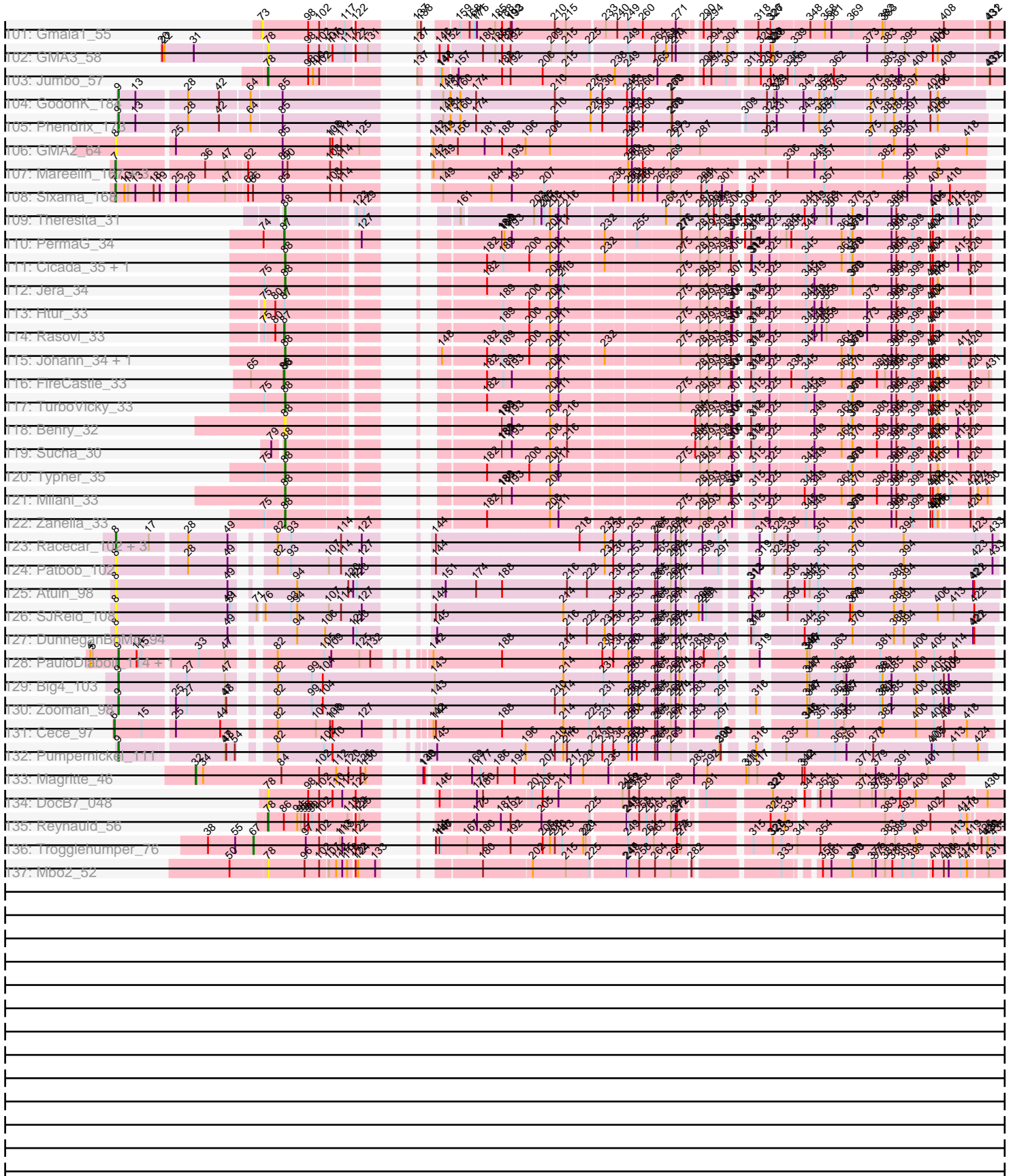


Pham 157579

	1	25	12	16	114	130	136	141	146	178	191	198	204	210	216	273	285	300	317	344	360	364	373	381	388	425	
51: GTE3_60				30				102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
52: Amore2_62 + 3				30				102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
53: GTE7_50	16	21	20	31	33	33		102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
54: CathyBurgh_58	16	21	20	31	33	33		102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
55: Samr12_58 + 4	16	21	20	31	33	33		102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
56: GourdRhymes_58	16	21	20	31	33	33		102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
57: Squibbles_58	16	21	20	31	33	33	00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425	
58: Dakiti_60 + 1	16	21	20	31	33	33	2	00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
59: PokyPuppy_58	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
60: BigShaq_58	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
61: BirksAndSocks_60	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
62: RoyaiG_59 + 1	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
63: Linetti_59	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
64: Adgers_62	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
65: Monty_58 + 2	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
66: BenoitCattle_60	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
67: PierreThree_58	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
68: Poland_66 + 1	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
69: Jellybones_61	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
70: John316_62	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
71: FelixAlejandro_64	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
72: Eggsie_58	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
73: Beaver_62	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
74: Breezic_59	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
75: Sombrero_60	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
76: Diabla_63	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
77: Bianmat_57 + 3	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
78: Neoevie_57 + 10	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
79: Jormungandr_57	16	21	20	31	33	33	4	00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
80: Luker_58 + 1	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
81: Charianelly_56	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
82: Bernes_57	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
83: Woess_57	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
84: Teatealatte_58 + 1	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
85: Benczkowski14_57 + 1	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
86: Pmion9_55	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
87: Hollow_57	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
88: Demosthenes_55	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
89: ASerpRocky_55	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
90: Niagara_57	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
91: Kvothe_56	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
92: Teech_56	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
93: Gibbles_56	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
94: PatrickStar_58 + 3	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
95: Ghobes_36	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
96: Archimedes_37	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
97: Sapo_34	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
98: Camerico_63	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
99: GoroTrk2_60	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425
100: GoroDuki_59	16	21	20	31	33	33		00	102	142	182	200	200	210	216	216	200	200	300	317	344	360	364	373	381	388	425

Pham 157579



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 157579 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157579 has 219 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Preamble_25
- Track 2 : Albanese_29
- Track 3 : GreenHearts_29
- Track 4 : Glenn_29, TattModd_29, Rozby_29, Fluke_29, Beethoven_29, Riverdale_29, Vallejo_29, Carpal_29
- Track 5 : Aledel_26, Eunoia_26, Riovina_26, OMalley_26
- Track 6 : Lucy_25
- Track 7 : DreamTeam_25, Gisselle_25, Kittykat_25
- Track 8 : DrRobert_25, PitaDog_25, Bodacious_25, Nancia_25, ChewChew_25, CristinaYang_25
- Track 9 : Greenhouse_29
- Track 10 : PinkFriday_25
- Track 11 : Christian_25
- Track 12 : Maria1952_26, Daiboju_26, Temper16_26, KingBob_26, Herb_26, Sergei_26
- Track 13 : Bennie_25
- Track 14 : Vulture_26, HunterDalle_26
- Track 15 : Kalizoi_30
- Track 16 : Lakshmi_29
- Track 17 : Litotes_29
- Track 18 : AustinPowers_26
- Track 19 : Moki_25
- Track 20 : Korra_30
- Track 21 : WonderBoy_25
- Track 22 : PartyCup_29
- Track 23 : MeganNoll_29, Cholula_29, RAP15_29, Savage2526_29, Potatoes_29, Jumboset_29
- Track 24 : Nubia_29, Oxyfnrius_29
- Track 25 : AppleCider_29
- Track 26 : Wawa_29
- Track 27 : Urla_26
- Track 28 : Suppi_29, Canowicakte_29, Wayne_29
- Track 29 : Zorro_29
- Track 30 : EstebanJulior_26, MamaPearl_26
- Track 31 : RcigaStruga_29, Huntingdon_29
- Track 32 : Scuttle_29
- Track 33 : BigMack_25

- Track 34 : Misaeng_29
- Track 35 : BrotherBLo_29
- Track 36 : Makoto_25
- Track 37 : Joann_29
- Track 38 : Chridison_26
- Track 39 : LilStuart_25
- Track 40 : Pumancara_25
- Track 41 : Bogota_43, Intolerant_41
- Track 42 : Microdon_41
- Track 43 : JackieB_42
- Track 44 : Crosby_42
- Track 45 : LazerLemon_42
- Track 46 : Araceli_42
- Track 47 : UNTPL_44
- Track 48 : Stuff_42
- Track 49 : Marky_44
- Track 50 : Henoccus_42
- Track 51 : GTE5_60
- Track 52 : Amore2_62, Austin_61, HayZem_63, GMA7_51
- Track 53 : GTE7_50
- Track 54 : CathyBurgh_58, Barbochs_59, Lizzo_59
- Track 55 : Sam12_58, RemRem_60, Flakey_58, Ekhein_59, Exiguo_58
- Track 56 : GourdThymes_59
- Track 57 : Squibbles_58
- Track 58 : Dakiti_60, Chelms_59
- Track 59 : PokyPuppy_58
- Track 60 : BigShaq_58
- Track 61 : BirksAndSocks_64, Boneham_63, Butterball_62
- Track 62 : RoyalG_59, SteveFrench_58
- Track 63 : Linetti_59
- Track 64 : Adgers_62
- Track 65 : Monty_58, Hotorobo_59, Gorko_58
- Track 66 : BenoitCattle_60
- Track 67 : PierreThree_58
- Track 68 : Poland_66, Msay19_64
- Track 69 : Jellybones_61
- Track 70 : John316_62
- Track 71 : FelixAlejandro_64
- Track 72 : Eggsie_58
- Track 73 : Beaver_62
- Track 74 : Breezic_59
- Track 75 : Sombrero_60
- Track 76 : Diabla_63
- Track 77 : Bianmat_57, Jams_57, Shelley_57, Lidong_57
- Track 78 : Neevie_57, GalacticEye_57, Sticker17_57, Anamika_57, Hail2Pitt_56, Newt_58, Damp_55, Teal_57, Hello_57, Minos_58, Harambe_57
- Track 79 : Jormungandr_57, Nimi13_57, MrWormie_57, Lahirium_57, Guillaume_57
- Track 80 : Luker_58, Kaseim_57
- Track 81 : Charianelly_56
- Track 82 : Berries_57
- Track 83 : Woes_57
- Track 84 : Teatealatte_58, Tredge_57
- Track 85 : Benczkowski14_57, Katyusha_57

- Track 86 : Philon9_55
- Track 87 : Hollow_57
- Track 88 : Demosthenes_55
- Track 89 : ASerpRocky_55
- Track 90 : Niagara_57
- Track 91 : Kvothe_56
- Track 92 : Teech_56
- Track 93 : Gibbles_56
- Track 94 : PatrickStar_58, Kampe_58, RobinSparkles_61, Orchid_57
- Track 95 : Ghobes_35
- Track 96 : Archimedes_37
- Track 97 : Sapo_34
- Track 98 : Camerico_63
- Track 99 : GordTnk2_60
- Track 100 : GordDuk1_59
- Track 101 : Gmala1_55
- Track 102 : GMA3_58
- Track 103 : Jumbo_57
- Track 104 : GodonK_184
- Track 105 : Phendrix_173
- Track 106 : GMA2_64
- Track 107 : Mareelih_167, Forza_170, Boopy_169, BlueNGold_166
- Track 108 : Sixama_168
- Track 109 : Theresita_31
- Track 110 : PermaG_34
- Track 111 : Cicada_35, SBlackberry_33
- Track 112 : Jera_34
- Track 113 : Htur_33
- Track 114 : Rasovi_33
- Track 115 : Johann_34, Goodman_34
- Track 116 : FireCastle_33
- Track 117 : TurboVicky_33
- Track 118 : Benry_32
- Track 119 : Sucha_30
- Track 120 : Typher_35
- Track 121 : Milani_33
- Track 122 : Zanella_33
- Track 123 : Racecar_102, Bloom_105, Mimi_107, Talia1610_103
- Track 124 : Patbob_102
- Track 125 : Atuin_98
- Track 126 : SJReid_108
- Track 127 : DunneganBoMo_94
- Track 128 : PauloDiaboli_114, A3Wally_114
- Track 129 : Big4_103
- Track 130 : Zooman_98
- Track 131 : Cece_97
- Track 132 : Pumpernickel_111
- Track 133 : Magritte_46
- Track 134 : DocB7_048
- Track 135 : Reynauld_56
- Track 136 : Trogglehumper_76
- Track 137 : Mbo2_52

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

The start number called the most often in the published annotations is 83, it was called in 69 of the 182 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_29, Aledel_26, AppleCider_29, AustinPowers_26, Beethoven_29, Bennie_25, BigMack_25, Bodacious_25, BrotherBLo_29, Canowicakte_29, Carpal_29, ChewChew_25, Cholula_29, Chridison_26, Christian_25, CristinaYang_25, Daiboju_26, DrRobert_25, DreamTeam_25, EstebanJulior_26, Eunoia_26, Fluke_29, Gisselle_25, Glenn_29, GreenHearts_29, Greenhouse_29, Herb_26, HunterDalle_26, Huntingdon_29, Joann_29, Jumboset_29, KingBob_26, Kittykat_25, Korra_30, Lakshmi_29, LilStuart_25, Litotes_29, Lucy_25, Makoto_25, MamaPearl_26, Maria1952_26, MeganNoll_29, Misaeng_29, Moki_25, Nancia_25, Nubia_29, OMalley_26, Oxynfrius_29, PartyCup_29, PitaDog_25, Potatoes_29, Preamble_25, Pumancara_25, RAP15_29, RcigaStruga_29, Riovina_26, Riverdale_29, Rozby_29, Savage2526_29, Scuttle_29, Sergei_26, Suppi_29, TattModd_29, Temper16_26, Urla_26, Vallejo_29, Vulture_26, Wawa_29, Wayne_29, WonderBoy_25, Zorro_29,

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

- Kalizoi_30, PinkFriday_25,

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

- A3Wally_114, ASerpRocky_55, Adgers_62, Amore2_62, Anamika_57, Araceli_42, Archimedes_37, Atuin_98, Austin_61, Barbochs_59, Beaver_62, Benczkowski14_57, BenoitCattle_60, Benry_32, Berries_57, Bianmat_57, Big4_103, BigShaq_58, BirksAndSocks_64, Bloom_105, BlueNGold_166, Bogota_43, Boneham_63, Boopy_169, Breezic_59, Butterball_62, Camerico_63, CathyBurgh_58, Cece_97, Charianelly_56, Chelms_59, Cicada_35, Crosby_42, Dakiti_60, Damp_55, Demosthenes_55, Diabla_63, DocB7_048, DunneganBoMo_94, Eggsie_58, Ekhein_59, Exiguo_58, FelixAlejandro_64, FireCastle_33, Flakey_58, Forza_170, GMA2_64, GMA3_58, GMA7_51, GTE5_60, GTE7_50, GalacticEye_57, Ghobes_35, Gibbles_56, Gmala1_55, GodonK_184, Goodman_34, GordDuk1_59, GordTnk2_60, Gorko_58, GourdThymes_59, Guillaume_57, Hail2Pitt_56, Harambe_57, HayZem_63, Hello_57, Henoccus_42, Hollow_57, Hotorobo_59, Htur_33, Intolerant_41, JackieB_42, Jams_57, Jellybones_61, Jera_34, Johann_34, John316_62, Jormungandr_57, Jumbo_57, Kampe_58, Kaseim_57, Katyusha_57, Kvothe_56, Lahirium_57, LazerLemon_42, Lidong_57, Linetti_59, Lizzo_59, Luker_58, Magritte_46, Mareelih_167, Marky_44, Mbo2_52, Microdon_41, Milani_33, Mimi_107, Minos_58, Monty_58, MrWormie_57, Msay19_64, Neeve_57, Newt_58, Niagara_57, Nimi13_57, Orchid_57, Patbob_102, PatrickStar_58, PauloDiaboli_114, PermaG_34, Phendrix_173, Philon9_55, PierreThree_58, PokyPuppy_58, Poland_66, Pumpernickel_111, Racecar_102, Rasovi_33, RemRem_60, Reynauld_56, RobinSparkles_61, RoyalG_59, SBlackberry_33, SJReid_108, Sam12_58, Sapo_34, Shelley_57, Sixama_168, Sombrero_60, Squibbles_58, SteveFrench_58, Sticker17_57, Stuff_42, Sucha_30, Talia1610_103, Teal_57, Teatealatte_58, Teech_56, Theresita_31, Tredge_57, Trogglehumper_76, TurboVicky_33, Typher_35, UNTPL_44, Woes_57, Zanella_33, Zooman_98,

Summary by start number:

Start 6:

- Found in 1 of 219 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece_97 (GD3),

Start 7:

- Found in 5 of 219 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_166 (DS), Boopy_169 (DS), Forza_170 (DS), Mareelih_167 (DS), Sixama_168 (DS),

Start 8:

- Found in 9 of 219 (4.1%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_98 (FC), Bloom_105 (FC), DunneganBoMo_94 (FC), GMA2_64 (DS), Mimi_107 (FC), Patbob_102 (FC), Racecar_102 (FC), SJReid_108 (FC), Talia1610_103 (FC),

Start 9:

- Found in 7 of 219 (3.2%) of genes in pham
- Manual Annotations of this start: 7 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_114 (GD1), Big4_103 (GD2), GodonK_184 (DK), PauloDiaboli_114 (GD1), Phendrix_173 (DK), Pumpernickel_111 (GD4), Zooman_98 (GD2),

Start 16:

- Found in 61 of 219 (27.9%) of genes in pham
- No Manual Annotations of this start.
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Berries_57 (CS3), Charianelly_56 (CS3),

Start 23:

- Found in 11 of 219 (5.0%) of genes in pham
- Manual Annotations of this start: 6 of 182
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Benczkowski14_57 (CS4), Hollow_57 (CS4), Katyusha_57 (CS4), Niagara_57 (CS4), Teatealatte_58 (CS4), Tredge_57 (CS4),

Start 24:

- Found in 11 of 219 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Demosthenes_55 (CS4), Kvothe_56 (CS4), Teech_56 (CS4),

Start 27:

- Found in 7 of 219 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Amore2_62 (CS1), Austin_61 (CS1), GMA7_51 (CS1), GTE7_50 (CS1), HayZem_63 (CS1),

Start 32:

- Found in 28 of 219 (12.8%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Magritte_46 (singleton),

Start 45:

- Found in 4 of 219 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_55 (CS4), Philon9_55 (CS4),

Start 53:

- Found in 61 of 219 (27.9%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Eggsie_58 (CS2), Woes_57 (CS3),

Start 61:

- Found in 2 of 219 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kaseim_57 (CS3), Luker_58 (CS3),

Start 63:

- Found in 36 of 219 (16.4%) of genes in pham
- Manual Annotations of this start: 23 of 182
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Adgers_62 (CS2), Barbochs_59 (CS2), Beaver_62 (CS2), BirksAndSocks_64 (CS2), Boneham_63 (CS2), Breezic_59 (CS2), Butterball_62 (CS2), CathyBurgh_58 (CS2), Ekhein_59 (CS2), Exiguo_58 (CS2), FelixAlejandro_64 (CS2), Flakey_58 (CS2), Gorko_58 (CS2), GourdThymes_59 (CS2), Hotorobo_59 (CS2), Jellybones_61 (CS2), John316_62 (CS2), Lizzo_59 (CS2), Monty_58 (CS2), Msay19_64 (CS2), Poland_66 (CS2), RemRem_60 (CS2), RoyalG_59 (CS2), Sam12_58 (CS2), Sombrero_60 (CS2), Squibbles_58 (CS2), SteveFrench_58 (CS2),

Start 67:

- Found in 1 of 219 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trogglehumper_76 (singleton),

Start 72:

- Found in 1 of 219 (0.5%) of genes in pham

- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PokyPuppy_58 (CS2),

Start 73:

- Found in 3 of 219 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gmala1_55 (DF1), GordDuk1_59 (DF1), GordTnk2_60 (DF1),

Start 75:

- Found in 6 of 219 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Htur_33 (EJ),

Start 76:

- Found in 6 of 219 (2.7%) of genes in pham
- Manual Annotations of this start: 5 of 182
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Gibbles_56 (CX), Kampe_58 (CX), Orchid_57 (CX), PatrickStar_58 (CX), RobinSparkles_61 (CX),

Start 78:

- Found in 6 of 219 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camerico_63 (DF), DocB7_048 (singleton), GMA3_58 (DF2), Jumbo_57 (DF3), Mbo2_52 (singleton), Reynauld_56 (singleton),

Start 83:

- Found in 73 of 219 (33.3%) of genes in pham
- Manual Annotations of this start: 69 of 182
- Called 97.3% of time when present
- Phage (with cluster) where this start called: Albanese_29 (AK), Aledel_26 (AK), AppleCider_29 (AK), AustinPowers_26 (AK), Beethoven_29 (AK), Bennie_25 (AK), BigMack_25 (AK), Bodacious_25 (AK), BrotherBLo_29 (AK), Canowicakte_29 (AK), Carpal_29 (AK), ChewChew_25 (AK), Cholula_29 (AK), Chridison_26 (AK), Christian_25 (AK), CristinaYang_25 (AK), Daiboju_26 (AK), DrRobert_25 (AK), DreamTeam_25 (AK), EstebanJulior_26 (AK), Eunoia_26 (AK), Fluke_29 (AK), Gisselle_25 (AK), Glenn_29 (AK), GreenHearts_29 (AK), Greenhouse_29 (AK), Herb_26 (AK), HunterDalle_26 (AK), Huntingdon_29 (AK), Joann_29 (AK), Jumboset_29 (AK), KingBob_26 (AK), Kittykat_25 (AK), Korra_30 (AK), Lakshmi_29 (AK), LilStuart_25 (AK), Litotes_29 (AK), Lucy_25 (AK), Makoto_25 (AK), MamaPearl_26 (AK), Maria1952_26 (AK), MeganNoll_29 (AK), Misaeng_29 (AK), Moki_25 (AK), Nancia_25 (AK), Nubia_29 (AK), OMalley_26 (AK), Oxyfnrius_29 (AK), PartyCup_29 (AK), PitaDog_25 (AK), Potatoes_29 (AK), Preamble_25 (AK), Pumancara_25 (AK), RAP15_29 (AK), RcigaStruga_29 (AK), Riovina_26 (AK), Riverdale_29 (AK), Rozby_29 (AK), Savage2526_29 (AK), Scuttle_29 (AK), Sergei_26 (AK), Suppi_29 (AK), TattModd_29 (AK), Temper16_26 (AK), Urla_26 (AK), Vallejo_29 (AK), Vulture_26 (AK), Wawa_29 (AK), Wayne_29 (AK),

WonderBoy_25 (AK), Zorro_29 (AK),

Start 86:

- Found in 2 of 219 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 50.0% of time when present
- Phage (with cluster) where this start called: FireCastle_33 (EJ),

Start 87:

- Found in 3 of 219 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 66.7% of time when present
- Phage (with cluster) where this start called: PermaG_34 (EJ), Rasovi_33 (EJ),

Start 88:

- Found in 13 of 219 (5.9%) of genes in pham
- Manual Annotations of this start: 11 of 182
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Berry_32 (EJ), Cicada_35 (EJ), Goodman_34 (EJ), Jera_34 (EJ), Johann_34 (EJ), Milani_33 (EJ), SBlackberry_33 (EJ), Sucha_30 (EJ), Theresita_31 (EA7), TurboVicky_33 (EJ), Typher_35 (EJ), Zanella_33 (EJ),

Start 89:

- Found in 12 of 219 (5.5%) of genes in pham
- Manual Annotations of this start: 12 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araceli_42 (BH), Archimedes_37 (DA), Bogota_43 (BH), Crosby_42 (BH), Henoccus_42 (BH), Intolerant_41 (BH), JackieB_42 (BH), LazerLemon_42 (BH), Microdon_41 (BH), Sapo_34 (DA), Stuff_42 (BH), UNTPL_44 (BH),

Start 91:

- Found in 11 of 219 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 182
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Ghobes_35 (DA), Marky_44 (BH),

Start 95:

- Found in 46 of 219 (21.0%) of genes in pham
- Manual Annotations of this start: 24 of 182
- Called 58.7% of time when present
- Phage (with cluster) where this start called: Anamika_57 (CS3), BenoitCattle_60 (CS2), Bianmat_57 (CS3), BigShaq_58 (CS2), Chelms_59 (CS2), Dakiti_60 (CS2), Damp_55 (CS3), Diabla_63 (CS2), GalacticEye_57 (CS3), Guillaume_57 (CS3), Hail2Pitt_56 (CS3), Harambe_57 (CS3), Hello_57 (CS3), Jams_57 (CS3), Jormungandr_57 (CS3), Lahirium_57 (CS3), Lidong_57 (CS3), Linetti_59 (CS2), Minos_58 (CS3), MrWormie_57 (CS3), Neoevie_57 (CS3), Newt_58 (CS3), Nimi13_57 (CS3), PierreThree_58 (CS2), Shelley_57 (CS3), Sticker17_57 (CS3), Teal_57 (CS3),

Start 118:

- Found in 17 of 219 (7.8%) of genes in pham

- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: PinkFriday_25 (AK),

Start 127:

- Found in 93 of 219 (42.5%) of genes in pham
- No Manual Annotations of this start.
- Called 1.1% of time when present
- Phage (with cluster) where this start called: Kalizoi_30 (AK),

Start 136:

- Found in 1 of 219 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GTE5_60 (CR1),

Summary by clusters:

There are 23 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, DF, BH, singleton, DA, FC, DS, DF1, DF3, DF2, CS4, CS1, CS3, CS2, EJ, AK, CX, EA7, CR1,

Info for manual annotations of cluster AK:

- Start number 83 was manually annotated 69 times for cluster AK.

Info for manual annotations of cluster BH:

- Start number 89 was manually annotated 10 times for cluster BH.
- Start number 91 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster CS1:

- Start number 27 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 63 was manually annotated 23 times for cluster CS2.
- Start number 72 was manually annotated 1 time for cluster CS2.
- Start number 95 was manually annotated 5 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 53 was manually annotated 1 time for cluster CS3.
- Start number 61 was manually annotated 1 time for cluster CS3.
- Start number 95 was manually annotated 19 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 23 was manually annotated 6 times for cluster CS4.
- Start number 24 was manually annotated 2 times for cluster CS4.
- Start number 45 was manually annotated 1 time for cluster CS4.

Info for manual annotations of cluster CX:

- Start number 76 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DA:

- Start number 89 was manually annotated 2 times for cluster DA.
- Start number 91 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DF:

- Start number 78 was manually annotated 1 time for cluster DF.

Info for manual annotations of cluster DF3:

- Start number 78 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DK:

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

Info for manual annotations of cluster DS:

- Start number 7 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster EA7:

- Start number 88 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:

- Start number 86 was manually annotated 1 time for cluster EJ.
- Start number 87 was manually annotated 2 times for cluster EJ.
- Start number 88 was manually annotated 10 times for cluster EJ.

Info for manual annotations of cluster FC:

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

Info for manual annotations of cluster GD1:

- Start number 9 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 9 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 6 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 9 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_114 Start: 79188, Stop: 77338, Start Num: 9

Candidate Starts for A3Wally_114:

(4, 79257), (5, 79251), (Start: 9 @79188 has 7 MA's), (14, 79143), (15, 79131), (33, 79005), (47, 78942), (82, 78867), (105, 78759), (109, 78741), (125, 78672), (132, 78645), (142, 78585), (188, 78420), (214, 78276), (230, 78189), (236, 78162), (250, 78126), (253, 78117), (264, 78060), (265, 78054), (271, 78009), (275, 77997), (283, 77976), (290, 77952), (297, 77916), (319, 77871), (345, 77787), (346, 77784), (347, 77778), (363, 77715), (381, 77613), (400, 77526), (405, 77484), (414, 77433),

Gene: ASerpRocky_55 Start: 52672, Stop: 51098, Start Num: 45

Candidate Starts for ASerpRocky_55:

(Start: 23 @52804 has 6 MA's), (Start: 24 @52792 has 2 MA's), (39, 52693), (Start: 45 @52672 has 1 MA's), (68, 52606), (96, 52507), (102, 52471), (107, 52447), (110, 52438), (112, 52429), (122, 52381), (130, 52357), (144, 52315), (148, 52300), (173, 52225), (187, 52165), (188, 52162), (201, 52096), (202, 52093), (208, 52057), (209, 52054), (213, 52027), (216, 52015), (223, 51967), (233, 51934), (240, 51910), (249, 51886), (258, 51862), (268, 51796), (291, 51697), (317, 51598), (327, 51565), (328, 51562), (369, 51445), (370, 51442), (380, 51385), (383, 51367), (404, 51250), (405, 51247), (407, 51235), (428, 51136), (434, 51115),

Gene: Adgers_62 Start: 52192, Stop: 50660, Start Num: 63

Candidate Starts for Adgers_62:

(16, 52447), (21, 52396), (37, 52291), (43, 52261), (Start: 53 @52228 has 1 MA's), (56, 52219), (Start: 63 @52192 has 23 MA's), (102, 52024), (112, 51982), (116, 51964), (122, 51934), (126, 51922), (130, 51910), (131, 51904), (134, 51883), (189, 51715), (207, 51628), (208, 51613), (210, 51601), (216, 51571), (249, 51442), (261, 51400), (263, 51382), (264, 51379), (266, 51370), (268, 51352), (291, 51265), (328, 51130), (332, 51115), (336, 51094), (369, 51013), (370, 51010), (380, 50953), (381, 50947), (383, 50935), (396, 50884), (400, 50860), (404, 50821), (406, 50809), (407, 50806), (425, 50713), (428, 50698),

Gene: Albanese_29 Start: 22144, Stop: 23535, Start Num: 83

Candidate Starts for Albanese_29:

(Start: 83 @22144 has 69 MA's), (103, 22231), (127, 22303), (128, 22306), (150, 22369), (151, 22372), (155, 22390), (158, 22396), (172, 22423), (190, 22480), (196, 22531), (207, 22570), (211, 22606), (215, 22624), (219, 22660), (228, 22681), (230, 22699), (242, 22732), (259, 22771), (267, 22813), (270, 22840), (276, 22864), (285, 22900), (287, 22906), (296, 22939), (299, 22954), (302, 22963), (312, 23008), (322, 23041), (323, 23044), (345, 23128), (349, 23149), (352, 23161), (359, 23179), (373, 23269), (379, 23290), (380, 23293), (384, 23317), (385, 23326), (402, 23413), (424, 23503), (430, 23527),

Gene: Aledel_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for Aledel_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468), (281, 22483), (287, 22510), (296, 22543), (299, 22558), (335, 22690), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Amore2_62 Start: 52713, Stop: 51082, Start Num: 27

Candidate Starts for Amore2_62:

(Start: 27 @52713 has 2 MA's), (30, 52701), (40, 52650), (41, 52644), (59, 52587), (102, 52446), (112, 52404), (114, 52392), (122, 52356), (123, 52353), (131, 52326), (144, 52290), (147, 52278), (152, 52263), (185, 52155), (207, 52050), (208, 52035), (233, 51912), (249, 51864), (258, 51840), (261, 51822), (268, 51774), (280, 51723), (291, 51687), (296, 51669), (328, 51552), (340, 51501), (364, 51459), (373, 51399), (383, 51357), (396, 51306), (400, 51282), (428, 51120), (434, 51099),

Gene: Anamika_57 Start: 52887, Stop: 51475, Start Num: 95

Candidate Starts for Anamika_57:

(16, 53235), (Start: 32 @53106 has 1 MA's), (52, 53019), (Start: 53 @53016 has 1 MA's), (Start: 95 @52887 has 24 MA's), (102, 52842), (122, 52752), (123, 52749), (125, 52743), (131, 52722), (152, 52659), (185, 52551), (189, 52533), (207, 52446), (208, 52431), (216, 52389), (233, 52308), (249, 52260), (261, 52218), (263, 52200), (264, 52197), (268, 52170), (280, 52119), (291, 52083), (304, 52032), (328, 51948), (333, 51927), (380, 51771), (381, 51765), (383, 51753), (406, 51627), (428, 51513),

Gene: AppleCider_29 Start: 22130, Stop: 23524, Start Num: 83

Candidate Starts for AppleCider_29:

(Start: 83 @22130 has 69 MA's), (98, 22187), (127, 22292), (155, 22379), (188, 22463), (189, 22466), (190, 22469), (207, 22559), (211, 22595), (213, 22604), (228, 22670), (230, 22688), (242, 22721), (251, 22733), (267, 22802), (270, 22829), (276, 22853), (285, 22889), (287, 22895), (296, 22928), (299, 22943), (302, 22952), (326, 23042), (343, 23111), (349, 23138), (355, 23156), (359, 23168), (373, 23258), (375, 23264), (378, 23273), (379, 23279), (385, 23315), (402, 23402), (415, 23453), (424, 23492), (430, 23516),

Gene: Araceli_42 Start: 30875, Stop: 32269, Start Num: 89

Candidate Starts for Araceli_42:

(Start: 89 @30875 has 12 MA's), (Start: 91 @30878 has 2 MA's), (102, 30953), (109, 30977), (122, 31007), (123, 31010), (127, 31022), (133, 31055), (163, 31112), (176, 31136), (188, 31181), (190, 31187), (200, 31247), (204, 31268), (213, 31322), (235, 31421), (243, 31448), (246, 31457), (275, 31583), (287, 31631), (293, 31652), (296, 31664), (299, 31679), (307, 31709), (315, 31742), (317, 31751), (330, 31793), (344, 31859), (345, 31862), (349, 31883), (355, 31901), (360, 31919), (370, 31973), (373, 32003), (385, 32060), (387, 32063), (399, 32111), (406, 32165), (421, 32234), (427, 32252),

Gene: Archimedes_37 Start: 33084, Stop: 31684, Start Num: 89

Candidate Starts for Archimedes_37:

(Start: 89 @33084 has 12 MA's), (96, 33042), (102, 33006), (107, 32988), (109, 32982), (122, 32952), (127, 32937), (128, 32934), (155, 32850), (212, 32628), (215, 32616), (243, 32502), (275, 32376), (279, 32364), (283, 32343), (284, 32340), (287, 32328), (296, 32295), (299, 32280), (305, 32256), (315, 32220), (317, 32211), (343, 32112), (359, 32055), (361, 32043), (362, 32037), (378, 31950), (382, 31929), (385, 31908), (404, 31815), (431, 31689),

Gene: Atuin_98 Start: 80621, Stop: 82477, Start Num: 8

Candidate Starts for Atuin_98:

(Start: 8 @80621 has 1 MA's), (49, 80894), (94, 80999), (120, 81122), (121, 81134), (123, 81143), (151, 81239), (174, 81314), (188, 81374), (216, 81527), (222, 81572), (236, 81632), (253, 81677), (264, 81734), (265, 81740), (269, 81773), (271, 81785), (275, 81797), (312, 81914), (313, 81917), (336, 81974), (344, 82010), (347, 82022), (351, 82043), (370, 82127), (388, 82220), (394, 82244), (421, 82412), (422, 82415),

Gene: Austin_61 Start: 52711, Stop: 51080, Start Num: 27

Candidate Starts for Austin_61:

(Start: 27 @52711 has 2 MA's), (30, 52699), (40, 52648), (41, 52642), (59, 52585), (102, 52444), (112, 52402), (114, 52390), (122, 52354), (123, 52351), (131, 52324), (144, 52288), (147, 52276), (152, 52261), (185, 52153), (207, 52048), (208, 52033), (233, 51910), (249, 51862), (258, 51838), (261, 51820), (268, 51772), (280, 51721), (291, 51685), (296, 51667), (328, 51550), (340, 51499), (364, 51457), (373, 51397), (383, 51355), (396, 51304), (400, 51280), (428, 51118), (434, 51097),

Gene: AustinPowers_26 Start: 21746, Stop: 23140, Start Num: 83

Candidate Starts for AustinPowers_26:

(Start: 83 @21746 has 69 MA's), (98, 21803), (118, 21890), (127, 21908), (128, 21911), (155, 21995), (172, 22028), (188, 22079), (190, 22085), (200, 22145), (207, 22175), (211, 22211), (215, 22229), (219, 22265), (228, 22286), (230, 22304), (232, 22310), (242, 22337), (267, 22418), (270, 22445), (276, 22469), (281, 22484), (287, 22511), (296, 22544), (299, 22559), (343, 22727), (349, 22754), (352, 22766), (359, 22784), (373, 22874), (375, 22880), (379, 22895), (380, 22898), (400, 22991), (402, 23018), (417, 23075), (424, 23108), (430, 23132),

Gene: Barbochs_59 Start: 51736, Stop: 50204, Start Num: 63

Candidate Starts for Barbochs_59:

(16, 51991), (21, 51940), (26, 51889), (37, 51835), (43, 51805), (Start: 53 @51772 has 1 MA's), (56, 51763), (Start: 63 @51736 has 23 MA's), (102, 51568), (112, 51526), (122, 51478), (126, 51466), (130, 51454), (131, 51448), (134, 51427), (147, 51400), (189, 51259), (207, 51172), (208, 51157), (210, 51145), (216, 51115), (225, 51064), (232, 51037), (249, 50986), (258, 50962), (261, 50944), (263, 50926), (264, 50923), (268, 50896), (277, 50854), (291, 50809), (328, 50674), (332, 50659), (336, 50638), (364, 50581), (369, 50557), (380, 50497), (381, 50491), (382, 50485), (383, 50479), (396, 50428), (400, 50404), (404, 50365), (406, 50353), (407, 50350), (425, 50257), (428, 50242), (434, 50221),

Gene: Beaver_62 Start: 53506, Stop: 51974, Start Num: 63

Candidate Starts for Beaver_62:

(16, 53761), (21, 53710), (26, 53659), (37, 53605), (43, 53575), (Start: 53 @53542 has 1 MA's), (56, 53533), (Start: 63 @53506 has 23 MA's), (102, 53338), (112, 53296), (122, 53248), (126, 53236), (130, 53224), (131, 53218), (134, 53197), (147, 53170), (189, 53029), (207, 52942), (208, 52927), (210, 52915), (216, 52885), (225, 52834), (232, 52807), (249, 52756), (261, 52714), (263, 52696), (264, 52693), (268, 52666), (277, 52624), (291, 52579), (296, 52561), (328, 52444), (332, 52429), (336, 52408), (364, 52351), (369, 52327), (380, 52267), (381, 52261), (382, 52255), (383, 52249), (396, 52198), (400, 52174), (404, 52135), (406, 52123), (425, 52027), (428, 52012), (434, 51991),

Gene: Beethoven_29 Start: 22100, Stop: 23500, Start Num: 83

Candidate Starts for Beethoven_29:

(Start: 83 @22100 has 69 MA's), (98, 22163), (127, 22268), (128, 22271), (155, 22355), (172, 22388), (188, 22439), (190, 22445), (204, 22526), (205, 22529), (207, 22535), (211, 22571), (215, 22589), (216, 22592), (219, 22625), (228, 22646), (230, 22664), (242, 22697), (267, 22778), (270, 22805), (279, 22835), (281, 22844), (287, 22871), (296, 22904), (299, 22919), (312, 22973), (319, 22994), (322, 23006), (326, 23018), (375, 23240), (378, 23249), (379, 23255), (385, 23291), (400, 23351), (402, 23378), (424, 23468),

Gene: Benczkowski14_57 Start: 53319, Stop: 51616, Start Num: 23

Candidate Starts for Benczkowski14_57:

(Start: 23 @53319 has 6 MA's), (Start: 24 @53307 has 2 MA's), (68, 53124), (Start: 95 @53034 has 24 MA's), (96, 53025), (102, 52989), (107, 52965), (110, 52956), (112, 52947), (122, 52899), (130, 52875), (152, 52803), (153, 52800), (159, 52782), (173, 52743), (201, 52614), (208, 52575), (209, 52572), (211, 52554), (213, 52545), (216, 52533), (223, 52485), (233, 52452), (249, 52404), (258, 52380), (268, 52314), (291, 52215), (317, 52116), (320, 52107), (327, 52083), (328, 52080), (364, 51987), (369, 51963), (370, 51960), (380, 51903), (383, 51885), (404, 51768), (405, 51765), (407, 51753), (428, 51654), (434, 51633),

Gene: Bennie_25 Start: 20566, Stop: 21960, Start Num: 83

Candidate Starts for Bennie_25:

(Start: 83 @20566 has 69 MA's), (98, 20623), (127, 20728), (128, 20731), (155, 20815), (172, 20848), (188, 20899), (190, 20905), (207, 20995), (211, 21031), (215, 21049), (216, 21052), (219, 21085), (228, 21106), (267, 21238), (270, 21265), (279, 21295), (281, 21304), (287, 21331), (296, 21364), (299, 21379), (307, 21406), (312, 21433), (323, 21469), (335, 21511), (349, 21574), (355, 21592), (370, 21664), (372, 21688), (373, 21694), (374, 21697), (379, 21715), (380, 21718), (384, 21742), (385, 21751), (402, 21838), (415, 21889), (424, 21928),

Gene: BenoitCattle_60 Start: 52020, Stop: 50611, Start Num: 95

Candidate Starts for BenoitCattle_60:

(16, 52398), (21, 52347), (26, 52296), (37, 52242), (43, 52212), (Start: 53 @52179 has 1 MA's), (56, 52170), (Start: 63 @52143 has 23 MA's), (Start: 95 @52020 has 24 MA's), (102, 51975), (112, 51933),

(122, 51885), (123, 51882), (125, 51876), (126, 51873), (130, 51861), (131, 51855), (147, 51807), (148, 51804), (185, 51684), (189, 51666), (201, 51603), (207, 51579), (208, 51564), (216, 51522), (225, 51471), (249, 51393), (263, 51333), (264, 51330), (266, 51321), (268, 51303), (277, 51261), (291, 51216), (328, 51081), (332, 51066), (336, 51045), (369, 50964), (370, 50961), (380, 50904), (381, 50898), (383, 50886), (396, 50835), (400, 50811), (404, 50772), (406, 50760), (425, 50664), (428, 50649),

Gene: Benry_32 Start: 21495, Stop: 22922, Start Num: 88

Candidate Starts for Benry_32:

(Start: 88 @21495 has 11 MA's), (188, 21849), (189, 21852), (193, 21873), (208, 21960), (216, 22002), (284, 22284), (287, 22296), (293, 22317), (299, 22344), (306, 22371), (307, 22374), (312, 22401), (315, 22407), (325, 22443), (349, 22542), (364, 22605), (369, 22623), (370, 22626), (380, 22680), (385, 22713), (390, 22725), (399, 22764), (402, 22800), (404, 22806), (406, 22818), (415, 22851), (420, 22881),

Gene: Berries_57 Start: 53207, Stop: 51447, Start Num: 16

Candidate Starts for Berries_57:

(16, 53207), (Start: 32 @53078 has 1 MA's), (Start: 53 @52988 has 1 MA's), (Start: 95 @52859 has 24 MA's), (102, 52814), (122, 52724), (123, 52721), (125, 52715), (131, 52694), (152, 52631), (185, 52523), (189, 52505), (207, 52418), (208, 52403), (216, 52361), (233, 52280), (249, 52232), (261, 52190), (263, 52172), (264, 52169), (268, 52142), (280, 52091), (291, 52055), (304, 52004), (328, 51920), (333, 51899), (380, 51743), (381, 51737), (383, 51725), (406, 51599), (428, 51485),

Gene: Bianmat_57 Start: 52899, Stop: 51487, Start Num: 95

Candidate Starts for Bianmat_57:

(16, 53247), (Start: 32 @53118 has 1 MA's), (Start: 53 @53028 has 1 MA's), (Start: 95 @52899 has 24 MA's), (102, 52854), (122, 52764), (123, 52761), (125, 52755), (131, 52734), (152, 52671), (180, 52593), (185, 52563), (189, 52545), (207, 52458), (208, 52443), (216, 52401), (233, 52320), (249, 52272), (261, 52230), (263, 52212), (264, 52209), (268, 52182), (280, 52131), (291, 52095), (304, 52044), (328, 51960), (333, 51939), (380, 51783), (381, 51777), (383, 51765), (406, 51639), (428, 51525),

Gene: Big4_103 Start: 78367, Stop: 76427, Start Num: 9

Candidate Starts for Big4_103:

(Start: 9 @78367 has 7 MA's), (Start: 27 @78214 has 2 MA's), (47, 78121), (82, 78046), (99, 77965), (104, 77941), (143, 77665), (214, 77359), (231, 77269), (250, 77209), (253, 77200), (264, 77143), (265, 77137), (269, 77104), (271, 77092), (274, 77083), (283, 77059), (297, 76999), (346, 76867), (347, 76861), (363, 76798), (365, 76777), (367, 76771), (381, 76696), (382, 76690), (385, 76669), (400, 76609), (405, 76567), (408, 76543), (409, 76531),

Gene: BigMack_25 Start: 20560, Stop: 21960, Start Num: 83

Candidate Starts for BigMack_25:

(Start: 83 @20560 has 69 MA's), (98, 20623), (127, 20728), (128, 20731), (155, 20815), (172, 20848), (188, 20899), (190, 20905), (204, 20986), (205, 20989), (207, 20995), (211, 21031), (215, 21049), (216, 21052), (219, 21085), (228, 21106), (230, 21124), (267, 21238), (270, 21265), (279, 21295), (281, 21304), (287, 21331), (296, 21364), (299, 21379), (307, 21406), (315, 21439), (335, 21511), (349, 21574), (355, 21592), (363, 21625), (373, 21694), (375, 21700), (379, 21715), (380, 21718), (385, 21751), (400, 21811), (402, 21838), (424, 21928),

Gene: BigShaq_58 Start: 52025, Stop: 50616, Start Num: 95

Candidate Starts for BigShaq_58:

(16, 52403), (21, 52352), (26, 52301), (37, 52247), (43, 52217), (Start: 53 @52184 has 1 MA's), (56, 52175), (Start: 63 @52148 has 23 MA's), (Start: 95 @52025 has 24 MA's), (102, 51980), (112, 51938),

(122, 51890), (123, 51887), (125, 51881), (126, 51878), (130, 51866), (131, 51860), (144, 51824), (147, 51812), (148, 51809), (185, 51689), (189, 51671), (207, 51584), (208, 51569), (216, 51527), (225, 51476), (232, 51449), (249, 51398), (263, 51338), (264, 51335), (266, 51326), (268, 51308), (277, 51266), (291, 51221), (328, 51086), (332, 51071), (336, 51050), (369, 50969), (370, 50966), (380, 50909), (381, 50903), (383, 50891), (396, 50840), (399, 50825), (400, 50816), (404, 50777), (406, 50765), (425, 50669), (428, 50654),

Gene: BirksAndSocks_64 Start: 53856, Stop: 52324, Start Num: 63

Candidate Starts for BirksAndSocks_64:

(16, 54111), (21, 54060), (37, 53955), (43, 53925), (Start: 53 @53892 has 1 MA's), (56, 53883), (Start: 63 @53856 has 23 MA's), (102, 53688), (112, 53646), (116, 53628), (122, 53598), (126, 53586), (130, 53574), (131, 53568), (134, 53547), (189, 53379), (207, 53292), (208, 53277), (210, 53265), (216, 53235), (249, 53106), (258, 53082), (261, 53064), (263, 53046), (264, 53043), (266, 53034), (268, 53016), (291, 52929), (328, 52794), (332, 52779), (336, 52758), (369, 52677), (370, 52674), (380, 52617), (381, 52611), (383, 52599), (396, 52548), (400, 52524), (404, 52485), (406, 52473), (407, 52470), (425, 52377), (428, 52362),

Gene: Bloom_105 Start: 80738, Stop: 82576, Start Num: 8

Candidate Starts for Bloom_105:

(Start: 8 @80738 has 1 MA's), (17, 80819), (28, 80897), (49, 80993), (82, 81053), (93, 81083), (114, 81203), (127, 81254), (144, 81314), (218, 81653), (232, 81710), (236, 81731), (253, 81776), (264, 81833), (265, 81839), (269, 81872), (271, 81884), (275, 81896), (289, 81941), (297, 81980), (319, 82037), (329, 82043), (336, 82076), (351, 82145), (370, 82229), (394, 82346), (423, 82520), (433, 82562),

Gene: BlueNGold_166 Start: 96830, Stop: 94920, Start Num: 7

Candidate Starts for BlueNGold_166:

(Start: 7 @96830 has 5 MA's), (36, 96626), (47, 96578), (62, 96533), (85, 96452), (90, 96440), (108, 96335), (114, 96308), (142, 96203), (149, 96179), (193, 96014), (250, 95747), (253, 95738), (260, 95711), (269, 95642), (336, 95393), (349, 95327), (357, 95303), (382, 95168), (397, 95108), (406, 95036),

Gene: Bodacious_25 Start: 20580, Stop: 21974, Start Num: 83

Candidate Starts for Bodacious_25:

(Start: 83 @20580 has 69 MA's), (98, 20637), (127, 20742), (128, 20745), (155, 20829), (172, 20862), (188, 20913), (190, 20919), (204, 21000), (205, 21003), (207, 21009), (211, 21045), (215, 21063), (216, 21066), (219, 21099), (228, 21120), (267, 21252), (270, 21279), (281, 21318), (285, 21339), (287, 21345), (296, 21378), (299, 21393), (302, 21402), (312, 21447), (323, 21483), (335, 21525), (349, 21588), (355, 21606), (373, 21708), (374, 21711), (379, 21729), (380, 21732), (384, 21756), (385, 21765), (402, 21852), (424, 21942), (430, 21966),

Gene: Bogota_43 Start: 31399, Stop: 32793, Start Num: 89

Candidate Starts for Bogota_43:

(Start: 89 @31399 has 12 MA's), (Start: 91 @31402 has 2 MA's), (102, 31477), (109, 31501), (122, 31531), (127, 31546), (163, 31636), (179, 31672), (200, 31771), (202, 31780), (214, 31849), (243, 31972), (275, 32107), (282, 32134), (287, 32155), (293, 32176), (307, 32233), (315, 32266), (317, 32275), (330, 32317), (344, 32383), (349, 32407), (355, 32425), (360, 32443), (370, 32497), (373, 32527), (385, 32584), (387, 32587), (399, 32635), (403, 32674), (406, 32689), (421, 32758), (427, 32776), (430, 32785),

Gene: Boneham_63 Start: 53757, Stop: 52225, Start Num: 63

Candidate Starts for Boneham_63:

(16, 54012), (21, 53961), (37, 53856), (43, 53826), (Start: 53 @53793 has 1 MA's), (56, 53784), (Start: 63 @53757 has 23 MA's), (102, 53589), (112, 53547), (116, 53529), (122, 53499), (126, 53487), (130, 53475), (131, 53469), (134, 53448), (189, 53280), (207, 53193), (208, 53178), (210, 53166), (216, 53136), (249, 53007), (258, 52983), (261, 52965), (263, 52947), (264, 52944), (266, 52935), (268, 52917), (291, 52830), (328, 52695), (332, 52680), (336, 52659), (369, 52578), (370, 52575), (380, 52518), (381, 52512), (383, 52500), (396, 52449), (400, 52425), (404, 52386), (406, 52374), (407, 52371), (425, 52278), (428, 52263),

Gene: Boopy_169 Start: 96841, Stop: 94931, Start Num: 7

Candidate Starts for Boopy_169:

(Start: 7 @96841 has 5 MA's), (36, 96637), (47, 96589), (62, 96544), (85, 96463), (90, 96451), (108, 96346), (114, 96319), (142, 96214), (149, 96190), (193, 96025), (250, 95758), (253, 95749), (260, 95722), (269, 95653), (336, 95404), (349, 95338), (357, 95314), (382, 95179), (397, 95119), (406, 95047),

Gene: Breezic_59 Start: 51749, Stop: 50217, Start Num: 63

Candidate Starts for Breezic_59:

(16, 52004), (21, 51953), (26, 51902), (37, 51848), (43, 51818), (Start: 53 @51785 has 1 MA's), (56, 51776), (Start: 63 @51749 has 23 MA's), (102, 51581), (112, 51539), (122, 51491), (126, 51479), (130, 51467), (131, 51461), (134, 51440), (147, 51413), (189, 51272), (207, 51185), (208, 51170), (210, 51158), (216, 51128), (225, 51077), (232, 51050), (249, 50999), (263, 50939), (264, 50936), (268, 50909), (277, 50867), (291, 50822), (328, 50687), (332, 50672), (336, 50651), (364, 50594), (369, 50570), (370, 50567), (380, 50510), (381, 50504), (382, 50498), (383, 50492), (396, 50441), (400, 50417), (404, 50378), (406, 50366), (407, 50363), (425, 50270), (428, 50255), (434, 50234),

Gene: BrotherBLo_29 Start: 22106, Stop: 23506, Start Num: 83

Candidate Starts for BrotherBLo_29:

(Start: 83 @22106 has 69 MA's), (98, 22169), (127, 22274), (155, 22361), (172, 22394), (188, 22445), (190, 22451), (204, 22532), (205, 22535), (207, 22541), (211, 22577), (215, 22595), (216, 22598), (219, 22631), (228, 22652), (230, 22670), (267, 22784), (270, 22811), (279, 22841), (281, 22850), (287, 22877), (296, 22910), (299, 22925), (312, 22979), (319, 23000), (322, 23012), (326, 23024), (373, 23240), (374, 23243), (375, 23246), (378, 23255), (379, 23261), (385, 23297), (400, 23357), (402, 23384), (424, 23474),

Gene: Butterball_62 Start: 53762, Stop: 52230, Start Num: 63

Candidate Starts for Butterball_62:

(16, 54017), (21, 53966), (37, 53861), (43, 53831), (Start: 53 @53798 has 1 MA's), (56, 53789), (Start: 63 @53762 has 23 MA's), (102, 53594), (112, 53552), (116, 53534), (122, 53504), (126, 53492), (130, 53480), (131, 53474), (134, 53453), (189, 53285), (207, 53198), (208, 53183), (210, 53171), (216, 53141), (249, 53012), (258, 52988), (261, 52970), (263, 52952), (264, 52949), (266, 52940), (268, 52922), (291, 52835), (328, 52700), (332, 52685), (336, 52664), (369, 52583), (370, 52580), (380, 52523), (381, 52517), (383, 52505), (396, 52454), (400, 52430), (404, 52391), (406, 52379), (407, 52376), (425, 52283), (428, 52268),

Gene: Camerico_63 Start: 54751, Stop: 53234, Start Num: 78

Candidate Starts for Camerico_63:

(Start: 78 @54751 has 3 MA's), (Start: 95 @54673 has 24 MA's), (98, 54655), (100, 54643), (102, 54628), (117, 54574), (122, 54556), (124, 54550), (137, 54496), (146, 54478), (167, 54418), (175, 54394), (192, 54313), (198, 54274), (206, 54247), (209, 54226), (213, 54199), (215, 54190), (249, 54058), (258, 54034), (261, 54016), (263, 53998), (265, 53989), (321, 53773), (322, 53767), (327, 53752), (339, 53701), (357, 53647), (383, 53506), (399, 53440), (400, 53431), (402, 53398),

Gene: Canowicakte_29 Start: 22165, Stop: 23559, Start Num: 83

Candidate Starts for Canowicakte_29:

(Start: 83 @22165 has 69 MA's), (98, 22222), (127, 22327), (155, 22414), (188, 22498), (189, 22501), (190, 22504), (207, 22594), (211, 22630), (213, 22639), (215, 22648), (228, 22705), (230, 22723), (242, 22756), (251, 22768), (267, 22837), (270, 22864), (276, 22888), (287, 22930), (296, 22963), (299, 22978), (302, 22987), (326, 23077), (343, 23146), (349, 23173), (355, 23191), (359, 23203), (373, 23293), (375, 23299), (378, 23308), (379, 23314), (385, 23350), (402, 23437), (415, 23488), (424, 23527), (430, 23551),

Gene: Carpal_29 Start: 22107, Stop: 23507, Start Num: 83

Candidate Starts for Carpal_29:

(Start: 83 @22107 has 69 MA's), (98, 22170), (127, 22275), (128, 22278), (155, 22362), (172, 22395), (188, 22446), (190, 22452), (204, 22533), (205, 22536), (207, 22542), (211, 22578), (215, 22596), (216, 22599), (219, 22632), (228, 22653), (230, 22671), (242, 22704), (267, 22785), (270, 22812), (279, 22842), (281, 22851), (287, 22878), (296, 22911), (299, 22926), (312, 22980), (319, 23001), (322, 23013), (326, 23025), (375, 23247), (378, 23256), (379, 23262), (385, 23298), (400, 23358), (402, 23385), (424, 23475),

Gene: CathyBurgh_58 Start: 52326, Stop: 50794, Start Num: 63

Candidate Starts for CathyBurgh_58:

(16, 52581), (21, 52530), (26, 52479), (37, 52425), (43, 52395), (Start: 53 @52362 has 1 MA's), (56, 52353), (Start: 63 @52326 has 23 MA's), (102, 52158), (112, 52116), (122, 52068), (126, 52056), (130, 52044), (131, 52038), (134, 52017), (147, 51990), (189, 51849), (207, 51762), (208, 51747), (210, 51735), (216, 51705), (225, 51654), (232, 51627), (249, 51576), (258, 51552), (261, 51534), (263, 51516), (264, 51513), (268, 51486), (277, 51444), (291, 51399), (328, 51264), (332, 51249), (336, 51228), (364, 51171), (369, 51147), (380, 51087), (381, 51081), (382, 51075), (383, 51069), (396, 51018), (400, 50994), (404, 50955), (406, 50943), (407, 50940), (425, 50847), (428, 50832), (434, 50811),

Gene: Cece_97 Start: 81318, Stop: 79462, Start Num: 6

Candidate Starts for Cece_97:

(Start: 6 @81318 has 1 MA's), (15, 81255), (25, 81186), (44, 81078), (82, 80991), (101, 80901), (108, 80868), (110, 80862), (127, 80790), (142, 80709), (144, 80703), (188, 80544), (214, 80400), (225, 80340), (231, 80310), (250, 80250), (253, 80241), (264, 80184), (265, 80178), (269, 80145), (271, 80133), (283, 80100), (297, 80040), (345, 79911), (346, 79908), (351, 79881), (363, 79839), (365, 79818), (382, 79731), (400, 79650), (405, 79608), (408, 79584), (418, 79527),

Gene: Charianelly_56 Start: 52957, Stop: 51197, Start Num: 16

Candidate Starts for Charianelly_56:

(16, 52957), (Start: 32 @52828 has 1 MA's), (Start: 53 @52738 has 1 MA's), (Start: 95 @52609 has 24 MA's), (102, 52564), (122, 52474), (123, 52471), (125, 52465), (131, 52444), (152, 52381), (180, 52303), (185, 52273), (189, 52255), (207, 52168), (208, 52153), (216, 52111), (233, 52030), (249, 51982), (261, 51940), (263, 51922), (264, 51919), (268, 51892), (280, 51841), (291, 51805), (304, 51754), (328, 51670), (333, 51649), (380, 51493), (381, 51487), (383, 51475), (406, 51349), (428, 51235),

Gene: Chelms_59 Start: 52169, Stop: 50760, Start Num: 95

Candidate Starts for Chelms_59:

(16, 52547), (21, 52496), (26, 52445), (37, 52391), (43, 52361), (Start: 53 @52328 has 1 MA's), (56, 52319), (Start: 63 @52292 has 23 MA's), (Start: 95 @52169 has 24 MA's), (102, 52124), (112, 52082), (122, 52034), (123, 52031), (125, 52025), (126, 52022), (130, 52010), (131, 52004), (147, 51956), (148, 51953), (185, 51833), (189, 51815), (201, 51752), (207, 51728), (208, 51713), (216, 51671), (225, 51620), (232, 51593), (249, 51542), (263, 51482), (264, 51479), (266, 51470), (268, 51452), (277, 51410), (291, 51365), (292, 51362), (328, 51230), (332, 51215), (336, 51194), (369, 51113),

(370, 51110), (380, 51053), (381, 51047), (383, 51035), (396, 50984), (399, 50969), (400, 50960), (404, 50921), (406, 50909), (425, 50813), (428, 50798),

Gene: ChewChew_25 Start: 20575, Stop: 21969, Start Num: 83

Candidate Starts for ChewChew_25:

(Start: 83 @20575 has 69 MA's), (98, 20632), (127, 20737), (128, 20740), (155, 20824), (172, 20857), (188, 20908), (190, 20914), (204, 20995), (205, 20998), (207, 21004), (211, 21040), (215, 21058), (216, 21061), (219, 21094), (228, 21115), (267, 21247), (270, 21274), (281, 21313), (285, 21334), (287, 21340), (296, 21373), (299, 21388), (302, 21397), (312, 21442), (323, 21478), (335, 21520), (349, 21583), (355, 21601), (373, 21703), (374, 21706), (379, 21724), (380, 21727), (384, 21751), (385, 21760), (402, 21847), (424, 21937), (430, 21961),

Gene: Cholula_29 Start: 22153, Stop: 23553, Start Num: 83

Candidate Starts for Cholula_29:

(Start: 83 @22153 has 69 MA's), (98, 22216), (127, 22321), (128, 22324), (155, 22408), (172, 22441), (188, 22492), (190, 22498), (204, 22579), (205, 22582), (207, 22588), (211, 22624), (215, 22642), (216, 22645), (228, 22699), (242, 22750), (267, 22831), (270, 22858), (279, 22888), (281, 22897), (287, 22924), (296, 22957), (299, 22972), (312, 23026), (319, 23047), (322, 23059), (326, 23071), (375, 23293), (378, 23302), (379, 23308), (385, 23344), (400, 23404), (402, 23431), (424, 23521),

Gene: Chridison_26 Start: 21746, Stop: 23140, Start Num: 83

Candidate Starts for Chridison_26:

(Start: 83 @21746 has 69 MA's), (98, 21803), (118, 21890), (127, 21908), (128, 21911), (155, 21995), (172, 22028), (188, 22079), (190, 22085), (200, 22145), (207, 22175), (211, 22211), (215, 22229), (228, 22286), (230, 22304), (232, 22310), (242, 22337), (267, 22418), (270, 22445), (276, 22469), (281, 22484), (287, 22511), (296, 22544), (299, 22559), (307, 22586), (343, 22727), (349, 22754), (352, 22766), (359, 22784), (366, 22826), (373, 22874), (375, 22880), (379, 22895), (380, 22898), (385, 22931), (400, 22991), (402, 23018), (417, 23075), (424, 23108), (430, 23132),

Gene: Christian_25 Start: 20576, Stop: 21970, Start Num: 83

Candidate Starts for Christian_25:

(Start: 83 @20576 has 69 MA's), (98, 20633), (127, 20738), (128, 20741), (155, 20825), (172, 20858), (190, 20915), (204, 20996), (205, 20999), (207, 21005), (211, 21041), (215, 21059), (216, 21062), (219, 21095), (228, 21116), (267, 21248), (270, 21275), (281, 21314), (285, 21335), (287, 21341), (296, 21374), (299, 21389), (302, 21398), (312, 21443), (323, 21479), (335, 21521), (349, 21584), (355, 21602), (373, 21704), (374, 21707), (379, 21725), (380, 21728), (384, 21752), (385, 21761), (402, 21848), (424, 21938), (430, 21962),

Gene: Cicada_35 Start: 23458, Stop: 24885, Start Num: 88

Candidate Starts for Cicada_35:

(Start: 88 @23458 has 11 MA's), (182, 23776), (189, 23815), (200, 23878), (208, 23923), (211, 23944), (232, 24043), (275, 24211), (287, 24259), (293, 24280), (299, 24307), (306, 24334), (312, 24364), (313, 24367), (315, 24370), (325, 24406), (345, 24484), (364, 24568), (369, 24586), (370, 24589), (385, 24676), (390, 24688), (399, 24727), (402, 24763), (404, 24769), (415, 24814), (420, 24844),

Gene: CristinaYang_25 Start: 20580, Stop: 21974, Start Num: 83

Candidate Starts for CristinaYang_25:

(Start: 83 @20580 has 69 MA's), (98, 20637), (127, 20742), (128, 20745), (155, 20829), (172, 20862), (188, 20913), (190, 20919), (204, 21000), (205, 21003), (207, 21009), (211, 21045), (215, 21063), (216, 21066), (219, 21099), (228, 21120), (267, 21252), (270, 21279), (281, 21318), (285, 21339), (287, 21345), (296, 21378), (299, 21393), (302, 21402), (312, 21447), (323, 21483), (335, 21525), (349, 21588), (355, 21606), (373, 21708), (374, 21711), (379, 21729), (380, 21732), (384, 21756),

(385, 21765), (402, 21852), (424, 21942), (430, 21966),

Gene: Crosby_42 Start: 31144, Stop: 32538, Start Num: 89

Candidate Starts for Crosby_42:

(Start: 89 @31144 has 12 MA's), (Start: 91 @31147 has 2 MA's), (102, 31222), (109, 31246), (111, 31252), (122, 31276), (127, 31291), (128, 31294), (153, 31366), (163, 31381), (179, 31417), (200, 31516), (214, 31594), (243, 31717), (275, 31852), (282, 31879), (287, 31900), (307, 31978), (315, 32011), (317, 32020), (330, 32062), (344, 32128), (345, 32131), (349, 32152), (355, 32170), (360, 32188), (370, 32242), (373, 32272), (385, 32329), (387, 32332), (399, 32380), (403, 32419), (406, 32434), (421, 32503), (427, 32521), (430, 32530),

Gene: Daiboju_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for Daiboju_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Dakiti_60 Start: 53037, Stop: 51628, Start Num: 95

Candidate Starts for Dakiti_60:

(16, 53415), (21, 53364), (26, 53313), (37, 53259), (43, 53229), (Start: 53 @53196 has 1 MA's), (56, 53187), (Start: 63 @53160 has 23 MA's), (Start: 95 @53037 has 24 MA's), (102, 52992), (112, 52950), (122, 52902), (123, 52899), (125, 52893), (126, 52890), (130, 52878), (131, 52872), (147, 52824), (148, 52821), (185, 52701), (189, 52683), (201, 52620), (207, 52596), (208, 52581), (216, 52539), (225, 52488), (232, 52461), (249, 52410), (263, 52350), (264, 52347), (266, 52338), (268, 52320), (277, 52278), (291, 52233), (292, 52230), (328, 52098), (332, 52083), (336, 52062), (369, 51981), (370, 51978), (380, 51921), (381, 51915), (383, 51903), (396, 51852), (399, 51837), (400, 51828), (404, 51789), (406, 51777), (425, 51681), (428, 51666),

Gene: Damp_55 Start: 51773, Stop: 50361, Start Num: 95

Candidate Starts for Damp_55:

(16, 52121), (Start: 32 @51992 has 1 MA's), (52, 51905), (Start: 53 @51902 has 1 MA's), (Start: 95 @51773 has 24 MA's), (102, 51728), (122, 51638), (123, 51635), (125, 51629), (131, 51608), (152, 51545), (185, 51437), (189, 51419), (207, 51332), (208, 51317), (216, 51275), (233, 51194), (249, 51146), (261, 51104), (263, 51086), (264, 51083), (268, 51056), (280, 51005), (291, 50969), (304, 50918), (328, 50834), (333, 50813), (380, 50657), (381, 50651), (383, 50639), (406, 50513), (428, 50399),

Gene: Demosthenes_55 Start: 52768, Stop: 51074, Start Num: 24

Candidate Starts for Demosthenes_55:

(Start: 23 @52780 has 6 MA's), (Start: 24 @52768 has 2 MA's), (39, 52669), (Start: 45 @52648 has 1 MA's), (68, 52582), (96, 52483), (102, 52447), (107, 52423), (110, 52414), (112, 52405), (122, 52357), (130, 52333), (144, 52291), (148, 52276), (152, 52261), (171, 52204), (173, 52201), (187, 52141), (188, 52138), (201, 52072), (202, 52069), (208, 52033), (209, 52030), (211, 52012), (213, 52003), (216, 51991), (223, 51943), (233, 51910), (240, 51886), (249, 51862), (258, 51838), (268, 51772), (291, 51673), (327, 51541), (328, 51538), (358, 51472), (369, 51421), (370, 51418), (380, 51361), (383, 51343), (404, 51226), (405, 51223), (407, 51211), (428, 51112), (434, 51091),

Gene: Diabla_63 Start: 53692, Stop: 52283, Start Num: 95

Candidate Starts for Diabla_63:

(16, 54070), (21, 54019), (37, 53914), (43, 53884), (Start: 53 @53851 has 1 MA's), (56, 53842), (Start: 63 @53815 has 23 MA's), (Start: 95 @53692 has 24 MA's), (102, 53647), (112, 53605), (122, 53557), (123, 53554), (125, 53548), (126, 53545), (131, 53527), (134, 53506), (147, 53479), (185, 53356), (189, 53338), (207, 53251), (208, 53236), (225, 53143), (249, 53065), (258, 53041), (263, 53005), (264, 53002), (268, 52975), (277, 52933), (291, 52888), (296, 52870), (312, 52804), (328, 52753), (332, 52738), (336, 52717), (364, 52660), (370, 52633), (380, 52576), (381, 52570), (383, 52558), (396, 52507), (400, 52483), (404, 52444), (406, 52432), (407, 52429), (425, 52336), (428, 52321), (434, 52300),

Gene: DocB7_048 Start: 43676, Stop: 42174, Start Num: 78

Candidate Starts for DocB7_048:

(Start: 78 @43676 has 3 MA's), (98, 43580), (102, 43553), (110, 43520), (115, 43496), (122, 43466), (146, 43391), (175, 43310), (180, 43295), (201, 43184), (206, 43163), (211, 43124), (245, 42986), (249, 42974), (252, 42971), (258, 42950), (269, 42872), (291, 42812), (327, 42677), (328, 42674), (344, 42623), (354, 42602), (361, 42575), (371, 42509), (377, 42482), (379, 42473), (383, 42452), (392, 42416), (400, 42377), (408, 42311), (430, 42215),

Gene: DrRobert_25 Start: 20576, Stop: 21970, Start Num: 83

Candidate Starts for DrRobert_25:

(Start: 83 @20576 has 69 MA's), (98, 20633), (127, 20738), (128, 20741), (155, 20825), (172, 20858), (188, 20909), (190, 20915), (204, 20996), (205, 20999), (207, 21005), (211, 21041), (215, 21059), (216, 21062), (219, 21095), (228, 21116), (267, 21248), (270, 21275), (281, 21314), (285, 21335), (287, 21341), (296, 21374), (299, 21389), (302, 21398), (312, 21443), (323, 21479), (335, 21521), (349, 21584), (355, 21602), (373, 21704), (374, 21707), (379, 21725), (380, 21728), (384, 21752), (385, 21761), (402, 21848), (424, 21938), (430, 21962),

Gene: DreamTeam_25 Start: 20615, Stop: 22009, Start Num: 83

Candidate Starts for DreamTeam_25:

(Start: 83 @20615 has 69 MA's), (98, 20672), (127, 20777), (128, 20780), (155, 20864), (172, 20897), (189, 20951), (190, 20954), (207, 21044), (211, 21080), (216, 21101), (219, 21134), (228, 21155), (267, 21287), (270, 21314), (281, 21353), (287, 21380), (296, 21413), (299, 21428), (302, 21437), (312, 21482), (323, 21518), (344, 21599), (349, 21623), (355, 21641), (359, 21653), (370, 21713), (372, 21737), (373, 21743), (374, 21746), (379, 21764), (380, 21767), (384, 21791), (385, 21800), (402, 21887), (415, 21938), (424, 21977),

Gene: DunneganBoMo_94 Start: 76558, Stop: 78402, Start Num: 8

Candidate Starts for DunneganBoMo_94:

(Start: 8 @76558 has 1 MA's), (49, 76831), (94, 76939), (106, 77005), (121, 77074), (123, 77083), (145, 77158), (216, 77467), (222, 77512), (232, 77551), (236, 77572), (253, 77617), (264, 77674), (265, 77680), (269, 77713), (271, 77725), (275, 77737), (312, 77854), (315, 77860), (344, 77950), (351, 77983), (370, 78067), (388, 78160), (394, 78184), (421, 78352), (422, 78355),

Gene: Eggsie_58 Start: 51628, Stop: 50060, Start Num: 53

Candidate Starts for Eggsie_58:

(16, 51847), (26, 51745), (Start: 32 @51718 has 1 MA's), (37, 51691), (40, 51670), (43, 51661), (Start: 53 @51628 has 1 MA's), (56, 51619), (Start: 63 @51592 has 23 MA's), (Start: 95 @51469 has 24 MA's), (102, 51424), (112, 51382), (122, 51334), (123, 51331), (125, 51325), (126, 51322), (131, 51304), (134, 51283), (147, 51256), (185, 51133), (189, 51115), (207, 51028), (208, 51013), (225, 50920), (249, 50842), (258, 50818), (263, 50782), (264, 50779), (268, 50752), (277, 50710), (291, 50665), (296, 50647), (312, 50581), (328, 50530), (332, 50515), (336, 50494), (364, 50437), (370, 50410), (380, 50353), (381, 50347), (383, 50335), (396, 50284), (400, 50260), (404, 50221), (406, 50209), (407, 50206), (425, 50113), (428, 50098), (434, 50077),

Gene: Ekhein_59 Start: 51454, Stop: 49922, Start Num: 63

Candidate Starts for Ekhein_59:

(16, 51709), (21, 51658), (26, 51607), (37, 51553), (43, 51523), (Start: 53 @51490 has 1 MA's), (56, 51481), (Start: 63 @51454 has 23 MA's), (102, 51286), (112, 51244), (122, 51196), (126, 51184), (130, 51172), (131, 51166), (134, 51145), (147, 51118), (189, 50977), (207, 50890), (208, 50875), (210, 50863), (216, 50833), (225, 50782), (232, 50755), (249, 50704), (261, 50662), (263, 50644), (264, 50641), (268, 50614), (277, 50572), (291, 50527), (328, 50392), (332, 50377), (336, 50356), (364, 50299), (369, 50275), (370, 50272), (380, 50215), (381, 50209), (382, 50203), (383, 50197), (396, 50146), (400, 50122), (404, 50083), (406, 50071), (407, 50068), (425, 49975), (428, 49960), (434, 49939),

Gene: EstebanJulior_26 Start: 21743, Stop: 23140, Start Num: 83

Candidate Starts for EstebanJulior_26:

(Start: 83 @21743 has 69 MA's), (98, 21803), (127, 21908), (128, 21911), (155, 21995), (172, 22028), (188, 22079), (190, 22085), (204, 22166), (207, 22175), (211, 22211), (215, 22229), (216, 22232), (219, 22265), (228, 22286), (267, 22418), (279, 22475), (281, 22484), (285, 22505), (287, 22511), (296, 22544), (299, 22559), (315, 22619), (323, 22649), (344, 22730), (355, 22772), (363, 22805), (372, 22868), (374, 22877), (378, 22889), (379, 22895), (382, 22910), (384, 22922), (385, 22931), (402, 23018), (417, 23075), (424, 23108),

Gene: Eunoia_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for Eunoia_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468), (281, 22483), (287, 22510), (296, 22543), (299, 22558), (335, 22690), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Exiguo_58 Start: 51466, Stop: 49934, Start Num: 63

Candidate Starts for Exiguo_58:

(16, 51721), (21, 51670), (26, 51619), (37, 51565), (43, 51535), (Start: 53 @51502 has 1 MA's), (56, 51493), (Start: 63 @51466 has 23 MA's), (102, 51298), (112, 51256), (122, 51208), (126, 51196), (130, 51184), (131, 51178), (134, 51157), (147, 51130), (189, 50989), (207, 50902), (208, 50887), (210, 50875), (216, 50845), (225, 50794), (232, 50767), (249, 50716), (261, 50674), (263, 50656), (264, 50653), (268, 50626), (277, 50584), (291, 50539), (328, 50404), (332, 50389), (336, 50368), (364, 50311), (369, 50287), (370, 50284), (380, 50227), (381, 50221), (382, 50215), (383, 50209), (396, 50158), (400, 50134), (404, 50095), (406, 50083), (407, 50080), (425, 49987), (428, 49972), (434, 49951),

Gene: FelixAlejandro_64 Start: 54160, Stop: 52628, Start Num: 63

Candidate Starts for FelixAlejandro_64:

(16, 54415), (21, 54364), (37, 54259), (43, 54229), (Start: 53 @54196 has 1 MA's), (56, 54187), (Start: 63 @54160 has 23 MA's), (96, 54028), (102, 53992), (112, 53950), (116, 53932), (122, 53902), (126, 53890), (130, 53878), (131, 53872), (134, 53851), (189, 53683), (207, 53596), (208, 53581), (210, 53569), (216, 53539), (225, 53488), (249, 53410), (258, 53386), (261, 53368), (263, 53350), (264, 53347), (266, 53338), (268, 53320), (291, 53233), (328, 53098), (332, 53083), (336, 53062), (369, 52981), (370, 52978), (380, 52921), (381, 52915), (383, 52903), (396, 52852), (400, 52828), (404, 52789), (406, 52777), (407, 52774), (425, 52681), (428, 52666), (434, 52645),

Gene: FireCastle_33 Start: 23203, Stop: 24633, Start Num: 86

Candidate Starts for FireCastle_33:

(65, 23134), (Start: 86 @23203 has 1 MA's), (Start: 88 @23206 has 11 MA's), (182, 23524), (189, 23563), (193, 23584), (208, 23671), (211, 23692), (287, 24007), (293, 24028), (299, 24055), (306, 24082), (307, 24085), (312, 24112), (315, 24118), (325, 24154), (338, 24202), (345, 24232), (364, 24316), (370, 24337), (380, 24391), (383, 24409), (385, 24424), (390, 24436), (399, 24475), (402, 24511), (404, 24517), (406, 24529), (420, 24592), (431, 24628),

Gene: Flakey_58 Start: 52330, Stop: 50798, Start Num: 63

Candidate Starts for Flakey_58:

(16, 52585), (21, 52534), (26, 52483), (37, 52429), (43, 52399), (Start: 53 @52366 has 1 MA's), (56, 52357), (Start: 63 @52330 has 23 MA's), (102, 52162), (112, 52120), (122, 52072), (126, 52060), (130, 52048), (131, 52042), (134, 52021), (147, 51994), (189, 51853), (207, 51766), (208, 51751), (210, 51739), (216, 51709), (225, 51658), (232, 51631), (249, 51580), (261, 51538), (263, 51520), (264, 51517), (268, 51490), (277, 51448), (291, 51403), (328, 51268), (332, 51253), (336, 51232), (364, 51175), (369, 51151), (370, 51148), (380, 51091), (381, 51085), (382, 51079), (383, 51073), (396, 51022), (400, 50998), (404, 50959), (406, 50947), (407, 50944), (425, 50851), (428, 50836), (434, 50815),

Gene: Fluke_29 Start: 22148, Stop: 23548, Start Num: 83

Candidate Starts for Fluke_29:

(Start: 83 @22148 has 69 MA's), (98, 22211), (127, 22316), (128, 22319), (155, 22403), (172, 22436), (188, 22487), (190, 22493), (204, 22574), (205, 22577), (207, 22583), (211, 22619), (215, 22637), (216, 22640), (219, 22673), (228, 22694), (230, 22712), (242, 22745), (267, 22826), (270, 22853), (279, 22883), (281, 22892), (287, 22919), (296, 22952), (299, 22967), (312, 23021), (319, 23042), (322, 23054), (326, 23066), (375, 23288), (378, 23297), (379, 23303), (385, 23339), (400, 23399), (402, 23426), (424, 23516),

Gene: Forza_170 Start: 96758, Stop: 94848, Start Num: 7

Candidate Starts for Forza_170:

(Start: 7 @96758 has 5 MA's), (36, 96554), (47, 96506), (62, 96461), (85, 96380), (90, 96368), (108, 96263), (114, 96236), (142, 96131), (149, 96107), (193, 95942), (250, 95675), (253, 95666), (260, 95639), (269, 95570), (336, 95321), (349, 95255), (357, 95231), (382, 95096), (397, 95036), (406, 94964),

Gene: GMA2_64 Start: 67776, Stop: 65812, Start Num: 8

Candidate Starts for GMA2_64:

(Start: 8 @67776 has 1 MA's), (25, 67644), (85, 67386), (108, 67269), (110, 67263), (114, 67242), (125, 67197), (142, 67137), (149, 67113), (156, 67077), (181, 67011), (188, 66972), (196, 66918), (208, 66864), (248, 66684), (253, 66672), (269, 66576), (273, 66558), (287, 66504), (323, 66342), (357, 66198), (375, 66093), (388, 66036), (397, 66003), (418, 65859),

Gene: GMA3_58 Start: 50868, Stop: 49351, Start Num: 78

Candidate Starts for GMA3_58:

(20, 51117), (22, 51111), (31, 51039), (Start: 78 @50868 has 3 MA's), (98, 50772), (102, 50745), (107, 50727), (110, 50718), (117, 50691), (122, 50673), (131, 50643), (137, 50613), (146, 50592), (152, 50571), (180, 50493), (185, 50463), (188, 50448), (192, 50427), (209, 50334), (215, 50298), (225, 50244), (249, 50166), (264, 50103), (268, 50076), (270, 50061), (271, 50052), (294, 49989), (304, 49950), (320, 49890), (326, 49869), (327, 49866), (328, 49863), (339, 49815), (373, 49653), (383, 49611), (395, 49563), (404, 49497), (406, 49485),

Gene: GMA7_51 Start: 46927, Stop: 45296, Start Num: 27

Candidate Starts for GMA7_51:

(Start: 27 @46927 has 2 MA's), (30, 46915), (40, 46864), (41, 46858), (59, 46801), (102, 46660), (112, 46618), (114, 46606), (122, 46570), (123, 46567), (131, 46540), (144, 46504), (147, 46492), (152,

46477), (185, 46369), (207, 46264), (208, 46249), (233, 46126), (249, 46078), (258, 46054), (261, 46036), (268, 45988), (280, 45937), (291, 45901), (296, 45883), (328, 45766), (340, 45715), (364, 45673), (373, 45613), (383, 45571), (396, 45520), (400, 45496), (428, 45334), (434, 45313),

Gene: GTE5_60 Start: 49067, Stop: 47640, Start Num: 136

Candidate Starts for GTE5_60:

(1, 49982), (2, 49865), (3, 49847), (12, 49697), (46, 49472), (114, 49184), (130, 49130), (135, 49094), (136, 49067), (141, 48989), (144, 48977), (149, 48959), (164, 48914), (166, 48908), (178, 48869), (191, 48815), (195, 48776), (200, 48758), (224, 48611), (230, 48578), (237, 48548), (239, 48542), (249, 48515), (273, 48392), (291, 48323), (295, 48305), (320, 48200), (322, 48191), (327, 48173), (337, 48131), (344, 48092), (350, 48062), (364, 48005), (373, 47945), (381, 47915), (388, 47882), (398, 47840), (425, 47684),

Gene: GTE7_50 Start: 46958, Stop: 45327, Start Num: 27

Candidate Starts for GTE7_50:

(Start: 27 @46958 has 2 MA's), (30, 46946), (40, 46895), (41, 46889), (59, 46832), (102, 46691), (112, 46649), (114, 46637), (122, 46601), (123, 46598), (131, 46571), (147, 46523), (152, 46508), (185, 46400), (207, 46295), (208, 46280), (233, 46157), (249, 46109), (258, 46085), (261, 46067), (268, 46019), (280, 45968), (291, 45932), (296, 45914), (328, 45797), (340, 45746), (364, 45704), (373, 45644), (383, 45602), (396, 45551), (400, 45527), (428, 45365), (434, 45344),

Gene: GalacticEye_57 Start: 52570, Stop: 51158, Start Num: 95

Candidate Starts for GalacticEye_57:

(16, 52918), (Start: 32 @52789 has 1 MA's), (52, 52702), (Start: 53 @52699 has 1 MA's), (Start: 95 @52570 has 24 MA's), (102, 52525), (122, 52435), (123, 52432), (125, 52426), (131, 52405), (152, 52342), (185, 52234), (189, 52216), (207, 52129), (208, 52114), (216, 52072), (233, 51991), (249, 51943), (261, 51901), (263, 51883), (264, 51880), (268, 51853), (280, 51802), (291, 51766), (304, 51715), (328, 51631), (333, 51610), (380, 51454), (381, 51448), (383, 51436), (406, 51310), (428, 51196),

Gene: Ghobes_35 Start: 32092, Stop: 30689, Start Num: 91

Candidate Starts for Ghobes_35:

(28, 32332), (29, 32329), (54, 32218), (Start: 91 @32092 has 2 MA's), (102, 32017), (109, 31993), (110, 31990), (122, 31960), (123, 31957), (162, 31846), (189, 31771), (190, 31768), (196, 31717), (197, 31714), (204, 31687), (208, 31663), (212, 31636), (243, 31510), (244, 31507), (275, 31384), (276, 31381), (283, 31351), (284, 31348), (305, 31264), (317, 31219), (343, 31117), (355, 31072), (362, 31042), (363, 31039), (380, 30946), (382, 30934), (404, 30820), (411, 30778),

Gene: Gibbles_56 Start: 50443, Stop: 48953, Start Num: 76

Candidate Starts for Gibbles_56:

(Start: 76 @50443 has 5 MA's), (96, 50350), (98, 50341), (100, 50329), (102, 50314), (107, 50296), (123, 50239), (142, 50167), (143, 50164), (170, 50071), (183, 50038), (187, 50005), (188, 50002), (192, 49981), (207, 49912), (211, 49876), (229, 49789), (244, 49738), (249, 49726), (252, 49723), (260, 49693), (270, 49621), (271, 49612), (311, 49489), (312, 49483), (370, 49309), (377, 49264), (383, 49234), (431, 48982),

Gene: Gisselle_25 Start: 20615, Stop: 22009, Start Num: 83

Candidate Starts for Gisselle_25:

(Start: 83 @20615 has 69 MA's), (98, 20672), (127, 20777), (128, 20780), (155, 20864), (172, 20897), (189, 20951), (190, 20954), (207, 21044), (211, 21080), (216, 21101), (219, 21134), (228, 21155), (267, 21287), (270, 21314), (281, 21353), (287, 21380), (296, 21413), (299, 21428), (302, 21437), (312, 21482), (323, 21518), (344, 21599), (349, 21623), (355, 21641), (359, 21653), (370, 21713), (372, 21737), (373, 21743), (374, 21746), (379, 21764), (380, 21767), (384, 21791), (385, 21800),

(402, 21887), (415, 21938), (424, 21977),

Gene: Glenn_29 Start: 22157, Stop: 23557, Start Num: 83

Candidate Starts for Glenn_29:

(Start: 83 @22157 has 69 MA's), (98, 22220), (127, 22325), (128, 22328), (155, 22412), (172, 22445), (188, 22496), (190, 22502), (204, 22583), (205, 22586), (207, 22592), (211, 22628), (215, 22646), (216, 22649), (219, 22682), (228, 22703), (230, 22721), (242, 22754), (267, 22835), (270, 22862), (279, 22892), (281, 22901), (287, 22928), (296, 22961), (299, 22976), (312, 23030), (319, 23051), (322, 23063), (326, 23075), (375, 23297), (378, 23306), (379, 23312), (385, 23348), (400, 23408), (402, 23435), (424, 23525),

Gene: Gmala1_55 Start: 48612, Stop: 47071, Start Num: 73

Candidate Starts for Gmala1_55:

(73, 48612), (98, 48507), (102, 48480), (117, 48426), (122, 48408), (137, 48348), (138, 48339), (159, 48288), (168, 48264), (171, 48252), (175, 48246), (185, 48201), (188, 48186), (192, 48165), (193, 48162), (210, 48063), (215, 48036), (233, 47952), (240, 47928), (249, 47904), (260, 47871), (271, 47790), (290, 47742), (294, 47727), (318, 47634), (326, 47607), (327, 47604), (348, 47520), (358, 47484), (361, 47469), (369, 47424), (382, 47352), (383, 47346), (408, 47205), (431, 47106), (432, 47103),

Gene: GodonK_184 Start: 93693, Stop: 91774, Start Num: 9

Candidate Starts for GodonK_184:

(Start: 9 @93693 has 7 MA's), (13, 93651), (28, 93537), (42, 93462), (64, 93393), (85, 93324), (149, 93051), (154, 93033), (160, 93009), (174, 92970), (210, 92790), (226, 92706), (230, 92682), (248, 92622), (253, 92610), (260, 92583), (269, 92514), (270, 92511), (324, 92295), (329, 92277), (331, 92271), (343, 92205), (352, 92166), (357, 92154), (363, 92127), (376, 92046), (383, 92013), (388, 91992), (397, 91959), (402, 91908), (406, 91890),

Gene: Goodman_34 Start: 23371, Stop: 24798, Start Num: 88

Candidate Starts for Goodman_34:

(Start: 88 @23371 has 11 MA's), (148, 23587), (182, 23689), (189, 23728), (200, 23791), (208, 23836), (211, 23857), (232, 23956), (275, 24124), (287, 24172), (293, 24193), (299, 24220), (306, 24247), (312, 24277), (315, 24283), (325, 24319), (345, 24397), (364, 24481), (369, 24499), (370, 24502), (385, 24589), (390, 24601), (399, 24640), (402, 24676), (404, 24682), (417, 24733), (420, 24757),

Gene: GordDuk1_59 Start: 49176, Stop: 47635, Start Num: 73

Candidate Starts for GordDuk1_59:

(73, 49176), (98, 49071), (102, 49044), (117, 48990), (122, 48972), (137, 48912), (138, 48903), (159, 48852), (168, 48828), (171, 48816), (175, 48810), (185, 48765), (188, 48750), (192, 48729), (193, 48726), (210, 48627), (215, 48600), (233, 48516), (240, 48492), (249, 48468), (260, 48435), (261, 48426), (268, 48378), (271, 48354), (290, 48306), (318, 48198), (326, 48171), (348, 48084), (358, 48048), (361, 48033), (369, 47988), (382, 47916), (383, 47910), (431, 47670), (432, 47667),

Gene: GordTnk2_60 Start: 49330, Stop: 47789, Start Num: 73

Candidate Starts for GordTnk2_60:

(73, 49330), (98, 49225), (102, 49198), (117, 49144), (122, 49126), (137, 49066), (138, 49057), (159, 49006), (168, 48982), (171, 48970), (175, 48964), (185, 48919), (188, 48904), (192, 48883), (193, 48880), (210, 48781), (215, 48754), (233, 48670), (240, 48646), (249, 48622), (260, 48589), (271, 48508), (290, 48460), (318, 48352), (326, 48325), (327, 48322), (348, 48238), (358, 48202), (361, 48187), (369, 48142), (382, 48070), (383, 48064), (408, 47923), (431, 47824), (432, 47821),

Gene: Gorko_58 Start: 51458, Stop: 49926, Start Num: 63

Candidate Starts for Gorko_58:

(16, 51713), (21, 51662), (26, 51611), (37, 51557), (43, 51527), (Start: 53 @51494 has 1 MA's), (56, 51485), (Start: 63 @51458 has 23 MA's), (102, 51290), (112, 51248), (122, 51200), (126, 51188), (130, 51176), (131, 51170), (134, 51149), (147, 51122), (189, 50981), (207, 50894), (208, 50879), (210, 50867), (216, 50837), (225, 50786), (232, 50759), (249, 50708), (263, 50648), (264, 50645), (268, 50618), (277, 50576), (291, 50531), (328, 50396), (332, 50381), (336, 50360), (369, 50279), (370, 50276), (380, 50219), (381, 50213), (382, 50207), (383, 50201), (400, 50126), (404, 50087), (406, 50075), (407, 50072), (425, 49979), (428, 49964), (434, 49943),

Gene: GourdThymes_59 Start: 52332, Stop: 50800, Start Num: 63

Candidate Starts for GourdThymes_59:

(16, 52587), (21, 52536), (26, 52485), (37, 52431), (43, 52401), (Start: 53 @52368 has 1 MA's), (56, 52359), (Start: 63 @52332 has 23 MA's), (102, 52164), (112, 52122), (122, 52074), (126, 52062), (130, 52050), (131, 52044), (134, 52023), (147, 51996), (189, 51855), (207, 51768), (208, 51753), (210, 51741), (216, 51711), (225, 51660), (232, 51633), (249, 51582), (258, 51558), (261, 51540), (263, 51522), (264, 51519), (268, 51492), (277, 51450), (291, 51405), (328, 51270), (332, 51255), (336, 51234), (364, 51177), (369, 51153), (370, 51150), (380, 51093), (381, 51087), (382, 51081), (383, 51075), (396, 51024), (400, 51000), (404, 50961), (406, 50949), (407, 50946), (425, 50853), (428, 50838), (434, 50817),

Gene: GreenHearts_29 Start: 22236, Stop: 23627, Start Num: 83

Candidate Starts for GreenHearts_29:

(Start: 83 @22236 has 69 MA's), (103, 22323), (127, 22395), (128, 22398), (151, 22464), (155, 22482), (158, 22488), (172, 22515), (190, 22572), (196, 22623), (207, 22662), (211, 22698), (215, 22716), (219, 22752), (228, 22773), (230, 22791), (242, 22824), (259, 22863), (267, 22905), (270, 22932), (276, 22956), (285, 22992), (287, 22998), (296, 23031), (299, 23046), (302, 23055), (312, 23100), (322, 23133), (323, 23136), (345, 23220), (349, 23241), (352, 23253), (355, 23259), (359, 23271), (373, 23361), (374, 23364), (375, 23367), (379, 23382), (380, 23385), (384, 23409), (385, 23418), (402, 23505), (415, 23556), (424, 23595), (430, 23619),

Gene: Greenhouse_29 Start: 22160, Stop: 23551, Start Num: 83

Candidate Starts for Greenhouse_29:

(57, 22058), (69, 22100), (77, 22127), (Start: 83 @22160 has 69 MA's), (103, 22247), (127, 22319), (128, 22322), (151, 22388), (155, 22406), (158, 22412), (172, 22439), (190, 22496), (196, 22547), (199, 22553), (200, 22556), (207, 22586), (211, 22622), (215, 22640), (219, 22676), (228, 22697), (230, 22715), (259, 22787), (267, 22829), (270, 22856), (276, 22880), (285, 22916), (287, 22922), (296, 22955), (299, 22970), (302, 22979), (322, 23057), (323, 23060), (345, 23144), (349, 23165), (352, 23177), (355, 23183), (359, 23195), (373, 23285), (379, 23306), (380, 23309), (384, 23333), (385, 23342), (402, 23429), (415, 23480), (424, 23519), (430, 23543),

Gene: Guillaume_57 Start: 52620, Stop: 51208, Start Num: 95

Candidate Starts for Guillaume_57:

(16, 52968), (Start: 32 @52839 has 1 MA's), (Start: 53 @52749 has 1 MA's), (Start: 95 @52620 has 24 MA's), (102, 52575), (122, 52485), (123, 52482), (125, 52476), (131, 52455), (152, 52392), (185, 52284), (189, 52266), (207, 52179), (208, 52164), (216, 52122), (233, 52041), (249, 51993), (261, 51951), (263, 51933), (264, 51930), (268, 51903), (280, 51852), (291, 51816), (304, 51765), (328, 51681), (333, 51660), (380, 51504), (381, 51498), (383, 51486), (406, 51360), (428, 51246),

Gene: Hail2Pitt_56 Start: 53096, Stop: 51684, Start Num: 95

Candidate Starts for Hail2Pitt_56:

(16, 53444), (Start: 32 @53315 has 1 MA's), (52, 53228), (Start: 53 @53225 has 1 MA's), (Start: 95 @53096 has 24 MA's), (102, 53051), (122, 52961), (123, 52958), (125, 52952), (131, 52931), (152, 52868), (185, 52760), (189, 52742), (207, 52655), (208, 52640), (216, 52598), (233, 52517), (249,

52469), (261, 52427), (263, 52409), (264, 52406), (268, 52379), (280, 52328), (291, 52292), (304, 52241), (328, 52157), (333, 52136), (380, 51980), (381, 51974), (383, 51962), (406, 51836), (428, 51722),

Gene: Harambe_57 Start: 52887, Stop: 51475, Start Num: 95

Candidate Starts for Harambe_57:

(16, 53235), (Start: 32 @53106 has 1 MA's), (52, 53019), (Start: 53 @53016 has 1 MA's), (Start: 95 @52887 has 24 MA's), (102, 52842), (122, 52752), (123, 52749), (125, 52743), (131, 52722), (152, 52659), (185, 52551), (189, 52533), (207, 52446), (208, 52431), (216, 52389), (233, 52308), (249, 52260), (261, 52218), (263, 52200), (264, 52197), (268, 52170), (280, 52119), (291, 52083), (304, 52032), (328, 51948), (333, 51927), (380, 51771), (381, 51765), (383, 51753), (406, 51627), (428, 51513),

Gene: HayZem_63 Start: 52710, Stop: 51079, Start Num: 27

Candidate Starts for HayZem_63:

(Start: 27 @52710 has 2 MA's), (30, 52698), (40, 52647), (41, 52641), (59, 52584), (102, 52443), (112, 52401), (114, 52389), (122, 52353), (123, 52350), (131, 52323), (144, 52287), (147, 52275), (152, 52260), (185, 52152), (207, 52047), (208, 52032), (233, 51909), (249, 51861), (258, 51837), (261, 51819), (268, 51771), (280, 51720), (291, 51684), (296, 51666), (328, 51549), (340, 51498), (364, 51456), (373, 51396), (383, 51354), (396, 51303), (400, 51279), (428, 51117), (434, 51096),

Gene: Hello_57 Start: 52849, Stop: 51437, Start Num: 95

Candidate Starts for Hello_57:

(16, 53197), (Start: 32 @53068 has 1 MA's), (52, 52981), (Start: 53 @52978 has 1 MA's), (Start: 95 @52849 has 24 MA's), (102, 52804), (122, 52714), (123, 52711), (125, 52705), (131, 52684), (152, 52621), (185, 52513), (189, 52495), (207, 52408), (208, 52393), (216, 52351), (233, 52270), (249, 52222), (261, 52180), (263, 52162), (264, 52159), (268, 52132), (280, 52081), (291, 52045), (304, 51994), (328, 51910), (333, 51889), (380, 51733), (381, 51727), (383, 51715), (406, 51589), (428, 51475),

Gene: Henococcus_42 Start: 30892, Stop: 32286, Start Num: 89

Candidate Starts for Henococcus_42:

(Start: 89 @30892 has 12 MA's), (Start: 91 @30895 has 2 MA's), (102, 30970), (109, 30994), (122, 31024), (123, 31027), (127, 31039), (163, 31129), (176, 31153), (188, 31198), (190, 31204), (200, 31264), (204, 31285), (213, 31339), (235, 31438), (243, 31465), (246, 31474), (275, 31600), (287, 31648), (293, 31669), (296, 31681), (299, 31696), (307, 31726), (315, 31759), (317, 31768), (330, 31810), (344, 31876), (345, 31879), (349, 31900), (355, 31918), (360, 31936), (370, 31990), (373, 32020), (385, 32077), (387, 32080), (399, 32128), (406, 32182), (421, 32251), (427, 32269),

Gene: Herb_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for Herb_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Hollow_57 Start: 53503, Stop: 51797, Start Num: 23

Candidate Starts for Hollow_57:

(Start: 23 @53503 has 6 MA's), (Start: 24 @53491 has 2 MA's), (39, 53392), (Start: 45 @53371 has 1 MA's), (68, 53305), (96, 53206), (102, 53170), (107, 53146), (110, 53137), (112, 53128), (122, 53080),

(130, 53056), (144, 53014), (148, 52999), (152, 52984), (171, 52927), (173, 52924), (187, 52864), (188, 52861), (201, 52795), (202, 52792), (208, 52756), (209, 52753), (211, 52735), (213, 52726), (216, 52714), (223, 52666), (233, 52633), (240, 52609), (249, 52585), (258, 52561), (268, 52495), (291, 52396), (327, 52264), (328, 52261), (369, 52144), (370, 52141), (380, 52084), (383, 52066), (404, 51949), (405, 51946), (407, 51934), (428, 51835), (434, 51814),

Gene: Hotorobo_59 Start: 52337, Stop: 50805, Start Num: 63

Candidate Starts for Hotorobo_59:

(16, 52592), (21, 52541), (26, 52490), (37, 52436), (43, 52406), (Start: 53 @52373 has 1 MA's), (56, 52364), (Start: 63 @52337 has 23 MA's), (102, 52169), (112, 52127), (122, 52079), (126, 52067), (130, 52055), (131, 52049), (134, 52028), (147, 52001), (189, 51860), (207, 51773), (208, 51758), (210, 51746), (216, 51716), (225, 51665), (232, 51638), (249, 51587), (263, 51527), (264, 51524), (268, 51497), (277, 51455), (291, 51410), (328, 51275), (332, 51260), (336, 51239), (369, 51158), (370, 51155), (380, 51098), (381, 51092), (382, 51086), (383, 51080), (400, 51005), (404, 50966), (406, 50954), (407, 50951), (425, 50858), (428, 50843), (434, 50822),

Gene: Htur_33 Start: 23426, Stop: 24892, Start Num: 75

Candidate Starts for Htur_33:

(75, 23426), (80, 23447), (Start: 87 @23465 has 2 MA's), (189, 23822), (200, 23885), (208, 23930), (211, 23951), (275, 24218), (287, 24266), (293, 24287), (299, 24314), (306, 24341), (307, 24344), (312, 24371), (315, 24377), (325, 24413), (345, 24491), (349, 24512), (355, 24530), (359, 24542), (373, 24626), (385, 24683), (390, 24695), (399, 24734), (402, 24770), (404, 24776),

Gene: HunterDalle_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for HunterDalle_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (219, 22264), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468), (281, 22483), (287, 22510), (296, 22543), (299, 22558), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Huntingdon_29 Start: 22127, Stop: 23518, Start Num: 83

Candidate Starts for Huntingdon_29:

(Start: 83 @22127 has 69 MA's), (103, 22214), (127, 22286), (128, 22289), (151, 22355), (155, 22373), (158, 22379), (172, 22406), (190, 22463), (204, 22544), (207, 22553), (211, 22589), (215, 22607), (219, 22643), (228, 22664), (230, 22682), (242, 22715), (259, 22754), (267, 22796), (270, 22823), (276, 22847), (285, 22883), (287, 22889), (296, 22922), (299, 22937), (302, 22946), (312, 22991), (322, 23024), (323, 23027), (344, 23108), (352, 23144), (355, 23150), (359, 23162), (373, 23252), (379, 23273), (380, 23276), (384, 23300), (385, 23309), (402, 23396), (415, 23447), (424, 23486), (430, 23510),

Gene: Intolerant_41 Start: 31037, Stop: 32431, Start Num: 89

Candidate Starts for Intolerant_41:

(Start: 89 @31037 has 12 MA's), (Start: 91 @31040 has 2 MA's), (102, 31115), (109, 31139), (122, 31169), (127, 31184), (163, 31274), (179, 31310), (200, 31409), (202, 31418), (214, 31487), (243, 31610), (275, 31745), (282, 31772), (287, 31793), (293, 31814), (307, 31871), (315, 31904), (317, 31913), (330, 31955), (344, 32021), (349, 32045), (355, 32063), (360, 32081), (370, 32135), (373, 32165), (385, 32222), (387, 32225), (399, 32273), (403, 32312), (406, 32327), (421, 32396), (427, 32414), (430, 32423),

Gene: JackieB_42 Start: 30731, Stop: 32125, Start Num: 89

Candidate Starts for JackieB_42:

(Start: 89 @30731 has 12 MA's), (Start: 91 @30734 has 2 MA's), (102, 30809), (109, 30833), (122, 30863), (123, 30866), (127, 30878), (163, 30968), (176, 30992), (188, 31037), (190, 31043), (200, 31103), (204, 31124), (213, 31178), (235, 31277), (243, 31304), (246, 31313), (275, 31439), (287, 31487), (293, 31508), (296, 31520), (299, 31535), (307, 31565), (315, 31598), (317, 31607), (330, 31649), (345, 31718), (349, 31739), (355, 31757), (360, 31775), (370, 31829), (373, 31859), (385, 31916), (387, 31919), (399, 31967), (406, 32021), (421, 32090), (427, 32108),

Gene: Jams_57 Start: 52059, Stop: 50647, Start Num: 95

Candidate Starts for Jams_57:

(16, 52407), (Start: 32 @52278 has 1 MA's), (Start: 53 @52188 has 1 MA's), (Start: 95 @52059 has 24 MA's), (102, 52014), (122, 51924), (123, 51921), (125, 51915), (131, 51894), (152, 51831), (180, 51753), (185, 51723), (189, 51705), (207, 51618), (208, 51603), (216, 51561), (233, 51480), (249, 51432), (261, 51390), (263, 51372), (264, 51369), (268, 51342), (280, 51291), (291, 51255), (304, 51204), (328, 51120), (333, 51099), (380, 50943), (381, 50937), (383, 50925), (406, 50799), (428, 50685),

Gene: Jellybones_61 Start: 53432, Stop: 51900, Start Num: 63

Candidate Starts for Jellybones_61:

(16, 53687), (21, 53636), (Start: 32 @53558 has 1 MA's), (37, 53531), (43, 53501), (Start: 53 @53468 has 1 MA's), (56, 53459), (Start: 63 @53432 has 23 MA's), (96, 53300), (102, 53264), (112, 53222), (116, 53204), (122, 53174), (126, 53162), (131, 53144), (147, 53096), (207, 52868), (208, 52853), (210, 52841), (216, 52811), (225, 52760), (249, 52682), (258, 52658), (261, 52640), (263, 52622), (264, 52619), (266, 52610), (268, 52592), (277, 52550), (291, 52505), (296, 52487), (328, 52370), (332, 52355), (336, 52334), (364, 52277), (369, 52253), (370, 52250), (380, 52193), (381, 52187), (383, 52175), (396, 52124), (400, 52100), (404, 52061), (406, 52049), (407, 52046), (425, 51953), (428, 51938), (434, 51917),

Gene: Jera_34 Start: 22504, Stop: 23931, Start Num: 88

Candidate Starts for Jera_34:

(75, 22462), (Start: 88 @22504 has 11 MA's), (182, 22822), (208, 22969), (211, 22990), (213, 22999), (275, 23257), (287, 23305), (293, 23326), (307, 23383), (315, 23416), (325, 23452), (345, 23530), (349, 23551), (369, 23632), (370, 23635), (385, 23722), (390, 23734), (399, 23773), (402, 23809), (404, 23815), (406, 23827), (420, 23890),

Gene: Joann_29 Start: 22094, Stop: 23485, Start Num: 83

Candidate Starts for Joann_29:

(Start: 83 @22094 has 69 MA's), (103, 22181), (127, 22253), (128, 22256), (151, 22322), (155, 22340), (172, 22373), (190, 22430), (196, 22481), (199, 22487), (200, 22490), (207, 22520), (211, 22556), (215, 22574), (219, 22610), (228, 22631), (230, 22649), (242, 22682), (259, 22721), (267, 22763), (270, 22790), (276, 22814), (285, 22850), (287, 22856), (296, 22889), (299, 22904), (302, 22913), (312, 22958), (319, 22979), (322, 22991), (344, 23075), (349, 23099), (352, 23111), (355, 23117), (359, 23129), (373, 23219), (375, 23225), (379, 23240), (380, 23243), (384, 23267), (385, 23276), (402, 23363), (424, 23453), (430, 23477),

Gene: Johann_34 Start: 23371, Stop: 24798, Start Num: 88

Candidate Starts for Johann_34:

(Start: 88 @23371 has 11 MA's), (148, 23587), (182, 23689), (189, 23728), (200, 23791), (208, 23836), (211, 23857), (232, 23956), (275, 24124), (287, 24172), (293, 24193), (299, 24220), (306, 24247), (312, 24277), (315, 24283), (325, 24319), (345, 24397), (364, 24481), (369, 24499), (370, 24502), (385, 24589), (390, 24601), (399, 24640), (402, 24676), (404, 24682), (417, 24733), (420, 24757),

Gene: John316_62 Start: 53495, Stop: 51963, Start Num: 63

Candidate Starts for John316_62:

(16, 53750), (21, 53699), (26, 53648), (37, 53594), (43, 53564), (Start: 53 @53531 has 1 MA's), (56, 53522), (Start: 63 @53495 has 23 MA's), (102, 53327), (112, 53285), (122, 53237), (126, 53225), (130, 53213), (131, 53207), (134, 53186), (147, 53159), (207, 52931), (208, 52916), (210, 52904), (216, 52874), (225, 52823), (232, 52796), (249, 52745), (261, 52703), (263, 52685), (264, 52682), (268, 52655), (277, 52613), (291, 52568), (328, 52433), (332, 52418), (336, 52397), (369, 52316), (370, 52313), (380, 52256), (381, 52250), (382, 52244), (383, 52238), (400, 52163), (404, 52124), (406, 52112), (407, 52109), (425, 52016), (428, 52001), (434, 51980),

Gene: Jormungandr_57 Start: 52602, Stop: 51190, Start Num: 95

Candidate Starts for Jormungandr_57:

(16, 52950), (Start: 32 @52821 has 1 MA's), (Start: 53 @52731 has 1 MA's), (Start: 95 @52602 has 24 MA's), (102, 52557), (122, 52467), (123, 52464), (125, 52458), (131, 52437), (152, 52374), (185, 52266), (189, 52248), (207, 52161), (208, 52146), (216, 52104), (233, 52023), (249, 51975), (261, 51933), (263, 51915), (264, 51912), (268, 51885), (280, 51834), (291, 51798), (304, 51747), (328, 51663), (333, 51642), (380, 51486), (381, 51480), (383, 51468), (406, 51342), (428, 51228),

Gene: Jumbo_57 Start: 53259, Stop: 51742, Start Num: 78

Candidate Starts for Jumbo_57:

(Start: 78 @53259 has 3 MA's), (98, 53163), (100, 53151), (102, 53136), (137, 53004), (147, 52980), (148, 52977), (157, 52944), (188, 52839), (192, 52818), (206, 52746), (215, 52689), (238, 52587), (249, 52557), (265, 52488), (290, 52395), (294, 52380), (303, 52344), (311, 52311), (320, 52281), (326, 52260), (336, 52218), (339, 52206), (362, 52131), (383, 52014), (391, 51981), (400, 51939), (408, 51873), (431, 51774), (432, 51771),

Gene: Jumboset_29 Start: 22100, Stop: 23500, Start Num: 83

Candidate Starts for Jumboset_29:

(Start: 83 @22100 has 69 MA's), (98, 22163), (127, 22268), (128, 22271), (155, 22355), (172, 22388), (188, 22439), (190, 22445), (204, 22526), (205, 22529), (207, 22535), (211, 22571), (215, 22589), (216, 22592), (228, 22646), (242, 22697), (267, 22778), (270, 22805), (279, 22835), (281, 22844), (287, 22871), (296, 22904), (299, 22919), (312, 22973), (319, 22994), (322, 23006), (326, 23018), (375, 23240), (378, 23249), (379, 23255), (385, 23291), (400, 23351), (402, 23378), (424, 23468),

Gene: Kalizoi_30 Start: 22267, Stop: 23499, Start Num: 127

Candidate Starts for Kalizoi_30:

(Start: 83 @22099 has 69 MA's), (98, 22162), (127, 22267), (128, 22270), (155, 22354), (172, 22387), (188, 22438), (190, 22444), (204, 22525), (205, 22528), (207, 22534), (211, 22570), (215, 22588), (216, 22591), (228, 22645), (242, 22696), (267, 22777), (270, 22804), (279, 22834), (281, 22843), (287, 22870), (296, 22903), (299, 22918), (312, 22972), (319, 22993), (322, 23005), (326, 23017), (375, 23239), (378, 23248), (379, 23254), (385, 23290), (400, 23350), (402, 23377), (424, 23467), (430, 23491), (431, 23494),

Gene: Kampe_58 Start: 50421, Stop: 48931, Start Num: 76

Candidate Starts for Kampe_58:

(Start: 76 @50421 has 5 MA's), (96, 50328), (98, 50319), (100, 50307), (102, 50292), (107, 50274), (123, 50217), (142, 50145), (143, 50142), (170, 50049), (183, 50016), (187, 49983), (188, 49980), (192, 49959), (207, 49890), (211, 49854), (229, 49767), (249, 49704), (252, 49701), (260, 49671), (270, 49599), (271, 49590), (311, 49467), (312, 49461), (362, 49329), (370, 49287), (377, 49242), (383, 49212), (431, 48960),

Gene: Kaseim_57 Start: 52137, Stop: 50632, Start Num: 61

Candidate Starts for Kaseim_57:

(16, 52392), (Start: 32 @52263 has 1 MA's), (Start: 53 @52173 has 1 MA's), (Start: 61 @52137 has 1 MA's), (Start: 95 @52044 has 24 MA's), (102, 51999), (122, 51909), (123, 51906), (125, 51900), (131, 51879), (152, 51816), (185, 51708), (189, 51690), (207, 51603), (208, 51588), (216, 51546), (233, 51465), (249, 51417), (261, 51375), (263, 51357), (264, 51354), (268, 51327), (280, 51276), (291, 51240), (304, 51189), (328, 51105), (333, 51084), (380, 50928), (381, 50922), (383, 50910), (406, 50784), (428, 50670),

Gene: Katyusha_57 Start: 53319, Stop: 51616, Start Num: 23

Candidate Starts for Katyusha_57:

(Start: 23 @53319 has 6 MA's), (Start: 24 @53307 has 2 MA's), (68, 53124), (Start: 95 @53034 has 24 MA's), (96, 53025), (102, 52989), (107, 52965), (110, 52956), (112, 52947), (122, 52899), (130, 52875), (152, 52803), (153, 52800), (159, 52782), (173, 52743), (201, 52614), (208, 52575), (209, 52572), (211, 52554), (213, 52545), (216, 52533), (223, 52485), (233, 52452), (249, 52404), (258, 52380), (268, 52314), (291, 52215), (317, 52116), (320, 52107), (327, 52083), (328, 52080), (364, 51987), (369, 51963), (370, 51960), (380, 51903), (383, 51885), (404, 51768), (405, 51765), (407, 51753), (428, 51654), (434, 51633),

Gene: KingBob_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for KingBob_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Kittykat_25 Start: 20600, Stop: 21994, Start Num: 83

Candidate Starts for Kittykat_25:

(Start: 83 @20600 has 69 MA's), (98, 20657), (127, 20762), (128, 20765), (155, 20849), (172, 20882), (189, 20936), (190, 20939), (207, 21029), (211, 21065), (216, 21086), (219, 21119), (228, 21140), (267, 21272), (270, 21299), (281, 21338), (287, 21365), (296, 21398), (299, 21413), (302, 21422), (312, 21467), (323, 21503), (344, 21584), (349, 21608), (355, 21626), (359, 21638), (370, 21698), (372, 21722), (373, 21728), (374, 21731), (379, 21749), (380, 21752), (384, 21776), (385, 21785), (402, 21872), (415, 21923), (424, 21962),

Gene: Korra_30 Start: 22105, Stop: 23505, Start Num: 83

Candidate Starts for Korra_30:

(Start: 83 @22105 has 69 MA's), (98, 22168), (127, 22273), (128, 22276), (155, 22360), (172, 22393), (188, 22444), (190, 22450), (204, 22531), (205, 22534), (207, 22540), (211, 22576), (215, 22594), (216, 22597), (219, 22630), (228, 22651), (242, 22702), (267, 22783), (270, 22810), (279, 22840), (281, 22849), (287, 22876), (296, 22909), (299, 22924), (312, 22978), (319, 22999), (322, 23011), (326, 23023), (355, 23137), (375, 23245), (378, 23254), (379, 23260), (385, 23296), (400, 23356), (402, 23383), (424, 23473),

Gene: Kvothe_56 Start: 53206, Stop: 51515, Start Num: 24

Candidate Starts for Kvothe_56:

(Start: 23 @53218 has 6 MA's), (Start: 24 @53206 has 2 MA's), (68, 53023), (Start: 95 @52933 has 24 MA's), (96, 52924), (102, 52888), (107, 52864), (110, 52855), (112, 52846), (122, 52798), (130, 52774), (152, 52702), (159, 52681), (171, 52645), (173, 52642), (201, 52513), (202, 52510), (208, 52474), (209, 52471), (211, 52453), (213, 52444), (216, 52432), (223, 52384), (233, 52351), (249, 52303), (258, 52279), (268, 52213), (291, 52114), (317, 52015), (320, 52006), (327, 51982), (328, 51979), (364, 51886), (369, 51862), (370, 51859), (380, 51802), (383, 51784), (404, 51667), (405,

51664), (407, 51652), (428, 51553), (434, 51532),

Gene: Lahirium_57 Start: 53124, Stop: 51712, Start Num: 95

Candidate Starts for Lahirium_57:

(16, 53472), (Start: 32 @53343 has 1 MA's), (Start: 53 @53253 has 1 MA's), (Start: 95 @53124 has 24 MA's), (102, 53079), (122, 52989), (123, 52986), (125, 52980), (131, 52959), (152, 52896), (185, 52788), (189, 52770), (207, 52683), (208, 52668), (216, 52626), (233, 52545), (249, 52497), (261, 52455), (263, 52437), (264, 52434), (268, 52407), (280, 52356), (291, 52320), (304, 52269), (328, 52185), (333, 52164), (380, 52008), (381, 52002), (383, 51990), (406, 51864), (428, 51750),

Gene: Lakshmi_29 Start: 22120, Stop: 23511, Start Num: 83

Candidate Starts for Lakshmi_29:

(Start: 83 @22120 has 69 MA's), (103, 22207), (127, 22279), (128, 22282), (150, 22345), (151, 22348), (155, 22366), (158, 22372), (172, 22399), (190, 22456), (196, 22507), (199, 22513), (200, 22516), (207, 22546), (211, 22582), (215, 22600), (219, 22636), (228, 22657), (230, 22675), (242, 22708), (259, 22747), (267, 22789), (270, 22816), (276, 22840), (285, 22876), (287, 22882), (296, 22915), (299, 22930), (302, 22939), (312, 22984), (322, 23017), (323, 23020), (345, 23104), (349, 23125), (352, 23137), (359, 23155), (373, 23245), (379, 23266), (380, 23269), (384, 23293), (385, 23302), (402, 23389), (415, 23440), (424, 23479), (430, 23503),

Gene: LazerLemon_42 Start: 31529, Stop: 32923, Start Num: 89

Candidate Starts for LazerLemon_42:

(60, 31445), (Start: 89 @31529 has 12 MA's), (Start: 95 @31562 has 24 MA's), (102, 31607), (109, 31631), (122, 31661), (123, 31664), (127, 31676), (163, 31766), (176, 31790), (200, 31901), (213, 31976), (219, 32021), (234, 32072), (235, 32075), (241, 32096), (275, 32237), (282, 32264), (287, 32285), (293, 32306), (307, 32363), (312, 32390), (315, 32396), (317, 32405), (330, 32447), (344, 32513), (345, 32516), (349, 32537), (355, 32555), (360, 32573), (370, 32627), (385, 32714), (387, 32717), (399, 32765), (403, 32804), (406, 32819), (421, 32888), (427, 32906), (430, 32915),

Gene: Lidong_57 Start: 52859, Stop: 51447, Start Num: 95

Candidate Starts for Lidong_57:

(16, 53207), (Start: 32 @53078 has 1 MA's), (Start: 53 @52988 has 1 MA's), (Start: 95 @52859 has 24 MA's), (102, 52814), (122, 52724), (123, 52721), (125, 52715), (131, 52694), (152, 52631), (180, 52553), (185, 52523), (189, 52505), (207, 52418), (208, 52403), (216, 52361), (233, 52280), (249, 52232), (261, 52190), (263, 52172), (264, 52169), (268, 52142), (280, 52091), (291, 52055), (304, 52004), (328, 51920), (333, 51899), (380, 51743), (381, 51737), (383, 51725), (406, 51599), (428, 51485),

Gene: LilStuart_25 Start: 20568, Stop: 21962, Start Num: 83

Candidate Starts for LilStuart_25:

(Start: 83 @20568 has 69 MA's), (98, 20625), (127, 20730), (128, 20733), (155, 20817), (172, 20850), (188, 20901), (190, 20907), (204, 20988), (205, 20991), (207, 20997), (211, 21033), (215, 21051), (216, 21054), (219, 21087), (228, 21108), (267, 21240), (270, 21267), (281, 21306), (285, 21327), (287, 21333), (296, 21366), (299, 21381), (302, 21390), (312, 21435), (323, 21471), (335, 21513), (349, 21576), (355, 21594), (373, 21696), (374, 21699), (379, 21717), (380, 21720), (384, 21744), (385, 21753), (402, 21840), (424, 21930), (430, 21954), (431, 21957),

Gene: Linetti_59 Start: 53022, Stop: 51613, Start Num: 95

Candidate Starts for Linetti_59:

(16, 53400), (21, 53349), (26, 53298), (37, 53244), (43, 53214), (Start: 53 @53181 has 1 MA's), (56, 53172), (Start: 63 @53145 has 23 MA's), (Start: 95 @53022 has 24 MA's), (102, 52977), (112, 52935), (122, 52887), (123, 52884), (125, 52878), (126, 52875), (130, 52863), (131, 52857), (144, 52821), (147, 52809), (148, 52806), (185, 52686), (189, 52668), (201, 52605), (207, 52581), (208, 52566),

(216, 52524), (232, 52446), (249, 52395), (263, 52335), (264, 52332), (266, 52323), (268, 52305), (277, 52263), (291, 52218), (328, 52083), (332, 52068), (336, 52047), (369, 51966), (370, 51963), (380, 51906), (381, 51900), (383, 51888), (396, 51837), (399, 51822), (400, 51813), (404, 51774), (406, 51762), (425, 51666), (428, 51651),

Gene: Litotes_29 Start: 22115, Stop: 23509, Start Num: 83

Candidate Starts for Litotes_29:

(Start: 83 @22115 has 69 MA's), (98, 22172), (127, 22277), (155, 22364), (189, 22451), (190, 22454), (207, 22544), (211, 22580), (213, 22589), (215, 22598), (228, 22655), (230, 22673), (242, 22706), (251, 22718), (267, 22787), (270, 22814), (276, 22838), (287, 22880), (296, 22913), (299, 22928), (302, 22937), (326, 23027), (343, 23096), (349, 23123), (355, 23141), (359, 23153), (373, 23243), (375, 23249), (378, 23258), (379, 23264), (385, 23300), (402, 23387), (415, 23438), (417, 23444), (424, 23477), (430, 23501),

Gene: Lizzo_59 Start: 52326, Stop: 50794, Start Num: 63

Candidate Starts for Lizzo_59:

(16, 52581), (21, 52530), (26, 52479), (37, 52425), (43, 52395), (Start: 53 @52362 has 1 MA's), (56, 52353), (Start: 63 @52326 has 23 MA's), (102, 52158), (112, 52116), (122, 52068), (126, 52056), (130, 52044), (131, 52038), (134, 52017), (147, 51990), (189, 51849), (207, 51762), (208, 51747), (210, 51735), (216, 51705), (225, 51654), (232, 51627), (249, 51576), (258, 51552), (261, 51534), (263, 51516), (264, 51513), (268, 51486), (277, 51444), (291, 51399), (328, 51264), (332, 51249), (336, 51228), (364, 51171), (369, 51147), (380, 51087), (381, 51081), (382, 51075), (383, 51069), (396, 51018), (400, 50994), (404, 50955), (406, 50943), (407, 50940), (425, 50847), (428, 50832), (434, 50811),

Gene: Lucy_25 Start: 20556, Stop: 21950, Start Num: 83

Candidate Starts for Lucy_25:

(Start: 83 @20556 has 69 MA's), (98, 20613), (127, 20718), (128, 20721), (155, 20805), (172, 20838), (190, 20895), (204, 20976), (205, 20979), (207, 20985), (211, 21021), (215, 21039), (216, 21042), (219, 21075), (228, 21096), (242, 21147), (267, 21228), (270, 21255), (281, 21294), (285, 21315), (287, 21321), (296, 21354), (299, 21369), (307, 21396), (312, 21423), (323, 21459), (349, 21564), (355, 21582), (373, 21684), (374, 21687), (379, 21705), (380, 21708), (384, 21732), (385, 21741), (402, 21828), (415, 21879), (416, 21882), (424, 21918), (430, 21942),

Gene: Luker_58 Start: 53170, Stop: 51665, Start Num: 61

Candidate Starts for Luker_58:

(16, 53425), (Start: 32 @53296 has 1 MA's), (Start: 53 @53206 has 1 MA's), (Start: 61 @53170 has 1 MA's), (Start: 95 @53077 has 24 MA's), (102, 53032), (122, 52942), (123, 52939), (125, 52933), (131, 52912), (152, 52849), (185, 52741), (189, 52723), (207, 52636), (208, 52621), (216, 52579), (233, 52498), (249, 52450), (261, 52408), (263, 52390), (264, 52387), (268, 52360), (280, 52309), (291, 52273), (304, 52222), (328, 52138), (333, 52117), (380, 51961), (381, 51955), (383, 51943), (406, 51817), (428, 51703),

Gene: Magritte_46 Start: 45422, Stop: 47152, Start Num: 32

Candidate Starts for Magritte_46:

(Start: 32 @45422 has 1 MA's), (34, 45440), (84, 45632), (102, 45725), (112, 45767), (120, 45797), (126, 45827), (130, 45839), (139, 45893), (140, 45896), (169, 45992), (177, 46013), (186, 46055), (194, 46097), (207, 46160), (217, 46226), (220, 46256), (235, 46313), (283, 46502), (292, 46535), (310, 46631), (311, 46637), (317, 46658), (342, 46763), (344, 46769), (371, 46904), (379, 46937), (391, 46994), (401, 47063),

Gene: Makoto_25 Start: 20576, Stop: 21970, Start Num: 83

Candidate Starts for Makoto_25:

(Start: 83 @20576 has 69 MA's), (98, 20633), (127, 20738), (155, 20825), (172, 20858), (190, 20915), (196, 20966), (204, 20996), (205, 20999), (207, 21005), (211, 21041), (215, 21059), (216, 21062), (219, 21095), (228, 21116), (267, 21248), (270, 21275), (281, 21314), (285, 21335), (287, 21341), (296, 21374), (299, 21389), (302, 21398), (312, 21443), (323, 21479), (335, 21521), (349, 21584), (355, 21602), (373, 21704), (374, 21707), (379, 21725), (380, 21728), (384, 21752), (385, 21761), (402, 21848), (424, 21938), (430, 21962),

Gene: MamaPearl_26 Start: 21743, Stop: 23140, Start Num: 83

Candidate Starts for MamaPearl_26:

(Start: 83 @21743 has 69 MA's), (98, 21803), (127, 21908), (128, 21911), (155, 21995), (172, 22028), (188, 22079), (190, 22085), (204, 22166), (207, 22175), (211, 22211), (215, 22229), (216, 22232), (219, 22265), (228, 22286), (267, 22418), (279, 22475), (281, 22484), (285, 22505), (287, 22511), (296, 22544), (299, 22559), (315, 22619), (323, 22649), (344, 22730), (355, 22772), (363, 22805), (372, 22868), (374, 22877), (378, 22889), (379, 22895), (382, 22910), (384, 22922), (385, 22931), (402, 23018), (417, 23075), (424, 23108),

Gene: Mareelih_167 Start: 96276, Stop: 94366, Start Num: 7

Candidate Starts for Mareelih_167:

(Start: 7 @96276 has 5 MA's), (36, 96072), (47, 96024), (62, 95979), (85, 95898), (90, 95886), (108, 95781), (114, 95754), (142, 95649), (149, 95625), (193, 95460), (250, 95193), (253, 95184), (260, 95157), (269, 95088), (336, 94839), (349, 94773), (357, 94749), (382, 94614), (397, 94554), (406, 94482),

Gene: Maria1952_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for Maria1952_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Marky_44 Start: 31624, Stop: 33015, Start Num: 91

Candidate Starts for Marky_44:

(81, 31615), (Start: 91 @31624 has 2 MA's), (92, 31630), (102, 31699), (109, 31723), (127, 31768), (165, 31861), (188, 31927), (208, 32038), (213, 32068), (214, 32071), (243, 32194), (275, 32329), (282, 32356), (287, 32377), (293, 32398), (296, 32410), (330, 32539), (345, 32608), (349, 32629), (355, 32647), (360, 32665), (370, 32719), (373, 32749), (385, 32806), (387, 32809), (399, 32857), (411, 32926), (421, 32980), (427, 32998),

Gene: Mbo2_52 Start: 42925, Stop: 41438, Start Num: 78

Candidate Starts for Mbo2_52:

(50, 43012), (Start: 78 @42925 has 3 MA's), (96, 42838), (102, 42802), (107, 42784), (112, 42769), (115, 42754), (118, 42742), (122, 42730), (124, 42724), (133, 42682), (180, 42559), (202, 42445), (215, 42370), (225, 42316), (247, 42241), (249, 42238), (258, 42214), (264, 42175), (269, 42136), (282, 42094), (333, 41911), (356, 41851), (361, 41833), (369, 41788), (370, 41785), (377, 41737), (379, 41728), (383, 41707), (386, 41689), (393, 41665), (399, 41641), (404, 41599), (408, 41572), (409, 41560), (417, 41530), (418, 41515), (431, 41473),

Gene: MeganNoll_29 Start: 22157, Stop: 23557, Start Num: 83

Candidate Starts for MeganNoll_29:

(Start: 83 @22157 has 69 MA's), (98, 22220), (127, 22325), (128, 22328), (155, 22412), (172, 22445), (188, 22496), (190, 22502), (204, 22583), (205, 22586), (207, 22592), (211, 22628), (215, 22646), (216, 22649), (228, 22703), (242, 22754), (267, 22835), (270, 22862), (279, 22892), (281, 22901), (287, 22928), (296, 22961), (299, 22976), (312, 23030), (319, 23051), (322, 23063), (326, 23075), (375, 23297), (378, 23306), (379, 23312), (385, 23348), (400, 23408), (402, 23435), (424, 23525),

Gene: Microdon_41 Start: 30843, Stop: 32237, Start Num: 89

Candidate Starts for Microdon_41:

(Start: 89 @30843 has 12 MA's), (Start: 91 @30846 has 2 MA's), (102, 30921), (109, 30945), (111, 30951), (122, 30975), (127, 30990), (128, 30993), (153, 31065), (163, 31080), (179, 31116), (200, 31215), (243, 31416), (275, 31551), (282, 31578), (287, 31599), (307, 31677), (315, 31710), (317, 31719), (330, 31761), (344, 31827), (345, 31830), (349, 31851), (355, 31869), (360, 31887), (370, 31941), (373, 31971), (385, 32028), (387, 32031), (399, 32079), (403, 32118), (406, 32133), (421, 32202), (427, 32220), (430, 32229),

Gene: Milani_33 Start: 22173, Stop: 23600, Start Num: 88

Candidate Starts for Milani_33:

(Start: 88 @22173 has 11 MA's), (188, 22527), (189, 22530), (193, 22551), (208, 22638), (287, 22974), (293, 22995), (299, 23022), (306, 23049), (307, 23052), (315, 23085), (325, 23121), (344, 23196), (349, 23220), (364, 23283), (370, 23304), (380, 23358), (385, 23391), (390, 23403), (399, 23442), (402, 23478), (404, 23484), (406, 23496), (411, 23511), (420, 23559), (424, 23568), (430, 23592),

Gene: Mimi_107 Start: 80085, Stop: 81923, Start Num: 8

Candidate Starts for Mimi_107:

(Start: 8 @80085 has 1 MA's), (17, 80166), (28, 80244), (49, 80340), (82, 80400), (93, 80430), (114, 80550), (127, 80601), (144, 80661), (218, 81000), (232, 81057), (236, 81078), (253, 81123), (264, 81180), (265, 81186), (269, 81219), (271, 81231), (275, 81243), (289, 81288), (297, 81327), (319, 81384), (329, 81390), (336, 81423), (351, 81492), (370, 81576), (394, 81693), (423, 81867), (433, 81909),

Gene: Minos_58 Start: 52601, Stop: 51189, Start Num: 95

Candidate Starts for Minos_58:

(16, 52949), (Start: 32 @52820 has 1 MA's), (52, 52733), (Start: 53 @52730 has 1 MA's), (Start: 95 @52601 has 24 MA's), (102, 52556), (122, 52466), (123, 52463), (125, 52457), (131, 52436), (152, 52373), (185, 52265), (189, 52247), (207, 52160), (208, 52145), (216, 52103), (233, 52022), (249, 51974), (261, 51932), (263, 51914), (264, 51911), (268, 51884), (280, 51833), (291, 51797), (304, 51746), (328, 51662), (333, 51641), (380, 51485), (381, 51479), (383, 51467), (406, 51341), (428, 51227),

Gene: Misaeng_29 Start: 22230, Stop: 23621, Start Num: 83

Candidate Starts for Misaeng_29:

(Start: 83 @22230 has 69 MA's), (103, 22317), (127, 22389), (128, 22392), (151, 22458), (155, 22476), (172, 22509), (190, 22566), (204, 22647), (207, 22656), (211, 22692), (215, 22710), (219, 22746), (228, 22767), (230, 22785), (242, 22818), (267, 22899), (270, 22926), (276, 22950), (285, 22986), (287, 22992), (296, 23025), (299, 23040), (302, 23049), (312, 23094), (322, 23127), (323, 23130), (345, 23214), (352, 23247), (355, 23253), (359, 23265), (373, 23355), (375, 23361), (379, 23376), (380, 23379), (382, 23391), (384, 23403), (385, 23412), (402, 23499), (424, 23589),

Gene: Moki_25 Start: 20566, Stop: 21960, Start Num: 83

Candidate Starts for Moki_25:

(Start: 83 @20566 has 69 MA's), (98, 20623), (127, 20728), (155, 20815), (172, 20848), (189, 20902), (190, 20905), (207, 20995), (211, 21031), (215, 21049), (216, 21052), (228, 21106), (267, 21238),

(270, 21265), (279, 21295), (281, 21304), (287, 21331), (296, 21364), (299, 21379), (307, 21406), (312, 21433), (323, 21469), (335, 21511), (349, 21574), (355, 21592), (370, 21664), (372, 21688), (373, 21694), (374, 21697), (379, 21715), (380, 21718), (384, 21742), (385, 21751), (402, 21838), (415, 21889), (424, 21928),

Gene: Monty_58 Start: 51476, Stop: 49944, Start Num: 63

Candidate Starts for Monty_58:

(16, 51731), (21, 51680), (26, 51629), (37, 51575), (43, 51545), (Start: 53 @51512 has 1 MA's), (56, 51503), (Start: 63 @51476 has 23 MA's), (102, 51308), (112, 51266), (122, 51218), (126, 51206), (130, 51194), (131, 51188), (134, 51167), (147, 51140), (189, 50999), (207, 50912), (208, 50897), (210, 50885), (216, 50855), (225, 50804), (232, 50777), (249, 50726), (263, 50666), (264, 50663), (268, 50636), (277, 50594), (291, 50549), (328, 50414), (332, 50399), (336, 50378), (369, 50297), (370, 50294), (380, 50237), (381, 50231), (382, 50225), (383, 50219), (400, 50144), (404, 50105), (406, 50093), (407, 50090), (425, 49997), (428, 49982), (434, 49961),

Gene: MrWormie_57 Start: 51762, Stop: 50350, Start Num: 95

Candidate Starts for MrWormie_57:

(16, 52110), (Start: 32 @51981 has 1 MA's), (Start: 53 @51891 has 1 MA's), (Start: 95 @51762 has 24 MA's), (102, 51717), (122, 51627), (123, 51624), (125, 51618), (131, 51597), (152, 51534), (185, 51426), (189, 51408), (207, 51321), (208, 51306), (216, 51264), (233, 51183), (249, 51135), (261, 51093), (263, 51075), (264, 51072), (268, 51045), (280, 50994), (291, 50958), (304, 50907), (328, 50823), (333, 50802), (380, 50646), (381, 50640), (383, 50628), (406, 50502), (428, 50388),

Gene: Msay19_64 Start: 54046, Stop: 52514, Start Num: 63

Candidate Starts for Msay19_64:

(16, 54301), (21, 54250), (37, 54145), (43, 54115), (Start: 53 @54082 has 1 MA's), (56, 54073), (Start: 63 @54046 has 23 MA's), (102, 53878), (112, 53836), (116, 53818), (122, 53788), (126, 53776), (130, 53764), (131, 53758), (134, 53737), (189, 53569), (207, 53482), (208, 53467), (210, 53455), (216, 53425), (225, 53374), (249, 53296), (258, 53272), (261, 53254), (263, 53236), (264, 53233), (266, 53224), (268, 53206), (277, 53164), (291, 53119), (296, 53101), (328, 52984), (332, 52969), (336, 52948), (369, 52867), (370, 52864), (380, 52807), (381, 52801), (383, 52789), (400, 52714), (404, 52675), (406, 52663), (407, 52660), (425, 52567), (428, 52552),

Gene: Nancia_25 Start: 20580, Stop: 21974, Start Num: 83

Candidate Starts for Nancia_25:

(Start: 83 @20580 has 69 MA's), (98, 20637), (127, 20742), (128, 20745), (155, 20829), (172, 20862), (188, 20913), (190, 20919), (204, 21000), (205, 21003), (207, 21009), (211, 21045), (215, 21063), (216, 21066), (219, 21099), (228, 21120), (267, 21252), (270, 21279), (281, 21318), (285, 21339), (287, 21345), (296, 21378), (299, 21393), (302, 21402), (312, 21447), (323, 21483), (335, 21525), (349, 21588), (355, 21606), (373, 21708), (374, 21711), (379, 21729), (380, 21732), (384, 21756), (385, 21765), (402, 21852), (424, 21942), (430, 21966),

Gene: Neoevie_57 Start: 52863, Stop: 51451, Start Num: 95

Candidate Starts for Neoevie_57:

(16, 53211), (Start: 32 @53082 has 1 MA's), (52, 52995), (Start: 53 @52992 has 1 MA's), (Start: 95 @52863 has 24 MA's), (102, 52818), (122, 52728), (123, 52725), (125, 52719), (131, 52698), (152, 52635), (185, 52527), (189, 52509), (207, 52422), (208, 52407), (216, 52365), (233, 52284), (249, 52236), (261, 52194), (263, 52176), (264, 52173), (268, 52146), (280, 52095), (291, 52059), (304, 52008), (328, 51924), (333, 51903), (380, 51747), (381, 51741), (383, 51729), (406, 51603), (428, 51489),

Gene: Newt_58 Start: 53091, Stop: 51679, Start Num: 95

Candidate Starts for Newt_58:

(16, 53439), (Start: 32 @53310 has 1 MA's), (52, 53223), (Start: 53 @53220 has 1 MA's), (Start: 95 @53091 has 24 MA's), (102, 53046), (122, 52956), (123, 52953), (125, 52947), (131, 52926), (152, 52863), (185, 52755), (189, 52737), (207, 52650), (208, 52635), (216, 52593), (233, 52512), (249, 52464), (261, 52422), (263, 52404), (264, 52401), (268, 52374), (280, 52323), (291, 52287), (304, 52236), (328, 52152), (333, 52131), (380, 51975), (381, 51969), (383, 51957), (406, 51831), (428, 51717),

Gene: Niagara_57 Start: 53309, Stop: 51606, Start Num: 23

Candidate Starts for Niagara_57:

(Start: 23 @53309 has 6 MA's), (Start: 24 @53297 has 2 MA's), (68, 53114), (Start: 95 @53024 has 24 MA's), (96, 53015), (102, 52979), (107, 52955), (110, 52946), (112, 52937), (122, 52889), (130, 52865), (152, 52793), (159, 52772), (171, 52736), (173, 52733), (201, 52604), (202, 52601), (208, 52565), (209, 52562), (211, 52544), (213, 52535), (216, 52523), (223, 52475), (233, 52442), (249, 52394), (258, 52370), (268, 52304), (291, 52205), (317, 52106), (320, 52097), (327, 52073), (328, 52070), (364, 51977), (369, 51953), (370, 51950), (380, 51893), (383, 51875), (404, 51758), (405, 51755), (407, 51743), (428, 51644), (434, 51623),

Gene: Nimi13_57 Start: 52610, Stop: 51198, Start Num: 95

Candidate Starts for Nimi13_57:

(16, 52958), (Start: 32 @52829 has 1 MA's), (Start: 53 @52739 has 1 MA's), (Start: 95 @52610 has 24 MA's), (102, 52565), (122, 52475), (123, 52472), (125, 52466), (131, 52445), (152, 52382), (185, 52274), (189, 52256), (207, 52169), (208, 52154), (216, 52112), (233, 52031), (249, 51983), (261, 51941), (263, 51923), (264, 51920), (268, 51893), (280, 51842), (291, 51806), (304, 51755), (328, 51671), (333, 51650), (380, 51494), (381, 51488), (383, 51476), (406, 51350), (428, 51236),

Gene: Nubia_29 Start: 22080, Stop: 23471, Start Num: 83

Candidate Starts for Nubia_29:

(Start: 83 @22080 has 69 MA's), (103, 22167), (127, 22239), (128, 22242), (151, 22308), (155, 22326), (158, 22332), (172, 22359), (190, 22416), (196, 22467), (207, 22506), (211, 22542), (215, 22560), (219, 22596), (228, 22617), (230, 22635), (242, 22668), (259, 22707), (267, 22749), (270, 22776), (276, 22800), (285, 22836), (287, 22842), (296, 22875), (299, 22890), (302, 22899), (312, 22944), (322, 22977), (323, 22980), (349, 23085), (352, 23097), (359, 23115), (373, 23205), (379, 23226), (380, 23229), (384, 23253), (385, 23262), (402, 23349), (415, 23400), (424, 23439), (430, 23463),

Gene: OMalley_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for OMalley_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468), (281, 22483), (287, 22510), (296, 22543), (299, 22558), (335, 22690), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Orchid_57 Start: 50422, Stop: 48932, Start Num: 76

Candidate Starts for Orchid_57:

(Start: 76 @50422 has 5 MA's), (96, 50329), (98, 50320), (100, 50308), (102, 50293), (107, 50275), (123, 50218), (142, 50146), (143, 50143), (170, 50050), (183, 50017), (187, 49984), (188, 49981), (192, 49960), (207, 49891), (211, 49855), (229, 49768), (249, 49705), (252, 49702), (260, 49672), (270, 49600), (271, 49591), (311, 49468), (312, 49462), (362, 49330), (370, 49288), (377, 49243), (383, 49213), (431, 48961),

Gene: Oxyfrius_29 Start: 22093, Stop: 23484, Start Num: 83

Candidate Starts for Oxynfrius_29:

(Start: 83 @22093 has 69 MA's), (103, 22180), (127, 22252), (128, 22255), (151, 22321), (155, 22339), (158, 22345), (172, 22372), (190, 22429), (196, 22480), (207, 22519), (211, 22555), (215, 22573), (219, 22609), (228, 22630), (230, 22648), (242, 22681), (259, 22720), (267, 22762), (270, 22789), (276, 22813), (285, 22849), (287, 22855), (296, 22888), (299, 22903), (302, 22912), (312, 22957), (322, 22990), (323, 22993), (349, 23098), (352, 23110), (359, 23128), (373, 23218), (379, 23239), (380, 23242), (384, 23266), (385, 23275), (402, 23362), (415, 23413), (424, 23452), (430, 23476),

Gene: PartyCup_29 Start: 22162, Stop: 23556, Start Num: 83

Candidate Starts for PartyCup_29:

(Start: 83 @22162 has 69 MA's), (98, 22219), (127, 22324), (155, 22411), (188, 22495), (189, 22498), (190, 22501), (207, 22591), (211, 22627), (213, 22636), (215, 22645), (228, 22702), (230, 22720), (242, 22753), (251, 22765), (267, 22834), (270, 22861), (276, 22885), (285, 22921), (287, 22927), (296, 22960), (299, 22975), (302, 22984), (326, 23074), (343, 23143), (349, 23170), (355, 23188), (359, 23200), (373, 23290), (375, 23296), (378, 23305), (379, 23311), (385, 23347), (402, 23434), (417, 23491), (424, 23524), (430, 23548),

Gene: Patbob_102 Start: 80820, Stop: 82658, Start Num: 8

Candidate Starts for Patbob_102:

(Start: 8 @80820 has 1 MA's), (28, 80979), (49, 81075), (82, 81135), (93, 81165), (107, 81255), (114, 81285), (127, 81336), (144, 81396), (232, 81792), (236, 81813), (253, 81858), (265, 81921), (269, 81954), (271, 81966), (275, 81978), (289, 82023), (297, 82062), (319, 82119), (329, 82125), (336, 82158), (351, 82227), (370, 82311), (394, 82428), (423, 82602), (433, 82644),

Gene: PatrickStar_58 Start: 50421, Stop: 48931, Start Num: 76

Candidate Starts for PatrickStar_58:

(Start: 76 @50421 has 5 MA's), (96, 50328), (98, 50319), (100, 50307), (102, 50292), (107, 50274), (123, 50217), (142, 50145), (143, 50142), (170, 50049), (183, 50016), (187, 49983), (188, 49980), (192, 49959), (207, 49890), (211, 49854), (229, 49767), (249, 49704), (252, 49701), (260, 49671), (270, 49599), (271, 49590), (311, 49467), (312, 49461), (362, 49329), (370, 49287), (377, 49242), (383, 49212), (431, 48960),

Gene: PauloDiaboli_114 Start: 78533, Stop: 76683, Start Num: 9

Candidate Starts for PauloDiaboli_114:

(4, 78602), (5, 78596), (Start: 9 @78533 has 7 MA's), (14, 78488), (15, 78476), (33, 78350), (47, 78287), (82, 78212), (105, 78104), (109, 78086), (125, 78017), (132, 77990), (142, 77930), (188, 77765), (214, 77621), (230, 77534), (236, 77507), (250, 77471), (253, 77462), (264, 77405), (265, 77399), (271, 77354), (275, 77342), (283, 77321), (290, 77297), (297, 77261), (319, 77216), (345, 77132), (346, 77129), (347, 77123), (363, 77060), (381, 76958), (400, 76871), (405, 76829), (414, 76778),

Gene: PermaG_34 Start: 23404, Stop: 24831, Start Num: 87

Candidate Starts for PermaG_34:

(74, 23362), (Start: 87 @23404 has 2 MA's), (127, 23560), (188, 23758), (189, 23761), (190, 23764), (193, 23782), (208, 23869), (211, 23890), (232, 23989), (255, 24055), (275, 24157), (276, 24160), (287, 24205), (293, 24226), (299, 24253), (306, 24280), (307, 24283), (308, 24295), (312, 24310), (315, 24316), (325, 24352), (335, 24388), (338, 24400), (345, 24430), (364, 24514), (369, 24532), (370, 24535), (385, 24622), (390, 24634), (399, 24673), (402, 24709), (404, 24715), (420, 24790),

Gene: Phendrix_173 Start: 92821, Stop: 90896, Start Num: 9

Candidate Starts for Phendrix_173:

(Start: 9 @92821 has 7 MA's), (13, 92779), (28, 92665), (42, 92590), (64, 92521), (85, 92452), (149, 92179), (154, 92161), (160, 92137), (174, 92098), (210, 91918), (226, 91834), (230, 91810), (248, 91750), (253, 91738), (260, 91711), (269, 91642), (270, 91639), (309, 91474), (324, 91423), (331, 91399), (343, 91333), (352, 91294), (357, 91282), (376, 91174), (383, 91141), (388, 91120), (397, 91087), (402, 91036), (406, 91018),

Gene: Philon9_55 Start: 53812, Stop: 52235, Start Num: 45

Candidate Starts for Philon9_55:

(Start: 23 @53944 has 6 MA's), (Start: 24 @53932 has 2 MA's), (Start: 45 @53812 has 1 MA's), (58, 53779), (66, 53749), (70, 53743), (96, 53635), (102, 53599), (107, 53575), (110, 53566), (112, 53557), (122, 53509), (123, 53506), (125, 53500), (126, 53497), (167, 53374), (173, 53353), (187, 53293), (202, 53221), (207, 53200), (208, 53185), (209, 53182), (210, 53173), (249, 53014), (262, 52963), (264, 52951), (265, 52945), (268, 52924), (278, 52879), (291, 52834), (302, 52792), (317, 52735), (326, 52705), (327, 52702), (328, 52699), (353, 52645), (380, 52522), (383, 52504), (404, 52387), (405, 52384), (407, 52372), (434, 52252),

Gene: PierreThree_58 Start: 52668, Stop: 51259, Start Num: 95

Candidate Starts for PierreThree_58:

(16, 53046), (21, 52995), (26, 52944), (37, 52890), (43, 52860), (Start: 53 @52827 has 1 MA's), (56, 52818), (Start: 63 @52791 has 23 MA's), (Start: 95 @52668 has 24 MA's), (102, 52623), (112, 52581), (122, 52533), (123, 52530), (125, 52524), (126, 52521), (130, 52509), (131, 52503), (147, 52455), (148, 52452), (185, 52332), (189, 52314), (201, 52251), (207, 52227), (208, 52212), (225, 52119), (249, 52041), (263, 51981), (264, 51978), (266, 51969), (268, 51951), (277, 51909), (291, 51864), (296, 51846), (328, 51729), (332, 51714), (336, 51693), (369, 51612), (370, 51609), (380, 51552), (381, 51546), (383, 51534), (396, 51483), (399, 51468), (400, 51459), (404, 51420), (406, 51408), (425, 51312), (428, 51297),

Gene: PinkFriday_25 Start: 20761, Stop: 22011, Start Num: 118

Candidate Starts for PinkFriday_25:

(Start: 83 @20614 has 69 MA's), (98, 20674), (118, 20761), (127, 20779), (155, 20866), (158, 20872), (172, 20899), (188, 20950), (190, 20956), (200, 21016), (204, 21037), (207, 21046), (211, 21082), (215, 21100), (216, 21103), (219, 21136), (228, 21157), (230, 21175), (232, 21181), (242, 21208), (255, 21235), (267, 21289), (268, 21301), (270, 21316), (276, 21340), (281, 21355), (282, 21361), (287, 21382), (296, 21415), (299, 21430), (302, 21439), (315, 21490), (335, 21562), (349, 21625), (355, 21643), (370, 21715), (372, 21739), (373, 21745), (374, 21748), (379, 21766), (385, 21802), (402, 21889), (424, 21979), (430, 22003),

Gene: PitaDog_25 Start: 20567, Stop: 21961, Start Num: 83

Candidate Starts for PitaDog_25:

(Start: 83 @20567 has 69 MA's), (98, 20624), (127, 20729), (128, 20732), (155, 20816), (172, 20849), (188, 20900), (190, 20906), (204, 20987), (205, 20990), (207, 20996), (211, 21032), (215, 21050), (216, 21053), (219, 21086), (228, 21107), (267, 21239), (270, 21266), (281, 21305), (285, 21326), (287, 21332), (296, 21365), (299, 21380), (302, 21389), (312, 21434), (323, 21470), (335, 21512), (349, 21575), (355, 21593), (373, 21695), (374, 21698), (379, 21716), (380, 21719), (384, 21743), (385, 21752), (402, 21839), (424, 21929), (430, 21953),

Gene: PokyPuppy_58 Start: 52764, Stop: 51256, Start Num: 72

Candidate Starts for PokyPuppy_58:

(16, 53043), (21, 52992), (26, 52941), (35, 52893), (37, 52887), (43, 52857), (Start: 53 @52824 has 1 MA's), (56, 52815), (Start: 63 @52788 has 23 MA's), (Start: 72 @52764 has 1 MA's), (Start: 95 @52665 has 24 MA's), (102, 52620), (112, 52578), (122, 52530), (123, 52527), (125, 52521), (126, 52518), (131, 52500), (147, 52452), (185, 52329), (189, 52311), (207, 52224), (208, 52209), (225, 52116), (232, 52089), (249, 52038), (263, 51978), (264, 51975), (266, 51966), (268, 51948), (277,

51906), (291, 51861), (328, 51726), (332, 51711), (336, 51690), (364, 51633), (370, 51606), (380, 51549), (381, 51543), (383, 51531), (396, 51480), (400, 51456), (404, 51417), (406, 51405), (407, 51402), (425, 51309), (428, 51294),

Gene: Poland_66 Start: 54025, Stop: 52493, Start Num: 63

Candidate Starts for Poland_66:

(16, 54280), (21, 54229), (37, 54124), (43, 54094), (Start: 53 @54061 has 1 MA's), (56, 54052), (Start: 63 @54025 has 23 MA's), (102, 53857), (112, 53815), (116, 53797), (122, 53767), (126, 53755), (130, 53743), (131, 53737), (134, 53716), (189, 53548), (207, 53461), (208, 53446), (210, 53434), (216, 53404), (225, 53353), (249, 53275), (258, 53251), (261, 53233), (263, 53215), (264, 53212), (266, 53203), (268, 53185), (277, 53143), (291, 53098), (296, 53080), (328, 52963), (332, 52948), (336, 52927), (369, 52846), (370, 52843), (380, 52786), (381, 52780), (383, 52768), (400, 52693), (404, 52654), (406, 52642), (407, 52639), (425, 52546), (428, 52531),

Gene: Potatoes_29 Start: 22153, Stop: 23553, Start Num: 83

Candidate Starts for Potatoes_29:

(Start: 83 @22153 has 69 MA's), (98, 22216), (127, 22321), (128, 22324), (155, 22408), (172, 22441), (188, 22492), (190, 22498), (204, 22579), (205, 22582), (207, 22588), (211, 22624), (215, 22642), (216, 22645), (228, 22699), (242, 22750), (267, 22831), (270, 22858), (279, 22888), (281, 22897), (287, 22924), (296, 22957), (299, 22972), (312, 23026), (319, 23047), (322, 23059), (326, 23071), (375, 23293), (378, 23302), (379, 23308), (385, 23344), (400, 23404), (402, 23431), (424, 23521),

Gene: Preamble_25 Start: 20577, Stop: 21971, Start Num: 83

Candidate Starts for Preamble_25:

(Start: 83 @20577 has 69 MA's), (98, 20634), (127, 20739), (128, 20742), (155, 20826), (172, 20859), (189, 20913), (190, 20916), (207, 21006), (211, 21042), (216, 21063), (219, 21096), (228, 21117), (242, 21168), (267, 21249), (270, 21276), (281, 21315), (287, 21342), (296, 21375), (299, 21390), (302, 21399), (312, 21444), (323, 21480), (344, 21561), (349, 21585), (355, 21603), (359, 21615), (370, 21675), (372, 21699), (373, 21705), (374, 21708), (379, 21726), (380, 21729), (384, 21753), (385, 21762), (402, 21849), (415, 21900), (424, 21939),

Gene: Pumancara_25 Start: 20596, Stop: 21993, Start Num: 83

Candidate Starts for Pumancara_25:

(Start: 83 @20596 has 69 MA's), (98, 20656), (118, 20743), (127, 20761), (155, 20848), (158, 20854), (172, 20881), (188, 20932), (190, 20938), (200, 20998), (204, 21019), (207, 21028), (211, 21064), (215, 21082), (216, 21085), (219, 21118), (228, 21139), (232, 21163), (242, 21190), (255, 21217), (267, 21271), (268, 21283), (270, 21298), (276, 21322), (281, 21337), (287, 21364), (296, 21397), (299, 21412), (302, 21421), (315, 21472), (335, 21544), (344, 21583), (349, 21607), (355, 21625), (370, 21697), (372, 21721), (373, 21727), (374, 21730), (379, 21748), (385, 21784), (402, 21871), (412, 21910), (424, 21961), (430, 21985), (431, 21988),

Gene: Pumpernickel_111 Start: 80095, Stop: 78248, Start Num: 9

Candidate Starts for Pumpernickel_111:

(Start: 9 @80095 has 7 MA's), (47, 79855), (48, 79852), (54, 79831), (82, 79780), (105, 79672), (110, 79651), (145, 79489), (196, 79276), (210, 79210), (214, 79189), (216, 79180), (227, 79123), (230, 79102), (236, 79075), (250, 79039), (253, 79030), (254, 79018), (264, 78973), (265, 78967), (269, 78934), (298, 78823), (300, 78820), (316, 78778), (335, 78727), (363, 78607), (367, 78580), (378, 78520), (403, 78382), (405, 78376), (413, 78328), (424, 78268),

Gene: RAP15_29 Start: 22157, Stop: 23557, Start Num: 83

Candidate Starts for RAP15_29:

(Start: 83 @22157 has 69 MA's), (98, 22220), (127, 22325), (128, 22328), (155, 22412), (172, 22445), (188, 22496), (190, 22502), (204, 22583), (205, 22586), (207, 22592), (211, 22628), (215, 22646),

(216, 22649), (228, 22703), (242, 22754), (267, 22835), (270, 22862), (279, 22892), (281, 22901), (287, 22928), (296, 22961), (299, 22976), (312, 23030), (319, 23051), (322, 23063), (326, 23075), (375, 23297), (378, 23306), (379, 23312), (385, 23348), (400, 23408), (402, 23435), (424, 23525),

Gene: Racecar_102 Start: 80738, Stop: 82576, Start Num: 8

Candidate Starts for Racecar_102:

(Start: 8 @80738 has 1 MA's), (17, 80819), (28, 80897), (49, 80993), (82, 81053), (93, 81083), (114, 81203), (127, 81254), (144, 81314), (218, 81653), (232, 81710), (236, 81731), (253, 81776), (264, 81833), (265, 81839), (269, 81872), (271, 81884), (275, 81896), (289, 81941), (297, 81980), (319, 82037), (329, 82043), (336, 82076), (351, 82145), (370, 82229), (394, 82346), (423, 82520), (433, 82562),

Gene: Rasovi_33 Start: 23465, Stop: 24892, Start Num: 87

Candidate Starts for Rasovi_33:

(75, 23426), (80, 23447), (Start: 87 @23465 has 2 MA's), (189, 23822), (200, 23885), (208, 23930), (211, 23951), (275, 24218), (287, 24266), (293, 24287), (299, 24314), (306, 24341), (307, 24344), (312, 24371), (315, 24377), (325, 24413), (345, 24491), (349, 24512), (355, 24530), (359, 24542), (373, 24626), (385, 24683), (390, 24695), (399, 24734), (402, 24770), (404, 24776),

Gene: RcigaStruga_29 Start: 22127, Stop: 23518, Start Num: 83

Candidate Starts for RcigaStruga_29:

(Start: 83 @22127 has 69 MA's), (103, 22214), (127, 22286), (128, 22289), (151, 22355), (155, 22373), (158, 22379), (172, 22406), (190, 22463), (204, 22544), (207, 22553), (211, 22589), (215, 22607), (219, 22643), (228, 22664), (230, 22682), (242, 22715), (259, 22754), (267, 22796), (270, 22823), (276, 22847), (285, 22883), (287, 22889), (296, 22922), (299, 22937), (302, 22946), (312, 22991), (322, 23024), (323, 23027), (344, 23108), (352, 23144), (355, 23150), (359, 23162), (373, 23252), (379, 23273), (380, 23276), (384, 23300), (385, 23309), (402, 23396), (415, 23447), (424, 23486), (430, 23510),

Gene: RemRem_60 Start: 51466, Stop: 49934, Start Num: 63

Candidate Starts for RemRem_60:

(16, 51721), (21, 51670), (26, 51619), (37, 51565), (43, 51535), (Start: 53 @51502 has 1 MA's), (56, 51493), (Start: 63 @51466 has 23 MA's), (102, 51298), (112, 51256), (122, 51208), (126, 51196), (130, 51184), (131, 51178), (134, 51157), (147, 51130), (189, 50989), (207, 50902), (208, 50887), (210, 50875), (216, 50845), (225, 50794), (232, 50767), (249, 50716), (261, 50674), (263, 50656), (264, 50653), (268, 50626), (277, 50584), (291, 50539), (328, 50404), (332, 50389), (336, 50368), (364, 50311), (369, 50287), (370, 50284), (380, 50227), (381, 50221), (382, 50215), (383, 50209), (396, 50158), (400, 50134), (404, 50095), (406, 50083), (407, 50080), (425, 49987), (428, 49972), (434, 49951),

Gene: Reynauld_56 Start: 50676, Stop: 49183, Start Num: 78

Candidate Starts for Reynauld_56:

(Start: 78 @50676 has 3 MA's), (Start: 86 @50640 has 1 MA's), (94, 50607), (Start: 95 @50598 has 24 MA's), (96, 50589), (98, 50580), (99, 50571), (102, 50553), (119, 50493), (122, 50481), (125, 50472), (175, 50325), (187, 50268), (192, 50244), (205, 50181), (225, 50067), (247, 49992), (249, 49989), (258, 49965), (261, 49947), (264, 49926), (269, 49887), (271, 49875), (272, 49872), (326, 49695), (334, 49659), (383, 49446), (393, 49404), (402, 49338), (417, 49263), (418, 49248),

Gene: Riovina_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for Riovina_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468),

(281, 22483), (287, 22510), (296, 22543), (299, 22558), (335, 22690), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Riverdale_29 Start: 22087, Stop: 23487, Start Num: 83

Candidate Starts for Riverdale_29:

(Start: 83 @22087 has 69 MA's), (98, 22150), (127, 22255), (128, 22258), (155, 22342), (172, 22375), (188, 22426), (190, 22432), (204, 22513), (205, 22516), (207, 22522), (211, 22558), (215, 22576), (216, 22579), (219, 22612), (228, 22633), (230, 22651), (242, 22684), (267, 22765), (270, 22792), (279, 22822), (281, 22831), (287, 22858), (296, 22891), (299, 22906), (312, 22960), (319, 22981), (322, 22993), (326, 23005), (375, 23227), (378, 23236), (379, 23242), (385, 23278), (400, 23338), (402, 23365), (424, 23455),

Gene: RobinSparkles_61 Start: 50974, Stop: 49484, Start Num: 76

Candidate Starts for RobinSparkles_61:

(Start: 76 @50974 has 5 MA's), (96, 50881), (98, 50872), (100, 50860), (102, 50845), (107, 50827), (123, 50770), (142, 50698), (143, 50695), (170, 50602), (183, 50569), (187, 50536), (188, 50533), (192, 50512), (207, 50443), (211, 50407), (229, 50320), (249, 50257), (252, 50254), (260, 50224), (270, 50152), (271, 50143), (311, 50020), (312, 50014), (362, 49882), (370, 49840), (377, 49795), (383, 49765), (431, 49513),

Gene: RoyalG_59 Start: 52241, Stop: 50709, Start Num: 63

Candidate Starts for RoyalG_59:

(16, 52496), (21, 52445), (37, 52340), (43, 52310), (Start: 53 @52277 has 1 MA's), (56, 52268), (Start: 63 @52241 has 23 MA's), (Start: 95 @52118 has 24 MA's), (102, 52073), (112, 52031), (122, 51983), (123, 51980), (125, 51974), (126, 51971), (131, 51953), (134, 51932), (147, 51905), (185, 51782), (189, 51764), (207, 51677), (208, 51662), (225, 51569), (249, 51491), (258, 51467), (263, 51431), (268, 51401), (277, 51359), (291, 51314), (328, 51179), (332, 51164), (336, 51143), (370, 51059), (380, 51002), (381, 50996), (383, 50984), (396, 50933), (400, 50909), (404, 50870), (406, 50858), (407, 50855), (425, 50762), (428, 50747),

Gene: Rozby_29 Start: 22088, Stop: 23488, Start Num: 83

Candidate Starts for Rozby_29:

(Start: 83 @22088 has 69 MA's), (98, 22151), (127, 22256), (128, 22259), (155, 22343), (172, 22376), (188, 22427), (190, 22433), (204, 22514), (205, 22517), (207, 22523), (211, 22559), (215, 22577), (216, 22580), (219, 22613), (228, 22634), (230, 22652), (242, 22685), (267, 22766), (270, 22793), (279, 22823), (281, 22832), (287, 22859), (296, 22892), (299, 22907), (312, 22961), (319, 22982), (322, 22994), (326, 23006), (375, 23228), (378, 23237), (379, 23243), (385, 23279), (400, 23339), (402, 23366), (424, 23456),

Gene: SBlackberry_33 Start: 23236, Stop: 24663, Start Num: 88

Candidate Starts for SBlackberry_33:

(Start: 88 @23236 has 11 MA's), (182, 23554), (189, 23593), (200, 23656), (208, 23701), (211, 23722), (232, 23821), (275, 23989), (287, 24037), (293, 24058), (299, 24085), (306, 24112), (312, 24142), (313, 24145), (315, 24148), (325, 24184), (345, 24262), (364, 24346), (369, 24364), (370, 24367), (385, 24454), (390, 24466), (399, 24505), (402, 24541), (404, 24547), (415, 24592), (420, 24622),

Gene: SJReid_108 Start: 73084, Stop: 74940, Start Num: 8

Candidate Starts for SJReid_108:

(Start: 8 @73084 has 1 MA's), (49, 73342), (51, 73348), (71, 73381), (Start: 76 @73390 has 5 MA's), (93, 73450), (94, 73465), (107, 73540), (114, 73570), (127, 73621), (144, 73681), (214, 73984), (236, 74098), (253, 74143), (264, 74200), (265, 74206), (269, 74239), (271, 74251), (286, 74299), (289,

74308), (291, 74317), (313, 74386), (336, 74443), (351, 74512), (368, 74590), (370, 74596), (388, 74689), (394, 74713), (406, 74794), (413, 74833), (422, 74884),

Gene: Sam12_58 Start: 51466, Stop: 49934, Start Num: 63

Candidate Starts for Sam12_58:

(16, 51721), (21, 51670), (26, 51619), (37, 51565), (43, 51535), (Start: 53 @51502 has 1 MA's), (56, 51493), (Start: 63 @51466 has 23 MA's), (102, 51298), (112, 51256), (122, 51208), (126, 51196), (130, 51184), (131, 51178), (134, 51157), (147, 51130), (189, 50989), (207, 50902), (208, 50887), (210, 50875), (216, 50845), (225, 50794), (232, 50767), (249, 50716), (261, 50674), (263, 50656), (264, 50653), (268, 50626), (277, 50584), (291, 50539), (328, 50404), (332, 50389), (336, 50368), (364, 50311), (369, 50287), (370, 50284), (380, 50227), (381, 50221), (382, 50215), (383, 50209), (396, 50158), (400, 50134), (404, 50095), (406, 50083), (407, 50080), (425, 49987), (428, 49972), (434, 49951),

Gene: Sapo_34 Start: 32116, Stop: 30710, Start Num: 89

Candidate Starts for Sapo_34:

(28, 32353), (29, 32350), (54, 32239), (58, 32224), (Start: 89 @32116 has 12 MA's), (102, 32038), (110, 32011), (122, 31981), (123, 31978), (193, 31771), (196, 31738), (243, 31531), (281, 31384), (284, 31369), (321, 31228), (355, 31093), (362, 31063), (363, 31060), (373, 30991), (374, 30988), (380, 30967), (387, 30931), (388, 30928), (404, 30841), (406, 30829), (424, 30742),

Gene: Savage2526_29 Start: 22151, Stop: 23551, Start Num: 83

Candidate Starts for Savage2526_29:

(Start: 83 @22151 has 69 MA's), (98, 22214), (127, 22319), (128, 22322), (155, 22406), (172, 22439), (188, 22490), (190, 22496), (204, 22577), (205, 22580), (207, 22586), (211, 22622), (215, 22640), (216, 22643), (228, 22697), (242, 22748), (267, 22829), (270, 22856), (279, 22886), (281, 22895), (287, 22922), (296, 22955), (299, 22970), (312, 23024), (319, 23045), (322, 23057), (326, 23069), (375, 23291), (378, 23300), (379, 23306), (385, 23342), (400, 23402), (402, 23429), (424, 23519),

Gene: Scuttle_29 Start: 22156, Stop: 23556, Start Num: 83

Candidate Starts for Scuttle_29:

(Start: 83 @22156 has 69 MA's), (98, 22219), (127, 22324), (128, 22327), (155, 22411), (172, 22444), (188, 22495), (190, 22501), (204, 22582), (205, 22585), (207, 22591), (211, 22627), (215, 22645), (216, 22648), (219, 22681), (228, 22702), (242, 22753), (267, 22834), (270, 22861), (281, 22900), (287, 22927), (296, 22960), (299, 22975), (312, 23029), (319, 23050), (322, 23062), (326, 23074), (355, 23188), (375, 23296), (378, 23305), (379, 23311), (385, 23347), (400, 23407), (402, 23434), (424, 23524),

Gene: Sergei_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for Sergei_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Shelley_57 Start: 52086, Stop: 50674, Start Num: 95

Candidate Starts for Shelley_57:

(16, 52434), (Start: 32 @52305 has 1 MA's), (Start: 53 @52215 has 1 MA's), (Start: 95 @52086 has 24 MA's), (102, 52041), (122, 51951), (123, 51948), (125, 51942), (131, 51921), (152, 51858), (180, 51780), (185, 51750), (189, 51732), (207, 51645), (208, 51630), (216, 51588), (233, 51507), (249,

51459), (261, 51417), (263, 51399), (264, 51396), (268, 51369), (280, 51318), (291, 51282), (304, 51231), (328, 51147), (333, 51126), (380, 50970), (381, 50964), (383, 50952), (406, 50826), (428, 50712),

Gene: Sixama_168 Start: 96248, Stop: 94338, Start Num: 7

Candidate Starts for Sixama_168:

(Start: 7 @96248 has 5 MA's), (10, 96227), (11, 96218), (13, 96200), (18, 96155), (19, 96140), (25, 96116), (28, 96086), (47, 95996), (62, 95951), (66, 95939), (85, 95870), (108, 95753), (114, 95726), (149, 95597), (184, 95480), (193, 95432), (207, 95363), (236, 95201), (250, 95165), (253, 95156), (256, 95141), (260, 95129), (265, 95093), (269, 95060), (288, 94985), (291, 94973), (301, 94934), (314, 94883), (357, 94721), (397, 94526), (403, 94469), (410, 94424),

Gene: Sombrero_60 Start: 52033, Stop: 50501, Start Num: 63

Candidate Starts for Sombrero_60:

(16, 52288), (21, 52237), (37, 52132), (43, 52102), (Start: 53 @52069 has 1 MA's), (56, 52060), (Start: 63 @52033 has 23 MA's), (102, 51865), (112, 51823), (122, 51775), (126, 51763), (130, 51751), (131, 51745), (134, 51724), (189, 51556), (207, 51469), (208, 51454), (210, 51442), (216, 51412), (225, 51361), (249, 51283), (258, 51259), (261, 51241), (263, 51223), (264, 51220), (266, 51211), (268, 51193), (291, 51106), (328, 50971), (332, 50956), (336, 50935), (369, 50854), (370, 50851), (380, 50794), (381, 50788), (383, 50776), (396, 50725), (400, 50701), (404, 50662), (406, 50650), (407, 50647), (425, 50554), (428, 50539), (434, 50518),

Gene: Squibbles_58 Start: 52329, Stop: 50797, Start Num: 63

Candidate Starts for Squibbles_58:

(16, 52584), (21, 52533), (26, 52482), (37, 52428), (43, 52398), (Start: 53 @52365 has 1 MA's), (56, 52356), (Start: 63 @52329 has 23 MA's), (102, 52161), (112, 52119), (122, 52071), (126, 52059), (130, 52047), (131, 52041), (134, 52020), (147, 51993), (189, 51852), (207, 51765), (208, 51750), (210, 51738), (216, 51708), (225, 51657), (232, 51630), (249, 51579), (261, 51537), (263, 51519), (264, 51516), (268, 51489), (277, 51447), (291, 51402), (328, 51267), (332, 51252), (336, 51231), (364, 51174), (370, 51147), (380, 51090), (381, 51084), (382, 51078), (383, 51072), (396, 51021), (400, 50997), (404, 50958), (406, 50946), (407, 50943), (425, 50850), (428, 50835), (434, 50814),

Gene: SteveFrench_58 Start: 52481, Stop: 50949, Start Num: 63

Candidate Starts for SteveFrench_58:

(16, 52736), (21, 52685), (37, 52580), (43, 52550), (Start: 53 @52517 has 1 MA's), (56, 52508), (Start: 63 @52481 has 23 MA's), (Start: 95 @52358 has 24 MA's), (102, 52313), (112, 52271), (122, 52223), (123, 52220), (125, 52214), (126, 52211), (131, 52193), (134, 52172), (147, 52145), (185, 52022), (189, 52004), (207, 51917), (208, 51902), (225, 51809), (249, 51731), (258, 51707), (263, 51671), (268, 51641), (277, 51599), (291, 51554), (328, 51419), (332, 51404), (336, 51383), (370, 51299), (380, 51242), (381, 51236), (383, 51224), (396, 51173), (400, 51149), (404, 51110), (406, 51098), (407, 51095), (425, 51002), (428, 50987),

Gene: Sticker17_57 Start: 52601, Stop: 51189, Start Num: 95

Candidate Starts for Sticker17_57:

(16, 52949), (Start: 32 @52820 has 1 MA's), (52, 52733), (Start: 53 @52730 has 1 MA's), (Start: 95 @52601 has 24 MA's), (102, 52556), (122, 52466), (123, 52463), (125, 52457), (131, 52436), (152, 52373), (185, 52265), (189, 52247), (207, 52160), (208, 52145), (216, 52103), (233, 52022), (249, 51974), (261, 51932), (263, 51914), (264, 51911), (268, 51884), (280, 51833), (291, 51797), (304, 51746), (328, 51662), (333, 51641), (380, 51485), (381, 51479), (383, 51467), (406, 51341), (428, 51227),

Gene: Stuff_42 Start: 31323, Stop: 32717, Start Num: 89

Candidate Starts for Stuff_42:

(Start: 89 @31323 has 12 MA's), (Start: 91 @31326 has 2 MA's), (102, 31401), (109, 31425), (111, 31431), (122, 31455), (127, 31470), (128, 31473), (129, 31476), (153, 31545), (163, 31560), (179, 31596), (200, 31695), (204, 31716), (214, 31773), (243, 31896), (275, 32031), (282, 32058), (287, 32079), (307, 32157), (315, 32190), (317, 32199), (330, 32241), (344, 32307), (349, 32331), (355, 32349), (360, 32367), (370, 32421), (373, 32451), (385, 32508), (387, 32511), (399, 32559), (403, 32598), (406, 32613), (421, 32682), (427, 32700), (430, 32709),

Gene: Sucha_30 Start: 20665, Stop: 22092, Start Num: 88

Candidate Starts for Sucha_30:

(79, 20644), (Start: 88 @20665 has 11 MA's), (188, 21019), (189, 21022), (193, 21043), (208, 21130), (216, 21172), (284, 21454), (287, 21466), (293, 21487), (299, 21514), (306, 21541), (307, 21544), (312, 21571), (315, 21577), (325, 21613), (349, 21712), (364, 21775), (370, 21796), (380, 21850), (385, 21883), (390, 21895), (399, 21934), (402, 21970), (404, 21976), (406, 21988), (415, 22021), (420, 22051),

Gene: Suppi_29 Start: 22165, Stop: 23559, Start Num: 83

Candidate Starts for Suppi_29:

(Start: 83 @22165 has 69 MA's), (98, 22222), (127, 22327), (155, 22414), (188, 22498), (189, 22501), (190, 22504), (207, 22594), (211, 22630), (213, 22639), (215, 22648), (228, 22705), (230, 22723), (242, 22756), (251, 22768), (267, 22837), (270, 22864), (276, 22888), (287, 22930), (296, 22963), (299, 22978), (302, 22987), (326, 23077), (343, 23146), (349, 23173), (355, 23191), (359, 23203), (373, 23293), (375, 23299), (378, 23308), (379, 23314), (385, 23350), (402, 23437), (415, 23488), (424, 23527), (430, 23551),

Gene: Talia1610_103 Start: 80103, Stop: 81941, Start Num: 8

Candidate Starts for Talia1610_103:

(Start: 8 @80103 has 1 MA's), (17, 80184), (28, 80262), (49, 80358), (82, 80418), (93, 80448), (114, 80568), (127, 80619), (144, 80679), (218, 81018), (232, 81075), (236, 81096), (253, 81141), (264, 81198), (265, 81204), (269, 81237), (271, 81249), (275, 81261), (289, 81306), (297, 81345), (319, 81402), (329, 81408), (336, 81441), (351, 81510), (370, 81594), (394, 81711), (423, 81885), (433, 81927),

Gene: TattModd_29 Start: 22150, Stop: 23550, Start Num: 83

Candidate Starts for TattModd_29:

(Start: 83 @22150 has 69 MA's), (98, 22213), (127, 22318), (128, 22321), (155, 22405), (172, 22438), (188, 22489), (190, 22495), (204, 22576), (205, 22579), (207, 22585), (211, 22621), (215, 22639), (216, 22642), (219, 22675), (228, 22696), (230, 22714), (242, 22747), (267, 22828), (270, 22855), (279, 22885), (281, 22894), (287, 22921), (296, 22954), (299, 22969), (312, 23023), (319, 23044), (322, 23056), (326, 23068), (375, 23290), (378, 23299), (379, 23305), (385, 23341), (400, 23401), (402, 23428), (424, 23518),

Gene: Teal_57 Start: 53068, Stop: 51656, Start Num: 95

Candidate Starts for Teal_57:

(16, 53416), (Start: 32 @53287 has 1 MA's), (52, 53200), (Start: 53 @53197 has 1 MA's), (Start: 95 @53068 has 24 MA's), (102, 53023), (122, 52933), (123, 52930), (125, 52924), (131, 52903), (152, 52840), (185, 52732), (189, 52714), (207, 52627), (208, 52612), (216, 52570), (233, 52489), (249, 52441), (261, 52399), (263, 52381), (264, 52378), (268, 52351), (280, 52300), (291, 52264), (304, 52213), (328, 52129), (333, 52108), (380, 51952), (381, 51946), (383, 51934), (406, 51808), (428, 51694),

Gene: Teatealatte_58 Start: 53221, Stop: 51518, Start Num: 23

Candidate Starts for Teatealatte_58:

(Start: 23 @53221 has 6 MA's), (Start: 24 @53209 has 2 MA's), (68, 53026), (Start: 95 @52936 has 24 MA's), (96, 52927), (102, 52891), (107, 52867), (110, 52858), (112, 52849), (122, 52801), (126, 52789), (130, 52777), (148, 52720), (152, 52705), (153, 52702), (159, 52684), (171, 52648), (173, 52645), (201, 52516), (202, 52513), (208, 52477), (209, 52474), (211, 52456), (213, 52447), (216, 52435), (223, 52387), (233, 52354), (249, 52306), (258, 52282), (268, 52216), (291, 52117), (317, 52018), (327, 51985), (328, 51982), (358, 51916), (369, 51865), (370, 51862), (380, 51805), (383, 51787), (404, 51670), (405, 51667), (407, 51655), (428, 51556), (434, 51535),

Gene: Teech_56 Start: 53010, Stop: 51319, Start Num: 24

Candidate Starts for Teech_56:

(Start: 23 @53022 has 6 MA's), (Start: 24 @53010 has 2 MA's), (68, 52827), (Start: 95 @52737 has 24 MA's), (96, 52728), (102, 52692), (107, 52668), (110, 52659), (112, 52650), (122, 52602), (130, 52578), (152, 52506), (159, 52485), (171, 52449), (173, 52446), (201, 52317), (202, 52314), (208, 52278), (209, 52275), (211, 52257), (213, 52248), (216, 52236), (223, 52188), (233, 52155), (249, 52107), (258, 52083), (268, 52017), (291, 51918), (317, 51819), (320, 51810), (327, 51786), (328, 51783), (358, 51717), (369, 51666), (370, 51663), (380, 51606), (383, 51588), (404, 51471), (405, 51468), (407, 51456), (428, 51357), (434, 51336),

Gene: Temper16_26 Start: 21732, Stop: 23129, Start Num: 83

Candidate Starts for Temper16_26:

(Start: 83 @21732 has 69 MA's), (98, 21792), (118, 21879), (127, 21897), (128, 21900), (155, 21984), (158, 21990), (172, 22017), (188, 22068), (190, 22074), (196, 22125), (200, 22134), (204, 22155), (207, 22164), (211, 22200), (216, 22221), (219, 22254), (228, 22275), (230, 22293), (232, 22299), (242, 22326), (251, 22338), (255, 22353), (267, 22407), (276, 22458), (279, 22464), (281, 22473), (282, 22479), (287, 22500), (296, 22533), (299, 22548), (302, 22557), (335, 22680), (344, 22719), (349, 22743), (352, 22755), (373, 22863), (375, 22869), (378, 22878), (379, 22884), (385, 22920), (402, 23007), (424, 23097), (430, 23121),

Gene: Theresita_31 Start: 21253, Stop: 22665, Start Num: 88

Candidate Starts for Theresita_31:

(Start: 88 @21253 has 11 MA's), (123, 21397), (129, 21415), (161, 21505), (203, 21664), (205, 21682), (207, 21688), (208, 21703), (211, 21724), (216, 21745), (268, 21955), (275, 21991), (287, 22039), (293, 22060), (296, 22072), (299, 22087), (306, 22114), (308, 22129), (325, 22186), (344, 22261), (349, 22285), (359, 22315), (361, 22327), (370, 22369), (373, 22399), (385, 22456), (390, 22468), (404, 22549), (405, 22552), (411, 22576), (415, 22594), (420, 22624),

Gene: Tredge_57 Start: 53221, Stop: 51518, Start Num: 23

Candidate Starts for Tredge_57:

(Start: 23 @53221 has 6 MA's), (Start: 24 @53209 has 2 MA's), (68, 53026), (Start: 95 @52936 has 24 MA's), (96, 52927), (102, 52891), (107, 52867), (110, 52858), (112, 52849), (122, 52801), (126, 52789), (130, 52777), (148, 52720), (152, 52705), (153, 52702), (159, 52684), (171, 52648), (173, 52645), (201, 52516), (202, 52513), (208, 52477), (209, 52474), (211, 52456), (213, 52447), (216, 52435), (223, 52387), (233, 52354), (249, 52306), (258, 52282), (268, 52216), (291, 52117), (317, 52018), (327, 51985), (328, 51982), (358, 51916), (369, 51865), (370, 51862), (380, 51805), (383, 51787), (404, 51670), (405, 51667), (407, 51655), (428, 51556), (434, 51535),

Gene: Trogglehumper_76 Start: 59717, Stop: 58170, Start Num: 67

Candidate Starts for Trogglehumper_76:

(38, 59828), (55, 59762), (Start: 67 @59717 has 1 MA's), (97, 59600), (102, 59567), (113, 59525), (115, 59519), (122, 59495), (144, 59429), (146, 59420), (147, 59417), (167, 59354), (180, 59315), (192, 59249), (206, 59183), (208, 59165), (210, 59153), (213, 59135), (220, 59087), (221, 59081), (249, 59003), (261, 58961), (263, 58943), (272, 58886), (275, 58877), (315, 58751), (327, 58709), (328, 58706), (333, 58685), (341, 58652), (354, 58595), (383, 58445), (389, 58421), (400, 58370),

(413, 58280), (419, 58241), (426, 58220), (429, 58208), (430, 58205), (435, 58193),

Gene: TurboVicky_33 Start: 23252, Stop: 24679, Start Num: 88

Candidate Starts for TurboVicky_33:

(75, 23210), (Start: 88 @23252 has 11 MA's), (182, 23570), (208, 23717), (211, 23738), (275, 24005), (287, 24053), (293, 24074), (307, 24131), (315, 24164), (325, 24200), (345, 24278), (349, 24299), (369, 24380), (370, 24383), (385, 24470), (390, 24482), (399, 24521), (402, 24557), (404, 24563), (406, 24575), (420, 24638),

Gene: Typher_35 Start: 23381, Stop: 24808, Start Num: 88

Candidate Starts for Typher_35:

(75, 23339), (Start: 88 @23381 has 11 MA's), (182, 23699), (200, 23801), (208, 23846), (211, 23867), (275, 24134), (287, 24182), (293, 24203), (307, 24260), (315, 24293), (325, 24329), (345, 24407), (349, 24428), (369, 24509), (370, 24512), (385, 24599), (390, 24611), (399, 24650), (402, 24686), (406, 24704), (420, 24767),

Gene: UNTPL_44 Start: 31380, Stop: 32774, Start Num: 89

Candidate Starts for UNTPL_44:

(Start: 89 @31380 has 12 MA's), (Start: 91 @31383 has 2 MA's), (102, 31458), (109, 31482), (122, 31512), (127, 31527), (163, 31617), (179, 31653), (200, 31752), (202, 31761), (214, 31830), (243, 31953), (275, 32088), (282, 32115), (287, 32136), (307, 32214), (315, 32247), (317, 32256), (330, 32298), (344, 32364), (349, 32388), (355, 32406), (360, 32424), (370, 32478), (373, 32508), (385, 32565), (387, 32568), (399, 32616), (403, 32655), (406, 32670), (421, 32739), (427, 32757), (430, 32766),

Gene: Urla_26 Start: 21745, Stop: 23142, Start Num: 83

Candidate Starts for Urla_26:

(Start: 83 @21745 has 69 MA's), (98, 21805), (127, 21910), (155, 21997), (172, 22030), (188, 22081), (190, 22087), (204, 22168), (207, 22177), (211, 22213), (215, 22231), (216, 22234), (219, 22267), (228, 22288), (257, 22369), (267, 22420), (270, 22447), (279, 22477), (281, 22486), (285, 22507), (287, 22513), (296, 22546), (299, 22561), (302, 22570), (315, 22621), (323, 22651), (344, 22732), (355, 22774), (363, 22807), (372, 22870), (378, 22891), (379, 22897), (382, 22912), (385, 22933), (402, 23020), (417, 23077), (424, 23110),

Gene: Vallejo_29 Start: 22089, Stop: 23489, Start Num: 83

Candidate Starts for Vallejo_29:

(Start: 83 @22089 has 69 MA's), (98, 22152), (127, 22257), (128, 22260), (155, 22344), (172, 22377), (188, 22428), (190, 22434), (204, 22515), (205, 22518), (207, 22524), (211, 22560), (215, 22578), (216, 22581), (219, 22614), (228, 22635), (230, 22653), (242, 22686), (267, 22767), (270, 22794), (279, 22824), (281, 22833), (287, 22860), (296, 22893), (299, 22908), (312, 22962), (319, 22983), (322, 22995), (326, 23007), (375, 23229), (378, 23238), (379, 23244), (385, 23280), (400, 23340), (402, 23367), (424, 23457),

Gene: Vulture_26 Start: 21745, Stop: 23139, Start Num: 83

Candidate Starts for Vulture_26:

(Start: 83 @21745 has 69 MA's), (98, 21802), (118, 21889), (127, 21907), (128, 21910), (155, 21994), (172, 22027), (188, 22078), (190, 22084), (200, 22144), (207, 22174), (211, 22210), (215, 22228), (219, 22264), (228, 22285), (230, 22303), (232, 22309), (242, 22336), (267, 22417), (270, 22444), (276, 22468), (281, 22483), (287, 22510), (296, 22543), (299, 22558), (343, 22726), (349, 22753), (352, 22765), (359, 22783), (373, 22873), (375, 22879), (379, 22894), (380, 22897), (385, 22930), (400, 22990), (402, 23017), (417, 23074), (424, 23107), (430, 23131),

Gene: Wawa_29 Start: 22126, Stop: 23526, Start Num: 83

Candidate Starts for Wawa_29:

(Start: 83 @22126 has 69 MA's), (98, 22189), (127, 22294), (128, 22297), (155, 22381), (172, 22414), (188, 22465), (190, 22471), (204, 22552), (205, 22555), (207, 22561), (211, 22597), (215, 22615), (216, 22618), (219, 22651), (228, 22672), (230, 22690), (242, 22723), (267, 22804), (270, 22831), (279, 22861), (281, 22870), (287, 22897), (296, 22930), (299, 22945), (312, 22999), (319, 23020), (322, 23032), (326, 23044), (355, 23158), (375, 23266), (378, 23275), (379, 23281), (385, 23317), (400, 23377), (402, 23404), (424, 23494),

Gene: Wayne_29 Start: 22211, Stop: 23605, Start Num: 83

Candidate Starts for Wayne_29:

(Start: 83 @22211 has 69 MA's), (98, 22268), (127, 22373), (155, 22460), (188, 22544), (189, 22547), (190, 22550), (207, 22640), (211, 22676), (213, 22685), (215, 22694), (228, 22751), (230, 22769), (242, 22802), (251, 22814), (267, 22883), (270, 22910), (276, 22934), (287, 22976), (296, 23009), (299, 23024), (302, 23033), (326, 23123), (343, 23192), (349, 23219), (355, 23237), (359, 23249), (373, 23339), (375, 23345), (378, 23354), (379, 23360), (385, 23396), (402, 23483), (415, 23534), (424, 23573), (430, 23597),

Gene: Woes_57 Start: 53248, Stop: 51707, Start Num: 53

Candidate Starts for Woes_57:

(16, 53467), (Start: 32 @53338 has 1 MA's), (52, 53251), (Start: 53 @53248 has 1 MA's), (Start: 95 @53119 has 24 MA's), (102, 53074), (122, 52984), (123, 52981), (125, 52975), (131, 52954), (152, 52891), (185, 52783), (189, 52765), (207, 52678), (208, 52663), (216, 52621), (233, 52540), (249, 52492), (261, 52450), (263, 52432), (264, 52429), (268, 52402), (280, 52351), (291, 52315), (304, 52264), (328, 52180), (333, 52159), (380, 52003), (381, 51997), (383, 51985), (406, 51859), (428, 51745),

Gene: WonderBoy_25 Start: 20548, Stop: 21942, Start Num: 83

Candidate Starts for WonderBoy_25:

(Start: 83 @20548 has 69 MA's), (98, 20605), (127, 20710), (155, 20797), (172, 20830), (188, 20881), (190, 20887), (204, 20968), (205, 20971), (207, 20977), (211, 21013), (215, 21031), (216, 21034), (219, 21067), (228, 21088), (267, 21220), (270, 21247), (281, 21286), (285, 21307), (287, 21313), (296, 21346), (299, 21361), (302, 21370), (312, 21415), (323, 21451), (335, 21493), (349, 21556), (355, 21574), (373, 21676), (374, 21679), (379, 21697), (380, 21700), (384, 21724), (385, 21733), (402, 21820), (424, 21910), (430, 21934),

Gene: Zanella_33 Start: 23260, Stop: 24687, Start Num: 88

Candidate Starts for Zanella_33:

(75, 23218), (Start: 88 @23260 has 11 MA's), (182, 23578), (208, 23725), (211, 23746), (275, 24013), (287, 24061), (293, 24082), (307, 24139), (315, 24172), (325, 24208), (345, 24286), (349, 24307), (369, 24388), (370, 24391), (385, 24478), (390, 24490), (399, 24529), (402, 24565), (404, 24571), (405, 24574), (406, 24583), (420, 24646),

Gene: Zooman_98 Start: 76212, Stop: 74272, Start Num: 9

Candidate Starts for Zooman_98:

(Start: 9 @76212 has 7 MA's), (25, 76086), (Start: 27 @76059 has 2 MA's), (47, 75966), (48, 75963), (82, 75891), (99, 75810), (104, 75786), (143, 75510), (210, 75225), (214, 75204), (231, 75114), (250, 75054), (253, 75045), (256, 75030), (264, 74988), (265, 74982), (269, 74949), (271, 74937), (274, 74928), (283, 74904), (297, 74844), (316, 74808), (346, 74712), (347, 74706), (363, 74643), (365, 74622), (367, 74616), (381, 74541), (382, 74535), (385, 74514), (400, 74454), (405, 74412), (408, 74388), (409, 74376),

Gene: Zorro_29 Start: 22105, Stop: 23505, Start Num: 83

Candidate Starts for Zorro_29:

(Start: 83 @22105 has 69 MA's), (98, 22168), (127, 22273), (128, 22276), (155, 22360), (172, 22393), (188, 22444), (190, 22450), (204, 22531), (205, 22534), (207, 22540), (211, 22576), (215, 22594), (216, 22597), (219, 22630), (228, 22651), (242, 22702), (267, 22783), (270, 22810), (279, 22840), (281, 22849), (287, 22876), (296, 22909), (299, 22924), (312, 22978), (319, 22999), (322, 23011), (326, 23023), (375, 23245), (378, 23254), (379, 23260), (385, 23296), (400, 23356), (402, 23383), (424, 23473),