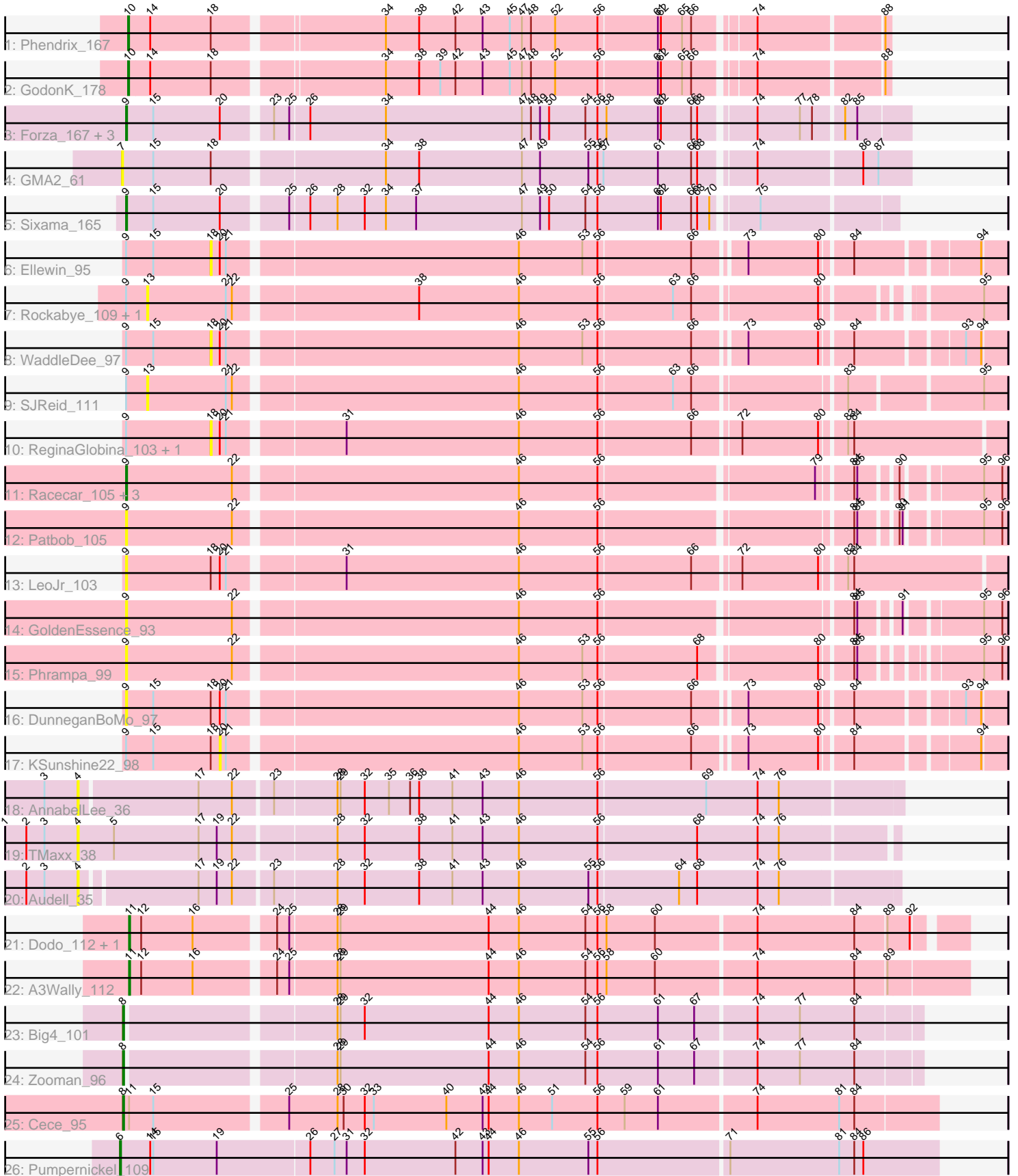


Pham 203148



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 203148 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203148 has 35 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Phendrix_167
- Track 2 : GodonK_178
- Track 3 : Forza_167, Boopy_166, BlueNGold_163, Mareelih_164
- Track 4 : GMA2_61
- Track 5 : Sixama_165
- Track 6 : Ellewin_95
- Track 7 : Rockabye_109, Chilliams_103
- Track 8 : WaddleDee_97
- Track 9 : SJReid_111
- Track 10 : ReginaGlobina_103, Atuin_101
- Track 11 : Racecar_105, Talia1610_104, Bloom_108, Mimi_110
- Track 12 : Patbob_105
- Track 13 : LeoJr_103
- Track 14 : GoldenEssence_93
- Track 15 : Phrampa_99
- Track 16 : DunneganBoMo_97
- Track 17 : KSunshine22_98
- Track 18 : AnnabelLee_36
- Track 19 : TMaxx_38
- Track 20 : Audell_35
- Track 21 : Dodo_112, PauloDiaboli_112
- Track 22 : A3Wally_112
- Track 23 : Big4_101
- Track 24 : Zooman_96
- Track 25 : Cece_95
- Track 26 : Pumpnickel_109

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

Genes that call this "Most Annotated" start:

- Bloom_108, BlueNGold_163, Boopy_166, DunneganBoMo_97, Forza_167, GoldenEssence_93, LeoJr_103, Mareelih_164, Mimi_110, Patbob_105, Phrampa_99, Racecar_105, Sixama_165, Talia1610_104,

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

- Atuin_101, Chilliams_103, Ellewin_95, KSunshine22_98, ReginaGlobina_103, Rockabye_109, SJReid_111, WaddleDee_97,

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

- A3Wally_112, AnnabelLee_36, Audell_35, Big4_101, Cece_95, Dodo_112, GMA2_61, GodonK_178, PauloDiaboli_112, Phendrix_167, Pumpernickel_109, TMaxx_38, Zooman_96,

Summary by start number:

Start 4:

- Found in 3 of 35 (8.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_36 (FR), Audell_35 (FR), TMaxx_38 (FR),

Start 6:

- Found in 1 of 35 (2.9%) 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_109 (GD4),

Start 7:

- Found in 1 of 35 (2.9%) 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_61 (DS),

Start 8:

- Found in 3 of 35 (8.6%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4_101 (GD2), Cece_95 (GD3), Zooman_96 (GD2),

Start 9:

- Found in 22 of 35 (62.9%) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 63.6% of time when present
- Phage (with cluster) where this start called: Bloom_108 (FC), BlueNGold_163 (DS), Boopy_166 (DS), DunneganBoMo_97 (FC), Forza_167 (DS), GoldenEssence_93 (FC), LeoJr_103 (FC), Mareelih_164 (DS), Mimi_110 (FC), Patbob_105 (FC), Phrampa_99 (FC), Racecar_105 (FC), Sixama_165 (DS), Talia1610_104 (FC),

Start 10:

- Found in 2 of 35 (5.7%) 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: GodonK_178 (DK), Phendrix_167 (DK),

Start 11:

- Found in 4 of 35 (11.4%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 75.0% of time when present
- Phage (with cluster) where this start called: A3Wally_112 (GD1), Dodo_112 (GD1), PauloDiaboli_112 (GD1),

Start 13:

- Found in 3 of 35 (8.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chilliams_103 (FC), Rockabye_109 (FC), SJReid_111 (FC),

Start 18:

- Found in 10 of 35 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Atuin_101 (FC), Ellewin_95 (FC), ReginaGlobina_103 (FC), WaddleDee_97 (FC),

Start 20:

- Found in 12 of 35 (34.3%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: KSunshine22_98 (FC),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, FR, GD3, GD4, DK, GD2, FC, DS,

Info for manual annotations of cluster DK:

- Start number 10 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DS:

- Start number 9 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster FC:

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

Info for manual annotations of cluster GD1:

- Start number 11 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 8 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 6 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_112 Start: 76409, Stop: 75603, Start Num: 11

Candidate Starts for A3Wally_112:

(Start: 11 @76409 has 2 MA's), (12, 76397), (16, 76346), (24, 76274), (25, 76262), (28, 76217), (29, 76214), (44, 76067), (46, 76037), (54, 75971), (56, 75959), (58, 75950), (60, 75902), (74, 75806), (84, 75710), (89, 75680),

Gene: AnnabelLee_36 Start: 23600, Stop: 22806, Start Num: 4

Candidate Starts for AnnabelLee_36:

(3, 23633), (4, 23600), (17, 23486), (22, 23453), (23, 23417), (28, 23357), (29, 23354), (32, 23330), (35, 23306), (36, 23285), (38, 23276), (41, 23243), (43, 23213), (46, 23177), (56, 23099), (69, 22994), (74, 22943), (76, 22922),

Gene: Atuin_101 Start: 84392, Stop: 85141, Start Num: 18

Candidate Starts for Atuin_101:

(Start: 9 @84308 has 7 MA's), (18, 84392), (20, 84401), (21, 84407), (31, 84512), (46, 84683), (56, 84761), (66, 84851), (72, 84893), (80, 84968), (83, 84989), (84, 84995),

Gene: Audell_35 Start: 25989, Stop: 25204, Start Num: 4

Candidate Starts for Audell_35:

(2, 26040), (3, 26022), (4, 25989), (17, 25881), (19, 25863), (22, 25848), (23, 25812), (28, 25752), (32, 25725), (38, 25671), (41, 25638), (43, 25608), (46, 25572), (55, 25503), (56, 25494), (64, 25416), (68, 25398), (74, 25338), (76, 25317),

Gene: Big4_101 Start: 75498, Stop: 74737, Start Num: 8

Candidate Starts for Big4_101:

(Start: 8 @75498 has 3 MA's), (28, 75306), (29, 75303), (32, 75279), (44, 75156), (46, 75126), (54, 75060), (56, 75048), (61, 74988), (67, 74952), (74, 74895), (77, 74853), (84, 74799),

Gene: Bloom_108 Start: 84483, Stop: 85292, Start Num: 9

Candidate Starts for Bloom_108:

(Start: 9 @84483 has 7 MA's), (22, 84588), (46, 84858), (56, 84936), (79, 85137), (84, 85167), (85, 85170), (90, 85200), (95, 85269), (96, 85287),

Gene: BlueNGold_163 Start: 93500, Stop: 92757, Start Num: 9

Candidate Starts for BlueNGold_163:

(Start: 9 @93500 has 7 MA's), (15, 93473), (20, 93407), (23, 93365), (25, 93350), (26, 93332), (34, 93257), (47, 93122), (48, 93113), (49, 93104), (50, 93095), (54, 93059), (56, 93047), (58, 93038), (61, 92987), (62, 92984), (66, 92954), (68, 92948), (74, 92900), (77, 92858), (78, 92846), (82, 92819), (85, 92807),

Gene: Boopy_166 Start: 93511, Stop: 92768, Start Num: 9

Candidate Starts for Boopy_166:

(Start: 9 @93511 has 7 MA's), (15, 93484), (20, 93418), (23, 93376), (25, 93361), (26, 93343), (34, 93268), (47, 93133), (48, 93124), (49, 93115), (50, 93106), (54, 93070), (56, 93058), (58, 93049), (61, 92998), (62, 92995), (66, 92965), (68, 92959), (74, 92911), (77, 92869), (78, 92857), (82, 92830), (85,

92818),

Gene: Cece_95 Start: 78538, Stop: 77750, Start Num: 8

Candidate Starts for Cece_95:

(Start: 8 @78538 has 3 MA's), (Start: 11 @78532 has 2 MA's), (15, 78508), (25, 78385), (28, 78337), (30, 78331), (32, 78310), (33, 78301), (40, 78229), (43, 78193), (44, 78187), (46, 78157), (51, 78124), (56, 78079), (59, 78052), (61, 78019), (74, 77926), (81, 77845), (84, 77830),

Gene: Chilliams_103 Start: 77303, Stop: 78091, Start Num: 13

Candidate Starts for Chilliams_103:

(Start: 9 @77282 has 7 MA's), (13, 77303), (21, 77381), (22, 77387), (38, 77558), (46, 77657), (56, 77735), (63, 77807), (66, 77825), (80, 77942), (95, 78068),

Gene: Dodo_112 Start: 76719, Stop: 75925, Start Num: 11

Candidate Starts for Dodo_112:

(Start: 11 @76719 has 2 MA's), (12, 76707), (16, 76656), (24, 76584), (25, 76572), (28, 76527), (29, 76524), (44, 76377), (46, 76347), (54, 76281), (56, 76269), (58, 76260), (60, 76212), (74, 76116), (84, 76020), (89, 75990), (92, 75969),

Gene: DunneganBoMo_97 Start: 80225, Stop: 81043, Start Num: 9

Candidate Starts for DunneganBoMo_97:

(Start: 9 @80225 has 7 MA's), (15, 80252), (18, 80309), (20, 80318), (21, 80324), (46, 80600), (53, 80663), (56, 80678), (66, 80768), (73, 80813), (80, 80882), (84, 80909), (93, 81005), (94, 81020),

Gene: Ellewin_95 Start: 79720, Stop: 80454, Start Num: 18

Candidate Starts for Ellewin_95:

(Start: 9 @79636 has 7 MA's), (15, 79663), (18, 79720), (20, 79729), (21, 79735), (46, 80011), (53, 80074), (56, 80089), (66, 80179), (73, 80224), (80, 80293), (84, 80320), (94, 80431),

Gene: Forza_167 Start: 93428, Stop: 92685, Start Num: 9

Candidate Starts for Forza_167:

(Start: 9 @93428 has 7 MA's), (15, 93401), (20, 93335), (23, 93293), (25, 93278), (26, 93260), (34, 93185), (47, 93050), (48, 93041), (49, 93032), (50, 93023), (54, 92987), (56, 92975), (58, 92966), (61, 92915), (62, 92912), (66, 92882), (68, 92876), (74, 92828), (77, 92786), (78, 92774), (82, 92747), (85, 92735),

Gene: GMA2_61 Start: 64314, Stop: 63565, Start Num: 7

Candidate Starts for GMA2_61:

(7, 64314), (15, 64284), (18, 64227), (34, 64068), (38, 64035), (47, 63933), (49, 63915), (55, 63867), (56, 63858), (57, 63852), (61, 63798), (66, 63765), (68, 63759), (74, 63711), (86, 63612), (87, 63597),

Gene: GodonK_178 Start: 89500, Stop: 88790, Start Num: 10

Candidate Starts for GodonK_178:

(Start: 10 @89500 has 2 MA's), (14, 89479), (18, 89419), (34, 89263), (38, 89230), (39, 89209), (42, 89194), (43, 89167), (45, 89140), (47, 89128), (48, 89119), (52, 89095), (56, 89053), (61, 88996), (62, 88993), (65, 88972), (66, 88963), (74, 88912), (88, 88795),

Gene: GoldenEssence_93 Start: 78275, Stop: 79084, Start Num: 9

Candidate Starts for GoldenEssence_93:

(Start: 9 @78275 has 7 MA's), (22, 78380), (46, 78650), (56, 78728), (84, 78959), (85, 78962), (91, 78995), (95, 79061), (96, 79079),

Gene: KSunshine22_98 Start: 81330, Stop: 82055, Start Num: 20

Candidate Starts for KSunshine22_98:

(Start: 9 @81237 has 7 MA's), (15, 81264), (18, 81321), (20, 81330), (21, 81336), (46, 81612), (53, 81675), (56, 81690), (66, 81780), (73, 81825), (80, 81894), (84, 81921), (94, 82032),

Gene: LeoJr_103 Start: 84544, Stop: 85377, Start Num: 9

Candidate Starts for LeoJr_103:

(Start: 9 @84544 has 7 MA's), (18, 84628), (20, 84637), (21, 84643), (31, 84748), (46, 84919), (56, 84997), (66, 85087), (72, 85129), (80, 85204), (83, 85225), (84, 85231),

Gene: Mareelih_164 Start: 92946, Stop: 92203, Start Num: 9

Candidate Starts for Mareelih_164:

(Start: 9 @92946 has 7 MA's), (15, 92919), (20, 92853), (23, 92811), (25, 92796), (26, 92778), (34, 92703), (47, 92568), (48, 92559), (49, 92550), (50, 92541), (54, 92505), (56, 92493), (58, 92484), (61, 92433), (62, 92430), (66, 92400), (68, 92394), (74, 92346), (77, 92304), (78, 92292), (82, 92265), (85, 92253),

Gene: Mimi_110 Start: 83830, Stop: 84639, Start Num: 9

Candidate Starts for Mimi_110:

(Start: 9 @83830 has 7 MA's), (22, 83935), (46, 84205), (56, 84283), (79, 84484), (84, 84514), (85, 84517), (90, 84547), (95, 84616), (96, 84634),

Gene: Patbob_105 Start: 84565, Stop: 85374, Start Num: 9

Candidate Starts for Patbob_105:

(Start: 9 @84565 has 7 MA's), (22, 84670), (46, 84940), (56, 85018), (84, 85249), (85, 85252), (90, 85282), (91, 85285), (95, 85351), (96, 85369),

Gene: PauloDiaboli_112 Start: 75754, Stop: 74960, Start Num: 11

Candidate Starts for PauloDiaboli_112:

(Start: 11 @75754 has 2 MA's), (12, 75742), (16, 75691), (24, 75619), (25, 75607), (28, 75562), (29, 75559), (44, 75412), (46, 75382), (54, 75316), (56, 75304), (58, 75295), (60, 75247), (74, 75151), (84, 75055), (89, 75025), (92, 75004),

Gene: Phendrix_167 Start: 88597, Stop: 87887, Start Num: 10

Candidate Starts for Phendrix_167:

(Start: 10 @88597 has 2 MA's), (14, 88576), (18, 88516), (34, 88360), (38, 88327), (42, 88291), (43, 88264), (45, 88237), (47, 88225), (48, 88216), (52, 88192), (56, 88150), (61, 88093), (62, 88090), (65, 88069), (66, 88060), (74, 88009), (88, 87892),

Gene: Phrampa_99 Start: 85968, Stop: 86774, Start Num: 9

Candidate Starts for Phrampa_99:

(Start: 9 @85968 has 7 MA's), (22, 86073), (46, 86343), (53, 86406), (56, 86421), (68, 86517), (80, 86625), (84, 86652), (85, 86655), (95, 86751), (96, 86769),

Gene: Pumpernickel_109 Start: 77313, Stop: 76510, Start Num: 6

Candidate Starts for Pumpernickel_109:

(Start: 6 @77313 has 1 MA's), (14, 77283), (15, 77280), (19, 77217), (26, 77127), (27, 77103), (31, 77091), (32, 77073), (42, 76983), (43, 76956), (44, 76950), (46, 76920), (55, 76851), (56, 76842), (71, 76716), (81, 76608), (84, 76593), (86, 76584),

Gene: Racecar_105 Start: 84483, Stop: 85292, Start Num: 9

Candidate Starts for Racecar_105:

(Start: 9 @84483 has 7 MA's), (22, 84588), (46, 84858), (56, 84936), (79, 85137), (84, 85167), (85, 85170), (90, 85200), (95, 85269), (96, 85287),

Gene: ReginaGlobina_103 Start: 84193, Stop: 84942, Start Num: 18

Candidate Starts for ReginaGlobina_103:

(Start: 9 @84109 has 7 MA's), (18, 84193), (20, 84202), (21, 84208), (31, 84313), (46, 84484), (56, 84562), (66, 84652), (72, 84694), (80, 84769), (83, 84790), (84, 84796),

Gene: Rockabye_109 Start: 77741, Stop: 78529, Start Num: 13

Candidate Starts for Rockabye_109:

(Start: 9 @77720 has 7 MA's), (13, 77741), (21, 77819), (22, 77825), (38, 77996), (46, 78095), (56, 78173), (63, 78245), (66, 78263), (80, 78380), (95, 78506),

Gene: SJReid_111 Start: 76759, Stop: 77565, Start Num: 13

Candidate Starts for SJReid_111:

(Start: 9 @76738 has 7 MA's), (13, 76759), (21, 76837), (22, 76843), (46, 77113), (56, 77191), (63, 77263), (66, 77281), (83, 77419), (95, 77542),

Gene: Sixama_165 Start: 92948, Stop: 92217, Start Num: 9

Candidate Starts for Sixama_165:

(Start: 9 @92948 has 7 MA's), (15, 92921), (20, 92855), (25, 92798), (26, 92780), (28, 92753), (32, 92726), (34, 92705), (37, 92675), (47, 92570), (49, 92552), (50, 92543), (54, 92507), (56, 92495), (61, 92435), (62, 92432), (66, 92402), (68, 92396), (70, 92384), (75, 92345),

Gene: TMaxx_38 Start: 24246, Stop: 23455, Start Num: 4

Candidate Starts for TMaxx_38:

(1, 24318), (2, 24297), (3, 24279), (4, 24246), (5, 24210), (17, 24126), (19, 24108), (22, 24093), (28, 23997), (32, 23970), (38, 23916), (41, 23883), (43, 23853), (46, 23817), (56, 23739), (68, 23643), (74, 23583), (76, 23562),

Gene: Talia1610_104 Start: 83848, Stop: 84657, Start Num: 9

Candidate Starts for Talia1610_104:

(Start: 9 @83848 has 7 MA's), (22, 83953), (46, 84223), (56, 84301), (79, 84502), (84, 84532), (85, 84535), (90, 84565), (95, 84634), (96, 84652),

Gene: WaddleDee_97 Start: 79495, Stop: 80229, Start Num: 18

Candidate Starts for WaddleDee_97:

(Start: 9 @79411 has 7 MA's), (15, 79438), (18, 79495), (20, 79504), (21, 79510), (46, 79786), (53, 79849), (56, 79864), (66, 79954), (73, 79999), (80, 80068), (84, 80095), (93, 80191), (94, 80206),

Gene: Zooman_96 Start: 73343, Stop: 72582, Start Num: 8

Candidate Starts for Zooman_96:

(Start: 8 @73343 has 3 MA's), (28, 73151), (29, 73148), (44, 73001), (46, 72971), (54, 72905), (56, 72893), (61, 72833), (67, 72797), (74, 72740), (77, 72698), (84, 72644),