64, 25337), (66, 25358), (67, 25361), (72, 25481), (86, 25667), (91, 25742), (92, 25763), (93, 25766), (97, 25826), (108, 25979), (124, 26531), (130, 26714), (131, 26717), (132, 26720), (144, 26927), (145, 26999), (148, 27029), (150, 27056), (151, 27074), (152, 27077), (155, 27155), (157, 27191), (159, 27275), (160, 27287), (162, 27353), (164, 27404), (165, 27410), (170, 27548), (172, 27581), (174, 27614), (177, 27656), (181, 27794), (183, 27815), (184, 27836), (186, 27842), (187, 27860), (188, 27869), (196, 28055), (199, 28178), (201, 28214), (205, 28328), (213, 28457), (216, 28601), (218, 28652), (222, 28796), (223, 28826), (227, 28937), (231, 28967), (235, 29171), (236, 29186), (239, 29210), (241, 29246), (243, 29375), (244, 29381), (246, 29546), (248, 29633), (250, 29657), (251, 29672), (252, 29702), (254, 29765), (255, 29768), (256, 30530), (257, 30557), (258, 30572), (259, 30575), (260, 30629),

Gene: GodonK_87 Start: 44708, Stop: 51373, Start Num: 1
Candidate Starts for GodonK_87:
(Start: 1 @44708 has 2 MA's), (3, 45251), (5, 45314), (7, 45452), (9, 45563), (12, 45908), (14, 45941), (15, 45968), (16, 45989), (20, 46049), (22, 46103), (23, 46169), (24, 46208), (26, 46418), (27, 46439), (29, 46655), (30, 46709), (35, 46850), (36, 46862), (42, 46931), (43, 46952), (48, 47021), (50, 47042), (51, 47054), (55, 47102), (56, 47129), (58, 47153), (67, 47306), (68, 47336), (69, 47345), (72, 47426), (74, 47447), (76, 47477), (77, 47492), (78, 47510), (79, 47516), (81, 47534), (82, 47537), (83, 47576), (84, 47588), (85, 47600), (87, 47633), (88, 47642), (90, 47681), (94, 47717), (95, 47729), (96, 47759), (98, 47777), (100, 47798), (101, 47801), (106, 47882), (107, 47903), (109, 47909), (110, 47930), (116, 48119), (117, 48140), (118, 48158), (120, 48272), (122, 48374), (125, 48434), (126, 48476), (129, 48521), (134, 48560), (142, 48680), (143, 48692), (150, 48812), (158, 48953), (160, 49046), (163, 49121), (166, 49190), (168, 49256), (169, 49277), (171, 49337), (173, 49364), (175, 49385), (178, 49436), (179, 49475), (180, 49520), (182, 49544), (189, 49643), (190, 49655), (192, 49724), (193, 49733), (197, 49811), (198, 49814), (204, 50033), (206, 50054), (209, 50099), (211, 50141), (212, 50153), (220, 50501), (225, 50633), (229, 50654), (230, 50657), (238, 50903), (242, 50969), (248, 51290), (249, 51308), (253, 51362),

Gene: Mareelih_97 Start: 52508, Stop: 58504, Start Num: 2
Candidate Starts for Mareelih_97:
(Start: 2 @52508 has 5 MA's), (4, 52598), (11, 53144), (17, 53255), (18, 53267), (19, 53285), (26, 53645), (28, 53819), (29, 53861), (30, 53915), (31, 53957), (33, 54008), (38, 54065), (40, 54101), (44, 54161), (45, 54164), (48, 54212), (49, 54215), (52, 54257), (54, 54287), (57, 54338), (59, 54368), (67, 54497), (71, 54611), (75, 54641), (80, 54716), (82, 54728), (89, 54866), (97, 54962), (103, 55025), (104, 55055), (105, 55064), (107, 55097), (111, 55193), (112, 55199), (113, 55247), (114, 55253), (115, 55259), (119, 55466), (121, 55520), (128, 55700), (133, 55754), (135, 55787), (136, 55832), (137, 55835), (140, 55856), (141, 55862), (147, 55973), (149, 55988), (155, 56105), (156, 56108), (161, 56282), (167, 56414), (173, 56540), (175, 56561), (191, 56855), (194, 56927), (200, 57071), (202, 57104), (203, 57164), (208, 57230), (209, 57263), (219, 57578), (221, 57650), (223, 57689), (224, 57719), (226, 57785), (228, 57803), (233, 57887), (234, 57890), (237, 58019), (240, 58043), (244, 58184), (245, 58211), (247, 58406), (248, 58421),

Gene: Phendrix_85 Start: 44570, Stop: 51235, Start Num: 1
Candidate Starts for Phendrix_85:

(Start: 1 @44570 has 2 MA's), (3, 45113), (5, 45176), (7, 45314), (9, 45425), (12, 45770), (14, 45803), (15, 45830), (16, 45851), (20, 45911), (22, 45965), (23, 46031), (24, 46070), (26, 46280), (27, 46301), (29, 46517), (30, 46571), (35, 46712), (36, 46724), (40, 46772), (42, 46793), (43, 46814), (48, 46883), (50, 46904), (51, 46916), (55, 46964), (56, 46991), (58, 47015), (65, 47153), (67, 47168), (68, 47198), (69, 47207), (74, 47309), (76, 47339), (77, 47354), (78, 47372), (79, 47378), (81, 47396), (82, 47399), (83, 47438), (84, 47450), (85, 47462), (87, 47495), (88, 47504), (90, 47543), (94, 47579), (95, 47591), (96, 47621), (98, 47639), (100, 47660), (101, 47663), (106, 47744), (107, 47765), (109, 47771), (110, 47792), (116, 47981), (117, 48002), (118, 48020), (120, 48134), (122, 48236), (125, 48296), (126, 48338), (129, 48383), (134, 48422), (142, 48542), (143, 48554), (150, 48674), (158, 48815), (160, 48908), (163, 48983), (166, 49052), (168, 49118), (169, 49139), (171, 49199), (173, 49226), (175, 49247), (178, 49298), (179, 49337), (180, 49382), (182, 49406), (189, 49505), (190, 49517), (192, 49586), (193, 49595), (197, 49673), (198, 49676), (204, 49895), (206, 49916), (209, 49961), (211, 50003), (212, 50015), (220, 50363), (225, 50495), (229, 50516), (230, 50519), (238, 50765), (242, 50831), (248, 51152), (249, 51170), (253, 51224),

Gene: Sixama_97 Start: 52616, Stop: 58471, Start Num: 2
Candidate Starts for Sixama_97:
(Start: 2 @52616 has 5 MA's), (4, 52697), (17, 53333), (26, 53723), (28, 53897), (29, 53939), (30, 53993), (31, 54035), (37, 54134), (38, 54143), (39, 54164), (48, 54290), (49, 54293), (59, 54446), (62, 54536), (63, 54539), (67, 54575), (70, 54644), (73, 54707), (80, 54794), (89, 54944), (99, 55052), (102, 55076), (103, 55103), (104, 55133), (107, 55175), (110, 55208), (111, 55271), (113, 55325), (115, 55337), (119, 55544), (121, 55598), (123, 55661), (124, 55679), (127, 55754), (128, 55778), (131, 55811), (133, 55832), (135, 55865), (137, 55913), (138, 55919), (139, 55931), (146, 56048), (153, 56147), (154, 56180), (155, 56183), (156, 56186), (161, 56360), (167, 56492), (176, 56651), (185, 56810), (195, 57002), (196, 57023), (207, 57290), (208, 57293), (210, 57356), (212, 57380), (214, 57485), (215, 57497), (217, 57545), (232, 57863), (237, 58019), (240, 58043), (244, 58184), (247, 58373), (248, 58388),