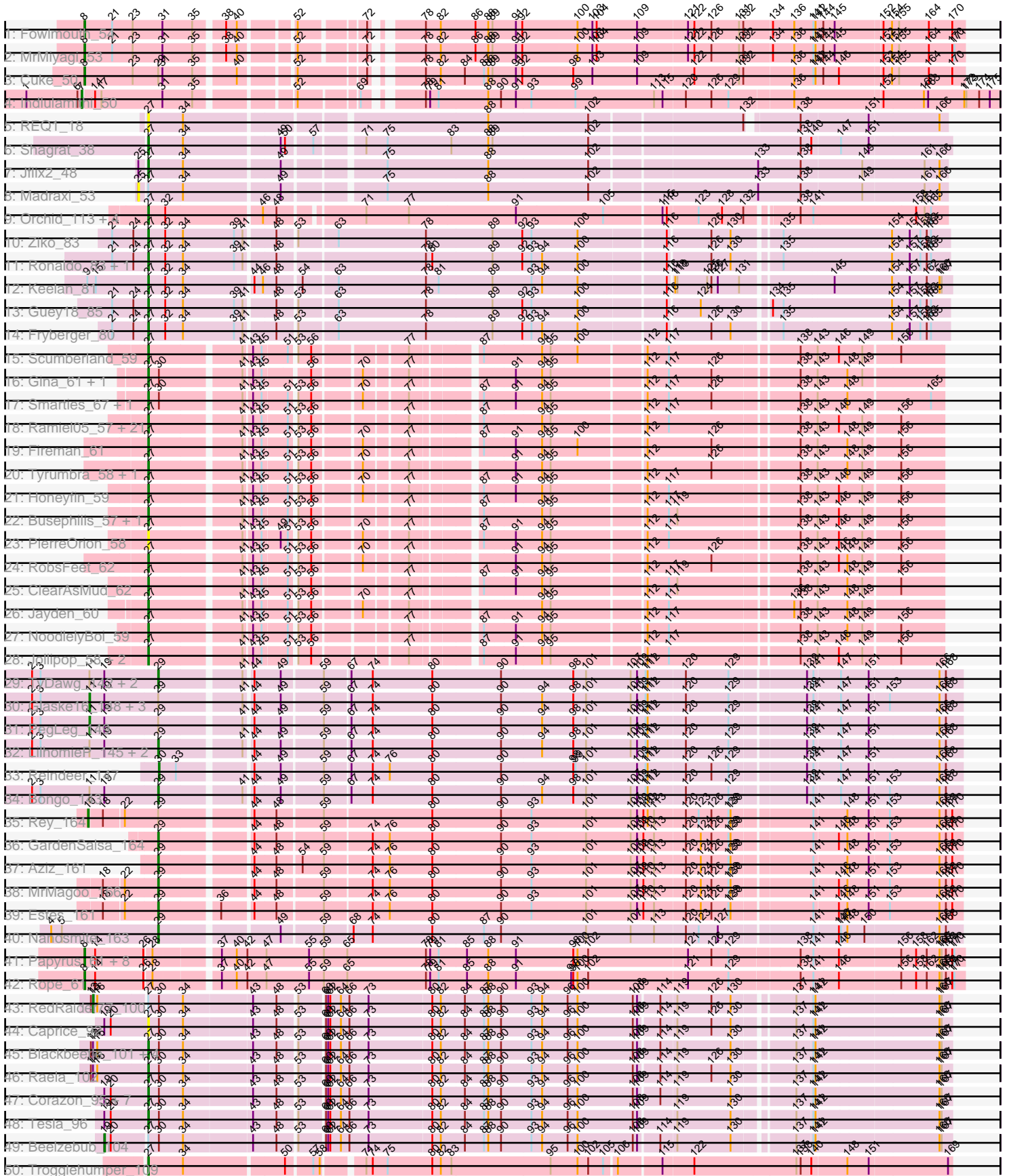


Pham 154565



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 154565 Report

This analysis was run 04/12/24 on database version 558.

Pham number 154565 has 108 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Fowlmouth_54
- Track 2 : MrMiyagi_53
- Track 3 : Cuke_50
- Track 4 : Indlulamithi_50
- Track 5 : REQ1_18
- Track 6 : Shagrat_38
- Track 7 : Jflix2_48
- Track 8 : Madraxi_53
- Track 9 : Orchid_113, Kampe_114, RobinSparkles_123, Gibbles_116, PatrickStar_114
- Track 10 : Ziko_83
- Track 11 : Ronaldo_83, Volt_83
- Track 12 : Keelan_81
- Track 13 : Guey18_85
- Track 14 : Fryberger_80
- Track 15 : Scumberland_59
- Track 16 : Gina_61, Teamocil_61
- Track 17 : Smarties_67, Ariadne_67
- Track 18 : Ramiel05_57, Kowalski_57, Selwyn23_59, Crisis_59, Hermeonysus_57, Quhwah_62, Antares_58, Jefe_58, Ganandorf_57, Piperis_59, Cranjis_59, EarickHC_59, KaiHaiDragon_59, LittleFortune_60, Phorgeous_58, Onika_57, Yeti_58, PiperSansNom_59, BrazzalePHS_57, CrazyRich_57, Pulchra_60, Savannah_57
- Track 19 : Fireman_61
- Track 20 : Tyumbra_58, Metamorphoo_61
- Track 21 : Honeyfin_59
- Track 22 : Busephilis_57, Phrancesco_58
- Track 23 : PierreOrion_58
- Track 24 : RobsFeet_62
- Track 25 : ClearAsMud_62
- Track 26 : Jayden_60
- Track 27 : NoodlelyBoi_59
- Track 28 : Jollipop_58, Shotgun_58, Paschalis_58
- Track 29 : TyDawg_142, Auspice_149, IPhane7_146
- Track 30 : Glaske16_148, Dulcita_146, Skinny_152, Diminimus_146
- Track 31 : PegLeg_149
- Track 32 : LilhomieP_145, Bricole_151, SlimJimmy_146

- Track 33 : Reindeer_147
- Track 34 : Bongo_143
- Track 35 : Rey_164
- Track 36 : GardenSalsa_164
- Track 37 : Aziz_161
- Track 38 : MrMagoo_166
- Track 39 : Estes_161
- Track 40 : Nanosmite_163
- Track 41 : Papyrus_61, Riparian_63, Zenon_62, Candle_59, Yelo_60, Send513_61, Weiss13_60, MontyDev_61, Nilo_63
- Track 42 : Rope_61
- Track 43 : RedRaider77_100
- Track 44 : Caprice_92
- Track 45 : Blackbeetle_101, Poise_101, MosMoris_96, JoieB_101, Gattaca_99
- Track 46 : Raela_102
- Track 47 : Corazon_95, LittleLaf_98, Lilbit_98, Huphlepuuff_102, Pringar_96, VasuNzinga_98, Clarkson_101, Marvin_94
- Track 48 : Tesla_96
- Track 49 : Beelzebub_104
- Track 50 : Trogglehumper_109

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

The start number called the most often in the published annotations is 27, it was called in 64 of the 97 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_58, Ariadne_67, Blackbeetle_101, BrazzalePHS_57, Busephillis_57, Caprice_92, Clarkson_101, ClearAsMud_62, Corazon_95, Cranjjs_59, CrazyRich_57, Crisis_59, EarickHC_59, Fireman_61, Fryberger_80, Ganandorf_57, Gattaca_99, Gibbles_116, Gina_61, Guey18_85, Hermeonysus_57, Honeyfin_59, Huphlepuuff_102, Jayden_60, Jefe_58, Jflix2_48, JoieB_101, Jollipop_58, KaiHaiDragon_59, Kampe_114, Keelan_81, Kowalski_57, Lilbit_98, LittleFortune_60, LittleLaf_98, Marvin_94, Metamorphoo_61, MosMoris_96, NoodlelyBoi_59, Onika_57, Orchid_113, Paschalis_58, PatrickStar_114, Phorgeous_58, Phrancesco_58, PierreOrion_58, PiperSansNom_59, Piperis_59, Poise_101, Pringar_96, Pulchra_60, Quhwah_62, REQ1_18, Raela_102, Ramiel05_57, RobinSparkles_123, RobsFeet_62, Ronaldo_83, Savannah_57, Scumberland_59, Selwyn23_59, Shagrat_38, Shotgun_58, Smarties_67, Teamocil_61, Tesla_96, Trogglehumper_109, Tyrumbra_58, VasuNzinga_98, Volt_83, Yeti_58, Ziko_83,

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

- Beelzebub_104, Madraxi_53, RedRaider77_100,

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

- Auspice_149, Aziz_161, Bongo_143, Bricole_151, Candle_59, Cuke_50, Diminimus_146, Dulcita_146, Estes_161, Fowlmouth_54, GardenSalsa_164, Glaske16_148, IPhane7_146, Indlulamithi_50, LilhomieP_145, MontyDev_61, MrMagoo_166, MrMiyagi_53, Nanosmite_163, Nilo_63, Papyrus_61, PegLeg_149, Reindeer_147, Rey_164, Riparian_63, Rope_61, Send513_61, Skinny_152,

SlimJimmy_146, TyDawg_142, Weiss13_60, Yelo_60, Zenon_62,

Summary by start number:

Start 7:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi_50 (AC),

Start 8:

- Found in 13 of 108 (12.0%) of genes in pham
- Manual Annotations of this start: 11 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candle_59 (R), Cuke_50 (AC), Fowlmouth_54 (AC), MontyDev_61 (R), MrMiyagi_53 (AC), Nilo_63 (R), Papyrus_61 (R), Riparian_63 (R), Rope_61 (R), Send513_61 (R), Weiss13_60 (R), Yelo_60 (R), Zenon_62 (R),

Start 10:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rey_164 (M2),

Start 11:

- Found in 12 of 108 (11.1%) of genes in pham
- Manual Annotations of this start: 5 of 97
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Diminimus_146 (M1), Dulcita_146 (M1), Glaske16_148 (M1), PegLeg_149 (M1), Skinny_152 (M1),

Start 13:

- Found in 7 of 108 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 14.3% of time when present
- Phage (with cluster) where this start called: RedRaider77_100 (S),

Start 19:

- Found in 23 of 108 (21.3%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Beelzebub_104 (S),

Start 25:

- Found in 2 of 108 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Madraxi_53 (CF),

Start 27:

- Found in 75 of 108 (69.4%) of genes in pham
- Manual Annotations of this start: 64 of 97

- Called 96.0% of time when present
- Phage (with cluster) where this start called: Antares_58 (EC), Ariadne_67 (EC), Blackbeetle_101 (S), BrazzalePHS_57 (EC), Busephilis_57 (EC), Caprice_92 (S), Clarkson_101 (S), ClearAsMud_62 (EC), Corazon_95 (S), Cranjis_59 (EC), CrazyRich_57 (EC), Crisis_59 (EC), EarickHC_59 (EC), Fireman_61 (EC), Fryberger_80 (DP), Ganandorf_57 (EC), Gattaca_99 (S), Gibbles_116 (CX), Gina_61 (EC), Guey18_85 (DP), Hermeonysus_57 (EC), Honeyfin_59 (EC), Huphlepuuff_102 (S), Jayden_60 (EC), Jefe_58 (EC), Jflix2_48 (CF), JoieB_101 (S), Jollipop_58 (EC), KaiHaiDragon_59 (EC), Kampe_114 (CX), Keelan_81 (DP), Kowalski_57 (EC), Lilbit_98 (S), LittleFortune_60 (EC), LittleLaf_98 (S), Marvin_94 (S), Metamorphoo_61 (EC), MosMoris_96 (S), NoodlelyBoi_59 (EC), Onika_57 (EC), Orchid_113 (CX), Paschalis_58 (EC), PatrickStar_114 (CX), Phorgeous_58 (EC), Phrancesco_58 (EC), PierreOrion_58 (EC), PiperSansNom_59 (EC), Piperis_59 (EC), Poise_101 (S), Pringar_96 (S), Pulchra_60 (EC), Quhwah_62 (EC), REQ1_18 (CF), Raela_102 (S), Ramiel05_57 (EC), RobinSparkles_123 (CX), RobsFeet_62 (EC), Ronaldo_83 (DP), Savannah_57 (EC), Scumberland_59 (EC), Selwyn23_59 (EC), Shagrat_38 (CF), Shotgun_58 (EC), Smarties_67 (EC), Teamocil_61 (EC), Tesla_96 (S), Trogglehumper_109 (singleton), Tyumbra_58 (EC), VasuNzinga_98 (S), Volt_83 (DP), Yeti_58 (EC), Ziko_83 (DP),

Start 29:

- Found in 19 of 108 (17.6%) of genes in pham
- Manual Annotations of this start: 12 of 97
- Called 63.2% of time when present
- Phage (with cluster) where this start called: Auspice_149 (M1), Aziz_161 (M2), Bongo_143 (M1), Bricole_151 (M1), Estes_161 (M2), GardenSalsa_164 (M2), IPhane7_146 (M1), LilhomieP_145 (M1), MrMagoo_166 (M2), Nanosmite_163 (M3), SlimJimmy_146 (M1), TyDawg_142 (M1),

Start 30:

- Found in 23 of 108 (21.3%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Reindeer_147 (M1),

Summary by clusters:

There are 11 clusters represented in this pham: AC, CF, EC, singleton, S, CX, M1, M3, M2, R, DP,

Info for manual annotations of cluster AC:

- Start number 7 was manually annotated 1 time for cluster AC.
- Start number 8 was manually annotated 3 times for cluster AC.

Info for manual annotations of cluster CF:

- Start number 27 was manually annotated 2 times for cluster CF.

Info for manual annotations of cluster CX:

- Start number 27 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DP:

- Start number 27 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EC:

- Start number 27 was manually annotated 36 times for cluster EC.

Info for manual annotations of cluster M1:

- Start number 11 was manually annotated 5 times for cluster M1.
- Start number 29 was manually annotated 7 times for cluster M1.
- Start number 30 was manually annotated 1 time for cluster M1.

Info for manual annotations of cluster M2:

- Start number 10 was manually annotated 1 time for cluster M2.
- Start number 29 was manually annotated 4 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 29 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster R:

- Start number 8 was manually annotated 8 times for cluster R.

Info for manual annotations of cluster S:

- Start number 13 was manually annotated 1 time for cluster S.
- Start number 19 was manually annotated 1 time for cluster S.
- Start number 27 was manually annotated 14 times for cluster S.

Gene Information:

Gene: Antares_58 Start: 37535, Stop: 38530, Start Num: 27

Candidate Starts for Antares_58:

(Start: 27 @37535 has 64 MA's), (41, 37655), (43, 37664), (45, 37676), (51, 37709), (53, 37715), (56, 37733), (77, 37844), (87, 37925), (94, 38003), (95, 38015), (112, 38138), (117, 38168), (138, 38339), (143, 38360), (146, 38390), (149, 38423), (156, 38471),

Gene: Ariadne_67 Start: 39139, Stop: 40134, Start Num: 27

Candidate Starts for Ariadne_67:

(Start: 27 @39139 has 64 MA's), (Start: 30 @39154 has 1 MA's), (41, 39259), (43, 39268), (45, 39280), (51, 39313), (53, 39319), (56, 39337), (70, 39394), (77, 39448), (87, 39529), (91, 39571), (94, 39607), (95, 39619), (112, 39742), (117, 39772), (126, 39832), (138, 39943), (143, 39964), (148, 40006), (165, 40117),

Gene: Auspice_149 Start: 75730, Stop: 74657, Start Num: 29

Candidate Starts for Auspice_149:

(2, 75907), (3, 75895), (Start: 11 @75826 has 5 MA's), (Start: 19 @75805 has 1 MA's), (Start: 29 @75730 has 12 MA's), (41, 75625), (44, 75616), (49, 75580), (59, 75526), (67, 75493), (74, 75463), (80, 75379), (90, 75283), (98, 75184), (101, 75166), (107, 75103), (109, 75094), (111, 75082), (112, 75079), (120, 75028), (129, 74968), (139, 74869), (141, 74860), (147, 74824), (151, 74785), (166, 74689), (168, 74680),

Gene: Aziz_161 Start: 77655, Stop: 76582, Start Num: 29

Candidate Starts for Aziz_161:

(Start: 29 @77655 has 12 MA's), (44, 77541), (48, 77511), (54, 77481), (59, 77451), (74, 77388), (76, 77364), (80, 77304), (90, 77208), (93, 77166), (101, 77091), (107, 77028), (109, 77019), (110, 77010), (113, 76995), (120, 76953), (124, 76932), (126, 76917), (129, 76893), (130, 76890), (141, 76785),

(148, 76740), (151, 76710), (153, 76683), (166, 76614), (168, 76605), (170, 76596),

Gene: Beelzebub_104 Start: 58128, Stop: 57004, Start Num: 19

Candidate Starts for Beelzebub_104:

(Start: 19 @58128 has 1 MA's), (20, 58119), (Start: 27 @58074 has 64 MA's), (Start: 30 @58059 has 1 MA's), (34, 58026), (43, 57933), (48, 57900), (53, 57876), (60, 57843), (61, 57840), (62, 57837), (64, 57822), (66, 57810), (73, 57783), (80, 57696), (82, 57684), (84, 57651), (87, 57624), (88, 57618), (90, 57600), (93, 57558), (94, 57543), (96, 57507), (100, 57495), (108, 57417), (109, 57411), (114, 57384), (119, 57363), (130, 57288), (137, 57213), (141, 57192), (142, 57189), (166, 57021), (167, 57018),

Gene: Blackbeetle_101 Start: 57574, Stop: 56504, Start Num: 27

Candidate Starts for Blackbeetle_101:

(12, 57646), (Start: 13 @57643 has 1 MA's), (16, 57637), (Start: 27 @57574 has 64 MA's), (Start: 30 @57559 has 1 MA's), (34, 57526), (43, 57433), (48, 57400), (53, 57376), (60, 57343), (61, 57340), (62, 57337), (64, 57322), (66, 57310), (73, 57283), (80, 57196), (82, 57184), (84, 57151), (87, 57124), (88, 57118), (90, 57100), (93, 57058), (94, 57043), (96, 57007), (100, 56995), (108, 56917), (109, 56911), (114, 56884), (119, 56863), (130, 56788), (137, 56713), (141, 56692), (142, 56689), (166, 56521), (167, 56518),

Gene: Bongo_143 Start: 74587, Stop: 73514, Start Num: 29

Candidate Starts for Bongo_143:

(2, 74764), (3, 74752), (Start: 11 @74683 has 5 MA's), (Start: 19 @74662 has 1 MA's), (Start: 29 @74587 has 12 MA's), (41, 74482), (44, 74473), (49, 74437), (59, 74383), (67, 74350), (74, 74320), (80, 74236), (90, 74140), (94, 74083), (98, 74041), (101, 74023), (107, 73960), (109, 73951), (111, 73939), (112, 73936), (120, 73885), (129, 73825), (139, 73726), (141, 73717), (147, 73681), (151, 73642), (153, 73615), (166, 73546), (168, 73537),

Gene: BrazzalePHS_57 Start: 37331, Stop: 38326, Start Num: 27

Candidate Starts for BrazzalePHS_57:

(Start: 27 @37331 has 64 MA's), (41, 37451), (43, 37460), (45, 37472), (51, 37505), (53, 37511), (56, 37529), (77, 37640), (87, 37721), (94, 37799), (95, 37811), (112, 37934), (117, 37964), (138, 38135), (143, 38156), (146, 38186), (149, 38219), (156, 38267),

Gene: Bricole_151 Start: 75493, Stop: 74420, Start Num: 29

Candidate Starts for Bricole_151:

(2, 75670), (3, 75658), (Start: 11 @75589 has 5 MA's), (Start: 19 @75568 has 1 MA's), (Start: 29 @75493 has 12 MA's), (41, 75388), (44, 75379), (49, 75343), (59, 75289), (67, 75256), (74, 75226), (80, 75142), (90, 75046), (94, 74989), (98, 74947), (101, 74929), (107, 74866), (109, 74857), (111, 74845), (112, 74842), (120, 74791), (129, 74731), (139, 74632), (141, 74623), (147, 74587), (151, 74548), (166, 74452), (168, 74443),

Gene: Busephilis_57 Start: 37241, Stop: 38236, Start Num: 27

Candidate Starts for Busephilis_57:

(Start: 27 @37241 has 64 MA's), (41, 37361), (43, 37370), (45, 37382), (51, 37415), (53, 37421), (56, 37439), (77, 37550), (87, 37631), (94, 37709), (95, 37721), (112, 37844), (117, 37874), (119, 37886), (138, 38045), (143, 38066), (146, 38096), (149, 38129), (156, 38177),

Gene: Candle_59 Start: 44716, Stop: 45912, Start Num: 8

Candidate Starts for Candle_59:

(Start: 8 @44716 has 11 MA's), (14, 44731), (26, 44797), (28, 44806), (37, 44887), (40, 44908), (42, 44923), (47, 44950), (55, 45010), (59, 45031), (65, 45064), (78, 45175), (79, 45181), (81, 45193), (85, 45232), (88, 45262), (91, 45301), (98, 45379), (100, 45385), (102, 45400), (121, 45538), (126, 45571), (129, 45595), (138, 45688), (141, 45706), (146, 45739), (156, 45823), (158, 45844), (162, 45859),

(166, 45877), (167, 45880), (168, 45886), (170, 45895), (171, 45898),

Gene: Caprice_92 Start: 57512, Stop: 56442, Start Num: 27

Candidate Starts for Caprice_92:

(Start: 19 @57566 has 1 MA's), (20, 57557), (Start: 27 @57512 has 64 MA's), (Start: 30 @57497 has 1 MA's), (34, 57464), (43, 57371), (48, 57338), (53, 57314), (60, 57281), (61, 57278), (62, 57275), (64, 57260), (66, 57248), (73, 57221), (80, 57134), (82, 57122), (84, 57089), (87, 57062), (88, 57056), (90, 57038), (93, 56996), (94, 56981), (96, 56945), (100, 56933), (108, 56855), (109, 56849), (114, 56822), (119, 56801), (126, 56753), (130, 56726), (137, 56651), (141, 56630), (142, 56627), (166, 56459), (167, 56456),

Gene: Clarkson_101 Start: 57755, Stop: 56685, Start Num: 27

Candidate Starts for Clarkson_101:

(Start: 19 @57809 has 1 MA's), (20, 57800), (Start: 27 @57755 has 64 MA's), (Start: 30 @57740 has 1 MA's), (34, 57707), (43, 57614), (48, 57581), (53, 57557), (60, 57524), (61, 57521), (62, 57518), (64, 57503), (66, 57491), (73, 57464), (80, 57377), (82, 57365), (84, 57332), (87, 57305), (88, 57299), (90, 57281), (93, 57239), (94, 57224), (96, 57188), (100, 57176), (108, 57098), (109, 57092), (114, 57065), (119, 57044), (130, 56969), (137, 56894), (141, 56873), (142, 56870), (166, 56702), (167, 56699),

Gene: ClearAsMud_62 Start: 37812, Stop: 38807, Start Num: 27

Candidate Starts for ClearAsMud_62:

(Start: 27 @37812 has 64 MA's), (41, 37932), (43, 37941), (45, 37953), (51, 37986), (53, 37992), (56, 38010), (77, 38121), (87, 38202), (91, 38244), (94, 38280), (95, 38292), (112, 38415), (117, 38445), (119, 38457), (138, 38616), (143, 38637), (148, 38679), (149, 38700), (156, 38748),

Gene: Corazon_95 Start: 57949, Stop: 56879, Start Num: 27

Candidate Starts for Corazon_95:

(Start: 19 @58003 has 1 MA's), (20, 57994), (Start: 27 @57949 has 64 MA's), (Start: 30 @57934 has 1 MA's), (34, 57901), (43, 57808), (48, 57775), (53, 57751), (60, 57718), (61, 57715), (62, 57712), (64, 57697), (66, 57685), (73, 57658), (80, 57571), (82, 57559), (84, 57526), (87, 57499), (88, 57493), (90, 57475), (93, 57433), (94, 57418), (96, 57382), (100, 57370), (108, 57292), (109, 57286), (114, 57259), (119, 57238), (130, 57163), (137, 57088), (141, 57067), (142, 57064), (166, 56896), (167, 56893),

Gene: Cranjis_59 Start: 37490, Stop: 38485, Start Num: 27

Candidate Starts for Cranjis_59:

(Start: 27 @37490 has 64 MA's), (41, 37610), (43, 37619), (45, 37631), (51, 37664), (53, 37670), (56, 37688), (77, 37799), (87, 37880), (94, 37958), (95, 37970), (112, 38093), (117, 38123), (138, 38294), (143, 38315), (146, 38345), (149, 38378), (156, 38426),

Gene: CrazyRich_57 Start: 37299, Stop: 38294, Start Num: 27

Candidate Starts for CrazyRich_57:

(Start: 27 @37299 has 64 MA's), (41, 37419), (43, 37428), (45, 37440), (51, 37473), (53, 37479), (56, 37497), (77, 37608), (87, 37689), (94, 37767), (95, 37779), (112, 37902), (117, 37932), (138, 38103), (143, 38124), (146, 38154), (149, 38187), (156, 38235),

Gene: Crisis_59 Start: 37290, Stop: 38285, Start Num: 27

Candidate Starts for Crisis_59:

(Start: 27 @37290 has 64 MA's), (41, 37410), (43, 37419), (45, 37431), (51, 37464), (53, 37470), (56, 37488), (77, 37599), (87, 37680), (94, 37758), (95, 37770), (112, 37893), (117, 37923), (138, 38094), (143, 38115), (146, 38145), (149, 38178), (156, 38226),

Gene: Cuke_50 Start: 34724, Stop: 35866, Start Num: 8

Candidate Starts for Cuke_50:

(Start: 8 @34724 has 11 MA's), (23, 34790), (Start: 29 @34826 has 12 MA's), (31, 34832), (35, 34874), (40, 34925), (52, 34988), (72, 35075), (78, 35126), (82, 35147), (84, 35180), (87, 35207), (88, 35213), (89, 35219), (91, 35252), (92, 35261), (98, 35330), (103, 35357), (109, 35420), (122, 35498), (131, 35561), (132, 35567), (136, 35636), (141, 35663), (142, 35666), (144, 35675), (146, 35696), (152, 35753), (154, 35765), (155, 35774), (164, 35816), (170, 35849),

Gene: Diminimus_146 Start: 74499, Stop: 73330, Start Num: 11

Candidate Starts for Diminimus_146:

(2, 74580), (3, 74568), (Start: 11 @74499 has 5 MA's), (Start: 19 @74478 has 1 MA's), (Start: 29 @74403 has 12 MA's), (41, 74298), (44, 74289), (49, 74253), (59, 74199), (67, 74166), (74, 74136), (80, 74052), (90, 73956), (94, 73899), (98, 73857), (101, 73839), (107, 73776), (109, 73767), (111, 73755), (112, 73752), (120, 73701), (129, 73641), (139, 73542), (141, 73533), (147, 73497), (151, 73458), (153, 73431), (166, 73362), (168, 73353),

Gene: Dulcita_146 Start: 74500, Stop: 73331, Start Num: 11

Candidate Starts for Dulcita_146:

(2, 74581), (3, 74569), (Start: 11 @74500 has 5 MA's), (Start: 19 @74479 has 1 MA's), (Start: 29 @74404 has 12 MA's), (41, 74299), (44, 74290), (49, 74254), (59, 74200), (67, 74167), (74, 74137), (80, 74053), (90, 73957), (94, 73900), (98, 73858), (101, 73840), (107, 73777), (109, 73768), (111, 73756), (112, 73753), (120, 73702), (129, 73642), (139, 73543), (141, 73534), (147, 73498), (151, 73459), (153, 73432), (166, 73363), (168, 73354),

Gene: EarickHC_59 Start: 37213, Stop: 38208, Start Num: 27

Candidate Starts for EarickHC_59:

(Start: 27 @37213 has 64 MA's), (41, 37333), (43, 37342), (45, 37354), (51, 37387), (53, 37393), (56, 37411), (77, 37522), (87, 37603), (94, 37681), (95, 37693), (112, 37816), (117, 37846), (138, 38017), (143, 38038), (146, 38068), (149, 38101), (156, 38149),

Gene: Estes_161 Start: 77859, Stop: 76786, Start Num: 29

Candidate Starts for Estes_161:

(18, 77931), (22, 77904), (Start: 29 @77859 has 12 MA's), (36, 77784), (44, 77745), (48, 77715), (59, 77655), (74, 77592), (76, 77568), (80, 77508), (90, 77412), (93, 77370), (101, 77295), (107, 77232), (109, 77223), (110, 77214), (113, 77199), (120, 77157), (124, 77136), (126, 77121), (129, 77097), (130, 77094), (141, 76989), (146, 76956), (148, 76944), (151, 76914), (153, 76887), (166, 76818), (168, 76809), (170, 76800),

Gene: Fireman_61 Start: 39216, Stop: 40211, Start Num: 27

Candidate Starts for Fireman_61:

(Start: 27 @39216 has 64 MA's), (41, 39336), (43, 39345), (45, 39357), (51, 39390), (53, 39396), (56, 39414), (70, 39471), (77, 39525), (87, 39606), (91, 39648), (94, 39684), (95, 39696), (100, 39732), (112, 39819), (126, 39909), (138, 40020), (143, 40041), (148, 40083), (149, 40104), (156, 40152),

Gene: Fowlmouth_54 Start: 38133, Stop: 39266, Start Num: 8

Candidate Starts for Fowlmouth_54:

(Start: 8 @38133 has 11 MA's), (21, 38172), (23, 38199), (31, 38241), (35, 38283), (38, 38319), (40, 38334), (52, 38397), (72, 38475), (78, 38526), (82, 38547), (86, 38595), (88, 38613), (89, 38619), (91, 38652), (92, 38661), (100, 38736), (103, 38757), (104, 38763), (109, 38820), (121, 38889), (122, 38898), (126, 38922), (131, 38961), (132, 38967), (134, 39006), (136, 39036), (141, 39063), (142, 39066), (144, 39075), (145, 39090), (152, 39153), (154, 39165), (155, 39174), (164, 39216), (170, 39249),

Gene: Fryberger_80 Start: 42863, Stop: 41793, Start Num: 27

Candidate Starts for Fryberger_80:

(21, 42908), (24, 42878), (Start: 27 @42863 has 64 MA's), (32, 42839), (34, 42815), (39, 42743), (41, 42731), (48, 42692), (53, 42668), (63, 42617), (78, 42494), (89, 42401), (92, 42359), (93, 42347), (94, 42332), (100, 42284), (116, 42167), (126, 42110), (130, 42083), (135, 42023), (154, 41873), (157, 41849), (159, 41834), (162, 41825), (165, 41819),

Gene: Ganandorf_57 Start: 37323, Stop: 38318, Start Num: 27

Candidate Starts for Ganandorf_57:

(Start: 27 @37323 has 64 MA's), (41, 37443), (43, 37452), (45, 37464), (51, 37497), (53, 37503), (56, 37521), (77, 37632), (87, 37713), (94, 37791), (95, 37803), (112, 37926), (117, 37956), (138, 38127), (143, 38148), (146, 38178), (149, 38211), (156, 38259),

Gene: GardenSalsa_164 Start: 78536, Stop: 77463, Start Num: 29

Candidate Starts for GardenSalsa_164:

(Start: 29 @78536 has 12 MA's), (44, 78422), (48, 78392), (59, 78332), (74, 78269), (76, 78245), (80, 78185), (90, 78089), (93, 78047), (101, 77972), (107, 77909), (109, 77900), (110, 77891), (113, 77876), (120, 77834), (124, 77813), (126, 77798), (129, 77774), (130, 77771), (141, 77666), (146, 77633), (148, 77621), (151, 77591), (153, 77564), (166, 77495), (168, 77486), (170, 77477),

Gene: Gattaca_99 Start: 57986, Stop: 56916, Start Num: 27

Candidate Starts for Gattaca_99:

(12, 58058), (Start: 13 @58055 has 1 MA's), (16, 58049), (Start: 27 @57986 has 64 MA's), (Start: 30 @57971 has 1 MA's), (34, 57938), (43, 57845), (48, 57812), (53, 57788), (60, 57755), (61, 57752), (62, 57749), (64, 57734), (66, 57722), (73, 57695), (80, 57608), (82, 57596), (84, 57563), (87, 57536), (88, 57530), (90, 57512), (93, 57470), (94, 57455), (96, 57419), (100, 57407), (108, 57329), (109, 57323), (114, 57296), (119, 57275), (130, 57200), (137, 57125), (141, 57104), (142, 57101), (166, 56933), (167, 56930),

Gene: Gibbles_116 Start: 78724, Stop: 77663, Start Num: 27

Candidate Starts for Gibbles_116:

(Start: 27 @78724 has 64 MA's), (32, 78700), (46, 78571), (48, 78553), (71, 78448), (77, 78388), (91, 78238), (105, 78118), (115, 78040), (116, 78034), (123, 77992), (128, 77959), (132, 77929), (138, 77866), (141, 77848), (158, 77707), (161, 77695), (165, 77686),

Gene: Gina_61 Start: 37315, Stop: 38310, Start Num: 27

Candidate Starts for Gina_61:

(Start: 27 @37315 has 64 MA's), (Start: 30 @37330 has 1 MA's), (41, 37435), (43, 37444), (45, 37456), (56, 37513), (70, 37570), (77, 37624), (91, 37747), (94, 37783), (95, 37795), (112, 37918), (117, 37948), (126, 38008), (138, 38119), (143, 38140), (148, 38182), (149, 38203),

Gene: Glaske16_148 Start: 75618, Stop: 74449, Start Num: 11

Candidate Starts for Glaske16_148:

(2, 75699), (3, 75687), (Start: 11 @75618 has 5 MA's), (Start: 19 @75597 has 1 MA's), (Start: 29 @75522 has 12 MA's), (41, 75417), (44, 75408), (49, 75372), (59, 75318), (67, 75285), (74, 75255), (80, 75171), (90, 75075), (94, 75018), (98, 74976), (101, 74958), (107, 74895), (109, 74886), (111, 74874), (112, 74871), (120, 74820), (129, 74760), (139, 74661), (141, 74652), (147, 74616), (151, 74577), (153, 74550), (166, 74481), (168, 74472),

Gene: Guey18_85 Start: 44196, Stop: 43126, Start Num: 27

Candidate Starts for Guey18_85:

(21, 44241), (24, 44211), (Start: 27 @44196 has 64 MA's), (32, 44172), (34, 44148), (39, 44076), (41, 44064), (48, 44025), (53, 44001), (63, 43950), (78, 43827), (89, 43734), (92, 43692), (93, 43680), (100, 43617), (116, 43500), (124, 43458), (134, 43371), (135, 43356), (154, 43206), (157, 43182), (159, 43167), (162, 43158), (165, 43152),

Gene: Hermeonysus_57 Start: 37219, Stop: 38214, Start Num: 27

Candidate Starts for Hermeonysus_57:

(Start: 27 @37219 has 64 MA's), (41, 37339), (43, 37348), (45, 37360), (51, 37393), (53, 37399), (56, 37417), (77, 37528), (87, 37609), (94, 37687), (95, 37699), (112, 37822), (117, 37852), (138, 38023), (143, 38044), (146, 38074), (149, 38107), (156, 38155),

Gene: Honeyfin_59 Start: 37511, Stop: 38506, Start Num: 27

Candidate Starts for Honeyfin_59:

(Start: 27 @37511 has 64 MA's), (41, 37631), (43, 37640), (45, 37652), (51, 37685), (53, 37691), (56, 37709), (70, 37766), (77, 37820), (87, 37901), (91, 37943), (94, 37979), (95, 37991), (112, 38114), (117, 38144), (138, 38315), (143, 38336), (146, 38366), (149, 38399), (156, 38447),

Gene: Huphlepuuff_102 Start: 57560, Stop: 56490, Start Num: 27

Candidate Starts for Huphlepuuff_102:

(Start: 19 @57614 has 1 MA's), (20, 57605), (Start: 27 @57560 has 64 MA's), (Start: 30 @57545 has 1 MA's), (34, 57512), (43, 57419), (48, 57386), (53, 57362), (60, 57329), (61, 57326), (62, 57323), (64, 57308), (66, 57296), (73, 57269), (80, 57182), (82, 57170), (84, 57137), (87, 57110), (88, 57104), (90, 57086), (93, 57044), (94, 57029), (96, 56993), (100, 56981), (108, 56903), (109, 56897), (114, 56870), (119, 56849), (130, 56774), (137, 56699), (141, 56678), (142, 56675), (166, 56507), (167, 56504),

Gene: IPhane7_146 Start: 75346, Stop: 74273, Start Num: 29

Candidate Starts for IPhane7_146:

(2, 75523), (3, 75511), (Start: 11 @75442 has 5 MA's), (Start: 19 @75421 has 1 MA's), (Start: 29 @75346 has 12 MA's), (41, 75241), (44, 75232), (49, 75196), (59, 75142), (67, 75109), (74, 75079), (80, 74995), (90, 74899), (98, 74800), (101, 74782), (107, 74719), (109, 74710), (111, 74698), (112, 74695), (120, 74644), (129, 74584), (139, 74485), (141, 74476), (147, 74440), (151, 74401), (166, 74305), (168, 74296),

Gene: Indlulamithi_50 Start: 39104, Stop: 40291, Start Num: 7

Candidate Starts for Indlulamithi_50:

(1, 39026), (6, 39098), (Start: 7 @39104 has 1 MA's), (14, 39119), (17, 39128), (31, 39212), (35, 39254), (52, 39371), (69, 39443), (78, 39503), (79, 39509), (81, 39521), (88, 39590), (90, 39608), (91, 39629), (93, 39650), (99, 39710), (113, 39821), (115, 39833), (120, 39863), (126, 39899), (129, 39923), (136, 40010), (152, 40130), (160, 40184), (163, 40190), (172, 40241), (173, 40244), (174, 40262), (175, 40277),

Gene: Jayden_60 Start: 37996, Stop: 38991, Start Num: 27

Candidate Starts for Jayden_60:

(Start: 27 @37996 has 64 MA's), (41, 38116), (43, 38125), (45, 38137), (51, 38170), (53, 38176), (56, 38194), (70, 38251), (77, 38305), (94, 38464), (95, 38476), (112, 38599), (117, 38629), (136, 38791), (138, 38800), (143, 38821), (148, 38863), (149, 38884),

Gene: Jefe_58 Start: 37277, Stop: 38272, Start Num: 27

Candidate Starts for Jefe_58:

(Start: 27 @37277 has 64 MA's), (41, 37397), (43, 37406), (45, 37418), (51, 37451), (53, 37457), (56, 37475), (77, 37586), (87, 37667), (94, 37745), (95, 37757), (112, 37880), (117, 37910), (138, 38081), (143, 38102), (146, 38132), (149, 38165), (156, 38213),

Gene: Jflix2_48 Start: 34302, Stop: 33235, Start Num: 27

Candidate Starts for Jflix2_48:

(25, 34311), (Start: 27 @34302 has 64 MA's), (34, 34254), (49, 34125), (75, 33999), (88, 33858), (102, 33720), (133, 33495), (138, 33435), (149, 33351), (161, 33267), (166, 33246),

Gene: JoieB_101 Start: 58161, Stop: 57091, Start Num: 27

Candidate Starts for JoieB_101:

(12, 58233), (Start: 13 @58230 has 1 MA's), (16, 58224), (Start: 27 @58161 has 64 MA's), (Start: 30 @58146 has 1 MA's), (34, 58113), (43, 58020), (48, 57987), (53, 57963), (60, 57930), (61, 57927), (62, 57924), (64, 57909), (66, 57897), (73, 57870), (80, 57783), (82, 57771), (84, 57738), (87, 57711), (88, 57705), (90, 57687), (93, 57645), (94, 57630), (96, 57594), (100, 57582), (108, 57504), (109, 57498), (114, 57471), (119, 57450), (130, 57375), (137, 57300), (141, 57279), (142, 57276), (166, 57108), (167, 57105),

Gene: Jollipop_58 Start: 37692, Stop: 38687, Start Num: 27

Candidate Starts for Jollipop_58:

(Start: 27 @37692 has 64 MA's), (41, 37812), (43, 37821), (45, 37833), (51, 37866), (53, 37872), (56, 37890), (77, 38001), (87, 38082), (91, 38124), (94, 38160), (95, 38172), (112, 38295), (117, 38325), (138, 38496), (143, 38517), (146, 38547), (149, 38580), (156, 38628),

Gene: KaiHaiDragon_59 Start: 37213, Stop: 38208, Start Num: 27

Candidate Starts for KaiHaiDragon_59:

(Start: 27 @37213 has 64 MA's), (41, 37333), (43, 37342), (45, 37354), (51, 37387), (53, 37393), (56, 37411), (77, 37522), (87, 37603), (94, 37681), (95, 37693), (112, 37816), (117, 37846), (138, 38017), (143, 38038), (146, 38068), (149, 38101), (156, 38149),

Gene: Kampe_114 Start: 77930, Stop: 76869, Start Num: 27

Candidate Starts for Kampe_114:

(Start: 27 @77930 has 64 MA's), (32, 77906), (46, 77777), (48, 77759), (71, 77654), (77, 77594), (91, 77444), (105, 77324), (115, 77246), (116, 77240), (123, 77198), (128, 77165), (132, 77135), (138, 77072), (141, 77054), (158, 76913), (161, 76901), (165, 76892),

Gene: Keelan_81 Start: 43600, Stop: 42530, Start Num: 27

Candidate Starts for Keelan_81:

(9, 43678), (15, 43666), (Start: 27 @43600 has 64 MA's), (32, 43576), (34, 43552), (44, 43459), (46, 43447), (48, 43429), (54, 43399), (63, 43354), (78, 43231), (81, 43213), (89, 43138), (93, 43084), (94, 43069), (100, 43021), (116, 42907), (118, 42901), (119, 42898), (125, 42856), (126, 42850), (127, 42841), (131, 42811), (145, 42694), (154, 42613), (157, 42589), (162, 42565), (166, 42547), (167, 42544),

Gene: Kowalski_57 Start: 37326, Stop: 38321, Start Num: 27

Candidate Starts for Kowalski_57:

(Start: 27 @37326 has 64 MA's), (41, 37446), (43, 37455), (45, 37467), (51, 37500), (53, 37506), (56, 37524), (77, 37635), (87, 37716), (94, 37794), (95, 37806), (112, 37929), (117, 37959), (138, 38130), (143, 38151), (146, 38181), (149, 38214), (156, 38262),

Gene: Lilbit_98 Start: 58120, Stop: 57050, Start Num: 27

Candidate Starts for Lilbit_98:

(Start: 19 @58174 has 1 MA's), (20, 58165), (Start: 27 @58120 has 64 MA's), (Start: 30 @58105 has 1 MA's), (34, 58072), (43, 57979), (48, 57946), (53, 57922), (60, 57889), (61, 57886), (62, 57883), (64, 57868), (66, 57856), (73, 57829), (80, 57742), (82, 57730), (84, 57697), (87, 57670), (88, 57664), (90, 57646), (93, 57604), (94, 57589), (96, 57553), (100, 57541), (108, 57463), (109, 57457), (114, 57430), (119, 57409), (130, 57334), (137, 57259), (141, 57238), (142, 57235), (166, 57067), (167, 57064),

Gene: LilhomieP_145 Start: 75433, Stop: 74360, Start Num: 29

Candidate Starts for LilhomieP_145:

(2, 75610), (3, 75598), (Start: 11 @75529 has 5 MA's), (Start: 19 @75508 has 1 MA's), (Start: 29 @75433 has 12 MA's), (41, 75328), (44, 75319), (49, 75283), (59, 75229), (67, 75196), (74, 75166), (80, 75082), (90, 74986), (94, 74929), (98, 74887), (101, 74869), (107, 74806), (109, 74797), (111, 74785), (112, 74782), (120, 74731), (129, 74671), (139, 74572), (141, 74563), (147, 74527), (151, 74488), (166, 74392), (168, 74383),

Gene: LittleFortune_60 Start: 37582, Stop: 38577, Start Num: 27

Candidate Starts for LittleFortune_60:

(Start: 27 @37582 has 64 MA's), (41, 37702), (43, 37711), (45, 37723), (51, 37756), (53, 37762), (56, 37780), (77, 37891), (87, 37972), (94, 38050), (95, 38062), (112, 38185), (117, 38215), (138, 38386), (143, 38407), (146, 38437), (149, 38470), (156, 38518),

Gene: LittleLaf_98 Start: 57849, Stop: 56779, Start Num: 27

Candidate Starts for LittleLaf_98:

(Start: 19 @57903 has 1 MA's), (20, 57894), (Start: 27 @57849 has 64 MA's), (Start: 30 @57834 has 1 MA's), (34, 57801), (43, 57708), (48, 57675), (53, 57651), (60, 57618), (61, 57615), (62, 57612), (64, 57597), (66, 57585), (73, 57558), (80, 57471), (82, 57459), (84, 57426), (87, 57399), (88, 57393), (90, 57375), (93, 57333), (94, 57318), (96, 57282), (100, 57270), (108, 57192), (109, 57186), (114, 57159), (119, 57138), (130, 57063), (137, 56988), (141, 56967), (142, 56964), (166, 56796), (167, 56793),

Gene: Madraxi_53 Start: 37049, Stop: 35973, Start Num: 25

Candidate Starts for Madraxi_53:

(25, 37049), (Start: 27 @37040 has 64 MA's), (34, 36992), (49, 36863), (75, 36737), (88, 36596), (102, 36458), (133, 36233), (138, 36173), (149, 36089), (161, 36005), (166, 35984),

Gene: Marvin_94 Start: 57642, Stop: 56572, Start Num: 27

Candidate Starts for Marvin_94:

(Start: 19 @57696 has 1 MA's), (20, 57687), (Start: 27 @57642 has 64 MA's), (Start: 30 @57627 has 1 MA's), (34, 57594), (43, 57501), (48, 57468), (53, 57444), (60, 57411), (61, 57408), (62, 57405), (64, 57390), (66, 57378), (73, 57351), (80, 57264), (82, 57252), (84, 57219), (87, 57192), (88, 57186), (90, 57168), (93, 57126), (94, 57111), (96, 57075), (100, 57063), (108, 56985), (109, 56979), (114, 56952), (119, 56931), (130, 56856), (137, 56781), (141, 56760), (142, 56757), (166, 56589), (167, 56586),

Gene: Metamorphoo_61 Start: 38510, Stop: 39505, Start Num: 27

Candidate Starts for Metamorphoo_61:

(Start: 27 @38510 has 64 MA's), (41, 38630), (43, 38639), (45, 38651), (51, 38684), (53, 38690), (56, 38708), (70, 38765), (77, 38819), (91, 38942), (94, 38978), (95, 38990), (112, 39113), (126, 39203), (138, 39314), (143, 39335), (148, 39377), (149, 39398), (156, 39446),

Gene: MontyDev_61 Start: 44363, Stop: 45559, Start Num: 8

Candidate Starts for MontyDev_61:

(Start: 8 @44363 has 11 MA's), (14, 44378), (26, 44444), (28, 44453), (37, 44534), (40, 44555), (42, 44570), (47, 44597), (55, 44657), (59, 44678), (65, 44711), (78, 44822), (79, 44828), (81, 44840), (85, 44879), (88, 44909), (91, 44948), (98, 45026), (100, 45032), (102, 45047), (121, 45185), (126, 45218), (129, 45242), (138, 45335), (141, 45353), (146, 45386), (156, 45470), (158, 45491), (162, 45506), (166, 45524), (167, 45527), (168, 45533), (170, 45542), (171, 45545),

Gene: MosMoris_96 Start: 57992, Stop: 56922, Start Num: 27

Candidate Starts for MosMoris_96:

(12, 58064), (Start: 13 @58061 has 1 MA's), (16, 58055), (Start: 27 @57992 has 64 MA's), (Start: 30 @57977 has 1 MA's), (34, 57944), (43, 57851), (48, 57818), (53, 57794), (60, 57761), (61, 57758), (62, 57755), (64, 57740), (66, 57728), (73, 57701), (80, 57614), (82, 57602), (84, 57569), (87, 57542), (88, 57536), (90, 57518), (93, 57476), (94, 57461), (96, 57425), (100, 57413), (108, 57335), (109,

57329), (114, 57302), (119, 57281), (130, 57206), (137, 57131), (141, 57110), (142, 57107), (166, 56939), (167, 56936),

Gene: MrMagoo_166 Start: 78537, Stop: 77464, Start Num: 29

Candidate Starts for MrMagoo_166:

(18, 78609), (22, 78582), (Start: 29 @78537 has 12 MA's), (44, 78423), (48, 78393), (59, 78333), (74, 78270), (76, 78246), (80, 78186), (90, 78090), (93, 78048), (101, 77973), (107, 77910), (109, 77901), (110, 77892), (113, 77877), (120, 77835), (124, 77814), (126, 77799), (129, 77775), (130, 77772), (141, 77667), (146, 77634), (148, 77622), (151, 77592), (153, 77565), (166, 77496), (168, 77487), (170, 77478),

Gene: MrMiyagi_53 Start: 38517, Stop: 39650, Start Num: 8

Candidate Starts for MrMiyagi_53:

(Start: 8 @38517 has 11 MA's), (21, 38556), (23, 38583), (31, 38625), (35, 38667), (38, 38703), (40, 38718), (52, 38781), (72, 38859), (78, 38910), (82, 38931), (86, 38979), (88, 38997), (89, 39003), (91, 39036), (92, 39045), (100, 39120), (103, 39141), (104, 39147), (109, 39204), (121, 39273), (122, 39282), (126, 39306), (131, 39345), (132, 39351), (134, 39390), (136, 39420), (141, 39447), (142, 39450), (144, 39459), (145, 39474), (152, 39537), (154, 39549), (155, 39558), (164, 39600), (170, 39633), (171, 39636),

Gene: Nanosmite_163 Start: 77987, Stop: 76914, Start Num: 29

Candidate Starts for Nanosmite_163:

(4, 78134), (5, 78119), (Start: 29 @77987 has 12 MA's), (49, 77837), (59, 77783), (68, 77747), (74, 77720), (80, 77636), (87, 77564), (90, 77540), (101, 77423), (107, 77360), (113, 77327), (120, 77285), (123, 77267), (127, 77240), (141, 77117), (146, 77084), (147, 77081), (148, 77072), (150, 77048), (166, 76946), (168, 76937),

Gene: Nilo_63 Start: 44715, Stop: 45911, Start Num: 8

Candidate Starts for Nilo_63:

(Start: 8 @44715 has 11 MA's), (14, 44730), (26, 44796), (28, 44805), (37, 44886), (40, 44907), (42, 44922), (47, 44949), (55, 45009), (59, 45030), (65, 45063), (78, 45174), (79, 45180), (81, 45192), (85, 45231), (88, 45261), (91, 45300), (98, 45378), (100, 45384), (102, 45399), (121, 45537), (126, 45570), (129, 45594), (138, 45687), (141, 45705), (146, 45738), (156, 45822), (158, 45843), (162, 45858), (166, 45876), (167, 45879), (168, 45885), (170, 45894), (171, 45897),

Gene: NoodlelyBoi_59 Start: 38103, Stop: 39098, Start Num: 27

Candidate Starts for NoodlelyBoi_59:

(Start: 27 @38103 has 64 MA's), (41, 38223), (43, 38232), (45, 38244), (51, 38277), (53, 38283), (56, 38301), (77, 38412), (87, 38493), (91, 38535), (94, 38571), (95, 38583), (112, 38706), (117, 38736), (138, 38907), (143, 38928), (148, 38970), (149, 38991), (156, 39039),

Gene: Onika_57 Start: 37301, Stop: 38296, Start Num: 27

Candidate Starts for Onika_57:

(Start: 27 @37301 has 64 MA's), (41, 37421), (43, 37430), (45, 37442), (51, 37475), (53, 37481), (56, 37499), (77, 37610), (87, 37691), (94, 37769), (95, 37781), (112, 37904), (117, 37934), (138, 38105), (143, 38126), (146, 38156), (149, 38189), (156, 38237),

Gene: Orchid_113 Start: 77931, Stop: 76870, Start Num: 27

Candidate Starts for Orchid_113:

(Start: 27 @77931 has 64 MA's), (32, 77907), (46, 77778), (48, 77760), (71, 77655), (77, 77595), (91, 77445), (105, 77325), (115, 77247), (116, 77241), (123, 77199), (128, 77166), (132, 77136), (138, 77073), (141, 77055), (158, 76914), (161, 76902), (165, 76893),

Gene: Papyrus_61 Start: 44571, Stop: 45767, Start Num: 8

Candidate Starts for Papyrus_61:

(Start: 8 @44571 has 11 MA's), (14, 44586), (26, 44652), (28, 44661), (37, 44742), (40, 44763), (42, 44778), (47, 44805), (55, 44865), (59, 44886), (65, 44919), (78, 45030), (79, 45036), (81, 45048), (85, 45087), (88, 45117), (91, 45156), (98, 45234), (100, 45240), (102, 45255), (121, 45393), (126, 45426), (129, 45450), (138, 45543), (141, 45561), (146, 45594), (156, 45678), (158, 45699), (162, 45714), (166, 45732), (167, 45735), (168, 45741), (170, 45750), (171, 45753),

Gene: Paschalis_58 Start: 37308, Stop: 38303, Start Num: 27

Candidate Starts for Paschalis_58:

(Start: 27 @37308 has 64 MA's), (41, 37428), (43, 37437), (45, 37449), (51, 37482), (53, 37488), (56, 37506), (77, 37617), (87, 37698), (91, 37740), (94, 37776), (95, 37788), (112, 37911), (117, 37941), (138, 38112), (143, 38133), (146, 38163), (149, 38196), (156, 38244),

Gene: PatrickStar_114 Start: 78010, Stop: 76949, Start Num: 27

Candidate Starts for PatrickStar_114:

(Start: 27 @78010 has 64 MA's), (32, 77986), (46, 77857), (48, 77839), (71, 77734), (77, 77674), (91, 77524), (105, 77404), (115, 77326), (116, 77320), (123, 77278), (128, 77245), (132, 77215), (138, 77152), (141, 77134), (158, 76993), (161, 76981), (165, 76972),

Gene: PegLeg_149 Start: 75413, Stop: 74244, Start Num: 11

Candidate Starts for PegLeg_149:

(2, 75494), (3, 75482), (Start: 11 @75413 has 5 MA's), (Start: 19 @75392 has 1 MA's), (Start: 29 @75317 has 12 MA's), (41, 75212), (44, 75203), (49, 75167), (59, 75113), (67, 75080), (74, 75050), (80, 74966), (90, 74870), (94, 74813), (98, 74771), (101, 74753), (107, 74690), (109, 74681), (111, 74669), (112, 74666), (120, 74615), (129, 74555), (139, 74456), (141, 74447), (147, 74411), (151, 74372), (166, 74276), (168, 74267),

Gene: Phorgeous_58 Start: 37142, Stop: 38137, Start Num: 27

Candidate Starts for Phorgeous_58:

(Start: 27 @37142 has 64 MA's), (41, 37262), (43, 37271), (45, 37283), (51, 37316), (53, 37322), (56, 37340), (77, 37451), (87, 37532), (94, 37610), (95, 37622), (112, 37745), (117, 37775), (138, 37946), (143, 37967), (146, 37997), (149, 38030), (156, 38078),

Gene: Phrancesco_58 Start: 37431, Stop: 38426, Start Num: 27

Candidate Starts for Phrancesco_58:

(Start: 27 @37431 has 64 MA's), (41, 37551), (43, 37560), (45, 37572), (51, 37605), (53, 37611), (56, 37629), (77, 37740), (87, 37821), (94, 37899), (95, 37911), (112, 38034), (117, 38064), (119, 38076), (138, 38235), (143, 38256), (146, 38286), (149, 38319), (156, 38367),

Gene: PierreOrion_58 Start: 37551, Stop: 38546, Start Num: 27

Candidate Starts for PierreOrion_58:

(Start: 27 @37551 has 64 MA's), (41, 37671), (43, 37680), (45, 37692), (49, 37716), (51, 37725), (53, 37731), (56, 37749), (70, 37806), (77, 37860), (87, 37941), (91, 37983), (94, 38019), (95, 38031), (112, 38154), (117, 38184), (138, 38355), (143, 38376), (146, 38406), (149, 38439), (156, 38487),

Gene: PiperSansNom_59 Start: 37615, Stop: 38610, Start Num: 27

Candidate Starts for PiperSansNom_59:

(Start: 27 @37615 has 64 MA's), (41, 37735), (43, 37744), (45, 37756), (51, 37789), (53, 37795), (56, 37813), (77, 37924), (87, 38005), (94, 38083), (95, 38095), (112, 38218), (117, 38248), (138, 38419), (143, 38440), (146, 38470), (149, 38503), (156, 38551),

Gene: Piperis_59 Start: 37265, Stop: 38260, Start Num: 27

Candidate Starts for Piperis_59:

(Start: 27 @37265 has 64 MA's), (41, 37385), (43, 37394), (45, 37406), (51, 37439), (53, 37445), (56, 37463), (77, 37574), (87, 37655), (94, 37733), (95, 37745), (112, 37868), (117, 37898), (138, 38069), (143, 38090), (146, 38120), (149, 38153), (156, 38201),

Gene: Poise_101 Start: 57574, Stop: 56504, Start Num: 27

Candidate Starts for Poise_101:

(12, 57646), (Start: 13 @57643 has 1 MA's), (16, 57637), (Start: 27 @57574 has 64 MA's), (Start: 30 @57559 has 1 MA's), (34, 57526), (43, 57433), (48, 57400), (53, 57376), (60, 57343), (61, 57340), (62, 57337), (64, 57322), (66, 57310), (73, 57283), (80, 57196), (82, 57184), (84, 57151), (87, 57124), (88, 57118), (90, 57100), (93, 57058), (94, 57043), (96, 57007), (100, 56995), (108, 56917), (109, 56911), (114, 56884), (119, 56863), (130, 56788), (137, 56713), (141, 56692), (142, 56689), (166, 56521), (167, 56518),

Gene: Pringar_96 Start: 57361, Stop: 56291, Start Num: 27

Candidate Starts for Pringar_96:

(Start: 19 @57415 has 1 MA's), (20, 57406), (Start: 27 @57361 has 64 MA's), (Start: 30 @57346 has 1 MA's), (34, 57313), (43, 57220), (48, 57187), (53, 57163), (60, 57130), (61, 57127), (62, 57124), (64, 57109), (66, 57097), (73, 57070), (80, 56983), (82, 56971), (84, 56938), (87, 56911), (88, 56905), (90, 56887), (93, 56845), (94, 56830), (96, 56794), (100, 56782), (108, 56704), (109, 56698), (114, 56671), (119, 56650), (130, 56575), (137, 56500), (141, 56479), (142, 56476), (166, 56308), (167, 56305),

Gene: Pulchra_60 Start: 37662, Stop: 38657, Start Num: 27

Candidate Starts for Pulchra_60:

(Start: 27 @37662 has 64 MA's), (41, 37782), (43, 37791), (45, 37803), (51, 37836), (53, 37842), (56, 37860), (77, 37971), (87, 38052), (94, 38130), (95, 38142), (112, 38265), (117, 38295), (138, 38466), (143, 38487), (146, 38517), (149, 38550), (156, 38598),

Gene: Quhwah_62 Start: 37923, Stop: 38918, Start Num: 27

Candidate Starts for Quhwah_62:

(Start: 27 @37923 has 64 MA's), (41, 38043), (43, 38052), (45, 38064), (51, 38097), (53, 38103), (56, 38121), (77, 38232), (87, 38313), (94, 38391), (95, 38403), (112, 38526), (117, 38556), (138, 38727), (143, 38748), (146, 38778), (149, 38811), (156, 38859),

Gene: REQ1_18 Start: 6081, Stop: 5032, Start Num: 27

Candidate Starts for REQ1_18:

(Start: 27 @6081 has 64 MA's), (34, 6033), (88, 5637), (102, 5499), (132, 5295), (138, 5232), (151, 5139), (166, 5043),

Gene: Raela_102 Start: 58129, Stop: 57059, Start Num: 27

Candidate Starts for Raela_102:

(12, 58201), (Start: 13 @58198 has 1 MA's), (16, 58192), (Start: 27 @58129 has 64 MA's), (Start: 30 @58114 has 1 MA's), (34, 58081), (43, 57988), (48, 57955), (53, 57931), (60, 57898), (61, 57895), (62, 57892), (64, 57877), (66, 57865), (73, 57838), (80, 57751), (82, 57739), (84, 57706), (87, 57679), (88, 57673), (90, 57655), (93, 57613), (94, 57598), (96, 57562), (100, 57550), (108, 57472), (109, 57466), (114, 57439), (119, 57418), (126, 57370), (130, 57343), (137, 57268), (141, 57247), (142, 57244), (166, 57076), (167, 57073),

Gene: Ramiel05_57 Start: 37326, Stop: 38321, Start Num: 27

Candidate Starts for Ramiel05_57:

(Start: 27 @37326 has 64 MA's), (41, 37446), (43, 37455), (45, 37467), (51, 37500), (53, 37506), (56, 37524), (77, 37635), (87, 37716), (94, 37794), (95, 37806), (112, 37929), (117, 37959), (138, 38130), (143, 38151), (146, 38181), (149, 38214), (156, 38262),

Gene: RedRaider77_100 Start: 57591, Stop: 56452, Start Num: 13

Candidate Starts for RedRaider77_100:

(12, 57594), (Start: 13 @57591 has 1 MA's), (16, 57585), (Start: 27 @57522 has 64 MA's), (Start: 30 @57507 has 1 MA's), (34, 57474), (43, 57381), (48, 57348), (53, 57324), (60, 57291), (61, 57288), (62, 57285), (64, 57270), (66, 57258), (73, 57231), (80, 57144), (82, 57132), (84, 57099), (87, 57072), (88, 57066), (90, 57048), (93, 57006), (94, 56991), (96, 56955), (100, 56943), (108, 56865), (109, 56859), (114, 56832), (119, 56811), (126, 56763), (130, 56736), (137, 56661), (141, 56640), (142, 56637), (166, 56469), (167, 56466),

Gene: Reindeer_147 Start: 76556, Stop: 75483, Start Num: 30

Candidate Starts for Reindeer_147:

(Start: 30 @76556 has 1 MA's), (33, 76532), (44, 76442), (49, 76406), (59, 76352), (67, 76319), (74, 76289), (76, 76265), (80, 76205), (90, 76109), (98, 76010), (99, 76007), (101, 75992), (109, 75920), (111, 75908), (112, 75905), (120, 75854), (126, 75818), (129, 75794), (139, 75695), (141, 75686), (147, 75650), (151, 75611), (166, 75515), (168, 75506),

Gene: Rey_164 Start: 77837, Stop: 76674, Start Num: 10

Candidate Starts for Rey_164:

(Start: 10 @77837 has 1 MA's), (18, 77819), (22, 77792), (Start: 29 @77747 has 12 MA's), (44, 77633), (48, 77603), (59, 77543), (80, 77396), (90, 77300), (93, 77258), (101, 77183), (107, 77120), (109, 77111), (110, 77102), (112, 77096), (113, 77087), (120, 77045), (123, 77027), (126, 77009), (129, 76985), (130, 76982), (141, 76877), (148, 76832), (151, 76802), (153, 76775), (166, 76706), (168, 76697), (170, 76688),

Gene: Riparian_63 Start: 44163, Stop: 45359, Start Num: 8

Candidate Starts for Riparian_63:

(Start: 8 @44163 has 11 MA's), (14, 44178), (26, 44244), (28, 44253), (37, 44334), (40, 44355), (42, 44370), (47, 44397), (55, 44457), (59, 44478), (65, 44511), (78, 44622), (79, 44628), (81, 44640), (85, 44679), (88, 44709), (91, 44748), (98, 44826), (100, 44832), (102, 44847), (121, 44985), (126, 45018), (129, 45042), (138, 45135), (141, 45153), (146, 45186), (156, 45270), (158, 45291), (162, 45306), (166, 45324), (167, 45327), (168, 45333), (170, 45342), (171, 45345),

Gene: RobinSparkles_123 Start: 79116, Stop: 78055, Start Num: 27

Candidate Starts for RobinSparkles_123:

(Start: 27 @79116 has 64 MA's), (32, 79092), (46, 78963), (48, 78945), (71, 78840), (77, 78780), (91, 78630), (105, 78510), (115, 78432), (116, 78426), (123, 78384), (128, 78351), (132, 78321), (138, 78258), (141, 78240), (158, 78099), (161, 78087), (165, 78078),

Gene: RobsFeet_62 Start: 38777, Stop: 39772, Start Num: 27

Candidate Starts for RobsFeet_62:

(Start: 27 @38777 has 64 MA's), (41, 38897), (43, 38906), (45, 38918), (51, 38951), (53, 38957), (56, 38975), (70, 39032), (77, 39086), (91, 39209), (94, 39245), (95, 39257), (112, 39380), (126, 39470), (138, 39581), (143, 39602), (146, 39632), (148, 39644), (149, 39665), (156, 39713),

Gene: Ronaldo_83 Start: 43764, Stop: 42694, Start Num: 27

Candidate Starts for Ronaldo_83:

(21, 43809), (24, 43779), (Start: 27 @43764 has 64 MA's), (32, 43740), (34, 43716), (39, 43644), (41, 43632), (48, 43593), (78, 43395), (80, 43386), (89, 43302), (92, 43260), (93, 43248), (94, 43233), (100, 43185), (116, 43068), (126, 43011), (130, 42984), (135, 42924), (154, 42774), (157, 42750), (159, 42735), (162, 42726), (165, 42720),

Gene: Rope_61 Start: 44561, Stop: 45757, Start Num: 8

Candidate Starts for Rope_61:

(Start: 8 @44561 has 11 MA's), (14, 44576), (26, 44642), (28, 44651), (37, 44732), (40, 44753), (42, 44768), (47, 44795), (55, 44855), (59, 44876), (65, 44909), (78, 45020), (79, 45026), (81, 45038), (85, 45077), (88, 45107), (91, 45146), (97, 45221), (98, 45224), (100, 45230), (102, 45245), (121, 45383), (129, 45440), (138, 45533), (141, 45551), (146, 45584), (156, 45668), (158, 45689), (162, 45704), (166, 45722), (167, 45725), (168, 45731), (170, 45740), (171, 45743),

Gene: Savannah_57 Start: 37353, Stop: 38348, Start Num: 27

Candidate Starts for Savannah_57:

(Start: 27 @37353 has 64 MA's), (41, 37473), (43, 37482), (45, 37494), (51, 37527), (53, 37533), (56, 37551), (77, 37662), (87, 37743), (94, 37821), (95, 37833), (112, 37956), (117, 37986), (138, 38157), (143, 38178), (146, 38208), (149, 38241), (156, 38289),

Gene: Scumberland_59 Start: 37548, Stop: 38543, Start Num: 27

Candidate Starts for Scumberland_59:

(Start: 27 @37548 has 64 MA's), (41, 37668), (43, 37677), (45, 37689), (51, 37722), (53, 37728), (56, 37746), (77, 37857), (87, 37938), (94, 38016), (95, 38028), (100, 38064), (112, 38151), (117, 38181), (138, 38352), (143, 38373), (146, 38403), (149, 38436), (156, 38484),

Gene: Selwyn23_59 Start: 37496, Stop: 38491, Start Num: 27

Candidate Starts for Selwyn23_59:

(Start: 27 @37496 has 64 MA's), (41, 37616), (43, 37625), (45, 37637), (51, 37670), (53, 37676), (56, 37694), (77, 37805), (87, 37886), (94, 37964), (95, 37976), (112, 38099), (117, 38129), (138, 38300), (143, 38321), (146, 38351), (149, 38384), (156, 38432),

Gene: Send513_61 Start: 44696, Stop: 45892, Start Num: 8

Candidate Starts for Send513_61:

(Start: 8 @44696 has 11 MA's), (14, 44711), (26, 44777), (28, 44786), (37, 44867), (40, 44888), (42, 44903), (47, 44930), (55, 44990), (59, 45011), (65, 45044), (78, 45155), (79, 45161), (81, 45173), (85, 45212), (88, 45242), (91, 45281), (98, 45359), (100, 45365), (102, 45380), (121, 45518), (126, 45551), (129, 45575), (138, 45668), (141, 45686), (146, 45719), (156, 45803), (158, 45824), (162, 45839), (166, 45857), (167, 45860), (168, 45866), (170, 45875), (171, 45878),

Gene: Shagrat_38 Start: 31485, Stop: 30412, Start Num: 27

Candidate Starts for Shagrat_38:

(Start: 27 @31485 has 64 MA's), (34, 31437), (49, 31308), (50, 31302), (57, 31269), (71, 31212), (75, 31182), (83, 31092), (88, 31041), (89, 31035), (102, 30903), (138, 30618), (140, 30603), (147, 30564), (151, 30525),

Gene: Shotgun_58 Start: 37229, Stop: 38224, Start Num: 27

Candidate Starts for Shotgun_58:

(Start: 27 @37229 has 64 MA's), (41, 37349), (43, 37358), (45, 37370), (51, 37403), (53, 37409), (56, 37427), (77, 37538), (87, 37619), (91, 37661), (94, 37697), (95, 37709), (112, 37832), (117, 37862), (138, 38033), (143, 38054), (146, 38084), (149, 38117), (156, 38165),

Gene: Skinny_152 Start: 76530, Stop: 75361, Start Num: 11

Candidate Starts for Skinny_152:

(2, 76611), (3, 76599), (Start: 11 @76530 has 5 MA's), (Start: 19 @76509 has 1 MA's), (Start: 29 @76434 has 12 MA's), (41, 76329), (44, 76320), (49, 76284), (59, 76230), (67, 76197), (74, 76167), (80, 76083), (90, 75987), (94, 75930), (98, 75888), (101, 75870), (107, 75807), (109, 75798), (111, 75786), (112, 75783), (120, 75732), (129, 75672), (139, 75573), (141, 75564), (147, 75528), (151, 75489), (153, 75462), (166, 75393), (168, 75384),

Gene: SlimJimmy_146 Start: 75904, Stop: 74831, Start Num: 29

Candidate Starts for SlimJimmy_146:

(2, 76081), (3, 76069), (Start: 11 @76000 has 5 MA's), (Start: 19 @75979 has 1 MA's), (Start: 29 @75904 has 12 MA's), (41, 75799), (44, 75790), (49, 75754), (59, 75700), (67, 75667), (74, 75637), (80, 75553), (90, 75457), (94, 75400), (98, 75358), (101, 75340), (107, 75277), (109, 75268), (111, 75256), (112, 75253), (120, 75202), (129, 75142), (139, 75043), (141, 75034), (147, 74998), (151, 74959), (166, 74863), (168, 74854),

Gene: Smarties_67 Start: 39139, Stop: 40134, Start Num: 27

Candidate Starts for Smarties_67:

(Start: 27 @39139 has 64 MA's), (Start: 30 @39154 has 1 MA's), (41, 39259), (43, 39268), (45, 39280), (51, 39313), (53, 39319), (56, 39337), (70, 39394), (77, 39448), (87, 39529), (91, 39571), (94, 39607), (95, 39619), (112, 39742), (117, 39772), (126, 39832), (138, 39943), (143, 39964), (148, 40006), (165, 40117),

Gene: Teamocil_61 Start: 37414, Stop: 38409, Start Num: 27

Candidate Starts for Teamocil_61:

(Start: 27 @37414 has 64 MA's), (Start: 30 @37429 has 1 MA's), (41, 37534), (43, 37543), (45, 37555), (56, 37612), (70, 37669), (77, 37723), (91, 37846), (94, 37882), (95, 37894), (112, 38017), (117, 38047), (126, 38107), (138, 38218), (143, 38239), (148, 38281), (149, 38302),

Gene: Tesla_96 Start: 57368, Stop: 56298, Start Num: 27

Candidate Starts for Tesla_96:

(Start: 19 @57422 has 1 MA's), (20, 57413), (Start: 27 @57368 has 64 MA's), (Start: 30 @57353 has 1 MA's), (34, 57320), (43, 57227), (48, 57194), (53, 57170), (60, 57137), (61, 57134), (62, 57131), (64, 57116), (66, 57104), (73, 57077), (80, 56990), (82, 56978), (84, 56945), (87, 56918), (88, 56912), (90, 56894), (93, 56852), (94, 56837), (96, 56801), (100, 56789), (108, 56711), (109, 56705), (119, 56657), (130, 56582), (137, 56507), (141, 56486), (142, 56483), (166, 56315), (167, 56312),

Gene: Trogglehumper_109 Start: 75166, Stop: 74096, Start Num: 27

Candidate Starts for Trogglehumper_109:

(Start: 27 @75166 has 64 MA's), (34, 75118), (50, 74983), (57, 74950), (58, 74941), (71, 74893), (74, 74884), (75, 74863), (80, 74800), (82, 74788), (83, 74773), (95, 74635), (100, 74599), (102, 74584), (105, 74563), (106, 74548), (115, 74491), (122, 74449), (137, 74308), (138, 74302), (140, 74287), (148, 74239), (151, 74209), (169, 74101),

Gene: TyDawg_142 Start: 75349, Stop: 74276, Start Num: 29

Candidate Starts for TyDawg_142:

(2, 75526), (3, 75514), (Start: 11 @75445 has 5 MA's), (Start: 19 @75424 has 1 MA's), (Start: 29 @75349 has 12 MA's), (41, 75244), (44, 75235), (49, 75199), (59, 75145), (67, 75112), (74, 75082), (80, 74998), (90, 74902), (98, 74803), (101, 74785), (107, 74722), (109, 74713), (111, 74701), (112, 74698), (120, 74647), (129, 74587), (139, 74488), (141, 74479), (147, 74443), (151, 74404), (166, 74308), (168, 74299),

Gene: Tyrumbra_58 Start: 38636, Stop: 39631, Start Num: 27

Candidate Starts for Tyrumbra_58:

(Start: 27 @38636 has 64 MA's), (41, 38756), (43, 38765), (45, 38777), (51, 38810), (53, 38816), (56, 38834), (70, 38891), (77, 38945), (91, 39068), (94, 39104), (95, 39116), (112, 39239), (126, 39329), (138, 39440), (143, 39461), (148, 39503), (149, 39524), (156, 39572),

Gene: VasuNzinga_98 Start: 57452, Stop: 56382, Start Num: 27

Candidate Starts for VasuNzinga_98:

(Start: 19 @57506 has 1 MA's), (20, 57497), (Start: 27 @57452 has 64 MA's), (Start: 30 @57437 has 1 MA's), (34, 57404), (43, 57311), (48, 57278), (53, 57254), (60, 57221), (61, 57218), (62, 57215), (64, 57200), (66, 57188), (73, 57161), (80, 57074), (82, 57062), (84, 57029), (87, 57002), (88, 56996), (90, 56978), (93, 56936), (94, 56921), (96, 56885), (100, 56873), (108, 56795), (109, 56789), (114, 56762), (119, 56741), (130, 56666), (137, 56591), (141, 56570), (142, 56567), (166, 56399), (167, 56396),

Gene: Volt_83 Start: 43928, Stop: 42858, Start Num: 27

Candidate Starts for Volt_83:

(21, 43973), (24, 43943), (Start: 27 @43928 has 64 MA's), (32, 43904), (34, 43880), (39, 43808), (41, 43796), (48, 43757), (78, 43559), (80, 43550), (89, 43466), (92, 43424), (93, 43412), (94, 43397), (100, 43349), (116, 43232), (126, 43175), (130, 43148), (135, 43088), (154, 42938), (157, 42914), (159, 42899), (162, 42890), (165, 42884),

Gene: Weiss13_60 Start: 44400, Stop: 45596, Start Num: 8

Candidate Starts for Weiss13_60:

(Start: 8 @44400 has 11 MA's), (14, 44415), (26, 44481), (28, 44490), (37, 44571), (40, 44592), (42, 44607), (47, 44634), (55, 44694), (59, 44715), (65, 44748), (78, 44859), (79, 44865), (81, 44877), (85, 44916), (88, 44946), (91, 44985), (98, 45063), (100, 45069), (102, 45084), (121, 45222), (126, 45255), (129, 45279), (138, 45372), (141, 45390), (146, 45423), (156, 45507), (158, 45528), (162, 45543), (166, 45561), (167, 45564), (168, 45570), (170, 45579), (171, 45582),

Gene: Yelo_60 Start: 44779, Stop: 45975, Start Num: 8

Candidate Starts for Yelo_60:

(Start: 8 @44779 has 11 MA's), (14, 44794), (26, 44860), (28, 44869), (37, 44950), (40, 44971), (42, 44986), (47, 45013), (55, 45073), (59, 45094), (65, 45127), (78, 45238), (79, 45244), (81, 45256), (85, 45295), (88, 45325), (91, 45364), (98, 45442), (100, 45448), (102, 45463), (121, 45601), (126, 45634), (129, 45658), (138, 45751), (141, 45769), (146, 45802), (156, 45886), (158, 45907), (162, 45922), (166, 45940), (167, 45943), (168, 45949), (170, 45958), (171, 45961),

Gene: Yeti_58 Start: 37298, Stop: 38293, Start Num: 27

Candidate Starts for Yeti_58:

(Start: 27 @37298 has 64 MA's), (41, 37418), (43, 37427), (45, 37439), (51, 37472), (53, 37478), (56, 37496), (77, 37607), (87, 37688), (94, 37766), (95, 37778), (112, 37901), (117, 37931), (138, 38102), (143, 38123), (146, 38153), (149, 38186), (156, 38234),

Gene: Zenon_62 Start: 44725, Stop: 45921, Start Num: 8

Candidate Starts for Zenon_62:

(Start: 8 @44725 has 11 MA's), (14, 44740), (26, 44806), (28, 44815), (37, 44896), (40, 44917), (42, 44932), (47, 44959), (55, 45019), (59, 45040), (65, 45073), (78, 45184), (79, 45190), (81, 45202), (85, 45241), (88, 45271), (91, 45310), (98, 45388), (100, 45394), (102, 45409), (121, 45547), (126, 45580), (129, 45604), (138, 45697), (141, 45715), (146, 45748), (156, 45832), (158, 45853), (162, 45868), (166, 45886), (167, 45889), (168, 45895), (170, 45904), (171, 45907),

Gene: Ziko_83 Start: 43750, Stop: 42680, Start Num: 27

Candidate Starts for Ziko_83:

(21, 43795), (24, 43765), (Start: 27 @43750 has 64 MA's), (32, 43726), (34, 43702), (39, 43630), (41, 43618), (48, 43579), (53, 43555), (63, 43504), (78, 43381), (89, 43288), (92, 43246), (93, 43234), (100, 43171), (116, 43054), (126, 42997), (130, 42970), (135, 42910), (154, 42760), (157, 42736), (159, 42721), (162, 42712), (165, 42706),