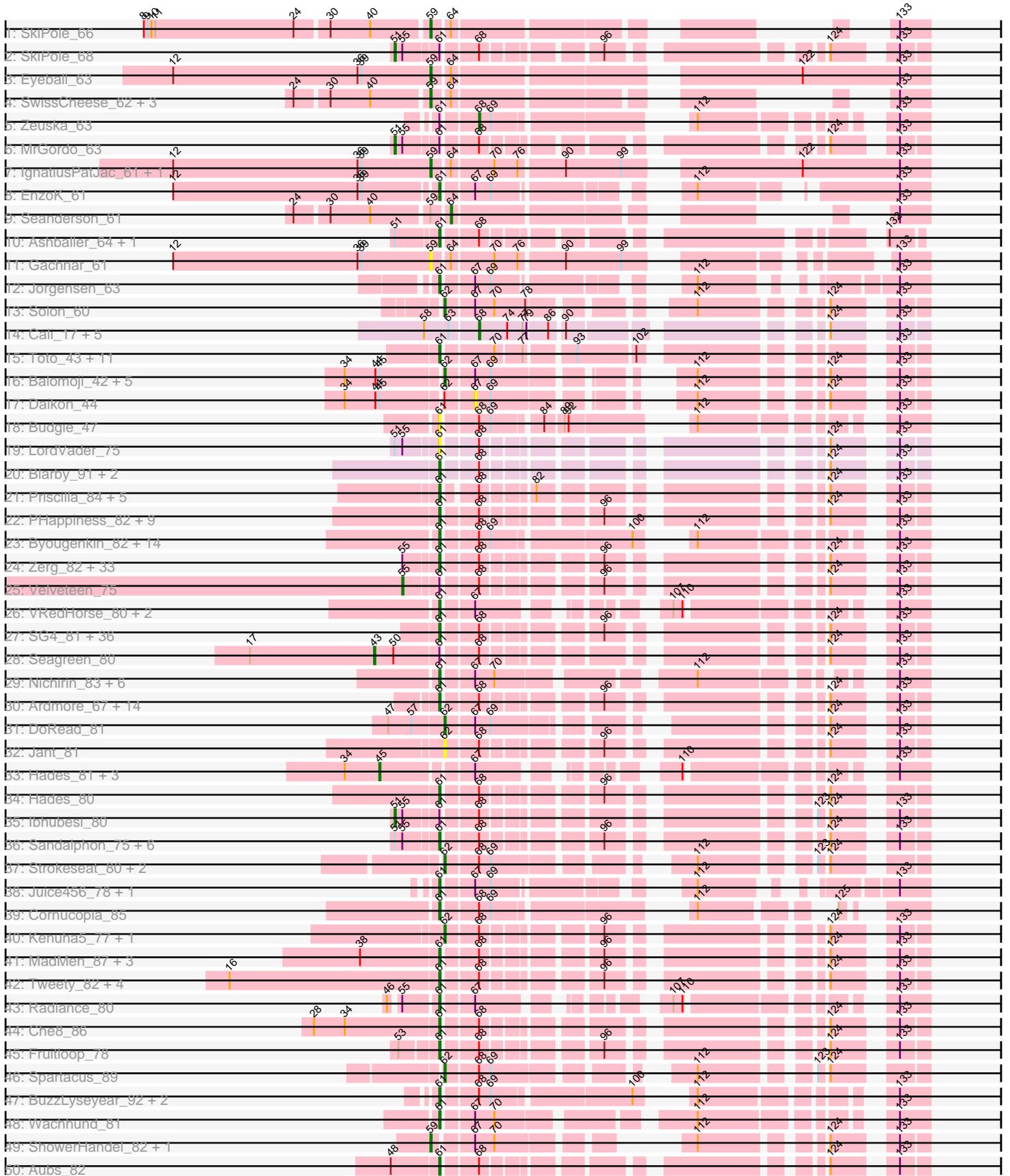# Pham 290744

Pham 290744

Pham 290744

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 290744 Report

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

Pham number 290744 has 356 members, 38 are drafts.

Phages represented in each track:
• Track 1 : SkiPole_66
• Track 2 : SkiPole_68
• Track 3 : Eyeball_63
• Track 4 : SwissCheese_62, Moose_60, Bruns_60, Forsytheast_60
• Track 5 : Zeuska_63
• Track 6 : MrGordo_63
• Track 7 : IgnatiusPatJac_61, BluSpix_59
• Track 8 : EnzoK_61
• Track 9 : Seanderson_61
• Track 10 : Ashballer_64, JC27_64
• Track 11 : Gachnar_61
• Track 12 : Jorgensen_63
• Track 13 : Solon_60
• Track 14 : Cali_17, SuperGrey_82, Eradicator_72, KashFlow_68, Sprinklers_16, BadAgartude_17
• Track 15 : Toto_43, BilboSwaggins_43, Myrale_44, IHOP_42, Tuco_45, Marshmallow_43, ABCat_42, Inca_41, Phaja_42, CrystalP_44, ShamWow_44, StellaBean_42
• Track 16 : Balomoji_42, Flypotenuse_38, Traaww1_40, Gator_41, Harella_43, Glexan_41
• Track 17 : Daikon_44
• Track 18 : Budgie_47
• Track 19 : LordVader_75
• Track 20 : Blarby_91, Jabbawokkie_91, Zapner_90
• Track 21 : Priscilla_84, Spartacus_87, Wanda_77, Koella_76, Klein_73, NormanBulbieJr_82
• Track 22 : PHappiness_82, Leperchaun_80, Nimbo_74, Geralt_75, JoeyJr_82, Daenerys_81, OldBen_79, RitaG_82, MilleniumForce_82, Deb65_75
• Track 23 : Byougenkin_82, PopTart_77, Wee_91, SassyB_77, Florinda_94, Royals2015_90, Tweety_86, Girafales_91, Phalconet_82, Eish_88, DeadP_86, PhesterPhotato_89, Medindi_89, Blexus_80, Quico_91
• Track 24 : Zerg_82, Beelzebub_12, VRedHorse_86, FeliMaine_10, PopTart_73, OfUltron_89, Nichirin_81, BAKA_82, Guppsters_76, SassyB_73, Ochi17_87, Mandlovu_76, Clarkson_10, Huphlepuff_10, Seabastian_89, Lilbit_10, Marvin_8, Pringar_9, Duke13_80, Jinglebell_88, BigPhil_74, Minerva_79, JoieB_10, Strokeseat_76, Modragons_86, Llama_88, Brookers_76, Cerasum_75, LittleLaf_9, Corazon_9, Sarma624_80, Pound_77, Hlubikazi_76, Coco12_78

- Track 25 : Velveteen_75
- Track 26 : VRedHorse_80, Cornucopia_81, Pacc40_73
- Track 27 : SG4_81, Burwell21_76, KristaRAM_79, Harley_80, Jarcob_81, Mova_80, Mozy_88, Clifton_74, OlympiaSaint_81, Lucia_81, Drago_78, Polo2Bam_89, Philus_84, SeaLumen_86, Rockne_82, Phatniss_78, Latretium_82, LunaBlu_84, Ms6_82, Flathead_81, Llij_77, Lorde_81, Eish_84, UncleRicky_80, NewHope4_84, Violac_83, James_82, Boomer_85, Enby_82, DirtMcgirt_80, Enzomatic_90, DRBy19_85, Ogopogo_87, Rita_88, Marker_87, PMC_78, Avani_90
- Track 28 : Seagreen_80
- Track 29 : Nichirin_83, Seabastian_91, Modragons_88, Llama_90, Ochi17_89, OfUltron_91, Jinglebell_90
- Track 30 : Ardmore_67, Hamulus_80, Phanphagia_80, Batiatus_81, Poise_9, Filuzino_82, DotProduct_76, Tesla_9, Akhila_78, MilanaBonita_77, Shauna1_81, Raela_9, Blackbeetle_9, Nekros_72, Manda_43
- Track 31 : DoRead_81
- Track 32 : Jant_81
- Track 33 : Hades_81, Strokeseat_81, Mandlovu_81, Hlubikazi_81
- Track 34 : Hades_80
- Track 35 : Ibhubesi_80
- Track 36 : Sandalphon_75, WillSterrel_80, Bubbles123_76, Minnie_77, Soul22_82, IrishSherpFalk_81, Pepe_59
- Track 37 : Strokeseat_80, Mandlovu_80, Hlubikazi_80
- Track 38 : Juice456_78, QuickMath_80
- Track 39 : Cornucopia_85
- Track 40 : Kenuha5_77, Gandalph_79
- Track 41 : MadMen_87, Nibley_65, Galactic_80, Kumao_59
- Track 42 : Tweety_82, Wee_87, DeadP_82, Taj_88, Donkeykong_86
- Track 43 : Radiance_80
- Track 44 : Che8_86
- Track 45 : Fruitloop_78
- Track 46 : Spartacus_89
- Track 47 : BuzzLyseyear_92, Krakatau_77, Job42_84
- Track 48 : Wachhund_81
- Track 49 : ShowerHandel_82, ByChance_73
- Track 50 : Aubs_82
- Track 51 : Taj_92
- Track 52 : Batiatus_83
- Track 53 : Pippy_76, Blexus_76, Leozinho_79
- Track 54 : StAnnes_83
- Track 55 : Llij_80, Soul22_84
- Track 56 : Estave1_93
- Track 57 : Spartacus_90
- Track 58 : Bipolar_84
- Track 59 : IMpilo_79
- Track 60 : IMpilo_76
- Track 61 : Galactic_82
- Track 62 : XFactor_77, DLane_83
- Track 63 : Nivrat_80, LilMoolah_82
- Track 64 : Mwanjiwa_84
- Track 65 : Medindi_85
- Track 66 : Fancypants_89
- Track 67 : Job42_81
- Track 68 : Tchotchke_76

- Track 69 : Whatsapiecost_74
- Track 70 : Royals2015_86
- Track 71 : Donkeykong_88
- Track 72 : Che9d_94
- Track 73 : Squirty_81
- Track 74 : Renaud18_93, Karhdo_80, MadMen_79, Sabbb_83, Kersh_83
- Track 75 : ThetaBob_85
- Track 76 : Cornie_78, CaptainTrips_81, MinionDave_77, Rearden_68
- Track 77 : Bagrid_74, DmpstrDiver_75, ThreeRngTarjay_73, Kalah2_70, Phoebus_78, Dallas_74, Odette_74, Halley_77, Zelink_73, Ejimix_75, Squint_76, JuicyJay_74, EricMillard_74, HokkenD_68, Porcelain_75, Hughesyang_74, Superphikiman_73, Beem_75, NihilNomen_76, MiaZeal_76, Schatzie_70, Ariel_75
- Track 78 : BAKA_166, Duke13_163, Bagrid_169, Marleymoo_148, Bobby_153, Optimus_157, Klein_164, EricMillard_159, Kalah2_157
- Track 79 : BronnyJames_70, Phalconet_78, Shaboozey_69, Hannaconda_70, Kingsley_85
- Track 80 : Redno2_72, Lucky2013_73
- Track 81 : DmpstrDiver_71, Superphikiman_69, Schatzie_66, Dallas_70, Odette_70, Klein_71, Lucky2013_69, Wanda_75, Halley_73, Zelink_69, Kalah2_66, Ejimix_71, JuicyJay_70, Marleymoo_65, Minerva_77, HokkenD_64, Hughesyang_70, Redno2_68, Beem_71, NihilNomen_72, ThreeRngTarjay_69, Pound_75
- Track 82 : Yeet_71, Courthouse_72
- Track 83 : Yeet_69
- Track 84 : Omega_79, PhesterPhotato_85, LittleE_77
- Track 85 : Omega_77
- Track 86 : Rearden_66
- Track 87 : BronnyJames_67
- Track 88 : Nekros_70
- Track 89 : Bobby_70
- Track 90 : LittleE_74
- Track 91 : Tortoise12_58
- Track 92 : Chewbacca_61, ZenTime222_56
- Track 93 : Tortoise12_60
- Track 94 : Cubone_64
- Track 95 : Etoile_54, Langerak_55, Chubbello_54, Fishburne_54, Donovan_54, Arib1_56, Zilizebeth_60, Phegasus_60, FirstPlacePfu_56, Bartholomew_54, Majeke_60, Venti_55, Mangethe_60, Kari_54
- Track 96 : Techage_55, GaloreK_58
- Track 97 : FirstPlacePfu_60
- Track 98 : Stellammi_145
- Track 99 : LilSpotty_77
- Track 100 : LilSpotty_76
- Track 101 : MooMoo_80

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

The start number called the most often in the published annotations is 61, it was called in 243 of the 318 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABCat_42, Akhila_78, Ardmore_67, Ariel_75, Ashballer_64, Aubs_82, Avani_90, BAKA_82, Bagrid_74, Batiatus_81, Batiatus_83, Beelzebub_12, Beem_71, Beem_75, BigPhil_74, BilboSwaggins_43, Bipolar_84, Blackbeetle_9, Blarby_91, Blexus_76, Blexus_80, Boomer_85, BronnyJames_70, Brookers_76, Bubbles123_76, Budgie_47, Burwell21_76, BuzzLyseyear_92, Byougenkin_82, CaptainTrips_81, Cerasum_75, Che8_86, Che9d_94, Clarkson_10, Clifton_74, Coco12_78, Corazon_9, Cornie_78, Cornucopia_81, Cornucopia_85, Courthouse_72, CrystalP_44, DLane_83, DRBy19_85, Daenerys_81, Dallas_70, Dallas_74, DeadP_82, DeadP_86, Deb65_75, DirtMcgirt_80, DmpstrDiver_71, DmpstrDiver_75, Donkeykong_86, DotProduct_76, Drago_78, Duke13_80, Eish_84, Eish_88, Ejimix_71, Ejimix_75, Enby_82, EnzoK_61, Enzomatic_90, EricMillard_74, Fancypants_89, FeliMaine_10, Filuzino_82, Flathead_81, Florinda_94, Fruitloop_78, Galactic_80, Galactic_82, Geralt_75, Girafales_91, Guppsters_76, Hades_80, Halley_73, Halley_77, Hamulus_80, Hannaconda_70, Harley_80, Hlubikazi_76, HokkenD_64, HokkenD_68, Hughesyang_70, Hughesyang_74, Huphlepuff_10, IHOP_42, IMpilo_76, Inca_41, IrishSherpFalk_81, JC27_64, Jabbawokkie_91, James_82, Jarcob_81, Jinglebell_88, Jinglebell_90, Job42_81, Job42_84, JoeyJr_82, JoieB_10, Jorgensen_63, Juice456_78, JuicyJay_70, JuicyJay_74, Kalah2_66, Kalah2_70, Karhdo_80, Kersh_83, Kingsley_85, Klein_71, Klein_73, Koella_76, Krakatau_77, KristaRAM_79, Kumao_59, Latretium_82, Leozinho_79, Leperchaun_80, LilMoolah_82, Lilbit_10, LittleE_74, LittleE_77, LittleLaf_9, Llama_88, Llama_90, Llij_77, Llij_80, LordVader_75, Lorde_81, Lucia_81, Lucky2013_69, LunaBlu_84, MadMen_79, MadMen_87, Manda_43, Mandlovu_76, Marker_87, Marleymoo_65, Marshmallow_43, Marvin_8, Medindi_85, Medindi_89, MiaZeal_76, MilanaBonita_77, MilleniumForce_82, Minerva_77, Minerva_79, MinionDave_77, Minnie_77, Modragons_86, Modragons_88, MooMoo_80, Mova_80, Mozy_88, Ms6_82, Myrale_44, Nekros_70, Nekros_72, NewHope4_84, Nibley_65, Nichirin_81, Nichirin_83, NihilNomen_72, NihilNomen_76, Nimbo_74, Nivrat_80, NormanBulbieJr_82, Ochi17_87, Ochi17_89, Odette_70, Odette_74, OfUltron_89, OfUltron_91, Ogopogo_87, OldBen_79, OlympiaSaint_81, Omega_77, Omega_79, PHappiness_82, PMC_78, Pacc40_73, Pepe_59, Phaja_42, Phalconet_78, Phalconet_82, Phanphagia_80, Phatniss_78, PhesterPhotato_85, PhesterPhotato_89, Philus_84, Phoebus_78, Pippy_76, Poise_9, Polo2Bam_89, PopTart_73, PopTart_77, Porcelain_75, Pound_75, Pound_77, Pringar_9, Priscilla_84, QuickMath_80, Quico_91, Radiance_80, Raela_9, Rearden_66, Rearden_68, Redno2_68, Renaud18_93, RitaG_82, Rita_88, Rockne_82, Royals2015_86, Royals2015_90, SG4_81, Sabbb_83, Sandalphon_75, Sarma624_80, SassyB_73, SassyB_77, Schatzie_66, Schatzie_70, SeaLumen_86, Seabastian_89, Seabastian_91, Shaboozey_69, ShamWow_44, Shauna1_81, Soul22_82, Soul22_84, Spartacus_87, Squint_76, Squirty_81, StAnnes_83, StellaBean_42, Strokeseat_76, Superphikiman_69, Superphikiman_73, Taj_88, Taj_92, Tesla_9, ThetaBob_85, ThreeRngTarjay_69, ThreeRngTarjay_73, Toto_43, Tuco_45, Tweety_82, Tweety_86, UncleRicky_80, VRedHorse_80, VRedHorse_86, Violac_83, Wachhund_81, Wanda_75, Wanda_77, Wee_87, Wee_91, Whatsapiecost_74, WillSterrel_80, XFactor_77, Yeet_69, Yeet_71, Zapner_90, Zelink_69, Zelink_73, Zerg_82,

Genes that have the "Most Annotated" start but do not call it:
• Bobby_70, IMpilo_79, Ibhubesi_80, Lucky2013_73, MrGordo_63, Redno2_72, Seagreen_80, SkiPole_68, Velveteen_75, Zeuska_63,

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

• Arib1_56, BAKA_166, BadAgartude_17, Bagrid_169, Balomoji_42, Bartholomew_54, BluSpix_59, Bobby_153, BronnyJames_67, Bruns_60, ByChance_73, Cali_17, Chewbacca_61, Chubbello_54, Cubone_64, Daikon_44, DoRead_81, Donkeykong_88, Donovan_54, Duke13_163, Eradicator_72, EricMillard_159, Estave1_93, Etoile_54, Eyeball_63, FirstPlacePfu_56, FirstPlacePfu_60, Fishburne_54, Flypotenuse_38, Forsytheast_60, Gachnar_61, GaloreK_58, Gandalph_79, Gator_41, Glexan_41, Hades_81, Harella_43, Hlubikazi_80, Hlubikazi_81, IgnatiusPatJac_61, Jant_81, Kalah2_157, Kari_54, KashFlow_68, Kenuha5_77, Klein_164, Langerak_55, LilSpotty_76, LilSpotty_77, Majeke_60, Mandlovu_80, Mandlovu_81, Mangethe_60, Marleymoo_148, Moose_60, Mwanjiwa_84, Optimus_157, Phegasus_60, Seanderson_61, ShowerHandel_82, SkiPole_66, Solon_60, Spartacus_89, Spartacus_90, Sprinklers_16, Stellammi_145, Strokeseat_80, Strokeseat_81, SuperGrey_82, SwissCheese_62, Tchotchke_76, Techage_55, Tortoise12_58, Tortoise12_60, Traaww1_40, Venti_55, ZenTime222_56, Zilizebeth_60,

Summary by start number:

Start 43:
• Found in 1 of 356 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 318
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Seagreen_80 (F1),

Start 45:
• Found in 12 of 356 (3.4%) of genes in pham
• Manual Annotations of this start: 5 of 318
• Called 41.7% of time when present
• Phage (with cluster) where this start called: Hades_81 (F1), Hlubikazi_81 (F1), Mandlovu_81 (F1), Spartacus_90 (F1), Strokeseat_81 (F1),

Start 51:
• Found in 13 of 356 (3.7%) of genes in pham
• Manual Annotations of this start: 3 of 318
• Called 23.1% of time when present
• Phage (with cluster) where this start called: Ibhubesi_80 (F1), MrGordo_63 (A1), SkiPole_68 (A1),

Start 55:
• Found in 48 of 356 (13.5%) of genes in pham
• Manual Annotations of this start: 1 of 318
• Called 2.1% of time when present
• Phage (with cluster) where this start called: Velveteen_75 (F1),

Start 59:
• Found in 12 of 356 (3.4%) of genes in pham
• Manual Annotations of this start: 10 of 318
• Called 91.7% of time when present
• Phage (with cluster) where this start called: BluSpix_59 (A1), Bruns_60 (A1), ByChance_73 (F1), Eyeball_63 (A1), Forsytheast_60 (A1), Gachnar_61 (A1), IgnatiusPatJac_61 (A1), Moose_60 (A1), ShowerHandel_82 (F1), SkiPole_66 (A1), SwissCheese_62 (A1),

Start 60:
• Found in 16 of 356 (4.5%) of genes in pham
• Manual Annotations of this start: 14 of 318
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arib1_56 (P1), Bartholomew_54 (P1), Chubbello_54 (P1), Donovan_54 (P1), Etoile_54 (P1), FirstPlacePfu_56 (P1), Fishburne_54 (P1), GaloreK_58 (P1), Kari_54 (P1), Langerak_55 (P1), Majeke_60 (P1), Mangethe_60 (P1), Phegasus_60 (P1), Techage_55 (P1), Venti_55 (P1), Zilizebeth_60 (P1),

Start 61:
• Found in 278 of 356 (78.1%) of genes in pham
• Manual Annotations of this start: 243 of 318
• Called 96.4% of time when present
• Phage (with cluster) where this start called: ABCat_42 (E), Akhila_78 (F1), Ardmore_67 (F1), Ariel_75 (J), Ashballer_64 (A1), Aubs_82 (F1), Avani_90 (F2), BAKA_82 (J), Bagrid_74 (J), Batiatus_81 (F1), Batiatus_83 (F1), Beelzebub_12 (S), Beem_71 (J), Beem_75 (J), BigPhil_74 (F1), BilboSwaggins_43 (E), Bipolar_84 (F1), Blackbeetle_9 (S), Blarby_91 (F), Blexus_76 (F1), Blexus_80 (F1), Boomer_85 (F1), BronnyJames_70 (J), Brookers_76 (F1), Bubbles123_76 (F1), Budgie_47 (E), Burwell21_76 (F1), BuzzLyseyear_92 (F1), Byougenkin_82 (F1), CaptainTrips_81 (F1), Cerasum_75 (F1), Che8_86 (F1), Che9d_94 (F2), Clarkson_10 (S), Clifton_74 (F1), Coco12_78 (F1), Corazon_9 (S), Cornie_78 (F5), Cornucopia_81 (F1), Cornucopia_85 (F1), Courthouse_72 (J), CrystalP_44 (E), DLane_83 (F1), DRBy19_85 (F1), Daenerys_81 (F1), Dallas_70 (J), Dallas_74 (J), DeadP_82 (F1), DeadP_86 (F1), Deb65_75 (F1), DirtMcgirt_80 (F1), DmpstrDiver_71 (J), DmpstrDiver_75 (J), Donkeykong_86 (F1), DotProduct_76 (F1), Drago_78 (F1), Duke13_80 (J), Eish_84 (F1), Eish_88 (F1), Ejimix_71 (J), Ejimix_75 (J), Enby_82 (F1), EnzoK_61 (A1), Enzomatic_90 (F1), EricMillard_74 (J), Fancypants_89 (F1), FeliMaine_10 (S), Filuzino_82 (F1), Flathead_81 (F1), Florinda_94 (F1), Fruitloop_78 (F1), Galactic_80 (F1), Galactic_82 (F1), Geralt_75 (F1), Girafales_91 (F1), Guppsters_76 (F1), Hades_80 (F1), Halley_73 (J), Halley_77 (J), Hamulus_80 (F1), Hannaconda_70 (J), Harley_80 (F1), Hlubikazi_76 (F1), HokkenD_64 (J), HokkenD_68 (J), Hughesyang_70 (J), Hughesyang_74 (J), Huphlepuff_10 (S), IHOP_42 (E), IMpilo_76 (F1), Inca_41 (E), IrishSherpFalk_81 (F1), JC27_64 (A1), Jabbawokkie_91 (F2), James_82 (F1), Jarcob_81 (F1), Jinglebell_88 (F1), Jinglebell_90 (F1), Job42_81 (F1), Job42_84 (F1), JoeyJr_82 (F1), JoieB_10 (S), Jorgensen_63 (A1), Juice456_78 (F1), JuicyJay_70 (J), JuicyJay_74 (J), Kalah2_66 (J), Kalah2_70 (J), Karhdo_80 (F1), Kersh_83 (F1), Kingsley_85 (F1), Klein_71 (J), Klein_73 (J), Koella_76 (F1), Krakatau_77 (F1), KristaRAM_79 (F1), Kumao_59 (singleton), Latretium_82 (F1), Leozinho_79 (F1), Leperchaun_80 (F1), LilMoolah_82 (F1), Lilbit_10 (S), LittleE_74 (J), LittleE_77 (J), LittleLaf_9 (S), Llama_88 (F1), Llama_90 (F1), Llij_77 (F1), Llij_80 (F1), LordVader_75 (F), Lorde_81 (F1), Lucia_81 (F1), Lucky2013_69 (J), LunaBlu_84 (F1), MadMen_79 (F1), MadMen_87 (F1), Manda_43 (E), Mandlovu_76 (F1), Marker_87 (F1), Marleymoo_65 (J), Marshmallow_43 (E), Marvin_8 (S), Medindi_85 (F1), Medindi_89 (F1), MiaZeal_76 (J), MilanaBonita_77 (F1), MilleniumForce_82 (F1), Minerva_77 (J), Minerva_79 (J), MinionDave_77 (F1), Minnie_77 (F1), Modragons_86 (F1), Modragons_88 (F1), MooMoo_80 (singleton), Mova_80 (F1), Mozy_88 (F1), Ms6_82 (F1), Myrale_44 (E), Nekros_70 (J), Nekros_72 (J), NewHope4_84 (F1), Nibley_65 (J), Nichirin_81 (F1), Nichirin_83 (F1), NihilNomen_72 (J), NihilNomen_76 (J), Nimbo_74 (F1), Nivrat_80 (F1), NormanBulbieJr_82 (F1), Ochi17_87 (F1), Ochi17_89 (F1), Odette_70 (J), Odette_74 (J), OfUltron_89 (F1), OfUltron_91 (F1), Ogopogo_87 (F1), OldBen_79

(F1), OlympiaSaint_81 (F1), Omega_77 (J), Omega_79 (J), PHappiness_82 (F1), PMC_78 (F1), Pacc40_73 (F1), Pepe_59 (A1), Phaja_42 (E), Phalconet_78 (F1), Phalconet_82 (F1), Phanphagia_80 (F1), Phatniss_78 (F1), PhesterPhotato_85 (F1), PhesterPhotato_89 (F1), Philus_84 (F1), Phoebus_78 (J), Pippy_76 (F1), Poise_9 (S), Polo2Bam_89 (F1), PopTart_73 (F1), PopTart_77 (F1), Porcelain_75 (J), Pound_75 (J), Pound_77 (J), Pringar_9 (S), Priscilla_84 (F1), QuickMath_80 (F1), Quico_91 (F1), Radiance_80 (F1), Raela_9 (S), Rearden_66 (J), Rearden_68 (J), Redno2_68 (J), Renaud18_93 (F4), RitaG_82 (F1), Rita_88 (F1), Rockne_82 (F1), Royals2015_86 (F1), Royals2015_90 (F1), SG4_81 (F1), Sabbb_83 (F1), Sandalphon_75 (F1), Sarma624_80 (F1), SassyB_73 (F1), SassyB_77 (F1), Schatzie_66 (J), Schatzie_70 (J), SeaLumen_86 (F1), Seabastian_89 (F1), Seabastian_91 (F1), Shaboozey_69 (J), ShamWow_44 (E), Shauna1_81 (F1), Soul22_82 (F2), Soul22_84 (F2), Spartacus_87 (F1), Squint_76 (J), Squirty_81 (F3), StAnnes_83 (F1), StellaBean_42 (E), Strokeseat_76 (F1), Superphikiman_69 (J), Superphikiman_73 (J), Taj_88 (F1), Taj_92 (F1), Tesla_9 (S), ThetaBob_85 (F4), ThreeRngTarjay_69 (J), ThreeRngTarjay_73 (J), Toto_43 (E), Tuco_45 (E), Tweety_82 (F1), Tweety_86 (F1), UncleRicky_80 (F1), VRedHorse_80 (F1), VRedHorse_86 (F1), Violac_83 (F1), Wachhund_81 (F1), Wanda_75 (J), Wanda_77 (J), Wee_87 (F1), Wee_91 (F1), Whatsapiecost_74 (F1), WillSterrel_80 (F1), XFactor_77 (F1), Yeet_69 (J), Yeet_71 (J), Zapner_90 (F2), Zelink_69 (J), Zelink_73 (J), Zerg_82 (F1),

Start 62:
• Found in 20 of 356 (5.6%) of genes in pham
• Manual Annotations of this start: 16 of 318
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Balomoji_42 (E), BronnyJames_67 (J), DoRead_81 (F1), Donkeykong_88 (F1), Estave1_93 (F1), Flypotenuse_38 (E), Gandalph_79 (F1), Gator_41 (E), Glexan_41 (E), Harella_43 (E), Hlubikazi_80 (F1), Jant_81 (F1), Kenuha5_77 (F1), Mandlovu_80 (F1), Solon_60 (A1), Spartacus_89 (F1), Strokeseat_80 (F1), Traaww1_40 (E),

Start 63:
• Found in 8 of 356 (2.2%) of genes in pham
• No Manual Annotations of this start.
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Cubone_64 (N), Tchotchke_76 (F1),

Start 64:
• Found in 10 of 356 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 318
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Seanderson_61 (A1),

Start 65:
• Found in 1 of 356 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 318
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tortoise12_60 (N),

Start 67:
• Found in 65 of 356 (18.3%) of genes in pham
• No Manual Annotations of this start.

• Called 3.1% of time when present
• Phage (with cluster) where this start called: Daikon_44 (E), Mwanjiwa_84 (F1),

Start 68:
• Found in 228 of 356 (64.0%) of genes in pham
• Manual Annotations of this start: 10 of 318
• Called 4.8% of time when present
• Phage (with cluster) where this start called: BadAgartude_17 (C1), Bobby_70 (J), Cali_17 (C1), Eradicator_72 (F1), IMpilo_79 (F1), KashFlow_68 (J), Lucky2013_73 (J), Redno2_72 (J), Sprinklers_16 (C1), SuperGrey_82 (F1), Zeuska_63 (A1),

Start 72:
• Found in 14 of 356 (3.9%) of genes in pham
• Manual Annotations of this start: 12 of 318
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BAKA_166 (J), Bagrid_169 (J), Bobby_153 (J), Chewbacca_61 (N), Duke13_163 (J), EricMillard_159 (J), FirstPlacePfu_60 (P1), Kalah2_157 (J), Klein_164 (J), LilSpotty_76 (singleton), Marleymoo_148 (J), Optimus_157 (J), Tortoise12_58 (N), ZenTime222_56 (T),

Start 80:
• Found in 1 of 356 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 318
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilSpotty_77 (singleton),

Start 85:
• Found in 11 of 356 (3.1%) of genes in pham
• No Manual Annotations of this start.
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Stellammi_145 (UNK),

Summary by clusters:

There are 16 clusters represented in this pham: F1, singleton, P1, E, F5, F, J, F2, N, A1, S, F3, T, F4, C1, UNK,

Info for manual annotations of cluster A1:
•Start number 51 was manually annotated 2 times for cluster A1.
•Start number 59 was manually annotated 8 times for cluster A1.
•Start number 61 was manually annotated 5 times for cluster A1.
•Start number 62 was manually annotated 1 time for cluster A1.
•Start number 64 was manually annotated 1 time for cluster A1.
•Start number 68 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster C1:
•Start number 68 was manually annotated 3 times for cluster C1.

Info for manual annotations of cluster E:
•Start number 61 was manually annotated 13 times for cluster E.
•Start number 62 was manually annotated 6 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 43 was manually annotated 1 time for cluster F1.
•Start number 45 was manually annotated 5 times for cluster F1.
•Start number 51 was manually annotated 1 time for cluster F1.
•Start number 55 was manually annotated 1 time for cluster F1.
•Start number 59 was manually annotated 2 times for cluster F1.
•Start number 61 was manually annotated 145 times for cluster F1.
•Start number 62 was manually annotated 9 times for cluster F1.
•Start number 68 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 61 was manually annotated 6 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 61 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 61 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 61 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster J:
•Start number 61 was manually annotated 54 times for cluster J.
•Start number 68 was manually annotated 4 times for cluster J.
•Start number 72 was manually annotated 7 times for cluster J.

Info for manual annotations of cluster N:
•Start number 65 was manually annotated 1 time for cluster N.
•Start number 72 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster P1:
•Start number 60 was manually annotated 14 times for cluster P1.
•Start number 72 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster S:
•Start number 61 was manually annotated 14 times for cluster S.

Info for manual annotations of cluster T:
•Start number 72 was manually annotated 1 time for cluster T.

Gene Information:
Gene: ABCat_42 Start: 36113, Stop: 35817, Start Num: 61
Candidate Starts for ABCat_42:
(Start: 61 @36113 has 243 MA's), (70, 36077), (77, 36059), (93, 36026), (102, 35984), (133, 35837),

Gene: Akhila_78 Start: 48008, Stop: 48292, Start Num: 61
Candidate Starts for Akhila_78:

(Start: 61 @48008 has 243 MA's), (Start: 68 @48032 has 10 MA's), (96, 48107), (124, 48236), (133, 48272),

Gene: Ardmore_67 Start: 43684, Stop: 43968, Start Num: 61
Candidate Starts for Ardmore_67:
(Start: 61 @43684 has 243 MA's), (Start: 68 @43708 has 10 MA's), (96, 43783), (124, 43912), (133, 43948),

Gene: Arib1_56 Start: 36638, Stop: 36877, Start Num: 60
Candidate Starts for Arib1_56:
(Start: 60 @36638 has 14 MA's), (117, 36839), (124, 36866),

Gene: Ariel_75 Start: 47349, Stop: 47065, Start Num: 61
Candidate Starts for Ariel_75:
(Start: 61 @47349 has 243 MA's), (Start: 68 @47325 has 10 MA's), (96, 47250), (124, 47121), (133, 47085),

Gene: Ashballer_64 Start: 41640, Stop: 41353, Start Num: 61
Candidate Starts for Ashballer_64:
(Start: 51 @41670 has 3 MA's), (Start: 61 @41640 has 243 MA's), (Start: 68 @41616 has 10 MA's), (132, 41376),

Gene: Aubs_82 Start: 49731, Stop: 50015, Start Num: 61
Candidate Starts for Aubs_82:
(48, 49695), (Start: 61 @49731 has 243 MA's), (Start: 68 @49755 has 10 MA's), (124, 49959), (133, 49995),

Gene: Avani_90 Start: 47333, Stop: 47617, Start Num: 61
Candidate Starts for Avani_90:
(Start: 61 @47333 has 243 MA's), (Start: 68 @47357 has 10 MA's), (96, 47432), (124, 47561), (133, 47597),

Gene: BAKA_166 Start: 86863, Stop: 87108, Start Num: 72
Candidate Starts for BAKA_166:
(Start: 72 @86863 has 12 MA's), (85, 86896), (101, 86950), (112, 86983), (113, 86989), (115, 87028),

Gene: BAKA_82 Start: 52624, Stop: 52340, Start Num: 61
Candidate Starts for BAKA_82:
(Start: 55 @52648 has 1 MA's), (Start: 61 @52624 has 243 MA's), (Start: 68 @52600 has 10 MA's), (96, 52525), (124, 52396), (133, 52360),

Gene: BadAgartude_17 Start: 5514, Stop: 5792, Start Num: 68
Candidate Starts for BadAgartude_17:
(58, 5475), (63, 5493), (Start: 68 @5514 has 10 MA's), (74, 5535), (77, 5547), (79, 5550), (86, 5565), (90, 5574), (124, 5736), (133, 5772),

Gene: Bagrid_74 Start: 50766, Stop: 50482, Start Num: 61
Candidate Starts for Bagrid_74:
(Start: 61 @50766 has 243 MA's), (Start: 68 @50742 has 10 MA's), (96, 50667), (124, 50538), (133, 50502),

Gene: Bagrid_169 Start: 88092, Stop: 88337, Start Num: 72
Candidate Starts for Bagrid_169:

(Start: 72 @88092 has 12 MA's), (85, 88125), (101, 88179), (112, 88212), (113, 88218), (115, 88257),

Gene: Balomoji_42 Start: 35703, Stop: 35428, Start Num: 62
Candidate Starts for Balomoji_42:
(34, 35775), (44, 35751), (Start: 45 @35748 has 5 MA's), (Start: 62 @35703 has 16 MA's), (67, 35682), (69, 35670), (112, 35562), (124, 35484), (133, 35448),

Gene: Bartholomew_54 Start: 36580, Stop: 36819, Start Num: 60
Candidate Starts for Bartholomew_54:
(Start: 60 @36580 has 14 MA's), (117, 36781), (124, 36808),

Gene: Batiatus_81 Start: 49093, Stop: 49377, Start Num: 61
Candidate Starts for Batiatus_81:
(Start: 61 @49093 has 243 MA's), (Start: 68 @49117 has 10 MA's), (96, 49192), (124, 49321), (133, 49357),

Gene: Batiatus_83 Start: 49708, Stop: 50034, Start Num: 61
Candidate Starts for Batiatus_83:
(25, 49603), (Start: 61 @49708 has 243 MA's), (69, 49741), (70, 49744), (82, 49771), (84, 49777), (112, 49897), (133, 50011),

Gene: Beelzebub_12 Start: 3476, Stop: 3760, Start Num: 61
Candidate Starts for Beelzebub_12:
(Start: 55 @3452 has 1 MA's), (Start: 61 @3476 has 243 MA's), (Start: 68 @3500 has 10 MA's), (96, 3575), (124, 3704), (133, 3740),

Gene: Beem_75 Start: 51626, Stop: 51342, Start Num: 61
Candidate Starts for Beem_75:
(Start: 61 @51626 has 243 MA's), (Start: 68 @51602 has 10 MA's), (96, 51527), (124, 51398), (133, 51362),

Gene: Beem_71 Start: 50213, Stop: 49920, Start Num: 61
Candidate Starts for Beem_71:
(Start: 61 @50213 has 243 MA's), (67, 50192), (69, 50180), (112, 50072), (116, 50024), (120, 50012), (127, 49985), (129, 49982), (133, 49943),

Gene: BigPhil_74 Start: 44927, Stop: 45211, Start Num: 61
Candidate Starts for BigPhil_74:
(Start: 55 @44903 has 1 MA's), (Start: 61 @44927 has 243 MA's), (Start: 68 @44951 has 10 MA's), (96, 45026), (124, 45155), (133, 45191),

Gene: BilboSwaggins_43 Start: 36121, Stop: 35825, Start Num: 61
Candidate Starts for BilboSwaggins_43:
(Start: 61 @36121 has 243 MA's), (70, 36085), (77, 36067), (93, 36034), (102, 35992), (133, 35845),

Gene: Bipolar_84 Start: 50621, Stop: 50905, Start Num: 61
Candidate Starts for Bipolar_84:
(48, 50585), (Start: 61 @50621 has 243 MA's), (Start: 68 @50645 has 10 MA's), (96, 50720), (124, 50849), (133, 50885),

Gene: Blackbeetle_9 Start: 2787, Stop: 3071, Start Num: 61
Candidate Starts for Blackbeetle_9:
(Start: 61 @2787 has 243 MA's), (Start: 68 @2811 has 10 MA's), (96, 2886), (124, 3015), (133, 3051),

Gene: Blarby_91 Start: 47885, Stop: 48169, Start Num: 61
Candidate Starts for Blarby_91:
(Start: 61 @47885 has 243 MA's), (Start: 68 @47909 has 10 MA's), (124, 48113), (133, 48149),

Gene: Blexus_76 Start: 48851, Stop: 49147, Start Num: 61
Candidate Starts for Blexus_76:
(Start: 61 @48851 has 243 MA's), (70, 48887), (77, 48905), (93, 48938), (102, 48980), (124, 49091), (133, 49127),

Gene: Blexus_80 Start: 49926, Stop: 50210, Start Num: 61
Candidate Starts for Blexus_80:
(Start: 61 @49926 has 243 MA's), (Start: 68 @49950 has 10 MA's), (69, 49959), (100, 50058), (112, 50073), (133, 50187),

Gene: BluSpix_59 Start: 36720, Stop: 36373, Start Num: 59
Candidate Starts for BluSpix_59:
(12, 36921), (36, 36777), (39, 36774), (Start: 59 @36720 has 10 MA's), (Start: 64 @36708 has 1 MA's), (70, 36678), (76, 36660), (90, 36627), (99, 36585), (122, 36471), (133, 36396),

Gene: Bobby_153 Start: 87833, Stop: 88078, Start Num: 72
Candidate Starts for Bobby_153:
(Start: 72 @87833 has 12 MA's), (85, 87866), (101, 87920), (112, 87953), (113, 87959), (115, 87998),

Gene: Bobby_70 Start: 49641, Stop: 49345, Start Num: 68
Candidate Starts for Bobby_70:
(Start: 55 @49689 has 1 MA's), (Start: 61 @49665 has 243 MA's), (Start: 68 @49641 has 10 MA's), (96, 49566), (124, 49437), (133, 49401),

Gene: Boomer_85 Start: 49678, Stop: 49962, Start Num: 61
Candidate Starts for Boomer_85:
(Start: 61 @49678 has 243 MA's), (Start: 68 @49702 has 10 MA's), (96, 49777), (124, 49906), (133, 49942),

Gene: BronnyJames_70 Start: 45965, Stop: 45681, Start Num: 61
Candidate Starts for BronnyJames_70:
(Start: 61 @45965 has 243 MA's), (Start: 68 @45941 has 10 MA's), (124, 45737), (133, 45701),

Gene: BronnyJames_67 Start: 44925, Stop: 44647, Start Num: 62
Candidate Starts for BronnyJames_67:
(39, 44982), (Start: 62 @44925 has 16 MA's), (Start: 68 @44901 has 10 MA's), (69, 44892), (81, 44859), (88, 44847), (91, 44844), (109, 44796), (112, 44781), (124, 44703), (133, 44667),

Gene: Brookers_76 Start: 47878, Stop: 48162, Start Num: 61
Candidate Starts for Brookers_76:
(Start: 55 @47854 has 1 MA's), (Start: 61 @47878 has 243 MA's), (Start: 68 @47902 has 10 MA's), (96, 47977), (124, 48106), (133, 48142),

Gene: Bruns_60 Start: 39755, Stop: 39507, Start Num: 59
Candidate Starts for Bruns_60:
(24, 39851), (30, 39827), (40, 39797), (Start: 59 @39755 has 10 MA's), (Start: 64 @39743 has 1 MA's), (133, 39530),

Gene: Bubbles123_76 Start: 48608, Stop: 48892, Start Num: 61
Candidate Starts for Bubbles123_76:
(Start: 51 @48578 has 3 MA's), (Start: 55 @48584 has 1 MA's), (Start: 61 @48608 has 243 MA's), (Start: 68 @48632 has 10 MA's), (96, 48707), (124, 48836), (133, 48872),

Gene: Budgie_47 Start: 35211, Stop: 34930, Start Num: 61
Candidate Starts for Budgie_47:
(Start: 61 @35211 has 243 MA's), (Start: 68 @35187 has 10 MA's), (69, 35178), (84, 35145), (89, 35133), (92, 35130), (112, 35067), (133, 34953),

Gene: Burwell21_76 Start: 48586, Stop: 48870, Start Num: 61
Candidate Starts for Burwell21_76:
(Start: 61 @48586 has 243 MA's), (Start: 68 @48610 has 10 MA's), (96, 48685), (124, 48814), (133, 48850),

Gene: BuzzLyseyear_92 Start: 52666, Stop: 52950, Start Num: 61
Candidate Starts for BuzzLyseyear_92:
(Start: 61 @52666 has 243 MA's), (Start: 68 @52690 has 10 MA's), (69, 52699), (100, 52798), (112, 52813), (133, 52927),

Gene: ByChance_73 Start: 44779, Stop: 45045, Start Num: 59
Candidate Starts for ByChance_73:
(Start: 59 @44779 has 10 MA's), (67, 44806), (70, 44821), (112, 44911), (124, 44989), (133, 45025),

Gene: Byougenkin_82 Start: 47350, Stop: 47634, Start Num: 61
Candidate Starts for Byougenkin_82:
(Start: 61 @47350 has 243 MA's), (Start: 68 @47374 has 10 MA's), (69, 47383), (100, 47482), (112, 47497), (133, 47611),

Gene: Cali_17 Start: 6490, Stop: 6768, Start Num: 68
Candidate Starts for Cali_17:
(58, 6451), (63, 6469), (Start: 68 @6490 has 10 MA's), (74, 6511), (77, 6523), (79, 6526), (86, 6541), (90, 6550), (124, 6712), (133, 6748),

Gene: CaptainTrips_81 Start: 48491, Stop: 48775, Start Num: 61
Candidate Starts for CaptainTrips_81:
(Start: 61 @48491 has 243 MA's), (Start: 68 @48515 has 10 MA's), (124, 48719), (133, 48755),

Gene: Cerasum_75 Start: 44945, Stop: 45229, Start Num: 61
Candidate Starts for Cerasum_75:
(Start: 55 @44921 has 1 MA's), (Start: 61 @44945 has 243 MA's), (Start: 68 @44969 has 10 MA's), (96, 45044), (124, 45173), (133, 45209),

Gene: Che8_86 Start: 49874, Stop: 50158, Start Num: 61
Candidate Starts for Che8_86:
(28, 49778), (34, 49802), (Start: 61 @49874 has 243 MA's), (Start: 68 @49898 has 10 MA's), (124, 50102), (133, 50138),

Gene: Che9d_94 Start: 49583, Stop: 49876, Start Num: 61
Candidate Starts for Che9d_94:
(53, 49556), (Start: 61 @49583 has 243 MA's), (67, 49604), (70, 49619), (112, 49745), (133, 49853),

Gene: Chewbacca_61 Start: 37859, Stop: 38119, Start Num: 72

Candidate Starts for Chewbacca_61:
(3, 37556), (6, 37577), (15, 37631), (31, 37733), (66, 37829), (Start: 72 @37859 has 12 MA's), (87, 37892), (117, 38033), (121, 38045), (124, 38060), (130, 38084), (133, 38096), (134, 38102),

Gene: Chubbello_54 Start: 36576, Stop: 36815, Start Num: 60
Candidate Starts for Chubbello_54:
(Start: 60 @36576 has 14 MA's), (117, 36777), (124, 36804),

Gene: Clarkson_10 Start: 3252, Stop: 3536, Start Num: 61
Candidate Starts for Clarkson_10:
(Start: 55 @3228 has 1 MA's), (Start: 61 @3252 has 243 MA's), (Start: 68 @3276 has 10 MA's), (96, 3351), (124, 3480), (133, 3516),

Gene: Clifton_74 Start: 47402, Stop: 47686, Start Num: 61
Candidate Starts for Clifton_74:
(Start: 61 @47402 has 243 MA's), (Start: 68 @47426 has 10 MA's), (96, 47501), (124, 47630), (133, 47666),

Gene: Coco12_78 Start: 49002, Stop: 49286, Start Num: 61
Candidate Starts for Coco12_78:
(Start: 55 @48978 has 1 MA's), (Start: 61 @49002 has 243 MA's), (Start: 68 @49026 has 10 MA's), (96, 49101), (124, 49230), (133, 49266),

Gene: Corazon_9 Start: 3205, Stop: 3489, Start Num: 61
Candidate Starts for Corazon_9:
(Start: 55 @3181 has 1 MA's), (Start: 61 @3205 has 243 MA's), (Start: 68 @3229 has 10 MA's), (96, 3304), (124, 3433), (133, 3469),

Gene: Cornie_78 Start: 47540, Stop: 47824, Start Num: 61
Candidate Starts for Cornie_78:
(Start: 61 @47540 has 243 MA's), (Start: 68 @47564 has 10 MA's), (124, 47768), (133, 47804),

Gene: Cornucopia_81 Start: 47550, Stop: 47819, Start Num: 61
Candidate Starts for Cornucopia_81:
(Start: 61 @47550 has 243 MA's), (67, 47571), (107, 47670), (110, 47676), (133, 47796),

Gene: Cornucopia_85 Start: 48642, Stop: 48905, Start Num: 61
Candidate Starts for Cornucopia_85:
(Start: 61 @48642 has 243 MA's), (Start: 68 @48666 has 10 MA's), (69, 48675), (112, 48789), (125, 48864),

Gene: Courthouse_72 Start: 46987, Stop: 46703, Start Num: 61
Candidate Starts for Courthouse_72:
(Start: 61 @46987 has 243 MA's), (Start: 68 @46963 has 10 MA's), (124, 46759), (133, 46723),

Gene: CrystalP_44 Start: 36121, Stop: 35825, Start Num: 61
Candidate Starts for CrystalP_44:
(Start: 61 @36121 has 243 MA's), (70, 36085), (77, 36067), (93, 36034), (102, 35992), (133, 35845),

Gene: Cubone_64 Start: 39109, Stop: 39372, Start Num: 63
Candidate Starts for Cubone_64:
(1, 38800), (2, 38848), (4, 38860), (21, 38983), (54, 39079), (63, 39109), (Start: 68 @39130 has 10 MA's), (132, 39349),

Gene: DLane_83 Start: 50315, Stop: 50599, Start Num: 61
Candidate Starts for DLane_83:
(Start: 61 @50315 has 243 MA's), (Start: 68 @50339 has 10 MA's), (96, 50414), (133, 50579),

Gene: DRBy19_85 Start: 51131, Stop: 51415, Start Num: 61
Candidate Starts for DRBy19_85:
(Start: 61 @51131 has 243 MA's), (Start: 68 @51155 has 10 MA's), (96, 51230), (124, 51359), (133, 51395),

Gene: Daenerys_81 Start: 50626, Stop: 50910, Start Num: 61
Candidate Starts for Daenerys_81:
(Start: 61 @50626 has 243 MA's), (Start: 68 @50650 has 10 MA's), (96, 50725), (124, 50854), (133, 50890),

Gene: Daikon_44 Start: 35703, Stop: 35449, Start Num: 67
Candidate Starts for Daikon_44:
(34, 35796), (44, 35772), (Start: 45 @35769 has 5 MA's), (Start: 62 @35724 has 16 MA's), (67, 35703), (69, 35691), (112, 35583), (124, 35505), (133, 35469),

Gene: Dallas_70 Start: 49134, Stop: 48841, Start Num: 61
Candidate Starts for Dallas_70:
(Start: 61 @49134 has 243 MA's), (67, 49113), (69, 49101), (112, 48993), (116, 48945), (120, 48933), (127, 48906), (129, 48903), (133, 48864),

Gene: Dallas_74 Start: 50547, Stop: 50263, Start Num: 61
Candidate Starts for Dallas_74:
(Start: 61 @50547 has 243 MA's), (Start: 68 @50523 has 10 MA's), (96, 50448), (124, 50319), (133, 50283),

Gene: DeadP_82 Start: 48110, Stop: 48394, Start Num: 61
Candidate Starts for DeadP_82:
(16, 47948), (Start: 61 @48110 has 243 MA's), (Start: 68 @48134 has 10 MA's), (96, 48209), (124, 48338), (133, 48374),

Gene: DeadP_86 Start: 49174, Stop: 49458, Start Num: 61
Candidate Starts for DeadP_86:
(Start: 61 @49174 has 243 MA's), (Start: 68 @49198 has 10 MA's), (69, 49207), (100, 49306), (112, 49321), (133, 49435),

Gene: Deb65_75 Start: 48348, Stop: 48632, Start Num: 61
Candidate Starts for Deb65_75:
(Start: 61 @48348 has 243 MA's), (Start: 68 @48372 has 10 MA's), (96, 48447), (124, 48576), (133, 48612),

Gene: DirtMcgirt_80 Start: 46288, Stop: 46572, Start Num: 61
Candidate Starts for DirtMcgirt_80:
(Start: 61 @46288 has 243 MA's), (Start: 68 @46312 has 10 MA's), (96, 46387), (124, 46516), (133, 46552),

Gene: DmpstrDiver_75 Start: 50974, Stop: 50690, Start Num: 61
Candidate Starts for DmpstrDiver_75:

(Start: 61 @50974 has 243 MA's), (Start: 68 @50950 has 10 MA's), (96, 50875), (124, 50746), (133, 50710),

Gene: DmpstrDiver_71 Start: 49561, Stop: 49268, Start Num: 61
Candidate Starts for DmpstrDiver_71:
(Start: 61 @49561 has 243 MA's), (67, 49540), (69, 49528), (112, 49420), (116, 49372), (120, 49360), (127, 49333), (129, 49330), (133, 49291),

Gene: DoRead_81 Start: 46952, Stop: 47230, Start Num: 62
Candidate Starts for DoRead_81:
(47, 46910), (57, 46928), (Start: 62 @46952 has 16 MA's), (67, 46973), (69, 46985), (124, 47174), (133, 47210),

Gene: Donkeykong_86 Start: 50724, Stop: 51008, Start Num: 61
Candidate Starts for Donkeykong_86:
(16, 50562), (Start: 61 @50724 has 243 MA's), (Start: 68 @50748 has 10 MA's), (96, 50823), (124, 50952), (133, 50988),

Gene: Donkeykong_88 Start: 51342, Stop: 51620, Start Num: 62
Candidate Starts for Donkeykong_88:
(Start: 62 @51342 has 16 MA's), (Start: 68 @51366 has 10 MA's), (69, 51375), (81, 51408), (88, 51420), (91, 51423), (109, 51471), (112, 51486), (124, 51564), (133, 51600),

Gene: Donovan_54 Start: 36798, Stop: 37037, Start Num: 60
Candidate Starts for Donovan_54:
(Start: 60 @36798 has 14 MA's), (117, 36999), (124, 37026),

Gene: DotProduct_76 Start: 47105, Stop: 47389, Start Num: 61
Candidate Starts for DotProduct_76:
(Start: 61 @47105 has 243 MA's), (Start: 68 @47129 has 10 MA's), (96, 47204), (124, 47333), (133, 47369),

Gene: Drago_78 Start: 46291, Stop: 46575, Start Num: 61
Candidate Starts for Drago_78:
(Start: 61 @46291 has 243 MA's), (Start: 68 @46315 has 10 MA's), (96, 46390), (124, 46519), (133, 46555),

Gene: Duke13_163 Start: 85359, Stop: 85604, Start Num: 72
Candidate Starts for Duke13_163:
(Start: 72 @85359 has 12 MA's), (85, 85392), (101, 85446), (112, 85479), (113, 85485), (115, 85524),

Gene: Duke13_80 Start: 51836, Stop: 51552, Start Num: 61
Candidate Starts for Duke13_80:
(Start: 55 @51860 has 1 MA's), (Start: 61 @51836 has 243 MA's), (Start: 68 @51812 has 10 MA's), (96, 51737), (124, 51608), (133, 51572),

Gene: Eish_88 Start: 51057, Stop: 51341, Start Num: 61
Candidate Starts for Eish_88:
(Start: 61 @51057 has 243 MA's), (Start: 68 @51081 has 10 MA's), (69, 51090), (100, 51189), (112, 51204), (133, 51318),

Gene: Eish_84 Start: 49994, Stop: 50278, Start Num: 61
Candidate Starts for Eish_84:

(Start: 61 @49994 has 243 MA's), (Start: 68 @50018 has 10 MA's), (96, 50093), (124, 50222), (133, 50258),

Gene: Ejimix_71 Start: 50999, Stop: 50706, Start Num: 61
Candidate Starts for Ejimix_71:
(Start: 61 @50999 has 243 MA's), (67, 50978), (69, 50966), (112, 50858), (116, 50810), (120, 50798), (127, 50771), (129, 50768), (133, 50729),

Gene: Ejimix_75 Start: 52415, Stop: 52131, Start Num: 61
Candidate Starts for Ejimix_75:
(Start: 61 @52415 has 243 MA's), (Start: 68 @52391 has 10 MA's), (96, 52316), (124, 52187), (133, 52151),

Gene: Enby_82 Start: 46567, Stop: 46851, Start Num: 61
Candidate Starts for Enby_82:
(Start: 61 @46567 has 243 MA's), (Start: 68 @46591 has 10 MA's), (96, 46666), (124, 46795), (133, 46831),

Gene: EnzoK_61 Start: 38364, Stop: 38077, Start Num: 61
Candidate Starts for EnzoK_61:
(12, 38565), (36, 38421), (39, 38418), (Start: 61 @38364 has 243 MA's), (67, 38343), (69, 38331), (112, 38223), (133, 38100),

Gene: Enzomatic_90 Start: 47423, Stop: 47707, Start Num: 61
Candidate Starts for Enzomatic_90:
(Start: 61 @47423 has 243 MA's), (Start: 68 @47447 has 10 MA's), (96, 47522), (124, 47651), (133, 47687),

Gene: Eradicator_72 Start: 46896, Stop: 47174, Start Num: 68
Candidate Starts for Eradicator_72:
(58, 46857), (63, 46875), (Start: 68 @46896 has 10 MA's), (74, 46917), (77, 46929), (79, 46932), (86, 46947), (90, 46956), (124, 47118), (133, 47154),

Gene: EricMillard_74 Start: 51619, Stop: 51335, Start Num: 61
Candidate Starts for EricMillard_74:
(Start: 61 @51619 has 243 MA's), (Start: 68 @51595 has 10 MA's), (96, 51520), (124, 51391), (133, 51355),

Gene: EricMillard_159 Start: 86702, Stop: 86947, Start Num: 72
Candidate Starts for EricMillard_159:
(Start: 72 @86702 has 12 MA's), (85, 86735), (101, 86789), (112, 86822), (113, 86828), (115, 86867),

Gene: Estave1_93 Start: 53691, Stop: 53975, Start Num: 62
Candidate Starts for Estave1_93:
(56, 53676), (Start: 62 @53691 has 16 MA's), (Start: 68 @53715 has 10 MA's), (96, 53790), (124, 53919), (133, 53955),

Gene: Etoile_54 Start: 36580, Stop: 36819, Start Num: 60
Candidate Starts for Etoile_54:
(Start: 60 @36580 has 14 MA's), (117, 36781), (124, 36808),

Gene: Eyeball_63 Start: 41903, Stop: 41556, Start Num: 59
Candidate Starts for Eyeball_63:

(12, 42104), (36, 41960), (39, 41957), (Start: 59 @41903 has 10 MA's), (Start: 64 @41891 has 1 MA's), (122, 41654), (133, 41579),

Gene: Fancypants_89 Start: 51307, Stop: 51630, Start Num: 61
Candidate Starts for Fancypants_89:
(18, 51169), (Start: 61 @51307 has 243 MA's), (67, 51328), (70, 51343), (94, 51412), (106, 51469), (111, 51484), (112, 51493), (113, 51499), (133, 51607),

Gene: FeliMaine_10 Start: 3253, Stop: 3537, Start Num: 61
Candidate Starts for FeliMaine_10:
(Start: 55 @3229 has 1 MA's), (Start: 61 @3253 has 243 MA's), (Start: 68 @3277 has 10 MA's), (96, 3352), (124, 3481), (133, 3517),

Gene: Filuzino_82 Start: 50908, Stop: 51192, Start Num: 61
Candidate Starts for Filuzino_82:
(Start: 61 @50908 has 243 MA's), (Start: 68 @50932 has 10 MA's), (96, 51007), (124, 51136), (133, 51172),

Gene: FirstPlacePfu_56 Start: 36612, Stop: 36851, Start Num: 60
Candidate Starts for FirstPlacePfu_56:
(Start: 60 @36612 has 14 MA's), (117, 36813), (124, 36840),

Gene: FirstPlacePfu_60 Start: 37764, Stop: 38024, Start Num: 72
Candidate Starts for FirstPlacePfu_60:
(37, 37662), (41, 37671), (Start: 72 @37764 has 12 MA's), (87, 37797), (117, 37938), (121, 37950), (124, 37965), (130, 37989), (133, 38001), (134, 38007),

Gene: Fishburne_54 Start: 36580, Stop: 36819, Start Num: 60
Candidate Starts for Fishburne_54:
(Start: 60 @36580 has 14 MA's), (117, 36781), (124, 36808),

Gene: Flathead_81 Start: 48740, Stop: 49024, Start Num: 61
Candidate Starts for Flathead_81:
(Start: 61 @48740 has 243 MA's), (Start: 68 @48764 has 10 MA's), (96, 48839), (124, 48968), (133, 49004),

Gene: Florinda_94 Start: 51591, Stop: 51875, Start Num: 61
Candidate Starts for Florinda_94:
(Start: 61 @51591 has 243 MA's), (Start: 68 @51615 has 10 MA's), (69, 51624), (100, 51723), (112, 51738), (133, 51852),

Gene: Flypotenuse_38 Start: 34455, Stop: 34180, Start Num: 62
Candidate Starts for Flypotenuse_38:
(34, 34527), (44, 34503), (Start: 45 @34500 has 5 MA's), (Start: 62 @34455 has 16 MA's), (67, 34434), (69, 34422), (112, 34314), (124, 34236), (133, 34200),

Gene: Forsytheast_60 Start: 39923, Stop: 39675, Start Num: 59
Candidate Starts for Forsytheast_60:
(24, 40019), (30, 39995), (40, 39965), (Start: 59 @39923 has 10 MA's), (Start: 64 @39911 has 1 MA's), (133, 39698),

Gene: Fruitloop_78 Start: 48745, Stop: 49029, Start Num: 61
Candidate Starts for Fruitloop_78:

(53, 48718), (Start: 61 @48745 has 243 MA's), (Start: 68 @48769 has 10 MA's), (96, 48844), (124, 48973), (133, 49009),

Gene: Gachnar_61 Start: 41094, Stop: 40789, Start Num: 59
Candidate Starts for Gachnar_61:
(12, 41295), (36, 41151), (39, 41148), (Start: 59 @41094 has 10 MA's), (Start: 64 @41082 has 1 MA's), (70, 41052), (76, 41034), (90, 41001), (99, 40959), (133, 40812),

Gene: Galactic_82 Start: 48872, Stop: 49156, Start Num: 61
Candidate Starts for Galactic_82:
(Start: 61 @48872 has 243 MA's), (Start: 68 @48899 has 10 MA's), (69, 48908), (84, 48941), (89, 48953), (92, 48956), (100, 49004), (112, 49019), (133, 49133),

Gene: Galactic_80 Start: 48440, Stop: 48724, Start Num: 61
Candidate Starts for Galactic_80:
(38, 48380), (Start: 61 @48440 has 243 MA's), (Start: 68 @48464 has 10 MA's), (96, 48539), (124, 48668), (133, 48704),

Gene: GaloreK_58 Start: 38104, Stop: 38343, Start Num: 60
Candidate Starts for GaloreK_58:
(Start: 60 @38104 has 14 MA's), (117, 38305), (124, 38332),

Gene: Gandalph_79 Start: 46011, Stop: 46295, Start Num: 62
Candidate Starts for Gandalph_79:
(Start: 62 @46011 has 16 MA's), (Start: 68 @46035 has 10 MA's), (96, 46110), (124, 46239), (133, 46275),

Gene: Gator_41 Start: 35594, Stop: 35319, Start Num: 62
Candidate Starts for Gator_41:
(34, 35666), (44, 35642), (Start: 45 @35639 has 5 MA's), (Start: 62 @35594 has 16 MA's), (67, 35573), (69, 35561), (112, 35453), (124, 35375), (133, 35339),

Gene: Geralt_75 Start: 48346, Stop: 48630, Start Num: 61
Candidate Starts for Geralt_75:
(Start: 61 @48346 has 243 MA's), (Start: 68 @48370 has 10 MA's), (96, 48445), (124, 48574), (133, 48610),

Gene: Girafales_91 Start: 51196, Stop: 51480, Start Num: 61
Candidate Starts for Girafales_91:
(Start: 61 @51196 has 243 MA's), (Start: 68 @51220 has 10 MA's), (69, 51229), (100, 51328), (112, 51343), (133, 51457),

Gene: Glexan_41 Start: 35582, Stop: 35307, Start Num: 62
Candidate Starts for Glexan_41:
(34, 35654), (44, 35630), (Start: 45 @35627 has 5 MA's), (Start: 62 @35582 has 16 MA's), (67, 35561), (69, 35549), (112, 35441), (124, 35363), (133, 35327),

Gene: Guppsters_76 Start: 46731, Stop: 47015, Start Num: 61
Candidate Starts for Guppsters_76:
(Start: 55 @46707 has 1 MA's), (Start: 61 @46731 has 243 MA's), (Start: 68 @46755 has 10 MA's), (96, 46830), (124, 46959), (133, 46995),

Gene: Hades_81 Start: 47173, Stop: 47484, Start Num: 45

Candidate Starts for Hades_81:
(34, 47146), (Start: 45 @47173 has 5 MA's), (67, 47236), (110, 47341), (133, 47461),

Gene: Hades_80 Start: 46896, Stop: 47180, Start Num: 61
Candidate Starts for Hades_80:
(Start: 61 @46896 has 243 MA's), (Start: 68 @46920 has 10 MA's), (96, 46995), (124, 47124),

Gene: Halley_77 Start: 51626, Stop: 51342, Start Num: 61
Candidate Starts for Halley_77:
(Start: 61 @51626 has 243 MA's), (Start: 68 @51602 has 10 MA's), (96, 51527), (124, 51398), (133, 51362),

Gene: Halley_73 Start: 50213, Stop: 49920, Start Num: 61
Candidate Starts for Halley_73:
(Start: 61 @50213 has 243 MA's), (67, 50192), (69, 50180), (112, 50072), (116, 50024), (120, 50012), (127, 49985), (129, 49982), (133, 49943),

Gene: Hamulus_80 Start: 48587, Stop: 48871, Start Num: 61
Candidate Starts for Hamulus_80:
(Start: 61 @48587 has 243 MA's), (Start: 68 @48611 has 10 MA's), (96, 48686), (124, 48815), (133, 48851),

Gene: Hannaconda_70 Start: 46036, Stop: 45752, Start Num: 61
Candidate Starts for Hannaconda_70:
(Start: 61 @46036 has 243 MA's), (Start: 68 @46012 has 10 MA's), (124, 45808), (133, 45772),

Gene: Harella_43 Start: 36098, Stop: 35823, Start Num: 62
Candidate Starts for Harella_43:
(34, 36170), (44, 36146), (Start: 45 @36143 has 5 MA's), (Start: 62 @36098 has 16 MA's), (67, 36077), (69, 36065), (112, 35957), (124, 35879), (133, 35843),

Gene: Harley_80 Start: 48340, Stop: 48624, Start Num: 61
Candidate Starts for Harley_80:
(Start: 61 @48340 has 243 MA's), (Start: 68 @48364 has 10 MA's), (96, 48439), (124, 48568), (133, 48604),

Gene: Hlubikazi_81 Start: 47588, Stop: 47899, Start Num: 45
Candidate Starts for Hlubikazi_81:
(34, 47561), (Start: 45 @47588 has 5 MA's), (67, 47651), (110, 47756), (133, 47876),

Gene: Hlubikazi_80 Start: 47314, Stop: 47595, Start Num: 62
Candidate Starts for Hlubikazi_80:
(Start: 62 @47314 has 16 MA's), (Start: 68 @47338 has 10 MA's), (69, 47347), (112, 47461), (123, 47533), (124, 47539),

Gene: Hlubikazi_76 Start: 46227, Stop: 46511, Start Num: 61
Candidate Starts for Hlubikazi_76:
(Start: 55 @46203 has 1 MA's), (Start: 61 @46227 has 243 MA's), (Start: 68 @46251 has 10 MA's), (96, 46326), (124, 46455), (133, 46491),

Gene: HokkenD_64 Start: 48482, Stop: 48189, Start Num: 61
Candidate Starts for HokkenD_64:

(Start: 61 @48482 has 243 MA's), (67, 48461), (69, 48449), (112, 48341), (116, 48293), (120, 48281), (127, 48254), (129, 48251), (133, 48212),

Gene: HokkenD_68 Start: 49895, Stop: 49611, Start Num: 61
Candidate Starts for HokkenD_68:
(Start: 61 @49895 has 243 MA's), (Start: 68 @49871 has 10 MA's), (96, 49796), (124, 49667), (133, 49631),

Gene: Hughesyang_70 Start: 50142, Stop: 49849, Start Num: 61
Candidate Starts for Hughesyang_70:
(Start: 61 @50142 has 243 MA's), (67, 50121), (69, 50109), (112, 50001), (116, 49953), (120, 49941), (127, 49914), (129, 49911), (133, 49872),

Gene: Hughesyang_74 Start: 51585, Stop: 51301, Start Num: 61
Candidate Starts for Hughesyang_74:
(Start: 61 @51585 has 243 MA's), (Start: 68 @51561 has 10 MA's), (96, 51486), (124, 51357), (133, 51321),

Gene: Huphlepuff_10 Start: 2982, Stop: 3266, Start Num: 61
Candidate Starts for Huphlepuff_10:
(Start: 55 @2958 has 1 MA's), (Start: 61 @2982 has 243 MA's), (Start: 68 @3006 has 10 MA's), (96, 3081), (124, 3210), (133, 3246),

Gene: IHOP_42 Start: 35685, Stop: 35389, Start Num: 61
Candidate Starts for IHOP_42:
(Start: 61 @35685 has 243 MA's), (70, 35649), (77, 35631), (93, 35598), (102, 35556), (133, 35409),

Gene: IMpilo_79 Start: 47727, Stop: 47987, Start Num: 68
Candidate Starts for IMpilo_79:
(29, 47616), (Start: 61 @47703 has 243 MA's), (Start: 68 @47727 has 10 MA's), (69, 47736), (100, 47835), (112, 47850), (133, 47964),

Gene: IMpilo_76 Start: 46638, Stop: 46922, Start Num: 61
Candidate Starts for IMpilo_76:
(5, 46392), (7, 46407), (Start: 61 @46638 has 243 MA's), (Start: 68 @46662 has 10 MA's), (96, 46737), (124, 46866), (133, 46902),

Gene: Ibhubesi_80 Start: 47022, Stop: 47336, Start Num: 51
Candidate Starts for Ibhubesi_80:
(Start: 51 @47022 has 3 MA's), (Start: 55 @47028 has 1 MA's), (Start: 61 @47052 has 243 MA's), (Start: 68 @47076 has 10 MA's), (123, 47274), (124, 47280), (133, 47316),

Gene: IgnatiusPatJac_61 Start: 40665, Stop: 40318, Start Num: 59
Candidate Starts for IgnatiusPatJac_61:
(12, 40866), (36, 40722), (39, 40719), (Start: 59 @40665 has 10 MA's), (Start: 64 @40653 has 1 MA's), (70, 40623), (76, 40605), (90, 40572), (99, 40530), (122, 40416), (133, 40341),

Gene: Inca_41 Start: 34210, Stop: 33914, Start Num: 61
Candidate Starts for Inca_41:
(Start: 61 @34210 has 243 MA's), (70, 34174), (77, 34156), (93, 34123), (102, 34081), (133, 33934),

Gene: IrishSherpFalk_81 Start: 49331, Stop: 49615, Start Num: 61
Candidate Starts for IrishSherpFalk_81:

(Start: 51 @49301 has 3 MA's), (Start: 55 @49307 has 1 MA's), (Start: 61 @49331 has 243 MA's), (Start: 68 @49355 has 10 MA's), (96, 49430), (124, 49559), (133, 49595),

Gene: JC27_64 Start: 41329, Stop: 41042, Start Num: 61
Candidate Starts for JC27_64:
(Start: 51 @41359 has 3 MA's), (Start: 61 @41329 has 243 MA's), (Start: 68 @41305 has 10 MA's), (132, 41065),

Gene: Jabbawokkie_91 Start: 47805, Stop: 48089, Start Num: 61
Candidate Starts for Jabbawokkie_91:
(Start: 61 @47805 has 243 MA's), (Start: 68 @47829 has 10 MA's), (124, 48033), (133, 48069),

Gene: James_82 Start: 50466, Stop: 50750, Start Num: 61
Candidate Starts for James_82:
(Start: 61 @50466 has 243 MA's), (Start: 68 @50490 has 10 MA's), (96, 50565), (124, 50694), (133, 50730),

Gene: Jant_81 Start: 47386, Stop: 47670, Start Num: 62
Candidate Starts for Jant_81:
(Start: 62 @47386 has 16 MA's), (Start: 68 @47410 has 10 MA's), (96, 47485), (124, 47614), (133, 47650),

Gene: Jarcob_81 Start: 50063, Stop: 50347, Start Num: 61
Candidate Starts for Jarcob_81:
(Start: 61 @50063 has 243 MA's), (Start: 68 @50087 has 10 MA's), (96, 50162), (124, 50291), (133, 50327),

Gene: Jinglebell_88 Start: 49768, Stop: 50088, Start Num: 61
Candidate Starts for Jinglebell_88:
(Start: 55 @49744 has 1 MA's), (Start: 61 @49768 has 243 MA's), (Start: 68 @49792 has 10 MA's), (96, 49867), (124, 49996), (133, 50032),

Gene: Jinglebell_90 Start: 50298, Stop: 50591, Start Num: 61
Candidate Starts for Jinglebell_90:
(Start: 61 @50298 has 243 MA's), (67, 50319), (70, 50334), (112, 50460), (133, 50568),

Gene: Job42_84 Start: 52418, Stop: 52702, Start Num: 61
Candidate Starts for Job42_84:
(Start: 61 @52418 has 243 MA's), (Start: 68 @52442 has 10 MA's), (69, 52451), (100, 52550), (112, 52565), (133, 52679),

Gene: Job42_81 Start: 51522, Stop: 51818, Start Num: 61
Candidate Starts for Job42_81:
(Start: 61 @51522 has 243 MA's), (67, 51543), (70, 51558), (112, 51684), (124, 51762), (133, 51798),

Gene: JoeyJr_82 Start: 50251, Stop: 50535, Start Num: 61
Candidate Starts for JoeyJr_82:
(Start: 61 @50251 has 243 MA's), (Start: 68 @50275 has 10 MA's), (96, 50350), (124, 50479), (133, 50515),

Gene: JoieB_10 Start: 3201, Stop: 3485, Start Num: 61
Candidate Starts for JoieB_10:

(Start: 55 @3177 has 1 MA's), (Start: 61 @3201 has 243 MA's), (Start: 68 @3225 has 10 MA's), (96, 3300), (124, 3429), (133, 3465),

Gene: Jorgensen_63 Start: 40720, Stop: 40448, Start Num: 61
Candidate Starts for Jorgensen_63:
(Start: 61 @40720 has 243 MA's), (67, 40699), (69, 40687), (112, 40579), (133, 40471),

Gene: Juice456_78 Start: 48213, Stop: 48485, Start Num: 61
Candidate Starts for Juice456_78:
(Start: 61 @48213 has 243 MA's), (67, 48234), (69, 48246), (112, 48354), (133, 48462),

Gene: JuicyJay_70 Start: 51347, Stop: 51054, Start Num: 61
Candidate Starts for JuicyJay_70:
(Start: 61 @51347 has 243 MA's), (67, 51326), (69, 51314), (112, 51206), (116, 51158), (120, 51146), (127, 51119), (129, 51116), (133, 51077),

Gene: JuicyJay_74 Start: 52760, Stop: 52476, Start Num: 61
Candidate Starts for JuicyJay_74:
(Start: 61 @52760 has 243 MA's), (Start: 68 @52736 has 10 MA's), (96, 52661), (124, 52532), (133, 52496),

Gene: Kalah2_70 Start: 50919, Stop: 50635, Start Num: 61
Candidate Starts for Kalah2_70:
(Start: 61 @50919 has 243 MA's), (Start: 68 @50895 has 10 MA's), (96, 50820), (124, 50691), (133, 50655),

Gene: Kalah2_66 Start: 49506, Stop: 49213, Start Num: 61
Candidate Starts for Kalah2_66:
(Start: 61 @49506 has 243 MA's), (67, 49485), (69, 49473), (112, 49365), (116, 49317), (120, 49305), (127, 49278), (129, 49275), (133, 49236),

Gene: Kalah2_157 Start: 86290, Stop: 86535, Start Num: 72
Candidate Starts for Kalah2_157:
(Start: 72 @86290 has 12 MA's), (85, 86323), (101, 86377), (112, 86410), (113, 86416), (115, 86455),

Gene: Karhdo_80 Start: 47607, Stop: 47906, Start Num: 61
Candidate Starts for Karhdo_80:
(Start: 61 @47607 has 243 MA's), (67, 47628), (70, 47643), (112, 47769), (133, 47883),

Gene: Kari_54 Start: 36577, Stop: 36816, Start Num: 60
Candidate Starts for Kari_54:
(Start: 60 @36577 has 14 MA's), (117, 36778), (124, 36805),

Gene: KashFlow_68 Start: 45901, Stop: 45623, Start Num: 68
Candidate Starts for KashFlow_68:
(58, 45940), (63, 45922), (Start: 68 @45901 has 10 MA's), (74, 45880), (77, 45868), (79, 45865), (86, 45850), (90, 45841), (124, 45679), (133, 45643),

Gene: Kenuha5_77 Start: 49369, Stop: 49653, Start Num: 62
Candidate Starts for Kenuha5_77:
(Start: 62 @49369 has 16 MA's), (Start: 68 @49393 has 10 MA's), (96, 49468), (124, 49597), (133, 49633),

Gene: Kersh_83 Start: 50793, Stop: 51092, Start Num: 61
Candidate Starts for Kersh_83:
(Start: 61 @50793 has 243 MA's), (67, 50814), (70, 50829), (112, 50955), (133, 51069),

Gene: Kingsley_85 Start: 51609, Stop: 51893, Start Num: 61
Candidate Starts for Kingsley_85:
(Start: 61 @51609 has 243 MA's), (Start: 68 @51633 has 10 MA's), (124, 51837), (133, 51873),

Gene: Klein_71 Start: 49529, Stop: 49236, Start Num: 61
Candidate Starts for Klein_71:
(Start: 61 @49529 has 243 MA's), (67, 49508), (69, 49496), (112, 49388), (116, 49340), (120, 49328), (127, 49301), (129, 49298), (133, 49259),

Gene: Klein_73 Start: 50165, Stop: 49884, Start Num: 61
Candidate Starts for Klein_73:
(Start: 61 @50165 has 243 MA's), (Start: 68 @50144 has 10 MA's), (82, 50111), (124, 49940), (133, 49904),

Gene: Klein_164 Start: 84650, Stop: 84895, Start Num: 72
Candidate Starts for Klein_164:
(Start: 72 @84650 has 12 MA's), (85, 84683), (101, 84737), (112, 84770), (113, 84776), (115, 84815),

Gene: Koella_76 Start: 46177, Stop: 46458, Start Num: 61
Candidate Starts for Koella_76:
(Start: 61 @46177 has 243 MA's), (Start: 68 @46198 has 10 MA's), (82, 46231), (124, 46402), (133, 46438),

Gene: Krakatau_77 Start: 45727, Stop: 46011, Start Num: 61
Candidate Starts for Krakatau_77:
(Start: 61 @45727 has 243 MA's), (Start: 68 @45751 has 10 MA's), (69, 45760), (100, 45859), (112, 45874), (133, 45988),

Gene: KristaRAM_79 Start: 47927, Stop: 48211, Start Num: 61
Candidate Starts for KristaRAM_79:
(Start: 61 @47927 has 243 MA's), (Start: 68 @47951 has 10 MA's), (96, 48026), (124, 48155), (133, 48191),

Gene: Kumao_59 Start: 43007, Stop: 43291, Start Num: 61
Candidate Starts for Kumao_59:
(38, 42947), (Start: 61 @43007 has 243 MA's), (Start: 68 @43031 has 10 MA's), (96, 43106), (124, 43235), (133, 43271),

Gene: Langerak_55 Start: 36596, Stop: 36835, Start Num: 60
Candidate Starts for Langerak_55:
(Start: 60 @36596 has 14 MA's), (117, 36797), (124, 36824),

Gene: Latretium_82 Start: 48306, Stop: 48590, Start Num: 61
Candidate Starts for Latretium_82:
(Start: 61 @48306 has 243 MA's), (Start: 68 @48330 has 10 MA's), (96, 48405), (124, 48534), (133, 48570),

Gene: Leozinho_79 Start: 46485, Stop: 46781, Start Num: 61
Candidate Starts for Leozinho_79:

(Start: 61 @46485 has 243 MA's), (70, 46521), (77, 46539), (93, 46572), (102, 46614), (124, 46725), (133, 46761),

Gene: Leperchaun_80 Start: 49485, Stop: 49769, Start Num: 61
Candidate Starts for Leperchaun_80:
(Start: 61 @49485 has 243 MA's), (Start: 68 @49509 has 10 MA's), (96, 49584), (124, 49713), (133, 49749),

Gene: LilMoolah_82 Start: 49634, Stop: 49918, Start Num: 61
Candidate Starts for LilMoolah_82:
(19, 49496), (32, 49559), (Start: 61 @49634 has 243 MA's), (Start: 68 @49658 has 10 MA's), (96, 49733), (124, 49862), (133, 49898),

Gene: LilSpotty_77 Start: 45059, Stop: 45403, Start Num: 80
Candidate Starts for LilSpotty_77:
(73, 45041), (75, 45047), (Start: 80 @45059 has 1 MA's), (83, 45071), (85, 45074), (95, 45101), (97, 45116), (103, 45131), (104, 45134), (114, 45209), (128, 45284), (131, 45311), (135, 45380), (136, 45386),

Gene: LilSpotty_76 Start: 44396, Stop: 44653, Start Num: 72
Candidate Starts for LilSpotty_76:
(22, 44225), (31, 44270), (66, 44366), (Start: 72 @44396 has 12 MA's), (87, 44429), (117, 44570), (118, 44573), (120, 44576), (123, 44600), (124, 44606), (130, 44630),

Gene: Lilbit_10 Start: 3253, Stop: 3537, Start Num: 61
Candidate Starts for Lilbit_10:
(Start: 55 @3229 has 1 MA's), (Start: 61 @3253 has 243 MA's), (Start: 68 @3277 has 10 MA's), (96, 3352), (124, 3481), (133, 3517),

Gene: LittleE_74 Start: 49484, Stop: 49203, Start Num: 61
Candidate Starts for LittleE_74:
(13, 49685), (14, 49673), (20, 49613), (23, 49601), (35, 49547), (Start: 61 @49484 has 243 MA's), (Start: 68 @49460 has 10 MA's), (69, 49451), (84, 49418), (89, 49406), (92, 49403), (100, 49355), (112, 49340), (133, 49226),

Gene: LittleE_77 Start: 50428, Stop: 50147, Start Num: 61
Candidate Starts for LittleE_77:
(Start: 61 @50428 has 243 MA's), (Start: 68 @50407 has 10 MA's), (96, 50332), (124, 50203), (133, 50167),

Gene: LittleLaf_9 Start: 2982, Stop: 3266, Start Num: 61
Candidate Starts for LittleLaf_9:
(Start: 55 @2958 has 1 MA's), (Start: 61 @2982 has 243 MA's), (Start: 68 @3006 has 10 MA's), (96, 3081), (124, 3210), (133, 3246),

Gene: Llama_90 Start: 50154, Stop: 50447, Start Num: 61
Candidate Starts for Llama_90:
(Start: 61 @50154 has 243 MA's), (67, 50175), (70, 50190), (112, 50316), (133, 50424),

Gene: Llama_88 Start: 49624, Stop: 49944, Start Num: 61
Candidate Starts for Llama_88:
(Start: 55 @49600 has 1 MA's), (Start: 61 @49624 has 243 MA's), (Start: 68 @49648 has 10 MA's), (96, 49723), (124, 49852), (133, 49888),

Gene: Llij_77 Start: 46445, Stop: 46729, Start Num: 61
Candidate Starts for Llij_77:
(Start: 61 @46445 has 243 MA's), (Start: 68 @46469 has 10 MA's), (96, 46544), (124, 46673), (133, 46709),

Gene: Llij_80 Start: 47508, Stop: 47834, Start Num: 61
Candidate Starts for Llij_80:
(Start: 61 @47508 has 243 MA's), (69, 47541), (70, 47544), (82, 47571), (84, 47577), (112, 47697), (133, 47811),

Gene: LordVader_75 Start: 44278, Stop: 44562, Start Num: 61
Candidate Starts for LordVader_75:
(Start: 51 @44248 has 3 MA's), (Start: 55 @44254 has 1 MA's), (Start: 61 @44278 has 243 MA's), (Start: 68 @44302 has 10 MA's), (124, 44506), (133, 44542),

Gene: Lorde_81 Start: 45732, Stop: 46016, Start Num: 61
Candidate Starts for Lorde_81:
(Start: 61 @45732 has 243 MA's), (Start: 68 @45756 has 10 MA's), (96, 45831), (124, 45960), (133, 45996),

Gene: Lucia_81 Start: 46580, Stop: 46864, Start Num: 61
Candidate Starts for Lucia_81:
(Start: 61 @46580 has 243 MA's), (Start: 68 @46604 has 10 MA's), (96, 46679), (124, 46808), (133, 46844),

Gene: Lucky2013_69 Start: 45952, Stop: 45659, Start Num: 61
Candidate Starts for Lucky2013_69:
(Start: 61 @45952 has 243 MA's), (67, 45931), (69, 45919), (112, 45811), (116, 45763), (120, 45751), (127, 45724), (129, 45721), (133, 45682),

Gene: Lucky2013_73 Start: 47341, Stop: 47081, Start Num: 68
Candidate Starts for Lucky2013_73:
(Start: 61 @47365 has 243 MA's), (Start: 68 @47341 has 10 MA's), (96, 47266), (124, 47137), (133, 47101),

Gene: LunaBlu_84 Start: 49474, Stop: 49758, Start Num: 61
Candidate Starts for LunaBlu_84:
(Start: 61 @49474 has 243 MA's), (Start: 68 @49498 has 10 MA's), (96, 49573), (124, 49702), (133, 49738),

Gene: MadMen_87 Start: 49600, Stop: 49884, Start Num: 61
Candidate Starts for MadMen_87:
(38, 49540), (Start: 61 @49600 has 243 MA's), (Start: 68 @49624 has 10 MA's), (96, 49699), (124, 49828), (133, 49864),

Gene: MadMen_79 Start: 47451, Stop: 47750, Start Num: 61
Candidate Starts for MadMen_79:
(Start: 61 @47451 has 243 MA's), (67, 47472), (70, 47487), (112, 47613), (133, 47727),

Gene: Majeke_60 Start: 38155, Stop: 38394, Start Num: 60
Candidate Starts for Majeke_60:
(Start: 60 @38155 has 14 MA's), (117, 38356), (124, 38383),

Gene: Manda_43 Start: 35798, Stop: 35514, Start Num: 61
Candidate Starts for Manda_43:
(Start: 61 @35798 has 243 MA's), (Start: 68 @35774 has 10 MA's), (96, 35699), (124, 35570), (133, 35534),

Gene: Mandlovu_81 Start: 47530, Stop: 47841, Start Num: 45
Candidate Starts for Mandlovu_81:
(34, 47503), (Start: 45 @47530 has 5 MA's), (67, 47593), (110, 47698), (133, 47818),

Gene: Mandlovu_80 Start: 47256, Stop: 47537, Start Num: 62
Candidate Starts for Mandlovu_80:
(Start: 62 @47256 has 16 MA's), (Start: 68 @47280 has 10 MA's), (69, 47289), (112, 47403), (123, 47475), (124, 47481),

Gene: Mandlovu_76 Start: 46169, Stop: 46453, Start Num: 61
Candidate Starts for Mandlovu_76:
(Start: 55 @46145 has 1 MA's), (Start: 61 @46169 has 243 MA's), (Start: 68 @46193 has 10 MA's), (96, 46268), (124, 46397), (133, 46433),

Gene: Mangethe_60 Start: 38155, Stop: 38394, Start Num: 60
Candidate Starts for Mangethe_60:
(Start: 60 @38155 has 14 MA's), (117, 38356), (124, 38383),

Gene: Marker_87 Start: 49400, Stop: 49684, Start Num: 61
Candidate Starts for Marker_87:
(Start: 61 @49400 has 243 MA's), (Start: 68 @49424 has 10 MA's), (96, 49499), (124, 49628), (133, 49664),

Gene: Marleymoo_148 Start: 83925, Stop: 84170, Start Num: 72
Candidate Starts for Marleymoo_148:
(Start: 72 @83925 has 12 MA's), (85, 83958), (101, 84012), (112, 84045), (113, 84051), (115, 84090),

Gene: Marleymoo_65 Start: 48325, Stop: 48032, Start Num: 61
Candidate Starts for Marleymoo_65:
(Start: 61 @48325 has 243 MA's), (67, 48304), (69, 48292), (112, 48184), (116, 48136), (120, 48124), (127, 48097), (129, 48094), (133, 48055),

Gene: Marshmallow_43 Start: 36119, Stop: 35823, Start Num: 61
Candidate Starts for Marshmallow_43:
(Start: 61 @36119 has 243 MA's), (70, 36083), (77, 36065), (93, 36032), (102, 35990), (133, 35843),

Gene: Marvin_8 Start: 2964, Stop: 3248, Start Num: 61
Candidate Starts for Marvin_8:
(Start: 55 @2940 has 1 MA's), (Start: 61 @2964 has 243 MA's), (Start: 68 @2988 has 10 MA's), (96, 3063), (124, 3192), (133, 3228),

Gene: Medindi_85 Start: 50197, Stop: 50481, Start Num: 61
Candidate Starts for Medindi_85:
(5, 49951), (7, 49966), (Start: 61 @50197 has 243 MA's), (Start: 68 @50221 has 10 MA's), (124, 50425), (133, 50461),

Gene: Medindi_89 Start: 51260, Stop: 51544, Start Num: 61

Candidate Starts for Medindi_89:
(Start: 61 @51260 has 243 MA's), (Start: 68 @51284 has 10 MA's), (69, 51293), (100, 51392), (112, 51407), (133, 51521),

Gene: MiaZeal_76 Start: 48021, Stop: 47737, Start Num: 61
Candidate Starts for MiaZeal_76:
(Start: 61 @48021 has 243 MA's), (Start: 68 @47997 has 10 MA's), (96, 47922), (124, 47793), (133, 47757),

Gene: MilanaBonita_77 Start: 48008, Stop: 48292, Start Num: 61
Candidate Starts for MilanaBonita_77:
(Start: 61 @48008 has 243 MA's), (Start: 68 @48032 has 10 MA's), (96, 48107), (124, 48236), (133, 48272),

Gene: MilleniumForce_82 Start: 49757, Stop: 50041, Start Num: 61
Candidate Starts for MilleniumForce_82:
(Start: 61 @49757 has 243 MA's), (Start: 68 @49781 has 10 MA's), (96, 49856), (124, 49985), (133, 50021),

Gene: Minerva_79 Start: 52268, Stop: 51984, Start Num: 61
Candidate Starts for Minerva_79:
(Start: 55 @52292 has 1 MA's), (Start: 61 @52268 has 243 MA's), (Start: 68 @52244 has 10 MA's), (96, 52169), (124, 52040), (133, 52004),

Gene: Minerva_77 Start: 51629, Stop: 51336, Start Num: 61
Candidate Starts for Minerva_77:
(Start: 61 @51629 has 243 MA's), (67, 51608), (69, 51596), (112, 51488), (116, 51440), (120, 51428), (127, 51401), (129, 51398), (133, 51359),

Gene: MinionDave_77 Start: 48491, Stop: 48775, Start Num: 61
Candidate Starts for MinionDave_77:
(Start: 61 @48491 has 243 MA's), (Start: 68 @48515 has 10 MA's), (124, 48719), (133, 48755),

Gene: Minnie_77 Start: 50537, Stop: 50821, Start Num: 61
Candidate Starts for Minnie_77:
(Start: 51 @50507 has 3 MA's), (Start: 55 @50513 has 1 MA's), (Start: 61 @50537 has 243 MA's), (Start: 68 @50561 has 10 MA's), (96, 50636), (124, 50765), (133, 50801),

Gene: Modragons_88 Start: 50142, Stop: 50435, Start Num: 61
Candidate Starts for Modragons_88:
(Start: 61 @50142 has 243 MA's), (67, 50163), (70, 50178), (112, 50304), (133, 50412),

Gene: Modragons_86 Start: 49612, Stop: 49932, Start Num: 61
Candidate Starts for Modragons_86:
(Start: 55 @49588 has 1 MA's), (Start: 61 @49612 has 243 MA's), (Start: 68 @49636 has 10 MA's), (96, 49711), (124, 49840), (133, 49876),

Gene: MooMoo_80 Start: 48107, Stop: 48433, Start Num: 61
Candidate Starts for MooMoo_80:
(Start: 61 @48107 has 243 MA's), (69, 48140), (70, 48143), (82, 48170), (84, 48176), (112, 48296), (133, 48410),

Gene: Moose_60 Start: 39923, Stop: 39675, Start Num: 59

Candidate Starts for Moose_60:
(24, 40019), (30, 39995), (40, 39965), (Start: 59 @39923 has 10 MA's), (Start: 64 @39911 has 1 MA's), (133, 39698),

Gene: Mova_80 Start: 47852, Stop: 48136, Start Num: 61
Candidate Starts for Mova_80:
(Start: 61 @47852 has 243 MA's), (Start: 68 @47876 has 10 MA's), (96, 47951), (124, 48080), (133, 48116),

Gene: Mozy_88 Start: 48337, Stop: 48621, Start Num: 61
Candidate Starts for Mozy_88:
(Start: 61 @48337 has 243 MA's), (Start: 68 @48361 has 10 MA's), (96, 48436), (124, 48565), (133, 48601),

Gene: MrGordo_63 Start: 41253, Stop: 40939, Start Num: 51
Candidate Starts for MrGordo_63:
(Start: 51 @41253 has 3 MA's), (Start: 55 @41247 has 1 MA's), (Start: 61 @41223 has 243 MA's), (Start: 68 @41199 has 10 MA's), (124, 40995), (133, 40959),

Gene: Ms6_82 Start: 45701, Stop: 45985, Start Num: 61
Candidate Starts for Ms6_82:
(Start: 61 @45701 has 243 MA's), (Start: 68 @45725 has 10 MA's), (96, 45800), (124, 45929), (133, 45965),

Gene: Mwanjiwa_84 Start: 49794, Stop: 50060, Start Num: 67
Candidate Starts for Mwanjiwa_84:
(Start: 62 @49773 has 16 MA's), (67, 49794), (70, 49809), (78, 49833), (112, 49926), (124, 50004), (133, 50040),

Gene: Myrale_44 Start: 35984, Stop: 35688, Start Num: 61
Candidate Starts for Myrale_44:
(Start: 61 @35984 has 243 MA's), (70, 35948), (77, 35930), (93, 35897), (102, 35855), (133, 35708),

Gene: Nekros_72 Start: 49247, Stop: 48963, Start Num: 61
Candidate Starts for Nekros_72:
(Start: 61 @49247 has 243 MA's), (Start: 68 @49223 has 10 MA's), (96, 49148), (124, 49019), (133, 48983),

Gene: Nekros_70 Start: 48461, Stop: 48180, Start Num: 61
Candidate Starts for Nekros_70:
(27, 48554), (33, 48530), (Start: 61 @48461 has 243 MA's), (Start: 68 @48437 has 10 MA's), (69, 48428), (84, 48395), (89, 48383), (92, 48380), (100, 48332), (112, 48317), (133, 48203),

Gene: NewHope4_84 Start: 47569, Stop: 47853, Start Num: 61
Candidate Starts for NewHope4_84:
(Start: 61 @47569 has 243 MA's), (Start: 68 @47593 has 10 MA's), (96, 47668), (124, 47797), (133, 47833),

Gene: Nibley_65 Start: 44964, Stop: 44680, Start Num: 61
Candidate Starts for Nibley_65:
(38, 45024), (Start: 61 @44964 has 243 MA's), (Start: 68 @44940 has 10 MA's), (96, 44865), (124, 44736), (133, 44700),

Gene: Nichirin_81 Start: 48986, Stop: 49306, Start Num: 61
Candidate Starts for Nichirin_81:
(Start: 55 @48962 has 1 MA's), (Start: 61 @48986 has 243 MA's), (Start: 68 @49010 has 10 MA's),
(96, 49085), (124, 49214), (133, 49250),

Gene: Nichirin_83 Start: 49518, Stop: 49811, Start Num: 61
Candidate Starts for Nichirin_83:
(Start: 61 @49518 has 243 MA's), (67, 49539), (70, 49554), (112, 49680), (133, 49788),

Gene: NihilNomen_76 Start: 51713, Stop: 51429, Start Num: 61
Candidate Starts for NihilNomen_76:
(Start: 61 @51713 has 243 MA's), (Start: 68 @51689 has 10 MA's), (96, 51614), (124, 51485), (133,
51449),

Gene: NihilNomen_72 Start: 50300, Stop: 50007, Start Num: 61
Candidate Starts for NihilNomen_72:
(Start: 61 @50300 has 243 MA's), (67, 50279), (69, 50267), (112, 50159), (116, 50111), (120, 50099),
(127, 50072), (129, 50069), (133, 50030),

Gene: Nimbo_74 Start: 48349, Stop: 48633, Start Num: 61
Candidate Starts for Nimbo_74:
(Start: 61 @48349 has 243 MA's), (Start: 68 @48373 has 10 MA's), (96, 48448), (124, 48577), (133,
48613),

Gene: Nivrat_80 Start: 49507, Stop: 49791, Start Num: 61
Candidate Starts for Nivrat_80:
(19, 49369), (32, 49432), (Start: 61 @49507 has 243 MA's), (Start: 68 @49531 has 10 MA's), (96,
49606), (124, 49735), (133, 49771),

Gene: NormanBulbieJr_82 Start: 50191, Stop: 50472, Start Num: 61
Candidate Starts for NormanBulbieJr_82:
(Start: 61 @50191 has 243 MA's), (Start: 68 @50212 has 10 MA's), (82, 50245), (124, 50416), (133,
50452),

Gene: Ochi17_87 Start: 49219, Stop: 49539, Start Num: 61
Candidate Starts for Ochi17_87:
(Start: 55 @49195 has 1 MA's), (Start: 61 @49219 has 243 MA's), (Start: 68 @49243 has 10 MA's),
(96, 49318), (124, 49447), (133, 49483),

Gene: Ochi17_89 Start: 49749, Stop: 50042, Start Num: 61
Candidate Starts for Ochi17_89:
(Start: 61 @49749 has 243 MA's), (67, 49770), (70, 49785), (112, 49911), (133, 50019),

Gene: Odette_70 Start: 49343, Stop: 49050, Start Num: 61
Candidate Starts for Odette_70:
(Start: 61 @49343 has 243 MA's), (67, 49322), (69, 49310), (112, 49202), (116, 49154), (120, 49142),
(127, 49115), (129, 49112), (133, 49073),

Gene: Odette_74 Start: 50756, Stop: 50472, Start Num: 61
Candidate Starts for Odette_74:
(Start: 61 @50756 has 243 MA's), (Start: 68 @50732 has 10 MA's), (96, 50657), (124, 50528), (133,
50492),

Gene: OfUltron_89 Start: 49768, Stop: 50088, Start Num: 61
Candidate Starts for OfUltron_89:
(Start: 55 @49744 has 1 MA's), (Start: 61 @49768 has 243 MA's), (Start: 68 @49792 has 10 MA's), (96, 49867), (124, 49996), (133, 50032),

Gene: OfUltron_91 Start: 50298, Stop: 50591, Start Num: 61
Candidate Starts for OfUltron_91:
(Start: 61 @50298 has 243 MA's), (67, 50319), (70, 50334), (112, 50460), (133, 50568),

Gene: Ogopogo_87 Start: 48817, Stop: 49101, Start Num: 61
Candidate Starts for Ogopogo_87:
(Start: 61 @48817 has 243 MA's), (Start: 68 @48841 has 10 MA's), (96, 48916), (124, 49045), (133, 49081),

Gene: OldBen_79 Start: 49741, Stop: 50025, Start Num: 61
Candidate Starts for OldBen_79:
(Start: 61 @49741 has 243 MA's), (Start: 68 @49765 has 10 MA's), (96, 49840), (124, 49969), (133, 50005),

Gene: OlympiaSaint_81 Start: 49408, Stop: 49692, Start Num: 61
Candidate Starts for OlympiaSaint_81:
(Start: 61 @49408 has 243 MA's), (Start: 68 @49432 has 10 MA's), (96, 49507), (124, 49636), (133, 49672),

Gene: Omega_79 Start: 51648, Stop: 51367, Start Num: 61
Candidate Starts for Omega_79:
(Start: 61 @51648 has 243 MA's), (Start: 68 @51627 has 10 MA's), (96, 51552), (124, 51423), (133, 51387),

Gene: Omega_77 Start: 51219, Stop: 50938, Start Num: 61
Candidate Starts for Omega_77:
(Start: 61 @51219 has 243 MA's), (Start: 68 @51195 has 10 MA's), (69, 51186), (84, 51153), (89, 51141), (92, 51138), (112, 51075), (133, 50961),

Gene: Optimus_157 Start: 85179, Stop: 85424, Start Num: 72
Candidate Starts for Optimus_157:
(Start: 72 @85179 has 12 MA's), (85, 85212), (101, 85266), (112, 85299), (113, 85305), (115, 85344),

Gene: PHappiness_82 Start: 50570, Stop: 50854, Start Num: 61
Candidate Starts for PHappiness_82:
(Start: 61 @50570 has 243 MA's), (Start: 68 @50594 has 10 MA's), (96, 50669), (124, 50798), (133, 50834),

Gene: PMC_78 Start: 47902, Stop: 48186, Start Num: 61
Candidate Starts for PMC_78:
(Start: 61 @47902 has 243 MA's), (Start: 68 @47926 has 10 MA's), (96, 48001), (124, 48130), (133, 48166),

Gene: Pacc40_73 Start: 48569, Stop: 48838, Start Num: 61
Candidate Starts for Pacc40_73:
(Start: 61 @48569 has 243 MA's), (67, 48590), (107, 48689), (110, 48695), (133, 48815),

Gene: Pepe_59 Start: 39848, Stop: 39564, Start Num: 61

Candidate Starts for Pepe_59:
(Start: 51 @39878 has 3 MA's), (Start: 55 @39872 has 1 MA's), (Start: 61 @39848 has 243 MA's), (Start: 68 @39824 has 10 MA's), (96, 39749), (124, 39620), (133, 39584),

Gene: Phaja_42 Start: 35684, Stop: 35388, Start Num: 61
Candidate Starts for Phaja_42:
(Start: 61 @35684 has 243 MA's), (70, 35648), (77, 35630), (93, 35597), (102, 35555), (133, 35408),

Gene: Phalconet_78 Start: 48031, Stop: 48315, Start Num: 61
Candidate Starts for Phalconet_78:
(Start: 61 @48031 has 243 MA's), (Start: 68 @48055 has 10 MA's), (124, 48259), (133, 48295),

Gene: Phalconet_82 Start: 49094, Stop: 49378, Start Num: 61
Candidate Starts for Phalconet_82:
(Start: 61 @49094 has 243 MA's), (Start: 68 @49118 has 10 MA's), (69, 49127), (100, 49226), (112, 49241), (133, 49355),

Gene: Phanphagia_80 Start: 49405, Stop: 49689, Start Num: 61
Candidate Starts for Phanphagia_80:
(Start: 61 @49405 has 243 MA's), (Start: 68 @49429 has 10 MA's), (96, 49504), (124, 49633), (133, 49669),

Gene: Phatniss_78 Start: 47540, Stop: 47824, Start Num: 61
Candidate Starts for Phatniss_78:
(Start: 61 @47540 has 243 MA's), (Start: 68 @47564 has 10 MA's), (96, 47639), (124, 47768), (133, 47804),

Gene: Phegasus_60 Start: 38122, Stop: 38361, Start Num: 60
Candidate Starts for Phegasus_60:
(Start: 60 @38122 has 14 MA's), (117, 38323), (124, 38350),

Gene: PhesterPhotato_85 Start: 49202, Stop: 49483, Start Num: 61
Candidate Starts for PhesterPhotato_85:
(Start: 61 @49202 has 243 MA's), (Start: 68 @49223 has 10 MA's), (96, 49298), (124, 49427), (133, 49463),

Gene: PhesterPhotato_89 Start: 50262, Stop: 50546, Start Num: 61
Candidate Starts for PhesterPhotato_89:
(Start: 61 @50262 has 243 MA's), (Start: 68 @50286 has 10 MA's), (69, 50295), (100, 50394), (112, 50409), (133, 50523),

Gene: Philus_84 Start: 51107, Stop: 51391, Start Num: 61
Candidate Starts for Philus_84:
(Start: 61 @51107 has 243 MA's), (Start: 68 @51131 has 10 MA's), (96, 51206), (124, 51335), (133, 51371),

Gene: Phoebus_78 Start: 52895, Stop: 52611, Start Num: 61
Candidate Starts for Phoebus_78:
(Start: 61 @52895 has 243 MA's), (Start: 68 @52871 has 10 MA's), (96, 52796), (124, 52667), (133, 52631),

Gene: Pippy_76 Start: 47591, Stop: 47887, Start Num: 61
Candidate Starts for Pippy_76:

(Start: 61 @47591 has 243 MA's), (70, 47627), (77, 47645), (93, 47678), (102, 47720), (124, 47831), (133, 47867),

Gene: Poise_9 Start: 2787, Stop: 3071, Start Num: 61
Candidate Starts for Poise_9:
(Start: 61 @2787 has 243 MA's), (Start: 68 @2811 has 10 MA's), (96, 2886), (124, 3015), (133, 3051),

Gene: Polo2Bam_89 Start: 47423, Stop: 47707, Start Num: 61
Candidate Starts for Polo2Bam_89:
(Start: 61 @47423 has 243 MA's), (Start: 68 @47447 has 10 MA's), (96, 47522), (124, 47651), (133, 47687),

Gene: PopTart_77 Start: 47157, Stop: 47441, Start Num: 61
Candidate Starts for PopTart_77:
(Start: 61 @47157 has 243 MA's), (Start: 68 @47181 has 10 MA's), (69, 47190), (100, 47289), (112, 47304), (133, 47418),

Gene: PopTart_73 Start: 46094, Stop: 46378, Start Num: 61
Candidate Starts for PopTart_73:
(Start: 55 @46070 has 1 MA's), (Start: 61 @46094 has 243 MA's), (Start: 68 @46118 has 10 MA's), (96, 46193), (124, 46322), (133, 46358),

Gene: Porcelain_75 Start: 48021, Stop: 47737, Start Num: 61
Candidate Starts for Porcelain_75:
(Start: 61 @48021 has 243 MA's), (Start: 68 @47997 has 10 MA's), (96, 47922), (124, 47793), (133, 47757),

Gene: Pound_77 Start: 53540, Stop: 53256, Start Num: 61
Candidate Starts for Pound_77:
(Start: 55 @53564 has 1 MA's), (Start: 61 @53540 has 243 MA's), (Start: 68 @53516 has 10 MA's), (96, 53441), (124, 53312), (133, 53276),

Gene: Pound_75 Start: 52901, Stop: 52608, Start Num: 61
Candidate Starts for Pound_75:
(Start: 61 @52901 has 243 MA's), (67, 52880), (69, 52868), (112, 52760), (116, 52712), (120, 52700), (127, 52673), (129, 52670), (133, 52631),

Gene: Pringar_9 Start: 2807, Stop: 3091, Start Num: 61
Candidate Starts for Pringar_9:
(Start: 55 @2783 has 1 MA's), (Start: 61 @2807 has 243 MA's), (Start: 68 @2831 has 10 MA's), (96, 2906), (124, 3035), (133, 3071),

Gene: Priscilla_84 Start: 50289, Stop: 50570, Start Num: 61
Candidate Starts for Priscilla_84:
(Start: 61 @50289 has 243 MA's), (Start: 68 @50310 has 10 MA's), (82, 50343), (124, 50514), (133, 50550),

Gene: QuickMath_80 Start: 48565, Stop: 48837, Start Num: 61
Candidate Starts for QuickMath_80:
(Start: 61 @48565 has 243 MA's), (67, 48586), (69, 48598), (112, 48706), (133, 48814),

Gene: Quico_91 Start: 51411, Stop: 51695, Start Num: 61
Candidate Starts for Quico_91:

(Start: 61 @51411 has 243 MA's), (Start: 68 @51435 has 10 MA's), (69, 51444), (100, 51543), (112, 51558), (133, 51672),

Gene: Radiance_80 Start: 49352, Stop: 49621, Start Num: 61
Candidate Starts for Radiance_80:
(46, 49322), (Start: 55 @49328 has 1 MA's), (Start: 61 @49352 has 243 MA's), (67, 49373), (107, 49472), (110, 49478), (133, 49598),

Gene: Raela_9 Start: 3191, Stop: 3475, Start Num: 61
Candidate Starts for Raela_9:
(Start: 61 @3191 has 243 MA's), (Start: 68 @3215 has 10 MA's), (96, 3290), (124, 3419), (133, 3455),

Gene: Rearden_68 Start: 46777, Stop: 46493, Start Num: 61
Candidate Starts for Rearden_68:
(Start: 61 @46777 has 243 MA's), (Start: 68 @46753 has 10 MA's), (124, 46549), (133, 46513),

Gene: Rearden_66 Start: 46135, Stop: 45818, Start Num: 61
Candidate Starts for Rearden_66:
(Start: 61 @46135 has 243 MA's), (Start: 68 @46111 has 10 MA's), (69, 46102), (84, 46069), (89, 46057), (92, 46054), (100, 46006), (112, 45991), (119, 45931), (133, 45841),

Gene: Redno2_72 Start: 48485, Stop: 48225, Start Num: 68
Candidate Starts for Redno2_72:
(Start: 61 @48509 has 243 MA's), (Start: 68 @48485 has 10 MA's), (96, 48410), (124, 48281), (133, 48245),

Gene: Redno2_68 Start: 47096, Stop: 46803, Start Num: 61
Candidate Starts for Redno2_68:
(Start: 61 @47096 has 243 MA's), (67, 47075), (69, 47063), (112, 46955), (116, 46907), (120, 46895), (127, 46868), (129, 46865), (133, 46826),

Gene: Renaud18_93 Start: 50655, Stop: 50924, Start Num: 61
Candidate Starts for Renaud18_93:
(Start: 61 @50655 has 243 MA's), (67, 50676), (70, 50691), (112, 50787), (133, 50901),

Gene: Rita_88 Start: 51756, Stop: 52040, Start Num: 61
Candidate Starts for Rita_88:
(Start: 61 @51756 has 243 MA's), (Start: 68 @51780 has 10 MA's), (96, 51855), (124, 51984), (133, 52020),

Gene: RitaG_82 Start: 50372, Stop: 50656, Start Num: 61
Candidate Starts for RitaG_82:
(Start: 61 @50372 has 243 MA's), (Start: 68 @50396 has 10 MA's), (96, 50471), (124, 50600), (133, 50636),

Gene: Rockne_82 Start: 47914, Stop: 48198, Start Num: 61
Candidate Starts for Rockne_82:
(Start: 61 @47914 has 243 MA's), (Start: 68 @47938 has 10 MA's), (96, 48013), (124, 48142), (133, 48178),

Gene: Royals2015_90 Start: 49759, Stop: 50043, Start Num: 61
Candidate Starts for Royals2015_90:

(Start: 61 @49759 has 243 MA's), (Start: 68 @49783 has 10 MA's), (69, 49792), (100, 49891), (112, 49906), (133, 50020),

Gene: Royals2015_86 Start: 48664, Stop: 48936, Start Num: 61
Candidate Starts for Royals2015_86:
(42, 48622), (52, 48640), (Start: 61 @48664 has 243 MA's), (67, 48685), (69, 48697), (112, 48805), (133, 48913),

Gene: SG4_81 Start: 49453, Stop: 49737, Start Num: 61
Candidate Starts for SG4_81:
(Start: 61 @49453 has 243 MA's), (Start: 68 @49477 has 10 MA's), (96, 49552), (124, 49681), (133, 49717),

Gene: Sabbb_83 Start: 46768, Stop: 47067, Start Num: 61
Candidate Starts for Sabbb_83:
(Start: 61 @46768 has 243 MA's), (67, 46789), (70, 46804), (112, 46930), (133, 47044),

Gene: Sandalphon_75 Start: 48522, Stop: 48806, Start Num: 61
Candidate Starts for Sandalphon_75:
(Start: 51 @48492 has 3 MA's), (Start: 55 @48498 has 1 MA's), (Start: 61 @48522 has 243 MA's), (Start: 68 @48546 has 10 MA's), (96, 48621), (124, 48750), (133, 48786),

Gene: Sarma624_80 Start: 45621, Stop: 45905, Start Num: 61
Candidate Starts for Sarma624_80:
(Start: 55 @45597 has 1 MA's), (Start: 61 @45621 has 243 MA's), (Start: 68 @45645 has 10 MA's), (96, 45720), (124, 45849), (133, 45885),

Gene: SassyB_73 Start: 46094, Stop: 46378, Start Num: 61
Candidate Starts for SassyB_73:
(Start: 55 @46070 has 1 MA's), (Start: 61 @46094 has 243 MA's), (Start: 68 @46118 has 10 MA's), (96, 46193), (124, 46322), (133, 46358),

Gene: SassyB_77 Start: 47157, Stop: 47441, Start Num: 61
Candidate Starts for SassyB_77:
(Start: 61 @47157 has 243 MA's), (Start: 68 @47181 has 10 MA's), (69, 47190), (100, 47289), (112, 47304), (133, 47418),

Gene: Schatzie_66 Start: 49090, Stop: 48797, Start Num: 61
Candidate Starts for Schatzie_66:
(Start: 61 @49090 has 243 MA's), (67, 49069), (69, 49057), (112, 48949), (116, 48901), (120, 48889), (127, 48862), (129, 48859), (133, 48820),

Gene: Schatzie_70 Start: 50503, Stop: 50219, Start Num: 61
Candidate Starts for Schatzie_70:
(Start: 61 @50503 has 243 MA's), (Start: 68 @50479 has 10 MA's), (96, 50404), (124, 50275), (133, 50239),

Gene: SeaLumen_86 Start: 47423, Stop: 47707, Start Num: 61
Candidate Starts for SeaLumen_86:
(Start: 61 @47423 has 243 MA's), (Start: 68 @47447 has 10 MA's), (96, 47522), (124, 47651), (133, 47687),

Gene: Seabastian_91 Start: 50299, Stop: 50592, Start Num: 61

Candidate Starts for Seabastian_91:
(Start: 61 @50299 has 243 MA's), (67, 50320), (70, 50335), (112, 50461), (133, 50569),

Gene: Seabastian_89 Start: 49769, Stop: 50089, Start Num: 61
Candidate Starts for Seabastian_89:
(Start: 55 @49745 has 1 MA's), (Start: 61 @49769 has 243 MA's), (Start: 68 @49793 has 10 MA's),
(96, 49868), (124, 49997), (133, 50033),

Gene: Seagreen_80 Start: 49149, Stop: 49481, Start Num: 43
Candidate Starts for Seagreen_80:
(17, 49053), (Start: 43 @49149 has 1 MA's), (50, 49164), (Start: 61 @49197 has 243 MA's), (Start: 68
@49221 has 10 MA's), (124, 49425), (133, 49461),

Gene: Seanderson_61 Start: 42123, Stop: 41887, Start Num: 64
Candidate Starts for Seanderson_61:
(24, 42231), (30, 42207), (40, 42177), (Start: 59 @42135 has 10 MA's), (Start: 64 @42123 has 1 MA's),
(133, 41910),

Gene: Shaboozey_69 Start: 45986, Stop: 45702, Start Num: 61
Candidate Starts for Shaboozey_69:
(Start: 61 @45986 has 243 MA's), (Start: 68 @45962 has 10 MA's), (124, 45758), (133, 45722),

Gene: ShamWow_44 Start: 36121, Stop: 35825, Start Num: 61
Candidate Starts for ShamWow_44:
(Start: 61 @36121 has 243 MA's), (70, 36085), (77, 36067), (93, 36034), (102, 35992), (133, 35845),

Gene: Shauna1_81 Start: 49655, Stop: 49939, Start Num: 61
Candidate Starts for Shauna1_81:
(Start: 61 @49655 has 243 MA's), (Start: 68 @49679 has 10 MA's), (96, 49754), (124, 49883), (133,
49919),

Gene: ShowerHandel_82 Start: 48717, Stop: 48983, Start Num: 59
Candidate Starts for ShowerHandel_82:
(Start: 59 @48717 has 10 MA's), (67, 48744), (70, 48759), (112, 48849), (124, 48927), (133, 48963),

Gene: SkiPole_66 Start: 41398, Stop: 41150, Start Num: 59
Candidate Starts for SkiPole_66:
(8, 41611), (9, 41608), (10, 41605), (11, 41602), (24, 41494), (30, 41470), (40, 41440), (Start: 59
@41398 has 10 MA's), (Start: 64 @41386 has 1 MA's), (133, 41173),

Gene: SkiPole_68 Start: 41922, Stop: 41608, Start Num: 51
Candidate Starts for SkiPole_68:
(Start: 51 @41922 has 3 MA's), (Start: 55 @41916 has 1 MA's), (Start: 61 @41892 has 243 MA's),
(Start: 68 @41868 has 10 MA's), (96, 41793), (124, 41664), (133, 41628),

Gene: Solon_60 Start: 40387, Stop: 40100, Start Num: 62
Candidate Starts for Solon_60:
(Start: 62 @40387 has 16 MA's), (67, 40366), (70, 40351), (78, 40327), (112, 40234), (124, 40156),
(133, 40120),

Gene: Soul22_82 Start: 47187, Stop: 47471, Start Num: 61
Candidate Starts for Soul22_82:

(Start: 51 @47157 has 3 MA's), (Start: 55 @47163 has 1 MA's), (Start: 61 @47187 has 243 MA's), (Start: 68 @47211 has 10 MA's), (96, 47286), (124, 47415), (133, 47451),

Gene: Soul22_84 Start: 47805, Stop: 48131, Start Num: 61
Candidate Starts for Soul22_84:
(Start: 61 @47805 has 243 MA's), (69, 47838), (70, 47841), (82, 47868), (84, 47874), (112, 47994), (133, 48108),

Gene: Spartacus_89 Start: 52261, Stop: 52542, Start Num: 62
Candidate Starts for Spartacus_89:
(Start: 62 @52261 has 16 MA's), (Start: 68 @52285 has 10 MA's), (69, 52294), (112, 52408), (123, 52480), (124, 52486),

Gene: Spartacus_87 Start: 51565, Stop: 51846, Start Num: 61
Candidate Starts for Spartacus_87:
(Start: 61 @51565 has 243 MA's), (Start: 68 @51586 has 10 MA's), (82, 51619), (124, 51790), (133, 51826),

Gene: Spartacus_90 Start: 52535, Stop: 52846, Start Num: 45
Candidate Starts for Spartacus_90:
(Start: 45 @52535 has 5 MA's), (67, 52598), (110, 52703), (133, 52823),

Gene: Sprinklers_16 Start: 4916, Stop: 5194, Start Num: 68
Candidate Starts for Sprinklers_16:
(58, 4877), (63, 4895), (Start: 68 @4916 has 10 MA's), (74, 4937), (77, 4949), (79, 4952), (86, 4967), (90, 4976), (124, 5138), (133, 5174),

Gene: Squint_76 Start: 48140, Stop: 47856, Start Num: 61
Candidate Starts for Squint_76:
(Start: 61 @48140 has 243 MA's), (Start: 68 @48116 has 10 MA's), (96, 48041), (124, 47912), (133, 47876),

Gene: Squirty_81 Start: 52224, Stop: 52505, Start Num: 61
Candidate Starts for Squirty_81:
(Start: 61 @52224 has 243 MA's), (Start: 68 @52248 has 10 MA's), (96, 52323), (124, 52452), (130, 52476), (133, 52488), (134, 52494),

Gene: StAnnes_83 Start: 50113, Stop: 50397, Start Num: 61
Candidate Starts for StAnnes_83:
(49, 50083), (Start: 61 @50113 has 243 MA's), (Start: 68 @50137 has 10 MA's), (96, 50212), (124, 50341), (133, 50377),

Gene: StellaBean_42 Start: 35445, Stop: 35149, Start Num: 61
Candidate Starts for StellaBean_42:
(Start: 61 @35445 has 243 MA's), (70, 35409), (77, 35391), (93, 35358), (102, 35316), (133, 35169),

Gene: Stellammi_145 Start: 63474, Stop: 63668, Start Num: 85
Candidate Starts for Stellammi_145:
(85, 63474), (123, 63639), (126, 63657),

Gene: Strokeseat_80 Start: 47313, Stop: 47594, Start Num: 62
Candidate Starts for Strokeseat_80:

(Start: 62 @47313 has 16 MA's), (Start: 68 @47337 has 10 MA's), (69, 47346), (112, 47460), (123, 47532), (124, 47538),

Gene: Strokeseat_81 Start: 47587, Stop: 47898, Start Num: 45
Candidate Starts for Strokeseat_81:
(34, 47560), (Start: 45 @47587 has 5 MA's), (67, 47650), (110, 47755), (133, 47875),

Gene: Strokeseat_76 Start: 46226, Stop: 46510, Start Num: 61
Candidate Starts for Strokeseat_76:
(Start: 55 @46202 has 1 MA's), (Start: 61 @46226 has 243 MA's), (Start: 68 @46250 has 10 MA's), (96, 46325), (124, 46454), (133, 46490),

Gene: SuperGrey_82 Start: 51027, Stop: 51305, Start Num: 68
Candidate Starts for SuperGrey_82:
(58, 50988), (63, 51006), (Start: 68 @51027 has 10 MA's), (74, 51048), (77, 51060), (79, 51063), (86, 51078), (90, 51087), (124, 51249), (133, 51285),

Gene: Superphikiman_69 Start: 45818, Stop: 45525, Start Num: 61
Candidate Starts for Superphikiman_69:
(Start: 61 @45818 has 243 MA's), (67, 45797), (69, 45785), (112, 45677), (116, 45629), (120, 45617), (127, 45590), (129, 45587), (133, 45548),

Gene: Superphikiman_73 Start: 47231, Stop: 46947, Start Num: 61
Candidate Starts for Superphikiman_73:
(Start: 61 @47231 has 243 MA's), (Start: 68 @47207 has 10 MA's), (96, 47132), (124, 47003), (133, 46967),

Gene: SwissCheese_62 Start: 40423, Stop: 40175, Start Num: 59
Candidate Starts for SwissCheese_62:
(24, 40519), (30, 40495), (40, 40465), (Start: 59 @40423 has 10 MA's), (Start: 64 @40411 has 1 MA's), (133, 40198),

Gene: Taj_92 Start: 52011, Stop: 52295, Start Num: 61
Candidate Starts for Taj_92:
(26, 51912), (Start: 61 @52011 has 243 MA's), (Start: 68 @52035 has 10 MA's), (69, 52044), (100, 52143), (112, 52158), (133, 52272),

Gene: Taj_88 Start: 50947, Stop: 51231, Start Num: 61
Candidate Starts for Taj_88:
(16, 50785), (Start: 61 @50947 has 243 MA's), (Start: 68 @50971 has 10 MA's), (96, 51046), (124, 51175), (133, 51211),

Gene: Tchotchke_76 Start: 47691, Stop: 47990, Start Num: 63
Candidate Starts for Tchotchke_76:
(58, 47673), (63, 47691), (Start: 68 @47712 has 10 MA's), (74, 47733), (77, 47745), (79, 47748), (86, 47763), (90, 47772), (124, 47934), (133, 47970),

Gene: Techage_55 Start: 36691, Stop: 36930, Start Num: 60
Candidate Starts for Techage_55:
(Start: 60 @36691 has 14 MA's), (117, 36892), (124, 36919),

Gene: Tesla_9 Start: 2778, Stop: 3062, Start Num: 61
Candidate Starts for Tesla_9:

(Start: 61 @2778 has 243 MA's), (Start: 68 @2802 has 10 MA's), (96, 2877), (124, 3006), (133, 3042),

Gene: ThetaBob_85 Start: 48938, Stop: 49243, Start Num: 61
Candidate Starts for ThetaBob_85:
(Start: 61 @48938 has 243 MA's), (69, 48971), (70, 48974), (82, 49001), (84, 49007), (112, 49127), (125, 49202),

Gene: ThreeRngTarjay_73 Start: 51787, Stop: 51503, Start Num: 61
Candidate Starts for ThreeRngTarjay_73:
(Start: 61 @51787 has 243 MA's), (Start: 68 @51763 has 10 MA's), (96, 51688), (124, 51559), (133, 51523),

Gene: ThreeRngTarjay_69 Start: 50376, Stop: 50083, Start Num: 61
Candidate Starts for ThreeRngTarjay_69:
(Start: 61 @50376 has 243 MA's), (67, 50355), (69, 50343), (112, 50235), (116, 50187), (120, 50175), (127, 50148), (129, 50145), (133, 50106),

Gene: Tortoise12_58 Start: 37074, Stop: 37331, Start Num: 72
Candidate Starts for Tortoise12_58:
(3, 36771), (6, 36792), (15, 36846), (31, 36948), (66, 37044), (Start: 72 @37074 has 12 MA's), (87, 37107), (117, 37248), (118, 37251), (120, 37254), (123, 37278), (124, 37284), (130, 37308),

Gene: Tortoise12_60 Start: 37645, Stop: 37935, Start Num: 65
Candidate Starts for Tortoise12_60:
(Start: 65 @37645 has 1 MA's), (71, 37675), (98, 37753), (105, 37768), (108, 37780), (112, 37798), (117, 37849), (121, 37861), (124, 37876), (130, 37900), (133, 37912), (134, 37918),

Gene: Toto_43 Start: 36121, Stop: 35825, Start Num: 61
Candidate Starts for Toto_43:
(Start: 61 @36121 has 243 MA's), (70, 36085), (77, 36067), (93, 36034), (102, 35992), (133, 35845),

Gene: Traaww1_40 Start: 34923, Stop: 34648, Start Num: 62
Candidate Starts for Traaww1_40:
(34, 34995), (44, 34971), (Start: 45 @34968 has 5 MA's), (Start: 62 @34923 has 16 MA's), (67, 34902), (69, 34890), (112, 34782), (124, 34704), (133, 34668),

Gene: Tuco_45 Start: 36629, Stop: 36333, Start Num: 61
Candidate Starts for Tuco_45:
(Start: 61 @36629 has 243 MA's), (70, 36593), (77, 36575), (93, 36542), (102, 36500), (133, 36353),

Gene: Tweety_86 Start: 51088, Stop: 51372, Start Num: 61
Candidate Starts for Tweety_86:
(Start: 61 @51088 has 243 MA's), (Start: 68 @51112 has 10 MA's), (69, 51121), (100, 51220), (112, 51235), (133, 51349),

Gene: Tweety_82 Start: 50025, Stop: 50309, Start Num: 61
Candidate Starts for Tweety_82:
(16, 49863), (Start: 61 @50025 has 243 MA's), (Start: 68 @50049 has 10 MA's), (96, 50124), (124, 50253), (133, 50289),

Gene: UncleRicky_80 Start: 47788, Stop: 48072, Start Num: 61
Candidate Starts for UncleRicky_80:

(Start: 61 @47788 has 243 MA's), (Start: 68 @47812 has 10 MA's), (96, 47887), (124, 48016), (133, 48052),

Gene: VRedHorse_86 Start: 47830, Stop: 48114, Start Num: 61
Candidate Starts for VRedHorse_86:
(Start: 55 @47806 has 1 MA's), (Start: 61 @47830 has 243 MA's), (Start: 68 @47854 has 10 MA's), (96, 47929), (124, 48058), (133, 48094),

Gene: VRedHorse_80 Start: 46368, Stop: 46637, Start Num: 61
Candidate Starts for VRedHorse_80:
(Start: 61 @46368 has 243 MA's), (67, 46389), (107, 46488), (110, 46494), (133, 46614),

Gene: Velveteen_75 Start: 45597, Stop: 45905, Start Num: 55
Candidate Starts for Velveteen_75:
(Start: 55 @45597 has 1 MA's), (Start: 61 @45621 has 243 MA's), (Start: 68 @45645 has 10 MA's), (96, 45720), (124, 45849), (133, 45885),

Gene: Venti_55 Start: 36580, Stop: 36819, Start Num: 60
Candidate Starts for Venti_55:
(Start: 60 @36580 has 14 MA's), (117, 36781), (124, 36808),

Gene: Violac_83 Start: 50504, Stop: 50788, Start Num: 61
Candidate Starts for Violac_83:
(Start: 61 @50504 has 243 MA's), (Start: 68 @50528 has 10 MA's), (96, 50603), (124, 50732), (133, 50768),

Gene: Wachhund_81 Start: 46941, Stop: 47240, Start Num: 61
Candidate Starts for Wachhund_81:
(Start: 61 @46941 has 243 MA's), (67, 46962), (70, 46977), (112, 47103), (133, 47217),

Gene: Wanda_75 Start: 49838, Stop: 49545, Start Num: 61
Candidate Starts for Wanda_75:
(Start: 61 @49838 has 243 MA's), (67, 49817), (69, 49805), (112, 49697), (116, 49649), (120, 49637), (127, 49610), (129, 49607), (133, 49568),

Gene: Wanda_77 Start: 50474, Stop: 50193, Start Num: 61
Candidate Starts for Wanda_77:
(Start: 61 @50474 has 243 MA's), (Start: 68 @50453 has 10 MA's), (82, 50420), (124, 50249), (133, 50213),

Gene: Wee_91 Start: 52087, Stop: 52371, Start Num: 61
Candidate Starts for Wee_91:
(Start: 61 @52087 has 243 MA's), (Start: 68 @52111 has 10 MA's), (69, 52120), (100, 52219), (112, 52234), (133, 52348),

Gene: Wee_87 Start: 51023, Stop: 51307, Start Num: 61
Candidate Starts for Wee_87:
(16, 50861), (Start: 61 @51023 has 243 MA's), (Start: 68 @51047 has 10 MA's), (96, 51122), (124, 51251), (133, 51287),

Gene: Whatsapiecost_74 Start: 44329, Stop: 44613, Start Num: 61
Candidate Starts for Whatsapiecost_74:

(Start: 61 @44329 has 243 MA's), (Start: 68 @44353 has 10 MA's), (69, 44362), (112, 44476), (133, 44590),

Gene: WillSterrel_80 Start: 49364, Stop: 49648, Start Num: 61
Candidate Starts for WillSterrel_80:
(Start: 51 @49334 has 3 MA's), (Start: 55 @49340 has 1 MA's), (Start: 61 @49364 has 243 MA's), (Start: 68 @49388 has 10 MA's), (96, 49463), (124, 49592), (133, 49628),

Gene: XFactor_77 Start: 48229, Stop: 48513, Start Num: 61
Candidate Starts for XFactor_77:
(Start: 61 @48229 has 243 MA's), (Start: 68 @48253 has 10 MA's), (96, 48328), (133, 48493),

Gene: Yeet_71 Start: 50004, Stop: 49720, Start Num: 61
Candidate Starts for Yeet_71:
(Start: 61 @50004 has 243 MA's), (Start: 68 @49980 has 10 MA's), (124, 49776), (133, 49740),

Gene: Yeet_69 Start: 49362, Stop: 49069, Start Num: 61
Candidate Starts for Yeet_69:
(Start: 61 @49362 has 243 MA's), (67, 49341), (69, 49329), (112, 49221), (116, 49173), (120, 49161), (127, 49134), (129, 49131), (133, 49092),

Gene: Zapner_90 Start: 47899, Stop: 48183, Start Num: 61
Candidate Starts for Zapner_90:
(Start: 61 @47899 has 243 MA's), (Start: 68 @47923 has 10 MA's), (124, 48127), (133, 48163),

Gene: Zelink_73 Start: 52099, Stop: 51815, Start Num: 61
Candidate Starts for Zelink_73:
(Start: 61 @52099 has 243 MA's), (Start: 68 @52075 has 10 MA's), (96, 52000), (124, 51871), (133, 51835),

Gene: Zelink_69 Start: 50689, Stop: 50396, Start Num: 61
Candidate Starts for Zelink_69:
(Start: 61 @50689 has 243 MA's), (67, 50668), (69, 50656), (112, 50548), (116, 50500), (120, 50488), (127, 50461), (129, 50458), (133, 50419),

Gene: ZenTime222_56 Start: 39238, Stop: 39498, Start Num: 72
Candidate Starts for ZenTime222_56:
(3, 38935), (6, 38956), (15, 39010), (31, 39112), (66, 39208), (Start: 72 @39238 has 12 MA's), (87, 39271), (117, 39412), (121, 39424), (124, 39439), (130, 39463), (133, 39475), (134, 39481),

Gene: Zerg_82 Start: 49172, Stop: 49456, Start Num: 61
Candidate Starts for Zerg_82:
(Start: 55 @49148 has 1 MA's), (Start: 61 @49172 has 243 MA's), (Start: 68 @49196 has 10 MA's), (96, 49271), (124, 49400), (133, 49436),

Gene: Zeuska_63 Start: 42656, Stop: 42396, Start Num: 68
Candidate Starts for Zeuska_63:
(Start: 61 @42680 has 243 MA's), (Start: 68 @42656 has 10 MA's), (69, 42647), (112, 42533), (133, 42419),

Gene: Zilizebeth_60 Start: 38146, Stop: 38385, Start Num: 60
Candidate Starts for Zilizebeth_60:
(Start: 60 @38146 has 14 MA's), (117, 38347), (124, 38374),