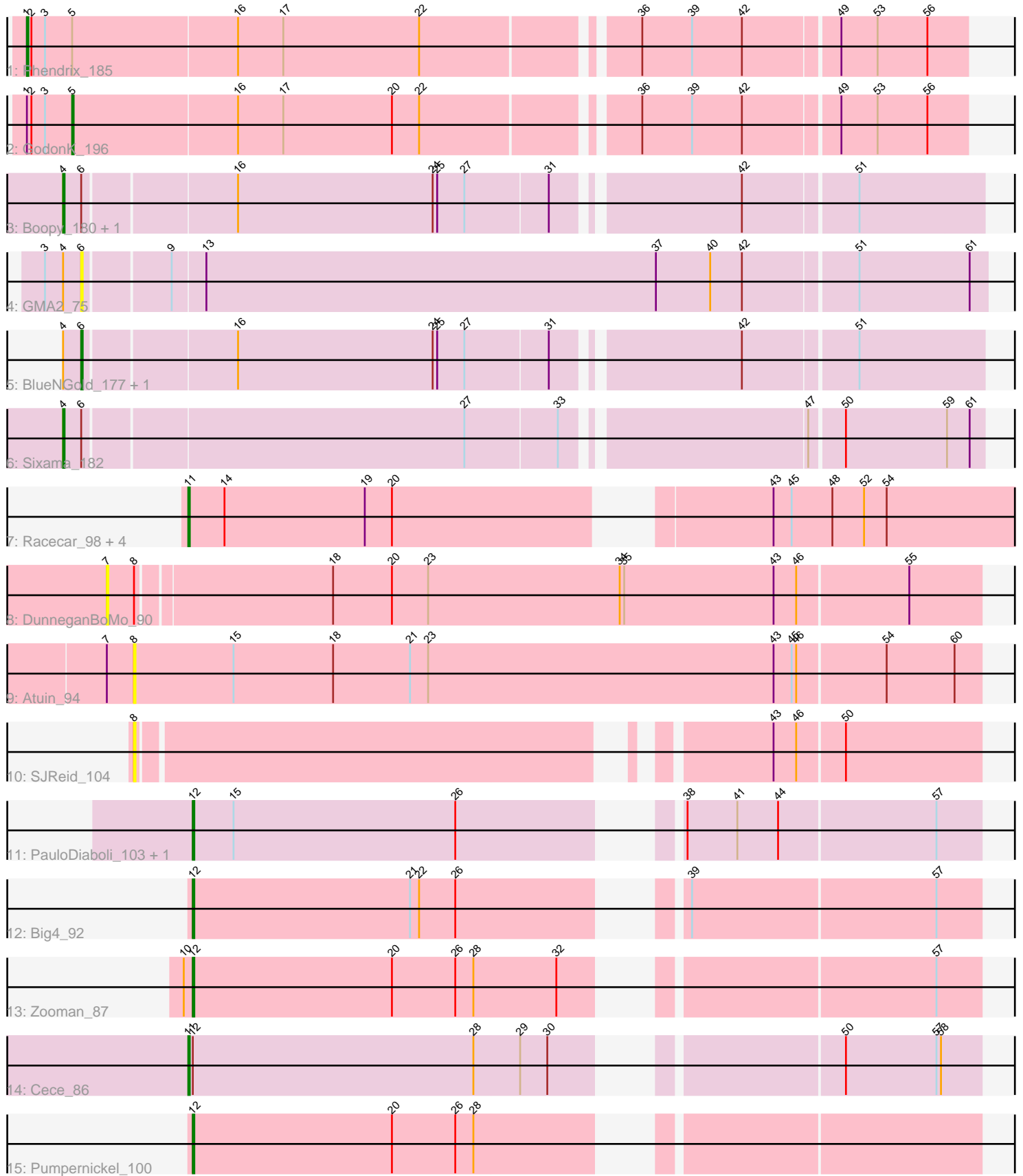# Pham 4217

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 4217 Report

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

Pham number 4217 has 22 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Phendrix_185
• Track 2 : GodonK_196
• Track 3 : Boopy_180, Mareelih_178
• Track 4 : GMA2_75
• Track 5 : BlueNGold_177, Forza_181
• Track 6 : Sixama_182
• Track 7 : Racecar_98, Talia1610_99, Mimi_103, Bloom_101, Patbob_98
• Track 8 : DunneganBoMo_90
• Track 9 : Atuin_94
• Track 10 : SJReid_104
• Track 11 : PauloDiaboli_103, A3Wally_103
• Track 12 : Big4_92
• Track 13 : Zooman_87
• Track 14 : Cece_86
• Track 15 : Pumpernickel_100

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

The start number called the most often in the published annotations is 12, it was called in 5 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A3Wally_103, Big4_92, PauloDiaboli_103, Pumpernickel_100, Zooman_87,

Genes that have the "Most Annotated" start but do not call it:
• Cece_86,

Genes that do not have the "Most Annotated" start:
• Atuin_94, Bloom_101, BlueNGold_177, Boopy_180, DunneganBoMo_90, Forza_181, GMA2_75, GodonK_196, Mareelih_178, Mimi_103, Patbob_98, Phendrix_185, Racecar_98, SJReid_104, Sixama_182, Talia1610_99,

Summary by start number:

Start 1:
• Found in 2 of 22 (9.1%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Phendrix_185 (DK),

Start 4:
• Found in 6 of 22 (27.3%) of genes in pham
• Manual Annotations of this start: 3 of 14
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Boopy_180 (DS), Mareelih_178 (DS),
Sixama_182 (DS),

Start 5:
• Found in 2 of 22 (9.1%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 50.0% of time when present
• Phage (with cluster) where this start called: GodonK_196 (DK),

Start 6:
• Found in 6 of 22 (27.3%) of genes in pham
• Manual Annotations of this start: 2 of 14
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_177 (DS), Forza_181 (DS),
GMA2_75 (DS),

Start 7:
• Found in 2 of 22 (9.1%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: DunneganBoMo_90 (FC),

Start 8:
• Found in 3 of 22 (13.6%) of genes in pham
• No Manual Annotations of this start.
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Atuin_94 (FC), SJReid_104 (FC),

Start 11:
• Found in 6 of 22 (27.3%) of genes in pham
• Manual Annotations of this start: 2 of 14
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bloom_101 (FC), Cece_86 (GD3),
Mimi_103 (FC), Patbob_98 (FC), Racecar_98 (FC), Talia1610_99 (FC),

Start 12:
• Found in 6 of 22 (27.3%) of genes in pham
• Manual Annotations of this start: 5 of 14
• Called 83.3% of time when present
• Phage (with cluster) where this start called: A3Wally_103 (GD1), Big4_92 (GD2),
PauloDiaboli_103 (GD1), Pumpernickel_100 (GD4), Zooman_87 (GD2),

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 1 was manually annotated 1 time for cluster DK.
•Start number 5 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:
•Start number 4 was manually annotated 3 times for cluster DS.
•Start number 6 was manually annotated 2 times for cluster DS.

Info for manual annotations of cluster FC:
•Start number 11 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:
•Start number 12 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 12 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 11 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 12 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_103 Start: 68020, Stop: 68490, Start Num: 12
Candidate Starts for A3Wally_103:
(Start: 12 @68020 has 5 MA's), (15, 68047), (26, 68194), (38, 68299), (41, 68332), (44, 68359), (57, 68461),

Gene: Atuin_94 Start: 76996, Stop: 77553, Start Num: 8
Candidate Starts for Atuin_94:
(7, 76978), (8, 76996), (15, 77062), (18, 77128), (21, 77179), (23, 77191), (43, 77419), (45, 77431), (46, 77434), (54, 77491), (60, 77536),

Gene: Big4_92 Start: 67235, Stop: 67705, Start Num: 12
Candidate Starts for Big4_92:
(Start: 12 @67235 has 5 MA's), (21, 67379), (22, 67385), (26, 67409), (39, 67517), (57, 67676),

Gene: Bloom_101 Start: 77157, Stop: 77663, Start Num: 11
Candidate Starts for Bloom_101:
(Start: 11 @77157 has 2 MA's), (14, 77181), (19, 77274), (20, 77292), (43, 77499), (45, 77511), (48, 77538), (52, 77559), (54, 77574),

Gene: BlueNGold_177 Start: 104697, Stop: 104134, Start Num: 6
Candidate Starts for BlueNGold_177:
(Start: 4 @104709 has 3 MA's), (Start: 6 @104697 has 2 MA's), (16, 104601), (24, 104472), (25, 104469), (27, 104451), (31, 104397), (42, 104286), (51, 104214),

Gene: Boopy_180 Start: 104720, Stop: 104145, Start Num: 4
Candidate Starts for Boopy_180:
(Start: 4 @104720 has 3 MA's), (Start: 6 @104708 has 2 MA's), (16, 104612), (24, 104483), (25, 104480), (27, 104462), (31, 104408), (42, 104297), (51, 104225),

Gene: Cece_86 Start: 70286, Stop: 70759, Start Num: 11
Candidate Starts for Cece_86:
(Start: 11 @70286 has 2 MA's), (Start: 12 @70289 has 5 MA's), (28, 70475), (29, 70505), (30, 70523), (50, 70670), (57, 70730), (58, 70733),

Gene: DunneganBoMo_90 Start: 72889, Stop: 73455, Start Num: 7
Candidate Starts for DunneganBoMo_90:
(7, 72889), (8, 72907), (18, 73030), (20, 73069), (23, 73093), (34, 73219), (35, 73222), (43, 73321), (46, 73336), (55, 73408),

Gene: Forza_181 Start: 104625, Stop: 104062, Start Num: 6
Candidate Starts for Forza_181:
(Start: 4 @104637 has 3 MA's), (Start: 6 @104625 has 2 MA's), (16, 104529), (24, 104400), (25, 104397), (27, 104379), (31, 104325), (42, 104214), (51, 104142),

Gene: GMA2_75 Start: 76604, Stop: 76020, Start Num: 6
Candidate Starts for GMA2_75:
(3, 76628), (Start: 4 @76616 has 3 MA's), (Start: 6 @76604 has 2 MA's), (9, 76550), (13, 76529), (37, 76232), (40, 76196), (42, 76175), (51, 76103), (61, 76031),

Gene: GodonK_196 Start: 101457, Stop: 100891, Start Num: 5
Candidate Starts for GodonK_196:
(Start: 1 @101487 has 1 MA's), (2, 101484), (3, 101475), (Start: 5 @101457 has 1 MA's), (16, 101349), (17, 101319), (20, 101247), (22, 101229), (36, 101100), (39, 101067), (42, 101034), (49, 100974), (53, 100950), (56, 100917),

Gene: Mareelih_178 Start: 104155, Stop: 103580, Start Num: 4
Candidate Starts for Mareelih_178:
(Start: 4 @104155 has 3 MA's), (Start: 6 @104143 has 2 MA's), (16, 104047), (24, 103918), (25, 103915), (27, 103897), (31, 103843), (42, 103732), (51, 103660),

Gene: Mimi_103 Start: 76504, Stop: 77010, Start Num: 11
Candidate Starts for Mimi_103:
(Start: 11 @76504 has 2 MA's), (14, 76528), (19, 76621), (20, 76639), (43, 76846), (45, 76858), (48, 76885), (52, 76906), (54, 76921),

Gene: Patbob_98 Start: 77232, Stop: 77738, Start Num: 11
Candidate Starts for Patbob_98:
(Start: 11 @77232 has 2 MA's), (14, 77256), (19, 77349), (20, 77367), (43, 77574), (45, 77586), (48, 77613), (52, 77634), (54, 77649),

Gene: PauloDiaboli_103 Start: 67377, Stop: 67847, Start Num: 12
Candidate Starts for PauloDiaboli_103:
(Start: 12 @67377 has 5 MA's), (15, 67404), (26, 67551), (38, 67656), (41, 67689), (44, 67716), (57, 67818),

Gene: Phendrix_185 Start: 100076, Stop: 99480, Start Num: 1

Candidate Starts for Phendrix_185:
(Start: 1 @100076 has 1 MA's), (2, 100073), (3, 100064), (Start: 5 @100046 has 1 MA's), (16, 99938), (17, 99908), (22, 99818), (36, 99689), (39, 99656), (42, 99623), (49, 99563), (53, 99539), (56, 99506),

Gene: Pumpernickel_100 Start: 69028, Stop: 69498, Start Num: 12
Candidate Starts for Pumpernickel_100:
(Start: 12 @69028 has 5 MA's), (20, 69160), (26, 69202), (28, 69214),

Gene: Racecar_98 Start: 77157, Stop: 77663, Start Num: 11
Candidate Starts for Racecar_98:
(Start: 11 @77157 has 2 MA's), (14, 77181), (19, 77274), (20, 77292), (43, 77499), (45, 77511), (48, 77538), (52, 77559), (54, 77574),

Gene: SJReid_104 Start: 69475, Stop: 69978, Start Num: 8
Candidate Starts for SJReid_104:
(8, 69475), (43, 69844), (46, 69859), (50, 69889),

Gene: Sixama_182 Start: 105456, Stop: 104881, Start Num: 4
Candidate Starts for Sixama_182:
(Start: 4 @105456 has 3 MA's), (Start: 6 @105444 has 2 MA's), (27, 105198), (33, 105138), (47, 104991), (50, 104970), (59, 104904), (61, 104889),

Gene: Talia1610_99 Start: 76522, Stop: 77028, Start Num: 11
Candidate Starts for Talia1610_99:
(Start: 11 @76522 has 2 MA's), (14, 76546), (19, 76639), (20, 76657), (43, 76864), (45, 76876), (48, 76903), (52, 76924), (54, 76939),

Gene: Zooman_87 Start: 65082, Stop: 65552, Start Num: 12
Candidate Starts for Zooman_87:
(10, 65076), (Start: 12 @65082 has 5 MA's), (20, 65214), (26, 65256), (28, 65268), (32, 65322), (57, 65523),