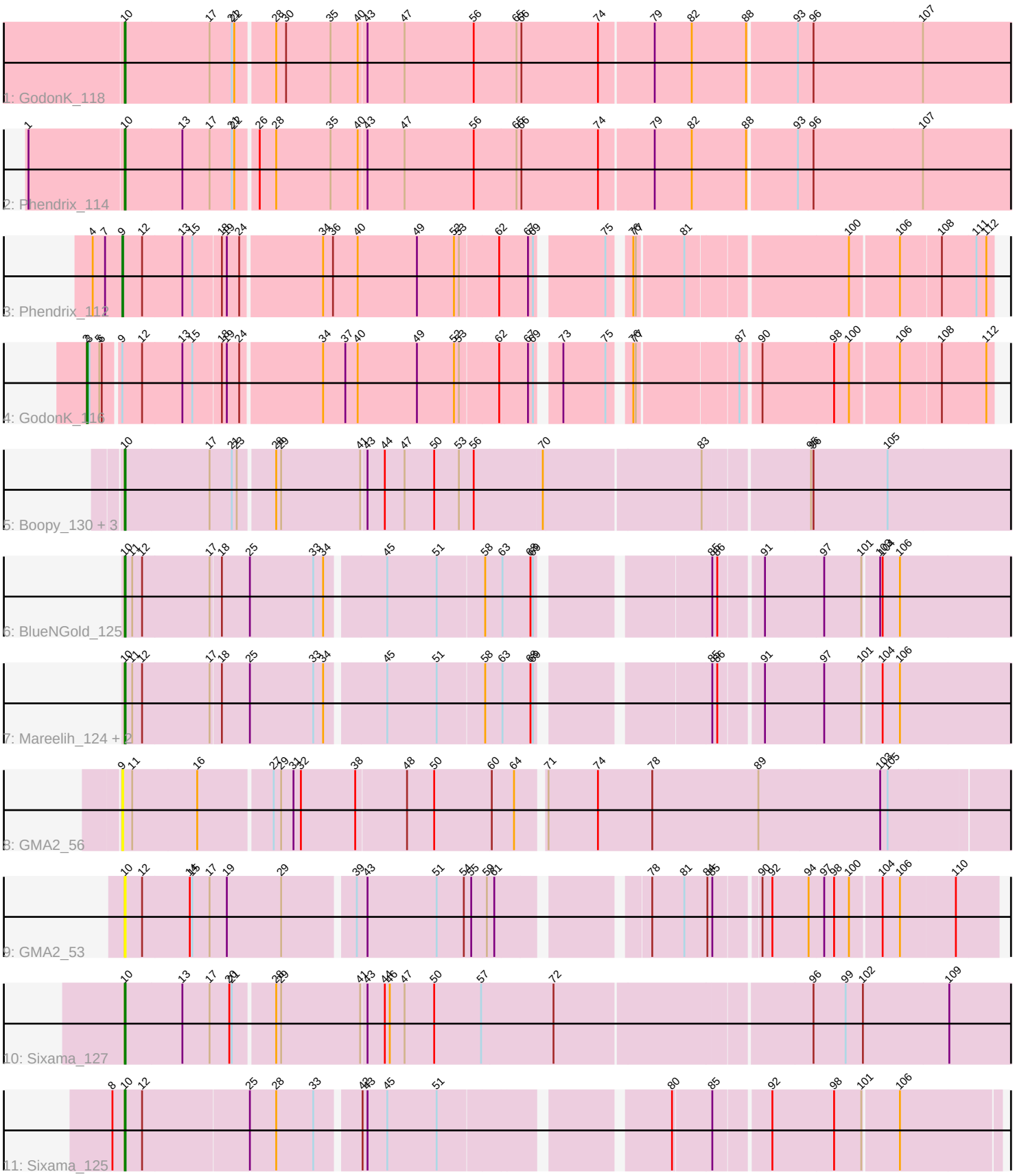
Pham 344511


1: GodonK_118
2: Phendrix_114
3: Phendrix_112
4: GodonK_116
5: Boopy_130 + 3
6: BlueNGold_125
7: Mareelih_124 + 2
8: GMA2_56
9: GMA2_53
10: Sixama_127
11: Sixama_125

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 344511 Report

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

Pham number 344511 has 16 members, 2 are drafts.

Phages represented in each track:
• Track 1 : GodonK_118
• Track 2 : Phendrix_114
• Track 3 : Phendrix_112
• Track 4 : GodonK_116
• Track 5 : Boopy_130, Mareelih_128, BlueNGold_129, Forza_130
• Track 6 : BlueNGold_125
• Track 7 : Mareelih_124, Boopy_126, Forza_126
• Track 8 : GMA2_56
• Track 9 : GMA2_53
• Track 10 : Sixama_127
• Track 11 : Sixama_125

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

The start number called the most often in the published annotations is 10, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueNGold_125, BlueNGold_129, Boopy_126, Boopy_130, Forza_126, Forza_130, GMA2_53, GodonK_118, Mareelih_124, Mareelih_128, Phendrix_114, Sixama_125, Sixama_127,

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

Genes that do not have the "Most Annotated" start:
• GMA2_56, GodonK_116, Phendrix_112,

Summary by start number:

Start 2:
• Found in 1 of 16 (6.2%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 100.0% of time when present

• Phage (with cluster) where this start called: GodonK_116 (DK),

Start 9:
• Found in 3 of 16 (18.8%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 66.7% of time when present
• Phage (with cluster) where this start called: GMA2_56 (DS), Phendrix_112 (DK),

Start 10:
• Found in 13 of 16 (81.2%) of genes in pham
• Manual Annotations of this start: 12 of 14
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_125 (DS), BlueNGold_129 (DS), Boopy_126 (DS), Boopy_130 (DS), Forza_126 (DS), Forza_130 (DS), GMA2_53 (DS), GodonK_118 (DK), Mareelih_124 (DS), Mareelih_128 (DS), Phendrix_114 (DK), Sixama_125 (DS), Sixama_127 (DS),

Summary by clusters:

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

Info for manual annotations of cluster DK:
•Start number 2 was manually annotated 1 time for cluster DK.
•Start number 9 was manually annotated 1 time for cluster DK.
•Start number 10 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DS:
•Start number 10 was manually annotated 10 times for cluster DS.

Gene Information:

Gene: BlueNGold_125 Start: 80985, Stop: 79975, Start Num: 10
Candidate Starts for BlueNGold_125:
(Start: 10 @80985 has 12 MA's), (11, 80976), (12, 80964), (17, 80883), (18, 80871), (25, 80838), (33, 80763), (34, 80751), (45, 80685), (51, 80625), (58, 80571), (63, 80553), (68, 80520), (69, 80517), (85, 80334), (86, 80328), (91, 80280), (97, 80211), (101, 80166), (103, 80148), (104, 80145), (106, 80124),

Gene: BlueNGold_129 Start: 83984, Stop: 82920, Start Num: 10
Candidate Starts for BlueNGold_129:
(Start: 10 @83984 has 12 MA's), (17, 83882), (21, 83855), (23, 83849), (28, 83810), (29, 83804), (41, 83708), (43, 83702), (44, 83681), (47, 83657), (50, 83621), (53, 83591), (56, 83573), (70, 83492), (83, 83306), (95, 83186), (96, 83183), (105, 83093),

Gene: Boopy_130 Start: 83996, Stop: 82932, Start Num: 10
Candidate Starts for Boopy_130:
(Start: 10 @83996 has 12 MA's), (17, 83894), (21, 83867), (23, 83861), (28, 83822), (29, 83816), (41, 83720), (43, 83714), (44, 83693), (47, 83669), (50, 83633), (53, 83603), (56, 83585), (70, 83504), (83, 83318), (95, 83198), (96, 83195), (105, 83105),

Gene: Boopy_126 Start: 80997, Stop: 79987, Start Num: 10
Candidate Starts for Boopy_126:

(Start: 10 @80997 has 12 MA's), (11, 80988), (12, 80976), (17, 80895), (18, 80883), (25, 80850), (33, 80775), (34, 80763), (45, 80697), (51, 80637), (58, 80583), (63, 80565), (68, 80532), (69, 80529), (85, 80346), (86, 80340), (91, 80292), (97, 80223), (101, 80178), (104, 80157), (106, 80136),

Gene: Forza_130 Start: 83912, Stop: 82848, Start Num: 10
Candidate Starts for Forza_130:
(Start: 10 @83912 has 12 MA's), (17, 83810), (21, 83783), (23, 83777), (28, 83738), (29, 83732), (41, 83636), (43, 83630), (44, 83609), (47, 83585), (50, 83549), (53, 83519), (56, 83501), (70, 83420), (83, 83234), (95, 83114), (96, 83111), (105, 83021),

Gene: Forza_126 Start: 80913, Stop: 79903, Start Num: 10
Candidate Starts for Forza_126:
(Start: 10 @80913 has 12 MA's), (11, 80904), (12, 80892), (17, 80811), (18, 80799), (25, 80766), (33, 80691), (34, 80679), (45, 80613), (51, 80553), (58, 80499), (63, 80481), (68, 80448), (69, 80445), (85, 80262), (86, 80256), (91, 80208), (97, 80139), (101, 80094), (104, 80073), (106, 80052),

Gene: GMA2_56 Start: 57162, Stop: 56092, Start Num: 9
Candidate Starts for GMA2_56:
(Start: 9 @57162 has 1 MA's), (11, 57150), (16, 57072), (27, 56988), (29, 56979), (31, 56964), (32, 56955), (38, 56889), (48, 56829), (50, 56796), (60, 56727), (64, 56700), (71, 56670), (74, 56610), (78, 56544), (89, 56415), (103, 56268), (105, 56259),

Gene: GMA2_53 Start: 54511, Stop: 53525, Start Num: 10
Candidate Starts for GMA2_53:
(Start: 10 @54511 has 12 MA's), (12, 54490), (14, 54433), (15, 54430), (17, 54409), (19, 54388), (29, 54322), (39, 54241), (43, 54229), (51, 54145), (54, 54112), (55, 54103), (59, 54085), (61, 54076), (78, 53920), (81, 53881), (84, 53854), (85, 53848), (90, 53800), (92, 53788), (94, 53746), (97, 53728), (98, 53716), (100, 53698), (104, 53662), (106, 53641), (110, 53575),

Gene: GodonK_118 Start: 74325, Stop: 73246, Start Num: 10
Candidate Starts for GodonK_118:
(Start: 10 @74325 has 12 MA's), (17, 74223), (21, 74196), (22, 74193), (28, 74151), (30, 74139), (35, 74085), (40, 74052), (43, 74043), (47, 73998), (56, 73914), (65, 73863), (66, 73857), (74, 73764), (79, 73701), (82, 73656), (88, 73590), (93, 73533), (96, 73515), (107, 73383),

Gene: GodonK_116 Start: 73096, Stop: 72086, Start Num: 2
Candidate Starts for GodonK_116:
(Start: 2 @73096 has 1 MA's), (3, 73093), (5, 73081), (6, 73078), (Start: 9 @73060 has 1 MA's), (12, 73036), (13, 72988), (15, 72976), (18, 72943), (19, 72937), (24, 72922), (34, 72829), (37, 72802), (40, 72787), (49, 72715), (52, 72670), (53, 72664), (62, 72619), (67, 72586), (69, 72580), (73, 72559), (75, 72508), (76, 72490), (77, 72487), (87, 72373), (90, 72352), (98, 72268), (100, 72250), (106, 72193), (108, 72145), (112, 72094),

Gene: Mareelih_128 Start: 83414, Stop: 82350, Start Num: 10
Candidate Starts for Mareelih_128:
(Start: 10 @83414 has 12 MA's), (17, 83312), (21, 83285), (23, 83279), (28, 83240), (29, 83234), (41, 83138), (43, 83132), (44, 83111), (47, 83087), (50, 83051), (53, 83021), (56, 83003), (70, 82922), (83, 82736), (95, 82616), (96, 82613), (105, 82523),

Gene: Mareelih_124 Start: 80415, Stop: 79405, Start Num: 10
Candidate Starts for Mareelih_124:
(Start: 10 @80415 has 12 MA's), (11, 80406), (12, 80394), (17, 80313), (18, 80301), (25, 80268), (33, 80193), (34, 80181), (45, 80115), (51, 80055), (58, 80001), (63, 79983), (68, 79950), (69, 79947), (85,

79764), (86, 79758), (91, 79710), (97, 79641), (101, 79596), (104, 79575), (106, 79554),

Gene: Phendrix_114 Start: 74581, Stop: 73502, Start Num: 10
Candidate Starts for Phendrix_114:
(1, 74695), (Start: 10 @74581 has 12 MA's), (13, 74512), (17, 74479), (21, 74452), (22, 74449), (26, 74425), (28, 74407), (35, 74341), (40, 74308), (43, 74299), (47, 74254), (56, 74170), (65, 74119), (66, 74113), (74, 74020), (79, 73957), (82, 73912), (88, 73846), (93, 73789), (96, 73771), (107, 73639),

Gene: Phendrix_112 Start: 73309, Stop: 72335, Start Num: 9
Candidate Starts for Phendrix_112:
(4, 73345), (7, 73330), (Start: 9 @73309 has 1 MA's), (12, 73285), (13, 73237), (15, 73225), (18, 73192), (19, 73186), (24, 73171), (34, 73078), (36, 73066), (40, 73036), (49, 72964), (52, 72919), (53, 72913), (62, 72868), (67, 72835), (69, 72829), (75, 72757), (76, 72739), (77, 72736), (81, 72682), (100, 72499), (106, 72442), (108, 72394), (111, 72355), (112, 72343),

Gene: Sixama_127 Start: 82877, Stop: 81810, Start Num: 10
Candidate Starts for Sixama_127:
(Start: 10 @82877 has 12 MA's), (13, 82808), (17, 82775), (20, 82751), (21, 82748), (28, 82703), (29, 82697), (41, 82601), (43, 82595), (44, 82574), (46, 82568), (47, 82550), (50, 82514), (57, 82457), (72, 82370), (96, 82073), (99, 82034), (102, 82013), (109, 81911),

Gene: Sixama_125 Start: 80566, Stop: 79586, Start Num: 10
Candidate Starts for Sixama_125:
(8, 80581), (Start: 10 @80566 has 12 MA's), (12, 80545), (25, 80419), (28, 80389), (33, 80344), (42, 80296), (43, 80290), (45, 80266), (51, 80206), (80, 79957), (85, 79912), (92, 79849), (98, 79777), (101, 79744), (106, 79702),