Pham 5733

1: Phendrix_218 + 1
2: GodonK_229 + 1
3: Boopy_174 + 3
4: Sixama_174
5: GMA2_69

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 5733 Report

This analysis was run 04/28/24 on database version 559.

Pham number 5733 has 10 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Phendrix_218, Phendrix_2
• Track 2 : GodonK_229, GodonK_3
• Track 3 : Boopy_174, Forza_175, Mareelih_172, BlueNGold_171
• Track 4 : Sixama_174
• Track 5 : GMA2_69

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

The start number called the most often in the published annotations is 3, it was called in 5 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueNGold_171, Boopy_174, Forza_175, Mareelih_172, Sixama_174,

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

Genes that do not have the "Most Annotated" start:
• GMA2_69, GodonK_229, GodonK_3, Phendrix_2, Phendrix_218,

Summary by start number:

Start 2:
• Found in 1 of 10 (10.0%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA2_69 (DS),

Start 3:
• Found in 5 of 10 (50.0%) of genes in pham
• Manual Annotations of this start: 5 of 9
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_171 (DS), Boopy_174 (DS), Forza_175 (DS), Mareelih_172 (DS), Sixama_174 (DS),

Start 13:
• Found in 4 of 10 (40.0%) of genes in pham
• Manual Annotations of this start: 4 of 9
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GodonK_229 (DK), GodonK_3 (DK), Phendrix_2 (DK), Phendrix_218 (DK),

Summary by clusters:

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

Info for manual annotations of cluster DK:
•Start number 13 was manually annotated 4 times for cluster DK.

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

Gene Information:

Gene: BlueNGold_171 Start: 101435, Stop: 99759, Start Num: 3
Candidate Starts for BlueNGold_171:
(Start: 3 @101435 has 5 MA's), (4, 101396), (7, 101279), (10, 101198), (14, 101144), (16, 101123), (22, 101006), (23, 100991), (25, 100889), (26, 100883), (29, 100838), (30, 100835), (33, 100742), (36, 100703), (37, 100697), (42, 100583), (47, 100352), (48, 100331), (50, 100274), (53, 100217), (55, 100172), (57, 100148), (58, 100136), (59, 100106), (61, 100088), (63, 100073), (64, 100058), (65, 100037), (68, 99971), (71, 99890),

Gene: Boopy_174 Start: 101446, Stop: 99770, Start Num: 3
Candidate Starts for Boopy_174:
(Start: 3 @101446 has 5 MA's), (4, 101407), (7, 101290), (10, 101209), (14, 101155), (16, 101134), (22, 101017), (23, 101002), (25, 100900), (26, 100894), (29, 100849), (30, 100846), (33, 100753), (36, 100714), (37, 100708), (42, 100594), (47, 100363), (48, 100342), (50, 100285), (53, 100228), (55, 100183), (57, 100159), (58, 100147), (59, 100117), (61, 100099), (63, 100084), (64, 100069), (65, 100048), (68, 99982), (71, 99901),

Gene: Forza_175 Start: 101363, Stop: 99687, Start Num: 3
Candidate Starts for Forza_175:
(Start: 3 @101363 has 5 MA's), (4, 101324), (7, 101207), (10, 101126), (14, 101072), (16, 101051), (22, 100934), (23, 100919), (25, 100817), (26, 100811), (29, 100766), (30, 100763), (33, 100670), (36, 100631), (37, 100625), (42, 100511), (47, 100280), (48, 100259), (50, 100202), (53, 100145), (55, 100100), (57, 100076), (58, 100064), (59, 100034), (61, 100016), (63, 100001), (64, 99986), (65, 99965), (68, 99899), (71, 99818),

Gene: GMA2_69 Start: 72845, Stop: 71187, Start Num: 2
Candidate Starts for GMA2_69:
(2, 72845), (5, 72791), (6, 72713), (8, 72641), (9, 72632), (10, 72614), (15, 72548), (16, 72530), (17, 72509), (19, 72458), (20, 72446), (22, 72413), (24, 72314), (26, 72290), (28, 72263), (29, 72245), (30, 72242), (38, 72089), (41, 72002), (43, 71966), (44, 71930), (47, 71756), (48, 71735), (55, 71576), (56, 71573), (57, 71552), (59, 71510), (61, 71492), (65, 71441), (67, 71390), (71, 71300), (73, 71216),

Gene: GodonK_229 Start: 116044, Stop: 117492, Start Num: 13
Candidate Starts for GodonK_229:
(Start: 13 @116044 has 4 MA's), (18, 116125), (26, 116311), (31, 116416), (32, 116437), (34, 116458), (40, 116569), (42, 116602), (45, 116773), (46, 116788), (51, 116926), (52, 116941), (54, 116980), (55, 116986), (57, 117010), (60, 117058), (62, 117076), (65, 117121), (66, 117124), (69, 117211), (74, 117394), (75, 117409), (76, 117430),

Gene: GodonK_3 Start: 1062, Stop: 2510, Start Num: 13
Candidate Starts for GodonK_3:
(Start: 13 @1062 has 4 MA's), (18, 1143), (26, 1329), (31, 1434), (32, 1455), (34, 1476), (40, 1587), (42, 1620), (45, 1791), (46, 1806), (51, 1944), (52, 1959), (54, 1998), (55, 2004), (57, 2028), (60, 2076), (62, 2094), (65, 2139), (66, 2142), (69, 2229), (74, 2412), (75, 2427), (76, 2448),

Gene: Mareelih_172 Start: 100881, Stop: 99205, Start Num: 3
Candidate Starts for Mareelih_172:
(Start: 3 @100881 has 5 MA's), (4, 100842), (7, 100725), (10, 100644), (14, 100590), (16, 100569), (22, 100452), (23, 100437), (25, 100335), (26, 100329), (29, 100284), (30, 100281), (33, 100188), (36, 100149), (37, 100143), (42, 100029), (47, 99798), (48, 99777), (50, 99720), (53, 99663), (55, 99618), (57, 99594), (58, 99582), (59, 99552), (61, 99534), (63, 99519), (64, 99504), (65, 99483), (68, 99417), (71, 99336),

Gene: Phendrix_218 Start: 114536, Stop: 115969, Start Num: 13
Candidate Starts for Phendrix_218:
(12, 114530), (Start: 13 @114536 has 4 MA's), (31, 114893), (32, 114914), (34, 114935), (40, 115046), (42, 115079), (45, 115250), (46, 115265), (49, 115331), (51, 115403), (52, 115418), (54, 115457), (55, 115463), (57, 115487), (60, 115535), (62, 115553), (65, 115598), (66, 115601), (69, 115688), (72, 115754), (74, 115871), (75, 115886), (76, 115907),

Gene: Phendrix_2 Start: 938, Stop: 2371, Start Num: 13
Candidate Starts for Phendrix_2:
(12, 932), (Start: 13 @938 has 4 MA's), (31, 1295), (32, 1316), (34, 1337), (40, 1448), (42, 1481), (45, 1652), (46, 1667), (49, 1733), (51, 1805), (52, 1820), (54, 1859), (55, 1865), (57, 1889), (60, 1937), (62, 1955), (65, 2000), (66, 2003), (69, 2090), (72, 2156), (74, 2273), (75, 2288), (76, 2309),

Gene: Sixama_174 Start: 101414, Stop: 99735, Start Num: 3
Candidate Starts for Sixama_174:
(1, 101447), (Start: 3 @101414 has 5 MA's), (4, 101375), (10, 101177), (11, 101171), (16, 101102), (21, 101012), (22, 100985), (23, 100970), (26, 100862), (27, 100841), (29, 100817), (30, 100814), (35, 100703), (37, 100676), (39, 100637), (42, 100562), (47, 100328), (48, 100307), (50, 100250), (57, 100124), (59, 100082), (64, 100034), (65, 100013), (70, 99872), (71, 99866), (72, 99857),