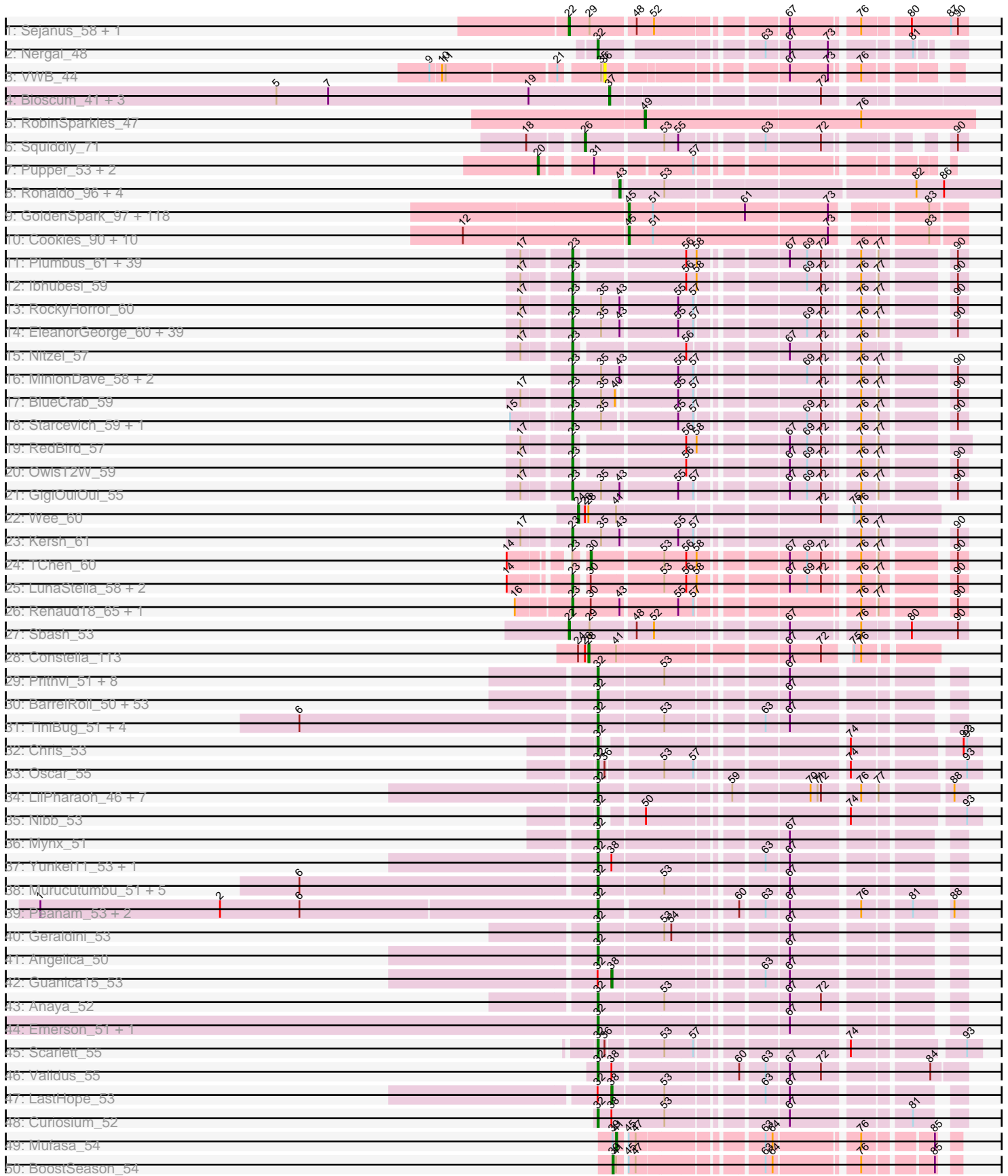
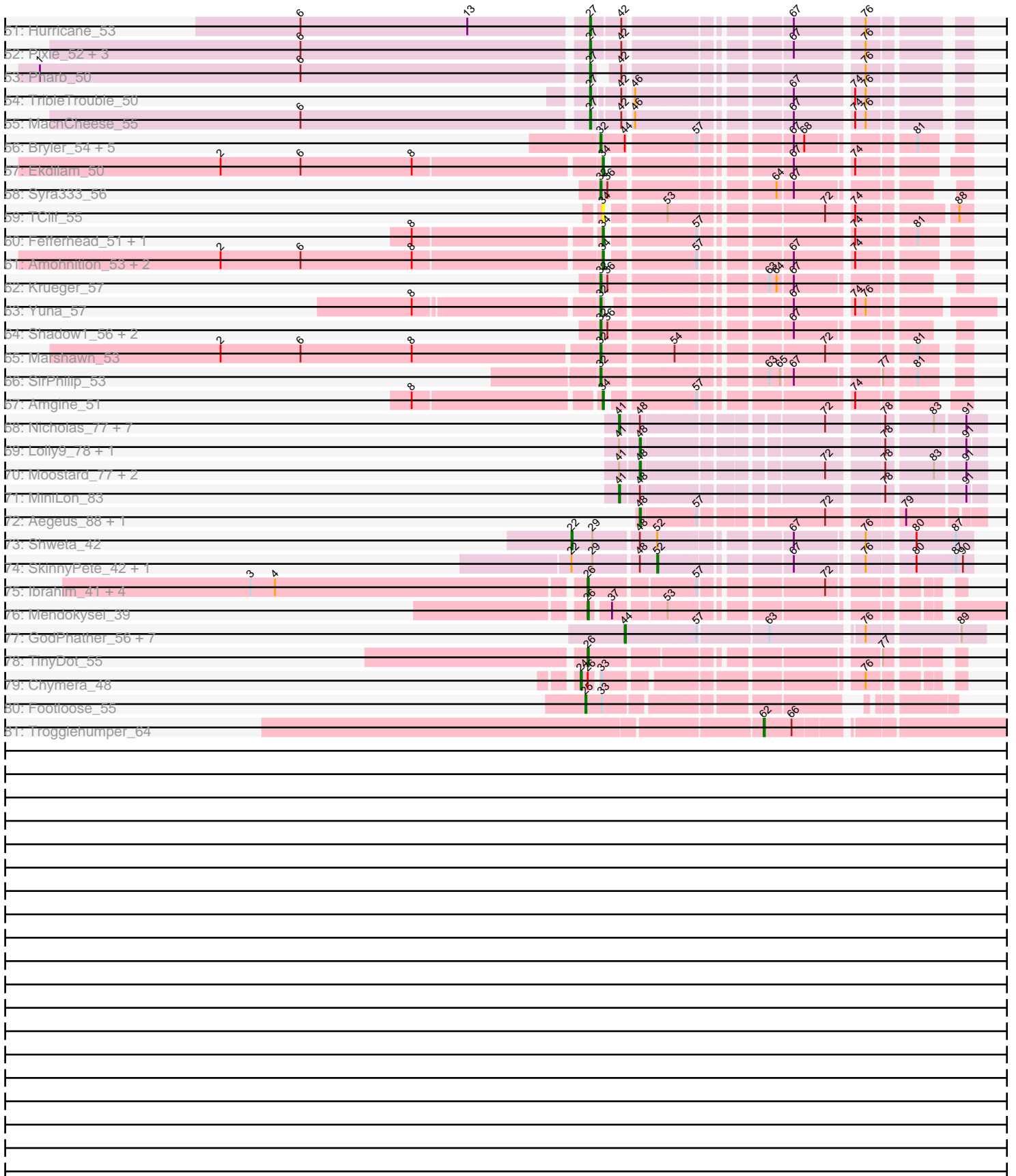


Pham 171116



Pham 171116



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 171116 Report

This analysis was run 07/09/24 on database version 566.

Pham number 171116 has 420 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_58, Charlie_44
- Track 2 : Nergal_48
- Track 3 : VWB_44
- Track 4 : Bioscum_41, PapayaSalad_40, Ididsumtinwong_41, Austintatious_37
- Track 5 : RobinSparkles_47
- Track 6 : Squiddly_71
- Track 7 : Pupper_53, SCentae_53, CherryTomatoes_55
- Track 8 : Ronaldo_96, Ziko_96, Guey18_98, Volt_97, Fryberger_93
- Track 9 : GoldenSpark_97, HanKaySha_94, Lilpickle_92, BigBubba_93, Terminus_96, Highbury_92, CrystalP_92, Cjw1_94, YassJohnny_90, ShamWow_93, Cactus_96, ChosenOne_93, TeardropMSU_89, Inca_90, Youngblood_96, Policronamos_97, Henry_91, Simpliphy_92, GooberAzure_96, Xandras_92, BilboSwaggins_92, Holt_98, Contagion_89, MadamMonkfish_93, Murica_96, Paperbeatsrock_92, NoSleep_94, Nala_95, JeTaime_94, Flypotenuse_89, Command613_95, OrionPax_92, Lilizi_94, Porky_92, Gemini_98, Kimchi_97, Tarkin_92, Gage_95, ShereKhan_91, Willez_88, Hopey_94, FireRed_97, Dusk_90, Harella_93, Quallification_94, Palpatine_95, Stark_95, Easy2Say_94, NelitzaMV_91, Eureka_92, Hoonter_96, SirDuracell_93, BaboJay_93, Sotrice96_94, RiverMonster_94, Murphy_93, Lilac_96, Goldilocks_96, StolenFromERC_96, Tucu_94, Miniwave_88, Amao_93, MISSy_94, Phrux_91, Glexan_92, Bruin_90, Thresher_96, Bench_96, Rakim_94, Mosby_89, Marshmallow_91, Misfit_94, 244_94, Myrale_93, Manda_95, Teaspoon_94, Nimrod_94, Pumpkin_97, SophKB_90, Tomaszewski_88, ABCat_90, Sassay_88, Phaja_91, Goku_92, Argent26_97, BadStone_90, Saints25_92, Asriel_91, Pharsalus_90, Elph10_94, DrDrey_93, TBrady12_96, Toto_91, HufflyPuff_95, xkcd_96, Dumbo_93, Adnama_97, Traaww1_89, IHOP_91, Icee_94, MPhalcon_94, BugsBunny_93, Filch_95, StellaBean_91, Wiggin_95, Ukulele_88, Czyszczonek1_94, PhatBacter_97, Mindy_92, Kostya_93, Moldemort_96, Stank_95, Emmina_93, Elite2014_92, AmericanBeauty_100, Kanye_90, Maxxinista_96, Barbarian_92, Phaux_96
- Track 10 : Cookies_90, Buck_94, Balomoji_93, Rimmer_91, Bask21_93, DoctorDiddles_92, Gator_91, Daikon_94, Petra64142_98, Pat3_90, ChotaBhai_93
- Track 11 : Plumbus_61, Daenerys_53, AlpineSix_64, Polka14_57, Pacc40_53, LunaBlu_61, Dorothy_57, KingMidas_58, Avani_67, Sebastian_64, Jinglebell_64, Ochi17_62, Leozinho_58, SimranZ1_59, DosHalletts_61, Stap_57, Modragons_63, Inventum_54, Phasih_57, Leperchaun_51, Girr_57, JoeyJr_54, PHappiness_54, Ruby_55, Cornucopia_61, Doomphist_59, Empress_57, Fastidio_58, Poenanya_59, Estave1_62, Sassafra_57, OfUltron_64, Oksu_63, Spoonbill_56, Llama_64,

RitaG_54, DillTech15_56, MisterCuddles_57, Galactic_58, BodEinwohner17_59

- Track 12 : lbhubesi_59
- Track 13 : RockyHorror_60
- Track 14 : EleanorGeorge_60, Mozy_68, Maravista_60, Radiance_58, James_63, Pippy_57, VRedHorse_59, LastJedi_53, Blexus_57, Strokeseat_55, Sabbb_63, GUmbie_57, Whouxphf_56, Byougenkin_57, Hlubikazi_55, Mattes_63, Spikelee_66, ShowerHandel_62, SwagPiggett_64, IrishSherpFalk_60, Saal_61, BuzzLyseyear_65, Mahavrat_57, OlympiaSaint_61, ShroomBoi_61, Mandlovu_55, Yorick_58, Hades_60, WillSterrel_60, Latretium_61, Eradicator_52, Martik_59, KristaRAM_62, Spartacus_61, Gandalph_62, Brocalys_54, Clifton_54, Gorge_63, FreddyB_60, Lizziana_65
- Track 15 : Nitzel_57
- Track 16 : MinionDave_58, Wee_63, Hegedechwinu_59
- Track 17 : BlueCrab_59
- Track 18 : Starcevich_59, Cornie_55
- Track 19 : RedBird_57
- Track 20 : OwlsT2W_59
- Track 21 : GigiOuiOui_55
- Track 22 : Wee_60
- Track 23 : Kersh_61
- Track 24 : TChen_60
- Track 25 : LunaStella_58, Yoshi_72, ThetaBob_64
- Track 26 : Renaud18_65, Demsculpinboyz_70
- Track 27 : Sbash_53
- Track 28 : Constella_113
- Track 29 : Prithvi_51, CrimD_50, LaterM_51, Megsy_52, LindNT_49, TreyKay_51, Deby_50, Tiri_51, Pokerus_49
- Track 30 : BarrelRoll_50, AlishaPH_50, TruffulaTree_50, BaghaKamala_49, Atiba_51, Veliki_51, Beezoo_52, JAWS_50, Ramen_51, ActinUp_50, Hyperbowlee_50, CREW_50, Slimphazie_50, Zavala_52, Adonis_50, Capricorn_50, Spock_50, QuincyRose_49, Durfee_50, Sulley_50, Tachez_50, Jayhawk_51, Rapunzel97_51, CaseJules_52, Topper_50, Dalmuri_50, Asayake_50, Rosmarinus_50, Apocalypse_53, Joy99_50, CheetoDust_49, Blizzard_50, Zabiza_46, Belladonna_50, Homura_50, Inky_50, Lunahalos_50, TaiwanKao_52, HedwigODU_50, MeaningOfLife_51, Peel_50, Llorens_50, Padfoot_50, Adephegia_50, Jeckyll_50, Boiii_50, BGIlluviae_50, BEEEST_50, Ganymede_51, Piatt_50, YoureAdopted_49, ShiaSurprise_51, Jarvi_50, Twitch_50
- Track 31 : TiniBug_51, SamuelLPlaqson_51, DrHayes_51, Bella96_51, Urkel_51
- Track 32 : Chris_53
- Track 33 : Oscar_55
- Track 34 : LilPharaoh_46, SgtBeansprout_46, Enkosi_48, Nutello_46, Amelie_46, Nikao_49, Mdavu_47, Binglebops_46
- Track 35 : Nibb_53
- Track 36 : Mynx_51
- Track 37 : Yunkel11_53, Efra2_53
- Track 38 : Murucutumbu_51, Illumine_53, Dole_53, Ageofdapage_52, Devera_55, Stinson_51
- Track 39 : Peanam_53, Shaobing_53, Niklas_53
- Track 40 : Geraldini_53
- Track 41 : Angelica_50
- Track 42 : Guanica15_53
- Track 43 : Anaya_52
- Track 44 : Emerson_51, Padpat_52

- Track 45 : Scarlett_55
- Track 46 : Validus_55
- Track 47 : LastHope_53
- Track 48 : Curiosium_52
- Track 49 : Mufasa_54
- Track 50 : BoostSeason_54
- Track 51 : Hurricane_53
- Track 52 : Pixie_52, ShedlockHolmes_54, Keshu_55, TBond007_51
- Track 53 : Pharb_50
- Track 54 : TribbleTrouble_50
- Track 55 : MacnCheese_55
- Track 56 : Bryler_54, Cain_54, Tierra_54, PhelpsODU_53, Phrank_54, Unicorn_53
- Track 57 : Ekdilam_50
- Track 58 : Syra333_56
- Track 59 : TClif_55
- Track 60 : Fefferhead_51, Ellie_49
- Track 61 : Amohnition_53, Hammy_53, DarthP_53
- Track 62 : Krueger_57
- Track 63 : Yuna_57
- Track 64 : Shadow1_56, Sunflower1121_57, Ximenita_57
- Track 65 : Marshawn_53
- Track 66 : SirPhilip_53
- Track 67 : Amgine_51
- Track 68 : Nicholas_77, Clautastrophe_77, Kingsolomon_77, Snenia_78, Finnry_79, Jobypre_80, MsGreen_79, Jubie_78
- Track 69 : Lolly9_78, MiniMac_83
- Track 70 : Moostard_77, Bellis_77, Samty_78
- Track 71 : MiniLon_83
- Track 72 : Aegeus_88, Baudelaire_88
- Track 73 : Shweta_42
- Track 74 : SkinnyPete_42, Journey_46
- Track 75 : Ibrahim_41, ZenTime222_40, Bernal13_41, RonRayGun_41, Nairb_40
- Track 76 : Mendokysei_39
- Track 77 : GodPhather_56, Taptic_55, PR_55, Megabear_55, Jeon_55, Cepens_55, D12_54, Argie_56
- Track 78 : TinyDot_55
- Track 79 : Chymera_48
- Track 80 : Footloose_55
- Track 81 : Trogglehumper_64

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

The start number called the most often in the published annotations is 45, it was called in 122 of the 400 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• 244_94, ABCat_90, Adnama_97, Amao_93, AmericanBeauty_100, Argent26_97, Asriel_91, BaboJay_93, BadStone_90, Balomoji_93, Barbarian_92, Bask21_93, Bench_96, BigBubba_93, BilboSwaggins_92, Bruin_90, Buck_94, BugsBunny_93, Cactus_96, ChosenOne_93, ChotaBhai_93, Cjw1_94, Command613_95,

Contagion_89, Cookies_90, CrystalP_92, Czyszczone1_94, Daikon_94, DoctorDiddles_92, DrDrey_93, Dumbo_93, Dusk_90, Easy2Say_94, Elite2014_92, Elph10_94, Emmina_93, Eureka_92, Filch_95, FireRed_97, Flypotenuse_89, Gage_95, Gator_91, Gemini_98, Glexan_92, Goku_92, GoldenSpark_97, Goldilocks_96, GooberAzure_96, HanKaySha_94, Harella_93, Henry_91, Highbury_92, Holt_98, Hoonter_96, Hopey_94, HufflyPuff_95, IHOP_91, Icee_94, Inca_90, JeTaime_94, Kanye_90, Kimchi_97, Kostya_93, Lilac_96, Lilizi_94, Lilpickle_92, MISSy_94, MPhalcon_94, MadamMonkfish_93, Manda_95, Marshmallow_91, Maxxinista_96, Mindy_92, Miniwave_88, Misfit_94, Moldemort_96, Mosby_89, Murica_96, Murphy_93, Myrale_93, Nala_95, NelitzaMV_91, Nimrod_94, NoSleep_94, OrionPax_92, Palpatine_95, Paperbeatsrock_92, Pat3_90, Petra64142_98, Phaja_91, Pharsalus_90, PhatBacter_97, Phaux_96, Phrux_91, Policronamos_97, Porky_92, Pumpkin_97, Qualification_94, Rakim_94, Rimmer_91, RiverMonster_94, Saints25_92, Sassay_88, ShamWow_93, ShereKhan_91, Simpliphy_92, SirDuracell_93, SophKB_90, Sotrice96_94, Stank_95, Stark_95, StellaBean_91, StolenFromERC_96, TBrady12_96, Tarkin_92, TeardropMSU_89, Teaspoon_94, Terminus_96, Thresher_96, Tomaszewski_88, Toto_91, Traaww1_89, Tuco_94, Ukulele_88, Wiggin_95, Willez_88, Xandras_92, YassJohnny_90, Youngblood_96, xkcd_96,

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

- BoostSeason_54, Mufasa_54,

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

- ActinUp_50, Adephegia_50, Adonis_50, Aegeus_88, Ageofdapage_52, AlishaPH_50, AlpineSix_64, Amelie_46, Amgine_51, Amohnton_53, Anaya_52, Angelica_50, Apocalypse_53, Argie_56, Asayake_50, Atiba_51, Austintatious_37, Avani_67, BEEEST_50, BGlluviae_50, BaghaKamala_49, BarrelRoll_50, Baudelaire_88, Beezoo_52, Bella96_51, Belladonna_50, Bellis_77, Bernal13_41, Binglebops_46, Bioscum_41, Blexus_57, Blizzard_50, BlueCrab_59, BodEinwohner17_59, Boiiii_50, Brocalys_54, Bryler_54, BuzzLyseyear_65, Byougenkin_57, CREW_50, Cain_54, Capricorn_50, CaseJules_52, Cepens_55, Charlie_44, CheetoDust_49, CherryTomatoes_55, Chris_53, Chymera_48, Clautastrophe_77, Clifton_54, Constella_113, Cornie_55, Cornucopia_61, CrimD_50, Curiosium_52, D12_54, Daenerys_53, Dalmuri_50, DarthP_53, Deby_50, Demsculpinboyz_70, Devera_55, DillTech15_56, Dole_53, Doomphist_59, Dorothy_57, DosHalletts_61, DrHayes_51, Durfee_50, Efra2_53, Ekdilam_50, EleanorGeorge_60, Ellie_49, Emerson_51, Empress_57, Enkosi_48, Eradicator_52, Estave1_62, Fastidio_58, Fefferhead_51, Finnry_79, Footloose_55, FreddyB_60, Fryberger_93, GUmble_57, Galactic_58, Gandolph_62, Ganymede_51, Geraldini_53, GigiOuiOui_55, Girr_57, GodPhather_56, Gorge_63, Guanica15_53, Guey18_98, Hades_60, Hammy_53, HedwigODU_50, Hegedechwinu_59, Hlubikazi_55, Homura_50, Hurricane_53, Hyperbowlee_50, Ibhubesi_59, Ibrahim_41, Ididsumtinwong_41, Illumine_53, Inky_50, Inventum_54, IrishSherpFalk_60, JAWS_50, James_63, Jarvi_50, Jayhawk_51, Jeckyll_50, Jeon_55, Jinglebell_64, Jobypre_80, JoeyJr_54, Journey_46, Joy99_50, Jubie_78, Kersh_61, Keshu_55, KingMidas_58, Kingsolomon_77, KristaRAM_62, Krueger_57, LastHope_53, LastJedi_53, LaterM_51, Latretium_61, Leozinho_58, Leperchaun_51, LilPharaoh_46, LindNT_49, Lizziana_65, Llama_64, Llorens_50, Lolly9_78, LunaBlu_61, LunaStella_58, Lunahalos_50, MacnCheese_55, Mahavrat_57, Mandlovu_55, Maravista_60, Marshawn_53, Martik_59, Mattes_63, Mdavu_47, MeaningOfLife_51, Megabear_55, Megsy_52, Mendokysei_39, MiniLon_83, MiniMac_83, MinionDave_58, MisterCuddles_57, Modragons_63, Moostard_77,

Mozy_68, MsGreen_79, Murucutumbu_51, Mynx_51, Nairb_40, Nergal_48, Nibb_53, Nicholas_77, Nikao_49, Niklas_53, Nitzel_57, Nutello_46, Ochi17_62, OfUltron_64, Oksu_63, OlympiaSaint_61, Oscar_55, OwlsT2W_59, PHappiness_54, PR_55, Pacc40_53, Padfoot_50, Padpat_52, PapayaSalad_40, Peanam_53, Peel_50, Pharb_50, Phasih_57, PhelpsODU_53, Phrank_54, Piatt_50, Pippy_57, Pixie_52, Plumbus_61, Poenanya_59, Pokerus_49, Polka14_57, Prithvi_51, Pupper_53, QuincyRose_49, Radiance_58, Ramen_51, Rapunzel97_51, RedBird_57, Renaud18_65, RitaG_54, RobinSparkles_47, RockyHorror_60, RonRayGun_41, Ronaldo_96, Rosmarinus_50, Ruby_55, SCentae_53, Saal_61, Sabbb_63, Samty_78, SamuelLPlaqson_51, Sassafras_57, Sbash_53, Scarlett_55, Seabastian_64, Sejanus_58, SgtBeansprout_46, Shadow1_56, Shaobing_53, ShedlockHolmes_54, ShiaSurprise_51, ShowerHandel_62, ShroomBoi_61, Shweta_42, SimranZ1_59, SirPhilip_53, SkinnyPete_42, Slimphazie_50, Snenia_78, Spartacus_61, Spikelee_66, Spock_50, Spoonbill_56, Squiddly_71, Stap_57, Starcevich_59, Stinson_51, Strokeseat_55, Sulley_50, Sunflower1121_57, SwagPiggett_64, Syra333_56, TBond007_51, TChen_60, TClif_55, Tachez_50, TaiwanKao_52, Taptic_55, ThetaBob_64, Tierra_54, TiniBug_51, TinyDot_55, Tiri_51, Topper_50, TreyKay_51, TribbleTrouble_50, Trogglehumper_64, TruffulaTree_50, Twitch_50, Unicorn_53, Urkel_51, VRedHorse_59, VWB_44, Validus_55, Veliki_51, Volt_97, Wee_60, Wee_63, Whouxphf_56, WillSterrel_60, Ximenita_57, Yorick_58, Yoshi_72, YoureAdopted_49, Yuna_57, Yunkel11_53, Zabiza_46, Zavala_52, ZenTime222_40, Ziko_96,

Summary by start number:

Start 20:

- Found in 3 of 420 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_55 (DO), Pupper_53 (DO), SCentae_53 (DO),

Start 22:

- Found in 6 of 420 (1.4%) of genes in pham
- Manual Annotations of this start: 4 of 400
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Charlie_44 (N), Sbash_53 (I2), Sejanus_58 (AD), Shweta_42 (N),

Start 23:

- Found in 99 of 420 (23.6%) of genes in pham
- Manual Annotations of this start: 95 of 400
- Called 99.0% of time when present
- Phage (with cluster) where this start called: AlpineSix_64 (F1), Avani_67 (F2), Blexus_57 (F1), BlueCrab_59 (F1), BodEinwohner17_59 (F1), Brocalys_54 (F1), BuzzLyseyear_65 (F1), Byougenkin_57 (F1), Clifton_54 (F1), Cornie_55 (F5), Cornucopia_61 (F1), Daenerys_53 (F1), Demsculpinboyz_70 (F2), DillTech15_56 (F1), Doomphist_59 (F1), Dorothy_57 (F1), DosHalletts_61 (F1), EleanorGeorge_60 (F1), Empress_57 (F1), Eradicator_52 (F1), Estave1_62 (F1), Fastidio_58 (F1), FreddyB_60 (F1), GUmbe_57 (F1), Galactic_58 (F1), Gandalph_62 (F1), GigiOuiOui_55 (F1), Girr_57 (F1), Gorge_63 (F1), Hades_60 (F1), Hegedechwinu_59 (F1), Hlubikazi_55 (F1), Ibhubesi_59 (F1), Inventum_54 (F1), IrishSherpFalk_60 (F1), James_63 (F1), Jinglebell_64 (F1), JoeyJr_54 (F1), Kersh_61 (F1), KingMidas_58

(F1), KristaRAM_62 (F1), LastJedi_53 (F1), Latretium_61 (F1), Leozinho_58 (F1), Leperchaun_51 (F1), Lizziana_65 (F1), Llama_64 (F1), LunaBlu_61 (F1), LunaStella_58 (F4), Mahavrat_57 (F1), Mandlovu_55 (F1), Maravista_60 (F1), Martik_59 (F1), Mattes_63 (F1), MinionDave_58 (F1), MisterCuddles_57 (F1), Modragons_63 (F1), Mozy_68 (F1), Nitzel_57 (F1), Ochi17_62 (F1), OfUltron_64 (F1), Oksu_63 (F1), OlympiaSaint_61 (F1), OwlsT2W_59 (F1), PHappiness_54 (F1), Pacc40_53 (F1), Phasih_57 (F1), Pippy_57 (F1), Plumbus_61 (F1), Poenanya_59 (F1), Polka14_57 (F1), Radiance_58 (F1), RedBird_57 (F1), Renaud18_65 (F4), RitaG_54 (F1), RockyHorror_60 (F1), Ruby_55 (F1), Saal_61 (F1), Sabbb_63 (F1), Sassafras_57 (F1), Seabastian_64 (F1), ShowerHandel_62 (F1), ShroomBoi_61 (F1), SimranZ1_59 (F1), Spartacus_61 (F1), Spikelee_66 (F1), Spoonbill_56 (F1), Stap_57 (F1), Starcevich_59 (F1), Strokeseat_55 (F1), SwagPigglett_64 (F1), ThetaBob_64 (F4), VRedHorse_59 (F1), Wee_63 (F1), Whouxphf_56 (F1), WillSterrel_60 (F1), Yorick_58 (F1), Yoshi_72 (F2),

Start 24:

- Found in 3 of 420 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 400
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Chymera_48 (singleton), Wee_60 (F1),

Start 25:

- Found in 1 of 420 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Footloose_55 (singleton),

Start 26:

- Found in 11 of 420 (2.6%) of genes in pham
- Manual Annotations of this start: 8 of 400
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Bernal13_41 (T), Ibrahim_41 (T), Mendokysei_39 (T), Nairb_40 (T), RonRayGun_41 (T), Squiddly_71 (DN2), TinyDot_55 (singleton), ZenTime222_40 (T),

Start 27:

- Found in 8 of 420 (1.9%) of genes in pham
- Manual Annotations of this start: 8 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_53 (K3), Keshu_55 (K3), MacnCheese_55 (K3), Pharb_50 (K3), Pixie_52 (K3), ShedlockHolmes_54 (K3), TBond007_51 (K3), TripleTrouble_50 (K3),

Start 28:

- Found in 2 of 420 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Constella_113 (J),

Start 30:

- Found in 6 of 420 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 16.7% of time when present

- Phage (with cluster) where this start called: TChen_60 (F4),

Start 32:

- Found in 116 of 420 (27.6%) of genes in pham
- Manual Annotations of this start: 110 of 400
- Called 98.3% of time when present
- Phage (with cluster) where this start called: ActinUp_50 (K1), Adephagia_50 (K1), Adonis_50 (K1), Ageofdapage_52 (K1), AlishaPH_50 (K1), Amelie_46 (K1), Anaya_52 (K1), Angelica_50 (K1), Apocalypse_53 (K1), Asayake_50 (K1), Atiba_51 (K1), BEEST_50 (K1), BGlluviae_50 (K1), BaghaKamala_49 (K1), BarrelRoll_50 (K1), Beezoo_52 (K1), Bella96_51 (K1), Belladonna_50 (K1), Binglebops_46 (K1), Blizzard_50 (K1), Boiiii_50 (K1), Bryler_54 (K6), CREW_50 (K1), Cain_54 (K6), Capricorn_50 (K1), CaseJules_52 (K1), CheetoDust_49 (K1), Chris_53 (K1), CrimD_50 (K1), Curiosium_52 (K1), Dalmuri_50 (K1), Deby_50 (K1), Devera_55 (K1), Dole_53 (K1), DrHayes_51 (K1), Durfee_50 (K1), Efra2_53 (K1), Emerson_51 (K1), Enkosi_48 (K1), Ganymede_51 (K1), Geraldini_53 (K1), HedwigODU_50 (K1), Homura_50 (K1), Hyperbowlee_50 (K1), Illumine_53 (K1), Inky_50 (K1), JAWS_50 (K1), Jarvi_50 (K1), Jayhawk_51 (K1), Jeckyll_50 (K1), Joy99_50 (K1), Krueger_57 (K6), LaterM_51 (K1), LilPharaoh_46 (K1), LindNT_49 (K1), Llorens_50 (K1), Lunahalos_50 (K1), Marshawn_53 (K6), Mdavu_47 (K1), MeaningOfLife_51 (K1), Megsy_52 (K1), Murucutumbu_51 (K1), Mynx_51 (K1), Nergal_48 (AG), Nibb_53 (K1), Nikao_49 (K1), Niklas_53 (K1), Nutello_46 (K1), Oscar_55 (K1), Padfoot_50 (K1), Padpat_52 (K1), Peanam_53 (K1), Peel_50 (K1), PhelpsODU_53 (K6), Phrank_54 (K6), Piatt_50 (K1), Pokerus_49 (K1), Prithvi_51 (K1), QuincyRose_49 (K1), Ramen_51 (K1), Rapunzel97_51 (K1), Rosmarinus_50 (K1), SamuelLPlaqson_51 (K1), Scarlett_55 (K1), SgtBeansprout_46 (K1), Shadow1_56 (K6), Shaobing_53 (K1), ShiaSurprise_51 (K1), SirPhilip_53 (K6), Slimphazie_50 (K1), Spock_50 (K1), Stinson_51 (K1), Sulley_50 (K1), Sunflower1121_57 (K6), Syra333_56 (K6), Tachez_50 (K1), TaiwanKao_52 (K1), Tierra_54 (K6), TiniBug_51 (K1), Tiri_51 (K1), Topper_50 (K1), TreyKay_51 (K1), TruffulaTree_50 (K1), Twitch_50 (K1), Unicorn_53 (K6), Urkel_51 (K1), Validus_55 (K1), Veliki_51 (K1), Ximenita_57 (K6), YoureAdopted_49 (K1), Yuna_57 (K6), Yunkel11_53 (K1), Zabiza_46 (K1), Zavala_52 (K1),

Start 34:

- Found in 8 of 420 (1.9%) of genes in pham
- Manual Annotations of this start: 7 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amgine_51 (K6), Amohnition_53 (K6), DarthP_53 (K6), Ekdilam_50 (K6), Ellie_49 (K6), Fefferhead_51 (K6), Hammy_53 (K6), TClif_55 (K6),

Start 36:

- Found in 8 of 420 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: VWB_44 (BA),

Start 37:

- Found in 5 of 420 (1.2%) of genes in pham
- Manual Annotations of this start: 4 of 400
- Called 80.0% of time when present

- Phage (with cluster) where this start called: Austintatious_37 (BC3), Bioscum_41 (BC3), Ididsumtinwong_41 (BC3), PapayaSalad_40 (BC3),

Start 38:

- Found in 6 of 420 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 400
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Guanica15_53 (K1), LastHope_53 (K1),

Start 39:

- Found in 2 of 420 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_54 (K2),

Start 41:

- Found in 18 of 420 (4.3%) of genes in pham
- Manual Annotations of this start: 9 of 400
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Clautastrophe_77 (L3), Finnry_79 (L3), Jobypre_80 (L3), Jubie_78 (L3), Kingsolomon_77 (L3), MiniLon_83 (L3), MsGreen_79 (L3), Mufasa_54 (K2), Nicholas_77 (L3), Snenia_78 (L3),

Start 43:

- Found in 53 of 420 (12.6%) of genes in pham
- Manual Annotations of this start: 5 of 400
- Called 9.4% of time when present
- Phage (with cluster) where this start called: Fryberger_93 (DP), Guey18_98 (DP), Ronaldo_96 (DP), Volt_97 (DP), Ziko_96 (DP),

Start 44:

- Found in 14 of 420 (3.3%) of genes in pham
- Manual Annotations of this start: 8 of 400
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Argie_56 (W), Cepens_55 (W), D12_54 (W), GodPhather_56 (W), Jeon_55 (W), Megabear_55 (W), PR_55 (W), Taptic_55 (W),

Start 45:

- Found in 132 of 420 (31.4%) of genes in pham
- Manual Annotations of this start: 122 of 400
- Called 98.5% of time when present
- Phage (with cluster) where this start called: 244_94 (E), ABCat_90 (E), Adnama_97 (E), Amao_93 (E), AmericanBeauty_100 (E), Argent26_97 (E), Asriel_91 (E), BaboJay_93 (E), BadStone_90 (E), Balomoji_93 (E), Barbarian_92 (E), Bask21_93 (E), Bench_96 (E), BigBubba_93 (E), BilboSwaggins_92 (E), Bruin_90 (E), Buck_94 (E), BugsBunny_93 (E), Cactus_96 (E), ChosenOne_93 (E), ChotaBhai_93 (E), Cjw1_94 (E), Command613_95 (E), Contagion_89 (E), Cookies_90 (E), CrystalP_92 (E), Czyszczonek_94 (E), Daikon_94 (E), DoctorDiddles_92 (E), DrDrey_93 (E), Dumbo_93 (E), Dusk_90 (E), Easy2Say_94 (E), Elite2014_92 (E), Elph10_94 (E), Emmina_93 (E), Eureka_92 (E), Filch_95 (E), FireRed_97 (E), Flypotenuse_89 (E), Gage_95 (E), Gator_91 (E), Gemini_98 (E), Glexan_92 (E), Goku_92 (E), GoldenSpark_97 (E), Goldilocks_96 (E), GooberAzure_96 (E), HanKaySha_94 (E),

Harella_93 (E), Henry_91 (E), Highbury_92 (E), Holt_98 (E), Hoonter_96 (E), Hopey_94 (E), HufflyPuff_95 (E), IHOP_91 (E), Icee_94 (E), Inca_90 (E), JeTaimé_94 (E), Kanye_90 (E), Kimchi_97 (E), Kostya_93 (E), Lilac_96 (E), Lilizi_94 (E), Lilpickle_92 (E), MISSy_94 (E), MPhalcon_94 (E), MadamMonkfish_93 (E), Manda_95 (E), Marshmallow_91 (E), Maxxinista_96 (E), Mindy_92 (E), Miniwave_88 (E), Misfit_94 (E), Moldemort_96 (E), Mosby_89 (E), Murica_96 (E), Murphy_93 (E), Myrale_93 (E), Nala_95 (E), NelitzaMV_91 (E), Nimrod_94 (E), NoSleep_94 (E), OrionPax_92 (E), Palpatine_95 (E), Paperbeatsrock_92 (E), Pat3_90 (E), Petra64142_98 (E), Phaja_91 (E), Pharsalus_90 (E), PhatBacter_97 (E), Phaux_96 (E), Phrux_91 (E), Policronamos_97 (E), Porky_92 (E), Pumpkin_97 (E), Quallification_94 (E), Rakim_94 (E), Rimmer_91 (E), RiverMonster_94 (E), Saints25_92 (E), Sassay_88 (E), ShamWow_93 (E), ShereKhan_91 (E), Simpliphy_92 (E), SirDuracell_93 (E), SophKB_90 (E), Sotrice96_94 (E), Stank_95 (E), Stark_95 (E), StellaBean_91 (E), StolenFromERC_96 (E), TBrady12_96 (E), Tarkin_92 (E), TeardropMSU_89 (E), Teaspoon_94 (E), Terminus_96 (E), Thresher_96 (E), Tomaszewski_88 (E), Toto_91 (E), Traaww1_89 (E), Tuco_94 (E), Ukulele_88 (E), Wiggin_95 (E), Willez_88 (E), Xandras_92 (E), YassJohnny_90 (E), Youngblood_96 (E), xkcd_96 (E),

Start 48:

- Found in 22 of 420 (5.2%) of genes in pham
- Manual Annotations of this start: 6 of 400
- Called 31.8% of time when present
- Phage (with cluster) where this start called: Aegeus_88 (L5), Baudelaire_88 (L5), Bellis_77 (L3), Lolly9_78 (L3), MiniMac_83 (L3), Moostard_77 (L3), Samty_78 (L3),

Start 49:

- Found in 1 of 420 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RobinSparkles_47 (CX),

Start 52:

- Found in 6 of 420 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Journey_46 (N), SkinnyPete_42 (N),

Start 62:

- Found in 1 of 420 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 400
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trogglehumper_64 (singleton),

Summary by clusters:

There are 25 clusters represented in this pham: DO, singleton, BA, K3, K2, K1, K6, DP, I2, DN2, E, AD, AG, J, N, CX, L3, W, F1, F2, F4, F5, T, L5, BC3,

Info for manual annotations of cluster AD:

- Start number 22 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AG:

- Start number 32 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster BC3:

- Start number 37 was manually annotated 4 times for cluster BC3.

Info for manual annotations of cluster CX:

- Start number 49 was manually annotated 1 time for cluster CX.

Info for manual annotations of cluster DN2:

- Start number 26 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DO:

- Start number 20 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DP:

- Start number 43 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster E:

- Start number 45 was manually annotated 122 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 23 was manually annotated 88 times for cluster F1.
- Start number 24 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 23 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 23 was manually annotated 3 times for cluster F4.
- Start number 30 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster F5:

- Start number 23 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster I2:

- Start number 22 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster J:

- Start number 28 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster K1:

- Start number 32 was manually annotated 95 times for cluster K1.
- Start number 38 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 39 was manually annotated 1 time for cluster K2.
- Start number 41 was manually annotated 1 time for cluster K2.

Info for manual annotations of cluster K3:

- Start number 27 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 32 was manually annotated 14 times for cluster K6.
- Start number 34 was manually annotated 7 times for cluster K6.

Info for manual annotations of cluster L3:

- Start number 41 was manually annotated 8 times for cluster L3.
- Start number 48 was manually annotated 4 times for cluster L3.

Info for manual annotations of cluster L5:

- Start number 48 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster N:

- Start number 22 was manually annotated 2 times for cluster N.
- Start number 52 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster T:

- Start number 26 was manually annotated 6 times for cluster T.

Info for manual annotations of cluster W:

- Start number 44 was manually annotated 8 times for cluster W.

Gene Information:

Gene: 244_94 Start: 56440, Stop: 56700, Start Num: 45

Candidate Starts for 244_94:

(Start: 45 @56440 has 122 MA's), (51, 56461), (61, 56536), (73, 56605), (83, 56671),

Gene: ABCat_90 Start: 57128, Stop: 57388, Start Num: 45

Candidate Starts for ABCat_90:

(Start: 45 @57128 has 122 MA's), (51, 57149), (61, 57224), (73, 57293), (83, 57359),

Gene: ActinUp_50 Start: 37356, Stop: 37619, Start Num: 32

Candidate Starts for ActinUp_50:

(Start: 32 @37356 has 110 MA's), (67, 37497),

Gene: Adephagia_50 Start: 37353, Stop: 37616, Start Num: 32

Candidate Starts for Adephagia_50:

(Start: 32 @37353 has 110 MA's), (67, 37494),

Gene: Adnama_97 Start: 56736, Stop: 56996, Start Num: 45

Candidate Starts for Adnama_97:

(Start: 45 @56736 has 122 MA's), (51, 56757), (61, 56832), (73, 56901), (83, 56967),

Gene: Adonis_50 Start: 37651, Stop: 37914, Start Num: 32

Candidate Starts for Adonis_50:

(Start: 32 @37651 has 110 MA's), (67, 37792),

Gene: Aegeus_88 Start: 54840, Stop: 55091, Start Num: 48

Candidate Starts for Aegeus_88:

(Start: 48 @54840 has 6 MA's), (57, 54885), (72, 54978), (79, 55032),

Gene: Ageofdapage_52 Start: 38336, Stop: 38599, Start Num: 32

Candidate Starts for Ageofdapage_52:
(6, 38084), (Start: 32 @38336 has 110 MA's), (53, 38390), (67, 38477),

Gene: AlishaPH_50 Start: 37626, Stop: 37889, Start Num: 32
Candidate Starts for AlishaPH_50:
(Start: 32 @37626 has 110 MA's), (67, 37767),

Gene: AlpineSix_64 Start: 42541, Stop: 42819, Start Num: 23
Candidate Starts for AlpineSix_64:
(17, 42514), (Start: 23 @42541 has 95 MA's), (56, 42625), (58, 42634), (67, 42697), (69, 42712), (72, 42724), (76, 42748), (77, 42760), (90, 42811),

Gene: Amao_93 Start: 56248, Stop: 56508, Start Num: 45
Candidate Starts for Amao_93:
(Start: 45 @56248 has 122 MA's), (51, 56269), (61, 56344), (73, 56413), (83, 56479),

Gene: Amelie_46 Start: 37040, Stop: 37309, Start Num: 32
Candidate Starts for Amelie_46:
(Start: 32 @37040 has 110 MA's), (59, 37136), (70, 37196), (71, 37202), (72, 37205), (76, 37232), (77, 37244), (88, 37298),

Gene: AmericanBeauty_100 Start: 57297, Stop: 57557, Start Num: 45
Candidate Starts for AmericanBeauty_100:
(Start: 45 @57297 has 122 MA's), (51, 57318), (61, 57393), (73, 57462), (83, 57528),

Gene: Amgine_51 Start: 38553, Stop: 38807, Start Num: 34
Candidate Starts for Amgine_51:
(8, 38403), (Start: 34 @38553 has 7 MA's), (57, 38619), (74, 38727),

Gene: Amohnition_53 Start: 38560, Stop: 38814, Start Num: 34
Candidate Starts for Amohnition_53:
(2, 38242), (6, 38311), (8, 38407), (Start: 34 @38560 has 7 MA's), (57, 38626), (67, 38689), (74, 38734),

Gene: Anaya_52 Start: 37953, Stop: 38216, Start Num: 32
Candidate Starts for Anaya_52:
(Start: 32 @37953 has 110 MA's), (53, 38007), (67, 38094), (72, 38121),

Gene: Angelica_50 Start: 37583, Stop: 37846, Start Num: 32
Candidate Starts for Angelica_50:
(Start: 32 @37583 has 110 MA's), (67, 37724),

Gene: Apocalypse_53 Start: 38362, Stop: 38625, Start Num: 32
Candidate Starts for Apocalypse_53:
(Start: 32 @38362 has 110 MA's), (67, 38503),

Gene: Argent26_97 Start: 56657, Stop: 56917, Start Num: 45
Candidate Starts for Argent26_97:
(Start: 45 @56657 has 122 MA's), (51, 56678), (61, 56753), (73, 56822), (83, 56888),

Gene: Argie_56 Start: 45292, Stop: 45573, Start Num: 44
Candidate Starts for Argie_56:
(Start: 44 @45292 has 8 MA's), (57, 45352), (63, 45409), (76, 45481), (89, 45553),

Gene: Asayake_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for Asayake_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: Asriel_91 Start: 55073, Stop: 55333, Start Num: 45

Candidate Starts for Asriel_91:

(Start: 45 @55073 has 122 MA's), (51, 55094), (61, 55169), (73, 55238), (83, 55304),

Gene: Atiba_51 Start: 37316, Stop: 37579, Start Num: 32

Candidate Starts for Atiba_51:

(Start: 32 @37316 has 110 MA's), (67, 37457),

Gene: Austintatious_37 Start: 25254, Stop: 25553, Start Num: 37

Candidate Starts for Austintatious_37:

(5, 24966), (7, 25011), (19, 25185), (Start: 37 @25254 has 4 MA's), (72, 25416),

Gene: Avani_67 Start: 40740, Stop: 41018, Start Num: 23

Candidate Starts for Avani_67:

(17, 40713), (Start: 23 @40740 has 95 MA's), (56, 40824), (58, 40833), (67, 40896), (69, 40911), (72, 40923), (76, 40947), (77, 40959), (90, 41010),

Gene: BEEST_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for BEEST_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: BGlluviae_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for BGlluviae_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: BaboJay_93 Start: 57319, Stop: 57579, Start Num: 45

Candidate Starts for BaboJay_93:

(Start: 45 @57319 has 122 MA's), (51, 57340), (61, 57415), (73, 57484), (83, 57550),

Gene: BadStone_90 Start: 56697, Stop: 56957, Start Num: 45

Candidate Starts for BadStone_90:

(Start: 45 @56697 has 122 MA's), (51, 56718), (61, 56793), (73, 56862), (83, 56928),

Gene: BaghaKamala_49 Start: 36791, Stop: 37054, Start Num: 32

Candidate Starts for BaghaKamala_49:

(Start: 32 @36791 has 110 MA's), (67, 36932),

Gene: Balomoji_93 Start: 56855, Stop: 57115, Start Num: 45

Candidate Starts for Balomoji_93:

(12, 56717), (Start: 45 @56855 has 122 MA's), (51, 56876), (73, 57020), (83, 57086),

Gene: Barbarian_92 Start: 55073, Stop: 55333, Start Num: 45

Candidate Starts for Barbarian_92:

(Start: 45 @55073 has 122 MA's), (51, 55094), (61, 55169), (73, 55238), (83, 55304),

Gene: BarrelRoll_50 Start: 37339, Stop: 37602, Start Num: 32

Candidate Starts for BarrelRoll_50:

(Start: 32 @37339 has 110 MA's), (67, 37480),

Gene: Bask21_93 Start: 55708, Stop: 55968, Start Num: 45
Candidate Starts for Bask21_93:
(12, 55570), (Start: 45 @55708 has 122 MA's), (51, 55729), (73, 55873), (83, 55939),

Gene: Baudelaire_88 Start: 54840, Stop: 55091, Start Num: 48
Candidate Starts for Baudelaire_88:
(Start: 48 @54840 has 6 MA's), (57, 54885), (72, 54978), (79, 55032),

Gene: Beezoo_52 Start: 38314, Stop: 38577, Start Num: 32
Candidate Starts for Beezoo_52:
(Start: 32 @38314 has 110 MA's), (67, 38455),

Gene: Bella96_51 Start: 38180, Stop: 38443, Start Num: 32
Candidate Starts for Bella96_51:
(6, 37928), (Start: 32 @38180 has 110 MA's), (53, 38234), (63, 38303), (67, 38321),

Gene: Belladonna_50 Start: 37471, Stop: 37734, Start Num: 32
Candidate Starts for Belladonna_50:
(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Bellis_77 Start: 53811, Stop: 54065, Start Num: 48
Candidate Starts for Bellis_77:
(Start: 41 @53796 has 9 MA's), (Start: 48 @53811 has 6 MA's), (72, 53946), (78, 53988), (83, 54024),
(91, 54048),

Gene: Bench_96 Start: 56792, Stop: 57052, Start Num: 45
Candidate Starts for Bench_96:
(Start: 45 @56792 has 122 MA's), (51, 56813), (61, 56888), (73, 56957), (83, 57023),

Gene: Bernal13_41 Start: 31446, Stop: 31703, Start Num: 26
Candidate Starts for Bernal13_41:
(3, 31170), (4, 31191), (Start: 26 @31446 has 8 MA's), (57, 31530), (72, 31620),

Gene: BigBubba_93 Start: 56089, Stop: 56349, Start Num: 45
Candidate Starts for BigBubba_93:
(Start: 45 @56089 has 122 MA's), (51, 56110), (61, 56185), (73, 56254), (83, 56320),

Gene: Biglebops_46 Start: 37040, Stop: 37309, Start Num: 32
Candidate Starts for Biglebops_46:
(Start: 32 @37040 has 110 MA's), (59, 37136), (70, 37196), (71, 37202), (72, 37205), (76, 37232), (77,
37244), (88, 37298),

Gene: BilboSwaggins_92 Start: 57094, Stop: 57354, Start Num: 45
Candidate Starts for BilboSwaggins_92:
(Start: 45 @57094 has 122 MA's), (51, 57115), (61, 57190), (73, 57259), (83, 57325),

Gene: Bioscum_41 Start: 27555, Stop: 27854, Start Num: 37
Candidate Starts for Bioscum_41:
(5, 27267), (7, 27312), (19, 27486), (Start: 37 @27555 has 4 MA's), (72, 27717),

Gene: Blexus_57 Start: 40392, Stop: 40673, Start Num: 23
Candidate Starts for Blexus_57:

(17, 40365), (Start: 23 @40392 has 95 MA's), (35, 40416), (Start: 43 @40431 has 5 MA's), (55, 40476), (57, 40488), (69, 40566), (72, 40578), (76, 40602), (77, 40614), (90, 40665),

Gene: Blizzard_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for Blizzard_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: BlueCrab_59 Start: 40700, Stop: 40978, Start Num: 23

Candidate Starts for BlueCrab_59:

(17, 40673), (Start: 23 @40700 has 95 MA's), (35, 40724), (40, 40736), (55, 40781), (57, 40793), (72, 40883), (76, 40907), (77, 40919), (90, 40970),

Gene: BodEinwohner17_59 Start: 39462, Stop: 39740, Start Num: 23

Candidate Starts for BodEinwohner17_59:

(17, 39435), (Start: 23 @39462 has 95 MA's), (56, 39546), (58, 39555), (67, 39618), (69, 39633), (72, 39645), (76, 39669), (77, 39681), (90, 39732),

Gene: Boiiii_50 Start: 37670, Stop: 37933, Start Num: 32

Candidate Starts for Boiiii_50:

(Start: 32 @37670 has 110 MA's), (67, 37811),

Gene: BoostSeason_54 Start: 39128, Stop: 39364, Start Num: 39

Candidate Starts for BoostSeason_54:

(Start: 39 @39128 has 1 MA's), (Start: 41 @39131 has 9 MA's), (Start: 45 @39137 has 122 MA's), (47, 39143), (63, 39233), (64, 39239), (76, 39302), (85, 39353),

Gene: Brocalys_54 Start: 36836, Stop: 37117, Start Num: 23

Candidate Starts for Brocalys_54:

(17, 36809), (Start: 23 @36836 has 95 MA's), (35, 36860), (Start: 43 @36875 has 5 MA's), (55, 36920), (57, 36932), (69, 37010), (72, 37022), (76, 37046), (77, 37058), (90, 37109),

Gene: Bruin_90 Start: 55671, Stop: 55931, Start Num: 45

Candidate Starts for Bruin_90:

(Start: 45 @55671 has 122 MA's), (51, 55692), (61, 55767), (73, 55836), (83, 55902),

Gene: Bryler_54 Start: 37154, Stop: 37411, Start Num: 32

Candidate Starts for Bryler_54:

(Start: 32 @37154 has 110 MA's), (Start: 44 @37175 has 8 MA's), (57, 37229), (67, 37292), (68, 37301), (81, 37379),

Gene: Buck_94 Start: 57360, Stop: 57620, Start Num: 45

Candidate Starts for Buck_94:

(12, 57222), (Start: 45 @57360 has 122 MA's), (51, 57381), (73, 57525), (83, 57591),

Gene: BugsBunny_93 Start: 57200, Stop: 57460, Start Num: 45

Candidate Starts for BugsBunny_93:

(Start: 45 @57200 has 122 MA's), (51, 57221), (61, 57296), (73, 57365), (83, 57431),

Gene: BuzzLyseyear_65 Start: 41358, Stop: 41639, Start Num: 23

Candidate Starts for BuzzLyseyear_65:

(17, 41331), (Start: 23 @41358 has 95 MA's), (35, 41382), (Start: 43 @41397 has 5 MA's), (55, 41442), (57, 41454), (69, 41532), (72, 41544), (76, 41568), (77, 41580), (90, 41631),

Gene: Byougenkin_57 Start: 39701, Stop: 39982, Start Num: 23
Candidate Starts for Byougenkin_57:
(17, 39674), (Start: 23 @39701 has 95 MA's), (35, 39725), (Start: 43 @39740 has 5 MA's), (55, 39785), (57, 39797), (69, 39875), (72, 39887), (76, 39911), (77, 39923), (90, 39974),

Gene: CREW_50 Start: 37471, Stop: 37734, Start Num: 32
Candidate Starts for CREW_50:
(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Cactus_96 Start: 55737, Stop: 55997, Start Num: 45
Candidate Starts for Cactus_96:
(Start: 45 @55737 has 122 MA's), (51, 55758), (61, 55833), (73, 55902), (83, 55968),

Gene: Cain_54 Start: 37142, Stop: 37399, Start Num: 32
Candidate Starts for Cain_54:
(Start: 32 @37142 has 110 MA's), (Start: 44 @37163 has 8 MA's), (57, 37217), (67, 37280), (68, 37289), (81, 37367),

Gene: Capricorn_50 Start: 37471, Stop: 37734, Start Num: 32
Candidate Starts for Capricorn_50:
(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: CaseJules_52 Start: 37668, Stop: 37931, Start Num: 32
Candidate Starts for CaseJules_52:
(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: Cepens_55 Start: 45007, Stop: 45288, Start Num: 44
Candidate Starts for Cepens_55:
(Start: 44 @45007 has 8 MA's), (57, 45067), (63, 45124), (76, 45196), (89, 45268),

Gene: Charlie_44 Start: 30217, Stop: 30516, Start Num: 22
Candidate Starts for Charlie_44:
(Start: 22 @30217 has 4 MA's), (29, 30235), (Start: 48 @30271 has 6 MA's), (Start: 52 @30286 has 1 MA's), (67, 30382), (76, 30433), (80, 30469), (87, 30502), (90, 30508),

Gene: CheetoDust_49 Start: 36840, Stop: 37103, Start Num: 32
Candidate Starts for CheetoDust_49:
(Start: 32 @36840 has 110 MA's), (67, 36981),

Gene: CherryTomatoes_55 Start: 18497, Stop: 18778, Start Num: 20
Candidate Starts for CherryTomatoes_55:
(Start: 20 @18497 has 3 MA's), (31, 18533), (57, 18608),

Gene: ChosenOne_93 Start: 56152, Stop: 56412, Start Num: 45
Candidate Starts for ChosenOne_93:
(Start: 45 @56152 has 122 MA's), (51, 56173), (61, 56248), (73, 56317), (83, 56383),

Gene: ChotaBhai_93 Start: 56073, Stop: 56333, Start Num: 45
Candidate Starts for ChotaBhai_93:
(12, 55935), (Start: 45 @56073 has 122 MA's), (51, 56094), (73, 56238), (83, 56304),

Gene: Chris_53 Start: 38292, Stop: 38561, Start Num: 32
Candidate Starts for Chris_53:

(Start: 32 @38292 has 110 MA's), (74, 38466), (92, 38547), (93, 38550),

Gene: Chymera_48 Start: 30948, Stop: 31208, Start Num: 24

Candidate Starts for Chymera_48:

(Start: 24 @30948 has 2 MA's), (Start: 26 @30954 has 8 MA's), (33, 30960), (76, 31149),

Gene: Cjw1_94 Start: 58116, Stop: 58376, Start Num: 45

Candidate Starts for Cjw1_94:

(Start: 45 @58116 has 122 MA's), (51, 58137), (61, 58212), (73, 58281), (83, 58347),

Gene: Clautastrophe_77 Start: 53794, Stop: 54063, Start Num: 41

Candidate Starts for Clautastrophe_77:

(Start: 41 @53794 has 9 MA's), (Start: 48 @53809 has 6 MA's), (72, 53944), (78, 53986), (83, 54022), (91, 54046),

Gene: Clifton_54 Start: 37187, Stop: 37468, Start Num: 23

Candidate Starts for Clifton_54:

(17, 37160), (Start: 23 @37187 has 95 MA's), (35, 37211), (Start: 43 @37226 has 5 MA's), (55, 37271), (57, 37283), (69, 37361), (72, 37373), (76, 37397), (77, 37409), (90, 37460),

Gene: Command613_95 Start: 57191, Stop: 57451, Start Num: 45

Candidate Starts for Command613_95:

(Start: 45 @57191 has 122 MA's), (51, 57212), (61, 57287), (73, 57356), (83, 57422),

Gene: Constella_113 Start: 65296, Stop: 65556, Start Num: 28

Candidate Starts for Constella_113:

(Start: 24 @65287 has 2 MA's), (Start: 26 @65293 has 8 MA's), (Start: 28 @65296 has 1 MA's), (Start: 41 @65320 has 9 MA's), (67, 65452), (72, 65479), (75, 65494), (76, 65500),

Gene: Contagion_89 Start: 55952, Stop: 56212, Start Num: 45

Candidate Starts for Contagion_89:

(Start: 45 @55952 has 122 MA's), (51, 55973), (61, 56048), (73, 56117), (83, 56183),

Gene: Cookies_90 Start: 55930, Stop: 56190, Start Num: 45

Candidate Starts for Cookies_90:

(12, 55792), (Start: 45 @55930 has 122 MA's), (51, 55951), (73, 56095), (83, 56161),

Gene: Cornie_55 Start: 38439, Stop: 38717, Start Num: 23

Candidate Starts for Cornie_55:

(15, 38403), (Start: 23 @38439 has 95 MA's), (35, 38463), (55, 38520), (57, 38532), (69, 38610), (72, 38622), (76, 38646), (77, 38658), (90, 38709),

Gene: Cornucopia_61 Start: 40668, Stop: 40946, Start Num: 23

Candidate Starts for Cornucopia_61:

(17, 40641), (Start: 23 @40668 has 95 MA's), (56, 40752), (58, 40761), (67, 40824), (69, 40839), (72, 40851), (76, 40875), (77, 40887), (90, 40938),

Gene: CrimD_50 Start: 37577, Stop: 37840, Start Num: 32

Candidate Starts for CrimD_50:

(Start: 32 @37577 has 110 MA's), (53, 37631), (67, 37718),

Gene: CrystalP_92 Start: 57094, Stop: 57354, Start Num: 45

Candidate Starts for CrystalP_92:

(Start: 45 @57094 has 122 MA's), (51, 57115), (61, 57190), (73, 57259), (83, 57325),

Gene: Curiosium_52 Start: 36255, Stop: 36521, Start Num: 32

Candidate Starts for Curiosium_52:

(Start: 32 @36255 has 110 MA's), (Start: 38 @36267 has 2 MA's), (53, 36312), (67, 36399), (81, 36489),

Gene: Czyszczone1_94 Start: 56655, Stop: 56915, Start Num: 45

Candidate Starts for Czyszczone1_94:

(Start: 45 @56655 has 122 MA's), (51, 56676), (61, 56751), (73, 56820), (83, 56886),

Gene: D12_54 Start: 45555, Stop: 45836, Start Num: 44

Candidate Starts for D12_54:

(Start: 44 @45555 has 8 MA's), (57, 45615), (63, 45672), (76, 45744), (89, 45816),

Gene: Daenerys_53 Start: 38267, Stop: 38545, Start Num: 23

Candidate Starts for Daenerys_53:

(17, 38240), (Start: 23 @38267 has 95 MA's), (56, 38351), (58, 38360), (67, 38423), (69, 38438), (72, 38450), (76, 38474), (77, 38486), (90, 38537),

Gene: Daikon_94 Start: 56682, Stop: 56942, Start Num: 45

Candidate Starts for Daikon_94:

(12, 56544), (Start: 45 @56682 has 122 MA's), (51, 56703), (73, 56847), (83, 56913),

Gene: Dalmuri_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Dalmuri_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: DarthP_53 Start: 38444, Stop: 38698, Start Num: 34

Candidate Starts for DarthP_53:

(2, 38126), (6, 38195), (8, 38291), (Start: 34 @38444 has 7 MA's), (57, 38510), (67, 38573), (74, 38618),

Gene: Deby_50 Start: 37599, Stop: 37862, Start Num: 32

Candidate Starts for Deby_50:

(Start: 32 @37599 has 110 MA's), (53, 37653), (67, 37740),

Gene: Demsculpinboyz_70 Start: 39936, Stop: 40217, Start Num: 23

Candidate Starts for Demsculpinboyz_70:

(16, 39900), (Start: 23 @39936 has 95 MA's), (Start: 30 @39951 has 1 MA's), (Start: 43 @39975 has 5 MA's), (55, 40020), (57, 40032), (76, 40146), (77, 40158), (90, 40209),

Gene: Devera_55 Start: 38103, Stop: 38366, Start Num: 32

Candidate Starts for Devera_55:

(6, 37851), (Start: 32 @38103 has 110 MA's), (53, 38157), (67, 38244),

Gene: DillTech15_56 Start: 38601, Stop: 38879, Start Num: 23

Candidate Starts for DillTech15_56:

(17, 38574), (Start: 23 @38601 has 95 MA's), (56, 38685), (58, 38694), (67, 38757), (69, 38772), (72, 38784), (76, 38808), (77, 38820), (90, 38871),

Gene: DoctorDiddles_92 Start: 56117, Stop: 56377, Start Num: 45

Candidate Starts for DoctorDiddles_92:

(12, 55979), (Start: 45 @56117 has 122 MA's), (51, 56138), (73, 56282), (83, 56348),

Gene: Dole_53 Start: 38105, Stop: 38368, Start Num: 32

Candidate Starts for Dole_53:

(6, 37853), (Start: 32 @38105 has 110 MA's), (53, 38159), (67, 38246),

Gene: Doomphist_59 Start: 41112, Stop: 41390, Start Num: 23

Candidate Starts for Doomphist_59:

(17, 41085), (Start: 23 @41112 has 95 MA's), (56, 41196), (58, 41205), (67, 41268), (69, 41283), (72, 41295), (76, 41319), (77, 41331), (90, 41382),

Gene: Dorothy_57 Start: 39331, Stop: 39609, Start Num: 23

Candidate Starts for Dorothy_57:

(17, 39304), (Start: 23 @39331 has 95 MA's), (56, 39415), (58, 39424), (67, 39487), (69, 39502), (72, 39514), (76, 39538), (77, 39550), (90, 39601),

Gene: DosHalletts_61 Start: 41467, Stop: 41745, Start Num: 23

Candidate Starts for DosHalletts_61:

(17, 41440), (Start: 23 @41467 has 95 MA's), (56, 41551), (58, 41560), (67, 41623), (69, 41638), (72, 41650), (76, 41674), (77, 41686), (90, 41737),

Gene: DrDrey_93 Start: 57574, Stop: 57834, Start Num: 45

Candidate Starts for DrDrey_93:

(Start: 45 @57574 has 122 MA's), (51, 57595), (61, 57670), (73, 57739), (83, 57805),

Gene: DrHayes_51 Start: 38242, Stop: 38505, Start Num: 32

Candidate Starts for DrHayes_51:

(6, 37990), (Start: 32 @38242 has 110 MA's), (53, 38296), (63, 38365), (67, 38383),

Gene: Dumbo_93 Start: 56054, Stop: 56314, Start Num: 45

Candidate Starts for Dumbo_93:

(Start: 45 @56054 has 122 MA's), (51, 56075), (61, 56150), (73, 56219), (83, 56285),

Gene: Durfee_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for Durfee_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: Dusk_90 Start: 56357, Stop: 56617, Start Num: 45

Candidate Starts for Dusk_90:

(Start: 45 @56357 has 122 MA's), (51, 56378), (61, 56453), (73, 56522), (83, 56588),

Gene: Easy2Say_94 Start: 57556, Stop: 57816, Start Num: 45

Candidate Starts for Easy2Say_94:

(Start: 45 @57556 has 122 MA's), (51, 57577), (61, 57652), (73, 57721), (83, 57787),

Gene: Efra2_53 Start: 37187, Stop: 37450, Start Num: 32

Candidate Starts for Efra2_53:

(Start: 32 @37187 has 110 MA's), (Start: 38 @37199 has 2 MA's), (63, 37310), (67, 37328),

Gene: Ekdilam_50 Start: 37991, Stop: 38245, Start Num: 34

Candidate Starts for Ekdilam_50:

(2, 37673), (6, 37742), (8, 37838), (Start: 34 @37991 has 7 MA's), (67, 38120), (74, 38165),

Gene: EleanorGeorge_60 Start: 40795, Stop: 41076, Start Num: 23
Candidate Starts for EleanorGeorge_60:
(17, 40768), (Start: 23 @40795 has 95 MA's), (35, 40819), (Start: 43 @40834 has 5 MA's), (55, 40879), (57, 40891), (69, 40969), (72, 40981), (76, 41005), (77, 41017), (90, 41068),

Gene: Elite2014_92 Start: 56151, Stop: 56411, Start Num: 45
Candidate Starts for Elite2014_92:
(Start: 45 @56151 has 122 MA's), (51, 56172), (61, 56247), (73, 56316), (83, 56382),

Gene: Ellie_49 Start: 37741, Stop: 37995, Start Num: 34
Candidate Starts for Ellie_49:
(8, 37591), (Start: 34 @37741 has 7 MA's), (57, 37807), (74, 37915), (81, 37960),

Gene: Elph10_94 Start: 56144, Stop: 56404, Start Num: 45
Candidate Starts for Elph10_94:
(Start: 45 @56144 has 122 MA's), (51, 56165), (61, 56240), (73, 56309), (83, 56375),

Gene: Emerson_51 Start: 37347, Stop: 37610, Start Num: 32
Candidate Starts for Emerson_51:
(Start: 32 @37347 has 110 MA's), (67, 37488),

Gene: Emmina_93 Start: 55777, Stop: 56037, Start Num: 45
Candidate Starts for Emmina_93:
(Start: 45 @55777 has 122 MA's), (51, 55798), (61, 55873), (73, 55942), (83, 56008),

Gene: Empress_57 Start: 39681, Stop: 39959, Start Num: 23
Candidate Starts for Empress_57:
(17, 39654), (Start: 23 @39681 has 95 MA's), (56, 39765), (58, 39774), (67, 39837), (69, 39852), (72, 39864), (76, 39888), (77, 39900), (90, 39951),

Gene: Enkosi_48 Start: 39653, Stop: 39922, Start Num: 32
Candidate Starts for Enkosi_48:
(Start: 32 @39653 has 110 MA's), (59, 39749), (70, 39809), (71, 39815), (72, 39818), (76, 39845), (77, 39857), (88, 39911),

Gene: Eradicator_52 Start: 38208, Stop: 38489, Start Num: 23
Candidate Starts for Eradicator_52:
(17, 38181), (Start: 23 @38208 has 95 MA's), (35, 38232), (Start: 43 @38247 has 5 MA's), (55, 38292), (57, 38304), (69, 38382), (72, 38394), (76, 38418), (77, 38430), (90, 38481),

Gene: Estave1_62 Start: 41132, Stop: 41410, Start Num: 23
Candidate Starts for Estave1_62:
(17, 41105), (Start: 23 @41132 has 95 MA's), (56, 41216), (58, 41225), (67, 41288), (69, 41303), (72, 41315), (76, 41339), (77, 41351), (90, 41402),

Gene: Eureka_92 Start: 57064, Stop: 57324, Start Num: 45
Candidate Starts for Eureka_92:
(Start: 45 @57064 has 122 MA's), (51, 57085), (61, 57160), (73, 57229), (83, 57295),

Gene: Fastidio_58 Start: 38748, Stop: 39026, Start Num: 23
Candidate Starts for Fastidio_58:
(17, 38721), (Start: 23 @38748 has 95 MA's), (56, 38832), (58, 38841), (67, 38904), (69, 38919), (72, 38931), (76, 38955), (77, 38967), (90, 39018),

Gene: Fefferhead_51 Start: 37691, Stop: 37945, Start Num: 34

Candidate Starts for Fefferhead_51:

(8, 37541), (Start: 34 @37691 has 7 MA's), (57, 37757), (74, 37865), (81, 37910),

Gene: Filch_95 Start: 56349, Stop: 56609, Start Num: 45

Candidate Starts for Filch_95:

(Start: 45 @56349 has 122 MA's), (51, 56370), (61, 56445), (73, 56514), (83, 56580),

Gene: Finnry_79 Start: 54045, Stop: 54314, Start Num: 41

Candidate Starts for Finnry_79:

(Start: 41 @54045 has 9 MA's), (Start: 48 @54060 has 6 MA's), (72, 54195), (78, 54237), (83, 54273), (91, 54297),

Gene: FireRed_97 Start: 57367, Stop: 57627, Start Num: 45

Candidate Starts for FireRed_97:

(Start: 45 @57367 has 122 MA's), (51, 57388), (61, 57463), (73, 57532), (83, 57598),

Gene: Flypotenuse_89 Start: 55727, Stop: 55987, Start Num: 45

Candidate Starts for Flypotenuse_89:

(Start: 45 @55727 has 122 MA's), (51, 55748), (61, 55823), (73, 55892), (83, 55958),

Gene: Footloose_55 Start: 31826, Stop: 32083, Start Num: 25

Candidate Starts for Footloose_55:

(Start: 25 @31826 has 1 MA's), (33, 31838),

Gene: FreddyB_60 Start: 38860, Stop: 39141, Start Num: 23

Candidate Starts for FreddyB_60:

(17, 38833), (Start: 23 @38860 has 95 MA's), (35, 38884), (Start: 43 @38899 has 5 MA's), (55, 38944), (57, 38956), (69, 39034), (72, 39046), (76, 39070), (77, 39082), (90, 39133),

Gene: Fryberger_93 Start: 47445, Stop: 47750, Start Num: 43

Candidate Starts for Fryberger_93:

(Start: 43 @47445 has 5 MA's), (53, 47478), (82, 47679), (86, 47703),

Gene: GUmbie_57 Start: 39435, Stop: 39716, Start Num: 23

Candidate Starts for GUmbie_57:

(17, 39408), (Start: 23 @39435 has 95 MA's), (35, 39459), (Start: 43 @39474 has 5 MA's), (55, 39519), (57, 39531), (69, 39609), (72, 39621), (76, 39645), (77, 39657), (90, 39708),

Gene: Gage_95 Start: 56798, Stop: 57058, Start Num: 45

Candidate Starts for Gage_95:

(Start: 45 @56798 has 122 MA's), (51, 56819), (61, 56894), (73, 56963), (83, 57029),

Gene: Galactic_58 Start: 39901, Stop: 40179, Start Num: 23

Candidate Starts for Galactic_58:

(17, 39874), (Start: 23 @39901 has 95 MA's), (56, 39985), (58, 39994), (67, 40057), (69, 40072), (72, 40084), (76, 40108), (77, 40120), (90, 40171),

Gene: Gandalph_62 Start: 40257, Stop: 40538, Start Num: 23

Candidate Starts for Gandalph_62:

(17, 40230), (Start: 23 @40257 has 95 MA's), (35, 40281), (Start: 43 @40296 has 5 MA's), (55, 40341), (57, 40353), (69, 40431), (72, 40443), (76, 40467), (77, 40479), (90, 40530),

Gene: Ganymede_51 Start: 37786, Stop: 38049, Start Num: 32
Candidate Starts for Ganymede_51:
(Start: 32 @37786 has 110 MA's), (67, 37927),

Gene: Gator_91 Start: 56582, Stop: 56842, Start Num: 45
Candidate Starts for Gator_91:
(12, 56444), (Start: 45 @56582 has 122 MA's), (51, 56603), (73, 56747), (83, 56813),

Gene: Gemini_98 Start: 57174, Stop: 57434, Start Num: 45
Candidate Starts for Gemini_98:
(Start: 45 @57174 has 122 MA's), (51, 57195), (61, 57270), (73, 57339), (83, 57405),

Gene: Geraldini_53 Start: 38403, Stop: 38666, Start Num: 32
Candidate Starts for Geraldini_53:
(Start: 32 @38403 has 110 MA's), (53, 38457), (54, 38463), (67, 38544),

Gene: GigiOuiOui_55 Start: 38875, Stop: 39156, Start Num: 23
Candidate Starts for GigiOuiOui_55:
(17, 38848), (Start: 23 @38875 has 95 MA's), (35, 38899), (Start: 43 @38914 has 5 MA's), (55, 38959), (57, 38971), (67, 39034), (69, 39049), (72, 39061), (76, 39085), (77, 39097), (90, 39148),

Gene: Girr_57 Start: 39742, Stop: 40020, Start Num: 23
Candidate Starts for Girr_57:
(17, 39715), (Start: 23 @39742 has 95 MA's), (56, 39826), (58, 39835), (67, 39898), (69, 39913), (72, 39925), (76, 39949), (77, 39961), (90, 40012),

Gene: Glexan_92 Start: 56857, Stop: 57117, Start Num: 45
Candidate Starts for Glexan_92:
(Start: 45 @56857 has 122 MA's), (51, 56878), (61, 56953), (73, 57022), (83, 57088),

Gene: GodPhather_56 Start: 45795, Stop: 46076, Start Num: 44
Candidate Starts for GodPhather_56:
(Start: 44 @45795 has 8 MA's), (57, 45855), (63, 45912), (76, 45984), (89, 46056),

Gene: Goku_92 Start: 56793, Stop: 57053, Start Num: 45
Candidate Starts for Goku_92:
(Start: 45 @56793 has 122 MA's), (51, 56814), (61, 56889), (73, 56958), (83, 57024),

Gene: GoldenSpark_97 Start: 56657, Stop: 56917, Start Num: 45
Candidate Starts for GoldenSpark_97:
(Start: 45 @56657 has 122 MA's), (51, 56678), (61, 56753), (73, 56822), (83, 56888),

Gene: Goldilocks_96 Start: 56015, Stop: 56275, Start Num: 45
Candidate Starts for Goldilocks_96:
(Start: 45 @56015 has 122 MA's), (51, 56036), (61, 56111), (73, 56180), (83, 56246),

Gene: GooberAzure_96 Start: 56657, Stop: 56917, Start Num: 45
Candidate Starts for GooberAzure_96:
(Start: 45 @56657 has 122 MA's), (51, 56678), (61, 56753), (73, 56822), (83, 56888),

Gene: Gorge_63 Start: 41377, Stop: 41658, Start Num: 23
Candidate Starts for Gorge_63:

(17, 41350), (Start: 23 @41377 has 95 MA's), (35, 41401), (Start: 43 @41416 has 5 MA's), (55, 41461), (57, 41473), (69, 41551), (72, 41563), (76, 41587), (77, 41599), (90, 41650),

Gene: Guanica15_53 Start: 37156, Stop: 37407, Start Num: 38

Candidate Starts for Guanica15_53:

(Start: 32 @37144 has 110 MA's), (Start: 38 @37156 has 2 MA's), (63, 37267), (67, 37285),

Gene: Guey18_98 Start: 48765, Stop: 49070, Start Num: 43

Candidate Starts for Guey18_98:

(Start: 43 @48765 has 5 MA's), (53, 48798), (82, 48999), (86, 49023),

Gene: Hades_60 Start: 40833, Stop: 41114, Start Num: 23

Candidate Starts for Hades_60:

(17, 40806), (Start: 23 @40833 has 95 MA's), (35, 40857), (Start: 43 @40872 has 5 MA's), (55, 40917), (57, 40929), (69, 41007), (72, 41019), (76, 41043), (77, 41055), (90, 41106),

Gene: Hammy_53 Start: 38432, Stop: 38686, Start Num: 34

Candidate Starts for Hammy_53:

(2, 38114), (6, 38183), (8, 38279), (Start: 34 @38432 has 7 MA's), (57, 38498), (67, 38561), (74, 38606),

Gene: HanKaySha_94 Start: 56224, Stop: 56484, Start Num: 45

Candidate Starts for HanKaySha_94:

(Start: 45 @56224 has 122 MA's), (51, 56245), (61, 56320), (73, 56389), (83, 56455),

Gene: Harella_93 Start: 57373, Stop: 57633, Start Num: 45

Candidate Starts for Harella_93:

(Start: 45 @57373 has 122 MA's), (51, 57394), (61, 57469), (73, 57538), (83, 57604),

Gene: HedwigODU_50 Start: 37356, Stop: 37619, Start Num: 32

Candidate Starts for HedwigODU_50:

(Start: 32 @37356 has 110 MA's), (67, 37497),

Gene: Hegedechwinu_59 Start: 39047, Stop: 39328, Start Num: 23

Candidate Starts for Hegedechwinu_59:

(Start: 23 @39047 has 95 MA's), (35, 39071), (Start: 43 @39086 has 5 MA's), (55, 39131), (57, 39143), (69, 39221), (72, 39233), (76, 39257), (77, 39269), (90, 39320),

Gene: Henry_91 Start: 56534, Stop: 56794, Start Num: 45

Candidate Starts for Henry_91:

(Start: 45 @56534 has 122 MA's), (51, 56555), (61, 56630), (73, 56699), (83, 56765),

Gene: Highbury_92 Start: 56224, Stop: 56484, Start Num: 45

Candidate Starts for Highbury_92:

(Start: 45 @56224 has 122 MA's), (51, 56245), (61, 56320), (73, 56389), (83, 56455),

Gene: Hlubikazi_55 Start: 38053, Stop: 38334, Start Num: 23

Candidate Starts for Hlubikazi_55:

(17, 38026), (Start: 23 @38053 has 95 MA's), (35, 38077), (Start: 43 @38092 has 5 MA's), (55, 38137), (57, 38149), (69, 38227), (72, 38239), (76, 38263), (77, 38275), (90, 38326),

Gene: Holt_98 Start: 57071, Stop: 57331, Start Num: 45

Candidate Starts for Holt_98:

(Start: 45 @57071 has 122 MA's), (51, 57092), (61, 57167), (73, 57236), (83, 57302),

Gene: Homura_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Homura_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Hoonter_96 Start: 56529, Stop: 56789, Start Num: 45

Candidate Starts for Hoonter_96:

(Start: 45 @56529 has 122 MA's), (51, 56550), (61, 56625), (73, 56694), (83, 56760),

Gene: Hokey_94 Start: 57035, Stop: 57295, Start Num: 45

Candidate Starts for Hokey_94:

(Start: 45 @57035 has 122 MA's), (51, 57056), (61, 57131), (73, 57200), (83, 57266),

Gene: HufflyPuff_95 Start: 57119, Stop: 57379, Start Num: 45

Candidate Starts for HufflyPuff_95:

(Start: 45 @57119 has 122 MA's), (51, 57140), (61, 57215), (73, 57284), (83, 57350),

Gene: Hurricane_53 Start: 37919, Stop: 38188, Start Num: 27

Candidate Starts for Hurricane_53:

(6, 37679), (13, 37823), (Start: 27 @37919 has 8 MA's), (42, 37943), (67, 38063), (76, 38117),

Gene: Hyperbowlee_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for Hyperbowlee_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: IHOP_91 Start: 56697, Stop: 56957, Start Num: 45

Candidate Starts for IHOP_91:

(Start: 45 @56697 has 122 MA's), (51, 56718), (61, 56793), (73, 56862), (83, 56928),

Gene: Ibhubesi_59 Start: 40025, Stop: 40303, Start Num: 23

Candidate Starts for Ibhubesi_59:

(17, 39998), (Start: 23 @40025 has 95 MA's), (56, 40109), (58, 40118), (69, 40196), (72, 40208), (76, 40232), (77, 40244), (90, 40295),

Gene: Ibrahim_41 Start: 31892, Stop: 32149, Start Num: 26

Candidate Starts for Ibrahim_41:

(3, 31616), (4, 31637), (Start: 26 @31892 has 8 MA's), (57, 31976), (72, 32066),

Gene: Icee_94 Start: 56184, Stop: 56444, Start Num: 45

Candidate Starts for Icee_94:

(Start: 45 @56184 has 122 MA's), (51, 56205), (61, 56280), (73, 56349), (83, 56415),

Gene: Ididsumtinwong_41 Start: 27555, Stop: 27854, Start Num: 37

Candidate Starts for Ididsumtinwong_41:

(5, 27267), (7, 27312), (19, 27486), (Start: 37 @27555 has 4 MA's), (72, 27717),

Gene: Illumine_53 Start: 38105, Stop: 38368, Start Num: 32

Candidate Starts for Illumine_53:

(6, 37853), (Start: 32 @38105 has 110 MA's), (53, 38159), (67, 38246),

Gene: Inca_90 Start: 55186, Stop: 55446, Start Num: 45

Candidate Starts for Inca_90:

(Start: 45 @55186 has 122 MA's), (51, 55207), (61, 55282), (73, 55351), (83, 55417),

Gene: Inky_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Inky_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Inventum_54 Start: 39529, Stop: 39807, Start Num: 23

Candidate Starts for Inventum_54:

(17, 39502), (Start: 23 @39529 has 95 MA's), (56, 39613), (58, 39622), (67, 39685), (69, 39700), (72, 39712), (76, 39736), (77, 39748), (90, 39799),

Gene: IrishSherpFalk_60 Start: 41690, Stop: 41971, Start Num: 23

Candidate Starts for IrishSherpFalk_60:

(17, 41663), (Start: 23 @41690 has 95 MA's), (35, 41714), (Start: 43 @41729 has 5 MA's), (55, 41774), (57, 41786), (69, 41864), (72, 41876), (76, 41900), (77, 41912), (90, 41963),

Gene: JAWS_50 Start: 37345, Stop: 37608, Start Num: 32

Candidate Starts for JAWS_50:

(Start: 32 @37345 has 110 MA's), (67, 37486),

Gene: James_63 Start: 41502, Stop: 41783, Start Num: 23

Candidate Starts for James_63:

(17, 41475), (Start: 23 @41502 has 95 MA's), (35, 41526), (Start: 43 @41541 has 5 MA's), (55, 41586), (57, 41598), (69, 41676), (72, 41688), (76, 41712), (77, 41724), (90, 41775),

Gene: Jarvi_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Jarvi_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Jayhawk_51 Start: 37354, Stop: 37617, Start Num: 32

Candidate Starts for Jayhawk_51:

(Start: 32 @37354 has 110 MA's), (67, 37495),

Gene: JeTaime_94 Start: 57387, Stop: 57647, Start Num: 45

Candidate Starts for JeTaime_94:

(Start: 45 @57387 has 122 MA's), (51, 57408), (61, 57483), (73, 57552), (83, 57618),

Gene: Jeckyll_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Jeckyll_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Jeon_55 Start: 45537, Stop: 45818, Start Num: 44

Candidate Starts for Jeon_55:

(Start: 44 @45537 has 8 MA's), (57, 45597), (63, 45654), (76, 45726), (89, 45798),

Gene: Jinglebell_64 Start: 42540, Stop: 42818, Start Num: 23

Candidate Starts for Jinglebell_64:

(17, 42513), (Start: 23 @42540 has 95 MA's), (56, 42624), (58, 42633), (67, 42696), (69, 42711), (72, 42723), (76, 42747), (77, 42759), (90, 42810),

Gene: Jobypre_80 Start: 53794, Stop: 54063, Start Num: 41

Candidate Starts for Jobypre_80:

(Start: 41 @53794 has 9 MA's), (Start: 48 @53809 has 6 MA's), (72, 53944), (78, 53986), (83, 54022), (91, 54046),

Gene: JoeyJr_54 Start: 38435, Stop: 38713, Start Num: 23

Candidate Starts for JoeyJr_54:

(17, 38408), (Start: 23 @38435 has 95 MA's), (56, 38519), (58, 38528), (67, 38591), (69, 38606), (72, 38618), (76, 38642), (77, 38654), (90, 38705),

Gene: Journey_46 Start: 30286, Stop: 30516, Start Num: 52

Candidate Starts for Journey_46:

(Start: 22 @30217 has 4 MA's), (29, 30235), (Start: 48 @30271 has 6 MA's), (Start: 52 @30286 has 1 MA's), (67, 30382), (76, 30433), (80, 30469), (87, 30502), (90, 30508),

Gene: Joy99_50 Start: 37400, Stop: 37663, Start Num: 32

Candidate Starts for Joy99_50:

(Start: 32 @37400 has 110 MA's), (67, 37541),

Gene: Jubie_78 Start: 53929, Stop: 54198, Start Num: 41

Candidate Starts for Jubie_78:

(Start: 41 @53929 has 9 MA's), (Start: 48 @53944 has 6 MA's), (72, 54079), (78, 54121), (83, 54157), (91, 54181),

Gene: Kanye_90 Start: 56281, Stop: 56541, Start Num: 45

Candidate Starts for Kanye_90:

(Start: 45 @56281 has 122 MA's), (51, 56302), (61, 56377), (73, 56446), (83, 56512),

Gene: Kersh_61 Start: 42278, Stop: 42559, Start Num: 23

Candidate Starts for Kersh_61:

(17, 42251), (Start: 23 @42278 has 95 MA's), (35, 42302), (Start: 43 @42317 has 5 MA's), (55, 42362), (57, 42374), (76, 42488), (77, 42500), (90, 42551),

Gene: Keshu_55 Start: 37986, Stop: 38255, Start Num: 27

Candidate Starts for Keshu_55:

(6, 37746), (Start: 27 @37986 has 8 MA's), (42, 38010), (67, 38130), (76, 38184),

Gene: Kimchi_97 Start: 56801, Stop: 57061, Start Num: 45

Candidate Starts for Kimchi_97:

(Start: 45 @56801 has 122 MA's), (51, 56822), (61, 56897), (73, 56966), (83, 57032),

Gene: KingMidas_58 Start: 40097, Stop: 40375, Start Num: 23

Candidate Starts for KingMidas_58:

(17, 40070), (Start: 23 @40097 has 95 MA's), (56, 40181), (58, 40190), (67, 40253), (69, 40268), (72, 40280), (76, 40304), (77, 40316), (90, 40367),

Gene: Kingsolomon_77 Start: 53801, Stop: 54070, Start Num: 41

Candidate Starts for Kingsolomon_77:

(Start: 41 @53801 has 9 MA's), (Start: 48 @53816 has 6 MA's), (72, 53951), (78, 53993), (83, 54029), (91, 54053),

Gene: Kostya_93 Start: 56799, Stop: 57059, Start Num: 45

Candidate Starts for Kostya_93:

(Start: 45 @56799 has 122 MA's), (51, 56820), (61, 56895), (73, 56964), (83, 57030),

Gene: KristaRAM_62 Start: 42482, Stop: 42763, Start Num: 23

Candidate Starts for KristaRAM_62:

(17, 42455), (Start: 23 @42482 has 95 MA's), (35, 42506), (Start: 43 @42521 has 5 MA's), (55, 42566), (57, 42578), (69, 42656), (72, 42668), (76, 42692), (77, 42704), (90, 42755),

Gene: Krueger_57 Start: 38145, Stop: 38396, Start Num: 32

Candidate Starts for Krueger_57:

(Start: 32 @38145 has 110 MA's), (36, 38151), (63, 38265), (64, 38271), (67, 38283),

Gene: LastHope_53 Start: 36640, Stop: 36891, Start Num: 38

Candidate Starts for LastHope_53:

(Start: 32 @36628 has 110 MA's), (Start: 38 @36640 has 2 MA's), (53, 36682), (63, 36751), (67, 36769),

Gene: LastJedi_53 Start: 37230, Stop: 37511, Start Num: 23

Candidate Starts for LastJedi_53:

(17, 37203), (Start: 23 @37230 has 95 MA's), (35, 37254), (Start: 43 @37269 has 5 MA's), (55, 37314), (57, 37326), (69, 37404), (72, 37416), (76, 37440), (77, 37452), (90, 37503),

Gene: LaterM_51 Start: 38233, Stop: 38496, Start Num: 32

Candidate Starts for LaterM_51:

(Start: 32 @38233 has 110 MA's), (53, 38287), (67, 38374),

Gene: Latretium_61 Start: 40556, Stop: 40837, Start Num: 23

Candidate Starts for Latretium_61:

(17, 40529), (Start: 23 @40556 has 95 MA's), (35, 40580), (Start: 43 @40595 has 5 MA's), (55, 40640), (57, 40652), (69, 40730), (72, 40742), (76, 40766), (77, 40778), (90, 40829),

Gene: Leozinho_58 Start: 39315, Stop: 39593, Start Num: 23

Candidate Starts for Leozinho_58:

(17, 39288), (Start: 23 @39315 has 95 MA's), (56, 39399), (58, 39408), (67, 39471), (69, 39486), (72, 39498), (76, 39522), (77, 39534), (90, 39585),

Gene: Leperchaun_51 Start: 37665, Stop: 37943, Start Num: 23

Candidate Starts for Leperchaun_51:

(17, 37638), (Start: 23 @37665 has 95 MA's), (56, 37749), (58, 37758), (67, 37821), (69, 37836), (72, 37848), (76, 37872), (77, 37884), (90, 37935),

Gene: LilPharaoh_46 Start: 36768, Stop: 37037, Start Num: 32

Candidate Starts for LilPharaoh_46:

(Start: 32 @36768 has 110 MA's), (59, 36864), (70, 36924), (71, 36930), (72, 36933), (76, 36960), (77, 36972), (88, 37026),

Gene: Lilac_96 Start: 56626, Stop: 56886, Start Num: 45

Candidate Starts for Lilac_96:

(Start: 45 @56626 has 122 MA's), (51, 56647), (61, 56722), (73, 56791), (83, 56857),

Gene: Lilizi_94 Start: 56263, Stop: 56523, Start Num: 45

Candidate Starts for Lilizi_94:

(Start: 45 @56263 has 122 MA's), (51, 56284), (61, 56359), (73, 56428), (83, 56494),

Gene: Lilpickle_92 Start: 56151, Stop: 56411, Start Num: 45

Candidate Starts for Lilpickle_92:

(Start: 45 @56151 has 122 MA's), (51, 56172), (61, 56247), (73, 56316), (83, 56382),

Gene: LindNT_49 Start: 37556, Stop: 37819, Start Num: 32

Candidate Starts for LindNT_49:

(Start: 32 @37556 has 110 MA's), (53, 37610), (67, 37697),

Gene: Lizziana_65 Start: 40983, Stop: 41264, Start Num: 23

Candidate Starts for Lizziana_65:

(17, 40956), (Start: 23 @40983 has 95 MA's), (35, 41007), (Start: 43 @41022 has 5 MA's), (55, 41067), (57, 41079), (69, 41157), (72, 41169), (76, 41193), (77, 41205), (90, 41256),

Gene: Llama_64 Start: 42394, Stop: 42672, Start Num: 23

Candidate Starts for Llama_64:

(17, 42367), (Start: 23 @42394 has 95 MA's), (56, 42478), (58, 42487), (67, 42550), (69, 42565), (72, 42577), (76, 42601), (77, 42613), (90, 42664),

Gene: Llorens_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Llorens_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Lolly9_78 Start: 53913, Stop: 54164, Start Num: 48

Candidate Starts for Lolly9_78:

(Start: 41 @53898 has 9 MA's), (Start: 48 @53913 has 6 MA's), (78, 54090), (91, 54150),

Gene: LunaBlu_61 Start: 40560, Stop: 40838, Start Num: 23

Candidate Starts for LunaBlu_61:

(17, 40533), (Start: 23 @40560 has 95 MA's), (56, 40644), (58, 40653), (67, 40716), (69, 40731), (72, 40743), (76, 40767), (77, 40779), (90, 40830),

Gene: LunaStella_58 Start: 39407, Stop: 39685, Start Num: 23

Candidate Starts for LunaStella_58:

(14, 39371), (Start: 23 @39407 has 95 MA's), (Start: 30 @39416 has 1 MA's), (53, 39473), (56, 39491), (58, 39500), (67, 39563), (69, 39578), (72, 39590), (76, 39614), (77, 39626), (90, 39677),

Gene: Lunahalos_50 Start: 37471, Stop: 37734, Start Num: 32

Candidate Starts for Lunahalos_50:

(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: MISSy_94 Start: 56379, Stop: 56639, Start Num: 45

Candidate Starts for MISSy_94:

(Start: 45 @56379 has 122 MA's), (51, 56400), (61, 56475), (73, 56544), (83, 56610),

Gene: MPhalcon_94 Start: 56372, Stop: 56632, Start Num: 45

Candidate Starts for MPhalcon_94:

(Start: 45 @56372 has 122 MA's), (51, 56393), (61, 56468), (73, 56537), (83, 56603),

Gene: MacnCheese_55 Start: 38928, Stop: 39194, Start Num: 27

Candidate Starts for MacnCheese_55:

(6, 38688), (Start: 27 @38928 has 8 MA's), (42, 38949), (46, 38955), (67, 39069), (74, 39114), (76, 39123),

Gene: MadamMonkfish_93 Start: 55878, Stop: 56138, Start Num: 45

Candidate Starts for MadamMonkfish_93:

(Start: 45 @55878 has 122 MA's), (51, 55899), (61, 55974), (73, 56043), (83, 56109),

Gene: Mahavrat_57 Start: 39385, Stop: 39666, Start Num: 23

Candidate Starts for Mahavrat_57:

(17, 39358), (Start: 23 @39385 has 95 MA's), (35, 39409), (Start: 43 @39424 has 5 MA's), (55, 39469), (57, 39481), (69, 39559), (72, 39571), (76, 39595), (77, 39607), (90, 39658),

Gene: Manda_95 Start: 57955, Stop: 58215, Start Num: 45

Candidate Starts for Manda_95:

(Start: 45 @57955 has 122 MA's), (51, 57976), (61, 58051), (73, 58120), (83, 58186),

Gene: Mandlovu_55 Start: 37995, Stop: 38276, Start Num: 23

Candidate Starts for Mandlovu_55:

(17, 37968), (Start: 23 @37995 has 95 MA's), (35, 38019), (Start: 43 @38034 has 5 MA's), (55, 38079), (57, 38091), (69, 38169), (72, 38181), (76, 38205), (77, 38217), (90, 38268),

Gene: Maravista_60 Start: 41432, Stop: 41713, Start Num: 23

Candidate Starts for Maravista_60:

(17, 41405), (Start: 23 @41432 has 95 MA's), (35, 41456), (Start: 43 @41471 has 5 MA's), (55, 41516), (57, 41528), (69, 41606), (72, 41618), (76, 41642), (77, 41654), (90, 41705),

Gene: Marshawn_53 Start: 38262, Stop: 38522, Start Num: 32

Candidate Starts for Marshawn_53:

(2, 37941), (6, 38010), (8, 38106), (Start: 32 @38262 has 110 MA's), (54, 38319), (72, 38427), (81, 38490),

Gene: Marshmallow_91 Start: 57427, Stop: 57687, Start Num: 45

Candidate Starts for Marshmallow_91:

(Start: 45 @57427 has 122 MA's), (51, 57448), (61, 57523), (73, 57592), (83, 57658),

Gene: Martik_59 Start: 39936, Stop: 40217, Start Num: 23

Candidate Starts for Martik_59:

(17, 39909), (Start: 23 @39936 has 95 MA's), (35, 39960), (Start: 43 @39975 has 5 MA's), (55, 40020), (57, 40032), (69, 40110), (72, 40122), (76, 40146), (77, 40158), (90, 40209),

Gene: Mattes_63 Start: 41502, Stop: 41783, Start Num: 23

Candidate Starts for Mattes_63:

(17, 41475), (Start: 23 @41502 has 95 MA's), (35, 41526), (Start: 43 @41541 has 5 MA's), (55, 41586), (57, 41598), (69, 41676), (72, 41688), (76, 41712), (77, 41724), (90, 41775),

Gene: Maxxinista_96 Start: 56793, Stop: 57053, Start Num: 45

Candidate Starts for Maxxinista_96:

(Start: 45 @56793 has 122 MA's), (51, 56814), (61, 56889), (73, 56958), (83, 57024),

Gene: Mdavu_47 Start: 37029, Stop: 37298, Start Num: 32

Candidate Starts for Mdavu_47:

(Start: 32 @37029 has 110 MA's), (59, 37125), (70, 37185), (71, 37191), (72, 37194), (76, 37221), (77, 37233), (88, 37287),

Gene: MeaningOfLife_51 Start: 38280, Stop: 38543, Start Num: 32

Candidate Starts for MeaningOfLife_51:

(Start: 32 @38280 has 110 MA's), (67, 38421),

Gene: Megabear_55 Start: 44928, Stop: 45209, Start Num: 44

Candidate Starts for Megabear_55:

(Start: 44 @44928 has 8 MA's), (57, 44988), (63, 45045), (76, 45117), (89, 45189),

Gene: Megsy_52 Start: 37615, Stop: 37878, Start Num: 32

Candidate Starts for Megsy_52:

(Start: 32 @37615 has 110 MA's), (53, 37669), (67, 37756),

Gene: Mendokysei_39 Start: 30983, Stop: 31297, Start Num: 26

Candidate Starts for Mendokysei_39:

(Start: 26 @30983 has 8 MA's), (Start: 37 @30998 has 4 MA's), (53, 31037),

Gene: Mindy_92 Start: 55700, Stop: 55960, Start Num: 45

Candidate Starts for Mindy_92:

(Start: 45 @55700 has 122 MA's), (51, 55721), (61, 55796), (73, 55865), (83, 55931),

Gene: MiniLon_83 Start: 53899, Stop: 54165, Start Num: 41

Candidate Starts for MiniLon_83:

(Start: 41 @53899 has 9 MA's), (Start: 48 @53914 has 6 MA's), (78, 54091), (91, 54151),

Gene: MiniMac_83 Start: 53909, Stop: 54160, Start Num: 48

Candidate Starts for MiniMac_83:

(Start: 41 @53894 has 9 MA's), (Start: 48 @53909 has 6 MA's), (78, 54086), (91, 54146),

Gene: MinionDave_58 Start: 40283, Stop: 40564, Start Num: 23

Candidate Starts for MinionDave_58:

(Start: 23 @40283 has 95 MA's), (35, 40307), (Start: 43 @40322 has 5 MA's), (55, 40367), (57, 40379), (69, 40457), (72, 40469), (76, 40493), (77, 40505), (90, 40556),

Gene: Miniwave_88 Start: 56195, Stop: 56455, Start Num: 45

Candidate Starts for Miniwave_88:

(Start: 45 @56195 has 122 MA's), (51, 56216), (61, 56291), (73, 56360), (83, 56426),

Gene: Misfit_94 Start: 57669, Stop: 57929, Start Num: 45

Candidate Starts for Misfit_94:

(Start: 45 @57669 has 122 MA's), (51, 57690), (61, 57765), (73, 57834), (83, 57900),

Gene: MisterCuddles_57 Start: 39742, Stop: 40020, Start Num: 23

Candidate Starts for MisterCuddles_57:

(17, 39715), (Start: 23 @39742 has 95 MA's), (56, 39826), (58, 39835), (67, 39898), (69, 39913), (72, 39925), (76, 39949), (77, 39961), (90, 40012),

Gene: Modragons_63 Start: 42384, Stop: 42662, Start Num: 23

Candidate Starts for Modragons_63:

(17, 42357), (Start: 23 @42384 has 95 MA's), (56, 42468), (58, 42477), (67, 42540), (69, 42555), (72, 42567), (76, 42591), (77, 42603), (90, 42654),

Gene: Moldemort_96 Start: 56336, Stop: 56596, Start Num: 45

Candidate Starts for Moldemort_96:

(Start: 45 @56336 has 122 MA's), (51, 56357), (61, 56432), (73, 56501), (83, 56567),

Gene: Moostard_77 Start: 53811, Stop: 54065, Start Num: 48

Candidate Starts for Moostard_77:

(Start: 41 @53796 has 9 MA's), (Start: 48 @53811 has 6 MA's), (72, 53946), (78, 53988), (83, 54024), (91, 54048),

Gene: Mosby_89 Start: 55952, Stop: 56212, Start Num: 45

Candidate Starts for Mosby_89:

(Start: 45 @55952 has 122 MA's), (51, 55973), (61, 56048), (73, 56117), (83, 56183),

Gene: Mozy_68 Start: 42517, Stop: 42798, Start Num: 23

Candidate Starts for Mozy_68:

(17, 42490), (Start: 23 @42517 has 95 MA's), (35, 42541), (Start: 43 @42556 has 5 MA's), (55, 42601), (57, 42613), (69, 42691), (72, 42703), (76, 42727), (77, 42739), (90, 42790),

Gene: MsGreen_79 Start: 53793, Stop: 54062, Start Num: 41

Candidate Starts for MsGreen_79:

(Start: 41 @53793 has 9 MA's), (Start: 48 @53808 has 6 MA's), (72, 53943), (78, 53985), (83, 54021), (91, 54045),

Gene: Mufasa_54 Start: 39116, Stop: 39349, Start Num: 41

Candidate Starts for Mufasa_54:

(Start: 39 @39113 has 1 MA's), (Start: 41 @39116 has 9 MA's), (Start: 45 @39122 has 122 MA's), (47, 39128), (63, 39218), (64, 39224), (76, 39287), (85, 39338),

Gene: Murica_96 Start: 57595, Stop: 57855, Start Num: 45

Candidate Starts for Murica_96:

(Start: 45 @57595 has 122 MA's), (51, 57616), (61, 57691), (73, 57760), (83, 57826),

Gene: Murphy_93 Start: 57036, Stop: 57296, Start Num: 45

Candidate Starts for Murphy_93:

(Start: 45 @57036 has 122 MA's), (51, 57057), (61, 57132), (73, 57201), (83, 57267),

Gene: Murucutumbu_51 Start: 38326, Stop: 38589, Start Num: 32

Candidate Starts for Murucutumbu_51:

(6, 38074), (Start: 32 @38326 has 110 MA's), (53, 38380), (67, 38467),

Gene: Mynx_51 Start: 37672, Stop: 37935, Start Num: 32

Candidate Starts for Mynx_51:

(Start: 32 @37672 has 110 MA's), (67, 37813),

Gene: Myrale_93 Start: 57158, Stop: 57418, Start Num: 45

Candidate Starts for Myrale_93:

(Start: 45 @57158 has 122 MA's), (51, 57179), (61, 57254), (73, 57323), (83, 57389),

Gene: Nairb_40 Start: 31446, Stop: 31703, Start Num: 26

Candidate Starts for Nairb_40:

(3, 31170), (4, 31191), (Start: 26 @31446 has 8 MA's), (57, 31530), (72, 31620),

Gene: Nala_95 Start: 56881, Stop: 57141, Start Num: 45

Candidate Starts for Nala_95:

(Start: 45 @56881 has 122 MA's), (51, 56902), (61, 56977), (73, 57046), (83, 57112),

Gene: NelitzaMV_91 Start: 56241, Stop: 56501, Start Num: 45

Candidate Starts for NelitzaMV_91:

(Start: 45 @56241 has 122 MA's), (51, 56262), (61, 56337), (73, 56406), (83, 56472),

Gene: Nergal_48 Start: 36024, Stop: 36272, Start Num: 32
Candidate Starts for Nergal_48:
(Start: 32 @36024 has 110 MA's), (63, 36138), (67, 36156), (73, 36189), (81, 36246),

Gene: Nibb_53 Start: 37813, Stop: 38082, Start Num: 32
Candidate Starts for Nibb_53:
(Start: 32 @37813 has 110 MA's), (50, 37840), (74, 37987), (93, 38071),

Gene: Nicholas_77 Start: 53801, Stop: 54070, Start Num: 41
Candidate Starts for Nicholas_77:
(Start: 41 @53801 has 9 MA's), (Start: 48 @53816 has 6 MA's), (72, 53951), (78, 53993), (83, 54029), (91, 54053),

Gene: Nikao_49 Start: 39653, Stop: 39922, Start Num: 32
Candidate Starts for Nikao_49:
(Start: 32 @39653 has 110 MA's), (59, 39749), (70, 39809), (71, 39815), (72, 39818), (76, 39845), (77, 39857), (88, 39911),

Gene: Niklas_53 Start: 38346, Stop: 38609, Start Num: 32
Candidate Starts for Niklas_53:
(1, 37866), (2, 38022), (6, 38091), (Start: 32 @38346 has 110 MA's), (60, 38448), (63, 38466), (67, 38484), (76, 38538), (81, 38574), (88, 38598),

Gene: Nimrod_94 Start: 57584, Stop: 57844, Start Num: 45
Candidate Starts for Nimrod_94:
(Start: 45 @57584 has 122 MA's), (51, 57605), (61, 57680), (73, 57749), (83, 57815),

Gene: Nitzel_57 Start: 39291, Stop: 39521, Start Num: 23
Candidate Starts for Nitzel_57:
(17, 39264), (Start: 23 @39291 has 95 MA's), (56, 39375), (67, 39444), (72, 39471), (76, 39495),

Gene: NoSleep_94 Start: 56218, Stop: 56478, Start Num: 45
Candidate Starts for NoSleep_94:
(Start: 45 @56218 has 122 MA's), (51, 56239), (61, 56314), (73, 56383), (83, 56449),

Gene: Nutello_46 Start: 37040, Stop: 37309, Start Num: 32
Candidate Starts for Nutello_46:
(Start: 32 @37040 has 110 MA's), (59, 37136), (70, 37196), (71, 37202), (72, 37205), (76, 37232), (77, 37244), (88, 37298),

Gene: Ochi17_62 Start: 41991, Stop: 42269, Start Num: 23
Candidate Starts for Ochi17_62:
(17, 41964), (Start: 23 @41991 has 95 MA's), (56, 42075), (58, 42084), (67, 42147), (69, 42162), (72, 42174), (76, 42198), (77, 42210), (90, 42261),

Gene: OfUltron_64 Start: 42540, Stop: 42818, Start Num: 23
Candidate Starts for OfUltron_64:
(17, 42513), (Start: 23 @42540 has 95 MA's), (56, 42624), (58, 42633), (67, 42696), (69, 42711), (72, 42723), (76, 42747), (77, 42759), (90, 42810),

Gene: Oksu_63 Start: 42803, Stop: 43081, Start Num: 23
Candidate Starts for Oksu_63:

(17, 42776), (Start: 23 @42803 has 95 MA's), (56, 42887), (58, 42896), (67, 42959), (69, 42974), (72, 42986), (76, 43010), (77, 43022), (90, 43073),

Gene: OlympiaSaint_61 Start: 40444, Stop: 40725, Start Num: 23

Candidate Starts for OlympiaSaint_61:

(17, 40417), (Start: 23 @40444 has 95 MA's), (35, 40468), (Start: 43 @40483 has 5 MA's), (55, 40528), (57, 40540), (69, 40618), (72, 40630), (76, 40654), (77, 40666), (90, 40717),

Gene: OrionPax_92 Start: 55969, Stop: 56229, Start Num: 45

Candidate Starts for OrionPax_92:

(Start: 45 @55969 has 122 MA's), (51, 55990), (61, 56065), (73, 56134), (83, 56200),

Gene: Oscar_55 Start: 38567, Stop: 38842, Start Num: 32

Candidate Starts for Oscar_55:

(Start: 32 @38567 has 110 MA's), (36, 38573), (53, 38615), (57, 38639), (74, 38747), (93, 38831),

Gene: OwlsT2W_59 Start: 40166, Stop: 40444, Start Num: 23

Candidate Starts for OwlsT2W_59:

(17, 40139), (Start: 23 @40166 has 95 MA's), (56, 40250), (67, 40322), (69, 40337), (72, 40349), (76, 40373), (77, 40385), (90, 40436),

Gene: PHappiness_54 Start: 38211, Stop: 38489, Start Num: 23

Candidate Starts for PHappiness_54:

(17, 38184), (Start: 23 @38211 has 95 MA's), (56, 38295), (58, 38304), (67, 38367), (69, 38382), (72, 38394), (76, 38418), (77, 38430), (90, 38481),

Gene: PR_55 Start: 45532, Stop: 45813, Start Num: 44

Candidate Starts for PR_55:

(Start: 44 @45532 has 8 MA's), (57, 45592), (63, 45649), (76, 45721), (89, 45793),

Gene: Pacc40_53 Start: 38285, Stop: 38563, Start Num: 23

Candidate Starts for Pacc40_53:

(17, 38258), (Start: 23 @38285 has 95 MA's), (56, 38369), (58, 38378), (67, 38441), (69, 38456), (72, 38468), (76, 38492), (77, 38504), (90, 38555),

Gene: Padfoot_50 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for Padfoot_50:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: Padpat_52 Start: 37347, Stop: 37610, Start Num: 32

Candidate Starts for Padpat_52:

(Start: 32 @37347 has 110 MA's), (67, 37488),

Gene: Palpatine_95 Start: 57622, Stop: 57882, Start Num: 45

Candidate Starts for Palpatine_95:

(Start: 45 @57622 has 122 MA's), (51, 57643), (61, 57718), (73, 57787), (83, 57853),

Gene: PapayaSalad_40 Start: 27840, Stop: 28139, Start Num: 37

Candidate Starts for PapayaSalad_40:

(5, 27552), (7, 27597), (19, 27771), (Start: 37 @27840 has 4 MA's), (72, 28002),

Gene: Paperbeatsrock_92 Start: 56873, Stop: 57133, Start Num: 45

Candidate Starts for Paperbeatsrock_92:

(Start: 45 @56873 has 122 MA's), (51, 56894), (61, 56969), (73, 57038), (83, 57104),

Gene: Pat3_90 Start: 55071, Stop: 55331, Start Num: 45

Candidate Starts for Pat3_90:

(12, 54933), (Start: 45 @55071 has 122 MA's), (51, 55092), (73, 55236), (83, 55302),

Gene: Peanam_53 Start: 38304, Stop: 38567, Start Num: 32

Candidate Starts for Peanam_53:

(1, 37824), (2, 37980), (6, 38049), (Start: 32 @38304 has 110 MA's), (60, 38406), (63, 38424), (67, 38442), (76, 38496), (81, 38532), (88, 38556),

Gene: Peel_50 Start: 37473, Stop: 37736, Start Num: 32

Candidate Starts for Peel_50:

(Start: 32 @37473 has 110 MA's), (67, 37614),

Gene: Petra64142_98 Start: 58076, Stop: 58336, Start Num: 45

Candidate Starts for Petra64142_98:

(12, 57938), (Start: 45 @58076 has 122 MA's), (51, 58097), (73, 58241), (83, 58307),

Gene: Phaja_91 Start: 56699, Stop: 56959, Start Num: 45

Candidate Starts for Phaja_91:

(Start: 45 @56699 has 122 MA's), (51, 56720), (61, 56795), (73, 56864), (83, 56930),

Gene: Pharb_50 Start: 36682, Stop: 36942, Start Num: 27

Candidate Starts for Pharb_50:

(1, 36217), (6, 36442), (Start: 27 @36682 has 8 MA's), (42, 36697), (76, 36871),

Gene: Pharsalus_90 Start: 56673, Stop: 56933, Start Num: 45

Candidate Starts for Pharsalus_90:

(Start: 45 @56673 has 122 MA's), (51, 56694), (61, 56769), (73, 56838), (83, 56904),

Gene: Phasih_57 Start: 40355, Stop: 40633, Start Num: 23

Candidate Starts for Phasih_57:

(17, 40328), (Start: 23 @40355 has 95 MA's), (56, 40439), (58, 40448), (67, 40511), (69, 40526), (72, 40538), (76, 40562), (77, 40574), (90, 40625),

Gene: PhatBacter_97 Start: 57367, Stop: 57627, Start Num: 45

Candidate Starts for PhatBacter_97:

(Start: 45 @57367 has 122 MA's), (51, 57388), (61, 57463), (73, 57532), (83, 57598),

Gene: Phaux_96 Start: 57909, Stop: 58169, Start Num: 45

Candidate Starts for Phaux_96:

(Start: 45 @57909 has 122 MA's), (51, 57930), (61, 58005), (73, 58074), (83, 58140),

Gene: PhelpsODU_53 Start: 37175, Stop: 37432, Start Num: 32

Candidate Starts for PhelpsODU_53:

(Start: 32 @37175 has 110 MA's), (Start: 44 @37196 has 8 MA's), (57, 37250), (67, 37313), (68, 37322), (81, 37400),

Gene: Phrank_54 Start: 37132, Stop: 37389, Start Num: 32

Candidate Starts for Phrank_54:

(Start: 32 @37132 has 110 MA's), (Start: 44 @37153 has 8 MA's), (57, 37207), (67, 37270), (68, 37279), (81, 37357),

Gene: Phrux_91 Start: 56185, Stop: 56445, Start Num: 45
Candidate Starts for Phrux_91:
(Start: 45 @56185 has 122 MA's), (51, 56206), (61, 56281), (73, 56350), (83, 56416),

Gene: Piatt_50 Start: 37668, Stop: 37931, Start Num: 32
Candidate Starts for Piatt_50:
(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: Pippy_57 Start: 38794, Stop: 39075, Start Num: 23
Candidate Starts for Pippy_57:
(17, 38767), (Start: 23 @38794 has 95 MA's), (35, 38818), (Start: 43 @38833 has 5 MA's), (55, 38878), (57, 38890), (69, 38968), (72, 38980), (76, 39004), (77, 39016), (90, 39067),

Gene: Pixie_52 Start: 37451, Stop: 37720, Start Num: 27
Candidate Starts for Pixie_52:
(6, 37211), (Start: 27 @37451 has 8 MA's), (42, 37475), (67, 37595), (76, 37649),

Gene: Plumbus_61 Start: 40255, Stop: 40533, Start Num: 23
Candidate Starts for Plumbus_61:
(17, 40228), (Start: 23 @40255 has 95 MA's), (56, 40339), (58, 40348), (67, 40411), (69, 40426), (72, 40438), (76, 40462), (77, 40474), (90, 40525),

Gene: Poenanya_59 Start: 41112, Stop: 41390, Start Num: 23
Candidate Starts for Poenanya_59:
(17, 41085), (Start: 23 @41112 has 95 MA's), (56, 41196), (58, 41205), (67, 41268), (69, 41283), (72, 41295), (76, 41319), (77, 41331), (90, 41382),

Gene: Pokerus_49 Start: 37394, Stop: 37657, Start Num: 32
Candidate Starts for Pokerus_49:
(Start: 32 @37394 has 110 MA's), (53, 37448), (67, 37535),

Gene: Policronamos_97 Start: 57640, Stop: 57900, Start Num: 45
Candidate Starts for Policronamos_97:
(Start: 45 @57640 has 122 MA's), (51, 57661), (61, 57736), (73, 57805), (83, 57871),

Gene: Polka14_57 Start: 39308, Stop: 39586, Start Num: 23
Candidate Starts for Polka14_57:
(17, 39281), (Start: 23 @39308 has 95 MA's), (56, 39392), (58, 39401), (67, 39464), (69, 39479), (72, 39491), (76, 39515), (77, 39527), (90, 39578),

Gene: Porky_92 Start: 55785, Stop: 56045, Start Num: 45
Candidate Starts for Porky_92:
(Start: 45 @55785 has 122 MA's), (51, 55806), (61, 55881), (73, 55950), (83, 56016),

Gene: Prithvi_51 Start: 37556, Stop: 37819, Start Num: 32
Candidate Starts for Prithvi_51:
(Start: 32 @37556 has 110 MA's), (53, 37610), (67, 37697),

Gene: Pumpkin_97 Start: 57561, Stop: 57821, Start Num: 45
Candidate Starts for Pumpkin_97:
(Start: 45 @57561 has 122 MA's), (51, 57582), (61, 57657), (73, 57726), (83, 57792),

Gene: Pupper_53 Start: 18336, Stop: 18617, Start Num: 20

Candidate Starts for Pupper_53:

(Start: 20 @18336 has 3 MA's), (31, 18372), (57, 18447),

Gene: Quallification_94 Start: 57281, Stop: 57541, Start Num: 45

Candidate Starts for Quallification_94:

(Start: 45 @57281 has 122 MA's), (51, 57302), (61, 57377), (73, 57446), (83, 57512),

Gene: QuincyRose_49 Start: 37786, Stop: 38049, Start Num: 32

Candidate Starts for QuincyRose_49:

(Start: 32 @37786 has 110 MA's), (67, 37927),

Gene: Radiance_58 Start: 40047, Stop: 40328, Start Num: 23

Candidate Starts for Radiance_58:

(17, 40020), (Start: 23 @40047 has 95 MA's), (35, 40071), (Start: 43 @40086 has 5 MA's), (55, 40131), (57, 40143), (69, 40221), (72, 40233), (76, 40257), (77, 40269), (90, 40320),

Gene: Rakim_94 Start: 56610, Stop: 56870, Start Num: 45

Candidate Starts for Rakim_94:

(Start: 45 @56610 has 122 MA's), (51, 56631), (61, 56706), (73, 56775), (83, 56841),

Gene: Ramen_51 Start: 37358, Stop: 37621, Start Num: 32

Candidate Starts for Ramen_51:

(Start: 32 @37358 has 110 MA's), (67, 37499),

Gene: Rapunzel97_51 Start: 37354, Stop: 37617, Start Num: 32

Candidate Starts for Rapunzel97_51:

(Start: 32 @37354 has 110 MA's), (67, 37495),

Gene: RedBird_57 Start: 39343, Stop: 39624, Start Num: 23

Candidate Starts for RedBird_57:

(17, 39316), (Start: 23 @39343 has 95 MA's), (56, 39427), (58, 39436), (67, 39499), (69, 39514), (72, 39526), (76, 39550), (77, 39562),

Gene: Renaud18_65 Start: 40812, Stop: 41093, Start Num: 23

Candidate Starts for Renaud18_65:

(16, 40776), (Start: 23 @40812 has 95 MA's), (Start: 30 @40827 has 1 MA's), (Start: 43 @40851 has 5 MA's), (55, 40896), (57, 40908), (76, 41022), (77, 41034), (90, 41085),

Gene: Rimmer_91 Start: 56182, Stop: 56442, Start Num: 45

Candidate Starts for Rimmer_91:

(12, 56044), (Start: 45 @56182 has 122 MA's), (51, 56203), (73, 56347), (83, 56413),

Gene: RitaG_54 Start: 38556, Stop: 38834, Start Num: 23

Candidate Starts for RitaG_54:

(17, 38529), (Start: 23 @38556 has 95 MA's), (56, 38640), (58, 38649), (67, 38712), (69, 38727), (72, 38739), (76, 38763), (77, 38775), (90, 38826),

Gene: RiverMonster_94 Start: 57081, Stop: 57341, Start Num: 45

Candidate Starts for RiverMonster_94:

(Start: 45 @57081 has 122 MA's), (51, 57102), (61, 57177), (73, 57246), (83, 57312),

Gene: RobinSparkles_47 Start: 44442, Stop: 44158, Start Num: 49

Candidate Starts for RobinSparkles_47:
(Start: 49 @44442 has 1 MA's), (76, 44256),

Gene: RockyHorror_60 Start: 39611, Stop: 39892, Start Num: 23
Candidate Starts for RockyHorror_60:
(17, 39584), (Start: 23 @39611 has 95 MA's), (35, 39635), (Start: 43 @39650 has 5 MA's), (55, 39695), (57, 39707), (72, 39797), (76, 39821), (77, 39833), (90, 39884),

Gene: RonRayGun_41 Start: 31892, Stop: 32149, Start Num: 26
Candidate Starts for RonRayGun_41:
(3, 31616), (4, 31637), (Start: 26 @31892 has 8 MA's), (57, 31976), (72, 32066),

Gene: Ronaldo_96 Start: 48347, Stop: 48652, Start Num: 43
Candidate Starts for Ronaldo_96:
(Start: 43 @48347 has 5 MA's), (53, 48380), (82, 48581), (86, 48605),

Gene: Rosmarinus_50 Start: 37459, Stop: 37722, Start Num: 32
Candidate Starts for Rosmarinus_50:
(Start: 32 @37459 has 110 MA's), (67, 37600),

Gene: Ruby_55 Start: 39743, Stop: 40021, Start Num: 23
Candidate Starts for Ruby_55:
(17, 39716), (Start: 23 @39743 has 95 MA's), (56, 39827), (58, 39836), (67, 39899), (69, 39914), (72, 39926), (76, 39950), (77, 39962), (90, 40013),

Gene: SCentae_53 Start: 18353, Stop: 18634, Start Num: 20
Candidate Starts for SCentae_53:
(Start: 20 @18353 has 3 MA's), (31, 18389), (57, 18464),

Gene: Saal_61 Start: 41196, Stop: 41477, Start Num: 23
Candidate Starts for Saal_61:
(17, 41169), (Start: 23 @41196 has 95 MA's), (35, 41220), (Start: 43 @41235 has 5 MA's), (55, 41280), (57, 41292), (69, 41370), (72, 41382), (76, 41406), (77, 41418), (90, 41469),

Gene: Sabbb_63 Start: 40884, Stop: 41165, Start Num: 23
Candidate Starts for Sabbb_63:
(17, 40857), (Start: 23 @40884 has 95 MA's), (35, 40908), (Start: 43 @40923 has 5 MA's), (55, 40968), (57, 40980), (69, 41058), (72, 41070), (76, 41094), (77, 41106), (90, 41157),

Gene: Saints25_92 Start: 56224, Stop: 56484, Start Num: 45
Candidate Starts for Saints25_92:
(Start: 45 @56224 has 122 MA's), (51, 56245), (61, 56320), (73, 56389), (83, 56455),

Gene: Samty_78 Start: 53804, Stop: 54058, Start Num: 48
Candidate Starts for Samty_78:
(Start: 41 @53789 has 9 MA's), (Start: 48 @53804 has 6 MA's), (72, 53939), (78, 53981), (83, 54017), (91, 54041),

Gene: SamuelLPlaqson_51 Start: 38242, Stop: 38505, Start Num: 32
Candidate Starts for SamuelLPlaqson_51:
(6, 37990), (Start: 32 @38242 has 110 MA's), (53, 38296), (63, 38365), (67, 38383),

Gene: Sassafra_57 Start: 39528, Stop: 39806, Start Num: 23

Candidate Starts for Sassafra_s_57:

(17, 39501), (Start: 23 @39528 has 95 MA's), (56, 39612), (58, 39621), (67, 39684), (69, 39699), (72, 39711), (76, 39735), (77, 39747), (90, 39798),

Gene: Sassay_88 Start: 54914, Stop: 55174, Start Num: 45

Candidate Starts for Sassay_88:

(Start: 45 @54914 has 122 MA's), (51, 54935), (61, 55010), (73, 55079), (83, 55145),

Gene: Sbash_53 Start: 39707, Stop: 40006, Start Num: 22

Candidate Starts for Sbash_53:

(Start: 22 @39707 has 4 MA's), (29, 39725), (Start: 48 @39761 has 6 MA's), (Start: 52 @39776 has 1 MA's), (67, 39872), (76, 39923), (80, 39959), (90, 39998),

Gene: Scarlett_55 Start: 38559, Stop: 38834, Start Num: 32

Candidate Starts for Scarlett_55:

(Start: 32 @38559 has 110 MA's), (36, 38565), (53, 38607), (57, 38631), (74, 38739), (93, 38823),

Gene: Seabastian_64 Start: 42541, Stop: 42819, Start Num: 23

Candidate Starts for Seabastian_64:

(17, 42514), (Start: 23 @42541 has 95 MA's), (56, 42625), (58, 42634), (67, 42697), (69, 42712), (72, 42724), (76, 42748), (77, 42760), (90, 42811),

Gene: Sejanus_58 Start: 47696, Stop: 47995, Start Num: 22

Candidate Starts for Sejanus_58:

(Start: 22 @47696 has 4 MA's), (29, 47714), (Start: 48 @47750 has 6 MA's), (Start: 52 @47765 has 1 MA's), (67, 47861), (76, 47912), (80, 47948), (87, 47981), (90, 47987),

Gene: SgtBeansprout_46 Start: 37040, Stop: 37309, Start Num: 32

Candidate Starts for SgtBeansprout_46:

(Start: 32 @37040 has 110 MA's), (59, 37136), (70, 37196), (71, 37202), (72, 37205), (76, 37232), (77, 37244), (88, 37298),

Gene: Shadow1_56 Start: 38290, Stop: 38541, Start Num: 32

Candidate Starts for Shadow1_56:

(Start: 32 @38290 has 110 MA's), (36, 38296), (67, 38428),

Gene: ShamWow_93 Start: 57094, Stop: 57354, Start Num: 45

Candidate Starts for ShamWow_93:

(Start: 45 @57094 has 122 MA's), (51, 57115), (61, 57190), (73, 57259), (83, 57325),

Gene: Shaobing_53 Start: 38322, Stop: 38585, Start Num: 32

Candidate Starts for Shaobing_53:

(1, 37842), (2, 37998), (6, 38067), (Start: 32 @38322 has 110 MA's), (60, 38424), (63, 38442), (67, 38460), (76, 38514), (81, 38550), (88, 38574),

Gene: ShedlockHolmes_54 Start: 37976, Stop: 38245, Start Num: 27

Candidate Starts for ShedlockHolmes_54:

(6, 37736), (Start: 27 @37976 has 8 MA's), (42, 38000), (67, 38120), (76, 38174),

Gene: ShereKhan_91 Start: 57206, Stop: 57466, Start Num: 45

Candidate Starts for ShereKhan_91:

(Start: 45 @57206 has 122 MA's), (51, 57227), (61, 57302), (73, 57371), (83, 57437),

Gene: ShiaSurprise_51 Start: 37668, Stop: 37931, Start Num: 32

Candidate Starts for ShiaSurprise_51:

(Start: 32 @37668 has 110 MA's), (67, 37809),

Gene: ShowerHandel_62 Start: 39936, Stop: 40217, Start Num: 23

Candidate Starts for ShowerHandel_62:

(17, 39909), (Start: 23 @39936 has 95 MA's), (35, 39960), (Start: 43 @39975 has 5 MA's), (55, 40020), (57, 40032), (69, 40110), (72, 40122), (76, 40146), (77, 40158), (90, 40209),

Gene: ShroomBoi_61 Start: 40896, Stop: 41177, Start Num: 23

Candidate Starts for ShroomBoi_61:

(17, 40869), (Start: 23 @40896 has 95 MA's), (35, 40920), (Start: 43 @40935 has 5 MA's), (55, 40980), (57, 40992), (69, 41070), (72, 41082), (76, 41106), (77, 41118), (90, 41169),

Gene: Shweta_42 Start: 30626, Stop: 30925, Start Num: 22

Candidate Starts for Shweta_42:

(Start: 22 @30626 has 4 MA's), (29, 30644), (Start: 48 @30680 has 6 MA's), (Start: 52 @30695 has 1 MA's), (67, 30791), (76, 30842), (80, 30878), (87, 30911),

Gene: Simpliphy_92 Start: 56214, Stop: 56474, Start Num: 45

Candidate Starts for Simpliphy_92:

(Start: 45 @56214 has 122 MA's), (51, 56235), (61, 56310), (73, 56379), (83, 56445),

Gene: SimranZ1_59 Start: 40122, Stop: 40400, Start Num: 23

Candidate Starts for SimranZ1_59:

(17, 40095), (Start: 23 @40122 has 95 MA's), (56, 40206), (58, 40215), (67, 40278), (69, 40293), (72, 40305), (76, 40329), (77, 40341), (90, 40392),

Gene: SirDuracell_93 Start: 55587, Stop: 55847, Start Num: 45

Candidate Starts for SirDuracell_93:

(Start: 45 @55587 has 122 MA's), (51, 55608), (61, 55683), (73, 55752), (83, 55818),

Gene: SirPhilip_53 Start: 38679, Stop: 38936, Start Num: 32

Candidate Starts for SirPhilip_53:

(Start: 32 @38679 has 110 MA's), (63, 38799), (65, 38808), (67, 38817), (77, 38880), (81, 38904),

Gene: SkinnyPete_42 Start: 29948, Stop: 30178, Start Num: 52

Candidate Starts for SkinnyPete_42:

(Start: 22 @29879 has 4 MA's), (29, 29897), (Start: 48 @29933 has 6 MA's), (Start: 52 @29948 has 1 MA's), (67, 30044), (76, 30095), (80, 30131), (87, 30164), (90, 30170),

Gene: Slimphazie_50 Start: 37354, Stop: 37617, Start Num: 32

Candidate Starts for Slimphazie_50:

(Start: 32 @37354 has 110 MA's), (67, 37495),

Gene: Snenia_78 Start: 53795, Stop: 54064, Start Num: 41

Candidate Starts for Snenia_78:

(Start: 41 @53795 has 9 MA's), (Start: 48 @53810 has 6 MA's), (72, 53945), (78, 53987), (83, 54023), (91, 54047),

Gene: SophKB_90 Start: 55892, Stop: 56152, Start Num: 45

Candidate Starts for SophKB_90:

(Start: 45 @55892 has 122 MA's), (51, 55913), (61, 55988), (73, 56057), (83, 56123),

Gene: Sotrice96_94 Start: 56480, Stop: 56740, Start Num: 45

Candidate Starts for Sotrice96_94:

(Start: 45 @56480 has 122 MA's), (51, 56501), (61, 56576), (73, 56645), (83, 56711),

Gene: Spartacus_61 Start: 40606, Stop: 40887, Start Num: 23

Candidate Starts for Spartacus_61:

(17, 40579), (Start: 23 @40606 has 95 MA's), (35, 40630), (Start: 43 @40645 has 5 MA's), (55, 40690), (57, 40702), (69, 40780), (72, 40792), (76, 40816), (77, 40828), (90, 40879),

Gene: Spikelee_66 Start: 42226, Stop: 42507, Start Num: 23

Candidate Starts for Spikelee_66:

(17, 42199), (Start: 23 @42226 has 95 MA's), (35, 42250), (Start: 43 @42265 has 5 MA's), (55, 42310), (57, 42322), (69, 42400), (72, 42412), (76, 42436), (77, 42448), (90, 42499),

Gene: Spock_50 Start: 37472, Stop: 37735, Start Num: 32

Candidate Starts for Spock_50:

(Start: 32 @37472 has 110 MA's), (67, 37613),

Gene: Spoonbill_56 Start: 38516, Stop: 38794, Start Num: 23

Candidate Starts for Spoonbill_56:

(17, 38489), (Start: 23 @38516 has 95 MA's), (56, 38600), (58, 38609), (67, 38672), (69, 38687), (72, 38699), (76, 38723), (77, 38735), (90, 38786),

Gene: Squiddly_71 Start: 45719, Stop: 45979, Start Num: 26

Candidate Starts for Squiddly_71:

(18, 45680), (Start: 26 @45719 has 8 MA's), (53, 45782), (55, 45794), (63, 45851), (72, 45896), (90, 45971),

Gene: Stank_95 Start: 56873, Stop: 57133, Start Num: 45

Candidate Starts for Stank_95:

(Start: 45 @56873 has 122 MA's), (51, 56894), (61, 56969), (73, 57038), (83, 57104),

Gene: Stap_57 Start: 39317, Stop: 39595, Start Num: 23

Candidate Starts for Stap_57:

(17, 39290), (Start: 23 @39317 has 95 MA's), (56, 39401), (58, 39410), (67, 39473), (69, 39488), (72, 39500), (76, 39524), (77, 39536), (90, 39587),

Gene: Starcevich_59 Start: 40105, Stop: 40383, Start Num: 23

Candidate Starts for Starcevich_59:

(15, 40069), (Start: 23 @40105 has 95 MA's), (35, 40129), (55, 40186), (57, 40198), (69, 40276), (72, 40288), (76, 40312), (77, 40324), (90, 40375),

Gene: Stark_95 Start: 56964, Stop: 57224, Start Num: 45

Candidate Starts for Stark_95:

(Start: 45 @56964 has 122 MA's), (51, 56985), (61, 57060), (73, 57129), (83, 57195),

Gene: StellaBean_91 Start: 56418, Stop: 56678, Start Num: 45

Candidate Starts for StellaBean_91:

(Start: 45 @56418 has 122 MA's), (51, 56439), (61, 56514), (73, 56583), (83, 56649),

Gene: Stinson_51 Start: 37846, Stop: 38109, Start Num: 32

Candidate Starts for Stinson_51:

(6, 37594), (Start: 32 @37846 has 110 MA's), (53, 37900), (67, 37987),

Gene: StolenFromERC_96 Start: 56798, Stop: 57058, Start Num: 45

Candidate Starts for StolenFromERC_96:

(Start: 45 @56798 has 122 MA's), (51, 56819), (61, 56894), (73, 56963), (83, 57029),

Gene: Strokeseat_55 Start: 38052, Stop: 38333, Start Num: 23

Candidate Starts for Strokeseat_55:

(17, 38025), (Start: 23 @38052 has 95 MA's), (35, 38076), (Start: 43 @38091 has 5 MA's), (55, 38136), (57, 38148), (69, 38226), (72, 38238), (76, 38262), (77, 38274), (90, 38325),

Gene: Sulley_50 Start: 37598, Stop: 37861, Start Num: 32

Candidate Starts for Sulley_50:

(Start: 32 @37598 has 110 MA's), (67, 37739),

Gene: Sunflower1121_57 Start: 38391, Stop: 38642, Start Num: 32

Candidate Starts for Sunflower1121_57:

(Start: 32 @38391 has 110 MA's), (36, 38397), (67, 38529),

Gene: SwagPigglett_64 Start: 42244, Stop: 42525, Start Num: 23

Candidate Starts for SwagPigglett_64:

(17, 42217), (Start: 23 @42244 has 95 MA's), (35, 42268), (Start: 43 @42283 has 5 MA's), (55, 42328), (57, 42340), (69, 42418), (72, 42430), (76, 42454), (77, 42466), (90, 42517),

Gene: Syra333_56 Start: 38055, Stop: 38306, Start Num: 32

Candidate Starts for Syra333_56:

(Start: 32 @38055 has 110 MA's), (36, 38061), (64, 38181), (67, 38193),

Gene: TBond007_51 Start: 37450, Stop: 37719, Start Num: 27

Candidate Starts for TBond007_51:

(6, 37210), (Start: 27 @37450 has 8 MA's), (42, 37474), (67, 37594), (76, 37648),

Gene: TBrady12_96 Start: 56634, Stop: 56894, Start Num: 45

Candidate Starts for TBrady12_96:

(Start: 45 @56634 has 122 MA's), (51, 56655), (61, 56730), (73, 56799), (83, 56865),

Gene: TChen_60 Start: 41367, Stop: 41636, Start Num: 30

Candidate Starts for TChen_60:

(14, 41322), (Start: 23 @41358 has 95 MA's), (Start: 30 @41367 has 1 MA's), (53, 41424), (56, 41442), (58, 41451), (67, 41514), (69, 41529), (72, 41541), (76, 41565), (77, 41577), (90, 41628),

Gene: TClif_55 Start: 38425, Stop: 38685, Start Num: 34

Candidate Starts for TClif_55:

(Start: 34 @38425 has 7 MA's), (53, 38467), (72, 38581), (74, 38599), (88, 38674),

Gene: Tachez_50 Start: 37316, Stop: 37579, Start Num: 32

Candidate Starts for Tachez_50:

(Start: 32 @37316 has 110 MA's), (67, 37457),

Gene: TaiwanKao_52 Start: 37612, Stop: 37875, Start Num: 32

Candidate Starts for TaiwanKao_52:

(Start: 32 @37612 has 110 MA's), (67, 37753),

Gene: Taptic_55 Start: 44928, Stop: 45209, Start Num: 44
Candidate Starts for Taptic_55:
(Start: 44 @44928 has 8 MA's), (57, 44988), (63, 45045), (76, 45117), (89, 45189),

Gene: Tarkin_92 Start: 56882, Stop: 57142, Start Num: 45
Candidate Starts for Tarkin_92:
(Start: 45 @56882 has 122 MA's), (51, 56903), (61, 56978), (73, 57047), (83, 57113),

Gene: TeardropMSU_89 Start: 55882, Stop: 56142, Start Num: 45
Candidate Starts for TeardropMSU_89:
(Start: 45 @55882 has 122 MA's), (51, 55903), (61, 55978), (73, 56047), (83, 56113),

Gene: Teaspoon_94 Start: 56734, Stop: 56994, Start Num: 45
Candidate Starts for Teaspoon_94:
(Start: 45 @56734 has 122 MA's), (51, 56755), (61, 56830), (73, 56899), (83, 56965),

Gene: Terminus_96 Start: 57669, Stop: 57929, Start Num: 45
Candidate Starts for Terminus_96:
(Start: 45 @57669 has 122 MA's), (51, 57690), (61, 57765), (73, 57834), (83, 57900),

Gene: ThetaBob_64 Start: 41432, Stop: 41710, Start Num: 23
Candidate Starts for ThetaBob_64:
(14, 41396), (Start: 23 @41432 has 95 MA's), (Start: 30 @41441 has 1 MA's), (53, 41498), (56, 41516), (58, 41525), (67, 41588), (69, 41603), (72, 41615), (76, 41639), (77, 41651), (90, 41702),

Gene: Thresher_96 Start: 57744, Stop: 58004, Start Num: 45
Candidate Starts for Thresher_96:
(Start: 45 @57744 has 122 MA's), (51, 57765), (61, 57840), (73, 57909), (83, 57975),

Gene: Tierra_54 Start: 37943, Stop: 38200, Start Num: 32
Candidate Starts for Tierra_54:
(Start: 32 @37943 has 110 MA's), (Start: 44 @37964 has 8 MA's), (57, 38018), (67, 38081), (68, 38090), (81, 38168),

Gene: TiniBug_51 Start: 38238, Stop: 38501, Start Num: 32
Candidate Starts for TiniBug_51:
(6, 37986), (Start: 32 @38238 has 110 MA's), (53, 38292), (63, 38361), (67, 38379),

Gene: TinyDot_55 Start: 34530, Stop: 34790, Start Num: 26
Candidate Starts for TinyDot_55:
(Start: 26 @34530 has 8 MA's), (77, 34740),

Gene: Tiri_51 Start: 37646, Stop: 37909, Start Num: 32
Candidate Starts for Tiri_51:
(Start: 32 @37646 has 110 MA's), (53, 37700), (67, 37787),

Gene: Tomaszewski_88 Start: 56045, Stop: 56305, Start Num: 45
Candidate Starts for Tomaszewski_88:
(Start: 45 @56045 has 122 MA's), (51, 56066), (61, 56141), (73, 56210), (83, 56276),

Gene: Topper_50 Start: 37471, Stop: 37734, Start Num: 32
Candidate Starts for Topper_50:
(Start: 32 @37471 has 110 MA's), (67, 37612),

Gene: Toto_91 Start: 57094, Stop: 57354, Start Num: 45

Candidate Starts for Toto_91:

(Start: 45 @57094 has 122 MA's), (51, 57115), (61, 57190), (73, 57259), (83, 57325),

Gene: Traaww1_89 Start: 55902, Stop: 56162, Start Num: 45

Candidate Starts for Traaww1_89:

(Start: 45 @55902 has 122 MA's), (51, 55923), (61, 55998), (73, 56067), (83, 56133),

Gene: TreyKay_51 Start: 37556, Stop: 37819, Start Num: 32

Candidate Starts for TreyKay_51:

(Start: 32 @37556 has 110 MA's), (53, 37610), (67, 37697),

Gene: TribbleTrouble_50 Start: 37335, Stop: 37601, Start Num: 27

Candidate Starts for TribbleTrouble_50:

(Start: 27 @37335 has 8 MA's), (42, 37356), (46, 37362), (67, 37476), (74, 37521), (76, 37530),

Gene: Trogglehumper_64 Start: 53677, Stop: 53435, Start Num: 62

Candidate Starts for Trogglehumper_64:

(Start: 62 @53677 has 1 MA's), (66, 53653),

Gene: TruffulaTree_50 Start: 37350, Stop: 37613, Start Num: 32

Candidate Starts for TruffulaTree_50:

(Start: 32 @37350 has 110 MA's), (67, 37491),

Gene: Tuco_94 Start: 57641, Stop: 57901, Start Num: 45

Candidate Starts for Tuco_94:

(Start: 45 @57641 has 122 MA's), (51, 57662), (61, 57737), (73, 57806), (83, 57872),

Gene: Twitch_50 Start: 37473, Stop: 37736, Start Num: 32

Candidate Starts for Twitch_50:

(Start: 32 @37473 has 110 MA's), (67, 37614),

Gene: Ukulele_88 Start: 56027, Stop: 56287, Start Num: 45

Candidate Starts for Ukulele_88:

(Start: 45 @56027 has 122 MA's), (51, 56048), (61, 56123), (73, 56192), (83, 56258),

Gene: Unicorn_53 Start: 37175, Stop: 37432, Start Num: 32

Candidate Starts for Unicorn_53:

(Start: 32 @37175 has 110 MA's), (Start: 44 @37196 has 8 MA's), (57, 37250), (67, 37313), (68, 37322), (81, 37400),

Gene: Urkel_51 Start: 38242, Stop: 38505, Start Num: 32

Candidate Starts for Urkel_51:

(6, 37990), (Start: 32 @38242 has 110 MA's), (53, 38296), (63, 38365), (67, 38383),

Gene: VRedHorse_59 Start: 39252, Stop: 39533, Start Num: 23

Candidate Starts for VRedHorse_59:

(17, 39225), (Start: 23 @39252 has 95 MA's), (35, 39276), (Start: 43 @39291 has 5 MA's), (55, 39336), (57, 39348), (69, 39426), (72, 39438), (76, 39462), (77, 39474), (90, 39525),

Gene: VWB_44 Start: 35402, Stop: 35647, Start Num: 36

Candidate Starts for VWB_44:

(9, 35270), (10, 35279), (11, 35282), (21, 35369), (35, 35399), (36, 35402), (67, 35531), (73, 35564), (76, 35582),

Gene: Validus_55 Start: 38351, Stop: 38623, Start Num: 32

Candidate Starts for Validus_55:

(Start: 32 @38351 has 110 MA's), (Start: 38 @38363 has 2 MA's), (60, 38453), (63, 38471), (67, 38489), (72, 38516), (84, 38594),

Gene: Veliki_51 Start: 37390, Stop: 37653, Start Num: 32

Candidate Starts for Veliki_51:

(Start: 32 @37390 has 110 MA's), (67, 37531),

Gene: Volt_97 Start: 48511, Stop: 48816, Start Num: 43

Candidate Starts for Volt_97:

(Start: 43 @48511 has 5 MA's), (53, 48544), (82, 48745), (86, 48769),

Gene: Wee_63 Start: 41773, Stop: 42054, Start Num: 23

Candidate Starts for Wee_63:

(Start: 23 @41773 has 95 MA's), (35, 41797), (Start: 43 @41812 has 5 MA's), (55, 41857), (57, 41869), (69, 41947), (72, 41959), (76, 41983), (77, 41995), (90, 42046),

Gene: Wee_60 Start: 40789, Stop: 41067, Start Num: 24

Candidate Starts for Wee_60:

(Start: 24 @40789 has 2 MA's), (Start: 26 @40795 has 8 MA's), (Start: 28 @40798 has 1 MA's), (Start: 41 @40822 has 9 MA's), (72, 40981), (75, 40996), (76, 41002),

Gene: Whouxphf_56 Start: 39848, Stop: 40129, Start Num: 23

Candidate Starts for Whouxphf_56:

(17, 39821), (Start: 23 @39848 has 95 MA's), (35, 39872), (Start: 43 @39887 has 5 MA's), (55, 39932), (57, 39944), (69, 40022), (72, 40034), (76, 40058), (77, 40070), (90, 40121),

Gene: Wiggin_95 Start: 56303, Stop: 56563, Start Num: 45

Candidate Starts for Wiggin_95:

(Start: 45 @56303 has 122 MA's), (51, 56324), (61, 56399), (73, 56468), (83, 56534),

Gene: WillSterrel_60 Start: 41723, Stop: 42004, Start Num: 23

Candidate Starts for WillSterrel_60:

(17, 41696), (Start: 23 @41723 has 95 MA's), (35, 41747), (Start: 43 @41762 has 5 MA's), (55, 41807), (57, 41819), (69, 41897), (72, 41909), (76, 41933), (77, 41945), (90, 41996),

Gene: Willez_88 Start: 54914, Stop: 55174, Start Num: 45

Candidate Starts for Willez_88:

(Start: 45 @54914 has 122 MA's), (51, 54935), (61, 55010), (73, 55079), (83, 55145),

Gene: Xandras_92 Start: 56126, Stop: 56386, Start Num: 45

Candidate Starts for Xandras_92:

(Start: 45 @56126 has 122 MA's), (51, 56147), (61, 56222), (73, 56291), (83, 56357),

Gene: Ximenita_57 Start: 38244, Stop: 38495, Start Num: 32

Candidate Starts for Ximenita_57:

(Start: 32 @38244 has 110 MA's), (36, 38250), (67, 38382),

Gene: YassJohnny_90 Start: 55767, Stop: 56027, Start Num: 45

Candidate Starts for YassJohnny_90:

(Start: 45 @55767 has 122 MA's), (51, 55788), (61, 55863), (73, 55932), (83, 55998),

Gene: Yorick_58 Start: 40310, Stop: 40591, Start Num: 23

Candidate Starts for Yorick_58:

(17, 40283), (Start: 23 @40310 has 95 MA's), (35, 40334), (Start: 43 @40349 has 5 MA's), (55, 40394), (57, 40406), (69, 40484), (72, 40496), (76, 40520), (77, 40532), (90, 40583),

Gene: Yoshi_72 Start: 41696, Stop: 41974, Start Num: 23

Candidate Starts for Yoshi_72:

(14, 41660), (Start: 23 @41696 has 95 MA's), (Start: 30 @41705 has 1 MA's), (53, 41762), (56, 41780), (58, 41789), (67, 41852), (69, 41867), (72, 41879), (76, 41903), (77, 41915), (90, 41966),

Gene: Youngblood_96 Start: 57596, Stop: 57856, Start Num: 45

Candidate Starts for Youngblood_96:

(Start: 45 @57596 has 122 MA's), (51, 57617), (61, 57692), (73, 57761), (83, 57827),

Gene: YoureAdopted_49 Start: 37555, Stop: 37818, Start Num: 32

Candidate Starts for YoureAdopted_49:

(Start: 32 @37555 has 110 MA's), (67, 37696),

Gene: Yuna_57 Start: 39151, Stop: 39429, Start Num: 32

Candidate Starts for Yuna_57:

(8, 39004), (Start: 32 @39151 has 110 MA's), (67, 39280), (74, 39325), (76, 39334),

Gene: Yunkel11_53 Start: 37143, Stop: 37406, Start Num: 32

Candidate Starts for Yunkel11_53:

(Start: 32 @37143 has 110 MA's), (Start: 38 @37155 has 2 MA's), (63, 37266), (67, 37284),

Gene: Zabiza_46 Start: 33661, Stop: 33924, Start Num: 32

Candidate Starts for Zabiza_46:

(Start: 32 @33661 has 110 MA's), (67, 33802),

Gene: Zavala_52 Start: 37632, Stop: 37895, Start Num: 32

Candidate Starts for Zavala_52:

(Start: 32 @37632 has 110 MA's), (67, 37773),

Gene: ZenTime222_40 Start: 31446, Stop: 31703, Start Num: 26

Candidate Starts for ZenTime222_40:

(3, 31170), (4, 31191), (Start: 26 @31446 has 8 MA's), (57, 31530), (72, 31620),

Gene: Ziko_96 Start: 48332, Stop: 48637, Start Num: 43

Candidate Starts for Ziko_96:

(Start: 43 @48332 has 5 MA's), (53, 48365), (82, 48566), (86, 48590),

Gene: xkcd_96 Start: 57780, Stop: 58040, Start Num: 45

Candidate Starts for xkcd_96:

(Start: 45 @57780 has 122 MA's), (51, 57801), (61, 57876), (73, 57945), (83, 58011),