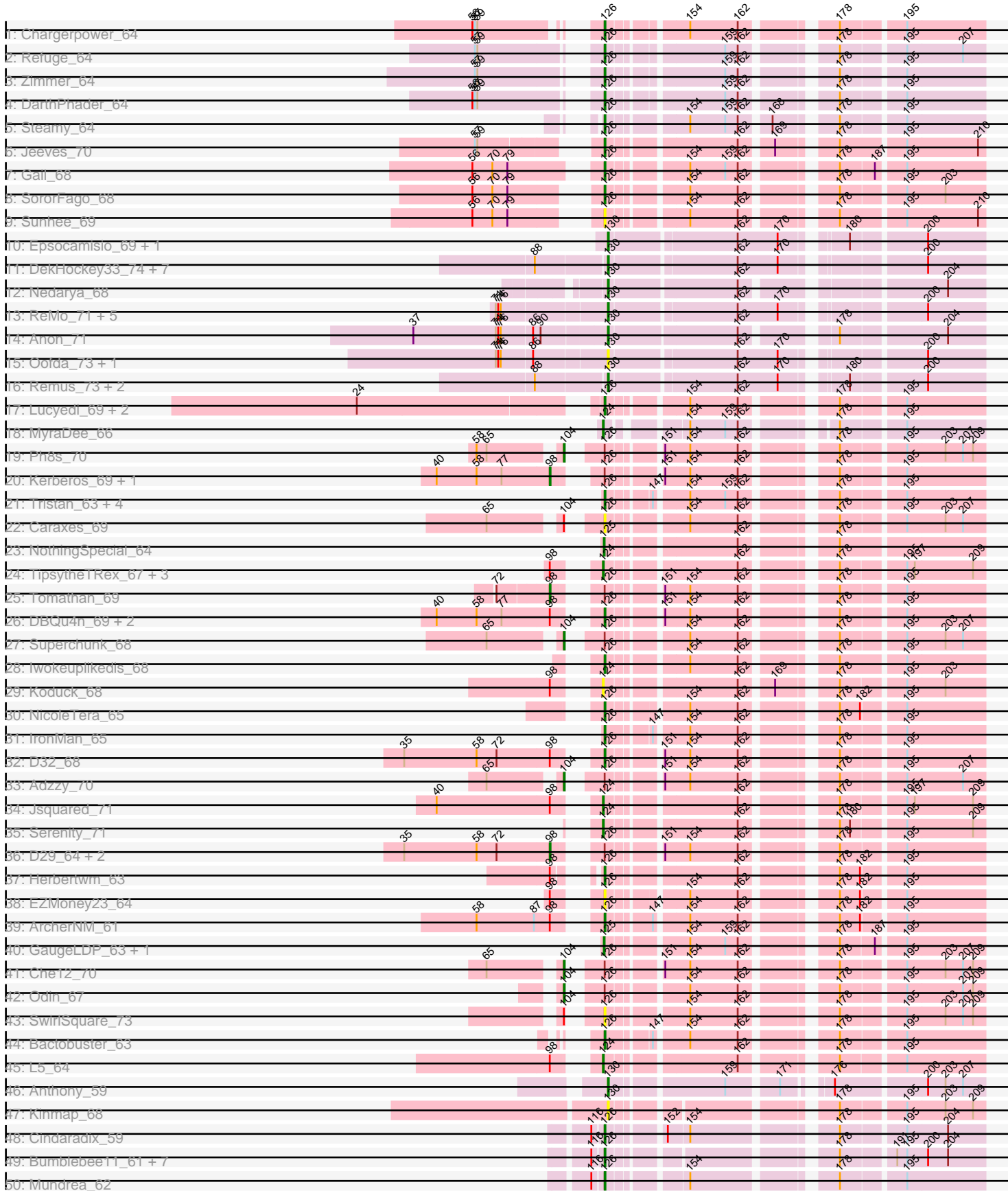
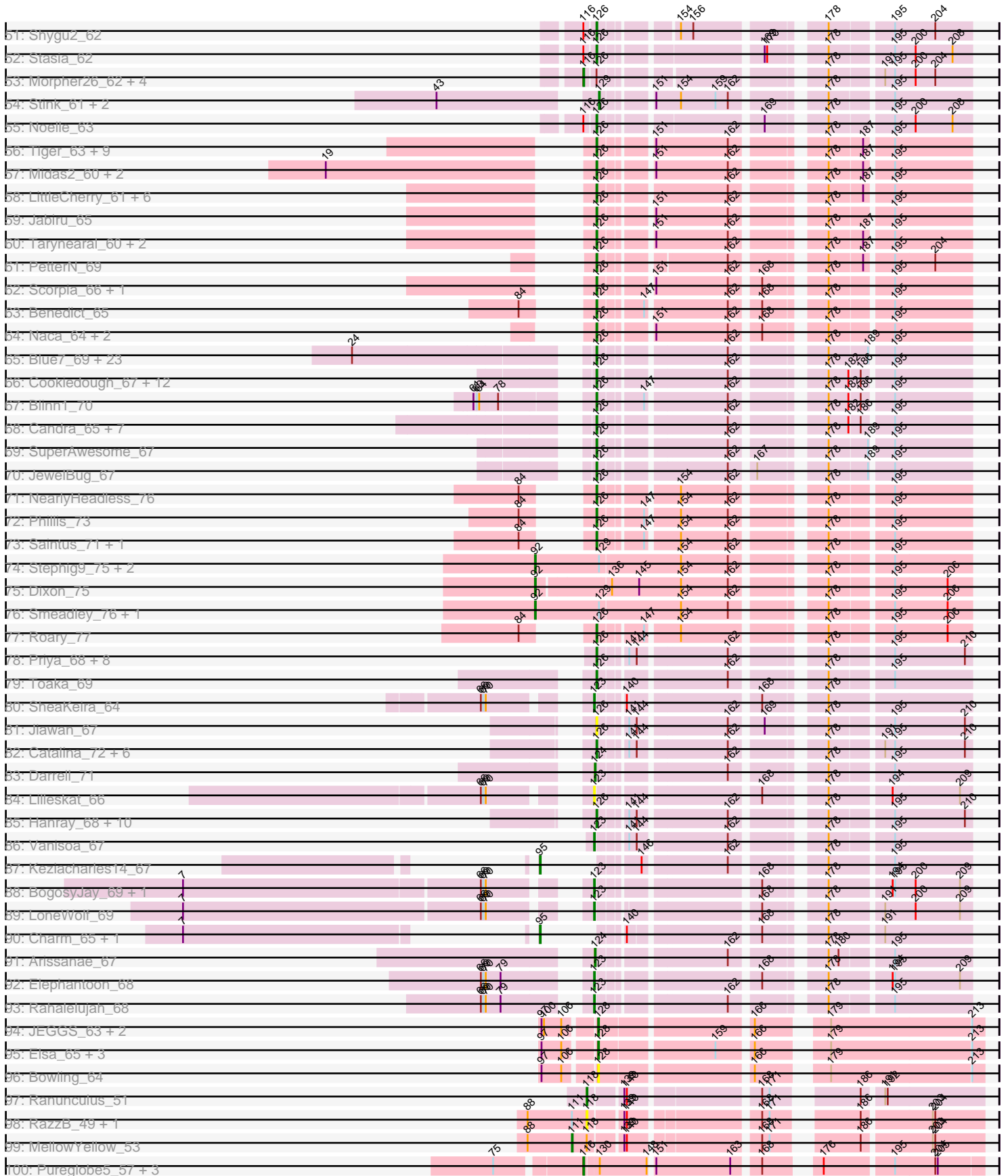


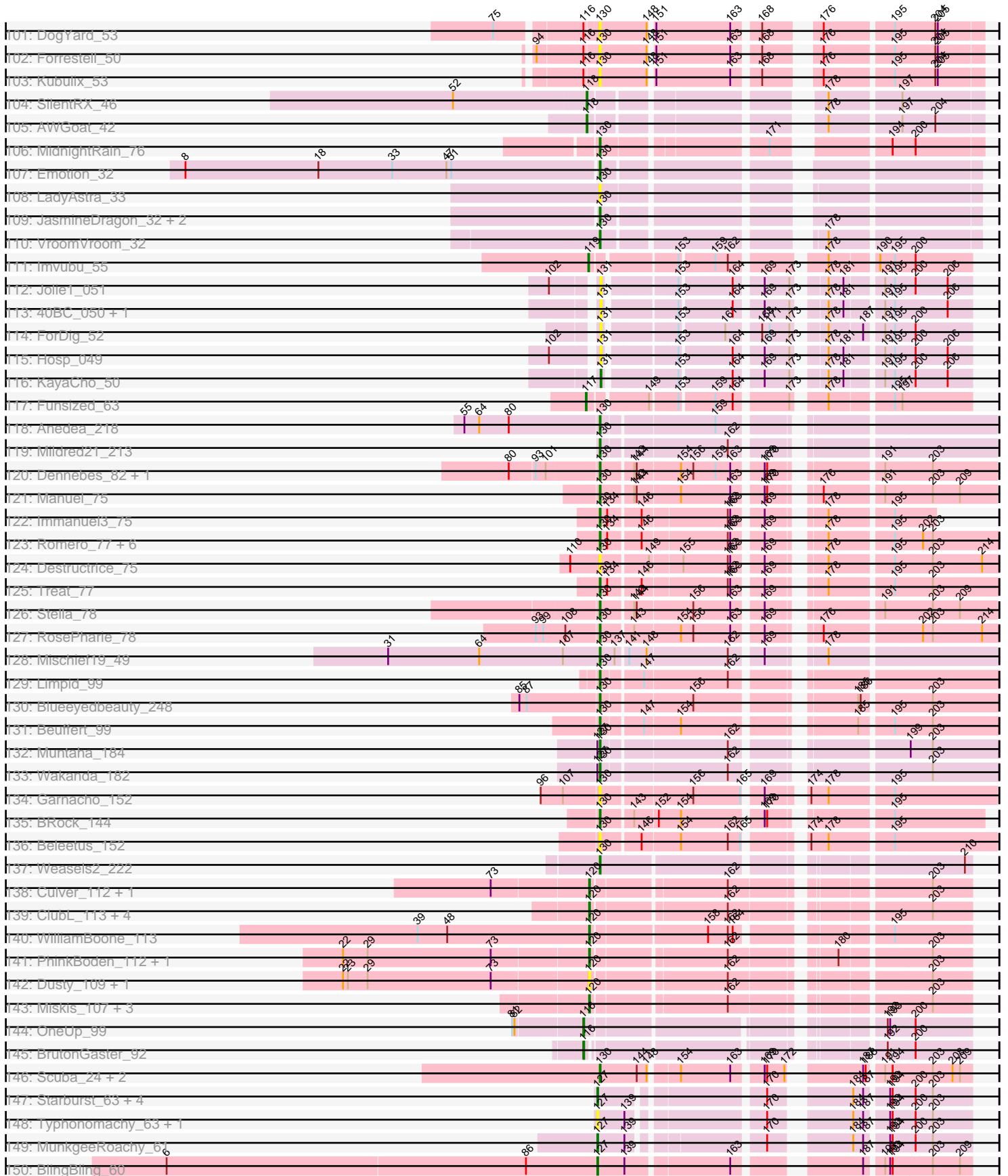
Pham 224165



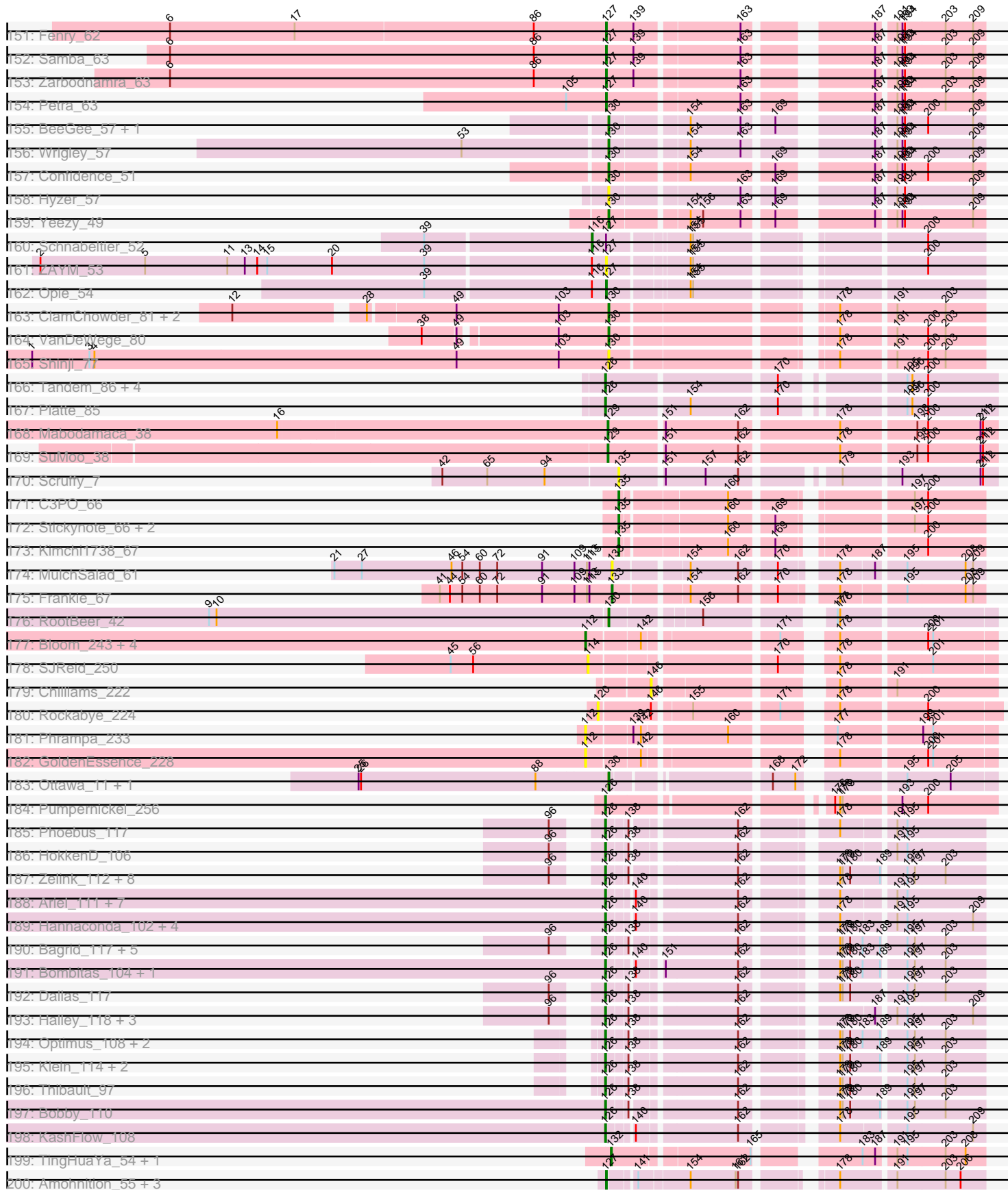
Pham 224165



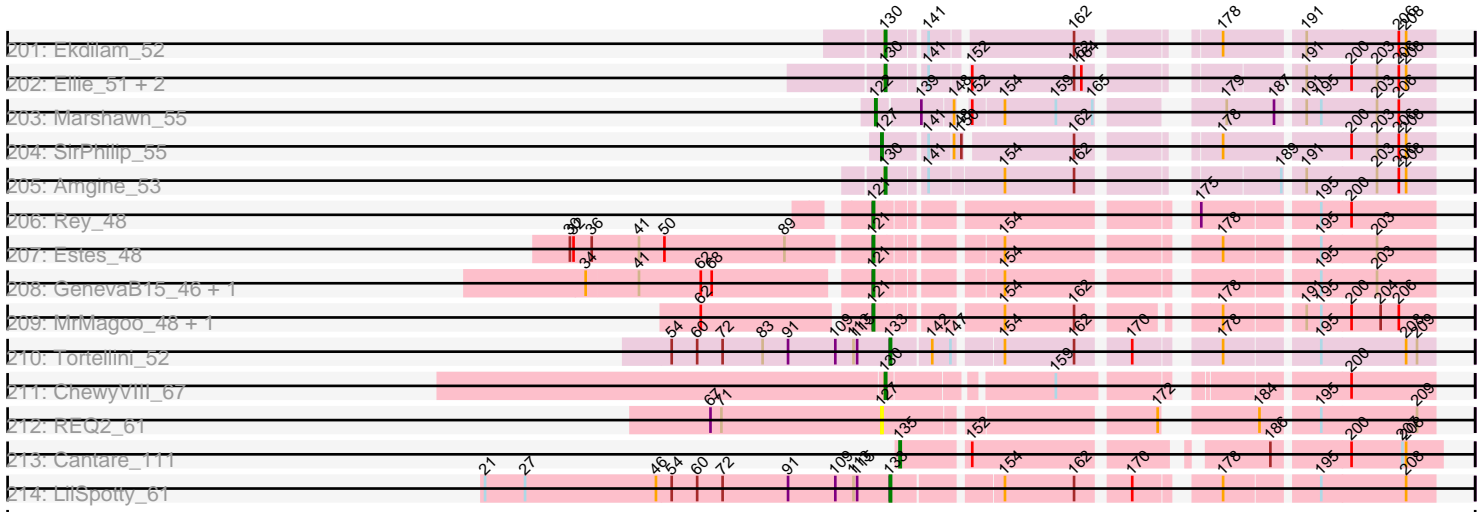
Pham 224165



Pham 224165



Pham 224165



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 224165 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224165 has 442 members, 77 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_64
- Track 2 : Refuge_64
- Track 3 : Zimmer_64
- Track 4 : DarthPhader_64
- Track 5 : Steamy_64
- Track 6 : Jeeves_70
- Track 7 : Gail_68
- Track 8 : SororFago_68
- Track 9 : Sunhee_69
- Track 10 : Epsocamisio_69, Nebulosus_70
- Track 11 : DekHockey33_74, Rosalind_71, Battleship_75, JSwag_72, Switzerland_72, KatherineG_73, ShayRa_73, MinecraftSteve_73
- Track 12 : Nedarya_68
- Track 13 : ReMo_71, Looper_72, Anaysia_73, Boohoo_73, Soups_73, LastResort_71
- Track 14 : Anon_71
- Track 15 : Oofda_73, Warrior24_75
- Track 16 : Remus_73, Strosahl_73, Waits_73
- Track 17 : Lucyedi_69, EagleEye_70, PainterBoy_68
- Track 18 : MyraDee_66
- Track 19 : Ph8s_70
- Track 20 : Kerberos_69, Duplo_69
- Track 21 : Tristan_63, Pukovnik_64, Phaded_64, Jaan_66, Landor_66
- Track 22 : Caraxes_69
- Track 23 : NothingSpecial_64
- Track 24 : TopsytheTRex_67, Quokka_69, Bradman_70, MajorMajor_69
- Track 25 : Tomathan_69
- Track 26 : DBQu4n_69, StarStuff_69, Pomar16_68
- Track 27 : Superchunk_68
- Track 28 : Iwokeuplikedis_68
- Track 29 : Koduck_68
- Track 30 : NicoleTera_65
- Track 31 : IronMan_65
- Track 32 : D32_68
- Track 33 : Adzzy_70
- Track 34 : Jsquared_71
- Track 35 : Serenity_71

- Track 36 : D29_64, Travvers_68, Naji_69
- Track 37 : Herbertwm_63
- Track 38 : EZMoney23_64
- Track 39 : ArcherNM_61
- Track 40 : GaugeLDP_63, BabyBack_64
- Track 41 : Che12_70
- Track 42 : Odin_67
- Track 43 : SwirlSquare_73
- Track 44 : Bactobuster_63
- Track 45 : L5_64
- Track 46 : Anthony_59
- Track 47 : Kinmap_68
- Track 48 : Cindaradix_59
- Track 49 : Bumblebee11_61, AbbysRanger_62, Backyardigan_60, PetiteSangsue_62, Katalie136_62, Cici_62, Datway_62, Achebe_61
- Track 50 : Mundrea_62
- Track 51 : Shygu2_62
- Track 52 : Stasia_62
- Track 53 : Morpher26_62, Xena_61, Wile_62, Perplexer_62, Badger_61
- Track 54 : Stink_61, Miramae_61, AvatarAhPeg_61
- Track 55 : Noelle_63
- Track 56 : Tiger_63, AgentM_63, Phlorence_62, PickleBack_64, Jovo_64, Lev2_64, Aragog_63, ForGetIt_64, Conspiracy_64, Discoknowium_61
- Track 57 : Midas2_60, Cuco_62, Coog_60
- Track 58 : LittleCherry_61, Twigg_59, Bonamassa_61, Swirley_63, George_58, HuhtaEnerson15_61, Milcery_61
- Track 59 : Jabiru_65
- Track 60 : Tarynearal_60, Prinasha11_60, UnionJack_65
- Track 61 : PetterN_69
- Track 62 : Scorpia_66, Chadwick_66
- Track 63 : Benedict_65
- Track 64 : Naca_64, EITiger69_66, Airmid_64
- Track 65 : Blue7_69, Jeffabunny_68, Temprado_69, Artemis2UCLA_68, WunderPhul_68, CloudWang3_69, Gladiator_65, Hexamo_68, Hammer_68, BlessJoy_67, Wiks_67, Helmet_69, Rifter_68, Tucker_68, Lilbunny_67, Zaka_68, Koko_70, Yokurt_67, Gruunaga_68, ToneTone_65, Garak_69, Zulu_69, Indra_71, Roksolana_69
- Track 66 : Cookiedough_67, Polyphemus_67, Priamo_69, Pmask_66, Neeharika16_66, Isiphiwo_65, Newrala_67, Dorothea_67, Chartreuse_64, DaVinci_65, Jordennis_66, McFly_67, SuperCallie99_64
- Track 67 : Blinn1_70
- Track 68 : Candra_65, Kazan_68, EricB_66, BABullseye_60, Hoot_62, VohminGhazi_67, SmellyB_67, Kipper29_67
- Track 69 : SuperAwesome_67
- Track 70 : JewelBug_67
- Track 71 : NearlyHeadless_76
- Track 72 : Phillis_73
- Track 73 : Saintus_71, Danforth_76
- Track 74 : Stephig9_75, Groundhog_75, Astro_76
- Track 75 : Dixon_75
- Track 76 : Smeadley_76, Expelliarmus_73
- Track 77 : Roary_77

- Track 78 : Priya_68, ExplosioNervosa_68, Alma_68, Spouty_68, EmyBug_67, Eidsmoe_68, Fayely_68, Qobbit_68, Conquerage_68
- Track 79 : Toaka_69
- Track 80 : SheaKeira_64
- Track 81 : Jiawan_67
- Track 82 : Catalina_72, Aliter_71, Tubs_70, HortumSL17_71, PackMan_69, Myxus_70, Phaeder_70
- Track 83 : Darrell_71
- Track 84 : Lilleskat_66
- Track 85 : Hanray_68, Beemo_70, EdogawaKiddo_68, Onglai_68, Ugenie5_65, RyeScarlet_71, Phonnegut_70, Scherzo_69, Horex_68, Sachima_66, Pioneer_70
- Track 86 : Vanisoa_67
- Track 87 : Keziacharles14_67
- Track 88 : BogosyJay_69, Maminiaina_69
- Track 89 : LoneWolf_69
- Track 90 : Charm_65, DreamTeam1_65
- Track 91 : Arissanae_67
- Track 92 : Elephantoon_68
- Track 93 : Rahalelujah_68
- Track 94 : JEGGS_63, Heisenberger_63, Mudcat_61
- Track 95 : Elsa_65, Xenomorph_61, Nason_65, Arcadia_65
- Track 96 : Bowling_64
- Track 97 : Ranunculus_51
- Track 98 : RazzB_49, NyleyClemson_52
- Track 99 : MellowYellow_53
- Track 100 : Pureglobe5_57, Pointis_54, Odyssey395_58, Beagle_56
- Track 101 : DogYard_53
- Track 102 : Forrestell_50
- Track 103 : Kubulix_53
- Track 104 : SilentRX_46
- Track 105 : AWGoat_42
- Track 106 : MidnightRain_76
- Track 107 : Emotion_32
- Track 108 : LadyAstra_33
- Track 109 : JasmineDragon_32, ShakeltOph_33, MiniMommy_33
- Track 110 : VroomVroom_32
- Track 111 : Imvubu_55
- Track 112 : Jolie1_051
- Track 113 : 40BC_050, 39HC_050
- Track 114 : ForDig_52
- Track 115 : Hosp_049
- Track 116 : KayaCho_50
- Track 117 : Funsized_63
- Track 118 : Anedea_218
- Track 119 : Mildred21_213
- Track 120 : Dennebes_82, Rideau_81
- Track 121 : Manuel_75
- Track 122 : Immanuel3_75
- Track 123 : Romero_77, JPandJE_76, Percastrophe_77, HaugeAnator_77, ZooBear_77, Olicious_77, ToriToki_77
- Track 124 : Destructrice_75
- Track 125 : Treat_77
- Track 126 : Stella_78

- Track 127 : RosePharie_78
- Track 128 : Mischief19_49
- Track 129 : Limpid_99
- Track 130 : Blueeyedbeauty_248
- Track 131 : Beuffert_99
- Track 132 : Muntaha_184
- Track 133 : Wakanda_182
- Track 134 : Garnacho_152
- Track 135 : BRock_144
- Track 136 : Beleetus_152
- Track 137 : Weasels2_222
- Track 138 : Culver_112, Abscondus_111
- Track 139 : ClubL_113, Lozinak_112, Smoothie_113, Engineer_113, Bachita_114
- Track 140 : WilliamBoone_113
- Track 141 : PhinkBoden_112, Cucurbita_113
- Track 142 : Dusty_109, Geeche_111
- Track 143 : Miskis_107, Norvs_114, Aphelion_113, Toniann_112
- Track 144 : OneUp_99
- Track 145 : BrutonGaster_92
- Track 146 : Scuba_24, Fury_24, Pleakley_24
- Track 147 : Starburst_63, Cozz_62, GoldHunter_64, Axym_62, Agatha_63
- Track 148 : Typhonomachy_63, Socotra_64
- Track 149 : MunkgeeRoachy_61
- Track 150 : BlingBling_60
- Track 151 : Fenry_62
- Track 152 : Samba_63
- Track 153 : Zarbodnamra_63
- Track 154 : Petra_63
- Track 155 : BeeGee_57, LonelyBoi_50
- Track 156 : Wrigley_57
- Track 157 : Confidence_51
- Track 158 : Hyzer_57
- Track 159 : Yeezy_49
- Track 160 : Schnabeltier_52
- Track 161 : ZAYM_53
- Track 162 : Opie_54
- Track 163 : ClamChowder_81, Fugax_82, Barb_81
- Track 164 : VanDeWege_80
- Track 165 : Shinji_77
- Track 166 : Tandem_86, Hortus1_86, Alleb_84, Pioneer3_86, OlinDD_86
- Track 167 : Platte_85
- Track 168 : Mabodamaca_38
- Track 169 : SuMoo_38
- Track 170 : Scruffy_7
- Track 171 : C3PO_66
- Track 172 : Stickynote_66, Cruella_66, Darwin_67
- Track 173 : Kimchi1738_67
- Track 174 : MulchSalad_61
- Track 175 : Frankie_67
- Track 176 : RootBeer_42
- Track 177 : Bloom_243, Mimi_239, Talia1610_241, Patbob_239, Racecar_241
- Track 178 : SJReid_250
- Track 179 : Chilliams_222

- Track 180 : Rockabye_224
- Track 181 : Phrampa_233
- Track 182 : GoldenEssence_228
- Track 183 : Ottawa_11, Kharcho_11
- Track 184 : Pumpnickel_256
- Track 185 : Phoebus_117
- Track 186 : HokkenD_106
- Track 187 : Zelink_112, Duke13_112, JuicyJay_113, Beem_118, Marleymoo_100, NihilNomen_118, Kalah2_109, ThreeRngTarjay_113, Dove_102
- Track 188 : Ariel_111, Porcelain_111, Rearden_105, Omega_120, Courthouse_106, Squint_109, MiaZeal_111, Superphikiman_108
- Track 189 : Hannaconda_102, Lucky2013_108, Shaboozey_109, Gonephishing_105, LittleE_115
- Track 190 : Bagrid_117, Schatzie_111, EricMillard_109, BAKA_117, Odette_118, DmpstrDiver_117
- Track 191 : Bombitas_104, Yeet_107
- Track 192 : Dallas_117
- Track 193 : Halley_118, Redno2_108, Hughesyang_115, Ejimix_110
- Track 194 : Optimus_108, Pound_106, Minerva_114
- Track 195 : Klein_114, Wanda_117, Constella_99
- Track 196 : Thibault_97
- Track 197 : Bobby_110
- Track 198 : KashFlow_108
- Track 199 : TingHuaYa_54, LastHope_56
- Track 200 : Amohntion_55, Hammy_55, DarthP_55, November_55
- Track 201 : Ekdilam_52
- Track 202 : Ellie_51, Applecrisp_55, Fefferhead_53
- Track 203 : Marshawn_55
- Track 204 : SirPhilip_55
- Track 205 : Amgine_53
- Track 206 : Rey_48
- Track 207 : Estes_48
- Track 208 : GenevaB15_46, Aziz_46
- Track 209 : MrMagoo_48, GardenSalsa_48
- Track 210 : Tortellini_52
- Track 211 : ChewyVIII_67
- Track 212 : REQ2_61
- Track 213 : Cantare_111
- Track 214 : LilSpotty_61

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

The start number called the most often in the published annotations is 126, it was called in 182 of the 365 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_62, Achebe_61, AgentM_63, Airmid_64, Aliter_71, Alleb_84, Alma_68, Aragog_63, ArcherNM_61, Ariel_111, Artemis2UCLA_68, BABullseye_60, BAKA_117, Backyardigan_60, Bactobuster_63, Bagrid_117, Beem_118, Beemo_70, Benedict_65, BlessJoy_67, Blinn1_70, Blue7_69, Bobby_110, Bombitas_104,

Bonamassa_61, Bumblebee11_61, Candra_65, Caraxes_69, Catalina_72, Chadwick_66, Chargerpower_64, Chartreuse_64, Cici_62, Cindaradix_59, CloudWang3_69, Conquerage_68, Conspiracy_64, Constella_99, Coog_60, Cookiedough_67, Courthouse_106, Cuco_62, D32_68, DBQu4n_69, DaVinci_65, Dallas_117, Danforth_76, DarthPhader_64, Datway_62, Discoknowium_61, DmpstrDiver_117, Dorothea_67, Dove_102, Duke13_112, EZMoney23_64, EagleEye_70, EdogawaKiddo_68, Eidsmoe_68, Ejimix_110, EITiger69_66, EmyBug_67, EricB_66, EricMillard_109, ExplosioNervosa_68, Fayely_68, ForGetIt_64, Gail_68, Garak_69, George_58, Gladiator_65, Gonephishing_105, Gruunaga_68, Halley_118, Hammer_68, Hannaconda_102, Hanray_68, Helmet_69, Herbertwm_63, Hexamo_68, HokkenD_106, Horex_68, Hoot_62, HortumSL17_71, Hortus1_86, Hughesyang_115, HuhtaEnerson15_61, Indra_71, IronMan_65, Isiphiwo_65, Iwokeuplikedis_68, Jaan_66, Jabiru_65, Jeeves_70, Jeffabunny_68, JewelBug_67, Jiawan_67, Jordennis_66, Jovo_64, JuicyJay_113, Kalah2_109, KashFlow_108, Katalie136_62, Kazan_68, Kipper29_67, Klein_114, Koko_70, Landor_66, Lev2_64, Lilbunny_67, LittleCherry_61, LittleE_115, Lucky2013_108, Lucyedi_69, Marleymoo_100, McFly_67, MiaZeal_111, Midas2_60, Milcery_61, Minerva_114, Mundrea_62, Myxus_70, Naca_64, NearlyHeadless_76, Neeharika16_66, Newrala_67, NicoleTera_65, NihilNomen_118, Noelle_63, Odette_118, OlinDD_86, Omega_120, Onglai_68, Optimus_108, PackMan_69, PainterBoy_68, PetiteSangsue_62, PetterN_69, Phaded_64, Phaeder_70, Phillis_73, Phlorence_62, Phoebus_117, Phonnegut_70, PickleBack_64, Pioneer3_86, Pioneer_70, Platte_85, Pmask_66, Polyphemus_67, Pomar16_68, Porcelain_111, Pound_106, Priamo_69, Prinash11_60, Priya_68, Pukovnik_64, Pumpernickel_256, Qobbit_68, Rearden_105, Redno2_108, Refuge_64, Rifter_68, Roary_77, Roksolana_69, RyeScarlet_71, Sachima_66, Saintus_71, Schatzie_111, Scherzo_69, Scorpia_66, Shaboozey_109, Shygu2_62, SmellyB_67, SororFago_68, Spouty_68, Squint_109, StarStuff_69, Stasia_62, Steamy_64, Sunhee_69, SuperAwesome_67, SuperCallie99_64, Superphikiman_108, SwirlSquare_73, Swirley_63, Tandem_86, Tarynearal_60, Temprado_69, Thibault_97, ThreeRngTarjay_113, Tiger_63, Toaka_69, ToneTone_65, Tristan_63, Tubs_70, Tucker_68, Twigg_59, Ugenie5_65, UnionJack_65, VohminGhazi_67, Wanda_117, Wiks_67, WunderPhul_68, Yeet_107, Yokurt_67, Zaka_68, Zelink_112, Zimmer_64, Zulu_69,

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

- Adzzy_70, Badger_61, Che12_70, D29_64, Duplo_69, Kerberos_69, Morpher26_62, Naji_69, Odin_67, Perplexer_62, Ph8s_70, Superchunk_68, Tomathan_69, Travvers_68, Wile_62, Xena_61,

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

- 39HC_050, 40BC_050, AWGoat_42, Abscondus_111, Agatha_63, Amgine_53, Amohnition_55, Anaysia_73, Anedea_218, Anon_71, Anthony_59, Aphelion_113, Applecrisp_55, Arcadia_65, Arissanae_67, Astro_76, AvatarAhPeg_61, Axym_62, Aziz_46, BRock_144, BabyBack_64, Bachita_114, Barb_81, Battleship_75, Beagle_56, BeeGee_57, Beleetus_152, Beuffert_99, BlingBling_60, Bloom_243, Blueeyedbeauty_248, BogosyJay_69, Boohoo_73, Bowling_64, Bradman_70, BrutonGaster_92, C3PO_66, Cantare_111, Charm_65, ChewyVIII_67, Chilliams_222, ClamChowder_81, ClubL_113, Confidence_51, Cozz_62, Cruella_66, Cucurbita_113, Culver_112, Darrell_71, DarthP_55, Darwin_67, DekHockey33_74, Dennebes_82, Destructrice_75, Dixon_75, DogYard_53, DreamTeam1_65, Dusty_109, Ekdilam_52, Elephantoon_68, Ellie_51, Elsa_65, Emotion_32, Engineer_113, Epsocamisio_69, Estes_48, Expelliarmus_73, Fefferhead_53, Fenry_62, ForDig_52, Forrestell_50, Frankie_67, Fugax_82, Funsized_63, Fury_24, GardenSalsa_48, Garnacho_152,

GaugeLDP_63, Geeche_111, GenevaB15_46, GoldHunter_64, GoldenEssence_228, Groundhog_75, Hammy_55, HaugeAnator_77, Heisenberger_63, Hosp_049, Hyzer_57, Immanuel3_75, Imvubu_55, JEGGS_63, JPandJE_76, JSwag_72, JasmineDragon_32, Jolie1_051, Jsquared_71, KatherineG_73, KayaCho_50, Keziacharles14_67, Kharcho_11, Kimchi1738_67, Kinmap_68, Koduck_68, Kubulix_53, L5_64, LadyAstra_33, LastHope_56, LastResort_71, LilSpotty_61, Lilleskat_66, Limpid_99, LoneWolf_69, LonelyBoi_50, Looper_72, Lozinak_112, Mabodamaca_38, MajorMajor_69, Maminaiaina_69, Manuel_75, Marshawn_55, MellowYellow_53, MidnightRain_76, Mildred21_213, Mimi_239, MinecraftSteve_73, MiniMommy_33, Miramae_61, Mischief19_49, Miskis_107, MrMagoo_48, Mudcat_61, MulchSalad_61, MunkgeeRoachy_61, Muntaha_184, MyraDee_66, Nason_65, Nebulosus_70, Nedarya_68, Norvs_114, NothingSpecial_64, November_55, NyleyClemson_52, Odyssey395_58, Olicious_77, OneUp_99, Oofda_73, Opie_54, Ottawa_11, Patbob_239, Percastrophe_77, Petra_63, PhinkBoden_112, Phrampa_233, Pleakley_24, Pointis_54, Pureglobe5_57, Quokka_69, REQ2_61, Racecar_241, Rahalelujah_68, Ranunculus_51, RazzB_49, ReMo_71, Remus_73, Rey_48, Rideau_81, Rockabye_224, Romero_77, RootBeer_42, Rosalind_71, RosePharie_78, SJReid_250, Samba_63, Schnabeltier_52, Scruffy_7, Scuba_24, Serenity_71, ShakeltOph_33, ShayRa_73, SheaKeira_64, Shinji_77, SilentRX_46, SirPhilip_55, Smeadley_76, Smoothie_113, Socotra_64, Soups_73, Starburst_63, Stella_78, Stephig9_75, Stickynote_66, Stink_61, Strosahl_73, SuMoo_38, Switzerland_72, Talia1610_241, TingHuaYa_54, TopsytheTRex_67, Toniann_112, ToriToki_77, Tortellini_52, Treat_77, Typhonmarchy_63, VanDeWege_80, Vanisoa_67, VroomVroom_32, Waits_73, Wakanda_182, Warrior24_75, Weasels2_222, WilliamBoone_113, Wrigley_57, Xenomorph_61, Yeezy_49, ZAYM_53, Zarbodnamra_63, ZooBear_77,

Summary by start number:

Start 92:

- Found in 6 of 442 (1.4%) of genes in pham
- Manual Annotations of this start: 6 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_76 (A8), Dixon_75 (A8), Expelliarmus_73 (A8), Groundhog_75 (A8), Smeadley_76 (A8), Stephig9_75 (A8),

Start 95:

- Found in 3 of 442 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Charm_65 (A9), DreamTeam1_65 (A9), Keziacharles14_67 (A9),

Start 98:

- Found in 20 of 442 (4.5%) of genes in pham
- Manual Annotations of this start: 5 of 365
- Called 30.0% of time when present
- Phage (with cluster) where this start called: D29_64 (A2), Duplo_69 (A2), Kerberos_69 (A2), Naji_69 (A2), Tomathan_69 (A2), Travvers_68 (A2),

Start 104:

- Found in 7 of 442 (1.6%) of genes in pham
- Manual Annotations of this start: 5 of 365

- Called 71.4% of time when present
- Phage (with cluster) where this start called: Adzzy_70 (A2), Che12_70 (A2), Odin_67 (A2), Ph8s_70 (A2), Superchunk_68 (A2),

Start 111:

- Found in 3 of 442 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 33.3% of time when present
- Phage (with cluster) where this start called: MellowYellow_53 (AP2),

Start 112:

- Found in 7 of 442 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_243 (FC), GoldenEssence_228 (FC), Mimi_239 (FC), Patbob_239 (FC), Phrampa_233 (FC), Racecar_241 (FC), Talia1610_241 (FC),

Start 114:

- Found in 1 of 442 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SJReid_250 (FC),

Start 116:

- Found in 30 of 442 (6.8%) of genes in pham
- Manual Annotations of this start: 12 of 365
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Badger_61 (A4), Beagle_56 (AP2), BrutonGaster_92 (CQ2), Morpher26_62 (A4), Odyssey395_58 (AP2), OneUp_99 (CQ2), Perplexer_62 (A4), Pointis_54 (AP2), Pureglobe5_57 (AP2), Schnabeltier_52 (DB), Wile_62 (A4), Xena_61 (A4),

Start 117:

- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized_63 (B9),

Start 118:

- Found in 6 of 442 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 365
- Called 83.3% of time when present
- Phage (with cluster) where this start called: AWGoat_42 (AP4), NyleyClemson_52 (AP2), Ranunculus_51 (AP), RazzB_49 (AP2), SilentRX_46 (AP4),

Start 119:

- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu_55 (B10),

Start 120:

- Found in 17 of 442 (3.8%) of genes in pham
- Manual Annotations of this start: 14 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_111 (CQ1), Aphelion_113 (CQ1), Bachita_114 (CQ1), ClubL_113 (CQ1), Cucurbita_113 (CQ1), Culver_112 (CQ1), Dusty_109 (CQ1), Engineer_113 (CQ1), Geeche_111 (CQ1), Lozinak_112 (CQ1), Miskis_107 (CQ1), Norvs_114 (CQ1), PhinkBoden_112 (CQ1), Rockabye_224 (FC), Smoothie_113 (CQ1), Toniann_112 (CQ1), WilliamBoone_113 (CQ1),

Start 121:

- Found in 6 of 442 (1.4%) of genes in pham
- Manual Annotations of this start: 6 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_46 (M2), Estes_48 (M2), GardenSalsa_48 (M2), GenevaB15_46 (M2), MrMagoo_48 (M2), Rey_48 (M2),

Start 122:

- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_55 (K6),

Start 123:

- Found in 8 of 442 (1.8%) of genes in pham
- Manual Annotations of this start: 7 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BogosyJay_69 (A9), Elephantoon_68 (A9), Lilleskat_66 (A9), LoneWolf_69 (A9), Maminiaina_69 (A9), Rahalelujah_68 (A9), SheaKeira_64 (A9), Vanisoa_67 (A9),

Start 124:

- Found in 11 of 442 (2.5%) of genes in pham
- Manual Annotations of this start: 7 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arissanae_67 (A9), Bradman_70 (A2), Darrell_71 (A9), Jsquared_71 (A2), Koduck_68 (A2), L5_64 (A2), MajorMajor_69 (A2), MyraDee_66 (A18), Quokka_69 (A2), Serenity_71 (A2), TipsytheTRex_67 (A2),

Start 125:

- Found in 3 of 442 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyBack_64 (A2), GaugeLDP_63 (A2), NothingSpecial_64 (A2),

Start 126:

- Found in 225 of 442 (50.9%) of genes in pham
- Manual Annotations of this start: 182 of 365
- Called 92.9% of time when present
- Phage (with cluster) where this start called: AbbysRanger_62 (A4), Achebe_61 (A4), AgentM_63 (A5), Airmid_64 (A5), Aliter_71 (A9), Alleb_84 (ED1), Alma_68 (A9), Aragog_63 (A5), ArcherNM_61 (A2), Ariel_111 (J), Artemis2UCLA_68 (A6), BABullseye_60 (A6), BAKA_117 (J), Backyardigan_60 (A4), Bactobuster_63 (A2),

Bagrid_117 (J), Beem_118 (J), Beemo_70 (A9), Benedict_65 (A5), BlessJoy_67 (A6), Blinn1_70 (A6), Blue7_69 (A6), Bobby_110 (J), Bombitas_104 (J), Bonamassa_61 (A5), Bumblebee11_61 (A4), Candra_65 (A6), Caraxes_69 (A2), Catalina_72 (A9), Chadwick_66 (A5), Chargerpower_64 (A), Chartreuse_64 (A6), Cici_62 (A4), Cindaradix_59 (A4), CloudWang3_69 (A6), Conquerage_68 (A9), Conspiracy_64 (A5), Constella_99 (J), Coog_60 (A5), Cookiedough_67 (A6), Courthouse_106 (J), Cuco_62 (A5), D32_68 (A2), DBQu4n_69 (A2), DaVinci_65 (A6), Dallas_117 (J), Danforth_76 (A8), DarthPhader_64 (A12), Datway_62 (A4), Discoknowium_61 (A5), DmpstrDiver_117 (J), Dorothea_67 (A6), Dove_102 (J), Duke13_112 (J), EZMoney23_64 (A2), EagleEye_70 (A16), EdogawaKiddo_68 (A9), Eidsmoe_68 (A9), Ejimix_110 (J), EITiger69_66 (A5), EmyBug_67 (A9), EricB_66 (A6), EricMillard_109 (J), ExplosioNervosa_68 (A9), Fayely_68 (A9), ForGetIt_64 (A5), Gail_68 (A14), Garak_69 (A6), George_58 (A5), Gladiator_65 (A6), Gonephishing_105 (J), Gruunaga_68 (A6), Halley_118 (J), Hammer_68 (A6), Hannaconda_102 (J), Hanray_68 (A9), Helmet_69 (A6), Herbertwm_63 (A2), Hexamo_68 (A6), HokkenD_106 (J), Holes_68 (A9), Hoot_62 (A6), HortumSL17_71 (A9), Hortus1_86 (ED1), Hughesyang_115 (J), HuhtaEnerson15_61 (A5), Indra_71 (A6), IronMan_65 (A2), Isiphiwo_65 (A6), Iwokeuplikedis_68 (A2), Jaan_66 (A2), Jabiru_65 (A5), Jeeves_70 (A14), Jeffabunny_68 (A6), JewelBug_67 (A6), Jiawan_67 (A9), Jordennis_66 (A6), Jovo_64 (A5), JuicyJay_113 (J), Kalah2_109 (J), KashFlow_108 (J), Katalie136_62 (A4), Kazan_68 (A6), Kipper29_67 (A6), Klein_114 (J), Koko_70 (A6), Landor_66 (A2), Lev2_64 (A5), Lilbunny_67 (A6), LittleCherry_61 (A5), LittleE_115 (J), Lucky2013_108 (J), Lucyedi_69 (A16), Marleymoo_100 (J), McFly_67 (A6), MiaZeal_111 (J), Midas2_60 (A5), Milcery_61 (A5), Minerva_114 (J), Mundrea_62 (A4), Myxus_70 (A9), Naca_64 (A5), NearlyHeadless_76 (A8), Neeharika16_66 (A6), Newrala_67 (A6), NicoleTera_65 (A2), NihilNomen_118 (J), Noelle_63 (A4), Odette_118 (J), OlinDD_86 (ED1), Omega_120 (J), Onglai_68 (A9), Optimus_108 (J), PackMan_69 (A9), PainterBoy_68 (A16), PetiteSangsue_62 (A4), PetterN_69 (A5), Phaded_64 (A2), Phaeder_70 (A9), Phillis_73 (A8), Phlorence_62 (A5), Phoebus_117 (J), Phonnegut_70 (A9), PickleBack_64 (A5), Pioneer3_86 (ED1), Pioneer_70 (A9), Platte_85 (ED1), Pmask_66 (A6), Polyphemus_67 (A6), Pomar16_68 (A2), Porcelain_111 (J), Pound_106 (J), Priamo_69 (A6), Prinash11_60 (A5), Priya_68 (A9), Pukovnik_64 (A2), Pumpnickel_256 (GD4), Qobbit_68 (A9), Rearden_105 (J), Redno2_108 (J), Refuge_64 (A12), Rifter_68 (A6), Roary_77 (A8), Roksolana_69 (A6), RyeScarlet_71 (A9), Sachima_66 (A9), Saintus_71 (A8), Schatzie_111 (J), Scherzo_69 (A9), Scorpia_66 (A5), Shaboozey_109 (J), Shygu2_62 (A4), SmellyB_67 (A6), SororFago_68 (A14), Spouty_68 (A9), Squint_109 (J), StarStuff_69 (A2), Stasia_62 (A4), Steamy_64 (A12), Sunhee_69 (A14), SuperAwesome_67 (A6), SuperCallie99_64 (A6), Superphikiman_108 (J), SwirlSquare_73 (A2), Swirley_63 (A5), Tandem_86 (ED1), Tarynearal_60 (A5), Temprado_69 (A6), Thibault_97 (J), ThreeRngTarjay_113 (J), Tiger_63 (A5), Toaka_69 (A9), ToneTone_65 (A6), Tristan_63 (A2), Tubs_70 (A9), Tucker_68 (A6), Twigg_59 (A5), Ugenie5_65 (A9), UnionJack_65 (A5), VohminGhazi_67 (A6), Wanda_117 (J), Wiks_67 (A6), WunderPhul_68 (A6), Yeet_107 (J), Yokurt_67 (A6), Zaka_68 (A6), Zelink_112 (J), Zimmer_64 (A12), Zulu_69 (A6),

Start 127:

- Found in 24 of 442 (5.4%) of genes in pham
- Manual Annotations of this start: 14 of 365
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Agatha_63 (CT), Amohnition_55 (K6), Axym_62 (CT), BlingBling_60 (CV), Cozz_62 (CT), DarthP_55 (K6), Fenry_62 (CV),

GoldHunter_64 (CT), Hammy_55 (K6), MunkgeeRoachy_61 (CT), November_55 (K6), Opie_54 (DB), Petra_63 (CV), REQ2_61 (singleton), Samba_63 (CV), SirPhilip_55 (K6), Socotra_64 (CT), Starburst_63 (CT), Typhonmarchy_63 (CT), ZAYM_53 (DB), Zarbodnamra_63 (CV),

Start 128:

- Found in 8 of 442 (1.8%) of genes in pham
- Manual Annotations of this start: 7 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia_65 (AM), Bowling_64 (AM), Elsa_65 (AM), Heisenberger_63 (AM), JEGGS_63 (AM), Mudcat_61 (AM), Nason_65 (AM), Xenomorph_61 (AM),

Start 129:

- Found in 10 of 442 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 365
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AvatarAhPeg_61 (A4), Mabodamaca_38 (EH), Miramae_61 (A4), Stink_61 (A4), SuMoo_38 (EH),

Start 130:

- Found in 89 of 442 (20.1%) of genes in pham
- Manual Annotations of this start: 68 of 365
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Amgine_53 (K6), Anaysia_73 (A15), Anedea_218 (BE1), Anon_71 (A15), Anthony_59 (A20), Applecrisp_55 (K6), BRock_144 (BS), Barb_81 (DC1), Battleship_75 (A15), BeeGee_57 (CY), Beleetus_152 (BS), Beuffert_99 (BK1), Blueeyedbeauty_248 (BK1), Boohoo_73 (A15), ChewyVIII_67 (singleton), ClamChowder_81 (DC1), Confidence_51 (CY1), DekHockey33_74 (A15), Dennebes_82 (BF), Destructrice_75 (BF), DogYard_53 (AP2), Ekdilam_52 (K6), Ellie_51 (K6), Emotion_32 (AZ4), Epsocamisio_69 (A15), Fefferhead_53 (K6), Forrestell_50 (AP2), Fugax_82 (DC1), Fury_24 (CR5), Garnacho_152 (BS), HaugeAnator_77 (BF), Hyzer_57 (CZ1), Immanuel3_75 (BF), JPandJE_76 (BF), JSwag_72 (A15), JasmineDragon_32 (AZ4), KatherineG_73 (A15), Kharcho_11 (FM), Kinmap_68 (A21), Kubulix_53 (AP2), LadyAstra_33 (AZ4), LastResort_71 (A15), Limpid_99 (BK1), LonelyBoi_50 (CY), Looper_72 (A15), Manuel_75 (BF), MidnightRain_76 (AY), Mildred21_213 (BE1), MinecraftSteve_73 (A15), MiniMommy_33 (AZ4), Mischief19_49 (BG), Muntaha_184 (BK2), Nebulosus_70 (A15), Nedarya_68 (A15), Olicious_77 (BF), Oofda_73 (A15), Ottawa_11 (FM), Percastrophe_77 (BF), Pleakley_24 (CR5), ReMo_71 (A15), Remus_73 (A15), Rideau_81 (BF), Romero_77 (BF), RootBeer_42 (FA), Rosalind_71 (A15), RosePharie_78 (BF), Scuba_24 (CR5), ShakeltOph_33 (AZ4), ShayRa_73 (A15), Shinji_77 (DC1), Soups_73 (A15), Stella_78 (BF), Strosahl_73 (A15), Switzerland_72 (A15), ToriToki_77 (BF), Treat_77 (BF), VanDeWege_80 (DC1), VroomVroom_32 (AZ4), Waits_73 (A15), Wakanda_182 (BK2), Warrior24_75 (A15), Weasels2_222 (CB), Wrigley_57 (CY), Yeezy_49 (CZ3), ZooBear_77 (BF),

Start 131:

- Found in 6 of 442 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_050 (B6), 40BC_050 (B6), ForDig_52 (B6), Hosp_049 (B6), Jolie1_051 (B6), KayaCho_50 (B6),

Start 132:

- Found in 2 of 442 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LastHope_56 (K1), TingHuaYa_54 (K1),

Start 133:

- Found in 4 of 442 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frankie_67 (F1), LilSpotty_61 (singleton), MulchSalad_61 (F), Tortellini_52 (P2),

Start 135:

- Found in 7 of 442 (1.6%) of genes in pham
- Manual Annotations of this start: 6 of 365
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_66 (EN), Cantare_111 (singleton), Cruella_66 (EN), Darwin_67 (EN), Kimchi1738_67 (EN), Scruffy_7 (EM1), Stickynote_66 (EN),

Start 146:

- Found in 13 of 442 (2.9%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Chilliams_222 (FC),

Summary by clusters:

There are 57 clusters represented in this pham: P2, BF, BG, GD4, AP2, CZ3, M2, DB, singleton, AP4, FA, K1, ED1, K6, B10, BS, FM, A15, A14, A16, CZ1, A12, F, A18, A2, A5, A4, A6, A9, A8, CQ1, DC1, A, CY1, EN, EH, A21, CB, J, AM, AP, CY, BK1, BK2, CQ2, AY, CV, CT, A20, F1, CR5, B6, FC, EM1, BE1, AZ4, B9,

Info for manual annotations of cluster A:

- Start number 126 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A12:

- Start number 126 was manually annotated 4 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 126 was manually annotated 3 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 130 was manually annotated 21 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 126 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 124 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 98 was manually annotated 5 times for cluster A2.
- Start number 104 was manually annotated 5 times for cluster A2.
- Start number 124 was manually annotated 4 times for cluster A2.
- Start number 125 was manually annotated 3 times for cluster A2.
- Start number 126 was manually annotated 14 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 130 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A4:

- Start number 116 was manually annotated 5 times for cluster A4.
- Start number 126 was manually annotated 13 times for cluster A4.
- Start number 129 was manually annotated 3 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 126 was manually annotated 29 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 126 was manually annotated 41 times for cluster A6.

Info for manual annotations of cluster A8:

- Start number 92 was manually annotated 6 times for cluster A8.
- Start number 126 was manually annotated 5 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 95 was manually annotated 3 times for cluster A9.
- Start number 123 was manually annotated 7 times for cluster A9.
- Start number 124 was manually annotated 2 times for cluster A9.
- Start number 126 was manually annotated 22 times for cluster A9.

Info for manual annotations of cluster AM:

- Start number 128 was manually annotated 7 times for cluster AM.

Info for manual annotations of cluster AP:

- Start number 118 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP2:

- Start number 111 was manually annotated 1 time for cluster AP2.
- Start number 116 was manually annotated 4 times for cluster AP2.

Info for manual annotations of cluster AP4:

- Start number 118 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster AY:

- Start number 130 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster AZ4:

- Start number 130 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster B10:

- Start number 119 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B6:

- Start number 131 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B9:

- Start number 117 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster BE1:

- Start number 130 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BF:

- Start number 130 was manually annotated 13 times for cluster BF.

Info for manual annotations of cluster BG:

- Start number 130 was manually annotated 1 time for cluster BG.

Info for manual annotations of cluster BK1:

- Start number 130 was manually annotated 3 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 130 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster BS:

- Start number 130 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster CB:

- Start number 130 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CQ1:

- Start number 120 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 116 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR5:

- Start number 130 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CT:

- Start number 127 was manually annotated 4 times for cluster CT.

Info for manual annotations of cluster CV:

- Start number 127 was manually annotated 5 times for cluster CV.

Info for manual annotations of cluster CY:

- Start number 130 was manually annotated 3 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 130 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ3:

- Start number 130 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster DB:

- Start number 116 was manually annotated 1 time for cluster DB.
- Start number 127 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 130 was manually annotated 4 times for cluster DC1.

Info for manual annotations of cluster ED1:

- Start number 126 was manually annotated 6 times for cluster ED1.

Info for manual annotations of cluster EH:

- Start number 129 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster EN:

- Start number 135 was manually annotated 5 times for cluster EN.

Info for manual annotations of cluster F1:

- Start number 133 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster FA:

- Start number 130 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FC:

- Start number 112 was manually annotated 3 times for cluster FC.

Info for manual annotations of cluster FM:

- Start number 130 was manually annotated 2 times for cluster FM.

Info for manual annotations of cluster GD4:

- Start number 126 was manually annotated 1 time for cluster GD4.

Info for manual annotations of cluster J:

- Start number 126 was manually annotated 40 times for cluster J.

Info for manual annotations of cluster K1:

- Start number 132 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K6:

- Start number 122 was manually annotated 1 time for cluster K6.
- Start number 127 was manually annotated 4 times for cluster K6.
- Start number 130 was manually annotated 4 times for cluster K6.

Info for manual annotations of cluster M2:

- Start number 121 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster P2:

- Start number 133 was manually annotated 1 time for cluster P2.

Gene Information:

Gene: 39HC_050 Start: 50405, Stop: 50022, Start Num: 131

Candidate Starts for 39HC_050:

(Start: 131 @50405 has 1 MA's), (153, 50327), (164, 50267), (169, 50240), (173, 50210), (178, 50183), (181, 50165), (191, 50126), (195, 50114), (206, 50051),

Gene: 40BC_050 Start: 50405, Stop: 50022, Start Num: 131

Candidate Starts for 40BC_050:

(Start: 131 @50405 has 1 MA's), (153, 50327), (164, 50267), (169, 50240), (173, 50210), (178, 50183), (181, 50165), (191, 50126), (195, 50114), (206, 50051),

Gene: AWGoat_42 Start: 36187, Stop: 35780, Start Num: 118

Candidate Starts for AWGoat_42:

(Start: 118 @36187 has 3 MA's), (178, 35956), (197, 35875), (204, 35836),

Gene: AbbysRanger_62 Start: 41338, Stop: 40955, Start Num: 126

Candidate Starts for AbbysRanger_62:

(Start: 116 @41350 has 12 MA's), (Start: 126 @41338 has 182 MA's), (178, 41116), (191, 41059), (195, 41047), (200, 41023), (204, 40999),

Gene: Abscondus_111 Start: 64932, Stop: 65336, Start Num: 120

Candidate Starts for Abscondus_111:

(73, 64818), (Start: 120 @64932 has 14 MA's), (162, 65082), (203, 65289),

Gene: Achebe_61 Start: 41321, Stop: 40938, Start Num: 126

Candidate Starts for Achebe_61:

(Start: 116 @41333 has 12 MA's), (Start: 126 @41321 has 182 MA's), (178, 41099), (191, 41042), (195, 41030), (200, 41006), (204, 40982),

Gene: Adzzy_70 Start: 40512, Stop: 40099, Start Num: 104

Candidate Starts for Adzzy_70:

(65, 40587), (Start: 104 @40512 has 5 MA's), (Start: 126 @40488 has 182 MA's), (151, 40437), (154, 40407), (162, 40350), (178, 40260), (195, 40191), (207, 40125),

Gene: Agatha_63 Start: 43367, Stop: 43753, Start Num: 127

Candidate Starts for Agatha_63:

(Start: 127 @43367 has 14 MA's), (170, 43541), (184, 43619), (187, 43631), (193, 43655), (194, 43658), (200, 43685), (203, 43706),

Gene: AgentM_63 Start: 40512, Stop: 40123, Start Num: 126

Candidate Starts for AgentM_63:

(Start: 126 @40512 has 182 MA's), (151, 40461), (162, 40374), (178, 40284), (187, 40245), (195, 40215),

Gene: Airmid_64 Start: 40674, Stop: 40285, Start Num: 126

Candidate Starts for Airmid_64:

(Start: 126 @40674 has 182 MA's), (151, 40623), (162, 40536), (168, 40506), (178, 40446), (195, 40377),

Gene: Aliter_71 Start: 41360, Stop: 40974, Start Num: 126

Candidate Starts for Aliter_71:

(Start: 126 @41360 has 182 MA's), (141, 41333), (144, 41324), (162, 41225), (178, 41135), (191, 41078), (195, 41066), (210, 40982),

Gene: Alleb_84 Start: 51042, Stop: 50629, Start Num: 126

Candidate Starts for Alleb_84:

(Start: 126 @51042 has 182 MA's), (170, 50856), (195, 50736), (196, 50730), (200, 50712),

Gene: Alma_68 Start: 41339, Stop: 40953, Start Num: 126

Candidate Starts for Alma_68:

(Start: 126 @41339 has 182 MA's), (141, 41312), (144, 41303), (162, 41204), (178, 41114), (195, 41045), (210, 40961),

Gene: Amgine_53 Start: 39598, Stop: 39984, Start Num: 130

Candidate Starts for Amgine_53:

(Start: 130 @39598 has 68 MA's), (141, 39625), (154, 39682), (162, 39739), (189, 39868), (191, 39880), (203, 39937), (206, 39955), (208, 39961),

Gene: Amohnition_55 Start: 39555, Stop: 39944, Start Num: 127

Candidate Starts for Amohnition_55:

(Start: 127 @39555 has 14 MA's), (141, 39582), (154, 39639), (161, 39693), (162, 39696), (178, 39780), (191, 39840), (203, 39897), (206, 39915),

Gene: Anaysia_73 Start: 40644, Stop: 40246, Start Num: 130

Candidate Starts for Anaysia_73:

(71, 40770), (74, 40767), (76, 40764), (Start: 130 @40644 has 68 MA's), (162, 40503), (170, 40455), (200, 40314),

Gene: Anedea_218 Start: 106894, Stop: 107316, Start Num: 130

Candidate Starts for Anedea_218:

(55, 106732), (64, 106750), (80, 106786), (Start: 130 @106894 has 68 MA's), (159, 107023),

Gene: Anon_71 Start: 40533, Stop: 40135, Start Num: 130

Candidate Starts for Anon_71:

(37, 40758), (71, 40659), (74, 40656), (76, 40653), (86, 40617), (90, 40608), (Start: 130 @40533 has 68 MA's), (162, 40386), (178, 40296), (204, 40179),

Gene: Anthony_59 Start: 38039, Stop: 37653, Start Num: 130

Candidate Starts for Anthony_59:

(Start: 130 @38039 has 68 MA's), (159, 37916), (171, 37862), (176, 37823), (200, 37721), (203, 37700), (207, 37679),

Gene: Aphelion_113 Start: 66485, Stop: 66889, Start Num: 120

Candidate Starts for Aphelion_113:

(Start: 120 @66485 has 14 MA's), (162, 66635), (203, 66842),

Gene: Applecrisp_55 Start: 39124, Stop: 39504, Start Num: 130

Candidate Starts for Applecrisp_55:

(Start: 130 @39124 has 68 MA's), (141, 39151), (152, 39175), (162, 39259), (164, 39265), (191, 39400), (200, 39436), (203, 39457), (206, 39475), (208, 39481),

Gene: Aragog_63 Start: 40532, Stop: 40143, Start Num: 126

Candidate Starts for Aragog_63:

(Start: 126 @40532 has 182 MA's), (151, 40481), (162, 40394), (178, 40304), (187, 40265), (195, 40235),

Gene: Arcadia_65 Start: 41909, Stop: 42322, Start Num: 128

Candidate Starts for Arcadia_65:

(97, 41852), (106, 41876), (Start: 128 @41909 has 7 MA's), (159, 42038), (166, 42074), (179, 42140), (213, 42308),

Gene: ArcherNM_61 Start: 41338, Stop: 40952, Start Num: 126

Candidate Starts for ArcherNM_61:

(58, 41458), (87, 41389), (Start: 98 @41371 has 5 MA's), (Start: 126 @41338 has 182 MA's), (147, 41293), (154, 41260), (162, 41203), (178, 41113), (182, 41089), (195, 41044),

Gene: Ariel_111 Start: 60291, Stop: 60674, Start Num: 126

Candidate Starts for Ariel_111:

(Start: 126 @60291 has 182 MA's), (140, 60315), (162, 60423), (178, 60513), (191, 60570), (195, 60582),

Gene: Arissanae_67 Start: 41603, Stop: 41217, Start Num: 124

Candidate Starts for Arissanae_67:

(Start: 124 @41603 has 7 MA's), (162, 41468), (178, 41378), (180, 41366), (195, 41309),

Gene: Artemis2UCLA_68 Start: 39691, Stop: 39305, Start Num: 126

Candidate Starts for Artemis2UCLA_68:

(24, 39946), (Start: 126 @39691 has 182 MA's), (162, 39556), (178, 39466), (189, 39421), (195, 39397),

Gene: Astro_76 Start: 42589, Stop: 42107, Start Num: 92

Candidate Starts for Astro_76:

(Start: 92 @42589 has 6 MA's), (Start: 129 @42511 has 5 MA's), (154, 42415), (162, 42358), (178, 42268), (195, 42199),

Gene: AvatarAhPeg_61 Start: 41105, Stop: 40722, Start Num: 129

Candidate Starts for AvatarAhPeg_61:

(43, 41270), (Start: 129 @41105 has 5 MA's), (151, 41057), (154, 41030), (159, 40988), (162, 40973), (178, 40883), (195, 40814),

Gene: Axym_62 Start: 43254, Stop: 43640, Start Num: 127

Candidate Starts for Axym_62:

(Start: 127 @43254 has 14 MA's), (170, 43428), (184, 43506), (187, 43518), (193, 43542), (194, 43545), (200, 43572), (203, 43593),

Gene: Aziz_46 Start: 34794, Stop: 34402, Start Num: 121

Candidate Starts for Aziz_46:

(34, 35016), (41, 34974), (62, 34923), (68, 34914), (Start: 121 @34794 has 6 MA's), (154, 34710), (195, 34494), (203, 34449),

Gene: BABullseye_60 Start: 37359, Stop: 36973, Start Num: 126

Candidate Starts for BABullseye_60:

(Start: 126 @37359 has 182 MA's), (162, 37224), (178, 37134), (182, 37110), (186, 37098), (195, 37065),

Gene: BAKA_117 Start: 65040, Stop: 65426, Start Num: 126

Candidate Starts for BAKA_117:

(96, 65004), (Start: 126 @65040 has 182 MA's), (138, 65061), (162, 65172), (178, 65262), (179, 65265), (180, 65274), (183, 65289), (189, 65310), (195, 65334), (197, 65343), (203, 65379),

Gene: BRock_144 Start: 78265, Stop: 78675, Start Num: 130

Candidate Starts for BRock_144:

(Start: 130 @78265 has 68 MA's), (143, 78301), (152, 78328), (154, 78355), (169, 78445), (170, 78448), (195, 78568),

Gene: BabyBack_64 Start: 41878, Stop: 41492, Start Num: 125

Candidate Starts for BabyBack_64:

(Start: 125 @41878 has 3 MA's), (154, 41800), (159, 41758), (162, 41743), (178, 41653), (187, 41614), (195, 41584),

Gene: Bachita_114 Start: 66155, Stop: 66559, Start Num: 120

Candidate Starts for Bachita_114:

(Start: 120 @66155 has 14 MA's), (162, 66305), (203, 66512),

Gene: Backyardigan_60 Start: 41354, Stop: 40971, Start Num: 126

Candidate Starts for Backyardigan_60:

(Start: 116 @41366 has 12 MA's), (Start: 126 @41354 has 182 MA's), (178, 41132), (191, 41075), (195, 41063), (200, 41039), (204, 41015),

Gene: Bactobuster_63 Start: 42222, Stop: 41836, Start Num: 126

Candidate Starts for Bactobuster_63:

(Start: 126 @42222 has 182 MA's), (147, 42177), (154, 42144), (162, 42087), (178, 41997), (195, 41928),

Gene: Badger_61 Start: 41334, Stop: 40939, Start Num: 116

Candidate Starts for Badger_61:

(Start: 116 @41334 has 12 MA's), (Start: 126 @41322 has 182 MA's), (178, 41100), (191, 41043), (195, 41031), (200, 41007), (204, 40983),

Gene: Bagrid_117 Start: 64748, Stop: 65134, Start Num: 126

Candidate Starts for Bagrid_117:

(96, 64712), (Start: 126 @64748 has 182 MA's), (138, 64769), (162, 64880), (178, 64970), (179, 64973), (180, 64982), (183, 64997), (189, 65018), (195, 65042), (197, 65051), (203, 65087),

Gene: Barb_81 Start: 52690, Stop: 53085, Start Num: 130

Candidate Starts for Barb_81:

(12, 52267), (28, 52408), (49, 52507), (103, 52630), (Start: 130 @52690 has 68 MA's), (178, 52921), (191, 52981), (203, 53038),

Gene: Battleship_75 Start: 40851, Stop: 40453, Start Num: 130

Candidate Starts for Battleship_75:

(88, 40932), (Start: 130 @40851 has 68 MA's), (162, 40710), (170, 40662), (200, 40521),

Gene: Beagle_56 Start: 39658, Stop: 39236, Start Num: 116

Candidate Starts for Beagle_56:

(75, 39754), (Start: 116 @39658 has 12 MA's), (Start: 130 @39643 has 68 MA's), (148, 39586), (151, 39583), (163, 39493), (168, 39466), (176, 39418), (195, 39340), (204, 39292), (205, 39289),

Gene: BeeGee_57 Start: 38386, Stop: 38775, Start Num: 130

Candidate Starts for BeeGee_57:

(Start: 130 @38386 has 68 MA's), (154, 38470), (163, 38530), (169, 38560), (187, 38653), (191, 38671), (193, 38677), (194, 38680), (200, 38707), (209, 38761),

Gene: Beem_118 Start: 66102, Stop: 66488, Start Num: 126

Candidate Starts for Beem_118:

(96, 66066), (Start: 126 @66102 has 182 MA's), (138, 66123), (162, 66234), (178, 66324), (179, 66327), (180, 66336), (189, 66372), (195, 66396), (197, 66405), (203, 66441),

Gene: Beemo_70 Start: 41378, Stop: 40992, Start Num: 126

Candidate Starts for Beemo_70:

(Start: 126 @41378 has 182 MA's), (141, 41351), (144, 41342), (162, 41243), (178, 41153), (195, 41084), (210, 41000),

Gene: Beleetus_152 Start: 82067, Stop: 82498, Start Num: 130

Candidate Starts for Beleetus_152:

(Start: 130 @82067 has 68 MA's), (146, 82112), (154, 82157), (162, 82214), (165, 82229), (174, 82283), (178, 82304), (195, 82376),

Gene: Benedict_65 Start: 40793, Stop: 40404, Start Num: 126

Candidate Starts for Benedict_65:

(84, 40826), (Start: 126 @40793 has 182 MA's), (147, 40748), (162, 40655), (168, 40625), (178, 40565), (195, 40496),

Gene: Beuffert_99 Start: 68400, Stop: 68825, Start Num: 130

Candidate Starts for Beuffert_99:

(Start: 130 @68400 has 68 MA's), (147, 68445), (154, 68487), (185, 68664), (195, 68700), (203, 68745),

Gene: BlessJoy_67 Start: 40117, Stop: 39731, Start Num: 126

Candidate Starts for BlessJoy_67:

(24, 40372), (Start: 126 @40117 has 182 MA's), (162, 39982), (178, 39892), (189, 39847), (195, 39823),

Gene: BlingBling_60 Start: 40662, Stop: 41057, Start Num: 127

Candidate Starts for BlingBling_60:

(6, 40140), (86, 40575), (Start: 127 @40662 has 14 MA's), (139, 40695), (163, 40812), (187, 40935), (191, 40953), (193, 40959), (194, 40962), (203, 41010), (209, 41043),

Gene: Blinn1_70 Start: 39776, Stop: 39390, Start Num: 126

Candidate Starts for Blinn1_70:

(61, 39881), (63, 39878), (64, 39875), (78, 39857), (Start: 126 @39776 has 182 MA's), (147, 39731), (162, 39641), (178, 39551), (182, 39527), (186, 39515), (195, 39482),

Gene: Bloom_243 Start: 156000, Stop: 156422, Start Num: 112

Candidate Starts for Bloom_243:

(Start: 112 @156000 has 3 MA's), (142, 156060), (171, 156201), (178, 156246), (200, 156342), (201, 156348),

Gene: Blue7_69 Start: 39819, Stop: 39433, Start Num: 126

Candidate Starts for Blue7_69:

(24, 40074), (Start: 126 @39819 has 182 MA's), (162, 39684), (178, 39594), (189, 39549), (195, 39525),

Gene: Blueeyedbeauty_248 Start: 118392, Stop: 118817, Start Num: 130

Candidate Starts for Blueeyedbeauty_248:

(85, 118299), (87, 118308), (Start: 130 @118392 has 68 MA's), (156, 118494), (185, 118656), (186, 118659), (203, 118737),

Gene: Bobby_110 Start: 66483, Stop: 66869, Start Num: 126

Candidate Starts for Bobby_110:

(Start: 126 @66483 has 182 MA's), (138, 66504), (162, 66615), (178, 66705), (179, 66708), (180, 66717), (189, 66753), (195, 66777), (197, 66786), (203, 66822),

Gene: BogosyJay_69 Start: 41417, Stop: 41028, Start Num: 123

Candidate Starts for BogosyJay_69:

(7, 41864), (66, 41510), (69, 41507), (70, 41504), (Start: 123 @41417 has 7 MA's), (168, 41252), (178, 41192), (194, 41123), (195, 41120), (200, 41096), (209, 41042),

Gene: Bombitas_104 Start: 62038, Stop: 62424, Start Num: 126

Candidate Starts for Bombitas_104:

(Start: 126 @62038 has 182 MA's), (140, 62062), (151, 62086), (162, 62170), (178, 62260), (179, 62263), (180, 62272), (183, 62287), (189, 62308), (195, 62332), (197, 62341), (203, 62377),

Gene: Bonamassa_61 Start: 40354, Stop: 39965, Start Num: 126

Candidate Starts for Bonamassa_61:

(Start: 126 @40354 has 182 MA's), (162, 40216), (178, 40126), (187, 40087), (195, 40057),

Gene: Boohoo_73 Start: 40644, Stop: 40246, Start Num: 130

Candidate Starts for Boohoo_73:

(71, 40770), (74, 40767), (76, 40764), (Start: 130 @40644 has 68 MA's), (162, 40503), (170, 40455), (200, 40314),

Gene: Bowling_64 Start: 41898, Stop: 42311, Start Num: 128

Candidate Starts for Bowling_64:

(97, 41841), (106, 41865), (Start: 128 @41898 has 7 MA's), (166, 42063), (179, 42129), (213, 42297),

Gene: Bradman_70 Start: 41009, Stop: 40623, Start Num: 124

Candidate Starts for Bradman_70:

(Start: 98 @41039 has 5 MA's), (Start: 124 @41009 has 7 MA's), (162, 40874), (178, 40784), (195, 40715), (197, 40706), (209, 40637),

Gene: BrutonGaster_92 Start: 59955, Stop: 60353, Start Num: 116

Candidate Starts for BrutonGaster_92:

(Start: 116 @59955 has 12 MA's), (192, 60252), (200, 60285),

Gene: Bumblebee11_61 Start: 41324, Stop: 40941, Start Num: 126

Candidate Starts for Bumblebee11_61:

(Start: 116 @41336 has 12 MA's), (Start: 126 @41324 has 182 MA's), (178, 41102), (191, 41045), (195, 41033), (200, 41009), (204, 40985),

Gene: C3PO_66 Start: 48881, Stop: 48504, Start Num: 135

Candidate Starts for C3PO_66:

(Start: 135 @48881 has 6 MA's), (160, 48764), (197, 48587), (200, 48572),

Gene: Candra_65 Start: 39723, Stop: 39337, Start Num: 126

Candidate Starts for Candra_65:

(Start: 126 @39723 has 182 MA's), (162, 39588), (178, 39498), (182, 39474), (186, 39462), (195, 39429),

Gene: Cantare_111 Start: 82062, Stop: 82451, Start Num: 135
Candidate Starts for Cantare_111:
(Start: 135 @82062 has 6 MA's), (152, 82113), (186, 82320), (200, 82377), (207, 82419), (208, 82422),

Gene: Caraxes_69 Start: 40235, Stop: 39846, Start Num: 126
Candidate Starts for Caraxes_69:
(65, 40334), (Start: 104 @40259 has 5 MA's), (Start: 126 @40235 has 182 MA's), (154, 40154), (162, 40097), (178, 40007), (195, 39938), (203, 39893), (207, 39872),

Gene: Catalina_72 Start: 41433, Stop: 41047, Start Num: 126
Candidate Starts for Catalina_72:
(Start: 126 @41433 has 182 MA's), (141, 41406), (144, 41397), (162, 41298), (178, 41208), (191, 41151), (195, 41139), (210, 41055),

Gene: Chadwick_66 Start: 40650, Stop: 40261, Start Num: 126
Candidate Starts for Chadwick_66:
(Start: 126 @40650 has 182 MA's), (151, 40599), (162, 40512), (168, 40482), (178, 40422), (195, 40353),

Gene: Chargerpower_64 Start: 39412, Stop: 39029, Start Num: 126
Candidate Starts for Chargerpower_64:
(56, 39520), (57, 39517), (59, 39514), (Start: 126 @39412 has 182 MA's), (154, 39337), (162, 39280), (178, 39190), (195, 39121),

Gene: Charm_65 Start: 40574, Stop: 40188, Start Num: 95
Candidate Starts for Charm_65:
(7, 40850), (Start: 95 @40574 has 3 MA's), (140, 40550), (168, 40412), (178, 40352), (191, 40292),

Gene: Chartreuse_64 Start: 39039, Stop: 38653, Start Num: 126
Candidate Starts for Chartreuse_64:
(Start: 126 @39039 has 182 MA's), (162, 38904), (178, 38814), (182, 38790), (186, 38778), (195, 38745),

Gene: Che12_70 Start: 40396, Stop: 39983, Start Num: 104
Candidate Starts for Che12_70:
(65, 40471), (Start: 104 @40396 has 5 MA's), (Start: 126 @40372 has 182 MA's), (151, 40321), (154, 40291), (162, 40234), (178, 40144), (195, 40075), (203, 40030), (207, 40009), (209, 39997),

Gene: ChewyVIII_67 Start: 48737, Stop: 48354, Start Num: 130
Candidate Starts for ChewyVIII_67:
(Start: 130 @48737 has 68 MA's), (159, 48617), (200, 48422),

Gene: Chilliams_222 Start: 145062, Stop: 145415, Start Num: 146
Candidate Starts for Chilliams_222:
(146, 145062), (178, 145236), (191, 145296),

Gene: Cici_62 Start: 41339, Stop: 40956, Start Num: 126
Candidate Starts for Cici_62:
(Start: 116 @41351 has 12 MA's), (Start: 126 @41339 has 182 MA's), (178, 41117), (191, 41060), (195, 41048), (200, 41024), (204, 41000),

Gene: Cindaradix_59 Start: 40951, Stop: 40565, Start Num: 126

Candidate Starts for Cindaradix_59:

(Start: 116 @40963 has 12 MA's), (Start: 126 @40951 has 182 MA's), (152, 40897), (154, 40873), (178, 40726), (195, 40657), (204, 40609),

Gene: ClamChowder_81 Start: 52690, Stop: 53085, Start Num: 130

Candidate Starts for ClamChowder_81:

(12, 52267), (28, 52408), (49, 52507), (103, 52630), (Start: 130 @52690 has 68 MA's), (178, 52921), (191, 52981), (203, 53038),

Gene: CloudWang3_69 Start: 40203, Stop: 39817, Start Num: 126

Candidate Starts for CloudWang3_69:

(24, 40458), (Start: 126 @40203 has 182 MA's), (162, 40068), (178, 39978), (189, 39933), (195, 39909),

Gene: ClubL_113 Start: 65085, Stop: 65489, Start Num: 120

Candidate Starts for ClubL_113:

(Start: 120 @65085 has 14 MA's), (162, 65235), (203, 65442),

Gene: Confidence_51 Start: 35894, Stop: 36283, Start Num: 130

Candidate Starts for Confidence_51:

(Start: 130 @35894 has 68 MA's), (154, 35978), (169, 36068), (187, 36161), (191, 36179), (193, 36185), (194, 36188), (200, 36215), (209, 36269),

Gene: Conquerage_68 Start: 41108, Stop: 40722, Start Num: 126

Candidate Starts for Conquerage_68:

(Start: 126 @41108 has 182 MA's), (141, 41081), (144, 41072), (162, 40973), (178, 40883), (195, 40814), (210, 40730),

Gene: Conspiracy_64 Start: 40754, Stop: 40365, Start Num: 126

Candidate Starts for Conspiracy_64:

(Start: 126 @40754 has 182 MA's), (151, 40703), (162, 40616), (178, 40526), (187, 40487), (195, 40457),

Gene: Constella_99 Start: 58878, Stop: 59264, Start Num: 126

Candidate Starts for Constella_99:

(Start: 126 @58878 has 182 MA's), (138, 58899), (162, 59010), (178, 59100), (179, 59103), (180, 59112), (189, 59148), (195, 59172), (197, 59181), (203, 59217),

Gene: Coog_60 Start: 40568, Stop: 40179, Start Num: 126

Candidate Starts for Coog_60:

(19, 40835), (Start: 126 @40568 has 182 MA's), (151, 40517), (162, 40430), (178, 40340), (187, 40301), (195, 40271),

Gene: Cookiedough_67 Start: 39667, Stop: 39281, Start Num: 126

Candidate Starts for Cookiedough_67:

(Start: 126 @39667 has 182 MA's), (162, 39532), (178, 39442), (182, 39418), (186, 39406), (195, 39373),

Gene: Courthouse_106 Start: 59891, Stop: 60274, Start Num: 126

Candidate Starts for Courthouse_106:

(Start: 126 @59891 has 182 MA's), (140, 59915), (162, 60023), (178, 60113), (191, 60170), (195, 60182),

Gene: Cozz_62 Start: 43369, Stop: 43755, Start Num: 127

Candidate Starts for Cozz_62:

(Start: 127 @43369 has 14 MA's), (170, 43543), (184, 43621), (187, 43633), (193, 43657), (194, 43660), (200, 43687), (203, 43708),

Gene: Cruella_66 Start: 48881, Stop: 48504, Start Num: 135

Candidate Starts for Cruella_66:

(Start: 135 @48881 has 6 MA's), (160, 48764), (169, 48719), (197, 48587), (200, 48572),

Gene: Cuco_62 Start: 40428, Stop: 40039, Start Num: 126

Candidate Starts for Cuco_62:

(19, 40695), (Start: 126 @40428 has 182 MA's), (151, 40377), (162, 40290), (178, 40200), (187, 40161), (195, 40131),

Gene: Cucurbita_113 Start: 66650, Stop: 67054, Start Num: 120

Candidate Starts for Cucurbita_113:

(22, 66356), (29, 66386), (73, 66536), (Start: 120 @66650 has 14 MA's), (162, 66800), (180, 66905), (203, 67007),

Gene: Culver_112 Start: 64404, Stop: 64808, Start Num: 120

Candidate Starts for Culver_112:

(73, 64290), (Start: 120 @64404 has 14 MA's), (162, 64554), (203, 64761),

Gene: D29_64 Start: 41880, Stop: 41464, Start Num: 98

Candidate Starts for D29_64:

(35, 42054), (58, 41967), (72, 41943), (Start: 98 @41880 has 5 MA's), (Start: 126 @41850 has 182 MA's), (151, 41799), (154, 41772), (162, 41715), (178, 41625), (195, 41556),

Gene: D32_68 Start: 41850, Stop: 41464, Start Num: 126

Candidate Starts for D32_68:

(35, 42054), (58, 41967), (72, 41943), (Start: 98 @41880 has 5 MA's), (Start: 126 @41850 has 182 MA's), (151, 41799), (154, 41772), (162, 41715), (178, 41625), (195, 41556),

Gene: DBQu4n_69 Start: 41830, Stop: 41444, Start Num: 126

Candidate Starts for DBQu4n_69:

(40, 41995), (58, 41947), (77, 41917), (Start: 98 @41860 has 5 MA's), (Start: 126 @41830 has 182 MA's), (151, 41779), (154, 41752), (162, 41695), (178, 41605), (195, 41536),

Gene: DaVinci_65 Start: 39093, Stop: 38707, Start Num: 126

Candidate Starts for DaVinci_65:

(Start: 126 @39093 has 182 MA's), (162, 38958), (178, 38868), (182, 38844), (186, 38832), (195, 38799),

Gene: Dallas_117 Start: 65617, Stop: 66003, Start Num: 126

Candidate Starts for Dallas_117:

(96, 65581), (Start: 126 @65617 has 182 MA's), (138, 65638), (162, 65749), (178, 65839), (179, 65842), (180, 65851), (195, 65911), (197, 65920), (203, 65956),

Gene: Danforth_76 Start: 42544, Stop: 42155, Start Num: 126

Candidate Starts for Danforth_76:

(84, 42577), (Start: 126 @42544 has 182 MA's), (147, 42499), (154, 42463), (162, 42406), (178, 42316), (195, 42247),

Gene: Darrell_71 Start: 41935, Stop: 41549, Start Num: 124
Candidate Starts for Darrell_71:
(Start: 124 @41935 has 7 MA's), (162, 41800), (178, 41710), (195, 41641),

Gene: DarthP_55 Start: 39439, Stop: 39828, Start Num: 127
Candidate Starts for DarthP_55:
(Start: 127 @39439 has 14 MA's), (141, 39466), (154, 39523), (161, 39577), (162, 39580), (178, 39664), (191, 39724), (203, 39781), (206, 39799),

Gene: DarthPhader_64 Start: 42068, Stop: 41685, Start Num: 126
Candidate Starts for DarthPhader_64:
(56, 42188), (57, 42185), (59, 42182), (Start: 126 @42068 has 182 MA's), (159, 41951), (162, 41936), (178, 41846), (195, 41777),

Gene: Darwin_67 Start: 48122, Stop: 47745, Start Num: 135
Candidate Starts for Darwin_67:
(Start: 135 @48122 has 6 MA's), (160, 48005), (169, 47960), (197, 47828), (200, 47813),

Gene: Datway_62 Start: 41310, Stop: 40927, Start Num: 126
Candidate Starts for Datway_62:
(Start: 116 @41322 has 12 MA's), (Start: 126 @41310 has 182 MA's), (178, 41088), (191, 41031), (195, 41019), (200, 40995), (204, 40971),

Gene: DekHockey33_74 Start: 40936, Stop: 40538, Start Num: 130
Candidate Starts for DekHockey33_74:
(88, 41017), (Start: 130 @40936 has 68 MA's), (162, 40795), (170, 40747), (200, 40606),

Gene: Dennebes_82 Start: 40059, Stop: 39634, Start Num: 130
Candidate Starts for Dennebes_82:
(80, 40161), (93, 40131), (101, 40119), (Start: 130 @40059 has 68 MA's), (143, 40023), (144, 40020), (154, 39969), (156, 39954), (159, 39927), (163, 39909), (169, 39879), (170, 39876), (191, 39768), (203, 39711),

Gene: Destructrice_75 Start: 39613, Stop: 39188, Start Num: 130
Candidate Starts for Destructrice_75:
(110, 39643), (Start: 130 @39613 has 68 MA's), (149, 39559), (155, 39523), (162, 39469), (163, 39466), (169, 39436), (178, 39385), (195, 39313), (203, 39268), (214, 39208),

Gene: Discoknowium_61 Start: 40271, Stop: 39882, Start Num: 126
Candidate Starts for Discoknowium_61:
(Start: 126 @40271 has 182 MA's), (151, 40220), (162, 40133), (178, 40043), (187, 40004), (195, 39974),

Gene: Dixon_75 Start: 42148, Stop: 41675, Start Num: 92
Candidate Starts for Dixon_75:
(Start: 92 @42148 has 6 MA's), (136, 42067), (145, 42034), (154, 41983), (162, 41926), (178, 41836), (195, 41767), (206, 41704),

Gene: DmpstrDiver_117 Start: 65037, Stop: 65423, Start Num: 126
Candidate Starts for DmpstrDiver_117:
(96, 65001), (Start: 126 @65037 has 182 MA's), (138, 65058), (162, 65169), (178, 65259), (179, 65262), (180, 65271), (183, 65286), (189, 65307), (195, 65331), (197, 65340), (203, 65376),

Gene: DogYard_53 Start: 39560, Stop: 39153, Start Num: 130

Candidate Starts for DogYard_53:

(75, 39671), (Start: 116 @39575 has 12 MA's), (Start: 130 @39560 has 68 MA's), (148, 39503), (151, 39500), (163, 39410), (168, 39383), (176, 39335), (195, 39257), (204, 39209), (205, 39206),

Gene: Dorothea_67 Start: 39665, Stop: 39279, Start Num: 126

Candidate Starts for Dorothea_67:

(Start: 126 @39665 has 182 MA's), (162, 39530), (178, 39440), (182, 39416), (186, 39404), (195, 39371),

Gene: Dove_102 Start: 60531, Stop: 60917, Start Num: 126

Candidate Starts for Dove_102:

(96, 60495), (Start: 126 @60531 has 182 MA's), (138, 60552), (162, 60663), (178, 60753), (179, 60756), (180, 60765), (189, 60801), (195, 60825), (197, 60834), (203, 60870),

Gene: DreamTeam1_65 Start: 40406, Stop: 40020, Start Num: 95

Candidate Starts for DreamTeam1_65:

(7, 40682), (Start: 95 @40406 has 3 MA's), (140, 40382), (168, 40244), (178, 40184), (191, 40124),

Gene: Duke13_112 Start: 62708, Stop: 63094, Start Num: 126

Candidate Starts for Duke13_112:

(96, 62672), (Start: 126 @62708 has 182 MA's), (138, 62729), (162, 62840), (178, 62930), (179, 62933), (180, 62942), (189, 62978), (195, 63002), (197, 63011), (203, 63047),

Gene: Duplo_69 Start: 41917, Stop: 41501, Start Num: 98

Candidate Starts for Duplo_69:

(40, 42052), (58, 42004), (77, 41974), (Start: 98 @41917 has 5 MA's), (Start: 126 @41887 has 182 MA's), (151, 41836), (154, 41809), (162, 41752), (178, 41662), (195, 41593),

Gene: Dusty_109 Start: 64991, Stop: 65395, Start Num: 120

Candidate Starts for Dusty_109:

(22, 64697), (23, 64703), (29, 64727), (73, 64877), (Start: 120 @64991 has 14 MA's), (162, 65141), (203, 65348),

Gene: EZMoney23_64 Start: 41540, Stop: 41157, Start Num: 126

Candidate Starts for EZMoney23_64:

(Start: 98 @41573 has 5 MA's), (Start: 126 @41540 has 182 MA's), (154, 41465), (162, 41408), (178, 41318), (182, 41294), (195, 41249),

Gene: EagleEye_70 Start: 41375, Stop: 40989, Start Num: 126

Candidate Starts for EagleEye_70:

(24, 41633), (Start: 126 @41375 has 182 MA's), (154, 41297), (162, 41240), (178, 41150), (195, 41081),

Gene: EdogawaKiddo_68 Start: 41400, Stop: 41014, Start Num: 126

Candidate Starts for EdogawaKiddo_68:

(Start: 126 @41400 has 182 MA's), (141, 41373), (144, 41364), (162, 41265), (178, 41175), (195, 41106), (210, 41022),

Gene: Eidsmoe_68 Start: 41100, Stop: 40714, Start Num: 126

Candidate Starts for Eidsmoe_68:

(Start: 126 @41100 has 182 MA's), (141, 41073), (144, 41064), (162, 40965), (178, 40875), (195, 40806), (210, 40722),

Gene: Ejimix_110 Start: 65796, Stop: 66179, Start Num: 126

Candidate Starts for Ejimix_110:

(96, 65760), (Start: 126 @65796 has 182 MA's), (138, 65817), (162, 65928), (187, 66057), (191, 66075), (195, 66087), (209, 66165),

Gene: Ekdilam_52 Start: 39075, Stop: 39458, Start Num: 130

Candidate Starts for Ekdilam_52:

(Start: 130 @39075 has 68 MA's), (141, 39102), (162, 39210), (178, 39294), (191, 39354), (206, 39429), (208, 39435),

Gene: EITiger69_66 Start: 40898, Stop: 40509, Start Num: 126

Candidate Starts for EITiger69_66:

(Start: 126 @40898 has 182 MA's), (151, 40847), (162, 40760), (168, 40730), (178, 40670), (195, 40601),

Gene: Elephantoon_68 Start: 40741, Stop: 40352, Start Num: 123

Candidate Starts for Elephantoon_68:

(66, 40846), (69, 40843), (70, 40840), (79, 40822), (Start: 123 @40741 has 7 MA's), (168, 40576), (178, 40516), (194, 40447), (195, 40444), (209, 40366),

Gene: Ellie_51 Start: 38816, Stop: 39196, Start Num: 130

Candidate Starts for Ellie_51:

(Start: 130 @38816 has 68 MA's), (141, 38843), (152, 38867), (162, 38951), (164, 38957), (191, 39092), (200, 39128), (203, 39149), (206, 39167), (208, 39173),

Gene: Elsa_65 Start: 41909, Stop: 42322, Start Num: 128

Candidate Starts for Elsa_65:

(97, 41852), (106, 41876), (Start: 128 @41909 has 7 MA's), (159, 42038), (166, 42074), (179, 42140), (213, 42308),

Gene: Emotion_32 Start: 23912, Stop: 24310, Start Num: 130

Candidate Starts for Emotion_32:

(8, 23414), (18, 23576), (33, 23666), (47, 23732), (51, 23738), (Start: 130 @23912 has 68 MA's),

Gene: EmyBug_67 Start: 41102, Stop: 40716, Start Num: 126

Candidate Starts for EmyBug_67:

(Start: 126 @41102 has 182 MA's), (141, 41075), (144, 41066), (162, 40967), (178, 40877), (195, 40808), (210, 40724),

Gene: Engineer_113 Start: 66128, Stop: 66532, Start Num: 120

Candidate Starts for Engineer_113:

(Start: 120 @66128 has 14 MA's), (162, 66278), (203, 66485),

Gene: Epsocamisio_69 Start: 40081, Stop: 39683, Start Num: 130

Candidate Starts for Epsocamisio_69:

(Start: 130 @40081 has 68 MA's), (162, 39940), (170, 39892), (180, 39832), (200, 39751),

Gene: EricB_66 Start: 39680, Stop: 39294, Start Num: 126

Candidate Starts for EricB_66:

(Start: 126 @39680 has 182 MA's), (162, 39545), (178, 39455), (182, 39431), (186, 39419), (195, 39386),

Gene: EricMillard_109 Start: 64677, Stop: 65063, Start Num: 126

Candidate Starts for EricMillard_109:

(96, 64641), (Start: 126 @64677 has 182 MA's), (138, 64698), (162, 64809), (178, 64899), (179, 64902), (180, 64911), (183, 64926), (189, 64947), (195, 64971), (197, 64980), (203, 65016),

Gene: Estes_48 Start: 35060, Stop: 34668, Start Num: 121

Candidate Starts for Estes_48:

(30, 35303), (32, 35300), (36, 35285), (41, 35246), (50, 35225), (89, 35126), (Start: 121 @35060 has 6 MA's), (154, 34976), (178, 34829), (195, 34760), (203, 34715),

Gene: Expelliarmus_73 Start: 42362, Stop: 41880, Start Num: 92

Candidate Starts for Expelliarmus_73:

(Start: 92 @42362 has 6 MA's), (Start: 129 @42284 has 5 MA's), (154, 42188), (162, 42131), (178, 42041), (195, 41972), (206, 41909),

Gene: ExplosioNervosa_68 Start: 41168, Stop: 40782, Start Num: 126

Candidate Starts for ExplosioNervosa_68:

(Start: 126 @41168 has 182 MA's), (141, 41141), (144, 41132), (162, 41033), (178, 40943), (195, 40874), (210, 40790),

Gene: Fayely_68 Start: 41069, Stop: 40683, Start Num: 126

Candidate Starts for Fayely_68:

(Start: 126 @41069 has 182 MA's), (141, 41042), (144, 41033), (162, 40934), (178, 40844), (195, 40775), (210, 40691),

Gene: Fefferhead_53 Start: 38763, Stop: 39143, Start Num: 130

Candidate Starts for Fefferhead_53:

(Start: 130 @38763 has 68 MA's), (141, 38790), (152, 38814), (162, 38898), (164, 38904), (191, 39039), (200, 39075), (203, 39096), (206, 39114), (208, 39120),

Gene: Fenry_62 Start: 41952, Stop: 42347, Start Num: 127

Candidate Starts for Fenry_62:

(6, 41430), (17, 41580), (86, 41865), (Start: 127 @41952 has 14 MA's), (139, 41985), (163, 42102), (187, 42225), (191, 42243), (193, 42249), (194, 42252), (203, 42300), (209, 42333),

Gene: ForDig_52 Start: 50594, Stop: 50211, Start Num: 131

Candidate Starts for ForDig_52:

(Start: 131 @50594 has 1 MA's), (153, 50516), (161, 50465), (168, 50432), (171, 50423), (173, 50399), (178, 50372), (187, 50333), (191, 50315), (195, 50303), (200, 50279),

Gene: ForGetIt_64 Start: 40779, Stop: 40390, Start Num: 126

Candidate Starts for ForGetIt_64:

(Start: 126 @40779 has 182 MA's), (151, 40728), (162, 40641), (178, 40551), (187, 40512), (195, 40482),

Gene: Forrestell_50 Start: 38204, Stop: 37797, Start Num: 130

Candidate Starts for Forrestell_50:

(94, 38273), (Start: 116 @38219 has 12 MA's), (Start: 130 @38204 has 68 MA's), (148, 38147), (151, 38144), (163, 38054), (168, 38027), (176, 37979), (195, 37901), (204, 37853), (205, 37850),

Gene: Frankie_67 Start: 42381, Stop: 42767, Start Num: 133

Candidate Starts for Frankie_67:

(41, 42174), (44, 42186), (54, 42201), (60, 42222), (72, 42243), (91, 42297), (109, 42336), (113, 42351), (115, 42354), (Start: 133 @42381 has 3 MA's), (154, 42459), (162, 42516), (170, 42552), (178, 42606), (195, 42675), (208, 42744), (209, 42753),

Gene: Fugax_82 Start: 52682, Stop: 53077, Start Num: 130

Candidate Starts for Fugax_82:

(12, 52259), (28, 52400), (49, 52499), (103, 52622), (Start: 130 @52682 has 68 MA's), (178, 52913), (191, 52973), (203, 53030),

Gene: Funsized_63 Start: 58183, Stop: 57782, Start Num: 117

Candidate Starts for Funsized_63:

(Start: 117 @58183 has 1 MA's), (149, 58120), (153, 58090), (159, 58051), (164, 58030), (173, 57973), (178, 57943), (195, 57874), (197, 57865),

Gene: Fury_24 Start: 9277, Stop: 9669, Start Num: 130

Candidate Starts for Fury_24:

(Start: 130 @9277 has 68 MA's), (144, 9322), (148, 9334), (154, 9364), (163, 9424), (169, 9454), (170, 9457), (172, 9478), (187, 9547), (188, 9550), (191, 9565), (194, 9574), (203, 9622), (208, 9646), (209, 9655),

Gene: Gail_68 Start: 41859, Stop: 41473, Start Num: 126

Candidate Starts for Gail_68:

(56, 41985), (70, 41961), (79, 41943), (Start: 126 @41859 has 182 MA's), (154, 41781), (159, 41739), (162, 41724), (178, 41634), (187, 41595), (195, 41565),

Gene: Garak_69 Start: 40058, Stop: 39672, Start Num: 126

Candidate Starts for Garak_69:

(24, 40313), (Start: 126 @40058 has 182 MA's), (162, 39923), (178, 39833), (189, 39788), (195, 39764),

Gene: GardenSalsa_48 Start: 35170, Stop: 34781, Start Num: 121

Candidate Starts for GardenSalsa_48:

(62, 35302), (Start: 121 @35170 has 6 MA's), (154, 35083), (162, 35026), (178, 34942), (191, 34885), (195, 34873), (200, 34849), (204, 34825), (206, 34810),

Gene: Garnacho_152 Start: 82256, Stop: 82687, Start Num: 130

Candidate Starts for Garnacho_152:

(96, 82187), (107, 82214), (Start: 130 @82256 has 68 MA's), (156, 82361), (165, 82418), (169, 82436), (174, 82472), (178, 82493), (195, 82565),

Gene: GaugeLDP_63 Start: 41446, Stop: 41060, Start Num: 125

Candidate Starts for GaugeLDP_63:

(Start: 125 @41446 has 3 MA's), (154, 41368), (159, 41326), (162, 41311), (178, 41221), (187, 41182), (195, 41152),

Gene: Geeche_111 Start: 65214, Stop: 65618, Start Num: 120

Candidate Starts for Geeche_111:

(22, 64920), (23, 64926), (29, 64950), (73, 65100), (Start: 120 @65214 has 14 MA's), (162, 65364), (203, 65571),

Gene: GenevaB15_46 Start: 34794, Stop: 34402, Start Num: 121

Candidate Starts for GenevaB15_46:

(34, 35016), (41, 34974), (62, 34923), (68, 34914), (Start: 121 @34794 has 6 MA's), (154, 34710), (195, 34494), (203, 34449),

Gene: George_58 Start: 40098, Stop: 39709, Start Num: 126

Candidate Starts for George_58:

(Start: 126 @40098 has 182 MA's), (162, 39960), (178, 39870), (187, 39831), (195, 39801),

Gene: Gladiator_65 Start: 39283, Stop: 38897, Start Num: 126

Candidate Starts for Gladiator_65:

(24, 39538), (Start: 126 @39283 has 182 MA's), (162, 39148), (178, 39058), (189, 39013), (195, 38989),

Gene: GoldHunter_64 Start: 43358, Stop: 43744, Start Num: 127

Candidate Starts for GoldHunter_64:

(Start: 127 @43358 has 14 MA's), (170, 43532), (184, 43610), (187, 43622), (193, 43646), (194, 43649), (200, 43676), (203, 43697),

Gene: GoldenEssence_228 Start: 149977, Stop: 150399, Start Num: 112

Candidate Starts for GoldenEssence_228:

(Start: 112 @149977 has 3 MA's), (142, 150037), (178, 150223), (200, 150319), (201, 150325),

Gene: Gonephishing_105 Start: 59315, Stop: 59698, Start Num: 126

Candidate Starts for Gonephishing_105:

(Start: 126 @59315 has 182 MA's), (140, 59339), (162, 59447), (178, 59537), (191, 59594), (195, 59606), (209, 59684),

Gene: Groundhog_75 Start: 42567, Stop: 42085, Start Num: 92

Candidate Starts for Groundhog_75:

(Start: 92 @42567 has 6 MA's), (Start: 129 @42489 has 5 MA's), (154, 42393), (162, 42336), (178, 42246), (195, 42177),

Gene: Gruunaga_68 Start: 40016, Stop: 39630, Start Num: 126

Candidate Starts for Gruunaga_68:

(24, 40271), (Start: 126 @40016 has 182 MA's), (162, 39881), (178, 39791), (189, 39746), (195, 39722),

Gene: Halley_118 Start: 66112, Stop: 66495, Start Num: 126

Candidate Starts for Halley_118:

(96, 66076), (Start: 126 @66112 has 182 MA's), (138, 66133), (162, 66244), (187, 66373), (191, 66391), (195, 66403), (209, 66481),

Gene: Hammer_68 Start: 39623, Stop: 39237, Start Num: 126

Candidate Starts for Hammer_68:

(24, 39878), (Start: 126 @39623 has 182 MA's), (162, 39488), (178, 39398), (189, 39353), (195, 39329),

Gene: Hammy_55 Start: 39427, Stop: 39816, Start Num: 127

Candidate Starts for Hammy_55:

(Start: 127 @39427 has 14 MA's), (141, 39454), (154, 39511), (161, 39565), (162, 39568), (178, 39652), (191, 39712), (203, 39769), (206, 39787),

Gene: Hannaconda_102 Start: 58261, Stop: 58644, Start Num: 126

Candidate Starts for Hannaconda_102:

(Start: 126 @58261 has 182 MA's), (140, 58285), (162, 58393), (178, 58483), (191, 58540), (195, 58552), (209, 58630),

Gene: Hanray_68 Start: 41432, Stop: 41046, Start Num: 126

Candidate Starts for Hanray_68:

(Start: 126 @41432 has 182 MA's), (141, 41405), (144, 41396), (162, 41297), (178, 41207), (195, 41138), (210, 41054),

Gene: HaugeAnator_77 Start: 39587, Stop: 39162, Start Num: 130

Candidate Starts for HaugeAnator_77:

(Start: 130 @39587 has 68 MA's), (134, 39578), (146, 39542), (162, 39443), (163, 39440), (169, 39410), (178, 39359), (195, 39287), (202, 39254), (203, 39242),

Gene: Heisenberger_63 Start: 41118, Stop: 41531, Start Num: 128

Candidate Starts for Heisenberger_63:

(97, 41061), (100, 41064), (106, 41085), (Start: 128 @41118 has 7 MA's), (166, 41283), (179, 41349), (213, 41517),

Gene: Helmet_69 Start: 40058, Stop: 39672, Start Num: 126

Candidate Starts for Helmet_69:

(24, 40313), (Start: 126 @40058 has 182 MA's), (162, 39923), (178, 39833), (189, 39788), (195, 39764),

Gene: Herbertwm_63 Start: 41241, Stop: 40855, Start Num: 126

Candidate Starts for Herbertwm_63:

(Start: 98 @41262 has 5 MA's), (Start: 126 @41241 has 182 MA's), (162, 41106), (178, 41016), (182, 40992), (195, 40947),

Gene: Hexamo_68 Start: 39688, Stop: 39302, Start Num: 126

Candidate Starts for Hexamo_68:

(24, 39943), (Start: 126 @39688 has 182 MA's), (162, 39553), (178, 39463), (189, 39418), (195, 39394),

Gene: HokkenD_106 Start: 63371, Stop: 63754, Start Num: 126

Candidate Starts for HokkenD_106:

(96, 63335), (Start: 126 @63371 has 182 MA's), (138, 63392), (162, 63503), (191, 63650), (195, 63662),

Gene: Horex_68 Start: 41448, Stop: 41062, Start Num: 126

Candidate Starts for Horex_68:

(Start: 126 @41448 has 182 MA's), (141, 41421), (144, 41412), (162, 41313), (178, 41223), (195, 41154), (210, 41070),

Gene: Hoot_62 Start: 37538, Stop: 37152, Start Num: 126

Candidate Starts for Hoot_62:

(Start: 126 @37538 has 182 MA's), (162, 37403), (178, 37313), (182, 37289), (186, 37277), (195, 37244),

Gene: HortumSL17_71 Start: 41432, Stop: 41046, Start Num: 126

Candidate Starts for HortumSL17_71:

(Start: 126 @41432 has 182 MA's), (141, 41405), (144, 41396), (162, 41297), (178, 41207), (191, 41150), (195, 41138), (210, 41054),

Gene: Hortus1_86 Start: 51617, Stop: 51204, Start Num: 126

Candidate Starts for Hortus1_86:

(Start: 126 @51617 has 182 MA's), (170, 51431), (195, 51311), (196, 51305), (200, 51287),

Gene: Hosp_049 Start: 48795, Stop: 48412, Start Num: 131

Candidate Starts for Hosp_049:

(102, 48843), (Start: 131 @48795 has 1 MA's), (153, 48717), (164, 48657), (169, 48630), (173, 48600), (178, 48573), (181, 48555), (191, 48516), (195, 48504), (200, 48480), (206, 48441),

Gene: Hughesyang_115 Start: 65568, Stop: 65951, Start Num: 126

Candidate Starts for Hughesyang_115:

(96, 65532), (Start: 126 @65568 has 182 MA's), (138, 65589), (162, 65700), (187, 65829), (191, 65847), (195, 65859), (209, 65937),

Gene: HuhtaEnerson15_61 Start: 40248, Stop: 39859, Start Num: 126

Candidate Starts for HuhtaEnerson15_61:

(Start: 126 @40248 has 182 MA's), (162, 40110), (178, 40020), (187, 39981), (195, 39951),

Gene: Hyzer_57 Start: 39859, Stop: 40248, Start Num: 130

Candidate Starts for Hyzer_57:

(Start: 130 @39859 has 68 MA's), (163, 40003), (169, 40033), (187, 40126), (191, 40144), (194, 40153), (209, 40234),

Gene: Immanuel3_75 Start: 39592, Stop: 39245, Start Num: 130

Candidate Starts for Immanuel3_75:

(Start: 130 @39592 has 68 MA's), (134, 39583), (146, 39547), (162, 39448), (163, 39445), (169, 39415), (178, 39364), (195, 39292),

Gene: Imvubu_55 Start: 53558, Stop: 53160, Start Num: 119

Candidate Starts for Imvubu_55:

(Start: 119 @53558 has 1 MA's), (153, 53468), (159, 53429), (162, 53414), (178, 53321), (190, 53270), (195, 53252), (200, 53228),

Gene: Indra_71 Start: 40059, Stop: 39673, Start Num: 126

Candidate Starts for Indra_71:

(24, 40314), (Start: 126 @40059 has 182 MA's), (162, 39924), (178, 39834), (189, 39789), (195, 39765),

Gene: IronMan_65 Start: 42406, Stop: 42020, Start Num: 126

Candidate Starts for IronMan_65:

(Start: 126 @42406 has 182 MA's), (147, 42361), (154, 42328), (162, 42271), (178, 42181), (195, 42112),

Gene: Isiphiwo_65 Start: 39219, Stop: 38833, Start Num: 126

Candidate Starts for Isiphiwo_65:

(Start: 126 @39219 has 182 MA's), (162, 39084), (178, 38994), (182, 38970), (186, 38958), (195, 38925),

Gene: Iwokeuplikedis_68 Start: 41379, Stop: 40990, Start Num: 126

Candidate Starts for Iwokeuplikedis_68:

(Start: 126 @41379 has 182 MA's), (154, 41301), (162, 41244), (178, 41154), (195, 41082),

Gene: JEGGS_63 Start: 41197, Stop: 41610, Start Num: 128

Candidate Starts for JEGGS_63:

(97, 41140), (100, 41143), (106, 41164), (Start: 128 @41197 has 7 MA's), (166, 41362), (179, 41428), (213, 41596),

Gene: JPandJE_76 Start: 39938, Stop: 39513, Start Num: 130

Candidate Starts for JPandJE_76:

(Start: 130 @39938 has 68 MA's), (134, 39929), (146, 39893), (162, 39794), (163, 39791), (169, 39761), (178, 39710), (195, 39638), (202, 39605), (203, 39593),

Gene: JSwag_72 Start: 40368, Stop: 39970, Start Num: 130

Candidate Starts for JSwag_72:

(88, 40449), (Start: 130 @40368 has 68 MA's), (162, 40227), (170, 40179), (200, 40038),

Gene: Jaan_66 Start: 42574, Stop: 42188, Start Num: 126

Candidate Starts for Jaan_66:

(Start: 126 @42574 has 182 MA's), (147, 42529), (154, 42496), (159, 42454), (162, 42439), (178, 42349), (195, 42280),

Gene: Jabiru_65 Start: 40817, Stop: 40428, Start Num: 126

Candidate Starts for Jabiru_65:

(Start: 126 @40817 has 182 MA's), (151, 40766), (162, 40679), (178, 40589), (195, 40520),

Gene: JasmineDragon_32 Start: 23314, Stop: 23712, Start Num: 130

Candidate Starts for JasmineDragon_32:

(Start: 130 @23314 has 68 MA's),

Gene: Jeeves_70 Start: 40857, Stop: 40468, Start Num: 126

Candidate Starts for Jeeves_70:

(57, 40965), (59, 40962), (Start: 126 @40857 has 182 MA's), (162, 40722), (169, 40689), (178, 40632), (195, 40560), (210, 40476),

Gene: Jeffabunny_68 Start: 39685, Stop: 39299, Start Num: 126

Candidate Starts for Jeffabunny_68:

(24, 39940), (Start: 126 @39685 has 182 MA's), (162, 39550), (178, 39460), (189, 39415), (195, 39391),

Gene: JewelBug_67 Start: 39959, Stop: 39573, Start Num: 126

Candidate Starts for JewelBug_67:

(Start: 126 @39959 has 182 MA's), (162, 39824), (167, 39800), (178, 39734), (189, 39689), (195, 39665),

Gene: Jiawan_67 Start: 41464, Stop: 41078, Start Num: 126

Candidate Starts for Jiawan_67:

(Start: 126 @41464 has 182 MA's), (141, 41437), (144, 41428), (162, 41329), (169, 41296), (178, 41239), (195, 41170), (210, 41086),

Gene: Jolie1_051 Start: 50701, Stop: 50318, Start Num: 131

Candidate Starts for Jolie1_051:

(102, 50746), (Start: 131 @50701 has 1 MA's), (153, 50623), (164, 50563), (169, 50536), (173, 50506), (178, 50479), (181, 50461), (191, 50422), (195, 50410), (200, 50386), (206, 50347),

Gene: Jordennis_66 Start: 39440, Stop: 39054, Start Num: 126

Candidate Starts for Jordennis_66:

(Start: 126 @39440 has 182 MA's), (162, 39305), (178, 39215), (182, 39191), (186, 39179), (195, 39146),

Gene: Jovo_64 Start: 41035, Stop: 40646, Start Num: 126

Candidate Starts for Jovo_64:

(Start: 126 @41035 has 182 MA's), (151, 40984), (162, 40897), (178, 40807), (187, 40768), (195, 40738),

Gene: Jsquared_71 Start: 41166, Stop: 40780, Start Num: 124

Candidate Starts for Jsquared_71:

(40, 41331), (Start: 98 @41196 has 5 MA's), (Start: 124 @41166 has 7 MA's), (162, 41031), (178, 40941), (195, 40872), (197, 40863), (209, 40794),

Gene: JuicyJay_113 Start: 67237, Stop: 67623, Start Num: 126

Candidate Starts for JuicyJay_113:

(96, 67201), (Start: 126 @67237 has 182 MA's), (138, 67258), (162, 67369), (178, 67459), (179, 67462), (180, 67471), (189, 67507), (195, 67531), (197, 67540), (203, 67576),

Gene: Kalah2_109 Start: 64903, Stop: 65289, Start Num: 126

Candidate Starts for Kalah2_109:

(96, 64867), (Start: 126 @64903 has 182 MA's), (138, 64924), (162, 65035), (178, 65125), (179, 65128), (180, 65137), (189, 65173), (195, 65197), (197, 65206), (203, 65242),

Gene: KashFlow_108 Start: 60766, Stop: 61149, Start Num: 126

Candidate Starts for KashFlow_108:

(Start: 126 @60766 has 182 MA's), (140, 60790), (162, 60898), (178, 60988), (195, 61057), (209, 61135),

Gene: Katalie136_62 Start: 41324, Stop: 40941, Start Num: 126

Candidate Starts for Katalie136_62:

(Start: 116 @41336 has 12 MA's), (Start: 126 @41324 has 182 MA's), (178, 41102), (191, 41045), (195, 41033), (200, 41009), (204, 40985),

Gene: KatherineG_73 Start: 40841, Stop: 40443, Start Num: 130

Candidate Starts for KatherineG_73:

(88, 40922), (Start: 130 @40841 has 68 MA's), (162, 40700), (170, 40652), (200, 40511),

Gene: KayaCho_50 Start: 50503, Stop: 50120, Start Num: 131

Candidate Starts for KayaCho_50:

(Start: 131 @50503 has 1 MA's), (153, 50425), (164, 50365), (169, 50338), (173, 50308), (178, 50281), (181, 50263), (191, 50224), (195, 50212), (200, 50188), (206, 50149),

Gene: Kazan_68 Start: 39693, Stop: 39307, Start Num: 126

Candidate Starts for Kazan_68:

(Start: 126 @39693 has 182 MA's), (162, 39558), (178, 39468), (182, 39444), (186, 39432), (195, 39399),

Gene: Kerberos_69 Start: 41879, Stop: 41463, Start Num: 98

Candidate Starts for Kerberos_69:

(40, 42014), (58, 41966), (77, 41936), (Start: 98 @41879 has 5 MA's), (Start: 126 @41849 has 182 MA's), (151, 41798), (154, 41771), (162, 41714), (178, 41624), (195, 41555),

Gene: Keziacharles14_67 Start: 41988, Stop: 41599, Start Num: 95

Candidate Starts for Keziacharles14_67:

(Start: 95 @41988 has 3 MA's), (146, 41946), (162, 41853), (178, 41763), (195, 41691),

Gene: Kharcho_11 Start: 3851, Stop: 4243, Start Num: 130

Candidate Starts for Kharcho_11:

(25, 3554), (26, 3557), (88, 3767), (Start: 130 @3851 has 68 MA's), (168, 4013), (172, 4040), (195, 4139), (205, 4190),

Gene: Kimchi1738_67 Start: 48857, Stop: 48480, Start Num: 135

Candidate Starts for Kimchi1738_67:

(Start: 135 @48857 has 6 MA's), (160, 48740), (169, 48695), (200, 48548),

Gene: Kinmap_68 Start: 40146, Stop: 39766, Start Num: 130

Candidate Starts for Kinmap_68:

(Start: 130 @40146 has 68 MA's), (178, 39927), (195, 39858), (203, 39813), (209, 39780),

Gene: Kipper29_67 Start: 39706, Stop: 39320, Start Num: 126

Candidate Starts for Kipper29_67:

(Start: 126 @39706 has 182 MA's), (162, 39571), (178, 39481), (182, 39457), (186, 39445), (195, 39412),

Gene: Klein_114 Start: 63260, Stop: 63646, Start Num: 126

Candidate Starts for Klein_114:

(Start: 126 @63260 has 182 MA's), (138, 63281), (162, 63392), (178, 63482), (179, 63485), (180, 63494), (189, 63530), (195, 63554), (197, 63563), (203, 63599),

Gene: Koduck_68 Start: 40602, Stop: 40216, Start Num: 124

Candidate Starts for Koduck_68:

(Start: 98 @40632 has 5 MA's), (Start: 124 @40602 has 7 MA's), (162, 40467), (169, 40434), (178, 40377), (195, 40308), (203, 40263),

Gene: Koko_70 Start: 40543, Stop: 40157, Start Num: 126

Candidate Starts for Koko_70:

(24, 40798), (Start: 126 @40543 has 182 MA's), (162, 40408), (178, 40318), (189, 40273), (195, 40249),

Gene: Kubulix_53 Start: 39508, Stop: 39101, Start Num: 130

Candidate Starts for Kubulix_53:

(Start: 116 @39523 has 12 MA's), (Start: 130 @39508 has 68 MA's), (148, 39451), (151, 39448), (163, 39358), (168, 39331), (176, 39283), (195, 39205), (204, 39157), (205, 39154),

Gene: L5_64 Start: 40755, Stop: 40369, Start Num: 124

Candidate Starts for L5_64:

(Start: 98 @40785 has 5 MA's), (Start: 124 @40755 has 7 MA's), (162, 40620), (178, 40530), (195, 40461),

Gene: LadyAstra_33 Start: 23354, Stop: 23752, Start Num: 130

Candidate Starts for LadyAstra_33:

(Start: 130 @23354 has 68 MA's),

Gene: Landor_66 Start: 42483, Stop: 42097, Start Num: 126

Candidate Starts for Landor_66:

(Start: 126 @42483 has 182 MA's), (147, 42438), (154, 42405), (159, 42363), (162, 42348), (178, 42258), (195, 42189),

Gene: LastHope_56 Start: 37963, Stop: 38349, Start Num: 132

Candidate Starts for LastHope_56:

(Start: 132 @37963 has 1 MA's), (165, 38116), (183, 38212), (187, 38227), (191, 38245), (195, 38257), (203, 38302), (208, 38326),

Gene: LastResort_71 Start: 40420, Stop: 40022, Start Num: 130

Candidate Starts for LastResort_71:

(71, 40546), (74, 40543), (76, 40540), (Start: 130 @40420 has 68 MA's), (162, 40279), (170, 40231), (200, 40090),

Gene: Lev2_64 Start: 40667, Stop: 40278, Start Num: 126

Candidate Starts for Lev2_64:

(Start: 126 @40667 has 182 MA's), (151, 40616), (162, 40529), (178, 40439), (187, 40400), (195, 40370),

Gene: LilSpotty_61 Start: 38299, Stop: 38685, Start Num: 133

Candidate Starts for LilSpotty_61:

(21, 37966), (27, 37999), (46, 38107), (54, 38119), (60, 38140), (72, 38161), (91, 38215), (109, 38254), (113, 38269), (115, 38272), (Start: 133 @38299 has 3 MA's), (154, 38377), (162, 38434), (170, 38470), (178, 38524), (195, 38593), (208, 38662),

Gene: Lilbunny_67 Start: 39689, Stop: 39303, Start Num: 126

Candidate Starts for Lilbunny_67:

(24, 39944), (Start: 126 @39689 has 182 MA's), (162, 39554), (178, 39464), (189, 39419), (195, 39395),

Gene: Lilleskat_66 Start: 41219, Stop: 40830, Start Num: 123

Candidate Starts for Lilleskat_66:

(66, 41312), (69, 41309), (70, 41306), (Start: 123 @41219 has 7 MA's), (168, 41054), (178, 40994), (194, 40925), (209, 40844),

Gene: Limpid_99 Start: 68068, Stop: 68493, Start Num: 130

Candidate Starts for Limpid_99:

(Start: 130 @68068 has 68 MA's), (147, 68113), (162, 68212),

Gene: LittleCherry_61 Start: 40118, Stop: 39729, Start Num: 126

Candidate Starts for LittleCherry_61:

(Start: 126 @40118 has 182 MA's), (162, 39980), (178, 39890), (187, 39851), (195, 39821),

Gene: LittleE_115 Start: 63882, Stop: 64265, Start Num: 126

Candidate Starts for LittleE_115:

(Start: 126 @63882 has 182 MA's), (140, 63906), (162, 64014), (178, 64104), (191, 64161), (195, 64173), (209, 64251),

Gene: LoneWolf_69 Start: 41266, Stop: 40880, Start Num: 123

Candidate Starts for LoneWolf_69:

(7, 41716), (66, 41359), (69, 41356), (70, 41353), (Start: 123 @41266 has 7 MA's), (168, 41104), (178, 41044), (191, 40984), (200, 40948), (209, 40894),

Gene: LonelyBoi_50 Start: 39411, Stop: 39800, Start Num: 130

Candidate Starts for LonelyBoi_50:

(Start: 130 @39411 has 68 MA's), (154, 39495), (163, 39555), (169, 39585), (187, 39678), (191, 39696), (193, 39702), (194, 39705), (200, 39732), (209, 39786),

Gene: Looper_72 Start: 40332, Stop: 39934, Start Num: 130

Candidate Starts for Looper_72:

(71, 40458), (74, 40455), (76, 40452), (Start: 130 @40332 has 68 MA's), (162, 40191), (170, 40143), (200, 40002),

Gene: Lozinak_112 Start: 65966, Stop: 66370, Start Num: 120

Candidate Starts for Lozinak_112:

(Start: 120 @65966 has 14 MA's), (162, 66116), (203, 66323),

Gene: Lucky2013_108 Start: 60332, Stop: 60715, Start Num: 126

Candidate Starts for Lucky2013_108:

(Start: 126 @60332 has 182 MA's), (140, 60356), (162, 60464), (178, 60554), (191, 60611), (195, 60623), (209, 60701),

Gene: Lucyedi_69 Start: 41571, Stop: 41185, Start Num: 126

Candidate Starts for Lucyedi_69:

(24, 41829), (Start: 126 @41571 has 182 MA's), (154, 41493), (162, 41436), (178, 41346), (195, 41277),

Gene: Mabodamaca_38 Start: 25972, Stop: 26409, Start Num: 129

Candidate Starts for Mabodamaca_38:

(16, 25582), (Start: 129 @25972 has 5 MA's), (151, 26032), (162, 26119), (178, 26230), (198, 26314), (200, 26326), (211, 26389), (212, 26392),

Gene: MajorMajor_69 Start: 41009, Stop: 40623, Start Num: 124

Candidate Starts for MajorMajor_69:

(Start: 98 @41039 has 5 MA's), (Start: 124 @41009 has 7 MA's), (162, 40874), (178, 40784), (195, 40715), (197, 40706), (209, 40637),

Gene: Maminiaina_69 Start: 41399, Stop: 41010, Start Num: 123

Candidate Starts for Maminiaina_69:

(7, 41846), (66, 41492), (69, 41489), (70, 41486), (Start: 123 @41399 has 7 MA's), (168, 41234), (178, 41174), (194, 41105), (195, 41102), (200, 41078), (209, 41024),

Gene: Manuel_75 Start: 39252, Stop: 38827, Start Num: 130

Candidate Starts for Manuel_75:

(Start: 130 @39252 has 68 MA's), (143, 39216), (144, 39213), (154, 39162), (163, 39102), (169, 39072), (170, 39069), (176, 39027), (191, 38961), (203, 38904), (209, 38871),

Gene: Marleymoo_100 Start: 62229, Stop: 62615, Start Num: 126

Candidate Starts for Marleymoo_100:

(96, 62193), (Start: 126 @62229 has 182 MA's), (138, 62250), (162, 62361), (178, 62451), (179, 62454), (180, 62463), (189, 62499), (195, 62523), (197, 62532), (203, 62568),

Gene: Marshawn_55 Start: 39223, Stop: 39612, Start Num: 122

Candidate Starts for Marshawn_55:

(Start: 122 @39223 has 1 MA's), (139, 39256), (148, 39280), (152, 39283), (154, 39307), (159, 39349), (165, 39379), (179, 39451), (187, 39490), (191, 39508), (195, 39520), (203, 39565), (206, 39583),

Gene: McFly_67 Start: 39652, Stop: 39266, Start Num: 126

Candidate Starts for McFly_67:

(Start: 126 @39652 has 182 MA's), (162, 39517), (178, 39427), (182, 39403), (186, 39391), (195, 39358),

Gene: MellowYellow_53 Start: 38680, Stop: 38258, Start Num: 111

Candidate Starts for MellowYellow_53:

(88, 38734), (Start: 111 @38680 has 1 MA's), (Start: 118 @38665 has 3 MA's), (139, 38629), (140, 38626), (168, 38488), (171, 38479), (186, 38398), (203, 38320), (204, 38317),

Gene: MiaZeal_111 Start: 60963, Stop: 61346, Start Num: 126

Candidate Starts for MiaZeal_111:

(Start: 126 @60963 has 182 MA's), (140, 60987), (162, 61095), (178, 61185), (191, 61242), (195, 61254),

Gene: Midas2_60 Start: 40568, Stop: 40179, Start Num: 126

Candidate Starts for Midas2_60:

(19, 40835), (Start: 126 @40568 has 182 MA's), (151, 40517), (162, 40430), (178, 40340), (187, 40301), (195, 40271),

Gene: MidnightRain_76 Start: 39445, Stop: 39840, Start Num: 130

Candidate Starts for MidnightRain_76:

(Start: 130 @39445 has 68 MA's), (171, 39622), (194, 39733), (200, 39760),

Gene: Milcery_61 Start: 40066, Stop: 39677, Start Num: 126

Candidate Starts for Milcery_61:

(Start: 126 @40066 has 182 MA's), (162, 39928), (178, 39838), (187, 39799), (195, 39769),

Gene: Mildred21_213 Start: 103422, Stop: 103844, Start Num: 130

Candidate Starts for Mildred21_213:

(Start: 130 @103422 has 68 MA's), (162, 103566),

Gene: Mimi_239 Start: 155375, Stop: 155797, Start Num: 112

Candidate Starts for Mimi_239:

(Start: 112 @155375 has 3 MA's), (142, 155435), (171, 155576), (178, 155621), (200, 155717), (201, 155723),

Gene: MinecraftSteve_73 Start: 40656, Stop: 40258, Start Num: 130

Candidate Starts for MinecraftSteve_73:

(88, 40737), (Start: 130 @40656 has 68 MA's), (162, 40515), (170, 40467), (200, 40326),

Gene: Minerva_114 Start: 64539, Stop: 64925, Start Num: 126

Candidate Starts for Minerva_114:

(Start: 126 @64539 has 182 MA's), (138, 64560), (162, 64671), (178, 64761), (179, 64764), (180, 64773), (183, 64788), (189, 64809), (195, 64833), (197, 64842), (203, 64878),

Gene: MiniMommy_33 Start: 23315, Stop: 23713, Start Num: 130

Candidate Starts for MiniMommy_33:

(Start: 130 @23315 has 68 MA's),

Gene: Miramae_61 Start: 40767, Stop: 40384, Start Num: 129

Candidate Starts for Miramae_61:

(43, 40932), (Start: 129 @40767 has 5 MA's), (151, 40719), (154, 40692), (159, 40650), (162, 40635), (178, 40545), (195, 40476),

Gene: Mischief19_49 Start: 43289, Stop: 42864, Start Num: 130

Candidate Starts for Mischief19_49:

(31, 43547), (64, 43436), (107, 43334), (Start: 130 @43289 has 68 MA's), (137, 43271), (141, 43259), (148, 43238), (162, 43142), (169, 43109), (178, 43058),

Gene: Miskis_107 Start: 64917, Stop: 65321, Start Num: 120

Candidate Starts for Miskis_107:

(Start: 120 @64917 has 14 MA's), (162, 65067), (203, 65274),

Gene: Morpher26_62 Start: 41357, Stop: 40962, Start Num: 116

Candidate Starts for Morpher26_62:

(Start: 116 @41357 has 12 MA's), (Start: 126 @41345 has 182 MA's), (178, 41123), (191, 41066), (195, 41054), (200, 41030), (204, 41006),

Gene: MrMagoo_48 Start: 35170, Stop: 34781, Start Num: 121

Candidate Starts for MrMagoo_48:

(62, 35302), (Start: 121 @35170 has 6 MA's), (154, 35083), (162, 35026), (178, 34942), (191, 34885), (195, 34873), (200, 34849), (204, 34825), (206, 34810),

Gene: Mudcat_61 Start: 42555, Stop: 42968, Start Num: 128

Candidate Starts for Mudcat_61:

(97, 42498), (100, 42501), (106, 42522), (Start: 128 @42555 has 7 MA's), (166, 42720), (179, 42786), (213, 42954),

Gene: MulchSalad_61 Start: 38224, Stop: 38610, Start Num: 133

Candidate Starts for MulchSalad_61:

(21, 37891), (27, 37924), (46, 38032), (54, 38044), (60, 38065), (72, 38086), (91, 38140), (109, 38179), (113, 38194), (115, 38197), (Start: 133 @38224 has 3 MA's), (154, 38302), (162, 38359), (170, 38395), (178, 38449), (187, 38488), (195, 38518), (208, 38587), (209, 38596),

Gene: Mundrea_62 Start: 41338, Stop: 40952, Start Num: 126

Candidate Starts for Mundrea_62:

(Start: 116 @41350 has 12 MA's), (Start: 126 @41338 has 182 MA's), (154, 41260), (178, 41113), (195, 41044),

Gene: MunkgeeRoachy_61 Start: 42695, Stop: 43078, Start Num: 127

Candidate Starts for MunkgeeRoachy_61:

(Start: 127 @42695 has 14 MA's), (139, 42728), (170, 42866), (184, 42944), (187, 42956), (193, 42980), (194, 42983), (200, 43010), (203, 43031),

Gene: Muntaha_184 Start: 94748, Stop: 95173, Start Num: 130

Candidate Starts for Muntaha_184:

(Start: 127 @94745 has 14 MA's), (Start: 130 @94748 has 68 MA's), (162, 94892), (199, 95066), (203, 95093),

Gene: MyraDee_66 Start: 39043, Stop: 38666, Start Num: 124

Candidate Starts for MyraDee_66:

(Start: 124 @39043 has 7 MA's), (154, 38968), (159, 38926), (162, 38911), (178, 38827), (195, 38758),

Gene: Myxus_70 Start: 41432, Stop: 41046, Start Num: 126

Candidate Starts for Myxus_70:

(Start: 126 @41432 has 182 MA's), (141, 41405), (144, 41396), (162, 41297), (178, 41207), (191, 41150), (195, 41138), (210, 41054),

Gene: Naca_64 Start: 41202, Stop: 40813, Start Num: 126

Candidate Starts for Naca_64:

(Start: 126 @41202 has 182 MA's), (151, 41151), (162, 41064), (168, 41034), (178, 40974), (195, 40905),

Gene: Naji_69 Start: 41880, Stop: 41464, Start Num: 98

Candidate Starts for Naji_69:

(35, 42054), (58, 41967), (72, 41943), (Start: 98 @41880 has 5 MA's), (Start: 126 @41850 has 182 MA's), (151, 41799), (154, 41772), (162, 41715), (178, 41625), (195, 41556),

Gene: Nason_65 Start: 41909, Stop: 42322, Start Num: 128

Candidate Starts for Nason_65:

(97, 41852), (106, 41876), (Start: 128 @41909 has 7 MA's), (159, 42038), (166, 42074), (179, 42140), (213, 42308),

Gene: NearlyHeadless_76 Start: 42310, Stop: 41921, Start Num: 126

Candidate Starts for NearlyHeadless_76:

(84, 42343), (Start: 126 @42310 has 182 MA's), (154, 42229), (162, 42172), (178, 42082), (195, 42013),

Gene: Nebulosus_70 Start: 40318, Stop: 39920, Start Num: 130

Candidate Starts for Nebulosus_70:

(Start: 130 @40318 has 68 MA's), (162, 40177), (170, 40129), (180, 40069), (200, 39988),

Gene: Nedarya_68 Start: 40272, Stop: 39877, Start Num: 130

Candidate Starts for Nedarya_68:

(Start: 130 @40272 has 68 MA's), (162, 40128), (204, 39921),

Gene: Neeharika16_66 Start: 39119, Stop: 38733, Start Num: 126

Candidate Starts for Neeharika16_66:

(Start: 126 @39119 has 182 MA's), (162, 38984), (178, 38894), (182, 38870), (186, 38858), (195, 38825),

Gene: Newrala_67 Start: 39654, Stop: 39268, Start Num: 126

Candidate Starts for Newrala_67:

(Start: 126 @39654 has 182 MA's), (162, 39519), (178, 39429), (182, 39405), (186, 39393), (195, 39360),

Gene: NicoleTera_65 Start: 41824, Stop: 41441, Start Num: 126

Candidate Starts for NicoleTera_65:

(Start: 126 @41824 has 182 MA's), (154, 41749), (162, 41692), (178, 41602), (182, 41578), (195, 41533),

Gene: NihilNomen_118 Start: 65189, Stop: 65575, Start Num: 126

Candidate Starts for NihilNomen_118:

(96, 65153), (Start: 126 @65189 has 182 MA's), (138, 65210), (162, 65321), (178, 65411), (179, 65414), (180, 65423), (189, 65459), (195, 65483), (197, 65492), (203, 65528),

Gene: Noelle_63 Start: 41653, Stop: 41267, Start Num: 126

Candidate Starts for Noelle_63:

(Start: 116 @41665 has 12 MA's), (Start: 126 @41653 has 182 MA's), (169, 41485), (178, 41428), (195, 41359), (200, 41335), (208, 41290),

Gene: Norvs_114 Start: 65981, Stop: 66385, Start Num: 120

Candidate Starts for Norvs_114:

(Start: 120 @65981 has 14 MA's), (162, 66131), (203, 66338),

Gene: NothingSpecial_64 Start: 42052, Stop: 41663, Start Num: 125

Candidate Starts for NothingSpecial_64:

(Start: 125 @42052 has 3 MA's), (162, 41917), (178, 41827),

Gene: November_55 Start: 39307, Stop: 39696, Start Num: 127

Candidate Starts for November_55:

(Start: 127 @39307 has 14 MA's), (141, 39334), (154, 39391), (161, 39445), (162, 39448), (178, 39532), (191, 39592), (203, 39649), (206, 39667),

Gene: NyleyClemson_52 Start: 38280, Stop: 37873, Start Num: 118

Candidate Starts for NyleyClemson_52:

(88, 38349), (Start: 111 @38295 has 1 MA's), (Start: 118 @38280 has 3 MA's), (139, 38244), (140, 38241), (168, 38103), (171, 38094), (186, 38013), (203, 37935), (204, 37932),

Gene: Odette_118 Start: 65097, Stop: 65483, Start Num: 126

Candidate Starts for Odette_118:

(96, 65061), (Start: 126 @65097 has 182 MA's), (138, 65118), (162, 65229), (178, 65319), (179, 65322), (180, 65331), (183, 65346), (189, 65367), (195, 65391), (197, 65400), (203, 65436),

Gene: Odin_67 Start: 40646, Stop: 40233, Start Num: 104

Candidate Starts for Odin_67:

(Start: 104 @40646 has 5 MA's), (Start: 126 @40622 has 182 MA's), (154, 40541), (162, 40484), (178, 40394), (195, 40325), (207, 40259), (209, 40247),

Gene: Odyssey395_58 Start: 39882, Stop: 39460, Start Num: 116

Candidate Starts for Odyssey395_58:

(75, 39978), (Start: 116 @39882 has 12 MA's), (Start: 130 @39867 has 68 MA's), (148, 39810), (151, 39807), (163, 39717), (168, 39690), (176, 39642), (195, 39564), (204, 39516), (205, 39513),

Gene: Olicious_77 Start: 39590, Stop: 39165, Start Num: 130

Candidate Starts for Olicious_77:

(Start: 130 @39590 has 68 MA's), (134, 39581), (146, 39545), (162, 39446), (163, 39443), (169, 39413), (178, 39362), (195, 39290), (202, 39257), (203, 39245),

Gene: OlinDD_86 Start: 51622, Stop: 51209, Start Num: 126

Candidate Starts for OlinDD_86:

(Start: 126 @51622 has 182 MA's), (170, 51436), (195, 51316), (196, 51310), (200, 51292),

Gene: Omega_120 Start: 64897, Stop: 65280, Start Num: 126

Candidate Starts for Omega_120:

(Start: 126 @64897 has 182 MA's), (140, 64921), (162, 65029), (178, 65119), (191, 65176), (195, 65188),

Gene: OneUp_99 Start: 62464, Stop: 62868, Start Num: 116

Candidate Starts for OneUp_99:

(81, 62383), (82, 62386), (Start: 116 @62464 has 12 MA's), (192, 62767), (193, 62770), (200, 62800),

Gene: Onglai_68 Start: 39636, Stop: 39250, Start Num: 126

Candidate Starts for Onglai_68:

(Start: 126 @39636 has 182 MA's), (141, 39609), (144, 39600), (162, 39501), (178, 39411), (195, 39342), (210, 39258),

Gene: Oofda_73 Start: 40533, Stop: 40135, Start Num: 130

Candidate Starts for Oofda_73:

(71, 40659), (74, 40656), (76, 40653), (86, 40617), (Start: 130 @40533 has 68 MA's), (162, 40392), (170, 40344), (200, 40203),

Gene: Opie_54 Start: 36900, Stop: 37292, Start Num: 127

Candidate Starts for Opie_54:

(39, 36690), (Start: 116 @36885 has 12 MA's), (Start: 127 @36900 has 14 MA's), (154, 36987), (155, 36990),

Gene: Optimus_108 Start: 63211, Stop: 63597, Start Num: 126

Candidate Starts for Optimus_108:

(Start: 126 @63211 has 182 MA's), (138, 63232), (162, 63343), (178, 63433), (179, 63436), (180, 63445), (183, 63460), (189, 63481), (195, 63505), (197, 63514), (203, 63550),

Gene: Ottawa_11 Start: 3851, Stop: 4243, Start Num: 130

Candidate Starts for Ottawa_11:

(25, 3554), (26, 3557), (88, 3767), (Start: 130 @3851 has 68 MA's), (168, 4013), (172, 4040), (195, 4139), (205, 4190),

Gene: PackMan_69 Start: 41307, Stop: 40921, Start Num: 126

Candidate Starts for PackMan_69:

(Start: 126 @41307 has 182 MA's), (141, 41280), (144, 41271), (162, 41172), (178, 41082), (191, 41025), (195, 41013), (210, 40929),

Gene: PainterBoy_68 Start: 41280, Stop: 40894, Start Num: 126

Candidate Starts for PainterBoy_68:

(24, 41538), (Start: 126 @41280 has 182 MA's), (154, 41202), (162, 41145), (178, 41055), (195, 40986),

Gene: Patbob_239 Start: 155772, Stop: 156194, Start Num: 112

Candidate Starts for Patbob_239:

(Start: 112 @155772 has 3 MA's), (142, 155832), (171, 155973), (178, 156018), (200, 156114), (201, 156120),

Gene: Percastrophe_77 Start: 39522, Stop: 39097, Start Num: 130

Candidate Starts for Percastrophe_77:

(Start: 130 @39522 has 68 MA's), (134, 39513), (146, 39477), (162, 39378), (163, 39375), (169, 39345), (178, 39294), (195, 39222), (202, 39189), (203, 39177),

Gene: Perplexer_62 Start: 41333, Stop: 40938, Start Num: 116

Candidate Starts for Perplexer_62:

(Start: 116 @41333 has 12 MA's), (Start: 126 @41321 has 182 MA's), (178, 41099), (191, 41042), (195, 41030), (200, 41006), (204, 40982),

Gene: PetiteSangusue_62 Start: 41324, Stop: 40941, Start Num: 126

Candidate Starts for PetiteSangsue_62:

(Start: 116 @41336 has 12 MA's), (Start: 126 @41324 has 182 MA's), (178, 41102), (191, 41045), (195, 41033), (200, 41009), (204, 40985),

Gene: Petra_63 Start: 40723, Stop: 41118, Start Num: 127

Candidate Starts for Petra_63:

(105, 40675), (Start: 127 @40723 has 14 MA's), (163, 40873), (187, 40996), (191, 41014), (193, 41020), (194, 41023), (203, 41071), (209, 41104),

Gene: PetterN_69 Start: 40942, Stop: 40559, Start Num: 126

Candidate Starts for PetterN_69:

(Start: 126 @40942 has 182 MA's), (162, 40810), (178, 40720), (187, 40681), (195, 40651), (204, 40603),

Gene: Ph8s_70 Start: 40729, Stop: 40316, Start Num: 104

Candidate Starts for Ph8s_70:

(58, 40816), (65, 40804), (Start: 104 @40729 has 5 MA's), (Start: 126 @40705 has 182 MA's), (151, 40654), (154, 40624), (162, 40567), (178, 40477), (195, 40408), (203, 40363), (207, 40342), (209, 40330),

Gene: Phaded_64 Start: 42459, Stop: 42076, Start Num: 126

Candidate Starts for Phaded_64:

(Start: 126 @42459 has 182 MA's), (147, 42417), (154, 42384), (159, 42342), (162, 42327), (178, 42237), (195, 42168),

Gene: Phaeder_70 Start: 41307, Stop: 40921, Start Num: 126

Candidate Starts for Phaeder_70:

(Start: 126 @41307 has 182 MA's), (141, 41280), (144, 41271), (162, 41172), (178, 41082), (191, 41025), (195, 41013), (210, 40929),

Gene: Phillis_73 Start: 41561, Stop: 41172, Start Num: 126

Candidate Starts for Phillis_73:

(84, 41594), (Start: 126 @41561 has 182 MA's), (147, 41516), (154, 41480), (162, 41423), (178, 41333), (195, 41264),

Gene: PhinkBoden_112 Start: 66255, Stop: 66659, Start Num: 120

Candidate Starts for PhinkBoden_112:

(22, 65961), (29, 65991), (73, 66141), (Start: 120 @66255 has 14 MA's), (162, 66405), (180, 66510), (203, 66612),

Gene: Phlorence_62 Start: 40412, Stop: 40023, Start Num: 126

Candidate Starts for Phlorence_62:

(Start: 126 @40412 has 182 MA's), (151, 40361), (162, 40274), (178, 40184), (187, 40145), (195, 40115),

Gene: Phoebus_117 Start: 66879, Stop: 67262, Start Num: 126

Candidate Starts for Phoebus_117:

(96, 66843), (Start: 126 @66879 has 182 MA's), (138, 66900), (162, 67011), (178, 67101), (191, 67158), (195, 67170),

Gene: Phonnegut_70 Start: 41377, Stop: 40991, Start Num: 126

Candidate Starts for Phonnegut_70:

(Start: 126 @41377 has 182 MA's), (141, 41350), (144, 41341), (162, 41242), (178, 41152), (195, 41083), (210, 40999),

Gene: Phrampa_233 Start: 156890, Stop: 157315, Start Num: 112

Candidate Starts for Phrampa_233:

(Start: 112 @156890 has 3 MA's), (139, 156941), (142, 156950), (160, 157043), (177, 157136), (199, 157229), (201, 157241),

Gene: PickleBack_64 Start: 40589, Stop: 40200, Start Num: 126

Candidate Starts for PickleBack_64:

(Start: 126 @40589 has 182 MA's), (151, 40538), (162, 40451), (178, 40361), (187, 40322), (195, 40292),

Gene: Pioneer_70 Start: 41377, Stop: 40991, Start Num: 126

Candidate Starts for Pioneer_70:

(Start: 126 @41377 has 182 MA's), (141, 41350), (144, 41341), (162, 41242), (178, 41152), (195, 41083), (210, 40999),

Gene: Pioneer3_86 Start: 51420, Stop: 51007, Start Num: 126

Candidate Starts for Pioneer3_86:

(Start: 126 @51420 has 182 MA's), (170, 51234), (195, 51114), (196, 51108), (200, 51090),

Gene: Platte_85 Start: 51188, Stop: 50775, Start Num: 126

Candidate Starts for Platte_85:

(Start: 126 @51188 has 182 MA's), (154, 51095), (170, 51002), (195, 50882), (196, 50876), (200, 50858),

Gene: Pleakley_24 Start: 9277, Stop: 9669, Start Num: 130

Candidate Starts for Pleakley_24:

(Start: 130 @9277 has 68 MA's), (144, 9322), (148, 9334), (154, 9364), (163, 9424), (169, 9454), (170, 9457), (172, 9478), (187, 9547), (188, 9550), (191, 9565), (194, 9574), (203, 9622), (208, 9646), (209, 9655),

Gene: Pmask_66 Start: 39655, Stop: 39269, Start Num: 126

Candidate Starts for Pmask_66:

(Start: 126 @39655 has 182 MA's), (162, 39520), (178, 39430), (182, 39406), (186, 39394), (195, 39361),

Gene: Pointis_54 Start: 39698, Stop: 39276, Start Num: 116

Candidate Starts for Pointis_54:

(75, 39794), (Start: 116 @39698 has 12 MA's), (Start: 130 @39683 has 68 MA's), (148, 39626), (151, 39623), (163, 39533), (168, 39506), (176, 39458), (195, 39380), (204, 39332), (205, 39329),

Gene: Polyphemus_67 Start: 40040, Stop: 39654, Start Num: 126

Candidate Starts for Polyphemus_67:

(Start: 126 @40040 has 182 MA's), (162, 39905), (178, 39815), (182, 39791), (186, 39779), (195, 39746),

Gene: Pomar16_68 Start: 41890, Stop: 41504, Start Num: 126

Candidate Starts for Pomar16_68:

(40, 42055), (58, 42007), (77, 41977), (Start: 98 @41920 has 5 MA's), (Start: 126 @41890 has 182 MA's), (151, 41839), (154, 41812), (162, 41755), (178, 41665), (195, 41596),

Gene: Porcelain_111 Start: 61278, Stop: 61661, Start Num: 126

Candidate Starts for Porcelain_111:

(Start: 126 @61278 has 182 MA's), (140, 61302), (162, 61410), (178, 61500), (191, 61557), (195, 61569),

Gene: Pound_106 Start: 63557, Stop: 63943, Start Num: 126

Candidate Starts for Pound_106:

(Start: 126 @63557 has 182 MA's), (138, 63578), (162, 63689), (178, 63779), (179, 63782), (180, 63791), (183, 63806), (189, 63827), (195, 63851), (197, 63860), (203, 63896),

Gene: Priamo_69 Start: 39506, Stop: 39120, Start Num: 126

Candidate Starts for Priamo_69:

(Start: 126 @39506 has 182 MA's), (162, 39371), (178, 39281), (182, 39257), (186, 39245), (195, 39212),

Gene: Prin Ashe11_60 Start: 40127, Stop: 39738, Start Num: 126

Candidate Starts for Prin Ashe11_60:

(Start: 126 @40127 has 182 MA's), (151, 40076), (162, 39989), (178, 39899), (187, 39860), (195, 39830),

Gene: Priya_68 Start: 41103, Stop: 40717, Start Num: 126

Candidate Starts for Priya_68:

(Start: 126 @41103 has 182 MA's), (141, 41076), (144, 41067), (162, 40968), (178, 40878), (195, 40809), (210, 40725),

Gene: Pukovnik_64 Start: 42126, Stop: 41743, Start Num: 126

Candidate Starts for Pukovnik_64:

(Start: 126 @42126 has 182 MA's), (147, 42084), (154, 42051), (159, 42009), (162, 41994), (178, 41904), (195, 41835),

Gene: Pumpnickel_256 Start: 148805, Stop: 149215, Start Num: 126

Candidate Starts for Pumpnickel_256:

(Start: 126 @148805 has 182 MA's), (176, 149030), (178, 149036), (179, 149039), (193, 149102), (200, 149132),

Gene: Pureglobe5_57 Start: 40129, Stop: 39707, Start Num: 116

Candidate Starts for Pureglobe5_57:

(75, 40225), (Start: 116 @40129 has 12 MA's), (Start: 130 @40114 has 68 MA's), (148, 40057), (151, 40054), (163, 39964), (168, 39937), (176, 39889), (195, 39811), (204, 39763), (205, 39760),

Gene: Qobbit_68 Start: 41065, Stop: 40679, Start Num: 126

Candidate Starts for Qobbit_68:

(Start: 126 @41065 has 182 MA's), (141, 41038), (144, 41029), (162, 40930), (178, 40840), (195, 40771), (210, 40687),

Gene: Quokka_69 Start: 41009, Stop: 40623, Start Num: 124

Candidate Starts for Quokka_69:

(Start: 98 @41039 has 5 MA's), (Start: 124 @41009 has 7 MA's), (162, 40874), (178, 40784), (195, 40715), (197, 40706), (209, 40637),

Gene: REQ2_61 Start: 40651, Stop: 41043, Start Num: 127

Candidate Starts for REQ2_61:

(67, 40510), (71, 40519), (Start: 127 @40651 has 14 MA's), (172, 40852), (184, 40909), (195, 40951), (209, 41029),

Gene: Racecar_241 Start: 155754, Stop: 156176, Start Num: 112

Candidate Starts for Racecar_241:

(Start: 112 @155754 has 3 MA's), (142, 155814), (171, 155955), (178, 156000), (200, 156096), (201, 156102),

Gene: Rahalelujah_68 Start: 40859, Stop: 40473, Start Num: 123

Candidate Starts for Rahalelujah_68:

(66, 40964), (69, 40961), (70, 40958), (79, 40940), (Start: 123 @40859 has 7 MA's), (162, 40724), (178, 40634), (195, 40565),

Gene: Ranunculus_51 Start: 42678, Stop: 42268, Start Num: 118

Candidate Starts for Ranunculus_51:

(Start: 118 @42678 has 3 MA's), (139, 42642), (140, 42639), (168, 42498), (171, 42489), (186, 42408), (191, 42387), (192, 42384),

Gene: RazzB_49 Start: 38411, Stop: 38004, Start Num: 118

Candidate Starts for RazzB_49:

(88, 38480), (Start: 111 @38426 has 1 MA's), (Start: 118 @38411 has 3 MA's), (139, 38375), (140, 38372), (168, 38234), (171, 38225), (186, 38144), (203, 38066), (204, 38063),

Gene: ReMo_71 Start: 40417, Stop: 40019, Start Num: 130

Candidate Starts for ReMo_71:

(71, 40543), (74, 40540), (76, 40537), (Start: 130 @40417 has 68 MA's), (162, 40276), (170, 40228), (200, 40087),

Gene: Rearden_105 Start: 61011, Stop: 61394, Start Num: 126

Candidate Starts for Rearden_105:

(Start: 126 @61011 has 182 MA's), (140, 61035), (162, 61143), (178, 61233), (191, 61290), (195, 61302),

Gene: Redno2_108 Start: 61893, Stop: 62276, Start Num: 126

Candidate Starts for Redno2_108:

(96, 61857), (Start: 126 @61893 has 182 MA's), (138, 61914), (162, 62025), (187, 62154), (191, 62172), (195, 62184), (209, 62262),

Gene: Refuge_64 Start: 42118, Stop: 41735, Start Num: 126

Candidate Starts for Refuge_64:

(57, 42235), (59, 42232), (Start: 126 @42118 has 182 MA's), (159, 42001), (162, 41986), (178, 41896), (195, 41827), (207, 41761),

Gene: Remus_73 Start: 40408, Stop: 40010, Start Num: 130

Candidate Starts for Remus_73:

(88, 40489), (Start: 130 @40408 has 68 MA's), (162, 40267), (170, 40219), (180, 40159), (200, 40078),

Gene: Rey_48 Start: 35434, Stop: 35039, Start Num: 121

Candidate Starts for Rey_48:

(Start: 121 @35434 has 6 MA's), (175, 35218), (195, 35131), (200, 35107),

Gene: Rideau_81 Start: 39950, Stop: 39525, Start Num: 130

Candidate Starts for Rideau_81:

(80, 40052), (93, 40022), (101, 40010), (Start: 130 @39950 has 68 MA's), (143, 39914), (144, 39911), (154, 39860), (156, 39845), (159, 39818), (163, 39800), (169, 39770), (170, 39767), (191, 39659), (203, 39602),

Gene: Rifter_68 Start: 39219, Stop: 38833, Start Num: 126

Candidate Starts for Rifter_68:

(24, 39474), (Start: 126 @39219 has 182 MA's), (162, 39084), (178, 38994), (189, 38949), (195, 38925),

Gene: Roary_77 Start: 42530, Stop: 42141, Start Num: 126

Candidate Starts for Roary_77:

(84, 42563), (Start: 126 @42530 has 182 MA's), (147, 42485), (154, 42449), (178, 42302), (195, 42233), (206, 42170),

Gene: Rockabye_224 Start: 143435, Stop: 143854, Start Num: 120

Candidate Starts for Rockabye_224:

(Start: 120 @143435 has 14 MA's), (146, 143495), (155, 143534), (171, 143627), (178, 143672), (200, 143768),

Gene: Roksolana_69 Start: 40053, Stop: 39667, Start Num: 126

Candidate Starts for Roksolana_69:

(24, 40308), (Start: 126 @40053 has 182 MA's), (162, 39918), (178, 39828), (189, 39783), (195, 39759),

Gene: Romero_77 Start: 39583, Stop: 39158, Start Num: 130

Candidate Starts for Romero_77:

(Start: 130 @39583 has 68 MA's), (134, 39574), (146, 39538), (162, 39439), (163, 39436), (169, 39406), (178, 39355), (195, 39283), (202, 39250), (203, 39238),

Gene: RootBeer_42 Start: 29931, Stop: 30326, Start Num: 130

Candidate Starts for RootBeer_42:

(9, 29454), (10, 29463), (Start: 130 @29931 has 68 MA's), (156, 30027), (177, 30147), (178, 30150),

Gene: Rosalind_71 Start: 40575, Stop: 40177, Start Num: 130

Candidate Starts for Rosalind_71:

(88, 40656), (Start: 130 @40575 has 68 MA's), (162, 40434), (170, 40386), (200, 40245),

Gene: RosePharie_78 Start: 39755, Stop: 39327, Start Num: 130

Candidate Starts for RosePharie_78:

(93, 39830), (99, 39821), (108, 39794), (Start: 130 @39755 has 68 MA's), (143, 39719), (154, 39665), (156, 39650), (163, 39605), (169, 39575), (176, 39530), (202, 39419), (203, 39407), (214, 39347),

Gene: RyeScarlet_71 Start: 41352, Stop: 40966, Start Num: 126

Candidate Starts for RyeScarlet_71:

(Start: 126 @41352 has 182 MA's), (141, 41325), (144, 41316), (162, 41217), (178, 41127), (195, 41058), (210, 40974),

Gene: SJReid_250 Start: 150980, Stop: 151402, Start Num: 114

Candidate Starts for SJReid_250:

(45, 150815), (56, 150842), (114, 150980), (170, 151178), (178, 151226), (201, 151328),

Gene: Sachima_66 Start: 41333, Stop: 40947, Start Num: 126

Candidate Starts for Sachima_66:

(Start: 126 @41333 has 182 MA's), (141, 41306), (144, 41297), (162, 41198), (178, 41108), (195, 41039), (210, 40955),

Gene: Saintus_71 Start: 39194, Stop: 38805, Start Num: 126

Candidate Starts for Saintus_71:

(84, 39227), (Start: 126 @39194 has 182 MA's), (147, 39149), (154, 39113), (162, 39056), (178, 38966), (195, 38897),

Gene: Samba_63 Start: 43280, Stop: 43675, Start Num: 127

Candidate Starts for Samba_63:

(6, 42755), (86, 43193), (Start: 127 @43280 has 14 MA's), (139, 43313), (163, 43430), (187, 43553), (191, 43571), (193, 43577), (194, 43580), (203, 43628), (209, 43661),

Gene: Schatzie_111 Start: 63979, Stop: 64365, Start Num: 126

Candidate Starts for Schatzie_111:

(96, 63943), (Start: 126 @63979 has 182 MA's), (138, 64000), (162, 64111), (178, 64201), (179, 64204), (180, 64213), (183, 64228), (189, 64249), (195, 64273), (197, 64282), (203, 64318),

Gene: Scherzo_69 Start: 41596, Stop: 41210, Start Num: 126

Candidate Starts for Scherzo_69:

(Start: 126 @41596 has 182 MA's), (141, 41569), (144, 41560), (162, 41461), (178, 41371), (195, 41302), (210, 41218),

Gene: Schnabeltier_52 Start: 36133, Stop: 36540, Start Num: 116

Candidate Starts for Schnabeltier_52:

(39, 35938), (Start: 116 @36133 has 12 MA's), (Start: 127 @36148 has 14 MA's), (154, 36235), (155, 36238), (200, 36472),

Gene: Scorpia_66 Start: 41007, Stop: 40618, Start Num: 126

Candidate Starts for Scorpia_66:

(Start: 126 @41007 has 182 MA's), (151, 40956), (162, 40869), (168, 40839), (178, 40779), (195, 40710),

Gene: Scruffy_7 Start: 5375, Stop: 4974, Start Num: 135

Candidate Starts for Scruffy_7:

(42, 5582), (65, 5528), (94, 5459), (Start: 135 @5375 has 6 MA's), (151, 5327), (157, 5279), (162, 5240), (179, 5150), (193, 5087), (211, 4994), (212, 4991),

Gene: Scuba_24 Start: 9364, Stop: 9756, Start Num: 130

Candidate Starts for Scuba_24:

(Start: 130 @9364 has 68 MA's), (144, 9409), (148, 9421), (154, 9451), (163, 9511), (169, 9541), (170, 9544), (172, 9565), (187, 9634), (188, 9637), (191, 9652), (194, 9661), (203, 9709), (208, 9733), (209, 9742),

Gene: Serenity_71 Start: 41233, Stop: 40847, Start Num: 124

Candidate Starts for Serenity_71:

(Start: 124 @41233 has 7 MA's), (162, 41098), (178, 41008), (180, 40996), (195, 40939), (209, 40861),

Gene: Shaboozey_109 Start: 60798, Stop: 61181, Start Num: 126

Candidate Starts for Shaboozey_109:

(Start: 126 @60798 has 182 MA's), (140, 60822), (162, 60930), (178, 61020), (191, 61077), (195, 61089), (209, 61167),

Gene: ShakeltOph_33 Start: 23314, Stop: 23712, Start Num: 130
Candidate Starts for ShakeltOph_33:
(Start: 130 @23314 has 68 MA's),

Gene: ShayRa_73 Start: 40604, Stop: 40206, Start Num: 130
Candidate Starts for ShayRa_73:
(88, 40685), (Start: 130 @40604 has 68 MA's), (162, 40463), (170, 40415), (200, 40274),

Gene: SheaKeira_64 Start: 40347, Stop: 39961, Start Num: 123
Candidate Starts for SheaKeira_64:
(66, 40440), (69, 40437), (70, 40434), (Start: 123 @40347 has 7 MA's), (140, 40323), (168, 40185),
(178, 40125),

Gene: Shinji_77 Start: 51864, Stop: 52259, Start Num: 130
Candidate Starts for Shinji_77:
(1, 51171), (3, 51240), (4, 51246), (49, 51681), (103, 51804), (Start: 130 @51864 has 68 MA's), (178,
52095), (191, 52155), (200, 52191), (203, 52212),

Gene: Shygu2_62 Start: 41375, Stop: 40992, Start Num: 126
Candidate Starts for Shygu2_62:
(Start: 116 @41387 has 12 MA's), (Start: 126 @41375 has 182 MA's), (154, 41300), (156, 41285),
(178, 41153), (195, 41084), (204, 41036),

Gene: SilentRX_46 Start: 38203, Stop: 37796, Start Num: 118
Candidate Starts for SilentRX_46:
(52, 38362), (Start: 118 @38203 has 3 MA's), (178, 37972), (197, 37891),

Gene: SirPhilip_55 Start: 39707, Stop: 40096, Start Num: 127
Candidate Starts for SirPhilip_55:
(Start: 127 @39707 has 14 MA's), (141, 39740), (148, 39758), (150, 39764), (162, 39848), (178,
39932), (200, 40028), (203, 40049), (206, 40067), (208, 40073),

Gene: Smeadley_76 Start: 42484, Stop: 42002, Start Num: 92
Candidate Starts for Smeadley_76:
(Start: 92 @42484 has 6 MA's), (Start: 129 @42406 has 5 MA's), (154, 42310), (162, 42253), (178,
42163), (195, 42094), (206, 42031),

Gene: SmellyB_67 Start: 39687, Stop: 39301, Start Num: 126
Candidate Starts for SmellyB_67:
(Start: 126 @39687 has 182 MA's), (162, 39552), (178, 39462), (182, 39438), (186, 39426), (195,
39393),

Gene: Smoothie_113 Start: 65966, Stop: 66370, Start Num: 120
Candidate Starts for Smoothie_113:
(Start: 120 @65966 has 14 MA's), (162, 66116), (203, 66323),

Gene: Socotra_64 Start: 43351, Stop: 43737, Start Num: 127
Candidate Starts for Socotra_64:
(Start: 127 @43351 has 14 MA's), (139, 43384), (170, 43525), (184, 43603), (187, 43615), (193,
43639), (194, 43642), (200, 43669), (203, 43690),

Gene: SororFago_68 Start: 42051, Stop: 41665, Start Num: 126
Candidate Starts for SororFago_68:

(56, 42168), (70, 42144), (79, 42126), (Start: 126 @42051 has 182 MA's), (154, 41973), (162, 41916), (178, 41826), (195, 41757), (203, 41712),

Gene: Soups_73 Start: 40867, Stop: 40469, Start Num: 130

Candidate Starts for Soups_73:

(71, 40993), (74, 40990), (76, 40987), (Start: 130 @40867 has 68 MA's), (162, 40726), (170, 40678), (200, 40537),

Gene: Spouty_68 Start: 41102, Stop: 40716, Start Num: 126

Candidate Starts for Spouty_68:

(Start: 126 @41102 has 182 MA's), (141, 41075), (144, 41066), (162, 40967), (178, 40877), (195, 40808), (210, 40724),

Gene: Squint_109 Start: 61082, Stop: 61465, Start Num: 126

Candidate Starts for Squint_109:

(Start: 126 @61082 has 182 MA's), (140, 61106), (162, 61214), (178, 61304), (191, 61361), (195, 61373),

Gene: StarStuff_69 Start: 41852, Stop: 41466, Start Num: 126

Candidate Starts for StarStuff_69:

(40, 42017), (58, 41969), (77, 41939), (Start: 98 @41882 has 5 MA's), (Start: 126 @41852 has 182 MA's), (151, 41801), (154, 41774), (162, 41717), (178, 41627), (195, 41558),

Gene: Starburst_63 Start: 43247, Stop: 43633, Start Num: 127

Candidate Starts for Starburst_63:

(Start: 127 @43247 has 14 MA's), (170, 43421), (184, 43499), (187, 43511), (193, 43535), (194, 43538), (200, 43565), (203, 43586),

Gene: Stasia_62 Start: 41257, Stop: 40871, Start Num: 126

Candidate Starts for Stasia_62:

(Start: 116 @41269 has 12 MA's), (Start: 126 @41257 has 182 MA's), (169, 41089), (170, 41086), (178, 41032), (195, 40963), (200, 40939), (208, 40894),

Gene: Steamy_64 Start: 40897, Stop: 40511, Start Num: 126

Candidate Starts for Steamy_64:

(Start: 126 @40897 has 182 MA's), (154, 40819), (159, 40777), (162, 40762), (168, 40732), (178, 40672), (195, 40603),

Gene: Stella_78 Start: 40191, Stop: 39766, Start Num: 130

Candidate Starts for Stella_78:

(Start: 130 @40191 has 68 MA's), (143, 40155), (144, 40152), (156, 40086), (163, 40041), (169, 40011), (191, 39900), (203, 39843), (209, 39810),

Gene: Stephig9_75 Start: 42420, Stop: 41938, Start Num: 92

Candidate Starts for Stephig9_75:

(Start: 92 @42420 has 6 MA's), (Start: 129 @42342 has 5 MA's), (154, 42246), (162, 42189), (178, 42099), (195, 42030),

Gene: Stickynote_66 Start: 48869, Stop: 48492, Start Num: 135

Candidate Starts for Stickynote_66:

(Start: 135 @48869 has 6 MA's), (160, 48752), (169, 48707), (197, 48575), (200, 48560),

Gene: Stink_61 Start: 41047, Stop: 40664, Start Num: 129

Candidate Starts for Stink_61:

(43, 41212), (Start: 129 @41047 has 5 MA's), (151, 40999), (154, 40972), (159, 40930), (162, 40915), (178, 40825), (195, 40756),

Gene: Strosahl_73 Start: 40408, Stop: 40010, Start Num: 130

Candidate Starts for Strosahl_73:

(88, 40489), (Start: 130 @40408 has 68 MA's), (162, 40267), (170, 40219), (180, 40159), (200, 40078),

Gene: SuMoo_38 Start: 24911, Stop: 25348, Start Num: 129

Candidate Starts for SuMoo_38:

(Start: 129 @24911 has 5 MA's), (151, 24971), (162, 25058), (178, 25169), (198, 25253), (200, 25265), (211, 25328), (212, 25331),

Gene: Sunhee_69 Start: 40391, Stop: 40002, Start Num: 126

Candidate Starts for Sunhee_69:

(56, 40508), (70, 40484), (79, 40466), (Start: 126 @40391 has 182 MA's), (154, 40313), (162, 40256), (178, 40166), (195, 40094), (210, 40010),

Gene: SuperAwesome_67 Start: 39692, Stop: 39306, Start Num: 126

Candidate Starts for SuperAwesome_67:

(Start: 126 @39692 has 182 MA's), (162, 39557), (178, 39467), (189, 39422), (195, 39398),

Gene: SuperCallie99_64 Start: 39539, Stop: 39153, Start Num: 126

Candidate Starts for SuperCallie99_64:

(Start: 126 @39539 has 182 MA's), (162, 39404), (178, 39314), (182, 39290), (186, 39278), (195, 39245),

Gene: Superchunk_68 Start: 40259, Stop: 39846, Start Num: 104

Candidate Starts for Superchunk_68:

(65, 40334), (Start: 104 @40259 has 5 MA's), (Start: 126 @40235 has 182 MA's), (154, 40154), (162, 40097), (178, 40007), (195, 39938), (203, 39893), (207, 39872),

Gene: Superphikiman_108 Start: 60173, Stop: 60556, Start Num: 126

Candidate Starts for Superphikiman_108:

(Start: 126 @60173 has 182 MA's), (140, 60197), (162, 60305), (178, 60395), (191, 60452), (195, 60464),

Gene: SwirlSquare_73 Start: 40983, Stop: 40594, Start Num: 126

Candidate Starts for SwirlSquare_73:

(Start: 104 @41007 has 5 MA's), (Start: 126 @40983 has 182 MA's), (154, 40902), (162, 40845), (178, 40755), (195, 40686), (203, 40641), (207, 40620), (209, 40608),

Gene: Swirley_63 Start: 40457, Stop: 40068, Start Num: 126

Candidate Starts for Swirley_63:

(Start: 126 @40457 has 182 MA's), (162, 40319), (178, 40229), (187, 40190), (195, 40160),

Gene: Switzerland_72 Start: 40743, Stop: 40345, Start Num: 130

Candidate Starts for Switzerland_72:

(88, 40824), (Start: 130 @40743 has 68 MA's), (162, 40602), (170, 40554), (200, 40413),

Gene: Talia1610_241 Start: 155784, Stop: 156206, Start Num: 112

Candidate Starts for Talia1610_241:

(Start: 112 @155784 has 3 MA's), (142, 155844), (171, 155985), (178, 156030), (200, 156126), (201, 156132),

Gene: Tandem_86 Start: 51500, Stop: 51087, Start Num: 126

Candidate Starts for Tandem_86:

(Start: 126 @51500 has 182 MA's), (170, 51314), (195, 51194), (196, 51188), (200, 51170),

Gene: Tarynearal_60 Start: 40052, Stop: 39663, Start Num: 126

Candidate Starts for Tarynearal_60:

(Start: 126 @40052 has 182 MA's), (151, 40001), (162, 39914), (178, 39824), (187, 39785), (195, 39755),

Gene: Temprado_69 Start: 40058, Stop: 39672, Start Num: 126

Candidate Starts for Temprado_69:

(24, 40313), (Start: 126 @40058 has 182 MA's), (162, 39923), (178, 39833), (189, 39788), (195, 39764),

Gene: Thibault_97 Start: 59154, Stop: 59540, Start Num: 126

Candidate Starts for Thibault_97:

(Start: 126 @59154 has 182 MA's), (138, 59175), (162, 59286), (178, 59376), (179, 59379), (180, 59388), (195, 59448), (197, 59457), (203, 59493),

Gene: ThreeRngTarjay_113 Start: 66135, Stop: 66521, Start Num: 126

Candidate Starts for ThreeRngTarjay_113:

(96, 66099), (Start: 126 @66135 has 182 MA's), (138, 66156), (162, 66267), (178, 66357), (179, 66360), (180, 66369), (189, 66405), (195, 66429), (197, 66438), (203, 66474),

Gene: Tiger_63 Start: 40333, Stop: 39944, Start Num: 126

Candidate Starts for Tiger_63:

(Start: 126 @40333 has 182 MA's), (151, 40282), (162, 40195), (178, 40105), (187, 40066), (195, 40036),

Gene: TingHuaYa_54 Start: 37825, Stop: 38211, Start Num: 132

Candidate Starts for TingHuaYa_54:

(Start: 132 @37825 has 1 MA's), (165, 37978), (183, 38074), (187, 38089), (191, 38107), (195, 38119), (203, 38164), (208, 38188),

Gene: TipsytheTRex_67 Start: 41208, Stop: 40822, Start Num: 124

Candidate Starts for TipsytheTRex_67:

(Start: 98 @41238 has 5 MA's), (Start: 124 @41208 has 7 MA's), (162, 41073), (178, 40983), (195, 40914), (197, 40905), (209, 40836),

Gene: Toaka_69 Start: 41307, Stop: 40921, Start Num: 126

Candidate Starts for Toaka_69:

(Start: 126 @41307 has 182 MA's), (162, 41172), (178, 41082), (195, 41013),

Gene: Tomathan_69 Start: 41929, Stop: 41513, Start Num: 98

Candidate Starts for Tomathan_69:

(72, 41986), (Start: 98 @41929 has 5 MA's), (Start: 126 @41899 has 182 MA's), (151, 41848), (154, 41821), (162, 41764), (178, 41674), (195, 41605),

Gene: ToneTone_65 Start: 39618, Stop: 39232, Start Num: 126

Candidate Starts for ToneTone_65:

(24, 39873), (Start: 126 @39618 has 182 MA's), (162, 39483), (178, 39393), (189, 39348), (195, 39324),

Gene: Toniann_112 Start: 65356, Stop: 65760, Start Num: 120

Candidate Starts for Toniann_112:

(Start: 120 @65356 has 14 MA's), (162, 65506), (203, 65713),

Gene: ToriToki_77 Start: 39586, Stop: 39161, Start Num: 130

Candidate Starts for ToriToki_77:

(Start: 130 @39586 has 68 MA's), (134, 39577), (146, 39541), (162, 39442), (163, 39439), (169, 39409), (178, 39358), (195, 39286), (202, 39253), (203, 39241),

Gene: Tortellini_52 Start: 38411, Stop: 38797, Start Num: 133

Candidate Starts for Tortellini_52:

(54, 38231), (60, 38252), (72, 38273), (83, 38306), (91, 38327), (109, 38366), (113, 38381), (115, 38384), (Start: 133 @38411 has 3 MA's), (142, 38441), (147, 38456), (154, 38489), (162, 38546), (170, 38582), (178, 38636), (195, 38705), (208, 38774), (209, 38783),

Gene: Travvers_68 Start: 41879, Stop: 41463, Start Num: 98

Candidate Starts for Travvers_68:

(35, 42053), (58, 41966), (72, 41942), (Start: 98 @41879 has 5 MA's), (Start: 126 @41849 has 182 MA's), (151, 41798), (154, 41771), (162, 41714), (178, 41624), (195, 41555),

Gene: Treat_77 Start: 39461, Stop: 39036, Start Num: 130

Candidate Starts for Treat_77:

(Start: 130 @39461 has 68 MA's), (134, 39452), (146, 39416), (162, 39317), (163, 39314), (169, 39284), (178, 39233), (195, 39161), (203, 39116),

Gene: Tristan_63 Start: 42296, Stop: 41913, Start Num: 126

Candidate Starts for Tristan_63:

(Start: 126 @42296 has 182 MA's), (147, 42254), (154, 42221), (159, 42179), (162, 42164), (178, 42074), (195, 42005),

Gene: Tubs_70 Start: 41307, Stop: 40921, Start Num: 126

Candidate Starts for Tubs_70:

(Start: 126 @41307 has 182 MA's), (141, 41280), (144, 41271), (162, 41172), (178, 41082), (191, 41025), (195, 41013), (210, 40929),

Gene: Tucker_68 Start: 39821, Stop: 39435, Start Num: 126

Candidate Starts for Tucker_68:

(24, 40076), (Start: 126 @39821 has 182 MA's), (162, 39686), (178, 39596), (189, 39551), (195, 39527),

Gene: Twigg_59 Start: 40105, Stop: 39716, Start Num: 126

Candidate Starts for Twigg_59:

(Start: 126 @40105 has 182 MA's), (162, 39967), (178, 39877), (187, 39838), (195, 39808),

Gene: Typhonomachy_63 Start: 43067, Stop: 43453, Start Num: 127

Candidate Starts for Typhonomachy_63:

(Start: 127 @43067 has 14 MA's), (139, 43100), (170, 43241), (184, 43319), (187, 43331), (193, 43355), (194, 43358), (200, 43385), (203, 43406),

Gene: Ugenie5_65 Start: 41595, Stop: 41209, Start Num: 126

Candidate Starts for Ugenie5_65:

(Start: 126 @41595 has 182 MA's), (141, 41568), (144, 41559), (162, 41460), (178, 41370), (195, 41301), (210, 41217),

Gene: UnionJack_65 Start: 40489, Stop: 40100, Start Num: 126

Candidate Starts for UnionJack_65:

(Start: 126 @40489 has 182 MA's), (151, 40438), (162, 40351), (178, 40261), (187, 40222), (195, 40192),

Gene: VanDeWege_80 Start: 52520, Stop: 52915, Start Num: 130

Candidate Starts for VanDeWege_80:

(38, 52313), (49, 52352), (103, 52460), (Start: 130 @52520 has 68 MA's), (178, 52751), (191, 52811), (200, 52847), (203, 52868),

Gene: Vanisoa_67 Start: 41938, Stop: 41552, Start Num: 123

Candidate Starts for Vanisoa_67:

(Start: 123 @41938 has 7 MA's), (141, 41911), (144, 41902), (162, 41803), (178, 41713), (195, 41644),

Gene: VohminGhazi_67 Start: 39688, Stop: 39302, Start Num: 126

Candidate Starts for VohminGhazi_67:

(Start: 126 @39688 has 182 MA's), (162, 39553), (178, 39463), (182, 39439), (186, 39427), (195, 39394),

Gene: VroomVroom_32 Start: 23412, Stop: 23807, Start Num: 130

Candidate Starts for VroomVroom_32:

(Start: 130 @23412 has 68 MA's), (178, 23634),

Gene: Waits_73 Start: 40640, Stop: 40242, Start Num: 130

Candidate Starts for Waits_73:

(88, 40721), (Start: 130 @40640 has 68 MA's), (162, 40499), (170, 40451), (180, 40391), (200, 40310),

Gene: Wakanda_182 Start: 94429, Stop: 94854, Start Num: 130

Candidate Starts for Wakanda_182:

(Start: 127 @94426 has 14 MA's), (Start: 130 @94429 has 68 MA's), (162, 94573), (203, 94774),

Gene: Wanda_117 Start: 63537, Stop: 63923, Start Num: 126

Candidate Starts for Wanda_117:

(Start: 126 @63537 has 182 MA's), (138, 63558), (162, 63669), (178, 63759), (179, 63762), (180, 63771), (189, 63807), (195, 63831), (197, 63840), (203, 63876),

Gene: Warrior24_75 Start: 40988, Stop: 40590, Start Num: 130

Candidate Starts for Warrior24_75:

(71, 41114), (74, 41111), (76, 41108), (86, 41072), (Start: 130 @40988 has 68 MA's), (162, 40847), (170, 40799), (200, 40658),

Gene: Weasels2_222 Start: 111777, Stop: 112169, Start Num: 130

Candidate Starts for Weasels2_222:

(Start: 130 @111777 has 68 MA's), (210, 112161),

Gene: Wiks_67 Start: 39689, Stop: 39303, Start Num: 126

Candidate Starts for Wiks_67:

(24, 39944), (Start: 126 @39689 has 182 MA's), (162, 39554), (178, 39464), (189, 39419), (195, 39395),

Gene: Wile_62 Start: 41367, Stop: 40972, Start Num: 116

Candidate Starts for Wile_62:

(Start: 116 @41367 has 12 MA's), (Start: 126 @41355 has 182 MA's), (178, 41133), (191, 41076), (195, 41064), (200, 41040), (204, 41016),

Gene: WilliamBoone_113 Start: 64363, Stop: 64770, Start Num: 120

Candidate Starts for WilliamBoone_113:

(39, 64156), (48, 64192), (Start: 120 @64363 has 14 MA's), (158, 64495), (162, 64519), (164, 64525), (195, 64678),

Gene: Wrigley_57 Start: 38811, Stop: 39200, Start Num: 130

Candidate Starts for Wrigley_57:

(53, 38643), (Start: 130 @38811 has 68 MA's), (154, 38895), (163, 38955), (187, 39078), (191, 39096), (193, 39102), (194, 39105), (209, 39186),

Gene: WunderPhul_68 Start: 39687, Stop: 39301, Start Num: 126

Candidate Starts for WunderPhul_68:

(24, 39942), (Start: 126 @39687 has 182 MA's), (162, 39552), (178, 39462), (189, 39417), (195, 39393),

Gene: Xena_61 Start: 41333, Stop: 40938, Start Num: 116

Candidate Starts for Xena_61:

(Start: 116 @41333 has 12 MA's), (Start: 126 @41321 has 182 MA's), (178, 41099), (191, 41042), (195, 41030), (200, 41006), (204, 40982),

Gene: Xenomorph_61 Start: 41580, Stop: 41993, Start Num: 128

Candidate Starts for Xenomorph_61:

(97, 41523), (106, 41547), (Start: 128 @41580 has 7 MA's), (159, 41709), (166, 41745), (179, 41811), (213, 41979),

Gene: Yeet_107 Start: 62917, Stop: 63303, Start Num: 126

Candidate Starts for Yeet_107:

(Start: 126 @62917 has 182 MA's), (140, 62941), (151, 62965), (162, 63049), (178, 63139), (179, 63142), (180, 63151), (183, 63166), (189, 63187), (195, 63211), (197, 63220), (203, 63256),

Gene: Yeezy_49 Start: 35466, Stop: 35855, Start Num: 130

Candidate Starts for Yeezy_49:

(Start: 130 @35466 has 68 MA's), (154, 35550), (156, 35565), (163, 35610), (169, 35640), (187, 35733), (191, 35751), (193, 35757), (194, 35760), (209, 35841),

Gene: Yokurt_67 Start: 39689, Stop: 39303, Start Num: 126

Candidate Starts for Yokurt_67:

(24, 39944), (Start: 126 @39689 has 182 MA's), (162, 39554), (178, 39464), (189, 39419), (195, 39395),

Gene: ZAYM_53 Start: 35447, Stop: 35839, Start Num: 127

Candidate Starts for ZAYM_53:

(2, 34775), (5, 34901), (11, 35000), (13, 35021), (14, 35036), (15, 35048), (20, 35126), (39, 35237), (Start: 116 @35432 has 12 MA's), (Start: 127 @35447 has 14 MA's), (154, 35534), (155, 35537), (200, 35771),

Gene: Zaka_68 Start: 39689, Stop: 39303, Start Num: 126

Candidate Starts for Zaka_68:

(24, 39944), (Start: 126 @39689 has 182 MA's), (162, 39554), (178, 39464), (189, 39419), (195, 39395),

Gene: Zarbodnamra_63 Start: 40466, Stop: 40861, Start Num: 127

Candidate Starts for Zarbodnamra_63:

(6, 39941), (86, 40379), (Start: 127 @40466 has 14 MA's), (139, 40499), (163, 40616), (187, 40739), (191, 40757), (193, 40763), (194, 40766), (203, 40814), (209, 40847),

Gene: Zelink_112 Start: 66082, Stop: 66468, Start Num: 126

Candidate Starts for Zelink_112:

(96, 66046), (Start: 126 @66082 has 182 MA's), (138, 66103), (162, 66214), (178, 66304), (179, 66307), (180, 66316), (189, 66352), (195, 66376), (197, 66385), (203, 66421),

Gene: Zimmer_64 Start: 41818, Stop: 41435, Start Num: 126

Candidate Starts for Zimmer_64:

(57, 41935), (59, 41932), (Start: 126 @41818 has 182 MA's), (159, 41701), (162, 41686), (178, 41596), (195, 41527),

Gene: ZooBear_77 Start: 39587, Stop: 39162, Start Num: 130

Candidate Starts for ZooBear_77:

(Start: 130 @39587 has 68 MA's), (134, 39578), (146, 39542), (162, 39443), (163, 39440), (169, 39410), (178, 39359), (195, 39287), (202, 39254), (203, 39242),

Gene: Zulu_69 Start: 40067, Stop: 39681, Start Num: 126

Candidate Starts for Zulu_69:

(24, 40322), (Start: 126 @40067 has 182 MA's), (162, 39932), (178, 39842), (189, 39797), (195, 39773),