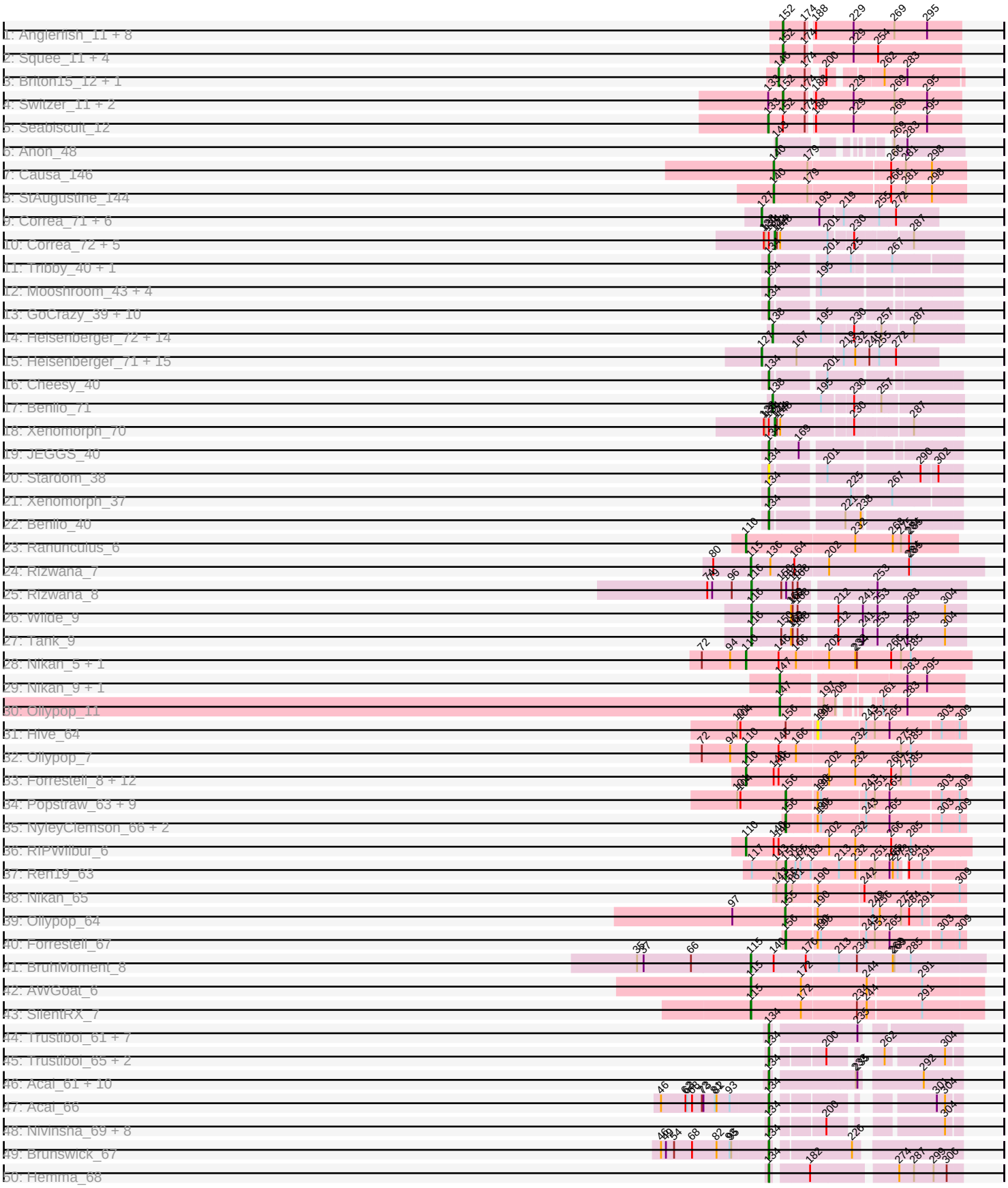
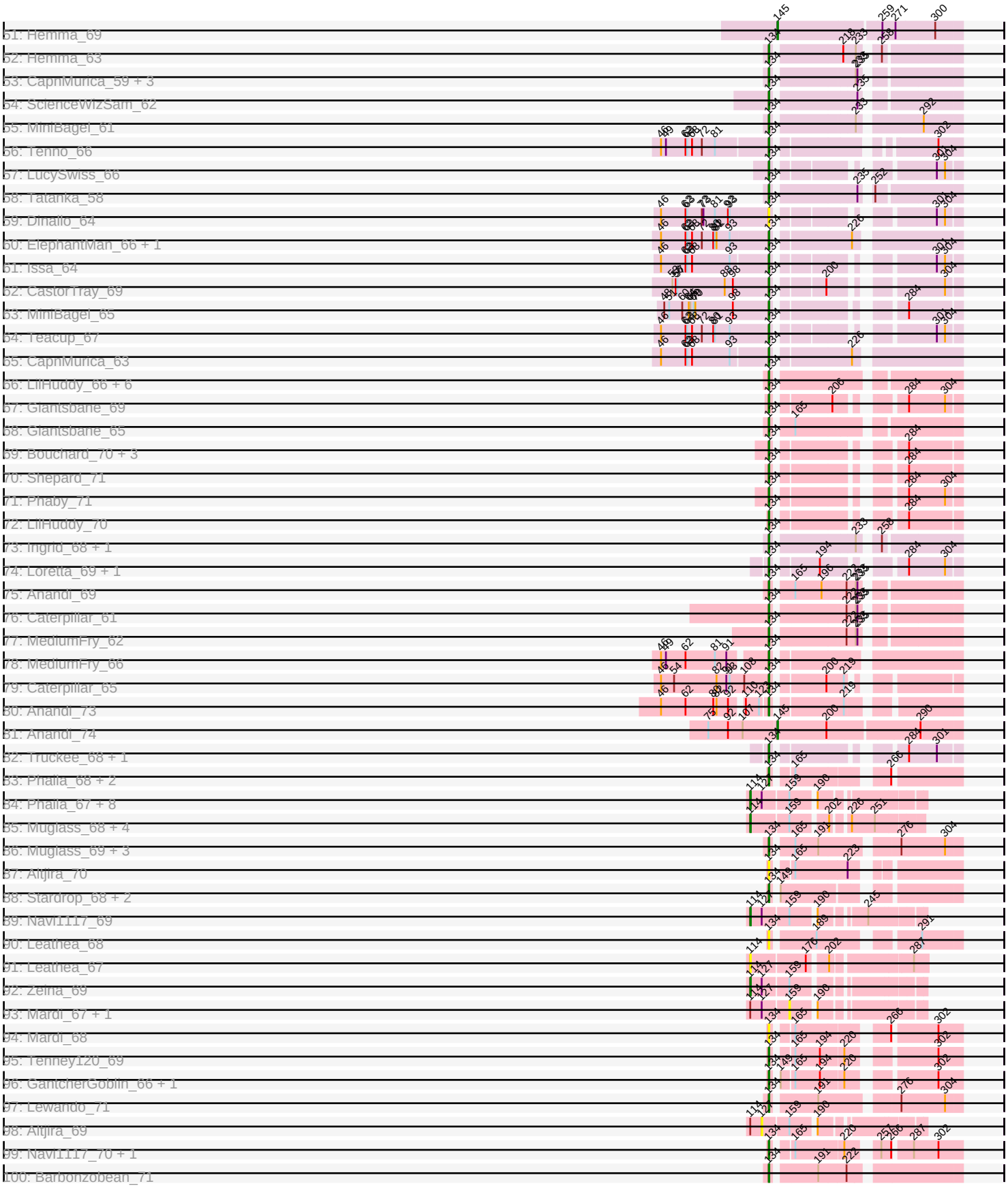
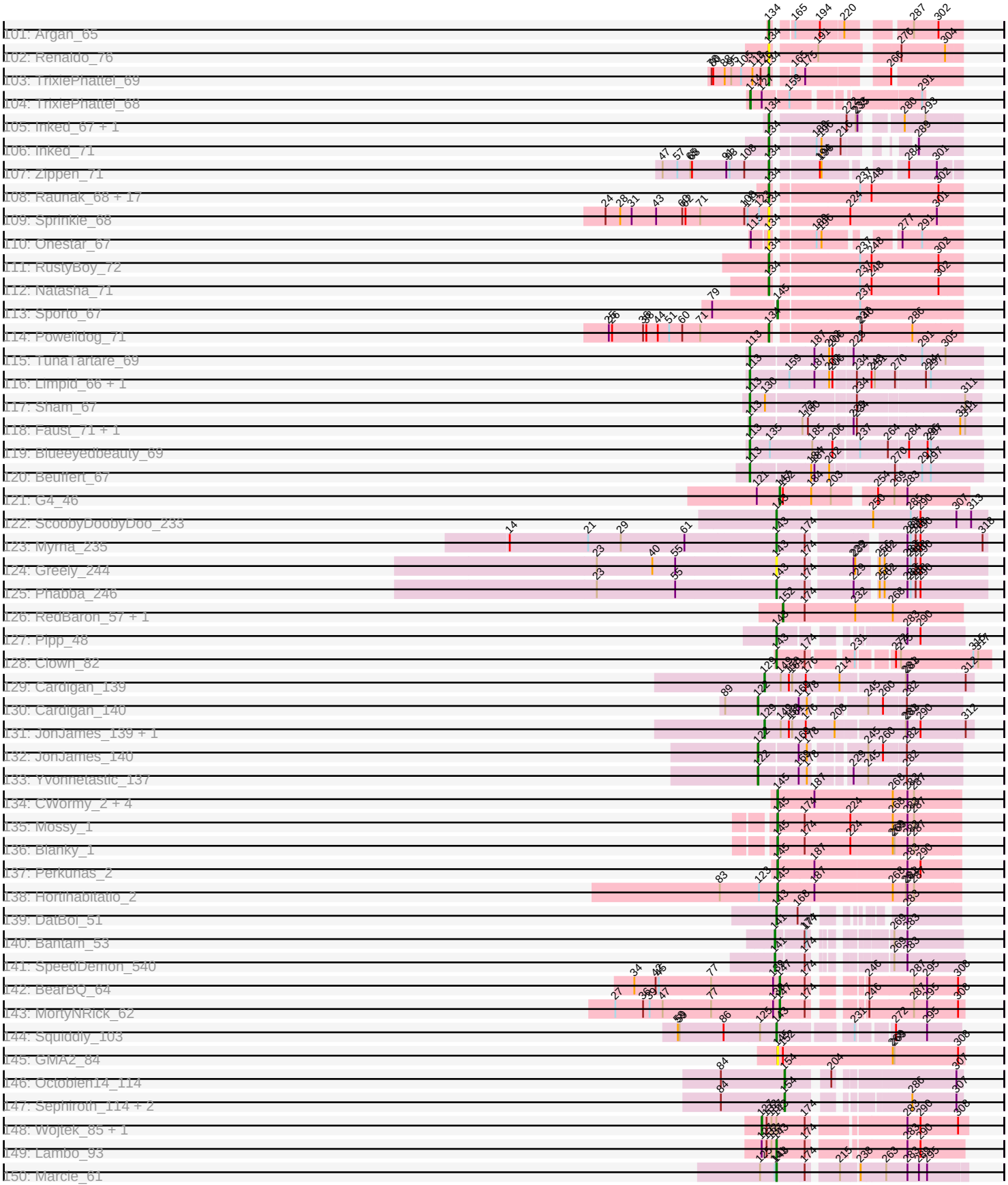
Pham 347085


1: Anglerfish_11 + 8
2: Squee_11 + 4
3: Briton15_12 + 1
4: Switzer_11 + 2
5: Seabiscuit_12
6: Anon_48
7: Causa_146
8: StAugustine_144
9: Correa_71 + 6
10: Correa_72 + 5
11: Tribby_40 + 1
12: Mooshroom_43 + 4
13: GoCrazy_39 + 10
14: Heisenberger_72 + 14
15: Heisenberger_71 + 15
16: Cheesy_40
17: Benilo_71
18: Xenomorph_70
19: JEGGS_40
20: Stardom_38
21: Xenomorph_37
22: Benilo_40
23: Ranunculus_6
24: Rizwana_7
25: Rizwana_8
26: Wilde_9
27: Tank_9
28: Nikan_5 + 1
29: Nikan_9 + 1
30: Ollypop_11
31: Hive_64
32: Ollypop_7
33: Forrestell_8 + 12
34: Popstraw_63 + 9
35: NyleyClemson_66 + 2
36: RIPWilbur_6
37: Ren19_63
38: Nikan_65
39: Ollypop_64
40: Forrestell_67
41: BrunMoment_8
42: AWGoat_6
43: SilentRX_7
44: Trustibol_61 + 7
45: Trustibol_65 + 2
46: Acai_61 + 10
47: Acai_66
48: Nivinsha_69 + 8
49: Brunswick_67
50: Hemma_68

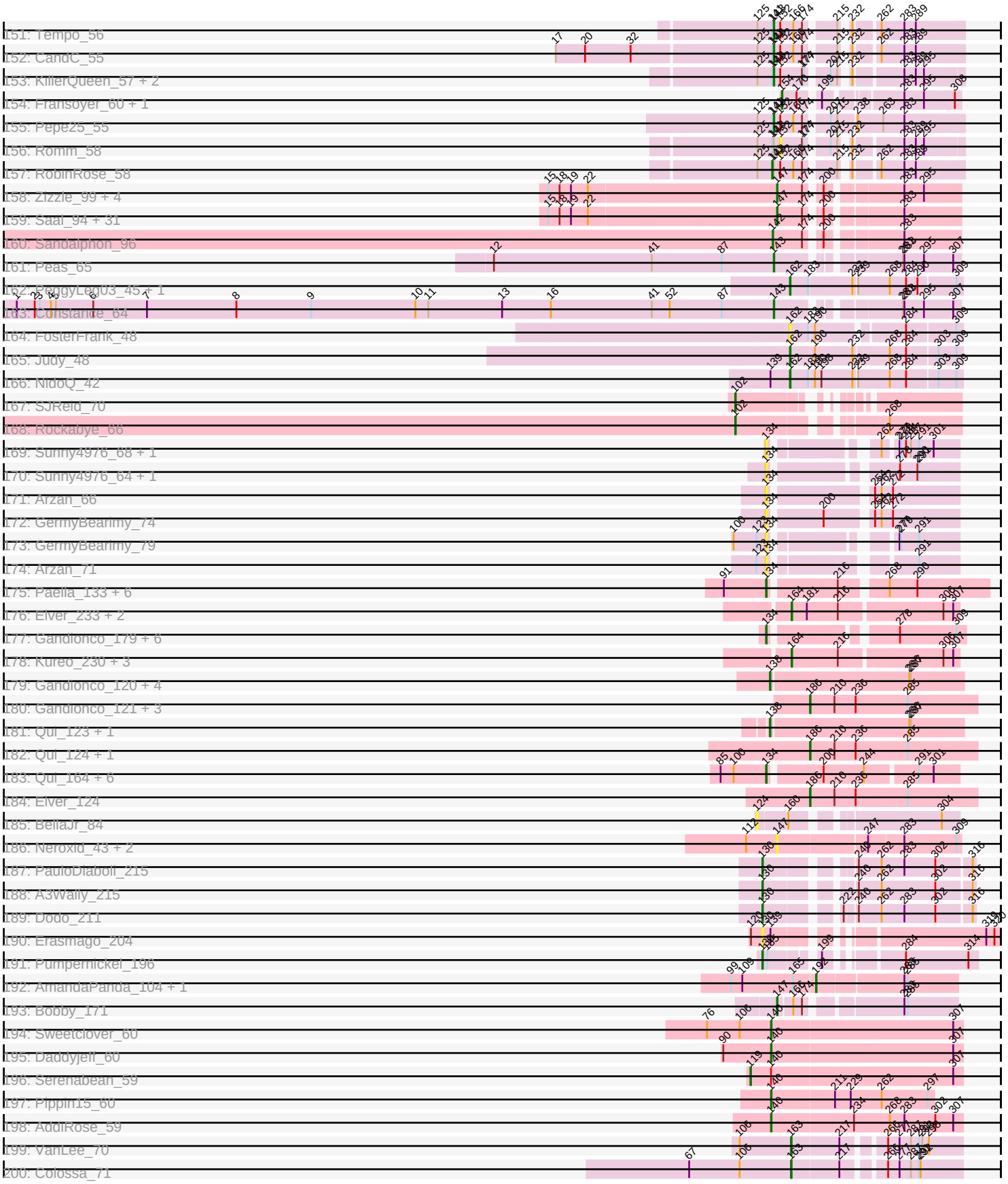
Pham 347085


51: Hemma_69
52: Hemma_63
53: CapnMurica_59 + 3
54: ScienceWizSam_62
55: MiniBagel_61
56: Tenno_66
57: LucySwiss_66
58: Tatanka_58
59: Dinallo_64
60: ElephantMan_66 + 1
61: Issa_64
62: CastorTray_69
63: MiniBagel_65
64: Teacup_67
65: CapnMurica_63
66: LilHuddy_66 + 6
67: Giantsbane_69
68: Giantsbane_65
69: Bouchard_70 + 3
70: Shepard_71
71: Phaby_71
72: LilHuddy_70
73: Ingrid_68 + 1
74: Loretta_69 + 1
75: Anandi_69
76: Caterpillar_61
77: MediumFry_62
78: MediumFry_66
79: Caterpillar_65
80: Anandi_73
81: Anandi_74
82: Truckee_68 + 1
83: Phalla_68 + 2
84: Phalla_67 + 8
85: Muglass_68 + 4
86: Muglass_69 + 3
87: Altjira_70
88: Stardrop_68 + 2
89: Navi1117_69
90: Leathea_68
91: Leathea_67
92: Zelna_69
93: Mardi_67 + 1
94: Mardi_68
95: Tenney120_69
96: GantcherGoblin_66 + 1
97: Lewando_71
98: Altjira_69
99: Navi1117_70 + 1
100: Barbonzobean_71

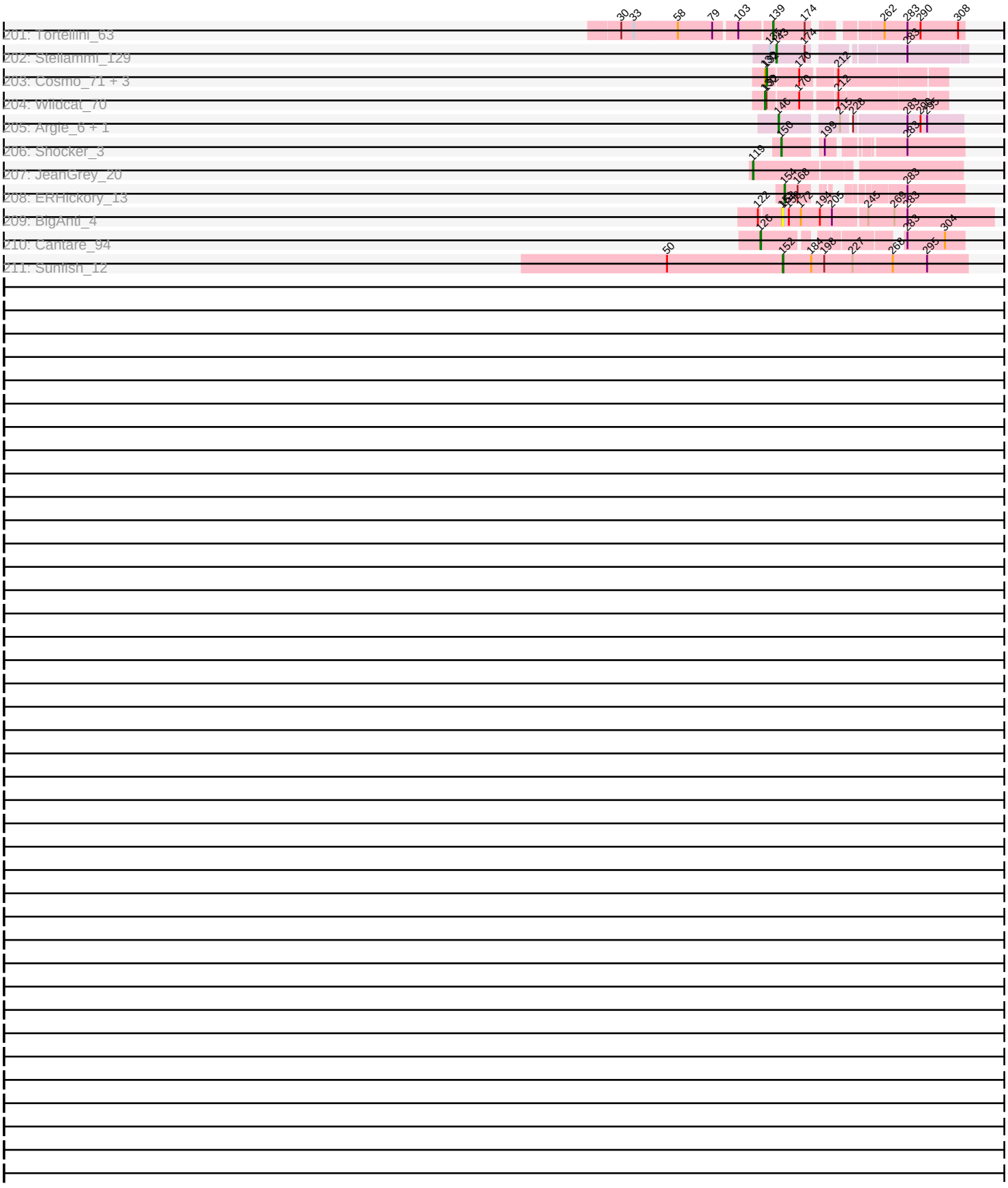
Pham 347085


101: Argan_65
102: Renaldo_76
103: TrixiePhattel_69
104: TrixiePhattel_68
105: Inked_67 + 1
106: Inked_71
107: Zippen_71
108: Raunak_68 + 17
109: Sprinkle_68
110: Onestar_67
111: RustyBoy_72
112: Natasha_71
113: Sporto_67
114: Powelldog_71
115: TunaTartare_69
116: Limpid_66 + 1
117: Sham_67
118: Faust_71 + 1
119: Blueeyedbeauty_69
120: Beuffert_67
121: G4_46
122: ScoobyDoobyDoo_233
123: Myrna_235
124: Greely_244
125: Phabba_246
126: RedBaron_57 + 1
127: Pipp_48
128: Clown_82
129: Cardigan_139
130: Cardigan_140
131: JonJames_139 + 1
132: JonJames_140
133: Yvonnetastic_137
134: CWormy_2 + 4
135: Mossy_1
136: Blanky_1
137: Perkunas_2
138: Hortihabitatio_2
139: DatBoi_51
140: Bantam_53
141: SpeedDemon_540
142: BearBQ_64
143: MortyNRick_62
144: Squiddly_103
145: GMA2_84
146: Octobien14_114
147: Sephiroth_114 + 2
148: Wojtek_85 + 1
149: Lambo_93
150: Marcie_61

Pham 347085


151: Tempo_56
152: CandC_55
153: KillerQueen_57 + 2
154: Fransoyer_60 + 1
155: Pepe25_55
156: Romm_58
157: RobinRose_58
158: Zizzie_99 + 4
159: Saal_94 + 31
160: Sandalphon_96
161: Peas_65
162: PeggyLeg03_45 + 1
163: Constande_64
164: FosterFrank_48
165: Judy_48
166: NidoQ_42
167: SJReid_70
168: Rockabye_66
169: Sunny4976_68 + 1
170: Sunny4976_64 + 1
171: Arzan_66
172: GermyBeanmy_74
173: GermyBeanmy_79
174: Arzan_71
175: Paella_133 + 6
176: Elver_233 + 2
177: Gandlonco_179 + 6
178: Kureo_230 + 3
179: Gandlonco_120 + 4
180: Gandlonco_121 + 3
181: Qui_123 + 1
182: Qui_124 + 1
183: Qui_164 + 6
184: Elver_124
185: BellaJr_84
186: Neroxid_43 + 2
187: PaulioDiaboli_215
188: A3Wally_215
189: Dodo_211
190: Erasmago_204
191: Pumpernickel_196
192: AmandaPanda_104 + 1
193: Bobby_171
194: Sweetclover_60
195: Daddyjeff_60
196: Serenabean_59
197: Pippin15_60
198: AddiRose_59
199: VanLee_70
200: Colossa_71

Pham 347085


201: Tortellini_63
202: Stellammi_129
203: Cosmo_71 + 3
204: Wildcat_70
205: Argie_6 + 1
206: Shocker_3
207: JeanGrey_20
208: ERHickory_13
209: BigAmi_4
210: Cantare_94
211: Sunfish_12

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 347085 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347085 has 480 members, 77 are drafts.

Phages represented in each track:
• Track 1 : Anglerfish_11, Dynamix_11, Arcanine_11, Rajelicia_10, PinkPlastic_9, DreamCatcher_12, McGuire_11, Slagathor_11, Manatee_11
• Track 2 : Squee_11, BeesKnees_11, Naira_11, Atkinbua_11, Fenn_11
• Track 3 : Briton15_12, Ichabod_11
• Track 4 : Switzer_11, KSSJEB_10, U2_10
• Track 5 : Seabiscuit_12
• Track 6 : Anon_48
• Track 7 : Causa_146
• Track 8 : StAugustine_144
• Track 9 : Correa_71, Xenomorph_69, Arcadia_72, Cheesy_73, Nason_72, Elsa_72, Tribby_76
• Track 10 : Correa_72, Nason_73, Arcadia_73, Cheesy_74, Elsa_73, Tribby_77
• Track 11 : Tribby_40, Correa_38
• Track 12 : Mooshroom_43, BenitoAntonio_41, Dynamite_40, Kardesai_42, NapoleonB_40
• Track 13 : GoCrazy_39, KeaneyLin_39, Mudcat_38, Circum_42, Bowling_40, Elsa_41, Nason_41, YoshiYama_40, Hankly_40, Heisenberger_40, Arcadia_41
• Track 14 : Heisenberger_72, Mooshroom_74, Mudcat_69, Hankly_73, Bowling_75, JEGGS_72, Circum_75, Kardesai_73, YoshiYama_75, BenitoAntonio_72, Stardom_73, NapoleonB_74, Dynamite_73, GoCrazy_70, KeaneyLin_69
• Track 15 : Heisenberger_71, Mooshroom_73, Hankly_72, GoCrazy_69, Bowling_74, JEGGS_71, Circum_74, Kardesai_72, YoshiYama_74, NapoleonB_73, BenitoAntonio_71, Benllo_70, Dynamite_72, Mudcat_68, Stardom_72, KeaneyLin_68
• Track 16 : Cheesy_40
• Track 17 : Benllo_71
• Track 18 : Xenomorph_70
• Track 19 : JEGGS_40
• Track 20 : Stardom_38
• Track 21 : Xenomorph_37
• Track 22 : Benllo_40
• Track 23 : Ranunculus_6
• Track 24 : Rizwana_7
• Track 25 : Rizwana_8
• Track 26 : Wilde_9
• Track 27 : Tank_9
• Track 28 : Nikan_5, Ren19_5
• Track 29 : Nikan_9, Ren19_9

• Track 30 : Ollypop_11
• Track 31 : Hive_64
• Track 32 : Ollypop_7
• Track 33 : Forrestell_8, Pureglobe5_10, RazzB_7, MellowYellow_8, Pointis_8, Odyssey395_10, DogYard_8, Beagle_10, PhuzzTulsa_6, NyleyClemson_7, Kubulix_9, BetaFish_8, Popstraw_8
• Track 34 : Popstraw_63, Odyssey395_68, Pureglobe5_67, Pointis_65, PhuzzTulsa_65, RIPWilbur_67, DogYard_67, Kubulix_68, BetaFish_69, Beagle_68
• Track 35 : NyleyClemson_66, MellowYellow_68, RazzB_67
• Track 36 : RIPWilbur_6
• Track 37 : Ren19_63
• Track 38 : Nikan_65
• Track 39 : Ollypop_64
• Track 40 : Forrestell_67
• Track 41 : BruhMoment_8
• Track 42 : AWGoat_6
• Track 43 : SilentRX_7
• Track 44 : Trustiboi_61, Nivinsha_63, AreFloNak_64, Breylor17_61, Darby_60, Synepsis_60, CastorTray_65, DevitoJr_61
• Track 45 : Trustiboi_65, Westerlin_65, Darby_64
• Track 46 : Acai_61, Gordon_59, Truckee_63, Brunswick_62, Westerlin_61, Nightmare_63, ElephantMan_61, LucySwiss_61, Niktson_61, Makai_65, Teacup_62
• Track 47 : Acai_66
• Track 48 : Nivinsha_69, AreFloNak_69, Breylor17_65, Nightmare_67, ScienceWizSam_67, Synepsis_64, Gordon_63, Tatanka_61, DevitoJr_65
• Track 49 : Brunswick_67
• Track 50 : Hemma_68
• Track 51 : Hemma_69
• Track 52 : Hemma_63
• Track 53 : CapnMurica_59, Tenno_62, Dinallo_60, Issa_60
• Track 54 : ScienceWizSam_62
• Track 55 : MiniBagel_61
• Track 56 : Tenno_66
• Track 57 : LucySwiss_66
• Track 58 : Tatanka_58
• Track 59 : Dinallo_64
• Track 60 : ElephantMan_66, Niktson_66
• Track 61 : Issa_64
• Track 62 : CastorTray_69
• Track 63 : MiniBagel_65
• Track 64 : Teacup_67
• Track 65 : CapnMurica_63
• Track 66 : LilHuddy_66, Chlochlo_65, Bouchard_65, Phaby_67, Tipton_66, Shepard_67, Tokki_70
• Track 67 : Giantsbane_69
• Track 68 : Giantsbane_65
• Track 69 : Bouchard_70, Chlochlo_70, Tokki_75, Tipton_71
• Track 70 : Shepard_71
• Track 71 : Phaby_71
• Track 72 : LilHuddy_70
• Track 73 : Ingrid_68, Loretta_65
• Track 74 : Loretta_69, Ingrid_72
• Track 75 : Anandi_69

• Track 76 : Caterpillar_61
• Track 77 : MediumFry_62
• Track 78 : MediumFry_66
• Track 79 : Caterpillar_65
• Track 80 : Anandi_73
• Track 81 : Anandi_74
• Track 82 : Truckee_68, Makai_70
• Track 83 : Phaila_68, Zeina_70, Remlit_74
• Track 84 : Phaila_67, BlackHoleSun_69, Stardrop_67, Tenney120_68, GantcherGoblin_65, PoeMe_67, Argan_64, Uzumaki_64, KevinMinion_65
• Track 85 : Muglass_68, Biscute_67, Lewando_70, Barbonzobean_70, Kinny_70
• Track 86 : Muglass_69, BarbieDoll_72, Biscute_68, Kinny_71
• Track 87 : Altjira_70
• Track 88 : Stardrop_68, BlackHoleSun_70, PoeMe_68
• Track 89 : Navi1117_69
• Track 90 : Leathea_68
• Track 91 : Leathea_67
• Track 92 : Zeina_69
• Track 93 : Mardi_67, Remlit_73
• Track 94 : Mardi_68
• Track 95 : Tenney120_69
• Track 96 : GantcherGoblin_66, Uzumaki_65
• Track 97 : Lewando_71
• Track 98 : Altjira_69
• Track 99 : Navi1117_70, KevinMinion_66
• Track 100 : Barbonzobean_71
• Track 101 : Argan_65
• Track 102 : Renaldo_76
• Track 103 : TrixiePhattel_69
• Track 104 : TrixiePhattel_68
• Track 105 : Inked_67, Zippen_67
• Track 106 : Inked_71
• Track 107 : Zippen_71
• Track 108 : Raunak_68, Boog_67, HerbBucket_66, Djungelskog_67, ProfFrink_68, Sloopyjoe_68, Egad_68, BronxBay_68, Shiba_67, MrAaronian_68, Michelle_68, Jeremy4pt0_67, Stayer_68, StarLord_68, Salk_68, Spain_68, DoctorPepper_67, Linda_68
• Track 109 : Sprinkle_68
• Track 110 : Onestar_67
• Track 111 : RustyBoy_72
• Track 112 : Natasha_71
• Track 113 : Sporto_67
• Track 114 : Powelldog_71
• Track 115 : TunaTartare_69
• Track 116 : Limpid_66, Annadreamy_67
• Track 117 : Sham_67
• Track 118 : Faust_71, SeresaTree_71
• Track 119 : Blueeyedbeauty_69
• Track 120 : Beuffert_67
• Track 121 : G4_46
• Track 122 : ScoobyDoobyDoo_233
• Track 123 : Myrna_235
• Track 124 : Greely_244

• Track 125 : Phabba_246
• Track 126 : RedBaron_57, Nina_52
• Track 127 : Pipp_48
• Track 128 : Clown_82
• Track 129 : Cardigan_139
• Track 130 : Cardigan_140
• Track 131 : JonJames_139, Yvonnetastic_136
• Track 132 : JonJames_140
• Track 133 : Yvonnetastic_137
• Track 134 : CWormy_2, ArtetaBall_2, Dialga_2, Untouchable_2, Crocheter_2
• Track 135 : Mossy_1
• Track 136 : Blanky_1
• Track 137 : Perkunas_2
• Track 138 : Hortihabitatio_2
• Track 139 : DatBoi_51
• Track 140 : Bantam_53
• Track 141 : SpeedDemon_540
• Track 142 : BearBQ_64
• Track 143 : MortyNRick_62
• Track 144 : Squiddly_103
• Track 145 : GMA2_84
• Track 146 : Octobien14_114
• Track 147 : Sephiroth_114, Kudefre_118, Syleon_119
• Track 148 : Wojtek_85, ParvusTarda_93
• Track 149 : Lambo_93
• Track 150 : Marcie_61
• Track 151 : Tempo_56
• Track 152 : CandC_55
• Track 153 : KillerQueen_57, Kelcole_54, OneinaGillian_56
• Track 154 : Fransoyer_60, SadLad_63
• Track 155 : Pepe25_55
• Track 156 : Romm_58
• Track 157 : RobinRose_58
• Track 158 : Zizzle_99, Jennelsea_94, BobaPhett_98, ShiLan_99, Mattes_97
• Track 159 : Saal_94, Clifton_88, Nivrat_96, Philus_98, Burwell21_90, Whouxphf_100, Lizziana_97, NormanBulbieJr_94, Latretium_99, Brocalys_88, Yorick_92, Spoonbill_96, FreddyB_106, Maravista_93, Martik_95, LastJedi_87, Crumble_91, Pippy_94, LilMoolah_99, Cabrinians_93, Minnie_91, James_100, OlympiaSaint_100, Blexus_93, SwagPigglett_98, Priscilla_97, ShowerHandel_97, Gorge_95, ByChance_87, Jarcob_99, Vivum_96, Koella_89
• Track 160 : Sandalphon_96
• Track 161 : Peas_65
• Track 162 : PeggyLeg03_45, Pucara_42
• Track 163 : Constance_64
• Track 164 : FosterFrank_48
• Track 165 : Judy_48
• Track 166 : NidoQ_42
• Track 167 : SJReid_70
• Track 168 : Rockabye_66
• Track 169 : Sunny4976_68, Jazzy4900_69
• Track 170 : Sunny4976_64, Jazzy4900_65
• Track 171 : Arzan_66
• Track 172 : GermyBearimy_74

• Track 173 : GermyBearimy_79
• Track 174 : Arzan_71
• Track 175 : Paella_133, Marianna39_130, Gandionco_129, JeNeSaisPas_130, Elver_133, Qui_133, Kureo_130
• Track 176 : Elver_233, Gandionco_233, Marianna39_233
• Track 177 : Gandionco_179, Kureo_178, Elver_180, Paella_181, Qui_181, JeNeSaisPas_182, Marianna39_178
• Track 178 : Kureo_230, Qui_234, JeNeSaisPas_235, Paella_235
• Track 179 : Gandionco_120, Marianna39_121, JeNeSaisPas_120, Elver_123, Kureo_121
• Track 180 : Gandionco_121, Marianna39_122, Kureo_122, JeNeSaisPas_121
• Track 181 : Qui_123, Paella_123
• Track 182 : Qui_124, Paella_124
• Track 183 : Qui_164, Marianna39_160, JeNeSaisPas_164, Gandionco_160, Elver_164, Paella_164, Kureo_159
• Track 184 : Elver_124
• Track 185 : BellaJr_84
• Track 186 : Neroxid_43, Skyerus_38, Raya_43
• Track 187 : PauloDiaboli_215
• Track 188 : A3Wally_215
• Track 189 : Dodo_211
• Track 190 : Erasmago_204
• Track 191 : Pumpernickel_196
• Track 192 : AmandaPanda_104, DrLupo_104
• Track 193 : Bobby_171
• Track 194 : Sweetclover_60
• Track 195 : Daddyjeff_60
• Track 196 : Serenabean_59
• Track 197 : Pippin15_60
• Track 198 : AddiRose_59
• Track 199 : VanLee_70
• Track 200 : Colossa_71
• Track 201 : Tortellini_63
• Track 202 : Stellammi_129
• Track 203 : Cosmo_71, EniyanLRS_67, Azrael100_70, MaryV_70
• Track 204 : Wildcat_70
• Track 205 : Argie_6, GodPhather_6
• Track 206 : Shocker_3
• Track 207 : JeanGrey_20
• Track 208 : ERHickory_13
• Track 209 : BigAnti_4
• Track 210 : Cantare_94
• Track 211 : Sunfish_12

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

The start number called the most often in the published annotations is 134, it was called in 144 of the 403 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Acai_61, Acai_66, Altjira_70, Anandi_69, Anandi_73, Arcadia_41, AreFloNak_64, AreFloNak_69, Argan_65, Arzan_66, Arzan_71, BarbieDoll_72, Barbonzobean_71, BenitoAntonio_41, Benllo_40, Biscute_68, BlackHoleSun_70, Boog_67, Bouchard_65, Bouchard_70, Bowling_40, Breylor17_61, Breylor17_65, BronxBay_68, Brunswick_62, Brunswick_67, CapnMurica_59, CapnMurica_63, CastorTray_65, CastorTray_69, Caterpillar_61, Caterpillar_65, Cheesy_40, Chlochlo_65, Chlochlo_70, Circum_42, Correa_38, Darby_60, Darby_64, DevitoJr_61, DevitoJr_65, Dinallo_60, Dinallo_64, Djungelskog_67, DoctorPepper_67, Dynamite_40, Egad_68, ElephantMan_61, ElephantMan_66, Elsa_41, Elver_133, Elver_164, Elver_180, Gandionco_129, Gandionco_160, Gandionco_179, GantcherGoblin_66, GermyBearimy_74, GermyBearimy_79, Giantsbane_65, Giantsbane_69, GoCrazy_39, Gordon_59, Gordon_63, Hankly_40, Heisenberger_40, Hemma_63, Hemma_68, HerbBucket_66, Ingrid_68, Ingrid_72, Inked_67, Inked_71, Issa_60, Issa_64, JEGGS_40, Jazzy4900_65, Jazzy4900_69, JeNeSaisPas_130, JeNeSaisPas_164, JeNeSaisPas_182, Jeremy4pt0_67, Kardesai_42, KeaneyLin_39, KevinMinion_66, Kinny_71, Kureo_130, Kureo_159, Kureo_178, Leathea_68, Lewando_71, LilHuddy_66, LilHuddy_70, Linda_68, Loretta_65, Loretta_69, LucySwiss_61, LucySwiss_66, Makai_65, Makai_70, Mardi_68, Marianna39_130, Marianna39_160, Marianna39_178, MediumFry_62, MediumFry_66, Michelle_68, MiniBagel_61, MiniBagel_65, Mooshroom_43, MrAaronian_68, Mudcat_38, Muglass_69, NapoleonB_40, Nason_41, Natasha_71, Navi1117_70, Nightmare_63, Nightmare_67, Niktson_61, Niktson_66, Nivinsha_63, Nivinsha_69, Onestar_67, Paella_133, Paella_164, Paella_181, Phaby_67, Phaby_71, Phaila_68, PoeMe_68, Powelldog_71, ProfFrink_68, Qui_133, Qui_164, Qui_181, Raunak_68, Remlit_74, Renaldo_76, RustyBoy_72, Salk_68, ScienceWizSam_62, ScienceWizSam_67, Shepard_67, Shepard_71, Shiba_67, Sloopyjoe_68, Spain_68, Sprinkle_68, StarLord_68, Stardom_38, Stardrop_68, Stayer_68, Sunny4976_64, Sunny4976_68, Synepsis_60, Synepsis_64, Tatanka_58, Tatanka_61, Teacup_62, Teacup_67, Tenney120_69, Tenno_62, Tenno_66, Tipton_66, Tipton_71, Tokki_70, Tokki_75, Tribby_40, TrixiePhattel_69, Truckee_63, Truckee_68, Trustiboi_61, Trustiboi_65, Uzumaki_65, Westerlin_61, Westerlin_65, Xenomorph_37, YoshiYama_40, Zeina_70, Zippen_67, Zippen_71,

Genes that have the "Most Annotated" start but do not call it:
• Arcadia_73, Cheesy_74, Correa_72, Elsa_73, Nason_73, Tribby_77, Xenomorph_70,

Genes that do not have the "Most Annotated" start:
• A3Wally_215, AWGoat_6, AddiRose_59, Altjira_69, AmandaPanda_104, Anandi_74, Anglerfish_11, Annadreamy_67, Anon_48, Arcadia_72, Arcanine_11, Argan_64, Argie_6, ArtetaBall_2, Atkinbua_11, Azrael100_70, Bantam_53, Barbonzobean_70, Beagle_10, Beagle_68, BearBQ_64, BeesKnees_11, BellaJr_84, BenitoAntonio_71, BenitoAntonio_72, Benllo_70, Benllo_71, BetaFish_69, BetaFish_8, Beuffert_67, BigAnti_4, Biscute_67, BlackHoleSun_69, Blanky_1, Blexus_93, Blueeyedbeauty_69, BobaPhett_98, Bobby_171, Bowling_74, Bowling_75, Briton15_12, Brocalys_88, BruhMoment_8, Burwell21_90, ByChance_87, CWormy_2, Cabrinians_93, CandC_55, Cantare_94, Cardigan_139, Cardigan_140, Causa_146, Cheesy_73, Circum_74, Circum_75, Clifton_88, Clown_82, Colossa_71, Constance_64, Correa_71, Cosmo_71, Crocheter_2, Crumble_91, Daddyjeff_60, DatBoi_51, Dialga_2, Dodo_211, DogYard_67, DogYard_8, DrLupo_104, DreamCatcher_12, Dynamite_72, Dynamite_73, Dynamix_11, ERHickory_13, Elsa_72, Elver_123, Elver_124, Elver_233, EniyanLRS_67, Erasmago_204, Faust_71, Fenn_11, Forrestell_67, Forrestell_8,

FosterFrank_48, Fransoyer_60, FreddyB_106, G4_46, GMA2_84, Gandionco_120, Gandionco_121, Gandionco_233, GantcherGoblin_65, GoCrazy_69, GoCrazy_70, GodPhather_6, Gorge_95, Greely_244, Hankly_72, Hankly_73, Heisenberger_71, Heisenberger_72, Hemma_69, Hive_64, Hortihabitatio_2, Ichabod_11, JEGGS_71, JEGGS_72, James_100, Jarcob_99, JeNeSaisPas_120, JeNeSaisPas_121, JeNeSaisPas_235, JeanGrey_20, Jennelsea_94, JonJames_139, JonJames_140, Judy_48, KSSJEB_10, Kardesai_72, Kardesai_73, KeaneyLin_68, KeaneyLin_69, Kelcole_54, KevinMinion_65, KillerQueen_57, Kinny_70, Koella_89, Kubulix_68, Kubulix_9, Kudefre_118, Kureo_121, Kureo_122, Kureo_230, Lambo_93, LastJedi_87, Latretium_99, Leathea_67, Lewando_70, LilMoolah_99, Limpid_66, Lizziana_97, Manatee_11, Maravista_93, Marcie_61, Mardi_67, Marianna39_121, Marianna39_122, Marianna39_233, Martik_95, MaryV_70, Mattes_97, McGuire_11, MellowYellow_68, MellowYellow_8, Minnie_91, Mooshroom_73, Mooshroom_74, MortyNRick_62, Mossy_1, Mudcat_68, Mudcat_69, Muglass_68, Myrna_235, Naira_11, NapoleonB_73, NapoleonB_74, Nason_72, Navi1117_69, Neroxid_43, NidoQ_42, Nikan_5, Nikan_65, Nikan_9, Nina_52, Nivrat_96, NormanBulbieJr_94, NyleyClemson_66, NyleyClemson_7, Octobien14_114, Odyssey395_10, Odyssey395_68, Ollypop_11, Ollypop_64, Ollypop_7, OlympiaSaint_100, OneinaGillian_56, Paella_123, Paella_124, Paella_235, ParvusTarda_93, PauloDiaboli_215, Peas_65, PeggyLeg03_45, Pepe25_55, Perkunas_2, Phabba_246, Phaila_67, Philus_98, PhuzzTulsa_6, PhuzzTulsa_65, PinkPlastic_9, Pipp_48, Pippin15_60, Pippy_94, PoeMe_67, Pointis_65, Pointis_8, Popstraw_63, Popstraw_8, Priscilla_97, Pucara_42, Pumpernickel_196, Pureglobe5_10, Pureglobe5_67, Qui_123, Qui_124, Qui_234, RIPWilbur_6, RIPWilbur_67, Rajelicia_10, Ranunculus_6, Raya_43, RazzB_67, RazzB_7, RedBaron_57, Remlit_73, Ren19_5, Ren19_63, Ren19_9, Rizwana_7, Rizwana_8, RobinRose_58, Rockabye_66, Romm_58, SJReid_70, Saal_94, SadLad_63, Sandalphon_96, ScoobyDoobyDoo_233, Seabiscuit_12, Sephiroth_114, Serenabean_59, SeresaTree_71, Sham_67, ShiLan_99, Shocker_3, ShowerHandel_97, SilentRX_7, Skyerus_38, Slagathor_11, SpeedDemon_540, Spoonbill_96, Sporto_67, Squee_11, Squiddly_103, StAugustine_144, Stardom_72, Stardom_73, Stardrop_67, Stellammi_129, Sunfish_12, SwagPigglett_98, Sweetclover_60, Switzer_11, Syleon_119, Tank_9, Tempo_56, Tenney120_68, Tortellini_63, Tribby_76, TrixiePhattel_68, TunaTartare_69, U2_10, Untouchable_2, Uzumaki_64, VanLee_70, Vivum_96, Whouxphf_100, Wildcat_70, Wilde_9, Wojtek_85, Xenomorph_69, Yorick_92, YoshiYama_74, YoshiYama_75, Yvonnetastic_136, Yvonnetastic_137, Zeina_69, Zizzle_99,

Summary by start number:

Start 102:
• Found in 2 of 480 (0.4%) of genes in pham
• Manual Annotations of this start: 2 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rockabye_66 (FC), SJReid_70 (FC),

Start 110:
• Found in 19 of 480 (4.0%) of genes in pham
• Manual Annotations of this start: 16 of 403
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Beagle_10 (AP2), BetaFish_8 (AP2), DogYard_8 (AP2), Forrestell_8 (AP2), Kubulix_9 (AP2), MellowYellow_8 (AP2), Nikan_5 (AP2), NyleyClemson_7 (AP2), Odyssey395_10 (AP2), Ollypop_7 (AP2),

PhuzzTulsa_6 (AP2), Pointis_8 (AP2), Popstraw_8 (AP2), Pureglobe5_10 (AP2), RIPWilbur_6 (AP2), Ranunculus_6 (AP), RazzB_7 (AP2), Ren19_5 (AP2),

Start 113:
• Found in 8 of 480 (1.7%) of genes in pham
• Manual Annotations of this start: 7 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Annadreamy_67 (BK1), Beuffert_67 (BK1), Blueeyedbeauty_69 (BK1), Faust_71 (BK1), Limpid_66 (BK1), SeresaTree_71 (BK1), Sham_67 (BK1), TunaTartare_69 (BK1),

Start 114:
• Found in 21 of 480 (4.4%) of genes in pham
• Manual Annotations of this start: 16 of 403
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Argan_64 (AU6), Barbonzobean_70 (AU6), Biscute_67 (AU6), BlackHoleSun_69 (AU6), GantcherGoblin_65 (AU6), KevinMinion_65 (AU6), Kinny_70 (AU6), Leathea_67 (AU6), Lewando_70 (AU6), Muglass_68 (AU6), Navi1117_69 (AU6), Phaila_67 (AU6), PoeMe_67 (AU6), Stardrop_67 (AU6), Tenney120_68 (AU6), TrixiePhattel_68 (AU6), Uzumaki_64 (AU6), Zeina_69 (AU6),

Start 115:
• Found in 5 of 480 (1.0%) of genes in pham
• Manual Annotations of this start: 4 of 403
• Called 80.0% of time when present
• Phage (with cluster) where this start called: AWGoat_6 (AP4), BruhMoment_8 (AP3), Rizwana_7 (AP1), SilentRX_7 (AP4),

Start 116:
• Found in 3 of 480 (0.6%) of genes in pham
• Manual Annotations of this start: 3 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rizwana_8 (AP1), Tank_9 (AP1), Wilde_9 (AP1),

Start 119:
• Found in 2 of 480 (0.4%) of genes in pham
• Manual Annotations of this start: 2 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JeanGrey_20 (singleton), Serenabean_59 (JA),

Start 122:
• Found in 4 of 480 (0.8%) of genes in pham
• Manual Annotations of this start: 3 of 403
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Cardigan_140 (DD), JonJames_140 (DD), Yvonnetastic_137 (DD),

Start 124:
• Found in 1 of 480 (0.2%) of genes in pham
• No Manual Annotations of this start.

• Called 100.0% of time when present
• Phage (with cluster) where this start called: BellaJr_84 (FN),

Start 126:
• Found in 2 of 480 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Cantare_94 (singleton),

Start 127:
• Found in 41 of 480 (8.5%) of genes in pham
• Manual Annotations of this start: 23 of 403
• Called 63.4% of time when present
• Phage (with cluster) where this start called: Altjira_69 (AU6), Arcadia_72 (AM), BenitoAntonio_71 (AM), Benllo_70 (AM), Bowling_74 (AM), Cheesy_73 (AM), Circum_74 (AM), Correa_71 (AM), Dynamite_72 (AM), Elsa_72 (AM), GoCrazy_69 (AM), Hankly_72 (AM), Heisenberger_71 (AM), JEGGS_71 (AM), Kardesai_72 (AM), KeaneyLin_68 (AM), Mooshroom_73 (AM), Mudcat_68 (AM), NapoleonB_73 (AM), Nason_72 (AM), ParvusTarda_93 (DV), Stardom_72 (AM), Tribby_76 (AM), Wojtek_85 (DV), Xenomorph_69 (AM), YoshiYama_74 (AM),

Start 129:
• Found in 3 of 480 (0.6%) of genes in pham
• Manual Annotations of this start: 3 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cardigan_139 (DD), JonJames_139 (DD), Yvonnetastic_136 (DD),

Start 130:
• Found in 11 of 480 (2.3%) of genes in pham
• Manual Annotations of this start: 5 of 403
• Called 54.5% of time when present
• Phage (with cluster) where this start called: A3Wally_215 (GD1), Dodo_211 (GD1), Erasmago_204 (GD2), PauloDiaboli_215 (GD1), Pumpernickel_196 (GD4), Wildcat_70 (V),

Start 132:
• Found in 8 of 480 (1.7%) of genes in pham
• Manual Annotations of this start: 4 of 403
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Azrael100_70 (V), Cosmo_71 (V), EniyanLRS_67 (V), MaryV_70 (V),

Start 133:
• Found in 4 of 480 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Seabiscuit_12 (A1),

Start 134:
• Found in 189 of 480 (39.4%) of genes in pham
• Manual Annotations of this start: 144 of 403
• Called 96.3% of time when present

• Phage (with cluster) where this start called: Acai_61 (AU1), Acai_66 (AU1), Altjira_70 (AU6), Anandi_69 (AU4), Anandi_73 (AU4), Arcadia_41 (AM), AreFloNak_64 (AU1), AreFloNak_69 (AU1), Argan_65 (AU6), Arzan_66 (FI), Arzan_71 (FI), BarbieDoll_72 (AU6), Barbonzobean_71 (AU6), BenitoAntonio_41 (AM), Benllo_40 (AM), Biscute_68 (AU6), BlackHoleSun_70 (AU6), Boog_67 (AW), Bouchard_65 (AU2), Bouchard_70 (AU2), Bowling_40 (AM), Breylor17_61 (AU1), Breylor17_65 (AU1), BronxBay_68 (AW), Brunswick_62 (AU1), Brunswick_67 (AU1), CapnMurica_59 (AU1), CapnMurica_63 (AU1), CastorTray_65 (AU1), CastorTray_69 (AU1), Caterpillar_61 (AU4), Caterpillar_65 (AU4), Cheesy_40 (AM), Chlochlo_65 (AU2), Chlochlo_70 (AU2), Circum_42 (AM), Correa_38 (AM), Darby_60 (AU1), Darby_64 (AU1), DevitoJr_61 (AU1), DevitoJr_65 (AU1), Dinallo_60 (AU1), Dinallo_64 (AU1), Djungelskog_67 (AW), DoctorPepper_67 (AW), Dynamite_40 (AM), Egad_68 (AW), ElephantMan_61 (AU1), ElephantMan_66 (AU1), Elsa_41 (AM), Elver_133 (FK), Elver_164 (FK), Elver_180 (FK), Gandionco_129 (FK), Gandionco_160 (FK), Gandionco_179 (FK), GantcherGoblin_66 (AU6), GermyBearimy_74 (FI), GermyBearimy_79 (FI), Giantsbane_65 (AU2), Giantsbane_69 (AU2), GoCrazy_39 (AM), Gordon_59 (AU1), Gordon_63 (AU1), Hankly_40 (AM), Heisenberger_40 (AM), Hemma_63 (AU1), Hemma_68 (AU1), HerbBucket_66 (AW), Ingrid_68 (AU3), Ingrid_72 (AU3), Inked_67 (AU7), Inked_71 (AU7), Issa_60 (AU1), Issa_64 (AU1), JEGGS_40 (AM), Jazzy4900_65 (FI), Jazzy4900_69 (FI), JeNeSaisPas_130 (FK), JeNeSaisPas_164 (FK), JeNeSaisPas_182 (FK), Jeremy4pt0_67 (AW), Kardesai_42 (AM), KeaneyLin_39 (AM), KevinMinion_66 (AU6), Kinny_71 (AU6), Kureo_130 (FK), Kureo_159 (FK), Kureo_178 (FK), Leathea_68 (AU6), Lewando_71 (AU6), LilHuddy_66 (AU2), LilHuddy_70 (AU2), Linda_68 (AW), Loretta_65 (AU3), Loretta_69 (AU3), LucySwiss_61 (AU1), LucySwiss_66 (AU1), Makai_65 (AU5), Makai_70 (AU5), Mardi_68 (AU6), Marianna39_130 (FK), Marianna39_160 (FK), Marianna39_178 (FK), MediumFry_62 (AU4), MediumFry_66 (AU4), Michelle_68 (AW), MiniBagel_61 (AU1), MiniBagel_65 (AU1), Mooshroom_43 (AM), MrAaronian_68 (AW), Mudcat_38 (AM), Muglass_69 (AU6), NapoleonB_40 (AM), Nason_41 (AM), Natasha_71 (AW), Navi1117_70 (AU6), Nightmare_63 (AU1), Nightmare_67 (AU1), Niktson_61 (AU1), Niktson_66 (AU1), Nivinsha_63 (AU1), Nivinsha_69 (AU1), Onestar_67 (AW), Paella_133 (FK), Paella_164 (FK), Paella_181 (FK), Phaby_67 (AU2), Phaby_71 (AU2), Phaila_68 (AU6), PoeMe_68 (AU6), Powelldog_71 (AW), ProfFrink_68 (AW), Qui_133 (FK), Qui_164 (FK), Qui_181 (FK), Raunak_68 (AW), Remlit_74 (AU6), Renaldo_76 (AU6), RustyBoy_72 (AW), Salk_68 (AW), ScienceWizSam_62 (AU1), ScienceWizSam_67 (AU1), Shepard_67 (AU2), Shepard_71 (AU2), Shiba_67 (AW), Sloopyjoe_68 (AW), Spain_68 (AW), Sprinkle_68 (AW), StarLord_68 (AW), Stardom_38 (AM), Stardrop_68 (AU6), Stayer_68 (AW), Sunny4976_64 (FI), Sunny4976_68 (FI), Synepsis_60 (AU1), Synepsis_64 (AU1), Tatanka_58 (AU1), Tatanka_61 (AU1), Teacup_62 (AU1), Teacup_67 (AU1), Tenney120_69 (AU6), Tenno_62 (AU1), Tenno_66 (AU1), Tipton_66 (AU2), Tipton_71 (AU2), Tokki_70 (AU2), Tokki_75 (AU2), Tribby_40 (AM), TrixiePhattel_69 (AU6), Truckee_63 (AU5), Truckee_68 (AU5), Trustiboi_61 (AU1), Trustiboi_65 (AU1), Uzumaki_65 (AU6), Westerlin_61 (AU1), Westerlin_65 (AU1), Xenomorph_37 (AM), YoshiYama_40 (AM), Zeina_70 (AU6), Zippen_67 (AU7), Zippen_71 (AU7),

Start 138:
• Found in 23 of 480 (4.8%) of genes in pham
• Manual Annotations of this start: 18 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BenitoAntonio_72 (AM), Benllo_71 (AM), Bowling_75 (AM), Circum_75 (AM), Dynamite_73 (AM), Elver_123 (FK),

Gandionco_120 (FK), GoCrazy_70 (AM), Hankly_73 (AM), Heisenberger_72 (AM), JEGGS_72 (AM), JeNeSaisPas_120 (FK), Kardesai_73 (AM), KeaneyLin_69 (AM), Kureo_121 (FK), Marianna39_121 (FK), Mooshroom_74 (AM), Mudcat_69 (AM), NapoleonB_74 (AM), Paella_123 (FK), Qui_123 (FK), Stardom_73 (AM), YoshiYama_75 (AM),

Start 139:
• Found in 5 of 480 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Tortellini_63 (P2),

Start 140:
• Found in 22 of 480 (4.6%) of genes in pham
• Manual Annotations of this start: 6 of 403
• Called 27.3% of time when present
• Phage (with cluster) where this start called: AddiRose_59 (JA), Causa_146 (AI), Daddyjeff_60 (JA), Pippin15_60 (JA), StAugustine_144 (AI), Sweetclover_60 (JA),

Start 141:
• Found in 18 of 480 (3.8%) of genes in pham
• Manual Annotations of this start: 10 of 403
• Called 55.6% of time when present
• Phage (with cluster) where this start called: Arcadia_73 (AM), Bantam_53 (DL), Cheesy_74 (AM), Correa_72 (AM), Elsa_73 (AM), Nason_73 (AM), RobinRose_58 (EG), SpeedDemon_540 (DL), Tribby_77 (AM), Xenomorph_70 (AM),

Start 142:
• Found in 1 of 480 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sandalphon_96 (F1),

Start 143:
• Found in 26 of 480 (5.4%) of genes in pham
• Manual Annotations of this start: 19 of 403
• Called 76.9% of time when present
• Phage (with cluster) where this start called: Anon_48 (A15), CandC_55 (EG), Clown_82 (DC2), Constance_64 (FA), DatBoi_51 (DL), Greely_244 (C2), Kelcole_54 (EG), KillerQueen_57 (EG), Lambo_93 (DV), Marcie_61 (EG), Myrna_235 (C2), OneinaGillian_56 (EG), Peas_65 (FA), Pepe25_55 (EG), Phabba_246 (C2), Pipp_48 (CV), ScoobyDoobyDoo_233 (C2), Squiddly_103 (DN2), Stellammi_129 (UNK), Tempo_56 (EG),

Start 145:
• Found in 13 of 480 (2.7%) of genes in pham
• Manual Annotations of this start: 9 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anandi_74 (AU4), ArtetaBall_2 (DJ), Blanky_1 (DJ), CWormy_2 (DJ), Crocheter_2 (DJ), Dialga_2 (DJ), GMA2_84 (DS), Hemma_69 (AU1), Hortihabitatio_2 (DJ), Mossy_1 (DJ), Perkunas_2 (DJ), Sporto_67 (AW), Untouchable_2 (DJ),

Start 146:
• Found in 21 of 480 (4.4%) of genes in pham
• Manual Annotations of this start: 4 of 403
• Called 19.0% of time when present
• Phage (with cluster) where this start called: Argie_6 (W), Briton15_12 (A1), GodPhather_6 (W), Ichabod_11 (A1),

Start 147:
• Found in 47 of 480 (9.8%) of genes in pham
• Manual Annotations of this start: 44 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BearBQ_64 (DN), Blexus_93 (F1), BobaPhett_98 (F1), Bobby_171 (J), Brocalys_88 (F1), Burwell21_90 (F1), ByChance_87 (F1), Cabrinians_93 (F1), Clifton_88 (F1), Crumble_91 (F1), FreddyB_106 (F1), G4_46 (BW), Gorge_95 (F1), James_100 (F1), Jarcob_99 (F1), Jennelsea_94 (F1), Koella_89 (F1), LastJedi_87 (F1), Latretium_99 (F1), LilMoolah_99 (F1), Lizziana_97 (F1), Maravista_93 (F1), Martik_95 (F1), Mattes_97 (F1), Minnie_91 (F1), MortyNRick_62 (DN), Neroxid_43 (FQ2), Nikan_9 (AP2), Nivrat_96 (F1), NormanBulbieJr_94 (F1), Ollypop_11 (AP2), OlympiaSaint_100 (F1), Philus_98 (F1), Pippy_94 (F1), Priscilla_97 (F1), Raya_43 (FQ2), Ren19_9 (AP2), Saal_94 (F1), ShiLan_99 (F1), ShowerHandel_97 (F1), Skyerus_38 (FQ2), Spoonbill_96 (F1), SwagPigglett_98 (F1), Vivum_96 (F1), Whouxphf_100 (F1), Yorick_92 (F1), Zizzle_99 (F1),

Start 150:
• Found in 3 of 480 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Shocker_3 (singleton),

Start 151:
• Found in 1 of 480 (0.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigAnti_4 (singleton),

Start 152:
• Found in 31 of 480 (6.5%) of genes in pham
• Manual Annotations of this start: 20 of 403
• Called 67.7% of time when present
• Phage (with cluster) where this start called: Anglerfish_11 (A1), Arcanine_11 (A1), Atkinbua_11 (A1), BeesKnees_11 (A1), DreamCatcher_12 (A1), Dynamix_11 (A1), Fenn_11 (A1), KSSJEB_10 (A1), Manatee_11 (A1), McGuire_11 (A1), Naira_11 (A1), Nina_52 (CT), PinkPlastic_9 (A1), Rajelicia_10 (A1), RedBaron_57 (CT), Romm_58 (EG), Slagathor_11 (A1), Squee_11 (A1), Sunfish_12 (singleton), Switzer_11 (A1), U2_10 (A1),

Start 154:
• Found in 7 of 480 (1.5%) of genes in pham
• Manual Annotations of this start: 7 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ERHickory_13 (singleton), Fransoyer_60 (EG), Kudefre_118 (DU1), Octobien14_114 (DU1), SadLad_63 (EG), Sephiroth_114

(DU1), Syleon_119 (DU1),

Start 155:
• Found in 1 of 480 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ollypop_64 (AP2),

Start 156:
• Found in 17 of 480 (3.5%) of genes in pham
• Manual Annotations of this start: 14 of 403
• Called 94.1% of time when present
• Phage (with cluster) where this start called: Beagle_68 (AP2), BetaFish_69 (AP2), DogYard_67 (AP2), Forrestell_67 (AP2), Kubulix_68 (AP2), MellowYellow_68 (AP2), Nikan_65 (AP2), NyleyClemson_66 (AP2), Odyssey395_68 (AP2), PhuzzTulsa_65 (AP2), Pointis_65 (AP2), Popstraw_63 (AP2), Pureglobe5_67 (AP2), RIPWilbur_67 (AP2), RazzB_67 (AP2), Ren19_63 (AP2),

Start 159:
• Found in 22 of 480 (4.6%) of genes in pham
• No Manual Annotations of this start.
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Mardi_67 (AU6), Remlit_73 (AU6),

Start 162:
• Found in 8 of 480 (1.7%) of genes in pham
• Manual Annotations of this start: 3 of 403
• Called 62.5% of time when present
• Phage (with cluster) where this start called: FosterFrank_48 (FA), Judy_48 (FA), NidoQ_42 (FA), PeggyLeg03_45 (FA), Pucara_42 (FA),

Start 163:
• Found in 2 of 480 (0.4%) of genes in pham
• Manual Annotations of this start: 2 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_71 (KA), VanLee_70 (KA),

Start 164:
• Found in 8 of 480 (1.7%) of genes in pham
• Manual Annotations of this start: 4 of 403
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Elver_233 (FK), Gandionco_233 (FK), JeNeSaisPas_235 (FK), Kureo_230 (FK), Marianna39_233 (FK), Paella_235 (FK), Qui_234 (FK),

Start 186:
• Found in 7 of 480 (1.5%) of genes in pham
• Manual Annotations of this start: 4 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_124 (FK), Gandionco_121 (FK), JeNeSaisPas_121 (FK), Kureo_122 (FK), Marianna39_122 (FK), Paella_124 (FK), Qui_124 (FK),

Start 190:
• Found in 33 of 480 (6.9%) of genes in pham
• No Manual Annotations of this start.
• Called 3.0% of time when present
• Phage (with cluster) where this start called: Hive_64 (AP2),

Start 192:
• Found in 2 of 480 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 403
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AmandaPanda_104 (H2), DrLupo_104 (H2),

Summary by clusters:

There are 51 clusters represented in this pham: DN, GD1, singleton, DJ, AW, AP2, AP3, DD, AP1, DU1, AP4, FA, BW, DL, DV, FI, FK, JA, FN, A15, A1, DS, AU1, DN2, AU3, AU2, AU5, AU4, AU7, AU6, C2, P2, AI, EG, J, AM, AP, BK1, W, V, UNK, DC2, CV, CT, F1, KA, H2, FC, GD4, FQ2, GD2,

Info for manual annotations of cluster A1:
•Start number 133 was manually annotated 1 time for cluster A1.
•Start number 146 was manually annotated 2 times for cluster A1.
•Start number 152 was manually annotated 17 times for cluster A1.

Info for manual annotations of cluster A15:
•Start number 143 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster AI:
•Start number 140 was manually annotated 2 times for cluster AI.

Info for manual annotations of cluster AM:
•Start number 127 was manually annotated 21 times for cluster AM.
•Start number 134 was manually annotated 21 times for cluster AM.
•Start number 138 was manually annotated 14 times for cluster AM.
•Start number 141 was manually annotated 7 times for cluster AM.

Info for manual annotations of cluster AP:
•Start number 110 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:
•Start number 115 was manually annotated 1 time for cluster AP1.
•Start number 116 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:
•Start number 110 was manually annotated 15 times for cluster AP2.
•Start number 147 was manually annotated 3 times for cluster AP2.
•Start number 155 was manually annotated 1 time for cluster AP2.
•Start number 156 was manually annotated 14 times for cluster AP2.

Info for manual annotations of cluster AP3:
•Start number 115 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:
•Start number 115 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster AU1:
•Start number 134 was manually annotated 42 times for cluster AU1.
•Start number 145 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 134 was manually annotated 16 times for cluster AU2.

Info for manual annotations of cluster AU3:
•Start number 134 was manually annotated 4 times for cluster AU3.

Info for manual annotations of cluster AU4:
•Start number 134 was manually annotated 6 times for cluster AU4.
•Start number 145 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 134 was manually annotated 4 times for cluster AU5.

Info for manual annotations of cluster AU6:
•Start number 114 was manually annotated 16 times for cluster AU6.
•Start number 134 was manually annotated 16 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 134 was manually annotated 4 times for cluster AU7.

Info for manual annotations of cluster AW:
•Start number 134 was manually annotated 19 times for cluster AW.
•Start number 145 was manually annotated 1 time for cluster AW.

Info for manual annotations of cluster BK1:
•Start number 113 was manually annotated 7 times for cluster BK1.

Info for manual annotations of cluster BW:
•Start number 147 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster C2:
•Start number 143 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster CT:
•Start number 152 was manually annotated 2 times for cluster CT.

Info for manual annotations of cluster CV:
•Start number 143 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DC2:
•Start number 143 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DD:
•Start number 122 was manually annotated 3 times for cluster DD.
•Start number 129 was manually annotated 3 times for cluster DD.

Info for manual annotations of cluster DJ:
•Start number 145 was manually annotated 6 times for cluster DJ.

Info for manual annotations of cluster DL:
•Start number 141 was manually annotated 2 times for cluster DL.
•Start number 143 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DN:
•Start number 147 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN2:
•Start number 143 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DU1:
•Start number 154 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DV:
•Start number 127 was manually annotated 2 times for cluster DV.
•Start number 143 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster EG:
•Start number 141 was manually annotated 1 time for cluster EG.
•Start number 143 was manually annotated 7 times for cluster EG.
•Start number 154 was manually annotated 2 times for cluster EG.

Info for manual annotations of cluster F1:
•Start number 142 was manually annotated 1 time for cluster F1.
•Start number 147 was manually annotated 37 times for cluster F1.

Info for manual annotations of cluster FA:
•Start number 143 was manually annotated 2 times for cluster FA.
•Start number 162 was manually annotated 3 times for cluster FA.

Info for manual annotations of cluster FC:
•Start number 102 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster FK:
•Start number 134 was manually annotated 12 times for cluster FK.
•Start number 138 was manually annotated 4 times for cluster FK.
•Start number 164 was manually annotated 4 times for cluster FK.
•Start number 186 was manually annotated 4 times for cluster FK.

Info for manual annotations of cluster GD1:
•Start number 130 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD4:
•Start number 130 was manually annotated 1 time for cluster GD4.

Info for manual annotations of cluster H2:
•Start number 192 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster J:
•Start number 147 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster JA:
•Start number 119 was manually annotated 1 time for cluster JA.
•Start number 140 was manually annotated 4 times for cluster JA.

Info for manual annotations of cluster KA:
•Start number 163 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster P2:
•Start number 139 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster UNK:
•Start number 143 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster V:
•Start number 130 was manually annotated 1 time for cluster V.
•Start number 132 was manually annotated 4 times for cluster V.

Info for manual annotations of cluster W:
•Start number 146 was manually annotated 2 times for cluster W.

Gene Information:

Gene: A3Wally_215 Start: 115440, Stop: 115123, Start Num: 130
Candidate Starts for A3Wally_215:
(Start: 130 @115440 has 5 MA's), (240, 115323), (262, 115284), (302, 115188), (316, 115128),

Gene: AWGoat_6 Start: 2566, Stop: 2979, Start Num: 115
Candidate Starts for AWGoat_6:
(Start: 115 @2566 has 4 MA's), (172, 2656), (244, 2773), (291, 2869),

Gene: Acai_61 Start: 44047, Stop: 44346, Start Num: 134
Candidate Starts for Acai_61:
(Start: 134 @44047 has 144 MA's), (233, 44179), (235, 44182), (292, 44281),

Gene: Acai_66 Start: 45783, Stop: 46046, Start Num: 134
Candidate Starts for Acai_66:
(46, 45588), (62, 45633), (63, 45636), (68, 45645), (72, 45663), (73, 45666), (81, 45687), (82, 45690), (93, 45714), (Start: 134 @45783 has 144 MA's), (301, 46005), (304, 46020),

Gene: AddiRose_59 Start: 40641, Stop: 40973, Start Num: 140
Candidate Starts for AddiRose_59:
(Start: 140 @40641 has 6 MA's), (234, 40779), (268, 40839), (283, 40866), (302, 40923), (307, 40956),

Gene: Altjira_70 Start: 44243, Stop: 44527, Start Num: 134
Candidate Starts for Altjira_70:

(Start: 134 @44243 has 144 MA's), (165, 44270), (223, 44363),

Gene: Altjira_69 Start: 43998, Stop: 44243, Start Num: 127
Candidate Starts for Altjira_69:
(Start: 114 @43977 has 16 MA's), (Start: 127 @43998 has 23 MA's), (159, 44043), (190, 44082),

Gene: AmandaPanda_104 Start: 65399, Stop: 65650, Start Num: 192
Candidate Starts for AmandaPanda_104:
(99, 65246), (109, 65267), (165, 65360), (Start: 192 @65399 has 1 MA's), (283, 65552), (285, 65558),

Gene: Anandi_69 Start: 44709, Stop: 44999, Start Num: 134
Candidate Starts for Anandi_69:
(Start: 134 @44709 has 144 MA's), (165, 44739), (196, 44787), (222, 44826), (233, 44841), (235, 44844),

Gene: Anandi_73 Start: 46264, Stop: 46551, Start Num: 134
Candidate Starts for Anandi_73:
(46, 46090), (62, 46132), (80, 46183), (82, 46189), (92, 46210), (Start: 110 @46228 has 16 MA's), (123, 46252), (Start: 134 @46264 has 144 MA's), (219, 46378),

Gene: Anandi_74 Start: 46553, Stop: 46873, Start Num: 145
Candidate Starts for Anandi_74:
(75, 46430), (92, 46466), (107, 46493), (Start: 145 @46553 has 9 MA's), (200, 46640), (290, 46799),

Gene: Anglerfish_11 Start: 6625, Stop: 6939, Start Num: 152
Candidate Starts for Anglerfish_11:
(Start: 152 @6625 has 20 MA's), (174, 6664), (188, 6673), (229, 6742), (269, 6817), (295, 6877),

Gene: Annadreamy_67 Start: 53881, Stop: 54282, Start Num: 113
Candidate Starts for Annadreamy_67:
(Start: 113 @53881 has 7 MA's), (159, 53947), (187, 53992), (202, 54019), (206, 54025), (234, 54061), (248, 54088), (251, 54094), (270, 54130), (294, 54181), (297, 54187),

Gene: Anon_48 Start: 31013, Stop: 30756, Start Num: 143
Candidate Starts for Anon_48:
(Start: 143 @31013 has 19 MA's), (269, 30884), (283, 30860),

Gene: Arcadia_72 Start: 44474, Stop: 44782, Start Num: 127
Candidate Starts for Arcadia_72:
(Start: 127 @44474 has 23 MA's), (193, 44576), (219, 44612), (255, 44675), (272, 44705),

Gene: Arcadia_73 Start: 44784, Stop: 45098, Start Num: 141
Candidate Starts for Arcadia_73:
(128, 44766), (131, 44769), (Start: 134 @44775 has 144 MA's), (Start: 141 @44784 has 10 MA's), (144, 44787), (148, 44793), (201, 44877), (230, 44916), (287, 45009),

Gene: Arcadia_41 Start: 29295, Stop: 29603, Start Num: 134
Candidate Starts for Arcadia_41:
(Start: 134 @29295 has 144 MA's),

Gene: Arcanine_11 Start: 6591, Stop: 6905, Start Num: 152
Candidate Starts for Arcanine_11:
(Start: 152 @6591 has 20 MA's), (174, 6630), (188, 6639), (229, 6708), (269, 6783), (295, 6843),

Gene: AreFloNak_64 Start: 44018, Stop: 44311, Start Num: 134
Candidate Starts for AreFloNak_64:
(Start: 134 @44018 has 144 MA's), (235, 44156),

Gene: AreFloNak_69 Start: 45830, Stop: 46093, Start Num: 134
Candidate Starts for AreFloNak_69:
(Start: 134 @45830 has 144 MA's), (200, 45908), (304, 46067),

Gene: Argan_65 Start: 42966, Stop: 43247, Start Num: 134
Candidate Starts for Argan_65:
(Start: 134 @42966 has 144 MA's), (165, 42993), (194, 43038), (220, 43074), (287, 43158), (302, 43203),

Gene: Argan_64 Start: 42700, Stop: 42966, Start Num: 114
Candidate Starts for Argan_64:
(Start: 114 @42700 has 16 MA's), (Start: 127 @42721 has 23 MA's), (159, 42766), (190, 42805),

Gene: Argie_6 Start: 3283, Stop: 3579, Start Num: 146
Candidate Starts for Argie_6:
(Start: 146 @3283 has 4 MA's), (215, 3376), (228, 3391), (283, 3481), (290, 3505), (295, 3517),

Gene: ArtetaBall_2 Start: 479, Stop: 808, Start Num: 145
Candidate Starts for ArtetaBall_2:
(Start: 145 @479 has 9 MA's), (187, 545), (268, 686), (283, 713), (287, 725),

Gene: Arzan_66 Start: 43794, Stop: 44099, Start Num: 134
Candidate Starts for Arzan_66:
(Start: 134 @43794 has 144 MA's), (254, 43950), (262, 43962), (272, 43983),

Gene: Arzan_71 Start: 45586, Stop: 45873, Start Num: 134
Candidate Starts for Arzan_71:
(123, 45568), (Start: 134 @45586 has 144 MA's), (291, 45802),

Gene: Atkinbua_11 Start: 6636, Stop: 6950, Start Num: 152
Candidate Starts for Atkinbua_11:
(Start: 152 @6636 has 20 MA's), (174, 6675), (229, 6753), (254, 6798),

Gene: Azrael100_70 Start: 46466, Stop: 46756, Start Num: 132
Candidate Starts for Azrael100_70:
(Start: 130 @46463 has 5 MA's), (Start: 132 @46466 has 4 MA's), (170, 46520), (212, 46577),

Gene: Bantam_53 Start: 43734, Stop: 44000, Start Num: 141
Candidate Starts for Bantam_53:
(Start: 141 @43734 has 10 MA's), (174, 43782), (177, 43785), (269, 43878), (283, 43902),

Gene: BarbieDoll_72 Start: 44655, Stop: 44960, Start Num: 134
Candidate Starts for BarbieDoll_72:
(Start: 134 @44655 has 144 MA's), (165, 44685), (191, 44727), (276, 44853), (304, 44931),

Gene: Barbonzobean_71 Start: 44903, Stop: 45208, Start Num: 134
Candidate Starts for Barbonzobean_71:
(Start: 134 @44903 has 144 MA's), (191, 44975), (222, 45023),

Gene: Barbonzobean_70 Start: 44628, Stop: 44903, Start Num: 114
Candidate Starts for Barbonzobean_70:
(Start: 114 @44628 has 16 MA's), (159, 44694), (202, 44754), (226, 44778), (251, 44820),

Gene: Beagle_10 Start: 3455, Stop: 3862, Start Num: 110
Candidate Starts for Beagle_10:
(Start: 110 @3455 has 16 MA's), (Start: 140 @3506 has 6 MA's), (Start: 146 @3515 has 4 MA's), (202, 3602), (232, 3650), (266, 3716), (275, 3734), (285, 3752),

Gene: Beagle_68 Start: 42670, Stop: 42362, Start Num: 156
Candidate Starts for Beagle_68:
(101, 42757), (104, 42751), (Start: 156 @42670 has 14 MA's), (190, 42619), (195, 42613), (243, 42535), (251, 42520), (265, 42493), (303, 42403), (309, 42373),

Gene: BearBQ_64 Start: 41458, Stop: 41745, Start Num: 147
Candidate Starts for BearBQ_64:
(34, 41194), (42, 41230), (45, 41236), (77, 41332), (Start: 139 @41446 has 1 MA's), (Start: 147 @41458 has 44 MA's), (174, 41503), (246, 41575), (287, 41653), (295, 41677), (308, 41734),

Gene: BeesKnees_11 Start: 6720, Stop: 7034, Start Num: 152
Candidate Starts for BeesKnees_11:
(Start: 152 @6720 has 20 MA's), (174, 6759), (229, 6837), (254, 6882),

Gene: BellaJr_84 Start: 48464, Stop: 48778, Start Num: 124
Candidate Starts for BellaJr_84:
(124, 48464), (160, 48512), (304, 48746),

Gene: BenitoAntonio_41 Start: 28872, Stop: 29180, Start Num: 134
Candidate Starts for BenitoAntonio_41:
(Start: 134 @28872 has 144 MA's), (195, 28944),

Gene: BenitoAntonio_72 Start: 44425, Stop: 44739, Start Num: 138
Candidate Starts for BenitoAntonio_72:
(Start: 138 @44425 has 18 MA's), (195, 44506), (230, 44557), (257, 44599), (287, 44650),

Gene: BenitoAntonio_71 Start: 44114, Stop: 44425, Start Num: 127
Candidate Starts for BenitoAntonio_71:
(Start: 127 @44114 has 23 MA's), (167, 44177), (219, 44255), (232, 44276), (246, 44300), (255, 44318), (272, 44348),

Gene: Benllo_71 Start: 45103, Stop: 45417, Start Num: 138
Candidate Starts for Benllo_71:
(Start: 138 @45103 has 18 MA's), (195, 45184), (230, 45235), (257, 45277),

Gene: Benllo_70 Start: 44792, Stop: 45103, Start Num: 127
Candidate Starts for Benllo_70:
(Start: 127 @44792 has 23 MA's), (167, 44855), (219, 44933), (232, 44954), (246, 44978), (255, 44996), (272, 45026),

Gene: Benllo_40 Start: 29550, Stop: 29864, Start Num: 134
Candidate Starts for Benllo_40:
(Start: 134 @29550 has 144 MA's), (221, 29667), (238, 29694),

Gene: BetaFish_69 Start: 43626, Stop: 43318, Start Num: 156
Candidate Starts for BetaFish_69:
(101, 43713), (104, 43707), (Start: 156 @43626 has 14 MA's), (190, 43575), (195, 43569), (243, 43491), (251, 43476), (265, 43449), (303, 43359), (309, 43329),

Gene: BetaFish_8 Start: 3461, Stop: 3868, Start Num: 110
Candidate Starts for BetaFish_8:
(Start: 110 @3461 has 16 MA's), (Start: 140 @3512 has 6 MA's), (Start: 146 @3521 has 4 MA's), (202, 3608), (232, 3656), (266, 3722), (275, 3740), (285, 3758),

Gene: Beuffert_67 Start: 55006, Stop: 55407, Start Num: 113
Candidate Starts for Beuffert_67:
(Start: 113 @55006 has 7 MA's), (184, 55111), (187, 55117), (202, 55144), (270, 55255), (291, 55300), (297, 55312),

Gene: BigAnti_4 Start: 2585, Stop: 2959, Start Num: 151
Candidate Starts for BigAnti_4:
(Start: 122 @2546 has 3 MA's), (151, 2585), (153, 2588), (158, 2597), (172, 2618), (194, 2648), (205, 2669), (245, 2729), (269, 2777), (283, 2801),

Gene: Biscute_68 Start: 44307, Stop: 44612, Start Num: 134
Candidate Starts for Biscute_68:
(Start: 134 @44307 has 144 MA's), (165, 44337), (191, 44379), (276, 44505), (304, 44583),

Gene: Biscute_67 Start: 44032, Stop: 44307, Start Num: 114
Candidate Starts for Biscute_67:
(Start: 114 @44032 has 16 MA's), (159, 44098), (202, 44158), (226, 44182), (251, 44224),

Gene: BlackHoleSun_69 Start: 42815, Stop: 43081, Start Num: 114
Candidate Starts for BlackHoleSun_69:
(Start: 114 @42815 has 16 MA's), (Start: 127 @42836 has 23 MA's), (159, 42881), (190, 42920),

Gene: BlackHoleSun_70 Start: 43081, Stop: 43365, Start Num: 134
Candidate Starts for BlackHoleSun_70:
(Start: 134 @43081 has 144 MA's), (149, 43087),

Gene: Blanky_1 Start: 220, Stop: 549, Start Num: 145
Candidate Starts for Blanky_1:
(Start: 145 @220 has 9 MA's), (174, 268), (224, 352), (268, 427), (269, 430), (283, 454), (287, 466),

Gene: Blexus_93 Start: 53556, Stop: 53837, Start Num: 147
Candidate Starts for Blexus_93:
(15, 53145), (18, 53166), (19, 53187), (22, 53217), (Start: 147 @53556 has 44 MA's), (174, 53601), (200, 53619), (283, 53736),

Gene: Blueeyedbeauty_69 Start: 54393, Stop: 54800, Start Num: 113
Candidate Starts for Blueeyedbeauty_69:
(Start: 113 @54393 has 7 MA's), (135, 54429), (185, 54507), (206, 54543), (237, 54582), (264, 54633), (284, 54666), (296, 54699), (297, 54705),

Gene: BobaPhett_98 Start: 55238, Stop: 55519, Start Num: 147
Candidate Starts for BobaPhett_98:

(15, 54827), (18, 54848), (19, 54869), (22, 54899), (Start: 147 @55238 has 44 MA's), (174, 55283), (200, 55301), (283, 55418), (295, 55454),

Gene: Bobby_171 Start: 94727, Stop: 95017, Start Num: 147
Candidate Starts for Bobby_171:
(Start: 147 @94727 has 44 MA's), (166, 94751), (174, 94766), (283, 94919), (285, 94925),

Gene: Boog_67 Start: 43689, Stop: 44018, Start Num: 134
Candidate Starts for Boog_67:
(Start: 134 @43689 has 144 MA's), (237, 43833), (248, 43854), (302, 43977),

Gene: Bouchard_65 Start: 44672, Stop: 44965, Start Num: 134
Candidate Starts for Bouchard_65:
(Start: 134 @44672 has 144 MA's),

Gene: Bouchard_70 Start: 46435, Stop: 46707, Start Num: 134
Candidate Starts for Bouchard_70:
(Start: 134 @46435 has 144 MA's), (284, 46615),

Gene: Bowling_75 Start: 45379, Stop: 45693, Start Num: 138
Candidate Starts for Bowling_75:
(Start: 138 @45379 has 18 MA's), (195, 45460), (230, 45511), (257, 45553), (287, 45604),

Gene: Bowling_74 Start: 45068, Stop: 45379, Start Num: 127
Candidate Starts for Bowling_74:
(Start: 127 @45068 has 23 MA's), (167, 45131), (219, 45209), (232, 45230), (246, 45254), (255, 45272), (272, 45302),

Gene: Bowling_40 Start: 28747, Stop: 29055, Start Num: 134
Candidate Starts for Bowling_40:
(Start: 134 @28747 has 144 MA's),

Gene: Breylor17_61 Start: 44593, Stop: 44886, Start Num: 134
Candidate Starts for Breylor17_61:
(Start: 134 @44593 has 144 MA's), (235, 44731),

Gene: Breylor17_65 Start: 46223, Stop: 46486, Start Num: 134
Candidate Starts for Breylor17_65:
(Start: 134 @46223 has 144 MA's), (200, 46301), (304, 46460),

Gene: Briton15_12 Start: 6774, Stop: 7046, Start Num: 146
Candidate Starts for Briton15_12:
(Start: 146 @6774 has 4 MA's), (174, 6813), (200, 6831), (262, 6909), (283, 6948),

Gene: Brocalys_88 Start: 50717, Stop: 50998, Start Num: 147
Candidate Starts for Brocalys_88:
(15, 50306), (18, 50327), (19, 50348), (22, 50378), (Start: 147 @50717 has 44 MA's), (174, 50762), (200, 50780), (283, 50897),

Gene: BronxBay_68 Start: 43961, Stop: 44290, Start Num: 134
Candidate Starts for BronxBay_68:
(Start: 134 @43961 has 144 MA's), (237, 44105), (248, 44126), (302, 44249),

Gene: BruhMoment_8 Start: 3480, Stop: 3902, Start Num: 115
Candidate Starts for BruhMoment_8:
(35, 3276), (37, 3288), (66, 3375), (Start: 115 @3480 has 4 MA's), (Start: 140 @3522 has 6 MA's), (176, 3579), (213, 3636), (234, 3669), (268, 3735), (269, 3738), (285, 3768),

Gene: Brunswick_62 Start: 43890, Stop: 44189, Start Num: 134
Candidate Starts for Brunswick_62:
(Start: 134 @43890 has 144 MA's), (233, 44022), (235, 44025), (292, 44124),

Gene: Brunswick_67 Start: 45626, Stop: 45928, Start Num: 134
Candidate Starts for Brunswick_67:
(46, 45431), (49, 45440), (54, 45455), (68, 45488), (82, 45533), (93, 45557), (95, 45560), (Start: 134 @45626 has 144 MA's), (226, 45755),

Gene: Burwell21_90 Start: 53003, Stop: 53284, Start Num: 147
Candidate Starts for Burwell21_90:
(15, 52592), (18, 52613), (19, 52634), (22, 52664), (Start: 147 @53003 has 44 MA's), (174, 53048), (200, 53066), (283, 53183),

Gene: ByChance_87 Start: 49075, Stop: 49356, Start Num: 147
Candidate Starts for ByChance_87:
(15, 48664), (18, 48685), (19, 48706), (22, 48736), (Start: 147 @49075 has 44 MA's), (174, 49120), (200, 49138), (283, 49255),

Gene: CWormy_2 Start: 479, Stop: 808, Start Num: 145
Candidate Starts for CWormy_2:
(Start: 145 @479 has 9 MA's), (187, 545), (268, 686), (283, 713), (287, 725),

Gene: Cabrinians_93 Start: 52638, Stop: 52919, Start Num: 147
Candidate Starts for Cabrinians_93:
(15, 52227), (18, 52248), (19, 52269), (22, 52299), (Start: 147 @52638 has 44 MA's), (174, 52683), (200, 52701), (283, 52818),

Gene: CandC_55 Start: 37729, Stop: 37433, Start Num: 143
Candidate Starts for CandC_55:
(17, 38122), (20, 38068), (32, 37984), (125, 37759), (Start: 141 @37732 has 10 MA's), (Start: 143 @37729 has 19 MA's), (Start: 152 @37717 has 20 MA's), (166, 37693), (174, 37678), (215, 37630), (232, 37621), (262, 37585), (283, 37543), (289, 37522),

Gene: Cantare_94 Start: 71064, Stop: 71369, Start Num: 126
Candidate Starts for Cantare_94:
(Start: 126 @71064 has 1 MA's), (283, 71268), (304, 71337),

Gene: CapnMurica_59 Start: 44782, Stop: 45072, Start Num: 134
Candidate Starts for CapnMurica_59:
(Start: 134 @44782 has 144 MA's), (233, 44914), (235, 44917),

Gene: CapnMurica_63 Start: 46364, Stop: 46666, Start Num: 134
Candidate Starts for CapnMurica_63:
(46, 46172), (62, 46217), (63, 46220), (68, 46229), (93, 46298), (Start: 134 @46364 has 144 MA's), (226, 46493),

Gene: Cardigan_139 Start: 79014, Stop: 79379, Start Num: 129

Candidate Starts for Cardigan_139:
(Start: 129 @79014 has 3 MA's), (149, 79044), (158, 79059), (161, 79065), (176, 79089), (214, 79149), (281, 79257), (283, 79260), (312, 79365),

Gene: Cardigan_140 Start: 79376, Stop: 79711, Start Num: 122
Candidate Starts for Cardigan_140:
(89, 79316), (Start: 122 @79376 has 3 MA's), (169, 79445), (178, 79460), (245, 79544), (260, 79571), (282, 79610),

Gene: CastorTray_69 Start: 46412, Stop: 46675, Start Num: 134
Candidate Starts for CastorTray_69:
(53, 46238), (56, 46244), (57, 46247), (88, 46334), (98, 46349), (Start: 134 @46412 has 144 MA's), (200, 46490), (304, 46649),

Gene: CastorTray_65 Start: 44782, Stop: 45075, Start Num: 134
Candidate Starts for CastorTray_65:
(Start: 134 @44782 has 144 MA's), (235, 44920),

Gene: Caterpillar_61 Start: 43710, Stop: 44000, Start Num: 134
Candidate Starts for Caterpillar_61:
(Start: 134 @43710 has 144 MA's), (222, 43827), (233, 43842), (235, 43845),

Gene: Caterpillar_65 Start: 45261, Stop: 45530, Start Num: 134
Candidate Starts for Caterpillar_65:
(46, 45066), (54, 45090), (82, 45165), (91, 45183), (93, 45189), (108, 45216), (Start: 134 @45261 has 144 MA's), (200, 45345), (219, 45375),

Gene: Causa_146 Start: 84210, Stop: 83881, Start Num: 140
Candidate Starts for Causa_146:
(Start: 140 @84210 has 6 MA's), (179, 84153), (266, 84015), (281, 83991), (298, 83943),

Gene: Cheesy_40 Start: 28725, Stop: 29033, Start Num: 134
Candidate Starts for Cheesy_40:
(Start: 134 @28725 has 144 MA's), (201, 28809),

Gene: Cheesy_74 Start: 44577, Stop: 44891, Start Num: 141
Candidate Starts for Cheesy_74:
(128, 44559), (131, 44562), (Start: 134 @44568 has 144 MA's), (Start: 141 @44577 has 10 MA's), (144, 44580), (148, 44586), (201, 44670), (230, 44709), (287, 44802),

Gene: Cheesy_73 Start: 44267, Stop: 44575, Start Num: 127
Candidate Starts for Cheesy_73:
(Start: 127 @44267 has 23 MA's), (193, 44369), (219, 44405), (255, 44468), (272, 44498),

Gene: Chlochlo_65 Start: 44198, Stop: 44491, Start Num: 134
Candidate Starts for Chlochlo_65:
(Start: 134 @44198 has 144 MA's),

Gene: Chlochlo_70 Start: 45962, Stop: 46234, Start Num: 134
Candidate Starts for Chlochlo_70:
(Start: 134 @45962 has 144 MA's), (284, 46142),

Gene: Circum_42 Start: 29385, Stop: 29693, Start Num: 134

Candidate Starts for Circum_42:
(Start: 134 @29385 has 144 MA's),

Gene: Circum_75 Start: 45193, Stop: 45507, Start Num: 138
Candidate Starts for Circum_75:
(Start: 138 @45193 has 18 MA's), (195, 45274), (230, 45325), (257, 45367), (287, 45418),

Gene: Circum_74 Start: 44882, Stop: 45193, Start Num: 127
Candidate Starts for Circum_74:
(Start: 127 @44882 has 23 MA's), (167, 44945), (219, 45023), (232, 45044), (246, 45068), (255, 45086), (272, 45116),

Gene: Clifton_88 Start: 51692, Stop: 51973, Start Num: 147
Candidate Starts for Clifton_88:
(15, 51281), (18, 51302), (19, 51323), (22, 51353), (Start: 147 @51692 has 44 MA's), (174, 51737), (200, 51755), (283, 51872),

Gene: Clown_82 Start: 53661, Stop: 54005, Start Num: 143
Candidate Starts for Clown_82:
(Start: 143 @53661 has 19 MA's), (174, 53709), (231, 53778), (272, 53832), (275, 53841), (315, 53973), (317, 53982),

Gene: Colossa_71 Start: 43354, Stop: 43638, Start Num: 163
Candidate Starts for Colossa_71:
(67, 43168), (106, 43261), (Start: 163 @43354 has 2 MA's), (217, 43438), (266, 43501), (277, 43522), (287, 43543), (291, 43558), (292, 43561),

Gene: Constance_64 Start: 41355, Stop: 41633, Start Num: 143
Candidate Starts for Constance_64:
(1, 39963), (2, 39996), (3, 40005), (4, 40026), (5, 40035), (6, 40104), (7, 40203), (8, 40368), (9, 40506), (10, 40698), (11, 40722), (13, 40857), (16, 40944), (41, 41130), (52, 41163), (87, 41259), (Start: 143 @41355 has 19 MA's), (281, 41529), (283, 41532), (295, 41568), (307, 41622),

Gene: Correa_71 Start: 43841, Stop: 44149, Start Num: 127
Candidate Starts for Correa_71:
(Start: 127 @43841 has 23 MA's), (193, 43943), (219, 43979), (255, 44042), (272, 44072),

Gene: Correa_72 Start: 44151, Stop: 44465, Start Num: 141
Candidate Starts for Correa_72:
(128, 44133), (131, 44136), (Start: 134 @44142 has 144 MA's), (Start: 141 @44151 has 10 MA's), (144, 44154), (148, 44160), (201, 44244), (230, 44283), (287, 44376),

Gene: Correa_38 Start: 27913, Stop: 28218, Start Num: 134
Candidate Starts for Correa_38:
(Start: 134 @27913 has 144 MA's), (201, 27997), (225, 28039), (267, 28102),

Gene: Cosmo_71 Start: 46467, Stop: 46757, Start Num: 132
Candidate Starts for Cosmo_71:
(Start: 130 @46464 has 5 MA's), (Start: 132 @46467 has 4 MA's), (170, 46521), (212, 46578),

Gene: Crocheter_2 Start: 479, Stop: 808, Start Num: 145
Candidate Starts for Crocheter_2:
(Start: 145 @479 has 9 MA's), (187, 545), (268, 686), (283, 713), (287, 725),

Gene: Crumble_91 Start: 49362, Stop: 49643, Start Num: 147
Candidate Starts for Crumble_91:
(15, 48951), (18, 48972), (19, 48993), (22, 49023), (Start: 147 @49362 has 44 MA's), (174, 49407), (200, 49425), (283, 49542),

Gene: Daddyjeff_60 Start: 40862, Stop: 41194, Start Num: 140
Candidate Starts for Daddyjeff_60:
(90, 40775), (Start: 140 @40862 has 6 MA's), (307, 41177),

Gene: Darby_60 Start: 43828, Stop: 44121, Start Num: 134
Candidate Starts for Darby_60:
(Start: 134 @43828 has 144 MA's), (235, 43966),

Gene: Darby_64 Start: 45407, Stop: 45670, Start Num: 134
Candidate Starts for Darby_64:
(Start: 134 @45407 has 144 MA's), (200, 45485), (262, 45545), (304, 45644),

Gene: DatBoi_51 Start: 43635, Stop: 43889, Start Num: 143
Candidate Starts for DatBoi_51:
(Start: 143 @43635 has 19 MA's), (168, 43674), (283, 43791),

Gene: DevitoJr_61 Start: 44214, Stop: 44507, Start Num: 134
Candidate Starts for DevitoJr_61:
(Start: 134 @44214 has 144 MA's), (235, 44352),

Gene: DevitoJr_65 Start: 45793, Stop: 46056, Start Num: 134
Candidate Starts for DevitoJr_65:
(Start: 134 @45793 has 144 MA's), (200, 45871), (304, 46030),

Gene: Dialga_2 Start: 479, Stop: 808, Start Num: 145
Candidate Starts for Dialga_2:
(Start: 145 @479 has 9 MA's), (187, 545), (268, 686), (283, 713), (287, 725),

Gene: Dinallo_64 Start: 46677, Stop: 46940, Start Num: 134
Candidate Starts for Dinallo_64:
(46, 46482), (62, 46527), (63, 46530), (72, 46557), (73, 46560), (81, 46581), (92, 46605), (93, 46608), (Start: 134 @46677 has 144 MA's), (301, 46899), (304, 46914),

Gene: Dinallo_60 Start: 45092, Stop: 45382, Start Num: 134
Candidate Starts for Dinallo_60:
(Start: 134 @45092 has 144 MA's), (233, 45224), (235, 45227),

Gene: Djungelskog_67 Start: 43963, Stop: 44292, Start Num: 134
Candidate Starts for Djungelskog_67:
(Start: 134 @43963 has 144 MA's), (237, 44107), (248, 44128), (302, 44251),

Gene: DoctorPepper_67 Start: 43665, Stop: 43994, Start Num: 134
Candidate Starts for DoctorPepper_67:
(Start: 134 @43665 has 144 MA's), (237, 43809), (248, 43830), (302, 43953),

Gene: Dodo_211 Start: 115242, Stop: 114925, Start Num: 130
Candidate Starts for Dodo_211:

(Start: 130 @115242 has 5 MA's), (222, 115140), (240, 115125), (262, 115086), (283, 115047), (302, 114990), (316, 114930),

Gene: DogYard_8 Start: 3331, Stop: 3738, Start Num: 110
Candidate Starts for DogYard_8:
(Start: 110 @3331 has 16 MA's), (Start: 140 @3382 has 6 MA's), (Start: 146 @3391 has 4 MA's), (202, 3478), (232, 3526), (266, 3592), (275, 3610), (285, 3628),

Gene: DogYard_67 Start: 42865, Stop: 42557, Start Num: 156
Candidate Starts for DogYard_67:
(101, 42952), (104, 42946), (Start: 156 @42865 has 14 MA's), (190, 42814), (195, 42808), (243, 42730), (251, 42715), (265, 42688), (303, 42598), (309, 42568),

Gene: DrLupo_104 Start: 65399, Stop: 65650, Start Num: 192
Candidate Starts for DrLupo_104:
(99, 65246), (109, 65267), (165, 65360), (Start: 192 @65399 has 1 MA's), (283, 65552), (285, 65558),

Gene: DreamCatcher_12 Start: 7365, Stop: 7679, Start Num: 152
Candidate Starts for DreamCatcher_12:
(Start: 152 @7365 has 20 MA's), (174, 7404), (188, 7413), (229, 7482), (269, 7557), (295, 7617),

Gene: Dynamite_40 Start: 28937, Stop: 29245, Start Num: 134
Candidate Starts for Dynamite_40:
(Start: 134 @28937 has 144 MA's), (195, 29009),

Gene: Dynamite_73 Start: 44636, Stop: 44950, Start Num: 138
Candidate Starts for Dynamite_73:
(Start: 138 @44636 has 18 MA's), (195, 44717), (230, 44768), (257, 44810), (287, 44861),

Gene: Dynamite_72 Start: 44325, Stop: 44636, Start Num: 127
Candidate Starts for Dynamite_72:
(Start: 127 @44325 has 23 MA's), (167, 44388), (219, 44466), (232, 44487), (246, 44511), (255, 44529), (272, 44559),

Gene: Dynamix_11 Start: 6722, Stop: 7036, Start Num: 152
Candidate Starts for Dynamix_11:
(Start: 152 @6722 has 20 MA's), (174, 6761), (188, 6770), (229, 6839), (269, 6914), (295, 6974),

Gene: ERHickory_13 Start: 5594, Stop: 5839, Start Num: 154
Candidate Starts for ERHickory_13:
(Start: 154 @5594 has 7 MA's), (168, 5618), (283, 5738),

Gene: Egad_68 Start: 43939, Stop: 44268, Start Num: 134
Candidate Starts for Egad_68:
(Start: 134 @43939 has 144 MA's), (237, 44083), (248, 44104), (302, 44227),

Gene: ElephantMan_66 Start: 46256, Stop: 46558, Start Num: 134
Candidate Starts for ElephantMan_66:
(46, 46061), (62, 46106), (63, 46109), (68, 46118), (72, 46136), (80, 46157), (81, 46160), (82, 46163), (93, 46187), (Start: 134 @46256 has 144 MA's), (226, 46385),

Gene: ElephantMan_61 Start: 44520, Stop: 44819, Start Num: 134
Candidate Starts for ElephantMan_61:

(Start: 134 @44520 has 144 MA's), (233, 44652), (235, 44655), (292, 44754),

Gene: Elsa_41 Start: 29295, Stop: 29603, Start Num: 134
Candidate Starts for Elsa_41:
(Start: 134 @29295 has 144 MA's),

Gene: Elsa_73 Start: 44784, Stop: 45098, Start Num: 141
Candidate Starts for Elsa_73:
(128, 44766), (131, 44769), (Start: 134 @44775 has 144 MA's), (Start: 141 @44784 has 10 MA's), (144, 44787), (148, 44793), (201, 44877), (230, 44916), (287, 45009),

Gene: Elsa_72 Start: 44474, Stop: 44782, Start Num: 127
Candidate Starts for Elsa_72:
(Start: 127 @44474 has 23 MA's), (193, 44576), (219, 44612), (255, 44675), (272, 44705),

Gene: Elver_233 Start: 104942, Stop: 105232, Start Num: 164
Candidate Starts for Elver_233:
(Start: 164 @104942 has 4 MA's), (181, 104969), (216, 105026), (306, 105206), (307, 105221),

Gene: Elver_133 Start: 70843, Stop: 71208, Start Num: 134
Candidate Starts for Elver_133:
(91, 70765), (Start: 134 @70843 has 144 MA's), (216, 70954), (268, 71029), (290, 71080),

Gene: Elver_180 Start: 88404, Stop: 88703, Start Num: 134
Candidate Starts for Elver_180:
(Start: 134 @88404 has 144 MA's), (278, 88590), (309, 88686),

Gene: Elver_164 Start: 81584, Stop: 81901, Start Num: 134
Candidate Starts for Elver_164:
(85, 81500), (100, 81524), (Start: 134 @81584 has 144 MA's), (200, 81671), (244, 81743), (291, 81830), (301, 81857),

Gene: Elver_124 Start: 67517, Stop: 67825, Start Num: 186
Candidate Starts for Elver_124:
(Start: 186 @67517 has 4 MA's), (210, 67562), (236, 67601), (285, 67697),

Gene: Elver_123 Start: 67170, Stop: 67514, Start Num: 138
Candidate Starts for Elver_123:
(Start: 138 @67170 has 18 MA's), (286, 67416), (287, 67419),

Gene: EniyanLRS_67 Start: 46206, Stop: 46496, Start Num: 132
Candidate Starts for EniyanLRS_67:
(Start: 130 @46203 has 5 MA's), (Start: 132 @46206 has 4 MA's), (170, 46260), (212, 46317),

Gene: Erasmago_204 Start: 109961, Stop: 109605, Start Num: 130
Candidate Starts for Erasmago_204:
(120, 109982), (Start: 130 @109961 has 5 MA's), (Start: 139 @109949 has 1 MA's), (319, 109631), (320, 109616),

Gene: Faust_71 Start: 56000, Stop: 56389, Start Num: 113
Candidate Starts for Faust_71:
(Start: 113 @56000 has 7 MA's), (173, 56087), (180, 56096), (229, 56168), (234, 56174), (310, 56351), (311, 56360),

Gene: Fenn_11 Start: 6952, Stop: 7266, Start Num: 152
Candidate Starts for Fenn_11:
(Start: 152 @6952 has 20 MA's), (174, 6991), (229, 7069), (254, 7114),

Gene: Forrestell_8 Start: 3035, Stop: 3442, Start Num: 110
Candidate Starts for Forrestell_8:
(Start: 110 @3035 has 16 MA's), (Start: 140 @3086 has 6 MA's), (Start: 146 @3095 has 4 MA's), (202, 3182), (232, 3230), (266, 3296), (275, 3314), (285, 3332),

Gene: Forrestell_67 Start: 42197, Stop: 41889, Start Num: 156
Candidate Starts for Forrestell_67:
(Start: 156 @42197 has 14 MA's), (190, 42146), (195, 42140), (243, 42062), (251, 42047), (265, 42020), (303, 41930), (309, 41900),

Gene: FosterFrank_48 Start: 30407, Stop: 30688, Start Num: 162
Candidate Starts for FosterFrank_48:
(Start: 162 @30407 has 3 MA's), (183, 30440), (190, 30449), (284, 30593), (309, 30677),

Gene: Fransoyer_60 Start: 45317, Stop: 45054, Start Num: 154
Candidate Starts for Fransoyer_60:
(Start: 154 @45317 has 7 MA's), (170, 45290), (199, 45269), (283, 45158), (295, 45122), (308, 45065),

Gene: FreddyB_106 Start: 54284, Stop: 54565, Start Num: 147
Candidate Starts for FreddyB_106:
(15, 53873), (18, 53894), (19, 53915), (22, 53945), (Start: 147 @54284 has 44 MA's), (174, 54329), (200, 54347), (283, 54464),

Gene: G4_46 Start: 30222, Stop: 30545, Start Num: 147
Candidate Starts for G4_46:
(121, 30180), (Start: 147 @30222 has 44 MA's), (Start: 152 @30228 has 20 MA's), (184, 30276), (203, 30312), (254, 30378), (269, 30408), (283, 30432),

Gene: GMA2_84 Start: 80351, Stop: 80010, Start Num: 145
Candidate Starts for GMA2_84:
(Start: 145 @80351 has 9 MA's), (Start: 152 @80342 has 20 MA's), (268, 80141), (269, 80138), (308, 80021),

Gene: Gandionco_179 Start: 87798, Stop: 88097, Start Num: 134
Candidate Starts for Gandionco_179:
(Start: 134 @87798 has 144 MA's), (278, 87984), (309, 88080),

Gene: Gandionco_120 Start: 65982, Stop: 66326, Start Num: 138
Candidate Starts for Gandionco_120:
(Start: 138 @65982 has 18 MA's), (286, 66228), (287, 66231),

Gene: Gandionco_121 Start: 66329, Stop: 66637, Start Num: 186
Candidate Starts for Gandionco_121:
(Start: 186 @66329 has 4 MA's), (210, 66374), (236, 66413), (285, 66509),

Gene: Gandionco_129 Start: 69661, Stop: 70026, Start Num: 134
Candidate Starts for Gandionco_129:
(91, 69583), (Start: 134 @69661 has 144 MA's), (216, 69772), (268, 69847), (290, 69898),

Gene: Gandionco_233 Start: 104689, Stop: 104979, Start Num: 164
Candidate Starts for Gandionco_233:
(Start: 164 @104689 has 4 MA's), (181, 104716), (216, 104773), (306, 104953), (307, 104968),

Gene: Gandionco_160 Start: 80664, Stop: 80981, Start Num: 134
Candidate Starts for Gandionco_160:
(85, 80580), (100, 80604), (Start: 134 @80664 has 144 MA's), (200, 80751), (244, 80823), (291, 80910), (301, 80937),

Gene: GantcherGoblin_66 Start: 43022, Stop: 43303, Start Num: 134
Candidate Starts for GantcherGoblin_66:
(Start: 134 @43022 has 144 MA's), (149, 43028), (165, 43049), (194, 43094), (220, 43130), (302, 43259),

Gene: GantcherGoblin_65 Start: 42756, Stop: 43022, Start Num: 114
Candidate Starts for GantcherGoblin_65:
(Start: 114 @42756 has 16 MA's), (Start: 127 @42777 has 23 MA's), (159, 42822), (190, 42861),

Gene: GermyBearimy_74 Start: 45364, Stop: 45669, Start Num: 134
Candidate Starts for GermyBearimy_74:
(Start: 134 @45364 has 144 MA's), (200, 45451), (254, 45520), (262, 45532), (272, 45553),

Gene: GermyBearimy_79 Start: 47156, Stop: 47434, Start Num: 134
Candidate Starts for GermyBearimy_79:
(100, 47096), (123, 47138), (Start: 134 @47156 has 144 MA's), (277, 47327), (279, 47330), (291, 47363),

Gene: Giantsbane_69 Start: 44963, Stop: 45232, Start Num: 134
Candidate Starts for Giantsbane_69:
(Start: 134 @44963 has 144 MA's), (206, 45056), (284, 45140), (304, 45206),

Gene: Giantsbane_65 Start: 43403, Stop: 43696, Start Num: 134
Candidate Starts for Giantsbane_65:
(Start: 134 @43403 has 144 MA's), (165, 43433),

Gene: GoCrazy_39 Start: 28863, Stop: 29171, Start Num: 134
Candidate Starts for GoCrazy_39:
(Start: 134 @28863 has 144 MA's),

Gene: GoCrazy_69 Start: 43769, Stop: 44080, Start Num: 127
Candidate Starts for GoCrazy_69:
(Start: 127 @43769 has 23 MA's), (167, 43832), (219, 43910), (232, 43931), (246, 43955), (255, 43973), (272, 44003),

Gene: GoCrazy_70 Start: 44080, Stop: 44394, Start Num: 138
Candidate Starts for GoCrazy_70:
(Start: 138 @44080 has 18 MA's), (195, 44161), (230, 44212), (257, 44254), (287, 44305),

Gene: GodPhather_6 Start: 3283, Stop: 3579, Start Num: 146
Candidate Starts for GodPhather_6:
(Start: 146 @3283 has 4 MA's), (215, 3376), (228, 3391), (283, 3481), (290, 3505), (295, 3517),

Gene: Gordon_59 Start: 44700, Stop: 44999, Start Num: 134
Candidate Starts for Gordon_59:
(Start: 134 @44700 has 144 MA's), (233, 44832), (235, 44835), (292, 44934),

Gene: Gordon_63 Start: 46285, Stop: 46548, Start Num: 134
Candidate Starts for Gordon_63:
(Start: 134 @46285 has 144 MA's), (200, 46363), (304, 46522),

Gene: Gorge_95 Start: 53911, Stop: 54192, Start Num: 147
Candidate Starts for Gorge_95:
(15, 53500), (18, 53521), (19, 53542), (22, 53572), (Start: 147 @53911 has 44 MA's), (174, 53956), (200, 53974), (283, 54091),

Gene: Greely_244 Start: 137695, Stop: 138051, Start Num: 143
Candidate Starts for Greely_244:
(23, 137374), (40, 137473), (55, 137515), (Start: 143 @137695 has 19 MA's), (174, 137746), (229, 137821), (232, 137824), (256, 137854), (262, 137863), (283, 137905), (285, 137911), (288, 137920), (290, 137929),

Gene: Hankly_73 Start: 44274, Stop: 44588, Start Num: 138
Candidate Starts for Hankly_73:
(Start: 138 @44274 has 18 MA's), (195, 44355), (230, 44406), (257, 44448), (287, 44499),

Gene: Hankly_72 Start: 43963, Stop: 44274, Start Num: 127
Candidate Starts for Hankly_72:
(Start: 127 @43963 has 23 MA's), (167, 44026), (219, 44104), (232, 44125), (246, 44149), (255, 44167), (272, 44197),

Gene: Hankly_40 Start: 28408, Stop: 28716, Start Num: 134
Candidate Starts for Hankly_40:
(Start: 134 @28408 has 144 MA's),

Gene: Heisenberger_72 Start: 44042, Stop: 44356, Start Num: 138
Candidate Starts for Heisenberger_72:
(Start: 138 @44042 has 18 MA's), (195, 44123), (230, 44174), (257, 44216), (287, 44267),

Gene: Heisenberger_71 Start: 43731, Stop: 44042, Start Num: 127
Candidate Starts for Heisenberger_71:
(Start: 127 @43731 has 23 MA's), (167, 43794), (219, 43872), (232, 43893), (246, 43917), (255, 43935), (272, 43965),

Gene: Heisenberger_40 Start: 28736, Stop: 29044, Start Num: 134
Candidate Starts for Heisenberger_40:
(Start: 134 @28736 has 144 MA's),

Gene: Hemma_68 Start: 43443, Stop: 43751, Start Num: 134
Candidate Starts for Hemma_68:
(Start: 134 @43443 has 144 MA's), (182, 43500), (274, 43638), (287, 43665), (299, 43701), (306, 43725),

Gene: Hemma_69 Start: 43757, Stop: 44077, Start Num: 145
Candidate Starts for Hemma_69:
(Start: 145 @43757 has 9 MA's), (259, 43934), (271, 43958), (300, 44030),

Gene: Hemma_63 Start: 41293, Stop: 41586, Start Num: 134
Candidate Starts for Hemma_63:
(Start: 134 @41293 has 144 MA's), (218, 41407), (233, 41428), (258, 41455),

Gene: HerbBucket_66 Start: 43671, Stop: 44000, Start Num: 134
Candidate Starts for HerbBucket_66:
(Start: 134 @43671 has 144 MA's), (237, 43815), (248, 43836), (302, 43959),

Gene: Hive_64 Start: 42839, Stop: 42582, Start Num: 190
Candidate Starts for Hive_64:
(101, 42977), (104, 42971), (Start: 156 @42890 has 14 MA's), (190, 42839), (195, 42833), (243, 42755), (251, 42740), (265, 42713), (303, 42623), (309, 42593),

Gene: Hortihabitatio_2 Start: 447, Stop: 776, Start Num: 145
Candidate Starts for Hortihabitatio_2:
(83, 342), (123, 414), (Start: 145 @447 has 9 MA's), (187, 513), (268, 654), (281, 678), (283, 681), (287, 693),

Gene: Ichabod_11 Start: 6739, Stop: 7011, Start Num: 146
Candidate Starts for Ichabod_11:
(Start: 146 @6739 has 4 MA's), (174, 6778), (200, 6796), (262, 6874), (283, 6913),

Gene: Ingrid_68 Start: 44584, Stop: 44877, Start Num: 134
Candidate Starts for Ingrid_68:
(Start: 134 @44584 has 144 MA's), (233, 44719), (258, 44746),

Gene: Ingrid_72 Start: 46231, Stop: 46503, Start Num: 134
Candidate Starts for Ingrid_72:
(Start: 134 @46231 has 144 MA's), (194, 46303), (284, 46411), (304, 46477),

Gene: Inked_67 Start: 45260, Stop: 45550, Start Num: 134
Candidate Starts for Inked_67:
(Start: 134 @45260 has 144 MA's), (222, 45377), (233, 45392), (235, 45395), (280, 45452), (293, 45488),

Gene: Inked_71 Start: 46836, Stop: 47096, Start Num: 134
Candidate Starts for Inked_71:
(Start: 134 @46836 has 144 MA's), (189, 46902), (196, 46911), (216, 46944), (289, 47016),

Gene: Issa_64 Start: 45459, Stop: 45722, Start Num: 134
Candidate Starts for Issa_64:
(46, 45267), (62, 45312), (63, 45315), (68, 45324), (93, 45393), (Start: 134 @45459 has 144 MA's), (301, 45681), (304, 45696),

Gene: Issa_60 Start: 43876, Stop: 44166, Start Num: 134
Candidate Starts for Issa_60:
(Start: 134 @43876 has 144 MA's), (233, 44008), (235, 44011),

Gene: JEGGS_72 Start: 44121, Stop: 44435, Start Num: 138
Candidate Starts for JEGGS_72:
(Start: 138 @44121 has 18 MA's), (195, 44202), (230, 44253), (257, 44295), (287, 44346),

Gene: JEGGS_71 Start: 43810, Stop: 44121, Start Num: 127
Candidate Starts for JEGGS_71:
(Start: 127 @43810 has 23 MA's), (167, 43873), (219, 43951), (232, 43972), (246, 43996), (255, 44014), (272, 44044),

Gene: JEGGS_40 Start: 28790, Stop: 29098, Start Num: 134
Candidate Starts for JEGGS_40:
(Start: 134 @28790 has 144 MA's), (169, 28835),

Gene: James_100 Start: 55293, Stop: 55574, Start Num: 147
Candidate Starts for James_100:
(15, 54882), (18, 54903), (19, 54924), (22, 54954), (Start: 147 @55293 has 44 MA's), (174, 55338), (200, 55356), (283, 55473),

Gene: Jarcob_99 Start: 54892, Stop: 55173, Start Num: 147
Candidate Starts for Jarcob_99:
(15, 54481), (18, 54502), (19, 54523), (22, 54553), (Start: 147 @54892 has 44 MA's), (174, 54937), (200, 54955), (283, 55072),

Gene: Jazzy4900_69 Start: 46463, Stop: 46738, Start Num: 134
Candidate Starts for Jazzy4900_69:
(Start: 134 @46463 has 144 MA's), (262, 46610), (277, 46631), (279, 46634), (284, 46643), (287, 46652), (291, 46667), (301, 46694),

Gene: Jazzy4900_65 Start: 44572, Stop: 44859, Start Num: 134
Candidate Starts for Jazzy4900_65:
(Start: 134 @44572 has 144 MA's), (278, 44758), (290, 44788), (291, 44791),

Gene: JeNeSaisPas_130 Start: 70257, Stop: 70622, Start Num: 134
Candidate Starts for JeNeSaisPas_130:
(91, 70179), (Start: 134 @70257 has 144 MA's), (216, 70368), (268, 70443), (290, 70494),

Gene: JeNeSaisPas_164 Start: 81260, Stop: 81577, Start Num: 134
Candidate Starts for JeNeSaisPas_164:
(85, 81176), (100, 81200), (Start: 134 @81260 has 144 MA's), (200, 81347), (244, 81419), (291, 81506), (301, 81533),

Gene: JeNeSaisPas_235 Start: 104699, Stop: 104989, Start Num: 164
Candidate Starts for JeNeSaisPas_235:
(Start: 164 @104699 has 4 MA's), (216, 104783), (306, 104963), (307, 104978),

Gene: JeNeSaisPas_120 Start: 66584, Stop: 66928, Start Num: 138
Candidate Starts for JeNeSaisPas_120:
(Start: 138 @66584 has 18 MA's), (286, 66830), (287, 66833),

Gene: JeNeSaisPas_121 Start: 66931, Stop: 67239, Start Num: 186
Candidate Starts for JeNeSaisPas_121:
(Start: 186 @66931 has 4 MA's), (210, 66976), (236, 67015), (285, 67111),

Gene: JeNeSaisPas_182 Start: 88525, Stop: 88824, Start Num: 134
Candidate Starts for JeNeSaisPas_182:
(Start: 134 @88525 has 144 MA's), (278, 88711), (309, 88807),

Gene: JeanGrey_20 Start: 10459, Stop: 10809, Start Num: 119
Candidate Starts for JeanGrey_20:
(Start: 119 @10459 has 2 MA's),

Gene: Jennelsea_94 Start: 52193, Stop: 52474, Start Num: 147
Candidate Starts for Jennelsea_94:
(15, 51782), (18, 51803), (19, 51824), (22, 51854), (Start: 147 @52193 has 44 MA's), (174, 52238), (200, 52256), (283, 52373), (295, 52409),

Gene: Jeremy4pt0_67 Start: 43660, Stop: 43989, Start Num: 134
Candidate Starts for Jeremy4pt0_67:
(Start: 134 @43660 has 144 MA's), (237, 43804), (248, 43825), (302, 43948),

Gene: JonJames_139 Start: 79256, Stop: 79624, Start Num: 129
Candidate Starts for JonJames_139:
(Start: 129 @79256 has 3 MA's), (149, 79286), (158, 79301), (161, 79307), (176, 79331), (208, 79382), (281, 79502), (283, 79505), (290, 79529), (312, 79610),

Gene: JonJames_140 Start: 79621, Stop: 79956, Start Num: 122
Candidate Starts for JonJames_140:
(Start: 122 @79621 has 3 MA's), (169, 79690), (178, 79705), (245, 79789), (260, 79816), (282, 79855),

Gene: Judy_48 Start: 31217, Stop: 31516, Start Num: 162
Candidate Starts for Judy_48:
(Start: 162 @31217 has 3 MA's), (190, 31259), (232, 31328), (268, 31391), (284, 31421), (303, 31475), (309, 31505),

Gene: KSSJEB_10 Start: 6483, Stop: 6797, Start Num: 152
Candidate Starts for KSSJEB_10:
(Start: 133 @6456 has 1 MA's), (Start: 152 @6483 has 20 MA's), (174, 6522), (188, 6531), (229, 6600), (269, 6675), (295, 6735),

Gene: Kardesai_72 Start: 44083, Stop: 44394, Start Num: 127
Candidate Starts for Kardesai_72:
(Start: 127 @44083 has 23 MA's), (167, 44146), (219, 44224), (232, 44245), (246, 44269), (255, 44287), (272, 44317),

Gene: Kardesai_73 Start: 44394, Stop: 44708, Start Num: 138
Candidate Starts for Kardesai_73:
(Start: 138 @44394 has 18 MA's), (195, 44475), (230, 44526), (257, 44568), (287, 44619),

Gene: Kardesai_42 Start: 29456, Stop: 29764, Start Num: 134
Candidate Starts for Kardesai_42:
(Start: 134 @29456 has 144 MA's), (195, 29528),

Gene: KeaneyLin_39 Start: 28863, Stop: 29171, Start Num: 134
Candidate Starts for KeaneyLin_39:
(Start: 134 @28863 has 144 MA's),

Gene: KeaneyLin_68 Start: 43769, Stop: 44080, Start Num: 127
Candidate Starts for KeaneyLin_68:
(Start: 127 @43769 has 23 MA's), (167, 43832), (219, 43910), (232, 43931), (246, 43955), (255, 43973), (272, 44003),

Gene: KeaneyLin_69 Start: 44080, Stop: 44394, Start Num: 138
Candidate Starts for KeaneyLin_69:
(Start: 138 @44080 has 18 MA's), (195, 44161), (230, 44212), (257, 44254), (287, 44305),

Gene: Kelcole_54 Start: 37921, Stop: 37628, Start Num: 143
Candidate Starts for Kelcole_54:
(125, 37951), (Start: 141 @37924 has 10 MA's), (Start: 143 @37921 has 19 MA's), (Start: 152 @37909 has 20 MA's), (174, 37870), (177, 37867), (207, 37834), (215, 37822), (232, 37813), (283, 37735), (289, 37714), (295, 37699),

Gene: KevinMinion_66 Start: 43917, Stop: 44198, Start Num: 134
Candidate Starts for KevinMinion_66:
(Start: 134 @43917 has 144 MA's), (165, 43944), (220, 44025), (257, 44064), (266, 44079), (287, 44109), (302, 44154),

Gene: KevinMinion_65 Start: 43651, Stop: 43917, Start Num: 114
Candidate Starts for KevinMinion_65:
(Start: 114 @43651 has 16 MA's), (Start: 127 @43672 has 23 MA's), (159, 43717), (190, 43756),

Gene: KillerQueen_57 Start: 38171, Stop: 37878, Start Num: 143
Candidate Starts for KillerQueen_57:
(125, 38201), (Start: 141 @38174 has 10 MA's), (Start: 143 @38171 has 19 MA's), (Start: 152 @38159 has 20 MA's), (174, 38120), (177, 38117), (207, 38084), (215, 38072), (232, 38063), (283, 37985), (289, 37964), (295, 37949),

Gene: Kinny_70 Start: 44860, Stop: 45135, Start Num: 114
Candidate Starts for Kinny_70:
(Start: 114 @44860 has 16 MA's), (159, 44926), (202, 44986), (226, 45010), (251, 45052),

Gene: Kinny_71 Start: 45135, Stop: 45440, Start Num: 134
Candidate Starts for Kinny_71:
(Start: 134 @45135 has 144 MA's), (165, 45165), (191, 45207), (276, 45333), (304, 45411),

Gene: Koella_89 Start: 50055, Stop: 50336, Start Num: 147
Candidate Starts for Koella_89:
(15, 49644), (18, 49665), (19, 49686), (22, 49716), (Start: 147 @50055 has 44 MA's), (174, 50100), (200, 50118), (283, 50235),

Gene: Kubulix_9 Start: 3460, Stop: 3867, Start Num: 110
Candidate Starts for Kubulix_9:
(Start: 110 @3460 has 16 MA's), (Start: 140 @3511 has 6 MA's), (Start: 146 @3520 has 4 MA's), (202, 3607), (232, 3655), (266, 3721), (275, 3739), (285, 3757),

Gene: Kubulix_68 Start: 42783, Stop: 42475, Start Num: 156
Candidate Starts for Kubulix_68:
(101, 42870), (104, 42864), (Start: 156 @42783 has 14 MA's), (190, 42732), (195, 42726), (243, 42648), (251, 42633), (265, 42606), (303, 42516), (309, 42486),

Gene: Kudefre_118 Start: 64805, Stop: 65071, Start Num: 154
Candidate Starts for Kudefre_118:
(84, 64688), (Start: 154 @64805 has 7 MA's), (286, 64979), (307, 65060),

Gene: Kureo_230 Start: 103280, Stop: 103570, Start Num: 164
Candidate Starts for Kureo_230:
(Start: 164 @103280 has 4 MA's), (216, 103364), (306, 103544), (307, 103559),

Gene: Kureo_178 Start: 87235, Stop: 87534, Start Num: 134
Candidate Starts for Kureo_178:
(Start: 134 @87235 has 144 MA's), (278, 87421), (309, 87517),

Gene: Kureo_122 Start: 66525, Stop: 66833, Start Num: 186
Candidate Starts for Kureo_122:
(Start: 186 @66525 has 4 MA's), (210, 66570), (236, 66609), (285, 66705),

Gene: Kureo_130 Start: 69857, Stop: 70222, Start Num: 134
Candidate Starts for Kureo_130:
(91, 69779), (Start: 134 @69857 has 144 MA's), (216, 69968), (268, 70043), (290, 70094),

Gene: Kureo_121 Start: 66178, Stop: 66522, Start Num: 138
Candidate Starts for Kureo_121:
(Start: 138 @66178 has 18 MA's), (286, 66424), (287, 66427),

Gene: Kureo_159 Start: 80759, Stop: 81076, Start Num: 134
Candidate Starts for Kureo_159:
(85, 80675), (100, 80699), (Start: 134 @80759 has 144 MA's), (200, 80846), (244, 80918), (291, 81005), (301, 81032),

Gene: Lambo_93 Start: 64770, Stop: 65072, Start Num: 143
Candidate Starts for Lambo_93:
(Start: 127 @64743 has 23 MA's), (Start: 132 @64752 has 4 MA's), (137, 64761), (Start: 143 @64770 has 19 MA's), (174, 64818), (283, 64971), (290, 64995),

Gene: LastJedi_87 Start: 51112, Stop: 51393, Start Num: 147
Candidate Starts for LastJedi_87:
(15, 50701), (18, 50722), (19, 50743), (22, 50773), (Start: 147 @51112 has 44 MA's), (174, 51157), (200, 51175), (283, 51292),

Gene: Latretium_99 Start: 54158, Stop: 54439, Start Num: 147
Candidate Starts for Latretium_99:
(15, 53747), (18, 53768), (19, 53789), (22, 53819), (Start: 147 @54158 has 44 MA's), (174, 54203), (200, 54221), (283, 54338),

Gene: Leathea_68 Start: 42920, Stop: 43210, Start Num: 134
Candidate Starts for Leathea_68:
(Start: 134 @42920 has 144 MA's), (189, 42989), (291, 43139),

Gene: Leathea_67 Start: 42633, Stop: 42920, Start Num: 114
Candidate Starts for Leathea_67:
(Start: 114 @42633 has 16 MA's), (176, 42729), (202, 42759), (287, 42894),

Gene: Lewando_71 Start: 44727, Stop: 45032, Start Num: 134
Candidate Starts for Lewando_71:
(Start: 134 @44727 has 144 MA's), (191, 44799), (276, 44925), (304, 45003),

Gene: Lewando_70 Start: 44452, Stop: 44727, Start Num: 114

Candidate Starts for Lewando_70:
(Start: 114 @44452 has 16 MA's), (159, 44518), (202, 44578), (226, 44602), (251, 44644),

Gene: LilHuddy_66 Start: 44510, Stop: 44803, Start Num: 134
Candidate Starts for LilHuddy_66:
(Start: 134 @44510 has 144 MA's),

Gene: LilHuddy_70 Start: 46088, Stop: 46360, Start Num: 134
Candidate Starts for LilHuddy_70:
(Start: 134 @46088 has 144 MA's), (284, 46268),

Gene: LilMoolah_99 Start: 54092, Stop: 54373, Start Num: 147
Candidate Starts for LilMoolah_99:
(15, 53681), (18, 53702), (19, 53723), (22, 53753), (Start: 147 @54092 has 44 MA's), (174, 54137), (200, 54155), (283, 54272),

Gene: Limpid_66 Start: 53880, Stop: 54281, Start Num: 113
Candidate Starts for Limpid_66:
(Start: 113 @53880 has 7 MA's), (159, 53946), (187, 53991), (202, 54018), (206, 54024), (234, 54060), (248, 54087), (251, 54093), (270, 54129), (294, 54180), (297, 54186),

Gene: Linda_68 Start: 43958, Stop: 44287, Start Num: 134
Candidate Starts for Linda_68:
(Start: 134 @43958 has 144 MA's), (237, 44102), (248, 44123), (302, 44246),

Gene: Lizziana_97 Start: 54360, Stop: 54641, Start Num: 147
Candidate Starts for Lizziana_97:
(15, 53949), (18, 53970), (19, 53991), (22, 54021), (Start: 147 @54360 has 44 MA's), (174, 54405), (200, 54423), (283, 54540),

Gene: Loretta_69 Start: 46231, Stop: 46503, Start Num: 134
Candidate Starts for Loretta_69:
(Start: 134 @46231 has 144 MA's), (194, 46303), (284, 46411), (304, 46477),

Gene: Loretta_65 Start: 44584, Stop: 44877, Start Num: 134
Candidate Starts for Loretta_65:
(Start: 134 @44584 has 144 MA's), (233, 44719), (258, 44746),

Gene: LucySwiss_66 Start: 45401, Stop: 45664, Start Num: 134
Candidate Starts for LucySwiss_66:
(Start: 134 @45401 has 144 MA's), (301, 45623), (304, 45638),

Gene: LucySwiss_61 Start: 43671, Stop: 43970, Start Num: 134
Candidate Starts for LucySwiss_61:
(Start: 134 @43671 has 144 MA's), (233, 43803), (235, 43806), (292, 43905),

Gene: Makai_70 Start: 46375, Stop: 46647, Start Num: 134
Candidate Starts for Makai_70:
(Start: 134 @46375 has 144 MA's), (284, 46555), (301, 46606),

Gene: Makai_65 Start: 44655, Stop: 44951, Start Num: 134
Candidate Starts for Makai_65:
(Start: 134 @44655 has 144 MA's), (233, 44787), (235, 44790), (292, 44886),

Gene: Manatee_11 Start: 6673, Stop: 6987, Start Num: 152
Candidate Starts for Manatee_11:
(Start: 152 @6673 has 20 MA's), (174, 6712), (188, 6721), (229, 6790), (269, 6865), (295, 6925),

Gene: Maravista_93 Start: 55020, Stop: 55301, Start Num: 147
Candidate Starts for Maravista_93:
(15, 54609), (18, 54630), (19, 54651), (22, 54681), (Start: 147 @55020 has 44 MA's), (174, 55065), (200, 55083), (283, 55200),

Gene: Marcie_61 Start: 38811, Stop: 38491, Start Num: 143
Candidate Starts for Marcie_61:
(125, 38841), (Start: 141 @38814 has 10 MA's), (Start: 143 @38811 has 19 MA's), (174, 38760), (215, 38712), (238, 38682), (263, 38637), (283, 38598), (289, 38577), (295, 38562),

Gene: Mardi_67 Start: 43284, Stop: 43484, Start Num: 159
Candidate Starts for Mardi_67:
(Start: 114 @43218 has 16 MA's), (Start: 127 @43239 has 23 MA's), (159, 43284), (190, 43323),

Gene: Mardi_68 Start: 43484, Stop: 43768, Start Num: 134
Candidate Starts for Mardi_68:
(Start: 134 @43484 has 144 MA's), (165, 43511), (266, 43649), (302, 43724),

Gene: Marianna39_130 Start: 70266, Stop: 70631, Start Num: 134
Candidate Starts for Marianna39_130:
(91, 70188), (Start: 134 @70266 has 144 MA's), (216, 70377), (268, 70452), (290, 70503),

Gene: Marianna39_160 Start: 81269, Stop: 81586, Start Num: 134
Candidate Starts for Marianna39_160:
(85, 81185), (100, 81209), (Start: 134 @81269 has 144 MA's), (200, 81356), (244, 81428), (291, 81515), (301, 81542),

Gene: Marianna39_122 Start: 66940, Stop: 67248, Start Num: 186
Candidate Starts for Marianna39_122:
(Start: 186 @66940 has 4 MA's), (210, 66985), (236, 67024), (285, 67120),

Gene: Marianna39_121 Start: 66593, Stop: 66937, Start Num: 138
Candidate Starts for Marianna39_121:
(Start: 138 @66593 has 18 MA's), (286, 66839), (287, 66842),

Gene: Marianna39_233 Start: 105292, Stop: 105582, Start Num: 164
Candidate Starts for Marianna39_233:
(Start: 164 @105292 has 4 MA's), (181, 105319), (216, 105376), (306, 105556), (307, 105571),

Gene: Marianna39_178 Start: 88401, Stop: 88700, Start Num: 134
Candidate Starts for Marianna39_178:
(Start: 134 @88401 has 144 MA's), (278, 88587), (309, 88683),

Gene: Martik_95 Start: 54823, Stop: 55104, Start Num: 147
Candidate Starts for Martik_95:
(15, 54412), (18, 54433), (19, 54454), (22, 54484), (Start: 147 @54823 has 44 MA's), (174, 54868), (200, 54886), (283, 55003),

Gene: MaryV_70 Start: 46288, Stop: 46578, Start Num: 132
Candidate Starts for MaryV_70:
(Start: 130 @46285 has 5 MA's), (Start: 132 @46288 has 4 MA's), (170, 46342), (212, 46399),

Gene: Mattes_97 Start: 54029, Stop: 54310, Start Num: 147
Candidate Starts for Mattes_97:
(15, 53618), (18, 53639), (19, 53660), (22, 53690), (Start: 147 @54029 has 44 MA's), (174, 54074), (200, 54092), (283, 54209), (295, 54245),

Gene: McGuire_11 Start: 6718, Stop: 7032, Start Num: 152
Candidate Starts for McGuire_11:
(Start: 152 @6718 has 20 MA's), (174, 6757), (188, 6766), (229, 6835), (269, 6910), (295, 6970),

Gene: MediumFry_62 Start: 44006, Stop: 44296, Start Num: 134
Candidate Starts for MediumFry_62:
(Start: 134 @44006 has 144 MA's), (222, 44123), (233, 44138), (235, 44141),

Gene: MediumFry_66 Start: 45539, Stop: 45841, Start Num: 134
Candidate Starts for MediumFry_66:
(46, 45362), (49, 45371), (62, 45404), (81, 45458), (91, 45479), (Start: 134 @45539 has 144 MA's),

Gene: MellowYellow_8 Start: 3065, Stop: 3472, Start Num: 110
Candidate Starts for MellowYellow_8:
(Start: 110 @3065 has 16 MA's), (Start: 140 @3116 has 6 MA's), (Start: 146 @3125 has 4 MA's), (202, 3212), (232, 3260), (266, 3326), (275, 3344), (285, 3362),

Gene: MellowYellow_68 Start: 42870, Stop: 42562, Start Num: 156
Candidate Starts for MellowYellow_68:
(Start: 156 @42870 has 14 MA's), (190, 42819), (195, 42813), (243, 42735), (265, 42693), (303, 42603), (309, 42573),

Gene: Michelle_68 Start: 43960, Stop: 44289, Start Num: 134
Candidate Starts for Michelle_68:
(Start: 134 @43960 has 144 MA's), (237, 44104), (248, 44125), (302, 44248),

Gene: MiniBagel_61 Start: 44764, Stop: 45063, Start Num: 134
Candidate Starts for MiniBagel_61:
(Start: 134 @44764 has 144 MA's), (233, 44896), (292, 44998),

Gene: MiniBagel_65 Start: 46355, Stop: 46624, Start Num: 134
Candidate Starts for MiniBagel_65:
(48, 46163), (51, 46172), (60, 46196), (64, 46208), (65, 46211), (69, 46217), (70, 46220), (98, 46289), (Start: 134 @46355 has 144 MA's), (284, 46532),

Gene: Minnie_91 Start: 54441, Stop: 54722, Start Num: 147
Candidate Starts for Minnie_91:
(15, 54030), (18, 54051), (19, 54072), (22, 54102), (Start: 147 @54441 has 44 MA's), (174, 54486), (200, 54504), (283, 54621),

Gene: Mooshroom_43 Start: 29456, Stop: 29764, Start Num: 134
Candidate Starts for Mooshroom_43:
(Start: 134 @29456 has 144 MA's), (195, 29528),

Gene: Mooshroom_74 Start: 44394, Stop: 44708, Start Num: 138
Candidate Starts for Mooshroom_74:
(Start: 138 @44394 has 18 MA's), (195, 44475), (230, 44526), (257, 44568), (287, 44619),

Gene: Mooshroom_73 Start: 44083, Stop: 44394, Start Num: 127
Candidate Starts for Mooshroom_73:
(Start: 127 @44083 has 23 MA's), (167, 44146), (219, 44224), (232, 44245), (246, 44269), (255, 44287), (272, 44317),

Gene: MortyNRick_62 Start: 41583, Stop: 41870, Start Num: 147
Candidate Starts for MortyNRick_62:
(27, 41283), (36, 41334), (39, 41346), (47, 41370), (77, 41457), (Start: 139 @41571 has 1 MA's), (Start: 147 @41583 has 44 MA's), (174, 41628), (246, 41700), (287, 41778), (295, 41802), (308, 41859),

Gene: Mossy_1 Start: 220, Stop: 549, Start Num: 145
Candidate Starts for Mossy_1:
(Start: 145 @220 has 9 MA's), (174, 268), (224, 352), (268, 427), (283, 454), (287, 466),

Gene: MrAaronian_68 Start: 43960, Stop: 44289, Start Num: 134
Candidate Starts for MrAaronian_68:
(Start: 134 @43960 has 144 MA's), (237, 44104), (248, 44125), (302, 44248),

Gene: Mudcat_38 Start: 30149, Stop: 30457, Start Num: 134
Candidate Starts for Mudcat_38:
(Start: 134 @30149 has 144 MA's),

Gene: Mudcat_69 Start: 45479, Stop: 45793, Start Num: 138
Candidate Starts for Mudcat_69:
(Start: 138 @45479 has 18 MA's), (195, 45560), (230, 45611), (257, 45653), (287, 45704),

Gene: Mudcat_68 Start: 45168, Stop: 45479, Start Num: 127
Candidate Starts for Mudcat_68:
(Start: 127 @45168 has 23 MA's), (167, 45231), (219, 45309), (232, 45330), (246, 45354), (255, 45372), (272, 45402),

Gene: Muglass_68 Start: 43936, Stop: 44211, Start Num: 114
Candidate Starts for Muglass_68:
(Start: 114 @43936 has 16 MA's), (159, 44002), (202, 44062), (226, 44086), (251, 44128),

Gene: Muglass_69 Start: 44211, Stop: 44516, Start Num: 134
Candidate Starts for Muglass_69:
(Start: 134 @44211 has 144 MA's), (165, 44241), (191, 44283), (276, 44409), (304, 44487),

Gene: Myrna_235 Start: 137260, Stop: 137607, Start Num: 143
Candidate Starts for Myrna_235:
(14, 136774), (21, 136918), (29, 136978), (61, 137095), (Start: 143 @137260 has 19 MA's), (174, 137311), (283, 137461), (285, 137467), (288, 137476), (290, 137485), (318, 137599),

Gene: Naira_11 Start: 6952, Stop: 7266, Start Num: 152
Candidate Starts for Naira_11:
(Start: 152 @6952 has 20 MA's), (174, 6991), (229, 7069), (254, 7114),

Gene: NapoleonB_73 Start: 44325, Stop: 44636, Start Num: 127
Candidate Starts for NapoleonB_73:
(Start: 127 @44325 has 23 MA's), (167, 44388), (219, 44466), (232, 44487), (246, 44511), (255, 44529), (272, 44559),

Gene: NapoleonB_74 Start: 44636, Stop: 44950, Start Num: 138
Candidate Starts for NapoleonB_74:
(Start: 138 @44636 has 18 MA's), (195, 44717), (230, 44768), (257, 44810), (287, 44861),

Gene: NapoleonB_40 Start: 28937, Stop: 29245, Start Num: 134
Candidate Starts for NapoleonB_40:
(Start: 134 @28937 has 144 MA's), (195, 29009),

Gene: Nason_73 Start: 44784, Stop: 45098, Start Num: 141
Candidate Starts for Nason_73:
(128, 44766), (131, 44769), (Start: 134 @44775 has 144 MA's), (Start: 141 @44784 has 10 MA's), (144, 44787), (148, 44793), (201, 44877), (230, 44916), (287, 45009),

Gene: Nason_72 Start: 44474, Stop: 44782, Start Num: 127
Candidate Starts for Nason_72:
(Start: 127 @44474 has 23 MA's), (193, 44576), (219, 44612), (255, 44675), (272, 44705),

Gene: Nason_41 Start: 29295, Stop: 29603, Start Num: 134
Candidate Starts for Nason_41:
(Start: 134 @29295 has 144 MA's),

Gene: Natasha_71 Start: 44273, Stop: 44602, Start Num: 134
Candidate Starts for Natasha_71:
(Start: 134 @44273 has 144 MA's), (237, 44417), (248, 44438), (302, 44561),

Gene: Navi1117_69 Start: 43660, Stop: 43926, Start Num: 114
Candidate Starts for Navi1117_69:
(Start: 114 @43660 has 16 MA's), (Start: 127 @43681 has 23 MA's), (159, 43726), (190, 43765), (245, 43834),

Gene: Navi1117_70 Start: 43926, Stop: 44207, Start Num: 134
Candidate Starts for Navi1117_70:
(Start: 134 @43926 has 144 MA's), (165, 43953), (220, 44034), (257, 44073), (266, 44088), (287, 44118), (302, 44163),

Gene: Neroxid_43 Start: 27312, Stop: 27632, Start Num: 147
Candidate Starts for Neroxid_43:
(112, 27255), (Start: 147 @27312 has 44 MA's), (247, 27468), (283, 27531), (309, 27624),

Gene: NidoQ_42 Start: 29491, Stop: 29790, Start Num: 162
Candidate Starts for NidoQ_42:
(Start: 139 @29455 has 1 MA's), (Start: 162 @29491 has 3 MA's), (183, 29524), (190, 29533), (198, 29545), (232, 29602), (239, 29608), (268, 29665), (284, 29695), (303, 29749), (309, 29779),

Gene: Nightmare_63 Start: 45062, Stop: 45361, Start Num: 134
Candidate Starts for Nightmare_63:
(Start: 134 @45062 has 144 MA's), (233, 45194), (235, 45197), (292, 45296),

Gene: Nightmare_67 Start: 46698, Stop: 46961, Start Num: 134
Candidate Starts for Nightmare_67:
(Start: 134 @46698 has 144 MA's), (200, 46776), (304, 46935),

Gene: Nikan_5 Start: 3039, Stop: 3446, Start Num: 110
Candidate Starts for Nikan_5:
(72, 2964), (94, 3015), (Start: 110 @3039 has 16 MA's), (Start: 146 @3099 has 4 MA's), (166, 3129), (202, 3186), (232, 3234), (234, 3237), (266, 3300), (275, 3318), (285, 3336),

Gene: Nikan_9 Start: 4093, Stop: 4401, Start Num: 147
Candidate Starts for Nikan_9:
(Start: 147 @4093 has 44 MA's), (283, 4297), (295, 4333),

Gene: Nikan_65 Start: 42741, Stop: 42433, Start Num: 156
Candidate Starts for Nikan_65:
(Start: 143 @42756 has 19 MA's), (Start: 156 @42741 has 14 MA's), (161, 42729), (190, 42690), (242, 42609), (309, 42444),

Gene: Niktson_61 Start: 44520, Stop: 44819, Start Num: 134
Candidate Starts for Niktson_61:
(Start: 134 @44520 has 144 MA's), (233, 44652), (235, 44655), (292, 44754),

Gene: Niktson_66 Start: 46256, Stop: 46558, Start Num: 134
Candidate Starts for Niktson_66:
(46, 46061), (62, 46106), (63, 46109), (68, 46118), (72, 46136), (80, 46157), (81, 46160), (82, 46163), (93, 46187), (Start: 134 @46256 has 144 MA's), (226, 46385),

Gene: Nina_52 Start: 37854, Stop: 37525, Start Num: 152
Candidate Starts for Nina_52:
(Start: 152 @37854 has 20 MA's), (174, 37815), (232, 37722), (268, 37653),

Gene: Nivinsha_63 Start: 44018, Stop: 44311, Start Num: 134
Candidate Starts for Nivinsha_63:
(Start: 134 @44018 has 144 MA's), (235, 44156),

Gene: Nivinsha_69 Start: 45830, Stop: 46093, Start Num: 134
Candidate Starts for Nivinsha_69:
(Start: 134 @45830 has 144 MA's), (200, 45908), (304, 46067),

Gene: Nivrat_96 Start: 53965, Stop: 54246, Start Num: 147
Candidate Starts for Nivrat_96:
(15, 53554), (18, 53575), (19, 53596), (22, 53626), (Start: 147 @53965 has 44 MA's), (174, 54010), (200, 54028), (283, 54145),

Gene: NormanBulbieJr_94 Start: 54069, Stop: 54350, Start Num: 147
Candidate Starts for NormanBulbieJr_94:
(15, 53658), (18, 53679), (19, 53700), (22, 53730), (Start: 147 @54069 has 44 MA's), (174, 54114), (200, 54132), (283, 54249),

Gene: NyleyClemson_66 Start: 42485, Stop: 42177, Start Num: 156
Candidate Starts for NyleyClemson_66:
(Start: 156 @42485 has 14 MA's), (190, 42434), (195, 42428), (243, 42350), (265, 42308), (303, 42218), (309, 42188),

Gene: NyleyClemson_7 Start: 3007, Stop: 3414, Start Num: 110
Candidate Starts for NyleyClemson_7:
(Start: 110 @3007 has 16 MA's), (Start: 140 @3058 has 6 MA's), (Start: 146 @3067 has 4 MA's), (202, 3154), (232, 3202), (266, 3268), (275, 3286), (285, 3304),

Gene: Octobien14_114 Start: 63585, Stop: 63860, Start Num: 154
Candidate Starts for Octobien14_114:
(84, 63468), (Start: 154 @63585 has 7 MA's), (204, 63651), (307, 63849),

Gene: Odyssey395_68 Start: 42907, Stop: 42599, Start Num: 156
Candidate Starts for Odyssey395_68:
(101, 42994), (104, 42988), (Start: 156 @42907 has 14 MA's), (190, 42856), (195, 42850), (243, 42772), (251, 42757), (265, 42730), (303, 42640), (309, 42610),

Gene: Odyssey395_10 Start: 3459, Stop: 3866, Start Num: 110
Candidate Starts for Odyssey395_10:
(Start: 110 @3459 has 16 MA's), (Start: 140 @3510 has 6 MA's), (Start: 146 @3519 has 4 MA's), (202, 3606), (232, 3654), (266, 3720), (275, 3738), (285, 3756),

Gene: Ollypop_11 Start: 4172, Stop: 4435, Start Num: 147
Candidate Starts for Ollypop_11:
(Start: 147 @4172 has 44 MA's), (197, 4235), (209, 4256), (261, 4292), (283, 4331),

Gene: Ollypop_7 Start: 3116, Stop: 3523, Start Num: 110
Candidate Starts for Ollypop_7:
(72, 3041), (94, 3092), (Start: 110 @3116 has 16 MA's), (Start: 146 @3176 has 4 MA's), (166, 3206), (232, 3311), (275, 3395), (285, 3413),

Gene: Ollypop_64 Start: 43411, Stop: 43103, Start Num: 155
Candidate Starts for Ollypop_64:
(97, 43504), (Start: 155 @43411 has 1 MA's), (190, 43360), (249, 43264), (256, 43252), (275, 43213), (284, 43198), (291, 43174),

Gene: OlympiaSaint_100 Start: 54235, Stop: 54516, Start Num: 147
Candidate Starts for OlympiaSaint_100:
(15, 53824), (18, 53845), (19, 53866), (22, 53896), (Start: 147 @54235 has 44 MA's), (174, 54280), (200, 54298), (283, 54415),

Gene: OneinaGillian_56 Start: 37823, Stop: 37530, Start Num: 143
Candidate Starts for OneinaGillian_56:
(125, 37853), (Start: 141 @37826 has 10 MA's), (Start: 143 @37823 has 19 MA's), (Start: 152 @37811 has 20 MA's), (174, 37772), (177, 37769), (207, 37736), (215, 37724), (232, 37715), (283, 37637), (289, 37616), (295, 37601),

Gene: Onestar_67 Start: 44130, Stop: 44408, Start Num: 134
Candidate Starts for Onestar_67:
(Start: 115 @44103 has 4 MA's), (Start: 134 @44130 has 144 MA's), (189, 44196), (196, 44205), (277, 44298), (291, 44334),

Gene: Paella_133 Start: 71406, Stop: 71771, Start Num: 134
Candidate Starts for Paella_133:
(91, 71328), (Start: 134 @71406 has 144 MA's), (216, 71517), (268, 71592), (290, 71643),

Gene: Paella_181 Start: 89280, Stop: 89579, Start Num: 134
Candidate Starts for Paella_181:
(Start: 134 @89280 has 144 MA's), (278, 89466), (309, 89562),

Gene: Paella_124 Start: 68080, Stop: 68388, Start Num: 186
Candidate Starts for Paella_124:
(Start: 186 @68080 has 4 MA's), (210, 68125), (236, 68164), (285, 68260),

Gene: Paella_123 Start: 67733, Stop: 68077, Start Num: 138
Candidate Starts for Paella_123:
(Start: 138 @67733 has 18 MA's), (286, 67979), (287, 67982),

Gene: Paella_235 Start: 106079, Stop: 106369, Start Num: 164
Candidate Starts for Paella_235:
(Start: 164 @106079 has 4 MA's), (216, 106163), (306, 106343), (307, 106358),

Gene: Paella_164 Start: 82455, Stop: 82772, Start Num: 134
Candidate Starts for Paella_164:
(85, 82371), (100, 82395), (Start: 134 @82455 has 144 MA's), (200, 82542), (244, 82614), (291, 82701), (301, 82728),

Gene: ParvusTarda_93 Start: 64024, Stop: 64359, Start Num: 127
Candidate Starts for ParvusTarda_93:
(Start: 127 @64024 has 23 MA's), (Start: 132 @64033 has 4 MA's), (137, 64042), (Start: 143 @64051 has 19 MA's), (174, 64099), (283, 64252), (290, 64276), (308, 64345),

Gene: PauloDiaboli_215 Start: 113653, Stop: 113336, Start Num: 130
Candidate Starts for PauloDiaboli_215:
(Start: 130 @113653 has 5 MA's), (240, 113536), (262, 113497), (283, 113458), (302, 113401), (316, 113341),

Gene: Peas_65 Start: 41993, Stop: 42271, Start Num: 143
Candidate Starts for Peas_65:
(12, 41477), (41, 41768), (87, 41897), (Start: 143 @41993 has 19 MA's), (281, 42167), (283, 42170), (295, 42206), (307, 42260),

Gene: PeggyLeg03_45 Start: 30402, Stop: 30701, Start Num: 162
Candidate Starts for PeggyLeg03_45:
(Start: 162 @30402 has 3 MA's), (183, 30435), (232, 30513), (239, 30519), (268, 30576), (284, 30606), (290, 30627), (309, 30690),

Gene: Pepe25_55 Start: 37387, Stop: 37064, Start Num: 143
Candidate Starts for Pepe25_55:
(125, 37417), (Start: 141 @37390 has 10 MA's), (Start: 143 @37387 has 19 MA's), (Start: 152 @37375 has 20 MA's), (166, 37351), (174, 37336), (207, 37300), (215, 37288), (238, 37258), (263, 37213), (283, 37174),

Gene: Perkunas_2 Start: 448, Stop: 780, Start Num: 145
Candidate Starts for Perkunas_2:
(Start: 145 @448 has 9 MA's), (187, 514), (283, 682), (290, 706),

Gene: Phabba_246 Start: 137077, Stop: 137433, Start Num: 143

Candidate Starts for Phabba_246:
(23, 136756), (55, 136897), (Start: 143 @137077 has 19 MA's), (174, 137128), (229, 137203), (256, 137236), (262, 137245), (283, 137287), (285, 137293), (288, 137302), (290, 137311),

Gene: Phaby_67 Start: 45074, Stop: 45367, Start Num: 134
Candidate Starts for Phaby_67:
(Start: 134 @45074 has 144 MA's),

Gene: Phaby_71 Start: 46619, Stop: 46891, Start Num: 134
Candidate Starts for Phaby_71:
(Start: 134 @46619 has 144 MA's), (284, 46799), (304, 46865),

Gene: Phaila_68 Start: 43149, Stop: 43433, Start Num: 134
Candidate Starts for Phaila_68:
(Start: 134 @43149 has 144 MA's), (165, 43176), (266, 43314),

Gene: Phaila_67 Start: 42883, Stop: 43149, Start Num: 114
Candidate Starts for Phaila_67:
(Start: 114 @42883 has 16 MA's), (Start: 127 @42904 has 23 MA's), (159, 42949), (190, 42988),

Gene: Philus_98 Start: 54977, Stop: 55258, Start Num: 147
Candidate Starts for Philus_98:
(15, 54566), (18, 54587), (19, 54608), (22, 54638), (Start: 147 @54977 has 44 MA's), (174, 55022), (200, 55040), (283, 55157),

Gene: PhuzzTulsa_6 Start: 3249, Stop: 3656, Start Num: 110
Candidate Starts for PhuzzTulsa_6:
(Start: 110 @3249 has 16 MA's), (Start: 140 @3300 has 6 MA's), (Start: 146 @3309 has 4 MA's), (202, 3396), (232, 3444), (266, 3510), (275, 3528), (285, 3546),

Gene: PhuzzTulsa_65 Start: 43131, Stop: 42823, Start Num: 156
Candidate Starts for PhuzzTulsa_65:
(101, 43218), (104, 43212), (Start: 156 @43131 has 14 MA's), (190, 43080), (195, 43074), (243, 42996), (251, 42981), (265, 42954), (303, 42864), (309, 42834),

Gene: PinkPlastic_9 Start: 6480, Stop: 6794, Start Num: 152
Candidate Starts for PinkPlastic_9:
(Start: 152 @6480 has 20 MA's), (174, 6519), (188, 6528), (229, 6597), (269, 6672), (295, 6732),

Gene: Pipp_48 Start: 34437, Stop: 34712, Start Num: 143
Candidate Starts for Pipp_48:
(Start: 143 @34437 has 19 MA's), (283, 34608), (290, 34632),

Gene: Pippin15_60 Start: 40959, Stop: 41237, Start Num: 140
Candidate Starts for Pippin15_60:
(Start: 140 @40959 has 6 MA's), (211, 41061), (229, 41088), (262, 41142), (297, 41226),

Gene: Pippy_94 Start: 52340, Stop: 52621, Start Num: 147
Candidate Starts for Pippy_94:
(15, 51929), (18, 51950), (19, 51971), (22, 52001), (Start: 147 @52340 has 44 MA's), (174, 52385), (200, 52403), (283, 52520),

Gene: PoeMe_67 Start: 43368, Stop: 43634, Start Num: 114

Candidate Starts for PoeMe_67:
(Start: 114 @43368 has 16 MA's), (Start: 127 @43389 has 23 MA's), (159, 43434), (190, 43473),

Gene: PoeMe_68 Start: 43634, Stop: 43918, Start Num: 134
Candidate Starts for PoeMe_68:
(Start: 134 @43634 has 144 MA's), (149, 43640),

Gene: Pointis_8 Start: 3460, Stop: 3867, Start Num: 110
Candidate Starts for Pointis_8:
(Start: 110 @3460 has 16 MA's), (Start: 140 @3511 has 6 MA's), (Start: 146 @3520 has 4 MA's), (202, 3607), (232, 3655), (266, 3721), (275, 3739), (285, 3757),

Gene: Pointis_65 Start: 42710, Stop: 42402, Start Num: 156
Candidate Starts for Pointis_65:
(101, 42797), (104, 42791), (Start: 156 @42710 has 14 MA's), (190, 42659), (195, 42653), (243, 42575), (251, 42560), (265, 42533), (303, 42443), (309, 42413),

Gene: Popstraw_63 Start: 42624, Stop: 42316, Start Num: 156
Candidate Starts for Popstraw_63:
(101, 42711), (104, 42705), (Start: 156 @42624 has 14 MA's), (190, 42573), (195, 42567), (243, 42489), (251, 42474), (265, 42447), (303, 42357), (309, 42327),

Gene: Popstraw_8 Start: 3443, Stop: 3850, Start Num: 110
Candidate Starts for Popstraw_8:
(Start: 110 @3443 has 16 MA's), (Start: 140 @3494 has 6 MA's), (Start: 146 @3503 has 4 MA's), (202, 3590), (232, 3638), (266, 3704), (275, 3722), (285, 3740),

Gene: Powelldog_71 Start: 44664, Stop: 44993, Start Num: 134
Candidate Starts for Powelldog_71:
(25, 44370), (26, 44376), (36, 44433), (38, 44439), (44, 44460), (51, 44481), (60, 44505), (71, 44538), (Start: 134 @44664 has 144 MA's), (237, 44808), (240, 44811), (286, 44904),

Gene: Priscilla_97 Start: 54167, Stop: 54448, Start Num: 147
Candidate Starts for Priscilla_97:
(15, 53756), (18, 53777), (19, 53798), (22, 53828), (Start: 147 @54167 has 44 MA's), (174, 54212), (200, 54230), (283, 54347),

Gene: ProfFrink_68 Start: 43938, Stop: 44267, Start Num: 134
Candidate Starts for ProfFrink_68:
(Start: 134 @43938 has 144 MA's), (237, 44082), (248, 44103), (302, 44226),

Gene: Pucara_42 Start: 30007, Stop: 30306, Start Num: 162
Candidate Starts for Pucara_42:
(Start: 162 @30007 has 3 MA's), (183, 30040), (232, 30118), (239, 30124), (268, 30181), (284, 30211), (290, 30232), (309, 30295),

Gene: Pumpernickel_196 Start: 112347, Stop: 112042, Start Num: 130
Candidate Starts for Pumpernickel_196:
(Start: 130 @112347 has 5 MA's), (135, 112341), (199, 112272), (284, 112170), (314, 112059),

Gene: Pureglobe5_10 Start: 3473, Stop: 3880, Start Num: 110
Candidate Starts for Pureglobe5_10:

(Start: 110 @3473 has 16 MA's), (Start: 140 @3524 has 6 MA's), (Start: 146 @3533 has 4 MA's), (202, 3620), (232, 3668), (266, 3734), (275, 3752), (285, 3770),

Gene: Pureglobe5_67 Start: 43154, Stop: 42846, Start Num: 156
Candidate Starts for Pureglobe5_67:
(101, 43241), (104, 43235), (Start: 156 @43154 has 14 MA's), (190, 43103), (195, 43097), (243, 43019), (251, 43004), (265, 42977), (303, 42887), (309, 42857),

Gene: Qui_123 Start: 67733, Stop: 68077, Start Num: 138
Candidate Starts for Qui_123:
(Start: 138 @67733 has 18 MA's), (286, 67979), (287, 67982),

Gene: Qui_124 Start: 68080, Stop: 68388, Start Num: 186
Candidate Starts for Qui_124:
(Start: 186 @68080 has 4 MA's), (210, 68125), (236, 68164), (285, 68260),

Gene: Qui_234 Start: 106067, Stop: 106357, Start Num: 164
Candidate Starts for Qui_234:
(Start: 164 @106067 has 4 MA's), (216, 106151), (306, 106331), (307, 106346),

Gene: Qui_164 Start: 82455, Stop: 82772, Start Num: 134
Candidate Starts for Qui_164:
(85, 82371), (100, 82395), (Start: 134 @82455 has 144 MA's), (200, 82542), (244, 82614), (291, 82701), (301, 82728),

Gene: Qui_133 Start: 71406, Stop: 71771, Start Num: 134
Candidate Starts for Qui_133:
(91, 71328), (Start: 134 @71406 has 144 MA's), (216, 71517), (268, 71592), (290, 71643),

Gene: Qui_181 Start: 89277, Stop: 89576, Start Num: 134
Candidate Starts for Qui_181:
(Start: 134 @89277 has 144 MA's), (278, 89463), (309, 89559),

Gene: RIPWilbur_6 Start: 2867, Stop: 3274, Start Num: 110
Candidate Starts for RIPWilbur_6:
(Start: 110 @2867 has 16 MA's), (Start: 140 @2918 has 6 MA's), (Start: 146 @2927 has 4 MA's), (202, 3014), (232, 3062), (266, 3128), (285, 3164),

Gene: RIPWilbur_67 Start: 42748, Stop: 42440, Start Num: 156
Candidate Starts for RIPWilbur_67:
(101, 42835), (104, 42829), (Start: 156 @42748 has 14 MA's), (190, 42697), (195, 42691), (243, 42613), (251, 42598), (265, 42571), (303, 42481), (309, 42451),

Gene: Rajelicia_10 Start: 6620, Stop: 6934, Start Num: 152
Candidate Starts for Rajelicia_10:
(Start: 152 @6620 has 20 MA's), (174, 6659), (188, 6668), (229, 6737), (269, 6812), (295, 6872),

Gene: Ranunculus_6 Start: 3041, Stop: 3424, Start Num: 110
Candidate Starts for Ranunculus_6:
(Start: 110 @3041 has 16 MA's), (232, 3236), (268, 3305), (275, 3320), (284, 3335), (285, 3338),

Gene: Raunak_68 Start: 43600, Stop: 43929, Start Num: 134
Candidate Starts for Raunak_68:

(Start: 134 @43600 has 144 MA's), (237, 43744), (248, 43765), (302, 43888),

Gene: Raya_43 Start: 27312, Stop: 27632, Start Num: 147
Candidate Starts for Raya_43:
(112, 27255), (Start: 147 @27312 has 44 MA's), (247, 27468), (283, 27531), (309, 27624),

Gene: RazzB_7 Start: 2835, Stop: 3242, Start Num: 110
Candidate Starts for RazzB_7:
(Start: 110 @2835 has 16 MA's), (Start: 140 @2886 has 6 MA's), (Start: 146 @2895 has 4 MA's), (202, 2982), (232, 3030), (266, 3096), (275, 3114), (285, 3132),

Gene: RazzB_67 Start: 42616, Stop: 42308, Start Num: 156
Candidate Starts for RazzB_67:
(Start: 156 @42616 has 14 MA's), (190, 42565), (195, 42559), (243, 42481), (265, 42439), (303, 42349), (309, 42319),

Gene: RedBaron_57 Start: 37907, Stop: 37578, Start Num: 152
Candidate Starts for RedBaron_57:
(Start: 152 @37907 has 20 MA's), (174, 37868), (232, 37775), (268, 37706),

Gene: Remlit_73 Start: 43686, Stop: 43886, Start Num: 159
Candidate Starts for Remlit_73:
(Start: 114 @43620 has 16 MA's), (Start: 127 @43641 has 23 MA's), (159, 43686), (190, 43725),

Gene: Remlit_74 Start: 43886, Stop: 44170, Start Num: 134
Candidate Starts for Remlit_74:
(Start: 134 @43886 has 144 MA's), (165, 43913), (266, 44051),

Gene: Ren19_63 Start: 42336, Stop: 42040, Start Num: 156
Candidate Starts for Ren19_63:
(117, 42396), (Start: 143 @42351 has 19 MA's), (Start: 156 @42336 has 14 MA's), (165, 42321), (171, 42312), (183, 42294), (213, 42246), (232, 42216), (251, 42186), (265, 42159), (268, 42153), (273, 42144), (284, 42135), (291, 42111),

Gene: Ren19_5 Start: 3039, Stop: 3446, Start Num: 110
Candidate Starts for Ren19_5:
(72, 2964), (94, 3015), (Start: 110 @3039 has 16 MA's), (Start: 146 @3099 has 4 MA's), (166, 3129), (202, 3186), (232, 3234), (234, 3237), (266, 3300), (275, 3318), (285, 3336),

Gene: Ren19_9 Start: 4093, Stop: 4401, Start Num: 147
Candidate Starts for Ren19_9:
(Start: 147 @4093 has 44 MA's), (283, 4297), (295, 4333),

Gene: Renaldo_76 Start: 45093, Stop: 45398, Start Num: 134
Candidate Starts for Renaldo_76:
(Start: 134 @45093 has 144 MA's), (191, 45165), (276, 45291), (304, 45369),

Gene: Rizwana_7 Start: 3422, Stop: 3844, Start Num: 115
Candidate Starts for Rizwana_7:
(80, 3356), (Start: 115 @3422 has 4 MA's), (136, 3458), (Start: 164 @3500 has 4 MA's), (202, 3560), (284, 3707), (285, 3710),

Gene: Rizwana_8 Start: 3952, Stop: 4329, Start Num: 116

Candidate Starts for Rizwana_8:
(74, 3871), (79, 3880), (96, 3916), (Start: 116 @3952 has 3 MA's), (Start: 150 @4006 has 1 MA's), (157, 4015), (Start: 162 @4027 has 3 MA's), (168, 4036), (253, 4168),

Gene: RobinRose_58 Start: 38338, Stop: 38039, Start Num: 141
Candidate Starts for RobinRose_58:
(125, 38365), (Start: 141 @38338 has 10 MA's), (Start: 143 @38335 has 19 MA's), (Start: 152 @38323 has 20 MA's), (166, 38299), (174, 38284), (215, 38236), (232, 38227), (262, 38191), (283, 38149), (289, 38128),

Gene: Rockabye_66 Start: 29857, Stop: 30210, Start Num: 102
Candidate Starts for Rockabye_66:
(Start: 102 @29857 has 2 MA's), (268, 30079),

Gene: Romm_58 Start: 38320, Stop: 38039, Start Num: 152
Candidate Starts for Romm_58:
(125, 38362), (Start: 141 @38335 has 10 MA's), (Start: 143 @38332 has 19 MA's), (Start: 152 @38320 has 20 MA's), (174, 38281), (177, 38278), (207, 38245), (215, 38233), (232, 38224), (283, 38146), (289, 38125), (295, 38110),

Gene: RustyBoy_72 Start: 44472, Stop: 44801, Start Num: 134
Candidate Starts for RustyBoy_72:
(Start: 134 @44472 has 144 MA's), (237, 44616), (248, 44637), (302, 44760),

Gene: SJReid_70 Start: 30780, Stop: 31085, Start Num: 102
Candidate Starts for SJReid_70:
(Start: 102 @30780 has 2 MA's),

Gene: Saal_94 Start: 53731, Stop: 54012, Start Num: 147
Candidate Starts for Saal_94:
(15, 53320), (18, 53341), (19, 53362), (22, 53392), (Start: 147 @53731 has 44 MA's), (174, 53776), (200, 53794), (283, 53911),

Gene: SadLad_63 Start: 46437, Stop: 46174, Start Num: 154
Candidate Starts for SadLad_63:
(Start: 154 @46437 has 7 MA's), (170, 46410), (199, 46389), (283, 46278), (295, 46242), (308, 46185),

Gene: Salk_68 Start: 43958, Stop: 44287, Start Num: 134
Candidate Starts for Salk_68:
(Start: 134 @43958 has 144 MA's), (237, 44102), (248, 44123), (302, 44246),

Gene: Sandalphon_96 Start: 54715, Stop: 55005, Start Num: 142
Candidate Starts for Sandalphon_96:
(Start: 142 @54715 has 1 MA's), (174, 54769), (200, 54787), (283, 54904),

Gene: ScienceWizSam_62 Start: 44180, Stop: 44473, Start Num: 134
Candidate Starts for ScienceWizSam_62:
(Start: 134 @44180 has 144 MA's), (235, 44318),

Gene: ScienceWizSam_67 Start: 45992, Stop: 46255, Start Num: 134
Candidate Starts for ScienceWizSam_67:
(Start: 134 @45992 has 144 MA's), (200, 46070), (304, 46229),

Gene: ScoobyDoobyDoo_233 Start: 134075, Stop: 134443, Start Num: 143
Candidate Starts for ScoobyDoobyDoo_233:
(Start: 143 @134075 has 19 MA's), (250, 134234), (285, 134303), (290, 134321), (307, 134387), (313, 134414),

Gene: Seabiscuit_12 Start: 6693, Stop: 7034, Start Num: 133
Candidate Starts for Seabiscuit_12:
(Start: 133 @6693 has 1 MA's), (Start: 152 @6720 has 20 MA's), (174, 6759), (188, 6768), (229, 6837), (269, 6912), (295, 6972),

Gene: Sephiroth_114 Start: 64560, Stop: 64826, Start Num: 154
Candidate Starts for Sephiroth_114:
(84, 64443), (Start: 154 @64560 has 7 MA's), (286, 64734), (307, 64815),

Gene: Serenabean_59 Start: 40775, Stop: 41143, Start Num: 119
Candidate Starts for Serenabean_59:
(Start: 119 @40775 has 2 MA's), (Start: 140 @40811 has 6 MA's), (307, 41126),

Gene: SeresaTree_71 Start: 55390, Stop: 55779, Start Num: 113
Candidate Starts for SeresaTree_71:
(Start: 113 @55390 has 7 MA's), (173, 55477), (180, 55486), (229, 55558), (234, 55564), (310, 55741), (311, 55750),

Gene: Sham_67 Start: 56064, Stop: 56453, Start Num: 113
Candidate Starts for Sham_67:
(Start: 113 @56064 has 7 MA's), (Start: 130 @56091 has 5 MA's), (234, 56238), (311, 56424),

Gene: Shepard_71 Start: 45944, Stop: 46213, Start Num: 134
Candidate Starts for Shepard_71:
(Start: 134 @45944 has 144 MA's), (284, 46121),

Gene: Shepard_67 Start: 44369, Stop: 44662, Start Num: 134
Candidate Starts for Shepard_67:
(Start: 134 @44369 has 144 MA's),

Gene: ShiLan_99 Start: 55748, Stop: 56029, Start Num: 147
Candidate Starts for ShiLan_99:
(15, 55337), (18, 55358), (19, 55379), (22, 55409), (Start: 147 @55748 has 44 MA's), (174, 55793), (200, 55811), (283, 55928), (295, 55964),

Gene: Shiba_67 Start: 43616, Stop: 43945, Start Num: 134
Candidate Starts for Shiba_67:
(Start: 134 @43616 has 144 MA's), (237, 43760), (248, 43781), (302, 43904),

Gene: Shocker_3 Start: 902, Stop: 1168, Start Num: 150
Candidate Starts for Shocker_3:
(Start: 150 @902 has 1 MA's), (199, 956), (283, 1067),

Gene: ShowerHandel_97 Start: 53013, Stop: 53294, Start Num: 147
Candidate Starts for ShowerHandel_97:
(15, 52602), (18, 52623), (19, 52644), (22, 52674), (Start: 147 @53013 has 44 MA's), (174, 53058), (200, 53076), (283, 53193),

Gene: SilentRX_7 Start: 2575, Stop: 2988, Start Num: 115
Candidate Starts for SilentRX_7:
(Start: 115 @2575 has 4 MA's), (172, 2665), (234, 2764), (244, 2782), (291, 2878),

Gene: Skyerus_38 Start: 25430, Stop: 25750, Start Num: 147
Candidate Starts for Skyerus_38:
(112, 25373), (Start: 147 @25430 has 44 MA's), (247, 25586), (283, 25649), (309, 25742),

Gene: Slagathor_11 Start: 6591, Stop: 6905, Start Num: 152
Candidate Starts for Slagathor_11:
(Start: 152 @6591 has 20 MA's), (174, 6630), (188, 6639), (229, 6708), (269, 6783), (295, 6843),

Gene: Sloopyjoe_68 Start: 43962, Stop: 44291, Start Num: 134
Candidate Starts for Sloopyjoe_68:
(Start: 134 @43962 has 144 MA's), (237, 44106), (248, 44127), (302, 44250),

Gene: Spain_68 Start: 43960, Stop: 44289, Start Num: 134
Candidate Starts for Spain_68:
(Start: 134 @43960 has 144 MA's), (237, 44104), (248, 44125), (302, 44248),

Gene: SpeedDemon_540 Start: 45518, Stop: 45787, Start Num: 141
Candidate Starts for SpeedDemon_540:
(Start: 141 @45518 has 10 MA's), (174, 45566), (269, 45662), (283, 45686),

Gene: Spoonbill_96 Start: 51661, Stop: 51942, Start Num: 147
Candidate Starts for Spoonbill_96:
(15, 51250), (18, 51271), (19, 51292), (22, 51322), (Start: 147 @51661 has 44 MA's), (174, 51706), (200, 51724), (283, 51841),

Gene: Sporto_67 Start: 45047, Stop: 45376, Start Num: 145
Candidate Starts for Sporto_67:
(79, 44933), (Start: 145 @45047 has 9 MA's), (237, 45191),

Gene: Sprinkle_68 Start: 44401, Stop: 44730, Start Num: 134
Candidate Starts for Sprinkle_68:
(24, 44101), (28, 44128), (31, 44149), (43, 44194), (60, 44242), (62, 44248), (71, 44275), (108, 44356), (111, 44362), (123, 44383), (Start: 134 @44401 has 144 MA's), (224, 44527), (301, 44686),

Gene: Squee_11 Start: 7115, Stop: 7429, Start Num: 152
Candidate Starts for Squee_11:
(Start: 152 @7115 has 20 MA's), (174, 7154), (229, 7232), (254, 7277),

Gene: Squiddly_103 Start: 56800, Stop: 57090, Start Num: 143
Candidate Starts for Squiddly_103:
(58, 56620), (59, 56623), (86, 56704), (125, 56770), (Start: 143 @56800 has 19 MA's), (231, 56917), (272, 56971), (295, 57028),

Gene: StAugustine_144 Start: 85407, Stop: 85078, Start Num: 140
Candidate Starts for StAugustine_144:
(Start: 140 @85407 has 6 MA's), (179, 85350), (266, 85212), (281, 85188), (298, 85140),

Gene: StarLord_68 Start: 43955, Stop: 44284, Start Num: 134
Candidate Starts for StarLord_68:

(Start: 134 @43955 has 144 MA's), (237, 44099), (248, 44120), (302, 44243),

Gene: Stardom_38 Start: 27917, Stop: 28228, Start Num: 134
Candidate Starts for Stardom_38:
(Start: 134 @27917 has 144 MA's), (201, 28001), (290, 28160), (302, 28187),

Gene: Stardom_73 Start: 43987, Stop: 44301, Start Num: 138
Candidate Starts for Stardom_73:
(Start: 138 @43987 has 18 MA's), (195, 44068), (230, 44119), (257, 44161), (287, 44212),

Gene: Stardom_72 Start: 43676, Stop: 43987, Start Num: 127
Candidate Starts for Stardom_72:
(Start: 127 @43676 has 23 MA's), (167, 43739), (219, 43817), (232, 43838), (246, 43862), (255, 43880), (272, 43910),

Gene: Stardrop_68 Start: 43736, Stop: 44020, Start Num: 134
Candidate Starts for Stardrop_68:
(Start: 134 @43736 has 144 MA's), (149, 43742),

Gene: Stardrop_67 Start: 43470, Stop: 43736, Start Num: 114
Candidate Starts for Stardrop_67:
(Start: 114 @43470 has 16 MA's), (Start: 127 @43491 has 23 MA's), (159, 43536), (190, 43575),

Gene: Stayer_68 Start: 43958, Stop: 44287, Start Num: 134
Candidate Starts for Stayer_68:
(Start: 134 @43958 has 144 MA's), (237, 44102), (248, 44123), (302, 44246),

Gene: Stellammi_129 Start: 61212, Stop: 61520, Start Num: 143
Candidate Starts for Stellammi_129:
(135, 61200), (Start: 143 @61212 has 19 MA's), (174, 61263), (283, 61413),

Gene: Sunfish_12 Start: 3876, Stop: 4208, Start Num: 152
Candidate Starts for Sunfish_12:
(50, 3663), (Start: 152 @3876 has 20 MA's), (184, 3927), (198, 3951), (227, 4002), (268, 4071), (295, 4134),

Gene: Sunny4976_68 Start: 46463, Stop: 46738, Start Num: 134
Candidate Starts for Sunny4976_68:
(Start: 134 @46463 has 144 MA's), (262, 46610), (277, 46631), (279, 46634), (284, 46643), (287, 46652), (291, 46667), (301, 46694),

Gene: Sunny4976_64 Start: 44572, Stop: 44859, Start Num: 134
Candidate Starts for Sunny4976_64:
(Start: 134 @44572 has 144 MA's), (278, 44758), (290, 44788), (291, 44791),

Gene: SwagPigglett_98 Start: 54867, Stop: 55148, Start Num: 147
Candidate Starts for SwagPigglett_98:
(15, 54456), (18, 54477), (19, 54498), (22, 54528), (Start: 147 @54867 has 44 MA's), (174, 54912), (200, 54930), (283, 55047),

Gene: Sweetclover_60 Start: 39794, Stop: 40126, Start Num: 140
Candidate Starts for Sweetclover_60:
(76, 39677), (106, 39737), (Start: 140 @39794 has 6 MA's), (307, 40109),

Gene: Switzer_11 Start: 6599, Stop: 6913, Start Num: 152
Candidate Starts for Switzer_11:
(Start: 133 @6572 has 1 MA's), (Start: 152 @6599 has 20 MA's), (174, 6638), (188, 6647), (229, 6716), (269, 6791), (295, 6851),

Gene: Syleon_119 Start: 65342, Stop: 65608, Start Num: 154
Candidate Starts for Syleon_119:
(84, 65225), (Start: 154 @65342 has 7 MA's), (286, 65516), (307, 65597),

Gene: Synepsis_64 Start: 45760, Stop: 46023, Start Num: 134
Candidate Starts for Synepsis_64:
(Start: 134 @45760 has 144 MA's), (200, 45838), (304, 45997),

Gene: Synepsis_60 Start: 44184, Stop: 44477, Start Num: 134
Candidate Starts for Synepsis_60:
(Start: 134 @44184 has 144 MA's), (235, 44322),

Gene: Tank_9 Start: 3973, Stop: 4347, Start Num: 116
Candidate Starts for Tank_9:
(Start: 116 @3973 has 3 MA's), (Start: 150 @4027 has 1 MA's), (160, 4045), (Start: 162 @4048 has 3 MA's), (168, 4057), (212, 4117), (241, 4162), (253, 4189), (283, 4240), (304, 4309),

Gene: Tatanka_58 Start: 44317, Stop: 44610, Start Num: 134
Candidate Starts for Tatanka_58:
(Start: 134 @44317 has 144 MA's), (235, 44455), (252, 44467),

Gene: Tatanka_61 Start: 45896, Stop: 46159, Start Num: 134
Candidate Starts for Tatanka_61:
(Start: 134 @45896 has 144 MA's), (200, 45974), (304, 46133),

Gene: Teacup_62 Start: 44599, Stop: 44898, Start Num: 134
Candidate Starts for Teacup_62:
(Start: 134 @44599 has 144 MA's), (233, 44731), (235, 44734), (292, 44833),

Gene: Teacup_67 Start: 46335, Stop: 46598, Start Num: 134
Candidate Starts for Teacup_67:
(46, 46140), (62, 46185), (63, 46188), (68, 46197), (72, 46215), (80, 46236), (81, 46239), (93, 46266), (Start: 134 @46335 has 144 MA's), (301, 46557), (304, 46572),

Gene: Tempo_56 Start: 38215, Stop: 37919, Start Num: 143
Candidate Starts for Tempo_56:
(125, 38245), (Start: 141 @38218 has 10 MA's), (Start: 143 @38215 has 19 MA's), (Start: 152 @38203 has 20 MA's), (166, 38179), (174, 38164), (215, 38116), (232, 38107), (262, 38071), (283, 38029), (289, 38008),

Gene: Tenney120_68 Start: 43416, Stop: 43682, Start Num: 114
Candidate Starts for Tenney120_68:
(Start: 114 @43416 has 16 MA's), (Start: 127 @43437 has 23 MA's), (159, 43482), (190, 43521),

Gene: Tenney120_69 Start: 43682, Stop: 43963, Start Num: 134
Candidate Starts for Tenney120_69:
(Start: 134 @43682 has 144 MA's), (165, 43709), (194, 43754), (220, 43790), (302, 43919),

Gene: Tenno_66 Start: 46419, Stop: 46703, Start Num: 134
Candidate Starts for Tenno_66:
(46, 46227), (49, 46236), (62, 46272), (63, 46275), (68, 46284), (72, 46302), (81, 46326), (Start: 134 @46419 has 144 MA's), (302, 46662),

Gene: Tenno_62 Start: 44837, Stop: 45127, Start Num: 134
Candidate Starts for Tenno_62:
(Start: 134 @44837 has 144 MA's), (233, 44969), (235, 44972),

Gene: Tipton_66 Start: 44692, Stop: 44985, Start Num: 134
Candidate Starts for Tipton_66:
(Start: 134 @44692 has 144 MA's),

Gene: Tipton_71 Start: 46456, Stop: 46728, Start Num: 134
Candidate Starts for Tipton_71:
(Start: 134 @46456 has 144 MA's), (284, 46636),

Gene: Tokki_70 Start: 44723, Stop: 45016, Start Num: 134
Candidate Starts for Tokki_70:
(Start: 134 @44723 has 144 MA's),

Gene: Tokki_75 Start: 46487, Stop: 46759, Start Num: 134
Candidate Starts for Tokki_75:
(Start: 134 @46487 has 144 MA's), (284, 46667),

Gene: Tortellini_63 Start: 43457, Stop: 43750, Start Num: 139
Candidate Starts for Tortellini_63:
(30, 43202), (33, 43223), (58, 43301), (79, 43364), (103, 43400), (Start: 139 @43457 has 1 MA's), (174, 43511), (262, 43607), (283, 43646), (290, 43670), (308, 43739),

Gene: Tribby_40 Start: 28746, Stop: 29051, Start Num: 134
Candidate Starts for Tribby_40:
(Start: 134 @28746 has 144 MA's), (201, 28830), (225, 28872), (267, 28935),

Gene: Tribby_76 Start: 45227, Stop: 45535, Start Num: 127
Candidate Starts for Tribby_76:
(Start: 127 @45227 has 23 MA's), (193, 45329), (219, 45365), (255, 45428), (272, 45458),

Gene: Tribby_77 Start: 45537, Stop: 45851, Start Num: 141
Candidate Starts for Tribby_77:
(128, 45519), (131, 45522), (Start: 134 @45528 has 144 MA's), (Start: 141 @45537 has 10 MA's), (144, 45540), (148, 45546), (201, 45630), (230, 45669), (287, 45762),

Gene: TrixiePhattel_69 Start: 43311, Stop: 43595, Start Num: 134
Candidate Starts for TrixiePhattel_69:
(78, 43206), (80, 43209), (88, 43230), (95, 43242), (105, 43260), (118, 43281), (Start: 126 @43296 has 1 MA's), (Start: 134 @43311 has 144 MA's), (165, 43338), (175, 43356), (266, 43476),

Gene: TrixiePhattel_68 Start: 43043, Stop: 43309, Start Num: 114
Candidate Starts for TrixiePhattel_68:
(Start: 114 @43043 has 16 MA's), (Start: 127 @43064 has 23 MA's), (159, 43109), (291, 43304),

Gene: Truckee_63 Start: 44439, Stop: 44735, Start Num: 134
Candidate Starts for Truckee_63:
(Start: 134 @44439 has 144 MA's), (233, 44571), (235, 44574), (292, 44670),

Gene: Truckee_68 Start: 46153, Stop: 46425, Start Num: 134
Candidate Starts for Truckee_68:
(Start: 134 @46153 has 144 MA's), (284, 46333), (301, 46384),

Gene: Trustiboi_61 Start: 44439, Stop: 44732, Start Num: 134
Candidate Starts for Trustiboi_61:
(Start: 134 @44439 has 144 MA's), (235, 44577),

Gene: Trustiboi_65 Start: 46015, Stop: 46278, Start Num: 134
Candidate Starts for Trustiboi_65:
(Start: 134 @46015 has 144 MA's), (200, 46093), (262, 46153), (304, 46252),

Gene: TunaTartare_69 Start: 56371, Stop: 56772, Start Num: 113
Candidate Starts for TunaTartare_69:
(Start: 113 @56371 has 7 MA's), (187, 56482), (202, 56509), (206, 56515), (229, 56545), (291, 56665), (305, 56704),

Gene: U2_10 Start: 6601, Stop: 6915, Start Num: 152
Candidate Starts for U2_10:
(Start: 133 @6574 has 1 MA's), (Start: 152 @6601 has 20 MA's), (174, 6640), (188, 6649), (229, 6718), (269, 6793), (295, 6853),

Gene: Untouchable_2 Start: 479, Stop: 808, Start Num: 145
Candidate Starts for Untouchable_2:
(Start: 145 @479 has 9 MA's), (187, 545), (268, 686), (283, 713), (287, 725),

Gene: Uzumaki_64 Start: 42857, Stop: 43123, Start Num: 114
Candidate Starts for Uzumaki_64:
(Start: 114 @42857 has 16 MA's), (Start: 127 @42878 has 23 MA's), (159, 42923), (190, 42962),

Gene: Uzumaki_65 Start: 43123, Stop: 43404, Start Num: 134
Candidate Starts for Uzumaki_65:
(Start: 134 @43123 has 144 MA's), (149, 43129), (165, 43150), (194, 43195), (220, 43231), (302, 43360),

Gene: VanLee_70 Start: 43231, Stop: 43515, Start Num: 163
Candidate Starts for VanLee_70:
(106, 43138), (Start: 163 @43231 has 2 MA's), (217, 43315), (266, 43378), (277, 43399), (287, 43420), (291, 43435), (293, 43441), (298, 43453),

Gene: Vivum_96 Start: 55102, Stop: 55383, Start Num: 147
Candidate Starts for Vivum_96:
(15, 54691), (18, 54712), (19, 54733), (22, 54763), (Start: 147 @55102 has 44 MA's), (174, 55147), (200, 55165), (283, 55282),

Gene: Westerlin_65 Start: 47104, Stop: 47367, Start Num: 134
Candidate Starts for Westerlin_65:
(Start: 134 @47104 has 144 MA's), (200, 47182), (262, 47242), (304, 47341),

Gene: Westerlin_61 Start: 45519, Stop: 45818, Start Num: 134
Candidate Starts for Westerlin_61:
(Start: 134 @45519 has 144 MA's), (233, 45651), (235, 45654), (292, 45753),

Gene: Whouxphf_100 Start: 54173, Stop: 54454, Start Num: 147
Candidate Starts for Whouxphf_100:
(15, 53762), (18, 53783), (19, 53804), (22, 53834), (Start: 147 @54173 has 44 MA's), (174, 54218), (200, 54236), (283, 54353),

Gene: Wildcat_70 Start: 46295, Stop: 46588, Start Num: 130
Candidate Starts for Wildcat_70:
(Start: 130 @46295 has 5 MA's), (Start: 132 @46298 has 4 MA's), (170, 46352), (212, 46409),

Gene: Wilde_9 Start: 3901, Stop: 4275, Start Num: 116
Candidate Starts for Wilde_9:
(Start: 116 @3901 has 3 MA's), (160, 3973), (Start: 162 @3976 has 3 MA's), (168, 3985), (212, 4045), (241, 4090), (253, 4117), (283, 4168), (304, 4237),

Gene: Wojtek_85 Start: 64679, Stop: 65014, Start Num: 127
Candidate Starts for Wojtek_85:
(Start: 127 @64679 has 23 MA's), (Start: 132 @64688 has 4 MA's), (137, 64697), (Start: 143 @64706 has 19 MA's), (174, 64754), (283, 64907), (290, 64931), (308, 65000),

Gene: Xenomorph_69 Start: 44753, Stop: 45061, Start Num: 127
Candidate Starts for Xenomorph_69:
(Start: 127 @44753 has 23 MA's), (193, 44855), (219, 44891), (255, 44954), (272, 44984),

Gene: Xenomorph_70 Start: 45063, Stop: 45377, Start Num: 141
Candidate Starts for Xenomorph_70:
(128, 45045), (131, 45048), (Start: 134 @45054 has 144 MA's), (Start: 141 @45063 has 10 MA's), (144, 45066), (148, 45072), (230, 45195), (287, 45288),

Gene: Xenomorph_37 Start: 28725, Stop: 29030, Start Num: 134
Candidate Starts for Xenomorph_37:
(Start: 134 @28725 has 144 MA's), (225, 28851), (267, 28914),

Gene: Yorick_92 Start: 54408, Stop: 54689, Start Num: 147
Candidate Starts for Yorick_92:
(15, 53997), (18, 54018), (19, 54039), (22, 54069), (Start: 147 @54408 has 44 MA's), (174, 54453), (200, 54471), (283, 54588),

Gene: YoshiYama_75 Start: 45633, Stop: 45947, Start Num: 138
Candidate Starts for YoshiYama_75:
(Start: 138 @45633 has 18 MA's), (195, 45714), (230, 45765), (257, 45807), (287, 45858),

Gene: YoshiYama_74 Start: 45322, Stop: 45633, Start Num: 127
Candidate Starts for YoshiYama_74:
(Start: 127 @45322 has 23 MA's), (167, 45385), (219, 45463), (232, 45484), (246, 45508), (255, 45526), (272, 45556),

Gene: YoshiYama_40 Start: 28969, Stop: 29277, Start Num: 134
Candidate Starts for YoshiYama_40:
(Start: 134 @28969 has 144 MA's),

Gene: Yvonnetastic_136 Start: 75890, Stop: 76258, Start Num: 129
Candidate Starts for Yvonnetastic_136:
(Start: 129 @75890 has 3 MA's), (149, 75920), (158, 75935), (161, 75941), (176, 75965), (208, 76016), (281, 76136), (283, 76139), (290, 76163), (312, 76244),

Gene: Yvonnetastic_137 Start: 76255, Stop: 76590, Start Num: 122
Candidate Starts for Yvonnetastic_137:
(Start: 122 @76255 has 3 MA's), (169, 76324), (178, 76339), (229, 76396), (245, 76423), (282, 76489),

Gene: Zeina_70 Start: 43817, Stop: 44101, Start Num: 134
Candidate Starts for Zeina_70:
(Start: 134 @43817 has 144 MA's), (165, 43844), (266, 43982),

Gene: Zeina_69 Start: 43551, Stop: 43817, Start Num: 114
Candidate Starts for Zeina_69:
(Start: 114 @43551 has 16 MA's), (Start: 127 @43572 has 23 MA's), (159, 43617),

Gene: Zippen_67 Start: 45128, Stop: 45418, Start Num: 134
Candidate Starts for Zippen_67:
(Start: 134 @45128 has 144 MA's), (222, 45245), (233, 45260), (235, 45263), (280, 45320), (293, 45356),

Gene: Zippen_71 Start: 46707, Stop: 46982, Start Num: 134
Candidate Starts for Zippen_71:
(47, 46512), (57, 46539), (65, 46563), (68, 46566), (91, 46629), (93, 46635), (108, 46662), (Start: 134 @46707 has 144 MA's), (194, 46779), (196, 46782), (284, 46890), (301, 46941),

Gene: Zizzle_99 Start: 55058, Stop: 55339, Start Num: 147
Candidate Starts for Zizzle_99:
(15, 54647), (18, 54668), (19, 54689), (22, 54719), (Start: 147 @55058 has 44 MA's), (174, 55103), (200, 55121), (283, 55238), (295, 55274),