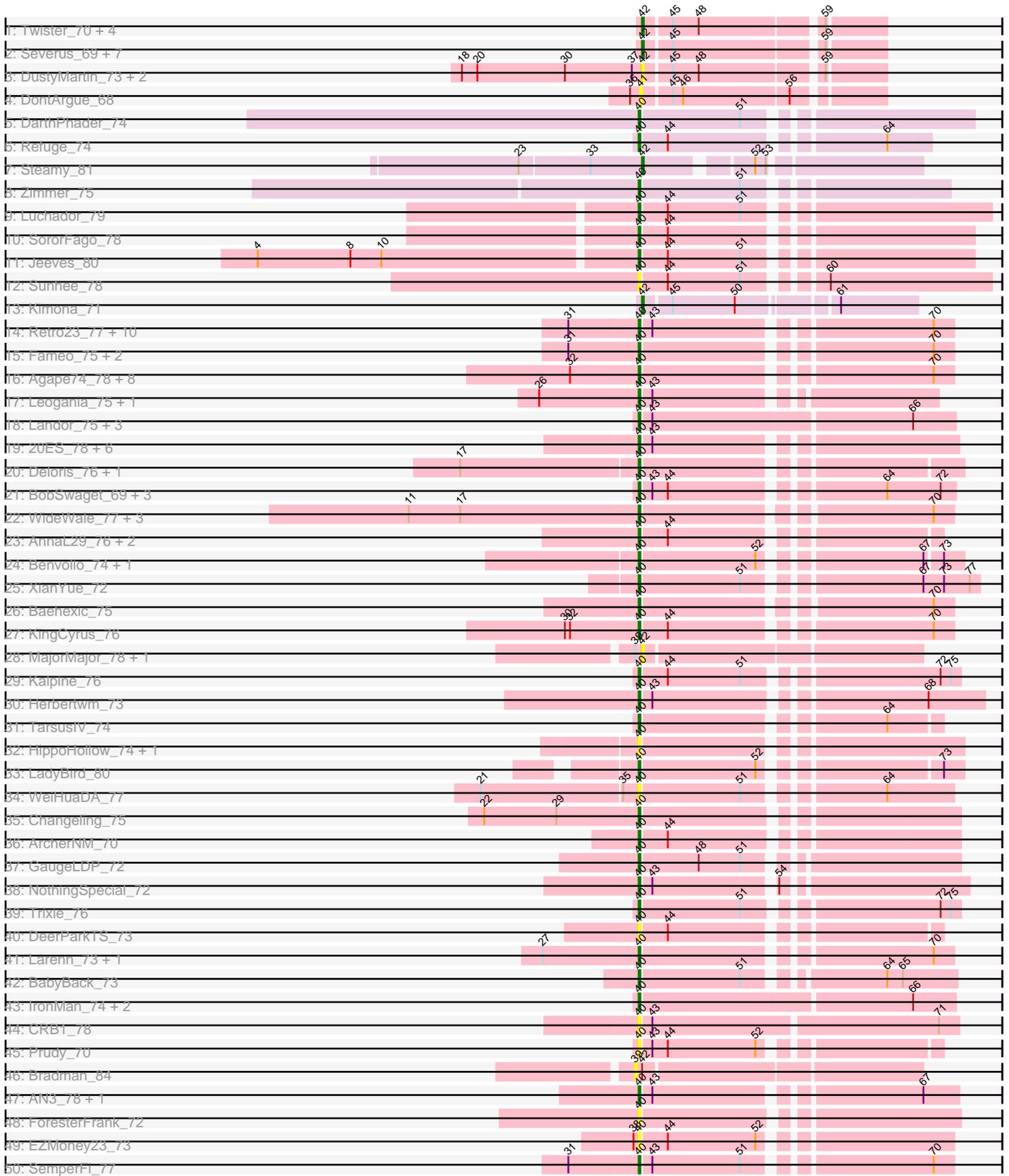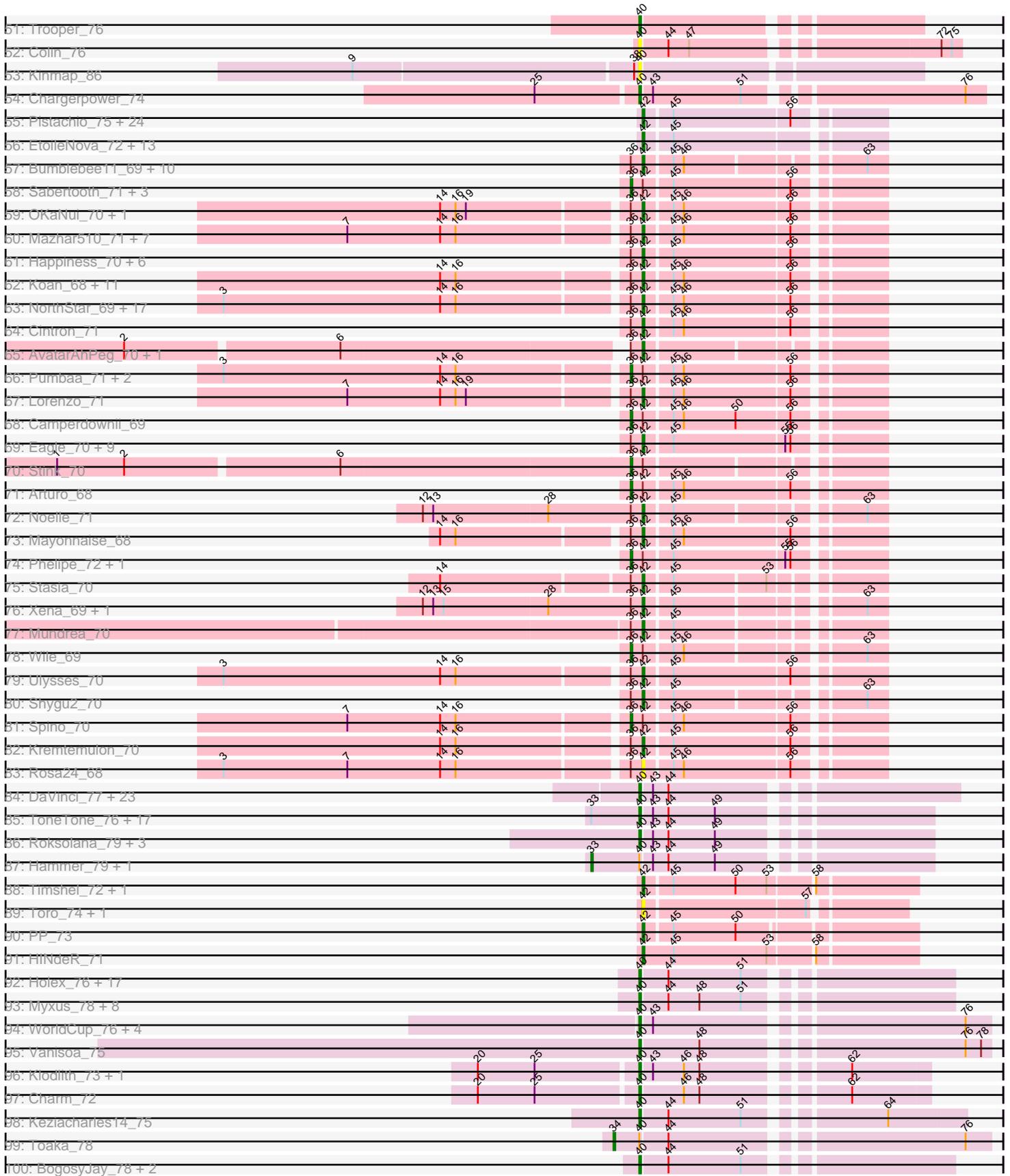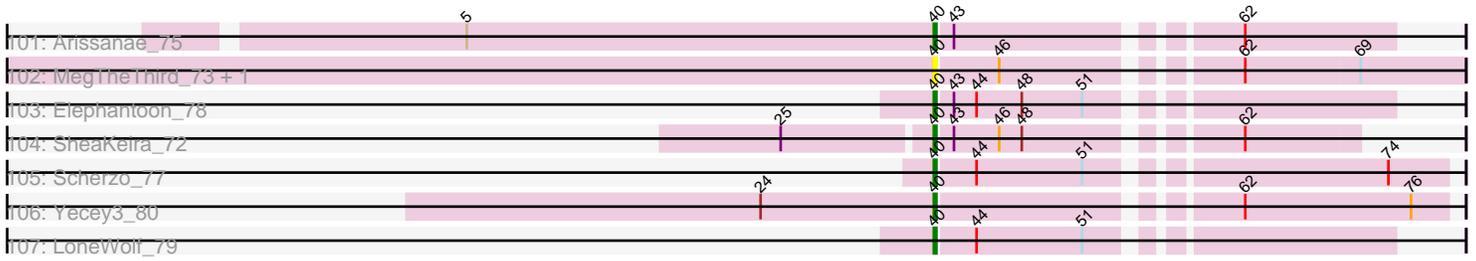# Pham 288992

Pham 288992

Pham 288992

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 288992 Report

This analysis was run 03/28/26 on database version 641.

Pham number 288992 has 351 members, 56 are drafts.

Phages represented in each track:
• Track 1 : Twister_70, Kristoff_70, Rebeuca_72, Edison31_68, WalterMcMickey_70
• Track 2 : Severus_69, Poompha_68, KittenMittens_68, PeaceMeal1_69, OKCentral2016_69, Goose_72, Drake94_69, Chupacabra_69
• Track 3 : DustyMartin_73, Rowdy_73, Shapes_73
• Track 4 : DontArgue_68
• Track 5 : DarthPhader_74
• Track 6 : Refuge_74
• Track 7 : Steamy_81
• Track 8 : Zimmer_75
• Track 9 : Luchador_79
• Track 10 : SororFago_78
• Track 11 : Jeeves_80
• Track 12 : Sunhee_78
• Track 13 : Kimona_71
• Track 14 : Retro23_77, SnapTap_76, Dalmatian_77, Crucio_77, QueenBeesly_77, Anselm_78, Georgie2_78, FiringLine_77, Power_76, DudeLittle_75, SweetiePie_76
• Track 15 : Fameo_75, Heffalump_74, QueenB2_74
• Track 16 : Agape74_78, LilTurb_77, Bugsy_78, Turbido_77, AbbyPaige_78, Dignity_78, Jerm_78, Leviathan_78, Smeagan_79
• Track 17 : Leogania_75, BiancaTri92_75
• Track 18 : Landor_75, Phaded_72, Tristan_73, Bactobuster_69
• Track 19 : 20ES_78, First_0077, Drake55_78, Piro94_76, JoshKayV_77, HarryHoudini_77, Iwokeuplikedis_78
• Track 20 : Deloris_76, BengiVuitton_76
• Track 21 : BobSwaget_69, Miko_70, Lokk_70, Rachaly_72
• Track 22 : WideWale_77, Gratitude_74, Updawg_77, Equemioh13_76
• Track 23 : AnnaL29_76, RedRock_75, Loser_78
• Track 24 : Benvolio_74, Echild_77
• Track 25 : XianYue_72
• Track 26 : Baehexic_75
• Track 27 : KingCyrus_76
• Track 28 : MajorMajor_78, Quokka_83
• Track 29 : Kalpine_76
• Track 30 : Herbertwm_73
• Track 31 : TarsusIV_74
• Track 32 : HippoHollow_74, LionsBait_76
• Track 33 : LadyBird_80

- Track 34 : WeiHuaDA_77
- Track 35 : Changeling_75
- Track 36 : ArcherNM_70
- Track 37 : GaugeLDP_72
- Track 38 : NothingSpecial_72
- Track 39 : Trixie_76
- Track 40 : DeerParkTS_73
- Track 41 : Larenn_73, Malec_74
- Track 42 : BabyBack_73
- Track 43 : IronMan_74, Pukovnik_73, Jaan_75
- Track 44 : CRB1_78
- Track 45 : Prudy_70
- Track 46 : Bradman_84
- Track 47 : AN3_78, VA6_76
- Track 48 : ForesterFrank_72
- Track 49 : EZMoney23_73
- Track 50 : SemperFi_77
- Track 51 : Trooper_76
- Track 52 : Colin_76
- Track 53 : Kinmap_86
- Track 54 : Chargerpower_74
- Track 55 : Pistachio_75, JF4_72, Clammy_74, Zarafa_72, Heathen_74, TNguyen7_75, JF2_72, SaturnRing_74, B1_66, DropBear_72, MA5_74, Fred313_72, BlueBird_77, Marchesa_73, Isca_72, Bugatti_74, Kachowdy_72, BabyRay_75, Giroux_77, Idleandcovert_75, HelDan_74, Phantastic_76, Roimos_72, Puppy_75, Scout_73
- Track 56 : EtoileNova_72, Pocahontas_73, Veracruz_71, Texage_72, Norbert_70, Margo_74, Todacoro_74, QuinnKiro_73, Panamaxus_72, Noella_75, ResDef_72, Lambert1_74, Popcicle_74, Hookmount_74
- Track 57 : Bumblebee11_69, Achebe_69, Morpher26_70, Backyardigan_68, Katalie136_70, AbbysRanger_70, Perplexer_70, Wizard007_70, Cici_70, PetiteSangsue_70, Badger_69
- Track 58 : Sabertooth_71, ChampagnePapi_73, BangNhom_69, LHTSCC_73
- Track 59 : OKaNui_70, Phontbonne_71
- Track 60 : Mazhar510_71, Nemo27_70, LochMonster_72, PeterPeter_71, Kyee_71, Tinybot_70, Phighter1804_71, DirtyDunning_70
- Track 61 : Happiness_70, SheldonCooper_71, Shaka_69, JetBlade_71, Cindaradix_67, Obama12_72, Cerulean_72
- Track 62 : Koan_68, Deano_68, TiroTheta9_70, Alberto7_72, Baby16_71, Kingmustik0402_71, RockieBear_68, Holli_70, KekoraPapaka_68, Florean_71, Roosevelt_69, Citius_71
- Track 63 : NorthStar_69, Albee_71, Flux_71, Scamp_71, LittleB_71, Chaph_71, Skipitt_70, Iceman_70, SenorClean_72, Jaykayelowell_68, Taquarus_70, Eros_71, Connomayer_71, SteMason_67, TygerBlood_71, Koreni_70, Pipcraft_68, Lunsford_71
- Track 64 : Cintron_71
- Track 65 : AvatarAhPeg_70, Miramae_70
- Track 66 : Pumbaa_71, YoSam321_71, Relief_70
- Track 67 : Lorenzo_71
- Track 68 : Camperdownii_69
- Track 69 : Eagle_70, Maxo_73, CentreCat_71, Kampy_70, TroyPia_72, LeoAvram_70, Eurydice_72, Ohfah_72, Polymorphads_71, Nebs_72
- Track 70 : Stink_70

- Track 71 : Arturo_68
- Track 72 : Noelle_71
- Track 73 : Mayonnaise_68
- Track 74 : Phelipe_72, BellusTerra_72
- Track 75 : Stasia_70
- Track 76 : Xena_69, Datway_70
- Track 77 : Mundrea_70
- Track 78 : Wile_69
- Track 79 : Ulysses_70
- Track 80 : Shygu2_70
- Track 81 : Spino_70
- Track 82 : Kremtemulon_70
- Track 83 : Rosa24_68
- Track 84 : DaVinci_77, Neeharika16_78, Jordennis_77, SmellyB_79, Hoot_74, EricB_78, Kazan_80, Kipper29_79, Priamo_81, GreedyLawyer_74, SuperAwesome_79, DelvinSonDorr_75, Candra_77, McFly_80, VohminGhazi_79, Blinn1_83, SuperCallie99_76, BABullseye_72, Pmask_78, Cookiedough_79, Isiphiwo_76, Newrala_78, Dorothea_79, Chartreuse_78
- Track 85 : ToneTone_76, Zulu_80, Helmet_81, Indra_82, Garak_80, Temprado_80, Zaka_79, BennyP_78, WunderPhul_79, BlessJoy_79, Blue7_80, Lilbunny_78, Wiks_78, Rifter_79, Tucker_79, Yokurt_78, Gruunaga_78, CloudWang3_79
- Track 86 : Roksolana_79, Artemis2UCLA_78, Hexamo_78, Koko_80
- Track 87 : Hammer_79, Gladiator_76
- Track 88 : Timshel_72, DroogsArmy_71
- Track 89 : Toro_74, FlyCatcher_76
- Track 90 : PP_73
- Track 91 : HINdeR_71
- Track 92 : Holex_76, Fayely_76, Priya_76, Pioneer_78, EmyBug_75, Phonnegut_78, Conquerage_76, Alma_76, Ayanochan_76, Jiawan_75, Spouty_76, Qobbit_76, Beemo_78, RyeScarlet_79, Onglai_76, ExplosioNervosa_76, Hanray_76, Eidsmoe_76
- Track 93 : Myxus_78, Sachima_74, Catalina_80, EdogawaKiddo_76, HortumSL17_79, PackMan_77, Tubs_78, Phaeder_78, Lilleskat_75
- Track 94 : WorldCup_76, Minispark_76, Bellris_76, Rahalelujah_78, CogOmlette_76
- Track 95 : Vanisoa_75
- Track 96 : Klodlith_73, DreamTeam1_72
- Track 97 : Charm_72
- Track 98 : Keziacharles14_75
- Track 99 : Toaka_78
- Track 100 : BogosyJay_78, Gail_78, Maminiaina_78
- Track 101 : Arissanae_75
- Track 102 : MegTheThird_73, Celestialunch_73
- Track 103 : Elephantoon_78
- Track 104 : SheaKeira_72
- Track 105 : Scherzo_77
- Track 106 : Yecey3_80
- Track 107 : LoneWolf_79

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

The start number called the most often in the published annotations is 40, it was called in 151 of the 295 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_78, AN3_78, AbbyPaige_78, Agape74_78, Alma_76, AnnaL29_76, Anselm_78, ArcherNM_70, Arissanae_75, Artemis2UCLA_78, Ayanochan_76, BABullseye_72, BabyBack_73, Bactobuster_69, Baehexic_75, Beemo_78, Bellris_76, BengiVuitton_76, BennyP_78, Benvolio_74, BiancaTri92_75, BlessJoy_79, Blinn1_83, Blue7_80, BobSwaget_69, BogosyJay_78, Bugsy_78, CRB1_78, Candra_77, Catalina_80, Celestialunch_73, Changeling_75, Chargerpower_74, Charm_72, Chartreuse_78, CloudWang3_79, CogOmlette_76, Colin_76, Conquerage_76, Cookiedough_79, Crucio_77, DaVinci_77, Dalmatian_77, DarthPhader_74, DeerParkTS_73, Deloris_76, DelvinSonDorr_75, Dignity_78, Dorothea_79, Drake55_78, DreamTeam1_72, DudeLittle_75, EZMoney23_73, Echild_77, EdogawaKiddo_76, Eidsmoe_76, Elephantoon_78, EmyBug_75, Equemioh13_76, EricB_78, ExplosioNervosa_76, Fameo_75, Fayely_76, FiringLine_77, First_0077, ForesterFrank_72, Gail_78, Garak_80, GaugeLDP_72, Georgie2_78, Gratitude_74, GreedyLawyer_74, Gruunaga_78, Hanray_76, HarryHoudini_77, Heffalump_74, Helmet_81, Herbertwm_73, Hexamo_78, HippoHollow_74, Holex_76, Hoot_74, HortumSL17_79, Indra_82, IronMan_74, Isiphiwo_76, Iwokeuplikedis_78, Jaan_75, Jeeves_80, Jerm_78, Jiawan_75, Jordennis_77, JoshKayV_77, Kalpine_76, Kazan_80, Keziacharles14_75, KingCyrus_76, Kinmap_86, Kipper29_79, Klodlith_73, Koko_80, LadyBird_80, Landor_75, Larenn_73, Leogania_75, Leviathan_78, LilTurb_77, Lilbunny_78, Lilleskat_75, LionsBait_76, Lokk_70, LoneWolf_79, Loser_78, Luchador_79, Malec_74, Maminiaina_78, McFly_80, MegTheThird_73, Miko_70, Minispark_76, Myxus_78, Neeharika16_78, Newrala_78, NothingSpecial_72, Onglai_76, PackMan_77, Phaded_72, Phaeder_78, Phonnegut_78, Pioneer_78, Piro94_76, Pmask_78, Power_76, Priamo_81, Priya_76, Prudy_70, Pukovnik_73, Qobbit_76, QueenB2_74, QueenBeesly_77, Rachaly_72, Rahalelujah_78, RedRock_75, Refuge_74, Retro23_77, Rifter_79, Roksolana_79, RyeScarlet_79, Sachima_74, Scherzo_77, SemperFi_77, SheaKeira_72, Smeagan_79, SmellyB_79, SnapTap_76, SororFago_78, Spouty_76, Sunhee_78, SuperAwesome_79, SuperCallie99_76, SweetiePie_76, TarsusIV_74, Temprado_80, ToneTone_76, Tristan_73, Trixie_76, Trooper_76, Tubs_78, Tucker_79, Turbido_77, Updawg_77, VA6_76, Vanisoa_75, VohminGhazi_79, WeiHuaDA_77, WideWale_77, Wiks_78, WorldCup_76, WunderPhul_79, XianYue_72, Yecey3_80, Yokurt_78, Zaka_79, Zimmer_75, Zulu_80,

Genes that have the "Most Annotated" start but do not call it:
• Gladiator_76, Hammer_79, Toaka_78,

Genes that do not have the "Most Annotated" start:
• AbbysRanger_70, Achebe_69, Albee_71, Alberto7_72, Arturo_68, AvatarAhPeg_70, B1_66, Baby16_71, BabyRay_75, Backyardigan_68, Badger_69, BangNhom_69, BellusTerra_72, BlueBird_77, Bradman_84, Bugatti_74, Bumblebee11_69, Camperdownii_69, CentreCat_71, Cerulean_72, ChampagnePapi_73, Chaph_71, Chupacabra_69, Cici_70, Cindaradix_67, Cintron_71, Citius_71, Clammy_74, Connomayer_71, Datway_70, Deano_68, DirtyDunning_70, DontArgue_68, Drake94_69, DroogsArmy_71, DropBear_72, DustyMartin_73, Eagle_70, Edison31_68, Eros_71, EtoileNova_72, Eurydice_72, Florean_71, Flux_71, FlyCatcher_76, Fred313_72, Giroux_77, Goose_72, HINdeR_71, Happiness_70, Heathen_74, HelDan_74, Holli_70, Hookmount_74, Iceman_70, Idleandcovert_75,

Isca_72, JF2_72, JF4_72, Jaykayelowell_68, JetBlade_71, Kachowdy_72, Kampy_70, Katalie136_70, KekoraPapaka_68, Kimona_71, Kingmustik0402_71, KittenMittens_68, Koan_68, Koreni_70, Kremtemulon_70, Kristoff_70, Kyee_71, LHTSCC_73, Lambert1_74, LeoAvram_70, LittleB_71, LochMonster_72, Lorenzo_71, Lunsford_71, MA5_74, MajorMajor_78, Marchesa_73, Margo_74, Maxo_73, Mayonnaise_68, Mazhar510_71, Miramae_70, Morpher26_70, Mundrea_70, Nebs_72, Nemo27_70, Noella_75, Noelle_71, Norbert_70, NorthStar_69, OKCentral2016_69, OKaNui_70, Obama12_72, Ohfah_72, PP_73, Panamaxus_72, PeaceMeal1_69, Perplexer_70, PeterPeter_71, PetiteSangsue_70, Phantastic_76, Phelipe_72, Phighter1804_71, Phontbonne_71, Pipcraft_68, Pistachio_75, Pocahontas_73, Polymorphads_71, Poompha_68, Popcicle_74, Pumbaa_71, Puppy_75, QuinnKiro_73, Quokka_83, Rebeuca_72, Relief_70, ResDef_72, RockieBear_68, Roimos_72, Roosevelt_69, Rosa24_68, Rowdy_73, Sabertooth_71, SaturnRing_74, Scamp_71, Scout_73, SenorClean_72, Severus_69, Shaka_69, Shapes_73, SheldonCooper_71, Shygu2_70, Skipitt_70, Spino_70, Stasia_70, SteMason_67, Steamy_81, Stink_70, TNguyen7_75, Taquarus_70, Texage_72, Timshel_72, Tinybot_70, TiroTheta9_70, Todacoro_74, Toro_74, TroyPia_72, Twister_70, TygerBlood_71, Ulysses_70, Veracruz_71, WalterMcMickey_70, Wile_69, Wizard007_70, Xena_69, YoSam321_71, Zarafa_72,

Summary by start number:

Start 33:
• Found in 21 of 351 (6.0%) of genes in pham
• Manual Annotations of this start: 2 of 295
• Called 9.5% of time when present
• Phage (with cluster) where this start called: Gladiator_76 (A6), Hammer_79 (A6),

Start 34:
• Found in 1 of 351 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 295
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toaka_78 (A9),

Start 36:
• Found in 97 of 351 (27.6%) of genes in pham
• Manual Annotations of this start: 14 of 295
• Called 14.4% of time when present
• Phage (with cluster) where this start called: Arturo_68 (A4), BangNhom_69 (A4), BellusTerra_72 (A4), Camperdownii_69 (A4), ChampagnePapi_73 (A4), LHTSCC_73 (A4), Phelipe_72 (A4), Pumbaa_71 (A4), Relief_70 (A4), Sabertooth_71 (A4), Spino_70 (A4), Stink_70 (A4), Wile_69 (A4), YoSam321_71 (A4),

Start 39:
• Found in 3 of 351 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Bradman_84 (A2),

Start 40:
• Found in 188 of 351 (53.6%) of genes in pham
• Manual Annotations of this start: 151 of 295
• Called 98.4% of time when present

• Phage (with cluster) where this start called: 20ES_78 (A2), AN3_78 (A2), AbbyPaige_78 (A2), Agape74_78 (A2), Alma_76 (A9), AnnaL29_76 (A2), Anselm_78 (A2), ArcherNM_70 (A2), Arissanae_75 (A9), Artemis2UCLA_78 (A6), Ayanochan_76 (A9), BABullseye_72 (A6), BabyBack_73 (A2), Bactobuster_69 (A2), Baehexic_75 (A2), Beemo_78 (A9), Bellris_76 (A9), BengiVuitton_76 (A2), BennyP_78 (A6), Benvolio_74 (A2), BiancaTri92_75 (A2), BlessJoy_79 (A6), Blinn1_83 (A6), Blue7_80 (A6), BobSwaget_69 (A2), BogosyJay_78 (A9), Bugsy_78 (A2), CRB1_78 (A2), Candra_77 (A6), Catalina_80 (A9), Celestialunch_73 (A9), Changeling_75 (A2), Chargerpower_74 (A22), Charm_72 (A9), Chartreuse_78 (A6), CloudWang3_79 (A6), CogOmlette_76 (A9), Colin_76 (A2), Conquerage_76 (A9), Cookiedough_79 (A6), Crucio_77 (A2), DaVinci_77 (A6), Dalmatian_77 (A2), DarthPhader_74 (A12), DeerParkTS_73 (A2), Deloris_76 (A2), DelvinSonDorr_75 (A6), Dignity_78 (A2), Dorothea_79 (A6), Drake55_78 (A2), DreamTeam1_72 (A9), DudeLittle_75 (A2), EZMoney23_73 (A2), Echild_77 (A2), EdogawaKiddo_76 (A9), Eidsmoe_76 (A9), Elephantoon_78 (A9), EmyBug_75 (A9), Equemioh13_76 (A2), EricB_78 (A6), ExplosioNervosa_76 (A9), Fameo_75 (A2), Fayely_76 (A9), FiringLine_77 (A2), First_0077 (A2), ForesterFrank_72 (A2), Gail_78 (A14), Garak_80 (A6), GaugeLDP_72 (A2), Georgie2_78 (A2), Gratitude_74 (A2), GreedyLawyer_74 (A6), Gruunaga_78 (A6), Hanray_76 (A9), HarryHoudini_77 (A2), Heffalump_74 (A2), Helmet_81 (A6), Herbertwm_73 (A2), Hexamo_78 (A6), HippoHollow_74 (A2), Holex_76 (A9), Hoot_74 (A6), HortumSL17_79 (A9), Indra_82 (A6), IronMan_74 (A2), Isiphiwo_76 (A6), Iwokeuplikedis_78 (A2), Jaan_75 (A2), Jeeves_80 (A14), Jerm_78 (A2), Jiawan_75 (A9), Jordennis_77 (A6), JoshKayV_77 (A2), Kalpine_76 (A2), Kazan_80 (A6), Keziacharles14_75 (A9), KingCyrus_76 (A2), Kinmap_86 (A21), Kipper29_79 (A6), Klodlith_73 (A9), Koko_80 (A6), LadyBird_80 (A2), Landor_75 (A2), Larenn_73 (A2), Leogania_75 (A2), Leviathan_78 (A2), LilTurb_77 (A2), Lilbunny_78 (A6), Lilleskat_75 (A9), LionsBait_76 (A2), Lokk_70 (A2), LoneWolf_79 (A9), Loser_78 (A2), Luchador_79 (A14), Malec_74 (A2), Maminiaina_78 (A9), McFly_80 (A6), MegTheThird_73 (A9), Miko_70 (A2), Minispark_76 (A9), Myxus_78 (A9), Neeharika16_78 (A6), Newrala_78 (A6), NothingSpecial_72 (A2), Onglai_76 (A9), PackMan_77 (A9), Phaded_72 (A2), Phaeder_78 (A9), Phonnegut_78 (A9), Pioneer_78 (A9), Piro94_76 (A2), Pmask_78 (A6), Power_76 (A2), Priamo_81 (A6), Priya_76 (A9), Prudy_70 (A2), Pukovnik_73 (A2), Qobbit_76 (A9), QueenB2_74 (A2), QueenBeesly_77 (A2), Rachaly_72 (A2), Rahalelujah_78 (A9), RedRock_75 (A2), Refuge_74 (A12), Retro23_77 (A2), Rifter_79 (A6), Roksolana_79 (A6), RyeScarlet_79 (A9), Sachima_74 (A9), Scherzo_77 (A9), SemperFi_77 (A2), SheaKeira_72 (A9), Smeagan_79 (A2), SmellyB_79 (A6), SnapTap_76 (A2), SororFago_78 (A14), Spouty_76 (A9), Sunhee_78 (A14), SuperAwesome_79 (A6), SuperCallie99_76 (A6), SweetiePie_76 (A2), TarsusIV_74 (A2), Temprado_80 (A6), ToneTone_76 (A6), Tristan_73 (A2), Trixie_76 (A2), Trooper_76 (A2), Tubs_78 (A9), Tucker_79 (A6), Turbido_77 (A2), Updawg_77 (A2), VA6_76 (A2), Vanisoa_75 (A9), VohminGhazi_79 (A6), WeiHuaDA_77 (A2), WideWale_77 (A2), Wiks_78 (A6), WorldCup_76 (A9), WunderPhul_79 (A6), XianYue_72 (A2), Yecey3_80 (A9), Yokurt_78 (A6), Zaka_79 (A6), Zimmer_75 (A12), Zulu_80 (A6),

Start 41:
• Found in 1 of 351 (0.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DontArgue_68 (A10),

Start 42:
• Found in 162 of 351 (46.2%) of genes in pham

• Manual Annotations of this start: 127 of 295
• Called 90.7% of time when present
• Phage (with cluster) where this start called: AbbysRanger_70 (A4), Achebe_69 (A4), Albee_71 (A4), Alberto7_72 (A4), AvatarAhPeg_70 (A4), B1_66 (A3), Baby16_71 (A4), BabyRay_75 (A3), Backyardigan_68 (A4), Badger_69 (A4), BlueBird_77 (A3), Bugatti_74 (A3), Bumblebee11_69 (A4), CentreCat_71 (A4), Cerulean_72 (A4), Chaph_71 (A4), Chupacabra_69 (A10), Cici_70 (A4), Cindaradix_67 (A4), Cintron_71 (A4), Citius_71 (A4), Clammy_74 (A3), Connomayer_71 (A4), Datway_70 (A4), Deano_68 (A4), DirtyDunning_70 (A4), Drake94_69 (A10), DroogsArmy_71 (A7), DropBear_72 (A3), DustyMartin_73 (A10), Eagle_70 (A4), Edison31_68 (A10), Eros_71 (A4), EtoileNova_72 (A3), Eurydice_72 (A4), Florean_71 (A4), Flux_71 (A4), FlyCatcher_76 (A7), Fred313_72 (A3), Giroux_77 (A3), Goose_72 (A10), HINdeR_71 (A7), Happiness_70 (A4), Heathen_74 (A3), HelDan_74 (A3), Holli_70 (A4), Hookmount_74 (A3), Iceman_70 (A4), Idleandcovert_75 (A3), Isca_72 (A3), JF2_72 (A3), JF4_72 (A3), Jaykayelowell_68 (A4), JetBlade_71 (A4), Kachowdy_72 (A3), Kampy_70 (A4), Katalie136_70 (A4), KekoraPapaka_68 (A4), Kimona_71 (A19), Kingmustik0402_71 (A4), KittenMittens_68 (A10), Koan_68 (A4), Koreni_70 (A4), Kremtemulon_70 (A4), Kristoff_70 (A10), Kyee_71 (A4), Lambert1_74 (A3), LeoAvram_70 (A4), LittleB_71 (A4), LochMonster_72 (A4), Lorenzo_71 (A4), Lunsford_71 (A4), MA5_74 (A3), MajorMajor_78 (A2), Marchesa_73 (A3), Margo_74 (A3), Maxo_73 (A4), Mayonnaise_68 (A4), Mazhar510_71 (A4), Miramae_70 (A4), Morpher26_70 (A4), Mundrea_70 (A4), Nebs_72 (A4), Nemo27_70 (A4), Noella_75 (A3), Noelle_71 (A4), Norbert_70 (A3), NorthStar_69 (A4), OKCentral2016_69 (A10), OKaNui_70 (A4), Obama12_72 (A4), Ohfah_72 (A4), PP_73 (A7), Panamaxus_72 (A3), PeaceMeal1_69 (A10), Perplexer_70 (A4), PeterPeter_71 (A4), PetiteSangsue_70 (A4), Phantastic_76 (A3), Phighter1804_71 (A4), Phontbonne_71 (A4), Pipcraft_68 (A4), Pistachio_75 (A3), Pocahontas_73 (A3), Polymorphads_71 (A4), Poompha_68 (A10), Popcicle_74 (A3), Puppy_75 (A3), QuinnKiro_73 (A3), Quokka_83 (A2), Rebeuca_72 (A10), ResDef_72 (A3), RockieBear_68 (A4), Roimos_72 (A3), Roosevelt_69 (A4), Rosa24_68 (A4), Rowdy_73 (A10), SaturnRing_74 (A3), Scamp_71 (A4), Scout_73 (A3), SenorClean_72 (A4), Severus_69 (A10), Shaka_69 (A4), Shapes_73 (A10), SheldonCooper_71 (A4), Shygu2_70 (A4), Skipitt_70 (A4), Stasia_70 (A4), SteMason_67 (A4), Steamy_81 (A12), TNguyen7_75 (A3), Taquarus_70 (A4), Texage_72 (A3), Timshel_72 (A7), Tinybot_70 (A4), TiroTheta9_70 (A4), Todacoro_74 (A3), Toro_74 (A7), TroyPia_72 (A4), Twister_70 (A10), TygerBlood_71 (A4), Ulysses_70 (A4), Veracruz_71 (A3), WalterMcMickey_70 (A10), Wizard007_70 (A4), Xena_69 (A4), Zarafa_72 (A3),

Summary by clusters:

There are 12 clusters represented in this pham: A14, A22, A10, A21, A12, A19, A3, A2, A4, A7, A6, A9,

Info for manual annotations of cluster A10:
•Start number 42 was manually annotated 13 times for cluster A10.

Info for manual annotations of cluster A12:
•Start number 40 was manually annotated 3 times for cluster A12.
•Start number 42 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:
•Start number 40 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A19:
•Start number 42 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:
•Start number 40 was manually annotated 70 times for cluster A2.

Info for manual annotations of cluster A22:
•Start number 40 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A3:
•Start number 42 was manually annotated 30 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 36 was manually annotated 14 times for cluster A4.
•Start number 42 was manually annotated 78 times for cluster A4.

Info for manual annotations of cluster A6:
•Start number 33 was manually annotated 2 times for cluster A6.
•Start number 40 was manually annotated 42 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 42 was manually annotated 4 times for cluster A7.

Info for manual annotations of cluster A9:
•Start number 34 was manually annotated 1 time for cluster A9.
•Start number 40 was manually annotated 31 times for cluster A9.

Gene Information:

Gene: 20ES_78 Start: 45905, Stop: 45738, Start Num: 40
Candidate Starts for 20ES_78:
(Start: 40 @45905 has 151 MA's), (43, 45899),

Gene: AN3_78 Start: 44672, Stop: 44505, Start Num: 40
Candidate Starts for AN3_78:
(Start: 40 @44672 has 151 MA's), (43, 44666), (67, 44525),

Gene: AbbyPaige_78 Start: 46176, Stop: 46012, Start Num: 40
Candidate Starts for AbbyPaige_78:
(32, 46215), (Start: 40 @46176 has 151 MA's), (70, 46023),

Gene: AbbysRanger_70 Start: 44685, Stop: 44563, Start Num: 42
Candidate Starts for AbbysRanger_70:
(Start: 36 @44691 has 14 MA's), (Start: 42 @44685 has 127 MA's), (45, 44670), (46, 44664), (63, 44574),

Gene: Achebe_69 Start: 44668, Stop: 44546, Start Num: 42
Candidate Starts for Achebe_69:
(Start: 36 @44674 has 14 MA's), (Start: 42 @44668 has 127 MA's), (45, 44653), (46, 44647), (63, 44557),

Gene: Agape74_78 Start: 46171, Stop: 46007, Start Num: 40
Candidate Starts for Agape74_78:
(32, 46210), (Start: 40 @46171 has 151 MA's), (70, 46018),

Gene: Albee_71 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for Albee_71:
(3, 44744), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Alberto7_72 Start: 44847, Stop: 44719, Start Num: 42
Candidate Starts for Alberto7_72:
(14, 44955), (16, 44946), (Start: 36 @44853 has 14 MA's), (Start: 42 @44847 has 127 MA's), (45, 44832), (46, 44826), (56, 44766),

Gene: Alma_76 Start: 45089, Stop: 44925, Start Num: 40
Candidate Starts for Alma_76:
(Start: 40 @45089 has 151 MA's), (44, 45074), (51, 45032),

Gene: AnnaL29_76 Start: 46109, Stop: 45954, Start Num: 40
Candidate Starts for AnnaL29_76:
(Start: 40 @46109 has 151 MA's), (44, 46094),

Gene: Anselm_78 Start: 46243, Stop: 46079, Start Num: 40
Candidate Starts for Anselm_78:
(31, 46282), (Start: 40 @46243 has 151 MA's), (43, 46237), (70, 46090),

Gene: ArcherNM_70 Start: 45375, Stop: 45208, Start Num: 40
Candidate Starts for ArcherNM_70:
(Start: 40 @45375 has 151 MA's), (44, 45360),

Gene: Arissanae_75 Start: 45413, Stop: 45249, Start Num: 40
Candidate Starts for Arissanae_75:
(5, 45599), (Start: 40 @45413 has 151 MA's), (43, 45407), (62, 45308),

Gene: Artemis2UCLA_78 Start: 44266, Stop: 44114, Start Num: 40
Candidate Starts for Artemis2UCLA_78:
(Start: 40 @44266 has 151 MA's), (43, 44260), (44, 44251), (49, 44224),

Gene: Arturo_68 Start: 44641, Stop: 44507, Start Num: 36
Candidate Starts for Arturo_68:
(Start: 36 @44641 has 14 MA's), (Start: 42 @44635 has 127 MA's), (45, 44620), (46, 44614), (56, 44554),

Gene: AvatarAhPeg_70 Start: 44568, Stop: 44446, Start Num: 42
Candidate Starts for AvatarAhPeg_70:
(2, 44850), (6, 44730), (Start: 36 @44574 has 14 MA's), (Start: 42 @44568 has 127 MA's),

Gene: Ayanochan_76 Start: 44872, Stop: 44708, Start Num: 40
Candidate Starts for Ayanochan_76:
(Start: 40 @44872 has 151 MA's), (44, 44857), (51, 44815),

Gene: B1_66 Start: 43265, Stop: 43137, Start Num: 42

Candidate Starts for B1_66:
(Start: 42 @43265 has 127 MA's), (45, 43250), (56, 43184),

Gene: BABullseye_72 Start: 42895, Stop: 42728, Start Num: 40
Candidate Starts for BABullseye_72:
(Start: 40 @42895 has 151 MA's), (43, 42889), (44, 42880),

Gene: Baby16_71 Start: 44521, Stop: 44393, Start Num: 42
Candidate Starts for Baby16_71:
(14, 44629), (16, 44620), (Start: 36 @44527 has 14 MA's), (Start: 42 @44521 has 127 MA's), (45, 44506), (46, 44500), (56, 44440),

Gene: BabyBack_73 Start: 45797, Stop: 45633, Start Num: 40
Candidate Starts for BabyBack_73:
(Start: 40 @45797 has 151 MA's), (51, 45740), (64, 45671), (65, 45662),

Gene: BabyRay_75 Start: 45018, Stop: 44890, Start Num: 42
Candidate Starts for BabyRay_75:
(Start: 42 @45018 has 127 MA's), (45, 45003), (56, 44937),

Gene: Backyardigan_68 Start: 44701, Stop: 44579, Start Num: 42
Candidate Starts for Backyardigan_68:
(Start: 36 @44707 has 14 MA's), (Start: 42 @44701 has 127 MA's), (45, 44686), (46, 44680), (63, 44590),

Gene: Bactobuster_69 Start: 45446, Stop: 45270, Start Num: 40
Candidate Starts for Bactobuster_69:
(Start: 40 @45446 has 151 MA's), (43, 45440), (66, 45293),

Gene: Badger_69 Start: 44669, Stop: 44547, Start Num: 42
Candidate Starts for Badger_69:
(Start: 36 @44675 has 14 MA's), (Start: 42 @44669 has 127 MA's), (45, 44654), (46, 44648), (63, 44558),

Gene: Baehexic_75 Start: 45567, Stop: 45403, Start Num: 40
Candidate Starts for Baehexic_75:
(Start: 40 @45567 has 151 MA's), (70, 45414),

Gene: BangNhom_69 Start: 44950, Stop: 44816, Start Num: 36
Candidate Starts for BangNhom_69:
(Start: 36 @44950 has 14 MA's), (Start: 42 @44944 has 127 MA's), (45, 44929), (56, 44863),

Gene: Beemo_78 Start: 45129, Stop: 44965, Start Num: 40
Candidate Starts for Beemo_78:
(Start: 40 @45129 has 151 MA's), (44, 45114), (51, 45072),

Gene: Bellris_76 Start: 44983, Stop: 44798, Start Num: 40
Candidate Starts for Bellris_76:
(Start: 40 @44983 has 151 MA's), (43, 44977), (76, 44812),

Gene: BellusTerra_72 Start: 44554, Stop: 44420, Start Num: 36
Candidate Starts for BellusTerra_72:

(Start: 36 @44554 has 14 MA's), (Start: 42 @44548 has 127 MA's), (45, 44533), (55, 44470), (56, 44467),

Gene: BengiVuitton_76 Start: 45866, Stop: 45699, Start Num: 40
Candidate Starts for BengiVuitton_76:
(17, 45968), (Start: 40 @45866 has 151 MA's),

Gene: BennyP_78 Start: 44432, Stop: 44280, Start Num: 40
Candidate Starts for BennyP_78:
(Start: 33 @44459 has 2 MA's), (Start: 40 @44432 has 151 MA's), (43, 44426), (44, 44417), (49, 44390),

Gene: Benvolio_74 Start: 45472, Stop: 45305, Start Num: 40
Candidate Starts for Benvolio_74:
(Start: 40 @45472 has 151 MA's), (52, 45406), (67, 45325), (73, 45316),

Gene: BiancaTri92_75 Start: 45806, Stop: 45651, Start Num: 40
Candidate Starts for BiancaTri92_75:
(26, 45863), (Start: 40 @45806 has 151 MA's), (43, 45800),

Gene: BlessJoy_79 Start: 44788, Stop: 44636, Start Num: 40
Candidate Starts for BlessJoy_79:
(Start: 33 @44815 has 2 MA's), (Start: 40 @44788 has 151 MA's), (43, 44782), (44, 44773), (49, 44746),

Gene: Blinn1_83 Start: 45509, Stop: 45342, Start Num: 40
Candidate Starts for Blinn1_83:
(Start: 40 @45509 has 151 MA's), (43, 45503), (44, 45494),

Gene: Blue7_80 Start: 44486, Stop: 44334, Start Num: 40
Candidate Starts for Blue7_80:
(Start: 33 @44513 has 2 MA's), (Start: 40 @44486 has 151 MA's), (43, 44480), (44, 44471), (49, 44444),

Gene: BlueBird_77 Start: 45089, Stop: 44961, Start Num: 42
Candidate Starts for BlueBird_77:
(Start: 42 @45089 has 127 MA's), (45, 45074), (56, 45008),

Gene: BobSwaget_69 Start: 43679, Stop: 43515, Start Num: 40
Candidate Starts for BobSwaget_69:
(Start: 40 @43679 has 151 MA's), (43, 43673), (44, 43664), (64, 43553), (72, 43523),

Gene: BogosyJay_78 Start: 45362, Stop: 45198, Start Num: 40
Candidate Starts for BogosyJay_78:
(Start: 40 @45362 has 151 MA's), (44, 45347), (51, 45305),

Gene: Bradman_84 Start: 46414, Stop: 46256, Start Num: 39
Candidate Starts for Bradman_84:
(39, 46414), (Start: 42 @46411 has 127 MA's),

Gene: Bugatti_74 Start: 45089, Stop: 44961, Start Num: 42
Candidate Starts for Bugatti_74:
(Start: 42 @45089 has 127 MA's), (45, 45074), (56, 45008),

Gene: Bugsy_78 Start: 46221, Stop: 46057, Start Num: 40
Candidate Starts for Bugsy_78:
(32, 46260), (Start: 40 @46221 has 151 MA's), (70, 46068),

Gene: Bumblebee11_69 Start: 44671, Stop: 44549, Start Num: 42
Candidate Starts for Bumblebee11_69:
(Start: 36 @44677 has 14 MA's), (Start: 42 @44671 has 127 MA's), (45, 44656), (46, 44650), (63, 44560),

Gene: CRB1_78 Start: 46424, Stop: 46245, Start Num: 40
Candidate Starts for CRB1_78:
(Start: 40 @46424 has 151 MA's), (43, 46418), (71, 46256),

Gene: Camperdownii_69 Start: 44185, Stop: 44051, Start Num: 36
Candidate Starts for Camperdownii_69:
(Start: 36 @44185 has 14 MA's), (Start: 42 @44179 has 127 MA's), (45, 44164), (46, 44158), (50, 44128), (56, 44098),

Gene: Candra_77 Start: 44590, Stop: 44423, Start Num: 40
Candidate Starts for Candra_77:
(Start: 40 @44590 has 151 MA's), (43, 44584), (44, 44575),

Gene: Catalina_80 Start: 45183, Stop: 45019, Start Num: 40
Candidate Starts for Catalina_80:
(Start: 40 @45183 has 151 MA's), (44, 45168), (48, 45150), (51, 45126),

Gene: Celestialunch_73 Start: 44364, Stop: 44173, Start Num: 40
Candidate Starts for Celestialunch_73:
(Start: 40 @44364 has 151 MA's), (46, 44340), (62, 44259), (69, 44214),

Gene: CentreCat_71 Start: 44547, Stop: 44419, Start Num: 42
Candidate Starts for CentreCat_71:
(Start: 36 @44553 has 14 MA's), (Start: 42 @44547 has 127 MA's), (45, 44532), (55, 44469), (56, 44466),

Gene: Cerulean_72 Start: 44945, Stop: 44817, Start Num: 42
Candidate Starts for Cerulean_72:
(Start: 36 @44951 has 14 MA's), (Start: 42 @44945 has 127 MA's), (45, 44930), (56, 44864),

Gene: ChampagnePapi_73 Start: 44950, Stop: 44816, Start Num: 36
Candidate Starts for ChampagnePapi_73:
(Start: 36 @44950 has 14 MA's), (Start: 42 @44944 has 127 MA's), (45, 44929), (56, 44863),

Gene: Changeling_75 Start: 46099, Stop: 45932, Start Num: 40
Candidate Starts for Changeling_75:
(22, 46189), (29, 46147), (Start: 40 @46099 has 151 MA's),

Gene: Chaph_71 Start: 44521, Stop: 44393, Start Num: 42
Candidate Starts for Chaph_71:
(3, 44755), (14, 44629), (16, 44620), (Start: 36 @44527 has 14 MA's), (Start: 42 @44521 has 127 MA's), (45, 44506), (46, 44500), (56, 44440),

Gene: Chargerpower_74 Start: 44306, Stop: 44124, Start Num: 40
Candidate Starts for Chargerpower_74:
(25, 44363), (Start: 40 @44306 has 151 MA's), (43, 44300), (51, 44249), (76, 44135),

Gene: Charm_72 Start: 44293, Stop: 44144, Start Num: 40
Candidate Starts for Charm_72:
(20, 44383), (25, 44350), (Start: 40 @44293 has 151 MA's), (46, 44269), (48, 44260), (62, 44188),

Gene: Chartreuse_78 Start: 43901, Stop: 43734, Start Num: 40
Candidate Starts for Chartreuse_78:
(Start: 40 @43901 has 151 MA's), (43, 43895), (44, 43886),

Gene: Chupacabra_69 Start: 44351, Stop: 44223, Start Num: 42
Candidate Starts for Chupacabra_69:
(Start: 42 @44351 has 127 MA's), (45, 44336), (59, 44255),

Gene: Cici_70 Start: 44686, Stop: 44564, Start Num: 42
Candidate Starts for Cici_70:
(Start: 36 @44692 has 14 MA's), (Start: 42 @44686 has 127 MA's), (45, 44671), (46, 44665), (63, 44575),

Gene: Cindaradix_67 Start: 44408, Stop: 44280, Start Num: 42
Candidate Starts for Cindaradix_67:
(Start: 36 @44414 has 14 MA's), (Start: 42 @44408 has 127 MA's), (45, 44393), (56, 44327),

Gene: Cintron_71 Start: 44658, Stop: 44530, Start Num: 42
Candidate Starts for Cintron_71:
(Start: 36 @44664 has 14 MA's), (Start: 42 @44658 has 127 MA's), (45, 44643), (46, 44637), (56, 44577),

Gene: Citius_71 Start: 44531, Stop: 44403, Start Num: 42
Candidate Starts for Citius_71:
(14, 44639), (16, 44630), (Start: 36 @44537 has 14 MA's), (Start: 42 @44531 has 127 MA's), (45, 44516), (46, 44510), (56, 44450),

Gene: Clammy_74 Start: 45089, Stop: 44961, Start Num: 42
Candidate Starts for Clammy_74:
(Start: 42 @45089 has 127 MA's), (45, 45074), (56, 45008),

Gene: CloudWang3_79 Start: 44778, Stop: 44626, Start Num: 40
Candidate Starts for CloudWang3_79:
(Start: 33 @44805 has 2 MA's), (Start: 40 @44778 has 151 MA's), (43, 44772), (44, 44763), (49, 44736),

Gene: CogOmlette_76 Start: 44980, Stop: 44795, Start Num: 40
Candidate Starts for CogOmlette_76:
(Start: 40 @44980 has 151 MA's), (43, 44974), (76, 44809),

Gene: Colin_76 Start: 46817, Stop: 46650, Start Num: 40
Candidate Starts for Colin_76:
(Start: 40 @46817 has 151 MA's), (44, 46802), (47, 46790), (72, 46661), (75, 46655),

Gene: Connomayer_71 Start: 44510, Stop: 44382, Start Num: 42

Candidate Starts for Connomayer_71:
(3, 44744), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Conquerage_76 Start: 44858, Stop: 44694, Start Num: 40
Candidate Starts for Conquerage_76:
(Start: 40 @44858 has 151 MA's), (44, 44843), (51, 44801),

Gene: Cookiedough_79 Start: 45205, Stop: 45038, Start Num: 40
Candidate Starts for Cookiedough_79:
(Start: 40 @45205 has 151 MA's), (43, 45199), (44, 45190),

Gene: Crucio_77 Start: 46142, Stop: 45978, Start Num: 40
Candidate Starts for Crucio_77:
(31, 46181), (Start: 40 @46142 has 151 MA's), (43, 46136), (70, 45989),

Gene: DaVinci_77 Start: 43955, Stop: 43788, Start Num: 40
Candidate Starts for DaVinci_77:
(Start: 40 @43955 has 151 MA's), (43, 43949), (44, 43940),

Gene: Dalmatian_77 Start: 45962, Stop: 45798, Start Num: 40
Candidate Starts for Dalmatian_77:
(31, 46001), (Start: 40 @45962 has 151 MA's), (43, 45956), (70, 45809),

Gene: DarthPhader_74 Start: 46216, Stop: 46040, Start Num: 40
Candidate Starts for DarthPhader_74:
(Start: 40 @46216 has 151 MA's), (51, 46159),

Gene: Datway_70 Start: 44680, Stop: 44558, Start Num: 42
Candidate Starts for Datway_70:
(12, 44806), (13, 44800), (15, 44794), (28, 44734), (Start: 36 @44686 has 14 MA's), (Start: 42 @44680 has 127 MA's), (45, 44665), (63, 44569),

Gene: Deano_68 Start: 44518, Stop: 44390, Start Num: 42
Candidate Starts for Deano_68:
(14, 44626), (16, 44617), (Start: 36 @44524 has 14 MA's), (Start: 42 @44518 has 127 MA's), (45, 44503), (46, 44497), (56, 44437),

Gene: DeerParkTS_73 Start: 44838, Stop: 44683, Start Num: 40
Candidate Starts for DeerParkTS_73:
(Start: 40 @44838 has 151 MA's), (44, 44823),

Gene: Deloris_76 Start: 45562, Stop: 45395, Start Num: 40
Candidate Starts for Deloris_76:
(17, 45664), (Start: 40 @45562 has 151 MA's),

Gene: DelvinSonDorr_75 Start: 44610, Stop: 44443, Start Num: 40
Candidate Starts for DelvinSonDorr_75:
(Start: 40 @44610 has 151 MA's), (43, 44604), (44, 44595),

Gene: Dignity_78 Start: 46259, Stop: 46095, Start Num: 40
Candidate Starts for Dignity_78:
(32, 46298), (Start: 40 @46259 has 151 MA's), (70, 46106),

Gene: DirtyDunning_70 Start: 44522, Stop: 44394, Start Num: 42
Candidate Starts for DirtyDunning_70:
(7, 44684), (14, 44630), (16, 44621), (Start: 36 @44528 has 14 MA's), (Start: 42 @44522 has 127 MA's), (45, 44507), (46, 44501), (56, 44441),

Gene: DontArgue_68 Start: 43342, Stop: 43214, Start Num: 41
Candidate Starts for DontArgue_68:
(Start: 36 @43348 has 14 MA's), (41, 43342), (45, 43327), (46, 43321), (56, 43261),

Gene: Dorothea_79 Start: 45201, Stop: 45034, Start Num: 40
Candidate Starts for Dorothea_79:
(Start: 40 @45201 has 151 MA's), (43, 45195), (44, 45186),

Gene: Drake55_78 Start: 45846, Stop: 45691, Start Num: 40
Candidate Starts for Drake55_78:
(Start: 40 @45846 has 151 MA's), (43, 45840),

Gene: Drake94_69 Start: 43482, Stop: 43354, Start Num: 42
Candidate Starts for Drake94_69:
(Start: 42 @43482 has 127 MA's), (45, 43467), (59, 43386),

Gene: DreamTeam1_72 Start: 44140, Stop: 43991, Start Num: 40
Candidate Starts for DreamTeam1_72:
(20, 44230), (25, 44197), (Start: 40 @44140 has 151 MA's), (43, 44134), (46, 44116), (48, 44107), (62, 44035),

Gene: DroogsArmy_71 Start: 47818, Stop: 47669, Start Num: 42
Candidate Starts for DroogsArmy_71:
(Start: 42 @47818 has 127 MA's), (45, 47803), (50, 47767), (53, 47749), (58, 47725),

Gene: DropBear_72 Start: 45013, Stop: 44885, Start Num: 42
Candidate Starts for DropBear_72:
(Start: 42 @45013 has 127 MA's), (45, 44998), (56, 44932),

Gene: DudeLittle_75 Start: 45728, Stop: 45564, Start Num: 40
Candidate Starts for DudeLittle_75:
(31, 45767), (Start: 40 @45728 has 151 MA's), (43, 45722), (70, 45575),

Gene: DustyMartin_73 Start: 44495, Stop: 44367, Start Num: 42
Candidate Starts for DustyMartin_73:
(18, 44600), (20, 44591), (30, 44540), (37, 44501), (Start: 42 @44495 has 127 MA's), (45, 44480), (48, 44465), (59, 44399),

Gene: EZMoney23_73 Start: 45628, Stop: 45464, Start Num: 40
Candidate Starts for EZMoney23_73:
(38, 45631), (Start: 40 @45628 has 151 MA's), (44, 45613), (52, 45562),

Gene: Eagle_70 Start: 44569, Stop: 44441, Start Num: 42
Candidate Starts for Eagle_70:
(Start: 36 @44575 has 14 MA's), (Start: 42 @44569 has 127 MA's), (45, 44554), (55, 44491), (56, 44488),

Gene: Echild_77 Start: 45496, Stop: 45329, Start Num: 40
Candidate Starts for Echild_77:
(Start: 40 @45496 has 151 MA's), (52, 45430), (67, 45349), (73, 45340),

Gene: Edison31_68 Start: 44218, Stop: 44090, Start Num: 42
Candidate Starts for Edison31_68:
(Start: 42 @44218 has 127 MA's), (45, 44203), (48, 44188), (59, 44122),

Gene: EdogawaKiddo_76 Start: 45151, Stop: 44987, Start Num: 40
Candidate Starts for EdogawaKiddo_76:
(Start: 40 @45151 has 151 MA's), (44, 45136), (48, 45118), (51, 45094),

Gene: Eidsmoe_76 Start: 44850, Stop: 44686, Start Num: 40
Candidate Starts for Eidsmoe_76:
(Start: 40 @44850 has 151 MA's), (44, 44835), (51, 44793),

Gene: Elephantoon_78 Start: 45016, Stop: 44852, Start Num: 40
Candidate Starts for Elephantoon_78:
(Start: 40 @45016 has 151 MA's), (43, 45010), (44, 45001), (48, 44983), (51, 44959),

Gene: EmyBug_75 Start: 44852, Stop: 44688, Start Num: 40
Candidate Starts for EmyBug_75:
(Start: 40 @44852 has 151 MA's), (44, 44837), (51, 44795),

Gene: Equemioh13_76 Start: 45675, Stop: 45511, Start Num: 40
Candidate Starts for Equemioh13_76:
(11, 45807), (17, 45777), (Start: 40 @45675 has 151 MA's), (70, 45522),

Gene: EricB_78 Start: 44547, Stop: 44380, Start Num: 40
Candidate Starts for EricB_78:
(Start: 40 @44547 has 151 MA's), (43, 44541), (44, 44532),

Gene: Eros_71 Start: 44512, Stop: 44384, Start Num: 42
Candidate Starts for Eros_71:
(3, 44746), (14, 44620), (16, 44611), (Start: 36 @44518 has 14 MA's), (Start: 42 @44512 has 127 MA's), (45, 44497), (46, 44491), (56, 44431),

Gene: EtoileNova_72 Start: 45046, Stop: 44918, Start Num: 42
Candidate Starts for EtoileNova_72:
(Start: 42 @45046 has 127 MA's), (45, 45031),

Gene: Eurydice_72 Start: 44544, Stop: 44416, Start Num: 42
Candidate Starts for Eurydice_72:
(Start: 36 @44550 has 14 MA's), (Start: 42 @44544 has 127 MA's), (45, 44529), (55, 44466), (56, 44463),

Gene: ExplosioNervosa_76 Start: 44918, Stop: 44754, Start Num: 40
Candidate Starts for ExplosioNervosa_76:
(Start: 40 @44918 has 151 MA's), (44, 44903), (51, 44861),

Gene: Fameo_75 Start: 45770, Stop: 45606, Start Num: 40
Candidate Starts for Fameo_75:
(31, 45809), (Start: 40 @45770 has 151 MA's), (70, 45617),

Gene: Fayely_76 Start: 44819, Stop: 44655, Start Num: 40
Candidate Starts for Fayely_76:
(Start: 40 @44819 has 151 MA's), (44, 44804), (51, 44762),

Gene: FiringLine_77 Start: 46124, Stop: 45960, Start Num: 40
Candidate Starts for FiringLine_77:
(31, 46163), (Start: 40 @46124 has 151 MA's), (43, 46118), (70, 45971),

Gene: First_0077 Start: 45805, Stop: 45638, Start Num: 40
Candidate Starts for First_0077:
(Start: 40 @45805 has 151 MA's), (43, 45799),

Gene: Florean_71 Start: 44509, Stop: 44381, Start Num: 42
Candidate Starts for Florean_71:
(14, 44617), (16, 44608), (Start: 36 @44515 has 14 MA's), (Start: 42 @44509 has 127 MA's), (45, 44494), (46, 44488), (56, 44428),

Gene: Flux_71 Start: 44508, Stop: 44380, Start Num: 42
Candidate Starts for Flux_71:
(3, 44742), (14, 44616), (16, 44607), (Start: 36 @44514 has 14 MA's), (Start: 42 @44508 has 127 MA's), (45, 44493), (46, 44487), (56, 44427),

Gene: FlyCatcher_76 Start: 48604, Stop: 48464, Start Num: 42
Candidate Starts for FlyCatcher_76:
(Start: 42 @48604 has 127 MA's), (57, 48514),

Gene: ForesterFrank_72 Start: 45901, Stop: 45734, Start Num: 40
Candidate Starts for ForesterFrank_72:
(Start: 40 @45901 has 151 MA's),

Gene: Fred313_72 Start: 44707, Stop: 44579, Start Num: 42
Candidate Starts for Fred313_72:
(Start: 42 @44707 has 127 MA's), (45, 44692), (56, 44626),

Gene: Gail_78 Start: 46233, Stop: 46051, Start Num: 40
Candidate Starts for Gail_78:
(Start: 40 @46233 has 151 MA's), (44, 46218), (51, 46176),

Gene: Garak_80 Start: 44729, Stop: 44577, Start Num: 40
Candidate Starts for Garak_80:
(Start: 33 @44756 has 2 MA's), (Start: 40 @44729 has 151 MA's), (43, 44723), (44, 44714), (49, 44687),

Gene: GaugeLDP_72 Start: 45357, Stop: 45190, Start Num: 40
Candidate Starts for GaugeLDP_72:
(Start: 40 @45357 has 151 MA's), (48, 45324), (51, 45300),

Gene: Georgie2_78 Start: 46168, Stop: 46004, Start Num: 40
Candidate Starts for Georgie2_78:
(31, 46207), (Start: 40 @46168 has 151 MA's), (43, 46162), (70, 46015),

Gene: Giroux_77 Start: 45088, Stop: 44960, Start Num: 42

Candidate Starts for Giroux_77:
(Start: 42 @45088 has 127 MA's), (45, 45073), (56, 45007),

Gene: Gladiator_76 Start: 44659, Stop: 44480, Start Num: 33
Candidate Starts for Gladiator_76:
(Start: 33 @44659 has 2 MA's), (Start: 40 @44632 has 151 MA's), (43, 44626), (44, 44617), (49, 44590),

Gene: Goose_72 Start: 44162, Stop: 44034, Start Num: 42
Candidate Starts for Goose_72:
(Start: 42 @44162 has 127 MA's), (45, 44147), (59, 44066),

Gene: Gratitude_74 Start: 45675, Stop: 45511, Start Num: 40
Candidate Starts for Gratitude_74:
(11, 45807), (17, 45777), (Start: 40 @45675 has 151 MA's), (70, 45522),

Gene: GreedyLawyer_74 Start: 44520, Stop: 44353, Start Num: 40
Candidate Starts for GreedyLawyer_74:
(Start: 40 @44520 has 151 MA's), (43, 44514), (44, 44505),

Gene: Gruunaga_78 Start: 44587, Stop: 44435, Start Num: 40
Candidate Starts for Gruunaga_78:
(Start: 33 @44614 has 2 MA's), (Start: 40 @44587 has 151 MA's), (43, 44581), (44, 44572), (49, 44545),

Gene: HINdeR_71 Start: 47193, Stop: 47041, Start Num: 42
Candidate Starts for HINdeR_71:
(Start: 42 @47193 has 127 MA's), (45, 47175), (53, 47121), (58, 47097),

Gene: Hammer_79 Start: 44321, Stop: 44142, Start Num: 33
Candidate Starts for Hammer_79:
(Start: 33 @44321 has 2 MA's), (Start: 40 @44294 has 151 MA's), (43, 44288), (44, 44279), (49, 44252),

Gene: Hanray_76 Start: 45183, Stop: 45019, Start Num: 40
Candidate Starts for Hanray_76:
(Start: 40 @45183 has 151 MA's), (44, 45168), (51, 45126),

Gene: Happiness_70 Start: 44527, Stop: 44399, Start Num: 42
Candidate Starts for Happiness_70:
(Start: 36 @44533 has 14 MA's), (Start: 42 @44527 has 127 MA's), (45, 44512), (56, 44446),

Gene: HarryHoudini_77 Start: 45843, Stop: 45688, Start Num: 40
Candidate Starts for HarryHoudini_77:
(Start: 40 @45843 has 151 MA's), (43, 45837),

Gene: Heathen_74 Start: 44802, Stop: 44674, Start Num: 42
Candidate Starts for Heathen_74:
(Start: 42 @44802 has 127 MA's), (45, 44787), (56, 44721),

Gene: Heffalump_74 Start: 46238, Stop: 46074, Start Num: 40
Candidate Starts for Heffalump_74:
(31, 46277), (Start: 40 @46238 has 151 MA's), (70, 46085),

Gene: HelDan_74 Start: 45018, Stop: 44890, Start Num: 42
Candidate Starts for HelDan_74:
(Start: 42 @45018 has 127 MA's), (45, 45003), (56, 44937),

Gene: Helmet_81 Start: 44729, Stop: 44577, Start Num: 40
Candidate Starts for Helmet_81:
(Start: 33 @44756 has 2 MA's), (Start: 40 @44729 has 151 MA's), (43, 44723), (44, 44714), (49, 44687),

Gene: Herbertwm_73 Start: 45474, Stop: 45292, Start Num: 40
Candidate Starts for Herbertwm_73:
(Start: 40 @45474 has 151 MA's), (43, 45468), (68, 45324),

Gene: Hexamo_78 Start: 44263, Stop: 44111, Start Num: 40
Candidate Starts for Hexamo_78:
(Start: 40 @44263 has 151 MA's), (43, 44257), (44, 44248), (49, 44221),

Gene: HippoHollow_74 Start: 46961, Stop: 46791, Start Num: 40
Candidate Starts for HippoHollow_74:
(Start: 40 @46961 has 151 MA's),

Gene: Holex_76 Start: 45199, Stop: 45035, Start Num: 40
Candidate Starts for Holex_76:
(Start: 40 @45199 has 151 MA's), (44, 45184), (51, 45142),

Gene: Holli_70 Start: 44300, Stop: 44172, Start Num: 42
Candidate Starts for Holli_70:
(14, 44408), (16, 44399), (Start: 36 @44306 has 14 MA's), (Start: 42 @44300 has 127 MA's), (45, 44285), (46, 44279), (56, 44219),

Gene: Hookmount_74 Start: 45042, Stop: 44914, Start Num: 42
Candidate Starts for Hookmount_74:
(Start: 42 @45042 has 127 MA's), (45, 45027),

Gene: Hoot_74 Start: 42405, Stop: 42238, Start Num: 40
Candidate Starts for Hoot_74:
(Start: 40 @42405 has 151 MA's), (43, 42399), (44, 42390),

Gene: HortumSL17_79 Start: 45181, Stop: 45017, Start Num: 40
Candidate Starts for HortumSL17_79:
(Start: 40 @45181 has 151 MA's), (44, 45166), (48, 45148), (51, 45124),

Gene: Iceman_70 Start: 44800, Stop: 44672, Start Num: 42
Candidate Starts for Iceman_70:
(3, 45034), (14, 44908), (16, 44899), (Start: 36 @44806 has 14 MA's), (Start: 42 @44800 has 127 MA's), (45, 44785), (46, 44779), (56, 44719),

Gene: Idleandcovert_75 Start: 45089, Stop: 44961, Start Num: 42
Candidate Starts for Idleandcovert_75:
(Start: 42 @45089 has 127 MA's), (45, 45074), (56, 45008),

Gene: Indra_82 Start: 44730, Stop: 44578, Start Num: 40

Candidate Starts for Indra_82:
(Start: 33 @44757 has 2 MA's), (Start: 40 @44730 has 151 MA's), (43, 44724), (44, 44715), (49, 44688),

Gene: IronMan_74 Start: 46915, Stop: 46739, Start Num: 40
Candidate Starts for IronMan_74:
(Start: 40 @46915 has 151 MA's), (66, 46762),

Gene: Isca_72 Start: 44569, Stop: 44441, Start Num: 42
Candidate Starts for Isca_72:
(Start: 42 @44569 has 127 MA's), (45, 44554), (56, 44488),

Gene: Isiphiwo_76 Start: 44572, Stop: 44405, Start Num: 40
Candidate Starts for Isiphiwo_76:
(Start: 40 @44572 has 151 MA's), (43, 44566), (44, 44557),

Gene: Iwokeuplikedis_78 Start: 46300, Stop: 46124, Start Num: 40
Candidate Starts for Iwokeuplikedis_78:
(Start: 40 @46300 has 151 MA's), (43, 46294),

Gene: JF2_72 Start: 43265, Stop: 43137, Start Num: 42
Candidate Starts for JF2_72:
(Start: 42 @43265 has 127 MA's), (45, 43250), (56, 43184),

Gene: JF4_72 Start: 43265, Stop: 43137, Start Num: 42
Candidate Starts for JF4_72:
(Start: 42 @43265 has 127 MA's), (45, 43250), (56, 43184),

Gene: Jaan_75 Start: 47076, Stop: 46900, Start Num: 40
Candidate Starts for Jaan_75:
(Start: 40 @47076 has 151 MA's), (66, 46923),

Gene: Jaykayelowell_68 Start: 44503, Stop: 44375, Start Num: 42
Candidate Starts for Jaykayelowell_68:
(3, 44737), (14, 44611), (16, 44602), (Start: 36 @44509 has 14 MA's), (Start: 42 @44503 has 127 MA's), (45, 44488), (46, 44482), (56, 44422),

Gene: Jeeves_80 Start: 45143, Stop: 44967, Start Num: 40
Candidate Starts for Jeeves_80:
(4, 45359), (8, 45305), (10, 45287), (Start: 40 @45143 has 151 MA's), (44, 45128), (51, 45086),

Gene: Jerm_78 Start: 46242, Stop: 46078, Start Num: 40
Candidate Starts for Jerm_78:
(32, 46281), (Start: 40 @46242 has 151 MA's), (70, 46089),

Gene: JetBlade_71 Start: 44535, Stop: 44407, Start Num: 42
Candidate Starts for JetBlade_71:
(Start: 36 @44541 has 14 MA's), (Start: 42 @44535 has 127 MA's), (45, 44520), (56, 44454),

Gene: Jiawan_75 Start: 45215, Stop: 45051, Start Num: 40
Candidate Starts for Jiawan_75:
(Start: 40 @45215 has 151 MA's), (44, 45200), (51, 45158),

Gene: Jordennis_77 Start: 44787, Stop: 44620, Start Num: 40
Candidate Starts for Jordennis_77:
(Start: 40 @44787 has 151 MA's), (43, 44781), (44, 44772),

Gene: JoshKayV_77 Start: 46282, Stop: 46115, Start Num: 40
Candidate Starts for JoshKayV_77:
(Start: 40 @46282 has 151 MA's), (43, 46276),

Gene: Kachowdy_72 Start: 45054, Stop: 44926, Start Num: 42
Candidate Starts for Kachowdy_72:
(Start: 42 @45054 has 127 MA's), (45, 45039), (56, 44973),

Gene: Kalpine_76 Start: 46163, Stop: 45996, Start Num: 40
Candidate Starts for Kalpine_76:
(Start: 40 @46163 has 151 MA's), (44, 46148), (51, 46106), (72, 46007), (75, 46001),

Gene: Kampy_70 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for Kampy_70:
(Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (55, 44432), (56, 44429),

Gene: Katalie136_70 Start: 44671, Stop: 44549, Start Num: 42
Candidate Starts for Katalie136_70:
(Start: 36 @44677 has 14 MA's), (Start: 42 @44671 has 127 MA's), (45, 44656), (46, 44650), (63, 44560),

Gene: Kazan_80 Start: 44560, Stop: 44393, Start Num: 40
Candidate Starts for Kazan_80:
(Start: 40 @44560 has 151 MA's), (43, 44554), (44, 44545),

Gene: KekoraPapaka_68 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for KekoraPapaka_68:
(14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Keziacharles14_75 Start: 45797, Stop: 45627, Start Num: 40
Candidate Starts for Keziacharles14_75:
(Start: 40 @45797 has 151 MA's), (44, 45782), (51, 45740), (64, 45671),

Gene: Kimona_71 Start: 43589, Stop: 43443, Start Num: 42
Candidate Starts for Kimona_71:
(Start: 42 @43589 has 127 MA's), (45, 43574), (50, 43538), (61, 43487),

Gene: KingCyrus_76 Start: 47256, Stop: 47092, Start Num: 40
Candidate Starts for KingCyrus_76:
(30, 47298), (32, 47295), (Start: 40 @47256 has 151 MA's), (44, 47241), (70, 47103),

Gene: Kingmustik0402_71 Start: 44499, Stop: 44371, Start Num: 42
Candidate Starts for Kingmustik0402_71:
(14, 44607), (16, 44598), (Start: 36 @44505 has 14 MA's), (Start: 42 @44499 has 127 MA's), (45, 44484), (46, 44478), (56, 44418),

Gene: Kinmap_86 Start: 46044, Stop: 45889, Start Num: 40

Candidate Starts for Kinmap_86:
(9, 46206), (38, 46047), (Start: 40 @46044 has 151 MA's),

Gene: Kipper29_79 Start: 44573, Stop: 44406, Start Num: 40
Candidate Starts for Kipper29_79:
(Start: 40 @44573 has 151 MA's), (43, 44567), (44, 44558),

Gene: KittenMittens_68 Start: 43490, Stop: 43362, Start Num: 42
Candidate Starts for KittenMittens_68:
(Start: 42 @43490 has 127 MA's), (45, 43475), (59, 43394),

Gene: Klodlith_73 Start: 44360, Stop: 44211, Start Num: 40
Candidate Starts for Klodlith_73:
(20, 44450), (25, 44417), (Start: 40 @44360 has 151 MA's), (43, 44354), (46, 44336), (48, 44327), (62, 44255),

Gene: Koan_68 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for Koan_68:
(14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Koko_80 Start: 45118, Stop: 44966, Start Num: 40
Candidate Starts for Koko_80:
(Start: 40 @45118 has 151 MA's), (43, 45112), (44, 45103), (49, 45076),

Gene: Koreni_70 Start: 44191, Stop: 44063, Start Num: 42
Candidate Starts for Koreni_70:
(3, 44425), (14, 44299), (16, 44290), (Start: 36 @44197 has 14 MA's), (Start: 42 @44191 has 127 MA's), (45, 44176), (46, 44170), (56, 44110),

Gene: Kremtemulon_70 Start: 44643, Stop: 44515, Start Num: 42
Candidate Starts for Kremtemulon_70:
(14, 44751), (16, 44742), (Start: 36 @44649 has 14 MA's), (Start: 42 @44643 has 127 MA's), (45, 44628), (56, 44562),

Gene: Kristoff_70 Start: 44796, Stop: 44668, Start Num: 42
Candidate Starts for Kristoff_70:
(Start: 42 @44796 has 127 MA's), (45, 44781), (48, 44766), (59, 44700),

Gene: Kyee_71 Start: 44505, Stop: 44377, Start Num: 42
Candidate Starts for Kyee_71:
(7, 44667), (14, 44613), (16, 44604), (Start: 36 @44511 has 14 MA's), (Start: 42 @44505 has 127 MA's), (45, 44490), (46, 44484), (56, 44424),

Gene: LHTSCC_73 Start: 44950, Stop: 44816, Start Num: 36
Candidate Starts for LHTSCC_73:
(Start: 36 @44950 has 14 MA's), (Start: 42 @44944 has 127 MA's), (45, 44929), (56, 44863),

Gene: LadyBird_80 Start: 46485, Stop: 46318, Start Num: 40
Candidate Starts for LadyBird_80:
(Start: 40 @46485 has 151 MA's), (52, 46419), (73, 46329),

Gene: Lambert1_74 Start: 45043, Stop: 44915, Start Num: 42

Candidate Starts for Lambert1_74:
(Start: 42 @45043 has 127 MA's), (45, 45028),

Gene: Landor_75 Start: 47003, Stop: 46827, Start Num: 40
Candidate Starts for Landor_75:
(Start: 40 @47003 has 151 MA's), (43, 46997), (66, 46850),

Gene: Larenn_73 Start: 45502, Stop: 45338, Start Num: 40
Candidate Starts for Larenn_73:
(27, 45556), (Start: 40 @45502 has 151 MA's), (70, 45349),

Gene: LeoAvram_70 Start: 44538, Stop: 44410, Start Num: 42
Candidate Starts for LeoAvram_70:
(Start: 36 @44544 has 14 MA's), (Start: 42 @44538 has 127 MA's), (45, 44523), (55, 44460), (56, 44457),

Gene: Leogania_75 Start: 46184, Stop: 46029, Start Num: 40
Candidate Starts for Leogania_75:
(26, 46241), (Start: 40 @46184 has 151 MA's), (43, 46178),

Gene: Leviathan_78 Start: 46308, Stop: 46144, Start Num: 40
Candidate Starts for Leviathan_78:
(32, 46347), (Start: 40 @46308 has 151 MA's), (70, 46155),

Gene: LilTurb_77 Start: 46122, Stop: 45958, Start Num: 40
Candidate Starts for LilTurb_77:
(32, 46161), (Start: 40 @46122 has 151 MA's), (70, 45969),

Gene: Lilbunny_78 Start: 44361, Stop: 44209, Start Num: 40
Candidate Starts for Lilbunny_78:
(Start: 33 @44388 has 2 MA's), (Start: 40 @44361 has 151 MA's), (43, 44355), (44, 44346), (49, 44319),

Gene: Lilleskat_75 Start: 45140, Stop: 44976, Start Num: 40
Candidate Starts for Lilleskat_75:
(Start: 40 @45140 has 151 MA's), (44, 45125), (48, 45107), (51, 45083),

Gene: LionsBait_76 Start: 46960, Stop: 46790, Start Num: 40
Candidate Starts for LionsBait_76:
(Start: 40 @46960 has 151 MA's),

Gene: LittleB_71 Start: 44511, Stop: 44383, Start Num: 42
Candidate Starts for LittleB_71:
(3, 44745), (14, 44619), (16, 44610), (Start: 36 @44517 has 14 MA's), (Start: 42 @44511 has 127 MA's), (45, 44496), (46, 44490), (56, 44430),

Gene: LochMonster_72 Start: 44746, Stop: 44618, Start Num: 42
Candidate Starts for LochMonster_72:
(7, 44908), (14, 44854), (16, 44845), (Start: 36 @44752 has 14 MA's), (Start: 42 @44746 has 127 MA's), (45, 44731), (46, 44725), (56, 44665),

Gene: Lokk_70 Start: 44303, Stop: 44139, Start Num: 40
Candidate Starts for Lokk_70:

(Start: 40 @44303 has 151 MA's), (43, 44297), (44, 44288), (64, 44177), (72, 44147),

Gene: LoneWolf_79 Start: 45428, Stop: 45264, Start Num: 40
Candidate Starts for LoneWolf_79:
(Start: 40 @45428 has 151 MA's), (44, 45413), (51, 45371),

Gene: Lorenzo_71 Start: 44508, Stop: 44380, Start Num: 42
Candidate Starts for Lorenzo_71:
(7, 44670), (14, 44616), (16, 44607), (19, 44601), (Start: 36 @44514 has 14 MA's), (Start: 42 @44508 has 127 MA's), (45, 44493), (46, 44487), (56, 44427),

Gene: Loser_78 Start: 46367, Stop: 46212, Start Num: 40
Candidate Starts for Loser_78:
(Start: 40 @46367 has 151 MA's), (44, 46352),

Gene: Luchador_79 Start: 46628, Stop: 46443, Start Num: 40
Candidate Starts for Luchador_79:
(Start: 40 @46628 has 151 MA's), (44, 46613), (51, 46571),

Gene: Lunsford_71 Start: 44503, Stop: 44375, Start Num: 42
Candidate Starts for Lunsford_71:
(3, 44737), (14, 44611), (16, 44602), (Start: 36 @44509 has 14 MA's), (Start: 42 @44503 has 127 MA's), (45, 44488), (46, 44482), (56, 44422),

Gene: MA5_74 Start: 44473, Stop: 44345, Start Num: 42
Candidate Starts for MA5_74:
(Start: 42 @44473 has 127 MA's), (45, 44458), (56, 44392),

Gene: MajorMajor_78 Start: 44703, Stop: 44548, Start Num: 42
Candidate Starts for MajorMajor_78:
(39, 44706), (Start: 42 @44703 has 127 MA's),

Gene: Malec_74 Start: 46069, Stop: 45905, Start Num: 40
Candidate Starts for Malec_74:
(27, 46123), (Start: 40 @46069 has 151 MA's), (70, 45916),

Gene: Maminiaina_78 Start: 45344, Stop: 45180, Start Num: 40
Candidate Starts for Maminiaina_78:
(Start: 40 @45344 has 151 MA's), (44, 45329), (51, 45287),

Gene: Marchesa_73 Start: 45006, Stop: 44878, Start Num: 42
Candidate Starts for Marchesa_73:
(Start: 42 @45006 has 127 MA's), (45, 44991), (56, 44925),

Gene: Margo_74 Start: 45068, Stop: 44940, Start Num: 42
Candidate Starts for Margo_74:
(Start: 42 @45068 has 127 MA's), (45, 45053),

Gene: Maxo_73 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for Maxo_73:
(Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (55, 44432), (56, 44429),

Gene: Mayonnaise_68 Start: 44507, Stop: 44379, Start Num: 42
Candidate Starts for Mayonnaise_68:
(14, 44615), (16, 44606), (Start: 36 @44513 has 14 MA's), (Start: 42 @44507 has 127 MA's), (45, 44492), (46, 44486), (56, 44426),

Gene: Mazhar510_71 Start: 44508, Stop: 44380, Start Num: 42
Candidate Starts for Mazhar510_71:
(7, 44670), (14, 44616), (16, 44607), (Start: 36 @44514 has 14 MA's), (Start: 42 @44508 has 127 MA's), (45, 44493), (46, 44487), (56, 44427),

Gene: McFly_80 Start: 45189, Stop: 45022, Start Num: 40
Candidate Starts for McFly_80:
(Start: 40 @45189 has 151 MA's), (43, 45183), (44, 45174),

Gene: MegTheThird_73 Start: 44364, Stop: 44173, Start Num: 40
Candidate Starts for MegTheThird_73:
(Start: 40 @44364 has 151 MA's), (46, 44340), (62, 44259), (69, 44214),

Gene: Miko_70 Start: 45080, Stop: 44916, Start Num: 40
Candidate Starts for Miko_70:
(Start: 40 @45080 has 151 MA's), (43, 45074), (44, 45065), (64, 44954), (72, 44924),

Gene: Minispark_76 Start: 44977, Stop: 44792, Start Num: 40
Candidate Starts for Minispark_76:
(Start: 40 @44977 has 151 MA's), (43, 44971), (76, 44806),

Gene: Miramae_70 Start: 44230, Stop: 44108, Start Num: 42
Candidate Starts for Miramae_70:
(2, 44512), (6, 44392), (Start: 36 @44236 has 14 MA's), (Start: 42 @44230 has 127 MA's),

Gene: Morpher26_70 Start: 44692, Stop: 44570, Start Num: 42
Candidate Starts for Morpher26_70:
(Start: 36 @44698 has 14 MA's), (Start: 42 @44692 has 127 MA's), (45, 44677), (46, 44671), (63, 44581),

Gene: Mundrea_70 Start: 44689, Stop: 44567, Start Num: 42
Candidate Starts for Mundrea_70:
(Start: 36 @44695 has 14 MA's), (Start: 42 @44689 has 127 MA's), (45, 44674),

Gene: Myxus_78 Start: 45181, Stop: 45017, Start Num: 40
Candidate Starts for Myxus_78:
(Start: 40 @45181 has 151 MA's), (44, 45166), (48, 45148), (51, 45124),

Gene: Nebs_72 Start: 44547, Stop: 44419, Start Num: 42
Candidate Starts for Nebs_72:
(Start: 36 @44553 has 14 MA's), (Start: 42 @44547 has 127 MA's), (45, 44532), (55, 44469), (56, 44466),

Gene: Neeharika16_78 Start: 44656, Stop: 44489, Start Num: 40
Candidate Starts for Neeharika16_78:
(Start: 40 @44656 has 151 MA's), (43, 44650), (44, 44641),

Gene: Nemo27_70 Start: 44506, Stop: 44378, Start Num: 42

Candidate Starts for Nemo27_70:
(7, 44668), (14, 44614), (16, 44605), (Start: 36 @44512 has 14 MA's), (Start: 42 @44506 has 127 MA's), (45, 44491), (46, 44485), (56, 44425),

Gene: Newrala_78 Start: 44995, Stop: 44828, Start Num: 40
Candidate Starts for Newrala_78:
(Start: 40 @44995 has 151 MA's), (43, 44989), (44, 44980),

Gene: Noella_75 Start: 45044, Stop: 44916, Start Num: 42
Candidate Starts for Noella_75:
(Start: 42 @45044 has 127 MA's), (45, 45029),

Gene: Noelle_71 Start: 45009, Stop: 44887, Start Num: 42
Candidate Starts for Noelle_71:
(12, 45135), (13, 45129), (28, 45063), (Start: 36 @45015 has 14 MA's), (Start: 42 @45009 has 127 MA's), (45, 44994), (63, 44898),

Gene: Norbert_70 Start: 45041, Stop: 44913, Start Num: 42
Candidate Starts for Norbert_70:
(Start: 42 @45041 has 127 MA's), (45, 45026),

Gene: NorthStar_69 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for NorthStar_69:
(3, 44744), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: NothingSpecial_72 Start: 45754, Stop: 45581, Start Num: 40
Candidate Starts for NothingSpecial_72:
(Start: 40 @45754 has 151 MA's), (43, 45748), (54, 45682),

Gene: OKCentral2016_69 Start: 43589, Stop: 43461, Start Num: 42
Candidate Starts for OKCentral2016_69:
(Start: 42 @43589 has 127 MA's), (45, 43574), (59, 43493),

Gene: OKaNui_70 Start: 44560, Stop: 44432, Start Num: 42
Candidate Starts for OKaNui_70:
(14, 44668), (16, 44659), (19, 44653), (Start: 36 @44566 has 14 MA's), (Start: 42 @44560 has 127 MA's), (45, 44545), (46, 44539), (56, 44479),

Gene: Obama12_72 Start: 44928, Stop: 44800, Start Num: 42
Candidate Starts for Obama12_72:
(Start: 36 @44934 has 14 MA's), (Start: 42 @44928 has 127 MA's), (45, 44913), (56, 44847),

Gene: Ohfah_72 Start: 44547, Stop: 44419, Start Num: 42
Candidate Starts for Ohfah_72:
(Start: 36 @44553 has 14 MA's), (Start: 42 @44547 has 127 MA's), (45, 44532), (55, 44469), (56, 44466),

Gene: Onglai_76 Start: 43387, Stop: 43223, Start Num: 40
Candidate Starts for Onglai_76:
(Start: 40 @43387 has 151 MA's), (44, 43372), (51, 43330),

Gene: PP_73 Start: 49011, Stop: 48865, Start Num: 42

Candidate Starts for PP_73:
(Start: 42 @49011 has 127 MA's), (45, 48996), (50, 48960),

Gene: PackMan_77 Start: 45056, Stop: 44892, Start Num: 40
Candidate Starts for PackMan_77:
(Start: 40 @45056 has 151 MA's), (44, 45041), (48, 45023), (51, 44999),

Gene: Panamaxus_72 Start: 45043, Stop: 44915, Start Num: 42
Candidate Starts for Panamaxus_72:
(Start: 42 @45043 has 127 MA's), (45, 45028),

Gene: PeaceMeal1_69 Start: 43491, Stop: 43363, Start Num: 42
Candidate Starts for PeaceMeal1_69:
(Start: 42 @43491 has 127 MA's), (45, 43476), (59, 43395),

Gene: Perplexer_70 Start: 44668, Stop: 44546, Start Num: 42
Candidate Starts for Perplexer_70:
(Start: 36 @44674 has 14 MA's), (Start: 42 @44668 has 127 MA's), (45, 44653), (46, 44647), (63, 44557),

Gene: PeterPeter_71 Start: 44504, Stop: 44376, Start Num: 42
Candidate Starts for PeterPeter_71:
(7, 44666), (14, 44612), (16, 44603), (Start: 36 @44510 has 14 MA's), (Start: 42 @44504 has 127 MA's), (45, 44489), (46, 44483), (56, 44423),

Gene: PetiteSangsue_70 Start: 44671, Stop: 44549, Start Num: 42
Candidate Starts for PetiteSangsue_70:
(Start: 36 @44677 has 14 MA's), (Start: 42 @44671 has 127 MA's), (45, 44656), (46, 44650), (63, 44560),

Gene: Phaded_72 Start: 46962, Stop: 46786, Start Num: 40
Candidate Starts for Phaded_72:
(Start: 40 @46962 has 151 MA's), (43, 46956), (66, 46809),

Gene: Phaeder_78 Start: 45056, Stop: 44892, Start Num: 40
Candidate Starts for Phaeder_78:
(Start: 40 @45056 has 151 MA's), (44, 45041), (48, 45023), (51, 44999),

Gene: Phantastic_76 Start: 44730, Stop: 44602, Start Num: 42
Candidate Starts for Phantastic_76:
(Start: 42 @44730 has 127 MA's), (45, 44715), (56, 44649),

Gene: Phelipe_72 Start: 44553, Stop: 44419, Start Num: 36
Candidate Starts for Phelipe_72:
(Start: 36 @44553 has 14 MA's), (Start: 42 @44547 has 127 MA's), (45, 44532), (55, 44469), (56, 44466),

Gene: Phighter1804_71 Start: 44571, Stop: 44443, Start Num: 42
Candidate Starts for Phighter1804_71:
(7, 44733), (14, 44679), (16, 44670), (Start: 36 @44577 has 14 MA's), (Start: 42 @44571 has 127 MA's), (45, 44556), (46, 44550), (56, 44490),

Gene: Phonnegut_78 Start: 45128, Stop: 44964, Start Num: 40

Candidate Starts for Phonnegut_78:
(Start: 40 @45128 has 151 MA's), (44, 45113), (51, 45071),

Gene: Phontbonne_71 Start: 44405, Stop: 44277, Start Num: 42
Candidate Starts for Phontbonne_71:
(14, 44513), (16, 44504), (19, 44498), (Start: 36 @44411 has 14 MA's), (Start: 42 @44405 has 127 MA's), (45, 44390), (46, 44384), (56, 44324),

Gene: Pioneer_78 Start: 45128, Stop: 44964, Start Num: 40
Candidate Starts for Pioneer_78:
(Start: 40 @45128 has 151 MA's), (44, 45113), (51, 45071),

Gene: Pipcraft_68 Start: 44511, Stop: 44383, Start Num: 42
Candidate Starts for Pipcraft_68:
(3, 44745), (14, 44619), (16, 44610), (Start: 36 @44517 has 14 MA's), (Start: 42 @44511 has 127 MA's), (45, 44496), (46, 44490), (56, 44430),

Gene: Piro94_76 Start: 45778, Stop: 45623, Start Num: 40
Candidate Starts for Piro94_76:
(Start: 40 @45778 has 151 MA's), (43, 45772),

Gene: Pistachio_75 Start: 44636, Stop: 44508, Start Num: 42
Candidate Starts for Pistachio_75:
(Start: 42 @44636 has 127 MA's), (45, 44621), (56, 44555),

Gene: Pmask_78 Start: 45193, Stop: 45026, Start Num: 40
Candidate Starts for Pmask_78:
(Start: 40 @45193 has 151 MA's), (43, 45187), (44, 45178),

Gene: Pocahontas_73 Start: 45039, Stop: 44911, Start Num: 42
Candidate Starts for Pocahontas_73:
(Start: 42 @45039 has 127 MA's), (45, 45024),

Gene: Polymorphads_71 Start: 44528, Stop: 44400, Start Num: 42
Candidate Starts for Polymorphads_71:
(Start: 36 @44534 has 14 MA's), (Start: 42 @44528 has 127 MA's), (45, 44513), (55, 44450), (56, 44447),

Gene: Poompha_68 Start: 43489, Stop: 43361, Start Num: 42
Candidate Starts for Poompha_68:
(Start: 42 @43489 has 127 MA's), (45, 43474), (59, 43393),

Gene: Popcicle_74 Start: 45039, Stop: 44911, Start Num: 42
Candidate Starts for Popcicle_74:
(Start: 42 @45039 has 127 MA's), (45, 45024),

Gene: Power_76 Start: 46167, Stop: 46003, Start Num: 40
Candidate Starts for Power_76:
(31, 46206), (Start: 40 @46167 has 151 MA's), (43, 46161), (70, 46014),

Gene: Priamo_81 Start: 44855, Stop: 44688, Start Num: 40
Candidate Starts for Priamo_81:
(Start: 40 @44855 has 151 MA's), (43, 44849), (44, 44840),

Gene: Priya_76 Start: 44853, Stop: 44689, Start Num: 40
Candidate Starts for Priya_76:
(Start: 40 @44853 has 151 MA's), (44, 44838), (51, 44796),

Gene: Prudy_70 Start: 45907, Stop: 45752, Start Num: 40
Candidate Starts for Prudy_70:
(Start: 40 @45907 has 151 MA's), (43, 45901), (44, 45892), (52, 45841),

Gene: Pukovnik_73 Start: 46577, Stop: 46401, Start Num: 40
Candidate Starts for Pukovnik_73:
(Start: 40 @46577 has 151 MA's), (66, 46424),

Gene: Pumbaa_71 Start: 44461, Stop: 44327, Start Num: 36
Candidate Starts for Pumbaa_71:
(3, 44689), (14, 44563), (16, 44554), (Start: 36 @44461 has 14 MA's), (Start: 42 @44455 has 127
MA's), (45, 44440), (46, 44434), (56, 44374),

Gene: Puppy_75 Start: 44706, Stop: 44578, Start Num: 42
Candidate Starts for Puppy_75:
(Start: 42 @44706 has 127 MA's), (45, 44691), (56, 44625),

Gene: Qobbit_76 Start: 44815, Stop: 44651, Start Num: 40
Candidate Starts for Qobbit_76:
(Start: 40 @44815 has 151 MA's), (44, 44800), (51, 44758),

Gene: QueenB2_74 Start: 45451, Stop: 45287, Start Num: 40
Candidate Starts for QueenB2_74:
(31, 45490), (Start: 40 @45451 has 151 MA's), (70, 45298),

Gene: QueenBeesly_77 Start: 46124, Stop: 45960, Start Num: 40
Candidate Starts for QueenBeesly_77:
(31, 46163), (Start: 40 @46124 has 151 MA's), (43, 46118), (70, 45971),

Gene: QuinnKiro_73 Start: 45042, Stop: 44914, Start Num: 42
Candidate Starts for QuinnKiro_73:
(Start: 42 @45042 has 127 MA's), (45, 45027),

Gene: Quokka_83 Start: 46412, Stop: 46257, Start Num: 42
Candidate Starts for Quokka_83:
(39, 46415), (Start: 42 @46412 has 127 MA's),

Gene: Rachaly_72 Start: 45226, Stop: 45062, Start Num: 40
Candidate Starts for Rachaly_72:
(Start: 40 @45226 has 151 MA's), (43, 45220), (44, 45211), (64, 45100), (72, 45070),

Gene: Rahalelujah_78 Start: 44992, Stop: 44807, Start Num: 40
Candidate Starts for Rahalelujah_78:
(Start: 40 @44992 has 151 MA's), (43, 44986), (76, 44821),

Gene: Rebeuca_72 Start: 44797, Stop: 44669, Start Num: 42
Candidate Starts for Rebeuca_72:
(Start: 42 @44797 has 127 MA's), (45, 44782), (48, 44767), (59, 44701),

Gene: RedRock_75 Start: 46134, Stop: 45979, Start Num: 40
Candidate Starts for RedRock_75:
(Start: 40 @46134 has 151 MA's), (44, 46119),

Gene: Refuge_74 Start: 46251, Stop: 46102, Start Num: 40
Candidate Starts for Refuge_74:
(Start: 40 @46251 has 151 MA's), (44, 46236), (64, 46125),

Gene: Relief_70 Start: 44513, Stop: 44379, Start Num: 36
Candidate Starts for Relief_70:
(3, 44741), (14, 44615), (16, 44606), (Start: 36 @44513 has 14 MA's), (Start: 42 @44507 has 127 MA's), (45, 44492), (46, 44486), (56, 44426),

Gene: ResDef_72 Start: 45045, Stop: 44917, Start Num: 42
Candidate Starts for ResDef_72:
(Start: 42 @45045 has 127 MA's), (45, 45030),

Gene: Retro23_77 Start: 45856, Stop: 45692, Start Num: 40
Candidate Starts for Retro23_77:
(31, 45895), (Start: 40 @45856 has 151 MA's), (43, 45850), (70, 45703),

Gene: Rifter_79 Start: 43891, Stop: 43739, Start Num: 40
Candidate Starts for Rifter_79:
(Start: 33 @43918 has 2 MA's), (Start: 40 @43891 has 151 MA's), (43, 43885), (44, 43876), (49, 43849),

Gene: RockieBear_68 Start: 44509, Stop: 44381, Start Num: 42
Candidate Starts for RockieBear_68:
(14, 44617), (16, 44608), (Start: 36 @44515 has 14 MA's), (Start: 42 @44509 has 127 MA's), (45, 44494), (46, 44488), (56, 44428),

Gene: Roimos_72 Start: 44940, Stop: 44812, Start Num: 42
Candidate Starts for Roimos_72:
(Start: 42 @44940 has 127 MA's), (45, 44925), (56, 44859),

Gene: Roksolana_79 Start: 44624, Stop: 44472, Start Num: 40
Candidate Starts for Roksolana_79:
(Start: 40 @44624 has 151 MA's), (43, 44618), (44, 44609), (49, 44582),

Gene: Roosevelt_69 Start: 44512, Stop: 44384, Start Num: 42
Candidate Starts for Roosevelt_69:
(14, 44620), (16, 44611), (Start: 36 @44518 has 14 MA's), (Start: 42 @44512 has 127 MA's), (45, 44497), (46, 44491), (56, 44431),

Gene: Rosa24_68 Start: 44538, Stop: 44410, Start Num: 42
Candidate Starts for Rosa24_68:
(3, 44772), (7, 44700), (14, 44646), (16, 44637), (Start: 36 @44544 has 14 MA's), (Start: 42 @44538 has 127 MA's), (45, 44523), (46, 44517), (56, 44457),

Gene: Rowdy_73 Start: 44495, Stop: 44367, Start Num: 42
Candidate Starts for Rowdy_73:

(18, 44600), (20, 44591), (30, 44540), (37, 44501), (Start: 42 @44495 has 127 MA's), (45, 44480), (48, 44465), (59, 44399),

Gene: RyeScarlet_79 Start: 45103, Stop: 44939, Start Num: 40
Candidate Starts for RyeScarlet_79:
(Start: 40 @45103 has 151 MA's), (44, 45088), (51, 45046),

Gene: Sabertooth_71 Start: 44518, Stop: 44384, Start Num: 36
Candidate Starts for Sabertooth_71:
(Start: 36 @44518 has 14 MA's), (Start: 42 @44512 has 127 MA's), (45, 44497), (56, 44431),

Gene: Sachima_74 Start: 45084, Stop: 44920, Start Num: 40
Candidate Starts for Sachima_74:
(Start: 40 @45084 has 151 MA's), (44, 45069), (48, 45051), (51, 45027),

Gene: SaturnRing_74 Start: 45089, Stop: 44961, Start Num: 42
Candidate Starts for SaturnRing_74:
(Start: 42 @45089 has 127 MA's), (45, 45074), (56, 45008),

Gene: Scamp_71 Start: 44512, Stop: 44384, Start Num: 42
Candidate Starts for Scamp_71:
(3, 44746), (14, 44620), (16, 44611), (Start: 36 @44518 has 14 MA's), (Start: 42 @44512 has 127 MA's), (45, 44497), (46, 44491), (56, 44431),

Gene: Scherzo_77 Start: 45338, Stop: 45153, Start Num: 40
Candidate Starts for Scherzo_77:
(Start: 40 @45338 has 151 MA's), (44, 45323), (51, 45281), (74, 45176),

Gene: Scout_73 Start: 44265, Stop: 44137, Start Num: 42
Candidate Starts for Scout_73:
(Start: 42 @44265 has 127 MA's), (45, 44250), (56, 44184),

Gene: SemperFi_77 Start: 46012, Stop: 45848, Start Num: 40
Candidate Starts for SemperFi_77:
(31, 46051), (Start: 40 @46012 has 151 MA's), (43, 46006), (51, 45955), (70, 45859),

Gene: SenorClean_72 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for SenorClean_72:
(3, 44744), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Severus_69 Start: 43489, Stop: 43361, Start Num: 42
Candidate Starts for Severus_69:
(Start: 42 @43489 has 127 MA's), (45, 43474), (59, 43393),

Gene: Shaka_69 Start: 44505, Stop: 44377, Start Num: 42
Candidate Starts for Shaka_69:
(Start: 36 @44511 has 14 MA's), (Start: 42 @44505 has 127 MA's), (45, 44490), (56, 44424),

Gene: Shapes_73 Start: 44495, Stop: 44367, Start Num: 42
Candidate Starts for Shapes_73:
(18, 44600), (20, 44591), (30, 44540), (37, 44501), (Start: 42 @44495 has 127 MA's), (45, 44480), (48, 44465), (59, 44399),

Gene: SheaKeira_72 Start: 44164, Stop: 44015, Start Num: 40
Candidate Starts for SheaKeira_72:
(25, 44221), (Start: 40 @44164 has 151 MA's), (43, 44158), (46, 44140), (48, 44131), (62, 44059),

Gene: SheldonCooper_71 Start: 44945, Stop: 44817, Start Num: 42
Candidate Starts for SheldonCooper_71:
(Start: 36 @44951 has 14 MA's), (Start: 42 @44945 has 127 MA's), (45, 44930), (56, 44864),

Gene: Shygu2_70 Start: 44723, Stop: 44601, Start Num: 42
Candidate Starts for Shygu2_70:
(Start: 36 @44729 has 14 MA's), (Start: 42 @44723 has 127 MA's), (45, 44708), (63, 44612),

Gene: Skipitt_70 Start: 44504, Stop: 44376, Start Num: 42
Candidate Starts for Skipitt_70:
(3, 44738), (14, 44612), (16, 44603), (Start: 36 @44510 has 14 MA's), (Start: 42 @44504 has 127 MA's), (45, 44489), (46, 44483), (56, 44423),

Gene: Smeagan_79 Start: 46399, Stop: 46235, Start Num: 40
Candidate Starts for Smeagan_79:
(32, 46438), (Start: 40 @46399 has 151 MA's), (70, 46246),

Gene: SmellyB_79 Start: 44554, Stop: 44387, Start Num: 40
Candidate Starts for SmellyB_79:
(Start: 40 @44554 has 151 MA's), (43, 44548), (44, 44539),

Gene: SnapTap_76 Start: 45823, Stop: 45659, Start Num: 40
Candidate Starts for SnapTap_76:
(31, 45862), (Start: 40 @45823 has 151 MA's), (43, 45817), (70, 45670),

Gene: SororFago_78 Start: 46342, Stop: 46166, Start Num: 40
Candidate Starts for SororFago_78:
(Start: 40 @46342 has 151 MA's), (44, 46327),

Gene: Spino_70 Start: 44516, Stop: 44382, Start Num: 36
Candidate Starts for Spino_70:
(7, 44672), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Spouty_76 Start: 44852, Stop: 44688, Start Num: 40
Candidate Starts for Spouty_76:
(Start: 40 @44852 has 151 MA's), (44, 44837), (51, 44795),

Gene: Stasia_70 Start: 44731, Stop: 44609, Start Num: 42
Candidate Starts for Stasia_70:
(14, 44842), (Start: 36 @44737 has 14 MA's), (Start: 42 @44731 has 127 MA's), (45, 44716), (53, 44665),

Gene: SteMason_67 Start: 44507, Stop: 44379, Start Num: 42
Candidate Starts for SteMason_67:
(3, 44741), (14, 44615), (16, 44606), (Start: 36 @44513 has 14 MA's), (Start: 42 @44507 has 127 MA's), (45, 44492), (46, 44486), (56, 44426),

Gene: Steamy_81 Start: 48438, Stop: 48295, Start Num: 42
Candidate Starts for Steamy_81:
(23, 48507), (Start: 33 @48468 has 2 MA's), (Start: 42 @48438 has 127 MA's), (52, 48384), (53, 48378),

Gene: Stink_70 Start: 44516, Stop: 44388, Start Num: 36
Candidate Starts for Stink_70:
(1, 44831), (2, 44792), (6, 44672), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's),

Gene: Sunhee_78 Start: 44429, Stop: 44244, Start Num: 40
Candidate Starts for Sunhee_78:
(Start: 40 @44429 has 151 MA's), (44, 44414), (51, 44372), (60, 44336),

Gene: SuperAwesome_79 Start: 45232, Stop: 45065, Start Num: 40
Candidate Starts for SuperAwesome_79:
(Start: 40 @45232 has 151 MA's), (43, 45226), (44, 45217),

Gene: SuperCallie99_76 Start: 45076, Stop: 44909, Start Num: 40
Candidate Starts for SuperCallie99_76:
(Start: 40 @45076 has 151 MA's), (43, 45070), (44, 45061),

Gene: SweetiePie_76 Start: 45955, Stop: 45791, Start Num: 40
Candidate Starts for SweetiePie_76:
(31, 45994), (Start: 40 @45955 has 151 MA's), (43, 45949), (70, 45802),

Gene: TNguyen7_75 Start: 45047, Stop: 44919, Start Num: 42
Candidate Starts for TNguyen7_75:
(Start: 42 @45047 has 127 MA's), (45, 45032), (56, 44966),

Gene: Taquarus_70 Start: 44513, Stop: 44385, Start Num: 42
Candidate Starts for Taquarus_70:
(3, 44747), (14, 44621), (16, 44612), (Start: 36 @44519 has 14 MA's), (Start: 42 @44513 has 127 MA's), (45, 44498), (46, 44492), (56, 44432),

Gene: TarsusIV_74 Start: 45855, Stop: 45700, Start Num: 40
Candidate Starts for TarsusIV_74:
(Start: 40 @45855 has 151 MA's), (64, 45729),

Gene: Temprado_80 Start: 44729, Stop: 44577, Start Num: 40
Candidate Starts for Temprado_80:
(Start: 33 @44756 has 2 MA's), (Start: 40 @44729 has 151 MA's), (43, 44723), (44, 44714), (49, 44687),

Gene: Texage_72 Start: 45043, Stop: 44915, Start Num: 42
Candidate Starts for Texage_72:
(Start: 42 @45043 has 127 MA's), (45, 45028),

Gene: Timshel_72 Start: 47629, Stop: 47480, Start Num: 42
Candidate Starts for Timshel_72:
(Start: 42 @47629 has 127 MA's), (45, 47614), (50, 47578), (53, 47560), (58, 47536),

Gene: Tinybot_70 Start: 44537, Stop: 44409, Start Num: 42
Candidate Starts for Tinybot_70:

(7, 44699), (14, 44645), (16, 44636), (Start: 36 @44543 has 14 MA's), (Start: 42 @44537 has 127 MA's), (45, 44522), (46, 44516), (56, 44456),

Gene: TiroTheta9_70 Start: 44504, Stop: 44376, Start Num: 42
Candidate Starts for TiroTheta9_70:
(14, 44612), (16, 44603), (Start: 36 @44510 has 14 MA's), (Start: 42 @44504 has 127 MA's), (45, 44489), (46, 44483), (56, 44423),

Gene: Toaka_78 Start: 45406, Stop: 45206, Start Num: 34
Candidate Starts for Toaka_78:
(Start: 34 @45406 has 1 MA's), (Start: 40 @45391 has 151 MA's), (44, 45376), (76, 45220),

Gene: Todacoro_74 Start: 45042, Stop: 44914, Start Num: 42
Candidate Starts for Todacoro_74:
(Start: 42 @45042 has 127 MA's), (45, 45027),

Gene: ToneTone_76 Start: 44289, Stop: 44137, Start Num: 40
Candidate Starts for ToneTone_76:
(Start: 33 @44316 has 2 MA's), (Start: 40 @44289 has 151 MA's), (43, 44283), (44, 44274), (49, 44247),

Gene: Toro_74 Start: 48604, Stop: 48464, Start Num: 42
Candidate Starts for Toro_74:
(Start: 42 @48604 has 127 MA's), (57, 48514),

Gene: Tristan_73 Start: 46813, Stop: 46637, Start Num: 40
Candidate Starts for Tristan_73:
(Start: 40 @46813 has 151 MA's), (43, 46807), (66, 46660),

Gene: Trixie_76 Start: 46566, Stop: 46399, Start Num: 40
Candidate Starts for Trixie_76:
(Start: 40 @46566 has 151 MA's), (51, 46509), (72, 46410), (75, 46404),

Gene: Trooper_76 Start: 45821, Stop: 45675, Start Num: 40
Candidate Starts for Trooper_76:
(Start: 40 @45821 has 151 MA's),

Gene: TroyPia_72 Start: 44542, Stop: 44414, Start Num: 42
Candidate Starts for TroyPia_72:
(Start: 36 @44548 has 14 MA's), (Start: 42 @44542 has 127 MA's), (45, 44527), (55, 44464), (56, 44461),

Gene: Tubs_78 Start: 45056, Stop: 44892, Start Num: 40
Candidate Starts for Tubs_78:
(Start: 40 @45056 has 151 MA's), (44, 45041), (48, 45023), (51, 44999),

Gene: Tucker_79 Start: 44492, Stop: 44340, Start Num: 40
Candidate Starts for Tucker_79:
(Start: 33 @44519 has 2 MA's), (Start: 40 @44492 has 151 MA's), (43, 44486), (44, 44477), (49, 44450),

Gene: Turbido_77 Start: 46120, Stop: 45956, Start Num: 40
Candidate Starts for Turbido_77:

(32, 46159), (Start: 40 @46120 has 151 MA's), (70, 45967),

Gene: Twister_70 Start: 44343, Stop: 44215, Start Num: 42
Candidate Starts for Twister_70:
(Start: 42 @44343 has 127 MA's), (45, 44328), (48, 44313), (59, 44247),

Gene: TygerBlood_71 Start: 44510, Stop: 44382, Start Num: 42
Candidate Starts for TygerBlood_71:
(3, 44744), (14, 44618), (16, 44609), (Start: 36 @44516 has 14 MA's), (Start: 42 @44510 has 127 MA's), (45, 44495), (46, 44489), (56, 44429),

Gene: Ulysses_70 Start: 44193, Stop: 44065, Start Num: 42
Candidate Starts for Ulysses_70:
(3, 44427), (14, 44301), (16, 44292), (Start: 36 @44199 has 14 MA's), (Start: 42 @44193 has 127 MA's), (45, 44178), (56, 44112),

Gene: Updawg_77 Start: 45675, Stop: 45511, Start Num: 40
Candidate Starts for Updawg_77:
(11, 45807), (17, 45777), (Start: 40 @45675 has 151 MA's), (70, 45522),

Gene: VA6_76 Start: 45850, Stop: 45683, Start Num: 40
Candidate Starts for VA6_76:
(Start: 40 @45850 has 151 MA's), (43, 45844), (67, 45703),

Gene: Vanisoa_75 Start: 45726, Stop: 45541, Start Num: 40
Candidate Starts for Vanisoa_75:
(Start: 40 @45726 has 151 MA's), (48, 45693), (76, 45555), (78, 45546),

Gene: Veracruz_71 Start: 45043, Stop: 44915, Start Num: 42
Candidate Starts for Veracruz_71:
(Start: 42 @45043 has 127 MA's), (45, 45028),

Gene: VohminGhazi_79 Start: 44555, Stop: 44388, Start Num: 40
Candidate Starts for VohminGhazi_79:
(Start: 40 @44555 has 151 MA's), (43, 44549), (44, 44540),

Gene: WalterMcMickey_70 Start: 44343, Stop: 44215, Start Num: 42
Candidate Starts for WalterMcMickey_70:
(Start: 42 @44343 has 127 MA's), (45, 44328), (48, 44313), (59, 44247),

Gene: WeiHuaDA_77 Start: 46612, Stop: 46448, Start Num: 40
Candidate Starts for WeiHuaDA_77:
(21, 46702), (35, 46621), (Start: 40 @46612 has 151 MA's), (51, 46555), (64, 46486),

Gene: WideWale_77 Start: 45675, Stop: 45511, Start Num: 40
Candidate Starts for WideWale_77:
(11, 45807), (17, 45777), (Start: 40 @45675 has 151 MA's), (70, 45522),

Gene: Wiks_78 Start: 44360, Stop: 44208, Start Num: 40
Candidate Starts for Wiks_78:
(Start: 33 @44387 has 2 MA's), (Start: 40 @44360 has 151 MA's), (43, 44354), (44, 44345), (49, 44318),

Gene: Wile_69 Start: 44707, Stop: 44579, Start Num: 36
Candidate Starts for Wile_69:
(Start: 36 @44707 has 14 MA's), (Start: 42 @44701 has 127 MA's), (45, 44686), (46, 44680), (63, 44590),

Gene: Wizard007_70 Start: 44427, Stop: 44305, Start Num: 42
Candidate Starts for Wizard007_70:
(Start: 36 @44433 has 14 MA's), (Start: 42 @44427 has 127 MA's), (45, 44412), (46, 44406), (63, 44316),

Gene: WorldCup_76 Start: 44990, Stop: 44805, Start Num: 40
Candidate Starts for WorldCup_76:
(Start: 40 @44990 has 151 MA's), (43, 44984), (76, 44819),

Gene: WunderPhul_79 Start: 44358, Stop: 44206, Start Num: 40
Candidate Starts for WunderPhul_79:
(Start: 33 @44385 has 2 MA's), (Start: 40 @44358 has 151 MA's), (43, 44352), (44, 44343), (49, 44316),

Gene: Xena_69 Start: 44688, Stop: 44566, Start Num: 42
Candidate Starts for Xena_69:
(12, 44814), (13, 44808), (15, 44802), (28, 44742), (Start: 36 @44694 has 14 MA's), (Start: 42 @44688 has 127 MA's), (45, 44673), (63, 44577),

Gene: XianYue_72 Start: 45602, Stop: 45423, Start Num: 40
Candidate Starts for XianYue_72:
(Start: 40 @45602 has 151 MA's), (51, 45545), (67, 45455), (73, 45443), (77, 45428),

Gene: Yecey3_80 Start: 45152, Stop: 44967, Start Num: 40
Candidate Starts for Yecey3_80:
(24, 45221), (Start: 40 @45152 has 151 MA's), (62, 45047), (76, 44981),

Gene: YoSam321_71 Start: 44511, Stop: 44377, Start Num: 36
Candidate Starts for YoSam321_71:
(3, 44739), (14, 44613), (16, 44604), (Start: 36 @44511 has 14 MA's), (Start: 42 @44505 has 127 MA's), (45, 44490), (46, 44484), (56, 44424),

Gene: Yokurt_78 Start: 44360, Stop: 44208, Start Num: 40
Candidate Starts for Yokurt_78:
(Start: 33 @44387 has 2 MA's), (Start: 40 @44360 has 151 MA's), (43, 44354), (44, 44345), (49, 44318),

Gene: Zaka_79 Start: 44360, Stop: 44208, Start Num: 40
Candidate Starts for Zaka_79:
(Start: 33 @44387 has 2 MA's), (Start: 40 @44360 has 151 MA's), (43, 44354), (44, 44345), (49, 44318),

Gene: Zarafa_72 Start: 45026, Stop: 44898, Start Num: 42
Candidate Starts for Zarafa_72:
(Start: 42 @45026 has 127 MA's), (45, 45011), (56, 44945),

Gene: Zimmer_75 Start: 46180, Stop: 46019, Start Num: 40
Candidate Starts for Zimmer_75:

(Start: 40 @46180 has 151 MA's), (51, 46123),

Gene: Zulu_80 Start: 44738, Stop: 44586, Start Num: 40
Candidate Starts for Zulu_80:
(Start: 33 @44765 has 2 MA's), (Start: 40 @44738 has 151 MA's), (43, 44732), (44, 44723), (49, 44696),