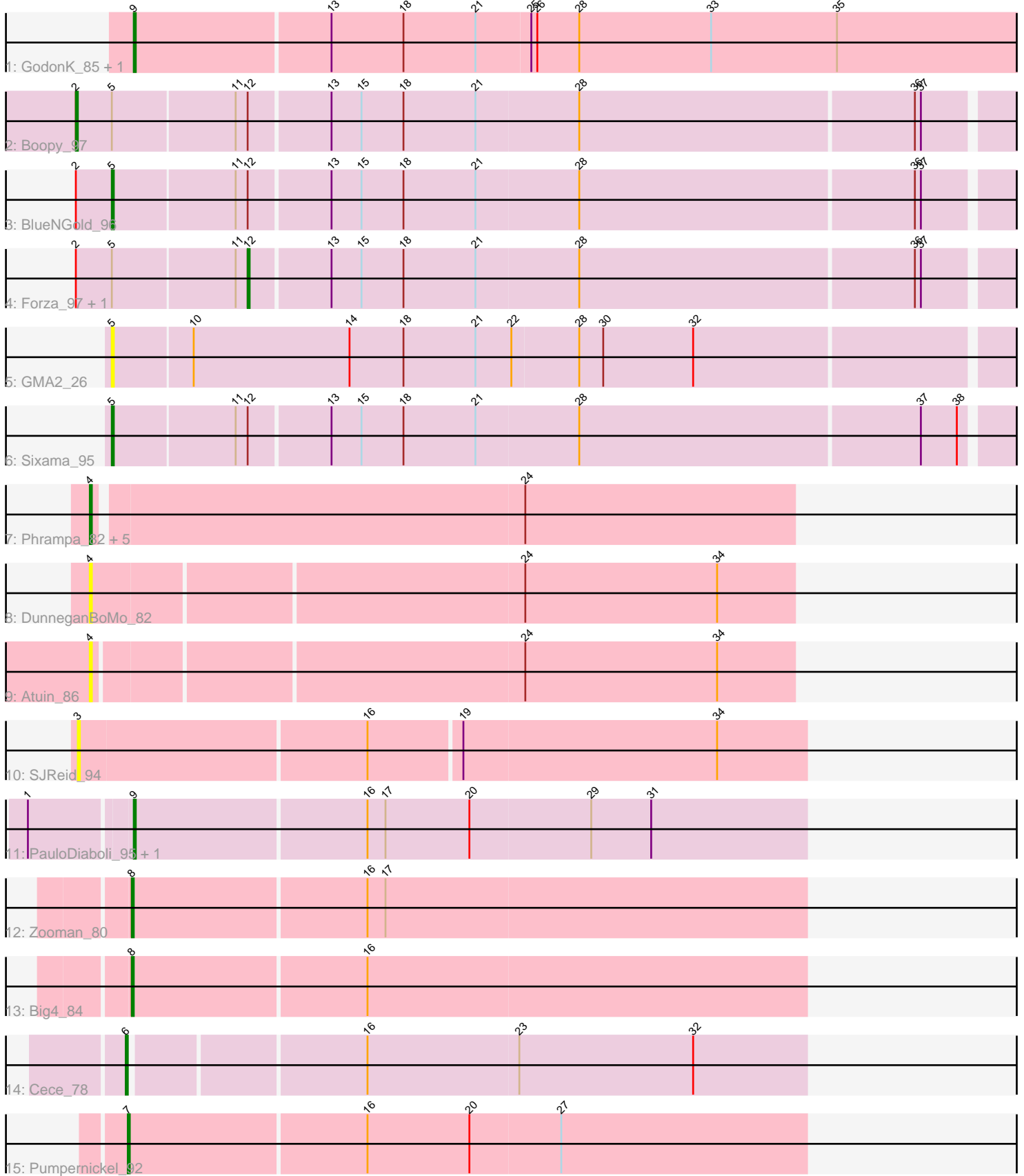# Pham 188409

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 188409 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188409 has 23 members, 8 are drafts.

Phages represented in each track:
• Track 1 : GodonK_85, Phendrix_83
• Track 2 : Boopy_97
• Track 3 : BlueNGold_96
• Track 4 : Forza_97, Mareelih_95
• Track 5 : GMA2_26
• Track 6 : Sixama_95
• Track 7 : Phrampa_82, Mimi_94, Patbob_89, Bloom_92, Talia1610_88, Racecar_89
• Track 8 : DunneganBoMo_82
• Track 9 : Atuin_86
• Track 10 : SJReid_94
• Track 11 : PauloDiaboli_95, A3Wally_95
• Track 12 : Zooman_80
• Track 13 : Big4_84
• Track 14 : Cece_78
• Track 15 : Pumpernickel_92

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 4 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A3Wally_95, GodonK_85, PauloDiaboli_95, Phendrix_83,

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

Genes that do not have the "Most Annotated" start:
• Atuin_86, Big4_84, Bloom_92, BlueNGold_96, Boopy_97, Cece_78, DunneganBoMo_82, Forza_97, GMA2_26, Mareelih_95, Mimi_94, Patbob_89, Phrampa_82, Pumpernickel_92, Racecar_89, SJReid_94, Sixama_95, Talia1610_88, Zooman_80,

Summary by start number:

Start 2:
• Found in 4 of 23 (17.4%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Boopy_97 (DS),

Start 3:
• Found in 1 of 23 (4.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_94 (FC),

Start 4:
• Found in 8 of 23 (34.8%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_86 (FC), Bloom_92 (FC),
DunneganBoMo_82 (FC), Mimi_94 (FC), Patbob_89 (FC), Phrampa_82 (FC),
Racecar_89 (FC), Talia1610_88 (FC),

Start 5:
• Found in 6 of 23 (26.1%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_96 (DS), GMA2_26 (DS),
Sixama_95 (DS),

Start 6:
• Found in 1 of 23 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cece_78 (GD3),

Start 7:
• Found in 1 of 23 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_92 (GD4),

Start 8:
• Found in 2 of 23 (8.7%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Big4_84 (GD2), Zooman_80 (GD2),

Start 9:
• Found in 4 of 23 (17.4%) of genes in pham
• Manual Annotations of this start: 4 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_95 (GD1), GodonK_85 (DK),
PauloDiaboli_95 (GD1), Phendrix_83 (DK),

Start 12:
• Found in 5 of 23 (21.7%) of genes in pham
• Manual Annotations of this start: 2 of 15
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Forza_97 (DS), Mareelih_95 (DS),

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 9 was manually annotated 2 times 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 2 times for cluster DS.
•Start number 12 was manually annotated 2 times for cluster DS.

Info for manual annotations of cluster FC:
•Start number 4 was manually annotated 2 times 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 8 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 6 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 7 was manually annotated 1 time for cluster GD4.

Gene Information:
Gene: A3Wally_95 Start: 51157, Stop: 51489, Start Num: 9
Candidate Starts for A3Wally_95:
(1, 51109), (Start: 9 @51157 has 4 MA's), (16, 51271), (17, 51280), (20, 51322), (29, 51382), (31, 51412),

Gene: Atuin_86 Start: 52443, Stop: 52784, Start Num: 4
Candidate Starts for Atuin_86:
(Start: 4 @52443 has 2 MA's), (24, 52650), (34, 52746),

Gene: Big4_84 Start: 50177, Stop: 50509, Start Num: 8
Candidate Starts for Big4_84:
(Start: 8 @50177 has 2 MA's), (16, 50291),

Gene: Bloom_92 Start: 53844, Stop: 54185, Start Num: 4
Candidate Starts for Bloom_92:
(Start: 4 @53844 has 2 MA's), (24, 54051),

Gene: BlueNGold_96 Start: 52383, Stop: 52823, Start Num: 5
Candidate Starts for BlueNGold_96:
(Start: 2 @52365 has 1 MA's), (Start: 5 @52383 has 2 MA's), (11, 52443), (Start: 12 @52449 has 2 MA's), (13, 52488), (15, 52503), (18, 52524), (21, 52560), (28, 52611), (36, 52776), (37, 52779),

Gene: Boopy_97 Start: 52377, Stop: 52835, Start Num: 2
Candidate Starts for Boopy_97:
(Start: 2 @52377 has 1 MA's), (Start: 5 @52395 has 2 MA's), (11, 52455), (Start: 12 @52461 has 2 MA's), (13, 52500), (15, 52515), (18, 52536), (21, 52572), (28, 52623), (36, 52788), (37, 52791),

Gene: Cece_78 Start: 46135, Stop: 46464, Start Num: 6
Candidate Starts for Cece_78:
(Start: 6 @46135 has 1 MA's), (16, 46246), (23, 46321), (32, 46408),

Gene: DunneganBoMo_82 Start: 49289, Stop: 49633, Start Num: 4
Candidate Starts for DunneganBoMo_82:
(Start: 4 @49289 has 2 MA's), (24, 49499), (34, 49595),

Gene: Forza_97 Start: 52377, Stop: 52751, Start Num: 12
Candidate Starts for Forza_97:
(Start: 2 @52293 has 1 MA's), (Start: 5 @52311 has 2 MA's), (11, 52371), (Start: 12 @52377 has 2 MA's), (13, 52416), (15, 52431), (18, 52452), (21, 52488), (28, 52539), (36, 52704), (37, 52707),

Gene: GMA2_26 Start: 22675, Stop: 23118, Start Num: 5
Candidate Starts for GMA2_26:
(Start: 5 @22675 has 2 MA's), (10, 22714), (14, 22792), (18, 22819), (21, 22855), (22, 22873), (28, 22906), (30, 22918), (32, 22963),

Gene: GodonK_85 Start: 44030, Stop: 44485, Start Num: 9
Candidate Starts for GodonK_85:
(Start: 9 @44030 has 4 MA's), (13, 44126), (18, 44162), (21, 44198), (25, 44225), (26, 44228), (28, 44249), (33, 44315), (35, 44378),

Gene: Mareelih_95 Start: 51879, Stop: 52253, Start Num: 12
Candidate Starts for Mareelih_95:
(Start: 2 @51795 has 1 MA's), (Start: 5 @51813 has 2 MA's), (11, 51873), (Start: 12 @51879 has 2 MA's), (13, 51918), (15, 51933), (18, 51954), (21, 51990), (28, 52041), (36, 52206), (37, 52209),

Gene: Mimi_94 Start: 53191, Stop: 53532, Start Num: 4
Candidate Starts for Mimi_94:
(Start: 4 @53191 has 2 MA's), (24, 53398),

Gene: Patbob_89 Start: 54063, Stop: 54404, Start Num: 4
Candidate Starts for Patbob_89:
(Start: 4 @54063 has 2 MA's), (24, 54270),

Gene: PauloDiaboli_95 Start: 50514, Stop: 50846, Start Num: 9
Candidate Starts for PauloDiaboli_95:
(1, 50466), (Start: 9 @50514 has 4 MA's), (16, 50628), (17, 50637), (20, 50679), (29, 50739), (31, 50769),

Gene: Phendrix_83 Start: 43898, Stop: 44353, Start Num: 9

Candidate Starts for Phendrix_83:
(Start: 9 @43898 has 4 MA's), (13, 43994), (18, 44030), (21, 44066), (25, 44093), (26, 44096), (28, 44117), (33, 44183), (35, 44246),

Gene: Phrampa_82 Start: 50791, Stop: 51135, Start Num: 4
Candidate Starts for Phrampa_82:
(Start: 4 @50791 has 2 MA's), (24, 51001),

Gene: Pumpernickel_92 Start: 51885, Stop: 52220, Start Num: 7
Candidate Starts for Pumpernickel_92:
(Start: 7 @51885 has 1 MA's), (16, 52002), (20, 52053), (27, 52098),

Gene: Racecar_89 Start: 53844, Stop: 54185, Start Num: 4
Candidate Starts for Racecar_89:
(Start: 4 @53844 has 2 MA's), (24, 54051),

Gene: SJReid_94 Start: 55142, Stop: 55498, Start Num: 3
Candidate Starts for SJReid_94:
(3, 55142), (16, 55283), (19, 55328), (34, 55454),

Gene: Sixama_95 Start: 51920, Stop: 52360, Start Num: 5
Candidate Starts for Sixama_95:
(Start: 5 @51920 has 2 MA's), (11, 51980), (Start: 12 @51986 has 2 MA's), (13, 52025), (15, 52040), (18, 52061), (21, 52097), (28, 52148), (37, 52316), (38, 52334),

Gene: Talia1610_88 Start: 53209, Stop: 53550, Start Num: 4
Candidate Starts for Talia1610_88:
(Start: 4 @53209 has 2 MA's), (24, 53416),

Gene: Zooman_80 Start: 48831, Stop: 49163, Start Num: 8
Candidate Starts for Zooman_80:
(Start: 8 @48831 has 2 MA's), (16, 48945), (17, 48954),