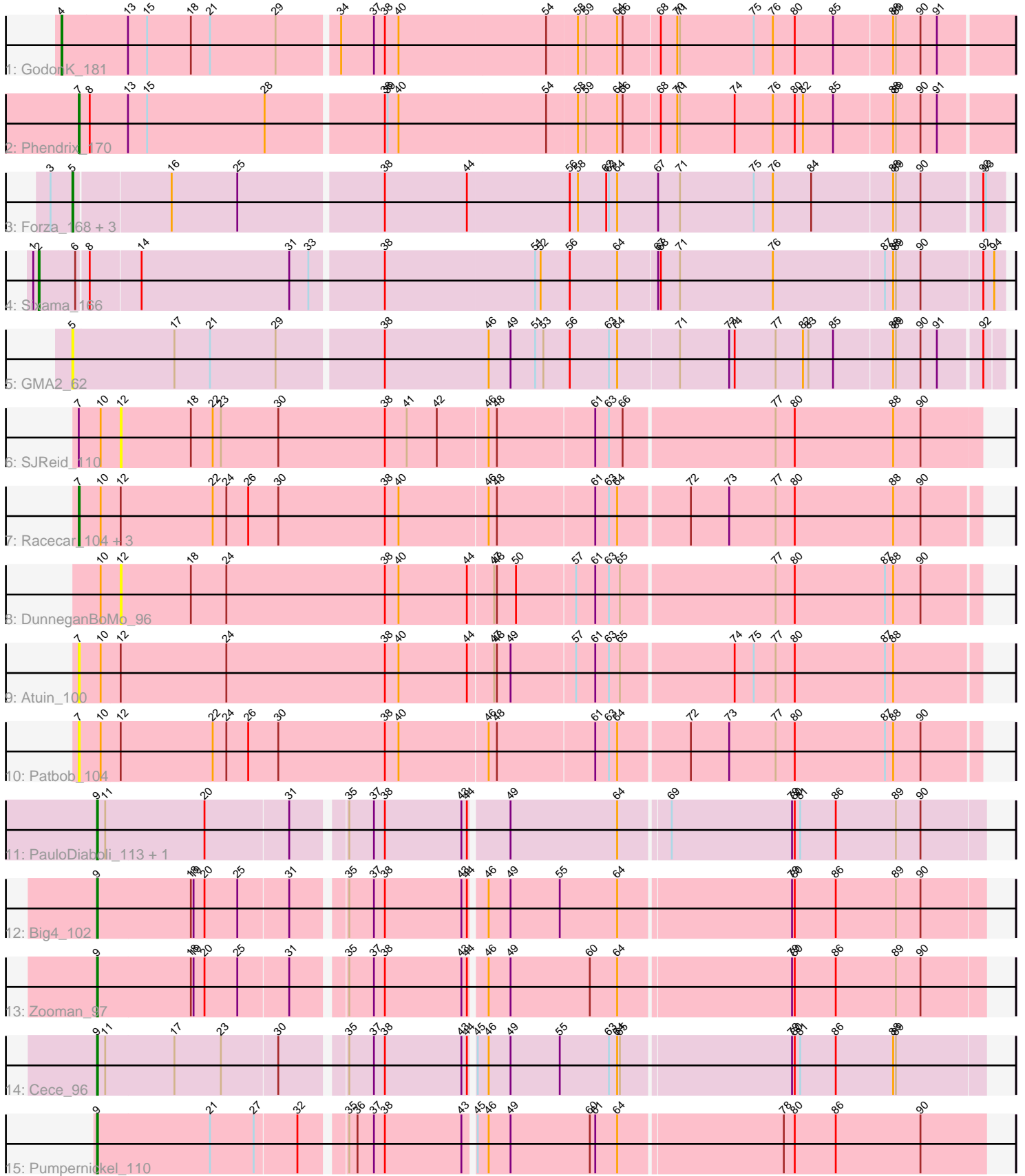


Pham 171748



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 171748 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171748 has 22 members, 8 are drafts.

Phages represented in each track:

- Track 1 : GodonK_181
- Track 2 : Phendrix_170
- Track 3 : Forza_168, Boopy_167, BlueNGGold_164, Mareelih_165
- Track 4 : Sixama_166
- Track 5 : GMA2_62
- Track 6 : SJReid_110
- Track 7 : Racecar_104, Mimi_109, Talia1610_105, Bloom_107
- Track 8 : DunneganBoMo_96
- Track 9 : Atuin_100
- Track 10 : Patbob_104
- Track 11 : PauloDiaboli_113, A3Wally_113
- Track 12 : Big4_102
- Track 13 : Zooman_97
- Track 14 : Cece_96
- Track 15 : Pumpernickel_110

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

The start number called the most often in the published annotations is 9, it was called in 6 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A3Wally_113, Big4_102, Cece_96, PauloDiaboli_113, Pumpernickel_110, Zooman_97,

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

-

Genes that do not have the "Most Annotated" start:

- Atuin_100, Bloom_107, BlueNGGold_164, Boopy_167, DunneganBoMo_96, Forza_168, GMA2_62, GodonK_181, Mareelih_165, Mimi_109, Patbob_104, Phendrix_170, Racecar_104, SJReid_110, Sixama_166, Talia1610_105,

Summary by start number:

Start 2:

- Found in 1 of 22 (4.5%) 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: Sixama_166 (DS),

Start 4:

- Found in 1 of 22 (4.5%) 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_181 (DK),

Start 5:

- Found in 5 of 22 (22.7%) of genes in pham
- Manual Annotations of this start: 4 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_164 (DS), Boopy_167 (DS), Forza_168 (DS), GMA2_62 (DS), Mareelih_165 (DS),

Start 7:

- Found in 8 of 22 (36.4%) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Atuin_100 (FC), Bloom_107 (FC), Mimi_109 (FC), Patbob_104 (FC), Phendrix_170 (DK), Racecar_104 (FC), Talia1610_105 (FC),

Start 9:

- Found in 6 of 22 (27.3%) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_113 (GD1), Big4_102 (GD2), Cece_96 (GD3), PauloDiaboli_113 (GD1), Pumpernickel_110 (GD4), Zooman_97 (GD2),

Start 12:

- Found in 8 of 22 (36.4%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: DunneganBoMo_96 (FC), SJReid_110 (FC),

Summary by clusters:

There are 7 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, FC, DS,

Info for manual annotations of cluster DK:

- Start number 4 was manually annotated 1 time for cluster DK.
- Start number 7 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:

- Start number 2 was manually annotated 1 time for cluster DS.

- Start number 5 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster FC:

- Start number 7 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 9 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 9 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 9 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 9 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_113 Start: 77350, Stop: 76415, Start Num: 9

Candidate Starts for A3Wally_113:

(Start: 9 @77350 has 6 MA's), (11, 77341), (20, 77233), (31, 77143), (35, 77092), (37, 77065), (38, 77053), (43, 76969), (44, 76963), (49, 76924), (64, 76807), (69, 76756), (79, 76624), (80, 76621), (81, 76615), (86, 76576), (89, 76510), (90, 76483),

Gene: Atuin_100 Start: 83319, Stop: 84290, Start Num: 7

Candidate Starts for Atuin_100:

(Start: 7 @83319 has 2 MA's), (10, 83343), (12, 83364), (24, 83478), (38, 83652), (40, 83667), (44, 83742), (47, 83769), (48, 83772), (49, 83787), (57, 83856), (61, 83877), (63, 83892), (65, 83904), (74, 84024), (75, 84045), (77, 84069), (80, 84090), (87, 84189), (88, 84198),

Gene: Big4_102 Start: 76433, Stop: 75498, Start Num: 9

Candidate Starts for Big4_102:

(Start: 9 @76433 has 6 MA's), (18, 76331), (19, 76328), (20, 76316), (25, 76280), (31, 76226), (35, 76175), (37, 76148), (38, 76136), (43, 76052), (44, 76046), (46, 76031), (49, 76007), (55, 75953), (64, 75890), (79, 75707), (80, 75704), (86, 75659), (89, 75593), (90, 75566),

Gene: Bloom_107 Start: 83495, Stop: 84466, Start Num: 7

Candidate Starts for Bloom_107:

(Start: 7 @83495 has 2 MA's), (10, 83519), (12, 83540), (22, 83639), (24, 83654), (26, 83678), (30, 83711), (38, 83828), (40, 83843), (46, 83939), (48, 83948), (61, 84053), (63, 84068), (64, 84077), (72, 84152), (73, 84194), (77, 84245), (80, 84266), (88, 84374), (90, 84404),

Gene: BlueNGold_164 Start: 94575, Stop: 93583, Start Num: 5

Candidate Starts for BlueNGold_164:

(3, 94599), (Start: 5 @94575 has 4 MA's), (16, 94473), (25, 94401), (38, 94248), (44, 94158), (56, 94050), (58, 94041), (62, 94011), (63, 94008), (64, 93999), (67, 93954), (71, 93930), (75, 93849), (76, 93828), (84, 93786), (88, 93699), (89, 93696), (90, 93669), (92, 93606), (93, 93603),

Gene: Boopy_167 Start: 94586, Stop: 93594, Start Num: 5

Candidate Starts for Boopy_167:

(3, 94610), (Start: 5 @94586 has 4 MA's), (16, 94484), (25, 94412), (38, 94259), (44, 94169), (56, 94061), (58, 94052), (62, 94022), (63, 94019), (64, 94010), (67, 93965), (71, 93941), (75, 93860), (76, 93839), (84, 93797), (88, 93710), (89, 93707), (90, 93680), (92, 93617), (93, 93614),

Gene: Cece_96 Start: 79474, Stop: 78539, Start Num: 9

Candidate Starts for Cece_96:

(Start: 9 @79474 has 6 MA's), (11, 79465), (17, 79390), (23, 79339), (30, 79279), (35, 79216), (37, 79189), (38, 79177), (43, 79093), (44, 79087), (45, 79084), (46, 79072), (49, 79048), (55, 78994), (63, 78940), (64, 78931), (65, 78928), (79, 78748), (80, 78745), (81, 78739), (86, 78700), (88, 78637), (89, 78634),

Gene: DunneganBoMo_96 Start: 79281, Stop: 80207, Start Num: 12

Candidate Starts for DunneganBoMo_96:

(10, 79260), (12, 79281), (18, 79356), (24, 79395), (38, 79569), (40, 79584), (44, 79659), (47, 79686), (48, 79689), (50, 79710), (57, 79773), (61, 79794), (63, 79809), (65, 79821), (77, 79986), (80, 80007), (87, 80106), (88, 80115), (90, 80145),

Gene: Forza_168 Start: 94503, Stop: 93511, Start Num: 5

Candidate Starts for Forza_168:

(3, 94527), (Start: 5 @94503 has 4 MA's), (16, 94401), (25, 94329), (38, 94176), (44, 94086), (56, 93978), (58, 93969), (62, 93939), (63, 93936), (64, 93927), (67, 93882), (71, 93858), (75, 93777), (76, 93756), (84, 93714), (88, 93627), (89, 93624), (90, 93597), (92, 93534), (93, 93531),

Gene: GMA2_62 Start: 65413, Stop: 64418, Start Num: 5

Candidate Starts for GMA2_62:

(Start: 5 @65413 has 4 MA's), (17, 65302), (21, 65263), (29, 65191), (38, 65080), (46, 64966), (49, 64942), (51, 64915), (53, 64906), (56, 64879), (63, 64837), (64, 64828), (71, 64762), (73, 64708), (74, 64702), (77, 64657), (82, 64627), (83, 64621), (85, 64594), (88, 64531), (89, 64528), (90, 64501), (91, 64483), (92, 64438),

Gene: GodonK_181 Start: 91029, Stop: 90010, Start Num: 4

Candidate Starts for GodonK_181:

(Start: 4 @91029 has 1 MA's), (13, 90957), (15, 90936), (18, 90888), (21, 90867), (29, 90795), (34, 90732), (37, 90696), (38, 90684), (40, 90669), (54, 90510), (58, 90477), (59, 90468), (64, 90435), (66, 90429), (68, 90390), (70, 90372), (71, 90369), (75, 90288), (76, 90267), (80, 90243), (85, 90201), (88, 90138), (89, 90135), (90, 90108), (91, 90090),

Gene: Mareelih_165 Start: 94021, Stop: 93029, Start Num: 5

Candidate Starts for Mareelih_165:

(3, 94045), (Start: 5 @94021 has 4 MA's), (16, 93919), (25, 93847), (38, 93694), (44, 93604), (56, 93496), (58, 93487), (62, 93457), (63, 93454), (64, 93445), (67, 93400), (71, 93376), (75, 93295), (76, 93274), (84, 93232), (88, 93145), (89, 93142), (90, 93115), (92, 93052), (93, 93049),

Gene: Mimi_109 Start: 82842, Stop: 83813, Start Num: 7

Candidate Starts for Mimi_109:

(Start: 7 @82842 has 2 MA's), (10, 82866), (12, 82887), (22, 82986), (24, 83001), (26, 83025), (30, 83058), (38, 83175), (40, 83190), (46, 83286), (48, 83295), (61, 83400), (63, 83415), (64, 83424), (72, 83499), (73, 83541), (77, 83592), (80, 83613), (88, 83721), (90, 83751),

Gene: Patbob_104 Start: 83577, Stop: 84548, Start Num: 7

Candidate Starts for Patbob_104:

(Start: 7 @83577 has 2 MA's), (10, 83601), (12, 83622), (22, 83721), (24, 83736), (26, 83760), (30, 83793), (38, 83910), (40, 83925), (46, 84021), (48, 84030), (61, 84135), (63, 84150), (64, 84159), (72,

84234), (73, 84276), (77, 84327), (80, 84348), (87, 84447), (88, 84456), (90, 84486),

Gene: PauloDiaboli_113 Start: 76695, Stop: 75760, Start Num: 9

Candidate Starts for PauloDiaboli_113:

(Start: 9 @76695 has 6 MA's), (11, 76686), (20, 76578), (31, 76488), (35, 76437), (37, 76410), (38, 76398), (43, 76314), (44, 76308), (49, 76269), (64, 76152), (69, 76101), (79, 75969), (80, 75966), (81, 75960), (86, 75921), (89, 75855), (90, 75828),

Gene: Phendrix_170 Start: 90108, Stop: 89107, Start Num: 7

Candidate Starts for Phendrix_170:

(Start: 7 @90108 has 2 MA's), (8, 90096), (13, 90054), (15, 90033), (28, 89904), (38, 89781), (39, 89778), (40, 89766), (54, 89607), (58, 89574), (59, 89565), (64, 89532), (66, 89526), (68, 89487), (70, 89469), (71, 89466), (74, 89406), (76, 89364), (80, 89340), (82, 89331), (85, 89298), (88, 89235), (89, 89232), (90, 89205), (91, 89187),

Gene: Pumpernickel_110 Start: 78248, Stop: 77310, Start Num: 9

Candidate Starts for Pumpernickel_110:

(Start: 9 @78248 has 6 MA's), (21, 78125), (27, 78077), (32, 78032), (35, 77990), (36, 77981), (37, 77963), (38, 77951), (43, 77867), (45, 77858), (46, 77846), (49, 77822), (60, 77735), (61, 77729), (64, 77705), (78, 77531), (80, 77519), (86, 77474), (90, 77381),

Gene: Racecar_104 Start: 83495, Stop: 84466, Start Num: 7

Candidate Starts for Racecar_104:

(Start: 7 @83495 has 2 MA's), (10, 83519), (12, 83540), (22, 83639), (24, 83654), (26, 83678), (30, 83711), (38, 83828), (40, 83843), (46, 83939), (48, 83948), (61, 84053), (63, 84068), (64, 84077), (72, 84152), (73, 84194), (77, 84245), (80, 84266), (88, 84374), (90, 84404),

Gene: SJReid_110 Start: 75794, Stop: 76723, Start Num: 12

Candidate Starts for SJReid_110:

(Start: 7 @75749 has 2 MA's), (10, 75773), (12, 75794), (18, 75869), (22, 75893), (23, 75902), (30, 75965), (38, 76082), (41, 76106), (42, 76139), (46, 76193), (48, 76202), (61, 76307), (63, 76322), (66, 76337), (77, 76499), (80, 76520), (88, 76628), (90, 76658),

Gene: Sixama_166 Start: 94053, Stop: 93025, Start Num: 2

Candidate Starts for Sixama_166:

(1, 94059), (Start: 2 @94053 has 1 MA's), (6, 94014), (8, 94002), (14, 93948), (31, 93786), (33, 93765), (38, 93690), (51, 93528), (52, 93522), (56, 93492), (64, 93441), (67, 93399), (68, 93396), (71, 93375), (76, 93273), (87, 93153), (88, 93144), (89, 93141), (90, 93114), (92, 93048), (94, 93036),

Gene: Talia1610_105 Start: 82860, Stop: 83831, Start Num: 7

Candidate Starts for Talia1610_105:

(Start: 7 @82860 has 2 MA's), (10, 82884), (12, 82905), (22, 83004), (24, 83019), (26, 83043), (30, 83076), (38, 83193), (40, 83208), (46, 83304), (48, 83313), (61, 83418), (63, 83433), (64, 83442), (72, 83517), (73, 83559), (77, 83610), (80, 83631), (88, 83739), (90, 83769),

Gene: Zooman_97 Start: 74278, Stop: 73343, Start Num: 9

Candidate Starts for Zooman_97:

(Start: 9 @74278 has 6 MA's), (18, 74176), (19, 74173), (20, 74161), (25, 74125), (31, 74071), (35, 74020), (37, 73993), (38, 73981), (43, 73897), (44, 73891), (46, 73876), (49, 73852), (60, 73765), (64, 73735), (79, 73552), (80, 73549), (86, 73504), (89, 73438), (90, 73411),