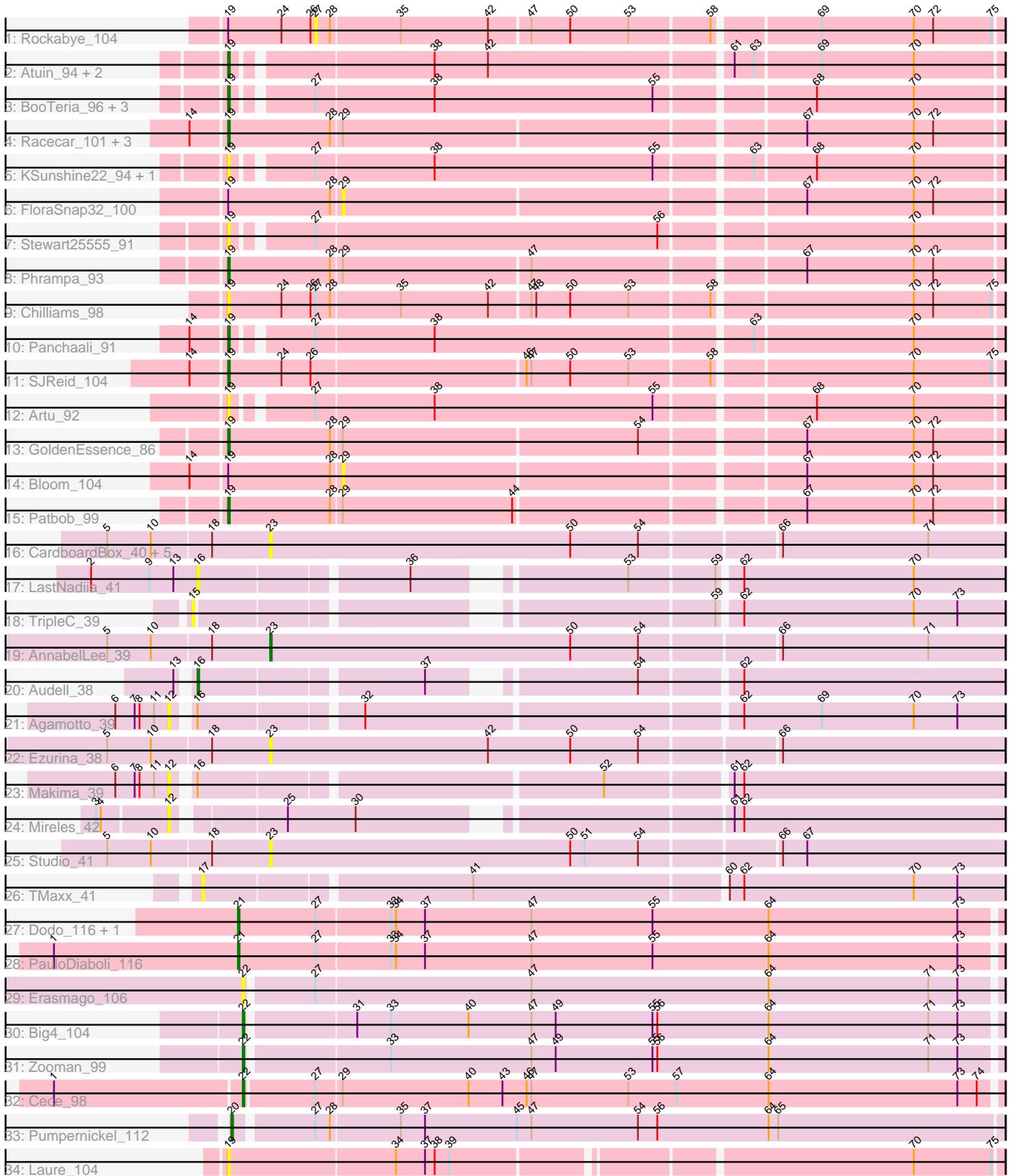


Pham 285668



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 285668 Report

This analysis was run 03/28/26 on database version 641.

Pham number 285668 has 49 members, 30 are drafts.

Phages represented in each track:

- Track 1 : Rockabye_104
- Track 2 : Atuin_94, ReginaGlobina_99, LeoJr_99
- Track 3 : BooTeria_96, DunneganBoMo_89, Emmetator_92, WaddleDee_87
- Track 4 : Racecar_101, FrostedClock_103, Mimi_100, Talia1610_100
- Track 5 : KSunshine22_94, Ellewin_91
- Track 6 : FloraSnap32_100
- Track 7 : Stewart25555_91
- Track 8 : Phrampa_93
- Track 9 : Chilliams_98
- Track 10 : Panchaali_91
- Track 11 : SJReid_104
- Track 12 : Artu_92
- Track 13 : GoldenEssence_86
- Track 14 : Bloom_104
- Track 15 : Patbob_99
- Track 16 : CardboardBox_40, Roberts_39, Gerri43_40, ChamoyPickle_41, ChipsNGuac_40, Neuville_39
- Track 17 : LastNadiia_41
- Track 18 : TripleC_39
- Track 19 : AnnabelLee_39
- Track 20 : Audell_38
- Track 21 : Agamoto_39
- Track 22 : Ezurina_38
- Track 23 : Makima_39
- Track 24 : Mireles_42
- Track 25 : Studio_41
- Track 26 : TMaxx_41
- Track 27 : Dodo_116, A3Wally_116
- Track 28 : PauloDiaboli_116
- Track 29 : Erasmago_106
- Track 30 : Big4_104
- Track 31 : Zooman_99
- Track 32 : Cece_98
- Track 33 : Pumpnickel_112
- Track 34 : Laure_104

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

The start number called the most often in the published annotations is 19, it was called in 11 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu_92, Atuin_94, BooTeria_96, Chilliams_98, DunneganBoMo_89, Ellewin_91, Emmetator_92, FrostedClock_103, GoldenEssence_86, KSunshine22_94, Laure_104, LeoJr_99, Mimi_100, Panchaali_91, Patbob_99, Phrampa_93, Racecar_101, ReginaGlobina_99, SJReid_104, Stewart25555_91, Talia1610_100, WaddleDee_87,

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

- Bloom_104, FloraSnap32_100, Rockabye_104,

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

- A3Wally_116, Agamoto_39, AnnabelLee_39, Audell_38, Big4_104, CardboardBox_40, Cece_98, ChamoyPickle_41, ChipsNGuac_40, Dodo_116, Erasmago_106, Ezurina_38, Gerri43_40, LastNadiia_41, Makima_39, Mireles_42, Neuville_39, PauloDiaboli_116, Pumpnickel_112, Roberts_39, Studio_41, TMaxx_41, TripleC_39, Zooman_99,

Summary by start number:

Start 12:

- Found in 3 of 49 (6.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agamoto_39 (FR), Makima_39 (FR), Mireles_42 (FR),

Start 15:

- Found in 1 of 49 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TripleC_39 (FR),

Start 16:

- Found in 4 of 49 (8.2%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Audell_38 (FR), LastNadiia_41 (FR),

Start 17:

- Found in 1 of 49 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TMaxx_41 (FR),

Start 19:

- Found in 25 of 49 (51.0%) of genes in pham
- Manual Annotations of this start: 11 of 19

- Called 88.0% of time when present
- Phage (with cluster) where this start called: Artu_92 (FC), Atuin_94 (FC), BooTeria_96 (FC), Chilliams_98 (FC), DunneganBoMo_89 (FC), Ellewin_91 (FC), Emmetator_92 (FC), FrostedClock_103 (FC), GoldenEssence_86 (FC), KSunshine22_94 (FC), Laure_104 (UNK), LeoJr_99 (FC), Mimi_100 (FC), Panchaali_91 (FC), Patbob_99 (FC), Phrampa_93 (FC), Racecar_101 (FC), ReginaGlobina_99 (FC), SJReid_104 (FC), Stewart25555_91 (FC), Talia1610_100 (FC), WaddleDee_87 (FC),

Start 20:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pumpernickel_112 (GD4),

Start 21:

- Found in 3 of 49 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_116 (GD1), Dodo_116 (GD1), PauloDiaboli_116 (GD1),

Start 22:

- Found in 4 of 49 (8.2%) of genes in pham
- Manual Annotations of this start: 3 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4_104 (GD2), Cece_98 (GD3), Erasmago_106 (GD2), Zooman_99 (GD2),

Start 23:

- Found in 9 of 49 (18.4%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_39 (FR), CardboardBox_40 (FR), ChamoyPickle_41 (FR), ChipsNGuac_40 (FR), Ezurina_38 (FR), Gerri43_40 (FR), Neuville_39 (FR), Roberts_39 (FR), Studio_41 (FR),

Start 27:

- Found in 17 of 49 (34.7%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Rockabye_104 (FC),

Start 29:

- Found in 10 of 49 (20.4%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Bloom_104 (FC), FloraSnap32_100 (FC),

Summary by clusters:

There are 7 clusters represented in this pham: GD1, FR, GD3, GD4, GD2, FC, UNK,

Info for manual annotations of cluster FC:

- Start number 19 was manually annotated 11 times for cluster FC.

Info for manual annotations of cluster FR:

- Start number 16 was manually annotated 1 time for cluster FR.
- Start number 23 was manually annotated 1 time for cluster FR.

Info for manual annotations of cluster GD1:

- Start number 21 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 22 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 22 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 20 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_116 Start: 79965, Stop: 79498, Start Num: 21

Candidate Starts for A3Wally_116:

(Start: 21 @79965 has 2 MA's), (27, 79917), (33, 79872), (34, 79869), (37, 79851), (47, 79785), (55, 79710), (64, 79638), (73, 79521),

Gene: Agamoto_39 Start: 29634, Stop: 29152, Start Num: 12

Candidate Starts for Agamoto_39:

(6, 29667), (7, 29655), (8, 29652), (11, 29643), (12, 29634), (Start: 16 @29625 has 1 MA's), (32, 29532), (62, 29313), (69, 29265), (70, 29208), (73, 29181),

Gene: AnnabelLee_39 Start: 26816, Stop: 26370, Start Num: 23

Candidate Starts for AnnabelLee_39:

(5, 26915), (10, 26888), (18, 26852), (Start: 23 @26816 has 1 MA's), (50, 26630), (54, 26588), (66, 26507), (71, 26417),

Gene: Artu_92 Start: 76740, Stop: 77192, Start Num: 19

Candidate Starts for Artu_92:

(Start: 19 @76740 has 11 MA's), (27, 76782), (38, 76854), (55, 76989), (68, 77079), (70, 77139),

Gene: Atuin_94 Start: 80139, Stop: 80591, Start Num: 19

Candidate Starts for Atuin_94:

(Start: 19 @80139 has 11 MA's), (38, 80253), (42, 80286), (61, 80430), (63, 80442), (69, 80481), (70, 80538),

Gene: Audell_38 Start: 29191, Stop: 28739, Start Num: 16

Candidate Starts for Audell_38:

(13, 29197), (Start: 16 @29191 has 1 MA's), (37, 29062), (54, 28957), (62, 28900),

Gene: Big4_104 Start: 78878, Stop: 78420, Start Num: 22
Candidate Starts for Big4_104:
(Start: 22 @78878 has 3 MA's), (31, 78815), (33, 78794), (40, 78746), (47, 78707), (49, 78692), (55, 78632), (56, 78629), (64, 78560), (71, 78461), (73, 78443),

Gene: Bloom_104 Start: 80312, Stop: 80704, Start Num: 29
Candidate Starts for Bloom_104:
(14, 80222), (Start: 19 @80243 has 11 MA's), (28, 80306), (29, 80312), (67, 80585), (70, 80651), (72, 80663),

Gene: BooTeria_96 Start: 76805, Stop: 77257, Start Num: 19
Candidate Starts for BooTeria_96:
(Start: 19 @76805 has 11 MA's), (27, 76847), (38, 76919), (55, 77054), (68, 77144), (70, 77204),

Gene: CardboardBox_40 Start: 26819, Stop: 26373, Start Num: 23
Candidate Starts for CardboardBox_40:
(5, 26918), (10, 26891), (18, 26855), (Start: 23 @26819 has 1 MA's), (50, 26633), (54, 26591), (66, 26510), (71, 26420),

Gene: Cece_98 Start: 81819, Stop: 81358, Start Num: 22
Candidate Starts for Cece_98:
(1, 81933), (Start: 22 @81819 has 3 MA's), (27, 81777), (29, 81762), (40, 81684), (43, 81663), (46, 81648), (47, 81645), (53, 81585), (57, 81555), (64, 81498), (73, 81381), (74, 81369),

Gene: ChamoyPickle_41 Start: 27359, Stop: 26913, Start Num: 23
Candidate Starts for ChamoyPickle_41:
(5, 27458), (10, 27431), (18, 27395), (Start: 23 @27359 has 1 MA's), (50, 27173), (54, 27131), (66, 27050), (71, 26960),

Gene: Chilliams_98 Start: 73042, Stop: 73503, Start Num: 19
Candidate Starts for Chilliams_98:
(Start: 19 @73042 has 11 MA's), (24, 73075), (26, 73093), (27, 73096), (28, 73105), (35, 73147), (42, 73201), (47, 73225), (48, 73228), (50, 73249), (53, 73285), (58, 73333), (70, 73450), (72, 73462), (75, 73498),

Gene: ChipsNGuac_40 Start: 26819, Stop: 26373, Start Num: 23
Candidate Starts for ChipsNGuac_40:
(5, 26918), (10, 26891), (18, 26855), (Start: 23 @26819 has 1 MA's), (50, 26633), (54, 26591), (66, 26510), (71, 26420),

Gene: Dodo_116 Start: 80275, Stop: 79808, Start Num: 21
Candidate Starts for Dodo_116:
(Start: 21 @80275 has 2 MA's), (27, 80227), (33, 80182), (34, 80179), (37, 80161), (47, 80095), (55, 80020), (64, 79948), (73, 79831),

Gene: DunneganBoMo_89 Start: 76074, Stop: 76526, Start Num: 19
Candidate Starts for DunneganBoMo_89:
(Start: 19 @76074 has 11 MA's), (27, 76116), (38, 76188), (55, 76323), (68, 76413), (70, 76473),

Gene: Ellewin_91 Start: 75485, Stop: 75937, Start Num: 19
Candidate Starts for Ellewin_91:
(Start: 19 @75485 has 11 MA's), (27, 75527), (38, 75599), (55, 75734), (63, 75788), (68, 75824), (70, 75884),

Gene: Emmetator_92 Start: 76077, Stop: 76529, Start Num: 19
Candidate Starts for Emmetator_92:
(Start: 19 @76077 has 11 MA's), (27, 76119), (38, 76191), (55, 76326), (68, 76416), (70, 76476),

Gene: Erasmago_106 Start: 76564, Stop: 76106, Start Num: 22
Candidate Starts for Erasmago_106:
(Start: 22 @76564 has 3 MA's), (27, 76525), (47, 76393), (64, 76246), (71, 76147), (73, 76129),

Gene: Ezurina_38 Start: 27906, Stop: 27460, Start Num: 23
Candidate Starts for Ezurina_38:
(5, 28005), (10, 27978), (18, 27942), (Start: 23 @27906 has 1 MA's), (42, 27771), (50, 27720), (54, 27678), (66, 27597),

Gene: FloraSnap32_100 Start: 79209, Stop: 79601, Start Num: 29
Candidate Starts for FloraSnap32_100:
(Start: 19 @79140 has 11 MA's), (28, 79203), (29, 79209), (67, 79482), (70, 79548), (72, 79560),

Gene: FrostedClock_103 Start: 80440, Stop: 80901, Start Num: 19
Candidate Starts for FrostedClock_103:
(14, 80419), (Start: 19 @80440 has 11 MA's), (28, 80503), (29, 80509), (67, 80782), (70, 80848), (72, 80860),

Gene: Gerri43_40 Start: 26819, Stop: 26373, Start Num: 23
Candidate Starts for Gerri43_40:
(5, 26918), (10, 26891), (18, 26855), (Start: 23 @26819 has 1 MA's), (50, 26633), (54, 26591), (66, 26510), (71, 26420),

Gene: GoldenEssence_86 Start: 74035, Stop: 74496, Start Num: 19
Candidate Starts for GoldenEssence_86:
(Start: 19 @74035 has 11 MA's), (28, 74098), (29, 74104), (54, 74284), (67, 74377), (70, 74443), (72, 74455),

Gene: KSunshine22_94 Start: 77134, Stop: 77586, Start Num: 19
Candidate Starts for KSunshine22_94:
(Start: 19 @77134 has 11 MA's), (27, 77176), (38, 77248), (55, 77383), (63, 77437), (68, 77473), (70, 77533),

Gene: LastNadiia_41 Start: 29150, Stop: 28698, Start Num: 16
Candidate Starts for LastNadiia_41:
(2, 29216), (9, 29180), (13, 29165), (Start: 16 @29150 has 1 MA's), (36, 29030), (53, 28922), (59, 28871), (62, 28859), (70, 28754),

Gene: Laure_104 Start: 73076, Stop: 73531, Start Num: 19
Candidate Starts for Laure_104:
(Start: 19 @73076 has 11 MA's), (34, 73178), (37, 73196), (38, 73202), (39, 73211), (70, 73478), (75, 73526),

Gene: LeoJr_99 Start: 80375, Stop: 80827, Start Num: 19
Candidate Starts for LeoJr_99:
(Start: 19 @80375 has 11 MA's), (38, 80489), (42, 80522), (61, 80666), (63, 80678), (69, 80717), (70, 80774),

Gene: Makima_39 Start: 28292, Stop: 27810, Start Num: 12
Candidate Starts for Makima_39:
(6, 28325), (7, 28313), (8, 28310), (11, 28301), (12, 28292), (Start: 16 @28283 has 1 MA's), (52, 28049), (61, 27977), (62, 27971),

Gene: Mimi_100 Start: 79590, Stop: 80051, Start Num: 19
Candidate Starts for Mimi_100:
(14, 79569), (Start: 19 @79590 has 11 MA's), (28, 79653), (29, 79659), (67, 79932), (70, 79998), (72, 80010),

Gene: Mireles_42 Start: 27838, Stop: 27368, Start Num: 12
Candidate Starts for Mireles_42:
(3, 27880), (4, 27877), (12, 27838), (25, 27778), (30, 27736), (61, 27535), (62, 27529),

Gene: Neuville_39 Start: 26819, Stop: 26373, Start Num: 23
Candidate Starts for Neuville_39:
(5, 26918), (10, 26891), (18, 26855), (Start: 23 @26819 has 1 MA's), (50, 26633), (54, 26591), (66, 26510), (71, 26420),

Gene: Panchaali_91 Start: 77087, Stop: 77539, Start Num: 19
Candidate Starts for Panchaali_91:
(14, 77066), (Start: 19 @77087 has 11 MA's), (27, 77129), (38, 77201), (63, 77390), (70, 77486),

Gene: Patbob_99 Start: 80325, Stop: 80786, Start Num: 19
Candidate Starts for Patbob_99:
(Start: 19 @80325 has 11 MA's), (28, 80388), (29, 80394), (44, 80499), (67, 80667), (70, 80733), (72, 80745),

Gene: PauloDiaboli_116 Start: 79310, Stop: 78843, Start Num: 21
Candidate Starts for PauloDiaboli_116:
(1, 79424), (Start: 21 @79310 has 2 MA's), (27, 79262), (33, 79217), (34, 79214), (37, 79196), (47, 79130), (55, 79055), (64, 78983), (73, 78866),

Gene: Phrampa_93 Start: 81823, Stop: 82284, Start Num: 19
Candidate Starts for Phrampa_93:
(Start: 19 @81823 has 11 MA's), (28, 81886), (29, 81892), (47, 82006), (67, 82165), (70, 82231), (72, 82243),

Gene: Pumpnickel_112 Start: 80618, Stop: 80151, Start Num: 20
Candidate Starts for Pumpnickel_112:
(Start: 20 @80618 has 1 MA's), (27, 80573), (28, 80564), (35, 80522), (37, 80507), (45, 80450), (47, 80441), (54, 80375), (56, 80363), (64, 80294), (65, 80288),

Gene: Racecar_101 Start: 80243, Stop: 80704, Start Num: 19
Candidate Starts for Racecar_101:
(14, 80222), (Start: 19 @80243 has 11 MA's), (28, 80306), (29, 80312), (67, 80585), (70, 80651), (72, 80663),

Gene: ReginaGlobina_99 Start: 79940, Stop: 80392, Start Num: 19
Candidate Starts for ReginaGlobina_99:
(Start: 19 @79940 has 11 MA's), (38, 80054), (42, 80087), (61, 80231), (63, 80243), (69, 80282), (70, 80339),

Gene: Roberts_39 Start: 26819, Stop: 26373, Start Num: 23

Candidate Starts for Roberts_39:

(5, 26918), (10, 26891), (18, 26855), (Start: 23 @26819 has 1 MA's), (50, 26633), (54, 26591), (66, 26510), (71, 26420),

Gene: Rockabye_104 Start: 73531, Stop: 73938, Start Num: 27

Candidate Starts for Rockabye_104:

(Start: 19 @73477 has 11 MA's), (24, 73510), (26, 73528), (27, 73531), (28, 73540), (35, 73582), (42, 73636), (47, 73660), (50, 73684), (53, 73720), (58, 73768), (69, 73828), (70, 73885), (72, 73897), (75, 73933),

Gene: SJReid_104 Start: 72591, Stop: 73052, Start Num: 19

Candidate Starts for SJReid_104:

(14, 72570), (Start: 19 @72591 has 11 MA's), (24, 72624), (26, 72642), (46, 72771), (47, 72774), (50, 72798), (53, 72834), (58, 72882), (70, 72999), (75, 73047),

Gene: Stewart25555_91 Start: 76846, Stop: 77298, Start Num: 19

Candidate Starts for Stewart25555_91:

(Start: 19 @76846 has 11 MA's), (27, 76888), (56, 77098), (70, 77245),

Gene: Studio_41 Start: 28182, Stop: 27736, Start Num: 23

Candidate Starts for Studio_41:

(5, 28281), (10, 28254), (18, 28218), (Start: 23 @28182 has 1 MA's), (50, 27996), (51, 27987), (54, 27954), (66, 27873), (67, 27858),

Gene: TMaxx_41 Start: 27472, Stop: 26996, Start Num: 17

Candidate Starts for TMaxx_41:

(17, 27472), (41, 27316), (60, 27166), (62, 27157), (70, 27052), (73, 27025),

Gene: Talia1610_100 Start: 79608, Stop: 80069, Start Num: 19

Candidate Starts for Talia1610_100:

(14, 79587), (Start: 19 @79608 has 11 MA's), (28, 79671), (29, 79677), (67, 79950), (70, 80016), (72, 80028),

Gene: TripleC_39 Start: 29799, Stop: 29347, Start Num: 15

Candidate Starts for TripleC_39:

(15, 29799), (59, 29520), (62, 29508), (70, 29403), (73, 29376),

Gene: WaddleDee_87 Start: 75260, Stop: 75712, Start Num: 19

Candidate Starts for WaddleDee_87:

(Start: 19 @75260 has 11 MA's), (27, 75302), (38, 75374), (55, 75509), (68, 75599), (70, 75659),

Gene: Zooman_99 Start: 76723, Stop: 76265, Start Num: 22

Candidate Starts for Zooman_99:

(Start: 22 @76723 has 3 MA's), (33, 76639), (47, 76552), (49, 76537), (55, 76477), (56, 76474), (64, 76405), (71, 76306), (73, 76288),