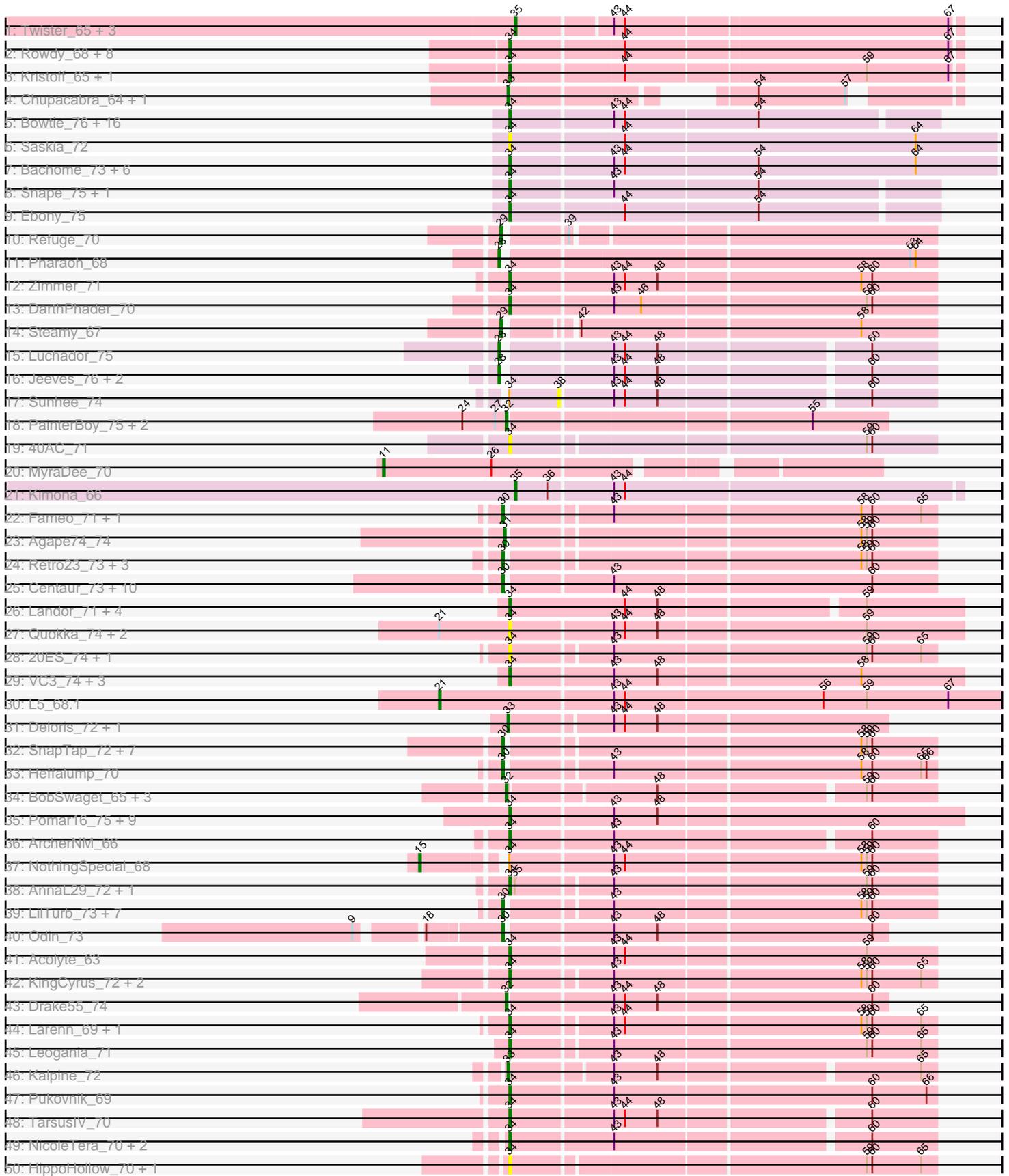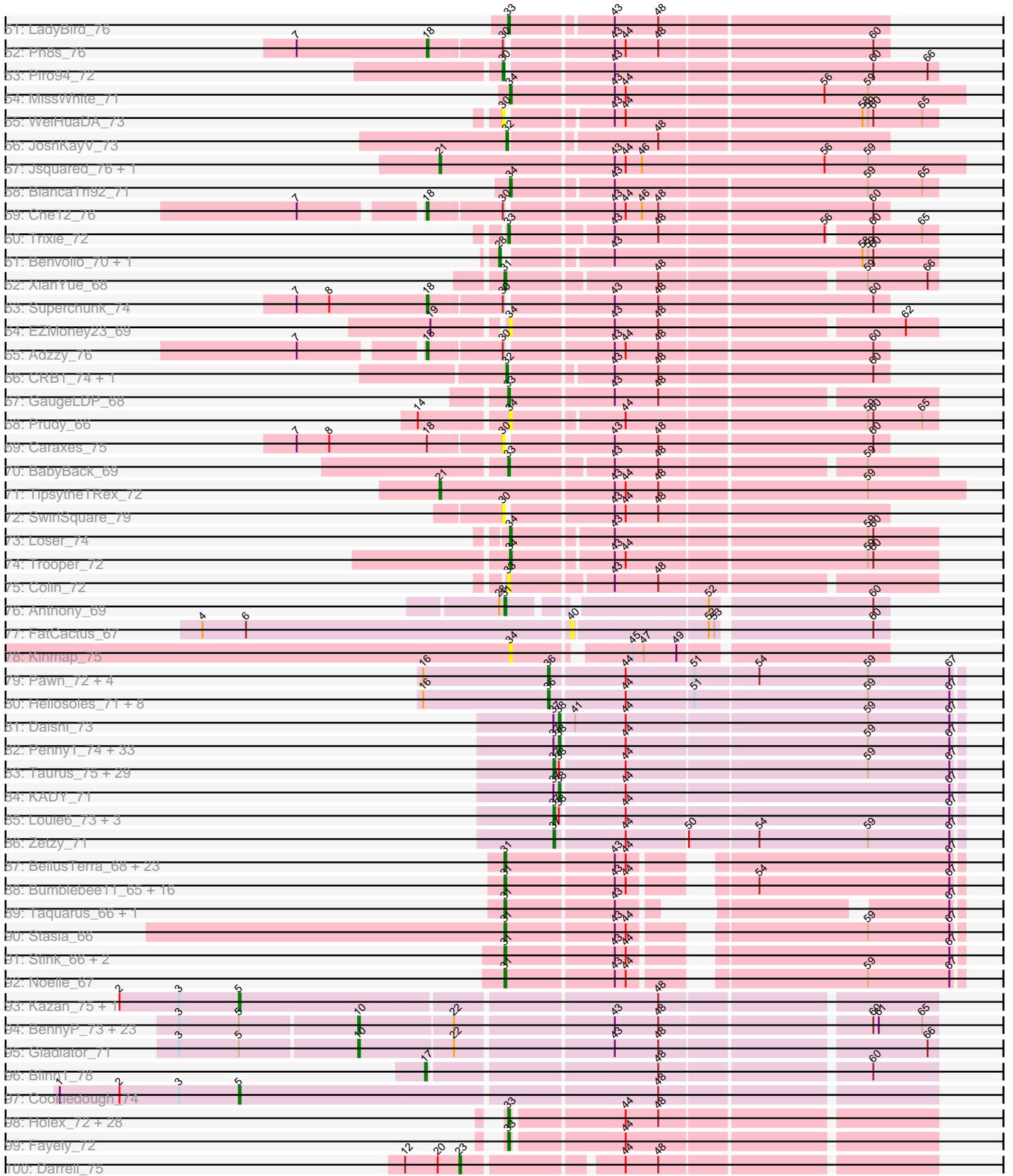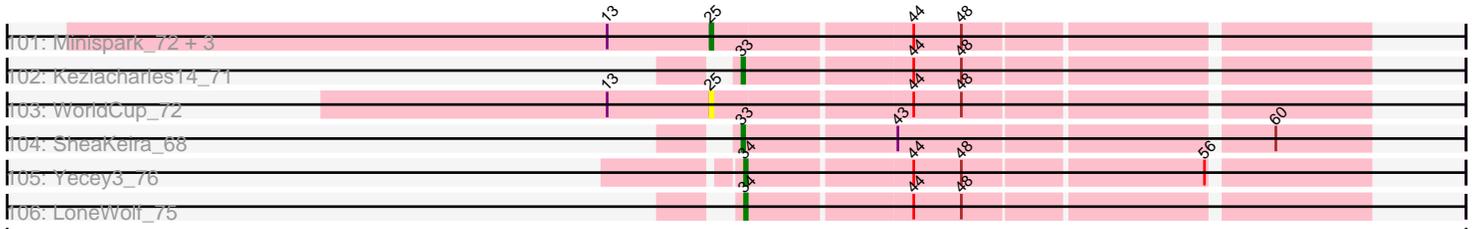# Pham 283390

Pham 283390

Pham 283390

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 283390 Report

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

Pham number 283390 has 381 members, 52 are drafts.

Phages represented in each track:
• Track 1 : Twister_65, Topanga_63, Edison31_63, WalterMcMickey_65
• Track 2 : Rowdy_68, Severus_64, Poompha_63, KittenMittens_63, PeaceMeal1_64, Shapes_68, DustyMartin_68, Trike_63, Drake94_64
• Track 3 : Kristoff_65, Rebeuca_67
• Track 4 : Chupacabra_64, Goose_67
• Track 5 : Bowtie_76, Et2Brutus_74, Flaverint_76, Joselito_74, Fibonacci_74, Mabel_75, Timothy_75, Lucivia_76, Kimba_72, Munch_75, Aneem_76, MaCh_75, Jabith_74, Wolpertinger_73, Orange_74, TinyTimmy_73, Insomnia_74
• Track 6 : Saskia_72
• Track 7 : Bachome_73, Sham4_71, Salz_70, Hutc2_70, Bud_70, Petersenfast_69, Gilberta_72
• Track 8 : Snape_75, Mulciber_73
• Track 9 : Ebony_75
• Track 10 : Refuge_70
• Track 11 : Pharaoh_68
• Track 12 : Zimmer_71
• Track 13 : DarthPhader_70
• Track 14 : Steamy_67
• Track 15 : Luchador_75
• Track 16 : Jeeves_76, SororFago_74, Gail_74
• Track 17 : Sunhee_74
• Track 18 : PainterBoy_75, EagleEye_77, Lucyedi_76
• Track 19 : 40AC_71
• Track 20 : MyraDee_70
• Track 21 : Kimona_66
• Track 22 : Fameo_71, QueenB2_70
• Track 23 : Agape74_74
• Track 24 : Retro23_73, Dalmatian_73, DudeLittle_71, Anselm_74
• Track 25 : Centaur_73, WideWale_73, Gratitude_70, Baehexic_71, NaSiaTalie_73, Terrific_73, Flare16_73, Updawg_73, Equemioh13_72, Sknot_73, MiculUcigas_73
• Track 26 : Landor_71, Tristan_69, IronMan_70, Phaded_68, Jaan_71
• Track 27 : Quokka_74, MajorMajor_74, Bradman_75
• Track 28 : 20ES_74, First_0073
• Track 29 : VC3_74, AN9_75, ANI8_75, C3_68
• Track 30 : L5_68.1
• Track 31 : Deloris_72, BengiVuitton_72

- Track 32 : SnapTap_72, Crucio_73, QueenBeesly_73, Georgie2_74, FiringLine_73, Power_72, SemperFi_73, SweetiePie_72
- Track 33 : Heffalump_70
- Track 34 : BobSwaget_65, Rachaly_68, Lokk_66, Miko_66
- Track 35 : Pomar16_75, Naji_75, D32_74, Tomathan_75, D29_68.1, StarStuff_75, Duplo_75, Kerberos_75, DBQu4n_75, Travvers_74
- Track 36 : ArcherNM_66
- Track 37 : NothingSpecial_68
- Track 38 : AnnaL29_72, RedRock_71
- Track 39 : LilTurb_73, Turbido_73, Bugsy_74, Dignity_74, Jerm_74, Leviathan_74, Smeagan_75, Whabigail7_73
- Track 40 : Odin_73
- Track 41 : Acolyte_63
- Track 42 : KingCyrus_72, ChipMunk_73, EvilGenius_72
- Track 43 : Drake55_74
- Track 44 : Larenn_69, Malec_70
- Track 45 : Leogania_71
- Track 46 : Kalpine_72
- Track 47 : Pukovnik_69
- Track 48 : TarsusIV_70
- Track 49 : NicoleTera_70, Changeling_71, ForesterFrank_68
- Track 50 : HippoHollow_70, LionsBait_72
- Track 51 : LadyBird_76
- Track 52 : Ph8s_76
- Track 53 : Piro94_72
- Track 54 : MissWhite_71
- Track 55 : WeiHuaDA_73
- Track 56 : JoshKayV_73
- Track 57 : Jsquared_76, Serenity_76
- Track 58 : BiancaTri92_71
- Track 59 : Che12_76
- Track 60 : Trixie_72
- Track 61 : Benvolio_70, Echild_73
- Track 62 : XianYue_68
- Track 63 : Superchunk_74
- Track 64 : EZMoney23_69
- Track 65 : Adzzy_76
- Track 66 : CRB1_74, HarryHoudini_73
- Track 67 : GaugeLDP_68
- Track 68 : Prudy_66
- Track 69 : Caraxes_75
- Track 70 : BabyBack_69
- Track 71 : TipsytheTRex_72
- Track 72 : SwirlSquare_79
- Track 73 : Loser_74
- Track 74 : Trooper_72
- Track 75 : Colin_72
- Track 76 : Anthony_69
- Track 77 : FatCactus_67
- Track 78 : Kinmap_75
- Track 79 : Pawn_72, Kalnoky_74, ACFishhook_71, JeppNRM_74, Marius_74
- Track 80 : Heliosoles_71, PurpleHaze_73, Gemma_71, OlanP_72, Calvinny_71, ClownCar_71, PhishRPhriends_70, HaveUMetTed_74, Manu_73

- Track 81 : Daishi_73
- Track 82 : Penny1_74, Stagni_71, Dieselweasel_74, EpicPhail_75, Montavir_69, AgronaGT15_71, Croquant_71, Aglet_75, AugsMagnumOpus_77, Grub_72, Pembroke_74, Lilith_72, Bxz2_69, Gwennie_69, Malinsilva_76, SoYo_71, Snickers_74, Marie_72, MuchMore_77, SoilDragon_73, Beauxregard13_73, Fernando_74, MadMarie_72, Watson_73, PGHhamlin_76, Lowa_71, Bigflo_71, Grif_72, Ollie_74, BreSam8_74, HashRod_75, Sabinator_72, LarryKay_74, GtownJaz_74
- Track 83 : Taurus_75, MarQuardt_74, Vix_70, Microwolf_70, Jobu08_70, GingkoMaracino_74, Grum1_73, Soshari_76, Sabia_72, Phoxy_74, Tiffany_73, Hercules11_74, LBerry_75, Rummer_73, Spike509_74, JenCasNa_75, Methuselah_67, Mainiac_73, Cullens_74, LugYA_77, PotatoSplit_75, Anubis_77, JHC117_70, P28Green_74, Wooldri_76, MoneyMay_73, Colbster_70, Farber_74, DaHudson_73, Phoebe_75
- Track 84 : KADY_71
- Track 85 : Louie6_73, TinyPebbles_73, BuzzBuzz_68, Misomonster_75
- Track 86 : Zetzy_71
- Track 87 : BellusTerra_68, Kremtemulon_66, Obama12_68, LHTSCC_69, ICleared_66, Kratark_66, Cerulean_68, Shygu2_66, Happiness_66, TroyPia_68, Cintron_67, Eurydice_68, Eagle_66, Ohfah_68, BangNhom_65, Phelipe_68, Polymorphads_67, SheldonCooper_67, Nebs_68, CentreCat_67, Morrow_68, ChampagnePapi_69, JetBlade_67, LeoAvram_66
- Track 88 : Bumblebee11_65, AbbysRanger_66, Mundrea_66, Backyardigan_64, PetiteSangsue_66, Wizard007_66, Morpher26_66, Xena_65, Wile_65, Katalie136_66, Cici_66, Datway_66, Perplexer_66, Cindaradix_63, Achebe_65, BubbleTrouble_66, Badger_65
- Track 89 : Taquarus_66, Rosa24_64
- Track 90 : Stasia_66
- Track 91 : Stink_66, Miramae_66, AvatarAhPeg_66
- Track 92 : Noelle_67
- Track 93 : Kazan_75, SmellyB_74
- Track 94 : BennyP_73, Zulu_75, Helmet_76, Indra_77, Roksolana_74, Garak_75, Lilbunny_73, Temprado_75, Zaka_74, Jeffabunny_74, Blue7_75, Artemis2UCLA_73, WunderPhul_74, BlessJoy_74, Hexamo_73, Hammer_74, Wiks_73, Rifter_74, Tucker_74, ToneTone_71, Koko_75, Yokurt_73, Gruunaga_73, CloudWang3_74
- Track 95 : Gladiator_71
- Track 96 : Blinn1_78
- Track 97 : Cookiedough_74
- Track 98 : Holex_72, Myxus_74, Priya_72, Catalina_76, EdogawaKiddo_72, Aliter_75, Pioneer_74, EmyBug_71, Phonnegut_74, Conquerage_72, Alma_72, Ayanochan_72, HortumSL17_75, PackMan_73, Jiawan_71, Tubs_74, Spouty_72, Beemo_74, Qobbit_72, Phaeder_74, RyeScarlet_75, Onglai_72, Sachima_70, ExplosioNervosa_72, Scherzo_73, Ugenie5_69, Lilleskat_71, Hanray_72, Eidsmoe_72
- Track 99 : Fayely_72
- Track 100 : Darrell_75
- Track 101 : Minispark_72, Bellris_72, Rahalelujah_74, CogOmlette_72
- Track 102 : Keziacharles14_71
- Track 103 : WorldCup_72
- Track 104 : SheaKeira_68
- Track 105 : Yecey3_76
- Track 106 : LoneWolf_75

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

The start number called the most often in the published annotations is 34, it was called in 72 of the 329 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_74, 40AC_71, AN9_75, ANI8_75, Acolyte_63, Aneem_76, AnnaL29_72, ArcherNM_66, Bachome_73, BiancaTri92_71, Bowtie_76, Bradman_75, Bud_70, C3_68, Changeling_71, ChipMunk_73, D29_68.1, D32_74, DBQu4n_75, DarthPhader_70, Drake94_64, Duplo_75, DustyMartin_68, EZMoney23_69, Ebony_75, Et2Brutus_74, EvilGenius_72, Fibonacci_74, First_0073, Flaverint_76, ForesterFrank_68, Gilberta_72, HippoHollow_70, Hutc2_70, Insomnia_74, IronMan_70, Jaan_71, Jabith_74, Joselito_74, Kerberos_75, Kimba_72, KingCyrus_72, Kinmap_75, KittenMittens_63, Kristoff_65, Landor_71, Larenn_69, Leogania_71, LionsBait_72, LoneWolf_75, Loser_74, Lucivia_76, MaCh_75, Mabel_75, MajorMajor_74, Malec_70, MissWhite_71, Mulciber_73, Munch_75, Naji_75, NicoleTera_70, Orange_74, PeaceMeal1_64, Petersenfast_69, Phaded_68, Pomar16_75, Poompha_63, Prudy_66, Pukovnik_69, Quokka_74, Rebeuca_67, RedRock_71, Rowdy_68, Salz_70, Saskia_72, Severus_64, Sham4_71, Shapes_68, Snape_75, StarStuff_75, TarsusIV_70, Timothy_75, TinyTimmy_73, Tomathan_75, Travvers_74, Trike_63, Tristan_69, Trooper_72, VC3_74, Wolpertinger_73, Yecey3_76, Zimmer_71,

Genes that have the "Most Annotated" start but do not call it:
• NothingSpecial_68, Sunhee_74,

Genes that do not have the "Most Annotated" start:
• ACFishhook_71, AbbysRanger_66, Achebe_65, Adzzy_76, Agape74_74, Aglet_75, AgronaGT15_71, Aliter_75, Alma_72, Anselm_74, Anthony_69, Anubis_77, Artemis2UCLA_73, AugsMagnumOpus_77, AvatarAhPeg_66, Ayanochan_72, BabyBack_69, Backyardigan_64, Badger_65, Baehexic_71, BangNhom_65, Beauxregard13_73, Beemo_74, Bellris_72, BellusTerra_68, BengiVuitton_72, BennyP_73, Benvolio_70, Bigflo_71, BlessJoy_74, Blinn1_78, Blue7_75, BobSwaget_65, BreSam8_74, BubbleTrouble_66, Bugsy_74, Bumblebee11_65, BuzzBuzz_68, Bxz2_69, CRB1_74, Calvinny_71, Caraxes_75, Catalina_76, Centaur_73, CentreCat_67, Cerulean_68, ChampagnePapi_69, Che12_76, Chupacabra_64, Cici_66, Cindaradix_63, Cintron_67, CloudWang3_74, ClownCar_71, CogOmlette_72, Colbster_70, Colin_72, Conquerage_72, Cookiedough_74, Croquant_71, Crucio_73, Cullens_74, DaHudson_73, Daishi_73, Dalmatian_73, Darrell_75, Datway_66, Deloris_72, Dieselweasel_74, Dignity_74, Drake55_74, DudeLittle_71, EagleEye_77, Eagle_66, Echild_73, Edison31_63, EdogawaKiddo_72, Eidsmoe_72, EmyBug_71, EpicPhail_75, Equemioh13_72, Eurydice_68, ExplosioNervosa_72, Fameo_71, Farber_74, FatCactus_67, Fayely_72, Fernando_74, FiringLine_73, Flare16_73, Gail_74, Garak_75, GaugeLDP_68, Gemma_71, Georgie2_74, GingkoMaracino_74, Gladiator_71, Goose_67, Gratitude_70, Grif_72, Grub_72, Grum1_73, Gruunaga_73, GtownJaz_74, Gwennie_69, Hammer_74, Hanray_72, Happiness_66, HarryHoudini_73, HashRod_75, HaveUMetTed_74, Heffalump_70, Heliosoles_71, Helmet_76, Hercules11_74, Hexamo_73, Holex_72, HortumSL17_75, ICleared_66, Indra_77, JHC117_70, Jeeves_76, Jeffabunny_74, JenCasNa_75, JeppNRM_74, Jerm_74,

JetBlade_67, Jiawan_71, Jobu08_70, JoshKayV_73, Jsquared_76, KADY_71, Kalnoky_74, Kalpine_72, Katalie136_66, Kazan_75, Keziacharles14_71, Kimona_66, Koko_75, Kratark_66, Kremtemulon_66, L5_68.1, LBerry_75, LHTSCC_69, LadyBird_76, LarryKay_74, LeoAvram_66, Leviathan_74, LilTurb_73, Lilbunny_73, Lilith_72, Lilleskat_71, Lokk_66, Louie6_73, Lowa_71, Luchador_75, Lucyedi_76, LugYA_77, MadMarie_72, Mainiac_73, Malinsilva_76, Manu_73, MarQuardt_74, Marie_72, Marius_74, Methuselah_67, Microwolf_70, MiculUcigas_73, Miko_66, Minispark_72, Miramae_66, Misomonster_75, MoneyMay_73, Montavir_69, Morpher26_66, Morrow_68, MuchMore_77, Mundrea_66, MyraDee_70, Myxus_74, NaSiaTalie_73, Nebs_68, Noelle_67, Obama12_68, Odin_73, Ohfah_68, OlanP_72, Ollie_74, Onglai_72, P28Green_74, PGHhamlin_76, PackMan_73, PainterBoy_75, Pawn_72, Pembroke_74, Penny1_74, Perplexer_66, PetiteSangsue_66, Ph8s_76, Phaeder_74, Pharaoh_68, Phelipe_68, PhishRPhriends_70, Phoebe_75, Phonnegut_74, Phoxy_74, Pioneer_74, Piro94_72, Polymorphads_67, PotatoSplit_75, Power_72, Priya_72, PurpleHaze_73, Qobbit_72, QueenB2_70, QueenBeesly_73, Rachaly_68, Rahalelujah_74, Refuge_70, Retro23_73, Rifter_74, Roksolana_74, Rosa24_64, Rummer_73, RyeScarlet_75, Sabia_72, Sabinator_72, Sachima_70, Scherzo_73, SemperFi_73, Serenity_76, SheaKeira_68, SheldonCooper_67, Shygu2_66, Sknot_73, Smeagan_75, SmellyB_74, SnapTap_72, Snickers_74, SoYo_71, SoilDragon_73, SororFago_74, Soshari_76, Spike509_74, Spouty_72, Stagni_71, Stasia_66, Steamy_67, Stink_66, Superchunk_74, SweetiePie_72, SwirlSquare_79, Taquarus_66, Taurus_75, Temprado_75, Terrific_73, Tiffany_73, TinyPebbles_73, TipsytheTRex_72, ToneTone_71, Topanga_63, Trixie_72, TroyPia_68, Tubs_74, Tucker_74, Turbido_73, Twister_65, Ugenie5_69, Updawg_73, Vix_70, WalterMcMickey_65, Watson_73, WeiHuaDA_73, Whabigail7_73, WideWale_73, Wiks_73, Wile_65, Wizard007_66, Wooldri_76, WorldCup_72, WunderPhul_74, Xena_65, XianYue_68, Yokurt_73, Zaka_74, Zetzy_71, Zulu_75,

Summary by start number:

Start 5:
• Found in 28 of 381 (7.3%) of genes in pham
• Manual Annotations of this start: 3 of 329
• Called 10.7% of time when present
• Phage (with cluster) where this start called: Cookiedough_74 (A6), Kazan_75 (A6), SmellyB_74 (A6),

Start 10:
• Found in 25 of 381 (6.6%) of genes in pham
• Manual Annotations of this start: 23 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_73 (A6), BennyP_73 (A6), BlessJoy_74 (A6), Blue7_75 (A6), CloudWang3_74 (A6), Garak_75 (A6), Gladiator_71 (A6), Gruunaga_73 (A6), Hammer_74 (A6), Helmet_76 (A6), Hexamo_73 (A6), Indra_77 (A6), Jeffabunny_74 (A6), Koko_75 (A6), Lilbunny_73 (A6), Rifter_74 (A6), Roksolana_74 (A6), Temprado_75 (A6), ToneTone_71 (A6), Tucker_74 (A6), Wiks_73 (A6), WunderPhul_74 (A6), Yokurt_73 (A6), Zaka_74 (A6), Zulu_75 (A6),

Start 11:
• Found in 1 of 381 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 329

• Called 100.0% of time when present
• Phage (with cluster) where this start called: MyraDee_70 (A18),

Start 15:
• Found in 1 of 381 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NothingSpecial_68 (A2),

Start 17:
• Found in 1 of 381 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Blinn1_78 (A6),

Start 18:
• Found in 6 of 381 (1.6%) of genes in pham
• Manual Annotations of this start: 4 of 329
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Adzzy_76 (A2), Che12_76 (A2),
Ph8s_76 (A2), Superchunk_74 (A2),

Start 21:
• Found in 7 of 381 (1.8%) of genes in pham
• Manual Annotations of this start: 4 of 329
• Called 57.1% of time when present
• Phage (with cluster) where this start called: Jsquared_76 (A2), L5_68.1 (A2),
Serenity_76 (A2), TipsytheTRex_72 (A2),

Start 23:
• Found in 1 of 381 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Darrell_75 (A9),

Start 25:
• Found in 5 of 381 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bellris_72 (A9), CogOmlette_72 (A9),
Minispark_72 (A9), Rahalelujah_74 (A9), WorldCup_72 (A9),

Start 28:
• Found in 8 of 381 (2.1%) of genes in pham
• Manual Annotations of this start: 7 of 329
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Benvolio_70 (A2), Echild_73 (A2),
Gail_74 (A14), Jeeves_76 (A14), Luchador_75 (A14), Pharaoh_68 (A12),
SororFago_74 (A14),

Start 29:
• Found in 2 of 381 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 329

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Refuge_70 (A12), Steamy_67 (A12),

Start 30:
• Found in 43 of 381 (11.3%) of genes in pham
• Manual Annotations of this start: 34 of 329
• Called 90.7% of time when present
• Phage (with cluster) where this start called: Anselm_74 (A2), Baehexic_71 (A2), Bugsy_74 (A2), Caraxes_75 (A2), Centaur_73 (A2), Crucio_73 (A2), Dalmatian_73 (A2), Dignity_74 (A2), DudeLittle_71 (A2), Equemioh13_72 (A2), Fameo_71 (A2), FiringLine_73 (A2), Flare16_73 (A2), Georgie2_74 (A2), Gratitude_70 (A2), Heffalump_70 (A2), Jerm_74 (A2), Leviathan_74 (A2), LilTurb_73 (A2), MiculUcigas_73 (A2), NaSiaTalie_73 (A2), Odin_73 (A2), Piro94_72 (A2), Power_72 (A2), QueenB2_70 (A2), QueenBeesly_73 (A2), Retro23_73 (A2), SemperFi_73 (A2), Sknot_73 (A2), Smeagan_75 (A2), SnapTap_72 (A2), SweetiePie_72 (A2), SwirlSquare_79 (A2), Terrific_73 (A2), Turbido_73 (A2), Updawg_73 (A2), WeiHuaDA_73 (A2), Whabigail7_73 (A2), WideWale_73 (A2),

Start 31:
• Found in 51 of 381 (13.4%) of genes in pham
• Manual Annotations of this start: 50 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbysRanger_66 (A4), Achebe_65 (A4), Agape74_74 (A2), Anthony_69 (A20), AvatarAhPeg_66 (A4), Backyardigan_64 (A4), Badger_65 (A4), BangNhom_65 (A4), BellusTerra_68 (A4), BubbleTrouble_66 (A4), Bumblebee11_65 (A4), CentreCat_67 (A4), Cerulean_68 (A4), ChampagnePapi_69 (A4), Cici_66 (A4), Cindaradix_63 (A4), Cintron_67 (A4), Datway_66 (A4), Eagle_66 (A4), Eurydice_68 (A4), Happiness_66 (A4), ICleared_66 (A4), JetBlade_67 (A4), Katalie136_66 (A4), Kratark_66 (A4), Kremtemulon_66 (A4), LHTSCC_69 (A4), LeoAvram_66 (A4), Miramae_66 (A4), Morpher26_66 (A4), Morrow_68 (A4), Mundrea_66 (A4), Nebs_68 (A4), Noelle_67 (A4), Obama12_68 (A4), Ohfah_68 (A4), Perplexer_66 (A4), PetiteSangsue_66 (A4), Phelipe_68 (A4), Polymorphads_67 (A4), Rosa24_64 (A4), SheldonCooper_67 (A4), Shygu2_66 (A4), Stasia_66 (A4), Stink_66 (A4), Taquarus_66 (A4), TroyPia_68 (A4), Wile_65 (A4), Wizard007_66 (A4), Xena_65 (A4), XianYue_68 (A2),

Start 32:
• Found in 11 of 381 (2.9%) of genes in pham
• Manual Annotations of this start: 10 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BobSwaget_65 (A2), CRB1_74 (A2), Drake55_74 (A2), EagleEye_77 (A16), HarryHoudini_73 (A2), JoshKayV_73 (A2), Lokk_66 (A2), Lucyedi_76 (A16), Miko_66 (A2), PainterBoy_75 (A16), Rachaly_68 (A2),

Start 33:
• Found in 42 of 381 (11.0%) of genes in pham
• Manual Annotations of this start: 32 of 329
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aliter_75 (A9), Alma_72 (A9), Ayanochan_72 (A9), BabyBack_69 (A2), Beemo_74 (A9), BengiVuitton_72 (A2), Catalina_76 (A9), Chupacabra_64 (A10), Colin_72 (A2), Conquerage_72 (A9), Deloris_72 (A2), EdogawaKiddo_72 (A9), Eidsmoe_72 (A9), EmyBug_71 (A9),

ExplosioNervosa_72 (A9), Fayely_72 (A9), GaugeLDP_68 (A2), Goose_67 (A10), Hanray_72 (A9), Holex_72 (A9), HortumSL17_75 (A9), Jiawan_71 (A9), Kalpine_72 (A2), Keziacharles14_71 (A9), LadyBird_76 (A2), Lilleskat_71 (A9), Myxus_74 (A9), Onglai_72 (A9), PackMan_73 (A9), Phaeder_74 (A9), Phonnegut_74 (A9), Pioneer_74 (A9), Priya_72 (A9), Qobbit_72 (A9), RyeScarlet_75 (A9), Sachima_70 (A9), Scherzo_73 (A9), SheaKeira_68 (A9), Spouty_72 (A9), Trixie_72 (A2), Tubs_74 (A9), Ugenie5_69 (A9),

Start 34:
• Found in 94 of 381 (24.7%) of genes in pham
• Manual Annotations of this start: 72 of 329
• Called 97.9% of time when present
• Phage (with cluster) where this start called: 20ES_74 (A2), 40AC_71 (A17), AN9_75 (A2), ANI8_75 (A2), Acolyte_63 (A2), Aneem_76 (A11), AnnaL29_72 (A2), ArcherNM_66 (A2), Bachome_73 (A11), BiancaTri92_71 (A2), Bowtie_76 (A11), Bradman_75 (A2), Bud_70 (A11), C3_68 (A2), Changeling_71 (A2), ChipMunk_73 (A2), D29_68.1 (A2), D32_74 (A2), DBQu4n_75 (A2), DarthPhader_70 (A12), Drake94_64 (A10), Duplo_75 (A2), DustyMartin_68 (A10), EZMoney23_69 (A2), Ebony_75 (A11), Et2Brutus_74 (A11), EvilGenius_72 (A2), Fibonacci_74 (A11), First_0073 (A2), Flaverint_76 (A11), ForesterFrank_68 (A2), Gilberta_72 (A11), HippoHollow_70 (A2), Hutc2_70 (A11), Insomnia_74 (A11), IronMan_70 (A2), Jaan_71 (A2), Jabith_74 (A11), Joselito_74 (A11), Kerberos_75 (A2), Kimba_72 (A11), KingCyrus_72 (A2), Kinmap_75 (A21), KittenMittens_63 (A10), Kristoff_65 (A10), Landor_71 (A2), Larenn_69 (A2), Leogania_71 (A2), LionsBait_72 (A2), LoneWolf_75 (A9), Loser_74 (A2), Lucivia_76 (A11), MaCh_75 (A11), Mabel_75 (A11), MajorMajor_74 (A2), Malec_70 (A2), MissWhite_71 (A2), Mulciber_73 (A11), Munch_75 (A11), Naji_75 (A2), NicoleTera_70 (A2), Orange_74 (A11), PeaceMeal1_64 (A10), Petersenfast_69 (A11), Phaded_68 (A2), Pomar16_75 (A2), Poompha_63 (A10), Prudy_66 (A2), Pukovnik_69 (A2), Quokka_74 (A2), Rebeuca_67 (A10), RedRock_71 (A2), Rowdy_68 (A10), Salz_70 (A11), Saskia_72 (A11), Severus_64 (A10), Sham4_71 (A11), Shapes_68 (A10), Snape_75 (A11), StarStuff_75 (A2), TarsusIV_70 (A2), Timothy_75 (A11), TinyTimmy_73 (A11), Tomathan_75 (A2), Travvers_74 (A2), Trike_63 (A10), Tristan_69 (A2), Trooper_72 (A2), VC3_74 (A2), Wolpertinger_73 (A11), Yecey3_76 (A9), Zimmer_71 (A12),

Start 35:
• Found in 7 of 381 (1.8%) of genes in pham
• Manual Annotations of this start: 5 of 329
• Called 71.4% of time when present
• Phage (with cluster) where this start called: Edison31_63 (A10), Kimona_66 (A19), Topanga_63 (A10), Twister_65 (A10), WalterMcMickey_65 (A10),

Start 36:
• Found in 15 of 381 (3.9%) of genes in pham
• Manual Annotations of this start: 12 of 329
• Called 93.3% of time when present
• Phage (with cluster) where this start called: ACFishhook_71 (A3), Calvinny_71 (A3), ClownCar_71 (A3), Gemma_71 (A3), HaveUMetTed_74 (A3), Heliosoles_71 (A3), JeppNRM_74 (A3), Kalnoky_74 (A3), Manu_73 (A3), Marius_74 (A3), OlanP_72 (A3), Pawn_72 (A3), PhishRPhriends_70 (A3), PurpleHaze_73 (A3),

Start 37:
• Found in 71 of 381 (18.6%) of genes in pham

• Manual Annotations of this start: 35 of 329
• Called 49.3% of time when present
• Phage (with cluster) where this start called: Anubis_77 (A3), BuzzBuzz_68 (A3), Colbster_70 (A3), Cullens_74 (A3), DaHudson_73 (A3), Farber_74 (A3), GingkoMaracino_74 (A3), Grum1_73 (A3), Hercules11_74 (A3), JHC117_70 (A3), JenCasNa_75 (A3), Jobu08_70 (A3), LBerry_75 (A3), Louie6_73 (A3), LugYA_77 (A3), Mainiac_73 (A3), MarQuardt_74 (A3), Methuselah_67 (A3), Microwolf_70 (A3), Misomonster_75 (A3), MoneyMay_73 (A3), P28Green_74 (A3), Phoebe_75 (A3), Phoxy_74 (A3), PotatoSplit_75 (A3), Rummer_73 (A3), Sabia_72 (A3), Soshari_76 (A3), Spike509_74 (A3), Taurus_75 (A3), Tiffany_73 (A3), TinyPebbles_73 (A3), Vix_70 (A3), Wooldri_76 (A3), Zetzy_71 (A3),

Start 38:
• Found in 71 of 381 (18.6%) of genes in pham
• Manual Annotations of this start: 31 of 329
• Called 52.1% of time when present
• Phage (with cluster) where this start called: Aglet_75 (A3), AgronaGT15_71 (A3), AugsMagnumOpus_77 (A3), Beauxregard13_73 (A3), Bigflo_71 (A3), BreSam8_74 (A3), Bxz2_69 (A3), Croquant_71 (A3), Daishi_73 (A3), Dieselweasel_74 (A3), EpicPhail_75 (A3), Fernando_74 (A3), Grif_72 (A3), Grub_72 (A3), GtownJaz_74 (A3), Gwennie_69 (A3), HashRod_75 (A3), KADY_71 (A3), LarryKay_74 (A3), Lilith_72 (A3), Lowa_71 (A3), MadMarie_72 (A3), Malinsilva_76 (A3), Marie_72 (A3), Montavir_69 (A3), MuchMore_77 (A3), Ollie_74 (A3), PGHhamlin_76 (A3), Pembroke_74 (A3), Penny1_74 (A3), Sabinator_72 (A3), Snickers_74 (A3), SoYo_71 (A3), SoilDragon_73 (A3), Stagni_71 (A3), Sunhee_74 (A14), Watson_73 (A3),

Start 40:
• Found in 1 of 381 (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: FatCactus_67 (A20),

Summary by clusters:

There are 15 clusters represented in this pham: A20, A14, A17, A16, A11, A10, A12, A19, A18, A21, A3, A2, A4, A6, A9,

Info for manual annotations of cluster A10:
•Start number 33 was manually annotated 2 times for cluster A10.
•Start number 34 was manually annotated 8 times for cluster A10.
•Start number 35 was manually annotated 4 times for cluster A10.

Info for manual annotations of cluster A11:
•Start number 34 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:
•Start number 28 was manually annotated 1 time for cluster A12.
•Start number 29 was manually annotated 2 times for cluster A12.
•Start number 34 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A14:
•Start number 28 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A16:
•Start number 32 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:
•Start number 11 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A19:
•Start number 35 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:
•Start number 15 was manually annotated 1 time for cluster A2.
•Start number 18 was manually annotated 4 times for cluster A2.
•Start number 21 was manually annotated 4 times for cluster A2.
•Start number 28 was manually annotated 2 times for cluster A2.
•Start number 30 was manually annotated 34 times for cluster A2.
•Start number 31 was manually annotated 2 times for cluster A2.
•Start number 32 was manually annotated 7 times for cluster A2.
•Start number 33 was manually annotated 7 times for cluster A2.
•Start number 34 was manually annotated 36 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 31 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:
•Start number 36 was manually annotated 12 times for cluster A3.
•Start number 37 was manually annotated 35 times for cluster A3.
•Start number 38 was manually annotated 31 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 31 was manually annotated 47 times for cluster A4.

Info for manual annotations of cluster A6:
•Start number 5 was manually annotated 3 times for cluster A6.
•Start number 10 was manually annotated 23 times for cluster A6.
•Start number 17 was manually annotated 1 time for cluster A6.

Info for manual annotations of cluster A9:
•Start number 23 was manually annotated 1 time for cluster A9.
•Start number 25 was manually annotated 1 time for cluster A9.
•Start number 33 was manually annotated 23 times for cluster A9.
•Start number 34 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: 20ES_74 Start: 43517, Stop: 43293, Start Num: 34
Candidate Starts for 20ES_74:
(Start: 34 @43517 has 72 MA's), (43, 43466), (59, 43331), (60, 43328), (65, 43301),

Gene: 40AC_71 Start: 44020, Stop: 43796, Start Num: 34

Candidate Starts for 40AC_71:
(Start: 34 @44020 has 72 MA's), (59, 43834), (60, 43831),

Gene: ACFishhook_71 Start: 42736, Stop: 42518, Start Num: 36
Candidate Starts for ACFishhook_71:
(16, 42805), (Start: 36 @42736 has 12 MA's), (44, 42697), (51, 42661), (54, 42628), (59, 42568), (67, 42523),

Gene: AN9_75 Start: 43459, Stop: 43217, Start Num: 34
Candidate Starts for AN9_75:
(Start: 34 @43459 has 72 MA's), (43, 43405), (48, 43381), (58, 43273),

Gene: ANI8_75 Start: 43459, Stop: 43217, Start Num: 34
Candidate Starts for ANI8_75:
(Start: 34 @43459 has 72 MA's), (43, 43405), (48, 43381), (58, 43273),

Gene: AbbysRanger_66 Start: 42647, Stop: 42423, Start Num: 31
Candidate Starts for AbbysRanger_66:
(Start: 31 @42647 has 50 MA's), (43, 42590), (44, 42584), (54, 42533), (67, 42428),

Gene: Achebe_65 Start: 42630, Stop: 42406, Start Num: 31
Candidate Starts for Achebe_65:
(Start: 31 @42630 has 50 MA's), (43, 42573), (44, 42567), (54, 42516), (67, 42411),

Gene: Acolyte_63 Start: 41528, Stop: 41301, Start Num: 34
Candidate Starts for Acolyte_63:
(Start: 34 @41528 has 72 MA's), (43, 41474), (44, 41468), (59, 41339),

Gene: Adzzy_76 Start: 42404, Stop: 42165, Start Num: 18
Candidate Starts for Adzzy_76:
(7, 42464), (Start: 18 @42404 has 4 MA's), (Start: 30 @42365 has 34 MA's), (43, 42311), (44, 42305), (48, 42287), (60, 42173),

Gene: Agape74_74 Start: 43761, Stop: 43537, Start Num: 31
Candidate Starts for Agape74_74:
(Start: 31 @43761 has 50 MA's), (58, 43578), (59, 43575), (60, 43572),

Gene: Aglet_75 Start: 42842, Stop: 42630, Start Num: 38
Candidate Starts for Aglet_75:
(Start: 37 @42845 has 35 MA's), (Start: 38 @42842 has 31 MA's), (44, 42809), (59, 42680), (67, 42635),

Gene: AgronaGT15_71 Start: 42690, Stop: 42478, Start Num: 38
Candidate Starts for AgronaGT15_71:
(Start: 37 @42693 has 35 MA's), (Start: 38 @42690 has 31 MA's), (44, 42657), (59, 42528), (67, 42483),

Gene: Aliter_75 Start: 42851, Stop: 42633, Start Num: 33
Candidate Starts for Aliter_75:
(Start: 33 @42851 has 32 MA's), (44, 42794), (48, 42776),

Gene: Alma_72 Start: 42828, Stop: 42610, Start Num: 33
Candidate Starts for Alma_72:

(Start: 33 @42828 has 32 MA's), (44, 42771), (48, 42753),

Gene: Aneem_76 Start: 43515, Stop: 43288, Start Num: 34
Candidate Starts for Aneem_76:
(Start: 34 @43515 has 72 MA's), (43, 43461), (44, 43455), (54, 43383),

Gene: AnnaL29_72 Start: 43717, Stop: 43493, Start Num: 34
Candidate Starts for AnnaL29_72:
(Start: 34 @43717 has 72 MA's), (Start: 35 @43714 has 5 MA's), (43, 43666), (59, 43531), (60, 43528),

Gene: Anselm_74 Start: 43911, Stop: 43687, Start Num: 30
Candidate Starts for Anselm_74:
(Start: 30 @43911 has 34 MA's), (58, 43728), (59, 43725), (60, 43722),

Gene: Anthony_69 Start: 41982, Stop: 41797, Start Num: 31
Candidate Starts for Anthony_69:
(Start: 28 @41985 has 7 MA's), (Start: 31 @41982 has 50 MA's), (52, 41889), (60, 41805),

Gene: Anubis_77 Start: 42731, Stop: 42516, Start Num: 37
Candidate Starts for Anubis_77:
(Start: 37 @42731 has 35 MA's), (Start: 38 @42728 has 31 MA's), (44, 42695), (59, 42566), (67, 42521),

Gene: ArcherNM_66 Start: 42985, Stop: 42764, Start Num: 34
Candidate Starts for ArcherNM_66:
(Start: 34 @42985 has 72 MA's), (43, 42931), (60, 42799),

Gene: Artemis2UCLA_73 Start: 41681, Stop: 41382, Start Num: 10
Candidate Starts for Artemis2UCLA_73:
(3, 41777), (Start: 5 @41744 has 3 MA's), (Start: 10 @41681 has 23 MA's), (22, 41630), (43, 41549), (48, 41525), (60, 41417), (61, 41414), (65, 41390),

Gene: AugsMagnumOpus_77 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for AugsMagnumOpus_77:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: AvatarAhPeg_66 Start: 42517, Stop: 42293, Start Num: 31
Candidate Starts for AvatarAhPeg_66:
(Start: 31 @42517 has 50 MA's), (43, 42460), (44, 42454), (67, 42298),

Gene: Ayanochan_72 Start: 42614, Stop: 42396, Start Num: 33
Candidate Starts for Ayanochan_72:
(Start: 33 @42614 has 32 MA's), (44, 42557), (48, 42539),

Gene: BabyBack_69 Start: 43490, Stop: 43272, Start Num: 33
Candidate Starts for BabyBack_69:
(Start: 33 @43490 has 32 MA's), (43, 43439), (48, 43415), (59, 43310),

Gene: Bachome_73 Start: 42394, Stop: 42131, Start Num: 34
Candidate Starts for Bachome_73:
(Start: 34 @42394 has 72 MA's), (43, 42340), (44, 42334), (54, 42262), (64, 42175),

Gene: Backyardigan_64 Start: 42663, Stop: 42439, Start Num: 31
Candidate Starts for Backyardigan_64:
(Start: 31 @42663 has 50 MA's), (43, 42606), (44, 42600), (54, 42549), (67, 42444),

Gene: Badger_65 Start: 42631, Stop: 42407, Start Num: 31
Candidate Starts for Badger_65:
(Start: 31 @42631 has 50 MA's), (43, 42574), (44, 42568), (54, 42517), (67, 42412),

Gene: Baehexic_71 Start: 43242, Stop: 43015, Start Num: 30
Candidate Starts for Baehexic_71:
(Start: 30 @43242 has 34 MA's), (43, 43188), (60, 43050),

Gene: BangNhom_65 Start: 42796, Stop: 42572, Start Num: 31
Candidate Starts for BangNhom_65:
(Start: 31 @42796 has 50 MA's), (43, 42739), (44, 42733), (67, 42577),

Gene: Beauxregard13_73 Start: 42845, Stop: 42633, Start Num: 38
Candidate Starts for Beauxregard13_73:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Beemo_74 Start: 42869, Stop: 42651, Start Num: 33
Candidate Starts for Beemo_74:
(Start: 33 @42869 has 32 MA's), (44, 42812), (48, 42794),

Gene: Bellris_72 Start: 42751, Stop: 42518, Start Num: 25
Candidate Starts for Bellris_72:
(13, 42790), (Start: 25 @42751 has 1 MA's), (44, 42679), (48, 42661),

Gene: BellusTerra_68 Start: 42397, Stop: 42173, Start Num: 31
Candidate Starts for BellusTerra_68:
(Start: 31 @42397 has 50 MA's), (43, 42340), (44, 42334), (67, 42178),

Gene: BengiVuitton_72 Start: 43467, Stop: 43270, Start Num: 33
Candidate Starts for BengiVuitton_72:
(Start: 33 @43467 has 32 MA's), (43, 43416), (44, 43410), (48, 43392),

Gene: BennyP_73 Start: 41847, Stop: 41548, Start Num: 10
Candidate Starts for BennyP_73:
(3, 41943), (Start: 5 @41910 has 3 MA's), (Start: 10 @41847 has 23 MA's), (22, 41796), (43, 41715), (48, 41691), (60, 41583), (61, 41580), (65, 41556),

Gene: Benvolio_70 Start: 43151, Stop: 42927, Start Num: 28
Candidate Starts for Benvolio_70:
(Start: 28 @43151 has 7 MA's), (43, 43100), (58, 42968), (59, 42965), (60, 42962),

Gene: BiancaTri92_71 Start: 43505, Stop: 43281, Start Num: 34
Candidate Starts for BiancaTri92_71:
(Start: 34 @43505 has 72 MA's), (43, 43454), (59, 43319), (65, 43289),

Gene: Bigflo_71 Start: 42841, Stop: 42629, Start Num: 38
Candidate Starts for Bigflo_71:

(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: BlessJoy_74 Start: 42203, Stop: 41904, Start Num: 10
Candidate Starts for BlessJoy_74:
(3, 42299), (Start: 5 @42266 has 3 MA's), (Start: 10 @42203 has 23 MA's), (22, 42152), (43, 42071), (48, 42047), (60, 41939), (61, 41936), (65, 41912),

Gene: Blinn1_78 Start: 42893, Stop: 42633, Start Num: 17
Candidate Starts for Blinn1_78:
(Start: 17 @42893 has 1 MA's), (48, 42776), (60, 42668),

Gene: Blue7_75 Start: 41901, Stop: 41602, Start Num: 10
Candidate Starts for Blue7_75:
(3, 41997), (Start: 5 @41964 has 3 MA's), (Start: 10 @41901 has 23 MA's), (22, 41850), (43, 41769), (48, 41745), (60, 41637), (61, 41634), (65, 41610),

Gene: BobSwaget_65 Start: 41376, Stop: 41158, Start Num: 32
Candidate Starts for BobSwaget_65:
(Start: 32 @41376 has 10 MA's), (48, 41301), (59, 41196), (60, 41193),

Gene: Bowtie_76 Start: 43522, Stop: 43295, Start Num: 34
Candidate Starts for Bowtie_76:
(Start: 34 @43522 has 72 MA's), (43, 43468), (44, 43462), (54, 43390),

Gene: Bradman_75 Start: 42863, Stop: 42621, Start Num: 34
Candidate Starts for Bradman_75:
(Start: 21 @42902 has 4 MA's), (Start: 34 @42863 has 72 MA's), (43, 42809), (44, 42803), (48, 42785), (59, 42674),

Gene: BreSam8_74 Start: 42835, Stop: 42623, Start Num: 38
Candidate Starts for BreSam8_74:
(Start: 37 @42838 has 35 MA's), (Start: 38 @42835 has 31 MA's), (44, 42802), (59, 42673), (67, 42628),

Gene: BubbleTrouble_66 Start: 42384, Stop: 42160, Start Num: 31
Candidate Starts for BubbleTrouble_66:
(Start: 31 @42384 has 50 MA's), (43, 42327), (44, 42321), (54, 42270), (67, 42165),

Gene: Bud_70 Start: 41952, Stop: 41689, Start Num: 34
Candidate Starts for Bud_70:
(Start: 34 @41952 has 72 MA's), (43, 41898), (44, 41892), (54, 41820), (64, 41733),

Gene: Bugsy_74 Start: 43814, Stop: 43590, Start Num: 30
Candidate Starts for Bugsy_74:
(Start: 30 @43814 has 34 MA's), (43, 43763), (58, 43631), (59, 43628), (60, 43625),

Gene: Bumblebee11_65 Start: 42633, Stop: 42409, Start Num: 31
Candidate Starts for Bumblebee11_65:
(Start: 31 @42633 has 50 MA's), (43, 42576), (44, 42570), (54, 42519), (67, 42414),

Gene: BuzzBuzz_68 Start: 42872, Stop: 42657, Start Num: 37
Candidate Starts for BuzzBuzz_68:

(Start: 37 @42872 has 35 MA's), (Start: 38 @42869 has 31 MA's), (44, 42836), (67, 42662),

Gene: Bxz2_69 Start: 42876, Stop: 42664, Start Num: 38
Candidate Starts for Bxz2_69:
(Start: 37 @42879 has 35 MA's), (Start: 38 @42876 has 31 MA's), (44, 42843), (59, 42714), (67, 42669),

Gene: C3_68 Start: 43459, Stop: 43217, Start Num: 34
Candidate Starts for C3_68:
(Start: 34 @43459 has 72 MA's), (43, 43405), (48, 43381), (58, 43273),

Gene: CRB1_74 Start: 44013, Stop: 43816, Start Num: 32
Candidate Starts for CRB1_74:
(Start: 32 @44013 has 10 MA's), (43, 43962), (48, 43938), (60, 43824),

Gene: Calvinny_71 Start: 42664, Stop: 42446, Start Num: 36
Candidate Starts for Calvinny_71:
(16, 42733), (Start: 36 @42664 has 12 MA's), (44, 42625), (51, 42589), (59, 42496), (67, 42451),

Gene: Caraxes_75 Start: 42129, Stop: 41929, Start Num: 30
Candidate Starts for Caraxes_75:
(7, 42240), (8, 42222), (Start: 18 @42168 has 4 MA's), (Start: 30 @42129 has 34 MA's), (43, 42075), (48, 42051), (60, 41937),

Gene: Catalina_76 Start: 42925, Stop: 42707, Start Num: 33
Candidate Starts for Catalina_76:
(Start: 33 @42925 has 32 MA's), (44, 42868), (48, 42850),

Gene: Centaur_73 Start: 43457, Stop: 43230, Start Num: 30
Candidate Starts for Centaur_73:
(Start: 30 @43457 has 34 MA's), (43, 43403), (60, 43265),

Gene: CentreCat_67 Start: 42396, Stop: 42172, Start Num: 31
Candidate Starts for CentreCat_67:
(Start: 31 @42396 has 50 MA's), (43, 42339), (44, 42333), (67, 42177),

Gene: Cerulean_68 Start: 42797, Stop: 42573, Start Num: 31
Candidate Starts for Cerulean_68:
(Start: 31 @42797 has 50 MA's), (43, 42740), (44, 42734), (67, 42578),

Gene: ChampagnePapi_69 Start: 42796, Stop: 42572, Start Num: 31
Candidate Starts for ChampagnePapi_69:
(Start: 31 @42796 has 50 MA's), (43, 42739), (44, 42733), (67, 42577),

Gene: Changeling_71 Start: 43693, Stop: 43472, Start Num: 34
Candidate Starts for Changeling_71:
(Start: 34 @43693 has 72 MA's), (43, 43639), (60, 43507),

Gene: Che12_76 Start: 42288, Stop: 42049, Start Num: 18
Candidate Starts for Che12_76:
(7, 42348), (Start: 18 @42288 has 4 MA's), (Start: 30 @42249 has 34 MA's), (43, 42195), (44, 42189), (46, 42180), (48, 42171), (60, 42057),

Gene: ChipMunk_73 Start: 44854, Stop: 44630, Start Num: 34
Candidate Starts for ChipMunk_73:
(Start: 34 @44854 has 72 MA's), (43, 44803), (58, 44671), (59, 44668), (60, 44665), (65, 44638),

Gene: Chupacabra_64 Start: 41694, Stop: 41500, Start Num: 33
Candidate Starts for Chupacabra_64:
(Start: 33 @41694 has 32 MA's), (54, 41598), (57, 41550),

Gene: Cici_66 Start: 42648, Stop: 42424, Start Num: 31
Candidate Starts for Cici_66:
(Start: 31 @42648 has 50 MA's), (43, 42591), (44, 42585), (54, 42534), (67, 42429),

Gene: Cindaradix_63 Start: 42259, Stop: 42035, Start Num: 31
Candidate Starts for Cindaradix_63:
(Start: 31 @42259 has 50 MA's), (43, 42202), (44, 42196), (54, 42145), (67, 42040),

Gene: Cintron_67 Start: 42507, Stop: 42283, Start Num: 31
Candidate Starts for Cintron_67:
(Start: 31 @42507 has 50 MA's), (43, 42450), (44, 42444), (67, 42288),

Gene: CloudWang3_74 Start: 42193, Stop: 41894, Start Num: 10
Candidate Starts for CloudWang3_74:
(3, 42289), (Start: 5 @42256 has 3 MA's), (Start: 10 @42193 has 23 MA's), (22, 42142), (43, 42061), (48, 42037), (60, 41929), (61, 41926), (65, 41902),

Gene: ClownCar_71 Start: 42657, Stop: 42439, Start Num: 36
Candidate Starts for ClownCar_71:
(16, 42726), (Start: 36 @42657 has 12 MA's), (44, 42618), (51, 42582), (59, 42489), (67, 42444),

Gene: CogOmlette_72 Start: 42748, Stop: 42515, Start Num: 25
Candidate Starts for CogOmlette_72:
(13, 42787), (Start: 25 @42748 has 1 MA's), (44, 42676), (48, 42658),

Gene: Colbster_70 Start: 42848, Stop: 42633, Start Num: 37
Candidate Starts for Colbster_70:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Colin_72 Start: 44437, Stop: 44219, Start Num: 33
Candidate Starts for Colin_72:
(Start: 33 @44437 has 32 MA's), (43, 44386), (48, 44362),

Gene: Conquerage_72 Start: 42600, Stop: 42382, Start Num: 33
Candidate Starts for Conquerage_72:
(Start: 33 @42600 has 32 MA's), (44, 42543), (48, 42525),

Gene: Cookiedough_74 Start: 42687, Stop: 42322, Start Num: 5
Candidate Starts for Cookiedough_74:
(1, 42786), (2, 42753), (3, 42720), (Start: 5 @42687 has 3 MA's), (48, 42465),

Gene: Croquant_71 Start: 42839, Stop: 42627, Start Num: 38
Candidate Starts for Croquant_71:

(Start: 37 @42842 has 35 MA's), (Start: 38 @42839 has 31 MA's), (44, 42806), (59, 42677), (67, 42632),

Gene: Crucio_73 Start: 43811, Stop: 43587, Start Num: 30
Candidate Starts for Crucio_73:
(Start: 30 @43811 has 34 MA's), (58, 43628), (59, 43625), (60, 43622),

Gene: Cullens_74 Start: 42844, Stop: 42629, Start Num: 37
Candidate Starts for Cullens_74:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: D29_68.1 Start: 44004, Stop: 43762, Start Num: 34
Candidate Starts for D29_68.1:
(Start: 34 @44004 has 72 MA's), (43, 43950), (48, 43926),

Gene: D32_74 Start: 44004, Stop: 43762, Start Num: 34
Candidate Starts for D32_74:
(Start: 34 @44004 has 72 MA's), (43, 43950), (48, 43926),

Gene: DBQu4n_75 Start: 43984, Stop: 43742, Start Num: 34
Candidate Starts for DBQu4n_75:
(Start: 34 @43984 has 72 MA's), (43, 43930), (48, 43906),

Gene: DaHudson_73 Start: 42837, Stop: 42622, Start Num: 37
Candidate Starts for DaHudson_73:
(Start: 37 @42837 has 35 MA's), (Start: 38 @42834 has 31 MA's), (44, 42801), (59, 42672), (67, 42627),

Gene: Daishi_73 Start: 41709, Stop: 41497, Start Num: 38
Candidate Starts for Daishi_73:
(Start: 37 @41712 has 35 MA's), (Start: 38 @41709 has 31 MA's), (41, 41703), (44, 41676), (59, 41547), (67, 41502),

Gene: Dalmatian_73 Start: 43630, Stop: 43406, Start Num: 30
Candidate Starts for Dalmatian_73:
(Start: 30 @43630 has 34 MA's), (58, 43447), (59, 43444), (60, 43441),

Gene: Darrell_75 Start: 43432, Stop: 43193, Start Num: 23
Candidate Starts for Darrell_75:
(12, 43462), (20, 43444), (Start: 23 @43432 has 1 MA's), (44, 43354), (48, 43336),

Gene: DarthPhader_70 Start: 44013, Stop: 43786, Start Num: 34
Candidate Starts for DarthPhader_70:
(Start: 34 @44013 has 72 MA's), (43, 43959), (46, 43944), (59, 43824), (60, 43821),

Gene: Datway_66 Start: 42619, Stop: 42395, Start Num: 31
Candidate Starts for Datway_66:
(Start: 31 @42619 has 50 MA's), (43, 42562), (44, 42556), (54, 42505), (67, 42400),

Gene: Deloris_72 Start: 43163, Stop: 42966, Start Num: 33
Candidate Starts for Deloris_72:
(Start: 33 @43163 has 32 MA's), (43, 43112), (44, 43106), (48, 43088),

Gene: Dieselweasel_74 Start: 42843, Stop: 42631, Start Num: 38
Candidate Starts for Dieselweasel_74:
(Start: 37 @42846 has 35 MA's), (Start: 38 @42843 has 31 MA's), (44, 42810), (59, 42681), (67, 42636),

Gene: Dignity_74 Start: 43852, Stop: 43628, Start Num: 30
Candidate Starts for Dignity_74:
(Start: 30 @43852 has 34 MA's), (43, 43801), (58, 43669), (59, 43666), (60, 43663),

Gene: Drake55_74 Start: 43531, Stop: 43331, Start Num: 32
Candidate Starts for Drake55_74:
(Start: 32 @43531 has 10 MA's), (43, 43477), (44, 43471), (48, 43453), (60, 43339),

Gene: Drake94_64 Start: 40814, Stop: 40575, Start Num: 34
Candidate Starts for Drake94_64:
(Start: 34 @40814 has 72 MA's), (44, 40754), (67, 40580),

Gene: DudeLittle_71 Start: 43396, Stop: 43172, Start Num: 30
Candidate Starts for DudeLittle_71:
(Start: 30 @43396 has 34 MA's), (58, 43213), (59, 43210), (60, 43207),

Gene: Duplo_75 Start: 44041, Stop: 43799, Start Num: 34
Candidate Starts for Duplo_75:
(Start: 34 @44041 has 72 MA's), (43, 43987), (48, 43963),

Gene: DustyMartin_68 Start: 41850, Stop: 41611, Start Num: 34
Candidate Starts for DustyMartin_68:
(Start: 34 @41850 has 72 MA's), (44, 41790), (67, 41616),

Gene: EZMoney23_69 Start: 43235, Stop: 43014, Start Num: 34
Candidate Starts for EZMoney23_69:
(19, 43271), (Start: 34 @43235 has 72 MA's), (43, 43181), (48, 43157), (62, 43031),

Gene: Eagle_66 Start: 42418, Stop: 42194, Start Num: 31
Candidate Starts for Eagle_66:
(Start: 31 @42418 has 50 MA's), (43, 42361), (44, 42355), (67, 42199),

Gene: EagleEye_77 Start: 43527, Stop: 43327, Start Num: 32
Candidate Starts for EagleEye_77:
(24, 43551), (27, 43533), (Start: 32 @43527 has 10 MA's), (55, 43368),

Gene: Ebony_75 Start: 43086, Stop: 42859, Start Num: 34
Candidate Starts for Ebony_75:
(Start: 34 @43086 has 72 MA's), (44, 43026), (54, 42954),

Gene: Echild_73 Start: 43175, Stop: 42951, Start Num: 28
Candidate Starts for Echild_73:
(Start: 28 @43175 has 7 MA's), (43, 43124), (58, 42992), (59, 42989), (60, 42986),

Gene: Edison31_63 Start: 41608, Stop: 41375, Start Num: 35
Candidate Starts for Edison31_63:
(Start: 35 @41608 has 5 MA's), (43, 41560), (44, 41554), (67, 41380),

Gene: EdogawaKiddo_72 Start: 42891, Stop: 42673, Start Num: 33
Candidate Starts for EdogawaKiddo_72:
(Start: 33 @42891 has 32 MA's), (44, 42834), (48, 42816),

Gene: Eidsmoe_72 Start: 42592, Stop: 42374, Start Num: 33
Candidate Starts for Eidsmoe_72:
(Start: 33 @42592 has 32 MA's), (44, 42535), (48, 42517),

Gene: EmyBug_71 Start: 42594, Stop: 42376, Start Num: 33
Candidate Starts for EmyBug_71:
(Start: 33 @42594 has 32 MA's), (44, 42537), (48, 42519),

Gene: EpicPhail_75 Start: 42845, Stop: 42633, Start Num: 38
Candidate Starts for EpicPhail_75:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Equemioh13_72 Start: 43362, Stop: 43135, Start Num: 30
Candidate Starts for Equemioh13_72:
(Start: 30 @43362 has 34 MA's), (43, 43308), (60, 43170),

Gene: Et2Brutus_74 Start: 43049, Stop: 42822, Start Num: 34
Candidate Starts for Et2Brutus_74:
(Start: 34 @43049 has 72 MA's), (43, 42995), (44, 42989), (54, 42917),

Gene: Eurydice_68 Start: 42393, Stop: 42169, Start Num: 31
Candidate Starts for Eurydice_68:
(Start: 31 @42393 has 50 MA's), (43, 42336), (44, 42330), (67, 42174),

Gene: EvilGenius_72 Start: 44855, Stop: 44631, Start Num: 34
Candidate Starts for EvilGenius_72:
(Start: 34 @44855 has 72 MA's), (43, 44804), (58, 44672), (59, 44669), (60, 44666), (65, 44639),

Gene: ExplosioNervosa_72 Start: 42660, Stop: 42442, Start Num: 33
Candidate Starts for ExplosioNervosa_72:
(Start: 33 @42660 has 32 MA's), (44, 42603), (48, 42585),

Gene: Fameo_71 Start: 43438, Stop: 43214, Start Num: 30
Candidate Starts for Fameo_71:
(Start: 30 @43438 has 34 MA's), (43, 43387), (58, 43255), (60, 43249), (65, 43222),

Gene: Farber_74 Start: 42834, Stop: 42619, Start Num: 37
Candidate Starts for Farber_74:
(Start: 37 @42834 has 35 MA's), (Start: 38 @42831 has 31 MA's), (44, 42798), (59, 42669), (67, 42624),

Gene: FatCactus_67 Start: 41591, Stop: 41430, Start Num: 40
Candidate Starts for FatCactus_67:
(4, 41792), (6, 41768), (40, 41591), (52, 41522), (53, 41519), (60, 41438),

Gene: Fayely_72 Start: 42561, Stop: 42343, Start Num: 33
Candidate Starts for Fayely_72:

(Start: 33 @42561 has 32 MA's), (44, 42504),

Gene: Fernando_74 Start: 42841, Stop: 42629, Start Num: 38
Candidate Starts for Fernando_74:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Fibonacci_74 Start: 43055, Stop: 42828, Start Num: 34
Candidate Starts for Fibonacci_74:
(Start: 34 @43055 has 72 MA's), (43, 43001), (44, 42995), (54, 42923),

Gene: FiringLine_73 Start: 43793, Stop: 43569, Start Num: 30
Candidate Starts for FiringLine_73:
(Start: 30 @43793 has 34 MA's), (58, 43610), (59, 43607), (60, 43604),

Gene: First_0073 Start: 43417, Stop: 43193, Start Num: 34
Candidate Starts for First_0073:
(Start: 34 @43417 has 72 MA's), (43, 43366), (59, 43231), (60, 43228), (65, 43201),

Gene: Flare16_73 Start: 43501, Stop: 43274, Start Num: 30
Candidate Starts for Flare16_73:
(Start: 30 @43501 has 34 MA's), (43, 43447), (60, 43309),

Gene: Flaverint_76 Start: 43513, Stop: 43286, Start Num: 34
Candidate Starts for Flaverint_76:
(Start: 34 @43513 has 72 MA's), (43, 43459), (44, 43453), (54, 43381),

Gene: ForesterFrank_68 Start: 43507, Stop: 43286, Start Num: 34
Candidate Starts for ForesterFrank_68:
(Start: 34 @43507 has 72 MA's), (43, 43453), (60, 43321),

Gene: Gail_74 Start: 43840, Stop: 43619, Start Num: 28
Candidate Starts for Gail_74:
(Start: 28 @43840 has 7 MA's), (43, 43786), (44, 43780), (48, 43762), (60, 43654),

Gene: Garak_75 Start: 42144, Stop: 41845, Start Num: 10
Candidate Starts for Garak_75:
(3, 42240), (Start: 5 @42207 has 3 MA's), (Start: 10 @42144 has 23 MA's), (22, 42093), (43, 42012), (48, 41988), (60, 41880), (61, 41877), (65, 41853),

Gene: GaugeLDP_68 Start: 43061, Stop: 42840, Start Num: 33
Candidate Starts for GaugeLDP_68:
(Start: 33 @43061 has 32 MA's), (43, 43007), (48, 42983),

Gene: Gemma_71 Start: 42660, Stop: 42442, Start Num: 36
Candidate Starts for Gemma_71:
(16, 42729), (Start: 36 @42660 has 12 MA's), (44, 42621), (51, 42585), (59, 42492), (67, 42447),

Gene: Georgie2_74 Start: 43838, Stop: 43614, Start Num: 30
Candidate Starts for Georgie2_74:
(Start: 30 @43838 has 34 MA's), (58, 43655), (59, 43652), (60, 43649),

Gene: Gilberta_72 Start: 42389, Stop: 42126, Start Num: 34

Candidate Starts for Gilberta_72:
(Start: 34 @42389 has 72 MA's), (43, 42335), (44, 42329), (54, 42257), (64, 42170),

Gene: GingkoMaracino_74 Start: 42730, Stop: 42515, Start Num: 37
Candidate Starts for GingkoMaracino_74:
(Start: 37 @42730 has 35 MA's), (Start: 38 @42727 has 31 MA's), (44, 42694), (59, 42565), (67, 42520),

Gene: Gladiator_71 Start: 42047, Stop: 41748, Start Num: 10
Candidate Starts for Gladiator_71:
(3, 42143), (Start: 5 @42110 has 3 MA's), (Start: 10 @42047 has 23 MA's), (22, 41996), (43, 41915), (48, 41891), (66, 41753),

Gene: Goose_67 Start: 41510, Stop: 41316, Start Num: 33
Candidate Starts for Goose_67:
(Start: 33 @41510 has 32 MA's), (54, 41414), (57, 41366),

Gene: Gratitude_70 Start: 43362, Stop: 43135, Start Num: 30
Candidate Starts for Gratitude_70:
(Start: 30 @43362 has 34 MA's), (43, 43308), (60, 43170),

Gene: Grif_72 Start: 42915, Stop: 42703, Start Num: 38
Candidate Starts for Grif_72:
(Start: 37 @42918 has 35 MA's), (Start: 38 @42915 has 31 MA's), (44, 42882), (59, 42753), (67, 42708),

Gene: Grub_72 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for Grub_72:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: Grum1_73 Start: 42844, Stop: 42629, Start Num: 37
Candidate Starts for Grum1_73:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Gruunaga_73 Start: 42002, Stop: 41703, Start Num: 10
Candidate Starts for Gruunaga_73:
(3, 42098), (Start: 5 @42065 has 3 MA's), (Start: 10 @42002 has 23 MA's), (22, 41951), (43, 41870), (48, 41846), (60, 41738), (61, 41735), (65, 41711),

Gene: GtownJaz_74 Start: 42842, Stop: 42630, Start Num: 38
Candidate Starts for GtownJaz_74:
(Start: 37 @42845 has 35 MA's), (Start: 38 @42842 has 31 MA's), (44, 42809), (59, 42680), (67, 42635),

Gene: Gwennie_69 Start: 42845, Stop: 42633, Start Num: 38
Candidate Starts for Gwennie_69:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Hammer_74 Start: 41709, Stop: 41410, Start Num: 10
Candidate Starts for Hammer_74:

(3, 41805), (Start: 5 @41772 has 3 MA's), (Start: 10 @41709 has 23 MA's), (22, 41658), (43, 41577), (48, 41553), (60, 41445), (61, 41442), (65, 41418),

Gene: Hanray_72 Start: 42923, Stop: 42705, Start Num: 33
Candidate Starts for Hanray_72:
(Start: 33 @42923 has 32 MA's), (44, 42866), (48, 42848),

Gene: Happiness_66 Start: 42379, Stop: 42155, Start Num: 31
Candidate Starts for Happiness_66:
(Start: 31 @42379 has 50 MA's), (43, 42322), (44, 42316), (67, 42160),

Gene: HarryHoudini_73 Start: 43532, Stop: 43332, Start Num: 32
Candidate Starts for HarryHoudini_73:
(Start: 32 @43532 has 10 MA's), (43, 43478), (48, 43454), (60, 43340),

Gene: HashRod_75 Start: 42869, Stop: 42657, Start Num: 38
Candidate Starts for HashRod_75:
(Start: 37 @42872 has 35 MA's), (Start: 38 @42869 has 31 MA's), (44, 42836), (59, 42707), (67, 42662),

Gene: HaveUMetTed_74 Start: 42649, Stop: 42431, Start Num: 36
Candidate Starts for HaveUMetTed_74:
(16, 42718), (Start: 36 @42649 has 12 MA's), (44, 42610), (51, 42574), (59, 42481), (67, 42436),

Gene: Heffalump_70 Start: 43906, Stop: 43682, Start Num: 30
Candidate Starts for Heffalump_70:
(Start: 30 @43906 has 34 MA's), (43, 43855), (58, 43723), (60, 43717), (65, 43690), (66, 43687),

Gene: Heliosoles_71 Start: 42667, Stop: 42449, Start Num: 36
Candidate Starts for Heliosoles_71:
(16, 42736), (Start: 36 @42667 has 12 MA's), (44, 42628), (51, 42592), (59, 42499), (67, 42454),

Gene: Helmet_76 Start: 42144, Stop: 41845, Start Num: 10
Candidate Starts for Helmet_76:
(3, 42240), (Start: 5 @42207 has 3 MA's), (Start: 10 @42144 has 23 MA's), (22, 42093), (43, 42012), (48, 41988), (60, 41880), (61, 41877), (65, 41853),

Gene: Hercules11_74 Start: 42853, Stop: 42638, Start Num: 37
Candidate Starts for Hercules11_74:
(Start: 37 @42853 has 35 MA's), (Start: 38 @42850 has 31 MA's), (44, 42817), (59, 42688), (67, 42643),

Gene: Hexamo_73 Start: 41678, Stop: 41379, Start Num: 10
Candidate Starts for Hexamo_73:
(3, 41774), (Start: 5 @41741 has 3 MA's), (Start: 10 @41678 has 23 MA's), (22, 41627), (43, 41546), (48, 41522), (60, 41414), (61, 41411), (65, 41387),

Gene: HippoHollow_70 Start: 44531, Stop: 44307, Start Num: 34
Candidate Starts for HippoHollow_70:
(Start: 34 @44531 has 72 MA's), (59, 44345), (60, 44342), (65, 44315),

Gene: Holex_72 Start: 42939, Stop: 42721, Start Num: 33
Candidate Starts for Holex_72:

(Start: 33 @42939 has 32 MA's), (44, 42882), (48, 42864),

Gene: HortumSL17_75 Start: 42923, Stop: 42705, Start Num: 33
Candidate Starts for HortumSL17_75:
(Start: 33 @42923 has 32 MA's), (44, 42866), (48, 42848),

Gene: Hutc2_70 Start: 41938, Stop: 41675, Start Num: 34
Candidate Starts for Hutc2_70:
(Start: 34 @41938 has 72 MA's), (43, 41884), (44, 41878), (54, 41806), (64, 41719),

Gene: ICleared_66 Start: 42425, Stop: 42201, Start Num: 31
Candidate Starts for ICleared_66:
(Start: 31 @42425 has 50 MA's), (43, 42368), (44, 42362), (67, 42206),

Gene: Indra_77 Start: 42145, Stop: 41846, Start Num: 10
Candidate Starts for Indra_77:
(3, 42241), (Start: 5 @42208 has 3 MA's), (Start: 10 @42145 has 23 MA's), (22, 42094), (43, 42013), (48, 41989), (60, 41881), (61, 41878), (65, 41854),

Gene: Insomnia_74 Start: 43230, Stop: 43003, Start Num: 34
Candidate Starts for Insomnia_74:
(Start: 34 @43230 has 72 MA's), (43, 43176), (44, 43170), (54, 43098),

Gene: IronMan_70 Start: 44663, Stop: 44424, Start Num: 34
Candidate Starts for IronMan_70:
(Start: 34 @44663 has 72 MA's), (44, 44600), (48, 44582), (59, 44477),

Gene: JHC117_70 Start: 42842, Stop: 42627, Start Num: 37
Candidate Starts for JHC117_70:
(Start: 37 @42842 has 35 MA's), (Start: 38 @42839 has 31 MA's), (44, 42806), (59, 42677), (67, 42632),

Gene: Jaan_71 Start: 44833, Stop: 44594, Start Num: 34
Candidate Starts for Jaan_71:
(Start: 34 @44833 has 72 MA's), (44, 44770), (48, 44752), (59, 44647),

Gene: Jabith_74 Start: 43247, Stop: 43020, Start Num: 34
Candidate Starts for Jabith_74:
(Start: 34 @43247 has 72 MA's), (43, 43193), (44, 43187), (54, 43115),

Gene: Jeeves_76 Start: 42825, Stop: 42604, Start Num: 28
Candidate Starts for Jeeves_76:
(Start: 28 @42825 has 7 MA's), (43, 42771), (44, 42765), (48, 42747), (60, 42639),

Gene: Jeffabunny_74 Start: 41771, Stop: 41472, Start Num: 10
Candidate Starts for Jeffabunny_74:
(3, 41867), (Start: 5 @41834 has 3 MA's), (Start: 10 @41771 has 23 MA's), (22, 41720), (43, 41639), (48, 41615), (60, 41507), (61, 41504), (65, 41480),

Gene: JenCasNa_75 Start: 42844, Stop: 42629, Start Num: 37
Candidate Starts for JenCasNa_75:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: JeppNRM_74 Start: 42665, Stop: 42447, Start Num: 36
Candidate Starts for JeppNRM_74:
(16, 42734), (Start: 36 @42665 has 12 MA's), (44, 42626), (51, 42590), (54, 42557), (59, 42497), (67, 42452),

Gene: Jerm_74 Start: 43834, Stop: 43610, Start Num: 30
Candidate Starts for Jerm_74:
(Start: 30 @43834 has 34 MA's), (43, 43783), (58, 43651), (59, 43648), (60, 43645),

Gene: JetBlade_67 Start: 42387, Stop: 42163, Start Num: 31
Candidate Starts for JetBlade_67:
(Start: 31 @42387 has 50 MA's), (43, 42330), (44, 42324), (67, 42168),

Gene: Jiawan_71 Start: 42955, Stop: 42737, Start Num: 33
Candidate Starts for Jiawan_71:
(Start: 33 @42955 has 32 MA's), (44, 42898), (48, 42880),

Gene: Jobu08_70 Start: 42676, Stop: 42461, Start Num: 37
Candidate Starts for Jobu08_70:
(Start: 37 @42676 has 35 MA's), (Start: 38 @42673 has 31 MA's), (44, 42640), (59, 42511), (67, 42466),

Gene: Joselito_74 Start: 43267, Stop: 43040, Start Num: 34
Candidate Starts for Joselito_74:
(Start: 34 @43267 has 72 MA's), (43, 43213), (44, 43207), (54, 43135),

Gene: JoshKayV_73 Start: 43858, Stop: 43661, Start Num: 32
Candidate Starts for JoshKayV_73:
(Start: 32 @43858 has 10 MA's), (48, 43783),

Gene: Jsquared_76 Start: 43035, Stop: 42751, Start Num: 21
Candidate Starts for Jsquared_76:
(Start: 21 @43035 has 4 MA's), (43, 42942), (44, 42936), (46, 42927), (56, 42828), (59, 42804),

Gene: KADY_71 Start: 42869, Stop: 42657, Start Num: 38
Candidate Starts for KADY_71:
(Start: 37 @42872 has 35 MA's), (Start: 38 @42869 has 31 MA's), (44, 42836), (67, 42662),

Gene: Kalnoky_74 Start: 42661, Stop: 42443, Start Num: 36
Candidate Starts for Kalnoky_74:
(16, 42730), (Start: 36 @42661 has 12 MA's), (44, 42622), (51, 42586), (54, 42553), (59, 42493), (67, 42448),

Gene: Kalpine_72 Start: 43855, Stop: 43637, Start Num: 33
Candidate Starts for Kalpine_72:
(Start: 33 @43855 has 32 MA's), (43, 43804), (48, 43780), (65, 43645),

Gene: Katalie136_66 Start: 42633, Stop: 42409, Start Num: 31
Candidate Starts for Katalie136_66:
(Start: 31 @42633 has 50 MA's), (43, 42576), (44, 42570), (54, 42519), (67, 42414),

Gene: Kazan_75 Start: 42042, Stop: 41680, Start Num: 5

Candidate Starts for Kazan_75:
(2, 42108), (3, 42075), (Start: 5 @42042 has 3 MA's), (48, 41823),

Gene: Kerberos_75 Start: 44003, Stop: 43761, Start Num: 34
Candidate Starts for Kerberos_75:
(Start: 34 @44003 has 72 MA's), (43, 43949), (48, 43925),

Gene: Keziacharles14_71 Start: 43500, Stop: 43279, Start Num: 33
Candidate Starts for Keziacharles14_71:
(Start: 33 @43500 has 32 MA's), (44, 43440), (48, 43422),

Gene: Kimba_72 Start: 42767, Stop: 42540, Start Num: 34
Candidate Starts for Kimba_72:
(Start: 34 @42767 has 72 MA's), (43, 42713), (44, 42707), (54, 42635),

Gene: Kimona_66 Start: 41475, Stop: 41236, Start Num: 35
Candidate Starts for Kimona_66:
(Start: 35 @41475 has 5 MA's), (Start: 36 @41457 has 12 MA's), (43, 41424), (44, 41418),

Gene: KingCyrus_72 Start: 44850, Stop: 44626, Start Num: 34
Candidate Starts for KingCyrus_72:
(Start: 34 @44850 has 72 MA's), (43, 44799), (58, 44667), (59, 44664), (60, 44661), (65, 44634),

Gene: Kinmap_75 Start: 42177, Stop: 41995, Start Num: 34
Candidate Starts for Kinmap_75:
(Start: 34 @42177 has 72 MA's), (45, 42123), (47, 42117), (49, 42102),

Gene: KittenMittens_63 Start: 40822, Stop: 40583, Start Num: 34
Candidate Starts for KittenMittens_63:
(Start: 34 @40822 has 72 MA's), (44, 40762), (67, 40588),

Gene: Koko_75 Start: 42533, Stop: 42234, Start Num: 10
Candidate Starts for Koko_75:
(3, 42629), (Start: 5 @42596 has 3 MA's), (Start: 10 @42533 has 23 MA's), (22, 42482), (43, 42401),
(48, 42377), (60, 42269), (61, 42266), (65, 42242),

Gene: Kratark_66 Start: 42394, Stop: 42170, Start Num: 31
Candidate Starts for Kratark_66:
(Start: 31 @42394 has 50 MA's), (43, 42337), (44, 42331), (67, 42175),

Gene: Kremtemulon_66 Start: 42490, Stop: 42266, Start Num: 31
Candidate Starts for Kremtemulon_66:
(Start: 31 @42490 has 50 MA's), (43, 42433), (44, 42427), (67, 42271),

Gene: Kristoff_65 Start: 42136, Stop: 41897, Start Num: 34
Candidate Starts for Kristoff_65:
(Start: 34 @42136 has 72 MA's), (44, 42076), (59, 41947), (67, 41902),

Gene: L5_68.1 Start: 42962, Stop: 42657, Start Num: 21
Candidate Starts for L5_68.1:
(Start: 21 @42962 has 4 MA's), (43, 42869), (44, 42863), (56, 42755), (59, 42731), (67, 42686),

Gene: LBerry_75 Start: 42848, Stop: 42633, Start Num: 37

Candidate Starts for LBerry_75:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: LHTSCC_69 Start: 42796, Stop: 42572, Start Num: 31
Candidate Starts for LHTSCC_69:
(Start: 31 @42796 has 50 MA's), (43, 42739), (44, 42733), (67, 42577),

Gene: LadyBird_76 Start: 44079, Stop: 43882, Start Num: 33
Candidate Starts for LadyBird_76:
(Start: 33 @44079 has 32 MA's), (43, 44028), (48, 44004),

Gene: Landor_71 Start: 44756, Stop: 44517, Start Num: 34
Candidate Starts for Landor_71:
(Start: 34 @44756 has 72 MA's), (44, 44693), (48, 44675), (59, 44570),

Gene: Larenn_69 Start: 43196, Stop: 42972, Start Num: 34
Candidate Starts for Larenn_69:
(Start: 34 @43196 has 72 MA's), (43, 43145), (44, 43139), (58, 43013), (59, 43010), (60, 43007), (65, 42980),

Gene: LarryKay_74 Start: 42870, Stop: 42658, Start Num: 38
Candidate Starts for LarryKay_74:
(Start: 37 @42873 has 35 MA's), (Start: 38 @42870 has 31 MA's), (44, 42837), (59, 42708), (67, 42663),

Gene: LeoAvram_66 Start: 42387, Stop: 42163, Start Num: 31
Candidate Starts for LeoAvram_66:
(Start: 31 @42387 has 50 MA's), (43, 42330), (44, 42324), (67, 42168),

Gene: Leogania_71 Start: 43883, Stop: 43659, Start Num: 34
Candidate Starts for Leogania_71:
(Start: 34 @43883 has 72 MA's), (43, 43832), (59, 43697), (60, 43694), (65, 43667),

Gene: Leviathan_74 Start: 43901, Stop: 43677, Start Num: 30
Candidate Starts for Leviathan_74:
(Start: 30 @43901 has 34 MA's), (43, 43850), (58, 43718), (59, 43715), (60, 43712),

Gene: LilTurb_73 Start: 43715, Stop: 43491, Start Num: 30
Candidate Starts for LilTurb_73:
(Start: 30 @43715 has 34 MA's), (43, 43664), (58, 43532), (59, 43529), (60, 43526),

Gene: Lilbunny_73 Start: 41775, Stop: 41476, Start Num: 10
Candidate Starts for Lilbunny_73:
(3, 41871), (Start: 5 @41838 has 3 MA's), (Start: 10 @41775 has 23 MA's), (22, 41724), (43, 41643), (48, 41619), (60, 41511), (61, 41508), (65, 41484),

Gene: Lilith_72 Start: 42834, Stop: 42622, Start Num: 38
Candidate Starts for Lilith_72:
(Start: 37 @42837 has 35 MA's), (Start: 38 @42834 has 31 MA's), (44, 42801), (59, 42672), (67, 42627),

Gene: Lilleskat_71 Start: 42880, Stop: 42662, Start Num: 33

Candidate Starts for Lilleskat_71:
(Start: 33 @42880 has 32 MA's), (44, 42823), (48, 42805),

Gene: LionsBait_72 Start: 44532, Stop: 44308, Start Num: 34
Candidate Starts for LionsBait_72:
(Start: 34 @44532 has 72 MA's), (59, 44346), (60, 44343), (65, 44316),

Gene: Lokk_66 Start: 42000, Stop: 41782, Start Num: 32
Candidate Starts for Lokk_66:
(Start: 32 @42000 has 10 MA's), (48, 41925), (59, 41820), (60, 41817),

Gene: LoneWolf_75 Start: 43122, Stop: 42901, Start Num: 34
Candidate Starts for LoneWolf_75:
(Start: 34 @43122 has 72 MA's), (44, 43062), (48, 43044),

Gene: Loser_74 Start: 43958, Stop: 43734, Start Num: 34
Candidate Starts for Loser_74:
(Start: 34 @43958 has 72 MA's), (43, 43907), (59, 43772), (60, 43769),

Gene: Louie6_73 Start: 42874, Stop: 42659, Start Num: 37
Candidate Starts for Louie6_73:
(Start: 37 @42874 has 35 MA's), (Start: 38 @42871 has 31 MA's), (44, 42838), (67, 42664),

Gene: Lowa_71 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for Lowa_71:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: Luchador_75 Start: 44307, Stop: 44086, Start Num: 28
Candidate Starts for Luchador_75:
(Start: 28 @44307 has 7 MA's), (43, 44253), (44, 44247), (48, 44229), (60, 44121),

Gene: Lucivia_76 Start: 43546, Stop: 43319, Start Num: 34
Candidate Starts for Lucivia_76:
(Start: 34 @43546 has 72 MA's), (43, 43492), (44, 43486), (54, 43414),

Gene: Lucyedi_76 Start: 43723, Stop: 43523, Start Num: 32
Candidate Starts for Lucyedi_76:
(24, 43747), (27, 43729), (Start: 32 @43723 has 10 MA's), (55, 43564),

Gene: LugYA_77 Start: 42845, Stop: 42630, Start Num: 37
Candidate Starts for LugYA_77:
(Start: 37 @42845 has 35 MA's), (Start: 38 @42842 has 31 MA's), (44, 42809), (59, 42680), (67, 42635),

Gene: MaCh_75 Start: 43510, Stop: 43283, Start Num: 34
Candidate Starts for MaCh_75:
(Start: 34 @43510 has 72 MA's), (43, 43456), (44, 43450), (54, 43378),

Gene: Mabel_75 Start: 43511, Stop: 43284, Start Num: 34
Candidate Starts for Mabel_75:
(Start: 34 @43511 has 72 MA's), (43, 43457), (44, 43451), (54, 43379),

Gene: MadMarie_72 Start: 42842, Stop: 42630, Start Num: 38
Candidate Starts for MadMarie_72:
(Start: 37 @42845 has 35 MA's), (Start: 38 @42842 has 31 MA's), (44, 42809), (59, 42680), (67, 42635),

Gene: Mainiac_73 Start: 42837, Stop: 42622, Start Num: 37
Candidate Starts for Mainiac_73:
(Start: 37 @42837 has 35 MA's), (Start: 38 @42834 has 31 MA's), (44, 42801), (59, 42672), (67, 42627),

Gene: MajorMajor_74 Start: 42863, Stop: 42621, Start Num: 34
Candidate Starts for MajorMajor_74:
(Start: 21 @42902 has 4 MA's), (Start: 34 @42863 has 72 MA's), (43, 42809), (44, 42803), (48, 42785), (59, 42674),

Gene: Malec_70 Start: 43763, Stop: 43539, Start Num: 34
Candidate Starts for Malec_70:
(Start: 34 @43763 has 72 MA's), (43, 43712), (44, 43706), (58, 43580), (59, 43577), (60, 43574), (65, 43547),

Gene: Malinsilva_76 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for Malinsilva_76:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: Manu_73 Start: 42664, Stop: 42446, Start Num: 36
Candidate Starts for Manu_73:
(16, 42733), (Start: 36 @42664 has 12 MA's), (44, 42625), (51, 42589), (59, 42496), (67, 42451),

Gene: MarQuardt_74 Start: 42846, Stop: 42631, Start Num: 37
Candidate Starts for MarQuardt_74:
(Start: 37 @42846 has 35 MA's), (Start: 38 @42843 has 31 MA's), (44, 42810), (59, 42681), (67, 42636),

Gene: Marie_72 Start: 42841, Stop: 42629, Start Num: 38
Candidate Starts for Marie_72:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Marius_74 Start: 42661, Stop: 42443, Start Num: 36
Candidate Starts for Marius_74:
(16, 42730), (Start: 36 @42661 has 12 MA's), (44, 42622), (51, 42586), (54, 42553), (59, 42493), (67, 42448),

Gene: Methuselah_67 Start: 42868, Stop: 42653, Start Num: 37
Candidate Starts for Methuselah_67:
(Start: 37 @42868 has 35 MA's), (Start: 38 @42865 has 31 MA's), (44, 42832), (59, 42703), (67, 42658),

Gene: Microwolf_70 Start: 42860, Stop: 42645, Start Num: 37
Candidate Starts for Microwolf_70:
(Start: 37 @42860 has 35 MA's), (Start: 38 @42857 has 31 MA's), (44, 42824), (59, 42695), (67, 42650),

Gene: MiculUcigas_73 Start: 43404, Stop: 43177, Start Num: 30
Candidate Starts for MiculUcigas_73:
(Start: 30 @43404 has 34 MA's), (43, 43350), (60, 43212),

Gene: Miko_66 Start: 42778, Stop: 42560, Start Num: 32
Candidate Starts for Miko_66:
(Start: 32 @42778 has 10 MA's), (48, 42703), (59, 42598), (60, 42595),

Gene: Minispark_72 Start: 42745, Stop: 42512, Start Num: 25
Candidate Starts for Minispark_72:
(13, 42784), (Start: 25 @42745 has 1 MA's), (44, 42673), (48, 42655),

Gene: Miramae_66 Start: 42179, Stop: 41955, Start Num: 31
Candidate Starts for Miramae_66:
(Start: 31 @42179 has 50 MA's), (43, 42122), (44, 42116), (67, 41960),

Gene: Misomonster_75 Start: 42871, Stop: 42656, Start Num: 37
Candidate Starts for Misomonster_75:
(Start: 37 @42871 has 35 MA's), (Start: 38 @42868 has 31 MA's), (44, 42835), (67, 42661),

Gene: MissWhite_71 Start: 41889, Stop: 41647, Start Num: 34
Candidate Starts for MissWhite_71:
(Start: 34 @41889 has 72 MA's), (43, 41835), (44, 41829), (56, 41724), (59, 41700),

Gene: MoneyMay_73 Start: 42844, Stop: 42629, Start Num: 37
Candidate Starts for MoneyMay_73:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Montavir_69 Start: 42841, Stop: 42629, Start Num: 38
Candidate Starts for Montavir_69:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Morpher26_66 Start: 42654, Stop: 42430, Start Num: 31
Candidate Starts for Morpher26_66:
(Start: 31 @42654 has 50 MA's), (43, 42597), (44, 42591), (54, 42540), (67, 42435),

Gene: Morrow_68 Start: 42399, Stop: 42175, Start Num: 31
Candidate Starts for Morrow_68:
(Start: 31 @42399 has 50 MA's), (43, 42342), (44, 42336), (67, 42180),

Gene: MuchMore_77 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for MuchMore_77:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: Mulciber_73 Start: 43052, Stop: 42825, Start Num: 34
Candidate Starts for Mulciber_73:
(Start: 34 @43052 has 72 MA's), (43, 42998), (54, 42920),

Gene: Munch_75 Start: 43515, Stop: 43288, Start Num: 34

Candidate Starts for Munch_75:
(Start: 34 @43515 has 72 MA's), (43, 43461), (44, 43455), (54, 43383),

Gene: Mundrea_66 Start: 42647, Stop: 42423, Start Num: 31
Candidate Starts for Mundrea_66:
(Start: 31 @42647 has 50 MA's), (43, 42590), (44, 42584), (54, 42533), (67, 42428),

Gene: MyraDee_70 Start: 40654, Stop: 40406, Start Num: 11
Candidate Starts for MyraDee_70:
(Start: 11 @40654 has 1 MA's), (26, 40594),

Gene: Myxus_74 Start: 42923, Stop: 42705, Start Num: 33
Candidate Starts for Myxus_74:
(Start: 33 @42923 has 32 MA's), (44, 42866), (48, 42848),

Gene: NaSiaTalie_73 Start: 43498, Stop: 43271, Start Num: 30
Candidate Starts for NaSiaTalie_73:
(Start: 30 @43498 has 34 MA's), (43, 43444), (60, 43306),

Gene: Naji_75 Start: 44004, Stop: 43762, Start Num: 34
Candidate Starts for Naji_75:
(Start: 34 @44004 has 72 MA's), (43, 43950), (48, 43926),

Gene: Nebs_68 Start: 42396, Stop: 42172, Start Num: 31
Candidate Starts for Nebs_68:
(Start: 31 @42396 has 50 MA's), (43, 42339), (44, 42333), (67, 42177),

Gene: NicoleTera_70 Start: 43518, Stop: 43297, Start Num: 34
Candidate Starts for NicoleTera_70:
(Start: 34 @43518 has 72 MA's), (43, 43464), (60, 43332),

Gene: Noelle_67 Start: 42962, Stop: 42738, Start Num: 31
Candidate Starts for Noelle_67:
(Start: 31 @42962 has 50 MA's), (43, 42905), (44, 42899), (59, 42788), (67, 42743),

Gene: NothingSpecial_68 Start: 43574, Stop: 43308, Start Num: 15
Candidate Starts for NothingSpecial_68:
(Start: 15 @43574 has 1 MA's), (Start: 34 @43535 has 72 MA's), (43, 43481), (44, 43475), (58, 43349), (59, 43346), (60, 43343),

Gene: Obama12_68 Start: 42780, Stop: 42556, Start Num: 31
Candidate Starts for Obama12_68:
(Start: 31 @42780 has 50 MA's), (43, 42723), (44, 42717), (67, 42561),

Gene: Odin_73 Start: 42517, Stop: 42317, Start Num: 30
Candidate Starts for Odin_73:
(9, 42586), (Start: 18 @42556 has 4 MA's), (Start: 30 @42517 has 34 MA's), (43, 42463), (48, 42439), (60, 42325),

Gene: Ohfah_68 Start: 42396, Stop: 42172, Start Num: 31
Candidate Starts for Ohfah_68:
(Start: 31 @42396 has 50 MA's), (43, 42339), (44, 42333), (67, 42177),

Gene: OlanP_72 Start: 42837, Stop: 42619, Start Num: 36
Candidate Starts for OlanP_72:
(16, 42906), (Start: 36 @42837 has 12 MA's), (44, 42798), (51, 42762), (59, 42669), (67, 42624),

Gene: Ollie_74 Start: 42712, Stop: 42500, Start Num: 38
Candidate Starts for Ollie_74:
(Start: 37 @42715 has 35 MA's), (Start: 38 @42712 has 31 MA's), (44, 42679), (59, 42550), (67, 42505),

Gene: Onglai_72 Start: 41127, Stop: 40909, Start Num: 33
Candidate Starts for Onglai_72:
(Start: 33 @41127 has 32 MA's), (44, 41070), (48, 41052),

Gene: Orange_74 Start: 43064, Stop: 42837, Start Num: 34
Candidate Starts for Orange_74:
(Start: 34 @43064 has 72 MA's), (43, 43010), (44, 43004), (54, 42932),

Gene: P28Green_74 Start: 42847, Stop: 42632, Start Num: 37
Candidate Starts for P28Green_74:
(Start: 37 @42847 has 35 MA's), (Start: 38 @42844 has 31 MA's), (44, 42811), (59, 42682), (67, 42637),

Gene: PGHhamlin_76 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for PGHhamlin_76:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: PackMan_73 Start: 42798, Stop: 42580, Start Num: 33
Candidate Starts for PackMan_73:
(Start: 33 @42798 has 32 MA's), (44, 42741), (48, 42723),

Gene: PainterBoy_75 Start: 43432, Stop: 43232, Start Num: 32
Candidate Starts for PainterBoy_75:
(24, 43456), (27, 43438), (Start: 32 @43432 has 10 MA's), (55, 43273),

Gene: Pawn_72 Start: 42668, Stop: 42450, Start Num: 36
Candidate Starts for Pawn_72:
(16, 42737), (Start: 36 @42668 has 12 MA's), (44, 42629), (51, 42593), (54, 42560), (59, 42500), (67, 42455),

Gene: PeaceMeal1_64 Start: 40823, Stop: 40584, Start Num: 34
Candidate Starts for PeaceMeal1_64:
(Start: 34 @40823 has 72 MA's), (44, 40763), (67, 40589),

Gene: Pembroke_74 Start: 42842, Stop: 42630, Start Num: 38
Candidate Starts for Pembroke_74:
(Start: 37 @42845 has 35 MA's), (Start: 38 @42842 has 31 MA's), (44, 42809), (59, 42680), (67, 42635),

Gene: Penny1_74 Start: 42845, Stop: 42633, Start Num: 38
Candidate Starts for Penny1_74:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Perplexer_66 Start: 42630, Stop: 42406, Start Num: 31
Candidate Starts for Perplexer_66:
(Start: 31 @42630 has 50 MA's), (43, 42573), (44, 42567), (54, 42516), (67, 42411),

Gene: Petersenfast_69 Start: 41946, Stop: 41683, Start Num: 34
Candidate Starts for Petersenfast_69:
(Start: 34 @41946 has 72 MA's), (43, 41892), (44, 41886), (54, 41814), (64, 41727),

Gene: PetiteSangsue_66 Start: 42633, Stop: 42409, Start Num: 31
Candidate Starts for PetiteSangsue_66:
(Start: 31 @42633 has 50 MA's), (43, 42576), (44, 42570), (54, 42519), (67, 42414),

Gene: Ph8s_76 Start: 42621, Stop: 42382, Start Num: 18
Candidate Starts for Ph8s_76:
(7, 42693), (Start: 18 @42621 has 4 MA's), (Start: 30 @42582 has 34 MA's), (43, 42528), (44, 42522), (48, 42504), (60, 42390),

Gene: Phaded_68 Start: 44715, Stop: 44476, Start Num: 34
Candidate Starts for Phaded_68:
(Start: 34 @44715 has 72 MA's), (44, 44652), (48, 44634), (59, 44529),

Gene: Phaeder_74 Start: 42798, Stop: 42580, Start Num: 33
Candidate Starts for Phaeder_74:
(Start: 33 @42798 has 32 MA's), (44, 42741), (48, 42723),

Gene: Pharaoh_68 Start: 42838, Stop: 42611, Start Num: 28
Candidate Starts for Pharaoh_68:
(Start: 28 @42838 has 7 MA's), (63, 42625), (64, 42622),

Gene: Phelipe_68 Start: 42396, Stop: 42172, Start Num: 31
Candidate Starts for Phelipe_68:
(Start: 31 @42396 has 50 MA's), (43, 42339), (44, 42333), (67, 42177),

Gene: PhishRPhriends_70 Start: 41845, Stop: 41627, Start Num: 36
Candidate Starts for PhishRPhriends_70:
(16, 41914), (Start: 36 @41845 has 12 MA's), (44, 41806), (51, 41770), (59, 41677), (67, 41632),

Gene: Phoebe_75 Start: 42837, Stop: 42622, Start Num: 37
Candidate Starts for Phoebe_75:
(Start: 37 @42837 has 35 MA's), (Start: 38 @42834 has 31 MA's), (44, 42801), (59, 42672), (67, 42627),

Gene: Phonnegut_74 Start: 42868, Stop: 42650, Start Num: 33
Candidate Starts for Phonnegut_74:
(Start: 33 @42868 has 32 MA's), (44, 42811), (48, 42793),

Gene: Phoxy_74 Start: 42869, Stop: 42654, Start Num: 37
Candidate Starts for Phoxy_74:
(Start: 37 @42869 has 35 MA's), (Start: 38 @42866 has 31 MA's), (44, 42833), (59, 42704), (67, 42659),

Gene: Pioneer_74 Start: 42868, Stop: 42650, Start Num: 33

Candidate Starts for Pioneer_74:
(Start: 33 @42868 has 32 MA's), (44, 42811), (48, 42793),

Gene: Piro94_72 Start: 43466, Stop: 43239, Start Num: 30
Candidate Starts for Piro94_72:
(Start: 30 @43466 has 34 MA's), (43, 43412), (60, 43274), (66, 43244),

Gene: Polymorphads_67 Start: 42377, Stop: 42153, Start Num: 31
Candidate Starts for Polymorphads_67:
(Start: 31 @42377 has 50 MA's), (43, 42320), (44, 42314), (67, 42158),

Gene: Pomar16_75 Start: 44044, Stop: 43802, Start Num: 34
Candidate Starts for Pomar16_75:
(Start: 34 @44044 has 72 MA's), (43, 43990), (48, 43966),

Gene: Poompha_63 Start: 40821, Stop: 40582, Start Num: 34
Candidate Starts for Poompha_63:
(Start: 34 @40821 has 72 MA's), (44, 40761), (67, 40587),

Gene: PotatoSplit_75 Start: 42848, Stop: 42633, Start Num: 37
Candidate Starts for PotatoSplit_75:
(Start: 37 @42848 has 35 MA's), (Start: 38 @42845 has 31 MA's), (44, 42812), (59, 42683), (67, 42638),

Gene: Power_72 Start: 43836, Stop: 43612, Start Num: 30
Candidate Starts for Power_72:
(Start: 30 @43836 has 34 MA's), (58, 43653), (59, 43650), (60, 43647),

Gene: Priya_72 Start: 42595, Stop: 42377, Start Num: 33
Candidate Starts for Priya_72:
(Start: 33 @42595 has 32 MA's), (44, 42538), (48, 42520),

Gene: Prudy_66 Start: 43483, Stop: 43259, Start Num: 34
Candidate Starts for Prudy_66:
(14, 43528), (Start: 34 @43483 has 72 MA's), (44, 43426), (59, 43297), (60, 43294), (65, 43267),

Gene: Pukovnik_69 Start: 44363, Stop: 44136, Start Num: 34
Candidate Starts for Pukovnik_69:
(Start: 34 @44363 has 72 MA's), (43, 44309), (60, 44171), (66, 44141),

Gene: PurpleHaze_73 Start: 42663, Stop: 42445, Start Num: 36
Candidate Starts for PurpleHaze_73:
(16, 42732), (Start: 36 @42663 has 12 MA's), (44, 42624), (51, 42588), (59, 42495), (67, 42450),

Gene: Qobbit_72 Start: 42557, Stop: 42339, Start Num: 33
Candidate Starts for Qobbit_72:
(Start: 33 @42557 has 32 MA's), (44, 42500), (48, 42482),

Gene: QueenB2_70 Start: 43119, Stop: 42895, Start Num: 30
Candidate Starts for QueenB2_70:
(Start: 30 @43119 has 34 MA's), (43, 43068), (58, 42936), (60, 42930), (65, 42903),

Gene: QueenBeesly_73 Start: 43793, Stop: 43569, Start Num: 30

Candidate Starts for QueenBeesly_73:
(Start: 30 @43793 has 34 MA's), (58, 43610), (59, 43607), (60, 43604),

Gene: Quokka_74 Start: 42863, Stop: 42621, Start Num: 34
Candidate Starts for Quokka_74:
(Start: 21 @42902 has 4 MA's), (Start: 34 @42863 has 72 MA's), (43, 42809), (44, 42803), (48, 42785),
(59, 42674),

Gene: Rachaly_68 Start: 42923, Stop: 42705, Start Num: 32
Candidate Starts for Rachaly_68:
(Start: 32 @42923 has 10 MA's), (48, 42848), (59, 42743), (60, 42740),

Gene: Rahalelujah_74 Start: 42760, Stop: 42527, Start Num: 25
Candidate Starts for Rahalelujah_74:
(13, 42799), (Start: 25 @42760 has 1 MA's), (44, 42688), (48, 42670),

Gene: Rebeuca_67 Start: 42137, Stop: 41898, Start Num: 34
Candidate Starts for Rebeuca_67:
(Start: 34 @42137 has 72 MA's), (44, 42077), (59, 41948), (67, 41903),

Gene: RedRock_71 Start: 43761, Stop: 43537, Start Num: 34
Candidate Starts for RedRock_71:
(Start: 34 @43761 has 72 MA's), (Start: 35 @43758 has 5 MA's), (43, 43710), (59, 43575), (60, 43572),

Gene: Refuge_70 Start: 44062, Stop: 43841, Start Num: 29
Candidate Starts for Refuge_70:
(Start: 29 @44062 has 2 MA's), (39, 44032),

Gene: Retro23_73 Start: 43524, Stop: 43300, Start Num: 30
Candidate Starts for Retro23_73:
(Start: 30 @43524 has 34 MA's), (58, 43341), (59, 43338), (60, 43335),

Gene: Rifter_74 Start: 41305, Stop: 41006, Start Num: 10
Candidate Starts for Rifter_74:
(3, 41401), (Start: 5 @41368 has 3 MA's), (Start: 10 @41305 has 23 MA's), (22, 41254), (43, 41173),
(48, 41149), (60, 41041), (61, 41038), (65, 41014),

Gene: Roksolana_74 Start: 42039, Stop: 41740, Start Num: 10
Candidate Starts for Roksolana_74:
(3, 42135), (Start: 5 @42102 has 3 MA's), (Start: 10 @42039 has 23 MA's), (22, 41988), (43, 41907),
(48, 41883), (60, 41775), (61, 41772), (65, 41748),

Gene: Rosa24_64 Start: 42388, Stop: 42191, Start Num: 31
Candidate Starts for Rosa24_64:
(Start: 31 @42388 has 50 MA's), (43, 42331), (67, 42196),

Gene: Rowdy_68 Start: 41850, Stop: 41611, Start Num: 34
Candidate Starts for Rowdy_68:
(Start: 34 @41850 has 72 MA's), (44, 41790), (67, 41616),

Gene: Rummer_73 Start: 42872, Stop: 42657, Start Num: 37
Candidate Starts for Rummer_73:

(Start: 37 @42872 has 35 MA's), (Start: 38 @42869 has 31 MA's), (44, 42836), (59, 42707), (67, 42662),

Gene: RyeScarlet_75 Start: 42843, Stop: 42625, Start Num: 33
Candidate Starts for RyeScarlet_75:
(Start: 33 @42843 has 32 MA's), (44, 42786), (48, 42768),

Gene: Sabia_72 Start: 42852, Stop: 42637, Start Num: 37
Candidate Starts for Sabia_72:
(Start: 37 @42852 has 35 MA's), (Start: 38 @42849 has 31 MA's), (44, 42816), (59, 42687), (67, 42642),

Gene: Sabinator_72 Start: 42840, Stop: 42628, Start Num: 38
Candidate Starts for Sabinator_72:
(Start: 37 @42843 has 35 MA's), (Start: 38 @42840 has 31 MA's), (44, 42807), (59, 42678), (67, 42633),

Gene: Sachima_70 Start: 42824, Stop: 42606, Start Num: 33
Candidate Starts for Sachima_70:
(Start: 33 @42824 has 32 MA's), (44, 42767), (48, 42749),

Gene: Salz_70 Start: 41861, Stop: 41598, Start Num: 34
Candidate Starts for Salz_70:
(Start: 34 @41861 has 72 MA's), (43, 41807), (44, 41801), (54, 41729), (64, 41642),

Gene: Saskia_72 Start: 42409, Stop: 42146, Start Num: 34
Candidate Starts for Saskia_72:
(Start: 34 @42409 has 72 MA's), (44, 42349), (64, 42190),

Gene: Scherzo_73 Start: 43087, Stop: 42869, Start Num: 33
Candidate Starts for Scherzo_73:
(Start: 33 @43087 has 32 MA's), (44, 43030), (48, 43012),

Gene: SemperFi_73 Start: 43681, Stop: 43457, Start Num: 30
Candidate Starts for SemperFi_73:
(Start: 30 @43681 has 34 MA's), (58, 43498), (59, 43495), (60, 43492),

Gene: Serenity_76 Start: 43102, Stop: 42818, Start Num: 21
Candidate Starts for Serenity_76:
(Start: 21 @43102 has 4 MA's), (43, 43009), (44, 43003), (46, 42994), (56, 42895), (59, 42871),

Gene: Severus_64 Start: 40821, Stop: 40582, Start Num: 34
Candidate Starts for Severus_64:
(Start: 34 @40821 has 72 MA's), (44, 40761), (67, 40587),

Gene: Sham4_71 Start: 41945, Stop: 41682, Start Num: 34
Candidate Starts for Sham4_71:
(Start: 34 @41945 has 72 MA's), (43, 41891), (44, 41885), (54, 41813), (64, 41726),

Gene: Shapes_68 Start: 41850, Stop: 41611, Start Num: 34
Candidate Starts for Shapes_68:
(Start: 34 @41850 has 72 MA's), (44, 41790), (67, 41616),

Gene: SheaKeira_68 Start: 41846, Stop: 41625, Start Num: 33
Candidate Starts for SheaKeira_68:
(Start: 33 @41846 has 32 MA's), (43, 41792), (60, 41660),

Gene: SheldonCooper_67 Start: 42797, Stop: 42573, Start Num: 31
Candidate Starts for SheldonCooper_67:
(Start: 31 @42797 has 50 MA's), (43, 42740), (44, 42734), (67, 42578),

Gene: Shygu2_66 Start: 42684, Stop: 42460, Start Num: 31
Candidate Starts for Shygu2_66:
(Start: 31 @42684 has 50 MA's), (43, 42627), (44, 42621), (67, 42465),

Gene: Sknot_73 Start: 43498, Stop: 43271, Start Num: 30
Candidate Starts for Sknot_73:
(Start: 30 @43498 has 34 MA's), (43, 43444), (60, 43306),

Gene: Smeagan_75 Start: 43992, Stop: 43768, Start Num: 30
Candidate Starts for Smeagan_75:
(Start: 30 @43992 has 34 MA's), (43, 43941), (58, 43809), (59, 43806), (60, 43803),

Gene: SmellyB_74 Start: 42036, Stop: 41674, Start Num: 5
Candidate Starts for SmellyB_74:
(2, 42102), (3, 42069), (Start: 5 @42036 has 3 MA's), (48, 41817),

Gene: SnapTap_72 Start: 43492, Stop: 43268, Start Num: 30
Candidate Starts for SnapTap_72:
(Start: 30 @43492 has 34 MA's), (58, 43309), (59, 43306), (60, 43303),

Gene: Snape_75 Start: 43054, Stop: 42827, Start Num: 34
Candidate Starts for Snape_75:
(Start: 34 @43054 has 72 MA's), (43, 43000), (54, 42922),

Gene: Snickers_74 Start: 42814, Stop: 42602, Start Num: 38
Candidate Starts for Snickers_74:
(Start: 37 @42817 has 35 MA's), (Start: 38 @42814 has 31 MA's), (44, 42781), (59, 42652), (67, 42607),

Gene: SoYo_71 Start: 42753, Stop: 42541, Start Num: 38
Candidate Starts for SoYo_71:
(Start: 37 @42756 has 35 MA's), (Start: 38 @42753 has 31 MA's), (44, 42720), (59, 42591), (67, 42546),

Gene: SoilDragon_73 Start: 42289, Stop: 42077, Start Num: 38
Candidate Starts for SoilDragon_73:
(Start: 37 @42292 has 35 MA's), (Start: 38 @42289 has 31 MA's), (44, 42256), (59, 42127), (67, 42082),

Gene: SororFago_74 Start: 44027, Stop: 43806, Start Num: 28
Candidate Starts for SororFago_74:
(Start: 28 @44027 has 7 MA's), (43, 43973), (44, 43967), (48, 43949), (60, 43841),

Gene: Soshari_76 Start: 42868, Stop: 42653, Start Num: 37
Candidate Starts for Soshari_76:

(Start: 37 @42868 has 35 MA's), (Start: 38 @42865 has 31 MA's), (44, 42832), (59, 42703), (67, 42658),

Gene: Spike509_74 Start: 42869, Stop: 42654, Start Num: 37
Candidate Starts for Spike509_74:
(Start: 37 @42869 has 35 MA's), (Start: 38 @42866 has 31 MA's), (44, 42833), (59, 42704), (67, 42659),

Gene: Spouty_72 Start: 42594, Stop: 42376, Start Num: 33
Candidate Starts for Spouty_72:
(Start: 33 @42594 has 32 MA's), (44, 42537), (48, 42519),

Gene: Stagni_71 Start: 42844, Stop: 42632, Start Num: 38
Candidate Starts for Stagni_71:
(Start: 37 @42847 has 35 MA's), (Start: 38 @42844 has 31 MA's), (44, 42811), (59, 42682), (67, 42637),

Gene: StarStuff_75 Start: 44006, Stop: 43764, Start Num: 34
Candidate Starts for StarStuff_75:
(Start: 34 @44006 has 72 MA's), (43, 43952), (48, 43928),

Gene: Stasia_66 Start: 42567, Stop: 42343, Start Num: 31
Candidate Starts for Stasia_66:
(Start: 31 @42567 has 50 MA's), (43, 42510), (44, 42504), (59, 42393), (67, 42348),

Gene: Steamy_67 Start: 42288, Stop: 42067, Start Num: 29
Candidate Starts for Steamy_67:
(Start: 29 @42288 has 2 MA's), (42, 42258), (58, 42108),

Gene: Stink_66 Start: 42459, Stop: 42235, Start Num: 31
Candidate Starts for Stink_66:
(Start: 31 @42459 has 50 MA's), (43, 42402), (44, 42396), (67, 42240),

Gene: Sunhee_74 Start: 42052, Stop: 41858, Start Num: 38
Candidate Starts for Sunhee_74:
(Start: 34 @42079 has 72 MA's), (Start: 38 @42052 has 31 MA's), (43, 42025), (44, 42019), (48, 42001), (60, 41893),

Gene: Superchunk_74 Start: 42168, Stop: 41929, Start Num: 18
Candidate Starts for Superchunk_74:
(7, 42240), (8, 42222), (Start: 18 @42168 has 4 MA's), (Start: 30 @42129 has 34 MA's), (43, 42075), (48, 42051), (60, 41937),

Gene: SweetiePie_72 Start: 43624, Stop: 43400, Start Num: 30
Candidate Starts for SweetiePie_72:
(Start: 30 @43624 has 34 MA's), (58, 43441), (59, 43438), (60, 43435),

Gene: SwirlSquare_79 Start: 42851, Stop: 42651, Start Num: 30
Candidate Starts for SwirlSquare_79:
(Start: 30 @42851 has 34 MA's), (43, 42797), (44, 42791), (48, 42773),

Gene: Taquarus_66 Start: 42360, Stop: 42163, Start Num: 31
Candidate Starts for Taquarus_66:

(Start: 31 @42360 has 50 MA's), (43, 42303), (67, 42168),

Gene: TarsusIV_70 Start: 43465, Stop: 43244, Start Num: 34
Candidate Starts for TarsusIV_70:
(Start: 34 @43465 has 72 MA's), (43, 43411), (44, 43405), (48, 43387), (60, 43279),

Gene: Taurus_75 Start: 42844, Stop: 42629, Start Num: 37
Candidate Starts for Taurus_75:
(Start: 37 @42844 has 35 MA's), (Start: 38 @42841 has 31 MA's), (44, 42808), (59, 42679), (67, 42634),

Gene: Temprado_75 Start: 42144, Stop: 41845, Start Num: 10
Candidate Starts for Temprado_75:
(3, 42240), (Start: 5 @42207 has 3 MA's), (Start: 10 @42144 has 23 MA's), (22, 42093), (43, 42012), (48, 41988), (60, 41880), (61, 41877), (65, 41853),

Gene: Terrific_73 Start: 43472, Stop: 43245, Start Num: 30
Candidate Starts for Terrific_73:
(Start: 30 @43472 has 34 MA's), (43, 43418), (60, 43280),

Gene: Tiffany_73 Start: 42729, Stop: 42514, Start Num: 37
Candidate Starts for Tiffany_73:
(Start: 37 @42729 has 35 MA's), (Start: 38 @42726 has 31 MA's), (44, 42693), (59, 42564), (67, 42519),

Gene: Timothy_75 Start: 43031, Stop: 42804, Start Num: 34
Candidate Starts for Timothy_75:
(Start: 34 @43031 has 72 MA's), (43, 42977), (44, 42971), (54, 42899),

Gene: TinyPebbles_73 Start: 42874, Stop: 42659, Start Num: 37
Candidate Starts for TinyPebbles_73:
(Start: 37 @42874 has 35 MA's), (Start: 38 @42871 has 31 MA's), (44, 42838), (67, 42664),

Gene: TinyTimmy_73 Start: 42760, Stop: 42533, Start Num: 34
Candidate Starts for TinyTimmy_73:
(Start: 34 @42760 has 72 MA's), (43, 42706), (44, 42700), (54, 42628),

Gene: TipsytheTRex_72 Start: 43101, Stop: 42820, Start Num: 21
Candidate Starts for TipsytheTRex_72:
(Start: 21 @43101 has 4 MA's), (43, 43008), (44, 43002), (48, 42984), (59, 42873),

Gene: Tomathan_75 Start: 44117, Stop: 43875, Start Num: 34
Candidate Starts for Tomathan_75:
(Start: 34 @44117 has 72 MA's), (43, 44063), (48, 44039),

Gene: ToneTone_71 Start: 41704, Stop: 41405, Start Num: 10
Candidate Starts for ToneTone_71:
(3, 41800), (Start: 5 @41767 has 3 MA's), (Start: 10 @41704 has 23 MA's), (22, 41653), (43, 41572), (48, 41548), (60, 41440), (61, 41437), (65, 41413),

Gene: Topanga_63 Start: 41611, Stop: 41378, Start Num: 35
Candidate Starts for Topanga_63:
(Start: 35 @41611 has 5 MA's), (43, 41563), (44, 41557), (67, 41383),

Gene: Travvers_74 Start: 44003, Stop: 43761, Start Num: 34
Candidate Starts for Travvers_74:
(Start: 34 @44003 has 72 MA's), (43, 43949), (48, 43925),

Gene: Trike_63 Start: 40825, Stop: 40589, Start Num: 34
Candidate Starts for Trike_63:
(Start: 34 @40825 has 72 MA's), (44, 40768), (67, 40594),

Gene: Tristan_69 Start: 44578, Stop: 44339, Start Num: 34
Candidate Starts for Tristan_69:
(Start: 34 @44578 has 72 MA's), (44, 44515), (48, 44497), (59, 44392),

Gene: Trixie_72 Start: 44253, Stop: 44035, Start Num: 33
Candidate Starts for Trixie_72:
(Start: 33 @44253 has 32 MA's), (43, 44202), (48, 44178), (56, 44091), (60, 44070), (65, 44043),

Gene: Trooper_72 Start: 43427, Stop: 43203, Start Num: 34
Candidate Starts for Trooper_72:
(Start: 34 @43427 has 72 MA's), (43, 43376), (44, 43370), (59, 43241), (60, 43238),

Gene: TroyPia_68 Start: 42391, Stop: 42167, Start Num: 31
Candidate Starts for TroyPia_68:
(Start: 31 @42391 has 50 MA's), (43, 42334), (44, 42328), (67, 42172),

Gene: Tubs_74 Start: 42798, Stop: 42580, Start Num: 33
Candidate Starts for Tubs_74:
(Start: 33 @42798 has 32 MA's), (44, 42741), (48, 42723),

Gene: Tucker_74 Start: 41907, Stop: 41608, Start Num: 10
Candidate Starts for Tucker_74:
(3, 42003), (Start: 5 @41970 has 3 MA's), (Start: 10 @41907 has 23 MA's), (22, 41856), (43, 41775), (48, 41751), (60, 41643), (61, 41640), (65, 41616),

Gene: Turbido_73 Start: 43711, Stop: 43487, Start Num: 30
Candidate Starts for Turbido_73:
(Start: 30 @43711 has 34 MA's), (43, 43660), (58, 43528), (59, 43525), (60, 43522),

Gene: Twister_65 Start: 41732, Stop: 41499, Start Num: 35
Candidate Starts for Twister_65:
(Start: 35 @41732 has 5 MA's), (43, 41684), (44, 41678), (67, 41504),

Gene: Ugenie5_69 Start: 43086, Stop: 42868, Start Num: 33
Candidate Starts for Ugenie5_69:
(Start: 33 @43086 has 32 MA's), (44, 43029), (48, 43011),

Gene: Updawg_73 Start: 43362, Stop: 43135, Start Num: 30
Candidate Starts for Updawg_73:
(Start: 30 @43362 has 34 MA's), (43, 43308), (60, 43170),

Gene: VC3_74 Start: 43459, Stop: 43217, Start Num: 34
Candidate Starts for VC3_74:
(Start: 34 @43459 has 72 MA's), (43, 43405), (48, 43381), (58, 43273),

Gene: Vix_70 Start: 42927, Stop: 42712, Start Num: 37
Candidate Starts for Vix_70:
(Start: 37 @42927 has 35 MA's), (Start: 38 @42924 has 31 MA's), (44, 42891), (59, 42762), (67, 42717),

Gene: WalterMcMickey_65 Start: 41732, Stop: 41499, Start Num: 35
Candidate Starts for WalterMcMickey_65:
(Start: 35 @41732 has 5 MA's), (43, 41684), (44, 41678), (67, 41504),

Gene: Watson_73 Start: 42833, Stop: 42621, Start Num: 38
Candidate Starts for Watson_73:
(Start: 37 @42836 has 35 MA's), (Start: 38 @42833 has 31 MA's), (44, 42800), (59, 42671), (67, 42626),

Gene: WeiHuaDA_73 Start: 44299, Stop: 44075, Start Num: 30
Candidate Starts for WeiHuaDA_73:
(Start: 30 @44299 has 34 MA's), (43, 44248), (44, 44242), (58, 44116), (59, 44113), (60, 44110), (65, 44083),

Gene: Whabigail7_73 Start: 43711, Stop: 43487, Start Num: 30
Candidate Starts for Whabigail7_73:
(Start: 30 @43711 has 34 MA's), (43, 43660), (58, 43528), (59, 43525), (60, 43522),

Gene: WideWale_73 Start: 43362, Stop: 43135, Start Num: 30
Candidate Starts for WideWale_73:
(Start: 30 @43362 has 34 MA's), (43, 43308), (60, 43170),

Gene: Wiks_73 Start: 41775, Stop: 41476, Start Num: 10
Candidate Starts for Wiks_73:
(3, 41871), (Start: 5 @41838 has 3 MA's), (Start: 10 @41775 has 23 MA's), (22, 41724), (43, 41643), (48, 41619), (60, 41511), (61, 41508), (65, 41484),

Gene: Wile_65 Start: 42663, Stop: 42439, Start Num: 31
Candidate Starts for Wile_65:
(Start: 31 @42663 has 50 MA's), (43, 42606), (44, 42600), (54, 42549), (67, 42444),

Gene: Wizard007_66 Start: 42389, Stop: 42165, Start Num: 31
Candidate Starts for Wizard007_66:
(Start: 31 @42389 has 50 MA's), (43, 42332), (44, 42326), (54, 42275), (67, 42170),

Gene: Wolpertinger_73 Start: 43063, Stop: 42836, Start Num: 34
Candidate Starts for Wolpertinger_73:
(Start: 34 @43063 has 72 MA's), (43, 43009), (44, 43003), (54, 42931),

Gene: Wooldri_76 Start: 42756, Stop: 42541, Start Num: 37
Candidate Starts for Wooldri_76:
(Start: 37 @42756 has 35 MA's), (Start: 38 @42753 has 31 MA's), (44, 42720), (59, 42591), (67, 42546),

Gene: WorldCup_72 Start: 42754, Stop: 42521, Start Num: 25
Candidate Starts for WorldCup_72:
(13, 42793), (Start: 25 @42754 has 1 MA's), (44, 42682), (48, 42664),

Gene: WunderPhul_74 Start: 41773, Stop: 41474, Start Num: 10
Candidate Starts for WunderPhul_74:
(3, 41869), (Start: 5 @41836 has 3 MA's), (Start: 10 @41773 has 23 MA's), (22, 41722), (43, 41641), (48, 41617), (60, 41509), (61, 41506), (65, 41482),

Gene: Xena_65 Start: 42630, Stop: 42406, Start Num: 31
Candidate Starts for Xena_65:
(Start: 31 @42630 has 50 MA's), (43, 42573), (44, 42567), (54, 42516), (67, 42411),

Gene: XianYue_68 Start: 43295, Stop: 43074, Start Num: 31
Candidate Starts for XianYue_68:
(Start: 31 @43295 has 50 MA's), (48, 43217), (59, 43112), (66, 43079),

Gene: Yecey3_76 Start: 42829, Stop: 42608, Start Num: 34
Candidate Starts for Yecey3_76:
(Start: 34 @42829 has 72 MA's), (44, 42769), (48, 42751), (56, 42664),

Gene: Yokurt_73 Start: 41775, Stop: 41476, Start Num: 10
Candidate Starts for Yokurt_73:
(3, 41871), (Start: 5 @41838 has 3 MA's), (Start: 10 @41775 has 23 MA's), (22, 41724), (43, 41643), (48, 41619), (60, 41511), (61, 41508), (65, 41484),

Gene: Zaka_74 Start: 41775, Stop: 41476, Start Num: 10
Candidate Starts for Zaka_74:
(3, 41871), (Start: 5 @41838 has 3 MA's), (Start: 10 @41775 has 23 MA's), (22, 41724), (43, 41643), (48, 41619), (60, 41511), (61, 41508), (65, 41484),

Gene: Zetzy_71 Start: 42407, Stop: 42192, Start Num: 37
Candidate Starts for Zetzy_71:
(Start: 37 @42407 has 35 MA's), (44, 42371), (50, 42338), (54, 42302), (59, 42242), (67, 42197),

Gene: Zimmer_71 Start: 43934, Stop: 43707, Start Num: 34
Candidate Starts for Zimmer_71:
(Start: 34 @43934 has 72 MA's), (43, 43880), (44, 43874), (48, 43856), (58, 43748), (60, 43742),

Gene: Zulu_75 Start: 42153, Stop: 41854, Start Num: 10
Candidate Starts for Zulu_75:
(3, 42249), (Start: 5 @42216 has 3 MA's), (Start: 10 @42153 has 23 MA's), (22, 42102), (43, 42021), (48, 41997), (60, 41889), (61, 41886), (65, 41862),