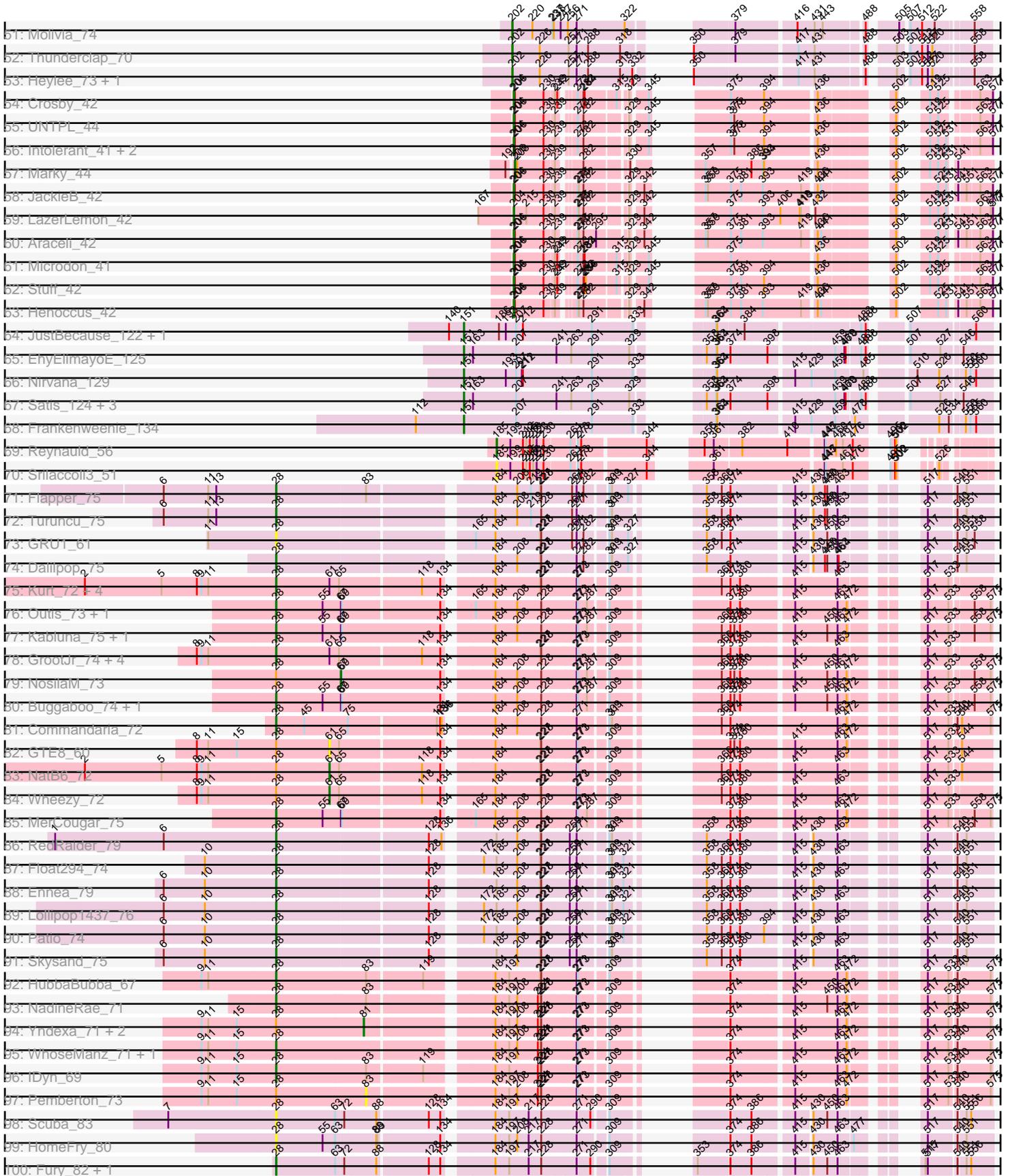
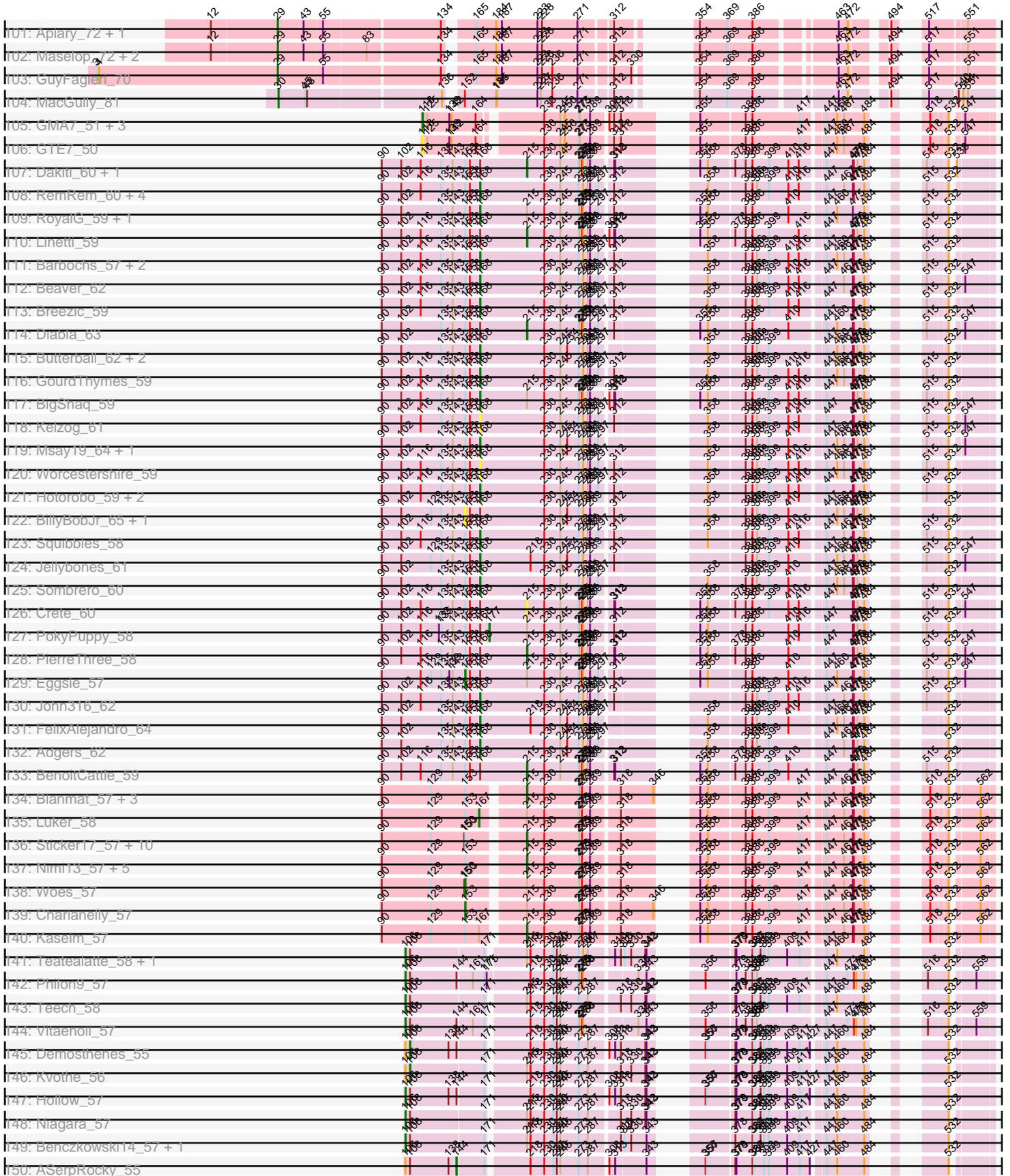


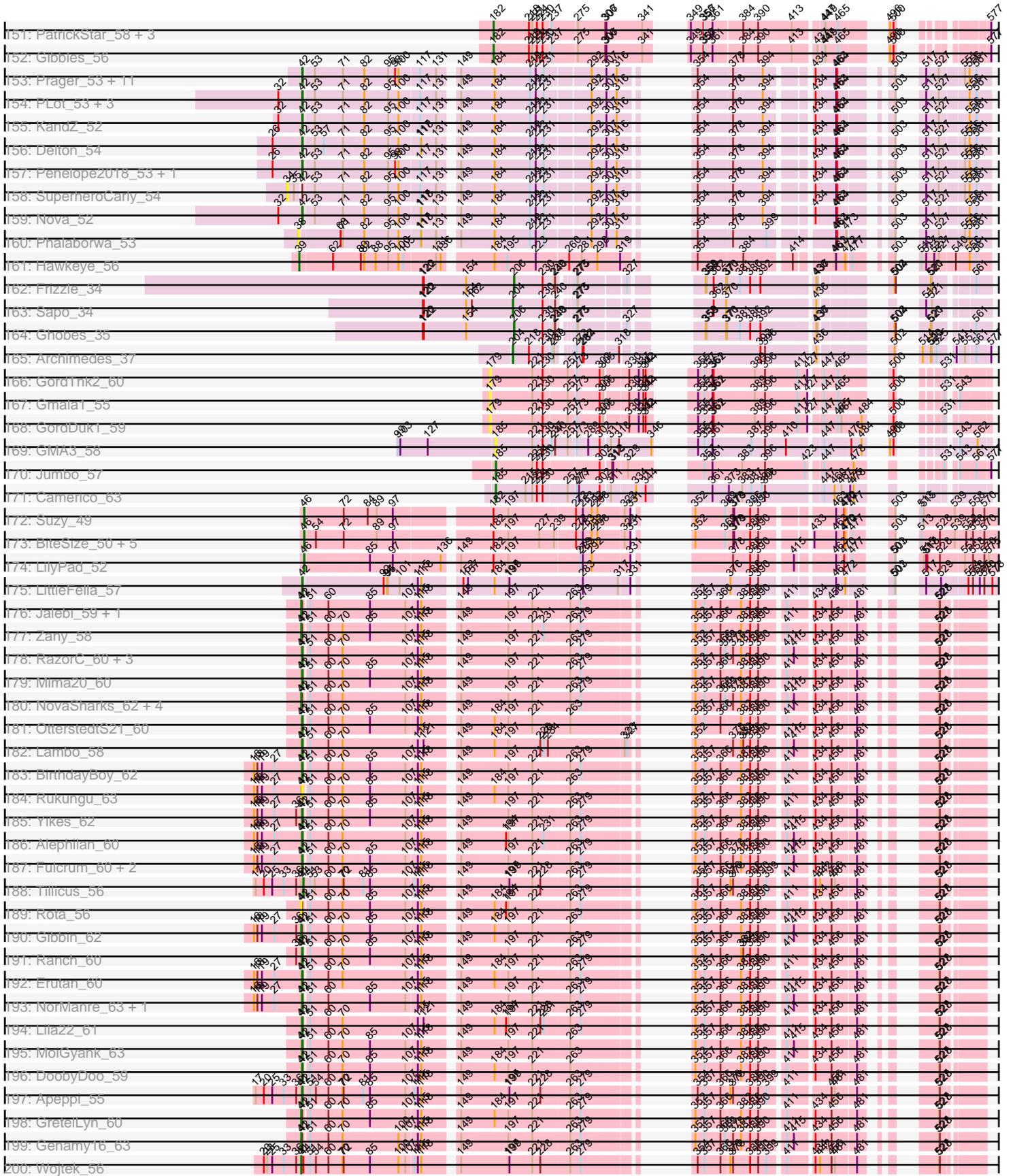
Zoomed Pham 283372



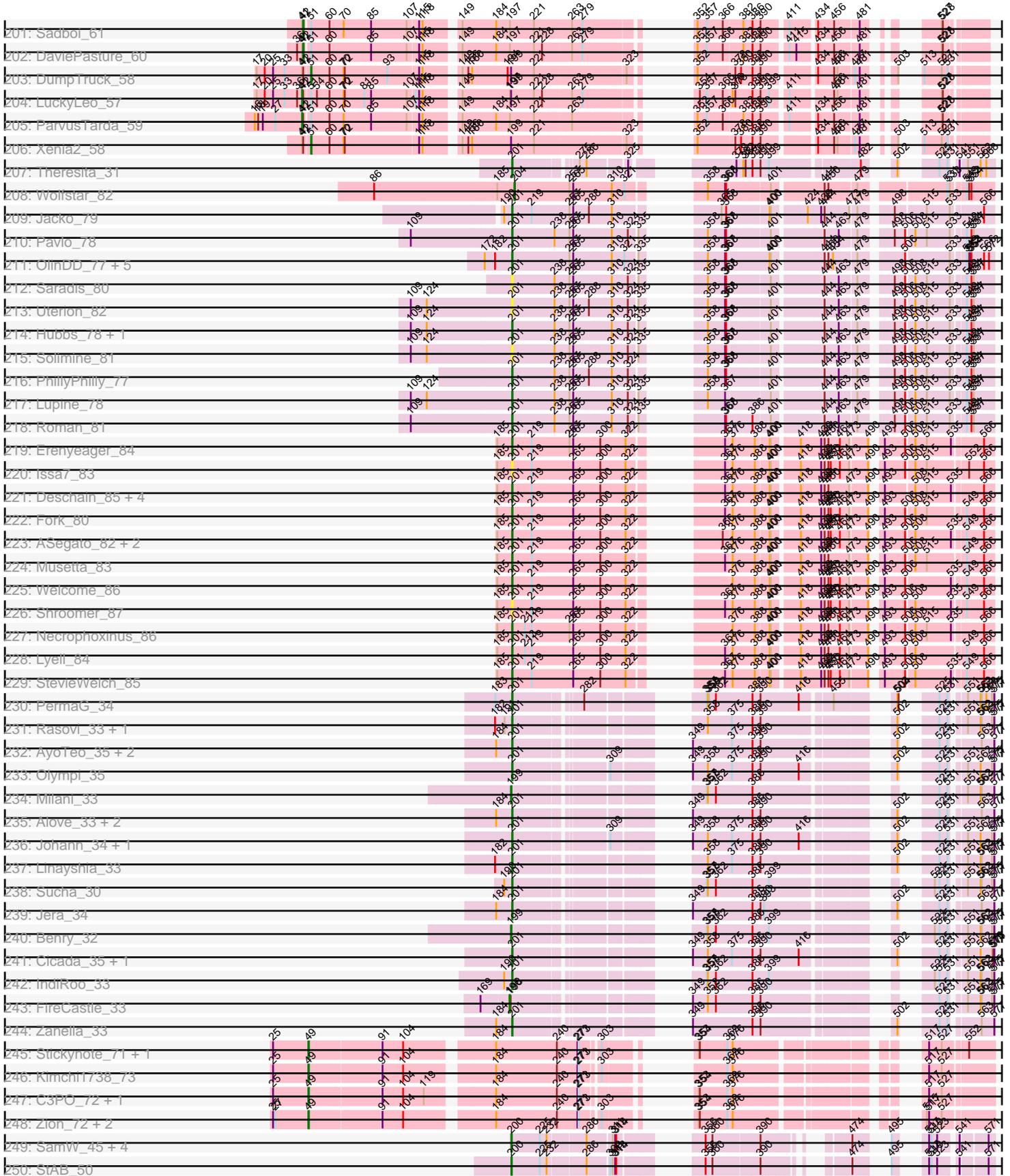
Zoomed Pham 283372



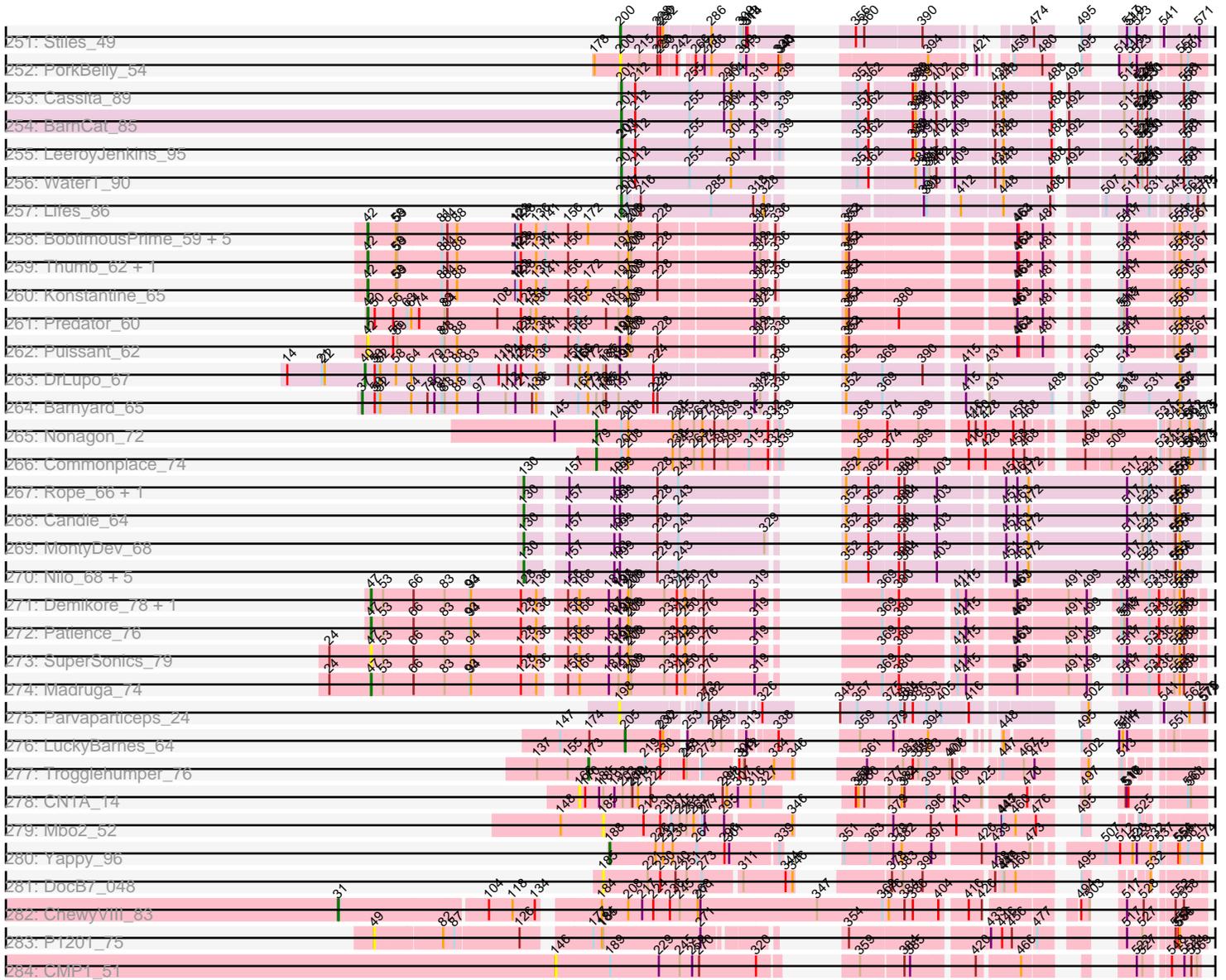
Zoomed Pham 283372



Zoomed Pham 283372



Zoomed Pham 283372



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 283372 Report

This analysis was run 02/23/26 on database version 636.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 283372 has 461 members, 52 are drafts.

Phages represented in each track:

- Track 1 : Fowlmouth_74
- Track 2 : Cuke_73
- Track 3 : Indlulamithi_65
- Track 4 : MrMiyagi_73
- Track 5 : Onyinye_65, Aikoy_65
- Track 6 : Leopard_64
- Track 7 : Aledel_26, Riovina_26, Eunoia_26, OMalley_26
- Track 8 : Lucy_25
- Track 9 : DreamTeam_25, Gisselle_25, Kittykat_25
- Track 10 : Christian_25
- Track 11 : Moki_25
- Track 12 : WonderBoy_25
- Track 13 : Nubia_29, Oxynfrius_29
- Track 14 : Kalizoi_29
- Track 15 : HunterDalle_26, Vulture_26
- Track 16 : Herb_26, Sergei_26, Maria1952_26, Daiboju_26, KingBob_26, Temper16_26
- Track 17 : Beethoven_29, Vallejo_29, Glenn_29, TattModd_29, Carpal_29, Rozby_29, Fluke_29, Riverdale_29
- Track 18 : EstebanJulior_26, MamaPearl_26
- Track 19 : MrBoss_30
- Track 20 : Savage2526_29, RAP15_29, Cholula_29, MeganNoll_29, Potatoes_29, Jumboset_29
- Track 21 : Misaeng_29
- Track 22 : Huntingdon_29, RcigaStruga_29
- Track 23 : BrotherBLo_29
- Track 24 : Chridison_26
- Track 25 : PitaDog_25, CristinaYang_25, ChewChew_25, Nancia_25, DrRobert_25, Bodacious_25
- Track 26 : AppleCider_29
- Track 27 : Wawa_29
- Track 28 : Pumancara_25
- Track 29 : Albanese_29

- Track 30 : PartyCup_29
- Track 31 : Urla_26
- Track 32 : Suppi_29, Canowicakte_29, Wayne_29
- Track 33 : Greenhouse_29
- Track 34 : Joann_29
- Track 35 : LilStuart_25
- Track 36 : Preamble_25
- Track 37 : GreenHearts_29
- Track 38 : Zorro_29
- Track 39 : PinkFriday_25
- Track 40 : Lakshmi_29
- Track 41 : Litotes_29
- Track 42 : AustinPowers_26
- Track 43 : Korra_30
- Track 44 : Makoto_25
- Track 45 : Graynor_30
- Track 46 : Bennie_25
- Track 47 : Scuttle_29
- Track 48 : BigMack_25
- Track 49 : SorJuana_70, Anansi_70, Rings_71, Gorgeous_70
- Track 50 : Amigo_71, Jaek_70, Ichor_70, Boersma_73, Yeezus_70
- Track 51 : Molivia_74
- Track 52 : Thunderclap_70
- Track 53 : Heylee_73, Amavida_72
- Track 54 : Crosby_42
- Track 55 : UNTPL_44
- Track 56 : Intolerant_41, Shynx_42, Bogota_43
- Track 57 : Marky_44
- Track 58 : JackieB_42
- Track 59 : LazerLemon_42
- Track 60 : Araceli_42
- Track 61 : Microdon_41
- Track 62 : Stuff_42
- Track 63 : Henoccus_42
- Track 64 : JustBecause_122, Kela_123
- Track 65 : EhyElimayoE_125
- Track 66 : Nirvana_129
- Track 67 : Satis_124, Quantum_123, Kradal_124, Sarkar_132
- Track 68 : Frankenweenie_134
- Track 69 : Reynauld_56
- Track 70 : Srilaccoli3_51
- Track 71 : Flapper_75
- Track 72 : Turuncu_75
- Track 73 : GRU1_61
- Track 74 : Dalilpop_75
- Track 75 : Kurt_72, Jifall16_71, KidneyBean_72, Emianna_72, Phomeo_71
- Track 76 : Outis_73, StarStruck_73
- Track 77 : Kabluna_75, Bonum_76
- Track 78 : GrootJr_74, Tracker_72, Arti_71, NovumRegina_72, Foxboro_72
- Track 79 : NosilaM_73
- Track 80 : Buggaboo_74, SuperSulley_74
- Track 81 : Commandaria_72
- Track 82 : GTE8_60

- Track 83 : NatB6_72
- Track 84 : Wheezy_72
- Track 85 : MerCougar_75
- Track 86 : RedRaider_79
- Track 87 : Float294_74
- Track 88 : Ennea_79
- Track 89 : Lollipop1437_76
- Track 90 : Patio_74
- Track 91 : Skysand_75
- Track 92 : HubbaBubba_67
- Track 93 : NadineRae_71
- Track 94 : Yndexa_71, Sukkupi_71, BiPauneto_74
- Track 95 : WhoseManz_71, Marietta_72
- Track 96 : IDyn_69
- Track 97 : Pemberton_73
- Track 98 : Scuba_83
- Track 99 : HomeFry_80
- Track 100 : Fury_82, Pleakley_82
- Track 101 : Apiary_72, Polyuyuki_72
- Track 102 : Maselop_72, CoffeeBean_72, Braxoaddie_72
- Track 103 : GuyFagieri_70
- Track 104 : MacGully_81
- Track 105 : GMA7_51, Amore2_62, Austin_61, HayZem_62
- Track 106 : GTE7_50
- Track 107 : Dakiti_60, Chelms_59
- Track 108 : RemRem_60, Ekhein_59, Exiguo_58, Flakey_58, Sam12_58
- Track 109 : RoyalG_59, SteveFrench_58
- Track 110 : Linetti_59
- Track 111 : Barbochs_57, CathyBurgh_59, Lizzo_59
- Track 112 : Beaver_62
- Track 113 : Breezic_59
- Track 114 : Diabla_63
- Track 115 : Butterball_62, BirksAndSocks_64, Boneham_63
- Track 116 : GourdThymes_59
- Track 117 : BigShaq_59
- Track 118 : Kelzog_61
- Track 119 : Msay19_64, Poland_64
- Track 120 : Worcestershire_59
- Track 121 : Hotorobo_59, Monty_58, Gorko_58
- Track 122 : BillyBobJr_65, CinnamonToast_65
- Track 123 : Squibbles_58
- Track 124 : Jellybones_61
- Track 125 : Sombrero_60
- Track 126 : Crete_60
- Track 127 : PokyPuppy_58
- Track 128 : PierreThree_58
- Track 129 : Eggsie_57
- Track 130 : John316_62
- Track 131 : FelixAlejandro_64
- Track 132 : Adgers_62
- Track 133 : BenoitCattle_59
- Track 134 : Bianmat_57, Shelley_57, Lidong_57, Jams_57
- Track 135 : Luker_58

- Track 136 : Sticker17_57, Hail2Pitt_56, Neoevie_57, Damp_57, GalacticEye_57, Teal_57, Minos_58, Newt_58, Anamika_57, Harambe_57, Hello_57
- Track 137 : Nimi13_57, Guillaume_57, Berries_57, Jormungandr_57, MrWormie_57, Lahirium_57
- Track 138 : Woes_57
- Track 139 : Charianelly_57
- Track 140 : Kaseim_57
- Track 141 : Teatealatte_58, Tredge_57
- Track 142 : Philon9_57
- Track 143 : Teech_58
- Track 144 : Vitaenoi_57
- Track 145 : Demosthenes_55
- Track 146 : Kvothe_56
- Track 147 : Hollow_57
- Track 148 : Niagara_57
- Track 149 : Benczkowski14_57, Katyusha_57
- Track 150 : ASerpRocky_55
- Track 151 : PatrickStar_58, Orchid_57, Kampe_58, RobinSparkles_61
- Track 152 : Gibbles_56
- Track 153 : Prager_53, Giuseppe_53, Butterscotch_52, Chill_55, PBI1_50, WaldoWhy_55, Adjutor_52, Visconti_54, Troll4_53, BigMama_51, Thoth_53, Mopey_54
- Track 154 : PLOT_53, SirHarley_54, Erk16_52, Gumball_52
- Track 155 : KandZ_52
- Track 156 : Delton_54
- Track 157 : Penelope2018_53, Helpful_56
- Track 158 : SuperheroCarly_54
- Track 159 : Nova_52
- Track 160 : Phalaborwa_53
- Track 161 : Hawkeye_56
- Track 162 : Frizzle_34
- Track 163 : Sapo_34
- Track 164 : Ghobes_35
- Track 165 : Archimedes_37
- Track 166 : GordTnk2_60
- Track 167 : Gmala1_55
- Track 168 : GordDuk1_59
- Track 169 : GMA3_58
- Track 170 : Jumbo_57
- Track 171 : Camerico_63
- Track 172 : Suzy_49
- Track 173 : BiteSize_50, Terapin_51, Sienna_50, Madi_50, Beyoncage_50, Djokovic_50
- Track 174 : LilyPad_52
- Track 175 : LittleFella_57
- Track 176 : Jalebi_59, Sampudon_60
- Track 177 : Zany_58
- Track 178 : RazorC_60, Charminar_60, Rumi_61, Astralis_60
- Track 179 : Mima20_60
- Track 180 : NovaSharks_62, Jamemuya19_59, Alyssamiracle_63, Avian_59, Stormer_61
- Track 181 : OtterstedtS21_60
- Track 182 : Lambo_58

- Track 183 : BirthdayBoy_62
- Track 184 : Rukungu_63
- Track 185 : Yikes_62
- Track 186 : Alephlan_60
- Track 187 : Fulcrum_60, LavAbarElk_60, GOATification_60
- Track 188 : Tillicus_56
- Track 189 : Rota_56
- Track 190 : Gibbin_62
- Track 191 : Ranch_60
- Track 192 : Erutan_60
- Track 193 : NorManre_63, Patos_63
- Track 194 : Lila22_61
- Track 195 : MoiGyank_63
- Track 196 : DoobyDoo_59
- Track 197 : Apeppi_55
- Track 198 : GretelLyn_60
- Track 199 : Genamy16_63
- Track 200 : Wojtek_56
- Track 201 : Sadboi_61
- Track 202 : DaviePasture_60
- Track 203 : DumpTruck_58
- Track 204 : LuckyLeo_57
- Track 205 : ParvusTarda_59
- Track 206 : Xenia2_58
- Track 207 : Theresita_31
- Track 208 : Wolfstar_82
- Track 209 : Jacko_79
- Track 210 : Pavlo_78
- Track 211 : OlinDD_77, Platte_76, Alleb_76, Tandem_77, Hortus1_77, Pioneer3_77
- Track 212 : Saradis_80
- Track 213 : Uterion_82
- Track 214 : Hubbs_78, DejaVu_80
- Track 215 : Solimine_81
- Track 216 : PhillyPhilly_77
- Track 217 : Lupine_78
- Track 218 : Roman_81
- Track 219 : Erenyeager_84
- Track 220 : Issa7_83
- Track 221 : Deschain_85, DustyDino_88, RunningBrook_86, Yuma_83, Casablancas_85
- Track 222 : Fork_80
- Track 223 : ASegato_82, SteakFry_83, HollowPurple_85
- Track 224 : Musetta_83
- Track 225 : Welcome_86
- Track 226 : Shroomer_87
- Track 227 : Necrophoxinus_86
- Track 228 : Lyell_84
- Track 229 : StevieWelch_85
- Track 230 : PermaG_34
- Track 231 : Rasovi_33, Htur_33
- Track 232 : AyoTeo_35, Labella_35, Typher_35
- Track 233 : Olympi_35
- Track 234 : Milani_33

- Track 235 : Alove_33, Rootkit7_33, TurboVicky_33
- Track 236 : Johann_34, Goodman_34
- Track 237 : Linayshia_33
- Track 238 : Sucha_30
- Track 239 : Jera_34
- Track 240 : Benry_32
- Track 241 : Cicada_35, SBlackberry_33
- Track 242 : IndiRoo_33
- Track 243 : FireCastle_33
- Track 244 : Zanella_33
- Track 245 : Stickynote_71, Darwin_73
- Track 246 : Kimchi1738_73
- Track 247 : C3PO_72, Cruella_72
- Track 248 : Zion_72, PeteyPab_71, PotatoChip_72
- Track 249 : SamW_45, Troy_45, Dina_47, Lederberg_45, Adelaide_46
- Track 250 : StAB_50
- Track 251 : Stiles_49
- Track 252 : PorkBelly_54
- Track 253 : Cassita_89
- Track 254 : BarnCat_85
- Track 255 : LeeroyJenkins_95
- Track 256 : WaterT_90
- Track 257 : Lifes_86
- Track 258 : BobtimousPrime_59, Megatron06_62, Damien_61, Beckerton_60, Cborch11_63, Oaker_60
- Track 259 : Thumb_62, Phreeze_60
- Track 260 : Konstantine_65
- Track 261 : Predator_60
- Track 262 : Puissant_62
- Track 263 : DrLupo_67
- Track 264 : Barnyard_65
- Track 265 : Nonagon_72
- Track 266 : Commonplace_74
- Track 267 : Rope_66, Papyrus_66
- Track 268 : Candle_64
- Track 269 : MontyDev_68
- Track 270 : Nilo_68, Riparian_68, Zenon_68, Send513_66, Yelo_65, Weiss13_66
- Track 271 : Demikore_78, Labelle_76
- Track 272 : Patience_76
- Track 273 : SuperSonics_79
- Track 274 : Madruga_74
- Track 275 : Parvarticeps_24
- Track 276 : LuckyBarnes_64
- Track 277 : Trogglehumper_76
- Track 278 : CN1A_14
- Track 279 : Mbo2_52
- Track 280 : Yappy_96
- Track 281 : DocB7_048
- Track 282 : ChewyVIII_83
- Track 283 : P1201_75
- Track 284 : CMP1_51

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

The start number called the most often in the published annotations is 197, it was called in 73 of the 409 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_29, Aledel_26, AppleCider_29, AustinPowers_26, Beethoven_29, Bennie_25, BigMack_25, Bodacious_25, BrotherBLo_29, Canowicakte_29, Carpal_29, ChewChew_25, Cholula_29, Chridison_26, Christian_25, CristinaYang_25, Daiboju_26, DrRobert_25, DreamTeam_25, EstebanJulior_26, Eunoia_26, Fluke_29, Gisselle_25, Glenn_29, Graynor_30, GreenHearts_29, Greenhouse_29, Herb_26, HunterDalle_26, Huntingdon_29, Joann_29, Jumboset_29, Kalizoi_29, KingBob_26, Kittykat_25, Korra_30, Lakshmi_29, LilStuart_25, Litotes_29, Lucy_25, Makoto_25, MamaPearl_26, Maria1952_26, MeganNoll_29, Misaeng_29, Moki_25, MrBoss_30, Nancia_25, Nubia_29, OMalley_26, Oxynfrius_29, PartyCup_29, PinkFriday_25, PitaDog_25, Potatoes_29, Preamble_25, Pumancara_25, RAP15_29, RcigaStruga_29, Riovina_26, Riverdale_29, Rozby_29, Savage2526_29, Scuttle_29, Sergei_26, Suppi_29, TattModd_29, Temper16_26, Urla_26, Vallejo_29, Vulture_26, Wawa_29, Wayne_29, WonderBoy_25, Zorro_29,

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

- Alephilan_60, Alyssamiracle_63, Apeppi_55, Astralis_60, Avian_59, Barnyard_65, Beckerton_60, Beyoncage_50, BiPauneto_74, BirthdayBoy_62, BiteSize_50, BobtimousPrime_59, Cborch11_63, Charminar_60, Cuke_73, Damien_61, DaviePasture_60, Demikore_78, Djokovic_50, DoobyDoo_59, DrLupo_67, Erutan_60, Fulcrum_60, Fury_82, GOATification_60, Genamy16_63, Gibbin_62, GretelLyn_60, HomeFry_80, HubbaBubba_67, IDyn_69, Jalebi_59, Jamemuya19_59, Konstantine_65, Labelle_76, Lambo_58, LavAbarElk_60, Lila22_61, LilyPad_52, LittleFella_57, LuckyLeo_57, Madi_50, Madrugua_74, Marietta_72, Megatron06_62, Mima20_60, MoiGyank_63, NadineRae_71, NorManre_63, NovaSharks_62, Oaker_60, OtterstedtS21_60, ParvusTarda_59, Patience_76, Patos_63, Pemberton_73, Phreeze_60, Pleakley_82, Predator_60, Puissant_62, Ranch_60, RazorC_60, Rota_56, Rukungu_63, Rumi_61, Sadboi_61, Sampudon_60, Scuba_83, Sienna_50, Stormer_61, Sukkupi_71, SuperSonics_79, Suzy_49, Terapin_51, Thumb_62, Tillicus_56, WhoseManz_71, Wojtek_56, Yikes_62, Yndexa_71, Zany_58,

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

- ASegato_82, ASerpRocky_55, Adelaide_46, Adgers_62, Adjutor_52, Aikoy_65, Alleb_76, Alove_33, Amavida_72, Amigo_71, Amore2_62, Anamika_57, Anansi_70, Apiary_72, Araceli_42, Archimedes_37, Arti_71, Austin_61, AyoTeo_35, Barbochs_57, BarnCat_85, Beaver_62, Benczkowski14_57, BenoitCattle_59, Benry_32, Berries_57, Bianmat_57, BigMama_51, BigShaq_59, BillyBobJr_65, BirksAndSocks_64, Boersma_73, Bogota_43, Boneham_63, Bonum_76, Braxoaddie_72, Breezic_59, Buggaboo_74, Butterball_62, Butterscotch_52, C3PO_72, CMP1_51, CN1A_14, Camerico_63, Candle_64, Casablanacas_85, Cassita_89, CathyBurgh_59, Charianelly_57, Chelms_59, ChewyVIII_83, Chill_55, Cicada_35, CinnamonToast_65, CoffeeBean_72, Commandaria_72, Commonplace_74, Crete_60, Crosby_42, Cruella_72, Dakiti_60, Dalilpop_75, Damp_57, Darwin_73, DejaVu_80, Delton_54, Demosthenes_55, Deschain_85, Diabla_63, Dina_47, DocB7_048, DumpTruck_58, DustyDino_88, Eggsie_57,

EhyElimayoE_125, Ekhein_59, Emianna_72, Ennea_79, Erenyeager_84, Erk16_52, Exiguo_58, FelixAlejandro_64, FireCastle_33, Flakey_58, Flapper_75, Float294_74, Fork_80, Fowlmouth_74, Foxboro_72, Frankenweenie_134, Frizzle_34, GMA3_58, GMA7_51, GRU1_61, GTE7_50, GTE8_60, GalacticEye_57, Ghobes_35, Gibbles_56, Giuseppe_53, Gmala1_55, Goodman_34, GordDuk1_59, GordTnk2_60, Gorgeous_70, Gorko_58, GourdThymes_59, GrootJr_74, Guillaume_57, Gumball_52, GuyFagieri_70, Hail2Pitt_56, Harambe_57, Hawkeye_56, HayZem_62, Hello_57, Helpful_56, Henoccus_42, Heylee_73, HollowPurple_85, Hollow_57, Hortus1_77, Hotorobo_59, Htur_33, Hubbs_78, Ichor_70, IndiRoo_33, Indlulamithi_65, Intolerant_41, Issa7_83, JackieB_42, Jacko_79, Jaek_70, Jams_57, Jellybones_61, Jera_34, Jifall16_71, Johann_34, John316_62, Jormungandr_57, Jumbo_57, JustBecause_122, Kabluna_75, Kampe_58, KandZ_52, Kaseim_57, Katyusha_57, Kela_123, Kelzog_61, KidneyBean_72, Kimchi1738_73, Kradal_124, Kurt_72, Kvothe_56, Labela_35, Lahirium_57, LazerLemon_42, Lederberg_45, LeeroyJenkins_95, Leopard_64, Lidong_57, Lifes_86, Linayshia_33, Linetti_59, Lizzo_59, Lollipop1437_76, LuckyBarnes_64, Luker_58, Lupine_78, Lyell_84, MacGully_81, Marky_44, Maselop_72, Mbo2_52, MerCougar_75, Microdon_41, Milani_33, Minos_58, Molivia_74, MontyDev_68, Monty_58, Mopey_54, MrMiyagi_73, MrWormie_57, Msay19_64, Musetta_83, NatB6_72, Necrophoxinus_86, Neeve_57, Newt_58, Niagara_57, Nilo_68, Nimi13_57, Nirvana_129, Nonagon_72, NosilaM_73, Nova_52, NovumRegina_72, OlinDD_77, Olympi_35, Onyinye_65, Orchid_57, Outis_73, P1201_75, PBI1_50, PLOT_53, Papyrus_66, Parvaparticeps_24, Patio_74, PatrickStar_58, Pavlo_78, Penelope2018_53, PermaG_34, PeteyPab_71, Phalaborwa_53, PhillyPhilly_77, Philon9_57, Phomeo_71, PierreThree_58, Pioneer3_77, Platte_76, PokyPuppy_58, Poland_64, Polyuyki_72, PorkBelly_54, PotatoChip_72, Prager_53, Quantum_123, Rasovi_33, RedRaider_79, RemRem_60, Reynauld_56, Rings_71, Riparian_68, RobinSparkles_61, Roman_81, Rootkit7_33, Rope_66, RoyalG_59, RunningBrook_86, SBlackberry_33, Sam12_58, SamW_45, Sapo_34, Saradis_80, Sarkar_132, Satis_124, Send513_66, Shelley_57, Shroomer_87, Shynx_42, SirHarley_54, Skysand_75, Solimine_81, Sombrero_60, SorJuana_70, Squibbles_58, Srilaccoli3_51, StAB_50, StarStruck_73, SteakFry_83, SteveFrench_58, StevieWelch_85, Sticker17_57, Stickynote_71, Stiles_49, Stuff_42, Sucha_30, SuperSulley_74, SuperheroCarly_54, Tandem_77, Teal_57, Teatealatte_58, Teech_58, Theresita_31, Thoth_53, Thunderclap_70, Tracker_72, Tredge_57, Trogglehumper_76, Troll4_53, Troy_45, TurboVicky_33, Turuncu_75, Typher_35, UNTPL_44, Uterion_82, Visconti_54, Vitaenoi_57, WaldoWhy_55, WaterT_90, Weiss13_66, Welcome_86, Wheezy_72, Woes_57, Wolfstar_82, Worcestershire_59, Xenia2_58, Yappy_96, Yeezus_70, Yelo_65, Yuma_83, Zanella_33, Zenon_68, Zion_72,

Summary by start number:

Start 28:

- Found in 45 of 461 (9.8%) of genes in pham
- Manual Annotations of this start: 34 of 409
- Called 82.2% of time when present
- Phage (with cluster) where this start called: Arti_71 (CR2), Bonum_76 (CR2), Buggaboo_74 (CR2), Commandaria_72 (CR2), Dalilpop_75 (CR1), Emianna_72 (CR2), Ennea_79 (CR3), Flapper_75 (CR1), Float294_74 (CR3), Foxboro_72 (CR2), Fury_82 (CR5), GRU1_61 (CR1), GrootJr_74 (CR2), HomeFry_80 (CR5), HubbaBubba_67 (CR4), IDyn_69 (CR4), Jifall16_71 (CR2), Kabluna_75 (CR2), KidneyBean_72 (CR2), Kurt_72 (CR2), Lollipop1437_76 (CR3), Marietta_72 (CR4), MerCougar_75 (CR2), NadineRae_71 (CR4), NovumRegina_72 (CR2), Outis_73

(CR2), Patio_74 (CR3), Phomeo_71 (CR2), Pleakley_82 (CR5), RedRaider_79 (CR3), Scuba_83 (CR5), Skysand_75 (CR3), StarStruck_73 (CR2), SuperSulley_74 (CR2), Tracker_72 (CR2), Turuncu_75 (CR1), WhoseManz_71 (CR4),

Start 29:

- Found in 6 of 461 (1.3%) of genes in pham
- Manual Annotations of this start: 6 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary_72 (CR6), Braxoaddie_72 (CR6), CoffeeBean_72 (CR6), GuyFagieri_70 (CR6), Maselep_72 (CR6), Polyuyuki_72 (CR6),

Start 30:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MacGully_81 (CR7),

Start 31:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChewyVIII_83 (singleton),

Start 34:

- Found in 1 of 461 (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: SuperheroCarly_54 (D1),

Start 37:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnyard_65 (H2),

Start 38:

- Found in 1 of 461 (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: Phalaborwa_53 (D1),

Start 39:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye_56 (D2),

Start 40:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrLupo_67 (H2),

Start 41:

- Found in 42 of 461 (9.1%) of genes in pham
- Manual Annotations of this start: 13 of 409
- Called 35.7% of time when present
- Phage (with cluster) where this start called: Alyssamiracle_63 (DV), Avian_59 (DV), Genamy16_63 (DV), Gibbin_62 (DV), GretelLyn_60 (DV), Jalebi_59 (DV), Jamemuya19_59 (DV), LuckyLeo_57 (DV), NovaSharks_62 (DV), ParvusTarda_59 (DV), Rota_56 (DV), Sampudon_60 (DV), Stormer_61 (DV), Wojtek_56 (DV), Zany_58 (DV),

Start 42:

- Found in 77 of 461 (16.7%) of genes in pham
- Manual Annotations of this start: 55 of 409
- Called 77.9% of time when present
- Phage (with cluster) where this start called: Adjutor_52 (D1), Aikoy_65 (AE), Alephilan_60 (DV), Apeppi_55 (DV), Astralis_60 (DV), Beckerton_60 (H1), BigMama_51 (D1), BirthdayBoy_62 (DV), BobtimousPrime_59 (H1), Butterscotch_52 (D1), Cborch11_63 (H1), Charminar_60 (DV), Chill_55 (D1), Damien_61 (H1), DaviePasture_60 (DV), Delton_54 (D1), DoobyDoo_59 (DV), Erk16_52 (D1), Erutan_60 (DV), Fulcrum_60 (DV), GOATification_60 (DV), Giuseppe_53 (D1), Gumball_52 (D1), Helpful_56 (D1), KandZ_52 (D1), Konstantine_65 (H1), Lambo_58 (DV), LavAbarElk_60 (DV), Leopard_64 (AE), Lila22_61 (DV), LittleFella_57 (DG2), Megatron06_62 (H1), Mima20_60 (DV), MoiGyank_63 (DV), Mopey_54 (D1), NorManre_63 (DV), Nova_52 (D1), Oaker_60 (H1), Onyinye_65 (AE), OtterstedtS21_60 (DV), PBI1_50 (D1), PLOT_53 (D1), Patos_63 (DV), Penelope2018_53 (D1), Phreeze_60 (H1), Prager_53 (D1), Predator_60 (H1), Puissant_62 (H1), Ranch_60 (DV), RazorC_60 (DV), Rukungu_63 (DV), Rumi_61 (DV), Sadboi_61 (DV), SirHarley_54 (D1), Thoth_53 (D1), Thumb_62 (H1), Troll4_53 (D1), Visconti_54 (D1), WaldoWhy_55 (D1), Yikes_62 (DV),

Start 44:

- Found in 2 of 461 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tillicus_56 (DV),

Start 46:

- Found in 8 of 461 (1.7%) of genes in pham
- Manual Annotations of this start: 8 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage_50 (DG1), BiteSize_50 (DG1), Djokovic_50 (DG1), LilyPad_52 (DG1), Madi_50 (DG1), Sienna_50 (DG1), Suzy_49 (DG1), Terapin_51 (DG1),

Start 47:

- Found in 5 of 461 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Demikore_78 (U), Labelle_76 (U), Madrugua_74 (U), Patience_76 (U), SuperSonics_79 (U),

Start 49:

- Found in 9 of 461 (2.0%) of genes in pham

- Manual Annotations of this start: 8 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_72 (EN), Cruella_72 (EN), Darwin_73 (EN), Kimchi1738_73 (EN), P1201_75 (singleton), PeteyPab_71 (EN), PotatoChip_72 (EN), Stickynote_71 (EN), Zion_72 (EN),

Start 51:

- Found in 44 of 461 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 409
- Called 4.5% of time when present
- Phage (with cluster) where this start called: DumpTruck_58 (DV), Xenia2_58 (DV),

Start 61:

- Found in 13 of 461 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 409
- Called 23.1% of time when present
- Phage (with cluster) where this start called: GTE8_60 (CR2), NatB6_72 (CR2), Wheezy_72 (CR2),

Start 67:

- Found in 11 of 461 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 409
- Called 36.4% of time when present
- Phage (with cluster) where this start called: Cuke_73 (AC), Fowlmouth_74 (AC), MrMiyagi_73 (AC), NosilaM_73 (CR2),

Start 73:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi_65 (AC),

Start 81:

- Found in 22 of 461 (4.8%) of genes in pham
- Manual Annotations of this start: 3 of 409
- Called 13.6% of time when present
- Phage (with cluster) where this start called: BiPauneto_74 (CR4), Sukkupi_71 (CR4), Yndexa_71 (CR4),

Start 83:

- Found in 17 of 461 (3.7%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Pemberton_73 (CR4),

Start 106:

- Found in 12 of 461 (2.6%) of genes in pham
- Manual Annotations of this start: 9 of 409
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Benczkowski14_57 (CS4), Hollow_57 (CS4), Katyusha_57 (CS4), Niagara_57 (CS4), Philon9_57 (CS4), Teatealatte_58 (CS4), Teech_58 (CS4), Tredge_57 (CS4), Vitaenoi_57 (CS4),

Start 108:

- Found in 13 of 461 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 409
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Demosthenes_55 (CS4), Kvothe_56 (CS4),

Start 118:

- Found in 65 of 461 (14.1%) of genes in pham
- Manual Annotations of this start: 3 of 409
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Amore2_62 (CS1), Austin_61 (CS1), GMA7_51 (CS1), GTE7_50 (CS1), HayZem_62 (CS1),

Start 130:

- Found in 10 of 461 (2.2%) of genes in pham
- Manual Annotations of this start: 9 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candle_64 (R), MontyDev_68 (R), Nilo_68 (R), Papyrus_66 (R), Riparian_68 (R), Rope_66 (R), Send513_66 (R), Weiss13_66 (R), Yelo_65 (R), Zenon_68 (R),

Start 144:

- Found in 5 of 461 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 20.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_55 (CS4),

Start 146:

- Found in 1 of 461 (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: CMP1_51 (singleton),

Start 151:

- Found in 9 of 461 (2.0%) of genes in pham
- Manual Annotations of this start: 8 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_125 (BM), Frankenweenie_134 (BM), JustBecause_122 (BM), Kela_123 (BM), Kradal_124 (BM), Nirvana_129 (BM), Quantum_123 (BM), Sarkar_132 (BM), Satis_124 (BM),

Start 153:

- Found in 66 of 461 (14.3%) of genes in pham
- Manual Annotations of this start: 3 of 409
- Called 7.6% of time when present
- Phage (with cluster) where this start called: BillyBobJr_65 (CS2), Charianelly_57 (CS3), CinnamonToast_65 (CS2), Eggsie_57 (CS2), Woes_57 (CS3),

Start 166:

- Found in 7 of 461 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present

- Phage (with cluster) where this start called: CN1A_14 (singleton),

Start 167:

- Found in 3 of 461 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Luker_58 (CS3),

Start 168:

- Found in 41 of 461 (8.9%) of genes in pham
- Manual Annotations of this start: 28 of 409
- Called 73.2% of time when present
- Phage (with cluster) where this start called: Adgers_62 (CS2), Barbochs_57 (CS2), Beaver_62 (CS2), BigShaq_59 (CS2), BirksAndSocks_64 (CS2), Boneham_63 (CS2), Breezic_59 (CS2), Butterball_62 (CS2), CathyBurgh_59 (CS2), Ekhein_59 (CS2), Exiguo_58 (CS2), FelixAlejandro_64 (CS2), Flakey_58 (CS2), Gorko_58 (CS2), GourdThymes_59 (CS2), Hotorobo_59 (CS2), Jellybones_61 (CS2), John316_62 (CS2), Kelzog_61 (CS2), Lizzo_59 (CS2), Monty_58 (CS2), Msay19_64 (CS2), Poland_64 (CS2), RemRem_60 (CS2), RoyalG_59 (CS2), Sam12_58 (CS2), Sombrero_60 (CS2), Squibbles_58 (CS2), SteveFrench_58 (CS2), Worcestershire_59 (CS2),

Start 173:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trogglehumper_76 (singleton),

Start 177:

- Found in 3 of 461 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 33.3% of time when present
- Phage (with cluster) where this start called: PokyPuppy_58 (CS2),

Start 179:

- Found in 6 of 461 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 409
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Commonplace_74 (JD), Gmala1_55 (DF1), GordDuk1_59 (DF1), GordTnk2_60 (DF1), Nonagon_72 (JD),

Start 182:

- Found in 22 of 461 (4.8%) of genes in pham
- Manual Annotations of this start: 5 of 409
- Called 22.7% of time when present
- Phage (with cluster) where this start called: Gibbles_56 (CX), Kampe_58 (CX), Orchid_57 (CX), PatrickStar_58 (CX), RobinSparkles_61 (CX),

Start 185:

- Found in 37 of 461 (8.0%) of genes in pham
- Manual Annotations of this start: 3 of 409
- Called 18.9% of time when present

- Phage (with cluster) where this start called: Camerico_63 (DF4), DocB7_048 (singleton), GMA3_58 (DF2), Jumbo_57 (DF3), Mbo2_52 (singleton), Reynauld_56 (CH), Srilaccoli3_51 (CH),

Start 188:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yappy_96 (singleton),

Start 196:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FireCastle_33 (EJ),

Start 197:

- Found in 156 of 461 (33.8%) of genes in pham
- Manual Annotations of this start: 73 of 409
- Called 48.1% of time when present
- Phage (with cluster) where this start called: Albanese_29 (AK), Aledel_26 (AK), AppleCider_29 (AK), AustinPowers_26 (AK), Beethoven_29 (AK), Bennie_25 (AK), BigMack_25 (AK), Bodacious_25 (AK), BrotherBLo_29 (AK), Canowicakte_29 (AK), Carpal_29 (AK), ChewChew_25 (AK), Cholula_29 (AK), Chridison_26 (AK), Christian_25 (AK), CristinaYang_25 (AK), Daiboju_26 (AK), DrRobert_25 (AK), DreamTeam_25 (AK), EstebanJulior_26 (AK), Eunoia_26 (AK), Fluke_29 (AK), Gisselle_25 (AK), Glenn_29 (AK), Graynor_30 (AK), GreenHearts_29 (AK), Greenhouse_29 (AK), Herb_26 (AK), HunterDalle_26 (AK), Huntingdon_29 (AK), Joann_29 (AK), Jumboset_29 (AK), Kalizoi_29 (AK), KingBob_26 (AK), Kittykat_25 (AK), Korra_30 (AK), Lakshmi_29 (AK), LilStuart_25 (AK), Litotes_29 (AK), Lucy_25 (AK), Makoto_25 (AK), MamaPearl_26 (AK), Maria1952_26 (AK), MeganNoll_29 (AK), Misaeng_29 (AK), Moki_25 (AK), MrBoss_30 (AK), Nancia_25 (AK), Nubia_29 (AK), OMalley_26 (AK), Oxynfrius_29 (AK), PartyCup_29 (AK), PinkFriday_25 (AK), PitaDog_25 (AK), Potatoes_29 (AK), Preamble_25 (AK), Pumancara_25 (AK), RAP15_29 (AK), RcigaStruga_29 (AK), Riovina_26 (AK), Riverdale_29 (AK), Rozby_29 (AK), Savage2526_29 (AK), Scuttle_29 (AK), Sergei_26 (AK), Suppi_29 (AK), TattModd_29 (AK), Temper16_26 (AK), Urla_26 (AK), Vallejo_29 (AK), Vulture_26 (AK), Wawa_29 (AK), Wayne_29 (AK), WonderBoy_25 (AK), Zorro_29 (AK),

Start 198:

- Found in 2 of 461 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Parvaparticeps_24 (UNK),

Start 199:

- Found in 27 of 461 (5.9%) of genes in pham
- Manual Annotations of this start: 2 of 409
- Called 7.4% of time when present
- Phage (with cluster) where this start called: Benry_32 (EJ), Milani_33 (EJ),

Start 200:

- Found in 8 of 461 (1.7%) of genes in pham
- Manual Annotations of this start: 7 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adelaide_46 (EP), Dina_47 (EP), Lederberg_45 (EP), PorkBelly_54 (FJ), SamW_45 (EP), StAB_50 (EP), Stiles_49 (EP), Troy_45 (EP),

Start 201:

- Found in 60 of 461 (13.0%) of genes in pham
- Manual Annotations of this start: 46 of 409
- Called 96.7% of time when present
- Phage (with cluster) where this start called: ASegato_82 (ED2), Alleb_76 (ED1), Alove_33 (EJ), AyoTeo_35 (EJ), BarnCat_85 (GB), Casablanacas_85 (ED2), Cassita_89 (GB), Cicada_35 (EJ), DejaVu_80 (ED1), Deschain_85 (ED2), DustyDino_88 (ED2), Erenyeager_84 (ED2), Fork_80 (ED2), Goodman_34 (EJ), HollowPurple_85 (ED2), Hortus1_77 (ED1), Htur_33 (EJ), Hubbs_78 (ED1), IndiRoo_33 (EJ), Issa7_83 (ED2), Jacko_79 (ED1), Jera_34 (EJ), Johann_34 (EJ), Labella_35 (EJ), LeeroyJenkins_95 (GB), Lifes_86 (GB), Linayshia_33 (EJ), Lupine_78 (ED1), Lyell_84 (ED2), Musetta_83 (ED2), Necrophoxinus_86 (ED2), OlinDD_77 (ED1), Olympi_35 (EJ), Pavlo_78 (ED1), PermaG_34 (EJ), PhillyPhilly_77 (ED1), Pioneer3_77 (ED1), Platte_76 (ED1), Rasovi_33 (EJ), Roman_81 (ED1), Rootkit7_33 (EJ), RunningBrook_86 (ED2), SBlackberry_33 (EJ), Saradis_80 (ED1), Shroomer_87 (ED2), Solimine_81 (ED1), SteakFry_83 (ED2), StevieWelch_85 (ED2), Sucha_30 (EJ), Tandem_77 (ED1), Theresita_31 (EA7), TurboVicky_33 (EJ), Typher_35 (EJ), Uterion_82 (ED1), WaterT_90 (GB), Welcome_86 (ED2), Yuma_83 (ED2), Zanella_33 (EJ),

Start 202:

- Found in 13 of 461 (2.8%) of genes in pham
- Manual Annotations of this start: 13 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida_72 (AQ), Amigo_71 (AQ), Anansi_70 (AQ), Boersma_73 (AQ), Gorgeous_70 (AQ), Heylee_73 (AQ), Ichor_70 (AQ), Jaek_70 (AQ), Molivia_74 (AQ), Rings_71 (AQ), SorJuana_70 (AQ), Thunderclap_70 (AQ), Yeezus_70 (AQ),

Start 204:

- Found in 14 of 461 (3.0%) of genes in pham
- Manual Annotations of this start: 13 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araceli_42 (BH), Archimedes_37 (DA), Bogota_43 (BH), Crosby_42 (BH), Henoccus_42 (BH), Intolerant_41 (BH), JackieB_42 (BH), LazerLemon_42 (BH), Microdon_41 (BH), Sapo_34 (DA), Shynx_42 (BH), Stuff_42 (BH), UNTPL_44 (BH), Wolfstar_82 (ED),

Start 205:

- Found in 1 of 461 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 409
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LuckyBarnes_64 (singleton),

Start 206:

- Found in 13 of 461 (2.8%) of genes in pham

- Manual Annotations of this start: 3 of 409
- Called 23.1% of time when present
- Phage (with cluster) where this start called: Frizzle_34 (DA), Ghobes_35 (DA), Marky_44 (BH),

Start 215:

- Found in 50 of 461 (10.8%) of genes in pham
- Manual Annotations of this start: 28 of 409
- Called 58.0% of time when present
- Phage (with cluster) where this start called: Anamika_57 (CS3), BenoitCattle_59 (CS2), Berries_57 (CS3), Bianmat_57 (CS3), Chelms_59 (CS2), Crete_60 (CS2), Dakiti_60 (CS2), Damp_57 (CS3), Diabla_63 (CS2), GalacticEye_57 (CS3), Guillaume_57 (CS3), Hail2Pitt_56 (CS3), Harambe_57 (CS3), Hello_57 (CS3), Jams_57 (CS3), Jormungandr_57 (CS3), Kaseim_57 (CS3), Lahirium_57 (CS3), Lidong_57 (CS3), Linetti_59 (CS2), Minos_58 (CS3), MrWormie_57 (CS3), Neevie_57 (CS3), Newt_58 (CS3), Nimi13_57 (CS3), PierreThree_58 (CS2), Shelley_57 (CS3), Sticker17_57 (CS3), Teal_57 (CS3),

Summary by clusters:

There are 45 clusters represented in this pham: singleton, BM, CH, BH, DA, ED2, JD, ED1, DV, DG1, FJ, DF4, DF1, DF3, DF2, CS4, CS1, CS3, CS2, DG2, AC, EN, AE, EJ, ED, AK, AQ, R, U, GB, UNK, EP, EA7, CR2, CR3, CR1, CR6, CR7, CR4, CR5, H2, H1, CX, D2, D1,

Info for manual annotations of cluster AC:

- Start number 67 was manually annotated 3 times for cluster AC.
- Start number 73 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster AE:

- Start number 42 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster AK:

- Start number 197 was manually annotated 73 times for cluster AK.

Info for manual annotations of cluster AQ:

- Start number 202 was manually annotated 13 times for cluster AQ.

Info for manual annotations of cluster BH:

- Start number 204 was manually annotated 10 times for cluster BH.
- Start number 206 was manually annotated 1 time for cluster BH.

Info for manual annotations of cluster BM:

- Start number 151 was manually annotated 8 times for cluster BM.

Info for manual annotations of cluster CH:

- Start number 185 was manually annotated 1 time for cluster CH.

Info for manual annotations of cluster CR1:

- Start number 28 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 28 was manually annotated 18 times for cluster CR2.

- Start number 61 was manually annotated 2 times for cluster CR2.
- Start number 67 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 28 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 28 was manually annotated 5 times for cluster CR4.
- Start number 81 was manually annotated 3 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 28 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 29 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 30 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CS1:

- Start number 118 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 153 was manually annotated 1 time for cluster CS2.
- Start number 168 was manually annotated 28 times for cluster CS2.
- Start number 177 was manually annotated 1 time for cluster CS2.
- Start number 215 was manually annotated 6 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 153 was manually annotated 2 times for cluster CS3.
- Start number 167 was manually annotated 1 time for cluster CS3.
- Start number 215 was manually annotated 22 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 106 was manually annotated 9 times for cluster CS4.
- Start number 108 was manually annotated 2 times for cluster CS4.
- Start number 144 was manually annotated 1 time for cluster CS4.

Info for manual annotations of cluster CX:

- Start number 182 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster D1:

- Start number 42 was manually annotated 21 times for cluster D1.

Info for manual annotations of cluster D2:

- Start number 39 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DA:

- Start number 204 was manually annotated 2 times for cluster DA.
- Start number 206 was manually annotated 2 times for cluster DA.

Info for manual annotations of cluster DF3:

- Start number 185 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DF4:

- Start number 185 was manually annotated 1 time for cluster DF4.

Info for manual annotations of cluster DG1:

- Start number 46 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:

- Start number 42 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:

- Start number 41 was manually annotated 13 times for cluster DV.
- Start number 42 was manually annotated 21 times for cluster DV.
- Start number 44 was manually annotated 1 time for cluster DV.
- Start number 51 was manually annotated 2 times for cluster DV.

Info for manual annotations of cluster EA7:

- Start number 201 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster ED:

- Start number 204 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 201 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 201 was manually annotated 12 times for cluster ED2.

Info for manual annotations of cluster EJ:

- Start number 196 was manually annotated 1 time for cluster EJ.
- Start number 199 was manually annotated 2 times for cluster EJ.
- Start number 201 was manually annotated 15 times for cluster EJ.

Info for manual annotations of cluster EN:

- Start number 49 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster EP:

- Start number 200 was manually annotated 7 times for cluster EP.

Info for manual annotations of cluster GB:

- Start number 201 was manually annotated 5 times for cluster GB.

Info for manual annotations of cluster H1:

- Start number 42 was manually annotated 9 times for cluster H1.

Info for manual annotations of cluster H2:

- Start number 37 was manually annotated 1 time for cluster H2.
- Start number 40 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster JD:

- Start number 179 was manually annotated 2 times for cluster JD.

Info for manual annotations of cluster R:

- Start number 130 was manually annotated 9 times for cluster R.

Info for manual annotations of cluster U:

- Start number 47 was manually annotated 3 times for cluster U.

Gene Information:

Gene: ASegato_82 Start: 49650, Stop: 48130, Start Num: 201

Candidate Starts for ASegato_82:

(Start: 185 @49683 has 3 MA's), (Start: 201 @49650 has 46 MA's), (219, 49599), (265, 49491), (300, 49425), (322, 49359), (366, 49242), (376, 49221), (388, 49164), (400, 49131), (401, 49128), (418, 49065), (439, 49014), (444, 49005), (450, 48996), (452, 48990), (464, 48966), (473, 48942), (490, 48903), (493, 48888), (506, 48837), (508, 48819), (535, 48726), (549, 48699), (566, 48654), (640, 48468), (681, 48360), (688, 48330), (703, 48285), (712, 48234), (731, 48171),

Gene: ASerpRocky_55 Start: 52672, Stop: 51098, Start Num: 144

Candidate Starts for ASerpRocky_55:

(Start: 106 @52804 has 9 MA's), (Start: 108 @52792 has 2 MA's), (138, 52693), (Start: 144 @52672 has 1 MA's), (171, 52606), (218, 52507), (230, 52471), (237, 52447), (240, 52438), (245, 52429), (273, 52381), (287, 52357), (308, 52315), (313, 52300), (343, 52225), (356, 52165), (357, 52162), (378, 52096), (379, 52093), (386, 52057), (387, 52054), (393, 52027), (399, 52015), (409, 51967), (417, 51934), (427, 51910), (447, 51886), (460, 51862), (484, 51796), (532, 51697), (592, 51598), (605, 51565), (608, 51562), (664, 51445), (666, 51442), (681, 51385), (684, 51367), (715, 51250), (716, 51247), (719, 51235), (754, 51136), (763, 51115),

Gene: Adelaide_46 Start: 37262, Stop: 38638, Start Num: 200

Candidate Starts for Adelaide_46:

(Start: 200 @37262 has 7 MA's), (225, 37331), (232, 37349), (286, 37442), (311, 37502), (313, 37508), (314, 37511), (356, 37631), (360, 37649), (390, 37766), (474, 37904), (495, 37943), (517, 37976), (519, 37982), (523, 37997), (541, 38036), (571, 38096), (588, 38120), (607, 38156), (631, 38225), (634, 38231), (666, 38312), (694, 38408), (697, 38420), (701, 38432), (712, 38489), (715, 38495), (718, 38507), (726, 38537), (742, 38588),

Gene: Adgers_62 Start: 52192, Stop: 50660, Start Num: 168

Candidate Starts for Adgers_62:

(90, 52447), (102, 52396), (135, 52291), (143, 52261), (Start: 153 @52228 has 3 MA's), (158, 52219), (Start: 168 @52192 has 28 MA's), (230, 52024), (245, 51982), (254, 51964), (273, 51934), (280, 51922), (287, 51910), (289, 51904), (297, 51883), (358, 51715), (384, 51628), (386, 51613), (389, 51601), (399, 51571), (447, 51442), (467, 51400), (475, 51382), (476, 51379), (479, 51370), (484, 51352), (532, 51265), (608, 51130), (611, 51115), (616, 51094), (664, 51013), (666, 51010), (681, 50953), (682, 50947), (684, 50935), (703, 50884), (707, 50860), (715, 50821), (718, 50809), (719, 50806), (746, 50713), (754, 50698),

Gene: Adjutor_52 Start: 39669, Stop: 41612, Start Num: 42

Candidate Starts for Adjutor_52:

(Start: 42 @39669 has 55 MA's), (53, 39696), (71, 39768), (82, 39822), (95, 39882), (98, 39900), (100, 39909), (117, 39960), (131, 40002), (149, 40038), (184, 40125), (219, 40218), (223, 40233), (231,

40254), (292, 40356), (307, 40389), (316, 40413), (354, 40473), (378, 40560), (394, 40635), (434, 40725), (463, 40776), (464, 40779), (503, 40869), (517, 40887), (527, 40920), (551, 40974), (556, 40986), (561, 41004), (594, 41067), (622, 41151), (665, 41268), (674, 41316), (694, 41379), (712, 41463),

Gene: Aikoy_65 Start: 45786, Stop: 47714, Start Num: 42

Candidate Starts for Aikoy_65:

(Start: 42 @45786 has 55 MA's), (52, 45807), (57, 45837), (Start: 81 @45936 has 3 MA's), (95, 45999), (115, 46071), (Start: 118 @46080 has 3 MA's), (136, 46128), (223, 46344), (231, 46365), (239, 46386), (240, 46389), (249, 46401), (269, 46428), (324, 46551), (354, 46587), (369, 46659), (376, 46668), (384, 46701), (399, 46758), (404, 46770), (434, 46839), (440, 46848), (451, 46866), (463, 46890), (513, 46986), (517, 46998), (527, 47031), (544, 47073), (570, 47136), (615, 47241), (684, 47457), (693, 47481), (694, 47484), (705, 47526), (710, 47556), (717, 47580), (758, 47697),

Gene: Albanese_29 Start: 22144, Stop: 23535, Start Num: 197

Candidate Starts for Albanese_29:

(Start: 197 @22144 has 73 MA's), (232, 22231), (282, 22303), (284, 22306), (311, 22369), (312, 22372), (318, 22390), (323, 22396), (340, 22423), (359, 22480), (370, 22531), (384, 22570), (390, 22606), (396, 22624), (406, 22660), (411, 22681), (415, 22699), (435, 22732), (462, 22771), (478, 22813), (487, 22840), (511, 22864), (523, 22900), (525, 22906), (541, 22939), (551, 22954), (554, 22963), (575, 23008), (594, 23041), (595, 23044), (627, 23128), (633, 23149), (638, 23161), (645, 23179), (672, 23269), (680, 23290), (681, 23293), (687, 23317), (691, 23326), (712, 23413), (740, 23503), (745, 23527),

Gene: Aledel_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for Aledel_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (612, 22690), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: Alephilan_60 Start: 40725, Stop: 42638, Start Num: 42

Candidate Starts for Alephilan_60:

(16, 40599), (18, 40608), (19, 40620), (27, 40653), (Start: 41 @40722 has 13 MA's), (Start: 42 @40725 has 55 MA's), (Start: 51 @40737 has 2 MA's), (60, 40785), (70, 40818), (107, 40977), (115, 41004), (Start: 118 @41013 has 3 MA's), (149, 41085), (194, 41202), (Start: 197 @41205 has 73 MA's), (221, 41268), (231, 41295), (263, 41358), (279, 41385), (352, 41514), (357, 41538), (366, 41580), (382, 41628), (386, 41649), (390, 41670), (411, 41727), (415, 41745), (434, 41781), (456, 41823), (481, 41883), (527, 41979), (528, 41982), (631, 42210), (665, 42300), (674, 42336), (676, 42342), (693, 42396), (704, 42435), (728, 42537), (733, 42552), (740, 42573),

Gene: Alleb_76 Start: 48902, Stop: 47379, Start Num: 201

Candidate Starts for Alleb_76:

(172, 48968), (Start: 182 @48941 has 5 MA's), (Start: 201 @48902 has 46 MA's), (257, 48752), (265, 48743), (310, 48647), (321, 48614), (335, 48587), (358, 48533), (367, 48488), (368, 48485), (400, 48380), (401, 48377), (444, 48254), (450, 48245), (454, 48233), (479, 48179), (506, 48086), (533, 47978), (549, 47948), (552, 47942), (553, 47939), (554, 47936), (566, 47903), (572, 47891), (624, 47765), (640, 47717), (674, 47627), (681, 47609), (695, 47561), (725, 47438),

Gene: Alove_33 Start: 23258, Stop: 24685, Start Num: 201

Candidate Starts for Alove_33:

(184, 23216), (Start: 201 @23258 has 46 MA's), (349, 23576), (386, 23723), (390, 23744), (502, 24011), (525, 24059), (531, 24080), (563, 24137), (577, 24170), (599, 24206), (627, 24284), (633, 24305), (665, 24386), (666, 24389), (691, 24476), (696, 24488), (706, 24527), (712, 24563), (715, 24569), (718, 24581), (737, 24644),

Gene: Alyssamiracle_63 Start: 39828, Stop: 41744, Start Num: 41

Candidate Starts for Alyssamiracle_63:

(Start: 41 @39828 has 13 MA's), (Start: 42 @39831 has 55 MA's), (Start: 51 @39843 has 2 MA's), (60, 39891), (70, 39924), (107, 40083), (115, 40110), (Start: 118 @40119 has 3 MA's), (149, 40191), (Start: 197 @40311 has 73 MA's), (221, 40374), (263, 40464), (279, 40491), (352, 40620), (357, 40644), (366, 40686), (369, 40698), (378, 40713), (382, 40734), (386, 40755), (390, 40776), (411, 40833), (415, 40851), (434, 40887), (456, 40929), (481, 40989), (527, 41085), (528, 41088), (613, 41265), (631, 41316), (665, 41406), (674, 41442), (676, 41448), (693, 41502), (704, 41541), (728, 41643), (733, 41658), (740, 41679),

Gene: Amavida_72 Start: 47198, Stop: 45804, Start Num: 202

Candidate Starts for Amavida_72:

(Start: 202 @47198 has 13 MA's), (226, 47129), (257, 47054), (271, 47036), (288, 47006), (318, 46925), (332, 46895), (350, 46871), (417, 46631), (431, 46592), (488, 46478), (503, 46427), (507, 46406), (512, 46376), (517, 46361), (520, 46349), (558, 46268), (587, 46220), (598, 46193), (606, 46172), (630, 46088), (660, 46022), (716, 45833), (719, 45821),

Gene: Amigo_71 Start: 47416, Stop: 46022, Start Num: 202

Candidate Starts for Amigo_71:

(Start: 202 @47416 has 13 MA's), (226, 47347), (257, 47272), (271, 47254), (288, 47224), (318, 47143), (417, 46849), (431, 46810), (488, 46696), (507, 46624), (512, 46594), (517, 46579), (520, 46567), (545, 46516), (566, 46465), (574, 46447), (587, 46438), (606, 46390), (660, 46240), (716, 46051),

Gene: Amore2_62 Start: 52713, Stop: 51082, Start Num: 118

Candidate Starts for Amore2_62:

(Start: 118 @52713 has 3 MA's), (125, 52701), (139, 52650), (142, 52644), (164, 52587), (230, 52446), (245, 52404), (250, 52392), (273, 52356), (275, 52353), (289, 52326), (308, 52290), (312, 52278), (318, 52263), (355, 52155), (384, 52050), (386, 52035), (417, 51912), (447, 51864), (460, 51840), (467, 51822), (484, 51774), (518, 51723), (532, 51687), (547, 51669), (608, 51552), (628, 51501), (655, 51459), (672, 51399), (684, 51357), (703, 51306), (707, 51282), (754, 51120), (763, 51099),

Gene: Anamika_57 Start: 52887, Stop: 51475, Start Num: 215

Candidate Starts for Anamika_57:

(90, 53235), (129, 53106), (150, 53019), (Start: 153 @53016 has 3 MA's), (Start: 215 @52887 has 28 MA's), (230, 52842), (273, 52752), (275, 52749), (278, 52743), (289, 52722), (318, 52659), (355, 52551), (358, 52533), (384, 52446), (386, 52431), (399, 52389), (417, 52308), (447, 52260), (467, 52218), (475, 52200), (476, 52197), (484, 52170), (518, 52119), (532, 52083), (562, 52032), (608, 51948), (612, 51927), (681, 51771), (682, 51765), (684, 51753), (718, 51627), (754, 51513),

Gene: Anansi_70 Start: 47020, Stop: 45626, Start Num: 202

Candidate Starts for Anansi_70:

(Start: 202 @47020 has 13 MA's), (226, 46951), (257, 46876), (271, 46858), (288, 46828), (318, 46747), (379, 46597), (417, 46453), (431, 46414), (488, 46300), (503, 46249), (507, 46228), (512, 46198), (517, 46183), (520, 46171), (558, 46090), (587, 46042), (598, 46015), (606, 45994), (630, 45910), (660, 45844), (716, 45655), (719, 45643),

Gene: Apeppi_55 Start: 40047, Stop: 41966, Start Num: 42

Candidate Starts for Apeppi_55:

(17, 39927), (20, 39948), (25, 39969), (33, 39999), (36, 40032), (Start: 41 @40044 has 13 MA's), (Start: 42 @40047 has 55 MA's), (Start: 51 @40062 has 2 MA's), (54, 40077), (60, 40110), (70, 40143), (72, 40146), (Start: 81 @40194 has 3 MA's), (85, 40212), (107, 40302), (111, 40320), (115, 40329), (Start: 118 @40338 has 3 MA's), (149, 40410), (Start: 197 @40530 has 73 MA's), (Start: 199 @40533 has 2 MA's), (221, 40593), (228, 40611), (263, 40683), (279, 40710), (354, 40845), (357, 40863), (366, 40905), (376, 40926), (378, 40932), (386, 40974), (390, 40995), (399, 41016), (411, 41052), (456, 41151), (461, 41160), (481, 41211), (527, 41307), (528, 41310), (590, 41421), (613, 41487), (622, 41511), (631, 41538), (686, 41706), (693, 41724), (700, 41748), (704, 41763), (705, 41769), (712, 41811), (717, 41826), (728, 41865), (733, 41880), (740, 41901), (762, 41958),

Gene: Apiary_72 Start: 53146, Stop: 51110, Start Num: 29

Candidate Starts for Apiary_72:

(12, 53314), (Start: 29 @53146 has 6 MA's), (43, 53080), (55, 53038), (134, 52753), (165, 52696), (184, 52645), (187, 52630), (223, 52540), (228, 52528), (271, 52435), (312, 52363), (354, 52294), (369, 52222), (386, 52165), (463, 51985), (472, 51961), (494, 51898), (517, 51862), (551, 51775), (605, 51643), (616, 51604), (617, 51601), (626, 51556), (674, 51409), (694, 51346), (705, 51304), (712, 51265), (720, 51241),

Gene: AppleCider_29 Start: 22130, Stop: 23524, Start Num: 197

Candidate Starts for AppleCider_29:

(Start: 197 @22130 has 73 MA's), (221, 22187), (282, 22292), (318, 22379), (357, 22463), (358, 22466), (359, 22469), (384, 22559), (390, 22595), (393, 22604), (411, 22670), (415, 22688), (435, 22721), (445, 22733), (478, 22802), (487, 22829), (511, 22853), (523, 22889), (525, 22895), (541, 22928), (551, 22943), (554, 22952), (600, 23042), (624, 23111), (633, 23138), (639, 23156), (645, 23168), (672, 23258), (674, 23264), (677, 23273), (680, 23279), (691, 23315), (712, 23402), (727, 23453), (740, 23492), (745, 23516),

Gene: Araceli_42 Start: 30875, Stop: 32269, Start Num: 204

Candidate Starts for Araceli_42:

(Start: 204 @30875 has 13 MA's), (Start: 206 @30878 has 3 MA's), (230, 30953), (239, 30977), (273, 31007), (275, 31010), (282, 31022), (295, 31055), (329, 31112), (342, 31136), (357, 31181), (359, 31187), (375, 31247), (381, 31268), (393, 31322), (419, 31421), (436, 31448), (441, 31457), (502, 31583), (525, 31631), (531, 31652), (541, 31664), (551, 31679), (563, 31709), (577, 31742), (588, 31751), (604, 31793), (626, 31859), (627, 31862), (633, 31883), (639, 31901), (648, 31919), (666, 31973), (672, 32003), (691, 32060), (693, 32063), (706, 32111), (718, 32165), (739, 32234), (743, 32252),

Gene: Archimedes_37 Start: 33084, Stop: 31684, Start Num: 204

Candidate Starts for Archimedes_37:

(Start: 204 @33084 has 13 MA's), (218, 33042), (230, 33006), (237, 32988), (239, 32982), (273, 32952), (282, 32937), (284, 32934), (318, 32850), (392, 32628), (396, 32616), (436, 32502), (502, 32376), (514, 32364), (520, 32343), (521, 32340), (525, 32328), (541, 32295), (551, 32280), (561, 32256), (577, 32220), (588, 32211), (624, 32112), (645, 32055), (649, 32043), (650, 32037), (677, 31950), (683, 31929), (691, 31908), (715, 31815), (746, 31689),

Gene: Arti_71 Start: 55496, Stop: 53430, Start Num: 28

Candidate Starts for Arti_71:

(8, 55700), (9, 55688), (11, 55670), (Start: 28 @55496 has 34 MA's), (Start: 61 @55358 has 2 MA's), (65, 55334), (Start: 118 @55130 has 3 MA's), (134, 55085), (184, 54977), (227, 54863), (228, 54860), (271, 54770), (273, 54767), (309, 54707), (366, 54569), (374, 54551), (380, 54527), (415, 54404), (463, 54299), (517, 54173), (533, 54119), (591, 53993), (594, 53984), (604, 53960), (622, 53888), (626, 53882), (635, 53852), (657, 53795), (674, 53735), (694, 53672), (712, 53591),

Gene: Astralis_60 Start: 39409, Stop: 41322, Start Num: 42

Candidate Starts for Astralis_60:

(Start: 41 @39406 has 13 MA's), (Start: 42 @39409 has 55 MA's), (Start: 51 @39421 has 2 MA's), (60, 39469), (70, 39502), (107, 39661), (115, 39688), (Start: 118 @39697 has 3 MA's), (149, 39769), (Start: 197 @39889 has 73 MA's), (221, 39952), (263, 40042), (279, 40069), (352, 40198), (357, 40222), (366, 40264), (369, 40276), (378, 40291), (382, 40312), (386, 40333), (390, 40354), (411, 40411), (415, 40429), (434, 40465), (456, 40507), (481, 40567), (527, 40663), (528, 40666), (613, 40843), (631, 40894), (665, 40984), (674, 41020), (676, 41026), (693, 41080), (704, 41119), (728, 41221), (733, 41236), (740, 41257),

Gene: Austin_61 Start: 52711, Stop: 51080, Start Num: 118

Candidate Starts for Austin_61:

(Start: 118 @52711 has 3 MA's), (125, 52699), (139, 52648), (142, 52642), (164, 52585), (230, 52444), (245, 52402), (250, 52390), (273, 52354), (275, 52351), (289, 52324), (308, 52288), (312, 52276), (318, 52261), (355, 52153), (384, 52048), (386, 52033), (417, 51910), (447, 51862), (460, 51838), (467, 51820), (484, 51772), (518, 51721), (532, 51685), (547, 51667), (608, 51550), (628, 51499), (655, 51457), (672, 51397), (684, 51355), (703, 51304), (707, 51280), (754, 51118), (763, 51097),

Gene: AustinPowers_26 Start: 21746, Stop: 23140, Start Num: 197

Candidate Starts for AustinPowers_26:

(Start: 197 @21746 has 73 MA's), (221, 21803), (271, 21890), (282, 21908), (284, 21911), (318, 21995), (340, 22028), (357, 22079), (359, 22085), (375, 22145), (384, 22175), (390, 22211), (396, 22229), (406, 22265), (411, 22286), (415, 22304), (416, 22310), (435, 22337), (478, 22418), (487, 22445), (511, 22469), (517, 22484), (525, 22511), (541, 22544), (551, 22559), (624, 22727), (633, 22754), (638, 22766), (645, 22784), (672, 22874), (674, 22880), (680, 22895), (681, 22898), (707, 22991), (712, 23018), (729, 23075), (740, 23108), (745, 23132),

Gene: Avian_59 Start: 39556, Stop: 41472, Start Num: 41

Candidate Starts for Avian_59:

(Start: 41 @39556 has 13 MA's), (Start: 42 @39559 has 55 MA's), (Start: 51 @39571 has 2 MA's), (60, 39619), (70, 39652), (107, 39811), (115, 39838), (Start: 118 @39847 has 3 MA's), (149, 39919), (Start: 197 @40039 has 73 MA's), (221, 40102), (263, 40192), (279, 40219), (352, 40348), (357, 40372), (366, 40414), (369, 40426), (378, 40441), (382, 40462), (386, 40483), (390, 40504), (411, 40561), (415, 40579), (434, 40615), (456, 40657), (481, 40717), (527, 40813), (528, 40816), (613, 40993), (631, 41044), (665, 41134), (674, 41170), (676, 41176), (693, 41230), (704, 41269), (728, 41371), (733, 41386), (740, 41407),

Gene: AyoTeo_35 Start: 23382, Stop: 24809, Start Num: 201

Candidate Starts for AyoTeo_35:

(184, 23340), (Start: 201 @23382 has 46 MA's), (349, 23700), (375, 23802), (386, 23847), (390, 23868), (502, 24135), (525, 24183), (531, 24204), (563, 24261), (577, 24294), (599, 24330), (627, 24408), (633, 24429), (665, 24510), (666, 24513), (691, 24600), (696, 24612), (706, 24651), (712, 24687), (718, 24705), (737, 24768),

Gene: Barbochs_57 Start: 51736, Stop: 50204, Start Num: 168

Candidate Starts for Barbochs_57:

(90, 51991), (102, 51940), (116, 51889), (135, 51835), (143, 51805), (Start: 153 @51772 has 3 MA's), (158, 51763), (Start: 168 @51736 has 28 MA's), (230, 51568), (245, 51526), (273, 51478), (280, 51466), (287, 51454), (289, 51448), (297, 51427), (312, 51400), (358, 51259), (384, 51172), (386, 51157), (389, 51145), (399, 51115), (410, 51064), (416, 51037), (447, 50986), (460, 50962), (467, 50944), (475, 50926), (476, 50923), (484, 50896), (515, 50854), (532, 50809), (608, 50674), (611, 50659), (616, 50638), (655, 50581), (664, 50557), (681, 50497), (682, 50491), (683, 50485), (684,

50479), (703, 50428), (707, 50404), (715, 50365), (718, 50353), (719, 50350), (746, 50257), (754, 50242), (763, 50221),

Gene: BarnCat_85 Start: 49027, Stop: 47570, Start Num: 201

Candidate Starts for BarnCat_85:

(Start: 201 @49027 has 46 MA's), (212, 48997), (255, 48883), (295, 48811), (304, 48799), (319, 48751), (339, 48709), (357, 48673), (362, 48649), (386, 48577), (388, 48571), (391, 48559), (402, 48532), (409, 48511), (438, 48436), (448, 48418), (488, 48322), (492, 48313), (515, 48208), (524, 48178), (525, 48175), (527, 48169), (530, 48157), (531, 48154), (558, 48094), (561, 48085), (610, 47995), (624, 47941), (636, 47905), (672, 47824), (673, 47821), (674, 47818), (677, 47809), (701, 47731), (703, 47725), (721, 47647), (726, 47626), (735, 47599), (736, 47596),

Gene: Barnyard_65 Start: 45144, Stop: 47105, Start Num: 37

Candidate Starts for Barnyard_65:

(Start: 37 @45144 has 1 MA's), (50, 45171), (Start: 51 @45177 has 2 MA's), (52, 45183), (64, 45249), (78, 45282), (79, 45297), (Start: 81 @45312 has 3 MA's), (83, 45318), (88, 45345), (97, 45387), (113, 45447), (121, 45468), (132, 45504), (136, 45513), (165, 45576), (172, 45597), (Start: 179 @45615 has 2 MA's), (Start: 185 @45630 has 3 MA's), (186, 45636), (Start: 197 @45660 has 73 MA's), (224, 45735), (228, 45741), (319, 45924), (323, 45936), (336, 45954), (352, 45969), (369, 46047), (415, 46200), (431, 46233), (489, 46368), (503, 46395), (513, 46401), (515, 46407), (531, 46461), (556, 46527), (557, 46530), (590, 46572), (626, 46656), (636, 46689), (673, 46800), (674, 46803), (675, 46806), (677, 46812), (686, 46845), (694, 46866), (695, 46869), (705, 46908), (717, 46962), (727, 46998), (730, 47007), (747, 47064), (756, 47082),

Gene: Beaver_62 Start: 53506, Stop: 51974, Start Num: 168

Candidate Starts for Beaver_62:

(90, 53761), (102, 53710), (116, 53659), (135, 53605), (143, 53575), (Start: 153 @53542 has 3 MA's), (158, 53533), (Start: 168 @53506 has 28 MA's), (230, 53338), (245, 53296), (273, 53248), (280, 53236), (287, 53224), (289, 53218), (297, 53197), (312, 53170), (358, 53029), (384, 52942), (386, 52927), (389, 52915), (399, 52885), (410, 52834), (416, 52807), (447, 52756), (467, 52714), (475, 52696), (476, 52693), (484, 52666), (515, 52624), (532, 52579), (547, 52561), (608, 52444), (611, 52429), (616, 52408), (655, 52351), (664, 52327), (681, 52267), (682, 52261), (683, 52255), (684, 52249), (703, 52198), (707, 52174), (715, 52135), (718, 52123), (746, 52027), (754, 52012), (763, 51991),

Gene: Beckerton_60 Start: 46572, Stop: 48629, Start Num: 42

Candidate Starts for Beckerton_60:

(Start: 42 @46572 has 55 MA's), (58, 46632), (59, 46635), (Start: 81 @46728 has 3 MA's), (84, 46740), (88, 46761), (121, 46884), (123, 46887), (128, 46896), (136, 46929), (141, 46950), (156, 46998), (172, 47040), (Start: 197 @47103 has 73 MA's), (208, 47124), (209, 47130), (228, 47184), (319, 47370), (323, 47382), (336, 47400), (352, 47415), (354, 47421), (463, 47739), (464, 47742), (481, 47787), (513, 47838), (517, 47850), (551, 47940), (556, 47952), (567, 47985), (584, 48009), (588, 48018), (626, 48108), (636, 48141), (673, 48252), (674, 48255), (675, 48258), (676, 48261), (686, 48297), (693, 48315), (709, 48381), (712, 48399), (764, 48576),

Gene: Beethoven_29 Start: 22100, Stop: 23500, Start Num: 197

Candidate Starts for Beethoven_29:

(Start: 197 @22100 has 73 MA's), (221, 22163), (282, 22268), (284, 22271), (318, 22355), (340, 22388), (357, 22439), (359, 22445), (381, 22526), (382, 22529), (384, 22535), (390, 22571), (396, 22589), (399, 22592), (406, 22625), (411, 22646), (415, 22664), (435, 22697), (478, 22778), (487, 22805), (514, 22835), (517, 22844), (525, 22871), (541, 22904), (551, 22919), (575, 22973), (590, 22994), (594, 23006), (600, 23018), (674, 23240), (677, 23249), (680, 23255), (691, 23291), (707, 23351), (712, 23378), (740, 23468),

Gene: Benczkowski14_57 Start: 53319, Stop: 51616, Start Num: 106

Candidate Starts for Benczkowski14_57:

(Start: 106 @53319 has 9 MA's), (Start: 108 @53307 has 2 MA's), (171, 53124), (Start: 215 @53034 has 28 MA's), (218, 53025), (230, 52989), (237, 52965), (240, 52956), (245, 52947), (273, 52899), (287, 52875), (318, 52803), (321, 52800), (330, 52782), (343, 52743), (378, 52614), (386, 52575), (387, 52572), (390, 52554), (393, 52545), (399, 52533), (409, 52485), (417, 52452), (447, 52404), (460, 52380), (484, 52314), (532, 52215), (592, 52116), (595, 52107), (605, 52083), (608, 52080), (655, 51987), (664, 51963), (666, 51960), (681, 51903), (684, 51885), (715, 51768), (716, 51765), (719, 51753), (754, 51654), (763, 51633),

Gene: Bennie_25 Start: 20566, Stop: 21960, Start Num: 197

Candidate Starts for Bennie_25:

(Start: 197 @20566 has 73 MA's), (221, 20623), (282, 20728), (284, 20731), (318, 20815), (340, 20848), (357, 20899), (359, 20905), (384, 20995), (390, 21031), (396, 21049), (399, 21052), (406, 21085), (411, 21106), (478, 21238), (487, 21265), (514, 21295), (517, 21304), (525, 21331), (541, 21364), (551, 21379), (563, 21406), (575, 21433), (595, 21469), (612, 21511), (633, 21574), (639, 21592), (666, 21664), (670, 21688), (672, 21694), (673, 21697), (680, 21715), (681, 21718), (687, 21742), (691, 21751), (712, 21838), (727, 21889), (740, 21928),

Gene: BenoitCattle_59 Start: 52020, Stop: 50611, Start Num: 215

Candidate Starts for BenoitCattle_59:

(90, 52398), (102, 52347), (116, 52296), (135, 52242), (143, 52212), (Start: 153 @52179 has 3 MA's), (158, 52170), (Start: 168 @52143 has 28 MA's), (Start: 215 @52020 has 28 MA's), (230, 51975), (245, 51933), (273, 51885), (275, 51882), (278, 51876), (280, 51873), (287, 51861), (289, 51855), (312, 51807), (313, 51804), (355, 51684), (358, 51666), (378, 51603), (384, 51579), (386, 51564), (399, 51522), (410, 51471), (447, 51393), (475, 51333), (476, 51330), (479, 51321), (484, 51303), (515, 51261), (532, 51216), (608, 51081), (611, 51066), (616, 51045), (664, 50964), (666, 50961), (681, 50904), (682, 50898), (684, 50886), (703, 50835), (707, 50811), (715, 50772), (718, 50760), (746, 50664), (754, 50649),

Gene: Benry_32 Start: 21495, Stop: 22922, Start Num: 199

Candidate Starts for Benry_32:

(Start: 199 @21495 has 2 MA's), (357, 21849), (358, 21852), (362, 21873), (386, 21960), (399, 22002), (521, 22284), (525, 22296), (531, 22317), (551, 22344), (562, 22371), (563, 22374), (575, 22401), (577, 22407), (599, 22443), (633, 22542), (655, 22605), (665, 22623), (666, 22626), (681, 22680), (691, 22713), (696, 22725), (706, 22764), (712, 22800), (715, 22806), (718, 22818), (727, 22851), (737, 22881),

Gene: Berries_57 Start: 52859, Stop: 51447, Start Num: 215

Candidate Starts for Berries_57:

(90, 53207), (129, 53078), (Start: 153 @52988 has 3 MA's), (Start: 215 @52859 has 28 MA's), (230, 52814), (273, 52724), (275, 52721), (278, 52715), (289, 52694), (318, 52631), (355, 52523), (358, 52505), (384, 52418), (386, 52403), (399, 52361), (417, 52280), (447, 52232), (467, 52190), (475, 52172), (476, 52169), (484, 52142), (518, 52091), (532, 52055), (562, 52004), (608, 51920), (612, 51899), (681, 51743), (682, 51737), (684, 51725), (718, 51599), (754, 51485),

Gene: Beyoncage_50 Start: 36615, Stop: 38669, Start Num: 46

Candidate Starts for Beyoncage_50:

(Start: 46 @36615 has 8 MA's), (54, 36639), (72, 36702), (89, 36786), (97, 36828), (Start: 182 @37050 has 5 MA's), (Start: 197 @37086 has 73 MA's), (227, 37161), (239, 37200), (272, 37242), (283, 37260), (292, 37281), (298, 37293), (323, 37353), (331, 37368), (352, 37386), (369, 37464), (378, 37479), (379, 37482), (386, 37521), (390, 37542), (433, 37644), (463, 37701), (470, 37722), (472,

37725), (477, 37737), (503, 37785), (513, 37791), (528, 37839), (539, 37872), (552, 37896), (558, 37914), (570, 37944), (581, 38067), (584, 38100), (589, 38112), (594, 38127), (610, 38166), (622, 38211), (631, 38238), (662, 38322), (681, 38385), (693, 38427), (696, 38436), (698, 38445), (709, 38493), (710, 38502), (712, 38514), (717, 38529), (729, 38571),

Gene: BiPauneto_74 Start: 54628, Stop: 52772, Start Num: 81

Candidate Starts for BiPauneto_74:

(9, 55045), (11, 55027), (15, 54952), (Start: 28 @54853 has 34 MA's), (Start: 81 @54628 has 3 MA's), (184, 54334), (Start: 197 @54301 has 73 MA's), (208, 54280), (224, 54226), (227, 54220), (228, 54217), (271, 54127), (273, 54124), (309, 54064), (374, 53908), (415, 53761), (463, 53653), (472, 53629), (517, 53527), (533, 53473), (540, 53458), (575, 53377), (594, 53338), (615, 53275), (622, 53236), (626, 53230), (635, 53200), (674, 53083), (694, 53020), (709, 52957), (712, 52939), (738, 52855),

Gene: Bianmat_57 Start: 52899, Stop: 51487, Start Num: 215

Candidate Starts for Bianmat_57:

(90, 53247), (129, 53118), (Start: 153 @53028 has 3 MA's), (Start: 215 @52899 has 28 MA's), (230, 52854), (273, 52764), (275, 52761), (278, 52755), (289, 52734), (318, 52671), (346, 52593), (355, 52563), (358, 52545), (384, 52458), (386, 52443), (399, 52401), (417, 52320), (447, 52272), (467, 52230), (475, 52212), (476, 52209), (484, 52182), (518, 52131), (532, 52095), (562, 52044), (608, 51960), (612, 51939), (681, 51783), (682, 51777), (684, 51765), (718, 51639), (754, 51525),

Gene: BigMack_25 Start: 20560, Stop: 21960, Start Num: 197

Candidate Starts for BigMack_25:

(Start: 197 @20560 has 73 MA's), (221, 20623), (282, 20728), (284, 20731), (318, 20815), (340, 20848), (357, 20899), (359, 20905), (381, 20986), (382, 20989), (384, 20995), (390, 21031), (396, 21049), (399, 21052), (406, 21085), (411, 21106), (415, 21124), (478, 21238), (487, 21265), (514, 21295), (517, 21304), (525, 21331), (541, 21364), (551, 21379), (563, 21406), (577, 21439), (612, 21511), (633, 21574), (639, 21592), (651, 21625), (672, 21694), (674, 21700), (680, 21715), (681, 21718), (691, 21751), (707, 21811), (712, 21838), (740, 21928),

Gene: BigMama_51 Start: 39745, Stop: 41688, Start Num: 42

Candidate Starts for BigMama_51:

(Start: 42 @39745 has 55 MA's), (53, 39772), (71, 39844), (82, 39898), (95, 39958), (98, 39976), (100, 39985), (117, 40036), (131, 40078), (149, 40114), (184, 40201), (219, 40294), (223, 40309), (231, 40330), (292, 40432), (307, 40465), (316, 40489), (354, 40549), (378, 40636), (394, 40711), (434, 40801), (463, 40852), (464, 40855), (503, 40945), (517, 40963), (527, 40996), (551, 41050), (556, 41062), (561, 41080), (594, 41143), (622, 41227), (665, 41344), (674, 41392), (694, 41455), (712, 41539),

Gene: BigShaq_59 Start: 52148, Stop: 50616, Start Num: 168

Candidate Starts for BigShaq_59:

(90, 52403), (102, 52352), (116, 52301), (135, 52247), (143, 52217), (Start: 153 @52184 has 3 MA's), (158, 52175), (Start: 168 @52148 has 28 MA's), (Start: 215 @52025 has 28 MA's), (230, 51980), (245, 51938), (273, 51890), (275, 51887), (278, 51881), (280, 51878), (287, 51866), (289, 51860), (308, 51824), (312, 51812), (313, 51809), (355, 51689), (358, 51671), (384, 51584), (386, 51569), (399, 51527), (410, 51476), (416, 51449), (447, 51398), (475, 51338), (476, 51335), (479, 51326), (484, 51308), (515, 51266), (532, 51221), (608, 51086), (611, 51071), (616, 51050), (664, 50969), (666, 50966), (681, 50909), (682, 50903), (684, 50891), (703, 50840), (706, 50825), (707, 50816), (715, 50777), (718, 50765), (746, 50669), (754, 50654),

Gene: BillyBobJr_65 Start: 53852, Stop: 52284, Start Num: 153

Candidate Starts for BillyBobJr_65:

(90, 54071), (102, 54020), (129, 53942), (135, 53915), (143, 53885), (Start: 153 @53852 has 3 MA's), (158, 53843), (Start: 168 @53816 has 28 MA's), (230, 53648), (245, 53606), (254, 53588), (273, 53558), (280, 53546), (289, 53528), (312, 53480), (358, 53339), (384, 53252), (386, 53237), (389, 53225), (399, 53195), (410, 53144), (447, 53066), (460, 53042), (467, 53024), (475, 53006), (476, 53003), (479, 52994), (484, 52976), (532, 52889), (608, 52754), (611, 52739), (616, 52718), (655, 52661), (664, 52637), (666, 52634), (681, 52577), (682, 52571), (684, 52559), (703, 52508), (707, 52484), (715, 52445), (718, 52433), (719, 52430), (746, 52337), (754, 52322), (763, 52301),

Gene: BirksAndSocks_64 Start: 53856, Stop: 52324, Start Num: 168

Candidate Starts for BirksAndSocks_64:

(90, 54111), (102, 54060), (135, 53955), (143, 53925), (Start: 153 @53892 has 3 MA's), (158, 53883), (Start: 168 @53856 has 28 MA's), (230, 53688), (245, 53646), (254, 53628), (273, 53598), (280, 53586), (287, 53574), (289, 53568), (297, 53547), (358, 53379), (384, 53292), (386, 53277), (389, 53265), (399, 53235), (447, 53106), (460, 53082), (467, 53064), (475, 53046), (476, 53043), (479, 53034), (484, 53016), (532, 52929), (608, 52794), (611, 52779), (616, 52758), (664, 52677), (666, 52674), (681, 52617), (682, 52611), (684, 52599), (703, 52548), (707, 52524), (715, 52485), (718, 52473), (719, 52470), (746, 52377), (754, 52362),

Gene: BirthdayBoy_62 Start: 41143, Stop: 43056, Start Num: 42

Candidate Starts for BirthdayBoy_62:

(16, 41017), (18, 41026), (19, 41038), (27, 41071), (Start: 41 @41140 has 13 MA's), (Start: 42 @41143 has 55 MA's), (Start: 51 @41155 has 2 MA's), (60, 41203), (70, 41236), (85, 41305), (107, 41395), (115, 41422), (Start: 118 @41431 has 3 MA's), (149, 41503), (Start: 197 @41623 has 73 MA's), (221, 41686), (263, 41776), (279, 41803), (352, 41932), (357, 41956), (366, 41998), (382, 42046), (386, 42067), (390, 42088), (411, 42145), (434, 42199), (456, 42241), (481, 42301), (527, 42397), (528, 42400), (613, 42577), (631, 42628), (665, 42718), (674, 42754), (676, 42760), (693, 42814), (704, 42853), (728, 42955), (733, 42970), (740, 42991),

Gene: BiteSize_50 Start: 36701, Stop: 38755, Start Num: 46

Candidate Starts for BiteSize_50:

(Start: 46 @36701 has 8 MA's), (54, 36725), (72, 36788), (89, 36872), (97, 36914), (Start: 182 @37136 has 5 MA's), (Start: 197 @37172 has 73 MA's), (227, 37247), (239, 37286), (272, 37328), (283, 37346), (292, 37367), (298, 37379), (323, 37439), (331, 37454), (352, 37472), (369, 37550), (378, 37565), (379, 37568), (386, 37607), (390, 37628), (433, 37730), (463, 37787), (470, 37808), (472, 37811), (477, 37823), (503, 37871), (513, 37877), (528, 37925), (539, 37958), (552, 37982), (558, 38000), (570, 38030), (581, 38153), (584, 38186), (589, 38198), (594, 38213), (610, 38252), (622, 38297), (631, 38324), (662, 38408), (681, 38471), (693, 38513), (696, 38522), (698, 38531), (709, 38579), (710, 38588), (712, 38600), (717, 38615), (729, 38657),

Gene: BobtimousPrime_59 Start: 46536, Stop: 48593, Start Num: 42

Candidate Starts for BobtimousPrime_59:

(Start: 42 @46536 has 55 MA's), (58, 46596), (59, 46599), (Start: 81 @46692 has 3 MA's), (84, 46704), (88, 46725), (121, 46848), (123, 46851), (128, 46860), (136, 46893), (141, 46914), (156, 46962), (172, 47004), (Start: 197 @47067 has 73 MA's), (208, 47088), (209, 47094), (228, 47148), (319, 47334), (323, 47346), (336, 47364), (352, 47379), (354, 47385), (463, 47703), (464, 47706), (481, 47751), (513, 47802), (517, 47814), (551, 47904), (556, 47916), (567, 47949), (584, 47973), (588, 47982), (626, 48072), (636, 48105), (673, 48216), (674, 48219), (675, 48222), (676, 48225), (686, 48261), (693, 48279), (709, 48345), (712, 48363), (764, 48540),

Gene: Bodacious_25 Start: 20580, Stop: 21974, Start Num: 197

Candidate Starts for Bodacious_25:

(Start: 197 @20580 has 73 MA's), (221, 20637), (282, 20742), (284, 20745), (318, 20829), (340, 20862), (357, 20913), (359, 20919), (381, 21000), (382, 21003), (384, 21009), (390, 21045), (396,

21063), (399, 21066), (406, 21099), (411, 21120), (478, 21252), (487, 21279), (517, 21318), (523, 21339), (525, 21345), (541, 21378), (551, 21393), (554, 21402), (575, 21447), (595, 21483), (612, 21525), (633, 21588), (639, 21606), (672, 21708), (673, 21711), (680, 21729), (681, 21732), (687, 21756), (691, 21765), (712, 21852), (740, 21942), (745, 21966),

Gene: Boersma_73 Start: 47416, Stop: 46022, Start Num: 202

Candidate Starts for Boersma_73:

(Start: 202 @47416 has 13 MA's), (226, 47347), (257, 47272), (271, 47254), (288, 47224), (318, 47143), (417, 46849), (431, 46810), (488, 46696), (507, 46624), (512, 46594), (517, 46579), (520, 46567), (545, 46516), (566, 46465), (574, 46447), (587, 46438), (606, 46390), (660, 46240), (716, 46051),

Gene: Bogota_43 Start: 31399, Stop: 32793, Start Num: 204

Candidate Starts for Bogota_43:

(Start: 204 @31399 has 13 MA's), (Start: 206 @31402 has 3 MA's), (230, 31477), (239, 31501), (273, 31531), (282, 31546), (329, 31636), (345, 31672), (375, 31771), (378, 31780), (394, 31849), (436, 31972), (502, 32107), (519, 32134), (525, 32155), (531, 32176), (563, 32233), (577, 32266), (588, 32275), (604, 32317), (626, 32383), (633, 32407), (639, 32425), (648, 32443), (666, 32497), (672, 32527), (691, 32584), (693, 32587), (706, 32635), (713, 32674), (718, 32689), (739, 32758), (743, 32776), (745, 32785),

Gene: Boneham_63 Start: 53757, Stop: 52225, Start Num: 168

Candidate Starts for Boneham_63:

(90, 54012), (102, 53961), (135, 53856), (143, 53826), (Start: 153 @53793 has 3 MA's), (158, 53784), (Start: 168 @53757 has 28 MA's), (230, 53589), (245, 53547), (254, 53529), (273, 53499), (280, 53487), (287, 53475), (289, 53469), (297, 53448), (358, 53280), (384, 53193), (386, 53178), (389, 53166), (399, 53136), (447, 53007), (460, 52983), (467, 52965), (475, 52947), (476, 52944), (479, 52935), (484, 52917), (532, 52830), (608, 52695), (611, 52680), (616, 52659), (664, 52578), (666, 52575), (681, 52518), (682, 52512), (684, 52500), (703, 52449), (707, 52425), (715, 52386), (718, 52374), (719, 52371), (746, 52278), (754, 52263),

Gene: Bonum_76 Start: 56632, Stop: 54545, Start Num: 28

Candidate Starts for Bonum_76:

(Start: 28 @56632 has 34 MA's), (55, 56512), (Start: 67 @56467 has 4 MA's), (69, 56464), (134, 56209), (184, 56101), (208, 56047), (228, 55984), (271, 55894), (273, 55891), (287, 55867), (309, 55831), (366, 55693), (374, 55675), (378, 55666), (380, 55651), (415, 55528), (450, 55444), (463, 55417), (472, 55393), (517, 55294), (533, 55240), (558, 55186), (575, 55144), (594, 55105), (617, 55036), (622, 55003), (635, 54967), (654, 54922), (657, 54910), (674, 54850), (694, 54787), (738, 54622), (744, 54598),

Gene: Braxoaddie_72 Start: 53132, Stop: 51096, Start Num: 29

Candidate Starts for Braxoaddie_72:

(12, 53300), (Start: 29 @53132 has 6 MA's), (43, 53066), (55, 53024), (83, 52919), (134, 52739), (165, 52682), (184, 52631), (187, 52616), (223, 52526), (228, 52514), (271, 52421), (312, 52349), (354, 52280), (369, 52208), (386, 52151), (463, 51971), (472, 51947), (494, 51884), (517, 51848), (551, 51761), (605, 51629), (616, 51590), (617, 51587), (626, 51542), (674, 51395), (694, 51332), (705, 51290), (712, 51251), (720, 51227),

Gene: Breezic_59 Start: 51749, Stop: 50217, Start Num: 168

Candidate Starts for Breezic_59:

(90, 52004), (102, 51953), (116, 51902), (135, 51848), (143, 51818), (Start: 153 @51785 has 3 MA's), (158, 51776), (Start: 168 @51749 has 28 MA's), (230, 51581), (245, 51539), (273, 51491), (280, 51479), (287, 51467), (289, 51461), (297, 51440), (312, 51413), (358, 51272), (384, 51185), (386,

51170), (389, 51158), (399, 51128), (410, 51077), (416, 51050), (447, 50999), (475, 50939), (476, 50936), (484, 50909), (515, 50867), (532, 50822), (608, 50687), (611, 50672), (616, 50651), (655, 50594), (664, 50570), (666, 50567), (681, 50510), (682, 50504), (683, 50498), (684, 50492), (703, 50441), (707, 50417), (715, 50378), (718, 50366), (719, 50363), (746, 50270), (754, 50255), (763, 50234),

Gene: BrotherBLo_29 Start: 22106, Stop: 23506, Start Num: 197

Candidate Starts for BrotherBLo_29:

(Start: 197 @22106 has 73 MA's), (221, 22169), (282, 22274), (318, 22361), (340, 22394), (357, 22445), (359, 22451), (381, 22532), (382, 22535), (384, 22541), (390, 22577), (396, 22595), (399, 22598), (406, 22631), (411, 22652), (415, 22670), (478, 22784), (487, 22811), (514, 22841), (517, 22850), (525, 22877), (541, 22910), (551, 22925), (575, 22979), (590, 23000), (594, 23012), (600, 23024), (672, 23240), (673, 23243), (674, 23246), (677, 23255), (680, 23261), (691, 23297), (707, 23357), (712, 23384), (740, 23474),

Gene: Buggaboo_74 Start: 57198, Stop: 55111, Start Num: 28

Candidate Starts for Buggaboo_74:

(Start: 28 @57198 has 34 MA's), (55, 57078), (Start: 67 @57033 has 4 MA's), (69, 57030), (134, 56775), (184, 56667), (208, 56613), (228, 56550), (271, 56460), (273, 56457), (287, 56433), (309, 56397), (366, 56259), (374, 56241), (378, 56232), (380, 56217), (415, 56094), (450, 56010), (463, 55983), (472, 55959), (517, 55860), (533, 55806), (558, 55752), (575, 55710), (594, 55671), (617, 55602), (622, 55569), (635, 55533), (654, 55488), (657, 55476), (674, 55416), (676, 55410), (694, 55353), (738, 55188), (744, 55164),

Gene: Butterball_62 Start: 53762, Stop: 52230, Start Num: 168

Candidate Starts for Butterball_62:

(90, 54017), (102, 53966), (135, 53861), (143, 53831), (Start: 153 @53798 has 3 MA's), (158, 53789), (Start: 168 @53762 has 28 MA's), (230, 53594), (245, 53552), (254, 53534), (273, 53504), (280, 53492), (287, 53480), (289, 53474), (297, 53453), (358, 53285), (384, 53198), (386, 53183), (389, 53171), (399, 53141), (447, 53012), (460, 52988), (467, 52970), (475, 52952), (476, 52949), (479, 52940), (484, 52922), (532, 52835), (608, 52700), (611, 52685), (616, 52664), (664, 52583), (666, 52580), (681, 52523), (682, 52517), (684, 52505), (703, 52454), (707, 52430), (715, 52391), (718, 52379), (719, 52376), (746, 52283), (754, 52268),

Gene: Butterscotch_52 Start: 39729, Stop: 41672, Start Num: 42

Candidate Starts for Butterscotch_52:

(Start: 42 @39729 has 55 MA's), (53, 39756), (71, 39828), (82, 39882), (95, 39942), (98, 39960), (100, 39969), (117, 40020), (131, 40062), (149, 40098), (184, 40185), (219, 40278), (223, 40293), (231, 40314), (292, 40416), (307, 40449), (316, 40473), (354, 40533), (378, 40620), (394, 40695), (434, 40785), (463, 40836), (464, 40839), (503, 40929), (517, 40947), (527, 40980), (551, 41034), (556, 41046), (561, 41064), (594, 41127), (622, 41211), (665, 41328), (674, 41376), (694, 41439), (712, 41523),

Gene: C3PO_72 Start: 52724, Stop: 50799, Start Num: 49

Candidate Starts for C3PO_72:

(25, 52817), (Start: 49 @52724 has 8 MA's), (91, 52553), (104, 52499), (119, 52445), (184, 52295), (240, 52139), (271, 52088), (273, 52085), (353, 51956), (354, 51953), (369, 51881), (376, 51872), (517, 51515), (527, 51482), (605, 51296), (676, 51077), (681, 51065), (684, 51047), (694, 51020), (709, 50957), (717, 50924), (739, 50852),

Gene: CMP1_51 Start: 48836, Stop: 47235, Start Num: 146

Candidate Starts for CMP1_51:

(146, 48836), (189, 48719), (229, 48617), (245, 48572), (259, 48548), (270, 48533), (320, 48410), (359, 48326), (384, 48242), (385, 48230), (420, 48110), (466, 48029), (523, 47909), (527, 47897), (548, 47855), (559, 47828), (564, 47813), (569, 47801), (585, 47792), (603, 47747), (622, 47681), (654, 47591), (670, 47537), (696, 47456), (707, 47408), (725, 47336), (726, 47333), (734, 47309), (736, 47303), (748, 47261),

Gene: CN1A_14 Start: 6751, Stop: 8316, Start Num: 166

Candidate Starts for CN1A_14:

(166, 6751), (170, 6763), (181, 6793), (Start: 185 @6802 has 3 MA's), (193, 6826), (203, 6844), (209, 6862), (210, 6865), (214, 6877), (222, 6904), (294, 7060), (298, 7069), (307, 7093), (316, 7120), (327, 7147), (356, 7216), (358, 7222), (360, 7234), (377, 7279), (382, 7303), (384, 7309), (393, 7354), (409, 7399), (425, 7456), (470, 7540), (497, 7600), (516, 7627), (517, 7630), (518, 7633), (561, 7735), (563, 7741), (591, 7792), (654, 7984), (658, 8002), (661, 8014), (678, 8080), (690, 8122), (693, 8128), (701, 8155), (703, 8161), (719, 8233), (732, 8284),

Gene: Camerico_63 Start: 54751, Stop: 53234, Start Num: 185

Candidate Starts for Camerico_63:

(Start: 185 @54751 has 3 MA's), (Start: 215 @54673 has 28 MA's), (221, 54655), (224, 54643), (230, 54628), (257, 54574), (273, 54556), (277, 54550), (302, 54496), (311, 54478), (334, 54418), (344, 54394), (361, 54313), (373, 54274), (383, 54247), (387, 54226), (393, 54199), (396, 54190), (447, 54058), (460, 54034), (467, 54016), (475, 53998), (478, 53989), (597, 53773), (600, 53767), (605, 53752), (620, 53701), (642, 53647), (684, 53506), (706, 53440), (707, 53431), (712, 53398),

Gene: Candle_64 Start: 47961, Stop: 49721, Start Num: 130

Candidate Starts for Candle_64:

(Start: 130 @47961 has 9 MA's), (157, 48030), (193, 48126), (Start: 199 @48135 has 2 MA's), (228, 48216), (243, 48261), (352, 48462), (362, 48510), (380, 48570), (384, 48582), (403, 48648), (451, 48771), (463, 48795), (472, 48819), (517, 49023), (527, 49056), (531, 49071), (551, 49110), (552, 49113), (556, 49122), (594, 49191), (604, 49215), (640, 49323), (674, 49446), (675, 49449), (683, 49476), (693, 49506), (695, 49512), (696, 49515), (701, 49533), (704, 49545), (740, 49680), (748, 49710),

Gene: Canowicakte_29 Start: 22165, Stop: 23559, Start Num: 197

Candidate Starts for Canowicakte_29:

(Start: 197 @22165 has 73 MA's), (221, 22222), (282, 22327), (318, 22414), (357, 22498), (358, 22501), (359, 22504), (384, 22594), (390, 22630), (393, 22639), (396, 22648), (411, 22705), (415, 22723), (435, 22756), (445, 22768), (478, 22837), (487, 22864), (511, 22888), (525, 22930), (541, 22963), (551, 22978), (554, 22987), (600, 23077), (624, 23146), (633, 23173), (639, 23191), (645, 23203), (672, 23293), (674, 23299), (677, 23308), (680, 23314), (691, 23350), (712, 23437), (727, 23488), (740, 23527), (745, 23551),

Gene: Carpal_29 Start: 22107, Stop: 23507, Start Num: 197

Candidate Starts for Carpal_29:

(Start: 197 @22107 has 73 MA's), (221, 22170), (282, 22275), (284, 22278), (318, 22362), (340, 22395), (357, 22446), (359, 22452), (381, 22533), (382, 22536), (384, 22542), (390, 22578), (396, 22596), (399, 22599), (406, 22632), (411, 22653), (415, 22671), (435, 22704), (478, 22785), (487, 22812), (514, 22842), (517, 22851), (525, 22878), (541, 22911), (551, 22926), (575, 22980), (590, 23001), (594, 23013), (600, 23025), (674, 23247), (677, 23256), (680, 23262), (691, 23298), (707, 23358), (712, 23385), (740, 23475),

Gene: Casablanco_85 Start: 49567, Stop: 48047, Start Num: 201

Candidate Starts for Casablanco_85:

(Start: 185 @49600 has 3 MA's), (Start: 201 @49567 has 46 MA's), (219, 49516), (265, 49408), (300, 49342), (322, 49276), (367, 49153), (376, 49138), (388, 49081), (400, 49048), (401, 49045), (418, 48982), (439, 48931), (444, 48922), (450, 48913), (473, 48859), (490, 48820), (493, 48805), (508, 48736), (515, 48706), (535, 48643), (566, 48571), (640, 48385), (681, 48277), (688, 48247), (703, 48202), (712, 48151), (731, 48088),

Gene: Cassita_89 Start: 50170, Stop: 48713, Start Num: 201

Candidate Starts for Cassita_89:

(Start: 201 @50170 has 46 MA's), (212, 50140), (255, 50026), (295, 49954), (304, 49942), (319, 49894), (339, 49852), (357, 49816), (362, 49792), (386, 49720), (388, 49714), (391, 49702), (402, 49675), (409, 49654), (438, 49579), (448, 49561), (488, 49465), (492, 49456), (515, 49351), (524, 49321), (525, 49318), (527, 49312), (530, 49300), (531, 49297), (558, 49237), (561, 49228), (610, 49138), (624, 49084), (636, 49048), (672, 48967), (673, 48964), (674, 48961), (677, 48952), (701, 48874), (703, 48868), (721, 48790), (726, 48769), (735, 48742), (736, 48739),

Gene: CathyBurgh_59 Start: 52326, Stop: 50794, Start Num: 168

Candidate Starts for CathyBurgh_59:

(90, 52581), (102, 52530), (116, 52479), (135, 52425), (143, 52395), (Start: 153 @52362 has 3 MA's), (158, 52353), (Start: 168 @52326 has 28 MA's), (230, 52158), (245, 52116), (273, 52068), (280, 52056), (287, 52044), (289, 52038), (297, 52017), (312, 51990), (358, 51849), (384, 51762), (386, 51747), (389, 51735), (399, 51705), (410, 51654), (416, 51627), (447, 51576), (460, 51552), (467, 51534), (475, 51516), (476, 51513), (484, 51486), (515, 51444), (532, 51399), (608, 51264), (611, 51249), (616, 51228), (655, 51171), (664, 51147), (681, 51087), (682, 51081), (683, 51075), (684, 51069), (703, 51018), (707, 50994), (715, 50955), (718, 50943), (719, 50940), (746, 50847), (754, 50832), (763, 50811),

Gene: Cborch11_63 Start: 46091, Stop: 48148, Start Num: 42

Candidate Starts for Cborch11_63:

(Start: 42 @46091 has 55 MA's), (58, 46151), (59, 46154), (Start: 81 @46247 has 3 MA's), (84, 46259), (88, 46280), (121, 46403), (123, 46406), (128, 46415), (136, 46448), (141, 46469), (156, 46517), (172, 46559), (Start: 197 @46622 has 73 MA's), (208, 46643), (209, 46649), (228, 46703), (319, 46889), (323, 46901), (336, 46919), (352, 46934), (354, 46940), (463, 47258), (464, 47261), (481, 47306), (513, 47357), (517, 47369), (551, 47459), (556, 47471), (567, 47504), (584, 47528), (588, 47537), (626, 47627), (636, 47660), (673, 47771), (674, 47774), (675, 47777), (676, 47780), (686, 47816), (693, 47834), (709, 47900), (712, 47918), (764, 48095),

Gene: Charianelly_57 Start: 52738, Stop: 51197, Start Num: 153

Candidate Starts for Charianelly_57:

(90, 52957), (129, 52828), (Start: 153 @52738 has 3 MA's), (Start: 215 @52609 has 28 MA's), (230, 52564), (273, 52474), (275, 52471), (278, 52465), (289, 52444), (318, 52381), (346, 52303), (355, 52273), (358, 52255), (384, 52168), (386, 52153), (399, 52111), (417, 52030), (447, 51982), (467, 51940), (475, 51922), (476, 51919), (484, 51892), (518, 51841), (532, 51805), (562, 51754), (608, 51670), (612, 51649), (681, 51493), (682, 51487), (684, 51475), (718, 51349), (754, 51235),

Gene: Charminar_60 Start: 39177, Stop: 41090, Start Num: 42

Candidate Starts for Charminar_60:

(Start: 41 @39174 has 13 MA's), (Start: 42 @39177 has 55 MA's), (Start: 51 @39189 has 2 MA's), (60, 39237), (70, 39270), (107, 39429), (115, 39456), (Start: 118 @39465 has 3 MA's), (149, 39537), (Start: 197 @39657 has 73 MA's), (221, 39720), (263, 39810), (279, 39837), (352, 39966), (357, 39990), (366, 40032), (369, 40044), (378, 40059), (382, 40080), (386, 40101), (390, 40122), (411, 40179), (415, 40197), (434, 40233), (456, 40275), (481, 40335), (527, 40431), (528, 40434), (613, 40611), (631, 40662), (665, 40752), (674, 40788), (676, 40794), (693, 40848), (704, 40887), (728, 40989), (733, 41004), (740, 41025),

Gene: Chelms_59 Start: 52169, Stop: 50760, Start Num: 215

Candidate Starts for Chelms_59:

(90, 52547), (102, 52496), (116, 52445), (135, 52391), (143, 52361), (Start: 153 @52328 has 3 MA's), (158, 52319), (Start: 168 @52292 has 28 MA's), (Start: 215 @52169 has 28 MA's), (230, 52124), (245, 52082), (273, 52034), (275, 52031), (278, 52025), (280, 52022), (287, 52010), (289, 52004), (312, 51956), (313, 51953), (355, 51833), (358, 51815), (378, 51752), (384, 51728), (386, 51713), (399, 51671), (410, 51620), (416, 51593), (447, 51542), (475, 51482), (476, 51479), (479, 51470), (484, 51452), (515, 51410), (532, 51365), (538, 51362), (608, 51230), (611, 51215), (616, 51194), (664, 51113), (666, 51110), (681, 51053), (682, 51047), (684, 51035), (703, 50984), (706, 50969), (707, 50960), (715, 50921), (718, 50909), (746, 50813), (754, 50798),

Gene: ChewChew_25 Start: 20575, Stop: 21969, Start Num: 197

Candidate Starts for ChewChew_25:

(Start: 197 @20575 has 73 MA's), (221, 20632), (282, 20737), (284, 20740), (318, 20824), (340, 20857), (357, 20908), (359, 20914), (381, 20995), (382, 20998), (384, 21004), (390, 21040), (396, 21058), (399, 21061), (406, 21094), (411, 21115), (478, 21247), (487, 21274), (517, 21313), (523, 21334), (525, 21340), (541, 21373), (551, 21388), (554, 21397), (575, 21442), (595, 21478), (612, 21520), (633, 21583), (639, 21601), (672, 21703), (673, 21706), (680, 21724), (681, 21727), (687, 21751), (691, 21760), (712, 21847), (740, 21937), (745, 21961),

Gene: ChewyVIII_83 Start: 61890, Stop: 59662, Start Num: 31

Candidate Starts for ChewyVIII_83:

(Start: 31 @61890 has 1 MA's), (104, 61581), (Start: 118 @61530 has 3 MA's), (134, 61485), (184, 61377), (208, 61323), (217, 61293), (224, 61269), (236, 61233), (245, 61212), (268, 61173), (271, 61167), (347, 60918), (369, 60777), (376, 60768), (384, 60735), (386, 60720), (404, 60666), (416, 60621), (426, 60597), (494, 60450), (503, 60432), (517, 60414), (528, 60378), (552, 60324), (558, 60306), (605, 60195), (617, 60153), (640, 60063), (674, 59958), (681, 59940), (705, 59853), (710, 59823), (712, 59814), (727, 59763), (735, 59739), (738, 59730), (744, 59706), (750, 59688),

Gene: Chill_55 Start: 39836, Stop: 41779, Start Num: 42

Candidate Starts for Chill_55:

(Start: 42 @39836 has 55 MA's), (53, 39863), (71, 39935), (82, 39989), (95, 40049), (98, 40067), (100, 40076), (117, 40127), (131, 40169), (149, 40205), (184, 40292), (219, 40385), (223, 40400), (231, 40421), (292, 40523), (307, 40556), (316, 40580), (354, 40640), (378, 40727), (394, 40802), (434, 40892), (463, 40943), (464, 40946), (503, 41036), (517, 41054), (527, 41087), (551, 41141), (556, 41153), (561, 41171), (594, 41234), (622, 41318), (665, 41435), (674, 41483), (694, 41546), (712, 41630),

Gene: Cholula_29 Start: 22153, Stop: 23553, Start Num: 197

Candidate Starts for Cholula_29:

(Start: 197 @22153 has 73 MA's), (221, 22216), (282, 22321), (284, 22324), (318, 22408), (340, 22441), (357, 22492), (359, 22498), (381, 22579), (382, 22582), (384, 22588), (390, 22624), (396, 22642), (399, 22645), (411, 22699), (435, 22750), (478, 22831), (487, 22858), (514, 22888), (517, 22897), (525, 22924), (541, 22957), (551, 22972), (575, 23026), (590, 23047), (594, 23059), (600, 23071), (674, 23293), (677, 23302), (680, 23308), (691, 23344), (707, 23404), (712, 23431), (740, 23521),

Gene: Chridison_26 Start: 21746, Stop: 23140, Start Num: 197

Candidate Starts for Chridison_26:

(Start: 197 @21746 has 73 MA's), (221, 21803), (271, 21890), (282, 21908), (284, 21911), (318, 21995), (340, 22028), (357, 22079), (359, 22085), (375, 22145), (384, 22175), (390, 22211), (396, 22229), (411, 22286), (415, 22304), (416, 22310), (435, 22337), (478, 22418), (487, 22445), (511,

22469), (517, 22484), (525, 22511), (541, 22544), (551, 22559), (563, 22586), (624, 22727), (633, 22754), (638, 22766), (645, 22784), (657, 22826), (672, 22874), (674, 22880), (680, 22895), (681, 22898), (691, 22931), (707, 22991), (712, 23018), (729, 23075), (740, 23108), (745, 23132),

Gene: Christian_25 Start: 20576, Stop: 21970, Start Num: 197

Candidate Starts for Christian_25:

(Start: 197 @20576 has 73 MA's), (221, 20633), (282, 20738), (284, 20741), (318, 20825), (340, 20858), (359, 20915), (381, 20996), (382, 20999), (384, 21005), (390, 21041), (396, 21059), (399, 21062), (406, 21095), (411, 21116), (478, 21248), (487, 21275), (517, 21314), (523, 21335), (525, 21341), (541, 21374), (551, 21389), (554, 21398), (575, 21443), (595, 21479), (612, 21521), (633, 21584), (639, 21602), (672, 21704), (673, 21707), (680, 21725), (681, 21728), (687, 21752), (691, 21761), (712, 21848), (740, 21938), (745, 21962),

Gene: Cicada_35 Start: 23458, Stop: 24885, Start Num: 201

Candidate Starts for Cicada_35:

(Start: 201 @23458 has 46 MA's), (349, 23776), (358, 23815), (375, 23878), (386, 23923), (390, 23944), (416, 24043), (502, 24211), (525, 24259), (531, 24280), (551, 24307), (562, 24334), (575, 24364), (576, 24367), (577, 24370), (599, 24406), (627, 24484), (655, 24568), (665, 24586), (666, 24589), (691, 24676), (696, 24688), (706, 24727), (712, 24763), (715, 24769), (727, 24814), (737, 24844),

Gene: CinnamonToast_65 Start: 53852, Stop: 52284, Start Num: 153

Candidate Starts for CinnamonToast_65:

(90, 54071), (102, 54020), (129, 53942), (135, 53915), (143, 53885), (Start: 153 @53852 has 3 MA's), (158, 53843), (Start: 168 @53816 has 28 MA's), (230, 53648), (245, 53606), (254, 53588), (273, 53558), (280, 53546), (289, 53528), (312, 53480), (358, 53339), (384, 53252), (386, 53237), (389, 53225), (399, 53195), (410, 53144), (447, 53066), (460, 53042), (467, 53024), (475, 53006), (476, 53003), (479, 52994), (484, 52976), (532, 52889), (608, 52754), (611, 52739), (616, 52718), (655, 52661), (664, 52637), (666, 52634), (681, 52577), (682, 52571), (684, 52559), (703, 52508), (707, 52484), (715, 52445), (718, 52433), (719, 52430), (746, 52337), (754, 52322), (763, 52301),

Gene: CoffeeBean_72 Start: 53090, Stop: 51054, Start Num: 29

Candidate Starts for CoffeeBean_72:

(12, 53258), (Start: 29 @53090 has 6 MA's), (43, 53024), (55, 52982), (83, 52877), (134, 52697), (165, 52640), (184, 52589), (187, 52574), (223, 52484), (228, 52472), (271, 52379), (312, 52307), (354, 52238), (369, 52166), (386, 52109), (463, 51929), (472, 51905), (494, 51842), (517, 51806), (551, 51719), (605, 51587), (616, 51548), (617, 51545), (626, 51500), (674, 51353), (694, 51290), (705, 51248), (712, 51209), (720, 51185),

Gene: Commandaria_72 Start: 56463, Stop: 54385, Start Num: 28

Candidate Starts for Commandaria_72:

(Start: 28 @56463 has 34 MA's), (45, 56391), (75, 56277), (131, 56058), (134, 56049), (136, 56046), (184, 55941), (208, 55887), (228, 55824), (271, 55734), (309, 55671), (311, 55665), (366, 55533), (374, 55515), (463, 55260), (472, 55236), (517, 55134), (533, 55080), (540, 55065), (544, 55059), (575, 54984), (594, 54945), (617, 54876), (624, 54840), (626, 54837), (635, 54807), (653, 54765), (674, 54690), (694, 54627), (712, 54546), (738, 54462), (744, 54438),

Gene: Commonplace_74 Start: 46896, Stop: 45316, Start Num: 179

Candidate Starts for Commonplace_74:

(Start: 179 @46896 has 2 MA's), (Start: 201 @46845 has 46 MA's), (208, 46830), (238, 46737), (245, 46722), (263, 46692), (274, 46677), (288, 46653), (299, 46626), (315, 46581), (332, 46542), (339, 46527), (358, 46485), (374, 46431), (389, 46368), (416, 46278), (428, 46242), (458, 46185), (468, 46164), (498, 46080), (509, 46029), (537, 45936), (545, 45921), (557, 45897), (561, 45882), (562,

45879), (573, 45855), (575, 45849), (591, 45834), (619, 45750), (624, 45729), (626, 45726), (635, 45696), (636, 45693), (659, 45624), (662, 45612), (672, 45570), (674, 45564), (685, 45525), (694, 45501), (712, 45420), (724, 45378), (725, 45375),

Gene: Crete_60 Start: 52291, Stop: 50882, Start Num: 215

Candidate Starts for Crete_60:

(90, 52669), (102, 52618), (116, 52567), (135, 52513), (143, 52483), (Start: 153 @52450 has 3 MA's), (158, 52441), (Start: 168 @52414 has 28 MA's), (Start: 215 @52291 has 28 MA's), (230, 52246), (245, 52204), (273, 52156), (275, 52153), (278, 52147), (280, 52144), (287, 52132), (289, 52126), (312, 52078), (313, 52075), (355, 51955), (358, 51937), (378, 51874), (384, 51850), (386, 51835), (399, 51793), (410, 51742), (416, 51715), (447, 51664), (475, 51604), (476, 51601), (479, 51592), (484, 51574), (515, 51532), (532, 51487), (547, 51469), (608, 51352), (611, 51337), (616, 51316), (664, 51235), (666, 51232), (681, 51175), (682, 51169), (684, 51157), (703, 51106), (706, 51091), (707, 51082), (715, 51043), (718, 51031), (746, 50935), (754, 50920),

Gene: CristinaYang_25 Start: 20580, Stop: 21974, Start Num: 197

Candidate Starts for CristinaYang_25:

(Start: 197 @20580 has 73 MA's), (221, 20637), (282, 20742), (284, 20745), (318, 20829), (340, 20862), (357, 20913), (359, 20919), (381, 21000), (382, 21003), (384, 21009), (390, 21045), (396, 21063), (399, 21066), (406, 21099), (411, 21120), (478, 21252), (487, 21279), (517, 21318), (523, 21339), (525, 21345), (541, 21378), (551, 21393), (554, 21402), (575, 21447), (595, 21483), (612, 21525), (633, 21588), (639, 21606), (672, 21708), (673, 21711), (680, 21729), (681, 21732), (687, 21756), (691, 21765), (712, 21852), (740, 21942), (745, 21966),

Gene: Crosby_42 Start: 31144, Stop: 32538, Start Num: 204

Candidate Starts for Crosby_42:

(Start: 204 @31144 has 13 MA's), (Start: 206 @31147 has 3 MA's), (230, 31222), (239, 31246), (242, 31252), (273, 31276), (282, 31291), (284, 31294), (315, 31366), (329, 31381), (345, 31417), (375, 31516), (394, 31594), (436, 31717), (502, 31852), (519, 31879), (525, 31900), (563, 31978), (577, 32011), (588, 32020), (604, 32062), (626, 32128), (627, 32131), (633, 32152), (639, 32170), (648, 32188), (666, 32242), (672, 32272), (691, 32329), (693, 32332), (706, 32380), (713, 32419), (718, 32434), (739, 32503), (743, 32521), (745, 32530),

Gene: Cruella_72 Start: 52724, Stop: 50799, Start Num: 49

Candidate Starts for Cruella_72:

(25, 52817), (Start: 49 @52724 has 8 MA's), (91, 52553), (104, 52499), (119, 52445), (184, 52295), (240, 52139), (271, 52088), (273, 52085), (353, 51956), (354, 51953), (369, 51881), (376, 51872), (517, 51515), (527, 51482), (605, 51296), (676, 51077), (681, 51065), (684, 51047), (694, 51020), (709, 50957), (717, 50924), (739, 50852),

Gene: Cuke_73 Start: 42303, Stop: 44156, Start Num: 67

Candidate Starts for Cuke_73:

(Start: 67 @42303 has 4 MA's), (96, 42423), (128, 42516), (136, 42549), (Start: 177 @42642 has 1 MA's), (180, 42651), (184, 42660), (194, 42690), (Start: 197 @42693 has 73 MA's), (219, 42750), (231, 42786), (235, 42798), (245, 42825), (258, 42849), (283, 42888), (307, 42942), (317, 42972), (323, 42990), (330, 43002), (384, 43143), (422, 43269), (456, 43326), (463, 43338), (517, 43440), (527, 43473), (531, 43488), (542, 43512), (544, 43515), (556, 43539), (570, 43578), (654, 43773), (674, 43863), (676, 43869), (684, 43899), (710, 43998), (726, 44058), (732, 44076), (736, 44088), (751, 44133), (755, 44139),

Gene: Daiboju_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for Daiboju_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318, 21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381, 22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Dakiti_60 Start: 53037, Stop: 51628, Start Num: 215

Candidate Starts for Dakiti_60:

(90, 53415), (102, 53364), (116, 53313), (135, 53259), (143, 53229), (Start: 153 @53196 has 3 MA's), (158, 53187), (Start: 168 @53160 has 28 MA's), (Start: 215 @53037 has 28 MA's), (230, 52992), (245, 52950), (273, 52902), (275, 52899), (278, 52893), (280, 52890), (287, 52878), (289, 52872), (312, 52824), (313, 52821), (355, 52701), (358, 52683), (378, 52620), (384, 52596), (386, 52581), (399, 52539), (410, 52488), (416, 52461), (447, 52410), (475, 52350), (476, 52347), (479, 52338), (484, 52320), (515, 52278), (532, 52233), (538, 52230), (608, 52098), (611, 52083), (616, 52062), (664, 51981), (666, 51978), (681, 51921), (682, 51915), (684, 51903), (703, 51852), (706, 51837), (707, 51828), (715, 51789), (718, 51777), (746, 51681), (754, 51666),

Gene: Dalilpop_75 Start: 57466, Stop: 55409, Start Num: 28

Candidate Starts for Dalilpop_75:

(Start: 28 @57466 has 34 MA's), (184, 56953), (208, 56899), (227, 56839), (228, 56836), (271, 56746), (282, 56728), (309, 56683), (311, 56677), (327, 56638), (358, 56584), (374, 56527), (415, 56380), (430, 56347), (446, 56317), (450, 56311), (463, 56284), (464, 56281), (517, 56161), (540, 56092), (551, 56074), (594, 55969), (599, 55960), (617, 55900), (626, 55861), (635, 55831), (657, 55774), (674, 55714), (683, 55684), (694, 55651), (705, 55609), (747, 55453),

Gene: Damien_61 Start: 46053, Stop: 48110, Start Num: 42

Candidate Starts for Damien_61:

(Start: 42 @46053 has 55 MA's), (58, 46113), (59, 46116), (Start: 81 @46209 has 3 MA's), (84, 46221), (88, 46242), (121, 46365), (123, 46368), (128, 46377), (136, 46410), (141, 46431), (156, 46479), (172, 46521), (Start: 197 @46584 has 73 MA's), (208, 46605), (209, 46611), (228, 46665), (319, 46851), (323, 46863), (336, 46881), (352, 46896), (354, 46902), (463, 47220), (464, 47223), (481, 47268), (513, 47319), (517, 47331), (551, 47421), (556, 47433), (567, 47466), (584, 47490), (588, 47499), (626, 47589), (636, 47622), (673, 47733), (674, 47736), (675, 47739), (676, 47742), (686, 47778), (693, 47796), (709, 47862), (712, 47880), (764, 48057),

Gene: Damp_57 Start: 51773, Stop: 50361, Start Num: 215

Candidate Starts for Damp_57:

(90, 52121), (129, 51992), (150, 51905), (Start: 153 @51902 has 3 MA's), (Start: 215 @51773 has 28 MA's), (230, 51728), (273, 51638), (275, 51635), (278, 51629), (289, 51608), (318, 51545), (355, 51437), (358, 51419), (384, 51332), (386, 51317), (399, 51275), (417, 51194), (447, 51146), (467, 51104), (475, 51086), (476, 51083), (484, 51056), (518, 51005), (532, 50969), (562, 50918), (608, 50834), (612, 50813), (681, 50657), (682, 50651), (684, 50639), (718, 50513), (754, 50399),

Gene: Darwin_73 Start: 51965, Stop: 50040, Start Num: 49

Candidate Starts for Darwin_73:

(25, 52058), (Start: 49 @51965 has 8 MA's), (91, 51794), (104, 51740), (184, 51536), (240, 51380), (271, 51329), (273, 51326), (303, 51284), (353, 51197), (354, 51194), (369, 51122), (376, 51113), (517, 50756), (527, 50723), (552, 50666), (657, 50384), (676, 50318), (681, 50306), (684, 50288), (686, 50282), (694, 50261), (709, 50198), (717, 50165), (728, 50126),

Gene: DaviePasture_60 Start: 40751, Stop: 42664, Start Num: 42

Candidate Starts for DaviePasture_60:

(36, 40736), (Start: 41 @40748 has 13 MA's), (Start: 42 @40751 has 55 MA's), (Start: 51 @40763 has 2 MA's), (60, 40811), (85, 40913), (107, 41003), (115, 41030), (Start: 118 @41039 has 3 MA's), (149, 41111), (184, 41198), (Start: 197 @41231 has 73 MA's), (221, 41294), (228, 41312), (263, 41384), (279, 41411), (352, 41540), (357, 41564), (366, 41606), (382, 41654), (386, 41675), (390, 41696), (411, 41753), (415, 41771), (434, 41807), (456, 41849), (481, 41909), (527, 42005), (528, 42008), (631, 42236), (665, 42326), (674, 42362), (676, 42368), (693, 42422), (704, 42461), (728, 42563), (733, 42578), (740, 42599),

Gene: DejaVu_80 Start: 49301, Stop: 47778, Start Num: 201

Candidate Starts for DejaVu_80:

(109, 49562), (124, 49520), (Start: 201 @49301 has 46 MA's), (238, 49190), (257, 49151), (265, 49142), (310, 49046), (324, 49004), (335, 48986), (358, 48932), (367, 48887), (368, 48884), (401, 48782), (444, 48659), (463, 48623), (479, 48584), (498, 48518), (506, 48491), (508, 48473), (515, 48443), (533, 48383), (549, 48353), (554, 48341), (557, 48335), (674, 48026), (681, 48008), (693, 47966), (695, 47960), (700, 47942), (701, 47939), (733, 47813),

Gene: Delton_54 Start: 40127, Stop: 42070, Start Num: 42

Candidate Starts for Delton_54:

(26, 40058), (Start: 42 @40127 has 55 MA's), (53, 40154), (57, 40178), (71, 40226), (82, 40280), (95, 40340), (100, 40367), (117, 40418), (Start: 118 @40421 has 3 MA's), (131, 40460), (149, 40496), (184, 40583), (219, 40676), (223, 40691), (231, 40712), (292, 40814), (307, 40847), (316, 40871), (354, 40931), (378, 41018), (394, 41093), (434, 41183), (463, 41234), (464, 41237), (503, 41327), (517, 41345), (527, 41378), (551, 41432), (556, 41444), (561, 41462), (594, 41525), (622, 41609), (665, 41726), (674, 41774), (694, 41837), (712, 41921),

Gene: Demikore_78 Start: 49350, Stop: 51383, Start Num: 47

Candidate Starts for Demikore_78:

(Start: 47 @49350 has 3 MA's), (53, 49374), (66, 49437), (83, 49503), (93, 49554), (94, 49557), (128, 49665), (136, 49698), (156, 49737), (166, 49761), (187, 49824), (Start: 197 @49842 has 73 MA's), (Start: 199 @49845 has 2 MA's), (208, 49863), (209, 49869), (233, 49938), (242, 49965), (250, 49977), (276, 50010), (319, 50112), (369, 50235), (380, 50265), (411, 50370), (415, 50388), (461, 50478), (463, 50481), (491, 50583), (499, 50622), (513, 50649), (517, 50661), (531, 50709), (536, 50727), (551, 50754), (556, 50766), (558, 50775), (626, 50913), (640, 50958), (673, 51063), (709, 51192), (717, 51225), (722, 51243), (739, 51297), (750, 51336),

Gene: Demosthenes_55 Start: 52768, Stop: 51074, Start Num: 108

Candidate Starts for Demosthenes_55:

(Start: 106 @52780 has 9 MA's), (Start: 108 @52768 has 2 MA's), (138, 52669), (Start: 144 @52648 has 1 MA's), (171, 52582), (218, 52483), (230, 52447), (237, 52423), (240, 52414), (245, 52405), (273, 52357), (287, 52333), (308, 52291), (313, 52276), (318, 52261), (342, 52204), (343, 52201), (356, 52141), (357, 52138), (378, 52072), (379, 52069), (386, 52033), (387, 52030), (390, 52012), (393, 52003), (399, 51991), (409, 51943), (417, 51910), (427, 51886), (447, 51862), (460, 51838), (484, 51772), (532, 51673), (605, 51541), (608, 51538), (641, 51472), (664, 51421), (666, 51418), (681, 51361), (684, 51343), (715, 51226), (716, 51223), (719, 51211), (754, 51112), (763, 51091),

Gene: Deschain_85 Start: 50231, Stop: 48711, Start Num: 201

Candidate Starts for Deschain_85:

(Start: 185 @50264 has 3 MA's), (Start: 201 @50231 has 46 MA's), (219, 50180), (265, 50072), (300, 50006), (322, 49940), (367, 49817), (376, 49802), (388, 49745), (400, 49712), (401, 49709), (418, 49646), (439, 49595), (444, 49586), (450, 49577), (473, 49523), (490, 49484), (493, 49469), (508, 49400), (515, 49370), (535, 49307), (566, 49235), (640, 49049), (681, 48941), (688, 48911), (703, 48866), (712, 48815), (731, 48752),

Gene: Diabla_63 Start: 53692, Stop: 52283, Start Num: 215

Candidate Starts for Diabla_63:

(90, 54070), (102, 54019), (135, 53914), (143, 53884), (Start: 153 @53851 has 3 MA's), (158, 53842), (Start: 168 @53815 has 28 MA's), (Start: 215 @53692 has 28 MA's), (230, 53647), (245, 53605), (273, 53557), (275, 53554), (278, 53548), (280, 53545), (289, 53527), (297, 53506), (312, 53479), (355, 53356), (358, 53338), (384, 53251), (386, 53236), (410, 53143), (447, 53065), (460, 53041), (475, 53005), (476, 53002), (484, 52975), (515, 52933), (532, 52888), (547, 52870), (586, 52804), (608, 52753), (611, 52738), (616, 52717), (655, 52660), (666, 52633), (681, 52576), (682, 52570), (684, 52558), (703, 52507), (707, 52483), (715, 52444), (718, 52432), (719, 52429), (746, 52336), (754, 52321), (763, 52300),

Gene: Dina_47 Start: 36338, Stop: 37714, Start Num: 200

Candidate Starts for Dina_47:

(Start: 200 @36338 has 7 MA's), (225, 36407), (232, 36425), (286, 36518), (311, 36578), (313, 36584), (314, 36587), (356, 36707), (360, 36725), (390, 36842), (474, 36980), (495, 37019), (517, 37052), (519, 37058), (523, 37073), (541, 37112), (571, 37172), (588, 37196), (607, 37232), (631, 37301), (634, 37307), (666, 37388), (694, 37484), (697, 37496), (701, 37508), (712, 37565), (715, 37571), (718, 37583), (726, 37613), (742, 37664),

Gene: Djokovic_50 Start: 36614, Stop: 38668, Start Num: 46

Candidate Starts for Djokovic_50:

(Start: 46 @36614 has 8 MA's), (54, 36638), (72, 36701), (89, 36785), (97, 36827), (Start: 182 @37049 has 5 MA's), (Start: 197 @37085 has 73 MA's), (227, 37160), (239, 37199), (272, 37241), (283, 37259), (292, 37280), (298, 37292), (323, 37352), (331, 37367), (352, 37385), (369, 37463), (378, 37478), (379, 37481), (386, 37520), (390, 37541), (433, 37643), (463, 37700), (470, 37721), (472, 37724), (477, 37736), (503, 37784), (513, 37790), (528, 37838), (539, 37871), (552, 37895), (558, 37913), (570, 37943), (581, 38066), (584, 38099), (589, 38111), (594, 38126), (610, 38165), (622, 38210), (631, 38237), (662, 38321), (681, 38384), (693, 38426), (696, 38435), (698, 38444), (709, 38492), (710, 38501), (712, 38513), (717, 38528), (729, 38570),

Gene: DocB7_048 Start: 43676, Stop: 42174, Start Num: 185

Candidate Starts for DocB7_048:

(Start: 185 @43676 has 3 MA's), (221, 43580), (230, 43553), (240, 43520), (251, 43496), (273, 43466), (311, 43391), (344, 43310), (346, 43295), (378, 43184), (383, 43163), (390, 43124), (438, 42986), (447, 42974), (449, 42971), (460, 42950), (495, 42872), (532, 42812), (605, 42677), (608, 42674), (623, 42623), (632, 42602), (646, 42575), (669, 42509), (676, 42482), (680, 42473), (684, 42452), (698, 42416), (707, 42377), (722, 42311), (752, 42215),

Gene: DoobyDoo_59 Start: 39773, Stop: 41686, Start Num: 42

Candidate Starts for DoobyDoo_59:

(Start: 41 @39770 has 13 MA's), (Start: 42 @39773 has 55 MA's), (Start: 51 @39785 has 2 MA's), (60, 39833), (70, 39866), (85, 39935), (107, 40025), (115, 40052), (Start: 118 @40061 has 3 MA's), (149, 40133), (184, 40220), (Start: 197 @40253 has 73 MA's), (221, 40316), (263, 40406), (352, 40562), (357, 40586), (366, 40628), (382, 40676), (386, 40697), (390, 40718), (411, 40775), (434, 40829), (456, 40871), (481, 40931), (527, 41027), (528, 41030), (613, 41207), (631, 41258), (665, 41348), (674, 41384), (676, 41390), (686, 41426), (693, 41444), (704, 41483), (728, 41585), (733, 41600), (740, 41621),

Gene: DrLupo_67 Start: 46291, Stop: 48255, Start Num: 40

Candidate Starts for DrLupo_67:

(14, 46123), (21, 46198), (22, 46204), (Start: 40 @46291 has 1 MA's), (50, 46312), (Start: 51 @46318 has 2 MA's), (52, 46324), (58, 46357), (64, 46390), (79, 46438), (83, 46459), (88, 46486), (93, 46510),

(110, 46573), (114, 46591), (121, 46609), (128, 46621), (136, 46654), (156, 46696), (165, 46717), (166, 46720), (172, 46738), (Start: 185 @46771 has 3 MA's), (186, 46777), (Start: 197 @46801 has 73 MA's), (Start: 199 @46804 has 2 MA's), (224, 46876), (336, 47095), (352, 47110), (369, 47188), (390, 47266), (415, 47341), (431, 47374), (503, 47536), (513, 47542), (556, 47668), (557, 47671), (588, 47707), (590, 47713), (626, 47797), (636, 47830), (673, 47941), (674, 47944), (677, 47953), (686, 47986), (694, 48007), (705, 48049), (720, 48112), (727, 48139), (756, 48223),

Gene: DrRobert_25 Start: 20576, Stop: 21970, Start Num: 197

Candidate Starts for DrRobert_25:

(Start: 197 @20576 has 73 MA's), (221, 20633), (282, 20738), (284, 20741), (318, 20825), (340, 20858), (357, 20909), (359, 20915), (381, 20996), (382, 20999), (384, 21005), (390, 21041), (396, 21059), (399, 21062), (406, 21095), (411, 21116), (478, 21248), (487, 21275), (517, 21314), (523, 21335), (525, 21341), (541, 21374), (551, 21389), (554, 21398), (575, 21443), (595, 21479), (612, 21521), (633, 21584), (639, 21602), (672, 21704), (673, 21707), (680, 21725), (681, 21728), (687, 21752), (691, 21761), (712, 21848), (740, 21938), (745, 21962),

Gene: DreamTeam_25 Start: 20615, Stop: 22009, Start Num: 197

Candidate Starts for DreamTeam_25:

(Start: 197 @20615 has 73 MA's), (221, 20672), (282, 20777), (284, 20780), (318, 20864), (340, 20897), (358, 20951), (359, 20954), (384, 21044), (390, 21080), (399, 21101), (406, 21134), (411, 21155), (478, 21287), (487, 21314), (517, 21353), (525, 21380), (541, 21413), (551, 21428), (554, 21437), (575, 21482), (595, 21518), (626, 21599), (633, 21623), (639, 21641), (645, 21653), (666, 21713), (670, 21737), (672, 21743), (673, 21746), (680, 21764), (681, 21767), (687, 21791), (691, 21800), (712, 21887), (727, 21938), (740, 21977),

Gene: DumpTruck_58 Start: 39261, Stop: 41165, Start Num: 51

Candidate Starts for DumpTruck_58:

(17, 39126), (20, 39147), (25, 39168), (33, 39198), (Start: 41 @39243 has 13 MA's), (Start: 42 @39246 has 55 MA's), (Start: 51 @39261 has 2 MA's), (60, 39309), (70, 39342), (72, 39345), (93, 39450), (115, 39528), (Start: 118 @39537 has 3 MA's), (149, 39609), (156, 39624), (160, 39633), (194, 39726), (Start: 199 @39732 has 2 MA's), (221, 39792), (323, 40005), (352, 40038), (378, 40131), (380, 40146), (386, 40173), (390, 40194), (434, 40308), (456, 40350), (461, 40359), (477, 40398), (481, 40410), (503, 40455), (513, 40461), (527, 40506), (531, 40521), (589, 40614), (622, 40707), (674, 40860), (686, 40902), (693, 40920), (694, 40923), (728, 41061), (740, 41097), (761, 41151),

Gene: DustyDino_88 Start: 50790, Stop: 49270, Start Num: 201

Candidate Starts for DustyDino_88:

(Start: 185 @50823 has 3 MA's), (Start: 201 @50790 has 46 MA's), (219, 50739), (265, 50631), (300, 50565), (322, 50499), (367, 50376), (376, 50361), (388, 50304), (400, 50271), (401, 50268), (418, 50205), (439, 50154), (444, 50145), (450, 50136), (473, 50082), (490, 50043), (493, 50028), (508, 49959), (515, 49929), (535, 49866), (566, 49794), (640, 49608), (681, 49500), (688, 49470), (703, 49425), (712, 49374), (731, 49311),

Gene: Eggsie_57 Start: 51628, Stop: 50060, Start Num: 153

Candidate Starts for Eggsie_57:

(90, 51847), (116, 51745), (129, 51718), (135, 51691), (139, 51670), (143, 51661), (Start: 153 @51628 has 3 MA's), (158, 51619), (Start: 168 @51592 has 28 MA's), (Start: 215 @51469 has 28 MA's), (230, 51424), (245, 51382), (273, 51334), (275, 51331), (278, 51325), (280, 51322), (289, 51304), (297, 51283), (312, 51256), (355, 51133), (358, 51115), (384, 51028), (386, 51013), (410, 50920), (447, 50842), (460, 50818), (475, 50782), (476, 50779), (484, 50752), (515, 50710), (532, 50665), (547, 50647), (586, 50581), (608, 50530), (611, 50515), (616, 50494), (655, 50437), (666, 50410), (681, 50353), (682, 50347), (684, 50335), (703, 50284), (707, 50260), (715, 50221), (718, 50209), (719, 50206), (746, 50113), (754, 50098), (763, 50077),

Gene: EhyElimayoE_125 Start: 82183, Stop: 80540, Start Num: 151

Candidate Starts for EhyElimayoE_125:

(Start: 151 @82183 has 8 MA's), (163, 82159), (207, 82051), (241, 81946), (263, 81907), (291, 81856), (329, 81763), (358, 81703), (363, 81679), (364, 81676), (374, 81649), (398, 81556), (459, 81403), (469, 81379), (470, 81376), (483, 81343), (488, 81331), (507, 81259), (527, 81181), (546, 81136), (612, 80989), (622, 80950), (626, 80944), (635, 80914), (651, 80884), (655, 80872), (673, 80806), (702, 80716), (703, 80713), (725, 80617), (727, 80611), (730, 80602), (736, 80584),

Gene: Ekhein_59 Start: 51454, Stop: 49922, Start Num: 168

Candidate Starts for Ekhein_59:

(90, 51709), (102, 51658), (116, 51607), (135, 51553), (143, 51523), (Start: 153 @51490 has 3 MA's), (158, 51481), (Start: 168 @51454 has 28 MA's), (230, 51286), (245, 51244), (273, 51196), (280, 51184), (287, 51172), (289, 51166), (297, 51145), (312, 51118), (358, 50977), (384, 50890), (386, 50875), (389, 50863), (399, 50833), (410, 50782), (416, 50755), (447, 50704), (467, 50662), (475, 50644), (476, 50641), (484, 50614), (515, 50572), (532, 50527), (608, 50392), (611, 50377), (616, 50356), (655, 50299), (664, 50275), (666, 50272), (681, 50215), (682, 50209), (683, 50203), (684, 50197), (703, 50146), (707, 50122), (715, 50083), (718, 50071), (719, 50068), (746, 49975), (754, 49960), (763, 49939),

Gene: Emianna_72 Start: 56707, Stop: 54641, Start Num: 28

Candidate Starts for Emianna_72:

(2, 57205), (5, 57004), (8, 56911), (9, 56899), (11, 56881), (Start: 28 @56707 has 34 MA's), (Start: 61 @56569 has 2 MA's), (65, 56545), (Start: 118 @56341 has 3 MA's), (134, 56296), (184, 56188), (227, 56074), (228, 56071), (271, 55981), (273, 55978), (309, 55918), (366, 55780), (374, 55762), (380, 55738), (415, 55615), (463, 55510), (517, 55384), (533, 55330), (591, 55204), (594, 55195), (604, 55171), (622, 55099), (626, 55093), (635, 55063), (657, 55006), (674, 54946), (694, 54883), (712, 54802),

Gene: Ennea_79 Start: 57918, Stop: 55861, Start Num: 28

Candidate Starts for Ennea_79:

(6, 58206), (10, 58098), (Start: 28 @57918 has 34 MA's), (128, 57543), (Start: 185 @57402 has 3 MA's), (208, 57351), (227, 57291), (228, 57288), (259, 57216), (271, 57198), (309, 57135), (311, 57129), (321, 57102), (358, 57036), (366, 56997), (374, 56979), (380, 56955), (415, 56832), (430, 56799), (463, 56736), (517, 56613), (540, 56544), (551, 56526), (594, 56421), (599, 56412), (617, 56352), (622, 56319), (626, 56313), (635, 56283), (657, 56226), (674, 56166), (683, 56136), (694, 56103), (738, 55938),

Gene: Erenyeager_84 Start: 49578, Stop: 48058, Start Num: 201

Candidate Starts for Erenyeager_84:

(Start: 185 @49611 has 3 MA's), (Start: 201 @49578 has 46 MA's), (219, 49527), (257, 49428), (265, 49419), (300, 49353), (322, 49287), (367, 49164), (376, 49149), (388, 49092), (400, 49059), (401, 49056), (418, 48993), (439, 48942), (444, 48933), (450, 48924), (464, 48894), (473, 48870), (490, 48831), (493, 48816), (506, 48765), (508, 48747), (515, 48717), (535, 48654), (566, 48582), (681, 48288), (688, 48258), (693, 48246), (703, 48213), (731, 48099),

Gene: Erk16_52 Start: 39875, Stop: 41818, Start Num: 42

Candidate Starts for Erk16_52:

(32, 39812), (Start: 42 @39875 has 55 MA's), (53, 39902), (71, 39974), (82, 40028), (95, 40088), (100, 40115), (117, 40166), (131, 40208), (149, 40244), (184, 40331), (219, 40424), (223, 40439), (231, 40460), (292, 40562), (307, 40595), (316, 40619), (354, 40679), (378, 40766), (394, 40841), (434, 40931), (463, 40982), (464, 40985), (503, 41075), (517, 41093), (527, 41126), (556, 41192), (561, 41210), (594, 41273), (622, 41357), (665, 41474), (674, 41522), (694, 41585), (712, 41669),

Gene: Erutan_60 Start: 40423, Stop: 42336, Start Num: 42

Candidate Starts for Erutan_60:

(16, 40297), (18, 40306), (19, 40318), (27, 40351), (Start: 41 @40420 has 13 MA's), (Start: 42 @40423 has 55 MA's), (Start: 51 @40435 has 2 MA's), (60, 40483), (70, 40516), (107, 40675), (115, 40702), (Start: 118 @40711 has 3 MA's), (149, 40783), (184, 40870), (Start: 197 @40903 has 73 MA's), (221, 40966), (263, 41056), (279, 41083), (352, 41212), (357, 41236), (366, 41278), (382, 41326), (386, 41347), (390, 41368), (411, 41425), (434, 41479), (456, 41521), (481, 41581), (527, 41677), (528, 41680), (631, 41908), (665, 41998), (674, 42034), (676, 42040), (693, 42094), (704, 42133), (728, 42235), (733, 42250), (740, 42271),

Gene: EstebanJulior_26 Start: 21743, Stop: 23140, Start Num: 197

Candidate Starts for EstebanJulior_26:

(Start: 197 @21743 has 73 MA's), (221, 21803), (282, 21908), (284, 21911), (318, 21995), (340, 22028), (357, 22079), (359, 22085), (381, 22166), (384, 22175), (390, 22211), (396, 22229), (399, 22232), (406, 22265), (411, 22286), (478, 22418), (514, 22475), (517, 22484), (523, 22505), (525, 22511), (541, 22544), (551, 22559), (577, 22619), (595, 22649), (626, 22730), (639, 22772), (651, 22805), (670, 22868), (673, 22877), (677, 22889), (680, 22895), (683, 22910), (687, 22922), (691, 22931), (712, 23018), (729, 23075), (740, 23108),

Gene: Eunoia_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for Eunoia_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (612, 22690), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: Exiguo_58 Start: 51466, Stop: 49934, Start Num: 168

Candidate Starts for Exiguo_58:

(90, 51721), (102, 51670), (116, 51619), (135, 51565), (143, 51535), (Start: 153 @51502 has 3 MA's), (158, 51493), (Start: 168 @51466 has 28 MA's), (230, 51298), (245, 51256), (273, 51208), (280, 51196), (287, 51184), (289, 51178), (297, 51157), (312, 51130), (358, 50989), (384, 50902), (386, 50887), (389, 50875), (399, 50845), (410, 50794), (416, 50767), (447, 50716), (467, 50674), (475, 50656), (476, 50653), (484, 50626), (515, 50584), (532, 50539), (608, 50404), (611, 50389), (616, 50368), (655, 50311), (664, 50287), (666, 50284), (681, 50227), (682, 50221), (683, 50215), (684, 50209), (703, 50158), (707, 50134), (715, 50095), (718, 50083), (719, 50080), (746, 49987), (754, 49972), (763, 49951),

Gene: FelixAlejandro_64 Start: 54160, Stop: 52628, Start Num: 168

Candidate Starts for FelixAlejandro_64:

(90, 54415), (102, 54364), (135, 54259), (143, 54229), (Start: 153 @54196 has 3 MA's), (158, 54187), (Start: 168 @54160 has 28 MA's), (218, 54028), (230, 53992), (245, 53950), (254, 53932), (273, 53902), (280, 53890), (287, 53878), (289, 53872), (297, 53851), (358, 53683), (384, 53596), (386, 53581), (389, 53569), (399, 53539), (410, 53488), (447, 53410), (460, 53386), (467, 53368), (475, 53350), (476, 53347), (479, 53338), (484, 53320), (532, 53233), (608, 53098), (611, 53083), (616, 53062), (664, 52981), (666, 52978), (681, 52921), (682, 52915), (684, 52903), (703, 52852), (707, 52828), (715, 52789), (718, 52777), (719, 52774), (746, 52681), (754, 52666), (763, 52645),

Gene: FireCastle_33 Start: 23203, Stop: 24633, Start Num: 196

Candidate Starts for FireCastle_33:

(169, 23134), (Start: 196 @23203 has 1 MA's), (198, 23206), (349, 23524), (358, 23563), (362, 23584), (386, 23671), (390, 23692), (525, 24007), (531, 24028), (551, 24055), (562, 24082), (563, 24085), (575, 24112), (577, 24118), (599, 24154), (615, 24202), (627, 24232), (655, 24316), (666, 24337), (681, 24391), (684, 24409), (691, 24424), (696, 24436), (706, 24475), (712, 24511), (715, 24517), (718, 24529), (737, 24592), (746, 24628),

Gene: Flakey_58 Start: 52330, Stop: 50798, Start Num: 168

Candidate Starts for Flakey_58:

(90, 52585), (102, 52534), (116, 52483), (135, 52429), (143, 52399), (Start: 153 @52366 has 3 MA's), (158, 52357), (Start: 168 @52330 has 28 MA's), (230, 52162), (245, 52120), (273, 52072), (280, 52060), (287, 52048), (289, 52042), (297, 52021), (312, 51994), (358, 51853), (384, 51766), (386, 51751), (389, 51739), (399, 51709), (410, 51658), (416, 51631), (447, 51580), (467, 51538), (475, 51520), (476, 51517), (484, 51490), (515, 51448), (532, 51403), (608, 51268), (611, 51253), (616, 51232), (655, 51175), (664, 51151), (666, 51148), (681, 51091), (682, 51085), (683, 51079), (684, 51073), (703, 51022), (707, 50998), (715, 50959), (718, 50947), (719, 50944), (746, 50851), (754, 50836), (763, 50815),

Gene: Flapper_75 Start: 57019, Stop: 54962, Start Num: 28

Candidate Starts for Flapper_75:

(6, 57304), (11, 57187), (13, 57169), (Start: 28 @57019 has 34 MA's), (83, 56794), (184, 56506), (208, 56452), (219, 56416), (227, 56392), (228, 56389), (264, 56311), (271, 56299), (282, 56281), (309, 56236), (311, 56230), (327, 56191), (358, 56137), (366, 56098), (374, 56080), (415, 55933), (430, 55900), (446, 55870), (450, 55864), (463, 55837), (517, 55714), (540, 55645), (551, 55627), (594, 55522), (599, 55513), (605, 55495), (617, 55453), (626, 55414), (635, 55384), (642, 55366), (657, 55327), (674, 55267), (683, 55237), (694, 55204), (705, 55162), (747, 55006),

Gene: Float294_74 Start: 57824, Stop: 55767, Start Num: 28

Candidate Starts for Float294_74:

(10, 58004), (Start: 28 @57824 has 34 MA's), (128, 57449), (172, 57341), (Start: 185 @57308 has 3 MA's), (208, 57257), (227, 57197), (228, 57194), (259, 57122), (271, 57104), (309, 57041), (311, 57035), (321, 57008), (358, 56942), (366, 56903), (374, 56885), (380, 56861), (415, 56738), (430, 56705), (463, 56642), (517, 56519), (540, 56450), (551, 56432), (594, 56327), (617, 56258), (626, 56219), (633, 56195), (635, 56189), (657, 56132), (674, 56072), (683, 56042), (694, 56009), (738, 55844),

Gene: Fluke_29 Start: 22148, Stop: 23548, Start Num: 197

Candidate Starts for Fluke_29:

(Start: 197 @22148 has 73 MA's), (221, 22211), (282, 22316), (284, 22319), (318, 22403), (340, 22436), (357, 22487), (359, 22493), (381, 22574), (382, 22577), (384, 22583), (390, 22619), (396, 22637), (399, 22640), (406, 22673), (411, 22694), (415, 22712), (435, 22745), (478, 22826), (487, 22853), (514, 22883), (517, 22892), (525, 22919), (541, 22952), (551, 22967), (575, 23021), (590, 23042), (594, 23054), (600, 23066), (674, 23288), (677, 23297), (680, 23303), (691, 23339), (707, 23399), (712, 23426), (740, 23516),

Gene: Fork_80 Start: 49528, Stop: 48008, Start Num: 201

Candidate Starts for Fork_80:

(Start: 185 @49561 has 3 MA's), (Start: 201 @49528 has 46 MA's), (219, 49477), (265, 49369), (300, 49303), (322, 49237), (367, 49114), (376, 49099), (388, 49042), (400, 49009), (401, 49006), (418, 48943), (439, 48892), (444, 48883), (450, 48874), (452, 48868), (464, 48844), (473, 48820), (490, 48781), (493, 48766), (506, 48715), (508, 48697), (515, 48667), (549, 48577), (566, 48532), (640, 48346), (681, 48238), (688, 48208), (703, 48163), (712, 48112), (725, 48067), (731, 48049),

Gene: Fowlmouth_74 Start: 44820, Stop: 46667, Start Num: 67

Candidate Starts for Fowlmouth_74:

(Start: 67 @44820 has 4 MA's), (76, 44838), (Start: 81 @44874 has 3 MA's), (92, 44925), (128, 45033), (136, 45066), (165, 45126), (180, 45168), (194, 45207), (231, 45303), (235, 45315), (245, 45342), (252, 45357), (258, 45366), (283, 45405), (290, 45420), (323, 45507), (330, 45519), (369, 45618), (374, 45624), (380, 45648), (394, 45708), (422, 45786), (442, 45813), (456, 45843), (463, 45855), (472, 45879), (515, 45951), (517, 45957), (527, 45990), (531, 46005), (542, 46029), (544, 46032), (556, 46056), (674, 46380), (677, 46389), (684, 46416), (693, 46440), (705, 46485), (712, 46527), (726, 46575), (732, 46593), (751, 46650),

Gene: Foxboro_72 Start: 56919, Stop: 54853, Start Num: 28

Candidate Starts for Foxboro_72:

(8, 57123), (9, 57111), (11, 57093), (Start: 28 @56919 has 34 MA's), (Start: 61 @56781 has 2 MA's), (65, 56757), (Start: 118 @56553 has 3 MA's), (134, 56508), (184, 56400), (227, 56286), (228, 56283), (271, 56193), (273, 56190), (309, 56130), (366, 55992), (374, 55974), (380, 55950), (415, 55827), (463, 55722), (517, 55596), (533, 55542), (591, 55416), (594, 55407), (604, 55383), (622, 55311), (626, 55305), (635, 55275), (657, 55218), (674, 55158), (694, 55095), (712, 55014),

Gene: Frankenweenie_134 Start: 87252, Stop: 85606, Start Num: 151

Candidate Starts for Frankenweenie_134:

(112, 87378), (Start: 151 @87252 has 8 MA's), (207, 87120), (291, 86925), (333, 86823), (363, 86748), (364, 86745), (415, 86571), (429, 86529), (459, 86472), (478, 86427), (526, 86253), (534, 86229), (550, 86199), (555, 86187), (560, 86172), (588, 86124), (626, 86010), (635, 85980), (644, 85959), (651, 85950), (655, 85938), (671, 85878), (702, 85782), (703, 85779), (727, 85677), (736, 85650),

Gene: Frizzle_34 Start: 32091, Stop: 30688, Start Num: 206

Candidate Starts for Frizzle_34:

(120, 32331), (122, 32328), (154, 32217), (Start: 206 @32091 has 3 MA's), (230, 32016), (239, 31992), (240, 31989), (273, 31959), (275, 31956), (327, 31845), (358, 31770), (359, 31767), (362, 31749), (370, 31716), (371, 31713), (381, 31686), (386, 31662), (392, 31635), (436, 31509), (437, 31506), (502, 31383), (504, 31380), (520, 31350), (521, 31347), (561, 31263), (588, 31218), (639, 31071), (650, 31041), (651, 31038), (715, 30819), (722, 30777),

Gene: Fulcrum_60 Start: 40439, Stop: 42352, Start Num: 42

Candidate Starts for Fulcrum_60:

(16, 40313), (18, 40322), (19, 40334), (27, 40367), (Start: 41 @40436 has 13 MA's), (Start: 42 @40439 has 55 MA's), (Start: 51 @40451 has 2 MA's), (60, 40499), (70, 40532), (85, 40601), (107, 40691), (115, 40718), (Start: 118 @40727 has 3 MA's), (149, 40799), (Start: 197 @40919 has 73 MA's), (221, 40982), (263, 41072), (279, 41099), (352, 41228), (357, 41252), (366, 41294), (378, 41321), (382, 41342), (386, 41363), (390, 41384), (411, 41441), (415, 41459), (434, 41495), (456, 41537), (481, 41597), (527, 41693), (528, 41696), (631, 41924), (665, 42014), (674, 42050), (676, 42056), (693, 42110), (704, 42149), (728, 42251), (733, 42266), (740, 42287),

Gene: Fury_82 Start: 56141, Stop: 54093, Start Num: 28

Candidate Starts for Fury_82:

(Start: 28 @56141 has 34 MA's), (63, 55988), (72, 55973), (88, 55892), (128, 55769), (134, 55739), (184, 55631), (Start: 197 @55598 has 73 MA's), (217, 55547), (228, 55514), (271, 55424), (290, 55391), (309, 55361), (353, 55286), (374, 55205), (386, 55154), (415, 55058), (430, 55025), (450, 54989), (463, 54962), (515, 54845), (517, 54839), (540, 54770), (551, 54752), (556, 54740), (617, 54578), (626, 54545), (635, 54515), (640, 54500), (657, 54458), (694, 54335), (712, 54254), (720, 54230), (738, 54170),

Gene: GMA3_58 Start: 50868, Stop: 49351, Start Num: 185

Candidate Starts for GMA3_58:

(99, 51117), (103, 51111), (127, 51039), (Start: 185 @50868 has 3 MA's), (221, 50772), (230, 50745), (237, 50727), (240, 50718), (257, 50691), (273, 50673), (289, 50643), (302, 50613), (311, 50592), (318, 50571), (346, 50493), (355, 50463), (357, 50448), (361, 50427), (387, 50334), (396, 50298), (410, 50244), (447, 50166), (476, 50103), (484, 50076), (496, 50061), (500, 50052), (543, 49989), (562, 49950), (595, 49890), (604, 49869), (605, 49866), (608, 49863), (620, 49815), (672, 49653), (684, 49611), (702, 49563), (715, 49497), (718, 49485),

Gene: GMA7_51 Start: 46927, Stop: 45296, Start Num: 118

Candidate Starts for GMA7_51:

(Start: 118 @46927 has 3 MA's), (125, 46915), (139, 46864), (142, 46858), (164, 46801), (230, 46660), (245, 46618), (250, 46606), (273, 46570), (275, 46567), (289, 46540), (308, 46504), (312, 46492), (318, 46477), (355, 46369), (384, 46264), (386, 46249), (417, 46126), (447, 46078), (460, 46054), (467, 46036), (484, 45988), (518, 45937), (532, 45901), (547, 45883), (608, 45766), (628, 45715), (655, 45673), (672, 45613), (684, 45571), (703, 45520), (707, 45496), (754, 45334), (763, 45313),

Gene: GOATification_60 Start: 40439, Stop: 42352, Start Num: 42

Candidate Starts for GOATification_60:

(16, 40313), (18, 40322), (19, 40334), (27, 40367), (Start: 41 @40436 has 13 MA's), (Start: 42 @40439 has 55 MA's), (Start: 51 @40451 has 2 MA's), (60, 40499), (70, 40532), (85, 40601), (107, 40691), (115, 40718), (Start: 118 @40727 has 3 MA's), (149, 40799), (Start: 197 @40919 has 73 MA's), (221, 40982), (263, 41072), (279, 41099), (352, 41228), (357, 41252), (366, 41294), (378, 41321), (382, 41342), (386, 41363), (390, 41384), (411, 41441), (415, 41459), (434, 41495), (456, 41537), (481, 41597), (527, 41693), (528, 41696), (631, 41924), (665, 42014), (674, 42050), (676, 42056), (693, 42110), (704, 42149), (728, 42251), (733, 42266), (740, 42287),

Gene: GRU1_61 Start: 48864, Stop: 46807, Start Num: 28

Candidate Starts for GRU1_61:

(11, 49032), (Start: 28 @48864 has 34 MA's), (165, 48402), (184, 48351), (227, 48237), (228, 48234), (264, 48156), (271, 48144), (282, 48126), (309, 48081), (311, 48075), (327, 48036), (358, 47982), (366, 47943), (374, 47925), (415, 47778), (430, 47745), (450, 47709), (463, 47682), (517, 47559), (540, 47490), (551, 47472), (558, 47451), (594, 47367), (617, 47298), (626, 47259), (635, 47229), (657, 47172), (674, 47112), (683, 47082), (694, 47049), (705, 47007), (747, 46851),

Gene: GTE7_50 Start: 46958, Stop: 45327, Start Num: 118

Candidate Starts for GTE7_50:

(Start: 118 @46958 has 3 MA's), (125, 46946), (139, 46895), (142, 46889), (164, 46832), (230, 46691), (245, 46649), (250, 46637), (273, 46601), (275, 46598), (289, 46571), (312, 46523), (318, 46508), (355, 46400), (384, 46295), (386, 46280), (417, 46157), (447, 46109), (460, 46085), (467, 46067), (484, 46019), (518, 45968), (532, 45932), (547, 45914), (608, 45797), (628, 45746), (655, 45704), (672, 45644), (684, 45602), (703, 45551), (707, 45527), (754, 45365), (763, 45344),

Gene: GTE8_60 Start: 49561, Stop: 47633, Start Num: 61

Candidate Starts for GTE8_60:

(8, 49903), (11, 49873), (15, 49798), (Start: 28 @49699 has 34 MA's), (Start: 61 @49561 has 2 MA's), (65, 49537), (134, 49288), (184, 49180), (227, 49066), (228, 49063), (271, 48973), (273, 48970), (309, 48910), (374, 48754), (378, 48745), (380, 48730), (415, 48607), (463, 48502), (472, 48478), (517, 48376), (533, 48322), (544, 48301), (594, 48187), (622, 48091), (626, 48085), (635, 48055), (652, 48016), (657, 47998), (674, 47938), (694, 47875), (712, 47794), (738, 47710),

Gene: GalacticEye_57 Start: 52570, Stop: 51158, Start Num: 215

Candidate Starts for GalacticEye_57:

(90, 52918), (129, 52789), (150, 52702), (Start: 153 @52699 has 3 MA's), (Start: 215 @52570 has 28 MA's), (230, 52525), (273, 52435), (275, 52432), (278, 52426), (289, 52405), (318, 52342), (355,

52234), (358, 52216), (384, 52129), (386, 52114), (399, 52072), (417, 51991), (447, 51943), (467, 51901), (475, 51883), (476, 51880), (484, 51853), (518, 51802), (532, 51766), (562, 51715), (608, 51631), (612, 51610), (681, 51454), (682, 51448), (684, 51436), (718, 51310), (754, 51196),

Gene: Genamy16_63 Start: 39814, Stop: 41730, Start Num: 41

Candidate Starts for Genamy16_63:

(Start: 41 @39814 has 13 MA's), (Start: 42 @39817 has 55 MA's), (Start: 51 @39829 has 2 MA's), (60, 39877), (70, 39910), (100, 40051), (107, 40069), (115, 40096), (Start: 118 @40105 has 3 MA's), (149, 40177), (Start: 197 @40297 has 73 MA's), (221, 40360), (263, 40450), (279, 40477), (352, 40606), (357, 40630), (366, 40672), (369, 40684), (378, 40699), (382, 40720), (386, 40741), (390, 40762), (411, 40819), (415, 40837), (434, 40873), (456, 40915), (481, 40975), (527, 41071), (528, 41074), (613, 41251), (631, 41302), (665, 41392), (674, 41428), (676, 41434), (693, 41488), (704, 41527), (728, 41629), (733, 41644), (740, 41665),

Gene: Ghobes_35 Start: 32092, Stop: 30689, Start Num: 206

Candidate Starts for Ghobes_35:

(120, 32332), (122, 32329), (154, 32218), (Start: 206 @32092 has 3 MA's), (230, 32017), (239, 31993), (240, 31990), (273, 31960), (275, 31957), (327, 31846), (358, 31771), (359, 31768), (370, 31717), (371, 31714), (381, 31687), (386, 31663), (392, 31636), (436, 31510), (437, 31507), (502, 31384), (504, 31381), (520, 31351), (521, 31348), (561, 31264), (588, 31219), (624, 31117), (639, 31072), (650, 31042), (651, 31039), (681, 30946), (683, 30934), (715, 30820), (722, 30778),

Gene: Gibbin_62 Start: 41245, Stop: 43161, Start Num: 41

Candidate Starts for Gibbin_62:

(16, 41122), (18, 41131), (19, 41143), (27, 41176), (36, 41233), (Start: 41 @41245 has 13 MA's), (Start: 42 @41248 has 55 MA's), (Start: 51 @41260 has 2 MA's), (60, 41308), (70, 41341), (85, 41410), (107, 41500), (115, 41527), (Start: 118 @41536 has 3 MA's), (149, 41608), (184, 41695), (Start: 197 @41728 has 73 MA's), (221, 41791), (263, 41881), (352, 42037), (357, 42061), (366, 42103), (382, 42151), (386, 42172), (390, 42193), (411, 42250), (415, 42268), (434, 42304), (456, 42346), (481, 42406), (527, 42502), (528, 42505), (631, 42733), (665, 42823), (674, 42859), (676, 42865), (693, 42919), (704, 42958), (728, 43060), (733, 43075), (740, 43096),

Gene: Gibbles_56 Start: 50443, Stop: 48953, Start Num: 182

Candidate Starts for Gibbles_56:

(Start: 182 @50443 has 5 MA's), (218, 50350), (221, 50341), (224, 50329), (230, 50314), (237, 50296), (275, 50239), (306, 50167), (307, 50164), (341, 50071), (349, 50038), (356, 50005), (357, 50002), (361, 49981), (384, 49912), (390, 49876), (413, 49789), (437, 49738), (447, 49726), (449, 49723), (465, 49693), (496, 49621), (500, 49612), (577, 49489), (586, 49483), (666, 49309), (676, 49264), (684, 49234), (759, 48982),

Gene: Gisselle_25 Start: 20615, Stop: 22009, Start Num: 197

Candidate Starts for Gisselle_25:

(Start: 197 @20615 has 73 MA's), (221, 20672), (282, 20777), (284, 20780), (318, 20864), (340, 20897), (358, 20951), (359, 20954), (384, 21044), (390, 21080), (399, 21101), (406, 21134), (411, 21155), (478, 21287), (487, 21314), (517, 21353), (525, 21380), (541, 21413), (551, 21428), (554, 21437), (575, 21482), (595, 21518), (626, 21599), (633, 21623), (639, 21641), (645, 21653), (666, 21713), (670, 21737), (672, 21743), (673, 21746), (680, 21764), (681, 21767), (687, 21791), (691, 21800), (712, 21887), (727, 21938), (740, 21977),

Gene: Giuseppe_53 Start: 39718, Stop: 41661, Start Num: 42

Candidate Starts for Giuseppe_53:

(Start: 42 @39718 has 55 MA's), (53, 39745), (71, 39817), (82, 39871), (95, 39931), (98, 39949), (100, 39958), (117, 40009), (131, 40051), (149, 40087), (184, 40174), (219, 40267), (223, 40282), (231,

40303), (292, 40405), (307, 40438), (316, 40462), (354, 40522), (378, 40609), (394, 40684), (434, 40774), (463, 40825), (464, 40828), (503, 40918), (517, 40936), (527, 40969), (551, 41023), (556, 41035), (561, 41053), (594, 41116), (622, 41200), (665, 41317), (674, 41365), (694, 41428), (712, 41512),

Gene: Glenn_29 Start: 22157, Stop: 23557, Start Num: 197

Candidate Starts for Glenn_29:

(Start: 197 @22157 has 73 MA's), (221, 22220), (282, 22325), (284, 22328), (318, 22412), (340, 22445), (357, 22496), (359, 22502), (381, 22583), (382, 22586), (384, 22592), (390, 22628), (396, 22646), (399, 22649), (406, 22682), (411, 22703), (415, 22721), (435, 22754), (478, 22835), (487, 22862), (514, 22892), (517, 22901), (525, 22928), (541, 22961), (551, 22976), (575, 23030), (590, 23051), (594, 23063), (600, 23075), (674, 23297), (677, 23306), (680, 23312), (691, 23348), (707, 23408), (712, 23435), (740, 23525),

Gene: Gmala1_55 Start: 48612, Stop: 47071, Start Num: 179

Candidate Starts for Gmala1_55:

(Start: 179 @48612 has 2 MA's), (221, 48507), (230, 48480), (257, 48426), (273, 48408), (302, 48348), (305, 48339), (330, 48288), (337, 48264), (342, 48252), (344, 48246), (355, 48201), (357, 48186), (361, 48165), (362, 48162), (389, 48063), (396, 48036), (417, 47952), (427, 47928), (447, 47904), (465, 47871), (500, 47790), (531, 47742), (543, 47727), (593, 47634), (604, 47607), (605, 47604), (629, 47520), (643, 47484), (649, 47469), (664, 47424), (683, 47352), (684, 47346), (722, 47205), (759, 47106), (760, 47103),

Gene: Goodman_34 Start: 23371, Stop: 24798, Start Num: 201

Candidate Starts for Goodman_34:

(Start: 201 @23371 has 46 MA's), (309, 23587), (349, 23689), (358, 23728), (375, 23791), (386, 23836), (390, 23857), (416, 23956), (502, 24124), (525, 24172), (531, 24193), (551, 24220), (562, 24247), (575, 24277), (577, 24283), (599, 24319), (627, 24397), (655, 24481), (665, 24499), (666, 24502), (691, 24589), (696, 24601), (706, 24640), (712, 24676), (715, 24682), (729, 24733), (737, 24757),

Gene: GordDuk1_59 Start: 49176, Stop: 47635, Start Num: 179

Candidate Starts for GordDuk1_59:

(Start: 179 @49176 has 2 MA's), (221, 49071), (230, 49044), (257, 48990), (273, 48972), (302, 48912), (305, 48903), (330, 48852), (337, 48828), (342, 48816), (344, 48810), (355, 48765), (357, 48750), (361, 48729), (362, 48726), (389, 48627), (396, 48600), (417, 48516), (427, 48492), (447, 48468), (465, 48435), (467, 48426), (484, 48378), (500, 48354), (531, 48306), (593, 48198), (604, 48171), (629, 48084), (643, 48048), (649, 48033), (664, 47988), (683, 47916), (684, 47910), (759, 47670), (760, 47667),

Gene: GordTnk2_60 Start: 49330, Stop: 47789, Start Num: 179

Candidate Starts for GordTnk2_60:

(Start: 179 @49330 has 2 MA's), (221, 49225), (230, 49198), (257, 49144), (273, 49126), (302, 49066), (305, 49057), (330, 49006), (337, 48982), (342, 48970), (344, 48964), (355, 48919), (357, 48904), (361, 48883), (362, 48880), (389, 48781), (396, 48754), (417, 48670), (427, 48646), (447, 48622), (465, 48589), (500, 48508), (531, 48460), (593, 48352), (604, 48325), (605, 48322), (629, 48238), (643, 48202), (649, 48187), (664, 48142), (683, 48070), (684, 48064), (722, 47923), (759, 47824), (760, 47821),

Gene: Gorgeous_70 Start: 47020, Stop: 45626, Start Num: 202

Candidate Starts for Gorgeous_70:

(Start: 202 @47020 has 13 MA's), (226, 46951), (257, 46876), (271, 46858), (288, 46828), (318, 46747), (379, 46597), (417, 46453), (431, 46414), (488, 46300), (503, 46249), (507, 46228), (512,

46198), (517, 46183), (520, 46171), (558, 46090), (587, 46042), (598, 46015), (606, 45994), (630, 45910), (660, 45844), (716, 45655), (719, 45643),

Gene: Gorko_58 Start: 51458, Stop: 49926, Start Num: 168

Candidate Starts for Gorko_58:

(90, 51713), (102, 51662), (116, 51611), (135, 51557), (143, 51527), (Start: 153 @51494 has 3 MA's), (158, 51485), (Start: 168 @51458 has 28 MA's), (230, 51290), (245, 51248), (273, 51200), (280, 51188), (287, 51176), (289, 51170), (297, 51149), (312, 51122), (358, 50981), (384, 50894), (386, 50879), (389, 50867), (399, 50837), (410, 50786), (416, 50759), (447, 50708), (475, 50648), (476, 50645), (484, 50618), (515, 50576), (532, 50531), (608, 50396), (611, 50381), (616, 50360), (664, 50279), (666, 50276), (681, 50219), (682, 50213), (683, 50207), (684, 50201), (707, 50126), (715, 50087), (718, 50075), (719, 50072), (746, 49979), (754, 49964), (763, 49943),

Gene: GourdThymes_59 Start: 52332, Stop: 50800, Start Num: 168

Candidate Starts for GourdThymes_59:

(90, 52587), (102, 52536), (116, 52485), (135, 52431), (143, 52401), (Start: 153 @52368 has 3 MA's), (158, 52359), (Start: 168 @52332 has 28 MA's), (230, 52164), (245, 52122), (273, 52074), (280, 52062), (287, 52050), (289, 52044), (297, 52023), (312, 51996), (358, 51855), (384, 51768), (386, 51753), (389, 51741), (399, 51711), (410, 51660), (416, 51633), (447, 51582), (460, 51558), (467, 51540), (475, 51522), (476, 51519), (484, 51492), (515, 51450), (532, 51405), (608, 51270), (611, 51255), (616, 51234), (655, 51177), (664, 51153), (666, 51150), (681, 51093), (682, 51087), (683, 51081), (684, 51075), (703, 51024), (707, 51000), (715, 50961), (718, 50949), (719, 50946), (746, 50853), (754, 50838), (763, 50817),

Gene: Graynor_30 Start: 22151, Stop: 23545, Start Num: 197

Candidate Starts for Graynor_30:

(Start: 197 @22151 has 73 MA's), (221, 22208), (282, 22313), (318, 22400), (358, 22487), (359, 22490), (384, 22580), (390, 22616), (393, 22625), (396, 22634), (411, 22691), (415, 22709), (435, 22742), (478, 22823), (487, 22850), (525, 22916), (541, 22949), (551, 22964), (554, 22973), (600, 23063), (624, 23132), (633, 23159), (639, 23177), (645, 23189), (672, 23279), (674, 23285), (677, 23294), (680, 23300), (691, 23336), (712, 23423), (727, 23474), (729, 23480), (740, 23513), (745, 23537),

Gene: GreenHearts_29 Start: 22236, Stop: 23627, Start Num: 197

Candidate Starts for GreenHearts_29:

(Start: 197 @22236 has 73 MA's), (232, 22323), (282, 22395), (284, 22398), (312, 22464), (318, 22482), (323, 22488), (340, 22515), (359, 22572), (370, 22623), (384, 22662), (390, 22698), (396, 22716), (406, 22752), (411, 22773), (415, 22791), (435, 22824), (462, 22863), (478, 22905), (487, 22932), (511, 22956), (523, 22992), (525, 22998), (541, 23031), (551, 23046), (554, 23055), (575, 23100), (594, 23133), (595, 23136), (627, 23220), (633, 23241), (638, 23253), (639, 23259), (645, 23271), (672, 23361), (673, 23364), (674, 23367), (680, 23382), (681, 23385), (687, 23409), (691, 23418), (712, 23505), (727, 23556), (740, 23595), (745, 23619),

Gene: Greenhouse_29 Start: 22160, Stop: 23551, Start Num: 197

Candidate Starts for Greenhouse_29:

(159, 22058), (176, 22100), (Start: 185 @22127 has 3 MA's), (Start: 197 @22160 has 73 MA's), (232, 22247), (282, 22319), (284, 22322), (312, 22388), (318, 22406), (323, 22412), (340, 22439), (359, 22496), (370, 22547), (372, 22553), (375, 22556), (384, 22586), (390, 22622), (396, 22640), (406, 22676), (411, 22697), (415, 22715), (462, 22787), (478, 22829), (487, 22856), (511, 22880), (523, 22916), (525, 22922), (541, 22955), (551, 22970), (554, 22979), (594, 23057), (595, 23060), (627, 23144), (633, 23165), (638, 23177), (639, 23183), (645, 23195), (672, 23285), (680, 23306), (681, 23309), (687, 23333), (691, 23342), (712, 23429), (727, 23480), (740, 23519), (745, 23543),

Gene: GretellLyn_60 Start: 41292, Stop: 43208, Start Num: 41

Candidate Starts for GretellLyn_60:

(Start: 41 @41292 has 13 MA's), (Start: 42 @41295 has 55 MA's), (Start: 51 @41307 has 2 MA's), (60, 41355), (70, 41388), (85, 41457), (107, 41547), (115, 41574), (Start: 118 @41583 has 3 MA's), (149, 41655), (184, 41742), (Start: 197 @41775 has 73 MA's), (221, 41838), (263, 41928), (279, 41955), (352, 42084), (357, 42108), (366, 42150), (382, 42198), (386, 42219), (390, 42240), (411, 42297), (434, 42351), (456, 42393), (481, 42453), (527, 42549), (528, 42552), (613, 42729), (631, 42780), (665, 42870), (674, 42906), (676, 42912), (693, 42966), (704, 43005), (728, 43107), (733, 43122), (740, 43143),

Gene: GrootJr_74 Start: 56101, Stop: 54035, Start Num: 28

Candidate Starts for GrootJr_74:

(8, 56305), (9, 56293), (11, 56275), (Start: 28 @56101 has 34 MA's), (Start: 61 @55963 has 2 MA's), (65, 55939), (Start: 118 @55735 has 3 MA's), (134, 55690), (184, 55582), (227, 55468), (228, 55465), (271, 55375), (273, 55372), (309, 55312), (366, 55174), (374, 55156), (380, 55132), (415, 55009), (463, 54904), (517, 54778), (533, 54724), (591, 54598), (594, 54589), (604, 54565), (622, 54493), (626, 54487), (635, 54457), (657, 54400), (674, 54340), (694, 54277), (712, 54196),

Gene: Guillaume_57 Start: 52620, Stop: 51208, Start Num: 215

Candidate Starts for Guillaume_57:

(90, 52968), (129, 52839), (Start: 153 @52749 has 3 MA's), (Start: 215 @52620 has 28 MA's), (230, 52575), (273, 52485), (275, 52482), (278, 52476), (289, 52455), (318, 52392), (355, 52284), (358, 52266), (384, 52179), (386, 52164), (399, 52122), (417, 52041), (447, 51993), (467, 51951), (475, 51933), (476, 51930), (484, 51903), (518, 51852), (532, 51816), (562, 51765), (608, 51681), (612, 51660), (681, 51504), (682, 51498), (684, 51486), (718, 51360), (754, 51246),

Gene: Gumball_52 Start: 39923, Stop: 41866, Start Num: 42

Candidate Starts for Gumball_52:

(32, 39860), (Start: 42 @39923 has 55 MA's), (53, 39950), (71, 40022), (82, 40076), (95, 40136), (100, 40163), (117, 40214), (131, 40256), (149, 40292), (184, 40379), (219, 40472), (223, 40487), (231, 40508), (292, 40610), (307, 40643), (316, 40667), (354, 40727), (378, 40814), (394, 40889), (434, 40979), (463, 41030), (464, 41033), (503, 41123), (517, 41141), (527, 41174), (556, 41240), (561, 41258), (594, 41321), (622, 41405), (665, 41522), (674, 41570), (694, 41633), (712, 41717),

Gene: GuyFagieri_70 Start: 52937, Stop: 50901, Start Num: 29

Candidate Starts for GuyFagieri_70:

(3, 53405), (4, 53399), (Start: 29 @52937 has 6 MA's), (55, 52829), (134, 52544), (165, 52487), (184, 52436), (187, 52421), (223, 52331), (228, 52319), (236, 52292), (271, 52226), (312, 52154), (330, 52112), (354, 52085), (369, 52013), (386, 51956), (463, 51776), (472, 51752), (494, 51689), (517, 51653), (551, 51566), (605, 51434), (616, 51395), (617, 51392), (657, 51260), (674, 51200), (694, 51137), (705, 51095), (720, 51032),

Gene: Hail2Pitt_56 Start: 53096, Stop: 51684, Start Num: 215

Candidate Starts for Hail2Pitt_56:

(90, 53444), (129, 53315), (150, 53228), (Start: 153 @53225 has 3 MA's), (Start: 215 @53096 has 28 MA's), (230, 53051), (273, 52961), (275, 52958), (278, 52952), (289, 52931), (318, 52868), (355, 52760), (358, 52742), (384, 52655), (386, 52640), (399, 52598), (417, 52517), (447, 52469), (467, 52427), (475, 52409), (476, 52406), (484, 52379), (518, 52328), (532, 52292), (562, 52241), (608, 52157), (612, 52136), (681, 51980), (682, 51974), (684, 51962), (718, 51836), (754, 51722),

Gene: Harambe_57 Start: 52887, Stop: 51475, Start Num: 215

Candidate Starts for Harambe_57:

(90, 53235), (129, 53106), (150, 53019), (Start: 153 @53016 has 3 MA's), (Start: 215 @52887 has 28 MA's), (230, 52842), (273, 52752), (275, 52749), (278, 52743), (289, 52722), (318, 52659), (355, 52551), (358, 52533), (384, 52446), (386, 52431), (399, 52389), (417, 52308), (447, 52260), (467, 52218), (475, 52200), (476, 52197), (484, 52170), (518, 52119), (532, 52083), (562, 52032), (608, 51948), (612, 51927), (681, 51771), (682, 51765), (684, 51753), (718, 51627), (754, 51513),

Gene: Hawkeye_56 Start: 39560, Stop: 41506, Start Num: 39

Candidate Starts for Hawkeye_56:

(Start: 39 @39560 has 1 MA's), (62, 39638), (80, 39707), (82, 39716), (88, 39746), (95, 39776), (100, 39803), (105, 39815), (131, 39893), (136, 39905), (184, 40016), (195, 40049), (223, 40124), (260, 40202), (281, 40232), (298, 40268), (319, 40322), (354, 40373), (384, 40487), (414, 40595), (461, 40673), (463, 40676), (472, 40700), (477, 40712), (503, 40769), (513, 40775), (517, 40787), (523, 40808), (527, 40820), (540, 40856), (556, 40886), (561, 40904), (594, 40967), (622, 41051), (635, 41087), (654, 41132), (665, 41168), (674, 41216), (676, 41222), (694, 41279), (749, 41483), (753, 41489), (755, 41492),

Gene: HayZem_62 Start: 52710, Stop: 51079, Start Num: 118

Candidate Starts for HayZem_62:

(Start: 118 @52710 has 3 MA's), (125, 52698), (139, 52647), (142, 52641), (164, 52584), (230, 52443), (245, 52401), (250, 52389), (273, 52353), (275, 52350), (289, 52323), (308, 52287), (312, 52275), (318, 52260), (355, 52152), (384, 52047), (386, 52032), (417, 51909), (447, 51861), (460, 51837), (467, 51819), (484, 51771), (518, 51720), (532, 51684), (547, 51666), (608, 51549), (628, 51498), (655, 51456), (672, 51396), (684, 51354), (703, 51303), (707, 51279), (754, 51117), (763, 51096),

Gene: Hello_57 Start: 52849, Stop: 51437, Start Num: 215

Candidate Starts for Hello_57:

(90, 53197), (129, 53068), (150, 52981), (Start: 153 @52978 has 3 MA's), (Start: 215 @52849 has 28 MA's), (230, 52804), (273, 52714), (275, 52711), (278, 52705), (289, 52684), (318, 52621), (355, 52513), (358, 52495), (384, 52408), (386, 52393), (399, 52351), (417, 52270), (447, 52222), (467, 52180), (475, 52162), (476, 52159), (484, 52132), (518, 52081), (532, 52045), (562, 51994), (608, 51910), (612, 51889), (681, 51733), (682, 51727), (684, 51715), (718, 51589), (754, 51475),

Gene: Helpful_56 Start: 40102, Stop: 42045, Start Num: 42

Candidate Starts for Helpful_56:

(26, 40033), (Start: 42 @40102 has 55 MA's), (53, 40129), (71, 40201), (82, 40255), (95, 40315), (98, 40333), (100, 40342), (117, 40393), (131, 40435), (149, 40471), (184, 40558), (219, 40651), (223, 40666), (231, 40687), (292, 40789), (307, 40822), (316, 40846), (354, 40906), (378, 40993), (394, 41068), (434, 41158), (463, 41209), (464, 41212), (503, 41302), (517, 41320), (527, 41353), (551, 41407), (556, 41419), (561, 41437), (594, 41500), (622, 41584), (665, 41701), (674, 41749), (694, 41812), (712, 41896),

Gene: Henococcus_42 Start: 30892, Stop: 32286, Start Num: 204

Candidate Starts for Henococcus_42:

(Start: 204 @30892 has 13 MA's), (Start: 206 @30895 has 3 MA's), (230, 30970), (239, 30994), (273, 31024), (275, 31027), (282, 31039), (329, 31129), (342, 31153), (357, 31198), (359, 31204), (375, 31264), (381, 31285), (393, 31339), (419, 31438), (436, 31465), (441, 31474), (502, 31600), (525, 31648), (531, 31669), (541, 31681), (551, 31696), (563, 31726), (577, 31759), (588, 31768), (604, 31810), (626, 31876), (627, 31879), (633, 31900), (639, 31918), (648, 31936), (666, 31990), (672, 32020), (691, 32077), (693, 32080), (706, 32128), (718, 32182), (739, 32251), (743, 32269),

Gene: Herb_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for Herb_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318, 21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381, 22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Heylee_73 Start: 47198, Stop: 45804, Start Num: 202

Candidate Starts for Heylee_73:

(Start: 202 @47198 has 13 MA's), (226, 47129), (257, 47054), (271, 47036), (288, 47006), (318, 46925), (332, 46895), (350, 46871), (417, 46631), (431, 46592), (488, 46478), (503, 46427), (507, 46406), (512, 46376), (517, 46361), (520, 46349), (558, 46268), (587, 46220), (598, 46193), (606, 46172), (630, 46088), (660, 46022), (716, 45833), (719, 45821),

Gene: Hollow_57 Start: 53503, Stop: 51797, Start Num: 106

Candidate Starts for Hollow_57:

(Start: 106 @53503 has 9 MA's), (Start: 108 @53491 has 2 MA's), (138, 53392), (Start: 144 @53371 has 1 MA's), (171, 53305), (218, 53206), (230, 53170), (237, 53146), (240, 53137), (245, 53128), (273, 53080), (287, 53056), (308, 53014), (313, 52999), (318, 52984), (342, 52927), (343, 52924), (356, 52864), (357, 52861), (378, 52795), (379, 52792), (386, 52756), (387, 52753), (390, 52735), (393, 52726), (399, 52714), (409, 52666), (417, 52633), (427, 52609), (447, 52585), (460, 52561), (484, 52495), (532, 52396), (605, 52264), (608, 52261), (664, 52144), (666, 52141), (681, 52084), (684, 52066), (715, 51949), (716, 51946), (719, 51934), (754, 51835), (763, 51814),

Gene: HollowPurple_85 Start: 50087, Stop: 48567, Start Num: 201

Candidate Starts for HollowPurple_85:

(Start: 185 @50120 has 3 MA's), (Start: 201 @50087 has 46 MA's), (219, 50036), (265, 49928), (300, 49862), (322, 49796), (366, 49679), (376, 49658), (388, 49601), (400, 49568), (401, 49565), (418, 49502), (439, 49451), (444, 49442), (450, 49433), (452, 49427), (464, 49403), (473, 49379), (490, 49340), (493, 49325), (506, 49274), (508, 49256), (535, 49163), (549, 49136), (566, 49091), (640, 48905), (681, 48797), (688, 48767), (703, 48722), (712, 48671), (731, 48608),

Gene: HomeFry_80 Start: 55194, Stop: 53140, Start Num: 28

Candidate Starts for HomeFry_80:

(Start: 28 @55194 has 34 MA's), (55, 55074), (63, 55041), (88, 54945), (89, 54942), (134, 54792), (184, 54684), (Start: 197 @54651 has 73 MA's), (208, 54630), (217, 54600), (228, 54567), (271, 54477), (309, 54414), (374, 54258), (386, 54207), (415, 54111), (430, 54078), (463, 54015), (477, 53979), (517, 53892), (540, 53823), (551, 53805), (594, 53700), (617, 53631), (622, 53598), (626, 53592), (635, 53562), (640, 53547), (657, 53505), (674, 53445), (694, 53382), (712, 53301), (720, 53277), (738, 53217),

Gene: Hortus1_77 Start: 49476, Stop: 47953, Start Num: 201

Candidate Starts for Hortus1_77:

(172, 49542), (Start: 182 @49515 has 5 MA's), (Start: 201 @49476 has 46 MA's), (257, 49326), (265, 49317), (310, 49221), (321, 49188), (335, 49161), (358, 49107), (367, 49062), (368, 49059), (400, 48954), (401, 48951), (444, 48828), (450, 48819), (454, 48807), (479, 48753), (506, 48660), (533, 48552), (549, 48522), (552, 48516), (553, 48513), (554, 48510), (566, 48477), (572, 48465), (624, 48339), (640, 48291), (674, 48201), (681, 48183), (695, 48135), (725, 48012),

Gene: Hotorobo_59 Start: 52337, Stop: 50805, Start Num: 168

Candidate Starts for Hotorobo_59:

(90, 52592), (102, 52541), (116, 52490), (135, 52436), (143, 52406), (Start: 153 @52373 has 3 MA's), (158, 52364), (Start: 168 @52337 has 28 MA's), (230, 52169), (245, 52127), (273, 52079), (280, 52067), (287, 52055), (289, 52049), (297, 52028), (312, 52001), (358, 51860), (384, 51773), (386, 51758), (389, 51746), (399, 51716), (410, 51665), (416, 51638), (447, 51587), (475, 51527), (476, 51524), (484, 51497), (515, 51455), (532, 51410), (608, 51275), (611, 51260), (616, 51239), (664, 51158), (666, 51155), (681, 51098), (682, 51092), (683, 51086), (684, 51080), (707, 51005), (715, 50966), (718, 50954), (719, 50951), (746, 50858), (754, 50843), (763, 50822),

Gene: Htur_33 Start: 23465, Stop: 24892, Start Num: 201

Candidate Starts for Htur_33:

(Start: 182 @23426 has 5 MA's), (191, 23447), (Start: 201 @23465 has 46 MA's), (358, 23822), (375, 23885), (386, 23930), (390, 23951), (502, 24218), (525, 24266), (531, 24287), (551, 24314), (562, 24341), (563, 24344), (575, 24371), (577, 24377), (599, 24413), (627, 24491), (633, 24512), (639, 24530), (645, 24542), (672, 24626), (691, 24683), (696, 24695), (706, 24734), (712, 24770), (715, 24776),

Gene: HubbaBubba_67 Start: 51701, Stop: 49620, Start Num: 28

Candidate Starts for HubbaBubba_67:

(9, 51893), (11, 51875), (Start: 28 @51701 has 34 MA's), (83, 51470), (119, 51332), (184, 51182), (Start: 197 @51149 has 73 MA's), (227, 51068), (228, 51065), (271, 50975), (273, 50972), (309, 50912), (374, 50756), (415, 50609), (463, 50501), (472, 50477), (517, 50375), (533, 50321), (540, 50306), (575, 50225), (594, 50186), (615, 50123), (622, 50084), (626, 50078), (635, 50048), (674, 49931), (694, 49868), (709, 49805), (712, 49787), (738, 49703),

Gene: Hubbs_78 Start: 49505, Stop: 47982, Start Num: 201

Candidate Starts for Hubbs_78:

(109, 49766), (124, 49724), (Start: 201 @49505 has 46 MA's), (238, 49394), (257, 49355), (265, 49346), (310, 49250), (324, 49208), (335, 49190), (358, 49136), (367, 49091), (368, 49088), (401, 48986), (444, 48863), (463, 48827), (479, 48788), (498, 48722), (506, 48695), (508, 48677), (515, 48647), (533, 48587), (549, 48557), (554, 48545), (557, 48539), (674, 48230), (681, 48212), (693, 48170), (695, 48164), (700, 48146), (701, 48143), (733, 48017),

Gene: HunterDalle_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for HunterDalle_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (406, 22264), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: Huntingdon_29 Start: 22127, Stop: 23518, Start Num: 197

Candidate Starts for Huntingdon_29:

(Start: 197 @22127 has 73 MA's), (232, 22214), (282, 22286), (284, 22289), (312, 22355), (318, 22373), (323, 22379), (340, 22406), (359, 22463), (381, 22544), (384, 22553), (390, 22589), (396, 22607), (406, 22643), (411, 22664), (415, 22682), (435, 22715), (462, 22754), (478, 22796), (487, 22823), (511, 22847), (523, 22883), (525, 22889), (541, 22922), (551, 22937), (554, 22946), (575, 22991), (594, 23024), (595, 23027), (626, 23108), (638, 23144), (639, 23150), (645, 23162), (672, 23252), (680, 23273), (681, 23276), (687, 23300), (691, 23309), (712, 23396), (727, 23447), (740, 23486), (745, 23510),

Gene: IDyn_69 Start: 52448, Stop: 50367, Start Num: 28

Candidate Starts for IDyn_69:

(9, 52640), (11, 52622), (15, 52547), (Start: 28 @52448 has 34 MA's), (83, 52217), (119, 52079), (184, 51929), (Start: 197 @51896 has 73 MA's), (224, 51821), (227, 51815), (228, 51812), (271, 51722), (273, 51719), (309, 51659), (374, 51503), (415, 51356), (463, 51248), (472, 51224), (517, 51122), (533, 51068), (540, 51053), (575, 50972), (594, 50933), (615, 50870), (622, 50831), (626, 50825), (635, 50795), (674, 50678), (694, 50615), (709, 50552), (712, 50534), (738, 50450),

Gene: Ichor_70 Start: 47416, Stop: 46022, Start Num: 202

Candidate Starts for Ichor_70:

(Start: 202 @47416 has 13 MA's), (226, 47347), (257, 47272), (271, 47254), (288, 47224), (318, 47143), (417, 46849), (431, 46810), (488, 46696), (507, 46624), (512, 46594), (517, 46579), (520, 46567), (545, 46516), (566, 46465), (574, 46447), (587, 46438), (606, 46390), (660, 46240), (716, 46051),

Gene: IndiRoo_33 Start: 21703, Stop: 23130, Start Num: 201

Candidate Starts for IndiRoo_33:

(190, 21682), (Start: 201 @21703 has 46 MA's), (357, 22057), (358, 22060), (362, 22081), (386, 22168), (399, 22210), (521, 22492), (525, 22504), (531, 22525), (551, 22552), (562, 22579), (563, 22582), (575, 22609), (577, 22615), (599, 22651), (633, 22750), (655, 22813), (666, 22834), (681, 22888), (691, 22921), (696, 22933), (706, 22972), (712, 23008), (715, 23014), (718, 23026), (727, 23059), (737, 23089),

Gene: Indlulamithi_65 Start: 45619, Stop: 47481, Start Num: 73

Candidate Starts for Indlulamithi_65:

(Start: 73 @45619 has 1 MA's), (77, 45634), (136, 45862), (165, 45922), (180, 45964), (193, 46000), (209, 46033), (Start: 215 @46051 has 28 MA's), (235, 46111), (240, 46129), (258, 46162), (283, 46201), (319, 46291), (329, 46312), (330, 46315), (352, 46336), (399, 46513), (422, 46582), (446, 46618), (456, 46639), (463, 46651), (489, 46717), (515, 46759), (517, 46765), (527, 46798), (531, 46813), (542, 46837), (544, 46840), (556, 46864), (558, 46873), (605, 46960), (640, 47065), (681, 47206), (709, 47314), (712, 47335), (717, 47350), (732, 47401), (751, 47458), (755, 47464), (761, 47476),

Gene: Intolerant_41 Start: 31037, Stop: 32431, Start Num: 204

Candidate Starts for Intolerant_41:

(Start: 204 @31037 has 13 MA's), (Start: 206 @31040 has 3 MA's), (230, 31115), (239, 31139), (273, 31169), (282, 31184), (329, 31274), (345, 31310), (375, 31409), (378, 31418), (394, 31487), (436, 31610), (502, 31745), (519, 31772), (525, 31793), (531, 31814), (563, 31871), (577, 31904), (588, 31913), (604, 31955), (626, 32021), (633, 32045), (639, 32063), (648, 32081), (666, 32135), (672, 32165), (691, 32222), (693, 32225), (706, 32273), (713, 32312), (718, 32327), (739, 32396), (743, 32414), (745, 32423),

Gene: Issa7_83 Start: 49544, Stop: 48024, Start Num: 201

Candidate Starts for Issa7_83:

(Start: 185 @49577 has 3 MA's), (Start: 201 @49544 has 46 MA's), (219, 49493), (265, 49385), (300, 49319), (322, 49253), (367, 49130), (376, 49115), (388, 49058), (400, 49025), (401, 49022), (418, 48959), (439, 48908), (444, 48899), (450, 48890), (452, 48884), (464, 48860), (473, 48836), (490, 48797), (493, 48782), (506, 48731), (508, 48713), (515, 48683), (552, 48587), (566, 48548), (640, 48362), (681, 48254), (688, 48224), (703, 48179), (731, 48065),

Gene: JackieB_42 Start: 30731, Stop: 32125, Start Num: 204

Candidate Starts for JackieB_42:

(Start: 204 @30731 has 13 MA's), (Start: 206 @30734 has 3 MA's), (230, 30809), (239, 30833), (273, 30863), (275, 30866), (282, 30878), (329, 30968), (342, 30992), (357, 31037), (359, 31043), (375, 31103), (381, 31124), (393, 31178), (419, 31277), (436, 31304), (441, 31313), (502, 31439), (525,

31487), (531, 31508), (541, 31520), (551, 31535), (563, 31565), (577, 31598), (588, 31607), (604, 31649), (627, 31718), (633, 31739), (639, 31757), (648, 31775), (666, 31829), (672, 31859), (691, 31916), (693, 31919), (706, 31967), (718, 32021), (739, 32090), (743, 32108),

Gene: Jacko_79 Start: 48477, Stop: 46960, Start Num: 201

Candidate Starts for Jacko_79:

(190, 48495), (Start: 201 @48477 has 46 MA's), (219, 48426), (257, 48327), (265, 48318), (288, 48279), (310, 48222), (365, 48072), (368, 48060), (400, 47958), (401, 47955), (424, 47874), (439, 47841), (444, 47832), (473, 47769), (479, 47757), (498, 47691), (515, 47616), (533, 47556), (566, 47481), (595, 47430), (624, 47343), (662, 47250), (674, 47205), (681, 47187), (688, 47157), (695, 47139), (701, 47118), (718, 47043), (725, 47016), (733, 46992),

Gene: Jaek_70 Start: 47416, Stop: 46022, Start Num: 202

Candidate Starts for Jaek_70:

(Start: 202 @47416 has 13 MA's), (226, 47347), (257, 47272), (271, 47254), (288, 47224), (318, 47143), (417, 46849), (431, 46810), (488, 46696), (507, 46624), (512, 46594), (517, 46579), (520, 46567), (545, 46516), (566, 46465), (574, 46447), (587, 46438), (606, 46390), (660, 46240), (716, 46051),

Gene: Jalebi_59 Start: 41637, Stop: 43553, Start Num: 41

Candidate Starts for Jalebi_59:

(Start: 41 @41637 has 13 MA's), (Start: 42 @41640 has 55 MA's), (Start: 51 @41652 has 2 MA's), (60, 41700), (85, 41802), (107, 41892), (115, 41919), (Start: 118 @41928 has 3 MA's), (149, 42000), (Start: 197 @42120 has 73 MA's), (221, 42183), (263, 42273), (279, 42300), (352, 42429), (357, 42453), (366, 42495), (382, 42543), (386, 42564), (390, 42585), (411, 42642), (434, 42696), (456, 42738), (481, 42798), (527, 42894), (528, 42897), (613, 43074), (631, 43125), (663, 43212), (665, 43215), (674, 43251), (676, 43257), (693, 43311), (704, 43350), (728, 43452), (733, 43467), (740, 43488),

Gene: Jamemuya19_59 Start: 39419, Stop: 41335, Start Num: 41

Candidate Starts for Jamemuya19_59:

(Start: 41 @39419 has 13 MA's), (Start: 42 @39422 has 55 MA's), (Start: 51 @39434 has 2 MA's), (60, 39482), (70, 39515), (107, 39674), (115, 39701), (Start: 118 @39710 has 3 MA's), (149, 39782), (Start: 197 @39902 has 73 MA's), (221, 39965), (263, 40055), (279, 40082), (352, 40211), (357, 40235), (366, 40277), (369, 40289), (378, 40304), (382, 40325), (386, 40346), (390, 40367), (411, 40424), (415, 40442), (434, 40478), (456, 40520), (481, 40580), (527, 40676), (528, 40679), (613, 40856), (631, 40907), (665, 40997), (674, 41033), (676, 41039), (693, 41093), (704, 41132), (728, 41234), (733, 41249), (740, 41270),

Gene: Jams_57 Start: 52059, Stop: 50647, Start Num: 215

Candidate Starts for Jams_57:

(90, 52407), (129, 52278), (Start: 153 @52188 has 3 MA's), (Start: 215 @52059 has 28 MA's), (230, 52014), (273, 51924), (275, 51921), (278, 51915), (289, 51894), (318, 51831), (346, 51753), (355, 51723), (358, 51705), (384, 51618), (386, 51603), (399, 51561), (417, 51480), (447, 51432), (467, 51390), (475, 51372), (476, 51369), (484, 51342), (518, 51291), (532, 51255), (562, 51204), (608, 51120), (612, 51099), (681, 50943), (682, 50937), (684, 50925), (718, 50799), (754, 50685),

Gene: Jellybones_61 Start: 53432, Stop: 51900, Start Num: 168

Candidate Starts for Jellybones_61:

(90, 53687), (102, 53636), (129, 53558), (135, 53531), (143, 53501), (Start: 153 @53468 has 3 MA's), (158, 53459), (Start: 168 @53432 has 28 MA's), (218, 53300), (230, 53264), (245, 53222), (254, 53204), (273, 53174), (280, 53162), (289, 53144), (312, 53096), (384, 52868), (386, 52853), (389, 52841), (399, 52811), (410, 52760), (447, 52682), (460, 52658), (467, 52640), (475, 52622), (476, 52619), (479, 52610), (484, 52592), (515, 52550), (532, 52505), (547, 52487), (608, 52370), (611,

52355), (616, 52334), (655, 52277), (664, 52253), (666, 52250), (681, 52193), (682, 52187), (684, 52175), (703, 52124), (707, 52100), (715, 52061), (718, 52049), (719, 52046), (746, 51953), (754, 51938), (763, 51917),

Gene: Jera_34 Start: 22504, Stop: 23931, Start Num: 201

Candidate Starts for Jera_34:

(184, 22462), (Start: 201 @22504 has 46 MA's), (349, 22822), (386, 22969), (390, 22990), (393, 22999), (502, 23257), (525, 23305), (531, 23326), (563, 23383), (577, 23416), (599, 23452), (627, 23530), (633, 23551), (665, 23632), (666, 23635), (691, 23722), (696, 23734), (706, 23773), (712, 23809), (715, 23815), (718, 23827), (737, 23890),

Gene: Jifall16_71 Start: 56412, Stop: 54346, Start Num: 28

Candidate Starts for Jifall16_71:

(2, 56910), (5, 56709), (8, 56616), (9, 56604), (11, 56586), (Start: 28 @56412 has 34 MA's), (Start: 61 @56274 has 2 MA's), (65, 56250), (Start: 118 @56046 has 3 MA's), (134, 56001), (184, 55893), (227, 55779), (228, 55776), (271, 55686), (273, 55683), (309, 55623), (366, 55485), (374, 55467), (380, 55443), (415, 55320), (463, 55215), (517, 55089), (533, 55035), (591, 54909), (594, 54900), (604, 54876), (622, 54804), (626, 54798), (635, 54768), (657, 54711), (674, 54651), (694, 54588), (712, 54507),

Gene: Joann_29 Start: 22094, Stop: 23485, Start Num: 197

Candidate Starts for Joann_29:

(Start: 197 @22094 has 73 MA's), (232, 22181), (282, 22253), (284, 22256), (312, 22322), (318, 22340), (340, 22373), (359, 22430), (370, 22481), (372, 22487), (375, 22490), (384, 22520), (390, 22556), (396, 22574), (406, 22610), (411, 22631), (415, 22649), (435, 22682), (462, 22721), (478, 22763), (487, 22790), (511, 22814), (523, 22850), (525, 22856), (541, 22889), (551, 22904), (554, 22913), (575, 22958), (590, 22979), (594, 22991), (626, 23075), (633, 23099), (638, 23111), (639, 23117), (645, 23129), (672, 23219), (674, 23225), (680, 23240), (681, 23243), (687, 23267), (691, 23276), (712, 23363), (740, 23453), (745, 23477),

Gene: Johann_34 Start: 23371, Stop: 24798, Start Num: 201

Candidate Starts for Johann_34:

(Start: 201 @23371 has 46 MA's), (309, 23587), (349, 23689), (358, 23728), (375, 23791), (386, 23836), (390, 23857), (416, 23956), (502, 24124), (525, 24172), (531, 24193), (551, 24220), (562, 24247), (575, 24277), (577, 24283), (599, 24319), (627, 24397), (655, 24481), (665, 24499), (666, 24502), (691, 24589), (696, 24601), (706, 24640), (712, 24676), (715, 24682), (729, 24733), (737, 24757),

Gene: John316_62 Start: 53495, Stop: 51963, Start Num: 168

Candidate Starts for John316_62:

(90, 53750), (102, 53699), (116, 53648), (135, 53594), (143, 53564), (Start: 153 @53531 has 3 MA's), (158, 53522), (Start: 168 @53495 has 28 MA's), (230, 53327), (245, 53285), (273, 53237), (280, 53225), (287, 53213), (289, 53207), (297, 53186), (312, 53159), (384, 52931), (386, 52916), (389, 52904), (399, 52874), (410, 52823), (416, 52796), (447, 52745), (467, 52703), (475, 52685), (476, 52682), (484, 52655), (515, 52613), (532, 52568), (608, 52433), (611, 52418), (616, 52397), (664, 52316), (666, 52313), (681, 52256), (682, 52250), (683, 52244), (684, 52238), (707, 52163), (715, 52124), (718, 52112), (719, 52109), (746, 52016), (754, 52001), (763, 51980),

Gene: Jormungandr_57 Start: 52602, Stop: 51190, Start Num: 215

Candidate Starts for Jormungandr_57:

(90, 52950), (129, 52821), (Start: 153 @52731 has 3 MA's), (Start: 215 @52602 has 28 MA's), (230, 52557), (273, 52467), (275, 52464), (278, 52458), (289, 52437), (318, 52374), (355, 52266), (358, 52248), (384, 52161), (386, 52146), (399, 52104), (417, 52023), (447, 51975), (467, 51933), (475,

51915), (476, 51912), (484, 51885), (518, 51834), (532, 51798), (562, 51747), (608, 51663), (612, 51642), (681, 51486), (682, 51480), (684, 51468), (718, 51342), (754, 51228),

Gene: Jumbo_57 Start: 53259, Stop: 51742, Start Num: 185

Candidate Starts for Jumbo_57:

(Start: 185 @53259 has 3 MA's), (221, 53163), (224, 53151), (230, 53136), (302, 53004), (312, 52980), (313, 52977), (329, 52944), (357, 52839), (361, 52818), (383, 52746), (396, 52689), (423, 52587), (447, 52557), (478, 52488), (531, 52395), (543, 52380), (561, 52344), (577, 52311), (595, 52281), (604, 52260), (616, 52218), (620, 52206), (650, 52131), (684, 52014), (697, 51981), (707, 51939), (722, 51873), (759, 51774), (760, 51771),

Gene: Jumboset_29 Start: 22100, Stop: 23500, Start Num: 197

Candidate Starts for Jumboset_29:

(Start: 197 @22100 has 73 MA's), (221, 22163), (282, 22268), (284, 22271), (318, 22355), (340, 22388), (357, 22439), (359, 22445), (381, 22526), (382, 22529), (384, 22535), (390, 22571), (396, 22589), (399, 22592), (411, 22646), (435, 22697), (478, 22778), (487, 22805), (514, 22835), (517, 22844), (525, 22871), (541, 22904), (551, 22919), (575, 22973), (590, 22994), (594, 23006), (600, 23018), (674, 23240), (677, 23249), (680, 23255), (691, 23291), (707, 23351), (712, 23378), (740, 23468),

Gene: JustBecause_122 Start: 81387, Stop: 79741, Start Num: 151

Candidate Starts for JustBecause_122:

(140, 81426), (Start: 151 @81387 has 8 MA's), (186, 81297), (193, 81279), (207, 81255), (212, 81237), (291, 81060), (333, 80958), (363, 80883), (364, 80880), (384, 80817), (483, 80547), (488, 80535), (507, 80463), (560, 80307), (592, 80247), (599, 80232), (626, 80145), (635, 80115), (655, 80073), (671, 80013), (702, 79917), (703, 79914), (736, 79785),

Gene: Kabluna_75 Start: 55961, Stop: 53874, Start Num: 28

Candidate Starts for Kabluna_75:

(Start: 28 @55961 has 34 MA's), (55, 55841), (Start: 67 @55796 has 4 MA's), (69, 55793), (134, 55538), (184, 55430), (208, 55376), (228, 55313), (271, 55223), (273, 55220), (287, 55196), (309, 55160), (366, 55022), (374, 55004), (378, 54995), (380, 54980), (415, 54857), (450, 54773), (463, 54746), (472, 54722), (517, 54623), (533, 54569), (558, 54515), (575, 54473), (594, 54434), (617, 54365), (622, 54332), (635, 54296), (654, 54251), (657, 54239), (674, 54179), (694, 54116), (738, 53951), (744, 53927),

Gene: Kalizoi_29 Start: 22099, Stop: 23499, Start Num: 197

Candidate Starts for Kalizoi_29:

(Start: 197 @22099 has 73 MA's), (221, 22162), (282, 22267), (284, 22270), (318, 22354), (340, 22387), (357, 22438), (359, 22444), (381, 22525), (382, 22528), (384, 22534), (390, 22570), (396, 22588), (399, 22591), (411, 22645), (435, 22696), (478, 22777), (487, 22804), (514, 22834), (517, 22843), (525, 22870), (541, 22903), (551, 22918), (575, 22972), (590, 22993), (594, 23005), (600, 23017), (674, 23239), (677, 23248), (680, 23254), (691, 23290), (707, 23350), (712, 23377), (740, 23467), (745, 23491), (746, 23494),

Gene: Kampe_58 Start: 50421, Stop: 48931, Start Num: 182

Candidate Starts for Kampe_58:

(Start: 182 @50421 has 5 MA's), (218, 50328), (221, 50319), (224, 50307), (230, 50292), (237, 50274), (275, 50217), (306, 50145), (307, 50142), (341, 50049), (349, 50016), (356, 49983), (357, 49980), (361, 49959), (384, 49890), (390, 49854), (413, 49767), (447, 49704), (449, 49701), (465, 49671), (496, 49599), (500, 49590), (577, 49467), (586, 49461), (650, 49329), (666, 49287), (676, 49242), (684, 49212), (759, 48960),

Gene: KandZ_52 Start: 39857, Stop: 41800, Start Num: 42

Candidate Starts for KandZ_52:

(32, 39794), (Start: 42 @39857 has 55 MA's), (53, 39884), (71, 39956), (82, 40010), (95, 40070), (100, 40097), (117, 40148), (131, 40190), (149, 40226), (184, 40313), (219, 40406), (223, 40421), (231, 40442), (292, 40544), (307, 40577), (316, 40601), (354, 40661), (378, 40748), (394, 40823), (434, 40913), (463, 40964), (464, 40967), (503, 41057), (517, 41075), (527, 41108), (556, 41174), (561, 41192), (594, 41255), (622, 41339), (665, 41456), (674, 41504), (694, 41567), (712, 41651),

Gene: Kaseim_57 Start: 52044, Stop: 50632, Start Num: 215

Candidate Starts for Kaseim_57:

(90, 52392), (129, 52263), (Start: 153 @52173 has 3 MA's), (Start: 167 @52137 has 1 MA's), (Start: 215 @52044 has 28 MA's), (230, 51999), (273, 51909), (275, 51906), (278, 51900), (289, 51879), (318, 51816), (355, 51708), (358, 51690), (384, 51603), (386, 51588), (399, 51546), (417, 51465), (447, 51417), (467, 51375), (475, 51357), (476, 51354), (484, 51327), (518, 51276), (532, 51240), (562, 51189), (608, 51105), (612, 51084), (681, 50928), (682, 50922), (684, 50910), (718, 50784), (754, 50670),

Gene: Katyusha_57 Start: 53319, Stop: 51616, Start Num: 106

Candidate Starts for Katyusha_57:

(Start: 106 @53319 has 9 MA's), (Start: 108 @53307 has 2 MA's), (171, 53124), (Start: 215 @53034 has 28 MA's), (218, 53025), (230, 52989), (237, 52965), (240, 52956), (245, 52947), (273, 52899), (287, 52875), (318, 52803), (321, 52800), (330, 52782), (343, 52743), (378, 52614), (386, 52575), (387, 52572), (390, 52554), (393, 52545), (399, 52533), (409, 52485), (417, 52452), (447, 52404), (460, 52380), (484, 52314), (532, 52215), (592, 52116), (595, 52107), (605, 52083), (608, 52080), (655, 51987), (664, 51963), (666, 51960), (681, 51903), (684, 51885), (715, 51768), (716, 51765), (719, 51753), (754, 51654), (763, 51633),

Gene: Kela_123 Start: 81267, Stop: 79621, Start Num: 151

Candidate Starts for Kela_123:

(140, 81306), (Start: 151 @81267 has 8 MA's), (186, 81177), (193, 81159), (207, 81135), (212, 81117), (291, 80940), (333, 80838), (363, 80763), (364, 80760), (384, 80697), (483, 80427), (488, 80415), (507, 80343), (560, 80187), (592, 80127), (599, 80112), (626, 80025), (635, 79995), (655, 79953), (671, 79893), (702, 79797), (703, 79794), (736, 79665),

Gene: Kelzog_61 Start: 52344, Stop: 50812, Start Num: 168

Candidate Starts for Kelzog_61:

(90, 52599), (102, 52548), (116, 52497), (135, 52443), (143, 52413), (Start: 153 @52380 has 3 MA's), (158, 52371), (Start: 168 @52344 has 28 MA's), (230, 52176), (245, 52134), (273, 52086), (280, 52074), (287, 52062), (289, 52056), (297, 52035), (312, 52008), (358, 51867), (384, 51780), (386, 51765), (389, 51753), (399, 51723), (410, 51672), (416, 51645), (447, 51594), (475, 51534), (476, 51531), (484, 51504), (515, 51462), (532, 51417), (547, 51399), (608, 51282), (611, 51267), (616, 51246), (655, 51189), (664, 51165), (681, 51105), (682, 51099), (683, 51093), (684, 51087), (703, 51036), (707, 51012), (715, 50973), (718, 50961), (719, 50958), (746, 50865), (754, 50850), (763, 50829),

Gene: KidneyBean_72 Start: 56536, Stop: 54470, Start Num: 28

Candidate Starts for KidneyBean_72:

(2, 57034), (5, 56833), (8, 56740), (9, 56728), (11, 56710), (Start: 28 @56536 has 34 MA's), (Start: 61 @56398 has 2 MA's), (65, 56374), (Start: 118 @56170 has 3 MA's), (134, 56125), (184, 56017), (227, 55903), (228, 55900), (271, 55810), (273, 55807), (309, 55747), (366, 55609), (374, 55591), (380, 55567), (415, 55444), (463, 55339), (517, 55213), (533, 55159), (591, 55033), (594, 55024), (604, 55000), (622, 54928), (626, 54922), (635, 54892), (657, 54835), (674, 54775), (694, 54712), (712, 54631),

Gene: Kimchi1738_73 Start: 52700, Stop: 50775, Start Num: 49

Candidate Starts for Kimchi1738_73:

(25, 52793), (Start: 49 @52700 has 8 MA's), (91, 52529), (104, 52475), (184, 52271), (240, 52115), (271, 52064), (273, 52061), (303, 52019), (369, 51857), (376, 51848), (517, 51491), (527, 51458), (605, 51272), (657, 51119), (676, 51053), (681, 51041), (684, 51023), (694, 50996), (709, 50933), (717, 50900), (739, 50828),

Gene: KingBob_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for KingBob_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318, 21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381, 22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Kittykat_25 Start: 20600, Stop: 21994, Start Num: 197

Candidate Starts for Kittykat_25:

(Start: 197 @20600 has 73 MA's), (221, 20657), (282, 20762), (284, 20765), (318, 20849), (340, 20882), (358, 20936), (359, 20939), (384, 21029), (390, 21065), (399, 21086), (406, 21119), (411, 21140), (478, 21272), (487, 21299), (517, 21338), (525, 21365), (541, 21398), (551, 21413), (554, 21422), (575, 21467), (595, 21503), (626, 21584), (633, 21608), (639, 21626), (645, 21638), (666, 21698), (670, 21722), (672, 21728), (673, 21731), (680, 21749), (681, 21752), (687, 21776), (691, 21785), (712, 21872), (727, 21923), (740, 21962),

Gene: Konstantine_65 Start: 46884, Stop: 48941, Start Num: 42

Candidate Starts for Konstantine_65:

(Start: 42 @46884 has 55 MA's), (58, 46944), (59, 46947), (Start: 81 @47040 has 3 MA's), (84, 47052), (88, 47073), (121, 47196), (123, 47199), (128, 47208), (136, 47241), (141, 47262), (156, 47310), (172, 47352), (Start: 197 @47415 has 73 MA's), (208, 47436), (209, 47442), (228, 47496), (319, 47682), (323, 47694), (336, 47712), (352, 47727), (354, 47733), (463, 48051), (464, 48054), (481, 48099), (513, 48150), (517, 48162), (551, 48252), (556, 48264), (567, 48297), (584, 48321), (588, 48330), (626, 48420), (636, 48453), (673, 48564), (674, 48567), (675, 48570), (676, 48573), (693, 48627), (709, 48693), (712, 48711), (764, 48888),

Gene: Korra_30 Start: 22105, Stop: 23505, Start Num: 197

Candidate Starts for Korra_30:

(Start: 197 @22105 has 73 MA's), (221, 22168), (282, 22273), (284, 22276), (318, 22360), (340, 22393), (357, 22444), (359, 22450), (381, 22531), (382, 22534), (384, 22540), (390, 22576), (396, 22594), (399, 22597), (406, 22630), (411, 22651), (435, 22702), (478, 22783), (487, 22810), (514, 22840), (517, 22849), (525, 22876), (541, 22909), (551, 22924), (575, 22978), (590, 22999), (594, 23011), (600, 23023), (639, 23137), (674, 23245), (677, 23254), (680, 23260), (691, 23296), (707, 23356), (712, 23383), (740, 23473),

Gene: Kradal_124 Start: 82180, Stop: 80537, Start Num: 151

Candidate Starts for Kradal_124:

(Start: 151 @82180 has 8 MA's), (163, 82156), (207, 82048), (241, 81943), (263, 81904), (291, 81853), (329, 81760), (358, 81700), (363, 81676), (364, 81673), (374, 81646), (398, 81553), (459, 81400), (469, 81376), (470, 81373), (483, 81340), (488, 81328), (507, 81256), (527, 81178), (546, 81133), (612, 80986), (626, 80941), (635, 80911), (651, 80881), (655, 80869), (673, 80803), (702, 80713), (703, 80710), (725, 80614), (727, 80608), (736, 80581),

Gene: Kurt_72 Start: 56722, Stop: 54656, Start Num: 28

Candidate Starts for Kurt_72:

(2, 57220), (5, 57019), (8, 56926), (9, 56914), (11, 56896), (Start: 28 @56722 has 34 MA's), (Start: 61 @56584 has 2 MA's), (65, 56560), (Start: 118 @56356 has 3 MA's), (134, 56311), (184, 56203), (227, 56089), (228, 56086), (271, 55996), (273, 55993), (309, 55933), (366, 55795), (374, 55777), (380, 55753), (415, 55630), (463, 55525), (517, 55399), (533, 55345), (591, 55219), (594, 55210), (604, 55186), (622, 55114), (626, 55108), (635, 55078), (657, 55021), (674, 54961), (694, 54898), (712, 54817),

Gene: Kvothe_56 Start: 53206, Stop: 51515, Start Num: 108

Candidate Starts for Kvothe_56:

(Start: 106 @53218 has 9 MA's), (Start: 108 @53206 has 2 MA's), (171, 53023), (Start: 215 @52933 has 28 MA's), (218, 52924), (230, 52888), (237, 52864), (240, 52855), (245, 52846), (273, 52798), (287, 52774), (318, 52702), (330, 52681), (342, 52645), (343, 52642), (378, 52513), (379, 52510), (386, 52474), (387, 52471), (390, 52453), (393, 52444), (399, 52432), (409, 52384), (417, 52351), (447, 52303), (460, 52279), (484, 52213), (532, 52114), (592, 52015), (595, 52006), (605, 51982), (608, 51979), (655, 51886), (664, 51862), (666, 51859), (681, 51802), (684, 51784), (715, 51667), (716, 51664), (719, 51652), (754, 51553), (763, 51532),

Gene: Labella_35 Start: 23381, Stop: 24808, Start Num: 201

Candidate Starts for Labella_35:

(184, 23339), (Start: 201 @23381 has 46 MA's), (349, 23699), (375, 23801), (386, 23846), (390, 23867), (502, 24134), (525, 24182), (531, 24203), (563, 24260), (577, 24293), (599, 24329), (627, 24407), (633, 24428), (665, 24509), (666, 24512), (691, 24599), (696, 24611), (706, 24650), (712, 24686), (718, 24704), (737, 24767),

Gene: Labelle_76 Start: 49171, Stop: 51204, Start Num: 47

Candidate Starts for Labelle_76:

(Start: 47 @49171 has 3 MA's), (53, 49195), (66, 49258), (83, 49324), (93, 49375), (94, 49378), (128, 49486), (136, 49519), (156, 49558), (166, 49582), (187, 49645), (Start: 197 @49663 has 73 MA's), (Start: 199 @49666 has 2 MA's), (208, 49684), (209, 49690), (233, 49759), (242, 49786), (250, 49798), (276, 49831), (319, 49933), (369, 50056), (380, 50086), (411, 50191), (415, 50209), (461, 50299), (463, 50302), (491, 50404), (499, 50443), (513, 50470), (517, 50482), (531, 50530), (536, 50548), (551, 50575), (556, 50587), (558, 50596), (626, 50734), (640, 50779), (673, 50884), (709, 51013), (717, 51046), (722, 51064), (739, 51118), (750, 51157),

Gene: Lahirium_57 Start: 53124, Stop: 51712, Start Num: 215

Candidate Starts for Lahirium_57:

(90, 53472), (129, 53343), (Start: 153 @53253 has 3 MA's), (Start: 215 @53124 has 28 MA's), (230, 53079), (273, 52989), (275, 52986), (278, 52980), (289, 52959), (318, 52896), (355, 52788), (358, 52770), (384, 52683), (386, 52668), (399, 52626), (417, 52545), (447, 52497), (467, 52455), (475, 52437), (476, 52434), (484, 52407), (518, 52356), (532, 52320), (562, 52269), (608, 52185), (612, 52164), (681, 52008), (682, 52002), (684, 51990), (718, 51864), (754, 51750),

Gene: Lakshmi_29 Start: 22120, Stop: 23511, Start Num: 197

Candidate Starts for Lakshmi_29:

(Start: 197 @22120 has 73 MA's), (232, 22207), (282, 22279), (284, 22282), (311, 22345), (312, 22348), (318, 22366), (323, 22372), (340, 22399), (359, 22456), (370, 22507), (372, 22513), (375, 22516), (384, 22546), (390, 22582), (396, 22600), (406, 22636), (411, 22657), (415, 22675), (435, 22708), (462, 22747), (478, 22789), (487, 22816), (511, 22840), (523, 22876), (525, 22882), (541, 22915), (551, 22930), (554, 22939), (575, 22984), (594, 23017), (595, 23020), (627, 23104), (633, 23125), (638, 23137), (645, 23155), (672, 23245), (680, 23266), (681, 23269), (687, 23293), (691,

23302), (712, 23389), (727, 23440), (740, 23479), (745, 23503),

Gene: Lambo_58 Start: 40249, Stop: 42159, Start Num: 42

Candidate Starts for Lambo_58:

(Start: 41 @40246 has 13 MA's), (Start: 42 @40249 has 55 MA's), (Start: 51 @40261 has 2 MA's), (60, 40309), (70, 40342), (115, 40528), (121, 40543), (149, 40609), (184, 40696), (Start: 197 @40729 has 73 MA's), (228, 40810), (231, 40819), (234, 40828), (323, 41002), (327, 41008), (352, 41035), (378, 41128), (382, 41149), (384, 41155), (386, 41170), (390, 41191), (411, 41248), (415, 41266), (434, 41302), (456, 41344), (481, 41404), (527, 41500), (528, 41503), (631, 41731), (665, 41821), (674, 41857), (676, 41863), (693, 41917), (704, 41956), (728, 42058), (733, 42073), (740, 42094),

Gene: LavAbarElk_60 Start: 40030, Stop: 41943, Start Num: 42

Candidate Starts for LavAbarElk_60:

(16, 39904), (18, 39913), (19, 39925), (27, 39958), (Start: 41 @40027 has 13 MA's), (Start: 42 @40030 has 55 MA's), (Start: 51 @40042 has 2 MA's), (60, 40090), (70, 40123), (85, 40192), (107, 40282), (115, 40309), (Start: 118 @40318 has 3 MA's), (149, 40390), (Start: 197 @40510 has 73 MA's), (221, 40573), (263, 40663), (279, 40690), (352, 40819), (357, 40843), (366, 40885), (378, 40912), (382, 40933), (386, 40954), (390, 40975), (411, 41032), (415, 41050), (434, 41086), (456, 41128), (481, 41188), (527, 41284), (528, 41287), (631, 41515), (665, 41605), (674, 41641), (676, 41647), (693, 41701), (704, 41740), (728, 41842), (733, 41857), (740, 41878),

Gene: LazerLemon_42 Start: 31529, Stop: 32923, Start Num: 204

Candidate Starts for LazerLemon_42:

(Start: 167 @31445 has 1 MA's), (Start: 204 @31529 has 13 MA's), (Start: 215 @31562 has 28 MA's), (230, 31607), (239, 31631), (273, 31661), (275, 31664), (282, 31676), (329, 31766), (342, 31790), (375, 31901), (393, 31976), (406, 32021), (418, 32072), (419, 32075), (432, 32096), (502, 32237), (519, 32264), (525, 32285), (531, 32306), (563, 32363), (575, 32390), (577, 32396), (588, 32405), (604, 32447), (626, 32513), (627, 32516), (633, 32537), (639, 32555), (648, 32573), (666, 32627), (691, 32714), (693, 32717), (706, 32765), (713, 32804), (718, 32819), (739, 32888), (743, 32906), (745, 32915),

Gene: Lederberg_45 Start: 37131, Stop: 38507, Start Num: 200

Candidate Starts for Lederberg_45:

(Start: 200 @37131 has 7 MA's), (225, 37200), (232, 37218), (286, 37311), (311, 37371), (313, 37377), (314, 37380), (356, 37500), (360, 37518), (390, 37635), (474, 37773), (495, 37812), (517, 37845), (519, 37851), (523, 37866), (541, 37905), (571, 37965), (588, 37989), (607, 38025), (631, 38094), (634, 38100), (666, 38181), (694, 38277), (697, 38289), (701, 38301), (712, 38358), (715, 38364), (718, 38376), (726, 38406), (742, 38457),

Gene: LeeroyJenkins_95 Start: 51345, Stop: 49888, Start Num: 201

Candidate Starts for LeeroyJenkins_95:

(Start: 201 @51345 has 46 MA's), (203, 51342), (212, 51315), (255, 51201), (304, 51117), (319, 51069), (339, 51027), (357, 50991), (362, 50967), (386, 50895), (388, 50889), (391, 50877), (402, 50850), (409, 50829), (438, 50754), (448, 50736), (488, 50640), (492, 50631), (515, 50526), (524, 50496), (525, 50493), (527, 50487), (530, 50475), (531, 50472), (558, 50412), (561, 50403), (610, 50313), (624, 50259), (636, 50223), (672, 50142), (673, 50139), (674, 50136), (677, 50127), (701, 50049), (703, 50043), (721, 49965), (726, 49944), (735, 49917), (736, 49914),

Gene: Leopard_64 Start: 46071, Stop: 48014, Start Num: 42

Candidate Starts for Leopard_64:

(Start: 42 @46071 has 55 MA's), (52, 46092), (57, 46122), (Start: 81 @46221 has 3 MA's), (95, 46284), (115, 46356), (Start: 118 @46365 has 3 MA's), (136, 46413), (244, 46686), (246, 46689), (324, 46851), (354, 46887), (369, 46959), (376, 46968), (384, 47001), (399, 47058), (404, 47070), (434, 47139),

(440, 47148), (451, 47166), (463, 47190), (513, 47286), (517, 47298), (527, 47331), (544, 47373), (570, 47436), (615, 47541), (684, 47757), (693, 47781), (694, 47784), (705, 47826), (710, 47856), (717, 47880), (758, 47997),

Gene: Lidong_57 Start: 52859, Stop: 51447, Start Num: 215

Candidate Starts for Lidong_57:

(90, 53207), (129, 53078), (Start: 153 @52988 has 3 MA's), (Start: 215 @52859 has 28 MA's), (230, 52814), (273, 52724), (275, 52721), (278, 52715), (289, 52694), (318, 52631), (346, 52553), (355, 52523), (358, 52505), (384, 52418), (386, 52403), (399, 52361), (417, 52280), (447, 52232), (467, 52190), (475, 52172), (476, 52169), (484, 52142), (518, 52091), (532, 52055), (562, 52004), (608, 51920), (612, 51899), (681, 51743), (682, 51737), (684, 51725), (718, 51599), (754, 51485),

Gene: Lifes_86 Start: 48144, Stop: 46666, Start Num: 201

Candidate Starts for Lifes_86:

(Start: 201 @48144 has 46 MA's), (207, 48135), (216, 48114), (285, 47964), (318, 47880), (328, 47859), (391, 47685), (393, 47679), (412, 47625), (448, 47547), (486, 47454), (507, 47379), (517, 47337), (531, 47289), (545, 47259), (561, 47220), (570, 47199), (575, 47187), (621, 47082), (622, 47067), (628, 47055), (638, 47025), (667, 46953), (674, 46917), (688, 46869), (694, 46854), (699, 46836), (703, 46824), (709, 46791), (726, 46725), (730, 46713), (736, 46695), (740, 46683),

Gene: LilStuart_25 Start: 20568, Stop: 21962, Start Num: 197

Candidate Starts for LilStuart_25:

(Start: 197 @20568 has 73 MA's), (221, 20625), (282, 20730), (284, 20733), (318, 20817), (340, 20850), (357, 20901), (359, 20907), (381, 20988), (382, 20991), (384, 20997), (390, 21033), (396, 21051), (399, 21054), (406, 21087), (411, 21108), (478, 21240), (487, 21267), (517, 21306), (523, 21327), (525, 21333), (541, 21366), (551, 21381), (554, 21390), (575, 21435), (595, 21471), (612, 21513), (633, 21576), (639, 21594), (672, 21696), (673, 21699), (680, 21717), (681, 21720), (687, 21744), (691, 21753), (712, 21840), (740, 21930), (745, 21954), (746, 21957),

Gene: Lila22_61 Start: 41200, Stop: 43113, Start Num: 42

Candidate Starts for Lila22_61:

(Start: 41 @41197 has 13 MA's), (Start: 42 @41200 has 55 MA's), (Start: 51 @41212 has 2 MA's), (60, 41260), (70, 41293), (115, 41479), (121, 41494), (149, 41560), (184, 41647), (194, 41677), (Start: 197 @41680 has 73 MA's), (221, 41743), (228, 41761), (231, 41770), (263, 41833), (279, 41860), (352, 41989), (357, 42013), (366, 42055), (382, 42103), (386, 42124), (390, 42145), (411, 42202), (434, 42256), (456, 42298), (481, 42358), (527, 42454), (528, 42457), (613, 42634), (631, 42685), (665, 42775), (674, 42811), (676, 42817), (693, 42871), (704, 42910), (728, 43012), (733, 43027), (740, 43048),

Gene: LilyPad_52 Start: 37853, Stop: 39895, Start Num: 46

Candidate Starts for LilyPad_52:

(Start: 46 @37853 has 8 MA's), (85, 38006), (97, 38066), (136, 38180), (149, 38204), (Start: 182 @38288 has 5 MA's), (Start: 197 @38324 has 73 MA's), (279, 38492), (283, 38498), (292, 38519), (331, 38606), (378, 38717), (386, 38759), (390, 38780), (415, 38855), (463, 38939), (470, 38960), (477, 38975), (501, 39020), (503, 39023), (515, 39035), (517, 39041), (518, 39044), (528, 39077), (551, 39131), (558, 39152), (570, 39182), (575, 39194), (579, 39227), (580, 39296), (591, 39353), (610, 39401), (622, 39446), (631, 39473), (681, 39620), (698, 39680), (709, 39728), (712, 39749), (729, 39806), (735, 39824), (740, 39839), (755, 39881),

Gene: Linayshia_33 Start: 23433, Stop: 24860, Start Num: 201

Candidate Starts for Linayshia_33:

(Start: 182 @23391 has 5 MA's), (Start: 201 @23433 has 46 MA's), (358, 23790), (375, 23853), (386, 23898), (390, 23919), (502, 24186), (525, 24234), (531, 24255), (551, 24282), (562, 24309), (563,

24312), (575, 24339), (577, 24345), (599, 24381), (627, 24459), (633, 24480), (639, 24498), (645, 24510), (672, 24594), (691, 24651), (696, 24663), (706, 24702), (712, 24738), (715, 24744),

Gene: Linetti_59 Start: 53022, Stop: 51613, Start Num: 215

Candidate Starts for Linetti_59:

(90, 53400), (102, 53349), (116, 53298), (135, 53244), (143, 53214), (Start: 153 @53181 has 3 MA's), (158, 53172), (Start: 168 @53145 has 28 MA's), (Start: 215 @53022 has 28 MA's), (230, 52977), (245, 52935), (273, 52887), (275, 52884), (278, 52878), (280, 52875), (287, 52863), (289, 52857), (308, 52821), (312, 52809), (313, 52806), (355, 52686), (358, 52668), (378, 52605), (384, 52581), (386, 52566), (399, 52524), (416, 52446), (447, 52395), (475, 52335), (476, 52332), (479, 52323), (484, 52305), (515, 52263), (532, 52218), (608, 52083), (611, 52068), (616, 52047), (664, 51966), (666, 51963), (681, 51906), (682, 51900), (684, 51888), (703, 51837), (706, 51822), (707, 51813), (715, 51774), (718, 51762), (746, 51666), (754, 51651),

Gene: Litotes_29 Start: 22115, Stop: 23509, Start Num: 197

Candidate Starts for Litotes_29:

(Start: 197 @22115 has 73 MA's), (221, 22172), (282, 22277), (318, 22364), (358, 22451), (359, 22454), (384, 22544), (390, 22580), (393, 22589), (396, 22598), (411, 22655), (415, 22673), (435, 22706), (445, 22718), (478, 22787), (487, 22814), (511, 22838), (525, 22880), (541, 22913), (551, 22928), (554, 22937), (600, 23027), (624, 23096), (633, 23123), (639, 23141), (645, 23153), (672, 23243), (674, 23249), (677, 23258), (680, 23264), (691, 23300), (712, 23387), (727, 23438), (729, 23444), (740, 23477), (745, 23501),

Gene: LittleFella_57 Start: 39855, Stop: 41873, Start Num: 42

Candidate Starts for LittleFella_57:

(Start: 42 @39855 has 55 MA's), (92, 40053), (94, 40062), (95, 40065), (101, 40095), (115, 40137), (Start: 118 @40146 has 3 MA's), (152, 40224), (157, 40236), (184, 40305), (Start: 197 @40338 has 73 MA's), (Start: 199 @40341 has 2 MA's), (283, 40521), (317, 40602), (331, 40629), (376, 40734), (386, 40776), (390, 40797), (463, 40956), (472, 40980), (501, 41037), (503, 41040), (517, 41058), (529, 41097), (554, 41157), (558, 41169), (565, 41187), (570, 41199), (578, 41220), (582, 41307), (583, 41310), (584, 41313), (610, 41379), (622, 41424), (631, 41451), (665, 41544), (684, 41619), (688, 41631), (693, 41643), (696, 41652), (698, 41661), (709, 41709), (712, 41727), (729, 41784), (740, 41817), (757, 41856),

Gene: Lizzo_59 Start: 52326, Stop: 50794, Start Num: 168

Candidate Starts for Lizzo_59:

(90, 52581), (102, 52530), (116, 52479), (135, 52425), (143, 52395), (Start: 153 @52362 has 3 MA's), (158, 52353), (Start: 168 @52326 has 28 MA's), (230, 52158), (245, 52116), (273, 52068), (280, 52056), (287, 52044), (289, 52038), (297, 52017), (312, 51990), (358, 51849), (384, 51762), (386, 51747), (389, 51735), (399, 51705), (410, 51654), (416, 51627), (447, 51576), (460, 51552), (467, 51534), (475, 51516), (476, 51513), (484, 51486), (515, 51444), (532, 51399), (608, 51264), (611, 51249), (616, 51228), (655, 51171), (664, 51147), (681, 51087), (682, 51081), (683, 51075), (684, 51069), (703, 51018), (707, 50994), (715, 50955), (718, 50943), (719, 50940), (746, 50847), (754, 50832), (763, 50811),

Gene: Lollipop1437_76 Start: 57598, Stop: 55541, Start Num: 28

Candidate Starts for Lollipop1437_76:

(6, 57886), (10, 57778), (Start: 28 @57598 has 34 MA's), (128, 57223), (172, 57115), (Start: 185 @57082 has 3 MA's), (208, 57031), (227, 56971), (228, 56968), (259, 56896), (271, 56878), (309, 56815), (311, 56809), (321, 56782), (358, 56716), (366, 56677), (374, 56659), (380, 56635), (415, 56512), (430, 56479), (463, 56416), (517, 56293), (540, 56224), (551, 56206), (594, 56101), (599, 56092), (617, 56032), (626, 55993), (635, 55963), (657, 55906), (674, 55846), (683, 55816), (694, 55783), (738, 55618),

Gene: LuckyBarnes_64 Start: 49560, Stop: 48223, Start Num: 205

Candidate Starts for LuckyBarnes_64:

(147, 49698), (174, 49635), (Start: 205 @49560 has 1 MA's), (230, 49485), (232, 49479), (253, 49449), (287, 49401), (293, 49383), (313, 49344), (338, 49290), (359, 49221), (379, 49149), (394, 49083), (448, 49002), (495, 48915), (511, 48897), (514, 48891), (517, 48882), (551, 48807), (588, 48735), (618, 48648), (624, 48633), (631, 48609), (633, 48606), (634, 48603), (705, 48384), (712, 48345), (713, 48342), (725, 48300), (737, 48264),

Gene: LuckyLeo_57 Start: 40044, Stop: 41966, Start Num: 41

Candidate Starts for LuckyLeo_57:

(17, 39927), (20, 39948), (25, 39969), (33, 39999), (36, 40032), (Start: 41 @40044 has 13 MA's), (Start: 42 @40047 has 55 MA's), (Start: 51 @40062 has 2 MA's), (54, 40077), (60, 40110), (70, 40143), (72, 40146), (Start: 81 @40194 has 3 MA's), (85, 40212), (107, 40302), (111, 40320), (115, 40329), (Start: 118 @40338 has 3 MA's), (149, 40410), (Start: 197 @40530 has 73 MA's), (Start: 199 @40533 has 2 MA's), (221, 40593), (228, 40611), (263, 40683), (279, 40710), (354, 40845), (357, 40863), (366, 40905), (376, 40926), (378, 40932), (386, 40974), (390, 40995), (399, 41016), (411, 41052), (456, 41151), (461, 41160), (481, 41211), (527, 41307), (528, 41310), (590, 41421), (613, 41487), (622, 41511), (631, 41538), (686, 41706), (693, 41724), (700, 41748), (704, 41763), (705, 41769), (712, 41811), (717, 41826), (728, 41865), (733, 41880), (740, 41901), (762, 41958),

Gene: Lucy_25 Start: 20556, Stop: 21950, Start Num: 197

Candidate Starts for Lucy_25:

(Start: 197 @20556 has 73 MA's), (221, 20613), (282, 20718), (284, 20721), (318, 20805), (340, 20838), (359, 20895), (381, 20976), (382, 20979), (384, 20985), (390, 21021), (396, 21039), (399, 21042), (406, 21075), (411, 21096), (435, 21147), (478, 21228), (487, 21255), (517, 21294), (523, 21315), (525, 21321), (541, 21354), (551, 21369), (563, 21396), (575, 21423), (595, 21459), (633, 21564), (639, 21582), (672, 21684), (673, 21687), (680, 21705), (681, 21708), (687, 21732), (691, 21741), (712, 21828), (727, 21879), (728, 21882), (740, 21918), (745, 21942),

Gene: Luker_58 Start: 53170, Stop: 51665, Start Num: 167

Candidate Starts for Luker_58:

(90, 53425), (129, 53296), (Start: 153 @53206 has 3 MA's), (Start: 167 @53170 has 1 MA's), (Start: 215 @53077 has 28 MA's), (230, 53032), (273, 52942), (275, 52939), (278, 52933), (289, 52912), (318, 52849), (355, 52741), (358, 52723), (384, 52636), (386, 52621), (399, 52579), (417, 52498), (447, 52450), (467, 52408), (475, 52390), (476, 52387), (484, 52360), (518, 52309), (532, 52273), (562, 52222), (608, 52138), (612, 52117), (681, 51961), (682, 51955), (684, 51943), (718, 51817), (754, 51703),

Gene: Lupine_78 Start: 49414, Stop: 47891, Start Num: 201

Candidate Starts for Lupine_78:

(109, 49675), (124, 49633), (Start: 201 @49414 has 46 MA's), (238, 49303), (257, 49264), (265, 49255), (310, 49159), (324, 49117), (335, 49099), (358, 49045), (367, 49000), (401, 48895), (444, 48772), (463, 48736), (479, 48697), (498, 48631), (506, 48604), (508, 48586), (515, 48556), (533, 48496), (549, 48466), (554, 48454), (557, 48448), (674, 48139), (681, 48121), (693, 48079), (695, 48073), (700, 48055), (701, 48052),

Gene: Lyell_84 Start: 49739, Stop: 48219, Start Num: 201

Candidate Starts for Lyell_84:

(Start: 185 @49772 has 3 MA's), (Start: 201 @49739 has 46 MA's), (213, 49706), (219, 49688), (265, 49580), (300, 49514), (322, 49448), (367, 49325), (376, 49310), (388, 49253), (400, 49220), (401, 49217), (418, 49154), (439, 49103), (444, 49094), (450, 49085), (464, 49055), (473, 49031), (490, 48992), (493, 48977), (506, 48926), (508, 48908), (549, 48788), (566, 48743), (681, 48449), (688,

48419), (703, 48374), (712, 48323), (731, 48260),

Gene: MacGully_81 Start: 56374, Stop: 54335, Start Num: 30

Candidate Starts for MacGully_81:

(Start: 30 @56374 has 1 MA's), (45, 56305), (48, 56299), (136, 55975), (152, 55951), (184, 55870),
(Start: 185 @55867 has 3 MA's), (223, 55765), (227, 55756), (236, 55726), (271, 55660), (312, 55588),
(354, 55519), (369, 55447), (386, 55390), (463, 55210), (472, 55186), (494, 55123), (517, 55087),
(540, 55018), (544, 55012), (551, 55000), (617, 54826), (683, 54604), (694, 54571), (705, 54529),
(710, 54499), (712, 54490), (720, 54466), (722, 54457), (735, 54415),

Gene: Madi_50 Start: 36692, Stop: 38746, Start Num: 46

Candidate Starts for Madi_50:

(Start: 46 @36692 has 8 MA's), (54, 36716), (72, 36779), (89, 36863), (97, 36905), (Start: 182 @37127
has 5 MA's), (Start: 197 @37163 has 73 MA's), (227, 37238), (239, 37277), (272, 37319), (283,
37337), (292, 37358), (298, 37370), (323, 37430), (331, 37445), (352, 37463), (369, 37541), (378,
37556), (379, 37559), (386, 37598), (390, 37619), (433, 37721), (463, 37778), (470, 37799), (472,
37802), (477, 37814), (503, 37862), (513, 37868), (528, 37916), (539, 37949), (552, 37973), (558,
37991), (570, 38021), (581, 38144), (584, 38177), (589, 38189), (594, 38204), (610, 38243), (622,
38288), (631, 38315), (662, 38399), (681, 38462), (693, 38504), (696, 38513), (698, 38522), (709,
38570), (710, 38579), (712, 38591), (717, 38606), (729, 38648),

Gene: Madruga_74 Start: 48812, Stop: 50845, Start Num: 47

Candidate Starts for Madruga_74:

(24, 48722), (Start: 47 @48812 has 3 MA's), (53, 48836), (66, 48899), (83, 48965), (93, 49016), (94,
49019), (128, 49127), (136, 49160), (156, 49199), (166, 49223), (187, 49286), (Start: 197 @49304 has
73 MA's), (208, 49325), (209, 49331), (233, 49400), (242, 49427), (250, 49439), (276, 49472), (319,
49574), (369, 49697), (380, 49727), (411, 49832), (415, 49850), (461, 49940), (463, 49943), (491,
50045), (499, 50084), (513, 50111), (517, 50123), (531, 50171), (536, 50189), (551, 50216), (556,
50228), (558, 50237), (626, 50375), (640, 50420), (673, 50525), (709, 50654), (717, 50687), (722,
50705), (739, 50759), (750, 50798),

Gene: Makoto_25 Start: 20576, Stop: 21970, Start Num: 197

Candidate Starts for Makoto_25:

(Start: 197 @20576 has 73 MA's), (221, 20633), (282, 20738), (318, 20825), (340, 20858), (359,
20915), (370, 20966), (381, 20996), (382, 20999), (384, 21005), (390, 21041), (396, 21059), (399,
21062), (406, 21095), (411, 21116), (478, 21248), (487, 21275), (517, 21314), (523, 21335), (525,
21341), (541, 21374), (551, 21389), (554, 21398), (575, 21443), (595, 21479), (612, 21521), (633,
21584), (639, 21602), (672, 21704), (673, 21707), (680, 21725), (681, 21728), (687, 21752), (691,
21761), (712, 21848), (740, 21938), (745, 21962),

Gene: MamaPearl_26 Start: 21743, Stop: 23140, Start Num: 197

Candidate Starts for MamaPearl_26:

(Start: 197 @21743 has 73 MA's), (221, 21803), (282, 21908), (284, 21911), (318, 21995), (340,
22028), (357, 22079), (359, 22085), (381, 22166), (384, 22175), (390, 22211), (396, 22229), (399,
22232), (406, 22265), (411, 22286), (478, 22418), (514, 22475), (517, 22484), (523, 22505), (525,
22511), (541, 22544), (551, 22559), (577, 22619), (595, 22649), (626, 22730), (639, 22772), (651,
22805), (670, 22868), (673, 22877), (677, 22889), (680, 22895), (683, 22910), (687, 22922), (691,
22931), (712, 23018), (729, 23075), (740, 23108),

Gene: Maria1952_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for Maria1952_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318,
21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381,

22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Marietta_72 Start: 52748, Stop: 50667, Start Num: 28

Candidate Starts for Marietta_72:

(9, 52940), (11, 52922), (15, 52847), (Start: 28 @52748 has 34 MA's), (184, 52229), (Start: 197 @52196 has 73 MA's), (208, 52175), (224, 52121), (227, 52115), (228, 52112), (271, 52022), (273, 52019), (309, 51959), (374, 51803), (415, 51656), (463, 51548), (472, 51524), (517, 51422), (533, 51368), (540, 51353), (575, 51272), (594, 51233), (615, 51170), (622, 51131), (626, 51125), (635, 51095), (674, 50978), (694, 50915), (709, 50852), (712, 50834), (738, 50750),

Gene: Marky_44 Start: 31624, Stop: 33015, Start Num: 206

Candidate Starts for Marky_44:

(192, 31615), (Start: 206 @31624 has 3 MA's), (208, 31630), (230, 31699), (239, 31723), (282, 31768), (330, 31861), (357, 31927), (386, 32038), (393, 32068), (394, 32071), (436, 32194), (502, 32329), (519, 32356), (525, 32377), (531, 32398), (541, 32410), (604, 32539), (627, 32608), (633, 32629), (639, 32647), (648, 32665), (666, 32719), (672, 32749), (691, 32806), (693, 32809), (706, 32857), (722, 32926), (739, 32980), (743, 32998),

Gene: Maselop_72 Start: 53166, Stop: 51130, Start Num: 29

Candidate Starts for Maselop_72:

(12, 53334), (Start: 29 @53166 has 6 MA's), (43, 53100), (55, 53058), (83, 52953), (134, 52773), (165, 52716), (184, 52665), (187, 52650), (223, 52560), (228, 52548), (271, 52455), (312, 52383), (354, 52314), (369, 52242), (386, 52185), (463, 52005), (472, 51981), (494, 51918), (517, 51882), (551, 51795), (605, 51663), (616, 51624), (617, 51621), (626, 51576), (674, 51429), (694, 51366), (705, 51324), (712, 51285), (720, 51261),

Gene: Mbo2_52 Start: 42925, Stop: 41438, Start Num: 185

Candidate Starts for Mbo2_52:

(148, 43012), (Start: 185 @42925 has 3 MA's), (218, 42838), (230, 42802), (237, 42784), (245, 42769), (251, 42754), (262, 42742), (273, 42730), (277, 42724), (295, 42682), (346, 42559), (379, 42445), (396, 42370), (410, 42316), (445, 42241), (447, 42238), (460, 42214), (476, 42175), (495, 42136), (525, 42094), (612, 41911), (637, 41851), (646, 41833), (664, 41788), (666, 41785), (676, 41737), (680, 41728), (684, 41707), (692, 41689), (700, 41665), (706, 41641), (715, 41599), (722, 41572), (725, 41560), (735, 41530), (740, 41515), (754, 41473),

Gene: MeganNoll_29 Start: 22157, Stop: 23557, Start Num: 197

Candidate Starts for MeganNoll_29:

(Start: 197 @22157 has 73 MA's), (221, 22220), (282, 22325), (284, 22328), (318, 22412), (340, 22445), (357, 22496), (359, 22502), (381, 22583), (382, 22586), (384, 22592), (390, 22628), (396, 22646), (399, 22649), (411, 22703), (435, 22754), (478, 22835), (487, 22862), (514, 22892), (517, 22901), (525, 22928), (541, 22961), (551, 22976), (575, 23030), (590, 23051), (594, 23063), (600, 23075), (674, 23297), (677, 23306), (680, 23312), (691, 23348), (707, 23408), (712, 23435), (740, 23525),

Gene: Megatron06_62 Start: 46630, Stop: 48687, Start Num: 42

Candidate Starts for Megatron06_62:

(Start: 42 @46630 has 55 MA's), (58, 46690), (59, 46693), (Start: 81 @46786 has 3 MA's), (84, 46798), (88, 46819), (121, 46942), (123, 46945), (128, 46954), (136, 46987), (141, 47008), (156, 47056), (172, 47098), (Start: 197 @47161 has 73 MA's), (208, 47182), (209, 47188), (228, 47242), (319, 47428),

(323, 47440), (336, 47458), (352, 47473), (354, 47479), (463, 47797), (464, 47800), (481, 47845), (513, 47896), (517, 47908), (551, 47998), (556, 48010), (567, 48043), (584, 48067), (588, 48076), (626, 48166), (636, 48199), (673, 48310), (674, 48313), (675, 48316), (676, 48319), (686, 48355), (693, 48373), (709, 48439), (712, 48457), (764, 48634),

Gene: MerCougar_75 Start: 57668, Stop: 55593, Start Num: 28

Candidate Starts for MerCougar_75:

(Start: 28 @57668 has 34 MA's), (55, 57548), (Start: 67 @57503 has 4 MA's), (69, 57500), (134, 57257), (165, 57200), (184, 57149), (208, 57095), (228, 57032), (271, 56942), (273, 56939), (287, 56915), (309, 56879), (374, 56723), (380, 56699), (415, 56576), (463, 56465), (472, 56441), (517, 56342), (533, 56288), (558, 56234), (575, 56192), (594, 56153), (605, 56126), (617, 56084), (622, 56051), (635, 56015), (654, 55970), (657, 55958), (674, 55898), (712, 55754), (738, 55670),

Gene: Microdon_41 Start: 30843, Stop: 32237, Start Num: 204

Candidate Starts for Microdon_41:

(Start: 204 @30843 has 13 MA's), (Start: 206 @30846 has 3 MA's), (230, 30921), (239, 30945), (242, 30951), (273, 30975), (282, 30990), (284, 30993), (315, 31065), (329, 31080), (345, 31116), (375, 31215), (436, 31416), (502, 31551), (519, 31578), (525, 31599), (563, 31677), (577, 31710), (588, 31719), (604, 31761), (626, 31827), (627, 31830), (633, 31851), (639, 31869), (648, 31887), (666, 31941), (672, 31971), (691, 32028), (693, 32031), (706, 32079), (713, 32118), (718, 32133), (739, 32202), (743, 32220), (745, 32229),

Gene: Milani_33 Start: 22173, Stop: 23600, Start Num: 199

Candidate Starts for Milani_33:

(Start: 199 @22173 has 2 MA's), (357, 22527), (358, 22530), (362, 22551), (386, 22638), (525, 22974), (531, 22995), (551, 23022), (562, 23049), (563, 23052), (577, 23085), (599, 23121), (626, 23196), (633, 23220), (655, 23283), (666, 23304), (681, 23358), (691, 23391), (696, 23403), (706, 23442), (712, 23478), (715, 23484), (718, 23496), (722, 23511), (737, 23559), (740, 23568), (745, 23592),

Gene: Mima20_60 Start: 40803, Stop: 42716, Start Num: 42

Candidate Starts for Mima20_60:

(Start: 41 @40800 has 13 MA's), (Start: 42 @40803 has 55 MA's), (Start: 51 @40815 has 2 MA's), (60, 40863), (70, 40896), (85, 40965), (107, 41055), (115, 41082), (Start: 118 @41091 has 3 MA's), (149, 41163), (Start: 197 @41283 has 73 MA's), (221, 41346), (263, 41436), (279, 41463), (352, 41592), (357, 41616), (366, 41658), (382, 41706), (386, 41727), (390, 41748), (411, 41805), (434, 41859), (456, 41901), (481, 41961), (527, 42057), (528, 42060), (613, 42237), (631, 42288), (665, 42378), (674, 42414), (676, 42420), (693, 42474), (704, 42513), (728, 42615), (733, 42630), (740, 42651),

Gene: Minos_58 Start: 52601, Stop: 51189, Start Num: 215

Candidate Starts for Minos_58:

(90, 52949), (129, 52820), (150, 52733), (Start: 153 @52730 has 3 MA's), (Start: 215 @52601 has 28 MA's), (230, 52556), (273, 52466), (275, 52463), (278, 52457), (289, 52436), (318, 52373), (355, 52265), (358, 52247), (384, 52160), (386, 52145), (399, 52103), (417, 52022), (447, 51974), (467, 51932), (475, 51914), (476, 51911), (484, 51884), (518, 51833), (532, 51797), (562, 51746), (608, 51662), (612, 51641), (681, 51485), (682, 51479), (684, 51467), (718, 51341), (754, 51227),

Gene: Misaeng_29 Start: 22230, Stop: 23621, Start Num: 197

Candidate Starts for Misaeng_29:

(Start: 197 @22230 has 73 MA's), (232, 22317), (282, 22389), (284, 22392), (312, 22458), (318, 22476), (340, 22509), (359, 22566), (381, 22647), (384, 22656), (390, 22692), (396, 22710), (406, 22746), (411, 22767), (415, 22785), (435, 22818), (478, 22899), (487, 22926), (511, 22950), (523, 22986), (525, 22992), (541, 23025), (551, 23040), (554, 23049), (575, 23094), (594, 23127), (595, 23130), (627, 23214), (638, 23247), (639, 23253), (645, 23265), (672, 23355), (674, 23361), (680,

23376), (681, 23379), (683, 23391), (687, 23403), (691, 23412), (712, 23499), (740, 23589),

Gene: MoiGyank_63 Start: 41576, Stop: 43489, Start Num: 42

Candidate Starts for MoiGyank_63:

(Start: 41 @41573 has 13 MA's), (Start: 42 @41576 has 55 MA's), (Start: 51 @41588 has 2 MA's), (60, 41636), (70, 41669), (85, 41738), (107, 41828), (115, 41855), (Start: 118 @41864 has 3 MA's), (149, 41936), (Start: 197 @42056 has 73 MA's), (221, 42119), (263, 42209), (352, 42365), (357, 42389), (366, 42431), (382, 42479), (386, 42500), (390, 42521), (411, 42578), (415, 42596), (434, 42632), (456, 42674), (481, 42734), (527, 42830), (528, 42833), (613, 43010), (631, 43061), (665, 43151), (674, 43187), (676, 43193), (686, 43229), (693, 43247), (704, 43286), (728, 43388), (733, 43403), (740, 43424),

Gene: Moki_25 Start: 20566, Stop: 21960, Start Num: 197

Candidate Starts for Moki_25:

(Start: 197 @20566 has 73 MA's), (221, 20623), (282, 20728), (318, 20815), (340, 20848), (358, 20902), (359, 20905), (384, 20995), (390, 21031), (396, 21049), (399, 21052), (411, 21106), (478, 21238), (487, 21265), (514, 21295), (517, 21304), (525, 21331), (541, 21364), (551, 21379), (563, 21406), (575, 21433), (595, 21469), (612, 21511), (633, 21574), (639, 21592), (666, 21664), (670, 21688), (672, 21694), (673, 21697), (680, 21715), (681, 21718), (687, 21742), (691, 21751), (712, 21838), (727, 21889), (740, 21928),

Gene: Molivia_74 Start: 46115, Stop: 44718, Start Num: 202

Candidate Starts for Molivia_74:

(Start: 202 @46115 has 13 MA's), (220, 46064), (237, 46013), (238, 46010), (247, 45992), (256, 45974), (271, 45953), (322, 45830), (379, 45692), (416, 45551), (431, 45509), (443, 45488), (488, 45395), (505, 45338), (507, 45323), (512, 45293), (522, 45260), (558, 45185), (587, 45137), (598, 45110), (601, 45101), (606, 45089), (638, 44987), (656, 44948), (660, 44939), (702, 44807), (711, 44762), (719, 44738),

Gene: Monty_58 Start: 51476, Stop: 49944, Start Num: 168

Candidate Starts for Monty_58:

(90, 51731), (102, 51680), (116, 51629), (135, 51575), (143, 51545), (Start: 153 @51512 has 3 MA's), (158, 51503), (Start: 168 @51476 has 28 MA's), (230, 51308), (245, 51266), (273, 51218), (280, 51206), (287, 51194), (289, 51188), (297, 51167), (312, 51140), (358, 50999), (384, 50912), (386, 50897), (389, 50885), (399, 50855), (410, 50804), (416, 50777), (447, 50726), (475, 50666), (476, 50663), (484, 50636), (515, 50594), (532, 50549), (608, 50414), (611, 50399), (616, 50378), (664, 50297), (666, 50294), (681, 50237), (682, 50231), (683, 50225), (684, 50219), (707, 50144), (715, 50105), (718, 50093), (719, 50090), (746, 49997), (754, 49982), (763, 49961),

Gene: MontyDev_68 Start: 47606, Stop: 49366, Start Num: 130

Candidate Starts for MontyDev_68:

(Start: 130 @47606 has 9 MA's), (157, 47675), (193, 47771), (Start: 199 @47780 has 2 MA's), (228, 47861), (243, 47906), (329, 48083), (352, 48107), (362, 48155), (380, 48215), (384, 48227), (403, 48293), (451, 48416), (463, 48440), (472, 48464), (517, 48668), (527, 48701), (531, 48716), (551, 48755), (552, 48758), (556, 48767), (594, 48836), (640, 48968), (674, 49091), (675, 49094), (683, 49121), (693, 49151), (695, 49157), (696, 49160), (701, 49178), (704, 49190), (740, 49325), (746, 49352), (748, 49355),

Gene: Mopey_54 Start: 39729, Stop: 41672, Start Num: 42

Candidate Starts for Mopey_54:

(Start: 42 @39729 has 55 MA's), (53, 39756), (71, 39828), (82, 39882), (95, 39942), (98, 39960), (100, 39969), (117, 40020), (131, 40062), (149, 40098), (184, 40185), (219, 40278), (223, 40293), (231, 40314), (292, 40416), (307, 40449), (316, 40473), (354, 40533), (378, 40620), (394, 40695), (434,

40785), (463, 40836), (464, 40839), (503, 40929), (517, 40947), (527, 40980), (551, 41034), (556, 41046), (561, 41064), (594, 41127), (622, 41211), (665, 41328), (674, 41376), (694, 41439), (712, 41523),

Gene: MrBoss_30 Start: 22115, Stop: 23509, Start Num: 197

Candidate Starts for MrBoss_30:

(Start: 197 @22115 has 73 MA's), (221, 22172), (282, 22277), (318, 22364), (357, 22448), (358, 22451), (359, 22454), (384, 22544), (390, 22580), (393, 22589), (396, 22598), (411, 22655), (415, 22673), (435, 22706), (478, 22787), (487, 22814), (511, 22838), (525, 22880), (541, 22913), (551, 22928), (600, 23027), (633, 23123), (639, 23141), (645, 23153), (672, 23243), (674, 23249), (677, 23258), (680, 23264), (691, 23300), (712, 23387), (727, 23438), (729, 23444), (740, 23477), (745, 23501),

Gene: MrMiyagi_73 Start: 45205, Stop: 47052, Start Num: 67

Candidate Starts for MrMiyagi_73:

(Start: 67 @45205 has 4 MA's), (76, 45223), (Start: 81 @45259 has 3 MA's), (92, 45310), (128, 45418), (136, 45451), (165, 45511), (180, 45553), (194, 45592), (231, 45688), (235, 45700), (245, 45727), (252, 45742), (258, 45751), (283, 45790), (290, 45805), (323, 45892), (330, 45904), (369, 46003), (374, 46009), (380, 46033), (394, 46093), (422, 46171), (442, 46198), (456, 46228), (463, 46240), (472, 46264), (517, 46342), (527, 46375), (531, 46390), (542, 46414), (544, 46417), (556, 46441), (674, 46765), (677, 46774), (684, 46801), (693, 46825), (705, 46870), (712, 46912), (726, 46960), (732, 46978), (751, 47035),

Gene: MrWormie_57 Start: 51762, Stop: 50350, Start Num: 215

Candidate Starts for MrWormie_57:

(90, 52110), (129, 51981), (Start: 153 @51891 has 3 MA's), (Start: 215 @51762 has 28 MA's), (230, 51717), (273, 51627), (275, 51624), (278, 51618), (289, 51597), (318, 51534), (355, 51426), (358, 51408), (384, 51321), (386, 51306), (399, 51264), (417, 51183), (447, 51135), (467, 51093), (475, 51075), (476, 51072), (484, 51045), (518, 50994), (532, 50958), (562, 50907), (608, 50823), (612, 50802), (681, 50646), (682, 50640), (684, 50628), (718, 50502), (754, 50388),

Gene: Msay19_64 Start: 54046, Stop: 52514, Start Num: 168

Candidate Starts for Msay19_64:

(90, 54301), (102, 54250), (135, 54145), (143, 54115), (Start: 153 @54082 has 3 MA's), (158, 54073), (Start: 168 @54046 has 28 MA's), (230, 53878), (245, 53836), (254, 53818), (273, 53788), (280, 53776), (287, 53764), (289, 53758), (297, 53737), (358, 53569), (384, 53482), (386, 53467), (389, 53455), (399, 53425), (410, 53374), (447, 53296), (460, 53272), (467, 53254), (475, 53236), (476, 53233), (479, 53224), (484, 53206), (515, 53164), (532, 53119), (547, 53101), (608, 52984), (611, 52969), (616, 52948), (664, 52867), (666, 52864), (681, 52807), (682, 52801), (684, 52789), (707, 52714), (715, 52675), (718, 52663), (719, 52660), (746, 52567), (754, 52552),

Gene: Musetta_83 Start: 50079, Stop: 48559, Start Num: 201

Candidate Starts for Musetta_83:

(Start: 185 @50112 has 3 MA's), (Start: 201 @50079 has 46 MA's), (219, 50028), (265, 49920), (300, 49854), (322, 49788), (367, 49665), (376, 49650), (388, 49593), (400, 49560), (401, 49557), (418, 49494), (439, 49443), (444, 49434), (450, 49425), (473, 49371), (490, 49332), (493, 49317), (506, 49266), (508, 49248), (515, 49218), (549, 49128), (566, 49083), (681, 48789), (688, 48759), (703, 48714), (731, 48600),

Gene: NadineRae_71 Start: 52357, Stop: 50276, Start Num: 28

Candidate Starts for NadineRae_71:

(Start: 28 @52357 has 34 MA's), (83, 52126), (184, 51838), (Start: 197 @51805 has 73 MA's), (208, 51784), (224, 51730), (227, 51724), (228, 51721), (271, 51631), (273, 51628), (309, 51568), (374,

51412), (415, 51265), (450, 51184), (463, 51157), (472, 51133), (517, 51031), (533, 50977), (540, 50962), (575, 50881), (594, 50842), (615, 50779), (622, 50740), (626, 50734), (635, 50704), (674, 50587), (694, 50524), (709, 50461), (712, 50443), (738, 50359),

Gene: Nancia_25 Start: 20580, Stop: 21974, Start Num: 197

Candidate Starts for Nancia_25:

(Start: 197 @20580 has 73 MA's), (221, 20637), (282, 20742), (284, 20745), (318, 20829), (340, 20862), (357, 20913), (359, 20919), (381, 21000), (382, 21003), (384, 21009), (390, 21045), (396, 21063), (399, 21066), (406, 21099), (411, 21120), (478, 21252), (487, 21279), (517, 21318), (523, 21339), (525, 21345), (541, 21378), (551, 21393), (554, 21402), (575, 21447), (595, 21483), (612, 21525), (633, 21588), (639, 21606), (672, 21708), (673, 21711), (680, 21729), (681, 21732), (687, 21756), (691, 21765), (712, 21852), (740, 21942), (745, 21966),

Gene: NatB6_72 Start: 55674, Stop: 53746, Start Num: 61

Candidate Starts for NatB6_72:

(2, 56310), (5, 56109), (8, 56016), (9, 56004), (11, 55986), (Start: 28 @55812 has 34 MA's), (Start: 61 @55674 has 2 MA's), (65, 55650), (Start: 118 @55446 has 3 MA's), (134, 55401), (184, 55293), (227, 55179), (228, 55176), (271, 55086), (273, 55083), (309, 55023), (366, 54885), (374, 54867), (380, 54843), (415, 54720), (463, 54615), (517, 54489), (533, 54435), (544, 54414), (594, 54300), (622, 54204), (626, 54198), (635, 54168), (657, 54111), (674, 54051), (694, 53988), (712, 53907),

Gene: Necrophoxinus_86 Start: 50425, Stop: 48905, Start Num: 201

Candidate Starts for Necrophoxinus_86:

(Start: 185 @50458 has 3 MA's), (Start: 201 @50425 has 46 MA's), (213, 50392), (219, 50374), (257, 50275), (265, 50266), (300, 50200), (322, 50134), (376, 49996), (388, 49939), (400, 49906), (401, 49903), (418, 49840), (439, 49789), (444, 49780), (450, 49771), (464, 49741), (473, 49717), (490, 49678), (493, 49663), (506, 49612), (508, 49594), (515, 49564), (535, 49501), (566, 49429), (681, 49135), (688, 49105), (703, 49060), (712, 49009), (725, 48964), (731, 48946),

Gene: Neoevie_57 Start: 52863, Stop: 51451, Start Num: 215

Candidate Starts for Neoevie_57:

(90, 53211), (129, 53082), (150, 52995), (Start: 153 @52992 has 3 MA's), (Start: 215 @52863 has 28 MA's), (230, 52818), (273, 52728), (275, 52725), (278, 52719), (289, 52698), (318, 52635), (355, 52527), (358, 52509), (384, 52422), (386, 52407), (399, 52365), (417, 52284), (447, 52236), (467, 52194), (475, 52176), (476, 52173), (484, 52146), (518, 52095), (532, 52059), (562, 52008), (608, 51924), (612, 51903), (681, 51747), (682, 51741), (684, 51729), (718, 51603), (754, 51489),

Gene: Newt_58 Start: 53091, Stop: 51679, Start Num: 215

Candidate Starts for Newt_58:

(90, 53439), (129, 53310), (150, 53223), (Start: 153 @53220 has 3 MA's), (Start: 215 @53091 has 28 MA's), (230, 53046), (273, 52956), (275, 52953), (278, 52947), (289, 52926), (318, 52863), (355, 52755), (358, 52737), (384, 52650), (386, 52635), (399, 52593), (417, 52512), (447, 52464), (467, 52422), (475, 52404), (476, 52401), (484, 52374), (518, 52323), (532, 52287), (562, 52236), (608, 52152), (612, 52131), (681, 51975), (682, 51969), (684, 51957), (718, 51831), (754, 51717),

Gene: Niagara_57 Start: 53309, Stop: 51606, Start Num: 106

Candidate Starts for Niagara_57:

(Start: 106 @53309 has 9 MA's), (Start: 108 @53297 has 2 MA's), (171, 53114), (Start: 215 @53024 has 28 MA's), (218, 53015), (230, 52979), (237, 52955), (240, 52946), (245, 52937), (273, 52889), (287, 52865), (318, 52793), (330, 52772), (342, 52736), (343, 52733), (378, 52604), (379, 52601), (386, 52565), (387, 52562), (390, 52544), (393, 52535), (399, 52523), (409, 52475), (417, 52442), (447, 52394), (460, 52370), (484, 52304), (532, 52205), (592, 52106), (595, 52097), (605, 52073), (608, 52070), (655, 51977), (664, 51953), (666, 51950), (681, 51893), (684, 51875), (715, 51758),

(716, 51755), (719, 51743), (754, 51644), (763, 51623),

Gene: Nilo_68 Start: 47960, Stop: 49720, Start Num: 130

Candidate Starts for Nilo_68:

(Start: 130 @47960 has 9 MA's), (157, 48029), (193, 48125), (Start: 199 @48134 has 2 MA's), (228, 48215), (243, 48260), (352, 48461), (362, 48509), (380, 48569), (384, 48581), (403, 48647), (451, 48770), (463, 48794), (472, 48818), (517, 49022), (527, 49055), (531, 49070), (551, 49109), (552, 49112), (556, 49121), (594, 49190), (640, 49322), (674, 49445), (675, 49448), (683, 49475), (693, 49505), (695, 49511), (696, 49514), (701, 49532), (704, 49544), (740, 49679), (748, 49709),

Gene: Nimi13_57 Start: 52610, Stop: 51198, Start Num: 215

Candidate Starts for Nimi13_57:

(90, 52958), (129, 52829), (Start: 153 @52739 has 3 MA's), (Start: 215 @52610 has 28 MA's), (230, 52565), (273, 52475), (275, 52472), (278, 52466), (289, 52445), (318, 52382), (355, 52274), (358, 52256), (384, 52169), (386, 52154), (399, 52112), (417, 52031), (447, 51983), (467, 51941), (475, 51923), (476, 51920), (484, 51893), (518, 51842), (532, 51806), (562, 51755), (608, 51671), (612, 51650), (681, 51494), (682, 51488), (684, 51476), (718, 51350), (754, 51236),

Gene: Nirvana_129 Start: 85649, Stop: 84003, Start Num: 151

Candidate Starts for Nirvana_129:

(Start: 151 @85649 has 8 MA's), (193, 85541), (207, 85517), (211, 85502), (212, 85499), (291, 85322), (333, 85220), (363, 85145), (364, 85142), (415, 84968), (429, 84926), (459, 84869), (485, 84803), (510, 84707), (526, 84650), (550, 84596), (555, 84584), (560, 84569), (588, 84521), (626, 84407), (635, 84377), (651, 84347), (655, 84335), (702, 84179), (703, 84176), (736, 84047),

Gene: Nonagon_72 Start: 46348, Stop: 44768, Start Num: 179

Candidate Starts for Nonagon_72:

(145, 46438), (Start: 179 @46348 has 2 MA's), (Start: 201 @46297 has 46 MA's), (208, 46282), (238, 46189), (245, 46174), (263, 46144), (274, 46129), (288, 46105), (299, 46078), (315, 46033), (332, 45994), (339, 45979), (358, 45937), (374, 45883), (389, 45820), (416, 45730), (420, 45715), (428, 45694), (458, 45637), (468, 45616), (498, 45532), (509, 45481), (537, 45388), (545, 45373), (557, 45349), (561, 45334), (562, 45331), (573, 45307), (575, 45301), (591, 45286), (619, 45202), (624, 45181), (626, 45178), (635, 45148), (636, 45145), (659, 45076), (662, 45064), (672, 45022), (674, 45016), (685, 44977), (694, 44953), (712, 44872), (724, 44830), (725, 44827),

Gene: NorManre_63 Start: 40960, Stop: 42873, Start Num: 42

Candidate Starts for NorManre_63:

(16, 40834), (18, 40843), (19, 40855), (27, 40888), (Start: 41 @40957 has 13 MA's), (Start: 42 @40960 has 55 MA's), (Start: 51 @40972 has 2 MA's), (60, 41020), (85, 41122), (107, 41212), (115, 41239), (Start: 118 @41248 has 3 MA's), (149, 41320), (Start: 197 @41440 has 73 MA's), (221, 41503), (263, 41593), (279, 41620), (352, 41749), (357, 41773), (366, 41815), (382, 41863), (386, 41884), (390, 41905), (411, 41962), (415, 41980), (434, 42016), (456, 42058), (481, 42118), (527, 42214), (528, 42217), (613, 42394), (631, 42445), (665, 42535), (674, 42571), (676, 42577), (693, 42631), (704, 42670), (728, 42772), (733, 42787), (740, 42808), (762, 42865),

Gene: NosilaM_73 Start: 56110, Stop: 54188, Start Num: 67

Candidate Starts for NosilaM_73:

(Start: 28 @56275 has 34 MA's), (Start: 67 @56110 has 4 MA's), (69, 56107), (134, 55852), (184, 55744), (208, 55690), (228, 55627), (271, 55537), (273, 55534), (287, 55510), (309, 55474), (366, 55336), (374, 55318), (378, 55309), (380, 55294), (415, 55171), (450, 55087), (463, 55060), (472, 55036), (517, 54937), (533, 54883), (558, 54829), (575, 54787), (594, 54748), (617, 54679), (622, 54646), (635, 54610), (654, 54565), (657, 54553), (674, 54493), (694, 54430), (738, 54265),

Gene: Nova_52 Start: 40183, Stop: 42126, Start Num: 42

Candidate Starts for Nova_52:

(32, 40120), (Start: 42 @40183 has 55 MA's), (53, 40210), (71, 40282), (82, 40336), (95, 40396), (100, 40423), (117, 40474), (Start: 118 @40477 has 3 MA's), (131, 40516), (149, 40552), (184, 40639), (219, 40732), (223, 40747), (231, 40768), (292, 40870), (307, 40903), (316, 40927), (354, 40987), (378, 41074), (394, 41149), (434, 41239), (463, 41290), (464, 41293), (503, 41383), (517, 41401), (527, 41434), (556, 41500), (561, 41518), (594, 41581), (622, 41665), (665, 41782), (674, 41830), (694, 41893), (712, 41977),

Gene: NovaSharks_62 Start: 39405, Stop: 41321, Start Num: 41

Candidate Starts for NovaSharks_62:

(Start: 41 @39405 has 13 MA's), (Start: 42 @39408 has 55 MA's), (Start: 51 @39420 has 2 MA's), (60, 39468), (70, 39501), (107, 39660), (115, 39687), (Start: 118 @39696 has 3 MA's), (149, 39768), (Start: 197 @39888 has 73 MA's), (221, 39951), (263, 40041), (279, 40068), (352, 40197), (357, 40221), (366, 40263), (369, 40275), (378, 40290), (382, 40311), (386, 40332), (390, 40353), (411, 40410), (415, 40428), (434, 40464), (456, 40506), (481, 40566), (527, 40662), (528, 40665), (613, 40842), (631, 40893), (665, 40983), (674, 41019), (676, 41025), (693, 41079), (704, 41118), (728, 41220), (733, 41235), (740, 41256),

Gene: NovumRegina_72 Start: 56100, Stop: 54034, Start Num: 28

Candidate Starts for NovumRegina_72:

(8, 56304), (9, 56292), (11, 56274), (Start: 28 @56100 has 34 MA's), (Start: 61 @55962 has 2 MA's), (65, 55938), (Start: 118 @55734 has 3 MA's), (134, 55689), (184, 55581), (227, 55467), (228, 55464), (271, 55374), (273, 55371), (309, 55311), (366, 55173), (374, 55155), (380, 55131), (415, 55008), (463, 54903), (517, 54777), (533, 54723), (591, 54597), (594, 54588), (604, 54564), (622, 54492), (626, 54486), (635, 54456), (657, 54399), (674, 54339), (694, 54276), (712, 54195),

Gene: Nubia_29 Start: 22080, Stop: 23471, Start Num: 197

Candidate Starts for Nubia_29:

(Start: 197 @22080 has 73 MA's), (232, 22167), (282, 22239), (284, 22242), (312, 22308), (318, 22326), (323, 22332), (340, 22359), (359, 22416), (370, 22467), (384, 22506), (390, 22542), (396, 22560), (406, 22596), (411, 22617), (415, 22635), (435, 22668), (462, 22707), (478, 22749), (487, 22776), (511, 22800), (523, 22836), (525, 22842), (541, 22875), (551, 22890), (554, 22899), (575, 22944), (594, 22977), (595, 22980), (633, 23085), (638, 23097), (645, 23115), (672, 23205), (680, 23226), (681, 23229), (687, 23253), (691, 23262), (712, 23349), (727, 23400), (740, 23439), (745, 23463),

Gene: OMalley_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for OMalley_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (612, 22690), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: Oaker_60 Start: 46344, Stop: 48401, Start Num: 42

Candidate Starts for Oaker_60:

(Start: 42 @46344 has 55 MA's), (58, 46404), (59, 46407), (Start: 81 @46500 has 3 MA's), (84, 46512), (88, 46533), (121, 46656), (123, 46659), (128, 46668), (136, 46701), (141, 46722), (156, 46770), (172, 46812), (Start: 197 @46875 has 73 MA's), (208, 46896), (209, 46902), (228, 46956), (319, 47142), (323, 47154), (336, 47172), (352, 47187), (354, 47193), (463, 47511), (464, 47514), (481, 47559), (513, 47610), (517, 47622), (551, 47712), (556, 47724), (567, 47757), (584, 47781), (588, 47790),

(626, 47880), (636, 47913), (673, 48024), (674, 48027), (675, 48030), (676, 48033), (686, 48069), (693, 48087), (709, 48153), (712, 48171), (764, 48348),

Gene: OlinDD_77 Start: 49475, Stop: 47952, Start Num: 201

Candidate Starts for OlinDD_77:

(172, 49541), (Start: 182 @49514 has 5 MA's), (Start: 201 @49475 has 46 MA's), (257, 49325), (265, 49316), (310, 49220), (321, 49187), (335, 49160), (358, 49106), (367, 49061), (368, 49058), (400, 48953), (401, 48950), (444, 48827), (450, 48818), (454, 48806), (479, 48752), (506, 48659), (533, 48551), (549, 48521), (552, 48515), (553, 48512), (554, 48509), (566, 48476), (572, 48464), (624, 48338), (640, 48290), (674, 48200), (681, 48182), (695, 48134), (725, 48011),

Gene: Olympi_35 Start: 23358, Stop: 24785, Start Num: 201

Candidate Starts for Olympi_35:

(Start: 201 @23358 has 46 MA's), (309, 23574), (349, 23676), (358, 23715), (375, 23778), (386, 23823), (390, 23844), (416, 23943), (502, 24111), (525, 24159), (531, 24180), (551, 24207), (562, 24234), (575, 24264), (577, 24270), (599, 24306), (627, 24384), (665, 24486), (666, 24489), (691, 24576), (696, 24588), (706, 24627), (712, 24663), (718, 24681), (737, 24744),

Gene: Onyinye_65 Start: 45953, Stop: 47881, Start Num: 42

Candidate Starts for Onyinye_65:

(Start: 42 @45953 has 55 MA's), (52, 45974), (57, 46004), (Start: 81 @46103 has 3 MA's), (95, 46166), (115, 46238), (Start: 118 @46247 has 3 MA's), (136, 46295), (223, 46511), (231, 46532), (239, 46553), (240, 46556), (249, 46568), (269, 46595), (324, 46718), (354, 46754), (369, 46826), (376, 46835), (384, 46868), (399, 46925), (404, 46937), (434, 47006), (440, 47015), (451, 47033), (463, 47057), (513, 47153), (517, 47165), (527, 47198), (544, 47240), (570, 47303), (615, 47408), (684, 47624), (693, 47648), (694, 47651), (705, 47693), (710, 47723), (717, 47747), (758, 47864),

Gene: Orchid_57 Start: 50422, Stop: 48932, Start Num: 182

Candidate Starts for Orchid_57:

(Start: 182 @50422 has 5 MA's), (218, 50329), (221, 50320), (224, 50308), (230, 50293), (237, 50275), (275, 50218), (306, 50146), (307, 50143), (341, 50050), (349, 50017), (356, 49984), (357, 49981), (361, 49960), (384, 49891), (390, 49855), (413, 49768), (447, 49705), (449, 49702), (465, 49672), (496, 49600), (500, 49591), (577, 49468), (586, 49462), (650, 49330), (666, 49288), (676, 49243), (684, 49213), (759, 48961),

Gene: OtterstedtS21_60 Start: 40582, Stop: 42495, Start Num: 42

Candidate Starts for OtterstedtS21_60:

(Start: 41 @40579 has 13 MA's), (Start: 42 @40582 has 55 MA's), (Start: 51 @40594 has 2 MA's), (60, 40642), (70, 40675), (85, 40744), (107, 40834), (115, 40861), (Start: 118 @40870 has 3 MA's), (149, 40942), (184, 41029), (Start: 197 @41062 has 73 MA's), (221, 41125), (263, 41215), (352, 41371), (357, 41395), (366, 41437), (382, 41485), (386, 41506), (390, 41527), (411, 41584), (434, 41638), (456, 41680), (481, 41740), (527, 41836), (528, 41839), (613, 42016), (631, 42067), (665, 42157), (674, 42193), (676, 42199), (693, 42253), (704, 42292), (728, 42394), (733, 42409), (740, 42430),

Gene: Outis_73 Start: 56760, Stop: 54685, Start Num: 28

Candidate Starts for Outis_73:

(Start: 28 @56760 has 34 MA's), (55, 56640), (Start: 67 @56595 has 4 MA's), (69, 56592), (134, 56349), (165, 56292), (184, 56241), (208, 56187), (228, 56124), (271, 56034), (273, 56031), (287, 56007), (309, 55971), (374, 55815), (380, 55791), (415, 55668), (463, 55557), (472, 55533), (517, 55434), (533, 55380), (558, 55326), (575, 55284), (594, 55245), (617, 55176), (622, 55143), (635, 55107), (654, 55062), (657, 55050), (674, 54990), (694, 54927), (712, 54846), (738, 54762),

Gene: Oxyfrius_29 Start: 22093, Stop: 23484, Start Num: 197

Candidate Starts for Oxynfrius_29:

(Start: 197 @22093 has 73 MA's), (232, 22180), (282, 22252), (284, 22255), (312, 22321), (318, 22339), (323, 22345), (340, 22372), (359, 22429), (370, 22480), (384, 22519), (390, 22555), (396, 22573), (406, 22609), (411, 22630), (415, 22648), (435, 22681), (462, 22720), (478, 22762), (487, 22789), (511, 22813), (523, 22849), (525, 22855), (541, 22888), (551, 22903), (554, 22912), (575, 22957), (594, 22990), (595, 22993), (633, 23098), (638, 23110), (645, 23128), (672, 23218), (680, 23239), (681, 23242), (687, 23266), (691, 23275), (712, 23362), (727, 23413), (740, 23452), (745, 23476),

Gene: P1201_75 Start: 57035, Stop: 55065, Start Num: 49

Candidate Starts for P1201_75:

(Start: 49 @57035 has 8 MA's), (82, 56897), (87, 56873), (126, 56741), (Start: 177 @56618 has 1 MA's), (184, 56600), (Start: 185 @56597 has 3 MA's), (271, 56390), (354, 56249), (433, 55979), (446, 55955), (456, 55934), (477, 55886), (517, 55790), (527, 55757), (552, 55700), (554, 55694), (556, 55691), (626, 55502), (684, 55319), (694, 55292), (709, 55229), (712, 55211),

Gene: PBI1_50 Start: 39660, Stop: 41603, Start Num: 42

Candidate Starts for PBI1_50:

(Start: 42 @39660 has 55 MA's), (53, 39687), (71, 39759), (82, 39813), (95, 39873), (98, 39891), (100, 39900), (117, 39951), (131, 39993), (149, 40029), (184, 40116), (219, 40209), (223, 40224), (231, 40245), (292, 40347), (307, 40380), (316, 40404), (354, 40464), (378, 40551), (394, 40626), (434, 40716), (463, 40767), (464, 40770), (503, 40860), (517, 40878), (527, 40911), (551, 40965), (556, 40977), (561, 40995), (594, 41058), (622, 41142), (665, 41259), (674, 41307), (694, 41370), (712, 41454),

Gene: PLOT_53 Start: 39756, Stop: 41699, Start Num: 42

Candidate Starts for PLOT_53:

(32, 39693), (Start: 42 @39756 has 55 MA's), (53, 39783), (71, 39855), (82, 39909), (95, 39969), (100, 39996), (117, 40047), (131, 40089), (149, 40125), (184, 40212), (219, 40305), (223, 40320), (231, 40341), (292, 40443), (307, 40476), (316, 40500), (354, 40560), (378, 40647), (394, 40722), (434, 40812), (463, 40863), (464, 40866), (503, 40956), (517, 40974), (527, 41007), (556, 41073), (561, 41091), (594, 41154), (622, 41238), (665, 41355), (674, 41403), (694, 41466), (712, 41550),

Gene: Papyrus_66 Start: 47571, Stop: 49331, Start Num: 130

Candidate Starts for Papyrus_66:

(Start: 130 @47571 has 9 MA's), (157, 47640), (193, 47736), (Start: 199 @47745 has 2 MA's), (228, 47826), (243, 47871), (352, 48072), (362, 48120), (380, 48180), (384, 48192), (403, 48258), (451, 48381), (463, 48405), (472, 48429), (517, 48633), (527, 48666), (531, 48681), (551, 48720), (552, 48723), (556, 48732), (594, 48801), (640, 48933), (674, 49056), (675, 49059), (683, 49086), (693, 49116), (695, 49122), (696, 49125), (701, 49143), (704, 49155), (740, 49290), (746, 49317), (748, 49320),

Gene: PartyCup_29 Start: 22162, Stop: 23556, Start Num: 197

Candidate Starts for PartyCup_29:

(Start: 197 @22162 has 73 MA's), (221, 22219), (282, 22324), (318, 22411), (357, 22495), (358, 22498), (359, 22501), (384, 22591), (390, 22627), (393, 22636), (396, 22645), (411, 22702), (415, 22720), (435, 22753), (445, 22765), (478, 22834), (487, 22861), (511, 22885), (523, 22921), (525, 22927), (541, 22960), (551, 22975), (554, 22984), (600, 23074), (624, 23143), (633, 23170), (639, 23188), (645, 23200), (672, 23290), (674, 23296), (677, 23305), (680, 23311), (691, 23347), (712, 23434), (729, 23491), (740, 23524), (745, 23548),

Gene: Parvaparticeps_24 Start: 17958, Stop: 16552, Start Num: 198

Candidate Starts for Parvaparticeps_24:

(198, 17958), (273, 17817), (282, 17802), (326, 17718), (348, 17655), (357, 17622), (375, 17556), (381, 17535), (384, 17526), (386, 17511), (393, 17481), (405, 17451), (416, 17397), (502, 17235), (541, 17154), (562, 17109), (575, 17079), (576, 17076), (599, 17037), (633, 16938), (639, 16920), (645, 16908), (650, 16890), (687, 16770), (691, 16761), (706, 16710), (707, 16701), (709, 16692), (712, 16674), (718, 16656), (737, 16593), (740, 16584), (745, 16560),

Gene: ParvusTarda_59 Start: 39954, Stop: 41870, Start Num: 41

Candidate Starts for ParvusTarda_59:

(16, 39831), (18, 39840), (19, 39852), (27, 39885), (Start: 41 @39954 has 13 MA's), (Start: 42 @39957 has 55 MA's), (Start: 51 @39969 has 2 MA's), (60, 40017), (70, 40050), (85, 40119), (107, 40209), (115, 40236), (Start: 118 @40245 has 3 MA's), (149, 40317), (184, 40404), (Start: 197 @40437 has 73 MA's), (221, 40500), (263, 40590), (352, 40746), (357, 40770), (366, 40812), (382, 40860), (386, 40881), (390, 40902), (411, 40959), (434, 41013), (456, 41055), (481, 41115), (527, 41211), (528, 41214), (613, 41391), (631, 41442), (665, 41532), (674, 41568), (676, 41574), (693, 41628), (704, 41667), (728, 41769), (733, 41784), (740, 41805),

Gene: Patience_76 Start: 49716, Stop: 51749, Start Num: 47

Candidate Starts for Patience_76:

(Start: 47 @49716 has 3 MA's), (53, 49740), (66, 49803), (83, 49869), (93, 49920), (94, 49923), (128, 50031), (136, 50064), (156, 50103), (166, 50127), (187, 50190), (Start: 197 @50208 has 73 MA's), (Start: 199 @50211 has 2 MA's), (208, 50229), (209, 50235), (233, 50304), (242, 50331), (250, 50343), (276, 50376), (319, 50478), (369, 50601), (380, 50631), (411, 50736), (415, 50754), (461, 50844), (463, 50847), (491, 50949), (499, 50988), (513, 51015), (515, 51021), (517, 51027), (531, 51075), (536, 51093), (551, 51120), (556, 51132), (558, 51141), (673, 51429), (709, 51558), (717, 51591), (722, 51609), (739, 51663), (750, 51702),

Gene: Patio_74 Start: 56655, Stop: 54598, Start Num: 28

Candidate Starts for Patio_74:

(6, 56943), (10, 56835), (Start: 28 @56655 has 34 MA's), (128, 56280), (172, 56172), (Start: 185 @56139 has 3 MA's), (208, 56088), (227, 56028), (228, 56025), (259, 55953), (271, 55935), (309, 55872), (311, 55866), (321, 55839), (358, 55773), (366, 55734), (374, 55716), (380, 55692), (394, 55632), (415, 55569), (430, 55536), (463, 55473), (517, 55350), (540, 55281), (551, 55263), (594, 55158), (599, 55149), (617, 55089), (622, 55056), (626, 55050), (635, 55020), (657, 54963), (674, 54903), (683, 54873), (694, 54840), (738, 54675),

Gene: Patos_63 Start: 40959, Stop: 42872, Start Num: 42

Candidate Starts for Patos_63:

(16, 40833), (18, 40842), (19, 40854), (27, 40887), (Start: 41 @40956 has 13 MA's), (Start: 42 @40959 has 55 MA's), (Start: 51 @40971 has 2 MA's), (60, 41019), (85, 41121), (107, 41211), (115, 41238), (Start: 118 @41247 has 3 MA's), (149, 41319), (Start: 197 @41439 has 73 MA's), (221, 41502), (263, 41592), (279, 41619), (352, 41748), (357, 41772), (366, 41814), (382, 41862), (386, 41883), (390, 41904), (411, 41961), (415, 41979), (434, 42015), (456, 42057), (481, 42117), (527, 42213), (528, 42216), (613, 42393), (631, 42444), (665, 42534), (674, 42570), (676, 42576), (693, 42630), (704, 42669), (728, 42771), (733, 42786), (740, 42807), (762, 42864),

Gene: PatrickStar_58 Start: 50421, Stop: 48931, Start Num: 182

Candidate Starts for PatrickStar_58:

(Start: 182 @50421 has 5 MA's), (218, 50328), (221, 50319), (224, 50307), (230, 50292), (237, 50274), (275, 50217), (306, 50145), (307, 50142), (341, 50049), (349, 50016), (356, 49983), (357, 49980), (361, 49959), (384, 49890), (390, 49854), (413, 49767), (447, 49704), (449, 49701), (465, 49671), (496, 49599), (500, 49590), (577, 49467), (586, 49461), (650, 49329), (666, 49287), (676, 49242), (684, 49212), (759, 48960),

Gene: Pavlo_78 Start: 49360, Stop: 47837, Start Num: 201

Candidate Starts for Pavlo_78:

(109, 49621), (Start: 201 @49360 has 46 MA's), (238, 49249), (257, 49210), (265, 49201), (310, 49105), (324, 49063), (335, 49045), (358, 48991), (367, 48946), (368, 48943), (401, 48841), (444, 48718), (463, 48682), (479, 48643), (498, 48577), (506, 48550), (508, 48532), (515, 48502), (533, 48442), (549, 48412), (554, 48400), (557, 48394), (674, 48085), (681, 48067), (693, 48025), (695, 48019), (700, 48001), (701, 47998), (733, 47872),

Gene: Pemberton_73 Start: 52697, Stop: 50847, Start Num: 83

Candidate Starts for Pemberton_73:

(9, 53120), (11, 53102), (15, 53027), (Start: 28 @52928 has 34 MA's), (83, 52697), (184, 52409), (Start: 197 @52376 has 73 MA's), (208, 52355), (224, 52301), (227, 52295), (228, 52292), (271, 52202), (273, 52199), (309, 52139), (374, 51983), (415, 51836), (463, 51728), (472, 51704), (517, 51602), (533, 51548), (540, 51533), (575, 51452), (594, 51413), (615, 51350), (622, 51311), (626, 51305), (635, 51275), (674, 51158), (694, 51095), (709, 51032), (712, 51014), (738, 50930),

Gene: Penelope2018_53 Start: 39774, Stop: 41717, Start Num: 42

Candidate Starts for Penelope2018_53:

(26, 39705), (Start: 42 @39774 has 55 MA's), (53, 39801), (71, 39873), (82, 39927), (95, 39987), (98, 40005), (100, 40014), (117, 40065), (131, 40107), (149, 40143), (184, 40230), (219, 40323), (223, 40338), (231, 40359), (292, 40461), (307, 40494), (316, 40518), (354, 40578), (378, 40665), (394, 40740), (434, 40830), (463, 40881), (464, 40884), (503, 40974), (517, 40992), (527, 41025), (551, 41079), (556, 41091), (561, 41109), (594, 41172), (622, 41256), (665, 41373), (674, 41421), (694, 41484), (712, 41568),

Gene: PermaG_34 Start: 23404, Stop: 24831, Start Num: 201

Candidate Starts for PermaG_34:

(183, 23362), (Start: 201 @23404 has 46 MA's), (282, 23560), (357, 23758), (358, 23761), (359, 23764), (362, 23782), (386, 23869), (390, 23890), (416, 23989), (455, 24055), (502, 24157), (504, 24160), (525, 24205), (531, 24226), (551, 24253), (562, 24280), (563, 24283), (568, 24295), (575, 24310), (577, 24316), (599, 24352), (612, 24388), (615, 24400), (627, 24430), (655, 24514), (665, 24532), (666, 24535), (691, 24622), (696, 24634), (706, 24673), (712, 24709), (715, 24715), (737, 24790),

Gene: PeteyPab_71 Start: 52509, Stop: 50584, Start Num: 49

Candidate Starts for PeteyPab_71:

(25, 52602), (27, 52596), (Start: 49 @52509 has 8 MA's), (91, 52338), (104, 52284), (184, 52080), (240, 51924), (271, 51873), (273, 51870), (303, 51828), (353, 51741), (354, 51738), (369, 51666), (376, 51657), (515, 51306), (517, 51300), (527, 51267), (657, 50928), (676, 50862), (681, 50850), (684, 50832), (694, 50805), (709, 50742), (717, 50709), (739, 50637),

Gene: Phalaborwa_53 Start: 39879, Stop: 41825, Start Num: 38

Candidate Starts for Phalaborwa_53:

(38, 39879), (68, 39975), (71, 39981), (82, 40035), (95, 40095), (100, 40122), (117, 40173), (Start: 118 @40176 has 3 MA's), (131, 40215), (149, 40251), (184, 40338), (219, 40431), (223, 40446), (231, 40467), (292, 40569), (307, 40602), (316, 40626), (354, 40686), (378, 40773), (399, 40857), (463, 40989), (464, 40992), (473, 41016), (503, 41082), (517, 41100), (527, 41133), (551, 41187), (556, 41199), (561, 41217), (594, 41280), (622, 41364), (665, 41481), (674, 41529), (694, 41592), (712, 41676),

Gene: PhillyPhilly_77 Start: 48897, Stop: 47374, Start Num: 201

Candidate Starts for PhillyPhilly_77:

(Start: 201 @48897 has 46 MA's), (238, 48786), (257, 48747), (265, 48738), (288, 48699), (310, 48642), (324, 48600), (358, 48528), (367, 48483), (368, 48480), (401, 48378), (444, 48255), (463, 48219), (479, 48180), (498, 48114), (506, 48087), (508, 48069), (515, 48039), (533, 47979), (549, 47949), (554, 47937), (557, 47931), (674, 47622), (681, 47604), (693, 47562), (695, 47556), (700, 47538), (701, 47535),

Gene: Philon9_57 Start: 53944, Stop: 52235, Start Num: 106

Candidate Starts for Philon9_57:

(Start: 106 @53944 has 9 MA's), (Start: 108 @53932 has 2 MA's), (Start: 144 @53812 has 1 MA's), (161, 53779), (171, 53749), (175, 53743), (218, 53635), (230, 53599), (237, 53575), (240, 53566), (245, 53557), (273, 53509), (275, 53506), (278, 53500), (280, 53497), (335, 53374), (343, 53353), (356, 53293), (379, 53221), (384, 53200), (386, 53185), (387, 53182), (389, 53173), (447, 53014), (471, 52963), (476, 52951), (478, 52945), (484, 52924), (516, 52879), (532, 52834), (559, 52792), (592, 52735), (604, 52705), (605, 52702), (608, 52699), (637, 52645), (681, 52522), (684, 52504), (715, 52387), (716, 52384), (719, 52372), (763, 52252),

Gene: Phomeo_71 Start: 56408, Stop: 54342, Start Num: 28

Candidate Starts for Phomeo_71:

(2, 56906), (5, 56705), (8, 56612), (9, 56600), (11, 56582), (Start: 28 @56408 has 34 MA's), (Start: 61 @56270 has 2 MA's), (65, 56246), (Start: 118 @56042 has 3 MA's), (134, 55997), (184, 55889), (227, 55775), (228, 55772), (271, 55682), (273, 55679), (309, 55619), (366, 55481), (374, 55463), (380, 55439), (415, 55316), (463, 55211), (517, 55085), (533, 55031), (591, 54905), (594, 54896), (604, 54872), (622, 54800), (626, 54794), (635, 54764), (657, 54707), (674, 54647), (694, 54584), (712, 54503),

Gene: Phreeze_60 Start: 45650, Stop: 47707, Start Num: 42

Candidate Starts for Phreeze_60:

(Start: 42 @45650 has 55 MA's), (58, 45710), (59, 45713), (Start: 81 @45806 has 3 MA's), (84, 45818), (88, 45839), (121, 45962), (123, 45965), (128, 45974), (136, 46007), (141, 46028), (156, 46076), (Start: 197 @46181 has 73 MA's), (208, 46202), (209, 46208), (228, 46262), (319, 46448), (323, 46460), (336, 46478), (352, 46493), (354, 46499), (463, 46817), (464, 46820), (481, 46865), (513, 46916), (517, 46928), (551, 47018), (556, 47030), (567, 47063), (584, 47087), (588, 47096), (626, 47186), (636, 47219), (673, 47330), (674, 47333), (675, 47336), (676, 47339), (693, 47393), (709, 47459), (712, 47477), (764, 47654),

Gene: PierreThree_58 Start: 52668, Stop: 51259, Start Num: 215

Candidate Starts for PierreThree_58:

(90, 53046), (102, 52995), (116, 52944), (135, 52890), (143, 52860), (Start: 153 @52827 has 3 MA's), (158, 52818), (Start: 168 @52791 has 28 MA's), (Start: 215 @52668 has 28 MA's), (230, 52623), (245, 52581), (273, 52533), (275, 52530), (278, 52524), (280, 52521), (287, 52509), (289, 52503), (312, 52455), (313, 52452), (355, 52332), (358, 52314), (378, 52251), (384, 52227), (386, 52212), (410, 52119), (447, 52041), (475, 51981), (476, 51978), (479, 51969), (484, 51951), (515, 51909), (532, 51864), (547, 51846), (608, 51729), (611, 51714), (616, 51693), (664, 51612), (666, 51609), (681, 51552), (682, 51546), (684, 51534), (703, 51483), (706, 51468), (707, 51459), (715, 51420), (718, 51408), (746, 51312), (754, 51297),

Gene: PinkFriday_25 Start: 20614, Stop: 22011, Start Num: 197

Candidate Starts for PinkFriday_25:

(Start: 197 @20614 has 73 MA's), (221, 20674), (271, 20761), (282, 20779), (318, 20866), (323, 20872), (340, 20899), (357, 20950), (359, 20956), (375, 21016), (381, 21037), (384, 21046), (390, 21082), (396, 21100), (399, 21103), (406, 21136), (411, 21157), (415, 21175), (416, 21181), (435, 21208), (453, 21235), (478, 21289), (482, 21301), (487, 21316), (511, 21340), (517, 21355), (519, 21361), (525, 21382), (541, 21415), (551, 21430), (554, 21439), (577, 21490), (612, 21562), (633,

21625), (639, 21643), (666, 21715), (670, 21739), (672, 21745), (673, 21748), (680, 21766), (691, 21802), (712, 21889), (740, 21979), (745, 22003),

Gene: Pioneer3_77 Start: 49273, Stop: 47750, Start Num: 201

Candidate Starts for Pioneer3_77:

(172, 49339), (Start: 182 @49312 has 5 MA's), (Start: 201 @49273 has 46 MA's), (257, 49123), (265, 49114), (310, 49018), (321, 48985), (335, 48958), (358, 48904), (367, 48859), (368, 48856), (400, 48751), (401, 48748), (444, 48625), (450, 48616), (454, 48604), (479, 48550), (506, 48457), (533, 48349), (549, 48319), (552, 48313), (553, 48310), (554, 48307), (566, 48274), (572, 48262), (624, 48136), (640, 48088), (674, 47998), (681, 47980), (695, 47932), (725, 47809),

Gene: PitaDog_25 Start: 20567, Stop: 21961, Start Num: 197

Candidate Starts for PitaDog_25:

(Start: 197 @20567 has 73 MA's), (221, 20624), (282, 20729), (284, 20732), (318, 20816), (340, 20849), (357, 20900), (359, 20906), (381, 20987), (382, 20990), (384, 20996), (390, 21032), (396, 21050), (399, 21053), (406, 21086), (411, 21107), (478, 21239), (487, 21266), (517, 21305), (523, 21326), (525, 21332), (541, 21365), (551, 21380), (554, 21389), (575, 21434), (595, 21470), (612, 21512), (633, 21575), (639, 21593), (672, 21695), (673, 21698), (680, 21716), (681, 21719), (687, 21743), (691, 21752), (712, 21839), (740, 21929), (745, 21953),

Gene: Platte_76 Start: 49041, Stop: 47518, Start Num: 201

Candidate Starts for Platte_76:

(172, 49107), (Start: 182 @49080 has 5 MA's), (Start: 201 @49041 has 46 MA's), (257, 48891), (265, 48882), (310, 48786), (321, 48753), (335, 48726), (358, 48672), (367, 48627), (368, 48624), (400, 48519), (401, 48516), (444, 48393), (450, 48384), (454, 48372), (479, 48318), (506, 48225), (533, 48117), (549, 48087), (552, 48081), (553, 48078), (554, 48075), (566, 48042), (572, 48030), (624, 47904), (640, 47856), (674, 47766), (681, 47748), (695, 47700), (725, 47577),

Gene: Pleakley_82 Start: 56142, Stop: 54094, Start Num: 28

Candidate Starts for Pleakley_82:

(Start: 28 @56142 has 34 MA's), (63, 55989), (72, 55974), (88, 55893), (128, 55770), (134, 55740), (184, 55632), (Start: 197 @55599 has 73 MA's), (217, 55548), (228, 55515), (271, 55425), (290, 55392), (309, 55362), (353, 55287), (374, 55206), (386, 55155), (415, 55059), (430, 55026), (450, 54990), (463, 54963), (515, 54846), (517, 54840), (540, 54771), (551, 54753), (556, 54741), (617, 54579), (626, 54546), (635, 54516), (640, 54501), (657, 54459), (694, 54336), (712, 54255), (720, 54231), (738, 54171),

Gene: PokyPuppy_58 Start: 52764, Stop: 51256, Start Num: 177

Candidate Starts for PokyPuppy_58:

(90, 53043), (102, 52992), (116, 52941), (133, 52893), (135, 52887), (143, 52857), (Start: 153 @52824 has 3 MA's), (158, 52815), (Start: 168 @52788 has 28 MA's), (Start: 177 @52764 has 1 MA's), (Start: 215 @52665 has 28 MA's), (230, 52620), (245, 52578), (273, 52530), (275, 52527), (278, 52521), (280, 52518), (289, 52500), (312, 52452), (355, 52329), (358, 52311), (384, 52224), (386, 52209), (410, 52116), (416, 52089), (447, 52038), (475, 51978), (476, 51975), (479, 51966), (484, 51948), (515, 51906), (532, 51861), (608, 51726), (611, 51711), (616, 51690), (655, 51633), (666, 51606), (681, 51549), (682, 51543), (684, 51531), (703, 51480), (707, 51456), (715, 51417), (718, 51405), (719, 51402), (746, 51309), (754, 51294),

Gene: Poland_64 Start: 54025, Stop: 52493, Start Num: 168

Candidate Starts for Poland_64:

(90, 54280), (102, 54229), (135, 54124), (143, 54094), (Start: 153 @54061 has 3 MA's), (158, 54052), (Start: 168 @54025 has 28 MA's), (230, 53857), (245, 53815), (254, 53797), (273, 53767), (280, 53755), (287, 53743), (289, 53737), (297, 53716), (358, 53548), (384, 53461), (386, 53446), (389,

53434), (399, 53404), (410, 53353), (447, 53275), (460, 53251), (467, 53233), (475, 53215), (476, 53212), (479, 53203), (484, 53185), (515, 53143), (532, 53098), (547, 53080), (608, 52963), (611, 52948), (616, 52927), (664, 52846), (666, 52843), (681, 52786), (682, 52780), (684, 52768), (707, 52693), (715, 52654), (718, 52642), (719, 52639), (746, 52546), (754, 52531),

Gene: Polygyki_72 Start: 53158, Stop: 51122, Start Num: 29

Candidate Starts for Polygyki_72:

(12, 53326), (Start: 29 @53158 has 6 MA's), (43, 53092), (55, 53050), (134, 52765), (165, 52708), (184, 52657), (187, 52642), (223, 52552), (228, 52540), (271, 52447), (312, 52375), (354, 52306), (369, 52234), (386, 52177), (463, 51997), (472, 51973), (494, 51910), (517, 51874), (551, 51787), (605, 51655), (616, 51616), (617, 51613), (626, 51568), (674, 51421), (694, 51358), (705, 51316), (712, 51277), (720, 51253),

Gene: PorkBelly_54 Start: 43266, Stop: 41917, Start Num: 200

Candidate Starts for PorkBelly_54:

(178, 43317), (Start: 200 @43266 has 7 MA's), (Start: 215 @43227 has 28 MA's), (228, 43188), (230, 43182), (242, 43152), (266, 43134), (277, 43116), (286, 43101), (309, 43053), (313, 43041), (338, 42984), (340, 42981), (341, 42978), (394, 42774), (421, 42702), (459, 42678), (480, 42627), (495, 42603), (511, 42585), (519, 42564), (523, 42549), (557, 42480), (561, 42465), (593, 42402), (631, 42300), (634, 42294), (648, 42264), (666, 42210), (670, 42186), (683, 42144), (717, 42018), (718, 42015), (728, 41979),

Gene: PotatoChip_72 Start: 52511, Stop: 50586, Start Num: 49

Candidate Starts for PotatoChip_72:

(25, 52604), (27, 52598), (Start: 49 @52511 has 8 MA's), (91, 52340), (104, 52286), (184, 52082), (240, 51926), (271, 51875), (273, 51872), (303, 51830), (353, 51743), (354, 51740), (369, 51668), (376, 51659), (515, 51308), (517, 51302), (527, 51269), (657, 50930), (676, 50864), (681, 50852), (684, 50834), (694, 50807), (709, 50744), (717, 50711), (739, 50639),

Gene: Potatoes_29 Start: 22153, Stop: 23553, Start Num: 197

Candidate Starts for Potatoes_29:

(Start: 197 @22153 has 73 MA's), (221, 22216), (282, 22321), (284, 22324), (318, 22408), (340, 22441), (357, 22492), (359, 22498), (381, 22579), (382, 22582), (384, 22588), (390, 22624), (396, 22642), (399, 22645), (411, 22699), (435, 22750), (478, 22831), (487, 22858), (514, 22888), (517, 22897), (525, 22924), (541, 22957), (551, 22972), (575, 23026), (590, 23047), (594, 23059), (600, 23071), (674, 23293), (677, 23302), (680, 23308), (691, 23344), (707, 23404), (712, 23431), (740, 23521),

Gene: Prager_53 Start: 39749, Stop: 41692, Start Num: 42

Candidate Starts for Prager_53:

(Start: 42 @39749 has 55 MA's), (53, 39776), (71, 39848), (82, 39902), (95, 39962), (98, 39980), (100, 39989), (117, 40040), (131, 40082), (149, 40118), (184, 40205), (219, 40298), (223, 40313), (231, 40334), (292, 40436), (307, 40469), (316, 40493), (354, 40553), (378, 40640), (394, 40715), (434, 40805), (463, 40856), (464, 40859), (503, 40949), (517, 40967), (527, 41000), (551, 41054), (556, 41066), (561, 41084), (594, 41147), (622, 41231), (665, 41348), (674, 41396), (694, 41459), (712, 41543),

Gene: Preamble_25 Start: 20577, Stop: 21971, Start Num: 197

Candidate Starts for Preamble_25:

(Start: 197 @20577 has 73 MA's), (221, 20634), (282, 20739), (284, 20742), (318, 20826), (340, 20859), (358, 20913), (359, 20916), (384, 21006), (390, 21042), (399, 21063), (406, 21096), (411, 21117), (435, 21168), (478, 21249), (487, 21276), (517, 21315), (525, 21342), (541, 21375), (551, 21390), (554, 21399), (575, 21444), (595, 21480), (626, 21561), (633, 21585), (639, 21603), (645,

21615), (666, 21675), (670, 21699), (672, 21705), (673, 21708), (680, 21726), (681, 21729), (687, 21753), (691, 21762), (712, 21849), (727, 21900), (740, 21939),

Gene: Predator_60 Start: 44295, Stop: 46307, Start Num: 42

Candidate Starts for Predator_60:

(Start: 42 @44295 has 55 MA's), (50, 44310), (56, 44349), (63, 44379), (64, 44388), (74, 44403), (83, 44457), (84, 44463), (Start: 108 @44568 has 2 MA's), (128, 44619), (131, 44640), (136, 44652), (156, 44721), (165, 44742), (186, 44802), (Start: 197 @44826 has 73 MA's), (208, 44847), (209, 44853), (319, 45093), (323, 45105), (352, 45138), (354, 45144), (380, 45246), (461, 45459), (463, 45462), (481, 45510), (513, 45561), (515, 45567), (517, 45573), (551, 45663), (556, 45675), (610, 45798), (626, 45831), (673, 45975), (677, 45987), (686, 46020), (709, 46104), (712, 46122), (713, 46125), (727, 46173), (744, 46230),

Gene: Puissant_62 Start: 45753, Stop: 47810, Start Num: 42

Candidate Starts for Puissant_62:

(Start: 42 @45753 has 55 MA's), (56, 45807), (59, 45816), (Start: 81 @45909 has 3 MA's), (83, 45915), (88, 45942), (123, 46068), (128, 46077), (136, 46110), (141, 46131), (156, 46179), (165, 46200), (Start: 197 @46284 has 73 MA's), (Start: 199 @46287 has 2 MA's), (208, 46305), (209, 46311), (228, 46365), (319, 46551), (323, 46563), (336, 46581), (352, 46596), (354, 46602), (463, 46920), (464, 46923), (481, 46968), (513, 47019), (517, 47031), (551, 47121), (556, 47133), (567, 47166), (584, 47190), (588, 47199), (626, 47289), (636, 47322), (673, 47433), (674, 47436), (675, 47439), (676, 47442), (693, 47496), (696, 47505), (712, 47580), (720, 47604), (727, 47631), (764, 47757),

Gene: Pumancara_25 Start: 20596, Stop: 21993, Start Num: 197

Candidate Starts for Pumancara_25:

(Start: 197 @20596 has 73 MA's), (221, 20656), (271, 20743), (282, 20761), (318, 20848), (323, 20854), (340, 20881), (357, 20932), (359, 20938), (375, 20998), (381, 21019), (384, 21028), (390, 21064), (396, 21082), (399, 21085), (406, 21118), (411, 21139), (416, 21163), (435, 21190), (453, 21217), (478, 21271), (482, 21283), (487, 21298), (511, 21322), (517, 21337), (525, 21364), (541, 21397), (551, 21412), (554, 21421), (577, 21472), (612, 21544), (626, 21583), (633, 21607), (639, 21625), (666, 21697), (670, 21721), (672, 21727), (673, 21730), (680, 21748), (691, 21784), (712, 21871), (723, 21910), (740, 21961), (745, 21985), (746, 21988),

Gene: Quantum_123 Start: 82180, Stop: 80537, Start Num: 151

Candidate Starts for Quantum_123:

(Start: 151 @82180 has 8 MA's), (163, 82156), (207, 82048), (241, 81943), (263, 81904), (291, 81853), (329, 81760), (358, 81700), (363, 81676), (364, 81673), (374, 81646), (398, 81553), (459, 81400), (469, 81376), (470, 81373), (483, 81340), (488, 81328), (507, 81256), (527, 81178), (546, 81133), (612, 80986), (626, 80941), (635, 80911), (651, 80881), (655, 80869), (673, 80803), (702, 80713), (703, 80710), (725, 80614), (727, 80608), (736, 80581),

Gene: RAP15_29 Start: 22157, Stop: 23557, Start Num: 197

Candidate Starts for RAP15_29:

(Start: 197 @22157 has 73 MA's), (221, 22220), (282, 22325), (284, 22328), (318, 22412), (340, 22445), (357, 22496), (359, 22502), (381, 22583), (382, 22586), (384, 22592), (390, 22628), (396, 22646), (399, 22649), (411, 22703), (435, 22754), (478, 22835), (487, 22862), (514, 22892), (517, 22901), (525, 22928), (541, 22961), (551, 22976), (575, 23030), (590, 23051), (594, 23063), (600, 23075), (674, 23297), (677, 23306), (680, 23312), (691, 23348), (707, 23408), (712, 23435), (740, 23525),

Gene: Ranch_60 Start: 39414, Stop: 41327, Start Num: 42

Candidate Starts for Ranch_60:

(36, 39399), (Start: 41 @39411 has 13 MA's), (Start: 42 @39414 has 55 MA's), (Start: 51 @39426 has 2 MA's), (60, 39474), (70, 39507), (85, 39576), (107, 39666), (115, 39693), (Start: 118 @39702 has 3 MA's), (149, 39774), (Start: 197 @39894 has 73 MA's), (221, 39957), (263, 40047), (279, 40074), (352, 40203), (357, 40227), (366, 40269), (382, 40317), (384, 40323), (386, 40338), (390, 40359), (411, 40416), (434, 40470), (456, 40512), (481, 40572), (527, 40668), (528, 40671), (613, 40848), (631, 40899), (665, 40989), (674, 41025), (676, 41031), (693, 41085), (704, 41124), (728, 41226), (733, 41241), (740, 41262),

Gene: Rasovi_33 Start: 23465, Stop: 24892, Start Num: 201

Candidate Starts for Rasovi_33:

(Start: 182 @23426 has 5 MA's), (191, 23447), (Start: 201 @23465 has 46 MA's), (358, 23822), (375, 23885), (386, 23930), (390, 23951), (502, 24218), (525, 24266), (531, 24287), (551, 24314), (562, 24341), (563, 24344), (575, 24371), (577, 24377), (599, 24413), (627, 24491), (633, 24512), (639, 24530), (645, 24542), (672, 24626), (691, 24683), (696, 24695), (706, 24734), (712, 24770), (715, 24776),

Gene: RazorC_60 Start: 39561, Stop: 41474, Start Num: 42

Candidate Starts for RazorC_60:

(Start: 41 @39558 has 13 MA's), (Start: 42 @39561 has 55 MA's), (Start: 51 @39573 has 2 MA's), (60, 39621), (70, 39654), (107, 39813), (115, 39840), (Start: 118 @39849 has 3 MA's), (149, 39921), (Start: 197 @40041 has 73 MA's), (221, 40104), (263, 40194), (279, 40221), (352, 40350), (357, 40374), (366, 40416), (369, 40428), (378, 40443), (382, 40464), (386, 40485), (390, 40506), (411, 40563), (415, 40581), (434, 40617), (456, 40659), (481, 40719), (527, 40815), (528, 40818), (613, 40995), (631, 41046), (665, 41136), (674, 41172), (676, 41178), (693, 41232), (704, 41271), (728, 41373), (733, 41388), (740, 41409),

Gene: RcigaStruga_29 Start: 22127, Stop: 23518, Start Num: 197

Candidate Starts for RcigaStruga_29:

(Start: 197 @22127 has 73 MA's), (232, 22214), (282, 22286), (284, 22289), (312, 22355), (318, 22373), (323, 22379), (340, 22406), (359, 22463), (381, 22544), (384, 22553), (390, 22589), (396, 22607), (406, 22643), (411, 22664), (415, 22682), (435, 22715), (462, 22754), (478, 22796), (487, 22823), (511, 22847), (523, 22883), (525, 22889), (541, 22922), (551, 22937), (554, 22946), (575, 22991), (594, 23024), (595, 23027), (626, 23108), (638, 23144), (639, 23150), (645, 23162), (672, 23252), (680, 23273), (681, 23276), (687, 23300), (691, 23309), (712, 23396), (727, 23447), (740, 23486), (745, 23510),

Gene: RedRaider_79 Start: 58956, Stop: 56899, Start Num: 28

Candidate Starts for RedRaider_79:

(1, 59529), (6, 59244), (Start: 28 @58956 has 34 MA's), (128, 58581), (136, 58548), (Start: 185 @58440 has 3 MA's), (208, 58389), (227, 58329), (228, 58326), (259, 58254), (271, 58236), (309, 58173), (311, 58167), (358, 58074), (374, 58017), (380, 57993), (415, 57870), (430, 57837), (463, 57774), (517, 57651), (540, 57582), (551, 57564), (594, 57459), (599, 57450), (617, 57390), (626, 57351), (635, 57321), (657, 57264), (674, 57204), (683, 57174), (694, 57141), (710, 57069), (738, 56976),

Gene: RemRem_60 Start: 51466, Stop: 49934, Start Num: 168

Candidate Starts for RemRem_60:

(90, 51721), (102, 51670), (116, 51619), (135, 51565), (143, 51535), (Start: 153 @51502 has 3 MA's), (158, 51493), (Start: 168 @51466 has 28 MA's), (230, 51298), (245, 51256), (273, 51208), (280, 51196), (287, 51184), (289, 51178), (297, 51157), (312, 51130), (358, 50989), (384, 50902), (386, 50887), (389, 50875), (399, 50845), (410, 50794), (416, 50767), (447, 50716), (467, 50674), (475, 50656), (476, 50653), (484, 50626), (515, 50584), (532, 50539), (608, 50404), (611, 50389), (616, 50368), (655, 50311), (664, 50287), (666, 50284), (681, 50227), (682, 50221), (683, 50215), (684,

50209), (703, 50158), (707, 50134), (715, 50095), (718, 50083), (719, 50080), (746, 49987), (754, 49972), (763, 49951),

Gene: Reynauld_56 Start: 50676, Stop: 49183, Start Num: 185

Candidate Starts for Reynauld_56:

(Start: 185 @50676 has 3 MA's), (Start: 199 @50640 has 2 MA's), (212, 50607), (Start: 215 @50598 has 28 MA's), (218, 50589), (221, 50580), (223, 50571), (230, 50553), (261, 50493), (273, 50481), (278, 50472), (344, 50325), (356, 50268), (361, 50244), (382, 50181), (410, 50067), (445, 49992), (447, 49989), (460, 49965), (467, 49947), (476, 49926), (495, 49887), (500, 49875), (502, 49872), (604, 49695), (614, 49659), (684, 49446), (700, 49404), (712, 49338), (735, 49263), (740, 49248),

Gene: Rings_71 Start: 47461, Stop: 46067, Start Num: 202

Candidate Starts for Rings_71:

(Start: 202 @47461 has 13 MA's), (226, 47392), (257, 47317), (271, 47299), (288, 47269), (318, 47188), (379, 47038), (417, 46894), (431, 46855), (488, 46741), (503, 46690), (507, 46669), (512, 46639), (517, 46624), (520, 46612), (558, 46531), (587, 46483), (598, 46456), (606, 46435), (630, 46351), (660, 46285), (716, 46096), (719, 46084),

Gene: Riovina_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for Riovina_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (612, 22690), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: Riparian_68 Start: 47408, Stop: 49168, Start Num: 130

Candidate Starts for Riparian_68:

(Start: 130 @47408 has 9 MA's), (157, 47477), (193, 47573), (Start: 199 @47582 has 2 MA's), (228, 47663), (243, 47708), (352, 47909), (362, 47957), (380, 48017), (384, 48029), (403, 48095), (451, 48218), (463, 48242), (472, 48266), (517, 48470), (527, 48503), (531, 48518), (551, 48557), (552, 48560), (556, 48569), (594, 48638), (640, 48770), (674, 48893), (675, 48896), (683, 48923), (693, 48953), (695, 48959), (696, 48962), (701, 48980), (704, 48992), (740, 49127), (748, 49157),

Gene: Riverdale_29 Start: 22087, Stop: 23487, Start Num: 197

Candidate Starts for Riverdale_29:

(Start: 197 @22087 has 73 MA's), (221, 22150), (282, 22255), (284, 22258), (318, 22342), (340, 22375), (357, 22426), (359, 22432), (381, 22513), (382, 22516), (384, 22522), (390, 22558), (396, 22576), (399, 22579), (406, 22612), (411, 22633), (415, 22651), (435, 22684), (478, 22765), (487, 22792), (514, 22822), (517, 22831), (525, 22858), (541, 22891), (551, 22906), (575, 22960), (590, 22981), (594, 22993), (600, 23005), (674, 23227), (677, 23236), (680, 23242), (691, 23278), (707, 23338), (712, 23365), (740, 23455),

Gene: RobinSparkles_61 Start: 50974, Stop: 49484, Start Num: 182

Candidate Starts for RobinSparkles_61:

(Start: 182 @50974 has 5 MA's), (218, 50881), (221, 50872), (224, 50860), (230, 50845), (237, 50827), (275, 50770), (306, 50698), (307, 50695), (341, 50602), (349, 50569), (356, 50536), (357, 50533), (361, 50512), (384, 50443), (390, 50407), (413, 50320), (447, 50257), (449, 50254), (465, 50224), (496, 50152), (500, 50143), (577, 50020), (586, 50014), (650, 49882), (666, 49840), (676, 49795), (684, 49765), (759, 49513),

Gene: Roman_81 Start: 50015, Stop: 48492, Start Num: 201

Candidate Starts for Roman_81:

(109, 50276), (Start: 201 @50015 has 46 MA's), (238, 49904), (257, 49865), (265, 49856), (310, 49760), (324, 49718), (335, 49700), (367, 49601), (368, 49598), (386, 49538), (401, 49496), (444, 49373), (463, 49337), (479, 49298), (498, 49232), (506, 49205), (508, 49187), (515, 49157), (533, 49097), (549, 49067), (554, 49055), (557, 49049), (674, 48740), (681, 48722), (693, 48680), (695, 48674), (700, 48656), (701, 48653),

Gene: Rootkit7_33 Start: 23258, Stop: 24685, Start Num: 201

Candidate Starts for Rootkit7_33:

(184, 23216), (Start: 201 @23258 has 46 MA's), (349, 23576), (386, 23723), (390, 23744), (502, 24011), (525, 24059), (531, 24080), (563, 24137), (577, 24170), (599, 24206), (627, 24284), (633, 24305), (665, 24386), (666, 24389), (691, 24476), (696, 24488), (706, 24527), (712, 24563), (715, 24569), (718, 24581), (737, 24644),

Gene: Rope_66 Start: 47562, Stop: 49322, Start Num: 130

Candidate Starts for Rope_66:

(Start: 130 @47562 has 9 MA's), (157, 47631), (193, 47727), (Start: 199 @47736 has 2 MA's), (228, 47817), (243, 47862), (352, 48063), (362, 48111), (380, 48171), (384, 48183), (403, 48249), (451, 48372), (463, 48396), (472, 48420), (517, 48624), (527, 48657), (531, 48672), (551, 48711), (552, 48714), (556, 48723), (594, 48792), (640, 48924), (674, 49047), (675, 49050), (683, 49077), (693, 49107), (695, 49113), (696, 49116), (701, 49134), (704, 49146), (740, 49281), (746, 49308), (748, 49311),

Gene: Rota_56 Start: 39801, Stop: 41717, Start Num: 41

Candidate Starts for Rota_56:

(Start: 41 @39801 has 13 MA's), (Start: 42 @39804 has 55 MA's), (Start: 51 @39816 has 2 MA's), (60, 39864), (70, 39897), (85, 39966), (107, 40056), (115, 40083), (Start: 118 @40092 has 3 MA's), (149, 40164), (184, 40251), (194, 40281), (Start: 197 @40284 has 73 MA's), (221, 40347), (263, 40437), (279, 40464), (352, 40593), (357, 40617), (366, 40659), (382, 40707), (386, 40728), (390, 40749), (411, 40806), (434, 40860), (456, 40902), (481, 40962), (527, 41058), (528, 41061), (613, 41238), (631, 41289), (663, 41376), (665, 41379), (674, 41415), (676, 41421), (693, 41475), (704, 41514), (728, 41616), (733, 41631), (740, 41652), (762, 41709),

Gene: RoyalG_59 Start: 52241, Stop: 50709, Start Num: 168

Candidate Starts for RoyalG_59:

(90, 52496), (102, 52445), (135, 52340), (143, 52310), (Start: 153 @52277 has 3 MA's), (158, 52268), (Start: 168 @52241 has 28 MA's), (Start: 215 @52118 has 28 MA's), (230, 52073), (245, 52031), (273, 51983), (275, 51980), (278, 51974), (280, 51971), (289, 51953), (297, 51932), (312, 51905), (355, 51782), (358, 51764), (384, 51677), (386, 51662), (410, 51569), (447, 51491), (460, 51467), (475, 51431), (484, 51401), (515, 51359), (532, 51314), (608, 51179), (611, 51164), (616, 51143), (666, 51059), (681, 51002), (682, 50996), (684, 50984), (703, 50933), (707, 50909), (715, 50870), (718, 50858), (719, 50855), (746, 50762), (754, 50747),

Gene: Rozby_29 Start: 22088, Stop: 23488, Start Num: 197

Candidate Starts for Rozby_29:

(Start: 197 @22088 has 73 MA's), (221, 22151), (282, 22256), (284, 22259), (318, 22343), (340, 22376), (357, 22427), (359, 22433), (381, 22514), (382, 22517), (384, 22523), (390, 22559), (396, 22577), (399, 22580), (406, 22613), (411, 22634), (415, 22652), (435, 22685), (478, 22766), (487, 22793), (514, 22823), (517, 22832), (525, 22859), (541, 22892), (551, 22907), (575, 22961), (590, 22982), (594, 22994), (600, 23006), (674, 23228), (677, 23237), (680, 23243), (691, 23279), (707, 23339), (712, 23366), (740, 23456),

Gene: Rukungu_63 Start: 41487, Stop: 43400, Start Num: 42

Candidate Starts for Rukungu_63:

(16, 41361), (18, 41370), (19, 41382), (27, 41415), (Start: 41 @41484 has 13 MA's), (Start: 42 @41487 has 55 MA's), (Start: 51 @41499 has 2 MA's), (60, 41547), (70, 41580), (85, 41649), (107, 41739), (115, 41766), (Start: 118 @41775 has 3 MA's), (149, 41847), (184, 41934), (Start: 197 @41967 has 73 MA's), (221, 42030), (263, 42120), (352, 42276), (357, 42300), (366, 42342), (382, 42390), (386, 42411), (390, 42432), (411, 42489), (434, 42543), (456, 42585), (481, 42645), (527, 42741), (528, 42744), (613, 42921), (631, 42972), (665, 43062), (674, 43098), (676, 43104), (693, 43158), (704, 43197), (728, 43299), (733, 43314), (740, 43335),

Gene: Rumi_61 Start: 39105, Stop: 41018, Start Num: 42

Candidate Starts for Rumi_61:

(Start: 41 @39102 has 13 MA's), (Start: 42 @39105 has 55 MA's), (Start: 51 @39117 has 2 MA's), (60, 39165), (70, 39198), (107, 39357), (115, 39384), (Start: 118 @39393 has 3 MA's), (149, 39465), (Start: 197 @39585 has 73 MA's), (221, 39648), (263, 39738), (279, 39765), (352, 39894), (357, 39918), (366, 39960), (369, 39972), (378, 39987), (382, 40008), (386, 40029), (390, 40050), (411, 40107), (415, 40125), (434, 40161), (456, 40203), (481, 40263), (527, 40359), (528, 40362), (613, 40539), (631, 40590), (665, 40680), (674, 40716), (676, 40722), (693, 40776), (704, 40815), (728, 40917), (733, 40932), (740, 40953),

Gene: RunningBrook_86 Start: 50790, Stop: 49270, Start Num: 201

Candidate Starts for RunningBrook_86:

(Start: 185 @50823 has 3 MA's), (Start: 201 @50790 has 46 MA's), (219, 50739), (265, 50631), (300, 50565), (322, 50499), (367, 50376), (376, 50361), (388, 50304), (400, 50271), (401, 50268), (418, 50205), (439, 50154), (444, 50145), (450, 50136), (473, 50082), (490, 50043), (493, 50028), (508, 49959), (515, 49929), (535, 49866), (566, 49794), (640, 49608), (681, 49500), (688, 49470), (703, 49425), (712, 49374), (731, 49311),

Gene: SBlackberry_33 Start: 23236, Stop: 24663, Start Num: 201

Candidate Starts for SBlackberry_33:

(Start: 201 @23236 has 46 MA's), (349, 23554), (358, 23593), (375, 23656), (386, 23701), (390, 23722), (416, 23821), (502, 23989), (525, 24037), (531, 24058), (551, 24085), (562, 24112), (575, 24142), (576, 24145), (577, 24148), (599, 24184), (627, 24262), (655, 24346), (665, 24364), (666, 24367), (691, 24454), (696, 24466), (706, 24505), (712, 24541), (715, 24547), (727, 24592), (737, 24622),

Gene: Sadboi_61 Start: 41296, Stop: 43209, Start Num: 42

Candidate Starts for Sadboi_61:

(Start: 41 @41293 has 13 MA's), (Start: 42 @41296 has 55 MA's), (Start: 51 @41308 has 2 MA's), (60, 41356), (70, 41389), (85, 41458), (107, 41548), (115, 41575), (Start: 118 @41584 has 3 MA's), (149, 41656), (184, 41743), (Start: 197 @41776 has 73 MA's), (221, 41839), (263, 41929), (279, 41956), (352, 42085), (357, 42109), (366, 42151), (382, 42199), (386, 42220), (390, 42241), (411, 42298), (434, 42352), (456, 42394), (481, 42454), (527, 42550), (528, 42553), (613, 42730), (631, 42781), (665, 42871), (674, 42907), (676, 42913), (693, 42967), (704, 43006), (728, 43108), (733, 43123), (740, 43144),

Gene: Sam12_58 Start: 51466, Stop: 49934, Start Num: 168

Candidate Starts for Sam12_58:

(90, 51721), (102, 51670), (116, 51619), (135, 51565), (143, 51535), (Start: 153 @51502 has 3 MA's), (158, 51493), (Start: 168 @51466 has 28 MA's), (230, 51298), (245, 51256), (273, 51208), (280, 51196), (287, 51184), (289, 51178), (297, 51157), (312, 51130), (358, 50989), (384, 50902), (386, 50887), (389, 50875), (399, 50845), (410, 50794), (416, 50767), (447, 50716), (467, 50674), (475, 50656), (476, 50653), (484, 50626), (515, 50584), (532, 50539), (608, 50404), (611, 50389), (616, 50368), (655, 50311), (664, 50287), (666, 50284), (681, 50227), (682, 50221), (683, 50215), (684,

50209), (703, 50158), (707, 50134), (715, 50095), (718, 50083), (719, 50080), (746, 49987), (754, 49972), (763, 49951),

Gene: SamW_45 Start: 36746, Stop: 38122, Start Num: 200

Candidate Starts for SamW_45:

(Start: 200 @36746 has 7 MA's), (225, 36815), (232, 36833), (286, 36926), (311, 36986), (313, 36992), (314, 36995), (356, 37115), (360, 37133), (390, 37250), (474, 37388), (495, 37427), (517, 37460), (519, 37466), (523, 37481), (541, 37520), (571, 37580), (588, 37604), (607, 37640), (631, 37709), (634, 37715), (666, 37796), (694, 37892), (697, 37904), (701, 37916), (712, 37973), (715, 37979), (718, 37991), (726, 38021), (742, 38072),

Gene: Sampudon_60 Start: 41637, Stop: 43553, Start Num: 41

Candidate Starts for Sampudon_60:

(Start: 41 @41637 has 13 MA's), (Start: 42 @41640 has 55 MA's), (Start: 51 @41652 has 2 MA's), (60, 41700), (85, 41802), (107, 41892), (115, 41919), (Start: 118 @41928 has 3 MA's), (149, 42000), (Start: 197 @42120 has 73 MA's), (221, 42183), (263, 42273), (279, 42300), (352, 42429), (357, 42453), (366, 42495), (382, 42543), (386, 42564), (390, 42585), (411, 42642), (434, 42696), (456, 42738), (481, 42798), (527, 42894), (528, 42897), (613, 43074), (631, 43125), (663, 43212), (665, 43215), (674, 43251), (676, 43257), (693, 43311), (704, 43350), (728, 43452), (733, 43467), (740, 43488),

Gene: Sapo_34 Start: 32116, Stop: 30710, Start Num: 204

Candidate Starts for Sapo_34:

(120, 32353), (122, 32350), (154, 32239), (162, 32224), (Start: 204 @32116 has 13 MA's), (230, 32038), (240, 32011), (273, 31981), (275, 31978), (362, 31771), (370, 31738), (436, 31531), (517, 31384), (521, 31369), (592, 31228), (639, 31093), (650, 31063), (651, 31060), (672, 30991), (673, 30988), (681, 30967), (693, 30931), (694, 30928), (715, 30841), (718, 30829), (740, 30742),

Gene: Saradis_80 Start: 48976, Stop: 47453, Start Num: 201

Candidate Starts for Saradis_80:

(Start: 201 @48976 has 46 MA's), (238, 48865), (257, 48826), (265, 48817), (310, 48721), (324, 48679), (335, 48661), (358, 48607), (367, 48562), (368, 48559), (401, 48457), (444, 48334), (463, 48298), (479, 48259), (498, 48193), (506, 48166), (508, 48148), (515, 48118), (533, 48058), (549, 48028), (554, 48016), (557, 48010), (674, 47701), (681, 47683), (693, 47641), (695, 47635), (700, 47617), (701, 47614), (733, 47488),

Gene: Sarkar_132 Start: 82180, Stop: 80537, Start Num: 151

Candidate Starts for Sarkar_132:

(Start: 151 @82180 has 8 MA's), (163, 82156), (207, 82048), (241, 81943), (263, 81904), (291, 81853), (329, 81760), (358, 81700), (363, 81676), (364, 81673), (374, 81646), (398, 81553), (459, 81400), (469, 81376), (470, 81373), (483, 81340), (488, 81328), (507, 81256), (527, 81178), (546, 81133), (612, 80986), (626, 80941), (635, 80911), (651, 80881), (655, 80869), (673, 80803), (702, 80713), (703, 80710), (725, 80614), (727, 80608), (736, 80581),

Gene: Satis_124 Start: 82176, Stop: 80533, Start Num: 151

Candidate Starts for Satis_124:

(Start: 151 @82176 has 8 MA's), (163, 82152), (207, 82044), (241, 81939), (263, 81900), (291, 81849), (329, 81756), (358, 81696), (363, 81672), (364, 81669), (374, 81642), (398, 81549), (459, 81396), (469, 81372), (470, 81369), (483, 81336), (488, 81324), (507, 81252), (527, 81174), (546, 81129), (612, 80982), (626, 80937), (635, 80907), (651, 80877), (655, 80865), (673, 80799), (702, 80709), (703, 80706), (725, 80610), (727, 80604), (736, 80577),

Gene: Savage2526_29 Start: 22151, Stop: 23551, Start Num: 197

Candidate Starts for Savage2526_29:

(Start: 197 @22151 has 73 MA's), (221, 22214), (282, 22319), (284, 22322), (318, 22406), (340, 22439), (357, 22490), (359, 22496), (381, 22577), (382, 22580), (384, 22586), (390, 22622), (396, 22640), (399, 22643), (411, 22697), (435, 22748), (478, 22829), (487, 22856), (514, 22886), (517, 22895), (525, 22922), (541, 22955), (551, 22970), (575, 23024), (590, 23045), (594, 23057), (600, 23069), (674, 23291), (677, 23300), (680, 23306), (691, 23342), (707, 23402), (712, 23429), (740, 23519),

Gene: Scuba_83 Start: 56215, Stop: 54161, Start Num: 28

Candidate Starts for Scuba_83:

(7, 56488), (Start: 28 @56215 has 34 MA's), (63, 56062), (72, 56047), (88, 55966), (128, 55843), (134, 55813), (184, 55705), (Start: 197 @55672 has 73 MA's), (217, 55621), (228, 55588), (271, 55498), (290, 55465), (309, 55435), (374, 55279), (386, 55228), (415, 55132), (430, 55099), (450, 55063), (463, 55036), (517, 54913), (540, 54844), (551, 54826), (556, 54814), (617, 54652), (626, 54613), (635, 54583), (640, 54568), (674, 54466), (694, 54403), (712, 54322), (720, 54298), (738, 54238),

Gene: Scuttle_29 Start: 22156, Stop: 23556, Start Num: 197

Candidate Starts for Scuttle_29:

(Start: 197 @22156 has 73 MA's), (221, 22219), (282, 22324), (284, 22327), (318, 22411), (340, 22444), (357, 22495), (359, 22501), (381, 22582), (382, 22585), (384, 22591), (390, 22627), (396, 22645), (399, 22648), (406, 22681), (411, 22702), (435, 22753), (478, 22834), (487, 22861), (517, 22900), (525, 22927), (541, 22960), (551, 22975), (575, 23029), (590, 23050), (594, 23062), (600, 23074), (639, 23188), (674, 23296), (677, 23305), (680, 23311), (691, 23347), (707, 23407), (712, 23434), (740, 23524),

Gene: Send513_66 Start: 47939, Stop: 49699, Start Num: 130

Candidate Starts for Send513_66:

(Start: 130 @47939 has 9 MA's), (157, 48008), (193, 48104), (Start: 199 @48113 has 2 MA's), (228, 48194), (243, 48239), (352, 48440), (362, 48488), (380, 48548), (384, 48560), (403, 48626), (451, 48749), (463, 48773), (472, 48797), (517, 49001), (527, 49034), (531, 49049), (551, 49088), (552, 49091), (556, 49100), (594, 49169), (640, 49301), (674, 49424), (675, 49427), (683, 49454), (693, 49484), (695, 49490), (696, 49493), (701, 49511), (704, 49523), (740, 49658), (748, 49688),

Gene: Sergei_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for Sergei_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318, 21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381, 22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Shelley_57 Start: 52086, Stop: 50674, Start Num: 215

Candidate Starts for Shelley_57:

(90, 52434), (129, 52305), (Start: 153 @52215 has 3 MA's), (Start: 215 @52086 has 28 MA's), (230, 52041), (273, 51951), (275, 51948), (278, 51942), (289, 51921), (318, 51858), (346, 51780), (355, 51750), (358, 51732), (384, 51645), (386, 51630), (399, 51588), (417, 51507), (447, 51459), (467, 51417), (475, 51399), (476, 51396), (484, 51369), (518, 51318), (532, 51282), (562, 51231), (608, 51147), (612, 51126), (681, 50970), (682, 50964), (684, 50952), (718, 50826), (754, 50712),

Gene: Shroomer_87 Start: 50030, Stop: 48510, Start Num: 201

Candidate Starts for Shroomer_87:

(Start: 185 @50063 has 3 MA's), (Start: 201 @50030 has 46 MA's), (219, 49979), (265, 49871), (300, 49805), (322, 49739), (367, 49616), (376, 49601), (388, 49544), (400, 49511), (401, 49508), (418, 49445), (439, 49394), (444, 49385), (450, 49376), (452, 49370), (464, 49346), (473, 49322), (490, 49283), (493, 49268), (506, 49217), (508, 49199), (535, 49106), (549, 49079), (566, 49034), (640, 48848), (681, 48740), (688, 48710), (703, 48665), (731, 48551),

Gene: Shynx_42 Start: 31327, Stop: 32721, Start Num: 204

Candidate Starts for Shynx_42:

(Start: 204 @31327 has 13 MA's), (Start: 206 @31330 has 3 MA's), (230, 31405), (239, 31429), (273, 31459), (282, 31474), (329, 31564), (345, 31600), (375, 31699), (378, 31708), (394, 31777), (436, 31900), (502, 32035), (519, 32062), (525, 32083), (531, 32104), (563, 32161), (577, 32194), (588, 32203), (604, 32245), (626, 32311), (633, 32335), (639, 32353), (648, 32371), (666, 32425), (672, 32455), (691, 32512), (693, 32515), (706, 32563), (713, 32602), (718, 32617), (739, 32686), (743, 32704), (745, 32713),

Gene: Sienna_50 Start: 36692, Stop: 38746, Start Num: 46

Candidate Starts for Sienna_50:

(Start: 46 @36692 has 8 MA's), (54, 36716), (72, 36779), (89, 36863), (97, 36905), (Start: 182 @37127 has 5 MA's), (Start: 197 @37163 has 73 MA's), (227, 37238), (239, 37277), (272, 37319), (283, 37337), (292, 37358), (298, 37370), (323, 37430), (331, 37445), (352, 37463), (369, 37541), (378, 37556), (379, 37559), (386, 37598), (390, 37619), (433, 37721), (463, 37778), (470, 37799), (472, 37802), (477, 37814), (503, 37862), (513, 37868), (528, 37916), (539, 37949), (552, 37973), (558, 37991), (570, 38021), (581, 38144), (584, 38177), (589, 38189), (594, 38204), (610, 38243), (622, 38288), (631, 38315), (662, 38399), (681, 38462), (693, 38504), (696, 38513), (698, 38522), (709, 38570), (710, 38579), (712, 38591), (717, 38606), (729, 38648),

Gene: SirHarley_54 Start: 39905, Stop: 41848, Start Num: 42

Candidate Starts for SirHarley_54:

(32, 39842), (Start: 42 @39905 has 55 MA's), (53, 39932), (71, 40004), (82, 40058), (95, 40118), (100, 40145), (117, 40196), (131, 40238), (149, 40274), (184, 40361), (219, 40454), (223, 40469), (231, 40490), (292, 40592), (307, 40625), (316, 40649), (354, 40709), (378, 40796), (394, 40871), (434, 40961), (463, 41012), (464, 41015), (503, 41105), (517, 41123), (527, 41156), (556, 41222), (561, 41240), (594, 41303), (622, 41387), (665, 41504), (674, 41552), (694, 41615), (712, 41699),

Gene: Skysand_75 Start: 57318, Stop: 55261, Start Num: 28

Candidate Starts for Skysand_75:

(6, 57606), (10, 57498), (Start: 28 @57318 has 34 MA's), (128, 56943), (Start: 185 @56802 has 3 MA's), (208, 56751), (227, 56691), (228, 56688), (259, 56616), (271, 56598), (309, 56535), (311, 56529), (358, 56436), (366, 56397), (374, 56379), (380, 56355), (415, 56232), (430, 56199), (463, 56136), (517, 56013), (540, 55944), (551, 55926), (594, 55821), (617, 55752), (626, 55713), (633, 55689), (635, 55683), (657, 55626), (674, 55566), (683, 55536), (694, 55503), (738, 55338), (750, 55296),

Gene: Solimine_81 Start: 49872, Stop: 48349, Start Num: 201

Candidate Starts for Solimine_81:

(109, 50133), (124, 50091), (Start: 201 @49872 has 46 MA's), (238, 49761), (257, 49722), (265, 49713), (310, 49617), (324, 49575), (335, 49557), (358, 49503), (367, 49458), (368, 49455), (401, 49353), (444, 49230), (463, 49194), (479, 49155), (498, 49089), (506, 49062), (508, 49044), (515, 49014), (533, 48954), (549, 48924), (554, 48912), (557, 48906), (674, 48597), (681, 48579), (693, 48537), (695, 48531), (700, 48513), (701, 48510), (725, 48408), (733, 48384),

Gene: Sombrero_60 Start: 52033, Stop: 50501, Start Num: 168

Candidate Starts for Sombrero_60:

(90, 52288), (102, 52237), (135, 52132), (143, 52102), (Start: 153 @52069 has 3 MA's), (158, 52060), (Start: 168 @52033 has 28 MA's), (230, 51865), (245, 51823), (273, 51775), (280, 51763), (287, 51751), (289, 51745), (297, 51724), (358, 51556), (384, 51469), (386, 51454), (389, 51442), (399, 51412), (410, 51361), (447, 51283), (460, 51259), (467, 51241), (475, 51223), (476, 51220), (479, 51211), (484, 51193), (532, 51106), (608, 50971), (611, 50956), (616, 50935), (664, 50854), (666, 50851), (681, 50794), (682, 50788), (684, 50776), (703, 50725), (707, 50701), (715, 50662), (718, 50650), (719, 50647), (746, 50554), (754, 50539), (763, 50518),

Gene: SorJuana_70 Start: 47020, Stop: 45626, Start Num: 202

Candidate Starts for SorJuana_70:

(Start: 202 @47020 has 13 MA's), (226, 46951), (257, 46876), (271, 46858), (288, 46828), (318, 46747), (379, 46597), (417, 46453), (431, 46414), (488, 46300), (503, 46249), (507, 46228), (512, 46198), (517, 46183), (520, 46171), (558, 46090), (587, 46042), (598, 46015), (606, 45994), (630, 45910), (660, 45844), (716, 45655), (719, 45643),

Gene: Squibbles_58 Start: 52329, Stop: 50797, Start Num: 168

Candidate Starts for Squibbles_58:

(90, 52584), (102, 52533), (116, 52482), (135, 52428), (143, 52398), (Start: 153 @52365 has 3 MA's), (158, 52356), (Start: 168 @52329 has 28 MA's), (230, 52161), (245, 52119), (273, 52071), (280, 52059), (287, 52047), (289, 52041), (297, 52020), (312, 51993), (358, 51852), (384, 51765), (386, 51750), (389, 51738), (399, 51708), (410, 51657), (416, 51630), (447, 51579), (467, 51537), (475, 51519), (476, 51516), (484, 51489), (515, 51447), (532, 51402), (608, 51267), (611, 51252), (616, 51231), (655, 51174), (666, 51147), (681, 51090), (682, 51084), (683, 51078), (684, 51072), (703, 51021), (707, 50997), (715, 50958), (718, 50946), (719, 50943), (746, 50850), (754, 50835), (763, 50814),

Gene: Srilaccoli3_51 Start: 49904, Stop: 48411, Start Num: 185

Candidate Starts for Srilaccoli3_51:

(Start: 185 @49904 has 3 MA's), (Start: 199 @49868 has 2 MA's), (212, 49835), (Start: 215 @49826 has 28 MA's), (218, 49817), (221, 49808), (223, 49799), (230, 49781), (261, 49721), (273, 49709), (278, 49700), (344, 49553), (361, 49472), (445, 49220), (447, 49217), (467, 49175), (476, 49154), (495, 49115), (500, 49103), (502, 49100), (526, 49070), (604, 48923), (614, 48887), (684, 48674), (700, 48632), (712, 48566), (735, 48491), (740, 48476),

Gene: StAB_50 Start: 39824, Stop: 41185, Start Num: 200

Candidate Starts for StAB_50:

(Start: 200 @39824 has 7 MA's), (225, 39893), (232, 39911), (286, 40004), (309, 40058), (311, 40064), (313, 40070), (314, 40073), (356, 40193), (360, 40211), (390, 40328), (474, 40466), (495, 40505), (517, 40538), (519, 40544), (523, 40559), (541, 40598), (571, 40658), (607, 40718), (634, 40793), (666, 40874), (694, 40970), (712, 41051), (715, 41057), (718, 41069), (726, 41099),

Gene: StarStruck_73 Start: 56760, Stop: 54685, Start Num: 28

Candidate Starts for StarStruck_73:

(Start: 28 @56760 has 34 MA's), (55, 56640), (Start: 67 @56595 has 4 MA's), (69, 56592), (134, 56349), (165, 56292), (184, 56241), (208, 56187), (228, 56124), (271, 56034), (273, 56031), (287, 56007), (309, 55971), (374, 55815), (380, 55791), (415, 55668), (463, 55557), (472, 55533), (517, 55434), (533, 55380), (558, 55326), (575, 55284), (594, 55245), (617, 55176), (622, 55143), (635, 55107), (654, 55062), (657, 55050), (674, 54990), (694, 54927), (712, 54846), (738, 54762),

Gene: SteakFry_83 Start: 50087, Stop: 48567, Start Num: 201

Candidate Starts for SteakFry_83:

(Start: 185 @50120 has 3 MA's), (Start: 201 @50087 has 46 MA's), (219, 50036), (265, 49928), (300, 49862), (322, 49796), (366, 49679), (376, 49658), (388, 49601), (400, 49568), (401, 49565), (418,

49502), (439, 49451), (444, 49442), (450, 49433), (452, 49427), (464, 49403), (473, 49379), (490, 49340), (493, 49325), (506, 49274), (508, 49256), (535, 49163), (549, 49136), (566, 49091), (640, 48905), (681, 48797), (688, 48767), (703, 48722), (712, 48671), (731, 48608),

Gene: SteveFrench_58 Start: 52481, Stop: 50949, Start Num: 168

Candidate Starts for SteveFrench_58:

(90, 52736), (102, 52685), (135, 52580), (143, 52550), (Start: 153 @52517 has 3 MA's), (158, 52508), (Start: 168 @52481 has 28 MA's), (Start: 215 @52358 has 28 MA's), (230, 52313), (245, 52271), (273, 52223), (275, 52220), (278, 52214), (280, 52211), (289, 52193), (297, 52172), (312, 52145), (355, 52022), (358, 52004), (384, 51917), (386, 51902), (410, 51809), (447, 51731), (460, 51707), (475, 51671), (484, 51641), (515, 51599), (532, 51554), (608, 51419), (611, 51404), (616, 51383), (666, 51299), (681, 51242), (682, 51236), (684, 51224), (703, 51173), (707, 51149), (715, 51110), (718, 51098), (719, 51095), (746, 51002), (754, 50987),

Gene: StevieWelch_85 Start: 49882, Stop: 48362, Start Num: 201

Candidate Starts for StevieWelch_85:

(Start: 185 @49915 has 3 MA's), (Start: 201 @49882 has 46 MA's), (219, 49831), (265, 49723), (300, 49657), (322, 49591), (367, 49468), (376, 49453), (388, 49396), (400, 49363), (401, 49360), (418, 49297), (439, 49246), (444, 49237), (450, 49228), (452, 49222), (464, 49198), (473, 49174), (490, 49135), (493, 49120), (506, 49069), (508, 49051), (535, 48958), (549, 48931), (566, 48886), (640, 48700), (681, 48592), (688, 48562), (703, 48517), (712, 48466), (725, 48421), (731, 48403),

Gene: Sticker17_57 Start: 52601, Stop: 51189, Start Num: 215

Candidate Starts for Sticker17_57:

(90, 52949), (129, 52820), (150, 52733), (Start: 153 @52730 has 3 MA's), (Start: 215 @52601 has 28 MA's), (230, 52556), (273, 52466), (275, 52463), (278, 52457), (289, 52436), (318, 52373), (355, 52265), (358, 52247), (384, 52160), (386, 52145), (399, 52103), (417, 52022), (447, 51974), (467, 51932), (475, 51914), (476, 51911), (484, 51884), (518, 51833), (532, 51797), (562, 51746), (608, 51662), (612, 51641), (681, 51485), (682, 51479), (684, 51467), (718, 51341), (754, 51227),

Gene: Stickynote_71 Start: 52712, Stop: 50787, Start Num: 49

Candidate Starts for Stickynote_71:

(25, 52805), (Start: 49 @52712 has 8 MA's), (91, 52541), (104, 52487), (184, 52283), (240, 52127), (271, 52076), (273, 52073), (303, 52031), (353, 51944), (354, 51941), (369, 51869), (376, 51860), (517, 51503), (527, 51470), (552, 51413), (657, 51131), (676, 51065), (681, 51053), (684, 51035), (686, 51029), (694, 51008), (709, 50945), (717, 50912), (728, 50873),

Gene: Stiles_49 Start: 38782, Stop: 40143, Start Num: 200

Candidate Starts for Stiles_49:

(Start: 200 @38782 has 7 MA's), (228, 38857), (230, 38863), (232, 38869), (286, 38962), (309, 39016), (311, 39022), (313, 39028), (314, 39031), (356, 39151), (360, 39169), (390, 39286), (474, 39424), (495, 39463), (517, 39496), (519, 39502), (523, 39517), (541, 39556), (571, 39616), (634, 39751), (666, 39832), (694, 39928), (712, 40009), (715, 40015), (718, 40027), (726, 40057),

Gene: Stormer_61 Start: 39106, Stop: 41022, Start Num: 41

Candidate Starts for Stormer_61:

(Start: 41 @39106 has 13 MA's), (Start: 42 @39109 has 55 MA's), (Start: 51 @39121 has 2 MA's), (60, 39169), (70, 39202), (107, 39361), (115, 39388), (Start: 118 @39397 has 3 MA's), (149, 39469), (Start: 197 @39589 has 73 MA's), (221, 39652), (263, 39742), (279, 39769), (352, 39898), (357, 39922), (366, 39964), (369, 39976), (378, 39991), (382, 40012), (386, 40033), (390, 40054), (411, 40111), (415, 40129), (434, 40165), (456, 40207), (481, 40267), (527, 40363), (528, 40366), (613, 40543), (631, 40594), (665, 40684), (674, 40720), (676, 40726), (693, 40780), (704, 40819), (728, 40921), (733, 40936), (740, 40957),

Gene: Stuff_42 Start: 31323, Stop: 32717, Start Num: 204

Candidate Starts for Stuff_42:

(Start: 204 @31323 has 13 MA's), (Start: 206 @31326 has 3 MA's), (230, 31401), (239, 31425), (242, 31431), (273, 31455), (282, 31470), (284, 31473), (286, 31476), (315, 31545), (329, 31560), (345, 31596), (375, 31695), (381, 31716), (394, 31773), (436, 31896), (502, 32031), (519, 32058), (525, 32079), (563, 32157), (577, 32190), (588, 32199), (604, 32241), (626, 32307), (633, 32331), (639, 32349), (648, 32367), (666, 32421), (672, 32451), (691, 32508), (693, 32511), (706, 32559), (713, 32598), (718, 32613), (739, 32682), (743, 32700), (745, 32709),

Gene: Sucha_30 Start: 20665, Stop: 22092, Start Num: 201

Candidate Starts for Sucha_30:

(190, 20644), (Start: 201 @20665 has 46 MA's), (357, 21019), (358, 21022), (362, 21043), (386, 21130), (399, 21172), (521, 21454), (525, 21466), (531, 21487), (551, 21514), (562, 21541), (563, 21544), (575, 21571), (577, 21577), (599, 21613), (633, 21712), (655, 21775), (666, 21796), (681, 21850), (691, 21883), (696, 21895), (706, 21934), (712, 21970), (715, 21976), (718, 21988), (727, 22021), (737, 22051),

Gene: Sukkupi_71 Start: 54175, Stop: 52319, Start Num: 81

Candidate Starts for Sukkupi_71:

(9, 54592), (11, 54574), (15, 54499), (Start: 28 @54400 has 34 MA's), (Start: 81 @54175 has 3 MA's), (184, 53881), (Start: 197 @53848 has 73 MA's), (208, 53827), (224, 53773), (227, 53767), (228, 53764), (271, 53674), (273, 53671), (309, 53611), (374, 53455), (415, 53308), (463, 53200), (472, 53176), (517, 53074), (533, 53020), (540, 53005), (575, 52924), (594, 52885), (615, 52822), (622, 52783), (626, 52777), (635, 52747), (674, 52630), (694, 52567), (709, 52504), (712, 52486), (738, 52402),

Gene: SuperSonics_79 Start: 49055, Stop: 51088, Start Num: 47

Candidate Starts for SuperSonics_79:

(24, 48965), (Start: 47 @49055 has 3 MA's), (53, 49079), (66, 49142), (83, 49208), (94, 49262), (128, 49370), (136, 49403), (156, 49442), (166, 49466), (187, 49529), (Start: 197 @49547 has 73 MA's), (Start: 199 @49550 has 2 MA's), (208, 49568), (209, 49574), (233, 49643), (242, 49670), (250, 49682), (276, 49715), (319, 49817), (369, 49940), (380, 49970), (411, 50075), (415, 50093), (461, 50183), (463, 50186), (491, 50288), (499, 50327), (513, 50354), (517, 50366), (531, 50414), (536, 50432), (551, 50459), (556, 50471), (558, 50480), (626, 50618), (640, 50663), (673, 50768), (709, 50897), (717, 50930), (722, 50948), (739, 51002), (750, 51041),

Gene: SuperSulley_74 Start: 57198, Stop: 55111, Start Num: 28

Candidate Starts for SuperSulley_74:

(Start: 28 @57198 has 34 MA's), (55, 57078), (Start: 67 @57033 has 4 MA's), (69, 57030), (134, 56775), (184, 56667), (208, 56613), (228, 56550), (271, 56460), (273, 56457), (287, 56433), (309, 56397), (366, 56259), (374, 56241), (378, 56232), (380, 56217), (415, 56094), (450, 56010), (463, 55983), (472, 55959), (517, 55860), (533, 55806), (558, 55752), (575, 55710), (594, 55671), (617, 55602), (622, 55569), (635, 55533), (654, 55488), (657, 55476), (674, 55416), (676, 55410), (694, 55353), (738, 55188), (744, 55164),

Gene: SuperheroCarly_54 Start: 39596, Stop: 41566, Start Num: 34

Candidate Starts for SuperheroCarly_54:

(34, 39596), (35, 39611), (Start: 42 @39623 has 55 MA's), (53, 39650), (71, 39722), (82, 39776), (95, 39836), (100, 39863), (117, 39914), (131, 39956), (149, 39992), (184, 40079), (219, 40172), (223, 40187), (231, 40208), (292, 40310), (307, 40343), (316, 40367), (354, 40427), (378, 40514), (394, 40589), (434, 40679), (463, 40730), (464, 40733), (503, 40823), (517, 40841), (527, 40874), (551, 40928), (556, 40940), (561, 40958), (594, 41021), (622, 41105), (665, 41222), (674, 41270), (694,

41333), (712, 41417),

Gene: Suppi_29 Start: 22165, Stop: 23559, Start Num: 197

Candidate Starts for Suppi_29:

(Start: 197 @22165 has 73 MA's), (221, 22222), (282, 22327), (318, 22414), (357, 22498), (358, 22501), (359, 22504), (384, 22594), (390, 22630), (393, 22639), (396, 22648), (411, 22705), (415, 22723), (435, 22756), (445, 22768), (478, 22837), (487, 22864), (511, 22888), (525, 22930), (541, 22963), (551, 22978), (554, 22987), (600, 23077), (624, 23146), (633, 23173), (639, 23191), (645, 23203), (672, 23293), (674, 23299), (677, 23308), (680, 23314), (691, 23350), (712, 23437), (727, 23488), (740, 23527), (745, 23551),

Gene: Suzy_49 Start: 37573, Stop: 39624, Start Num: 46

Candidate Starts for Suzy_49:

(Start: 46 @37573 has 8 MA's), (72, 37660), (84, 37720), (89, 37744), (97, 37786), (Start: 182 @38008 has 5 MA's), (Start: 197 @38044 has 73 MA's), (272, 38200), (283, 38218), (292, 38239), (298, 38251), (323, 38311), (331, 38326), (352, 38344), (369, 38422), (378, 38437), (379, 38440), (386, 38479), (390, 38500), (463, 38659), (470, 38680), (472, 38683), (477, 38695), (503, 38743), (513, 38749), (515, 38755), (539, 38830), (558, 38872), (570, 38902), (581, 39025), (584, 39058), (589, 39070), (610, 39124), (631, 39196), (635, 39205), (662, 39280), (677, 39334), (693, 39385), (698, 39403), (709, 39451), (710, 39460), (712, 39472), (717, 39487), (729, 39529), (739, 39559),

Gene: Tandem_77 Start: 49353, Stop: 47830, Start Num: 201

Candidate Starts for Tandem_77:

(172, 49419), (Start: 182 @49392 has 5 MA's), (Start: 201 @49353 has 46 MA's), (257, 49203), (265, 49194), (310, 49098), (321, 49065), (335, 49038), (358, 48984), (367, 48939), (368, 48936), (400, 48831), (401, 48828), (444, 48705), (450, 48696), (454, 48684), (479, 48630), (506, 48537), (533, 48429), (549, 48399), (552, 48393), (553, 48390), (554, 48387), (566, 48354), (572, 48342), (624, 48216), (640, 48168), (674, 48078), (681, 48060), (695, 48012), (725, 47889),

Gene: TattModd_29 Start: 22150, Stop: 23550, Start Num: 197

Candidate Starts for TattModd_29:

(Start: 197 @22150 has 73 MA's), (221, 22213), (282, 22318), (284, 22321), (318, 22405), (340, 22438), (357, 22489), (359, 22495), (381, 22576), (382, 22579), (384, 22585), (390, 22621), (396, 22639), (399, 22642), (406, 22675), (411, 22696), (415, 22714), (435, 22747), (478, 22828), (487, 22855), (514, 22885), (517, 22894), (525, 22921), (541, 22954), (551, 22969), (575, 23023), (590, 23044), (594, 23056), (600, 23068), (674, 23290), (677, 23299), (680, 23305), (691, 23341), (707, 23401), (712, 23428), (740, 23518),

Gene: Teal_57 Start: 53068, Stop: 51656, Start Num: 215

Candidate Starts for Teal_57:

(90, 53416), (129, 53287), (150, 53200), (Start: 153 @53197 has 3 MA's), (Start: 215 @53068 has 28 MA's), (230, 53023), (273, 52933), (275, 52930), (278, 52924), (289, 52903), (318, 52840), (355, 52732), (358, 52714), (384, 52627), (386, 52612), (399, 52570), (417, 52489), (447, 52441), (467, 52399), (475, 52381), (476, 52378), (484, 52351), (518, 52300), (532, 52264), (562, 52213), (608, 52129), (612, 52108), (681, 51952), (682, 51946), (684, 51934), (718, 51808), (754, 51694),

Gene: Teatealatte_58 Start: 53221, Stop: 51518, Start Num: 106

Candidate Starts for Teatealatte_58:

(Start: 106 @53221 has 9 MA's), (Start: 108 @53209 has 2 MA's), (171, 53026), (Start: 215 @52936 has 28 MA's), (218, 52927), (230, 52891), (237, 52867), (240, 52858), (245, 52849), (273, 52801), (280, 52789), (287, 52777), (313, 52720), (318, 52705), (321, 52702), (330, 52684), (342, 52648), (343, 52645), (378, 52516), (379, 52513), (386, 52477), (387, 52474), (390, 52456), (393, 52447), (399, 52435), (409, 52387), (417, 52354), (447, 52306), (460, 52282), (484, 52216), (532, 52117),

(592, 52018), (605, 51985), (608, 51982), (641, 51916), (664, 51865), (666, 51862), (681, 51805), (684, 51787), (715, 51670), (716, 51667), (719, 51655), (754, 51556), (763, 51535),

Gene: Teech_58 Start: 53022, Stop: 51319, Start Num: 106

Candidate Starts for Teech_58:

(Start: 106 @53022 has 9 MA's), (Start: 108 @53010 has 2 MA's), (171, 52827), (Start: 215 @52737 has 28 MA's), (218, 52728), (230, 52692), (237, 52668), (240, 52659), (245, 52650), (273, 52602), (287, 52578), (318, 52506), (330, 52485), (342, 52449), (343, 52446), (378, 52317), (379, 52314), (386, 52278), (387, 52275), (390, 52257), (393, 52248), (399, 52236), (409, 52188), (417, 52155), (447, 52107), (460, 52083), (484, 52017), (532, 51918), (592, 51819), (595, 51810), (605, 51786), (608, 51783), (641, 51717), (664, 51666), (666, 51663), (681, 51606), (684, 51588), (715, 51471), (716, 51468), (719, 51456), (754, 51357), (763, 51336),

Gene: Temper16_26 Start: 21732, Stop: 23129, Start Num: 197

Candidate Starts for Temper16_26:

(Start: 197 @21732 has 73 MA's), (221, 21792), (271, 21879), (282, 21897), (284, 21900), (318, 21984), (323, 21990), (340, 22017), (357, 22068), (359, 22074), (370, 22125), (375, 22134), (381, 22155), (384, 22164), (390, 22200), (399, 22221), (406, 22254), (411, 22275), (415, 22293), (416, 22299), (435, 22326), (445, 22338), (453, 22353), (478, 22407), (511, 22458), (514, 22464), (517, 22473), (519, 22479), (525, 22500), (541, 22533), (551, 22548), (554, 22557), (612, 22680), (626, 22719), (633, 22743), (638, 22755), (672, 22863), (674, 22869), (677, 22878), (680, 22884), (691, 22920), (712, 23007), (740, 23097), (745, 23121),

Gene: Terapin_51 Start: 36616, Stop: 38670, Start Num: 46

Candidate Starts for Terapin_51:

(Start: 46 @36616 has 8 MA's), (54, 36640), (72, 36703), (89, 36787), (97, 36829), (Start: 182 @37051 has 5 MA's), (Start: 197 @37087 has 73 MA's), (227, 37162), (239, 37201), (272, 37243), (283, 37261), (292, 37282), (298, 37294), (323, 37354), (331, 37369), (352, 37387), (369, 37465), (378, 37480), (379, 37483), (386, 37522), (390, 37543), (433, 37645), (463, 37702), (470, 37723), (472, 37726), (477, 37738), (503, 37786), (513, 37792), (528, 37840), (539, 37873), (552, 37897), (558, 37915), (570, 37945), (581, 38068), (584, 38101), (589, 38113), (594, 38128), (610, 38167), (622, 38212), (631, 38239), (662, 38323), (681, 38386), (693, 38428), (696, 38437), (698, 38446), (709, 38494), (710, 38503), (712, 38515), (717, 38530), (729, 38572),

Gene: Theresita_31 Start: 21253, Stop: 22665, Start Num: 201

Candidate Starts for Theresita_31:

(Start: 201 @21253 has 46 MA's), (275, 21397), (286, 21415), (325, 21505), (379, 21664), (382, 21682), (384, 21688), (386, 21703), (390, 21724), (399, 21745), (482, 21955), (502, 21991), (525, 22039), (531, 22060), (541, 22072), (551, 22087), (562, 22114), (568, 22129), (599, 22186), (626, 22261), (633, 22285), (645, 22315), (649, 22327), (666, 22369), (672, 22399), (691, 22456), (696, 22468), (715, 22549), (716, 22552), (722, 22576), (727, 22594), (737, 22624),

Gene: Thoth_53 Start: 39727, Stop: 41670, Start Num: 42

Candidate Starts for Thoth_53:

(Start: 42 @39727 has 55 MA's), (53, 39754), (71, 39826), (82, 39880), (95, 39940), (98, 39958), (100, 39967), (117, 40018), (131, 40060), (149, 40096), (184, 40183), (219, 40276), (223, 40291), (231, 40312), (292, 40414), (307, 40447), (316, 40471), (354, 40531), (378, 40618), (394, 40693), (434, 40783), (463, 40834), (464, 40837), (503, 40927), (517, 40945), (527, 40978), (551, 41032), (556, 41044), (561, 41062), (594, 41125), (622, 41209), (665, 41326), (674, 41374), (694, 41437), (712, 41521),

Gene: Thumb_62 Start: 46085, Stop: 48142, Start Num: 42

Candidate Starts for Thumb_62:

(Start: 42 @46085 has 55 MA's), (58, 46145), (59, 46148), (Start: 81 @46241 has 3 MA's), (84, 46253), (88, 46274), (121, 46397), (123, 46400), (128, 46409), (136, 46442), (141, 46463), (156, 46511), (Start: 197 @46616 has 73 MA's), (208, 46637), (209, 46643), (228, 46697), (319, 46883), (323, 46895), (336, 46913), (352, 46928), (354, 46934), (463, 47252), (464, 47255), (481, 47300), (513, 47351), (517, 47363), (551, 47453), (556, 47465), (567, 47498), (584, 47522), (588, 47531), (626, 47621), (636, 47654), (673, 47765), (674, 47768), (675, 47771), (676, 47774), (693, 47828), (709, 47894), (712, 47912), (764, 48089),

Gene: Thunderclap_70 Start: 47442, Stop: 46048, Start Num: 202

Candidate Starts for Thunderclap_70:

(Start: 202 @47442 has 13 MA's), (226, 47373), (257, 47298), (271, 47280), (288, 47250), (318, 47169), (350, 47115), (379, 47019), (417, 46875), (431, 46836), (488, 46722), (503, 46671), (507, 46650), (512, 46620), (517, 46605), (520, 46593), (558, 46512), (587, 46464), (598, 46437), (606, 46416), (630, 46332), (660, 46266), (716, 46077), (719, 46065),

Gene: Tillicus_56 Start: 39985, Stop: 41907, Start Num: 44

Candidate Starts for Tillicus_56:

(17, 39862), (20, 39883), (25, 39904), (33, 39934), (36, 39967), (Start: 41 @39979 has 13 MA's), (Start: 44 @39985 has 1 MA's), (Start: 51 @40003 has 2 MA's), (53, 40015), (60, 40051), (70, 40084), (72, 40087), (Start: 81 @40135 has 3 MA's), (85, 40153), (107, 40243), (111, 40261), (115, 40270), (Start: 118 @40279 has 3 MA's), (149, 40351), (Start: 197 @40471 has 73 MA's), (Start: 199 @40474 has 2 MA's), (221, 40534), (228, 40552), (263, 40624), (279, 40651), (354, 40786), (357, 40804), (366, 40846), (376, 40867), (378, 40873), (386, 40915), (390, 40936), (399, 40957), (411, 40993), (434, 41050), (442, 41062), (456, 41092), (461, 41101), (481, 41152), (527, 41248), (528, 41251), (590, 41362), (609, 41410), (622, 41452), (631, 41479), (662, 41563), (686, 41647), (693, 41665), (700, 41689), (704, 41704), (712, 41752), (717, 41767), (728, 41806), (733, 41821), (740, 41842), (762, 41899),

Gene: Tracker_72 Start: 55556, Stop: 53490, Start Num: 28

Candidate Starts for Tracker_72:

(8, 55760), (9, 55748), (11, 55730), (Start: 28 @55556 has 34 MA's), (Start: 61 @55418 has 2 MA's), (65, 55394), (Start: 118 @55190 has 3 MA's), (134, 55145), (184, 55037), (227, 54923), (228, 54920), (271, 54830), (273, 54827), (309, 54767), (366, 54629), (374, 54611), (380, 54587), (415, 54464), (463, 54359), (517, 54233), (533, 54179), (591, 54053), (594, 54044), (604, 54020), (622, 53948), (626, 53942), (635, 53912), (657, 53855), (674, 53795), (694, 53732), (712, 53651),

Gene: Tredge_57 Start: 53221, Stop: 51518, Start Num: 106

Candidate Starts for Tredge_57:

(Start: 106 @53221 has 9 MA's), (Start: 108 @53209 has 2 MA's), (171, 53026), (Start: 215 @52936 has 28 MA's), (218, 52927), (230, 52891), (237, 52867), (240, 52858), (245, 52849), (273, 52801), (280, 52789), (287, 52777), (313, 52720), (318, 52705), (321, 52702), (330, 52684), (342, 52648), (343, 52645), (378, 52516), (379, 52513), (386, 52477), (387, 52474), (390, 52456), (393, 52447), (399, 52435), (409, 52387), (417, 52354), (447, 52306), (460, 52282), (484, 52216), (532, 52117), (592, 52018), (605, 51985), (608, 51982), (641, 51916), (664, 51865), (666, 51862), (681, 51805), (684, 51787), (715, 51670), (716, 51667), (719, 51655), (754, 51556), (763, 51535),

Gene: Trogglehumper_76 Start: 59717, Stop: 58170, Start Num: 173

Candidate Starts for Trogglehumper_76:

(137, 59828), (155, 59762), (Start: 173 @59717 has 1 MA's), (219, 59600), (230, 59567), (248, 59525), (251, 59519), (273, 59495), (308, 59429), (311, 59420), (312, 59417), (334, 59354), (346, 59315), (361, 59249), (383, 59183), (386, 59165), (389, 59153), (393, 59135), (407, 59087), (408, 59081), (447, 59003), (467, 58961), (475, 58943), (502, 58886), (513, 58877), (589, 58751), (605, 58709), (608, 58706), (612, 58685), (624, 58652), (647, 58595), (684, 58445), (695, 58421), (707, 58370),

(729, 58280), (741, 58241), (746, 58220), (752, 58208), (754, 58205), (762, 58193),

Gene: Troll4_53 Start: 39859, Stop: 41802, Start Num: 42

Candidate Starts for Troll4_53:

(Start: 42 @39859 has 55 MA's), (53, 39886), (71, 39958), (82, 40012), (95, 40072), (98, 40090), (100, 40099), (117, 40150), (131, 40192), (149, 40228), (184, 40315), (219, 40408), (223, 40423), (231, 40444), (292, 40546), (307, 40579), (316, 40603), (354, 40663), (378, 40750), (394, 40825), (434, 40915), (463, 40966), (464, 40969), (503, 41059), (517, 41077), (527, 41110), (551, 41164), (556, 41176), (561, 41194), (594, 41257), (622, 41341), (665, 41458), (674, 41506), (694, 41569), (712, 41653),

Gene: Troy_45 Start: 36746, Stop: 38122, Start Num: 200

Candidate Starts for Troy_45:

(Start: 200 @36746 has 7 MA's), (225, 36815), (232, 36833), (286, 36926), (311, 36986), (313, 36992), (314, 36995), (356, 37115), (360, 37133), (390, 37250), (474, 37388), (495, 37427), (517, 37460), (519, 37466), (523, 37481), (541, 37520), (571, 37580), (588, 37604), (607, 37640), (631, 37709), (634, 37715), (666, 37796), (694, 37892), (697, 37904), (701, 37916), (712, 37973), (715, 37979), (718, 37991), (726, 38021), (742, 38072),

Gene: TurboVicky_33 Start: 23252, Stop: 24679, Start Num: 201

Candidate Starts for TurboVicky_33:

(184, 23210), (Start: 201 @23252 has 46 MA's), (349, 23570), (386, 23717), (390, 23738), (502, 24005), (525, 24053), (531, 24074), (563, 24131), (577, 24164), (599, 24200), (627, 24278), (633, 24299), (665, 24380), (666, 24383), (691, 24470), (696, 24482), (706, 24521), (712, 24557), (715, 24563), (718, 24575), (737, 24638),

Gene: Turuncu_75 Start: 56841, Stop: 54784, Start Num: 28

Candidate Starts for Turuncu_75:

(6, 57126), (11, 57009), (13, 56991), (Start: 28 @56841 has 34 MA's), (184, 56328), (208, 56274), (219, 56238), (228, 56211), (264, 56133), (271, 56121), (309, 56058), (311, 56052), (358, 55959), (366, 55920), (374, 55902), (415, 55755), (430, 55722), (446, 55692), (450, 55686), (463, 55659), (517, 55536), (540, 55467), (551, 55449), (594, 55344), (599, 55335), (617, 55275), (626, 55236), (635, 55206), (642, 55188), (657, 55149), (674, 55089), (683, 55059), (694, 55026), (705, 54984), (747, 54828),

Gene: Typher_35 Start: 23381, Stop: 24808, Start Num: 201

Candidate Starts for Typher_35:

(184, 23339), (Start: 201 @23381 has 46 MA's), (349, 23699), (375, 23801), (386, 23846), (390, 23867), (502, 24134), (525, 24182), (531, 24203), (563, 24260), (577, 24293), (599, 24329), (627, 24407), (633, 24428), (665, 24509), (666, 24512), (691, 24599), (696, 24611), (706, 24650), (712, 24686), (718, 24704), (737, 24767),

Gene: UNTPL_44 Start: 31380, Stop: 32774, Start Num: 204

Candidate Starts for UNTPL_44:

(Start: 204 @31380 has 13 MA's), (Start: 206 @31383 has 3 MA's), (230, 31458), (239, 31482), (273, 31512), (282, 31527), (329, 31617), (345, 31653), (375, 31752), (378, 31761), (394, 31830), (436, 31953), (502, 32088), (519, 32115), (525, 32136), (563, 32214), (577, 32247), (588, 32256), (604, 32298), (626, 32364), (633, 32388), (639, 32406), (648, 32424), (666, 32478), (672, 32508), (691, 32565), (693, 32568), (706, 32616), (713, 32655), (718, 32670), (739, 32739), (743, 32757), (745, 32766),

Gene: Urla_26 Start: 21745, Stop: 23142, Start Num: 197

Candidate Starts for Urla_26:

(Start: 197 @21745 has 73 MA's), (221, 21805), (282, 21910), (318, 21997), (340, 22030), (357, 22081), (359, 22087), (381, 22168), (384, 22177), (390, 22213), (396, 22231), (399, 22234), (406, 22267), (411, 22288), (457, 22369), (478, 22420), (487, 22447), (514, 22477), (517, 22486), (523, 22507), (525, 22513), (541, 22546), (551, 22561), (554, 22570), (577, 22621), (595, 22651), (626, 22732), (639, 22774), (651, 22807), (670, 22870), (677, 22891), (680, 22897), (683, 22912), (691, 22933), (712, 23020), (729, 23077), (740, 23110),

Gene: Uterion_82 Start: 49462, Stop: 47939, Start Num: 201

Candidate Starts for Uterion_82:

(109, 49723), (124, 49681), (Start: 201 @49462 has 46 MA's), (238, 49351), (257, 49312), (265, 49303), (288, 49264), (310, 49207), (324, 49165), (335, 49147), (358, 49093), (367, 49048), (368, 49045), (401, 48943), (444, 48820), (463, 48784), (479, 48745), (498, 48679), (506, 48652), (508, 48634), (515, 48604), (533, 48544), (549, 48514), (554, 48502), (557, 48496), (674, 48187), (681, 48169), (693, 48127), (695, 48121), (700, 48103), (701, 48100), (733, 47974),

Gene: Vallejo_29 Start: 22089, Stop: 23489, Start Num: 197

Candidate Starts for Vallejo_29:

(Start: 197 @22089 has 73 MA's), (221, 22152), (282, 22257), (284, 22260), (318, 22344), (340, 22377), (357, 22428), (359, 22434), (381, 22515), (382, 22518), (384, 22524), (390, 22560), (396, 22578), (399, 22581), (406, 22614), (411, 22635), (415, 22653), (435, 22686), (478, 22767), (487, 22794), (514, 22824), (517, 22833), (525, 22860), (541, 22893), (551, 22908), (575, 22962), (590, 22983), (594, 22995), (600, 23007), (674, 23229), (677, 23238), (680, 23244), (691, 23280), (707, 23340), (712, 23367), (740, 23457),

Gene: Visconti_54 Start: 39739, Stop: 41682, Start Num: 42

Candidate Starts for Visconti_54:

(Start: 42 @39739 has 55 MA's), (53, 39766), (71, 39838), (82, 39892), (95, 39952), (98, 39970), (100, 39979), (117, 40030), (131, 40072), (149, 40108), (184, 40195), (219, 40288), (223, 40303), (231, 40324), (292, 40426), (307, 40459), (316, 40483), (354, 40543), (378, 40630), (394, 40705), (434, 40795), (463, 40846), (464, 40849), (503, 40939), (517, 40957), (527, 40990), (551, 41044), (556, 41056), (561, 41074), (594, 41137), (622, 41221), (665, 41338), (674, 41386), (694, 41449), (712, 41533),

Gene: Vitaenoi_57 Start: 53928, Stop: 52234, Start Num: 106

Candidate Starts for Vitaenoi_57:

(Start: 106 @53928 has 9 MA's), (Start: 108 @53916 has 2 MA's), (Start: 144 @53796 has 1 MA's), (161, 53763), (171, 53733), (218, 53634), (230, 53598), (237, 53574), (240, 53565), (245, 53556), (273, 53508), (275, 53505), (278, 53499), (280, 53496), (335, 53373), (343, 53352), (356, 53292), (379, 53220), (384, 53199), (386, 53184), (387, 53181), (389, 53172), (447, 53013), (471, 52962), (476, 52950), (478, 52944), (484, 52923), (516, 52878), (532, 52833), (559, 52791), (592, 52734), (604, 52704), (605, 52701), (608, 52698), (637, 52644), (681, 52521), (684, 52503), (715, 52386), (716, 52383), (719, 52371), (763, 52251),

Gene: Vulture_26 Start: 21745, Stop: 23139, Start Num: 197

Candidate Starts for Vulture_26:

(Start: 197 @21745 has 73 MA's), (221, 21802), (271, 21889), (282, 21907), (284, 21910), (318, 21994), (340, 22027), (357, 22078), (359, 22084), (375, 22144), (384, 22174), (390, 22210), (396, 22228), (406, 22264), (411, 22285), (415, 22303), (416, 22309), (435, 22336), (478, 22417), (487, 22444), (511, 22468), (517, 22483), (525, 22510), (541, 22543), (551, 22558), (624, 22726), (633, 22753), (638, 22765), (645, 22783), (672, 22873), (674, 22879), (680, 22894), (681, 22897), (691, 22930), (707, 22990), (712, 23017), (729, 23074), (740, 23107), (745, 23131),

Gene: WaldoWhy_55 Start: 39836, Stop: 41779, Start Num: 42

Candidate Starts for WaldoWhy_55:

(Start: 42 @39836 has 55 MA's), (53, 39863), (71, 39935), (82, 39989), (95, 40049), (98, 40067), (100, 40076), (117, 40127), (131, 40169), (149, 40205), (184, 40292), (219, 40385), (223, 40400), (231, 40421), (292, 40523), (307, 40556), (316, 40580), (354, 40640), (378, 40727), (394, 40802), (434, 40892), (463, 40943), (464, 40946), (503, 41036), (517, 41054), (527, 41087), (551, 41141), (556, 41153), (561, 41171), (594, 41234), (622, 41318), (665, 41435), (674, 41483), (694, 41546), (712, 41630),

Gene: WaterT_90 Start: 50077, Stop: 48617, Start Num: 201

Candidate Starts for WaterT_90:

(Start: 201 @50077 has 46 MA's), (212, 50047), (255, 49933), (304, 49849), (357, 49723), (362, 49699), (388, 49621), (391, 49609), (393, 49603), (395, 49597), (402, 49582), (409, 49561), (438, 49486), (448, 49468), (488, 49372), (492, 49363), (515, 49258), (524, 49228), (525, 49225), (527, 49219), (530, 49207), (531, 49204), (558, 49144), (561, 49135), (610, 49045), (624, 48991), (636, 48955), (672, 48874), (673, 48871), (674, 48868), (677, 48859), (701, 48781), (703, 48775), (721, 48697), (726, 48676), (735, 48649), (736, 48646), (740, 48634),

Gene: Wawa_29 Start: 22126, Stop: 23526, Start Num: 197

Candidate Starts for Wawa_29:

(Start: 197 @22126 has 73 MA's), (221, 22189), (282, 22294), (284, 22297), (318, 22381), (340, 22414), (357, 22465), (359, 22471), (381, 22552), (382, 22555), (384, 22561), (390, 22597), (396, 22615), (399, 22618), (406, 22651), (411, 22672), (415, 22690), (435, 22723), (478, 22804), (487, 22831), (514, 22861), (517, 22870), (525, 22897), (541, 22930), (551, 22945), (575, 22999), (590, 23020), (594, 23032), (600, 23044), (639, 23158), (674, 23266), (677, 23275), (680, 23281), (691, 23317), (707, 23377), (712, 23404), (740, 23494),

Gene: Wayne_29 Start: 22211, Stop: 23605, Start Num: 197

Candidate Starts for Wayne_29:

(Start: 197 @22211 has 73 MA's), (221, 22268), (282, 22373), (318, 22460), (357, 22544), (358, 22547), (359, 22550), (384, 22640), (390, 22676), (393, 22685), (396, 22694), (411, 22751), (415, 22769), (435, 22802), (445, 22814), (478, 22883), (487, 22910), (511, 22934), (525, 22976), (541, 23009), (551, 23024), (554, 23033), (600, 23123), (624, 23192), (633, 23219), (639, 23237), (645, 23249), (672, 23339), (674, 23345), (677, 23354), (680, 23360), (691, 23396), (712, 23483), (727, 23534), (740, 23573), (745, 23597),

Gene: Weiss13_66 Start: 47645, Stop: 49405, Start Num: 130

Candidate Starts for Weiss13_66:

(Start: 130 @47645 has 9 MA's), (157, 47714), (193, 47810), (Start: 199 @47819 has 2 MA's), (228, 47900), (243, 47945), (352, 48146), (362, 48194), (380, 48254), (384, 48266), (403, 48332), (451, 48455), (463, 48479), (472, 48503), (517, 48707), (527, 48740), (531, 48755), (551, 48794), (552, 48797), (556, 48806), (594, 48875), (640, 49007), (674, 49130), (675, 49133), (683, 49160), (693, 49190), (695, 49196), (696, 49199), (701, 49217), (704, 49229), (740, 49364), (748, 49394),

Gene: Welcome_86 Start: 50242, Stop: 48722, Start Num: 201

Candidate Starts for Welcome_86:

(Start: 185 @50275 has 3 MA's), (Start: 201 @50242 has 46 MA's), (219, 50191), (265, 50083), (300, 50017), (322, 49951), (376, 49813), (388, 49756), (400, 49723), (401, 49720), (418, 49657), (439, 49606), (444, 49597), (450, 49588), (452, 49582), (464, 49558), (473, 49534), (490, 49495), (493, 49480), (506, 49429), (535, 49318), (549, 49291), (566, 49246), (681, 48952), (688, 48922), (703, 48877), (712, 48826), (725, 48781), (731, 48763),

Gene: Wheezy_72 Start: 55632, Stop: 53704, Start Num: 61

Candidate Starts for Wheezy_72:

(8, 55974), (9, 55962), (11, 55944), (Start: 28 @55770 has 34 MA's), (Start: 61 @55632 has 2 MA's), (65, 55608), (Start: 118 @55404 has 3 MA's), (134, 55359), (184, 55251), (227, 55137), (228, 55134), (271, 55044), (273, 55041), (309, 54981), (366, 54843), (374, 54825), (380, 54801), (415, 54678), (463, 54573), (517, 54447), (533, 54393), (591, 54267), (594, 54258), (604, 54234), (622, 54162), (626, 54156), (635, 54126), (657, 54069), (674, 54009), (694, 53946), (712, 53865),

Gene: WhoseManz_71 Start: 52415, Stop: 50334, Start Num: 28

Candidate Starts for WhoseManz_71:

(9, 52607), (11, 52589), (15, 52514), (Start: 28 @52415 has 34 MA's), (184, 51896), (Start: 197 @51863 has 73 MA's), (208, 51842), (224, 51788), (227, 51782), (228, 51779), (271, 51689), (273, 51686), (309, 51626), (374, 51470), (415, 51323), (463, 51215), (472, 51191), (517, 51089), (533, 51035), (540, 51020), (575, 50939), (594, 50900), (615, 50837), (622, 50798), (626, 50792), (635, 50762), (674, 50645), (694, 50582), (709, 50519), (712, 50501), (738, 50417),

Gene: Woes_57 Start: 53248, Stop: 51707, Start Num: 153

Candidate Starts for Woes_57:

(90, 53467), (129, 53338), (150, 53251), (Start: 153 @53248 has 3 MA's), (Start: 215 @53119 has 28 MA's), (230, 53074), (273, 52984), (275, 52981), (278, 52975), (289, 52954), (318, 52891), (355, 52783), (358, 52765), (384, 52678), (386, 52663), (399, 52621), (417, 52540), (447, 52492), (467, 52450), (475, 52432), (476, 52429), (484, 52402), (518, 52351), (532, 52315), (562, 52264), (608, 52180), (612, 52159), (681, 52003), (682, 51997), (684, 51985), (718, 51859), (754, 51745),

Gene: Wojtek_56 Start: 39665, Stop: 41593, Start Num: 41

Candidate Starts for Wojtek_56:

(20, 39569), (23, 39578), (25, 39590), (33, 39620), (36, 39653), (Start: 41 @39665 has 13 MA's), (Start: 44 @39671 has 1 MA's), (Start: 51 @39689 has 2 MA's), (54, 39704), (60, 39737), (70, 39770), (72, 39773), (85, 39839), (100, 39911), (107, 39929), (111, 39947), (115, 39956), (Start: 118 @39965 has 3 MA's), (149, 40037), (Start: 197 @40157 has 73 MA's), (Start: 199 @40160 has 2 MA's), (221, 40220), (228, 40238), (263, 40310), (279, 40337), (354, 40472), (357, 40490), (366, 40532), (376, 40553), (378, 40559), (386, 40601), (390, 40622), (399, 40643), (411, 40679), (434, 40736), (442, 40748), (456, 40778), (461, 40787), (481, 40838), (527, 40934), (528, 40937), (590, 41048), (622, 41138), (631, 41165), (665, 41255), (686, 41333), (693, 41351), (700, 41375), (704, 41390), (728, 41492), (733, 41507), (740, 41528),

Gene: Wolfstar_82 Start: 50847, Stop: 49330, Start Num: 204

Candidate Starts for Wolfstar_82:

(86, 51207), (Start: 185 @50889 has 3 MA's), (Start: 204 @50847 has 13 MA's), (257, 50703), (265, 50694), (310, 50598), (321, 50565), (358, 50484), (367, 50439), (368, 50436), (401, 50334), (444, 50211), (450, 50202), (479, 50136), (531, 49941), (533, 49935), (549, 49905), (552, 49899), (554, 49893), (624, 49722), (681, 49560), (695, 49512), (715, 49428), (725, 49389), (733, 49365),

Gene: WonderBoy_25 Start: 20548, Stop: 21942, Start Num: 197

Candidate Starts for WonderBoy_25:

(Start: 197 @20548 has 73 MA's), (221, 20605), (282, 20710), (318, 20797), (340, 20830), (357, 20881), (359, 20887), (381, 20968), (382, 20971), (384, 20977), (390, 21013), (396, 21031), (399, 21034), (406, 21067), (411, 21088), (478, 21220), (487, 21247), (517, 21286), (523, 21307), (525, 21313), (541, 21346), (551, 21361), (554, 21370), (575, 21415), (595, 21451), (612, 21493), (633, 21556), (639, 21574), (672, 21676), (673, 21679), (680, 21697), (681, 21700), (687, 21724), (691, 21733), (712, 21820), (740, 21910), (745, 21934),

Gene: Worcestershire_59 Start: 51468, Stop: 49936, Start Num: 168

Candidate Starts for Worcestershire_59:

(90, 51723), (102, 51672), (116, 51621), (135, 51567), (143, 51537), (Start: 153 @51504 has 3 MA's), (158, 51495), (Start: 168 @51468 has 28 MA's), (230, 51300), (245, 51258), (273, 51210), (280, 51198), (287, 51186), (289, 51180), (297, 51159), (312, 51132), (358, 50991), (384, 50904), (386, 50889), (389, 50877), (399, 50847), (410, 50796), (416, 50769), (447, 50718), (460, 50694), (467, 50676), (475, 50658), (476, 50655), (484, 50628), (515, 50586), (532, 50541), (608, 50406), (611, 50391), (616, 50370), (664, 50289), (666, 50286), (681, 50229), (682, 50223), (683, 50217), (684, 50211), (707, 50136), (715, 50097), (718, 50085), (719, 50082), (746, 49989), (754, 49974), (763, 49953),

Gene: Xenia2_58 Start: 39008, Stop: 40912, Start Num: 51

Candidate Starts for Xenia2_58:

(Start: 41 @38990 has 13 MA's), (Start: 42 @38993 has 55 MA's), (Start: 51 @39008 has 2 MA's), (60, 39056), (70, 39089), (72, 39092), (115, 39275), (Start: 118 @39284 has 3 MA's), (149, 39356), (156, 39371), (160, 39380), (Start: 199 @39479 has 2 MA's), (221, 39539), (323, 39752), (352, 39785), (378, 39878), (380, 39893), (386, 39920), (390, 39941), (434, 40055), (456, 40097), (461, 40106), (477, 40145), (481, 40157), (503, 40202), (513, 40208), (527, 40253), (531, 40268), (589, 40361), (622, 40454), (674, 40607), (686, 40649), (693, 40667), (694, 40670), (728, 40808), (740, 40844), (761, 40898),

Gene: Yappy_96 Start: 49042, Stop: 47645, Start Num: 188

Candidate Starts for Yappy_96:

(Start: 188 @49042 has 1 MA's), (226, 48952), (232, 48940), (238, 48919), (267, 48868), (296, 48811), (301, 48805), (339, 48712), (351, 48700), (363, 48649), (379, 48604), (382, 48586), (397, 48526), (426, 48439), (439, 48412), (473, 48346), (507, 48232), (512, 48202), (520, 48175), (523, 48166), (532, 48142), (537, 48130), (554, 48097), (556, 48094), (561, 48076), (574, 48046), (596, 48022), (602, 48007), (625, 47932), (636, 47899), (660, 47848), (668, 47827), (679, 47785), (689, 47752), (708, 47686), (714, 47665),

Gene: Yeezus_70 Start: 47415, Stop: 46021, Start Num: 202

Candidate Starts for Yeezus_70:

(Start: 202 @47415 has 13 MA's), (226, 47346), (257, 47271), (271, 47253), (288, 47223), (318, 47142), (417, 46848), (431, 46809), (488, 46695), (507, 46623), (512, 46593), (517, 46578), (520, 46566), (545, 46515), (566, 46464), (574, 46446), (587, 46437), (606, 46389), (660, 46239), (716, 46050),

Gene: Yelo_65 Start: 48022, Stop: 49782, Start Num: 130

Candidate Starts for Yelo_65:

(Start: 130 @48022 has 9 MA's), (157, 48091), (193, 48187), (Start: 199 @48196 has 2 MA's), (228, 48277), (243, 48322), (352, 48523), (362, 48571), (380, 48631), (384, 48643), (403, 48709), (451, 48832), (463, 48856), (472, 48880), (517, 49084), (527, 49117), (531, 49132), (551, 49171), (552, 49174), (556, 49183), (594, 49252), (640, 49384), (674, 49507), (675, 49510), (683, 49537), (693, 49567), (695, 49573), (696, 49576), (701, 49594), (704, 49606), (740, 49741), (748, 49771),

Gene: Yikes_62 Start: 41734, Stop: 43647, Start Num: 42

Candidate Starts for Yikes_62:

(16, 41608), (18, 41617), (19, 41629), (27, 41662), (36, 41719), (Start: 41 @41731 has 13 MA's), (Start: 42 @41734 has 55 MA's), (Start: 51 @41746 has 2 MA's), (60, 41794), (70, 41827), (85, 41896), (107, 41986), (115, 42013), (Start: 118 @42022 has 3 MA's), (149, 42094), (Start: 197 @42214 has 73 MA's), (221, 42277), (263, 42367), (279, 42394), (352, 42523), (357, 42547), (366, 42589), (382, 42637), (386, 42658), (390, 42679), (411, 42736), (434, 42790), (456, 42832), (481, 42892), (527, 42988), (528, 42991), (613, 43168), (631, 43219), (665, 43309), (674, 43345), (676, 43351), (693, 43405), (704, 43444), (728, 43546), (733, 43561), (740, 43582),

Gene: Yndexa_71 Start: 54175, Stop: 52319, Start Num: 81

Candidate Starts for Yndexa_71:

(9, 54592), (11, 54574), (15, 54499), (Start: 28 @54400 has 34 MA's), (Start: 81 @54175 has 3 MA's), (184, 53881), (Start: 197 @53848 has 73 MA's), (208, 53827), (224, 53773), (227, 53767), (228, 53764), (271, 53674), (273, 53671), (309, 53611), (374, 53455), (415, 53308), (463, 53200), (472, 53176), (517, 53074), (533, 53020), (540, 53005), (575, 52924), (594, 52885), (615, 52822), (622, 52783), (626, 52777), (635, 52747), (674, 52630), (694, 52567), (709, 52504), (712, 52486), (738, 52402),

Gene: Yuma_83 Start: 49751, Stop: 48231, Start Num: 201

Candidate Starts for Yuma_83:

(Start: 185 @49784 has 3 MA's), (Start: 201 @49751 has 46 MA's), (219, 49700), (265, 49592), (300, 49526), (322, 49460), (367, 49337), (376, 49322), (388, 49265), (400, 49232), (401, 49229), (418, 49166), (439, 49115), (444, 49106), (450, 49097), (473, 49043), (490, 49004), (493, 48989), (508, 48920), (515, 48890), (535, 48827), (566, 48755), (640, 48569), (681, 48461), (688, 48431), (703, 48386), (712, 48335), (731, 48272),

Gene: Zanella_33 Start: 23260, Stop: 24687, Start Num: 201

Candidate Starts for Zanella_33:

(184, 23218), (Start: 201 @23260 has 46 MA's), (349, 23578), (386, 23725), (390, 23746), (502, 24013), (525, 24061), (531, 24082), (563, 24139), (577, 24172), (599, 24208), (627, 24286), (633, 24307), (665, 24388), (666, 24391), (691, 24478), (696, 24490), (706, 24529), (712, 24565), (715, 24571), (716, 24574), (718, 24583), (737, 24646),

Gene: Zany_58 Start: 41140, Stop: 43056, Start Num: 41

Candidate Starts for Zany_58:

(Start: 41 @41140 has 13 MA's), (Start: 42 @41143 has 55 MA's), (Start: 51 @41155 has 2 MA's), (60, 41203), (70, 41236), (85, 41305), (107, 41395), (115, 41422), (Start: 118 @41431 has 3 MA's), (149, 41503), (Start: 197 @41623 has 73 MA's), (221, 41686), (231, 41713), (263, 41776), (279, 41803), (352, 41932), (357, 41956), (366, 41998), (382, 42046), (386, 42067), (390, 42088), (411, 42145), (434, 42199), (456, 42241), (481, 42301), (527, 42397), (528, 42400), (631, 42628), (665, 42718), (674, 42754), (676, 42760), (693, 42814), (704, 42853), (728, 42955), (733, 42970), (740, 42991),

Gene: Zenon_68 Start: 47968, Stop: 49728, Start Num: 130

Candidate Starts for Zenon_68:

(Start: 130 @47968 has 9 MA's), (157, 48037), (193, 48133), (Start: 199 @48142 has 2 MA's), (228, 48223), (243, 48268), (352, 48469), (362, 48517), (380, 48577), (384, 48589), (403, 48655), (451, 48778), (463, 48802), (472, 48826), (517, 49030), (527, 49063), (531, 49078), (551, 49117), (552, 49120), (556, 49129), (594, 49198), (640, 49330), (674, 49453), (675, 49456), (683, 49483), (693, 49513), (695, 49519), (696, 49522), (701, 49540), (704, 49552), (740, 49687), (748, 49717),

Gene: Zion_72 Start: 52509, Stop: 50584, Start Num: 49

Candidate Starts for Zion_72:

(25, 52602), (27, 52596), (Start: 49 @52509 has 8 MA's), (91, 52338), (104, 52284), (184, 52080), (240, 51924), (271, 51873), (273, 51870), (303, 51828), (353, 51741), (354, 51738), (369, 51666), (376, 51657), (515, 51306), (517, 51300), (527, 51267), (657, 50928), (676, 50862), (681, 50850), (684, 50832), (694, 50805), (709, 50742), (717, 50709), (739, 50637),

Gene: Zorro_29 Start: 22105, Stop: 23505, Start Num: 197

Candidate Starts for Zorro_29:

(Start: 197 @22105 has 73 MA's), (221, 22168), (282, 22273), (284, 22276), (318, 22360), (340, 22393), (357, 22444), (359, 22450), (381, 22531), (382, 22534), (384, 22540), (390, 22576), (396, 22594), (399, 22597), (406, 22630), (411, 22651), (435, 22702), (478, 22783), (487, 22810), (514,

22840), (517, 22849), (525, 22876), (541, 22909), (551, 22924), (575, 22978), (590, 22999), (594, 23011), (600, 23023), (674, 23245), (677, 23254), (680, 23260), (691, 23296), (707, 23356), (712, 23383), (740, 23473),