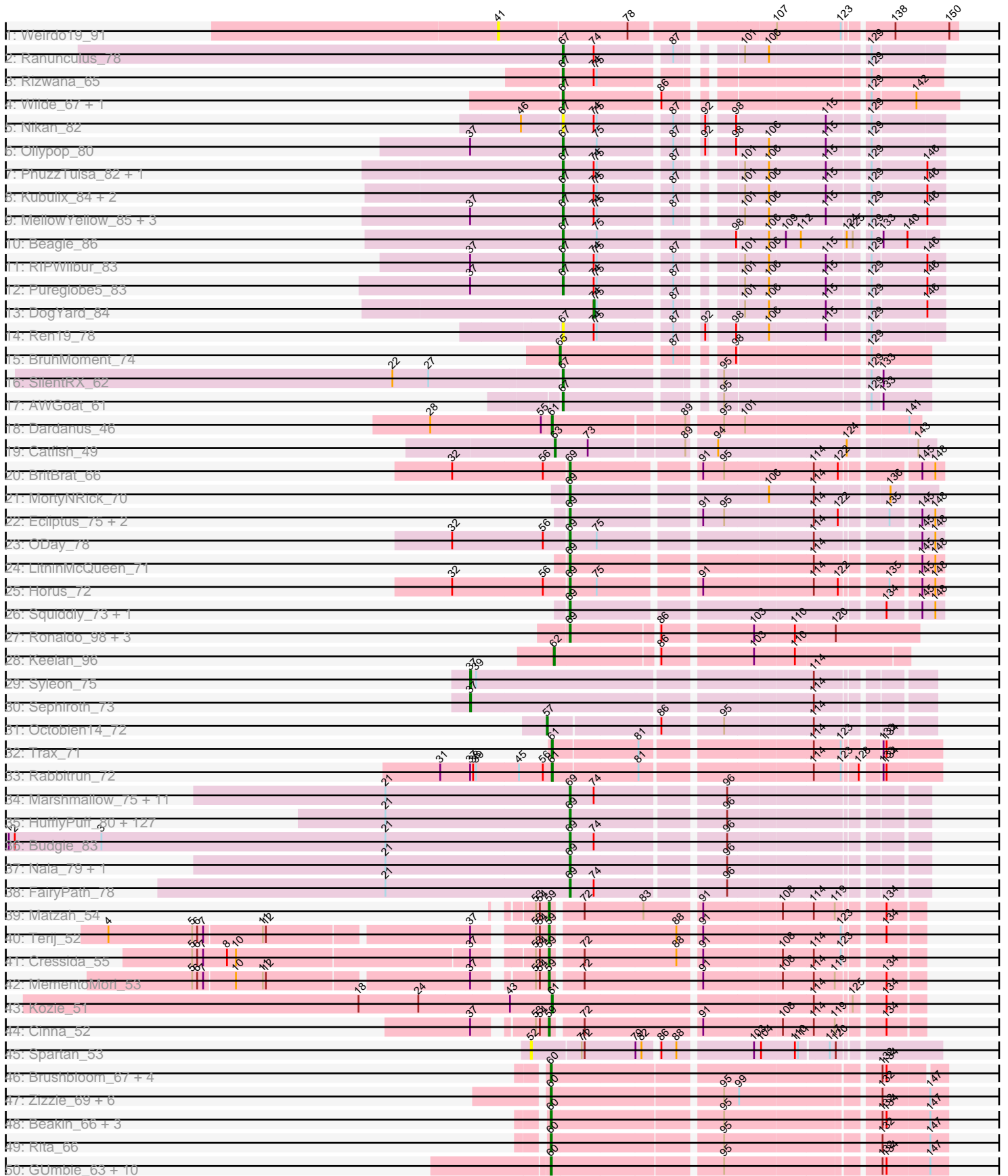
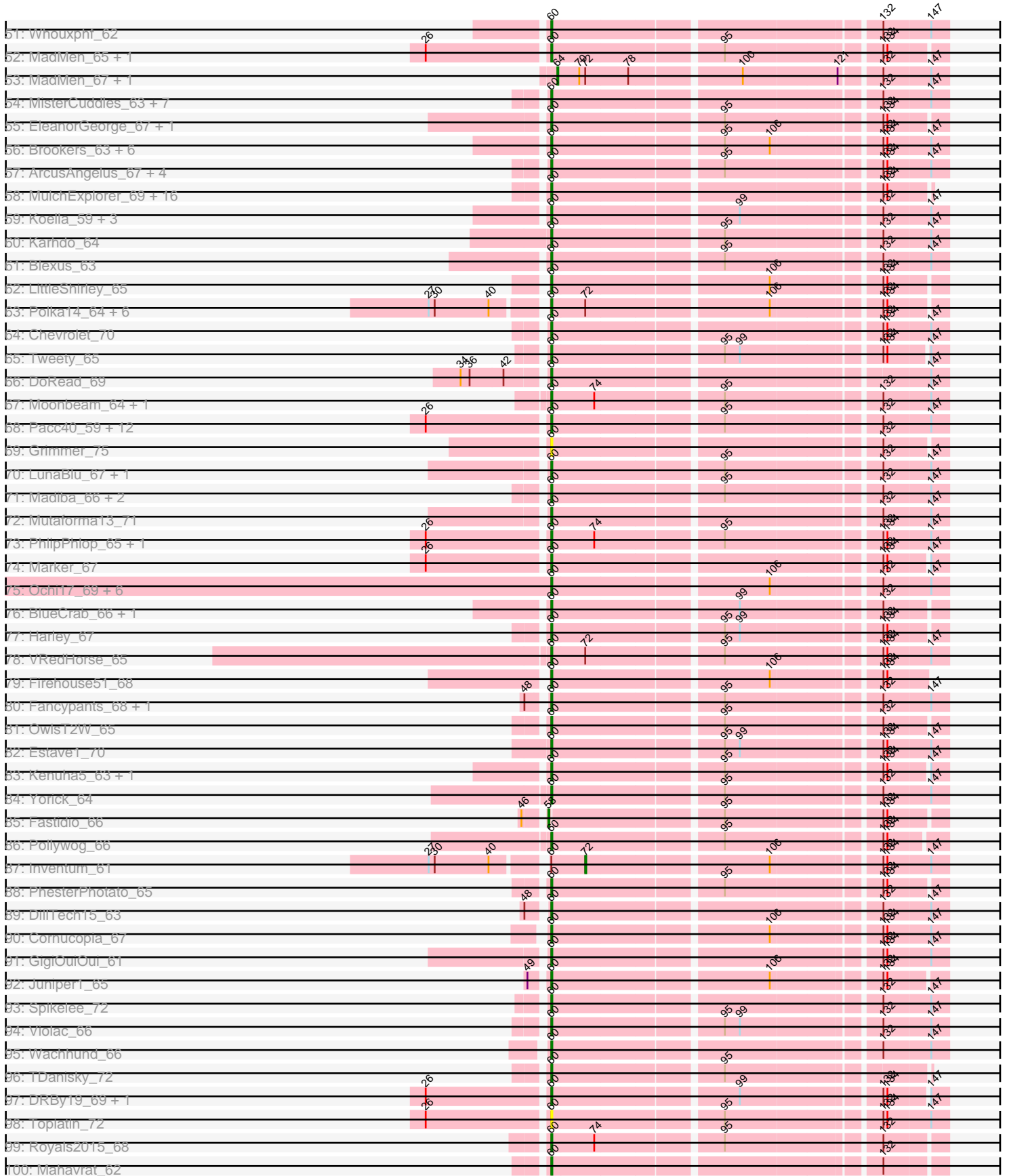


Pham 311087



Pham 311087



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 311087 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311087 has 421 members, 31 are drafts.

Phages represented in each track:

- Track 1 : Weirdo19_91
- Track 2 : Ranunculus_78
- Track 3 : Rizwana_65
- Track 4 : Wilde_67, Tank_65
- Track 5 : Nikan_82
- Track 6 : Ollypop_80
- Track 7 : PhuzzTulsa_82, Odyssey395_85
- Track 8 : Kubulix_84, Pointis_81, BetaFish_84
- Track 9 : MellowYellow_85, RazzB_84, Forrestell_84, NyleyClemson_83
- Track 10 : Beagle_86
- Track 11 : RIPWilbur_83
- Track 12 : Pureglobe5_83
- Track 13 : DogYard_84
- Track 14 : Ren19_78
- Track 15 : BruhMoment_74
- Track 16 : SilentRX_62
- Track 17 : AWGoat_61
- Track 18 : Dardanus_46
- Track 19 : Catfish_49
- Track 20 : BritBrat_66
- Track 21 : MortyNRick_70
- Track 22 : Ecliptus_75, CheeseTouch_74, Kuwabara_72
- Track 23 : ODay_78
- Track 24 : LitninMcQueen_71
- Track 25 : Horus_72
- Track 26 : Squiddly_73, Spooky_68
- Track 27 : Ronaldo_98, Guey18_100, Volt_99, Fryberger_95
- Track 28 : Keelan_96
- Track 29 : Syleon_75
- Track 30 : Sephiroth_73
- Track 31 : Octobien14_72
- Track 32 : Trax_71
- Track 33 : Rabbitrun_72
- Track 34 : Marshmallow_75, Cookies_74, ChotaBhai_77, SirDuracell_76, Bask21_77, TeamEdward_79, YassJohnny_74, Pat3_75, Tomaszewski_72, OrionPax_76, Amao_77, DoctorDiddles_76

- Track 35 : HufflyPuff_80, Teaspoon_78, Buck_78, Petra64142_81, NoSleep_78, Highbury_76, PaddyBaddy_77, Glexan_76, TeardropMSU_73, Lilizi_78, Thresher_79, Inca_74, 244_78, MISSy_78, Nimrod_78, Stank_80, Gage_79, Moldemort_80, RiverMonster_77, Bogg_77, Phaja_75, HanKaySha_77, Becksu_76, Bruin_74, BilboSwaggins_75, StellaBean_75, Bench_80, AmericanBeauty_81, Myrale_77, Manda_78, Ukulele_72, Rimmer_78, Kostya_77, SophKB_74, FoghornLeghorn_71, Pumpkin_80, Terminus_80, IHOP_75, Icee_78, Sassay_72, MPhalcon_78, Balomoji_77, Dusk_74, Kanye_74, Saints25_76, Cactus_80, JeTaime_77, Simpliphy_76, Liveloughbron_79, GooberAzure_80, PhatBacter_81, Palpatine_79, xkcd_80, Lilpickle_76, Holt_82, Murica_80, Rakim_78, Adnama_81, Gemini_82, MadamMonkfish_77, Greep_81, Mindy_76, Mosby_73, Dumbo_77, Lilac_79, Kimchi_81, Phaux_79, NelitzaMV_75, BadStone_74, Eureka_75, TBrady12_80, BigBubba_77, Brewer_73, CrystalP_76, Phrux_74, BugsBunny_77, Cjw1_77, Hoonter_80, Willez_72, BaboJay_74, Goku_75, Asriel_76, Henry_75, Barbarian_76, Xandras_76, Tuco_78, Contagion_73, NonchalantPear_77, Quallification_78, Goldilocks_80, StolenFromERC_80, GoldenSpark_81, Traaww1_73, Flypotenuse_73, Daikon_79, Easy2Say_78, Filch_78, ShamWow_77, Porky_76, Czyszczon1_78, Sotrice96_78, Harella_77, Elph10_77, Policronamos_80, Youngblood_80, Toto_75, Murphy_77, Pharsalus_74, Command613_79, Gator_75, StormChicken_79, Stark_78, Hopey_77, Miniwave_72, Elite2014_76, Misfit_78, Maxxinista_79, ChosenOne_77, Emmina_77, Tarkin_76, Argent26_81, ABCat_74, Wiggin_79, Ptowny_74, DrDrey_77, MollyToe_72, Paperbeatsrock_76, Thimble_78
- Track 36 : Budgie_83
- Track 37 : Nala_79, FireRed_81
- Track 38 : FairyPath_78
- Track 39 : Matzah_54
- Track 40 : Terij_52
- Track 41 : Cressida_55
- Track 42 : MementoMori_53
- Track 43 : Kozie_51
- Track 44 : Cinna_52
- Track 45 : Spartan_53
- Track 46 : Brushbloom_67, Bobi_69, Batiatus_63, MilleniumForce_68, Ibhubes_i_65
- Track 47 : Zizzle_69, Maravista_67, ByChance_58, Pippy_64, ShowerHandel_68, Crumble_60, BobaPhett_69
- Track 48 : Beakin_66, Guppsters_66, Hades_66, Soul22_71
- Track 49 : Rita_66
- Track 50 : GUmbie_63, James_69, BuzzLyseyear_71, Tchotchke_64, Mattes_69, Gorge_69, Lizziana_71, Saal_67, Che8_70, OlympiaSaint_67, Eradicator_58
- Track 51 : Whouxphf_62
- Track 52 : MadMen_65, Martik_65
- Track 53 : MadMen_67, Leozinho_66
- Track 54 : MisterCuddles_63, XFactor_63, Zerg_65, RockyHorror_66, Alexphander_69, Doug_67, Girr_63, Ruby_61
- Track 55 : EleanorGeorge_67, Leozinho_64
- Track 56 : Brookers_63, Kingsley_63, Coco12_65, Sarma624_64, Cerasum_62, Velveteen_61, BigPhil_62
- Track 57 : ArcusAngelus_67, Eish_68, DosHalletts_67, Mova_69, Radiance_64
- Track 58 : MulchExplorer_69, Rockne_66, Kimberlium_70, QuickMath_69, Hamulus_65, Chuckly_68, Juice456_66, Byougenkin_65, JalFarm20_78, Jant_69, PMC_62, Boomer_70, SiSi_63, Ardmore_57, KristaRAM_68, Starcevich_65, Avani_73
- Track 59 : Koella_59, Priscilla_65, NormanBulbieJr_65, Cabrinians_66

- Track 60 : Karhdo_64
- Track 61 : Blexus_63
- Track 62 : LittleShirley_65
- Track 63 : Polka14_64, JoeyJr_61, PHappiness_61, Leperchaun_58, Spoonbill_63, RitaG_61, Daenerys_60
- Track 64 : Chevrolet_70
- Track 65 : Tweety_65
- Track 66 : DoRead_69
- Track 67 : Moonbeam_64, Emma_67
- Track 68 : Pacc40_59, LastJedi_59, CaptainTrips_63, MinionDave_64, Nivrat_62, Minnie_68, LilMoolah_64, Clifton_60, Aubs_65, Brocalys_60, Burwell21_63, SwagPigglett_70, Sandalphon_66
- Track 69 : Grimmer_75
- Track 70 : LunaBlu_67, Galactic_64
- Track 71 : Madiba_66, Ramsey_64, DaWorst_65
- Track 72 : Mutaforma13_71
- Track 73 : PhlipPhlop_65, Vivum_66
- Track 74 : Marker_67
- Track 75 : Ochi17_69, Modragons_69, OfUltron_71, Llama_70, Jinglebell_71, AlpineSix_71, Seabastian_71
- Track 76 : BlueCrab_66, FreddyB_66
- Track 77 : Harley_67
- Track 78 : VRedHorse_65
- Track 79 : Firehouse51_68
- Track 80 : Fancypants_68, Mozy_75
- Track 81 : OwlsT2W_65
- Track 82 : Estave1_70
- Track 83 : Kenuha5_63, SuperGrey_69
- Track 84 : Yorick_64
- Track 85 : Fastidio_66
- Track 86 : Pollywog_66
- Track 87 : Inventum_61
- Track 88 : PhesterPhotato_65
- Track 89 : DillTech15_63
- Track 90 : Cornucopia_67
- Track 91 : GigiOuiOui_61
- Track 92 : Juniper1_65
- Track 93 : Spikelee_72
- Track 94 : Violac_66
- Track 95 : Wachhund_66
- Track 96 : TDanisky_72
- Track 97 : DRBy19_69, Philus_69
- Track 98 : Topiatin_72
- Track 99 : Royals2015_68
- Track 100 : Mahavrat_62
- Track 101 : Zapner_79, Jabbawokkie_80, Blarby_78, Mantra_62
- Track 102 : Yoshi_81
- Track 103 : Che9d_75, ShiLan_64, Kersh_67
- Track 104 : Demsculpinboyz_78
- Track 105 : ThetaBob_73, Ogopogo_71
- Track 106 : Renaud18_75
- Track 107 : Cornie_63, CheesePuff_74
- Track 108 : RomansRevenge_72

- Track 109 : Dropshot_41
- Track 110 : Guzman_41, Appa_41, Winchester007_57, PhillyJawn_42, Losacky_42
- Track 111 : Pickles13_40
- Track 112 : Constella_107, JuicyJay_120, Phoebus_124, Thibault_106, Dallas_124, Beem_125, NihilNomen_125, Dove_109
- Track 113 : Lucky2013_115
- Track 114 : MiaZeal_118
- Track 115 : HokkenD_113
- Track 116 : Colossa_116
- Track 117 : VanLee_116
- Track 118 : Wyatt2_67, AvadaKedavra_66, Tyson_67
- Track 119 : Rose5_66, Wamburgxpress_66
- Track 120 : Archie_67
- Track 121 : Bellis_66, MsGreen_66, Snenia_65, Jubie_65, TriFive_67, Lumos_67, Krypton555_67, Clautastrophe_65, Jobypre_66, Whirlwind_66, Red305_66
- Track 122 : BourbonZero_66
- Track 123 : Finnry_66, Samty_66
- Track 124 : MiniMac_69
- Track 125 : MiniLon_69, Lolly9_65
- Track 126 : DuncansLeg_66
- Track 127 : Aegeus_71, Baudelaire_71
- Track 128 : Dulcita_67, Glaske16_67, FreakyGoo_67, Izel_67
- Track 129 : MrMagoo_76
- Track 130 : Stellammi_92
- Track 131 : PhaoMing_57
- Track 132 : Wildcat_77, MaryV_77, EniyanLRS_168
- Track 133 : Cosmo_77, Azrael100_76
- Track 134 : Kumao_62

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

The start number called the most often in the published annotations is 69, it was called in 166 of the 390 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_78, ABCat_74, Adnama_81, Aegeus_71, Amao_77, AmericanBeauty_81, Argent26_81, Asriel_76, AvadaKedavra_66, BaboJay_74, BadStone_74, Balomoji_77, Barbarian_76, Bask21_77, Baudelaire_71, Becksu_76, Beem_125, Bench_80, BigBubba_77, BilboSwaggins_75, Bogg_77, Brewer_73, BritBrat_66, Bruin_74, Buck_78, Budgie_83, BugsBunny_77, Cactus_80, CheeseTouch_74, ChosenOne_77, ChotaBhai_77, Cjw1_77, Command613_79, Constella_107, Contagion_73, Cookies_74, CrystalP_76, Czyszczonek_78, Daikon_79, Dallas_124, DoctorDiddles_76, Dove_109, DrDrey_77, Dulcita_67, Dumbo_77, Dusk_74, Easy2Say_78, Ecliptus_75, Elite2014_76, Elph10_77, Emmina_77, Eureka_75, FairyPath_78, Filch_78, FireRed_81, Flypotenuse_73, FoghornLeghorn_71, FreakyGoo_67, Fryberger_95, Gage_79, Gator_75, Gemini_82, Glaske16_67, Glexan_76, Goku_75, GoldenSpark_81, Goldilocks_80, GooberAzure_80, Greep_81, Guey18_100, HanKaySha_77, Harella_77, Henry_75, Highbury_76, Holt_82, Hoonter_80, Hopey_77, Horus_72, HufflyPuff_80, IHOP_75, Icee_78, Inca_74, Izel_67, JeTaime_77, JuicyJay_120, Kanye_74, Kimchi_81, Kostya_77,

Kuwabara_72, Lilac_79, Lilizi_78, Lilpickle_76, LitninMcQueen_71, Liveloughbron_79, MISSy_78, MPhalcon_78, MadamMonkfish_77, Manda_78, Marshmallow_75, Maxxinista_79, MiaZeal_118, Mindy_76, Miniwave_72, Misfit_78, Moldemort_80, MollyToe_72, MortyNRick_70, Mosby_73, MrMagoo_76, Murica_80, Murphy_77, Myrale_77, Nala_79, NelitzaMV_75, NihilNomen_125, Nimrod_78, NoSleep_78, NonchalantPear_77, ODay_78, OrionPax_76, PaddyBaddy_77, Palpatine_79, Paperbeatsrock_76, Pat3_75, Petra64142_81, Phaja_75, PhaoMing_57, Pharsalus_74, PhatBacter_81, Phaux_79, Phoebus_124, Phrux_74, Policronamos_80, Porky_76, Ptowny_74, Pumpkin_80, Qualification_78, Rakim_78, Rimmer_78, RiverMonster_77, Ronaldo_98, Rose5_66, Saints25_76, Sassay_72, ShamWow_77, Simpliphy_76, SirDuracell_76, SophKB_74, Sotrice96_78, Spooky_68, Squiddly_73, Stank_80, Stark_78, StellaBean_75, StolenFromERC_80, StormChicken_79, TBrady12_80, Tarkin_76, TeamEdward_79, TeardropMSU_73, Teaspoon_78, Terminus_80, Thibault_106, Thimble_78, Thresher_79, Tomaszewski_72, Toto_75, Traaww1_73, Tuco_78, Tyson_67, Ukulele_72, Volt_99, Wamburgrxpress_66, Wiggin_79, Willez_72, Wyatt2_67, Xandras_76, YassJohnny_74, Youngblood_80, xkcd_80,

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

-

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

- AWGoat_61, Alexphander_69, AlpineSix_71, Appa_41, Archie_67, ArcusAngelus_67, Ardmore_57, Aubs_65, Avani_73, Azrael100_76, Batiatus_63, Beagle_86, Beakin_66, Bellis_66, BetaFish_84, BigPhil_62, Blarby_78, Blexus_63, BlueCrab_66, BobaPhett_69, Bobi_69, Boomer_70, BourbonZero_66, Brocalys_60, Brookers_63, BruhMoment_74, Brushbloom_67, Burwell21_63, BuzzLyseyear_71, ByChance_58, Byougenkin_65, Cabrinians_66, CaptainTrips_63, Catfish_49, Cerasum_62, Che8_70, Che9d_75, CheesePuff_74, Chevrolet_70, Chuckly_68, Cinna_52, Clautastrophe_65, Clifton_60, Coco12_65, Colossa_116, Cornie_63, Cornucopia_67, Cosmo_77, Cressida_55, Crumble_60, DRBy19_69, DaWorst_65, Daenerys_60, Dardanus_46, Demsculpinboyz_78, DillTech15_63, DoRead_69, DogYard_84, DosHalletts_67, Doug_67, Dropshot_41, DuncansLeg_66, Eish_68, EleanorGeorge_67, Emma_67, EniyanLRS_168, Eradicator_58, Estave1_70, Fancypants_68, Fastidio_66, Finnry_66, Firehouse51_68, Forrestell_84, FreddyB_66, GUmbie_63, Galactic_64, GigiOuiOui_61, Girr_63, Gorge_69, Grimmer_75, Guppsters_66, Guzman_41, Hades_66, Hamulus_65, Harley_67, HokkenD_113, Ibhubesi_65, Inventum_61, Jabbawokkie_80, JalFarm20_78, James_69, Jant_69, Jinglebell_71, Jobypre_66, JoeyJr_61, Jubie_65, Juice456_66, Juniper1_65, Karhdo_64, Keelan_96, Kenuha5_63, Kersh_67, Kimberlium_70, Kingsley_63, Koella_59, Kozie_51, KristaRAM_68, Krypton555_67, Kubulix_84, Kumao_62, LastJedi_59, Leozinho_64, Leozinho_66, Leperchaun_58, LilMoolah_64, LittleShirley_65, Lizziana_71, Llama_70, Lolly9_65, Losacky_42, Lucky2013_115, Lumos_67, LunaBlu_67, MadMen_65, MadMen_67, Madiba_66, Mahavrat_62, Mantra_62, Maravista_67, Marker_67, Martik_65, MaryV_77, Mattes_69, Matzah_54, MellowYellow_85, MementoMori_53, MilleniumForce_68, MiniLon_69, MiniMac_69, MinionDave_64, Minnie_68, MisterCuddles_63, Modragons_69, Moonbeam_64, Mova_69, Mozy_75, MsGreen_66, MulchExplorer_69, Mutaforma13_71, Nikan_82, Nivrat_62, NormanBulbieJr_65, NyleyClemson_83, Ochi17_69, Octobien14_72, Odyssey395_85, OfUltron_71, Ogopogo_71, Ollypop_80, OlympiaSaint_67, OwlsT2W_65, PHappiness_61, PMC_62, Pacc40_59, PhesterPotato_65, PhillyJawn_42, Philus_69, PhlipPhlop_65, PhuzzTulsa_82, Pickles13_40, Pippy_64, Pointis_81, Polka14_64, Pollywog_66, Priscilla_65, Pureglobe5_83, QuickMath_69,

RIPWilbur_83, Rabbitrun_72, Radiance_64, Ramsey_64, Ranunculus_78, RazzB_84, Red305_66, Ren19_78, Renaud18_75, RitaG_61, Rita_66, Rizwana_65, Rockne_66, RockyHorror_66, RomansRevenge_72, Royals2015_68, Ruby_61, Saal_67, Samty_66, Sandalphon_66, Sarma624_64, Seabastian_71, Sephiroth_73, ShiLan_64, ShowerHandel_68, SiSi_63, SilentRX_62, Snenia_65, Soul22_71, Spartan_53, Spikelee_72, Spoonbill_63, Starcevich_65, Stellammi_92, SuperGrey_69, SwagPigglett_70, Syleon_75, TDanisky_72, Tank_65, Tchotchke_64, Terij_52, ThetaBob_73, Topiatin_72, Trax_71, TriFive_67, Tweety_65, VRedHorse_65, VanLee_116, Velveteen_61, Violac_66, Vivum_66, Wachhund_66, Weirdo19_91, Whirlwind_66, Whouxphf_62, Wildcat_77, Wilde_67, Winchester007_57, XFactor_63, Yorick_64, Yoshi_81, Zapner_79, Zerg_65, Zizzle_69,

Summary by start number:

Start 37:

- Found in 14 of 421 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 390
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Sephiroth_73 (DU1), Syleon_75 (DU1),

Start 41:

- Found in 1 of 421 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Weirdo19_91 (AH),

Start 44:

- Found in 2 of 421 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lucky2013_115 (J),

Start 49:

- Found in 3 of 421 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 33.3% of time when present
- Phage (with cluster) where this start called: HokkenD_113 (J),

Start 50:

- Found in 5 of 421 (1.2%) of genes in pham
- Manual Annotations of this start: 5 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_76 (V), Cosmo_77 (V), EniyanLRS_168 (V), MaryV_77 (V), Wildcat_77 (V),

Start 51:

- Found in 1 of 421 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_62 (singleton),

Start 52:

- Found in 1 of 421 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spartan_53 (ES),

Start 57:

- Found in 1 of 421 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Octobien14_72 (DU1),

Start 58:

- Found in 5 of 421 (1.2%) of genes in pham
- Manual Annotations of this start: 4 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blarby_78 (F), Fastidio_66 (F1), Jabbawokkie_80 (F2), Mantra_62 (F1), Zapner_79 (F2),

Start 59:

- Found in 6 of 421 (1.4%) of genes in pham
- Manual Annotations of this start: 5 of 390
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Cinna_52 (EI), Cressida_55 (EI), Matzah_54 (EI), MementoMori_53 (EI), Terij_52 (EI),

Start 60:

- Found in 157 of 421 (37.3%) of genes in pham
- Manual Annotations of this start: 151 of 390
- Called 99.4% of time when present
- Phage (with cluster) where this start called: Alexphander_69 (F1), AlpineSix_71 (F1), ArcusAngelus_67 (F1), Ardmore_57 (F1), Aubs_65 (F1), Avani_73 (F2), Batiatus_63 (F1), Beakin_66 (F1), BigPhil_62 (F1), Blexus_63 (F1), BlueCrab_66 (F1), BobaPhett_69 (F1), Bobi_69 (F1), Boomer_70 (F1), Brocalys_60 (F1), Brookers_63 (F1), Brushbloom_67 (F1), Burwell21_63 (F1), BuzzLyseyear_71 (F1), ByChance_58 (F1), Byougenkin_65 (F1), Cabrinians_66 (F1), CaptainTrips_63 (F1), Cerasum_62 (F1), Che8_70 (F1), Che9d_75 (F2), CheesePuff_74 (F1), Chevrolet_70 (F1), Chuckly_68 (F1), Clifton_60 (F1), Coco12_65 (F1), Cornie_63 (F5), Cornucopia_67 (F1), Crumble_60 (F1), DRBy19_69 (F1), DaWorst_65 (F1), Daenerys_60 (F1), Demsculpinboyz_78 (F2), DillTech15_63 (F1), DoRead_69 (F1), DosHalletts_67 (F1), Doug_67 (F1), Eish_68 (F1), EleanorGeorge_67 (F1), Emma_67 (F1), Eradicator_58 (F1), Estave1_70 (F1), FancyPants_68 (F1), Firehouse51_68 (F1), FreddyB_66 (F1), GUmBie_63 (F1), Galactic_64 (F1), GigiOuiOui_61 (F1), Girr_63 (F1), Gorge_69 (F1), Grimmer_75 (F1), Guppsters_66 (F1), Hades_66 (F1), Hamulus_65 (F1), Harley_67 (F1), Ibhuesi_65 (F1), JalFarm20_78 (F1), James_69 (F1), Jant_69 (F1), Jinglebell_71 (F1), JoeyJr_61 (F1), Juice456_66 (F1), Juniper1_65 (F1), Karhdo_64 (F1), Kenuha5_63 (F1), Kersh_67 (F1), Kimberlium_70 (F1), Kingsley_63 (F1), Koella_59 (F1), KristaRAM_68 (F1), LastJedi_59 (F1), Leozinho_64 (F1), Leperchaun_58 (F1), LilMoolah_64 (F1), LittleShirley_65 (F1), Lizziana_71 (F1), Llama_70 (F1), LunaBlu_67 (F1), MadMen_65 (F1), Madiba_66 (F1), Mahavrat_62 (F1), Maravista_67 (F1), Marker_67 (F1), Martik_65 (F1), Mattes_69 (F1), MilleniumForce_68 (F1), MinionDave_64 (F1), Minnie_68 (F1), MisterCuddles_63 (F1), Modragons_69 (F1), Moonbeam_64 (F1), Mova_69 (F1), Mozy_75 (F1), MulchExplorer_69 (F1), Mutaforma13_71 (F1), Nivrat_62 (F1), NormanBulbieJr_65

(F1), Ochi17_69 (F1), OfUltron_71 (F1), Ogotogo_71 (F1), OlympiaSaint_67 (F1), OwlsT2W_65 (F1), PHappiness_61 (F1), PMC_62 (F1), Pacc40_59 (F1), PhesterPhotato_65 (F1), Philus_69 (F1), PhilipPhlop_65 (F1), Pippy_64 (F1), Polka14_64 (F1), Pollywog_66 (F1), Priscilla_65 (F1), QuickMath_69 (F1), Radiance_64 (F1), Ramsey_64 (F1), Renaud18_75 (F4), RitaG_61 (F1), Rita_66 (F1), Rockne_66 (F1), RockyHorror_66 (F1), Royals2015_68 (F1), Ruby_61 (F1), Saal_67 (F1), Sandalphon_66 (F1), Sarma624_64 (F1), Seabastian_71 (F1), ShiLan_64 (F1), ShowerHandel_68 (F1), SiSi_63 (F1), Soul22_71 (F2), Spikelee_72 (F1), Spoonbill_63 (F1), Starceвич_65 (F1), SuperGrey_69 (F1), SwagPiggett_70 (F1), TDanisky_72 (F1), Tchotchke_64 (F1), ThetaBob_73 (F4), Topiatin_72 (F1), Tweety_65 (F1), VRedHorse_65 (F1), Velveteen_61 (F1), Violac_66 (F1), Vivum_66 (F1), Wachhund_66 (F1), Whouxphf_62 (F1), XFactor_63 (F1), Yorick_64 (F1), Yoshi_81 (F2), Zerg_65 (F1), Zizzle_69 (F1),

Start 61:

- Found in 5 of 421 (1.2%) of genes in pham
- Manual Annotations of this start: 5 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dardanus_46 (CU3), Kozie_51 (EI), Rabbitrun_72 (DU2), Stellammi_92 (UNK), Trax_71 (DU2),

Start 62:

- Found in 9 of 421 (2.1%) of genes in pham
- Manual Annotations of this start: 5 of 390
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Appa_41 (GA), Dropshot_41 (GA), Guzman_41 (GA), Keelan_96 (DP), Losacky_42 (GA), PhillyJawn_42 (GA), Pickles13_40 (GA), Winchester007_57 (GA),

Start 63:

- Found in 1 of 421 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish_49 (CU5),

Start 64:

- Found in 2 of 421 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Leozinho_66 (F1), MadMen_67 (F1),

Start 65:

- Found in 1 of 421 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_74 (AP3),

Start 66:

- Found in 20 of 421 (4.8%) of genes in pham
- Manual Annotations of this start: 17 of 390
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Archie_67 (L2), Bellis_66 (L3), BourbonZero_66 (L3), Clautastrophe_65 (L3), DuncansLeg_66 (L3), Finnry_66 (L3),

Jobypre_66 (L3), Jubie_65 (L3), Krypton555_67 (L3), Lolly9_65 (L3), Lumos_67 (L3), MiniLon_69 (L3), MsGreen_66 (L3), Red305_66 (L3), RomansRevenge_72 (FT), Samty_66 (L3), Snenia_65 (L3), TriFive_67 (L3), Whirlwind_66 (L3),

Start 67:

- Found in 21 of 421 (5.0%) of genes in pham
- Manual Annotations of this start: 17 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_61 (AP4), Beagle_86 (AP2), BetaFish_84 (AP2), Forrestell_84 (AP2), Kubulix_84 (AP2), MellowYellow_85 (AP2), Nikan_82 (AP2), NyleyClemson_83 (AP2), Odyssey395_85 (AP2), Ollypop_80 (AP2), PhuzzTulsa_82 (AP2), Pointis_81 (AP2), Pureglobe5_83 (AP2), RIPWilbur_83 (AP2), Ranunculus_78 (AP), RazzB_84 (AP2), Ren19_78 (AP2), Rizwana_65 (AP1), SilentRX_62 (AP4), Tank_65 (AP1), Wilde_67 (AP1),

Start 68:

- Found in 2 of 421 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_116 (KA), VanLee_116 (KA),

Start 69:

- Found in 180 of 421 (42.8%) of genes in pham
- Manual Annotations of this start: 166 of 390
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_78 (E), ABCat_74 (E), Adnama_81 (E), Aegeus_71 (L5), Amao_77 (E), AmericanBeauty_81 (E), Argent26_81 (E), Asriel_76 (E), AvadaKedavra_66 (L1), BaboJay_74 (E), BadStone_74 (E), Balomoji_77 (E), Barbarian_76 (E), Bask21_77 (E), Baudelaire_71 (L5), Becksu_76 (E), Beem_125 (J), Bench_80 (E), BigBubba_77 (E), BilboSwaggins_75 (E), Bogg_77 (E), Brewer_73 (E), BritBrat_66 (CY2), Bruin_74 (E), Buck_78 (E), Budgie_83 (E), BugsBunny_77 (E), Cactus_80 (E), CheeseTouch_74 (DN1), ChosenOne_77 (E), ChotaBhai_77 (E), Cjw1_77 (E), Command613_79 (E), Constella_107 (J), Contagion_73 (E), Cookies_74 (E), CrystalP_76 (E), Czyszczonek_78 (E), Daikon_79 (E), Dallas_124 (J), DoctorDiddles_76 (E), Dove_109 (J), DrDrey_77 (E), Dulcita_67 (M1), Dumbo_77 (E), Dusk_74 (E), Easy2Say_78 (E), Ecliptus_75 (DN), Elite2014_76 (E), Elph10_77 (E), Emmina_77 (E), Eureka_75 (E), FairyPath_78 (E), Filch_78 (E), FireRed_81 (E), Flypotenuse_73 (E), FoghornLeghorn_71 (E), FreakyGoo_67 (M1), Fryberger_95 (DP), Gage_79 (E), Gator_75 (E), Gemini_82 (E), Glaske16_67 (M1), Glexan_76 (E), Goku_75 (E), GoldenSpark_81 (E), Goldilocks_80 (E), GooberAzure_80 (E), Greep_81 (E), Guey18_100 (DP), HanKaySha_77 (E), Harella_77 (E), Henry_75 (E), Highbury_76 (E), Holt_82 (E), Hoonter_80 (E), Hopey_77 (E), Horus_72 (DN1), HuffyPuff_80 (E), IHOP_75 (E), Icee_78 (E), Inca_74 (E), Izel_67 (M1), JeTaime_77 (E), JuicyJay_120 (J), Kanye_74 (E), Kimchi_81 (E), Kostya_77 (E), Kuwabara_72 (DN4), Lilac_79 (E), Lilizi_78 (E), Lilpickle_76 (E), LitninMcQueen_71 (DN1), Liveloughbron_79 (E), MISSy_78 (E), MPhalcon_78 (E), MadamMonkfish_77 (E), Manda_78 (E), Marshmallow_75 (E), Maxxinista_79 (E), MiaZeal_118 (J), Mindy_76 (E), Miniwave_72 (E), Misfit_78 (E), Moldemort_80 (E), MollyToe_72 (E), MortyNRick_70 (DN), Mosby_73 (E), MrMagoo_76 (M2), Murica_80 (E), Murphy_77 (E), Myrale_77 (E), Nala_79 (E), NelitzaMV_75 (E), NihilNomen_125 (J), Nimrod_78 (E), NoSleep_78 (E), NonchalantPear_77 (E), ODay_78 (DN), OrionPax_76 (E), PaddyBaddy_77 (E), Palpatine_79 (E), Paperbeatsrock_76 (E), Pat3_75 (E), Petra64142_81 (E), Phaja_75

(E), PhaoMing_57 (UNK), Pharsalus_74 (E), PhatBacter_81 (E), Phaux_79 (E), Phoebus_124 (J), Phrux_74 (E), Policronamos_80 (E), Porky_76 (E), Ptowny_74 (E), Pumpkin_80 (E), Quallification_78 (E), Rakim_78 (E), Rimmer_78 (E), RiverMonster_77 (E), Ronaldo_98 (DP), Rose5_66 (L1), Saints25_76 (E), Sassay_72 (E), ShamWow_77 (E), Simpliphy_76 (E), SirDuracell_76 (E), SophKB_74 (E), Sotrice96_78 (E), Spooky_68 (DN2), Squiddly_73 (DN2), Stank_80 (E), Stark_78 (E), StellaBean_75 (E), StolenFromERC_80 (E), StormChicken_79 (E), TBrady12_80 (E), Tarkin_76 (E), TeamEdward_79 (E), TeardropMSU_73 (E), Teaspoon_78 (E), Terminus_80 (E), Thibault_106 (J), Thimble_78 (E), Thresher_79 (E), Tomaszewski_72 (E), Toto_75 (E), Traaww1_73 (E), Tuco_78 (E), Tyson_67 (L1), Ukulele_72 (E), Volt_99 (DP), Wamburggrxpress_66 (L1), Wiggin_79 (E), Willez_72 (E), Wyatt2_67 (L1), Xandras_76 (E), YassJohnny_74 (E), Youngblood_80 (E), xkcd_80 (E),

Start 72:

- Found in 16 of 421 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 390
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Inventum_61 (F1),

Start 74:

- Found in 39 of 421 (9.3%) of genes in pham
- Manual Annotations of this start: 2 of 390
- Called 5.1% of time when present
- Phage (with cluster) where this start called: DogYard_84 (AP2), MiniMac_69 (L3),

Summary by clusters:

There are 37 clusters represented in this pham: DN, singleton, FT, AP2, AP3, AP1, AP4, M1, M2, EI, DP, CU5, CU3, DN4, DN1, DN2, DU1, DU2, CY2, V, E, F, AH, J, F2, AP, L5, L2, L3, GA, L1, UNK, ES, F1, KA, F4, F5,

Info for manual annotations of cluster AP:

- Start number 67 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 67 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 67 was manually annotated 11 times for cluster AP2.
- Start number 74 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 65 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 67 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster CU3:

- Start number 61 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU5:

- Start number 63 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CY2:

- Start number 69 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DN:

- Start number 69 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 69 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 69 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN4:

- Start number 69 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 62 was manually annotated 1 time for cluster DP.
- Start number 69 was manually annotated 4 times for cluster DP.

Info for manual annotations of cluster DU1:

- Start number 37 was manually annotated 2 times for cluster DU1.
- Start number 57 was manually annotated 1 time for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 61 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster E:

- Start number 69 was manually annotated 131 times for cluster E.

Info for manual annotations of cluster EI:

- Start number 59 was manually annotated 5 times for cluster EI.
- Start number 61 was manually annotated 1 time for cluster EI.

Info for manual annotations of cluster F1:

- Start number 58 was manually annotated 2 times for cluster F1.
- Start number 60 was manually annotated 143 times for cluster F1.
- Start number 64 was manually annotated 2 times for cluster F1.
- Start number 72 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 58 was manually annotated 2 times for cluster F2.
- Start number 60 was manually annotated 5 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 60 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 60 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FT:

- Start number 66 was manually annotated 1 time for cluster FT.

Info for manual annotations of cluster GA:

- Start number 62 was manually annotated 4 times for cluster GA.

Info for manual annotations of cluster J:

- Start number 44 was manually annotated 1 time for cluster J.
- Start number 49 was manually annotated 1 time for cluster J.
- Start number 69 was manually annotated 9 times for cluster J.

Info for manual annotations of cluster KA:

- Start number 68 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster L1:

- Start number 69 was manually annotated 5 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 66 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 66 was manually annotated 15 times for cluster L3.
- Start number 74 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L5:

- Start number 69 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 69 was manually annotated 4 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 69 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster UNK:

- Start number 61 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster V:

- Start number 50 was manually annotated 5 times for cluster V.

Gene Information:

Gene: 244_78 Start: 48609, Stop: 48926, Start Num: 69

Candidate Starts for 244_78:

(21, 48426), (Start: 69 @48609 has 166 MA's), (96, 48750),

Gene: ABCat_74 Start: 48962, Stop: 49279, Start Num: 69

Candidate Starts for ABCat_74:

(21, 48779), (Start: 69 @48962 has 166 MA's), (96, 49103),

Gene: AWGoat_61 Start: 44482, Stop: 44168, Start Num: 67

Candidate Starts for AWGoat_61:

(Start: 67 @44482 has 17 MA's), (95, 44356), (129, 44224), (133, 44215),

Gene: Adnama_81 Start: 48988, Stop: 49305, Start Num: 69

Candidate Starts for Adnama_81:

(21, 48805), (Start: 69 @48988 has 166 MA's), (96, 49129),

Gene: Aegeus_71 Start: 46495, Stop: 46824, Start Num: 69

Candidate Starts for Aegeus_71:

(Start: 69 @46495 has 166 MA's), (86, 46579), (114, 46717), (123, 46744), (125, 46750), (131, 46774), (144, 46813),

Gene: Alexphander_69 Start: 42282, Stop: 42644, Start Num: 60

Candidate Starts for Alexphander_69:

(Start: 60 @42282 has 151 MA's), (132, 42582), (147, 42627),

Gene: AlpineSix_71 Start: 45319, Stop: 45681, Start Num: 60

Candidate Starts for AlpineSix_71:

(Start: 60 @45319 has 151 MA's), (106, 45523), (132, 45619), (147, 45664),

Gene: Amao_77 Start: 48382, Stop: 48699, Start Num: 69

Candidate Starts for Amao_77:

(21, 48199), (Start: 69 @48382 has 166 MA's), (Start: 74 @48406 has 2 MA's), (96, 48523),

Gene: AmericanBeauty_81 Start: 49131, Stop: 49448, Start Num: 69

Candidate Starts for AmericanBeauty_81:

(21, 48948), (Start: 69 @49131 has 166 MA's), (96, 49272),

Gene: Appa_41 Start: 25620, Stop: 25997, Start Num: 62

Candidate Starts for Appa_41:

(Start: 62 @25620 has 5 MA's), (77, 25683), (123, 25884), (125, 25890), (131, 25911), (152, 25986),

Gene: Archie_67 Start: 46551, Stop: 46892, Start Num: 66

Candidate Starts for Archie_67:

(Start: 66 @46551 has 17 MA's), (95, 46698),

Gene: ArcusAngelus_67 Start: 42632, Stop: 42994, Start Num: 60

Candidate Starts for ArcusAngelus_67:

(Start: 60 @42632 has 151 MA's), (95, 42791), (132, 42932), (134, 42935), (147, 42977),

Gene: Ardmore_57 Start: 40049, Stop: 40405, Start Num: 60

Candidate Starts for Ardmore_57:

(Start: 60 @40049 has 151 MA's), (132, 40349), (134, 40352),

Gene: Argent26_81 Start: 48769, Stop: 49086, Start Num: 69

Candidate Starts for Argent26_81:

(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: Asriel_76 Start: 47325, Stop: 47642, Start Num: 69

Candidate Starts for Asriel_76:

(21, 47142), (Start: 69 @47325 has 166 MA's), (96, 47466),

Gene: Aubs_65 Start: 42690, Stop: 43052, Start Num: 60

Candidate Starts for Aubs_65:

(26, 42573), (Start: 60 @42690 has 151 MA's), (95, 42849), (132, 42990), (147, 43035),

Gene: AvadaKedavra_66 Start: 45153, Stop: 45521, Start Num: 69

Candidate Starts for AvadaKedavra_66:

(Start: 69 @45153 has 166 MA's), (75, 45180), (87, 45249), (91, 45270), (96, 45294), (114, 45375), (135, 45438), (153, 45513),

Gene: Avani_73 Start: 42666, Stop: 43022, Start Num: 60

Candidate Starts for Avani_73:

(Start: 60 @42666 has 151 MA's), (132, 42966), (134, 42969),

Gene: Azrael100_76 Start: 48787, Stop: 49152, Start Num: 50

Candidate Starts for Azrael100_76:

(35, 48724), (Start: 50 @48787 has 5 MA's), (102, 48979), (133, 49099), (142, 49132),

Gene: BaboJay_74 Start: 48162, Stop: 48479, Start Num: 69

Candidate Starts for BaboJay_74:

(21, 47979), (Start: 69 @48162 has 166 MA's), (96, 48303),

Gene: BadStone_74 Start: 48531, Stop: 48848, Start Num: 69

Candidate Starts for BadStone_74:

(21, 48348), (Start: 69 @48531 has 166 MA's), (96, 48672),

Gene: Balomoji_77 Start: 49092, Stop: 49409, Start Num: 69

Candidate Starts for Balomoji_77:

(21, 48909), (Start: 69 @49092 has 166 MA's), (96, 49233),

Gene: Barbarian_76 Start: 47325, Stop: 47642, Start Num: 69

Candidate Starts for Barbarian_76:

(21, 47142), (Start: 69 @47325 has 166 MA's), (96, 47466),

Gene: Bask21_77 Start: 47945, Stop: 48262, Start Num: 69

Candidate Starts for Bask21_77:

(21, 47762), (Start: 69 @47945 has 166 MA's), (Start: 74 @47969 has 2 MA's), (96, 48086),

Gene: Batiatus_63 Start: 41925, Stop: 42281, Start Num: 60

Candidate Starts for Batiatus_63:

(Start: 60 @41925 has 151 MA's), (132, 42225), (134, 42228),

Gene: Baudelaire_71 Start: 46495, Stop: 46824, Start Num: 69

Candidate Starts for Baudelaire_71:

(Start: 69 @46495 has 166 MA's), (86, 46579), (114, 46717), (123, 46744), (125, 46750), (131, 46774), (144, 46813),

Gene: Beagle_86 Start: 50592, Stop: 50260, Start Num: 67

Candidate Starts for Beagle_86:

(Start: 67 @50592 has 17 MA's), (75, 50559), (98, 50442), (106, 50412), (109, 50397), (112, 50382), (124, 50340), (125, 50334), (129, 50322), (133, 50313), (140, 50289),

Gene: Beakin_66 Start: 41229, Stop: 41591, Start Num: 60

Candidate Starts for Beakin_66:

(Start: 60 @41229 has 151 MA's), (95, 41388), (132, 41529), (134, 41532), (147, 41574),

Gene: Becksu_76 Start: 49161, Stop: 49478, Start Num: 69
Candidate Starts for Becksu_76:
(21, 48978), (Start: 69 @49161 has 166 MA's), (96, 49302),

Gene: Beem_125 Start: 69590, Stop: 69922, Start Num: 69
Candidate Starts for Beem_125:
(Start: 69 @69590 has 166 MA's), (90, 69701), (93, 69725), (144, 69905),

Gene: Bellis_66 Start: 46470, Stop: 46802, Start Num: 66
Candidate Starts for Bellis_66:
(13, 46194), (14, 46206), (15, 46215), (17, 46239), (23, 46317), (33, 46365), (Start: 66 @46470 has 17 MA's), (95, 46614), (114, 46698), (125, 46731),

Gene: Bench_80 Start: 48629, Stop: 48946, Start Num: 69
Candidate Starts for Bench_80:
(21, 48446), (Start: 69 @48629 has 166 MA's), (96, 48770),

Gene: BetaFish_84 Start: 50810, Stop: 50484, Start Num: 67
Candidate Starts for BetaFish_84:
(Start: 67 @50810 has 17 MA's), (Start: 74 @50780 has 2 MA's), (75, 50777), (87, 50711), (101, 50666), (106, 50642), (115, 50588), (129, 50552), (146, 50501),

Gene: BigBubba_77 Start: 48341, Stop: 48658, Start Num: 69
Candidate Starts for BigBubba_77:
(21, 48158), (Start: 69 @48341 has 166 MA's), (96, 48482),

Gene: BigPhil_62 Start: 39148, Stop: 39510, Start Num: 60
Candidate Starts for BigPhil_62:
(Start: 60 @39148 has 151 MA's), (95, 39307), (106, 39352), (132, 39448), (134, 39451), (147, 39493),

Gene: BilboSwaggins_75 Start: 48970, Stop: 49287, Start Num: 69
Candidate Starts for BilboSwaggins_75:
(21, 48787), (Start: 69 @48970 has 166 MA's), (96, 49111),

Gene: Blarby_78 Start: 44162, Stop: 44503, Start Num: 58
Candidate Starts for Blarby_78:
(46, 44147), (Start: 58 @44162 has 4 MA's), (132, 44462), (134, 44465),

Gene: Blexus_63 Start: 42819, Stop: 43181, Start Num: 60
Candidate Starts for Blexus_63:
(Start: 60 @42819 has 151 MA's), (95, 42978), (132, 43119), (147, 43164),

Gene: BlueCrab_66 Start: 43528, Stop: 43884, Start Num: 60
Candidate Starts for BlueCrab_66:
(Start: 60 @43528 has 151 MA's), (99, 43702), (132, 43828),

Gene: BobaPhett_69 Start: 45114, Stop: 45476, Start Num: 60
Candidate Starts for BobaPhett_69:
(Start: 60 @45114 has 151 MA's), (95, 45273), (99, 45288), (132, 45414), (147, 45459),

Gene: Bobi_69 Start: 43528, Stop: 43884, Start Num: 60
Candidate Starts for Bobi_69:
(Start: 60 @43528 has 151 MA's), (132, 43828), (134, 43831),

Gene: Bogg_77 Start: 47908, Stop: 48225, Start Num: 69

Candidate Starts for Bogg_77:

(21, 47725), (Start: 69 @47908 has 166 MA's), (96, 48049),

Gene: Boomer_70 Start: 44186, Stop: 44542, Start Num: 60

Candidate Starts for Boomer_70:

(Start: 60 @44186 has 151 MA's), (132, 44486), (134, 44489),

Gene: BourbonZero_66 Start: 46515, Stop: 46847, Start Num: 66

Candidate Starts for BourbonZero_66:

(33, 46410), (Start: 66 @46515 has 17 MA's), (91, 46638), (97, 46665), (114, 46743), (127, 46779),
(140, 46824),

Gene: Brewer_73 Start: 47431, Stop: 47748, Start Num: 69

Candidate Starts for Brewer_73:

(21, 47248), (Start: 69 @47431 has 166 MA's), (96, 47572),

Gene: BritBrat_66 Start: 43849, Stop: 44178, Start Num: 69

Candidate Starts for BritBrat_66:

(32, 43735), (56, 43825), (Start: 69 @43849 has 166 MA's), (91, 43963), (95, 43984), (114, 44068),
(122, 44092), (145, 44158), (148, 44170),

Gene: Brocalys_60 Start: 39296, Stop: 39658, Start Num: 60

Candidate Starts for Brocalys_60:

(26, 39179), (Start: 60 @39296 has 151 MA's), (95, 39455), (132, 39596), (147, 39641),

Gene: Brookers_63 Start: 42099, Stop: 42461, Start Num: 60

Candidate Starts for Brookers_63:

(Start: 60 @42099 has 151 MA's), (95, 42258), (106, 42303), (132, 42399), (134, 42402), (147, 42444),

Gene: BruhMoment_74 Start: 49610, Stop: 49293, Start Num: 65

Candidate Starts for BruhMoment_74:

(Start: 65 @49610 has 1 MA's), (87, 49508), (98, 49469), (129, 49349),

Gene: Bruin_74 Start: 47505, Stop: 47822, Start Num: 69

Candidate Starts for Bruin_74:

(21, 47322), (Start: 69 @47505 has 166 MA's), (96, 47646),

Gene: Brushbloom_67 Start: 42857, Stop: 43213, Start Num: 60

Candidate Starts for Brushbloom_67:

(Start: 60 @42857 has 151 MA's), (132, 43157), (134, 43160),

Gene: Buck_78 Start: 49210, Stop: 49527, Start Num: 69

Candidate Starts for Buck_78:

(21, 49027), (Start: 69 @49210 has 166 MA's), (96, 49351),

Gene: Budgie_83 Start: 49000, Stop: 49317, Start Num: 69

Candidate Starts for Budgie_83:

(1, 48439), (2, 48445), (3, 48532), (21, 48817), (Start: 69 @49000 has 166 MA's), (Start: 74 @49024
has 2 MA's), (96, 49141),

Gene: BugsBunny_77 Start: 49037, Stop: 49354, Start Num: 69

Candidate Starts for BugsBunny_77:

(21, 48854), (Start: 69 @49037 has 166 MA's), (96, 49178),

Gene: Burwell21_63 Start: 42397, Stop: 42759, Start Num: 60

Candidate Starts for Burwell21_63:

(26, 42280), (Start: 60 @42397 has 151 MA's), (95, 42556), (132, 42697), (147, 42742),

Gene: BuzzLyseyear_71 Start: 43599, Stop: 43961, Start Num: 60

Candidate Starts for BuzzLyseyear_71:

(Start: 60 @43599 has 151 MA's), (95, 43758), (132, 43899), (134, 43902), (147, 43944),

Gene: ByChance_58 Start: 38456, Stop: 38818, Start Num: 60

Candidate Starts for ByChance_58:

(Start: 60 @38456 has 151 MA's), (95, 38615), (99, 38630), (132, 38756), (147, 38801),

Gene: Byougenkin_65 Start: 42188, Stop: 42544, Start Num: 60

Candidate Starts for Byougenkin_65:

(Start: 60 @42188 has 151 MA's), (132, 42488), (134, 42491),

Gene: Cabrinians_66 Start: 42475, Stop: 42837, Start Num: 60

Candidate Starts for Cabrinians_66:

(Start: 60 @42475 has 151 MA's), (99, 42649), (132, 42775), (147, 42820),

Gene: Cactus_80 Start: 47986, Stop: 48303, Start Num: 69

Candidate Starts for Cactus_80:

(21, 47803), (Start: 69 @47986 has 166 MA's), (96, 48127),

Gene: CaptainTrips_63 Start: 42210, Stop: 42572, Start Num: 60

Candidate Starts for CaptainTrips_63:

(26, 42093), (Start: 60 @42210 has 151 MA's), (95, 42369), (132, 42510), (147, 42555),

Gene: Catfish_49 Start: 34051, Stop: 34401, Start Num: 63

Candidate Starts for Catfish_49:

(Start: 63 @34051 has 1 MA's), (73, 34084), (89, 34174), (94, 34198), (124, 34324), (143, 34384),

Gene: Cerasum_62 Start: 39166, Stop: 39528, Start Num: 60

Candidate Starts for Cerasum_62:

(Start: 60 @39166 has 151 MA's), (95, 39325), (106, 39370), (132, 39466), (134, 39469), (147, 39511),

Gene: Che8_70 Start: 45095, Stop: 45457, Start Num: 60

Candidate Starts for Che8_70:

(Start: 60 @45095 has 151 MA's), (95, 45254), (132, 45395), (134, 45398), (147, 45440),

Gene: Che9d_75 Start: 42864, Stop: 43220, Start Num: 60

Candidate Starts for Che9d_75:

(Start: 60 @42864 has 151 MA's), (95, 43023), (132, 43164), (134, 43167),

Gene: CheeseTouch_74 Start: 39429, Stop: 39758, Start Num: 69

Candidate Starts for CheeseTouch_74:

(Start: 69 @39429 has 166 MA's), (91, 39543), (95, 39564), (114, 39648), (122, 39672), (135, 39711), (145, 39738), (148, 39750),

Gene: CheesePuff_74 Start: 44480, Stop: 44842, Start Num: 60

Candidate Starts for Cheesepuff_74:

(Start: 60 @44480 has 151 MA's), (95, 44639), (132, 44780), (147, 44825),

Gene: Chevrolet_70 Start: 42633, Stop: 42995, Start Num: 60

Candidate Starts for Chevrolet_70:

(Start: 60 @42633 has 151 MA's), (132, 42933), (134, 42936), (147, 42978),

Gene: ChosenOne_77 Start: 47986, Stop: 48303, Start Num: 69

Candidate Starts for ChosenOne_77:

(21, 47803), (Start: 69 @47986 has 166 MA's), (96, 48127),

Gene: ChotaBhai_77 Start: 48310, Stop: 48627, Start Num: 69

Candidate Starts for ChotaBhai_77:

(21, 48127), (Start: 69 @48310 has 166 MA's), (Start: 74 @48334 has 2 MA's), (96, 48451),

Gene: Chuckly_68 Start: 42655, Stop: 43011, Start Num: 60

Candidate Starts for Chuckly_68:

(Start: 60 @42655 has 151 MA's), (132, 42955), (134, 42958),

Gene: Cinna_52 Start: 36948, Stop: 37283, Start Num: 59

Candidate Starts for Cinna_52:

(Start: 37 @36891 has 2 MA's), (53, 36936), (54, 36939), (Start: 59 @36948 has 5 MA's), (Start: 72 @36975 has 1 MA's), (91, 37083), (108, 37158), (114, 37188), (119, 37209), (134, 37248),

Gene: Cjw1_77 Start: 49683, Stop: 50000, Start Num: 69

Candidate Starts for Cjw1_77:

(21, 49500), (Start: 69 @49683 has 166 MA's), (96, 49824),

Gene: Clautastrophe_65 Start: 46467, Stop: 46799, Start Num: 66

Candidate Starts for Clautastrophe_65:

(13, 46191), (14, 46203), (15, 46212), (17, 46236), (23, 46314), (33, 46362), (Start: 66 @46467 has 17 MA's), (95, 46611), (114, 46695), (125, 46728),

Gene: Clifton_60 Start: 39647, Stop: 40009, Start Num: 60

Candidate Starts for Clifton_60:

(26, 39530), (Start: 60 @39647 has 151 MA's), (95, 39806), (132, 39947), (147, 39992),

Gene: Coco12_65 Start: 43223, Stop: 43585, Start Num: 60

Candidate Starts for Coco12_65:

(Start: 60 @43223 has 151 MA's), (95, 43382), (106, 43427), (132, 43523), (134, 43526), (147, 43568),

Gene: Colossa_116 Start: 60533, Stop: 60895, Start Num: 68

Candidate Starts for Colossa_116:

(Start: 68 @60533 has 2 MA's), (111, 60746), (116, 60773), (126, 60800), (130, 60824), (142, 60863),

Gene: Command613_79 Start: 49025, Stop: 49342, Start Num: 69

Candidate Starts for Command613_79:

(21, 48842), (Start: 69 @49025 has 166 MA's), (96, 49166),

Gene: Constella_107 Start: 63055, Stop: 63387, Start Num: 69

Candidate Starts for Constella_107:

(Start: 69 @63055 has 166 MA's), (90, 63166), (93, 63190), (144, 63370),

Gene: Contagion_73 Start: 47786, Stop: 48103, Start Num: 69

Candidate Starts for Contagion_73:

(21, 47603), (Start: 69 @47786 has 166 MA's), (96, 47927),

Gene: Cookies_74 Start: 48167, Stop: 48484, Start Num: 69

Candidate Starts for Cookies_74:

(21, 47984), (Start: 69 @48167 has 166 MA's), (Start: 74 @48191 has 2 MA's), (96, 48308),

Gene: Cornie_63 Start: 40942, Stop: 41304, Start Num: 60

Candidate Starts for Cornie_63:

(Start: 60 @40942 has 151 MA's), (95, 41101), (132, 41242), (147, 41287),

Gene: Cornucopia_67 Start: 42579, Stop: 42941, Start Num: 60

Candidate Starts for Cornucopia_67:

(Start: 60 @42579 has 151 MA's), (106, 42783), (132, 42879), (134, 42882), (147, 42924),

Gene: Cosmo_77 Start: 48788, Stop: 49153, Start Num: 50

Candidate Starts for Cosmo_77:

(35, 48725), (Start: 50 @48788 has 5 MA's), (102, 48980), (133, 49100), (142, 49133),

Gene: Cressida_55 Start: 36599, Stop: 36934, Start Num: 59

Candidate Starts for Cressida_55:

(5, 36272), (6, 36275), (7, 36281), (8, 36305), (10, 36314), (Start: 37 @36542 has 2 MA's), (53, 36587), (54, 36590), (Start: 59 @36599 has 5 MA's), (Start: 72 @36626 has 1 MA's), (88, 36716), (91, 36734), (108, 36809), (114, 36839), (123, 36866),

Gene: Crumble_60 Start: 38411, Stop: 38773, Start Num: 60

Candidate Starts for Crumble_60:

(Start: 60 @38411 has 151 MA's), (95, 38570), (99, 38585), (132, 38711), (147, 38756),

Gene: CrystalP_76 Start: 48970, Stop: 49287, Start Num: 69

Candidate Starts for CrystalP_76:

(21, 48787), (Start: 69 @48970 has 166 MA's), (96, 49111),

Gene: Czyszczonek1_78 Start: 48492, Stop: 48809, Start Num: 69

Candidate Starts for Czyszczonek1_78:

(21, 48309), (Start: 69 @48492 has 166 MA's), (96, 48633),

Gene: DRBy19_69 Start: 43907, Stop: 44263, Start Num: 60

Candidate Starts for DRBy19_69:

(26, 43790), (Start: 60 @43907 has 151 MA's), (99, 44081), (132, 44207), (134, 44210), (147, 44246),

Gene: DaWorst_65 Start: 42022, Stop: 42384, Start Num: 60

Candidate Starts for DaWorst_65:

(Start: 60 @42022 has 151 MA's), (95, 42181), (132, 42322), (147, 42367),

Gene: Daenerys_60 Start: 41329, Stop: 41685, Start Num: 60

Candidate Starts for Daenerys_60:

(27, 41224), (30, 41230), (40, 41284), (Start: 60 @41329 has 151 MA's), (Start: 72 @41362 has 1 MA's), (106, 41533), (132, 41629), (134, 41632),

Gene: Daikon_79 Start: 49113, Stop: 49430, Start Num: 69

Candidate Starts for Daikon_79:

(21, 48930), (Start: 69 @49113 has 166 MA's), (96, 49254),

Gene: Dallas_124 Start: 69105, Stop: 69437, Start Num: 69

Candidate Starts for Dallas_124:

(Start: 69 @69105 has 166 MA's), (90, 69216), (93, 69240), (144, 69420),

Gene: Dardanus_46 Start: 31283, Stop: 31621, Start Num: 61

Candidate Starts for Dardanus_46:

(28, 31163), (55, 31274), (Start: 61 @31283 has 5 MA's), (89, 31409), (95, 31439), (101, 31460), (141, 31610),

Gene: Demsculpinboyz_78 Start: 42611, Stop: 42973, Start Num: 60

Candidate Starts for Demsculpinboyz_78:

(Start: 60 @42611 has 151 MA's), (106, 42815), (132, 42911), (147, 42956),

Gene: DillTech15_63 Start: 40922, Stop: 41284, Start Num: 60

Candidate Starts for DillTech15_63:

(48, 40907), (Start: 60 @40922 has 151 MA's), (132, 41222), (147, 41267),

Gene: DoRead_69 Start: 42341, Stop: 42703, Start Num: 60

Candidate Starts for DoRead_69:

(34, 42263), (36, 42272), (42, 42305), (Start: 60 @42341 has 151 MA's), (147, 42686),

Gene: DoctorDiddles_76 Start: 48354, Stop: 48671, Start Num: 69

Candidate Starts for DoctorDiddles_76:

(21, 48171), (Start: 69 @48354 has 166 MA's), (Start: 74 @48378 has 2 MA's), (96, 48495),

Gene: DogYard_84 Start: 50267, Stop: 49971, Start Num: 74

Candidate Starts for DogYard_84:

(Start: 74 @50267 has 2 MA's), (75, 50264), (87, 50198), (101, 50153), (106, 50129), (115, 50075), (129, 50039), (146, 49988),

Gene: DosHalletts_67 Start: 43303, Stop: 43665, Start Num: 60

Candidate Starts for DosHalletts_67:

(Start: 60 @43303 has 151 MA's), (95, 43462), (132, 43603), (134, 43606), (147, 43648),

Gene: Doug_67 Start: 42635, Stop: 42997, Start Num: 60

Candidate Starts for Doug_67:

(Start: 60 @42635 has 151 MA's), (132, 42935), (147, 42980),

Gene: Dove_109 Start: 64018, Stop: 64350, Start Num: 69

Candidate Starts for Dove_109:

(Start: 69 @64018 has 166 MA's), (90, 64129), (93, 64153), (144, 64333),

Gene: DrDrey_77 Start: 49411, Stop: 49728, Start Num: 69

Candidate Starts for DrDrey_77:

(21, 49228), (Start: 69 @49411 has 166 MA's), (96, 49552),

Gene: Dropshot_41 Start: 25455, Stop: 25832, Start Num: 62

Candidate Starts for Dropshot_41:

(Start: 62 @25455 has 5 MA's), (77, 25518), (85, 25545), (123, 25719), (125, 25725), (131, 25746), (152, 25821),

Gene: Dulcita_67 Start: 43444, Stop: 43842, Start Num: 69
Candidate Starts for Dulcita_67:
(56, 43423), (Start: 69 @43444 has 166 MA's), (76, 43492), (86, 43528), (123, 43693),

Gene: Dumbo_77 Start: 47891, Stop: 48208, Start Num: 69
Candidate Starts for Dumbo_77:
(21, 47708), (Start: 69 @47891 has 166 MA's), (96, 48032),

Gene: DuncansLeg_66 Start: 46503, Stop: 46835, Start Num: 66
Candidate Starts for DuncansLeg_66:
(33, 46398), (47, 46464), (Start: 66 @46503 has 17 MA's), (91, 46626), (97, 46653), (114, 46731),
(127, 46767), (140, 46812),

Gene: Dusk_74 Start: 48191, Stop: 48508, Start Num: 69
Candidate Starts for Dusk_74:
(21, 48008), (Start: 69 @48191 has 166 MA's), (96, 48332),

Gene: Easy2Say_78 Start: 49435, Stop: 49752, Start Num: 69
Candidate Starts for Easy2Say_78:
(21, 49252), (Start: 69 @49435 has 166 MA's), (96, 49576),

Gene: Ecliptus_75 Start: 44750, Stop: 45079, Start Num: 69
Candidate Starts for Ecliptus_75:
(Start: 69 @44750 has 166 MA's), (91, 44864), (95, 44885), (114, 44969), (122, 44993), (135, 45032),
(145, 45059), (148, 45071),

Gene: Eish_68 Start: 42537, Stop: 42899, Start Num: 60
Candidate Starts for Eish_68:
(Start: 60 @42537 has 151 MA's), (95, 42696), (132, 42837), (134, 42840), (147, 42882),

Gene: EleanorGeorge_67 Start: 43317, Stop: 43673, Start Num: 60
Candidate Starts for EleanorGeorge_67:
(Start: 60 @43317 has 151 MA's), (95, 43476), (132, 43617), (134, 43620),

Gene: Elite2014_76 Start: 47985, Stop: 48302, Start Num: 69
Candidate Starts for Elite2014_76:
(21, 47802), (Start: 69 @47985 has 166 MA's), (96, 48126),

Gene: Elph10_77 Start: 47990, Stop: 48307, Start Num: 69
Candidate Starts for Elph10_77:
(21, 47807), (Start: 69 @47990 has 166 MA's), (96, 48131),

Gene: Emma_67 Start: 42045, Stop: 42407, Start Num: 60
Candidate Starts for Emma_67:
(Start: 60 @42045 has 151 MA's), (Start: 74 @42087 has 2 MA's), (95, 42204), (132, 42345), (147, 42390),

Gene: Emmina_77 Start: 47892, Stop: 48209, Start Num: 69
Candidate Starts for Emmina_77:
(21, 47709), (Start: 69 @47892 has 166 MA's), (96, 48033),

Gene: EniyanLRS_168 Start: 48527, Stop: 48892, Start Num: 50
Candidate Starts for EniyanLRS_168:

(35, 48464), (Start: 50 @48527 has 5 MA's), (102, 48719), (133, 48839), (142, 48872),

Gene: Eradicator_58 Start: 40449, Stop: 40811, Start Num: 60

Candidate Starts for Eradicator_58:

(Start: 60 @40449 has 151 MA's), (95, 40608), (132, 40749), (134, 40752), (147, 40794),

Gene: Estave1_70 Start: 44873, Stop: 45235, Start Num: 60

Candidate Starts for Estave1_70:

(Start: 60 @44873 has 151 MA's), (95, 45032), (99, 45047), (132, 45173), (134, 45176), (147, 45218),

Gene: Eureka_75 Start: 48456, Stop: 48773, Start Num: 69

Candidate Starts for Eureka_75:

(21, 48273), (Start: 69 @48456 has 166 MA's), (96, 48597),

Gene: FairyPath_78 Start: 49104, Stop: 49421, Start Num: 69

Candidate Starts for FairyPath_78:

(21, 48921), (Start: 69 @49104 has 166 MA's), (Start: 74 @49128 has 2 MA's), (96, 49245),

Gene: Fancypants_68 Start: 43057, Stop: 43419, Start Num: 60

Candidate Starts for Fancypants_68:

(48, 43042), (Start: 60 @43057 has 151 MA's), (95, 43216), (132, 43357), (147, 43402),

Gene: Fastidio_66 Start: 41072, Stop: 41428, Start Num: 58

Candidate Starts for Fastidio_66:

(46, 41057), (Start: 58 @41072 has 4 MA's), (95, 41231), (132, 41372), (134, 41375),

Gene: Filch_78 Start: 47917, Stop: 48234, Start Num: 69

Candidate Starts for Filch_78:

(21, 47734), (Start: 69 @47917 has 166 MA's), (96, 48058),

Gene: Finnry_66 Start: 46731, Stop: 47063, Start Num: 66

Candidate Starts for Finnry_66:

(14, 46467), (15, 46476), (17, 46500), (23, 46578), (33, 46626), (Start: 66 @46731 has 17 MA's), (95, 46875), (114, 46959), (125, 46992),

Gene: FireRed_81 Start: 49479, Stop: 49796, Start Num: 69

Candidate Starts for FireRed_81:

(21, 49296), (Start: 69 @49479 has 166 MA's), (96, 49620),

Gene: Firehouse51_68 Start: 46363, Stop: 46704, Start Num: 60

Candidate Starts for Firehouse51_68:

(Start: 60 @46363 has 151 MA's), (106, 46567), (132, 46663), (134, 46666),

Gene: Flypotenuse_73 Start: 47976, Stop: 48293, Start Num: 69

Candidate Starts for Flypotenuse_73:

(21, 47793), (Start: 69 @47976 has 166 MA's), (96, 48117),

Gene: FoghornLeghorn_71 Start: 46989, Stop: 47306, Start Num: 69

Candidate Starts for FoghornLeghorn_71:

(21, 46806), (Start: 69 @46989 has 166 MA's), (96, 47130),

Gene: Forrestell_84 Start: 49543, Stop: 49217, Start Num: 67

Candidate Starts for Forrestell_84:

(Start: 37 @49636 has 2 MA's), (Start: 67 @49543 has 17 MA's), (Start: 74 @49513 has 2 MA's), (75, 49510), (87, 49444), (101, 49399), (106, 49375), (115, 49321), (129, 49285), (146, 49234),

Gene: FreakyGoo_67 Start: 43444, Stop: 43842, Start Num: 69

Candidate Starts for FreakyGoo_67:

(56, 43423), (Start: 69 @43444 has 166 MA's), (76, 43492), (86, 43528), (123, 43693),

Gene: FreddyB_66 Start: 41323, Stop: 41679, Start Num: 60

Candidate Starts for FreddyB_66:

(Start: 60 @41323 has 151 MA's), (99, 41497), (132, 41623),

Gene: Fryberger_95 Start: 48138, Stop: 48464, Start Num: 69

Candidate Starts for Fryberger_95:

(Start: 69 @48138 has 166 MA's), (86, 48219), (103, 48303), (110, 48342), (120, 48381),

Gene: GUmbie_63 Start: 41676, Stop: 42038, Start Num: 60

Candidate Starts for GUmbie_63:

(Start: 60 @41676 has 151 MA's), (95, 41835), (132, 41976), (134, 41979), (147, 42021),

Gene: Gage_79 Start: 48769, Stop: 49086, Start Num: 69

Candidate Starts for Gage_79:

(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: Galactic_64 Start: 41833, Stop: 42195, Start Num: 60

Candidate Starts for Galactic_64:

(Start: 60 @41833 has 151 MA's), (95, 41992), (132, 42133), (147, 42178),

Gene: Gator_75 Start: 48822, Stop: 49139, Start Num: 69

Candidate Starts for Gator_75:

(21, 48639), (Start: 69 @48822 has 166 MA's), (96, 48963),

Gene: Gemini_82 Start: 49286, Stop: 49603, Start Num: 69

Candidate Starts for Gemini_82:

(21, 49103), (Start: 69 @49286 has 166 MA's), (96, 49427),

Gene: GigiOuiOui_61 Start: 40822, Stop: 41184, Start Num: 60

Candidate Starts for GigiOuiOui_61:

(Start: 60 @40822 has 151 MA's), (132, 41122), (134, 41125), (147, 41167),

Gene: Girr_63 Start: 41692, Stop: 42054, Start Num: 60

Candidate Starts for Girr_63:

(Start: 60 @41692 has 151 MA's), (132, 41992), (147, 42037),

Gene: Glaske16_67 Start: 43443, Stop: 43841, Start Num: 69

Candidate Starts for Glaske16_67:

(56, 43422), (Start: 69 @43443 has 166 MA's), (76, 43491), (86, 43527), (123, 43692),

Gene: Glexan_76 Start: 49106, Stop: 49423, Start Num: 69

Candidate Starts for Glexan_76:

(21, 48923), (Start: 69 @49106 has 166 MA's), (96, 49247),

Gene: Goku_75 Start: 48185, Stop: 48502, Start Num: 69

Candidate Starts for Goku_75:

(21, 48002), (Start: 69 @48185 has 166 MA's), (96, 48326),

Gene: GoldenSpark_81 Start: 48769, Stop: 49086, Start Num: 69

Candidate Starts for GoldenSpark_81:

(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: Goldilocks_80 Start: 48267, Stop: 48584, Start Num: 69

Candidate Starts for Goldilocks_80:

(21, 48084), (Start: 69 @48267 has 166 MA's), (96, 48408),

Gene: GooberAzure_80 Start: 48769, Stop: 49086, Start Num: 69

Candidate Starts for GooberAzure_80:

(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: Gorge_69 Start: 43618, Stop: 43980, Start Num: 60

Candidate Starts for Gorge_69:

(Start: 60 @43618 has 151 MA's), (95, 43777), (132, 43918), (134, 43921), (147, 43963),

Gene: Greep_81 Start: 49768, Stop: 50085, Start Num: 69

Candidate Starts for Greep_81:

(21, 49585), (Start: 69 @49768 has 166 MA's), (96, 49909),

Gene: Grimmer_75 Start: 43862, Stop: 44218, Start Num: 60

Candidate Starts for Grimmer_75:

(Start: 60 @43862 has 151 MA's), (132, 44162),

Gene: Guey18_100 Start: 49458, Stop: 49784, Start Num: 69

Candidate Starts for Guey18_100:

(Start: 69 @49458 has 166 MA's), (86, 49539), (103, 49623), (110, 49662), (120, 49701),

Gene: Guppsters_66 Start: 41977, Stop: 42339, Start Num: 60

Candidate Starts for Guppsters_66:

(Start: 60 @41977 has 151 MA's), (95, 42136), (132, 42277), (134, 42280), (147, 42322),

Gene: Guzman_41 Start: 25719, Stop: 26096, Start Num: 62

Candidate Starts for Guzman_41:

(Start: 62 @25719 has 5 MA's), (77, 25782), (123, 25983), (125, 25989), (131, 26010), (152, 26085),

Gene: Hades_66 Start: 42692, Stop: 43054, Start Num: 60

Candidate Starts for Hades_66:

(Start: 60 @42692 has 151 MA's), (95, 42851), (132, 42992), (134, 42995), (147, 43037),

Gene: Hamulus_65 Start: 42334, Stop: 42690, Start Num: 60

Candidate Starts for Hamulus_65:

(Start: 60 @42334 has 151 MA's), (132, 42634), (134, 42637),

Gene: HanKaySha_77 Start: 48070, Stop: 48387, Start Num: 69

Candidate Starts for HanKaySha_77:

(21, 47887), (Start: 69 @48070 has 166 MA's), (96, 48211),

Gene: Harella_77 Start: 49622, Stop: 49939, Start Num: 69

Candidate Starts for Harella_77:

(21, 49439), (Start: 69 @49622 has 166 MA's), (96, 49763),

Gene: Harley_67 Start: 42941, Stop: 43297, Start Num: 60
Candidate Starts for Harley_67:
(Start: 60 @42941 has 151 MA's), (95, 43100), (99, 43115), (132, 43241), (134, 43244),

Gene: Henry_75 Start: 48410, Stop: 48727, Start Num: 69
Candidate Starts for Henry_75:
(21, 48227), (Start: 69 @48410 has 166 MA's), (96, 48551),

Gene: Highbury_76 Start: 48058, Stop: 48375, Start Num: 69
Candidate Starts for Highbury_76:
(21, 47875), (Start: 69 @48058 has 166 MA's), (96, 48199),

Gene: HokkenD_113 Start: 67777, Stop: 68151, Start Num: 49
Candidate Starts for HokkenD_113:
(Start: 44 @67768 has 1 MA's), (Start: 49 @67777 has 1 MA's), (80, 67885), (90, 67930), (144, 68134),

Gene: Holt_82 Start: 49183, Stop: 49500, Start Num: 69
Candidate Starts for Holt_82:
(21, 49000), (Start: 69 @49183 has 166 MA's), (96, 49324),

Gene: Hoonter_80 Start: 48769, Stop: 49086, Start Num: 69
Candidate Starts for Hoonter_80:
(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: Hopecy_77 Start: 48602, Stop: 48919, Start Num: 69
Candidate Starts for Hopecy_77:
(21, 48419), (Start: 69 @48602 has 166 MA's), (96, 48743),

Gene: Horus_72 Start: 44321, Stop: 44650, Start Num: 69
Candidate Starts for Horus_72:
(32, 44207), (56, 44297), (Start: 69 @44321 has 166 MA's), (75, 44348), (91, 44435), (114, 44540),
(122, 44564), (135, 44603), (145, 44630), (148, 44642),

Gene: HufflyPuff_80 Start: 49435, Stop: 49752, Start Num: 69
Candidate Starts for HufflyPuff_80:
(21, 49252), (Start: 69 @49435 has 166 MA's), (96, 49576),

Gene: IHOP_75 Start: 48534, Stop: 48851, Start Num: 69
Candidate Starts for IHOP_75:
(21, 48351), (Start: 69 @48534 has 166 MA's), (96, 48675),

Gene: Ibhubesi_65 Start: 41957, Stop: 42313, Start Num: 60
Candidate Starts for Ibhubesi_65:
(Start: 60 @41957 has 151 MA's), (132, 42257), (134, 42260),

Gene: Icee_78 Start: 48433, Stop: 48750, Start Num: 69
Candidate Starts for Icee_78:
(21, 48250), (Start: 69 @48433 has 166 MA's), (96, 48574),

Gene: Inca_74 Start: 47059, Stop: 47376, Start Num: 69
Candidate Starts for Inca_74:
(21, 46876), (Start: 69 @47059 has 166 MA's), (96, 47200),

Gene: Inventum_61 Start: 42492, Stop: 42821, Start Num: 72

Candidate Starts for Inventum_61:

(27, 42354), (30, 42360), (40, 42414), (Start: 60 @42459 has 151 MA's), (Start: 72 @42492 has 1 MA's), (106, 42663), (132, 42759), (134, 42762), (147, 42804),

Gene: Izel_67 Start: 43443, Stop: 43841, Start Num: 69

Candidate Starts for Izel_67:

(56, 43422), (Start: 69 @43443 has 166 MA's), (76, 43491), (86, 43527), (123, 43692),

Gene: Jabbawokkie_80 Start: 44082, Stop: 44423, Start Num: 58

Candidate Starts for Jabbawokkie_80:

(46, 44067), (Start: 58 @44082 has 4 MA's), (132, 44382), (134, 44385),

Gene: JalFarm20_78 Start: 46016, Stop: 46372, Start Num: 60

Candidate Starts for JalFarm20_78:

(Start: 60 @46016 has 151 MA's), (132, 46316), (134, 46319),

Gene: James_69 Start: 43743, Stop: 44105, Start Num: 60

Candidate Starts for James_69:

(Start: 60 @43743 has 151 MA's), (95, 43902), (132, 44043), (134, 44046), (147, 44088),

Gene: Jant_69 Start: 43594, Stop: 43950, Start Num: 60

Candidate Starts for Jant_69:

(Start: 60 @43594 has 151 MA's), (132, 43894), (134, 43897),

Gene: JeTaime_77 Start: 49251, Stop: 49568, Start Num: 69

Candidate Starts for JeTaime_77:

(21, 49068), (Start: 69 @49251 has 166 MA's), (96, 49392),

Gene: Jinglebell_71 Start: 45318, Stop: 45680, Start Num: 60

Candidate Starts for Jinglebell_71:

(Start: 60 @45318 has 151 MA's), (106, 45522), (132, 45618), (147, 45663),

Gene: Jobypre_66 Start: 46467, Stop: 46799, Start Num: 66

Candidate Starts for Jobypre_66:

(13, 46191), (14, 46203), (15, 46212), (17, 46236), (23, 46314), (33, 46362), (Start: 66 @46467 has 17 MA's), (95, 46611), (114, 46695), (125, 46728),

Gene: JoeyJr_61 Start: 41497, Stop: 41853, Start Num: 60

Candidate Starts for JoeyJr_61:

(27, 41392), (30, 41398), (40, 41452), (Start: 60 @41497 has 151 MA's), (Start: 72 @41530 has 1 MA's), (106, 41701), (132, 41797), (134, 41800),

Gene: Jubie_65 Start: 46602, Stop: 46934, Start Num: 66

Candidate Starts for Jubie_65:

(13, 46326), (14, 46338), (15, 46347), (17, 46371), (23, 46449), (33, 46497), (Start: 66 @46602 has 17 MA's), (95, 46746), (114, 46830), (125, 46863),

Gene: Juice456_66 Start: 43972, Stop: 44328, Start Num: 60

Candidate Starts for Juice456_66:

(Start: 60 @43972 has 151 MA's), (132, 44272), (134, 44275),

Gene: JuicyJay_120 Start: 70726, Stop: 71058, Start Num: 69
Candidate Starts for JuicyJay_120:
(Start: 69 @70726 has 166 MA's), (90, 70837), (93, 70861), (144, 71041),

Gene: Juniper1_65 Start: 42735, Stop: 43091, Start Num: 60
Candidate Starts for Juniper1_65:
(Start: 49 @42720 has 1 MA's), (Start: 60 @42735 has 151 MA's), (106, 42939), (132, 43035), (134, 43038),

Gene: Kanye_74 Start: 48115, Stop: 48432, Start Num: 69
Candidate Starts for Kanye_74:
(21, 47932), (Start: 69 @48115 has 166 MA's), (96, 48256),

Gene: Karhdo_64 Start: 43305, Stop: 43667, Start Num: 60
Candidate Starts for Karhdo_64:
(Start: 60 @43305 has 151 MA's), (95, 43464), (132, 43605), (147, 43650),

Gene: Keelan_96 Start: 49018, Stop: 49347, Start Num: 62
Candidate Starts for Keelan_96:
(Start: 62 @49018 has 5 MA's), (86, 49114), (103, 49198), (110, 49237),

Gene: Kenuha5_63 Start: 41295, Stop: 41651, Start Num: 60
Candidate Starts for Kenuha5_63:
(Start: 60 @41295 has 151 MA's), (95, 41454), (132, 41595), (134, 41598), (147, 41634),

Gene: Kersh_67 Start: 44741, Stop: 45097, Start Num: 60
Candidate Starts for Kersh_67:
(Start: 60 @44741 has 151 MA's), (95, 44900), (132, 45041), (134, 45044),

Gene: Kimberlium_70 Start: 44253, Stop: 44594, Start Num: 60
Candidate Starts for Kimberlium_70:
(Start: 60 @44253 has 151 MA's), (132, 44553), (134, 44556),

Gene: Kimchi_81 Start: 48772, Stop: 49089, Start Num: 69
Candidate Starts for Kimchi_81:
(21, 48589), (Start: 69 @48772 has 166 MA's), (96, 48913),

Gene: Kingsley_63 Start: 41956, Stop: 42318, Start Num: 60
Candidate Starts for Kingsley_63:
(Start: 60 @41956 has 151 MA's), (95, 42115), (106, 42160), (132, 42256), (134, 42259), (147, 42301),

Gene: Koella_59 Start: 38373, Stop: 38735, Start Num: 60
Candidate Starts for Koella_59:
(Start: 60 @38373 has 151 MA's), (99, 38547), (132, 38673), (147, 38718),

Gene: Kostya_77 Start: 48633, Stop: 48950, Start Num: 69
Candidate Starts for Kostya_77:
(21, 48450), (Start: 69 @48633 has 166 MA's), (96, 48774),

Gene: Kozie_51 Start: 36191, Stop: 36532, Start Num: 61
Candidate Starts for Kozie_51:
(18, 35999), (24, 36059), (43, 36149), (Start: 61 @36191 has 5 MA's), (114, 36437), (125, 36470), (134, 36497),

Gene: KristaRAM_68 Start: 44341, Stop: 44697, Start Num: 60

Candidate Starts for KristaRAM_68:

(Start: 60 @44341 has 151 MA's), (132, 44641), (134, 44644),

Gene: Krypton555_67 Start: 46693, Stop: 47025, Start Num: 66

Candidate Starts for Krypton555_67:

(13, 46417), (14, 46429), (15, 46438), (17, 46462), (23, 46540), (33, 46588), (Start: 66 @46693 has 17 MA's), (95, 46837), (114, 46921), (125, 46954),

Gene: Kubulix_84 Start: 49967, Stop: 49641, Start Num: 67

Candidate Starts for Kubulix_84:

(Start: 67 @49967 has 17 MA's), (Start: 74 @49937 has 2 MA's), (75, 49934), (87, 49868), (101, 49823), (106, 49799), (115, 49745), (129, 49709), (146, 49658),

Gene: Kumao_62 Start: 44058, Stop: 44420, Start Num: 51

Candidate Starts for Kumao_62:

(9, 43764), (16, 43851), (19, 43896), (20, 43911), (25, 43950), (Start: 51 @44058 has 1 MA's), (Start: 62 @44082 has 5 MA's), (Start: 74 @44118 has 2 MA's), (75, 44121), (97, 44235), (125, 44346),

Gene: Kuwabara_72 Start: 44078, Stop: 44407, Start Num: 69

Candidate Starts for Kuwabara_72:

(Start: 69 @44078 has 166 MA's), (91, 44192), (95, 44213), (114, 44297), (122, 44321), (135, 44360), (145, 44387), (148, 44399),

Gene: LastJedi_59 Start: 39690, Stop: 40052, Start Num: 60

Candidate Starts for LastJedi_59:

(26, 39573), (Start: 60 @39690 has 151 MA's), (95, 39849), (132, 39990), (147, 40035),

Gene: Leozinho_64 Start: 41151, Stop: 41507, Start Num: 60

Candidate Starts for Leozinho_64:

(Start: 60 @41151 has 151 MA's), (95, 41310), (132, 41451), (134, 41454),

Gene: Leozinho_66 Start: 42196, Stop: 42552, Start Num: 64

Candidate Starts for Leozinho_66:

(Start: 64 @42196 has 2 MA's), (70, 42217), (Start: 72 @42223 has 1 MA's), (78, 42265), (100, 42367), (121, 42457), (132, 42490), (147, 42535),

Gene: Leperchaun_58 Start: 40727, Stop: 41083, Start Num: 60

Candidate Starts for Leperchaun_58:

(27, 40622), (30, 40628), (40, 40682), (Start: 60 @40727 has 151 MA's), (Start: 72 @40760 has 1 MA's), (106, 40931), (132, 41027), (134, 41030),

Gene: LilMoolah_64 Start: 42220, Stop: 42582, Start Num: 60

Candidate Starts for LilMoolah_64:

(26, 42103), (Start: 60 @42220 has 151 MA's), (95, 42379), (132, 42520), (147, 42565),

Gene: Lilac_79 Start: 48387, Stop: 48704, Start Num: 69

Candidate Starts for Lilac_79:

(21, 48204), (Start: 69 @48387 has 166 MA's), (96, 48528),

Gene: Lilizi_78 Start: 48100, Stop: 48417, Start Num: 69

Candidate Starts for Lilizi_78:

(21, 47917), (Start: 69 @48100 has 166 MA's), (96, 48241),

Gene: Lilpickle_76 Start: 47985, Stop: 48302, Start Num: 69

Candidate Starts for Lilpickle_76:

(21, 47802), (Start: 69 @47985 has 166 MA's), (96, 48126),

Gene: LitninMcQueen_71 Start: 42944, Stop: 43273, Start Num: 69

Candidate Starts for LitninMcQueen_71:

(Start: 69 @42944 has 166 MA's), (114, 43163), (145, 43253), (148, 43265),

Gene: LittleShirley_65 Start: 42793, Stop: 43149, Start Num: 60

Candidate Starts for LittleShirley_65:

(Start: 60 @42793 has 151 MA's), (106, 42997), (132, 43093), (134, 43096),

Gene: Liveloughbron_79 Start: 49563, Stop: 49880, Start Num: 69

Candidate Starts for Liveloughbron_79:

(21, 49380), (Start: 69 @49563 has 166 MA's), (96, 49704),

Gene: Lizziana_71 Start: 43224, Stop: 43586, Start Num: 60

Candidate Starts for Lizziana_71:

(Start: 60 @43224 has 151 MA's), (95, 43383), (132, 43524), (134, 43527), (147, 43569),

Gene: Llama_70 Start: 45173, Stop: 45535, Start Num: 60

Candidate Starts for Llama_70:

(Start: 60 @45173 has 151 MA's), (106, 45377), (132, 45473), (147, 45518),

Gene: Lolly9_65 Start: 46290, Stop: 46622, Start Num: 66

Candidate Starts for Lolly9_65:

(Start: 66 @46290 has 17 MA's), (Start: 74 @46320 has 2 MA's), (91, 46413), (97, 46440), (114, 46518), (125, 46551), (140, 46599),

Gene: Losacky_42 Start: 25840, Stop: 26217, Start Num: 62

Candidate Starts for Losacky_42:

(Start: 62 @25840 has 5 MA's), (77, 25903), (123, 26104), (125, 26110), (131, 26131), (152, 26206),

Gene: Lucky2013_115 Start: 64045, Stop: 64419, Start Num: 44

Candidate Starts for Lucky2013_115:

(Start: 44 @64045 has 1 MA's), (Start: 49 @64054 has 1 MA's), (80, 64162), (90, 64207), (114, 64327),

Gene: Lumos_67 Start: 46464, Stop: 46796, Start Num: 66

Candidate Starts for Lumos_67:

(13, 46188), (14, 46200), (15, 46209), (17, 46233), (23, 46311), (33, 46359), (Start: 66 @46464 has 17 MA's), (95, 46608), (114, 46692), (125, 46725),

Gene: LunaBlu_67 Start: 42492, Stop: 42854, Start Num: 60

Candidate Starts for LunaBlu_67:

(Start: 60 @42492 has 151 MA's), (95, 42651), (132, 42792), (147, 42837),

Gene: MISSy_78 Start: 48491, Stop: 48808, Start Num: 69

Candidate Starts for MISSy_78:

(21, 48308), (Start: 69 @48491 has 166 MA's), (96, 48632),

Gene: MPhalcon_78 Start: 48484, Stop: 48801, Start Num: 69

Candidate Starts for MPhalcon_78:

(21, 48301), (Start: 69 @48484 has 166 MA's), (96, 48625),

Gene: MadMen_65 Start: 42619, Stop: 42975, Start Num: 60

Candidate Starts for MadMen_65:

(26, 42502), (Start: 60 @42619 has 151 MA's), (95, 42778), (132, 42919), (134, 42922),

Gene: MadMen_67 Start: 43664, Stop: 44020, Start Num: 64

Candidate Starts for MadMen_67:

(Start: 64 @43664 has 2 MA's), (70, 43685), (Start: 72 @43691 has 1 MA's), (78, 43733), (100, 43835), (121, 43925), (132, 43958), (147, 44003),

Gene: MadamMonkfish_77 Start: 47709, Stop: 48026, Start Num: 69

Candidate Starts for MadamMonkfish_77:

(21, 47526), (Start: 69 @47709 has 166 MA's), (96, 47850),

Gene: Madiba_66 Start: 41725, Stop: 42087, Start Num: 60

Candidate Starts for Madiba_66:

(Start: 60 @41725 has 151 MA's), (95, 41884), (132, 42025), (147, 42070),

Gene: Mahavrat_62 Start: 41431, Stop: 41787, Start Num: 60

Candidate Starts for Mahavrat_62:

(Start: 60 @41431 has 151 MA's), (132, 41731),

Gene: Manda_78 Start: 49571, Stop: 49888, Start Num: 69

Candidate Starts for Manda_78:

(21, 49388), (Start: 69 @49571 has 166 MA's), (96, 49712),

Gene: Mantra_62 Start: 41207, Stop: 41563, Start Num: 58

Candidate Starts for Mantra_62:

(46, 41192), (Start: 58 @41207 has 4 MA's), (132, 41507), (134, 41510),

Gene: Maravista_67 Start: 44362, Stop: 44724, Start Num: 60

Candidate Starts for Maravista_67:

(Start: 60 @44362 has 151 MA's), (95, 44521), (99, 44536), (132, 44662), (147, 44707),

Gene: Marker_67 Start: 42458, Stop: 42814, Start Num: 60

Candidate Starts for Marker_67:

(26, 42341), (Start: 60 @42458 has 151 MA's), (132, 42758), (134, 42761), (147, 42797),

Gene: Marshmallow_75 Start: 49264, Stop: 49581, Start Num: 69

Candidate Starts for Marshmallow_75:

(21, 49081), (Start: 69 @49264 has 166 MA's), (Start: 74 @49288 has 2 MA's), (96, 49405),

Gene: Martik_65 Start: 42396, Stop: 42752, Start Num: 60

Candidate Starts for Martik_65:

(26, 42279), (Start: 60 @42396 has 151 MA's), (95, 42555), (132, 42696), (134, 42699),

Gene: MaryV_77 Start: 48609, Stop: 48974, Start Num: 50

Candidate Starts for MaryV_77:

(35, 48546), (Start: 50 @48609 has 5 MA's), (102, 48801), (133, 48921), (142, 48954),

Gene: Mattes_69 Start: 43743, Stop: 44105, Start Num: 60

Candidate Starts for Mattes_69:

(Start: 60 @43743 has 151 MA's), (95, 43902), (132, 44043), (134, 44046), (147, 44088),

Gene: Matzah_54 Start: 37029, Stop: 37364, Start Num: 59

Candidate Starts for Matzah_54:

(53, 37017), (54, 37020), (Start: 59 @37029 has 5 MA's), (Start: 72 @37056 has 1 MA's), (83, 37113), (91, 37164), (108, 37239), (114, 37269), (119, 37290), (134, 37329),

Gene: Maxxinista_79 Start: 48360, Stop: 48677, Start Num: 69

Candidate Starts for Maxxinista_79:

(21, 48177), (Start: 69 @48360 has 166 MA's), (96, 48501),

Gene: MellowYellow_85 Start: 50209, Stop: 49883, Start Num: 67

Candidate Starts for MellowYellow_85:

(Start: 37 @50302 has 2 MA's), (Start: 67 @50209 has 17 MA's), (Start: 74 @50179 has 2 MA's), (75, 50176), (87, 50110), (101, 50065), (106, 50041), (115, 49987), (129, 49951), (146, 49900),

Gene: MementoMori_53 Start: 36606, Stop: 36941, Start Num: 59

Candidate Starts for MementoMori_53:

(5, 36288), (6, 36291), (7, 36297), (10, 36327), (11, 36354), (12, 36357), (Start: 37 @36549 has 2 MA's), (53, 36594), (54, 36597), (Start: 59 @36606 has 5 MA's), (Start: 72 @36633 has 1 MA's), (91, 36741), (108, 36816), (114, 36846), (119, 36867), (134, 36906),

Gene: MiaZeal_118 Start: 64854, Stop: 65177, Start Num: 69

Candidate Starts for MiaZeal_118:

(Start: 69 @64854 has 166 MA's), (90, 64965), (114, 65085),

Gene: MilleniumForce_68 Start: 44060, Stop: 44416, Start Num: 60

Candidate Starts for MilleniumForce_68:

(Start: 60 @44060 has 151 MA's), (132, 44360), (134, 44363),

Gene: Mindy_76 Start: 47576, Stop: 47893, Start Num: 69

Candidate Starts for Mindy_76:

(21, 47393), (Start: 69 @47576 has 166 MA's), (96, 47717),

Gene: MiniLon_69 Start: 46291, Stop: 46623, Start Num: 66

Candidate Starts for MiniLon_69:

(Start: 66 @46291 has 17 MA's), (Start: 74 @46321 has 2 MA's), (91, 46414), (97, 46441), (114, 46519), (125, 46552), (140, 46600),

Gene: MiniMac_69 Start: 46319, Stop: 46621, Start Num: 74

Candidate Starts for MiniMac_69:

(Start: 66 @46289 has 17 MA's), (Start: 74 @46319 has 2 MA's), (91, 46412), (97, 46439), (114, 46517), (125, 46550), (140, 46598),

Gene: MinionDave_64 Start: 42746, Stop: 43108, Start Num: 60

Candidate Starts for MinionDave_64:

(26, 42629), (Start: 60 @42746 has 151 MA's), (95, 42905), (132, 43046), (147, 43091),

Gene: Miniwave_72 Start: 48029, Stop: 48346, Start Num: 69

Candidate Starts for Miniwave_72:

(21, 47846), (Start: 69 @48029 has 166 MA's), (96, 48170),

Gene: Minnie_68 Start: 43966, Stop: 44328, Start Num: 60
Candidate Starts for Minnie_68:
(26, 43849), (Start: 60 @43966 has 151 MA's), (95, 44125), (132, 44266), (147, 44311),

Gene: Misfit_78 Start: 49503, Stop: 49820, Start Num: 69
Candidate Starts for Misfit_78:
(21, 49320), (Start: 69 @49503 has 166 MA's), (96, 49644),

Gene: MisterCuddles_63 Start: 41692, Stop: 42054, Start Num: 60
Candidate Starts for MisterCuddles_63:
(Start: 60 @41692 has 151 MA's), (132, 41992), (147, 42037),

Gene: Modragons_69 Start: 45162, Stop: 45524, Start Num: 60
Candidate Starts for Modragons_69:
(Start: 60 @45162 has 151 MA's), (106, 45366), (132, 45462), (147, 45507),

Gene: Moldemort_80 Start: 48588, Stop: 48905, Start Num: 69
Candidate Starts for Moldemort_80:
(21, 48405), (Start: 69 @48588 has 166 MA's), (96, 48729),

Gene: MollyToe_72 Start: 47330, Stop: 47647, Start Num: 69
Candidate Starts for MollyToe_72:
(21, 47147), (Start: 69 @47330 has 166 MA's), (96, 47471),

Gene: Moonbeam_64 Start: 41974, Stop: 42336, Start Num: 60
Candidate Starts for Moonbeam_64:
(Start: 60 @41974 has 151 MA's), (Start: 74 @42016 has 2 MA's), (95, 42133), (132, 42274), (147, 42319),

Gene: MortyNRick_70 Start: 44625, Stop: 44951, Start Num: 69
Candidate Starts for MortyNRick_70:
(Start: 69 @44625 has 166 MA's), (106, 44802), (114, 44847), (136, 44910),

Gene: Mosby_73 Start: 47786, Stop: 48103, Start Num: 69
Candidate Starts for Mosby_73:
(21, 47603), (Start: 69 @47786 has 166 MA's), (96, 47927),

Gene: Mova_69 Start: 42229, Stop: 42585, Start Num: 60
Candidate Starts for Mova_69:
(Start: 60 @42229 has 151 MA's), (95, 42388), (132, 42529), (134, 42532), (147, 42568),

Gene: Mozy_75 Start: 44841, Stop: 45203, Start Num: 60
Candidate Starts for Mozy_75:
(48, 44826), (Start: 60 @44841 has 151 MA's), (95, 45000), (132, 45141), (147, 45186),

Gene: MrMagoo_76 Start: 46031, Stop: 46429, Start Num: 69
Candidate Starts for MrMagoo_76:
(Start: 69 @46031 has 166 MA's), (86, 46115), (106, 46211),

Gene: MsGreen_66 Start: 46467, Stop: 46799, Start Num: 66
Candidate Starts for MsGreen_66:
(13, 46191), (14, 46203), (15, 46212), (17, 46236), (23, 46314), (33, 46362), (Start: 66 @46467 has 17 MA's), (95, 46611), (114, 46695), (125, 46728),

Gene: MulchExplorer_69 Start: 44252, Stop: 44593, Start Num: 60
Candidate Starts for MulchExplorer_69:
(Start: 60 @44252 has 151 MA's), (132, 44552), (134, 44555),

Gene: Murica_80 Start: 49435, Stop: 49752, Start Num: 69
Candidate Starts for Murica_80:
(21, 49252), (Start: 69 @49435 has 166 MA's), (96, 49576),

Gene: Murphy_77 Start: 48872, Stop: 49189, Start Num: 69
Candidate Starts for Murphy_77:
(21, 48689), (Start: 69 @48872 has 166 MA's), (96, 49013),

Gene: Mutaforma13_71 Start: 45673, Stop: 46035, Start Num: 60
Candidate Starts for Mutaforma13_71:
(Start: 60 @45673 has 151 MA's), (132, 45973), (147, 46018),

Gene: Myrale_77 Start: 49129, Stop: 49446, Start Num: 69
Candidate Starts for Myrale_77:
(21, 48946), (Start: 69 @49129 has 166 MA's), (96, 49270),

Gene: Nala_79 Start: 48993, Stop: 49310, Start Num: 69
Candidate Starts for Nala_79:
(21, 48810), (Start: 69 @48993 has 166 MA's), (96, 49134),

Gene: NelitzaMV_75 Start: 48075, Stop: 48392, Start Num: 69
Candidate Starts for NelitzaMV_75:
(21, 47892), (Start: 69 @48075 has 166 MA's), (96, 48216),

Gene: NihilNomen_125 Start: 68678, Stop: 69010, Start Num: 69
Candidate Starts for NihilNomen_125:
(Start: 69 @68678 has 166 MA's), (90, 68789), (93, 68813), (144, 68993),

Gene: Nikan_82 Start: 50187, Stop: 49861, Start Num: 67
Candidate Starts for Nikan_82:
(46, 50226), (Start: 67 @50187 has 17 MA's), (Start: 74 @50157 has 2 MA's), (75, 50154), (87, 50088),
(92, 50070), (98, 50049), (115, 49965), (129, 49929),

Gene: Nimrod_78 Start: 49696, Stop: 50013, Start Num: 69
Candidate Starts for Nimrod_78:
(21, 49513), (Start: 69 @49696 has 166 MA's), (96, 49837),

Gene: Nivrat_62 Start: 42093, Stop: 42455, Start Num: 60
Candidate Starts for Nivrat_62:
(26, 41976), (Start: 60 @42093 has 151 MA's), (95, 42252), (132, 42393), (147, 42438),

Gene: NoSleep_78 Start: 48330, Stop: 48647, Start Num: 69
Candidate Starts for NoSleep_78:
(21, 48147), (Start: 69 @48330 has 166 MA's), (96, 48471),

Gene: NonchalantPear_77 Start: 48183, Stop: 48500, Start Num: 69
Candidate Starts for NonchalantPear_77:
(21, 48000), (Start: 69 @48183 has 166 MA's), (96, 48324),

Gene: NormanBulbieJr_65 Start: 42386, Stop: 42748, Start Num: 60

Candidate Starts for NormanBulbieJr_65:

(Start: 60 @42386 has 151 MA's), (99, 42560), (132, 42686), (147, 42731),

Gene: NyleyClemson_83 Start: 49827, Stop: 49501, Start Num: 67

Candidate Starts for NyleyClemson_83:

(Start: 37 @49920 has 2 MA's), (Start: 67 @49827 has 17 MA's), (Start: 74 @49797 has 2 MA's), (75, 49794), (87, 49728), (101, 49683), (106, 49659), (115, 49605), (129, 49569), (146, 49518),

Gene: ODay_78 Start: 45557, Stop: 45886, Start Num: 69

Candidate Starts for ODay_78:

(32, 45443), (56, 45533), (Start: 69 @45557 has 166 MA's), (75, 45584), (114, 45776), (145, 45866), (148, 45878),

Gene: Ochi17_69 Start: 44769, Stop: 45131, Start Num: 60

Candidate Starts for Ochi17_69:

(Start: 60 @44769 has 151 MA's), (106, 44973), (132, 45069), (147, 45114),

Gene: Octobien14_72 Start: 45181, Stop: 45522, Start Num: 57

Candidate Starts for Octobien14_72:

(Start: 57 @45181 has 1 MA's), (86, 45283), (95, 45337), (114, 45421),

Gene: Odyssey395_85 Start: 50318, Stop: 49992, Start Num: 67

Candidate Starts for Odyssey395_85:

(Start: 67 @50318 has 17 MA's), (Start: 74 @50288 has 2 MA's), (75, 50285), (87, 50219), (101, 50174), (106, 50150), (115, 50096), (129, 50060), (146, 50009),

Gene: OfUltron_71 Start: 45318, Stop: 45680, Start Num: 60

Candidate Starts for OfUltron_71:

(Start: 60 @45318 has 151 MA's), (106, 45522), (132, 45618), (147, 45663),

Gene: Ogopogo_71 Start: 42797, Stop: 43153, Start Num: 60

Candidate Starts for Ogopogo_71:

(27, 42686), (Start: 60 @42797 has 151 MA's), (132, 43097), (134, 43100),

Gene: Ollypop_80 Start: 50972, Stop: 50646, Start Num: 67

Candidate Starts for Ollypop_80:

(Start: 37 @51065 has 2 MA's), (Start: 67 @50972 has 17 MA's), (75, 50939), (87, 50873), (92, 50855), (98, 50834), (106, 50804), (115, 50750), (129, 50714),

Gene: OlympiaSaint_67 Start: 42685, Stop: 43047, Start Num: 60

Candidate Starts for OlympiaSaint_67:

(Start: 60 @42685 has 151 MA's), (95, 42844), (132, 42985), (134, 42988), (147, 43030),

Gene: OrionPax_76 Start: 48081, Stop: 48398, Start Num: 69

Candidate Starts for OrionPax_76:

(21, 47898), (Start: 69 @48081 has 166 MA's), (Start: 74 @48105 has 2 MA's), (96, 48222),

Gene: OwlsT2W_65 Start: 42020, Stop: 42376, Start Num: 60

Candidate Starts for OwlsT2W_65:

(Start: 60 @42020 has 151 MA's), (95, 42179), (132, 42320),

Gene: PHappiness_61 Start: 41273, Stop: 41629, Start Num: 60
Candidate Starts for PHappiness_61:
(27, 41168), (30, 41174), (40, 41228), (Start: 60 @41273 has 151 MA's), (Start: 72 @41306 has 1 MA's), (106, 41477), (132, 41573), (134, 41576),

Gene: PMC_62 Start: 42410, Stop: 42766, Start Num: 60
Candidate Starts for PMC_62:
(Start: 60 @42410 has 151 MA's), (132, 42710), (134, 42713),

Gene: Pacc40_59 Start: 40742, Stop: 41104, Start Num: 60
Candidate Starts for Pacc40_59:
(26, 40625), (Start: 60 @40742 has 151 MA's), (95, 40901), (132, 41042), (147, 41087),

Gene: PaddyBaddy_77 Start: 48084, Stop: 48401, Start Num: 69
Candidate Starts for PaddyBaddy_77:
(21, 47901), (Start: 69 @48084 has 166 MA's), (96, 48225),

Gene: Palpatine_79 Start: 49462, Stop: 49779, Start Num: 69
Candidate Starts for Palpatine_79:
(21, 49279), (Start: 69 @49462 has 166 MA's), (96, 49603),

Gene: Paperbeatsrock_76 Start: 48707, Stop: 49024, Start Num: 69
Candidate Starts for Paperbeatsrock_76:
(21, 48524), (Start: 69 @48707 has 166 MA's), (96, 48848),

Gene: Pat3_75 Start: 47239, Stop: 47556, Start Num: 69
Candidate Starts for Pat3_75:
(21, 47056), (Start: 69 @47239 has 166 MA's), (Start: 74 @47263 has 2 MA's), (96, 47380),

Gene: Petra64142_81 Start: 49926, Stop: 50243, Start Num: 69
Candidate Starts for Petra64142_81:
(21, 49743), (Start: 69 @49926 has 166 MA's), (96, 50067),

Gene: Phaja_75 Start: 48533, Stop: 48850, Start Num: 69
Candidate Starts for Phaja_75:
(21, 48350), (Start: 69 @48533 has 166 MA's), (96, 48674),

Gene: PhaoMing_57 Start: 39593, Stop: 39922, Start Num: 69
Candidate Starts for PhaoMing_57:
(32, 39479), (56, 39569), (Start: 69 @39593 has 166 MA's), (75, 39620), (91, 39707), (107, 39776), (114, 39812), (122, 39836), (135, 39875), (145, 39902), (148, 39914),

Gene: Pharsalus_74 Start: 48507, Stop: 48824, Start Num: 69
Candidate Starts for Pharsalus_74:
(21, 48324), (Start: 69 @48507 has 166 MA's), (96, 48648),

Gene: PhatBacter_81 Start: 49479, Stop: 49796, Start Num: 69
Candidate Starts for PhatBacter_81:
(21, 49296), (Start: 69 @49479 has 166 MA's), (96, 49620),

Gene: Phaux_79 Start: 49474, Stop: 49791, Start Num: 69
Candidate Starts for Phaux_79:
(21, 49291), (Start: 69 @49474 has 166 MA's), (96, 49615),

Gene: PhesterPhotato_65 Start: 41443, Stop: 41799, Start Num: 60

Candidate Starts for PhesterPhotato_65:

(Start: 60 @41443 has 151 MA's), (95, 41602), (132, 41743), (134, 41746),

Gene: PhillyJawn_42 Start: 25617, Stop: 25994, Start Num: 62

Candidate Starts for PhillyJawn_42:

(Start: 62 @25617 has 5 MA's), (77, 25680), (123, 25881), (125, 25887), (131, 25908), (152, 25983),

Gene: Philus_69 Start: 43883, Stop: 44239, Start Num: 60

Candidate Starts for Philus_69:

(26, 43766), (Start: 60 @43883 has 151 MA's), (99, 44057), (132, 44183), (134, 44186), (147, 44222),

Gene: PhlipPhlop_65 Start: 44108, Stop: 44470, Start Num: 60

Candidate Starts for PhlipPhlop_65:

(26, 43991), (Start: 60 @44108 has 151 MA's), (Start: 74 @44150 has 2 MA's), (95, 44267), (132, 44408), (134, 44411), (147, 44453),

Gene: Phoebus_124 Start: 70535, Stop: 70867, Start Num: 69

Candidate Starts for Phoebus_124:

(Start: 69 @70535 has 166 MA's), (90, 70646), (93, 70670), (144, 70850),

Gene: Phrux_74 Start: 48070, Stop: 48387, Start Num: 69

Candidate Starts for Phrux_74:

(21, 47887), (Start: 69 @48070 has 166 MA's), (96, 48211),

Gene: PhuzzTulsa_82 Start: 50446, Stop: 50120, Start Num: 67

Candidate Starts for PhuzzTulsa_82:

(Start: 67 @50446 has 17 MA's), (Start: 74 @50416 has 2 MA's), (75, 50413), (87, 50347), (101, 50302), (106, 50278), (115, 50224), (129, 50188), (146, 50137),

Gene: Pickles13_40 Start: 25930, Stop: 26307, Start Num: 62

Candidate Starts for Pickles13_40:

(Start: 62 @25930 has 5 MA's), (85, 26020), (123, 26194), (125, 26200), (131, 26221), (152, 26296),

Gene: Pippy_64 Start: 41724, Stop: 42086, Start Num: 60

Candidate Starts for Pippy_64:

(Start: 60 @41724 has 151 MA's), (95, 41883), (99, 41898), (132, 42024), (147, 42069),

Gene: Pointis_81 Start: 49894, Stop: 49568, Start Num: 67

Candidate Starts for Pointis_81:

(Start: 67 @49894 has 17 MA's), (Start: 74 @49864 has 2 MA's), (75, 49861), (87, 49795), (101, 49750), (106, 49726), (115, 49672), (129, 49636), (146, 49585),

Gene: Policronamos_80 Start: 49474, Stop: 49791, Start Num: 69

Candidate Starts for Policronamos_80:

(21, 49291), (Start: 69 @49474 has 166 MA's), (96, 49615),

Gene: Polka14_64 Start: 42337, Stop: 42693, Start Num: 60

Candidate Starts for Polka14_64:

(27, 42232), (30, 42238), (40, 42292), (Start: 60 @42337 has 151 MA's), (Start: 72 @42370 has 1 MA's), (106, 42541), (132, 42637), (134, 42640),

Gene: Pollywog_66 Start: 43003, Stop: 43359, Start Num: 60
Candidate Starts for Pollywog_66:
(Start: 60 @43003 has 151 MA's), (95, 43162), (132, 43303), (134, 43306),

Gene: Porky_76 Start: 47900, Stop: 48217, Start Num: 69
Candidate Starts for Porky_76:
(21, 47717), (Start: 69 @47900 has 166 MA's), (96, 48041),

Gene: Priscilla_65 Start: 42485, Stop: 42847, Start Num: 60
Candidate Starts for Priscilla_65:
(Start: 60 @42485 has 151 MA's), (99, 42659), (132, 42785), (147, 42830),

Gene: Ptowny_74 Start: 47369, Stop: 47686, Start Num: 69
Candidate Starts for Ptowny_74:
(21, 47186), (Start: 69 @47369 has 166 MA's), (96, 47510),

Gene: Pumpkin_80 Start: 49128, Stop: 49445, Start Num: 69
Candidate Starts for Pumpkin_80:
(21, 48945), (Start: 69 @49128 has 166 MA's), (96, 49269),

Gene: Pureglobe5_83 Start: 50341, Stop: 50015, Start Num: 67
Candidate Starts for Pureglobe5_83:
(Start: 37 @50434 has 2 MA's), (Start: 67 @50341 has 17 MA's), (Start: 74 @50311 has 2 MA's), (75, 50308), (87, 50242), (101, 50197), (106, 50173), (115, 50119), (129, 50083), (146, 50032),

Gene: Quallification_78 Start: 49115, Stop: 49432, Start Num: 69
Candidate Starts for Quallification_78:
(21, 48932), (Start: 69 @49115 has 166 MA's), (96, 49256),

Gene: QuickMath_69 Start: 44476, Stop: 44817, Start Num: 60
Candidate Starts for QuickMath_69:
(Start: 60 @44476 has 151 MA's), (132, 44776), (134, 44779),

Gene: RIPWilbur_83 Start: 49861, Stop: 49535, Start Num: 67
Candidate Starts for RIPWilbur_83:
(Start: 37 @49954 has 2 MA's), (Start: 67 @49861 has 17 MA's), (Start: 74 @49831 has 2 MA's), (75, 49828), (87, 49762), (101, 49717), (106, 49693), (115, 49639), (129, 49603), (146, 49552),

Gene: Rabbitrun_72 Start: 44571, Stop: 44918, Start Num: 61
Candidate Starts for Rabbitrun_72:
(31, 44460), (Start: 37 @44490 has 2 MA's), (38, 44493), (39, 44496), (45, 44538), (56, 44562), (Start: 61 @44571 has 5 MA's), (81, 44652), (114, 44808), (123, 44835), (128, 44847), (133, 44862), (134, 44865),

Gene: Radiance_64 Start: 41901, Stop: 42263, Start Num: 60
Candidate Starts for Radiance_64:
(Start: 60 @41901 has 151 MA's), (95, 42060), (132, 42201), (134, 42204), (147, 42246),

Gene: Rakim_78 Start: 48584, Stop: 48901, Start Num: 69
Candidate Starts for Rakim_78:
(21, 48401), (Start: 69 @48584 has 166 MA's), (96, 48725),

Gene: Ramsey_64 Start: 42214, Stop: 42576, Start Num: 60

Candidate Starts for Ramsey_64:

(Start: 60 @42214 has 151 MA's), (95, 42373), (132, 42514), (147, 42559),

Gene: Ranunculus_78 Start: 52647, Stop: 52321, Start Num: 67

Candidate Starts for Ranunculus_78:

(Start: 67 @52647 has 17 MA's), (Start: 74 @52617 has 2 MA's), (87, 52548), (101, 52503), (106, 52479), (129, 52389),

Gene: RazzB_84 Start: 49953, Stop: 49627, Start Num: 67

Candidate Starts for RazzB_84:

(Start: 37 @50046 has 2 MA's), (Start: 67 @49953 has 17 MA's), (Start: 74 @49923 has 2 MA's), (75, 49920), (87, 49854), (101, 49809), (106, 49785), (115, 49731), (129, 49695), (146, 49644),

Gene: Red305_66 Start: 46467, Stop: 46799, Start Num: 66

Candidate Starts for Red305_66:

(13, 46191), (14, 46203), (15, 46212), (17, 46236), (23, 46314), (33, 46362), (Start: 66 @46467 has 17 MA's), (95, 46611), (114, 46695), (125, 46728),

Gene: Ren19_78 Start: 49730, Stop: 49404, Start Num: 67

Candidate Starts for Ren19_78:

(Start: 67 @49730 has 17 MA's), (Start: 74 @49700 has 2 MA's), (75, 49697), (87, 49631), (92, 49613), (98, 49592), (106, 49562), (115, 49508), (129, 49472),

Gene: Renaud18_75 Start: 44207, Stop: 44563, Start Num: 60

Candidate Starts for Renaud18_75:

(Start: 60 @44207 has 151 MA's), (95, 44366), (132, 44507),

Gene: Rimmer_78 Start: 48820, Stop: 49137, Start Num: 69

Candidate Starts for Rimmer_78:

(21, 48637), (Start: 69 @48820 has 166 MA's), (96, 48961),

Gene: Rita_66 Start: 40513, Stop: 40875, Start Num: 60

Candidate Starts for Rita_66:

(Start: 60 @40513 has 151 MA's), (95, 40672), (132, 40813), (147, 40858),

Gene: RitaG_61 Start: 41618, Stop: 41974, Start Num: 60

Candidate Starts for RitaG_61:

(27, 41513), (30, 41519), (40, 41573), (Start: 60 @41618 has 151 MA's), (Start: 72 @41651 has 1 MA's), (106, 41822), (132, 41918), (134, 41921),

Gene: RiverMonster_77 Start: 48648, Stop: 48965, Start Num: 69

Candidate Starts for RiverMonster_77:

(21, 48465), (Start: 69 @48648 has 166 MA's), (96, 48789),

Gene: Rizwana_65 Start: 46684, Stop: 46358, Start Num: 67

Candidate Starts for Rizwana_65:

(Start: 67 @46684 has 17 MA's), (Start: 74 @46654 has 2 MA's), (75, 46651), (129, 46426),

Gene: Rockne_66 Start: 42422, Stop: 42778, Start Num: 60

Candidate Starts for Rockne_66:

(Start: 60 @42422 has 151 MA's), (132, 42722), (134, 42725),

Gene: RockyHorror_66 Start: 41564, Stop: 41926, Start Num: 60

Candidate Starts for RockyHorror_66:
(Start: 60 @41564 has 151 MA's), (132, 41864), (147, 41909),

Gene: RomansRevenge_72 Start: 48362, Stop: 47964, Start Num: 66
Candidate Starts for RomansRevenge_72:
(Start: 59 @48374 has 5 MA's), (Start: 66 @48362 has 17 MA's), (75, 48326), (105, 48185), (113, 48143), (125, 48101), (140, 48056), (149, 48023), (151, 48005),

Gene: Ronaldo_98 Start: 49040, Stop: 49366, Start Num: 69
Candidate Starts for Ronaldo_98:
(Start: 69 @49040 has 166 MA's), (86, 49121), (103, 49205), (110, 49244), (120, 49283),

Gene: Rose5_66 Start: 45488, Stop: 45859, Start Num: 69
Candidate Starts for Rose5_66:
(Start: 69 @45488 has 166 MA's), (84, 45566), (114, 45713), (135, 45776), (153, 45851),

Gene: Royals2015_68 Start: 42421, Stop: 42777, Start Num: 60
Candidate Starts for Royals2015_68:
(Start: 60 @42421 has 151 MA's), (Start: 74 @42463 has 2 MA's), (95, 42580), (132, 42721),

Gene: Ruby_61 Start: 41693, Stop: 42055, Start Num: 60
Candidate Starts for Ruby_61:
(Start: 60 @41693 has 151 MA's), (132, 41993), (147, 42038),

Gene: Saal_67 Start: 43437, Stop: 43799, Start Num: 60
Candidate Starts for Saal_67:
(Start: 60 @43437 has 151 MA's), (95, 43596), (132, 43737), (134, 43740), (147, 43782),

Gene: Saints25_76 Start: 48058, Stop: 48375, Start Num: 69
Candidate Starts for Saints25_76:
(21, 47875), (Start: 69 @48058 has 166 MA's), (96, 48199),

Gene: Samty_66 Start: 46475, Stop: 46807, Start Num: 66
Candidate Starts for Samty_66:
(14, 46211), (15, 46220), (17, 46244), (23, 46322), (33, 46370), (Start: 66 @46475 has 17 MA's), (95, 46619), (114, 46703), (125, 46736),

Gene: Sandalphon_66 Start: 42944, Stop: 43306, Start Num: 60
Candidate Starts for Sandalphon_66:
(26, 42827), (Start: 60 @42944 has 151 MA's), (95, 43103), (132, 43244), (147, 43289),

Gene: Sarma624_64 Start: 39148, Stop: 39510, Start Num: 60
Candidate Starts for Sarma624_64:
(Start: 60 @39148 has 151 MA's), (95, 39307), (106, 39352), (132, 39448), (134, 39451), (147, 39493),

Gene: Sassay_72 Start: 46748, Stop: 47065, Start Num: 69
Candidate Starts for Sassay_72:
(21, 46565), (Start: 69 @46748 has 166 MA's), (96, 46889),

Gene: Seabastian_71 Start: 45319, Stop: 45681, Start Num: 60
Candidate Starts for Seabastian_71:
(Start: 60 @45319 has 151 MA's), (106, 45523), (132, 45619), (147, 45664),

Gene: Sephiroth_73 Start: 45931, Stop: 46353, Start Num: 37
Candidate Starts for Sephiroth_73:
(Start: 37 @45931 has 2 MA's), (114, 46252),

Gene: ShamWow_77 Start: 48970, Stop: 49287, Start Num: 69
Candidate Starts for ShamWow_77:
(21, 48787), (Start: 69 @48970 has 166 MA's), (96, 49111),

Gene: ShiLan_64 Start: 42432, Stop: 42788, Start Num: 60
Candidate Starts for ShiLan_64:
(Start: 60 @42432 has 151 MA's), (95, 42591), (132, 42732), (134, 42735),

Gene: ShowerHandel_68 Start: 42396, Stop: 42758, Start Num: 60
Candidate Starts for ShowerHandel_68:
(Start: 60 @42396 has 151 MA's), (95, 42555), (99, 42570), (132, 42696), (147, 42741),

Gene: SiSi_63 Start: 41202, Stop: 41558, Start Num: 60
Candidate Starts for SiSi_63:
(Start: 60 @41202 has 151 MA's), (132, 41502), (134, 41505),

Gene: SilentRX_62 Start: 45416, Stop: 45102, Start Num: 67
Candidate Starts for SilentRX_62:
(22, 45581), (27, 45545), (Start: 67 @45416 has 17 MA's), (95, 45290), (129, 45158), (133, 45149),

Gene: Simpliphy_76 Start: 48048, Stop: 48365, Start Num: 69
Candidate Starts for Simpliphy_76:
(21, 47865), (Start: 69 @48048 has 166 MA's), (96, 48189),

Gene: SirDuracell_76 Start: 47334, Stop: 47651, Start Num: 69
Candidate Starts for SirDuracell_76:
(21, 47151), (Start: 69 @47334 has 166 MA's), (Start: 74 @47358 has 2 MA's), (96, 47475),

Gene: Snenia_65 Start: 46468, Stop: 46800, Start Num: 66
Candidate Starts for Snenia_65:
(13, 46192), (14, 46204), (15, 46213), (17, 46237), (23, 46315), (33, 46363), (Start: 66 @46468 has 17 MA's), (95, 46612), (114, 46696), (125, 46729),

Gene: SophKB_74 Start: 47726, Stop: 48043, Start Num: 69
Candidate Starts for SophKB_74:
(21, 47543), (Start: 69 @47726 has 166 MA's), (96, 47867),

Gene: Sotrice96_78 Start: 48729, Stop: 49046, Start Num: 69
Candidate Starts for Sotrice96_78:
(21, 48546), (Start: 69 @48729 has 166 MA's), (96, 48870),

Gene: Soul22_71 Start: 43477, Stop: 43839, Start Num: 60
Candidate Starts for Soul22_71:
(Start: 60 @43477 has 151 MA's), (95, 43636), (132, 43777), (134, 43780), (147, 43822),

Gene: Spartan_53 Start: 40162, Stop: 40533, Start Num: 52
Candidate Starts for Spartan_53:
(52, 40162), (71, 40210), (Start: 72 @40213 has 1 MA's), (79, 40264), (82, 40270), (86, 40282), (88, 40297), (103, 40366), (104, 40372), (110, 40405), (111, 40408), (117, 40435), (120, 40441),

Gene: Spikelee_72 Start: 44062, Stop: 44424, Start Num: 60
Candidate Starts for Spikelee_72:
(Start: 60 @44062 has 151 MA's), (132, 44362), (147, 44407),

Gene: Spooky_68 Start: 42098, Stop: 42427, Start Num: 69
Candidate Starts for Spooky_68:
(Start: 69 @42098 has 166 MA's), (134, 42377), (145, 42407), (148, 42419),

Gene: Spoonbill_63 Start: 41578, Stop: 41934, Start Num: 60
Candidate Starts for Spoonbill_63:
(27, 41473), (30, 41479), (40, 41533), (Start: 60 @41578 has 151 MA's), (Start: 72 @41611 has 1 MA's), (106, 41782), (132, 41878), (134, 41881),

Gene: Squiddly_73 Start: 46416, Stop: 46745, Start Num: 69
Candidate Starts for Squiddly_73:
(Start: 69 @46416 has 166 MA's), (134, 46695), (145, 46725), (148, 46737),

Gene: Stank_80 Start: 48987, Stop: 49304, Start Num: 69
Candidate Starts for Stank_80:
(21, 48804), (Start: 69 @48987 has 166 MA's), (96, 49128),

Gene: Starcevich_65 Start: 41944, Stop: 42300, Start Num: 60
Candidate Starts for Starcevich_65:
(Start: 60 @41944 has 151 MA's), (132, 42244), (134, 42247),

Gene: Stark_78 Start: 48531, Stop: 48848, Start Num: 69
Candidate Starts for Stark_78:
(21, 48348), (Start: 69 @48531 has 166 MA's), (96, 48672),

Gene: StellaBean_75 Start: 48294, Stop: 48611, Start Num: 69
Candidate Starts for StellaBean_75:
(21, 48111), (Start: 69 @48294 has 166 MA's), (96, 48435),

Gene: Stellammi_92 Start: 47049, Stop: 47387, Start Num: 61
Candidate Starts for Stellammi_92:
(Start: 61 @47049 has 5 MA's), (90, 47175), (96, 47214), (114, 47295),

Gene: StolenFromERC_80 Start: 48769, Stop: 49086, Start Num: 69
Candidate Starts for StolenFromERC_80:
(21, 48586), (Start: 69 @48769 has 166 MA's), (96, 48910),

Gene: StormChicken_79 Start: 49427, Stop: 49744, Start Num: 69
Candidate Starts for StormChicken_79:
(21, 49244), (Start: 69 @49427 has 166 MA's), (96, 49568),

Gene: SuperGrey_69 Start: 44472, Stop: 44828, Start Num: 60
Candidate Starts for SuperGrey_69:
(Start: 60 @44472 has 151 MA's), (95, 44631), (132, 44772), (134, 44775), (147, 44811),

Gene: SwagPigglett_70 Start: 44704, Stop: 45066, Start Num: 60
Candidate Starts for SwagPigglett_70:
(26, 44587), (Start: 60 @44704 has 151 MA's), (95, 44863), (132, 45004), (147, 45049),

Gene: Syleon_75 Start: 45869, Stop: 46291, Start Num: 37
Candidate Starts for Syleon_75:
(Start: 37 @45869 has 2 MA's), (39, 45875), (114, 46190),

Gene: TBrady12_80 Start: 48468, Stop: 48785, Start Num: 69
Candidate Starts for TBrady12_80:
(21, 48285), (Start: 69 @48468 has 166 MA's), (96, 48609),

Gene: TDanisky_72 Start: 43265, Stop: 43606, Start Num: 60
Candidate Starts for TDanisky_72:
(Start: 60 @43265 has 151 MA's), (95, 43424),

Gene: Tank_65 Start: 46679, Stop: 46338, Start Num: 67
Candidate Starts for Tank_65:
(Start: 67 @46679 has 17 MA's), (86, 46592), (129, 46421), (142, 46379),

Gene: Tarkin_76 Start: 48716, Stop: 49033, Start Num: 69
Candidate Starts for Tarkin_76:
(21, 48533), (Start: 69 @48716 has 166 MA's), (96, 48857),

Gene: Tchotchke_64 Start: 41928, Stop: 42290, Start Num: 60
Candidate Starts for Tchotchke_64:
(Start: 60 @41928 has 151 MA's), (95, 42087), (132, 42228), (134, 42231), (147, 42273),

Gene: TeamEdward_79 Start: 49421, Stop: 49738, Start Num: 69
Candidate Starts for TeamEdward_79:
(21, 49238), (Start: 69 @49421 has 166 MA's), (Start: 74 @49445 has 2 MA's), (96, 49562),

Gene: TeardropMSU_73 Start: 47716, Stop: 48033, Start Num: 69
Candidate Starts for TeardropMSU_73:
(21, 47533), (Start: 69 @47716 has 166 MA's), (96, 47857),

Gene: Teaspoon_78 Start: 48610, Stop: 48927, Start Num: 69
Candidate Starts for Teaspoon_78:
(21, 48427), (Start: 69 @48610 has 166 MA's), (96, 48751),

Gene: Terij_52 Start: 35668, Stop: 36003, Start Num: 59
Candidate Starts for Terij_52:
(4, 35263), (5, 35347), (6, 35350), (7, 35356), (11, 35413), (12, 35416), (Start: 37 @35608 has 2 MA's),
(53, 35656), (54, 35659), (Start: 59 @35668 has 5 MA's), (88, 35785), (91, 35803), (123, 35935), (134,
35968),

Gene: Terminus_80 Start: 49503, Stop: 49820, Start Num: 69
Candidate Starts for Terminus_80:
(21, 49320), (Start: 69 @49503 has 166 MA's), (96, 49644),

Gene: ThetaBob_73 Start: 44248, Stop: 44604, Start Num: 60
Candidate Starts for ThetaBob_73:
(27, 44137), (Start: 60 @44248 has 151 MA's), (132, 44548), (134, 44551),

Gene: Thibault_106 Start: 63336, Stop: 63668, Start Num: 69
Candidate Starts for Thibault_106:

(Start: 69 @63336 has 166 MA's), (90, 63447), (93, 63471), (144, 63651),

Gene: Thimble_78 Start: 47951, Stop: 48268, Start Num: 69

Candidate Starts for Thimble_78:

(21, 47768), (Start: 69 @47951 has 166 MA's), (96, 48092),

Gene: Thresher_79 Start: 49590, Stop: 49907, Start Num: 69

Candidate Starts for Thresher_79:

(21, 49407), (Start: 69 @49590 has 166 MA's), (96, 49731),

Gene: Tomaszewski_72 Start: 47879, Stop: 48196, Start Num: 69

Candidate Starts for Tomaszewski_72:

(21, 47696), (Start: 69 @47879 has 166 MA's), (Start: 74 @47903 has 2 MA's), (96, 48020),

Gene: Topiatin_72 Start: 44952, Stop: 45314, Start Num: 60

Candidate Starts for Topiatin_72:

(26, 44835), (Start: 60 @44952 has 151 MA's), (95, 45111), (132, 45252), (134, 45255), (147, 45297),

Gene: Toto_75 Start: 48970, Stop: 49287, Start Num: 69

Candidate Starts for Toto_75:

(21, 48787), (Start: 69 @48970 has 166 MA's), (96, 49111),

Gene: Traaww1_73 Start: 48154, Stop: 48471, Start Num: 69

Candidate Starts for Traaww1_73:

(21, 47971), (Start: 69 @48154 has 166 MA's), (96, 48295),

Gene: Trax_71 Start: 44944, Stop: 45291, Start Num: 61

Candidate Starts for Trax_71:

(Start: 61 @44944 has 5 MA's), (81, 45025), (114, 45181), (123, 45208), (133, 45235), (134, 45238),

Gene: TriFive_67 Start: 46467, Stop: 46799, Start Num: 66

Candidate Starts for TriFive_67:

(13, 46191), (14, 46203), (15, 46212), (17, 46236), (23, 46314), (33, 46362), (Start: 66 @46467 has 17 MA's), (95, 46611), (114, 46695), (125, 46728),

Gene: Tuco_78 Start: 49478, Stop: 49795, Start Num: 69

Candidate Starts for Tuco_78:

(21, 49295), (Start: 69 @49478 has 166 MA's), (96, 49619),

Gene: Tweety_65 Start: 43115, Stop: 43471, Start Num: 60

Candidate Starts for Tweety_65:

(Start: 60 @43115 has 151 MA's), (95, 43274), (99, 43289), (132, 43415), (134, 43418), (147, 43454),

Gene: Tyson_67 Start: 45417, Stop: 45785, Start Num: 69

Candidate Starts for Tyson_67:

(Start: 69 @45417 has 166 MA's), (75, 45444), (87, 45513), (91, 45534), (96, 45558), (114, 45639), (135, 45702), (153, 45777),

Gene: Ukulele_72 Start: 47861, Stop: 48178, Start Num: 69

Candidate Starts for Ukulele_72:

(21, 47678), (Start: 69 @47861 has 166 MA's), (96, 48002),

Gene: VRedHorse_65 Start: 41397, Stop: 41759, Start Num: 60

Candidate Starts for VRedHorse_65:

(Start: 60 @41397 has 151 MA's), (Start: 72 @41430 has 1 MA's), (95, 41556), (132, 41697), (134, 41700), (147, 41742),

Gene: VanLee_116 Start: 60612, Stop: 60974, Start Num: 68

Candidate Starts for VanLee_116:

(Start: 68 @60612 has 2 MA's), (118, 60858), (130, 60903), (137, 60918), (139, 60927), (142, 60942),

Gene: Velveteen_61 Start: 39148, Stop: 39510, Start Num: 60

Candidate Starts for Velveteen_61:

(Start: 60 @39148 has 151 MA's), (95, 39307), (106, 39352), (132, 39448), (134, 39451), (147, 39493),

Gene: Violac_66 Start: 42928, Stop: 43290, Start Num: 60

Candidate Starts for Violac_66:

(Start: 60 @42928 has 151 MA's), (95, 43087), (99, 43102), (132, 43228), (147, 43273),

Gene: Vivum_66 Start: 42717, Stop: 43079, Start Num: 60

Candidate Starts for Vivum_66:

(26, 42600), (Start: 60 @42717 has 151 MA's), (Start: 74 @42759 has 2 MA's), (95, 42876), (132, 43017), (134, 43020), (147, 43062),

Gene: Volt_99 Start: 49204, Stop: 49530, Start Num: 69

Candidate Starts for Volt_99:

(Start: 69 @49204 has 166 MA's), (86, 49285), (103, 49369), (110, 49408), (120, 49447),

Gene: Wachhund_66 Start: 42028, Stop: 42390, Start Num: 60

Candidate Starts for Wachhund_66:

(Start: 60 @42028 has 151 MA's), (132, 42328), (147, 42373),

Gene: Wamburgxpress_66 Start: 45044, Stop: 45415, Start Num: 69

Candidate Starts for Wamburgxpress_66:

(Start: 69 @45044 has 166 MA's), (84, 45122), (114, 45269), (135, 45332), (153, 45407),

Gene: Weirido19_91 Start: 53190, Stop: 53612, Start Num: 41

Candidate Starts for Weirido19_91:

(41, 53190), (78, 53316), (107, 53445), (123, 53508), (138, 53550), (150, 53604),

Gene: Whirlwind_66 Start: 46283, Stop: 46615, Start Num: 66

Candidate Starts for Whirlwind_66:

(13, 46007), (14, 46019), (15, 46028), (17, 46052), (23, 46130), (33, 46178), (Start: 66 @46283 has 17 MA's), (95, 46427), (114, 46511), (125, 46544),

Gene: Whouxphf_62 Start: 42311, Stop: 42673, Start Num: 60

Candidate Starts for Whouxphf_62:

(Start: 60 @42311 has 151 MA's), (132, 42611), (147, 42656),

Gene: Wiggin_79 Start: 48555, Stop: 48872, Start Num: 69

Candidate Starts for Wiggin_79:

(21, 48372), (Start: 69 @48555 has 166 MA's), (96, 48696),

Gene: Wildcat_77 Start: 48619, Stop: 48984, Start Num: 50

Candidate Starts for Wildcat_77:

(35, 48556), (Start: 50 @48619 has 5 MA's), (102, 48811), (133, 48931), (142, 48964),

Gene: Wilde_67 Start: 46978, Stop: 46637, Start Num: 67
Candidate Starts for Wilde_67:
(Start: 67 @46978 has 17 MA's), (86, 46891), (129, 46720), (142, 46678),

Gene: Willez_72 Start: 46748, Stop: 47065, Start Num: 69
Candidate Starts for Willez_72:
(21, 46565), (Start: 69 @46748 has 166 MA's), (96, 46889),

Gene: Winchester007_57 Start: 31732, Stop: 32109, Start Num: 62
Candidate Starts for Winchester007_57:
(Start: 62 @31732 has 5 MA's), (77, 31795), (123, 31996), (125, 32002), (131, 32023), (152, 32098),

Gene: Wyatt2_67 Start: 45415, Stop: 45783, Start Num: 69
Candidate Starts for Wyatt2_67:
(Start: 69 @45415 has 166 MA's), (75, 45442), (87, 45511), (91, 45532), (96, 45556), (114, 45637),
(135, 45700), (153, 45775),

Gene: XFactor_63 Start: 40832, Stop: 41194, Start Num: 60
Candidate Starts for XFactor_63:
(Start: 60 @40832 has 151 MA's), (132, 41132), (147, 41177),

Gene: Xandras_76 Start: 47963, Stop: 48280, Start Num: 69
Candidate Starts for Xandras_76:
(21, 47780), (Start: 69 @47963 has 166 MA's), (96, 48104),

Gene: YassJohnny_74 Start: 47918, Stop: 48235, Start Num: 69
Candidate Starts for YassJohnny_74:
(21, 47735), (Start: 69 @47918 has 166 MA's), (Start: 74 @47942 has 2 MA's), (96, 48059),

Gene: Yorick_64 Start: 42551, Stop: 42913, Start Num: 60
Candidate Starts for Yorick_64:
(Start: 60 @42551 has 151 MA's), (95, 42710), (132, 42851), (147, 42896),

Gene: Yoshi_81 Start: 44512, Stop: 44874, Start Num: 60
Candidate Starts for Yoshi_81:
(29, 44401), (Start: 60 @44512 has 151 MA's), (132, 44812), (134, 44815), (147, 44857),

Gene: Youngblood_80 Start: 49430, Stop: 49747, Start Num: 69
Candidate Starts for Youngblood_80:
(21, 49247), (Start: 69 @49430 has 166 MA's), (96, 49571),

Gene: Zapner_79 Start: 44176, Stop: 44517, Start Num: 58
Candidate Starts for Zapner_79:
(46, 44161), (Start: 58 @44176 has 4 MA's), (132, 44476), (134, 44479),

Gene: Zerg_65 Start: 41676, Stop: 42038, Start Num: 60
Candidate Starts for Zerg_65:
(Start: 60 @41676 has 151 MA's), (132, 41976), (147, 42021),

Gene: Zizzle_69 Start: 44029, Stop: 44391, Start Num: 60
Candidate Starts for Zizzle_69:
(Start: 60 @44029 has 151 MA's), (95, 44188), (99, 44203), (132, 44329), (147, 44374),

Gene: xkcd_80 Start: 49620, Stop: 49937, Start Num: 69
Candidate Starts for xkcd_80:
(21, 49437), (Start: 69 @49620 has 166 MA's), (96, 49761),