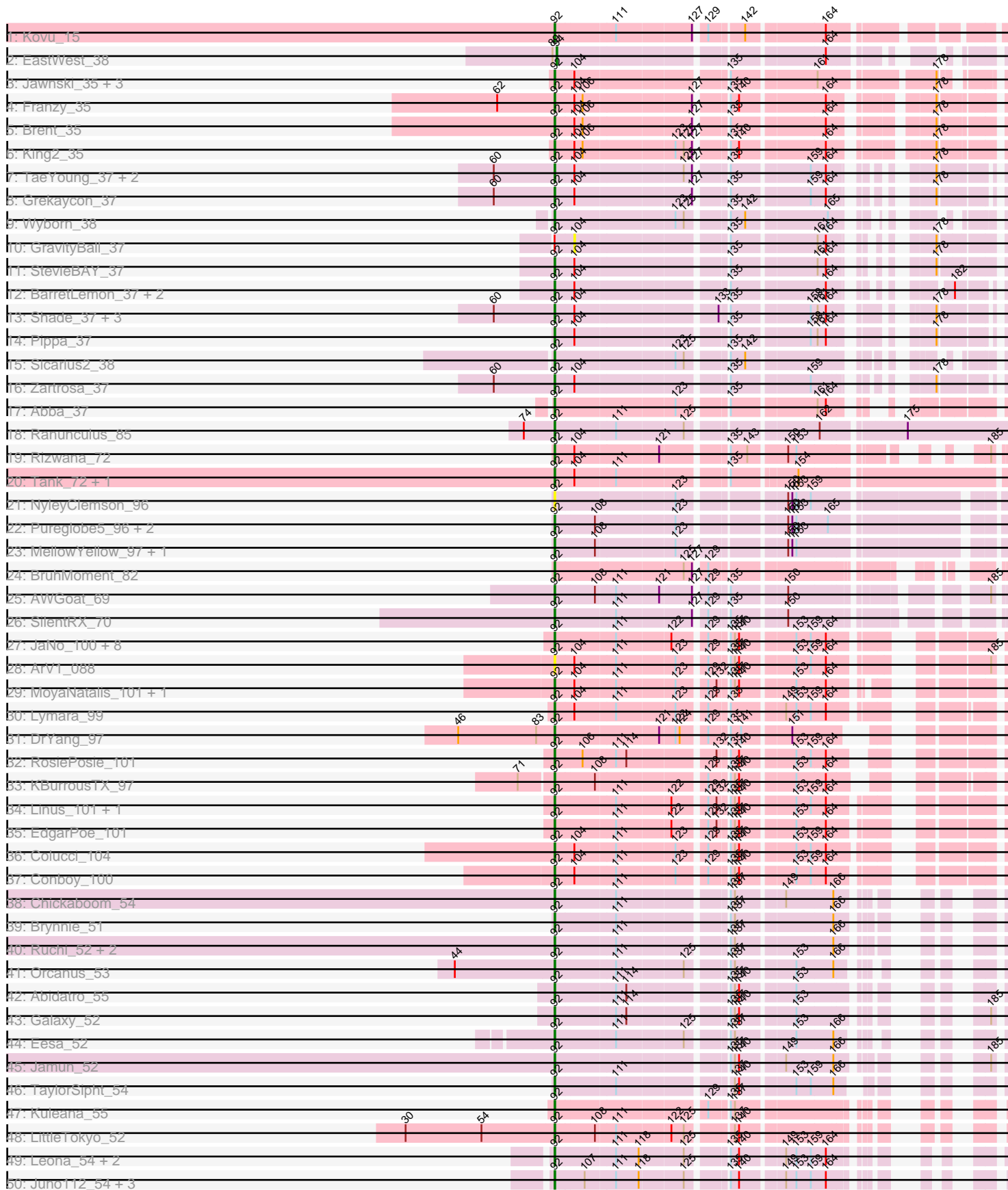
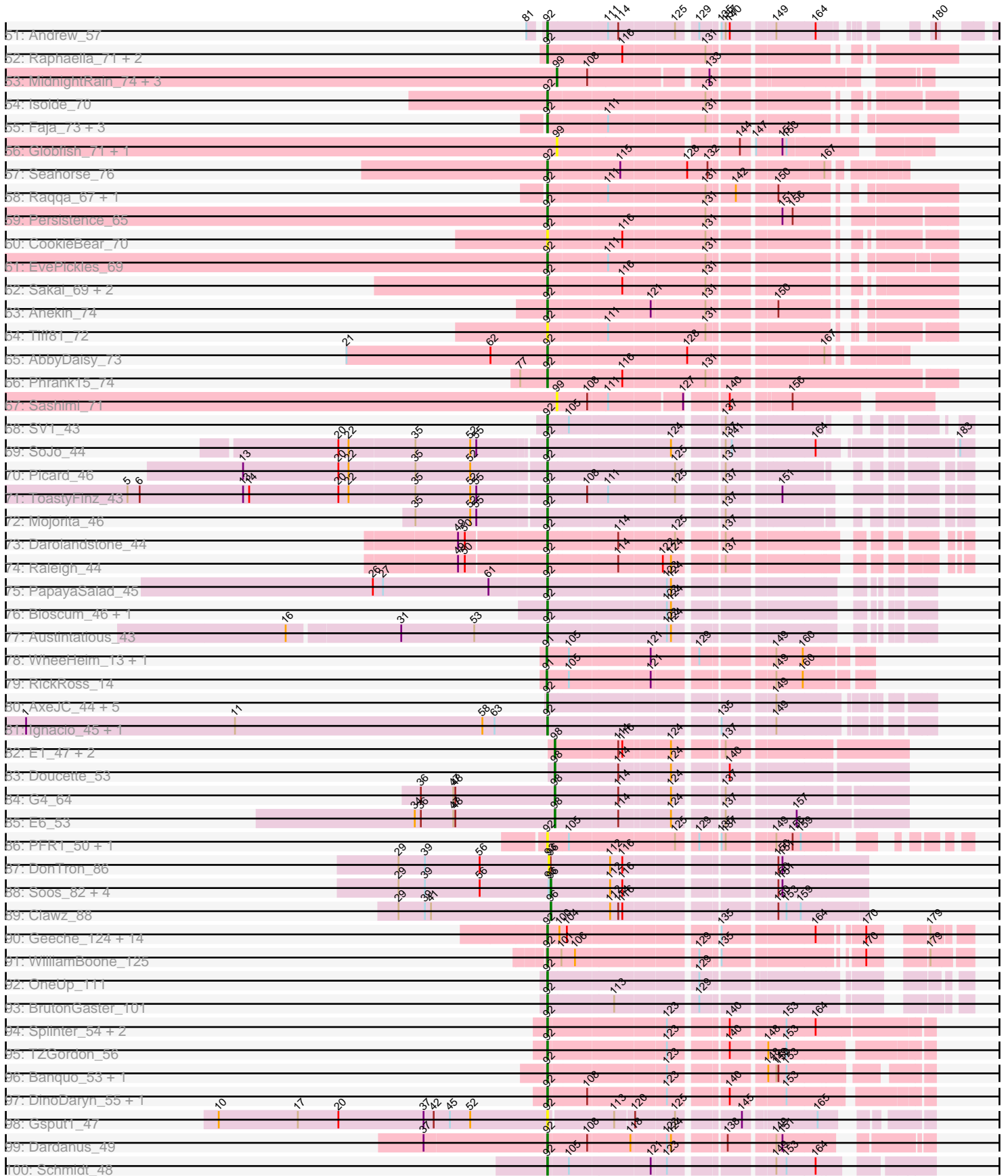


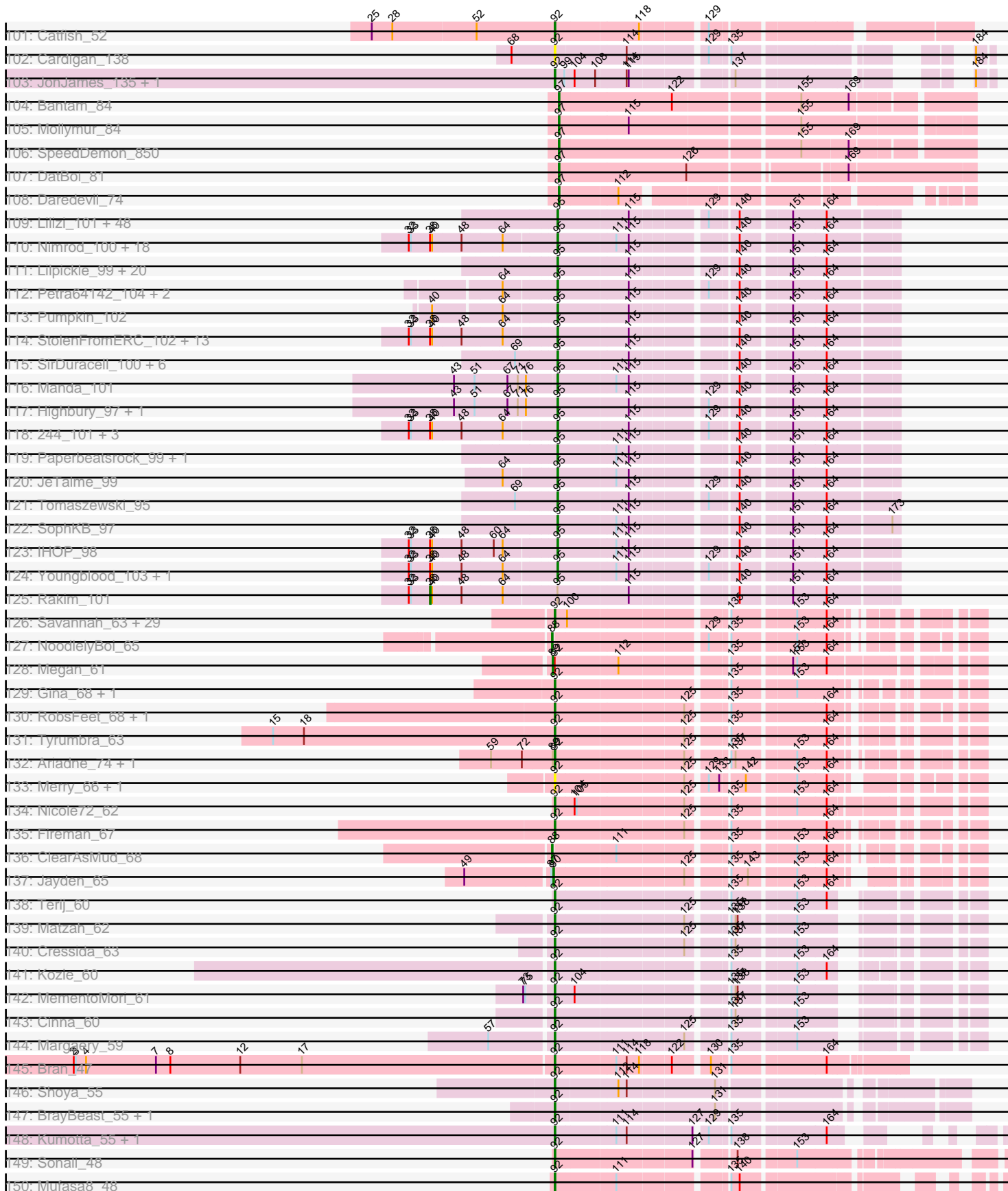
Pham 192196



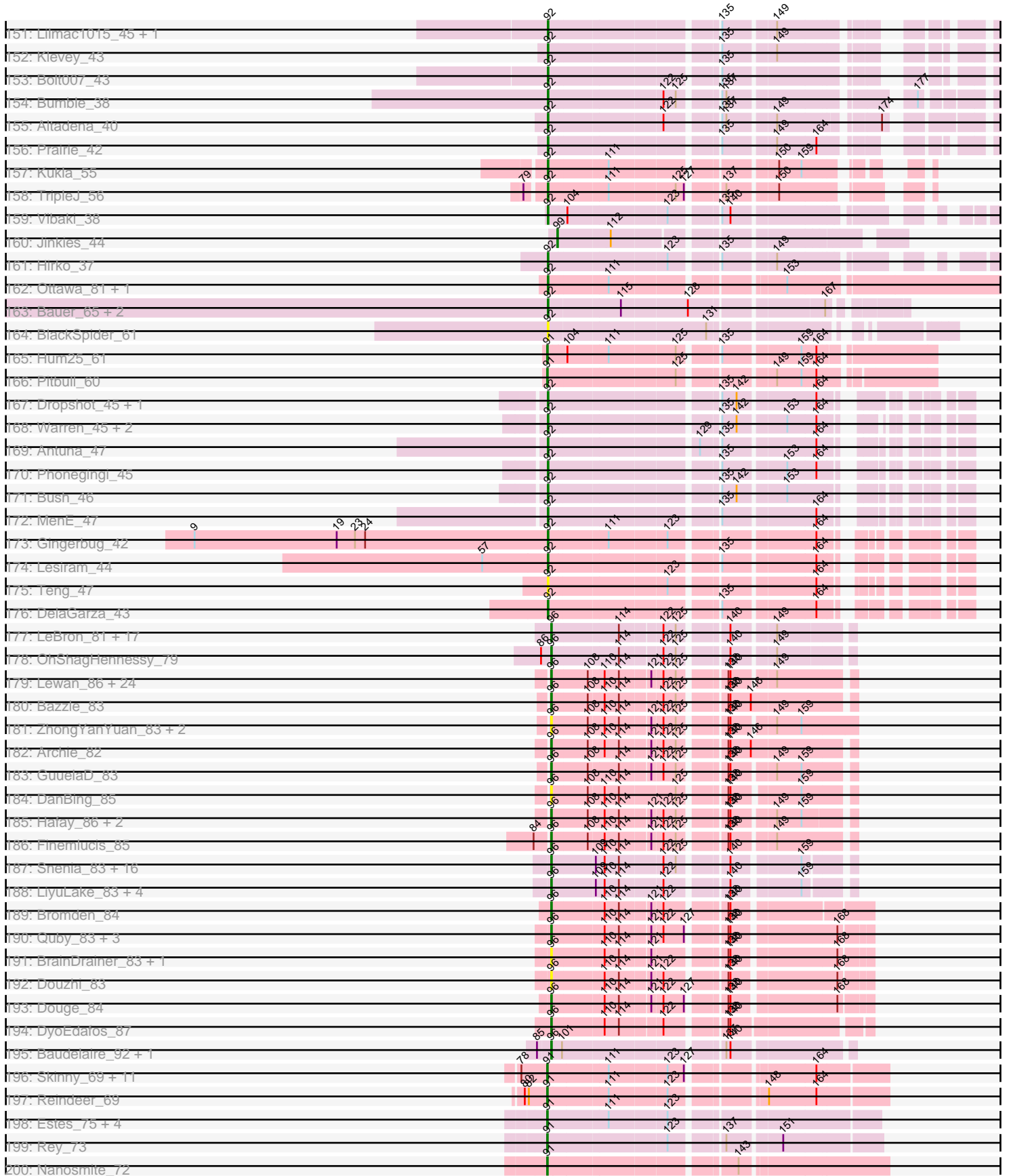
Pham 192196



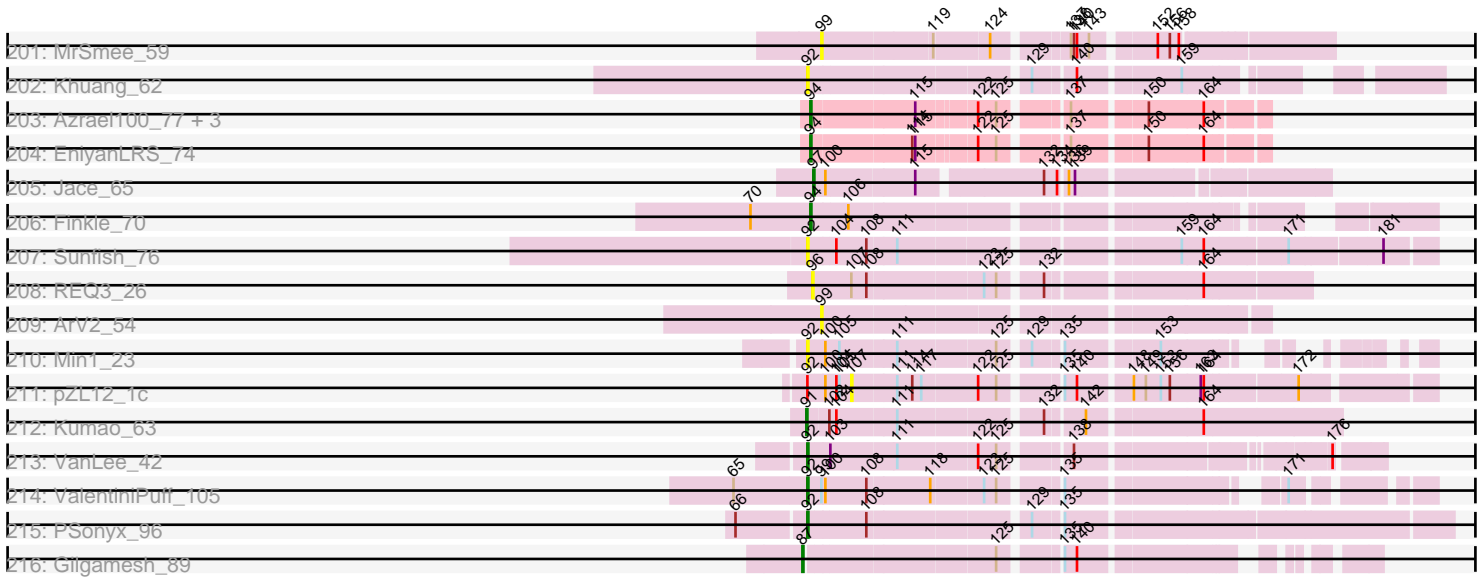
Pham 192196



Pham 192196



Pham 192196



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 192196 Report

This analysis was run 11/02/24 on database version 579.

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 192196 has 536 members, 69 are drafts.

Phages represented in each track:

- Track 1 : Kovu_15
- Track 2 : EastWest_38
- Track 3 : Jawnski_35, Piccoletto_35, Beans_35, NathanVaag_35
- Track 4 : Franzy_35
- Track 5 : Brent_35
- Track 6 : King2_35
- Track 7 : TaeYoung_37, BossLady_37, Martha_37
- Track 8 : Grekaycon_37
- Track 9 : Wyborn_38
- Track 10 : GravityBall_37
- Track 11 : StevieBAY_37
- Track 12 : BarretLemon_37, LeeroyJ_37, Timinator_37
- Track 13 : Shade_37, Jordan_37, JKerns_37, Sonny_37
- Track 14 : Pippa_37
- Track 15 : Sicarius2_38
- Track 16 : Zartrosa_37
- Track 17 : Abba_37
- Track 18 : Ranunculus_85
- Track 19 : Rizwana_72
- Track 20 : Tank_72, Wilde_74
- Track 21 : NyleyClemson_96
- Track 22 : Pureglobe5_96, Odyssey395_96, Pointis_93
- Track 23 : MellowYellow_97, Beagle_98
- Track 24 : BruhMoment_82
- Track 25 : AWGoat_69
- Track 26 : SilentRX_70
- Track 27 : JaNo_100, Mordred_101, Tophat_102, Chipper1996_1020, HumptyDumpty_101, Chubster_101, PrincessTrina_102, Kabreeze_101, Scavito_102
- Track 28 : ArV1_088
- Track 29 : MoyaNatalis_101, JayCookie_102
- Track 30 : Lymara_99
- Track 31 : DrYang_97
- Track 32 : RosiePosie_101

- Track 33 : KBurrousTX_97
- Track 34 : Linus_101, Chocolat_101
- Track 35 : EdgarPoe_101
- Track 36 : Colucci_104
- Track 37 : Conboy_100
- Track 38 : Chickaboom_54
- Track 39 : Brynnie_51
- Track 40 : Ruchi_52, Basilisk_53, Vulpecula_52
- Track 41 : Orcanus_53
- Track 42 : Abidatro_55
- Track 43 : Galaxy_52
- Track 44 : Eesa_52
- Track 45 : Jamun_52
- Track 46 : TaylorSipht_54
- Track 47 : Kuleana_55
- Track 48 : LittleTokyo_52
- Track 49 : Leona_54, Renna12_54, RedFox_55
- Track 50 : Juno112_54, KHumphrey_55, PhluffyCoco_55, Camara_55
- Track 51 : Andrew_57
- Track 52 : Raphaella_71, Richie_74, Lawnathon_71
- Track 53 : MidnightRain_74, Auxilium_68, RadFad_76, Hillester_76
- Track 54 : Isolde_70
- Track 55 : Faja_73, BillyTP_73, Hestia_64, YoungHarleezy_70
- Track 56 : Globfish_71, SpicyFrank_74
- Track 57 : Seahorse_76
- Track 58 : Raqqa_67, BenchScraper_72
- Track 59 : Persistence_65
- Track 60 : CookieBear_70
- Track 61 : EvePickles_69
- Track 62 : Sakai_69, Gorpy_70, Aikyam_70
- Track 63 : Anekin_74
- Track 64 : Tiff81_72
- Track 65 : AbbyDaisy_73
- Track 66 : Phrank15_74
- Track 67 : Sashimi_71
- Track 68 : SV1_43
- Track 69 : SoJo_44
- Track 70 : Picard_46
- Track 71 : ToastyFinz_43
- Track 72 : Mojorita_46
- Track 73 : Darolandstone_44
- Track 74 : Raleigh_44
- Track 75 : PapayaSalad_45
- Track 76 : Bioscum_46, Ididsumtinwong_47
- Track 77 : Austintatious_43
- Track 78 : WheeHeim_13, Forthebois_13
- Track 79 : RickRoss_14
- Track 80 : AxeJC_44, Eklok_45, Cumberbatch_46, Eastland_45, Piccadilly_45, Vondra_44
- Track 81 : Ignacio_45, HFrancette_46
- Track 82 : E1_47, Anatole_47, B3_49
- Track 83 : Doucette_53
- Track 84 : G4_64

- Track 85 : E6_53
- Track 86 : PFR1_50, PFR2_52
- Track 87 : DonTron_86
- Track 88 : Soos_82, Sting_85, KingstonB_88, ColdSoup_89, Jollymon_89
- Track 89 : Clawz_88
- Track 90 : Geeche_124, Abscondus_125, Miskis_125, Cucurbita_127, Culver_126, Norvs_125, Aphelion_126, Toniann_126, Dusty_122, ClubL_126, Bachita_129, PhinkBoden_126, Lozinak_126, Engineer_128, Smoothie_127
- Track 91 : WilliamBoone_125
- Track 92 : OneUp_111
- Track 93 : BrutonGaster_101
- Track 94 : Splinter_54, Vendetta_54, Goib_55
- Track 95 : TZGordon_56
- Track 96 : Banquo_53, TinaLin_53
- Track 97 : DinoDaryn_55, Huffy_55
- Track 98 : Gspu1_47
- Track 99 : Dardanus_49
- Track 100 : Schmidt_48
- Track 101 : Catfish_52
- Track 102 : Cardigan_138
- Track 103 : JonJames_135, Yvonnetastic_132
- Track 104 : Bantam_84
- Track 105 : Mollymur_84
- Track 106 : SpeedDemon_850
- Track 107 : DatBoi_81
- Track 108 : Daredevil_74
- Track 109 : Lilizi_101, Moldemort_103, Emmina_100, ShamWow_100, RiverMonster_100, Misfit_101, CrystalP_99, Hoonter_103, FireRed_103, Henry_97, Simpliphy_99, BilboSwaggins_99, Filch_102, OrionPax_99, Palpatine_101, Porky_99, Tarkin_99, ShereKhan_98, Hopey_101, Nala_102, Buck_101, MadamMonkfish_100, Eureka_99, Policronamos_103, Elph10_100, Contagion_96, Phrux_97, Bruin_97, Stark_101, Ukulele_95, Teaspoon_101, HanKaySha_101, Maxxinista_102, Lilac_102, Quallification_101, Thresher_102, Goku_99, Terminus_103, Cjw1_101, Toto_98, NoSleep_101, Bench_103, BugsBunny_99, PhatBacter_103, Mosby_96, Sassay_95, Kanye_97, Phaux_102, Willez_95
- Track 110 : Nimrod_100, Harella_100, Glexan_99, Inca_97, Xandras_99, Icee_101, Marshmallow_97, Flypotenuse_96, DoctorDiddles_99, Gator_98, YassJohnny_97, Asriel_98, Phaja_98, Bask21_100, xkcd_103, AmericanBeauty_104, Barbarian_99, Myrale_100, Traaww1_96
- Track 111 : Lilpickle_99, Cactus_104, DrDrey_100, Tuco_101, Dusk_97, Goldilocks_103, TeardropMSU_96, MPhalcon_101, Murica_103, Murphy_100, ABCat_97, BadStone_97, MISSy_101, Pharsalus_97, StellaBean_99, ChosenOne_100, BaboJay_100, Mindy_99, Dumbo_100, Sotrice96_101, Elite2014_99
- Track 112 : Petra64142_104, Daikon_100, NelitzaMV_97
- Track 113 : Pumpkin_102
- Track 114 : StolenFromERC_102, Easy2Say_100, GooberAzure_103, Stank_102, GoldenSpark_104, Kimchi_104, Adnama_104, Command613_102, Gage_102, Argent26_104, Holt_105, Gemini_105, Kostya_100, Wiggin_102
- Track 115 : SirDuracell_100, Cookies_97, Amao_100, ChotaBhai_100, Rimmer_98, HufflyPuff_102, Pat3_97
- Track 116 : Manda_101
- Track 117 : Highbury_97, Saints25_97

- Track 118 : 244_101, Balomoji_100, TBrady12_103, Czyszczon1_101
- Track 119 : Paperbeatsrock_99, Miniwave_95
- Track 120 : JeTaime_99
- Track 121 : Tomaszewski_95
- Track 122 : SophKB_97
- Track 123 : IHOP_98
- Track 124 : Youngblood_103, BigBubba_100
- Track 125 : Rakim_101
- Track 126 : Savannah_63, Scumberland_66, Phorgeous_64, Kowalski_63, LittleFortune_66, Cranjjs_65, KaiHaiDragon_65, Pulchra_66, Hermeonysus_64, PierreOrion_64, Ganandorf_63, Ramiel05_63, Piperis_65, Shotgun_64, Quhwah_68, Honeyfin_65, Paschalis_64, BrazzalePHS_63, CrazyRich_63, PiperSansNom_65, EarickHC_65, Jollipop_65, Crisis_65, Antares_64, Onika_63, Busephilis_63, Jefe_64, Yeti_66, Selwyn23_65, Phrancesco_64
- Track 127 : NoodlelyBoi_65
- Track 128 : Megan_61
- Track 129 : Gina_68, Teamocil_68
- Track 130 : RobsFeet_68, Metamorphoo_67
- Track 131 : Tyrumbra_63
- Track 132 : Ariadne_74, Smarties_74
- Track 133 : Merry_66, Sunny_66
- Track 134 : Nicole72_62
- Track 135 : Fireman_67
- Track 136 : ClearAsMud_68
- Track 137 : Jayden_65
- Track 138 : Terij_60
- Track 139 : Matzah_62
- Track 140 : Cressida_63
- Track 141 : Kozie_60
- Track 142 : MementoMori_61
- Track 143 : Cinna_60
- Track 144 : Margaery_59
- Track 145 : Bran_47
- Track 146 : Shoya_55
- Track 147 : BrayBeast_55, Sarge_49
- Track 148 : Kumotta_55, MargaretKali_51
- Track 149 : Sonali_48
- Track 150 : Mufasa8_48
- Track 151 : Lilmac1015_45, CalWood4100_45
- Track 152 : Klevey_43
- Track 153 : Bolt007_43
- Track 154 : Bumble_38
- Track 155 : Altadena_40
- Track 156 : Prairie_42
- Track 157 : Kukla_55
- Track 158 : TripleJ_56
- Track 159 : Vibaki_38
- Track 160 : Jinkies_44
- Track 161 : Hirko_37
- Track 162 : Ottawa_81, Kharcho_81
- Track 163 : Bauer_65, ThayneTheZag_76, Zucker_67
- Track 164 : BlackSpider_61
- Track 165 : Hum25_61

- Track 166 : Pitbull_60
- Track 167 : Dropshot_45, Appa_45
- Track 168 : Warren_45, Blett_45, Pickles13_44
- Track 169 : Antuna_47
- Track 170 : Phonegingi_45
- Track 171 : Bush_46
- Track 172 : MenE_47
- Track 173 : Gingerbug_42
- Track 174 : Lesiram_44
- Track 175 : Teng_47
- Track 176 : DelaGarza_43
- Track 177 : LeBron_81, Rose5_83, Enceladus_79, AvadaKedavra_82, Silverleaf_82, DirkDirk_79, Acquire49_82, Halena_80, MAckerman_81, Appletree2_81, Zaria_83, Tyson_83, JoeDirt_83, CicholasNage_79, Wyatt2_83, Calm_84, UPIE_81, Wamburgxpress_82
- Track 178 : OhShagHennessy_79
- Track 179 : Lewan_86, Rumpelstiltskin_82, Itos_85, Crossroads_85, Soap141_85, Gabriela_85, Breezona_85, Gardann_85, Loadrie_83, Nicholasp3_85, Miley16_85, Winky_85, Vetric_84, Netyap_86, BobsGarage_85, LilDestine_84, Faith1_85, DrSeegs_85, Zakai_86, Wilder_86, MkaliMitinis3_86, Wigglewiggle_84, Kahlid_85, BigCheese_85, Sarshaun_86
- Track 180 : Bazzle_83
- Track 181 : ZhongYanYuan_83, DHan_89, Baoshan_83
- Track 182 : Archie_82
- Track 183 : GuuelaD_83
- Track 184 : DanBing_85
- Track 185 : Hafay_86, Tourach_84, Claus_85
- Track 186 : Finemlucis_85
- Track 187 : Snenia_83, Finnry_83, Lolly9_82, Clautastrophe_82, Jubie_83, Nicholas_81, Samty_82, Bellis_82, MiniMac_87, Jobypre_85, MsGreen_84, Kingsolomon_81, Moostard_81, Lumos_84, Whirlwind_84, Krypton555_84, MiniLon_87
- Track 188 : LiyuLake_83, DuncansLeg_84, BourbonZero_85, KirDoubleO7_82, Ellson_83
- Track 189 : Bromden_84
- Track 190 : Quby_83, FarmResident_84, Sheng711_84, Chaser_82
- Track 191 : BrainDrainer_83, PYPDinur_82
- Track 192 : Douzhi_83
- Track 193 : Douge_84
- Track 194 : DyoEdafos_87
- Track 195 : Baudelaire_92, Aegeus_92
- Track 196 : Skinny_69, Dulcita_68, Bricole_66, Auspice_67, Glaske16_68, LilhomieP_66, IPhane7_67, SlimJimmy_66, TyDawg_67, Bongo_67, PegLeg_66, Diminimus_68
- Track 197 : Reindeer_69
- Track 198 : Estes_75, GenevaB15_75, MrMagoo_77, Aziz_74, GardenSalsa_76
- Track 199 : Rey_73
- Track 200 : Nanosmite_72
- Track 201 : MrSmee_59
- Track 202 : Khuang_62
- Track 203 : Azrael100_77, Wildcat_78, Cosmo_78, MaryV_78
- Track 204 : EniyanLRS_74
- Track 205 : Jace_65

- Track 206 : Finkle_70
- Track 207 : Sunfish_76
- Track 208 : REQ3_26
- Track 209 : ArV2_54
- Track 210 : Min1_23
- Track 211 : pZL12_1c
- Track 212 : Kumao_63
- Track 213 : VanLee_42
- Track 214 : ValentiniPuff_105
- Track 215 : PSonyx_96
- Track 216 : Gilgamesh_89

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

The start number called the most often in the published annotations is 92, it was called in 218 of the 467 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AWGoat_69, Abba_37, AbbyDaisy_73, Abidatro_55, Abscondus_125, Aikyam_70, Altadena_40, Andrew_57, Anekin_74, Antares_64, Antuna_47, Aphelion_126, Appa_45, ArV1_088, Ariadne_74, Austintatious_43, AxeJC_44, Bachita_129, Banquo_53, BarretLemon_37, Basilisk_53, Bauer_65, Beagle_98, Beans_35, BenchScraper_72, BillyTP_73, Bioscum_46, BlackSpider_61, Blett_45, Bolt007_43, BossLady_37, Bran_47, BrayBeast_55, BrazzalePHS_63, Brent_35, BruhMoment_82, BrutonGaster_101, Brynnie_51, Bumble_38, Busephilis_63, Bush_46, CalWood4100_45, Camara_55, Cardigan_138, Catfish_52, Chickaboom_54, Chipper1996_1020, Chocolat_101, Chubster_101, Cinna_60, ClubL_126, Colucci_104, Conboy_100, CookieBear_70, Cranjis_65, CrazyRich_63, Cressida_63, Crisis_65, Cucurbita_127, Culver_126, Cumberbatch_46, Dardanus_49, Darolandstone_44, DelaGarza_43, DinoDaryn_55, DrYang_97, Dropshot_45, Dusty_122, EarickHC_65, Eastland_45, EdgarPoe_101, Eesa_52, Eklok_45, Engineer_128, EvePickles_69, Faja_73, Fireman_67, Franzy_35, Galaxy_52, Ganandorf_63, Geeche_124, Gina_68, Gingerbug_42, Goib_55, Gorpy_70, Grekaycon_37, Gspu1_47, HFrancette_46, Hermeonysus_64, Hestia_64, Hirko_37, Honeyfin_65, Huff_55, HumptyDumpty_101, Ididsumtinwong_47, Ignacio_45, Isolde_70, JKerns_37, JaNo_100, Jamun_52, Jawnski_35, JayCookie_102, Jefe_64, Jollipop_65, JonJames_135, Jordan_37, Juno112_54, KBurrousTX_97, KHumphrey_55, Kabreeze_101, KaiHaiDragon_65, Kharcho_81, Khuang_62, King2_35, Klevey_43, Kovu_15, Kowalski_63, Kozi_60, Kukla_55, Kuleana_55, Kumotta_55, Lawnathon_71, LeeroyJ_37, Leona_54, Lesiram_44, Lilmac1015_45, Linus_101, LittleFortune_66, LittleTokyo_52, Lozinak_126, Lymara_99, Margaery_59, MargaretKali_51, Martha_37, Matzah_62, MellowYellow_97, MementoMori_61, MenE_47, Merry_66, Metamorphoo_67, Min1_23, Miskis_125, Mojarita_46, Mordred_101, MoyaNatalis_101, Mufasa8_48, NathanVaag_35, Nicole72_62, Norvs_125, NyleyClemson_96, Odyssey395_96, OneUp_111, Onika_63, Orcanus_53, Ottawa_81, PFR1_50, PFR2_52, PSonyx_96, PapayaSalad_45, Paschalis_64, Persistence_65, PhinkBoden_126, PhluffyCoco_55, Phonegingi_45, Phorgeous_64, Phrancesco_64, Phrank15_74, Picard_46, Piccadilly_45, Piccoletto_35, Pickles13_44, PierreOrion_64, PiperSansNom_65, Piperis_65, Pippa_37, Pointis_93, Prairie_42, PrincessTrina_102, Pulchra_66,

Pureglobe5_96, Quhwah_68, Raleigh_44, Ramiel05_63, Ranunculus_85, Raphaella_71, Raqqa_67, RedFox_55, Renna12_54, Richie_74, Rizwana_72, RobsFeet_68, RosiePosie_101, Ruchi_52, SV1_43, Sakai_69, Sarge_49, Savannah_63, Scavito_102, Schmidt_48, Scumberland_66, Seahorse_76, Selwyn23_65, Shade_37, Shotgun_64, Shoya_55, Sicarius2_38, SilentRX_70, Smarties_74, Smoothie_127, SoJo_44, Sonali_48, Sonny_37, Splinter_54, StevieBAY_37, Sunfish_76, Sunny_66, TZGordon_56, TaeYoung_37, Tank_72, TaylorSipht_54, Teamocil_68, Teng_47, Terij_60, ThayneTheZag_76, Tiff81_72, Timinator_37, TinaLin_53, ToastyFinz_43, Toniann_126, Tophat_102, TripleJ_56, Tyumbra_63, ValentiniPuff_105, VanLee_42, Vendetta_54, Vibaki_38, Vondra_44, Vulpecula_52, Warren_45, Wilde_74, WilliamBoone_125, Wyborn_38, Yeti_66, YoungHarleezy_70, Yvonnetastic_132, Zartrosa_37, Zucker_67,

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

- GravityBall_37, Megan_61, pZL12_1c,

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

- 244_101, ABCat_97, Acquire49_82, Adnama_104, Aegeus_92, Amao_100, AmericanBeauty_104, Anatole_47, Appletree2_81, ArV2_54, Archie_82, Argent26_104, Asriel_98, Auspice_67, Auxilium_68, AvadaKedavra_82, Aziz_74, Azrael100_77, B3_49, BaboJay_100, BadStone_97, Balomoji_100, Bantam_84, Baoshan_83, Barbarian_99, Bask21_100, Baudelaire_92, Bazzle_83, Bellis_82, Bench_103, BigBubba_100, BigCheese_85, BilboSwaggins_99, BobsGarage_85, Bongo_67, BourbonZero_85, BrainDrainer_83, Breezona_85, Bricole_66, Bromden_84, Bruin_97, Buck_101, BugsBunny_99, Cactus_104, Calm_84, Chaser_82, ChosenOne_100, ChotaBhai_100, CicholasNage_79, Cjw1_101, Claus_85, Clautastrophe_82, Clawz_88, ClearAsMud_68, ColdSoup_89, Command613_102, Contagion_96, Cookies_97, Cosmo_78, Crossroads_85, CrystalP_99, Czystzczon1_101, DHan_89, Daikon_100, DanBing_85, Daredevil_74, DatBoi_81, Diminimus_68, DirkDirk_79, DoctorDiddles_99, DonTron_86, Doucette_53, Douge_84, Douzhi_83, DrDrey_100, DrSeegs_85, Dulcita_68, Dumbo_100, DuncansLeg_84, Dusk_97, DyoEdafos_87, E1_47, E6_53, EastWest_38, Easy2Say_100, Elite2014_99, Ellson_83, Elph10_100, Emmina_100, Enceladus_79, EniyanLRS_74, Estes_75, Eureka_99, Faith1_85, FarmResident_84, Filch_102, Finemlucis_85, Finkle_70, Finnry_83, FireRed_103, Flypotenuse_96, Forthebois_13, G4_64, Gabriela_85, Gage_102, Gardann_85, GardenSalsa_76, Gator_98, Gemini_105, GenevaB15_75, Gilgamesh_89, Glaske16_68, Glexan_99, Globfish_71, Goku_99, GoldenSpark_104, Goldilocks_103, GooberAzure_103, GuuelaD_83, Hafay_86, Halena_80, HanKaySha_101, Harella_100, Henry_97, Highbury_97, Hillester_76, Holt_105, Hoonter_103, Hopey_101, HufflyPuff_102, Hum25_61, IHOP_98, IPhane7_67, Icee_101, Inca_97, Itos_85, Jace_65, Jayden_65, JeTaime_99, Jinkies_44, Jobypre_85, JoeDirt_83, Jollymon_89, Jubie_83, Kahlid_85, Kanye_97, Kimchi_104, Kingsolomon_81, KingstonB_88, KirDoubleO7_82, Kostya_100, Krypton555_84, Kumao_63, LeBron_81, Lewan_86, LilDestine_84, Lilac_102, LilhomieP_66, Lilizi_101, Lilpickle_99, LiyuLake_83, Loadrie_83, Lolly9_82, Lumos_84, MAckerman_81, MISSy_101, MPhalcon_101, MadamMonkfish_100, Manda_101, Marshmallow_97, MaryV_78, Maxxinista_102, MidnightRain_74, Miley16_85, Mindy_99, MiniLon_87, MiniMac_87, Miniwave_95, Misfit_101, MkaliMitinis3_86, Moldemort_103, Mollymur_84, Moostard_81, Mosby_96, MrMagoo_77, MrSmee_59, MsGreen_84, Murica_103, Murphy_100, Myrale_100, Nala_102, Nanosmite_72, NelitzaMV_97, Netyap_86, Nicholas_81, Nicholasp3_85, Nimrod_100, NoSleep_101, NoodlelyBoi_65, OhShagHennessy_79, OrionPax_99, PYPDinur_82, Palpatine_101, Paperbeatsrock_99, Pat3_97,

PegLeg_66, Petra64142_104, Phaja_98, Pharsalus_97, PhatBacter_103, Phaux_102, Phrux_97, Pitbull_60, Policronamos_103, Porky_99, Pumpkin_102, Quallification_101, Quby_83, REQ3_26, RadFad_76, Rakim_101, Reindeer_69, Rey_73, RickRoss_14, Rimmer_98, RiverMonster_100, Rose5_83, Rumpelstiltskin_82, Saints25_97, Samty_82, Sarshaun_86, Sashimi_71, Sassay_95, ShamWow_100, Sheng711_84, ShereKhan_98, Silverleaf_82, Simpliphy_99, SirDuracell_100, Skinny_69, SlimJimmy_66, Snenia_83, Soap141_85, Soos_82, SophKB_97, Sotrice96_101, SpeedDemon_850, SpicyFrank_74, Stank_102, Stark_101, StellaBean_99, Sting_85, StolenFromERC_102, TBrady12_103, Tarkin_99, TeardropMSU_96, Teaspoon_101, Terminus_103, Thresher_102, Tomaszewski_95, Toto_98, Tourach_84, Traaww1_96, Tuco_101, TyDawg_67, Tyson_83, UPIE_81, Ukulele_95, Vetrrix_84, Wamburggrxpress_82, WheeHeim_13, Whirlwind_84, Wiggin_102, Wigglewiggle_84, Wildcat_78, Wilder_86, Willez_95, Winky_85, Wyatt2_83, Xandras_99, YassJohnny_97, Youngblood_103, Zakai_86, Zaria_83, ZhongYanYuan_83, xkcd_103,

Summary by start number:

Start 38:

- Found in 41 of 536 (7.6%) of genes in pham
- Manual Annotations of this start: 1 of 467
- Called 2.4% of time when present
- Phage (with cluster) where this start called: Rakim_101 (E),

Start 87:

- Found in 2 of 536 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 467
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gilgamesh_89 (singleton),

Start 88:

- Found in 2 of 536 (0.4%) of genes in pham
- Manual Annotations of this start: 2 of 467
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClearAsMud_68 (EC), NoodlelyBoi_65 (EC),

Start 89:

- Found in 4 of 536 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 467
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Megan_61 (EC),

Start 90:

- Found in 1 of 536 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 467
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jayden_65 (EC),

Start 91:

- Found in 26 of 536 (4.9%) of genes in pham
- Manual Annotations of this start: 26 of 467
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Auspice_67 (M1), Aziz_74 (M2), Bongo_67 (M1), Bricole_66 (M1), Diminimus_68 (M1), Dulcita_68 (M1), Estes_75 (M2), Forthebois_13 (BO), GardenSalsa_76 (M2), GenevaB15_75 (M2), Glaske16_68 (M1), Hum25_61 (FQ), IPhone7_67 (M1), Kumao_63 (singleton), LilhomieP_66 (M1), MrMagoo_77 (M2), Nanosmite_72 (M3), PegLeg_66 (M1), Pitbull_60 (FQ), Reindeer_69 (M1), Rey_73 (M2), RickRoss_14 (BO), Skinny_69 (M1), SlimJimmy_66 (M1), TyDawg_67 (M1), WheeHeim_13 (BO),

Start 92:

- Found in 250 of 536 (46.6%) of genes in pham
- Manual Annotations of this start: 218 of 467
- Called 98.8% of time when present
- Phage (with cluster) where this start called: AWGoat_69 (AP4), Abba_37 (AO3), AbbyDaisy_73 (AY), Abidatro_55 (AS1), Abscondus_125 (CQ1), Aikyam_70 (AY), Altadena_40 (FH), Andrew_57 (AS3), Anekin_74 (AY), Antares_64 (EC), Antuna_47 (GA), Aphelion_126 (CQ1), Appa_45 (GA), ArV1_088 (AR), Ariadne_74 (EC), Austintatious_43 (BC3), AxeJC_44 (BP), Bachita_129 (CQ1), Banquo_53 (CU1), BarretLemon_37 (AO2), Basilisk_53 (AS1), Bauer_65 (FN), Beagle_98 (AP2), Beans_35 (AO1), BenchScraper_72 (AY), BillyTP_73 (AY), Bioscum_46 (BC3), BlackSpider_61 (FN), Blett_45 (GA), Bolt007_43 (FH), BossLady_37 (AO2), Bran_47 (EP), BrayBeast_55 (FB), BrazzalePHS_63 (EC), Brent_35 (AO1), BruhMoment_82 (AP3), BrutonGaster_101 (CQ2), Brynnie_51 (AS1), Bumble_38 (FH), Busephilis_63 (EC), Bush_46 (GA), CalWood4100_45 (FH), Camara_55 (AS3), Cardigan_138 (DD), Catfish_52 (CU5), Chickaboom_54 (AS1), Chipper1996_1020 (AR), Chocolat_101 (AR), Chubster_101 (AR), Cinna_60 (EI), ClubL_126 (CQ1), Colucci_104 (AR), Conboy_100 (AR), CookieBear_70 (AY), Cranjis_65 (EC), CrazyRich_63 (EC), Cressida_63 (EI), Crisis_65 (EC), Cucurbita_127 (CQ1), Culver_126 (CQ1), Cumberbatch_46 (BP), Dardanus_49 (CU3), Darolandstone_44 (BC2), DelaGarza_43 (GF), DinoDaryn_55 (CU1), DrYang_97 (AR), Dropshot_45 (GA), Dusty_122 (CQ1), EarickHC_65 (EC), Eastland_45 (BP), EdgarPoe_101 (AR), Eesa_52 (AS1), Eklok_45 (BP), Engineer_128 (CQ1), EvePickles_69 (AY), Faja_73 (AY), Fireman_67 (EC), Franzy_35 (AO1), Galaxy_52 (AS1), Ganandorf_63 (EC), Geeche_124 (CQ1), Gina_68 (EC), Gingerbug_42 (GF), Goib_55 (CU1), Gorpy_70 (AY), Grekaycon_37 (AO2), Gspu1_47 (CU2), HFrancette_46 (BP), Hermeonysus_64 (EC), Hestia_64 (AY), Hirko_37 (FL), Honeyfin_65 (EC), Huffy_55 (CU1), HumptyDumpty_101 (AR), Ididsumtinwong_47 (BC3), Ignacio_45 (BP), Isolde_70 (AY), JKerns_37 (AO2), JaNo_100 (AR), Jamun_52 (AS1), Jawnski_35 (AO1), JayCookie_102 (AR), Jefe_64 (EC), Jollipop_65 (EC), JonJames_135 (DD), Jordan_37 (AO2), Juno112_54 (AS3), KBurrousTX_97 (AR), KHumphrey_55 (AS3), Kabreeze_101 (AR), KaiHaiDragon_65 (EC), Kharcho_81 (FM), Khuang_62 (UNK), King2_35 (AO1), Klevey_43 (FH), Kovu_15 (AL), Kowalski_63 (EC), Kozie_60 (EI), Kukla_55 (FJ), Kuleana_55 (AS2), Kumotta_55 (FB), Lawnathon_71 (AY), LeeroyJ_37 (AO2), Leona_54 (AS3), Lesiram_44 (GF), Lilmac1015_45 (FH), Linus_101 (AR), LittleFortune_66 (EC), LittleTokyo_52 (AS2), Lozinak_126 (CQ1), Lymara_99 (AR), Margaery_59 (EI), MargaretKali_51 (FB), Martha_37 (AO2), Matzah_62 (EI), MellowYellow_97 (AP2), MementoMori_61 (EI), MenE_47 (GA), Merry_66 (EC), Metamorphoo_67 (EC), Min1_23 (singleton), Miskis_125 (CQ1), Moajorita_46 (BC1), Mordred_101 (AR), MoyaNatalis_101 (AR), Mufasa8_48 (FG), NathanVaag_35 (AO1), Nicole72_62 (EC), Norvs_125 (CQ1), NyleyClemson_96 (AP2), Odyssey395_96 (AP2), OneUp_111 (CQ2), Onika_63 (EC), Orcanus_53 (AS1), Ottawa_81 (FM), PFR1_50 (BX), PFR2_52 (BX), PSonyx_96 (singleton), PapayaSalad_45 (BC3), Paschalis_64 (EC), Persistence_65 (AY), PhinkBoden_126 (CQ1), PhluffyCoco_55 (AS3), Phonegingi_45 (GA), Phorgeous_64 (EC),

Phrancesco_64 (EC), Phrank15_74 (AY), Picard_46 (BC1), Piccadilly_45 (BP), Piccoletto_35 (AO1), Pickles13_44 (GA), PierreOrion_64 (EC), PiperSansNom_65 (EC), Piperis_65 (EC), Pippa_37 (AO2), Pointis_93 (AP2), Prairie_42 (FH), PrincessTrina_102 (AR), Pulchra_66 (EC), Pureglobe5_96 (AP2), Quhwah_68 (EC), Raleigh_44 (BC2), Ramiel05_63 (EC), Ranunculus_85 (AP), Raphaella_71 (AY), Raqqa_67 (AY), RedFox_55 (AS3), Renna12_54 (AS3), Richie_74 (AY), Rizwana_72 (AP1), RobsFeet_68 (EC), RosiePosie_101 (AR), Ruchi_52 (AS1), SV1_43 (BC1), Sakai_69 (AY), Sarge_49 (FB), Savannah_63 (EC), Scavito_102 (AR), Schmidt_48 (CU4), Scumberland_66 (EC), Seahorse_76 (AY), Selwyn23_65 (EC), Shade_37 (AO2), Shotgun_64 (EC), Shoya_55 (FB), Sicarius2_38 (AO2), SilentRX_70 (AP4), Smarties_74 (EC), Smoothie_127 (CQ1), SoJo_44 (BC1), Sonali_48 (FG), Sonny_37 (AO2), Splinter_54 (CU1), StevieBAY_37 (AO2), Sunfish_76 (singleton), Sunny_66 (EC), TZGordon_56 (CU1), TaeYoung_37 (AO2), Tank_72 (AP1), TaylorSipht_54 (AS1), Teamocil_68 (EC), Teng_47 (GF), Terij_60 (EI), ThayneTheZag_76 (AY), Tiff81_72 (AY), Timinator_37 (AO2), TinaLin_53 (CU1), ToastyFinz_43 (BC1), Toniann_126 (CQ1), Tophat_102 (AR), TripleJ_56 (FJ), Tyrumbra_63 (EC), ValentiniPuff_105 (singleton), VanLee_42 (singleton), Vendetta_54 (CU1), Vibaki_38 (FL), Vondra_44 (BP), Vulpecula_52 (AS1), Warren_45 (GA), Wilde_74 (AP1), WilliamBoone_125 (CQ1), Wyborn_38 (AO2), Yeti_66 (EC), YoungHarleezy_70 (AY), Yvonnestic_132 (DD), Zartrosa_37 (AO2), Zucker_67 (FN),

Start 93:

- Found in 6 of 536 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: DonTron_86 (CP),

Start 94:

- Found in 7 of 536 (1.3%) of genes in pham
- Manual Annotations of this start: 7 of 467
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_77 (V), Cosmo_78 (V), EastWest_38 (AO), EniyanLRS_74 (V), Finkle_70 (singleton), MaryV_78 (V), Wildcat_78 (V),

Start 95:

- Found in 130 of 536 (24.3%) of genes in pham
- Manual Annotations of this start: 122 of 467
- Called 99.2% of time when present
- Phage (with cluster) where this start called: 244_101 (E), ABCat_97 (E), Adnama_104 (E), Amao_100 (E), AmericanBeauty_104 (E), Argent26_104 (E), Asriel_98 (E), BaboJay_100 (E), BadStone_97 (E), Balomoji_100 (E), Barbarian_99 (E), Bask21_100 (E), Bench_103 (E), BigBubba_100 (E), BilboSwaggins_99 (E), Bruin_97 (E), Buck_101 (E), BugsBunny_99 (E), Cactus_104 (E), ChosenOne_100 (E), ChotaBhai_100 (E), Cjw1_101 (E), Command613_102 (E), Contagion_96 (E), Cookies_97 (E), CrystalP_99 (E), Czystczon1_101 (E), Daikon_100 (E), DoctorDiddles_99 (E), DrDrey_100 (E), Dumbo_100 (E), Dusk_97 (E), Easy2Say_100 (E), Elite2014_99 (E), Elph10_100 (E), Emmina_100 (E), Eureka_99 (E), Filch_102 (E), FireRed_103 (E), Flypotenuse_96 (E), Gage_102 (E), Gator_98 (E), Gemini_105 (E), Glexan_99 (E), Goku_99 (E), GoldenSpark_104 (E), Goldilocks_103 (E), GooberAzure_103 (E), HanKaySha_101 (E), Harella_100 (E), Henry_97 (E), Highbury_97 (E), Holt_105 (E), Hoonter_103 (E), Hopey_101 (E), HuffyPuff_102 (E), IHOP_98 (E), Icee_101 (E), Inca_97 (E), JeTaimie_99 (E),

Kanye_97 (E), Kimchi_104 (E), Kostya_100 (E), Lilac_102 (E), Lilizi_101 (E), Lilpickle_99 (E), MISSy_101 (E), MPhalcon_101 (E), MadamMonkfish_100 (E), Manda_101 (E), Marshmallow_97 (E), Maxxinista_102 (E), Mindy_99 (E), Miniwave_95 (E), Misfit_101 (E), Moldemort_103 (E), Mosby_96 (E), Murica_103 (E), Murphy_100 (E), Myrale_100 (E), Nala_102 (E), NelitzaMV_97 (E), Nimrod_100 (E), NoSleep_101 (E), OrionPax_99 (E), Palpatine_101 (E), Paperbeatsrock_99 (E), Pat3_97 (E), Petra64142_104 (E), Phaja_98 (E), Pharsalus_97 (E), PhatBacter_103 (E), Phaux_102 (E), Phrux_97 (E), Policronamos_103 (E), Porky_99 (E), Pumpkin_102 (E), Qualification_101 (E), Rimmer_98 (E), RiverMonster_100 (E), Saints25_97 (E), Sassay_95 (E), ShamWow_100 (E), ShereKhan_98 (E), Simpliphy_99 (E), SirDuracell_100 (E), SophKB_97 (E), Sotrice96_101 (E), Stank_102 (E), Stark_101 (E), StellaBean_99 (E), StolenFromERC_102 (E), TBrady12_103 (E), Tarkin_99 (E), TeardropMSU_96 (E), Teaspoon_101 (E), Terminus_103 (E), Thresher_102 (E), Tomaszewski_95 (E), Toto_98 (E), Traaww1_96 (E), Tuco_101 (E), Ukulele_95 (E), Wiggin_102 (E), Willez_95 (E), Xandras_99 (E), YassJohnny_97 (E), Youngblood_103 (E), xkcd_103 (E),

Start 96:

- Found in 97 of 536 (18.1%) of genes in pham
- Manual Annotations of this start: 72 of 467
- Called 99.0% of time when present
- Phage (with cluster) where this start called: Acquire49_82 (L1), Aegeus_92 (L5), Appletree2_81 (L1), Archie_82 (L2), AvadaKedavra_82 (L1), Baoshan_83 (L2), Baudelaire_92 (L5), Bazzle_83 (L2), Bellis_82 (L3), BigCheese_85 (L2), BobsGarage_85 (L2), BourbonZero_85 (L3), BrainDrainer_83 (L4), Breezona_85 (L2), Bromden_84 (L4), Calm_84 (L1), Chaser_82 (L4), CicholasNage_79 (L1), Claus_85 (L2), Clautastrophe_82 (L3), Clawz_88 (CP), ColdSoup_89 (CP), Crossroads_85 (L2), DHan_89 (L2), DanBing_85 (L2), DirkDirk_79 (L1), Douge_84 (L4), Douzhi_83 (L4), DrSeegs_85 (L2), DuncansLeg_84 (L3), DyoEdafos_87 (L4), Ellson_83 (L3), Enceladus_79 (L1), Faith1_85 (L2), FarmResident_84 (L4), Finemlucis_85 (L2), Finnry_83 (L3), Gabriela_85 (L2), Gardann_85 (L2), GuuelaD_83 (L2), Hafay_86 (L2), Halena_80 (L1), Itos_85 (L2), Jobypre_85 (L3), JoeDirt_83 (L1), Jollymon_89 (CP), Jubie_83 (L3), Kahlid_85 (L2), Kingsolomon_81 (L3), KingstonB_88 (CP), KirDoubleO7_82 (L3), Krypton555_84 (L3), LeBron_81 (L1), Lewan_86 (L2), LilDestine_84 (L2), LiyuLake_83 (L3), Loadrie_83 (L2), Lolly9_82 (L3), Lumos_84 (L3), MAckerman_81 (L1), Miley16_85 (L2), MiniLon_87 (L3), MiniMac_87 (L3), MkaliMitinis3_86 (L2), Moostard_81 (L3), MsGreen_84 (L3), Netyap_86 (L2), Nicholas_81 (L3), Nicholasp3_85 (L2), OhShagHennessy_79 (L1), PYPDinur_82 (L4), Quby_83 (L4), REQ3_26 (singleton), Rose5_83 (L1), Rumpelstiltskin_82 (L2), Samty_82 (L3), Sarshaun_86 (L2), Sheng711_84 (L4), Silverleaf_82 (L1), Snenia_83 (L3), Soap141_85 (L2), Soos_82 (CP), Sting_85 (CP), Tourach_84 (L2), Tyson_83 (L1), UPIE_81 (L1), Vetrix_84 (L2), Wamburggrxpress_82 (L1), Whirlwind_84 (L3), Wigglewiggles_84 (L2), Wilder_86 (L2), Winky_85 (L2), Wyatt2_83 (L1), Zakai_86 (L2), Zaria_83 (L1), ZhongYanYuan_83 (L2),

Start 97:

- Found in 6 of 536 (1.1%) of genes in pham
- Manual Annotations of this start: 6 of 467
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_84 (DL), Daredevil_74 (DL), DatBoi_81 (DL), Jace_65 (singleton), Mollymur_84 (DL), SpeedDemon_850 (DL),

Start 98:

- Found in 6 of 536 (1.1%) of genes in pham
- Manual Annotations of this start: 6 of 467
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole_47 (BV), B3_49 (BV), Doucette_53 (BW), E1_47 (BV), E6_53 (BW), G4_64 (BW),

Start 99:

- Found in 13 of 536 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 467
- Called 76.9% of time when present
- Phage (with cluster) where this start called: ArV2_54 (singleton), Auxilium_68 (AY), Globfish_71 (AY), Hillester_76 (AY), Jinkies_44 (FL), MidnightRain_74 (AY), MrSme_59 (UNK), RadFad_76 (AY), Sashimi_71 (AY), SpicyFrank_74 (AY),

Start 104:

- Found in 55 of 536 (10.3%) of genes in pham
- No Manual Annotations of this start.
- Called 1.8% of time when present
- Phage (with cluster) where this start called: GravityBall_37 (AO2),

Start 107:

- Found in 6 of 536 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: pZL12_1c (singleton),

Summary by clusters:

There are 58 clusters represented in this pham: FG, FQ, singleton, GA, AP2, AP3, DD, V, DL, AO2, FB, BW, M1, CU4, M3, M2, FH, EI, FJ, BX, FM, FN, CU5, CP, CU3, CU2, CU1, FL, BO, CQ2, CQ1, AS3, AS2, AS1, AP4, E, AL, EC, GF, L4, AR, L2, L3, AO1, L1, AY, UNK, EP, AP1, AP, AO, BV, AO3, L5, BP, BC1, BC2, BC3,

Info for manual annotations of cluster AL:

- Start number 92 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster AO:

- Start number 94 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 92 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 92 was manually annotated 16 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 92 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AP:

- Start number 92 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 92 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 92 was manually annotated 5 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 92 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 92 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster AR:

- Start number 92 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster AS1:

- Start number 92 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 92 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 92 was manually annotated 6 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 92 was manually annotated 15 times for cluster AY.
- Start number 99 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster BC1:

- Start number 92 was manually annotated 5 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 92 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 92 was manually annotated 4 times for cluster BC3.

Info for manual annotations of cluster BO:

- Start number 91 was manually annotated 3 times for cluster BO.

Info for manual annotations of cluster BP:

- Start number 92 was manually annotated 8 times for cluster BP.

Info for manual annotations of cluster BV:

- Start number 98 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 98 was manually annotated 3 times for cluster BW.

Info for manual annotations of cluster CP:

- Start number 96 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster CQ1:

- Start number 92 was manually annotated 12 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 92 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CU1:

- Start number 92 was manually annotated 8 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 92 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 92 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 92 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DD:

- Start number 92 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 97 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster E:

- Start number 38 was manually annotated 1 time for cluster E.
- Start number 95 was manually annotated 122 times for cluster E.

Info for manual annotations of cluster EC:

- Start number 88 was manually annotated 2 times for cluster EC.
- Start number 89 was manually annotated 1 time for cluster EC.
- Start number 90 was manually annotated 1 time for cluster EC.
- Start number 92 was manually annotated 38 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 92 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster EP:

- Start number 92 was manually annotated 1 time for cluster EP.

Info for manual annotations of cluster FB:

- Start number 92 was manually annotated 5 times for cluster FB.

Info for manual annotations of cluster FG:

- Start number 92 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FH:

- Start number 92 was manually annotated 6 times for cluster FH.

Info for manual annotations of cluster FJ:

- Start number 92 was manually annotated 2 times for cluster FJ.

Info for manual annotations of cluster FL:

- Start number 92 was manually annotated 2 times for cluster FL.

- Start number 99 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FM:

- Start number 92 was manually annotated 2 times for cluster FM.

Info for manual annotations of cluster FN:

- Start number 92 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster FQ:

- Start number 91 was manually annotated 2 times for cluster FQ.

Info for manual annotations of cluster GA:

- Start number 92 was manually annotated 9 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 92 was manually annotated 3 times for cluster GF.

Info for manual annotations of cluster L1:

- Start number 96 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 96 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 96 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 96 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 96 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 91 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 91 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 91 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 94 was manually annotated 5 times for cluster V.

Gene Information:

Gene: 244_101 Start: 59239, Stop: 59679, Start Num: 95

Candidate Starts for 244_101:

(32, 59038), (33, 59041), (Start: 38 @59068 has 1 MA's), (40, 59071), (48, 59113), (64, 59167), (Start: 95 @59239 has 122 MA's), (115, 59338), (129, 59434), (140, 59470), (151, 59536), (164, 59584),

Gene: ABCat_97 Start: 60224, Stop: 60664, Start Num: 95

Candidate Starts for ABCat_97:

(Start: 95 @60224 has 122 MA's), (115, 60323), (140, 60455), (151, 60521), (164, 60569),

Gene: AWGoat_69 Start: 49925, Stop: 49359, Start Num: 92

Candidate Starts for AWGoat_69:

(Start: 92 @49925 has 218 MA's), (108, 49871), (111, 49844), (121, 49784), (127, 49739), (129, 49727), (135, 49703), (150, 49631), (185, 49412),

Gene: Abba_37 Start: 29639, Stop: 30190, Start Num: 92

Candidate Starts for Abba_37:

(Start: 92 @29639 has 218 MA's), (123, 29804), (135, 29864), (161, 29978), (164, 29990),

Gene: AbbyDaisy_73 Start: 38801, Stop: 39268, Start Num: 92

Candidate Starts for AbbyDaisy_73:

(21, 38504), (62, 38717), (Start: 92 @38801 has 218 MA's), (128, 38993), (167, 39170),

Gene: Abidatro_55 Start: 34615, Stop: 35133, Start Num: 92

Candidate Starts for Abidatro_55:

(Start: 92 @34615 has 218 MA's), (111, 34696), (114, 34711), (135, 34837), (137, 34843), (140, 34849), (153, 34921),

Gene: Abscondus_125 Start: 71279, Stop: 71788, Start Num: 92

Candidate Starts for Abscondus_125:

(Start: 92 @71279 has 218 MA's), (100, 71294), (104, 71303), (135, 71501), (164, 71627), (170, 71678), (179, 71738),

Gene: Acquire49_82 Start: 53525, Stop: 53908, Start Num: 96

Candidate Starts for Acquire49_82:

(Start: 96 @53525 has 72 MA's), (114, 53618), (122, 53672), (125, 53690), (140, 53750), (149, 53807),

Gene: Adnama_104 Start: 59534, Stop: 59974, Start Num: 95

Candidate Starts for Adnama_104:

(32, 59333), (33, 59336), (Start: 38 @59363 has 1 MA's), (40, 59366), (48, 59408), (64, 59462), (Start: 95 @59534 has 122 MA's), (115, 59633), (140, 59765), (151, 59831), (164, 59879),

Gene: Aegeus_92 Start: 56890, Stop: 57282, Start Num: 96

Candidate Starts for Aegeus_92:

(85, 56872), (Start: 96 @56890 has 72 MA's), (101, 56905), (137, 57115), (140, 57121),

Gene: Aikyam_70 Start: 36571, Stop: 37089, Start Num: 92

Candidate Starts for Aikyam_70:

(Start: 92 @36571 has 218 MA's), (116, 36673), (131, 36790),

Gene: Altadena_40 Start: 29404, Stop: 29982, Start Num: 92

Candidate Starts for Altadena_40:

(Start: 92 @29404 has 218 MA's), (122, 29560), (135, 29626), (137, 29632), (149, 29695), (174, 29821),

Gene: Amao_100 Start: 59648, Stop: 60088, Start Num: 95

Candidate Starts for Amao_100:

(69, 59591), (Start: 95 @59648 has 122 MA's), (115, 59747), (140, 59879), (151, 59945), (164, 59993),

Gene: AmericanBeauty_104 Start: 59774, Stop: 60214, Start Num: 95

Candidate Starts for AmericanBeauty_104:

(32, 59573), (33, 59576), (Start: 38 @59603 has 1 MA's), (40, 59606), (48, 59648), (64, 59702), (Start: 95 @59774 has 122 MA's), (111, 59855), (115, 59873), (140, 60005), (151, 60071), (164, 60119),

Gene: Anatole_47 Start: 31132, Stop: 31596, Start Num: 98

Candidate Starts for Anatole_47:

(Start: 98 @31132 has 6 MA's), (114, 31222), (116, 31228), (124, 31291), (137, 31351),

Gene: Andrew_57 Start: 33845, Stop: 34357, Start Num: 92

Candidate Starts for Andrew_57:

(81, 33827), (Start: 92 @33845 has 218 MA's), (111, 33926), (114, 33941), (125, 34019), (129, 34043), (135, 34067), (137, 34073), (140, 34079), (149, 34136), (164, 34193), (180, 34271),

Gene: Anekin_74 Start: 39408, Stop: 39929, Start Num: 92

Candidate Starts for Anekin_74:

(Start: 92 @39408 has 218 MA's), (121, 39549), (131, 39627), (150, 39714),

Gene: Antares_64 Start: 40804, Stop: 41310, Start Num: 92

Candidate Starts for Antares_64:

(Start: 92 @40804 has 218 MA's), (100, 40819), (135, 41026), (153, 41110), (164, 41152),

Gene: Antuna_47 Start: 28781, Stop: 29272, Start Num: 92

Candidate Starts for Antuna_47:

(Start: 92 @28781 has 218 MA's), (129, 28979), (135, 29003), (164, 29129),

Gene: Aphelion_126 Start: 72342, Stop: 72881, Start Num: 92

Candidate Starts for Aphelion_126:

(Start: 92 @72342 has 218 MA's), (100, 72357), (104, 72366), (135, 72564), (164, 72690), (170, 72741), (179, 72801),

Gene: Appa_45 Start: 28538, Stop: 29032, Start Num: 92

Candidate Starts for Appa_45:

(Start: 92 @28538 has 218 MA's), (135, 28760), (142, 28781), (164, 28886),

Gene: Appletree2_81 Start: 53136, Stop: 53519, Start Num: 96

Candidate Starts for Appletree2_81:

(Start: 96 @53136 has 72 MA's), (114, 53229), (122, 53283), (125, 53301), (140, 53361), (149, 53418),

Gene: ArV1_088 Start: 62726, Stop: 63295, Start Num: 92

Candidate Starts for ArV1_088:

(Start: 92 @62726 has 218 MA's), (104, 62750), (111, 62807), (123, 62888), (129, 62924), (135, 62948), (137, 62954), (140, 62960), (153, 63032), (159, 63053), (164, 63074), (185, 63242),

Gene: ArV2_54 Start: 30423, Stop: 30827, Start Num: 99

Candidate Starts for ArV2_54:

(Start: 99 @30423 has 4 MA's),

Gene: Archie_82 Start: 55052, Stop: 55447, Start Num: 96

Candidate Starts for Archie_82:

(Start: 96 @55052 has 72 MA's), (108, 55103), (110, 55124), (114, 55145), (121, 55184), (122, 55199), (125, 55217), (138, 55274), (140, 55277), (146, 55307),

Gene: Argent26_104 Start: 59458, Stop: 59898, Start Num: 95

Candidate Starts for Argent26_104:

(32, 59257), (33, 59260), (Start: 38 @59287 has 1 MA's), (40, 59290), (48, 59332), (64, 59386), (Start: 95 @59458 has 122 MA's), (115, 59557), (140, 59689), (151, 59755), (164, 59803),

Gene: Ariadne_74 Start: 42439, Stop: 42945, Start Num: 92

Candidate Starts for Ariadne_74:

(59, 42349), (72, 42394), (Start: 89 @42436 has 1 MA's), (Start: 92 @42439 has 218 MA's), (125, 42613), (135, 42661), (137, 42667), (153, 42745), (164, 42787),

Gene: Asriel_98 Start: 57871, Stop: 58311, Start Num: 95

Candidate Starts for Asriel_98:

(32, 57670), (33, 57673), (Start: 38 @57700 has 1 MA's), (40, 57703), (48, 57745), (64, 57799), (Start: 95 @57871 has 122 MA's), (111, 57952), (115, 57970), (140, 58102), (151, 58168), (164, 58216),

Gene: Auspice_67 Start: 43863, Stop: 44309, Start Num: 91

Candidate Starts for Auspice_67:

(78, 43827), (Start: 91 @43863 has 26 MA's), (111, 43947), (123, 44028), (127, 44052), (164, 44211),

Gene: Austintatious_43 Start: 28177, Stop: 28638, Start Num: 92

Candidate Starts for Austintatious_43:

(16, 27802), (31, 27961), (53, 28069), (Start: 92 @28177 has 218 MA's), (123, 28339), (124, 28345),

Gene: Auxilium_68 Start: 35492, Stop: 35971, Start Num: 99

Candidate Starts for Auxilium_68:

(Start: 99 @35492 has 4 MA's), (108, 35537), (133, 35693),

Gene: AvadaKedavra_82 Start: 53604, Stop: 53987, Start Num: 96

Candidate Starts for AvadaKedavra_82:

(Start: 96 @53604 has 72 MA's), (114, 53697), (122, 53751), (125, 53769), (140, 53829), (149, 53886),

Gene: AxeJC_44 Start: 30398, Stop: 30877, Start Num: 92

Candidate Starts for AxeJC_44:

(Start: 92 @30398 has 218 MA's), (149, 30689),

Gene: Aziz_74 Start: 45899, Stop: 46336, Start Num: 91

Candidate Starts for Aziz_74:

(Start: 91 @45899 has 26 MA's), (111, 45983), (123, 46064),

Gene: Azrael100_77 Start: 49155, Stop: 49544, Start Num: 94

Candidate Starts for Azrael100_77:

(Start: 94 @49155 has 7 MA's), (115, 49251), (122, 49302), (125, 49320), (137, 49374), (150, 49440), (164, 49494),

Gene: B3_49 Start: 31795, Stop: 32259, Start Num: 98

Candidate Starts for B3_49:

(Start: 98 @31795 has 6 MA's), (114, 31885), (116, 31891), (124, 31954), (137, 32014),

Gene: BaboJay_100 Start: 60412, Stop: 60852, Start Num: 95

Candidate Starts for BaboJay_100:

(Start: 95 @60412 has 122 MA's), (115, 60511), (140, 60643), (151, 60709), (164, 60757),

Gene: Bachita_129 Start: 72298, Stop: 72807, Start Num: 92

Candidate Starts for Bachita_129:

(Start: 92 @72298 has 218 MA's), (100, 72313), (104, 72322), (135, 72520), (164, 72646), (170, 72697), (179, 72757),

Gene: BadStone_97 Start: 59793, Stop: 60233, Start Num: 95

Candidate Starts for BadStone_97:

(Start: 95 @59793 has 122 MA's), (115, 59892), (140, 60024), (151, 60090), (164, 60138),

Gene: Balomoji_100 Start: 59654, Stop: 60094, Start Num: 95

Candidate Starts for Balomoji_100:

(32, 59453), (33, 59456), (Start: 38 @59483 has 1 MA's), (40, 59486), (48, 59528), (64, 59582), (Start: 95 @59654 has 122 MA's), (115, 59753), (129, 59849), (140, 59885), (151, 59951), (164, 59999),

Gene: Banquo_53 Start: 35074, Stop: 35562, Start Num: 92

Candidate Starts for Banquo_53:

(Start: 92 @35074 has 218 MA's), (123, 35236), (148, 35353), (149, 35365), (150, 35368), (153, 35380),

Gene: Bantam_84 Start: 57099, Stop: 56536, Start Num: 97

Candidate Starts for Bantam_84:

(Start: 97 @57099 has 6 MA's), (122, 56937), (155, 56766), (169, 56697),

Gene: Baoshan_83 Start: 55708, Stop: 56106, Start Num: 96

Candidate Starts for Baoshan_83:

(Start: 96 @55708 has 72 MA's), (108, 55759), (110, 55780), (114, 55801), (121, 55840), (122, 55855), (125, 55873), (138, 55930), (140, 55933), (149, 55990), (159, 56026),

Gene: Barbarian_99 Start: 57871, Stop: 58311, Start Num: 95

Candidate Starts for Barbarian_99:

(32, 57670), (33, 57673), (Start: 38 @57700 has 1 MA's), (40, 57703), (48, 57745), (64, 57799), (Start: 95 @57871 has 122 MA's), (111, 57952), (115, 57970), (140, 58102), (151, 58168), (164, 58216),

Gene: BarretLemon_37 Start: 30898, Stop: 31434, Start Num: 92

Candidate Starts for BarretLemon_37:

(Start: 92 @30898 has 218 MA's), (104, 30922), (135, 31120), (164, 31246), (182, 31342),

Gene: Basilisk_53 Start: 33835, Stop: 34356, Start Num: 92

Candidate Starts for Basilisk_53:

(Start: 92 @33835 has 218 MA's), (111, 33916), (135, 34057), (137, 34063), (166, 34192),

Gene: Bask21_100 Start: 58510, Stop: 58950, Start Num: 95

Candidate Starts for Bask21_100:

(32, 58309), (33, 58312), (Start: 38 @58339 has 1 MA's), (40, 58342), (48, 58384), (64, 58438), (Start: 95 @58510 has 122 MA's), (111, 58591), (115, 58609), (140, 58741), (151, 58807), (164, 58855),

Gene: Baudelaire_92 Start: 56890, Stop: 57282, Start Num: 96

Candidate Starts for Baudelaire_92:

(85, 56872), (Start: 96 @56890 has 72 MA's), (101, 56905), (137, 57115), (140, 57121),

Gene: Bauer_65 Start: 36668, Stop: 37132, Start Num: 92
Candidate Starts for Bauer_65:
(Start: 92 @36668 has 218 MA's), (115, 36767), (128, 36860), (167, 37037),

Gene: Bazzle_83 Start: 55608, Stop: 56003, Start Num: 96
Candidate Starts for Bazzle_83:
(Start: 96 @55608 has 72 MA's), (108, 55659), (110, 55680), (114, 55701), (122, 55755), (125, 55773), (138, 55830), (140, 55833), (146, 55863),

Gene: Beagle_98 Start: 57722, Stop: 57117, Start Num: 92
Candidate Starts for Beagle_98:
(Start: 92 @57722 has 218 MA's), (108, 57668), (123, 57560), (150, 57428), (151, 57422), (153, 57416),

Gene: Beans_35 Start: 30601, Stop: 31176, Start Num: 92
Candidate Starts for Beans_35:
(Start: 92 @30601 has 218 MA's), (104, 30625), (135, 30823), (161, 30937), (178, 31081),

Gene: Bellis_82 Start: 55408, Stop: 55791, Start Num: 96
Candidate Starts for Bellis_82:
(Start: 96 @55408 has 72 MA's), (109, 55468), (110, 55480), (114, 55501), (122, 55561), (125, 55579), (140, 55639), (159, 55729),

Gene: Bench_103 Start: 60413, Stop: 60853, Start Num: 95
Candidate Starts for Bench_103:
(Start: 95 @60413 has 122 MA's), (115, 60512), (129, 60608), (140, 60644), (151, 60710), (164, 60758),

Gene: BenchScraper_72 Start: 37528, Stop: 38034, Start Num: 92
Candidate Starts for BenchScraper_72:
(Start: 92 @37528 has 218 MA's), (111, 37609), (131, 37747), (142, 37783), (150, 37834),

Gene: BigBubba_100 Start: 58566, Stop: 59006, Start Num: 95
Candidate Starts for BigBubba_100:
(32, 58365), (33, 58368), (Start: 38 @58395 has 1 MA's), (40, 58398), (48, 58440), (64, 58494), (Start: 95 @58566 has 122 MA's), (111, 58647), (115, 58665), (129, 58761), (140, 58797), (151, 58863), (164, 58911),

Gene: BigCheese_85 Start: 55471, Stop: 55857, Start Num: 96
Candidate Starts for BigCheese_85:
(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: BilboSwaggins_99 Start: 60193, Stop: 60633, Start Num: 95
Candidate Starts for BilboSwaggins_99:
(Start: 95 @60193 has 122 MA's), (115, 60292), (129, 60388), (140, 60424), (151, 60490), (164, 60538),

Gene: BillyTP_73 Start: 39383, Stop: 39889, Start Num: 92
Candidate Starts for BillyTP_73:
(Start: 92 @39383 has 218 MA's), (111, 39464), (131, 39602),

Gene: Bioscum_46 Start: 30484, Stop: 30945, Start Num: 92
Candidate Starts for Bioscum_46:
(Start: 92 @30484 has 218 MA's), (123, 30646), (124, 30652),

Gene: BlackSpider_61 Start: 35527, Stop: 36036, Start Num: 92
Candidate Starts for BlackSpider_61:
(Start: 92 @35527 has 218 MA's), (131, 35746),

Gene: Blett_45 Start: 28732, Stop: 29223, Start Num: 92
Candidate Starts for Blett_45:
(Start: 92 @28732 has 218 MA's), (135, 28954), (142, 28975), (153, 29038), (164, 29080),

Gene: BobsGarage_85 Start: 55471, Stop: 55857, Start Num: 96
Candidate Starts for BobsGarage_85:
(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: Bolt007_43 Start: 32404, Stop: 32961, Start Num: 92
Candidate Starts for Bolt007_43:
(Start: 92 @32404 has 218 MA's), (135, 32626),

Gene: Bongo_67 Start: 43867, Stop: 44313, Start Num: 91
Candidate Starts for Bongo_67:
(78, 43831), (Start: 91 @43867 has 26 MA's), (111, 43951), (123, 44032), (127, 44056), (164, 44215),

Gene: BossLady_37 Start: 30876, Stop: 31424, Start Num: 92
Candidate Starts for BossLady_37:
(60, 30789), (Start: 92 @30876 has 218 MA's), (104, 30900), (125, 31050), (127, 31062), (135, 31098), (159, 31203), (164, 31224), (178, 31308),

Gene: BourbonZero_85 Start: 55437, Stop: 55820, Start Num: 96
Candidate Starts for BourbonZero_85:
(Start: 96 @55437 has 72 MA's), (109, 55497), (110, 55509), (114, 55530), (122, 55590), (140, 55668), (159, 55758),

Gene: BrainDrainer_83 Start: 54240, Stop: 54647, Start Num: 96
Candidate Starts for BrainDrainer_83:
(Start: 96 @54240 has 72 MA's), (110, 54312), (114, 54333), (121, 54372), (138, 54462), (140, 54465), (168, 54606),

Gene: Bran_47 Start: 33745, Stop: 34197, Start Num: 92
Candidate Starts for Bran_47:
(2, 33049), (3, 33052), (4, 33067), (7, 33169), (8, 33190), (12, 33292), (17, 33382), (Start: 92 @33745 has 218 MA's), (111, 33829), (114, 33844), (118, 33862), (122, 33904), (130, 33949), (135, 33970), (164, 34096),

Gene: BrayBeast_55 Start: 31242, Stop: 31763, Start Num: 92
Candidate Starts for BrayBeast_55:
(Start: 92 @31242 has 218 MA's), (131, 31461),

Gene: BrazzalePHS_63 Start: 40566, Stop: 41072, Start Num: 92
Candidate Starts for BrazzalePHS_63:
(Start: 92 @40566 has 218 MA's), (100, 40581), (135, 40788), (153, 40872), (164, 40914),

Gene: Breezona_85 Start: 55471, Stop: 55857, Start Num: 96

Candidate Starts for Breezona_85:

(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: Brent_35 Start: 30565, Stop: 31143, Start Num: 92

Candidate Starts for Brent_35:

(Start: 92 @30565 has 218 MA's), (104, 30589), (106, 30601), (127, 30751), (135, 30787), (164, 30913), (178, 31024),

Gene: Bricole_66 Start: 43589, Stop: 44035, Start Num: 91

Candidate Starts for Bricole_66:

(78, 43553), (Start: 91 @43589 has 26 MA's), (111, 43673), (123, 43754), (127, 43778), (164, 43937),

Gene: Bromden_84 Start: 55234, Stop: 55644, Start Num: 96

Candidate Starts for Bromden_84:

(Start: 96 @55234 has 72 MA's), (110, 55306), (114, 55327), (121, 55366), (122, 55381), (138, 55456), (140, 55459),

Gene: BruhMoment_82 Start: 54954, Stop: 54415, Start Num: 92

Candidate Starts for BruhMoment_82:

(Start: 92 @54954 has 218 MA's), (125, 54780), (127, 54768), (129, 54756),

Gene: Bruin_97 Start: 58899, Stop: 59339, Start Num: 95

Candidate Starts for Bruin_97:

(Start: 95 @58899 has 122 MA's), (115, 58998), (129, 59094), (140, 59130), (151, 59196), (164, 59244),

Gene: BrutonGaster_101 Start: 65631, Stop: 66143, Start Num: 92

Candidate Starts for BrutonGaster_101:

(Start: 92 @65631 has 218 MA's), (113, 65721), (129, 65829),

Gene: Brynnie_51 Start: 33460, Stop: 33981, Start Num: 92

Candidate Starts for Brynnie_51:

(Start: 92 @33460 has 218 MA's), (111, 33541), (135, 33682), (137, 33688), (166, 33817),

Gene: Buck_101 Start: 60736, Stop: 61176, Start Num: 95

Candidate Starts for Buck_101:

(Start: 95 @60736 has 122 MA's), (115, 60835), (129, 60931), (140, 60967), (151, 61033), (164, 61081),

Gene: BugsBunny_99 Start: 60212, Stop: 60652, Start Num: 95

Candidate Starts for BugsBunny_99:

(Start: 95 @60212 has 122 MA's), (115, 60311), (129, 60407), (140, 60443), (151, 60509), (164, 60557),

Gene: Bumble_38 Start: 29473, Stop: 30051, Start Num: 92

Candidate Starts for Bumble_38:

(Start: 92 @29473 has 218 MA's), (122, 29629), (125, 29647), (135, 29695), (137, 29701), (177, 29926),

Gene: Busephilis_63 Start: 40511, Stop: 41017, Start Num: 92

Candidate Starts for Busephilis_63:

(Start: 92 @40511 has 218 MA's), (100, 40526), (135, 40733), (153, 40817), (164, 40859),

Gene: Bush_46 Start: 28681, Stop: 29172, Start Num: 92

Candidate Starts for Bush_46:

(Start: 92 @28681 has 218 MA's), (135, 28903), (142, 28924), (153, 28987),

Gene: Cactus_104 Start: 59153, Stop: 59593, Start Num: 95

Candidate Starts for Cactus_104:

(Start: 95 @59153 has 122 MA's), (115, 59252), (140, 59384), (151, 59450), (164, 59498),

Gene: CalWood4100_45 Start: 31895, Stop: 32452, Start Num: 92

Candidate Starts for CalWood4100_45:

(Start: 92 @31895 has 218 MA's), (135, 32117), (149, 32186),

Gene: Calm_84 Start: 53847, Stop: 54230, Start Num: 96

Candidate Starts for Calm_84:

(Start: 96 @53847 has 72 MA's), (114, 53940), (122, 53994), (125, 54012), (140, 54072), (149, 54129),

Gene: Camara_55 Start: 33397, Stop: 33906, Start Num: 92

Candidate Starts for Camara_55:

(Start: 92 @33397 has 218 MA's), (107, 33436), (111, 33478), (118, 33511), (125, 33571), (135, 33619), (140, 33631), (149, 33688), (153, 33703), (159, 33724), (164, 33745),

Gene: Cardigan_138 Start: 77634, Stop: 78149, Start Num: 92

Candidate Starts for Cardigan_138:

(68, 77571), (Start: 92 @77634 has 218 MA's), (114, 77730), (129, 77832), (135, 77856), (184, 78099),

Gene: Catfish_52 Start: 36484, Stop: 37020, Start Num: 92

Candidate Starts for Catfish_52:

(25, 36223), (28, 36253), (52, 36373), (Start: 92 @36484 has 218 MA's), (118, 36601), (129, 36685),

Gene: Chaser_82 Start: 53878, Stop: 54270, Start Num: 96

Candidate Starts for Chaser_82:

(Start: 96 @53878 has 72 MA's), (110, 53950), (114, 53971), (121, 54010), (122, 54025), (127, 54055), (138, 54100), (140, 54103), (168, 54226),

Gene: Chickaboom_54 Start: 34174, Stop: 34692, Start Num: 92

Candidate Starts for Chickaboom_54:

(Start: 92 @34174 has 218 MA's), (111, 34255), (135, 34396), (137, 34402), (149, 34465), (166, 34531),

Gene: Chipper1996_1020 Start: 64351, Stop: 64920, Start Num: 92

Candidate Starts for Chipper1996_1020:

(Start: 92 @64351 has 218 MA's), (111, 64432), (122, 64507), (129, 64549), (135, 64573), (137, 64579), (140, 64585), (153, 64657), (159, 64678), (164, 64699),

Gene: Chocolat_101 Start: 64058, Stop: 64627, Start Num: 92

Candidate Starts for Chocolat_101:

(Start: 92 @64058 has 218 MA's), (111, 64139), (122, 64214), (129, 64256), (132, 64268), (135, 64280), (137, 64286), (140, 64292), (153, 64364), (159, 64385), (164, 64406),

Gene: ChosenOne_100 Start: 59101, Stop: 59541, Start Num: 95
Candidate Starts for ChosenOne_100:
(Start: 95 @59101 has 122 MA's), (115, 59200), (140, 59332), (151, 59398), (164, 59446),

Gene: ChotaBhai_100 Start: 59512, Stop: 59952, Start Num: 95
Candidate Starts for ChotaBhai_100:
(69, 59455), (Start: 95 @59512 has 122 MA's), (115, 59611), (140, 59743), (151, 59809), (164, 59857),

Gene: Chubster_101 Start: 64298, Stop: 64867, Start Num: 92
Candidate Starts for Chubster_101:
(Start: 92 @64298 has 218 MA's), (111, 64379), (122, 64454), (129, 64496), (135, 64520), (137, 64526), (140, 64532), (153, 64604), (159, 64625), (164, 64646),

Gene: CicholasNage_79 Start: 53189, Stop: 53572, Start Num: 96
Candidate Starts for CicholasNage_79:
(Start: 96 @53189 has 72 MA's), (114, 53282), (122, 53336), (125, 53354), (140, 53414), (149, 53471),

Gene: Cinna_60 Start: 41333, Stop: 41833, Start Num: 92
Candidate Starts for Cinna_60:
(Start: 92 @41333 has 218 MA's), (135, 41555), (137, 41561), (153, 41639),

Gene: Cjw1_101 Start: 61106, Stop: 61546, Start Num: 95
Candidate Starts for Cjw1_101:
(Start: 95 @61106 has 122 MA's), (115, 61205), (129, 61301), (140, 61337), (151, 61403), (164, 61451),

Gene: Claus_85 Start: 55406, Stop: 55789, Start Num: 96
Candidate Starts for Claus_85:
(Start: 96 @55406 has 72 MA's), (108, 55457), (110, 55478), (114, 55499), (121, 55538), (122, 55553), (125, 55571), (138, 55628), (140, 55631), (149, 55688), (159, 55724),

Gene: Clautastrophe_82 Start: 55406, Stop: 55789, Start Num: 96
Candidate Starts for Clautastrophe_82:
(Start: 96 @55406 has 72 MA's), (109, 55466), (110, 55478), (114, 55499), (122, 55559), (125, 55577), (140, 55637), (159, 55727),

Gene: Clawz_88 Start: 56168, Stop: 56587, Start Num: 96
Candidate Starts for Clawz_88:
(29, 55943), (39, 55982), (41, 55991), (Start: 96 @56168 has 72 MA's), (112, 56252), (114, 56264), (116, 56270), (150, 56462), (153, 56474), (159, 56495),

Gene: ClearAsMud_68 Start: 41092, Stop: 41592, Start Num: 88
Candidate Starts for ClearAsMud_68:
(Start: 88 @41092 has 2 MA's), (111, 41173), (135, 41314), (153, 41398), (164, 41440),

Gene: ClubL_126 Start: 70869, Stop: 71378, Start Num: 92
Candidate Starts for ClubL_126:
(Start: 92 @70869 has 218 MA's), (100, 70884), (104, 70893), (135, 71091), (164, 71217), (170, 71268), (179, 71328),

Gene: ColdSoup_89 Start: 55950, Stop: 56372, Start Num: 96
Candidate Starts for ColdSoup_89:
(29, 55725), (39, 55764), (56, 55845), (93, 55947), (Start: 96 @55950 has 72 MA's), (112, 56034),
(116, 56052), (150, 56244), (151, 56250),

Gene: Colucci_104 Start: 64674, Stop: 65246, Start Num: 92
Candidate Starts for Colucci_104:
(Start: 92 @64674 has 218 MA's), (104, 64698), (111, 64755), (123, 64836), (129, 64872), (135,
64896), (137, 64902), (140, 64908), (153, 64980), (159, 65001), (164, 65022),

Gene: Command613_102 Start: 59668, Stop: 60108, Start Num: 95
Candidate Starts for Command613_102:
(32, 59467), (33, 59470), (Start: 38 @59497 has 1 MA's), (40, 59500), (48, 59542), (64, 59596), (Start:
95 @59668 has 122 MA's), (115, 59767), (140, 59899), (151, 59965), (164, 60013),

Gene: Conboy_100 Start: 63864, Stop: 64433, Start Num: 92
Candidate Starts for Conboy_100:
(Start: 92 @63864 has 218 MA's), (104, 63888), (111, 63945), (123, 64026), (129, 64062), (135,
64086), (137, 64092), (140, 64098), (153, 64170), (159, 64191), (164, 64212),

Gene: Contagion_96 Start: 59261, Stop: 59701, Start Num: 95
Candidate Starts for Contagion_96:
(Start: 95 @59261 has 122 MA's), (115, 59360), (129, 59456), (140, 59492), (151, 59558), (164,
59606),

Gene: CookieBear_70 Start: 38002, Stop: 38508, Start Num: 92
Candidate Starts for CookieBear_70:
(Start: 92 @38002 has 218 MA's), (116, 38104), (131, 38221),

Gene: Cookies_97 Start: 59438, Stop: 59878, Start Num: 95
Candidate Starts for Cookies_97:
(69, 59381), (Start: 95 @59438 has 122 MA's), (115, 59537), (140, 59669), (151, 59735), (164,
59783),

Gene: Cosmo_78 Start: 49156, Stop: 49545, Start Num: 94
Candidate Starts for Cosmo_78:
(Start: 94 @49156 has 7 MA's), (115, 49252), (122, 49303), (125, 49321), (137, 49375), (150, 49441),
(164, 49495),

Gene: Cranjis_65 Start: 40759, Stop: 41265, Start Num: 92
Candidate Starts for Cranjis_65:
(Start: 92 @40759 has 218 MA's), (100, 40774), (135, 40981), (153, 41065), (164, 41107),

Gene: CrazyRich_63 Start: 40568, Stop: 41071, Start Num: 92
Candidate Starts for CrazyRich_63:
(Start: 92 @40568 has 218 MA's), (100, 40583), (135, 40790), (153, 40874), (164, 40916),

Gene: Cressida_63 Start: 40938, Stop: 41438, Start Num: 92
Candidate Starts for Cressida_63:
(Start: 92 @40938 has 218 MA's), (125, 41112), (135, 41160), (137, 41166), (153, 41244),

Gene: Crisis_65 Start: 40574, Stop: 41080, Start Num: 92
Candidate Starts for Crisis_65:

(Start: 92 @40574 has 218 MA's), (100, 40589), (135, 40796), (153, 40880), (164, 40922),

Gene: Crossroads_85 Start: 55546, Stop: 55932, Start Num: 96

Candidate Starts for Crossroads_85:

(Start: 96 @55546 has 72 MA's), (108, 55597), (110, 55618), (114, 55639), (121, 55678), (122, 55693), (125, 55711), (138, 55768), (140, 55771), (149, 55828),

Gene: CrystalP_99 Start: 60193, Stop: 60633, Start Num: 95

Candidate Starts for CrystalP_99:

(Start: 95 @60193 has 122 MA's), (115, 60292), (129, 60388), (140, 60424), (151, 60490), (164, 60538),

Gene: Cucurbita_127 Start: 72611, Stop: 73120, Start Num: 92

Candidate Starts for Cucurbita_127:

(Start: 92 @72611 has 218 MA's), (100, 72626), (104, 72635), (135, 72833), (164, 72959), (170, 73010), (179, 73070),

Gene: Culver_126 Start: 70629, Stop: 71138, Start Num: 92

Candidate Starts for Culver_126:

(Start: 92 @70629 has 218 MA's), (100, 70644), (104, 70653), (135, 70851), (164, 70977), (170, 71028), (179, 71088),

Gene: Cumberbatch_46 Start: 30696, Stop: 31175, Start Num: 92

Candidate Starts for Cumberbatch_46:

(Start: 92 @30696 has 218 MA's), (149, 30987),

Gene: Czyszczonek1_101 Start: 59453, Stop: 59893, Start Num: 95

Candidate Starts for Czyszczonek1_101:

(32, 59252), (33, 59255), (Start: 38 @59282 has 1 MA's), (40, 59285), (48, 59327), (64, 59381), (Start: 95 @59453 has 122 MA's), (115, 59552), (129, 59648), (140, 59684), (151, 59750), (164, 59798),

Gene: DHan_89 Start: 55771, Stop: 56169, Start Num: 96

Candidate Starts for DHan_89:

(Start: 96 @55771 has 72 MA's), (108, 55822), (110, 55843), (114, 55864), (121, 55903), (122, 55918), (125, 55936), (138, 55993), (140, 55996), (149, 56053), (159, 56089),

Gene: Daikon_100 Start: 59067, Stop: 59507, Start Num: 95

Candidate Starts for Daikon_100:

(64, 58995), (Start: 95 @59067 has 122 MA's), (115, 59166), (129, 59262), (140, 59298), (151, 59364), (164, 59412),

Gene: DanBing_85 Start: 55276, Stop: 55665, Start Num: 96

Candidate Starts for DanBing_85:

(Start: 96 @55276 has 72 MA's), (108, 55327), (110, 55348), (114, 55369), (125, 55447), (138, 55504), (140, 55507), (159, 55597),

Gene: Dardanus_49 Start: 33729, Stop: 34202, Start Num: 92

Candidate Starts for Dardanus_49:

(37, 33552), (Start: 92 @33729 has 218 MA's), (108, 33783), (118, 33843), (123, 33891), (124, 33897), (138, 33960), (149, 34020), (151, 34029),

Gene: Daredevil_74 Start: 52691, Stop: 52191, Start Num: 97

Candidate Starts for Daredevil_74:

(Start: 97 @52691 has 6 MA's), (112, 52613),

Gene: Darolandstone_44 Start: 33598, Stop: 34095, Start Num: 92

Candidate Starts for Darolandstone_44:

(49, 33475), (50, 33484), (Start: 92 @33598 has 218 MA's), (114, 33694), (125, 33772), (137, 33826),

Gene: DatBoi_81 Start: 56811, Stop: 56245, Start Num: 97

Candidate Starts for DatBoi_81:

(Start: 97 @56811 has 6 MA's), (126, 56628), (169, 56424),

Gene: DelaGarza_43 Start: 26483, Stop: 25980, Start Num: 92

Candidate Starts for DelaGarza_43:

(Start: 92 @26483 has 218 MA's), (135, 26261), (164, 26135),

Gene: Diminimus_68 Start: 43862, Stop: 44308, Start Num: 91

Candidate Starts for Diminimus_68:

(78, 43826), (Start: 91 @43862 has 26 MA's), (111, 43946), (123, 44027), (127, 44051), (164, 44210),

Gene: DinoDaryn_55 Start: 35610, Stop: 36101, Start Num: 92

Candidate Starts for DinoDaryn_55:

(Start: 92 @35610 has 218 MA's), (108, 35664), (123, 35772), (140, 35844), (153, 35916),

Gene: DirkDirk_79 Start: 52716, Stop: 53099, Start Num: 96

Candidate Starts for DirkDirk_79:

(Start: 96 @52716 has 72 MA's), (114, 52809), (122, 52863), (125, 52881), (140, 52941), (149, 52998),

Gene: DoctorDiddles_99 Start: 58916, Stop: 59356, Start Num: 95

Candidate Starts for DoctorDiddles_99:

(32, 58715), (33, 58718), (Start: 38 @58745 has 1 MA's), (40, 58748), (48, 58790), (64, 58844), (Start: 95 @58916 has 122 MA's), (111, 58997), (115, 59015), (140, 59147), (151, 59213), (164, 59261),

Gene: DonTron_86 Start: 55825, Stop: 56250, Start Num: 93

Candidate Starts for DonTron_86:

(29, 55603), (39, 55642), (56, 55723), (93, 55825), (Start: 96 @55828 has 72 MA's), (112, 55912), (116, 55930), (150, 56122), (151, 56128),

Gene: Doucette_53 Start: 34241, Stop: 34705, Start Num: 98

Candidate Starts for Doucette_53:

(Start: 98 @34241 has 6 MA's), (114, 34331), (124, 34400), (140, 34466),

Gene: Douge_84 Start: 54186, Stop: 54593, Start Num: 96

Candidate Starts for Douge_84:

(Start: 96 @54186 has 72 MA's), (110, 54258), (114, 54279), (121, 54318), (122, 54333), (127, 54363), (138, 54408), (140, 54411), (168, 54552),

Gene: Douzhi_83 Start: 54057, Stop: 54464, Start Num: 96

Candidate Starts for Douzhi_83:

(Start: 96 @54057 has 72 MA's), (110, 54129), (114, 54150), (121, 54189), (122, 54204), (138, 54279), (140, 54282), (168, 54423),

Gene: DrDrey_100 Start: 60931, Stop: 61371, Start Num: 95

Candidate Starts for DrDrey_100:

(Start: 95 @60931 has 122 MA's), (115, 61030), (140, 61162), (151, 61228), (164, 61276),

Gene: DrSeegs_85 Start: 55471, Stop: 55857, Start Num: 96

Candidate Starts for DrSeegs_85:

(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: DrYang_97 Start: 63553, Stop: 64098, Start Num: 92

Candidate Starts for DrYang_97:

(46, 63412), (83, 63526), (Start: 92 @63553 has 218 MA's), (121, 63694), (123, 63715), (124, 63721), (129, 63751), (135, 63775), (141, 63790), (151, 63853),

Gene: Dropshot_45 Start: 28373, Stop: 28867, Start Num: 92

Candidate Starts for Dropshot_45:

(Start: 92 @28373 has 218 MA's), (135, 28595), (142, 28616), (164, 28721),

Gene: Dulcita_68 Start: 43863, Stop: 44309, Start Num: 91

Candidate Starts for Dulcita_68:

(78, 43827), (Start: 91 @43863 has 26 MA's), (111, 43947), (123, 44028), (127, 44052), (164, 44211),

Gene: Dumbo_100 Start: 59489, Stop: 59929, Start Num: 95

Candidate Starts for Dumbo_100:

(Start: 95 @59489 has 122 MA's), (115, 59588), (140, 59720), (151, 59786), (164, 59834),

Gene: DuncansLeg_84 Start: 55425, Stop: 55808, Start Num: 96

Candidate Starts for DuncansLeg_84:

(Start: 96 @55425 has 72 MA's), (109, 55485), (110, 55497), (114, 55518), (122, 55578), (140, 55656), (159, 55746),

Gene: Dusk_97 Start: 59453, Stop: 59893, Start Num: 95

Candidate Starts for Dusk_97:

(Start: 95 @59453 has 122 MA's), (115, 59552), (140, 59684), (151, 59750), (164, 59798),

Gene: Dusty_122 Start: 70841, Stop: 71350, Start Num: 92

Candidate Starts for Dusty_122:

(Start: 92 @70841 has 218 MA's), (100, 70856), (104, 70865), (135, 71063), (164, 71189), (170, 71240), (179, 71300),

Gene: DyoEdafos_87 Start: 54732, Stop: 55139, Start Num: 96

Candidate Starts for DyoEdafos_87:

(Start: 96 @54732 has 72 MA's), (110, 54804), (114, 54825), (122, 54879), (138, 54954), (140, 54957),

Gene: E1_47 Start: 31132, Stop: 31596, Start Num: 98

Candidate Starts for E1_47:

(Start: 98 @31132 has 6 MA's), (114, 31222), (116, 31228), (124, 31291), (137, 31351),

Gene: E6_53 Start: 34060, Stop: 34527, Start Num: 98

Candidate Starts for E6_53:

(34, 33853), (36, 33862), (47, 33910), (48, 33913), (Start: 98 @34060 has 6 MA's), (114, 34150), (124, 34219), (137, 34279), (157, 34372),

Gene: EarickHC_65 Start: 40496, Stop: 41002, Start Num: 92

Candidate Starts for EarickHC_65:

(Start: 92 @40496 has 218 MA's), (100, 40511), (135, 40718), (153, 40802), (164, 40844),

Gene: EastWest_38 Start: 30167, Stop: 30706, Start Num: 94

Candidate Starts for EastWest_38:

(Start: 89 @30161 has 1 MA's), (Start: 94 @30167 has 7 MA's), (164, 30512),

Gene: Eastland_45 Start: 30656, Stop: 31135, Start Num: 92

Candidate Starts for Eastland_45:

(Start: 92 @30656 has 218 MA's), (149, 30947),

Gene: Easy2Say_100 Start: 59925, Stop: 60365, Start Num: 95

Candidate Starts for Easy2Say_100:

(32, 59724), (33, 59727), (Start: 38 @59754 has 1 MA's), (40, 59757), (48, 59799), (64, 59853), (Start: 95 @59925 has 122 MA's), (115, 60024), (140, 60156), (151, 60222), (164, 60270),

Gene: EdgarPoe_101 Start: 64215, Stop: 64784, Start Num: 92

Candidate Starts for EdgarPoe_101:

(Start: 92 @64215 has 218 MA's), (111, 64296), (122, 64371), (129, 64413), (132, 64425), (135, 64437), (137, 64443), (140, 64449), (153, 64521), (164, 64563),

Gene: Eesa_52 Start: 34727, Stop: 35206, Start Num: 92

Candidate Starts for Eesa_52:

(Start: 92 @34727 has 218 MA's), (111, 34808), (125, 34901), (135, 34949), (137, 34955), (153, 35033), (166, 35084),

Gene: Eklok_45 Start: 30455, Stop: 30934, Start Num: 92

Candidate Starts for Eklok_45:

(Start: 92 @30455 has 218 MA's), (149, 30746),

Gene: Elite2014_99 Start: 59100, Stop: 59540, Start Num: 95

Candidate Starts for Elite2014_99:

(Start: 95 @59100 has 122 MA's), (115, 59199), (140, 59331), (151, 59397), (164, 59445),

Gene: Ellson_83 Start: 55740, Stop: 56123, Start Num: 96

Candidate Starts for Ellson_83:

(Start: 96 @55740 has 72 MA's), (109, 55800), (110, 55812), (114, 55833), (122, 55893), (140, 55971), (159, 56061),

Gene: Elph10_100 Start: 59135, Stop: 59575, Start Num: 95

Candidate Starts for Elph10_100:

(Start: 95 @59135 has 122 MA's), (115, 59234), (129, 59330), (140, 59366), (151, 59432), (164, 59480),

Gene: Emmina_100 Start: 58876, Stop: 59316, Start Num: 95

Candidate Starts for Emmina_100:

(Start: 95 @58876 has 122 MA's), (115, 58975), (129, 59071), (140, 59107), (151, 59173), (164, 59221),

Gene: Enceladus_79 Start: 53493, Stop: 53876, Start Num: 96

Candidate Starts for Enceladus_79:

(Start: 96 @53493 has 72 MA's), (114, 53586), (122, 53640), (125, 53658), (140, 53718), (149, 53775),

Gene: Engineer_128 Start: 72271, Stop: 72780, Start Num: 92

Candidate Starts for Engineer_128:

(Start: 92 @72271 has 218 MA's), (100, 72286), (104, 72295), (135, 72493), (164, 72619), (170, 72670), (179, 72730),

Gene: EniyanLRS_74 Start: 48895, Stop: 49284, Start Num: 94

Candidate Starts for EniyanLRS_74:

(Start: 94 @48895 has 7 MA's), (114, 48988), (115, 48991), (122, 49042), (125, 49060), (137, 49114), (150, 49180), (164, 49234),

Gene: Estes_75 Start: 46028, Stop: 46465, Start Num: 91

Candidate Starts for Estes_75:

(Start: 91 @46028 has 26 MA's), (111, 46112), (123, 46193),

Gene: Eureka_99 Start: 60064, Stop: 60504, Start Num: 95

Candidate Starts for Eureka_99:

(Start: 95 @60064 has 122 MA's), (115, 60163), (129, 60259), (140, 60295), (151, 60361), (164, 60409),

Gene: EvePickles_69 Start: 38354, Stop: 38866, Start Num: 92

Candidate Starts for EvePickles_69:

(Start: 92 @38354 has 218 MA's), (111, 38435), (131, 38573),

Gene: Faith1_85 Start: 55471, Stop: 55857, Start Num: 96

Candidate Starts for Faith1_85:

(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: Faja_73 Start: 39133, Stop: 39654, Start Num: 92

Candidate Starts for Faja_73:

(Start: 92 @39133 has 218 MA's), (111, 39214), (131, 39352),

Gene: FarmResident_84 Start: 53796, Stop: 54203, Start Num: 96

Candidate Starts for FarmResident_84:

(Start: 96 @53796 has 72 MA's), (110, 53868), (114, 53889), (121, 53928), (122, 53943), (127, 53973), (138, 54018), (140, 54021), (168, 54162),

Gene: Filch_102 Start: 59448, Stop: 59888, Start Num: 95

Candidate Starts for Filch_102:

(Start: 95 @59448 has 122 MA's), (115, 59547), (129, 59643), (140, 59679), (151, 59745), (164, 59793),

Gene: Finemlucis_85 Start: 56160, Stop: 56546, Start Num: 96

Candidate Starts for Finemlucis_85:

(84, 56142), (Start: 96 @56160 has 72 MA's), (108, 56211), (110, 56232), (114, 56253), (121, 56292), (122, 56307), (125, 56325), (138, 56382), (140, 56385), (149, 56442),

Gene: Finkle_70 Start: 43173, Stop: 43691, Start Num: 94

Candidate Starts for Finkle_70:

(70, 43113), (Start: 94 @43173 has 7 MA's), (106, 43206),

Gene: Finnry_83 Start: 55427, Stop: 55810, Start Num: 96

Candidate Starts for Finnry_83:

(Start: 96 @55427 has 72 MA's), (109, 55487), (110, 55499), (114, 55520), (122, 55580), (125, 55598), (140, 55658), (159, 55748),

Gene: FireRed_103 Start: 60340, Stop: 60780, Start Num: 95

Candidate Starts for FireRed_103:

(Start: 95 @60340 has 122 MA's), (115, 60439), (129, 60535), (140, 60571), (151, 60637), (164, 60685),

Gene: Fireman_67 Start: 42549, Stop: 43052, Start Num: 92

Candidate Starts for Fireman_67:

(Start: 92 @42549 has 218 MA's), (125, 42723), (135, 42771), (164, 42897),

Gene: Flypotenuse_96 Start: 58525, Stop: 58965, Start Num: 95

Candidate Starts for Flypotenuse_96:

(32, 58324), (33, 58327), (Start: 38 @58354 has 1 MA's), (40, 58357), (48, 58399), (64, 58453), (Start: 95 @58525 has 122 MA's), (111, 58606), (115, 58624), (140, 58756), (151, 58822), (164, 58870),

Gene: Forthebois_13 Start: 6604, Stop: 6182, Start Num: 91

Candidate Starts for Forthebois_13:

(Start: 91 @6604 has 26 MA's), (105, 6571), (121, 6457), (129, 6400), (149, 6307), (160, 6268),

Gene: Franzy_35 Start: 30564, Stop: 31142, Start Num: 92

Candidate Starts for Franzy_35:

(62, 30480), (Start: 92 @30564 has 218 MA's), (104, 30588), (106, 30600), (127, 30750), (135, 30786), (140, 30798), (164, 30912), (178, 31023),

Gene: G4_64 Start: 35908, Stop: 36363, Start Num: 98

Candidate Starts for G4_64:

(36, 35710), (47, 35758), (48, 35761), (Start: 98 @35908 has 6 MA's), (114, 35998), (124, 36067), (137, 36127),

Gene: Gabriela_85 Start: 54817, Stop: 55203, Start Num: 96

Candidate Starts for Gabriela_85:

(Start: 96 @54817 has 72 MA's), (108, 54868), (110, 54889), (114, 54910), (121, 54949), (122, 54964), (125, 54982), (138, 55039), (140, 55042), (149, 55099),

Gene: Gage_102 Start: 59596, Stop: 60036, Start Num: 95

Candidate Starts for Gage_102:

(32, 59395), (33, 59398), (Start: 38 @59425 has 1 MA's), (40, 59428), (48, 59470), (64, 59524), (Start: 95 @59596 has 122 MA's), (115, 59695), (140, 59827), (151, 59893), (164, 59941),

Gene: Galaxy_52 Start: 33030, Stop: 33548, Start Num: 92

Candidate Starts for Galaxy_52:

(Start: 92 @33030 has 218 MA's), (111, 33111), (114, 33126), (135, 33252), (137, 33258), (140, 33264), (153, 33336), (185, 33495),

Gene: Ganandorf_63 Start: 40592, Stop: 41098, Start Num: 92

Candidate Starts for Ganandorf_63:

(Start: 92 @40592 has 218 MA's), (100, 40607), (135, 40814), (153, 40898), (164, 40940),

Gene: Gardann_85 Start: 55306, Stop: 55692, Start Num: 96

Candidate Starts for Gardann_85:

(Start: 96 @55306 has 72 MA's), (108, 55357), (110, 55378), (114, 55399), (121, 55438), (122, 55453), (125, 55471), (138, 55528), (140, 55531), (149, 55588),

Gene: GardenSalsa_76 Start: 46450, Stop: 46887, Start Num: 91

Candidate Starts for GardenSalsa_76:

(Start: 91 @46450 has 26 MA's), (111, 46534), (123, 46615),

Gene: Gator_98 Start: 59381, Stop: 59821, Start Num: 95

Candidate Starts for Gator_98:

(32, 59180), (33, 59183), (Start: 38 @59210 has 1 MA's), (40, 59213), (48, 59255), (64, 59309), (Start: 95 @59381 has 122 MA's), (111, 59462), (115, 59480), (140, 59612), (151, 59678), (164, 59726),

Gene: Geeche_124 Start: 71064, Stop: 71573, Start Num: 92

Candidate Starts for Geeche_124:

(Start: 92 @71064 has 218 MA's), (100, 71079), (104, 71088), (135, 71286), (164, 71412), (170, 71463), (179, 71523),

Gene: Gemini_105 Start: 59975, Stop: 60415, Start Num: 95

Candidate Starts for Gemini_105:

(32, 59774), (33, 59777), (Start: 38 @59804 has 1 MA's), (40, 59807), (48, 59849), (64, 59903), (Start: 95 @59975 has 122 MA's), (115, 60074), (140, 60206), (151, 60272), (164, 60320),

Gene: GenevaB15_75 Start: 45899, Stop: 46336, Start Num: 91

Candidate Starts for GenevaB15_75:

(Start: 91 @45899 has 26 MA's), (111, 45983), (123, 46064),

Gene: Gilgamesh_89 Start: 83492, Stop: 83953, Start Num: 87

Candidate Starts for Gilgamesh_89:

(Start: 87 @83492 has 1 MA's), (125, 83666), (135, 83714), (140, 83726),

Gene: Gina_68 Start: 40668, Stop: 41171, Start Num: 92

Candidate Starts for Gina_68:

(Start: 92 @40668 has 218 MA's), (135, 40890), (153, 40974),

Gene: Gingerbug_42 Start: 27000, Stop: 26503, Start Num: 92

Candidate Starts for Gingerbug_42:

(9, 27522), (19, 27312), (23, 27285), (24, 27270), (Start: 92 @27000 has 218 MA's), (111, 26919), (123, 26838), (164, 26652),

Gene: Glaske16_68 Start: 43862, Stop: 44308, Start Num: 91

Candidate Starts for Glaske16_68:

(78, 43826), (Start: 91 @43862 has 26 MA's), (111, 43946), (123, 44027), (127, 44051), (164, 44210),

Gene: Glexan_99 Start: 59655, Stop: 60095, Start Num: 95

Candidate Starts for Glexan_99:

(32, 59454), (33, 59457), (Start: 38 @59484 has 1 MA's), (40, 59487), (48, 59529), (64, 59583), (Start: 95 @59655 has 122 MA's), (111, 59736), (115, 59754), (140, 59886), (151, 59952), (164, 60000),

Gene: Globfish_71 Start: 37764, Stop: 38243, Start Num: 99

Candidate Starts for Globfish_71:

(Start: 99 @37764 has 4 MA's), (144, 38007), (147, 38022), (151, 38058), (153, 38064),

Gene: Goib_55 Start: 36148, Stop: 36654, Start Num: 92

Candidate Starts for Goib_55:

(Start: 92 @36148 has 218 MA's), (123, 36310), (140, 36382), (153, 36454), (164, 36496),

Gene: Goku_99 Start: 59793, Stop: 60233, Start Num: 95

Candidate Starts for Goku_99:

(Start: 95 @59793 has 122 MA's), (115, 59892), (129, 59988), (140, 60024), (151, 60090), (164, 60138),

Gene: GoldenSpark_104 Start: 59458, Stop: 59898, Start Num: 95

Candidate Starts for GoldenSpark_104:

(32, 59257), (33, 59260), (Start: 38 @59287 has 1 MA's), (40, 59290), (48, 59332), (64, 59386), (Start: 95 @59458 has 122 MA's), (115, 59557), (140, 59689), (151, 59755), (164, 59803),

Gene: Goldilocks_103 Start: 59375, Stop: 59815, Start Num: 95

Candidate Starts for Goldilocks_103:

(Start: 95 @59375 has 122 MA's), (115, 59474), (140, 59606), (151, 59672), (164, 59720),

Gene: GooberAzure_103 Start: 59458, Stop: 59898, Start Num: 95

Candidate Starts for GooberAzure_103:

(32, 59257), (33, 59260), (Start: 38 @59287 has 1 MA's), (40, 59290), (48, 59332), (64, 59386), (Start: 95 @59458 has 122 MA's), (115, 59557), (140, 59689), (151, 59755), (164, 59803),

Gene: Gorpy_70 Start: 38991, Stop: 39509, Start Num: 92

Candidate Starts for Gorpy_70:

(Start: 92 @38991 has 218 MA's), (116, 39093), (131, 39210),

Gene: GravityBall_37 Start: 30922, Stop: 31446, Start Num: 104

Candidate Starts for GravityBall_37:

(Start: 92 @30898 has 218 MA's), (104, 30922), (135, 31120), (161, 31234), (164, 31246), (178, 31324),

Gene: Grekaycon_37 Start: 30822, Stop: 31370, Start Num: 92

Candidate Starts for Grekaycon_37:

(60, 30735), (Start: 92 @30822 has 218 MA's), (104, 30846), (127, 31008), (135, 31044), (159, 31149), (164, 31170), (178, 31254),

Gene: Gspu1_47 Start: 34521, Stop: 34976, Start Num: 92

Candidate Starts for Gspu1_47:

(10, 34035), (17, 34152), (20, 34212), (37, 34338), (42, 34353), (45, 34377), (52, 34407), (Start: 92 @34521 has 218 MA's), (113, 34608), (120, 34632), (125, 34686), (145, 34764), (165, 34860),

Gene: GuuelaD_83 Start: 55445, Stop: 55831, Start Num: 96

Candidate Starts for GuuelaD_83:

(Start: 96 @55445 has 72 MA's), (108, 55496), (114, 55538), (121, 55577), (122, 55592), (125, 55610), (138, 55667), (140, 55670), (149, 55727), (159, 55763),

Gene: HFrancette_46 Start: 31430, Stop: 31909, Start Num: 92

Candidate Starts for HFrancette_46:

(1, 30659), (11, 30968), (58, 31334), (63, 31352), (Start: 92 @31430 has 218 MA's), (135, 31652), (149, 31721),

Gene: Hafay_86 Start: 55401, Stop: 55784, Start Num: 96

Candidate Starts for Hafay_86:

(Start: 96 @55401 has 72 MA's), (108, 55452), (110, 55473), (114, 55494), (121, 55533), (122, 55548), (125, 55566), (138, 55623), (140, 55626), (149, 55683), (159, 55719),

Gene: Halena_80 Start: 52763, Stop: 53146, Start Num: 96

Candidate Starts for Halena_80:

(Start: 96 @52763 has 72 MA's), (114, 52856), (122, 52910), (125, 52928), (140, 52988), (149, 53045),

Gene: HanKaySha_101 Start: 59845, Stop: 60285, Start Num: 95

Candidate Starts for HanKaySha_101:

(Start: 95 @59845 has 122 MA's), (115, 59944), (129, 60040), (140, 60076), (151, 60142), (164, 60190),

Gene: Harella_100 Start: 60171, Stop: 60611, Start Num: 95

Candidate Starts for Harella_100:

(32, 59970), (33, 59973), (Start: 38 @60000 has 1 MA's), (40, 60003), (48, 60045), (64, 60099), (Start: 95 @60171 has 122 MA's), (111, 60252), (115, 60270), (140, 60402), (151, 60468), (164, 60516),

Gene: Henry_97 Start: 59498, Stop: 59938, Start Num: 95

Candidate Starts for Henry_97:

(Start: 95 @59498 has 122 MA's), (115, 59597), (129, 59693), (140, 59729), (151, 59795), (164, 59843),

Gene: Hermeonysus_64 Start: 40487, Stop: 40993, Start Num: 92

Candidate Starts for Hermeonysus_64:

(Start: 92 @40487 has 218 MA's), (100, 40502), (135, 40709), (153, 40793), (164, 40835),

Gene: Hestia_64 Start: 35356, Stop: 35877, Start Num: 92

Candidate Starts for Hestia_64:

(Start: 92 @35356 has 218 MA's), (111, 35437), (131, 35575),

Gene: Highbury_97 Start: 58002, Stop: 58442, Start Num: 95

Candidate Starts for Highbury_97:

(43, 57852), (51, 57882), (67, 57930), (71, 57945), (76, 57957), (Start: 95 @58002 has 122 MA's), (115, 58101), (129, 58197), (140, 58233), (151, 58299), (164, 58347),

Gene: Hillester_76 Start: 38827, Stop: 39300, Start Num: 99

Candidate Starts for Hillester_76:

(Start: 99 @38827 has 4 MA's), (108, 38872), (133, 39028),

Gene: Hirko_37 Start: 32245, Stop: 32802, Start Num: 92

Candidate Starts for Hirko_37:

(Start: 92 @32245 has 218 MA's), (123, 32407), (135, 32467), (149, 32536),

Gene: Holt_105 Start: 59872, Stop: 60312, Start Num: 95

Candidate Starts for Holt_105:

(32, 59671), (33, 59674), (Start: 38 @59701 has 1 MA's), (40, 59704), (48, 59746), (64, 59800), (Start: 95 @59872 has 122 MA's), (115, 59971), (140, 60103), (151, 60169), (164, 60217),

Gene: Honeyfin_65 Start: 40747, Stop: 41253, Start Num: 92

Candidate Starts for Honeyfin_65:

(Start: 92 @40747 has 218 MA's), (100, 40762), (135, 40969), (153, 41053), (164, 41095),

Gene: Hoonter_103 Start: 59949, Stop: 60389, Start Num: 95

Candidate Starts for Hoonter_103:

(Start: 95 @59949 has 122 MA's), (115, 60048), (129, 60144), (140, 60180), (151, 60246), (164, 60294),

Gene: Hokey_101 Start: 60455, Stop: 60895, Start Num: 95

Candidate Starts for Hokey_101:

(Start: 95 @60455 has 122 MA's), (115, 60554), (129, 60650), (140, 60686), (151, 60752), (164, 60800),

Gene: HufflyPuff_102 Start: 60566, Stop: 61006, Start Num: 95

Candidate Starts for HufflyPuff_102:

(69, 60509), (Start: 95 @60566 has 122 MA's), (115, 60665), (140, 60797), (151, 60863), (164, 60911),

Gene: Huffly_55 Start: 35610, Stop: 36101, Start Num: 92

Candidate Starts for Huffly_55:

(Start: 92 @35610 has 218 MA's), (108, 35664), (123, 35772), (140, 35844), (153, 35916),

Gene: Hum25_61 Start: 35235, Stop: 35735, Start Num: 91

Candidate Starts for Hum25_61:

(Start: 91 @35235 has 26 MA's), (104, 35259), (111, 35316), (125, 35409), (135, 35457), (159, 35562), (164, 35583),

Gene: HumptyDumpty_101 Start: 64018, Stop: 64587, Start Num: 92

Candidate Starts for HumptyDumpty_101:

(Start: 92 @64018 has 218 MA's), (111, 64099), (122, 64174), (129, 64216), (135, 64240), (137, 64246), (140, 64252), (153, 64324), (159, 64345), (164, 64366),

Gene: IHOP_98 Start: 59174, Stop: 59614, Start Num: 95

Candidate Starts for IHOP_98:

(32, 58973), (33, 58976), (Start: 38 @59003 has 1 MA's), (40, 59006), (48, 59048), (60, 59090), (64, 59102), (Start: 95 @59174 has 122 MA's), (111, 59255), (115, 59273), (140, 59405), (151, 59471), (164, 59519),

Gene: IPhone7_67 Start: 43867, Stop: 44313, Start Num: 91

Candidate Starts for IPhone7_67:

(78, 43831), (Start: 91 @43867 has 26 MA's), (111, 43951), (123, 44032), (127, 44056), (164, 44215),

Gene: Icee_101 Start: 58982, Stop: 59422, Start Num: 95

Candidate Starts for Icee_101:

(32, 58781), (33, 58784), (Start: 38 @58811 has 1 MA's), (40, 58814), (48, 58856), (64, 58910), (Start: 95 @58982 has 122 MA's), (111, 59063), (115, 59081), (140, 59213), (151, 59279), (164, 59327),

Gene: Ididsumtinwong_47 Start: 30484, Stop: 30948, Start Num: 92

Candidate Starts for Ididsumtinwong_47:

(Start: 92 @30484 has 218 MA's), (123, 30646), (124, 30652),

Gene: Ignacio_45 Start: 31333, Stop: 31812, Start Num: 92

Candidate Starts for Ignacio_45:

(1, 30562), (11, 30871), (58, 31237), (63, 31255), (Start: 92 @31333 has 218 MA's), (135, 31555), (149, 31624),

Gene: Inca_97 Start: 57663, Stop: 58103, Start Num: 95

Candidate Starts for Inca_97:

(32, 57462), (33, 57465), (Start: 38 @57492 has 1 MA's), (40, 57495), (48, 57537), (64, 57591), (Start: 95 @57663 has 122 MA's), (111, 57744), (115, 57762), (140, 57894), (151, 57960), (164, 58008),

Gene: Isolde_70 Start: 38113, Stop: 38619, Start Num: 92

Candidate Starts for Isolde_70:

(Start: 92 @38113 has 218 MA's), (131, 38332),

Gene: Itos_85 Start: 54377, Stop: 54763, Start Num: 96

Candidate Starts for Itos_85:

(Start: 96 @54377 has 72 MA's), (108, 54428), (110, 54449), (114, 54470), (121, 54509), (122, 54524), (125, 54542), (138, 54599), (140, 54602), (149, 54659),

Gene: JKerns_37 Start: 30786, Stop: 31343, Start Num: 92

Candidate Starts for JKerns_37:

(60, 30699), (Start: 92 @30786 has 218 MA's), (104, 30810), (133, 30999), (135, 31008), (159, 31113), (161, 31122), (164, 31134), (178, 31227),

Gene: JaNo_100 Start: 63989, Stop: 64558, Start Num: 92

Candidate Starts for JaNo_100:

(Start: 92 @63989 has 218 MA's), (111, 64070), (122, 64145), (129, 64187), (135, 64211), (137, 64217), (140, 64223), (153, 64295), (159, 64316), (164, 64337),

Gene: Jace_65 Start: 39601, Stop: 40059, Start Num: 97

Candidate Starts for Jace_65:

(Start: 97 @39601 has 6 MA's), (100, 39613), (115, 39697), (132, 39811), (134, 39823), (136, 39829), (139, 39835),

Gene: Jamun_52 Start: 34262, Stop: 34783, Start Num: 92

Candidate Starts for Jamun_52:

(Start: 92 @34262 has 218 MA's), (135, 34484), (137, 34490), (140, 34496), (149, 34553), (166, 34619), (185, 34730),

Gene: Jawnski_35 Start: 30570, Stop: 31145, Start Num: 92

Candidate Starts for Jawnski_35:

(Start: 92 @30570 has 218 MA's), (104, 30594), (135, 30792), (161, 30906), (178, 31050),

Gene: JayCookie_102 Start: 64608, Stop: 65165, Start Num: 92

Candidate Starts for JayCookie_102:

(Start: 92 @64608 has 218 MA's), (104, 64632), (111, 64689), (123, 64770), (129, 64806), (132, 64818), (135, 64830), (137, 64836), (140, 64842), (153, 64914), (164, 64956),

Gene: Jayden_65 Start: 41095, Stop: 41595, Start Num: 90

Candidate Starts for Jayden_65:

(49, 40975), (Start: 87 @41092 has 1 MA's), (Start: 90 @41095 has 1 MA's), (125, 41269), (135, 41317), (143, 41341), (153, 41401), (164, 41443),

Gene: JeTaime_99 Start: 59281, Stop: 59721, Start Num: 95

Candidate Starts for JeTaime_99:

(64, 59209), (Start: 95 @59281 has 122 MA's), (111, 59362), (115, 59380), (140, 59512), (151, 59578), (164, 59626),

Gene: Jefe_64 Start: 40545, Stop: 41048, Start Num: 92

Candidate Starts for Jefe_64:

(Start: 92 @40545 has 218 MA's), (100, 40560), (135, 40767), (153, 40851), (164, 40893),

Gene: Jinkies_44 Start: 33571, Stop: 34011, Start Num: 99

Candidate Starts for Jinkies_44:

(Start: 99 @33571 has 4 MA's), (112, 33646),

Gene: Jobypre_85 Start: 55406, Stop: 55789, Start Num: 96

Candidate Starts for Jobypre_85:

(Start: 96 @55406 has 72 MA's), (109, 55466), (110, 55478), (114, 55499), (122, 55559), (125, 55577), (140, 55637), (159, 55727),

Gene: JoeDirt_83 Start: 54091, Stop: 54474, Start Num: 96

Candidate Starts for JoeDirt_83:

(Start: 96 @54091 has 72 MA's), (114, 54184), (122, 54238), (125, 54256), (140, 54316), (149, 54373),

Gene: Jollipop_65 Start: 40927, Stop: 41430, Start Num: 92

Candidate Starts for Jollipop_65:

(Start: 92 @40927 has 218 MA's), (100, 40942), (135, 41149), (153, 41233), (164, 41275),

Gene: Jollymon_89 Start: 55950, Stop: 56372, Start Num: 96

Candidate Starts for Jollymon_89:

(29, 55725), (39, 55764), (56, 55845), (93, 55947), (Start: 96 @55950 has 72 MA's), (112, 56034), (116, 56052), (150, 56244), (151, 56250),

Gene: JonJames_135 Start: 77869, Stop: 78390, Start Num: 92

Candidate Starts for JonJames_135:

(Start: 92 @77869 has 218 MA's), (Start: 99 @77881 has 4 MA's), (104, 77893), (108, 77923), (114, 77965), (115, 77968), (137, 78097), (184, 78334),

Gene: Jordan_37 Start: 30836, Stop: 31393, Start Num: 92

Candidate Starts for Jordan_37:

(60, 30749), (Start: 92 @30836 has 218 MA's), (104, 30860), (133, 31049), (135, 31058), (159, 31163), (161, 31172), (164, 31184), (178, 31277),

Gene: Jubie_83 Start: 55541, Stop: 55924, Start Num: 96

Candidate Starts for Jubie_83:

(Start: 96 @55541 has 72 MA's), (109, 55601), (110, 55613), (114, 55634), (122, 55694), (125, 55712), (140, 55772), (159, 55862),

Gene: Juno112_54 Start: 33508, Stop: 34017, Start Num: 92

Candidate Starts for Juno112_54:

(Start: 92 @33508 has 218 MA's), (107, 33547), (111, 33589), (118, 33622), (125, 33682), (135, 33730), (140, 33742), (149, 33799), (153, 33814), (159, 33835), (164, 33856),

Gene: KBurrousTX_97 Start: 64742, Stop: 65284, Start Num: 92

Candidate Starts for KBurrousTX_97:

(71, 64694), (Start: 92 @64742 has 218 MA's), (108, 64796), (129, 64940), (135, 64964), (137, 64970), (140, 64976), (153, 65048), (164, 65090),

Gene: KHumphrey_55 Start: 33396, Stop: 33905, Start Num: 92

Candidate Starts for KHumphrey_55:

(Start: 92 @33396 has 218 MA's), (107, 33435), (111, 33477), (118, 33510), (125, 33570), (135, 33618), (140, 33630), (149, 33687), (153, 33702), (159, 33723), (164, 33744),

Gene: Kabreeze_101 Start: 64075, Stop: 64644, Start Num: 92

Candidate Starts for Kabreeze_101:

(Start: 92 @64075 has 218 MA's), (111, 64156), (122, 64231), (129, 64273), (135, 64297), (137, 64303), (140, 64309), (153, 64381), (159, 64402), (164, 64423),

Gene: Kahlid_85 Start: 55257, Stop: 55643, Start Num: 96

Candidate Starts for Kahlid_85:

(Start: 96 @55257 has 72 MA's), (108, 55308), (110, 55329), (114, 55350), (121, 55389), (122, 55404), (125, 55422), (138, 55479), (140, 55482), (149, 55539),

Gene: KaiHaiDragon_65 Start: 40496, Stop: 41002, Start Num: 92

Candidate Starts for KaiHaiDragon_65:

(Start: 92 @40496 has 218 MA's), (100, 40511), (135, 40718), (153, 40802), (164, 40844),

Gene: Kanye_97 Start: 59707, Stop: 60147, Start Num: 95

Candidate Starts for Kanye_97:

(Start: 95 @59707 has 122 MA's), (115, 59806), (129, 59902), (140, 59938), (151, 60004), (164, 60052),

Gene: Kharcho_81 Start: 48261, Stop: 48899, Start Num: 92

Candidate Starts for Kharcho_81:

(Start: 92 @48261 has 218 MA's), (111, 48342), (153, 48564),

Gene: Khuang_62 Start: 36400, Stop: 36924, Start Num: 92

Candidate Starts for Khuang_62:

(Start: 92 @36400 has 218 MA's), (129, 36598), (140, 36634), (159, 36727),

Gene: Kimchi_104 Start: 59599, Stop: 60039, Start Num: 95

Candidate Starts for Kimchi_104:

(32, 59398), (33, 59401), (Start: 38 @59428 has 1 MA's), (40, 59431), (48, 59473), (64, 59527), (Start: 95 @59599 has 122 MA's), (115, 59698), (140, 59830), (151, 59896), (164, 59944),

Gene: King2_35 Start: 30559, Stop: 31137, Start Num: 92

Candidate Starts for King2_35:

(Start: 92 @30559 has 218 MA's), (104, 30583), (106, 30595), (123, 30721), (125, 30733), (127, 30745), (135, 30781), (140, 30793), (164, 30907), (178, 31018),

Gene: Kingsolomon_81 Start: 55183, Stop: 55566, Start Num: 96

Candidate Starts for Kingsolomon_81:

(Start: 96 @55183 has 72 MA's), (109, 55243), (110, 55255), (114, 55276), (122, 55336), (125, 55354), (140, 55414), (159, 55504),

Gene: KingstonB_88 Start: 55361, Stop: 55783, Start Num: 96

Candidate Starts for KingstonB_88:

(29, 55136), (39, 55175), (56, 55256), (93, 55358), (Start: 96 @55361 has 72 MA's), (112, 55445), (116, 55463), (150, 55655), (151, 55661),

Gene: KirDoubleO7_82 Start: 55427, Stop: 55810, Start Num: 96

Candidate Starts for KirDoubleO7_82:

(Start: 96 @55427 has 72 MA's), (109, 55487), (110, 55499), (114, 55520), (122, 55580), (140, 55658), (159, 55748),

Gene: Klevey_43 Start: 31378, Stop: 31935, Start Num: 92

Candidate Starts for Klevey_43:

(Start: 92 @31378 has 218 MA's), (135, 31600), (149, 31669),

Gene: Kostya_100 Start: 59276, Stop: 59716, Start Num: 95

Candidate Starts for Kostya_100:

(32, 59075), (33, 59078), (Start: 38 @59105 has 1 MA's), (40, 59108), (48, 59150), (64, 59204), (Start: 95 @59276 has 122 MA's), (115, 59375), (140, 59507), (151, 59573), (164, 59621),

Gene: Kovu_15 Start: 9876, Stop: 10469, Start Num: 92

Candidate Starts for Kovu_15:

(Start: 92 @9876 has 218 MA's), (111, 9957), (127, 10062), (129, 10074), (142, 10119), (164, 10224),

Gene: Kowalski_63 Start: 40561, Stop: 41067, Start Num: 92

Candidate Starts for Kowalski_63:

(Start: 92 @40561 has 218 MA's), (100, 40576), (135, 40783), (153, 40867), (164, 40909),

Gene: Kozi_60 Start: 40548, Stop: 41045, Start Num: 92

Candidate Starts for Kozi_60:

(Start: 92 @40548 has 218 MA's), (135, 40770), (153, 40854), (164, 40896),

Gene: Krypton555_84 Start: 55452, Stop: 55835, Start Num: 96

Candidate Starts for Krypton555_84:

(Start: 96 @55452 has 72 MA's), (109, 55512), (110, 55524), (114, 55545), (122, 55605), (125, 55623), (140, 55683), (159, 55773),

Gene: Kukla_55 Start: 34866, Stop: 35303, Start Num: 92

Candidate Starts for Kukla_55:

(Start: 92 @34866 has 218 MA's), (111, 34947), (150, 35160), (159, 35193),

Gene: Kuleana_55 Start: 32730, Stop: 33242, Start Num: 92

Candidate Starts for Kuleana_55:

(Start: 92 @32730 has 218 MA's), (129, 32928), (135, 32952), (137, 32958),

Gene: Kumao_63 Start: 44478, Stop: 44960, Start Num: 91

Candidate Starts for Kumao_63:

(Start: 91 @44478 has 26 MA's), (102, 44496), (104, 44502), (111, 44559), (132, 44688), (142, 44721), (164, 44826),

Gene: Kumotta_55 Start: 31998, Stop: 32498, Start Num: 92

Candidate Starts for Kumotta_55:

(Start: 92 @31998 has 218 MA's), (111, 32079), (114, 32094), (127, 32184), (129, 32196), (135, 32220), (164, 32346),

Gene: Lawnathon_71 Start: 37451, Stop: 37972, Start Num: 92

Candidate Starts for Lawnathon_71:

(Start: 92 @37451 has 218 MA's), (116, 37553), (131, 37670),

Gene: LeBron_81 Start: 52762, Stop: 53145, Start Num: 96

Candidate Starts for LeBron_81:

(Start: 96 @52762 has 72 MA's), (114, 52855), (122, 52909), (125, 52927), (140, 52987), (149, 53044),

Gene: LeeroyJ_37 Start: 30897, Stop: 31436, Start Num: 92

Candidate Starts for LeeroyJ_37:

(Start: 92 @30897 has 218 MA's), (104, 30921), (135, 31119), (164, 31245), (182, 31344),

Gene: Leona_54 Start: 33587, Stop: 34099, Start Num: 92

Candidate Starts for Leona_54:

(Start: 92 @33587 has 218 MA's), (111, 33668), (118, 33701), (125, 33761), (135, 33809), (140, 33821), (149, 33878), (153, 33893), (159, 33914), (164, 33935),

Gene: Lesiram_44 Start: 26454, Stop: 25951, Start Num: 92

Candidate Starts for Lesiram_44:

(57, 26550), (Start: 92 @26454 has 218 MA's), (135, 26232), (164, 26106),

Gene: Lewan_86 Start: 55312, Stop: 55698, Start Num: 96

Candidate Starts for Lewan_86:

(Start: 96 @55312 has 72 MA's), (108, 55363), (110, 55384), (114, 55405), (121, 55444), (122, 55459), (125, 55477), (138, 55534), (140, 55537), (149, 55594),

Gene: LilDestine_84 Start: 55161, Stop: 55547, Start Num: 96

Candidate Starts for LilDestine_84:

(Start: 96 @55161 has 72 MA's), (108, 55212), (110, 55233), (114, 55254), (121, 55293), (122, 55308), (125, 55326), (138, 55383), (140, 55386), (149, 55443),

Gene: Lilac_102 Start: 60598, Stop: 61038, Start Num: 95

Candidate Starts for Lilac_102:

(Start: 95 @60598 has 122 MA's), (115, 60697), (129, 60793), (140, 60829), (151, 60895), (164, 60943),

Gene: LilhomieP_66 Start: 43867, Stop: 44313, Start Num: 91

Candidate Starts for LilhomieP_66:

(78, 43831), (Start: 91 @43867 has 26 MA's), (111, 43951), (123, 44032), (127, 44056), (164, 44215),

Gene: Lilizi_101 Start: 59884, Stop: 60324, Start Num: 95

Candidate Starts for Lilizi_101:

(Start: 95 @59884 has 122 MA's), (115, 59983), (129, 60079), (140, 60115), (151, 60181), (164, 60229),

Gene: Lilmac1015_45 Start: 31895, Stop: 32452, Start Num: 92

Candidate Starts for Lilmac1015_45:

(Start: 92 @31895 has 218 MA's), (135, 32117), (149, 32186),

Gene: Lilpickle_99 Start: 59100, Stop: 59540, Start Num: 95

Candidate Starts for Lilpickle_99:

(Start: 95 @59100 has 122 MA's), (115, 59199), (140, 59331), (151, 59397), (164, 59445),

Gene: Linus_101 Start: 64523, Stop: 65092, Start Num: 92

Candidate Starts for Linus_101:

(Start: 92 @64523 has 218 MA's), (111, 64604), (122, 64679), (129, 64721), (132, 64733), (135, 64745), (137, 64751), (140, 64757), (153, 64829), (159, 64850), (164, 64871),

Gene: LittleFortune_66 Start: 40852, Stop: 41358, Start Num: 92
Candidate Starts for LittleFortune_66:
(Start: 92 @40852 has 218 MA's), (100, 40867), (135, 41074), (153, 41158), (164, 41200),

Gene: LittleTokyo_52 Start: 31946, Stop: 32464, Start Num: 92
Candidate Starts for LittleTokyo_52:
(30, 31730), (54, 31841), (Start: 92 @31946 has 218 MA's), (108, 32000), (111, 32027), (122, 32102),
(125, 32120), (137, 32177), (140, 32183),

Gene: LiyuLake_83 Start: 55500, Stop: 55883, Start Num: 96
Candidate Starts for LiyuLake_83:
(Start: 96 @55500 has 72 MA's), (109, 55560), (110, 55572), (114, 55593), (122, 55653), (140,
55731), (159, 55821),

Gene: Loadrie_83 Start: 55336, Stop: 55722, Start Num: 96
Candidate Starts for Loadrie_83:
(Start: 96 @55336 has 72 MA's), (108, 55387), (110, 55408), (114, 55429), (121, 55468), (122,
55483), (125, 55501), (138, 55558), (140, 55561), (149, 55618),

Gene: Lolly9_82 Start: 55259, Stop: 55642, Start Num: 96
Candidate Starts for Lolly9_82:
(Start: 96 @55259 has 72 MA's), (109, 55319), (110, 55331), (114, 55352), (122, 55412), (125,
55430), (140, 55490), (159, 55580),

Gene: Lozinak_126 Start: 71932, Stop: 72441, Start Num: 92
Candidate Starts for Lozinak_126:
(Start: 92 @71932 has 218 MA's), (100, 71947), (104, 71956), (135, 72154), (164, 72280), (170,
72331), (179, 72391),

Gene: Lumos_84 Start: 55403, Stop: 55786, Start Num: 96
Candidate Starts for Lumos_84:
(Start: 96 @55403 has 72 MA's), (109, 55463), (110, 55475), (114, 55496), (122, 55556), (125,
55574), (140, 55634), (159, 55724),

Gene: Lymara_99 Start: 62866, Stop: 63429, Start Num: 92
Candidate Starts for Lymara_99:
(Start: 92 @62866 has 218 MA's), (104, 62890), (111, 62947), (123, 63028), (129, 63064), (135,
63088), (149, 63157), (153, 63172), (159, 63193), (164, 63214),

Gene: MAckerman_81 Start: 52756, Stop: 53139, Start Num: 96
Candidate Starts for MAckerman_81:
(Start: 96 @52756 has 72 MA's), (114, 52849), (122, 52903), (125, 52921), (140, 52981), (149,
53038),

Gene: MISSy_101 Start: 60384, Stop: 60824, Start Num: 95
Candidate Starts for MISSy_101:
(Start: 95 @60384 has 122 MA's), (115, 60483), (140, 60615), (151, 60681), (164, 60729),

Gene: MPhalcon_101 Start: 59801, Stop: 60241, Start Num: 95
Candidate Starts for MPhalcon_101:
(Start: 95 @59801 has 122 MA's), (115, 59900), (140, 60032), (151, 60098), (164, 60146),

Gene: MadamMonkfish_100 Start: 59307, Stop: 59747, Start Num: 95

Candidate Starts for MadamMonkfish_100:

(Start: 95 @59307 has 122 MA's), (115, 59406), (129, 59502), (140, 59538), (151, 59604), (164, 59652),

Gene: Manda_101 Start: 59838, Stop: 60278, Start Num: 95

Candidate Starts for Manda_101:

(43, 59691), (51, 59721), (67, 59769), (71, 59784), (76, 59796), (Start: 95 @59838 has 122 MA's), (111, 59919), (115, 59937), (140, 60069), (151, 60135), (164, 60183),

Gene: Margaery_59 Start: 40552, Stop: 41055, Start Num: 92

Candidate Starts for Margaery_59:

(57, 40465), (Start: 92 @40552 has 218 MA's), (125, 40726), (135, 40774), (153, 40858),

Gene: MargaretKali_51 Start: 30616, Stop: 31116, Start Num: 92

Candidate Starts for MargaretKali_51:

(Start: 92 @30616 has 218 MA's), (111, 30697), (114, 30712), (127, 30802), (129, 30814), (135, 30838), (164, 30964),

Gene: Marshmallow_97 Start: 59796, Stop: 60236, Start Num: 95

Candidate Starts for Marshmallow_97:

(32, 59595), (33, 59598), (Start: 38 @59625 has 1 MA's), (40, 59628), (48, 59670), (64, 59724), (Start: 95 @59796 has 122 MA's), (111, 59877), (115, 59895), (140, 60027), (151, 60093), (164, 60141),

Gene: Martha_37 Start: 30823, Stop: 31371, Start Num: 92

Candidate Starts for Martha_37:

(60, 30736), (Start: 92 @30823 has 218 MA's), (104, 30847), (125, 30997), (127, 31009), (135, 31045), (159, 31150), (164, 31171), (178, 31255),

Gene: MaryV_78 Start: 48977, Stop: 49366, Start Num: 94

Candidate Starts for MaryV_78:

(Start: 94 @48977 has 7 MA's), (115, 49073), (122, 49124), (125, 49142), (137, 49196), (150, 49262), (164, 49316),

Gene: Matzah_62 Start: 41397, Stop: 41900, Start Num: 92

Candidate Starts for Matzah_62:

(Start: 92 @41397 has 218 MA's), (125, 41571), (135, 41619), (137, 41625), (138, 41628), (153, 41703),

Gene: Maxxinista_102 Start: 59784, Stop: 60224, Start Num: 95

Candidate Starts for Maxxinista_102:

(Start: 95 @59784 has 122 MA's), (115, 59883), (129, 59979), (140, 60015), (151, 60081), (164, 60129),

Gene: Megan_61 Start: 44759, Stop: 45289, Start Num: 89

Candidate Starts for Megan_61:

(Start: 89 @44759 has 1 MA's), (Start: 92 @44762 has 218 MA's), (112, 44846), (135, 44984), (151, 45062), (153, 45068), (164, 45110),

Gene: MellowYellow_97 Start: 57337, Stop: 56732, Start Num: 92

Candidate Starts for MellowYellow_97:

(Start: 92 @57337 has 218 MA's), (108, 57283), (123, 57175), (150, 57043), (151, 57037), (153, 57031),

Gene: MementoMori_61 Start: 40995, Stop: 41495, Start Num: 92
Candidate Starts for MementoMori_61:
(73, 40959), (75, 40962), (Start: 92 @40995 has 218 MA's), (104, 41019), (135, 41217), (137, 41223),
(138, 41226), (153, 41301),

Gene: MenE_47 Start: 28803, Stop: 29294, Start Num: 92
Candidate Starts for MenE_47:
(Start: 92 @28803 has 218 MA's), (135, 29025), (164, 29151),

Gene: Merry_66 Start: 42731, Stop: 43237, Start Num: 92
Candidate Starts for Merry_66:
(Start: 92 @42731 has 218 MA's), (125, 42905), (129, 42929), (133, 42944), (142, 42974), (153, 43037), (164, 43079),

Gene: Metamorphoo_67 Start: 41843, Stop: 42346, Start Num: 92
Candidate Starts for Metamorphoo_67:
(Start: 92 @41843 has 218 MA's), (125, 42017), (135, 42065), (164, 42191),

Gene: MidnightRain_74 Start: 38613, Stop: 39080, Start Num: 99
Candidate Starts for MidnightRain_74:
(Start: 99 @38613 has 4 MA's), (108, 38658), (133, 38814),

Gene: Miley16_85 Start: 55471, Stop: 55857, Start Num: 96
Candidate Starts for Miley16_85:
(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: Min1_23 Start: 11006, Stop: 11470, Start Num: 92
Candidate Starts for Min1_23:
(Start: 92 @11006 has 218 MA's), (100, 11021), (105, 11033), (111, 11087), (125, 11180), (129, 11204), (135, 11228), (153, 11312),

Gene: Mindy_99 Start: 59117, Stop: 59557, Start Num: 95
Candidate Starts for Mindy_99:
(Start: 95 @59117 has 122 MA's), (115, 59216), (140, 59348), (151, 59414), (164, 59462),

Gene: MiniLon_87 Start: 55260, Stop: 55643, Start Num: 96
Candidate Starts for MiniLon_87:
(Start: 96 @55260 has 72 MA's), (109, 55320), (110, 55332), (114, 55353), (122, 55413), (125, 55431), (140, 55491), (159, 55581),

Gene: MiniMac_87 Start: 55255, Stop: 55638, Start Num: 96
Candidate Starts for MiniMac_87:
(Start: 96 @55255 has 72 MA's), (109, 55315), (110, 55327), (114, 55348), (122, 55408), (125, 55426), (140, 55486), (159, 55576),

Gene: Miniwave_95 Start: 59294, Stop: 59734, Start Num: 95
Candidate Starts for Miniwave_95:
(Start: 95 @59294 has 122 MA's), (111, 59375), (115, 59393), (140, 59525), (151, 59591), (164, 59639),

Gene: Misfit_101 Start: 60897, Stop: 61337, Start Num: 95
Candidate Starts for Misfit_101:

(Start: 95 @60897 has 122 MA's), (115, 60996), (129, 61092), (140, 61128), (151, 61194), (164, 61242),

Gene: Miskis_125 Start: 71364, Stop: 71873, Start Num: 92

Candidate Starts for Miskis_125:

(Start: 92 @71364 has 218 MA's), (100, 71379), (104, 71388), (135, 71586), (164, 71712), (170, 71763), (179, 71823),

Gene: MkaliMitinis3_86 Start: 55320, Stop: 55706, Start Num: 96

Candidate Starts for MkaliMitinis3_86:

(Start: 96 @55320 has 72 MA's), (108, 55371), (110, 55392), (114, 55413), (121, 55452), (122, 55467), (125, 55485), (138, 55542), (140, 55545), (149, 55602),

Gene: Mojorita_46 Start: 31281, Stop: 31766, Start Num: 92

Candidate Starts for Mojorita_46:

(35, 31095), (52, 31176), (55, 31185), (Start: 92 @31281 has 218 MA's), (137, 31509),

Gene: Moldemort_103 Start: 59765, Stop: 60205, Start Num: 95

Candidate Starts for Moldemort_103:

(Start: 95 @59765 has 122 MA's), (115, 59864), (129, 59960), (140, 59996), (151, 60062), (164, 60110),

Gene: Mollymur_84 Start: 57822, Stop: 57259, Start Num: 97

Candidate Starts for Mollymur_84:

(Start: 97 @57822 has 6 MA's), (115, 57723), (155, 57489),

Gene: Moostard_81 Start: 55178, Stop: 55561, Start Num: 96

Candidate Starts for Moostard_81:

(Start: 96 @55178 has 72 MA's), (109, 55238), (110, 55250), (114, 55271), (122, 55331), (125, 55349), (140, 55409), (159, 55499),

Gene: Mordred_101 Start: 64114, Stop: 64683, Start Num: 92

Candidate Starts for Mordred_101:

(Start: 92 @64114 has 218 MA's), (111, 64195), (122, 64270), (129, 64312), (135, 64336), (137, 64342), (140, 64348), (153, 64420), (159, 64441), (164, 64462),

Gene: Mosby_96 Start: 59261, Stop: 59701, Start Num: 95

Candidate Starts for Mosby_96:

(Start: 95 @59261 has 122 MA's), (115, 59360), (129, 59456), (140, 59492), (151, 59558), (164, 59606),

Gene: MoyaNatalis_101 Start: 64054, Stop: 64611, Start Num: 92

Candidate Starts for MoyaNatalis_101:

(Start: 92 @64054 has 218 MA's), (104, 64078), (111, 64135), (123, 64216), (129, 64252), (132, 64264), (135, 64276), (137, 64282), (140, 64288), (153, 64360), (164, 64402),

Gene: MrMagoo_77 Start: 46450, Stop: 46887, Start Num: 91

Candidate Starts for MrMagoo_77:

(Start: 91 @46450 has 26 MA's), (111, 46534), (123, 46615),

Gene: MrSmee_59 Start: 34937, Stop: 35392, Start Num: 99

Candidate Starts for MrSmee_59:

(Start: 99 @34937 has 4 MA's), (119, 35042), (124, 35093), (137, 35156), (138, 35159), (140, 35162), (143, 35174), (152, 35228), (156, 35240), (158, 35249),

Gene: MsGreen_84 Start: 55405, Stop: 55788, Start Num: 96

Candidate Starts for MsGreen_84:

(Start: 96 @55405 has 72 MA's), (109, 55465), (110, 55477), (114, 55498), (122, 55558), (125, 55576), (140, 55636), (159, 55726),

Gene: Mufasa8_48 Start: 36302, Stop: 36853, Start Num: 92

Candidate Starts for Mufasa8_48:

(Start: 92 @36302 has 218 MA's), (111, 36383), (135, 36524), (140, 36536),

Gene: Murica_103 Start: 61600, Stop: 62040, Start Num: 95

Candidate Starts for Murica_103:

(Start: 95 @61600 has 122 MA's), (115, 61699), (140, 61831), (151, 61897), (164, 61945),

Gene: Murphy_100 Start: 60156, Stop: 60596, Start Num: 95

Candidate Starts for Murphy_100:

(Start: 95 @60156 has 122 MA's), (115, 60255), (140, 60387), (151, 60453), (164, 60501),

Gene: Myrale_100 Start: 59956, Stop: 60396, Start Num: 95

Candidate Starts for Myrale_100:

(32, 59755), (33, 59758), (Start: 38 @59785 has 1 MA's), (40, 59788), (48, 59830), (64, 59884), (Start: 95 @59956 has 122 MA's), (111, 60037), (115, 60055), (140, 60187), (151, 60253), (164, 60301),

Gene: Nala_102 Start: 60310, Stop: 60750, Start Num: 95

Candidate Starts for Nala_102:

(Start: 95 @60310 has 122 MA's), (115, 60409), (129, 60505), (140, 60541), (151, 60607), (164, 60655),

Gene: Nanosmite_72 Start: 45490, Stop: 45942, Start Num: 91

Candidate Starts for Nanosmite_72:

(Start: 91 @45490 has 26 MA's), (143, 45739),

Gene: NathanVaag_35 Start: 30573, Stop: 31163, Start Num: 92

Candidate Starts for NathanVaag_35:

(Start: 92 @30573 has 218 MA's), (104, 30597), (135, 30795), (161, 30909), (178, 31044),

Gene: NelitzaMV_97 Start: 58304, Stop: 58744, Start Num: 95

Candidate Starts for NelitzaMV_97:

(64, 58232), (Start: 95 @58304 has 122 MA's), (115, 58403), (129, 58499), (140, 58535), (151, 58601), (164, 58649),

Gene: Netyap_86 Start: 55472, Stop: 55858, Start Num: 96

Candidate Starts for Netyap_86:

(Start: 96 @55472 has 72 MA's), (108, 55523), (110, 55544), (114, 55565), (121, 55604), (122, 55619), (125, 55637), (138, 55694), (140, 55697), (149, 55754),

Gene: Nicholas_81 Start: 55183, Stop: 55566, Start Num: 96

Candidate Starts for Nicholas_81:

(Start: 96 @55183 has 72 MA's), (109, 55243), (110, 55255), (114, 55276), (122, 55336), (125, 55354), (140, 55414), (159, 55504),

Gene: Nicholasp3_85 Start: 55306, Stop: 55692, Start Num: 96

Candidate Starts for Nicholasp3_85:

(Start: 96 @55306 has 72 MA's), (108, 55357), (110, 55378), (114, 55399), (121, 55438), (122, 55453), (125, 55471), (138, 55528), (140, 55531), (149, 55588),

Gene: Nicole72_62 Start: 45253, Stop: 45780, Start Num: 92

Candidate Starts for Nicole72_62:

(Start: 92 @45253 has 218 MA's), (104, 45277), (105, 45280), (125, 45427), (135, 45475), (153, 45559), (164, 45601),

Gene: Nimrod_100 Start: 59923, Stop: 60363, Start Num: 95

Candidate Starts for Nimrod_100:

(32, 59722), (33, 59725), (Start: 38 @59752 has 1 MA's), (40, 59755), (48, 59797), (64, 59851), (Start: 95 @59923 has 122 MA's), (111, 60004), (115, 60022), (140, 60154), (151, 60220), (164, 60268),

Gene: NoSleep_101 Start: 59317, Stop: 59757, Start Num: 95

Candidate Starts for NoSleep_101:

(Start: 95 @59317 has 122 MA's), (115, 59416), (129, 59512), (140, 59548), (151, 59614), (164, 59662),

Gene: NoodlelyBoi_65 Start: 41341, Stop: 41841, Start Num: 88

Candidate Starts for NoodlelyBoi_65:

(Start: 88 @41341 has 2 MA's), (129, 41539), (135, 41563), (153, 41647), (164, 41689),

Gene: Norvs_125 Start: 71351, Stop: 71860, Start Num: 92

Candidate Starts for Norvs_125:

(Start: 92 @71351 has 218 MA's), (100, 71366), (104, 71375), (135, 71573), (164, 71699), (170, 71750), (179, 71810),

Gene: NyleyClemson_96 Start: 56955, Stop: 56350, Start Num: 92

Candidate Starts for NyleyClemson_96:

(Start: 92 @56955 has 218 MA's), (123, 56793), (150, 56661), (151, 56655), (153, 56649), (159, 56628),

Gene: Odyssey395_96 Start: 57117, Stop: 56512, Start Num: 92

Candidate Starts for Odyssey395_96:

(Start: 92 @57117 has 218 MA's), (108, 57063), (123, 56955), (150, 56823), (151, 56817), (153, 56811), (165, 56766),

Gene: OhShagHennessy_79 Start: 53016, Stop: 53399, Start Num: 96

Candidate Starts for OhShagHennessy_79:

(86, 53001), (Start: 96 @53016 has 72 MA's), (114, 53109), (122, 53163), (125, 53181), (140, 53241), (149, 53298),

Gene: OneUp_111 Start: 69624, Stop: 70130, Start Num: 92

Candidate Starts for OneUp_111:

(Start: 92 @69624 has 218 MA's), (129, 69822),

Gene: Onika_63 Start: 40570, Stop: 41076, Start Num: 92

Candidate Starts for Onika_63:

(Start: 92 @40570 has 218 MA's), (100, 40585), (135, 40792), (153, 40876), (164, 40918),

Gene: Orcanus_53 Start: 34413, Stop: 34919, Start Num: 92

Candidate Starts for Orcanus_53:

(44, 34269), (Start: 92 @34413 has 218 MA's), (111, 34494), (125, 34587), (135, 34635), (137, 34641), (153, 34719), (166, 34770),

Gene: OrionPax_99 Start: 59389, Stop: 59829, Start Num: 95

Candidate Starts for OrionPax_99:

(Start: 95 @59389 has 122 MA's), (115, 59488), (129, 59584), (140, 59620), (151, 59686), (164, 59734),

Gene: Ottawa_81 Start: 48211, Stop: 48849, Start Num: 92

Candidate Starts for Ottawa_81:

(Start: 92 @48211 has 218 MA's), (111, 48292), (153, 48514),

Gene: PFR1_50 Start: 34850, Stop: 35323, Start Num: 92

Candidate Starts for PFR1_50:

(Start: 92 @34850 has 218 MA's), (105, 34877), (125, 35024), (129, 35048), (135, 35072), (137, 35078), (149, 35141), (156, 35165), (159, 35177),

Gene: PFR2_52 Start: 36419, Stop: 36892, Start Num: 92

Candidate Starts for PFR2_52:

(Start: 92 @36419 has 218 MA's), (105, 36446), (125, 36593), (129, 36617), (135, 36641), (137, 36647), (149, 36710), (156, 36734), (159, 36746),

Gene: PSonyx_96 Start: 53094, Stop: 52513, Start Num: 92

Candidate Starts for PSonyx_96:

(66, 53160), (Start: 92 @53094 has 218 MA's), (108, 53040), (129, 52896), (135, 52872),

Gene: PYPDinur_82 Start: 54492, Stop: 54899, Start Num: 96

Candidate Starts for PYPDinur_82:

(Start: 96 @54492 has 72 MA's), (110, 54564), (114, 54585), (121, 54624), (138, 54714), (140, 54717), (168, 54858),

Gene: Palpatine_101 Start: 60595, Stop: 61035, Start Num: 95

Candidate Starts for Palpatine_101:

(Start: 95 @60595 has 122 MA's), (115, 60694), (129, 60790), (140, 60826), (151, 60892), (164, 60940),

Gene: PapayaSalad_45 Start: 30774, Stop: 31235, Start Num: 92

Candidate Starts for PapayaSalad_45:

(26, 30519), (27, 30534), (61, 30690), (Start: 92 @30774 has 218 MA's), (123, 30936), (124, 30942),

Gene: Paperbeatsrock_99 Start: 59972, Stop: 60412, Start Num: 95

Candidate Starts for Paperbeatsrock_99:

(Start: 95 @59972 has 122 MA's), (111, 60053), (115, 60071), (140, 60203), (151, 60269), (164, 60317),

Gene: Paschalis_64 Start: 40592, Stop: 41095, Start Num: 92

Candidate Starts for Paschalis_64:

(Start: 92 @40592 has 218 MA's), (100, 40607), (135, 40814), (153, 40898), (164, 40940),

Gene: Pat3_97 Start: 58489, Stop: 58929, Start Num: 95

Candidate Starts for Pat3_97:

(69, 58432), (Start: 95 @58489 has 122 MA's), (115, 58588), (140, 58720), (151, 58786), (164, 58834),

Gene: PegLeg_66 Start: 43606, Stop: 44052, Start Num: 91

Candidate Starts for PegLeg_66:

(78, 43570), (Start: 91 @43606 has 26 MA's), (111, 43690), (123, 43771), (127, 43795), (164, 43954),

Gene: Persistence_65 Start: 36167, Stop: 36694, Start Num: 92

Candidate Starts for Persistence_65:

(Start: 92 @36167 has 218 MA's), (131, 36386), (151, 36479), (156, 36494),

Gene: Petra64142_104 Start: 60461, Stop: 60901, Start Num: 95

Candidate Starts for Petra64142_104:

(64, 60389), (Start: 95 @60461 has 122 MA's), (115, 60560), (129, 60656), (140, 60692), (151, 60758), (164, 60806),

Gene: Phaja_98 Start: 59176, Stop: 59616, Start Num: 95

Candidate Starts for Phaja_98:

(32, 58975), (33, 58978), (Start: 38 @59005 has 1 MA's), (40, 59008), (48, 59050), (64, 59104), (Start: 95 @59176 has 122 MA's), (111, 59257), (115, 59275), (140, 59407), (151, 59473), (164, 59521),

Gene: Pharsalus_97 Start: 59671, Stop: 60111, Start Num: 95

Candidate Starts for Pharsalus_97:

(Start: 95 @59671 has 122 MA's), (115, 59770), (140, 59902), (151, 59968), (164, 60016),

Gene: PhatBacter_103 Start: 60340, Stop: 60780, Start Num: 95

Candidate Starts for PhatBacter_103:

(Start: 95 @60340 has 122 MA's), (115, 60439), (129, 60535), (140, 60571), (151, 60637), (164, 60685),

Gene: Phaux_102 Start: 60900, Stop: 61340, Start Num: 95

Candidate Starts for Phaux_102:

(Start: 95 @60900 has 122 MA's), (115, 60999), (129, 61095), (140, 61131), (151, 61197), (164, 61245),

Gene: PhinkBoden_126 Start: 72216, Stop: 72725, Start Num: 92

Candidate Starts for PhinkBoden_126:

(Start: 92 @72216 has 218 MA's), (100, 72231), (104, 72240), (135, 72438), (164, 72564), (170, 72615), (179, 72675),

Gene: PhluffyCoco_55 Start: 33606, Stop: 34115, Start Num: 92

Candidate Starts for PhluffyCoco_55:

(Start: 92 @33606 has 218 MA's), (107, 33645), (111, 33687), (118, 33720), (125, 33780), (135, 33828), (140, 33840), (149, 33897), (153, 33912), (159, 33933), (164, 33954),

Gene: Phonegingi_45 Start: 28583, Stop: 29074, Start Num: 92

Candidate Starts for Phonegingi_45:

(Start: 92 @28583 has 218 MA's), (135, 28805), (153, 28889), (164, 28931),

Gene: Phorgeous_64 Start: 40378, Stop: 40884, Start Num: 92

Candidate Starts for Phorgeous_64:

(Start: 92 @40378 has 218 MA's), (100, 40393), (135, 40600), (153, 40684), (164, 40726),

Gene: Phrancesco_64 Start: 40701, Stop: 41207, Start Num: 92
Candidate Starts for Phrancesco_64:
(Start: 92 @40701 has 218 MA's), (100, 40716), (135, 40923), (153, 41007), (164, 41049),

Gene: Phrank15_74 Start: 38031, Stop: 38585, Start Num: 92
Candidate Starts for Phrank15_74:
(77, 37992), (Start: 92 @38031 has 218 MA's), (116, 38133), (131, 38250),

Gene: Phrux_97 Start: 59176, Stop: 59616, Start Num: 95
Candidate Starts for Phrux_97:
(Start: 95 @59176 has 122 MA's), (115, 59275), (129, 59371), (140, 59407), (151, 59473), (164, 59521),

Gene: Picard_46 Start: 31479, Stop: 31958, Start Num: 92
Candidate Starts for Picard_46:
(13, 31044), (20, 31185), (22, 31200), (35, 31293), (52, 31374), (Start: 92 @31479 has 218 MA's),
(125, 31653), (137, 31707),

Gene: Piccadilly_45 Start: 30655, Stop: 31134, Start Num: 92
Candidate Starts for Piccadilly_45:
(Start: 92 @30655 has 218 MA's), (149, 30946),

Gene: Piccoletto_35 Start: 30574, Stop: 31161, Start Num: 92
Candidate Starts for Piccoletto_35:
(Start: 92 @30574 has 218 MA's), (104, 30598), (135, 30796), (161, 30910), (178, 31045),

Gene: Pickles13_44 Start: 28847, Stop: 29341, Start Num: 92
Candidate Starts for Pickles13_44:
(Start: 92 @28847 has 218 MA's), (135, 29069), (142, 29090), (153, 29153), (164, 29195),

Gene: PierreOrion_64 Start: 40801, Stop: 41307, Start Num: 92
Candidate Starts for PierreOrion_64:
(Start: 92 @40801 has 218 MA's), (100, 40816), (135, 41023), (153, 41107), (164, 41149),

Gene: PiperSansNom_65 Start: 40883, Stop: 41386, Start Num: 92
Candidate Starts for PiperSansNom_65:
(Start: 92 @40883 has 218 MA's), (100, 40898), (135, 41105), (153, 41189), (164, 41231),

Gene: Piperis_65 Start: 40503, Stop: 41009, Start Num: 92
Candidate Starts for Piperis_65:
(Start: 92 @40503 has 218 MA's), (100, 40518), (135, 40725), (153, 40809), (164, 40851),

Gene: Pippa_37 Start: 30966, Stop: 31526, Start Num: 92
Candidate Starts for Pippa_37:
(Start: 92 @30966 has 218 MA's), (104, 30990), (135, 31188), (159, 31293), (161, 31302), (164, 31314), (178, 31410),

Gene: Pitbull_60 Start: 34082, Stop: 34579, Start Num: 91
Candidate Starts for Pitbull_60:
(Start: 91 @34082 has 26 MA's), (125, 34256), (149, 34373), (159, 34409), (164, 34430),

Gene: Pointis_93 Start: 57013, Stop: 56408, Start Num: 92
Candidate Starts for Pointis_93:

(Start: 92 @57013 has 218 MA's), (108, 56959), (123, 56851), (150, 56719), (151, 56713), (153, 56707), (165, 56662),

Gene: Policronamos_103 Start: 60604, Stop: 61044, Start Num: 95

Candidate Starts for Policronamos_103:

(Start: 95 @60604 has 122 MA's), (115, 60703), (129, 60799), (140, 60835), (151, 60901), (164, 60949),

Gene: Porky_99 Start: 58920, Stop: 59360, Start Num: 95

Candidate Starts for Porky_99:

(Start: 95 @58920 has 122 MA's), (115, 59019), (129, 59115), (140, 59151), (151, 59217), (164, 59265),

Gene: Prairie_42 Start: 31210, Stop: 31767, Start Num: 92

Candidate Starts for Prairie_42:

(Start: 92 @31210 has 218 MA's), (135, 31432), (149, 31501), (164, 31558),

Gene: PrincessTrina_102 Start: 64305, Stop: 64874, Start Num: 92

Candidate Starts for PrincessTrina_102:

(Start: 92 @64305 has 218 MA's), (111, 64386), (122, 64461), (129, 64503), (135, 64527), (137, 64533), (140, 64539), (153, 64611), (159, 64632), (164, 64653),

Gene: Pulchra_66 Start: 40899, Stop: 41405, Start Num: 92

Candidate Starts for Pulchra_66:

(Start: 92 @40899 has 218 MA's), (100, 40914), (135, 41121), (153, 41205), (164, 41247),

Gene: Pumpkin_102 Start: 59517, Stop: 59957, Start Num: 95

Candidate Starts for Pumpkin_102:

(40, 59355), (64, 59445), (Start: 95 @59517 has 122 MA's), (115, 59616), (140, 59748), (151, 59814), (164, 59862),

Gene: Pureglobe5_96 Start: 57675, Stop: 57070, Start Num: 92

Candidate Starts for Pureglobe5_96:

(Start: 92 @57675 has 218 MA's), (108, 57621), (123, 57513), (150, 57381), (151, 57375), (153, 57369), (165, 57324),

Gene: Quallification_101 Start: 60386, Stop: 60826, Start Num: 95

Candidate Starts for Quallification_101:

(Start: 95 @60386 has 122 MA's), (115, 60485), (129, 60581), (140, 60617), (151, 60683), (164, 60731),

Gene: Quby_83 Start: 53820, Stop: 54227, Start Num: 96

Candidate Starts for Quby_83:

(Start: 96 @53820 has 72 MA's), (110, 53892), (114, 53913), (121, 53952), (122, 53967), (127, 53997), (138, 54042), (140, 54045), (168, 54186),

Gene: Quhwah_68 Start: 41191, Stop: 41694, Start Num: 92

Candidate Starts for Quhwah_68:

(Start: 92 @41191 has 218 MA's), (100, 41206), (135, 41413), (153, 41497), (164, 41539),

Gene: REQ3_26 Start: 12169, Stop: 12615, Start Num: 96

Candidate Starts for REQ3_26:

(Start: 96 @12169 has 72 MA's), (107, 12205), (108, 12220), (123, 12328), (125, 12340), (132, 12376), (164, 12514),

Gene: RadFad_76 Start: 38827, Stop: 39300, Start Num: 99

Candidate Starts for RadFad_76:

(Start: 99 @38827 has 4 MA's), (108, 38872), (133, 39028),

Gene: Rakim_101 Start: 59237, Stop: 59848, Start Num: 38

Candidate Starts for Rakim_101:

(32, 59207), (33, 59210), (Start: 38 @59237 has 1 MA's), (40, 59240), (48, 59282), (64, 59336), (Start: 95 @59408 has 122 MA's), (115, 59507), (140, 59639), (151, 59705), (164, 59753),

Gene: Raleigh_44 Start: 33967, Stop: 34464, Start Num: 92

Candidate Starts for Raleigh_44:

(49, 33844), (50, 33853), (Start: 92 @33967 has 218 MA's), (114, 34063), (122, 34123), (124, 34135), (137, 34195),

Gene: Ramiel05_63 Start: 40561, Stop: 41067, Start Num: 92

Candidate Starts for Ramiel05_63:

(Start: 92 @40561 has 218 MA's), (100, 40576), (135, 40783), (153, 40867), (164, 40909),

Gene: Ranunculus_85 Start: 57963, Stop: 57334, Start Num: 92

Candidate Starts for Ranunculus_85:

(74, 58008), (Start: 92 @57963 has 218 MA's), (111, 57882), (125, 57789), (162, 57624), (175, 57519),

Gene: Raphaella_71 Start: 37149, Stop: 37670, Start Num: 92

Candidate Starts for Raphaella_71:

(Start: 92 @37149 has 218 MA's), (116, 37251), (131, 37368),

Gene: Raqqa_67 Start: 35948, Stop: 36466, Start Num: 92

Candidate Starts for Raqqa_67:

(Start: 92 @35948 has 218 MA's), (111, 36029), (131, 36167), (142, 36203), (150, 36254),

Gene: RedFox_55 Start: 33605, Stop: 34114, Start Num: 92

Candidate Starts for RedFox_55:

(Start: 92 @33605 has 218 MA's), (111, 33686), (118, 33719), (125, 33779), (135, 33827), (140, 33839), (149, 33896), (153, 33911), (159, 33932), (164, 33953),

Gene: Reindeer_69 Start: 45000, Stop: 45446, Start Num: 91

Candidate Starts for Reindeer_69:

(80, 44970), (82, 44976), (Start: 91 @45000 has 26 MA's), (111, 45084), (123, 45165), (148, 45279), (164, 45348),

Gene: Renna12_54 Start: 33458, Stop: 33970, Start Num: 92

Candidate Starts for Renna12_54:

(Start: 92 @33458 has 218 MA's), (111, 33539), (118, 33572), (125, 33632), (135, 33680), (140, 33692), (149, 33749), (153, 33764), (159, 33785), (164, 33806),

Gene: Rey_73 Start: 45977, Stop: 46417, Start Num: 91

Candidate Starts for Rey_73:

(Start: 91 @45977 has 26 MA's), (123, 46142), (137, 46208), (151, 46280),

Gene: Richie_74 Start: 38954, Stop: 39472, Start Num: 92
Candidate Starts for Richie_74:
(Start: 92 @38954 has 218 MA's), (116, 39056), (131, 39173),

Gene: RickRoss_14 Start: 6690, Stop: 6268, Start Num: 91
Candidate Starts for RickRoss_14:
(Start: 91 @6690 has 26 MA's), (105, 6657), (121, 6543), (149, 6393), (160, 6354),

Gene: Rimmer_98 Start: 59798, Stop: 60238, Start Num: 95
Candidate Starts for Rimmer_98:
(69, 59741), (Start: 95 @59798 has 122 MA's), (115, 59897), (140, 60029), (151, 60095), (164, 60143),

Gene: RiverMonster_100 Start: 60072, Stop: 60512, Start Num: 95
Candidate Starts for RiverMonster_100:
(Start: 95 @60072 has 122 MA's), (115, 60171), (129, 60267), (140, 60303), (151, 60369), (164, 60417),

Gene: Rizwana_72 Start: 51720, Stop: 51190, Start Num: 92
Candidate Starts for Rizwana_72:
(Start: 92 @51720 has 218 MA's), (104, 51696), (121, 51579), (135, 51498), (143, 51474), (150, 51423), (153, 51411), (185, 51243),

Gene: RobsFeet_68 Start: 42128, Stop: 42631, Start Num: 92
Candidate Starts for RobsFeet_68:
(Start: 92 @42128 has 218 MA's), (125, 42302), (135, 42350), (164, 42476),

Gene: Rose5_83 Start: 53936, Stop: 54319, Start Num: 96
Candidate Starts for Rose5_83:
(Start: 96 @53936 has 72 MA's), (114, 54029), (122, 54083), (125, 54101), (140, 54161), (149, 54218),

Gene: RosiePosie_101 Start: 64170, Stop: 64727, Start Num: 92
Candidate Starts for RosiePosie_101:
(Start: 92 @64170 has 218 MA's), (106, 64206), (111, 64251), (114, 64266), (132, 64380), (135, 64392), (140, 64404), (153, 64476), (159, 64497), (164, 64518),

Gene: Ruchi_52 Start: 33757, Stop: 34278, Start Num: 92
Candidate Starts for Ruchi_52:
(Start: 92 @33757 has 218 MA's), (111, 33838), (135, 33979), (137, 33985), (166, 34114),

Gene: Rumpelstiltskin_82 Start: 55099, Stop: 55485, Start Num: 96
Candidate Starts for Rumpelstiltskin_82:
(Start: 96 @55099 has 72 MA's), (108, 55150), (110, 55171), (114, 55192), (121, 55231), (122, 55246), (125, 55264), (138, 55321), (140, 55324), (149, 55381),

Gene: SV1_43 Start: 30169, Stop: 30636, Start Num: 92
Candidate Starts for SV1_43:
(Start: 92 @30169 has 218 MA's), (105, 30196), (137, 30397),

Gene: Saints25_97 Start: 58002, Stop: 58442, Start Num: 95
Candidate Starts for Saints25_97:

(43, 57852), (51, 57882), (67, 57930), (71, 57945), (76, 57957), (Start: 95 @58002 has 122 MA's), (115, 58101), (129, 58197), (140, 58233), (151, 58299), (164, 58347),

Gene: Sakai_69 Start: 37702, Stop: 38220, Start Num: 92
Candidate Starts for Sakai_69:
(Start: 92 @37702 has 218 MA's), (116, 37804), (131, 37921),

Gene: Samty_82 Start: 55171, Stop: 55554, Start Num: 96
Candidate Starts for Samty_82:
(Start: 96 @55171 has 72 MA's), (109, 55231), (110, 55243), (114, 55264), (122, 55324), (125, 55342), (140, 55402), (159, 55492),

Gene: Sarge_49 Start: 28989, Stop: 29513, Start Num: 92
Candidate Starts for Sarge_49:
(Start: 92 @28989 has 218 MA's), (131, 29208),

Gene: Sarshaun_86 Start: 55564, Stop: 55950, Start Num: 96
Candidate Starts for Sarshaun_86:
(Start: 96 @55564 has 72 MA's), (108, 55615), (110, 55636), (114, 55657), (121, 55696), (122, 55711), (125, 55729), (138, 55786), (140, 55789), (149, 55846),

Gene: Sashimi_71 Start: 38075, Stop: 38557, Start Num: 99
Candidate Starts for Sashimi_71:
(Start: 99 @38075 has 4 MA's), (108, 38120), (111, 38147), (127, 38249), (140, 38297), (156, 38375),

Gene: Sassay_95 Start: 58223, Stop: 58663, Start Num: 95
Candidate Starts for Sassay_95:
(Start: 95 @58223 has 122 MA's), (115, 58322), (129, 58418), (140, 58454), (151, 58520), (164, 58568),

Gene: Savannah_63 Start: 40621, Stop: 41124, Start Num: 92
Candidate Starts for Savannah_63:
(Start: 92 @40621 has 218 MA's), (100, 40636), (135, 40843), (153, 40927), (164, 40969),

Gene: Scavito_102 Start: 64163, Stop: 64732, Start Num: 92
Candidate Starts for Scavito_102:
(Start: 92 @64163 has 218 MA's), (111, 64244), (122, 64319), (129, 64361), (135, 64385), (137, 64391), (140, 64397), (153, 64469), (159, 64490), (164, 64511),

Gene: Schmidt_48 Start: 32790, Stop: 33275, Start Num: 92
Candidate Starts for Schmidt_48:
(Start: 92 @32790 has 218 MA's), (105, 32817), (121, 32931), (123, 32952), (149, 33081), (153, 33096), (164, 33138),

Gene: Scumberland_66 Start: 40816, Stop: 41319, Start Num: 92
Candidate Starts for Scumberland_66:
(Start: 92 @40816 has 218 MA's), (100, 40831), (135, 41038), (153, 41122), (164, 41164),

Gene: Seahorse_76 Start: 40120, Stop: 40581, Start Num: 92
Candidate Starts for Seahorse_76:
(Start: 92 @40120 has 218 MA's), (115, 40219), (128, 40312), (132, 40342), (167, 40489),

Gene: Selwyn23_65 Start: 40733, Stop: 41236, Start Num: 92

Candidate Starts for Selwyn23_65:

(Start: 92 @40733 has 218 MA's), (100, 40748), (135, 40955), (153, 41039), (164, 41081),

Gene: Shade_37 Start: 30810, Stop: 31367, Start Num: 92

Candidate Starts for Shade_37:

(60, 30723), (Start: 92 @30810 has 218 MA's), (104, 30834), (133, 31023), (135, 31032), (159, 31137), (161, 31146), (164, 31158), (178, 31251),

Gene: ShamWow_100 Start: 60193, Stop: 60633, Start Num: 95

Candidate Starts for ShamWow_100:

(Start: 95 @60193 has 122 MA's), (115, 60292), (129, 60388), (140, 60424), (151, 60490), (164, 60538),

Gene: Sheng711_84 Start: 54126, Stop: 54533, Start Num: 96

Candidate Starts for Sheng711_84:

(Start: 96 @54126 has 72 MA's), (110, 54198), (114, 54219), (121, 54258), (122, 54273), (127, 54303), (138, 54348), (140, 54351), (168, 54492),

Gene: ShereKhan_98 Start: 60632, Stop: 61072, Start Num: 95

Candidate Starts for ShereKhan_98:

(Start: 95 @60632 has 122 MA's), (115, 60731), (129, 60827), (140, 60863), (151, 60929), (164, 60977),

Gene: Shotgun_64 Start: 40497, Stop: 41003, Start Num: 92

Candidate Starts for Shotgun_64:

(Start: 92 @40497 has 218 MA's), (100, 40512), (135, 40719), (153, 40803), (164, 40845),

Gene: Shoya_55 Start: 31189, Stop: 31710, Start Num: 92

Candidate Starts for Shoya_55:

(Start: 92 @31189 has 218 MA's), (112, 31273), (114, 31285), (131, 31408),

Gene: Sicarius2_38 Start: 30424, Stop: 30954, Start Num: 92

Candidate Starts for Sicarius2_38:

(Start: 92 @30424 has 218 MA's), (123, 30586), (125, 30598), (135, 30646), (142, 30667),

Gene: SilentRX_70 Start: 50764, Stop: 50189, Start Num: 92

Candidate Starts for SilentRX_70:

(Start: 92 @50764 has 218 MA's), (111, 50683), (127, 50578), (129, 50566), (135, 50542), (150, 50470),

Gene: Silverleaf_82 Start: 53392, Stop: 53775, Start Num: 96

Candidate Starts for Silverleaf_82:

(Start: 96 @53392 has 72 MA's), (114, 53485), (122, 53539), (125, 53557), (140, 53617), (149, 53674),

Gene: Simpliphy_99 Start: 59643, Stop: 60083, Start Num: 95

Candidate Starts for Simpliphy_99:

(Start: 95 @59643 has 122 MA's), (115, 59742), (129, 59838), (140, 59874), (151, 59940), (164, 59988),

Gene: SirDuracell_100 Start: 59010, Stop: 59450, Start Num: 95

Candidate Starts for SirDuracell_100:

(69, 58953), (Start: 95 @59010 has 122 MA's), (115, 59109), (140, 59241), (151, 59307), (164, 59355),

Gene: Skinny_69 Start: 44296, Stop: 44742, Start Num: 91

Candidate Starts for Skinny_69:

(78, 44260), (Start: 91 @44296 has 26 MA's), (111, 44380), (123, 44461), (127, 44485), (164, 44644),

Gene: SlimJimmy_66 Start: 43851, Stop: 44297, Start Num: 91

Candidate Starts for SlimJimmy_66:

(78, 43815), (Start: 91 @43851 has 26 MA's), (111, 43935), (123, 44016), (127, 44040), (164, 44199),

Gene: Smarties_74 Start: 42439, Stop: 42945, Start Num: 92

Candidate Starts for Smarties_74:

(59, 42349), (72, 42394), (Start: 89 @42436 has 1 MA's), (Start: 92 @42439 has 218 MA's), (125, 42613), (135, 42661), (137, 42667), (153, 42745), (164, 42787),

Gene: Smoothie_127 Start: 71932, Stop: 72441, Start Num: 92

Candidate Starts for Smoothie_127:

(Start: 92 @71932 has 218 MA's), (100, 71947), (104, 71956), (135, 72154), (164, 72280), (170, 72331), (179, 72391),

Gene: Snenia_83 Start: 55407, Stop: 55790, Start Num: 96

Candidate Starts for Snenia_83:

(Start: 96 @55407 has 72 MA's), (109, 55467), (110, 55479), (114, 55500), (122, 55560), (125, 55578), (140, 55638), (159, 55728),

Gene: SoJo_44 Start: 31978, Stop: 32505, Start Num: 92

Candidate Starts for SoJo_44:

(20, 31687), (22, 31702), (35, 31795), (52, 31876), (55, 31885), (Start: 92 @31978 has 218 MA's), (124, 32146), (137, 32206), (141, 32215), (164, 32323), (183, 32485),

Gene: Soap141_85 Start: 55564, Stop: 55950, Start Num: 96

Candidate Starts for Soap141_85:

(Start: 96 @55564 has 72 MA's), (108, 55615), (110, 55636), (114, 55657), (121, 55696), (122, 55711), (125, 55729), (138, 55786), (140, 55789), (149, 55846),

Gene: Sonali_48 Start: 38621, Stop: 39217, Start Num: 92

Candidate Starts for Sonali_48:

(Start: 92 @38621 has 218 MA's), (127, 38807), (138, 38852), (153, 38927),

Gene: Sonny_37 Start: 30840, Stop: 31397, Start Num: 92

Candidate Starts for Sonny_37:

(60, 30753), (Start: 92 @30840 has 218 MA's), (104, 30864), (133, 31053), (135, 31062), (159, 31167), (161, 31176), (164, 31188), (178, 31281),

Gene: Soos_82 Start: 55154, Stop: 55576, Start Num: 96

Candidate Starts for Soos_82:

(29, 54929), (39, 54968), (56, 55049), (93, 55151), (Start: 96 @55154 has 72 MA's), (112, 55238), (116, 55256), (150, 55448), (151, 55454),

Gene: SophKB_97 Start: 58991, Stop: 59434, Start Num: 95

Candidate Starts for SophKB_97:

(Start: 95 @58991 has 122 MA's), (111, 59072), (115, 59090), (140, 59222), (151, 59288), (164, 59336), (173, 59423),

Gene: Sotrice96_101 Start: 59897, Stop: 60337, Start Num: 95

Candidate Starts for Sotrice96_101:

(Start: 95 @59897 has 122 MA's), (115, 59996), (140, 60128), (151, 60194), (164, 60242),

Gene: SpeedDemon_850 Start: 59020, Stop: 58460, Start Num: 97

Candidate Starts for SpeedDemon_850:

(Start: 97 @59020 has 6 MA's), (155, 58687), (169, 58621),

Gene: SpicyFrank_74 Start: 38376, Stop: 38855, Start Num: 99

Candidate Starts for SpicyFrank_74:

(Start: 99 @38376 has 4 MA's), (144, 38619), (147, 38634), (151, 38670), (153, 38676),

Gene: Splinter_54 Start: 36171, Stop: 36677, Start Num: 92

Candidate Starts for Splinter_54:

(Start: 92 @36171 has 218 MA's), (123, 36333), (140, 36405), (153, 36477), (164, 36519),

Gene: Stank_102 Start: 59671, Stop: 60111, Start Num: 95

Candidate Starts for Stank_102:

(32, 59470), (33, 59473), (Start: 38 @59500 has 1 MA's), (40, 59503), (48, 59545), (64, 59599), (Start: 95 @59671 has 122 MA's), (115, 59770), (140, 59902), (151, 59968), (164, 60016),

Gene: Stark_101 Start: 59955, Stop: 60395, Start Num: 95

Candidate Starts for Stark_101:

(Start: 95 @59955 has 122 MA's), (115, 60054), (129, 60150), (140, 60186), (151, 60252), (164, 60300),

Gene: StellaBean_99 Start: 60033, Stop: 60473, Start Num: 95

Candidate Starts for StellaBean_99:

(Start: 95 @60033 has 122 MA's), (115, 60132), (140, 60264), (151, 60330), (164, 60378),

Gene: StevieBAY_37 Start: 30898, Stop: 31446, Start Num: 92

Candidate Starts for StevieBAY_37:

(Start: 92 @30898 has 218 MA's), (104, 30922), (135, 31120), (161, 31234), (164, 31246), (178, 31324),

Gene: Sting_85 Start: 55593, Stop: 56015, Start Num: 96

Candidate Starts for Sting_85:

(29, 55368), (39, 55407), (56, 55488), (93, 55590), (Start: 96 @55593 has 72 MA's), (112, 55677), (116, 55695), (150, 55887), (151, 55893),

Gene: StolenFromERC_102 Start: 59596, Stop: 60036, Start Num: 95

Candidate Starts for StolenFromERC_102:

(32, 59395), (33, 59398), (Start: 38 @59425 has 1 MA's), (40, 59428), (48, 59470), (64, 59524), (Start: 95 @59596 has 122 MA's), (115, 59695), (140, 59827), (151, 59893), (164, 59941),

Gene: Sunfish_76 Start: 46316, Stop: 45759, Start Num: 92

Candidate Starts for Sunfish_76:

(Start: 92 @46316 has 218 MA's), (104, 46292), (108, 46262), (111, 46235), (159, 45989), (164, 45968), (171, 45893), (181, 45806),

Gene: Sunny_66 Start: 42733, Stop: 43239, Start Num: 92

Candidate Starts for Sunny_66:

(Start: 92 @42733 has 218 MA's), (125, 42907), (129, 42931), (133, 42946), (142, 42976), (153, 43039), (164, 43081),

Gene: TBrady12_103 Start: 59111, Stop: 59551, Start Num: 95

Candidate Starts for TBrady12_103:

(32, 58910), (33, 58913), (Start: 38 @58940 has 1 MA's), (40, 58943), (48, 58985), (64, 59039), (Start: 95 @59111 has 122 MA's), (115, 59210), (129, 59306), (140, 59342), (151, 59408), (164, 59456),

Gene: TZGordon_56 Start: 35517, Stop: 36008, Start Num: 92

Candidate Starts for TZGordon_56:

(Start: 92 @35517 has 218 MA's), (123, 35679), (140, 35751), (148, 35796), (153, 35823),

Gene: TaeYoung_37 Start: 30823, Stop: 31371, Start Num: 92

Candidate Starts for TaeYoung_37:

(60, 30736), (Start: 92 @30823 has 218 MA's), (104, 30847), (125, 30997), (127, 31009), (135, 31045), (159, 31150), (164, 31171), (178, 31255),

Gene: Tank_72 Start: 51819, Stop: 51199, Start Num: 92

Candidate Starts for Tank_72:

(Start: 92 @51819 has 218 MA's), (104, 51795), (111, 51738), (135, 51597), (154, 51513),

Gene: Tarkin_99 Start: 60497, Stop: 60937, Start Num: 95

Candidate Starts for Tarkin_99:

(Start: 95 @60497 has 122 MA's), (115, 60596), (129, 60692), (140, 60728), (151, 60794), (164, 60842),

Gene: TaylorSipht_54 Start: 34187, Stop: 34702, Start Num: 92

Candidate Starts for TaylorSipht_54:

(Start: 92 @34187 has 218 MA's), (111, 34268), (137, 34415), (140, 34421), (153, 34493), (159, 34514), (166, 34544),

Gene: Teamocil_68 Start: 40761, Stop: 41264, Start Num: 92

Candidate Starts for Teamocil_68:

(Start: 92 @40761 has 218 MA's), (135, 40983), (153, 41067),

Gene: TeardropMSU_96 Start: 58978, Stop: 59418, Start Num: 95

Candidate Starts for TeardropMSU_96:

(Start: 95 @58978 has 122 MA's), (115, 59077), (140, 59209), (151, 59275), (164, 59323),

Gene: Teaspoon_101 Start: 59854, Stop: 60294, Start Num: 95

Candidate Starts for Teaspoon_101:

(Start: 95 @59854 has 122 MA's), (115, 59953), (129, 60049), (140, 60085), (151, 60151), (164, 60199),

Gene: Teng_47 Start: 26473, Stop: 25979, Start Num: 92

Candidate Starts for Teng_47:

(Start: 92 @26473 has 218 MA's), (123, 26311), (164, 26125),

Gene: Terij_60 Start: 39794, Stop: 40297, Start Num: 92

Candidate Starts for Terij_60:

(Start: 92 @39794 has 218 MA's), (135, 40016), (153, 40100), (164, 40142),

Gene: Terminus_103 Start: 60897, Stop: 61337, Start Num: 95

Candidate Starts for Terminus_103:

(Start: 95 @60897 has 122 MA's), (115, 60996), (129, 61092), (140, 61128), (151, 61194), (164, 61242),

Gene: ThayneTheZag_76 Start: 38042, Stop: 38506, Start Num: 92

Candidate Starts for ThayneTheZag_76:

(Start: 92 @38042 has 218 MA's), (115, 38141), (128, 38234), (167, 38411),

Gene: Thresher_102 Start: 60735, Stop: 61175, Start Num: 95

Candidate Starts for Thresher_102:

(Start: 95 @60735 has 122 MA's), (115, 60834), (129, 60930), (140, 60966), (151, 61032), (164, 61080),

Gene: Tiff81_72 Start: 36649, Stop: 37155, Start Num: 92

Candidate Starts for Tiff81_72:

(Start: 92 @36649 has 218 MA's), (111, 36730), (131, 36868),

Gene: Timinator_37 Start: 30897, Stop: 31436, Start Num: 92

Candidate Starts for Timinator_37:

(Start: 92 @30897 has 218 MA's), (104, 30921), (135, 31119), (164, 31245), (182, 31344),

Gene: TinaLin_53 Start: 34968, Stop: 35471, Start Num: 92

Candidate Starts for TinaLin_53:

(Start: 92 @34968 has 218 MA's), (123, 35130), (148, 35247), (149, 35259), (150, 35262), (153, 35274),

Gene: ToastyFinz_43 Start: 32811, Stop: 33314, Start Num: 92

Candidate Starts for ToastyFinz_43:

(5, 32205), (6, 32223), (13, 32376), (14, 32385), (20, 32517), (22, 32532), (35, 32625), (52, 32706), (55, 32715), (Start: 92 @32811 has 218 MA's), (108, 32865), (111, 32892), (125, 32985), (137, 33039), (151, 33108),

Gene: Tomaszewski_95 Start: 59435, Stop: 59875, Start Num: 95

Candidate Starts for Tomaszewski_95:

(69, 59378), (Start: 95 @59435 has 122 MA's), (115, 59534), (129, 59630), (140, 59666), (151, 59732), (164, 59780),

Gene: Toniann_126 Start: 71461, Stop: 71970, Start Num: 92

Candidate Starts for Toniann_126:

(Start: 92 @71461 has 218 MA's), (100, 71476), (104, 71485), (135, 71683), (164, 71809), (170, 71860), (179, 71920),

Gene: Tophat_102 Start: 64352, Stop: 64921, Start Num: 92

Candidate Starts for Tophat_102:

(Start: 92 @64352 has 218 MA's), (111, 64433), (122, 64508), (129, 64550), (135, 64574), (137, 64580), (140, 64586), (153, 64658), (159, 64679), (164, 64700),

Gene: Toto_98 Start: 60193, Stop: 60633, Start Num: 95

Candidate Starts for Toto_98:

(Start: 95 @60193 has 122 MA's), (115, 60292), (129, 60388), (140, 60424), (151, 60490), (164, 60538),

Gene: Tourach_84 Start: 55589, Stop: 55975, Start Num: 96

Candidate Starts for Tourach_84:

(Start: 96 @55589 has 72 MA's), (108, 55640), (110, 55661), (114, 55682), (121, 55721), (122, 55736), (125, 55754), (138, 55811), (140, 55814), (149, 55871), (159, 55907),

Gene: Traaww1_96 Start: 58700, Stop: 59140, Start Num: 95

Candidate Starts for Traaww1_96:

(32, 58499), (33, 58502), (Start: 38 @58529 has 1 MA's), (40, 58532), (48, 58574), (64, 58628), (Start: 95 @58700 has 122 MA's), (111, 58781), (115, 58799), (140, 58931), (151, 58997), (164, 59045),

Gene: TripleJ_56 Start: 34802, Stop: 35257, Start Num: 92

Candidate Starts for TripleJ_56:

(79, 34775), (Start: 92 @34802 has 218 MA's), (111, 34883), (125, 34976), (127, 34988), (137, 35030), (150, 35096),

Gene: Tuco_101 Start: 61058, Stop: 61498, Start Num: 95

Candidate Starts for Tuco_101:

(Start: 95 @61058 has 122 MA's), (115, 61157), (140, 61289), (151, 61355), (164, 61403),

Gene: TyDawg_67 Start: 43867, Stop: 44313, Start Num: 91

Candidate Starts for TyDawg_67:

(78, 43831), (Start: 91 @43867 has 26 MA's), (111, 43951), (123, 44032), (127, 44056), (164, 44215),

Gene: Tyrumbra_63 Start: 41408, Stop: 41914, Start Num: 92

Candidate Starts for Tyrumbra_63:

(15, 41000), (18, 41045), (Start: 92 @41408 has 218 MA's), (125, 41582), (135, 41630), (164, 41756),

Gene: Tyson_83 Start: 53862, Stop: 54245, Start Num: 96

Candidate Starts for Tyson_83:

(Start: 96 @53862 has 72 MA's), (114, 53955), (122, 54009), (125, 54027), (140, 54087), (149, 54144),

Gene: UPIE_81 Start: 53458, Stop: 53841, Start Num: 96

Candidate Starts for UPIE_81:

(Start: 96 @53458 has 72 MA's), (114, 53551), (122, 53605), (125, 53623), (140, 53683), (149, 53740),

Gene: Ukulele_95 Start: 59455, Stop: 59895, Start Num: 95

Candidate Starts for Ukulele_95:

(Start: 95 @59455 has 122 MA's), (115, 59554), (129, 59650), (140, 59686), (151, 59752), (164, 59800),

Gene: ValentiniPuff_105 Start: 59002, Stop: 59508, Start Num: 92

Candidate Starts for ValentiniPuff_105:

(65, 58930), (Start: 92 @59002 has 218 MA's), (Start: 99 @59014 has 4 MA's), (100, 59017), (108, 59056), (118, 59116), (123, 59164), (125, 59176), (135, 59224), (171, 59398),

Gene: VanLee_42 Start: 32268, Stop: 32756, Start Num: 92

Candidate Starts for VanLee_42:

(Start: 92 @32268 has 218 MA's), (103, 32286), (111, 32349), (122, 32424), (125, 32442), (138, 32499), (176, 32712),

Gene: Vendetta_54 Start: 36171, Stop: 36677, Start Num: 92

Candidate Starts for Vendetta_54:

(Start: 92 @36171 has 218 MA's), (123, 36333), (140, 36405), (153, 36477), (164, 36519),

Gene: Vetrix_84 Start: 55168, Stop: 55554, Start Num: 96

Candidate Starts for Vetrix_84:

(Start: 96 @55168 has 72 MA's), (108, 55219), (110, 55240), (114, 55261), (121, 55300), (122, 55315), (125, 55333), (138, 55390), (140, 55393), (149, 55450),

Gene: Vibaki_38 Start: 32552, Stop: 33103, Start Num: 92

Candidate Starts for Vibaki_38:

(Start: 92 @32552 has 218 MA's), (104, 32576), (123, 32714), (135, 32774), (140, 32786),

Gene: Vondra_44 Start: 30507, Stop: 30950, Start Num: 92

Candidate Starts for Vondra_44:

(Start: 92 @30507 has 218 MA's), (149, 30798),

Gene: Vulpecula_52 Start: 33417, Stop: 33938, Start Num: 92

Candidate Starts for Vulpecula_52:

(Start: 92 @33417 has 218 MA's), (111, 33498), (135, 33639), (137, 33645), (166, 33774),

Gene: Wamburgexpress_82 Start: 53897, Stop: 54280, Start Num: 96

Candidate Starts for Wamburgexpress_82:

(Start: 96 @53897 has 72 MA's), (114, 53990), (122, 54044), (125, 54062), (140, 54122), (149, 54179),

Gene: Warren_45 Start: 28593, Stop: 29075, Start Num: 92

Candidate Starts for Warren_45:

(Start: 92 @28593 has 218 MA's), (135, 28815), (142, 28836), (153, 28899), (164, 28941),

Gene: WheeHeim_13 Start: 6628, Stop: 6206, Start Num: 91

Candidate Starts for WheeHeim_13:

(Start: 91 @6628 has 26 MA's), (105, 6595), (121, 6481), (129, 6424), (149, 6331), (160, 6292),

Gene: Whirlwind_84 Start: 55415, Stop: 55798, Start Num: 96

Candidate Starts for Whirlwind_84:

(Start: 96 @55415 has 72 MA's), (109, 55475), (110, 55487), (114, 55508), (122, 55568), (125, 55586), (140, 55646), (159, 55736),

Gene: Wiggin_102 Start: 59101, Stop: 59541, Start Num: 95

Candidate Starts for Wiggin_102:

(32, 58900), (33, 58903), (Start: 38 @58930 has 1 MA's), (40, 58933), (48, 58975), (64, 59029), (Start: 95 @59101 has 122 MA's), (115, 59200), (140, 59332), (151, 59398), (164, 59446),

Gene: Wigglewigggle_84 Start: 55113, Stop: 55499, Start Num: 96

Candidate Starts for Wigglewigggle_84:

(Start: 96 @55113 has 72 MA's), (108, 55164), (110, 55185), (114, 55206), (121, 55245), (122, 55260), (125, 55278), (138, 55335), (140, 55338), (149, 55395),

Gene: Wildcat_78 Start: 48987, Stop: 49376, Start Num: 94

Candidate Starts for Wildcat_78:

(Start: 94 @48987 has 7 MA's), (115, 49083), (122, 49134), (125, 49152), (137, 49206), (150, 49272), (164, 49326),

Gene: Wilde_74 Start: 52160, Stop: 51552, Start Num: 92

Candidate Starts for Wilde_74:

(Start: 92 @52160 has 218 MA's), (104, 52136), (111, 52079), (135, 51938), (154, 51854),

Gene: Wilder_86 Start: 55257, Stop: 55643, Start Num: 96

Candidate Starts for Wilder_86:

(Start: 96 @55257 has 72 MA's), (108, 55308), (110, 55329), (114, 55350), (121, 55389), (122, 55404), (125, 55422), (138, 55479), (140, 55482), (149, 55539),

Gene: Willez_95 Start: 58223, Stop: 58663, Start Num: 95

Candidate Starts for Willez_95:

(Start: 95 @58223 has 122 MA's), (115, 58322), (129, 58418), (140, 58454), (151, 58520), (164, 58568),

Gene: WilliamBoone_125 Start: 69149, Stop: 69661, Start Num: 92

Candidate Starts for WilliamBoone_125:

(Start: 92 @69149 has 218 MA's), (101, 69167), (106, 69185), (129, 69347), (135, 69371), (170, 69545), (179, 69605),

Gene: Winky_85 Start: 55471, Stop: 55857, Start Num: 96

Candidate Starts for Winky_85:

(Start: 96 @55471 has 72 MA's), (108, 55522), (110, 55543), (114, 55564), (121, 55603), (122, 55618), (125, 55636), (138, 55693), (140, 55696), (149, 55753),

Gene: Wyatt2_83 Start: 53860, Stop: 54243, Start Num: 96

Candidate Starts for Wyatt2_83:

(Start: 96 @53860 has 72 MA's), (114, 53953), (122, 54007), (125, 54025), (140, 54085), (149, 54142),

Gene: Wyborn_38 Start: 31062, Stop: 31586, Start Num: 92

Candidate Starts for Wyborn_38:

(Start: 92 @31062 has 218 MA's), (123, 31224), (125, 31236), (135, 31284), (142, 31305), (165, 31413),

Gene: Xandras_99 Start: 58924, Stop: 59364, Start Num: 95

Candidate Starts for Xandras_99:

(32, 58723), (33, 58726), (Start: 38 @58753 has 1 MA's), (40, 58756), (48, 58798), (64, 58852), (Start: 95 @58924 has 122 MA's), (111, 59005), (115, 59023), (140, 59155), (151, 59221), (164, 59269),

Gene: YassJohnny_97 Start: 58244, Stop: 58684, Start Num: 95

Candidate Starts for YassJohnny_97:

(32, 58043), (33, 58046), (Start: 38 @58073 has 1 MA's), (40, 58076), (48, 58118), (64, 58172), (Start: 95 @58244 has 122 MA's), (111, 58325), (115, 58343), (140, 58475), (151, 58541), (164, 58589),

Gene: Yeti_66 Start: 40535, Stop: 41041, Start Num: 92

Candidate Starts for Yeti_66:

(Start: 92 @40535 has 218 MA's), (100, 40550), (135, 40757), (153, 40841), (164, 40883),

Gene: YoungHarleezy_70 Start: 37838, Stop: 38341, Start Num: 92

Candidate Starts for YoungHarleezy_70:

(Start: 92 @37838 has 218 MA's), (111, 37919), (131, 38057),

Gene: Youngblood_103 Start: 60394, Stop: 60834, Start Num: 95
Candidate Starts for Youngblood_103:
(32, 60193), (33, 60196), (Start: 38 @60223 has 1 MA's), (40, 60226), (48, 60268), (64, 60322), (Start: 95 @60394 has 122 MA's), (111, 60475), (115, 60493), (129, 60589), (140, 60625), (151, 60691), (164, 60739),

Gene: Yvonnetastic_132 Start: 74503, Stop: 75024, Start Num: 92
Candidate Starts for Yvonnetastic_132:
(Start: 92 @74503 has 218 MA's), (Start: 99 @74515 has 4 MA's), (104, 74527), (108, 74557), (114, 74599), (115, 74602), (137, 74731), (184, 74968),

Gene: Zakai_86 Start: 55577, Stop: 55963, Start Num: 96
Candidate Starts for Zakai_86:
(Start: 96 @55577 has 72 MA's), (108, 55628), (110, 55649), (114, 55670), (121, 55709), (122, 55724), (125, 55742), (138, 55799), (140, 55802), (149, 55859),

Gene: Zaria_83 Start: 53312, Stop: 53695, Start Num: 96
Candidate Starts for Zaria_83:
(Start: 96 @53312 has 72 MA's), (114, 53405), (122, 53459), (125, 53477), (140, 53537), (149, 53594),

Gene: Zartrosa_37 Start: 30749, Stop: 31297, Start Num: 92
Candidate Starts for Zartrosa_37:
(60, 30662), (Start: 92 @30749 has 218 MA's), (104, 30773), (135, 30971), (159, 31076), (178, 31181),

Gene: ZhongYanYuan_83 Start: 55291, Stop: 55689, Start Num: 96
Candidate Starts for ZhongYanYuan_83:
(Start: 96 @55291 has 72 MA's), (108, 55342), (110, 55363), (114, 55384), (121, 55423), (122, 55438), (125, 55456), (138, 55513), (140, 55516), (149, 55573), (159, 55609),

Gene: Zucker_67 Start: 38807, Stop: 39271, Start Num: 92
Candidate Starts for Zucker_67:
(Start: 92 @38807 has 218 MA's), (115, 38906), (128, 38999), (167, 39176),

Gene: pZL12_1c Start: 1177, Stop: 662, Start Num: 107
Candidate Starts for pZL12_1c:
(Start: 92 @1216 has 218 MA's), (100, 1201), (104, 1192), (105, 1189), (107, 1177), (111, 1135), (114, 1120), (117, 1111), (122, 1057), (125, 1039), (135, 991), (140, 979), (148, 934), (149, 922), (153, 907), (156, 898), (163, 868), (164, 865), (172, 781),

Gene: xkcd_103 Start: 60578, Stop: 61018, Start Num: 95
Candidate Starts for xkcd_103:
(32, 60377), (33, 60380), (Start: 38 @60407 has 1 MA's), (40, 60410), (48, 60452), (64, 60506), (Start: 95 @60578 has 122 MA's), (111, 60659), (115, 60677), (140, 60809), (151, 60875), (164, 60923),