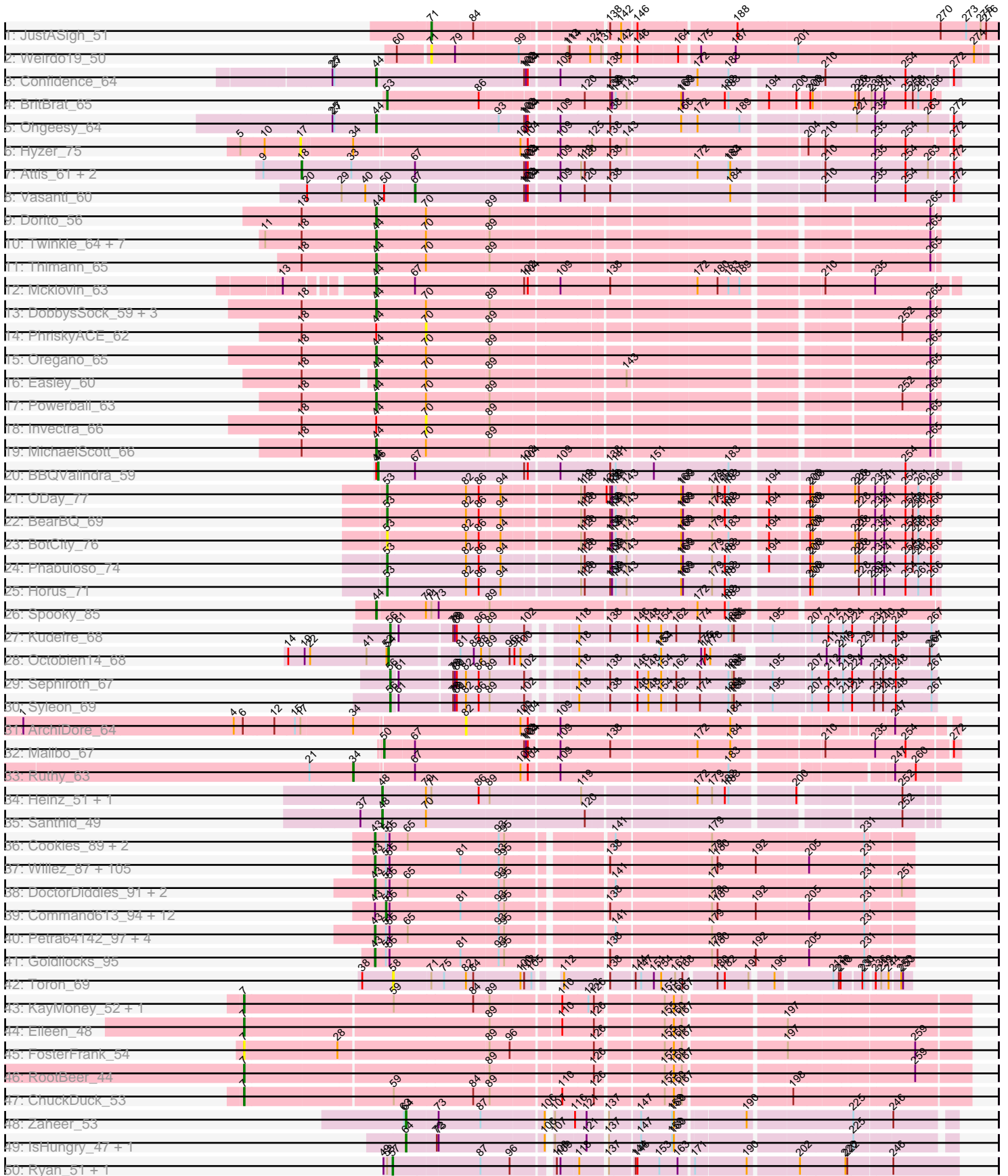
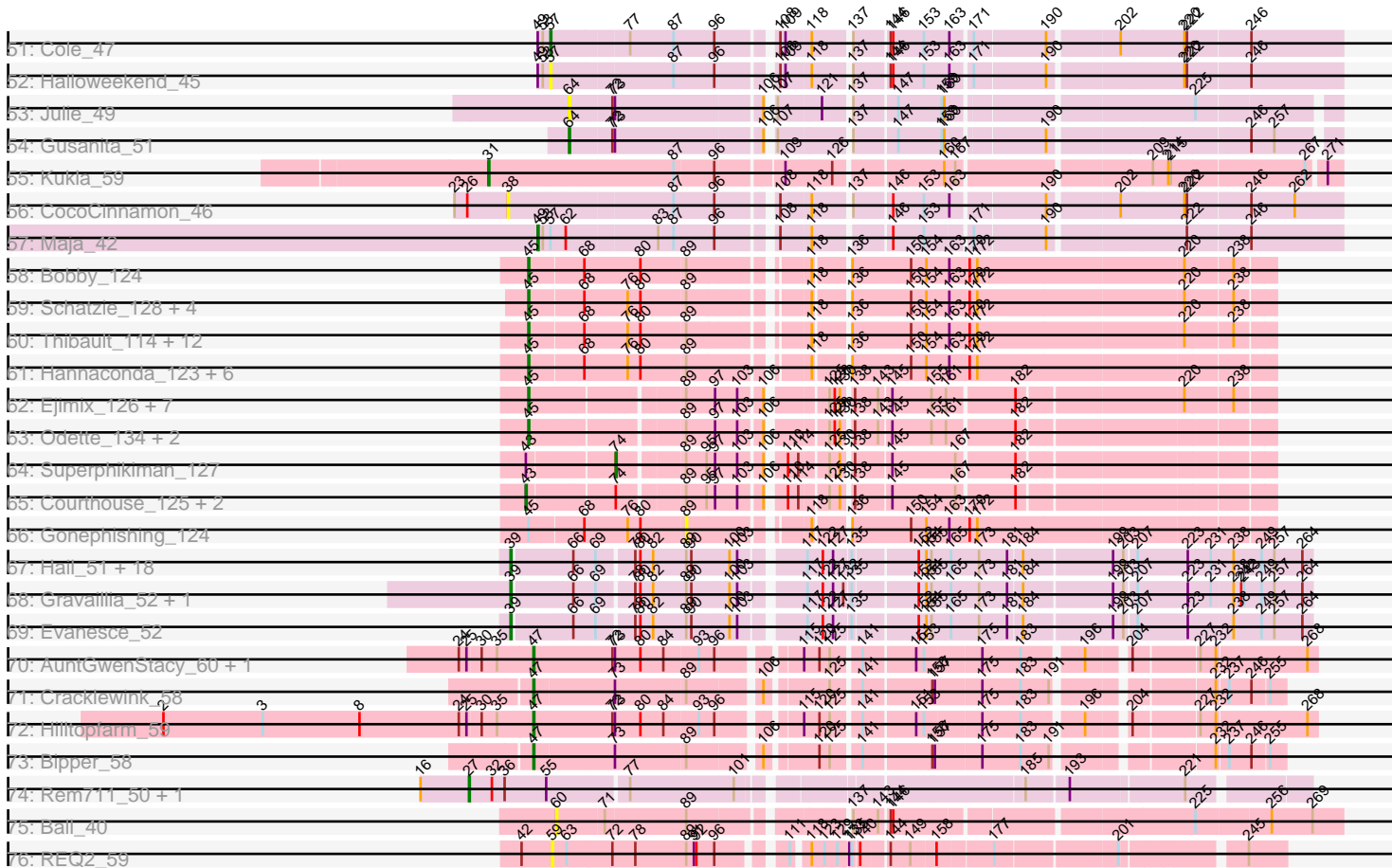


Pham 202631



Pham 202631



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 202631 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202631 has 271 members, 28 are drafts.

Phages represented in each track:

- Track 1 : JustASigh_51
- Track 2 : Weirdo19_50
- Track 3 : Confidence_64
- Track 4 : BritBrat_65
- Track 5 : Ohgeesy_64
- Track 6 : Hyzer_75
- Track 7 : Attis_61, LordFarquaad_63, SoilAssassin_61
- Track 8 : Vasanti_60
- Track 9 : Dorito_56
- Track 10 : Twinkle_64, Adora_62, Shlim410_63, Howe_65, Dolores_63, Sekhmet_62, WinkNick_63, Hortense_65
- Track 11 : Thimann_65
- Track 12 : Mcklovin_63
- Track 13 : DobbysSock_59, Beenie_59, Samman98_65, Clark_64
- Track 14 : PhriskyACE_62
- Track 15 : Oregano_65
- Track 16 : Easley_60
- Track 17 : Powerball_63
- Track 18 : Invectra_66
- Track 19 : MichaelScott_66
- Track 20 : BBQValindra_59
- Track 21 : ODay_77
- Track 22 : BearBQ_69
- Track 23 : BotCity_76
- Track 24 : Phabuloso_74
- Track 25 : Horus_71
- Track 26 : Spooky_85
- Track 27 : Kudrefre_68
- Track 28 : Octobien14_68
- Track 29 : Sephiroth_67
- Track 30 : Syleon_69
- Track 31 : ArchiDore_64
- Track 32 : Malibo_67
- Track 33 : Ruthy_63
- Track 34 : Heinz_51, Hibiscus_51
- Track 35 : Santhid_49
- Track 36 : Cookies_89, Balomoji_92, Gator_90

- Track 37 : Willez_87, GoldenSpark_96, Hopey_93, Adnama_96, Traaww1_88, FireRed_96, Thresher_95, IHOP_90, Bench_95, MPhalcon_93, Harella_92, Dumbo_92, BugsBunny_92, Terminus_95, Filch_94, Qualification_93, Rakim_93, Palpatine_94, HanKaySha_93, Pharsalus_89, Marshmallow_90, Highbury_91, YassJohnny_89, Czyszczo1_93, Lilpickle_91, Stark_94, CrystalP_91, 244_93, Mindy_91, AmericanBeauty_96, Myrale_92, Amao_92, Easy2Say_93, Manda_94, Teaspoon_93, NelitzaMV_90, Nimrod_93, Pumpkin_96, StellaBean_90, Moldemort_95, Emmina_92, Cactus_95, ShamWow_92, BigBubba_92, MISSy_93, TeardropMSU_88, Hoonter_95, Sassay_87, BaboJay_92, Policronamos_96, Wiggin_94, Henry_90, Simpliphy_91, Stank_94, SirDuracell_92, Sotrice96_93, RiverMonster_93, Goku_91, SophKB_89, Kanye_89, Argent26_96, Inca_89, Elite2014_91, ShereKhan_90, BadStone_89, ChosenOne_92, Murphy_92, FairyPath_92, BilboSwaggins_91, Contagion_88, Holt_97, Ukulele_87, Xandras_91, GooberAzure_95, Paperbeatsrock_91, NoSleep_93, Youngblood_95, Saints25_91, JeTaimé_93, Asriel_90, MadamMonkfish_92, Flypotenuse_88, Barbarian_91, Elph10_93, Gemini_97, StolenFromERC_95, DrDrey_92, Tuco_93, Misfit_93, Toto_90, TBrady12_95, Bruin_89, Tomaszewski_87, Lilizi_93, Miniwave_87, OrionPax_91, Icee_93, xkcd_95, Phaux_95, Phaja_90, Porky_91, Tarkin_91, Kimchi_96, Phrux_90, Gage_94, Glexan_91
- Track 38 : DoctorDiddles_91, ChotaBhai_92, Bask21_92
- Track 39 : Command613_94, Cjw1_93, Dusk_89, Mosby_88, Eureka_91, Kostya_92, Murica_95, Lilac_95, Nala_94, Maxxinista_95, ABCat_89, PhatBacter_96, HuffyPuff_94
- Track 40 : Petra64142_97, Buck_93, Daikon_93, Rimmer_90, Pat3_89
- Track 41 : Goldilocks_95
- Track 42 : Toron_69
- Track 43 : KayMoney_52, Constance_53
- Track 44 : Eileen_48
- Track 45 : FosterFrank_54
- Track 46 : RootBeer_44
- Track 47 : ChuckDuck_53
- Track 48 : Zaheer_53
- Track 49 : IsHungry_47, Popper_52
- Track 50 : Ryan_51, QuinnAvery_52
- Track 51 : Cole_47
- Track 52 : Halloweekend_45
- Track 53 : Julie_49
- Track 54 : Gusanita_51
- Track 55 : Kukla_59
- Track 56 : CocoCinnamon_46
- Track 57 : Maja_42
- Track 58 : Bobby_124
- Track 59 : Schatzie_128, Pound_121, DmpstrDiver_132, Kalah2_123, Optimus_123
- Track 60 : Thibault_114, JuicyJay_129, Bombitas_120, Hughesyang_132, NihilNomen_134, ThreeRngTarjay_128, Minerva_131, Phoebus_133, Duke13_127, Beem_134, Constella_122, Zelink_127, Wanda_131
- Track 61 : Hannaconda_123, Porcelain_128, Lucky2013_125, Ariel_130, LittleE_133, Omega_140, MiaZeal_130
- Track 62 : Ejjimix_126, Halley_134, Redno2_124, Dallas_133, EricMillard_124, Dove_118, BAKA_132, Klein_129
- Track 63 : Odette_134, Yeet_124, HokkenD_122
- Track 64 : Superphikiman_127
- Track 65 : Courthouse_125, KashFlow_128, Squint_128

- Track 66 : Gonephishing_124
- Track 67 : Hail_51, DeepSoil15_53, Kinbote_53, Amochick_53, Webster2_53, Luke_53, LilHazelnut_53, Hadrien_53, Wishmaker_51, Giles_51, Forge_51, Luna22_51, Ubuntu_53, Gancho_52, Ein37_53, Amymech_53, HH92_52, Daegal_55, Dewey_51
- Track 68 : Gravaillia_52, OBUpride_53
- Track 69 : Evanesce_52
- Track 70 : AuntGwenStacy_60, Typha_59
- Track 71 : Cracklewink_58
- Track 72 : Hilltopfarm_59
- Track 73 : Bipper_58
- Track 74 : Rem711_50, 32HC_51
- Track 75 : Ball_40
- Track 76 : REQ2_59

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

The start number called the most often in the published annotations is 43, it was called in 113 of the 243 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_93, Adnama_96, Amao_92, AmericanBeauty_96, Argent26_96, Asriel_90, BaboJay_92, BadStone_89, Balomoji_92, Barbarian_91, Bask21_92, Bench_95, BigBubba_92, BilboSwaggins_91, Bruin_89, Buck_93, BugsBunny_92, Cactus_95, ChosenOne_92, ChotaBhai_92, Contagion_88, Cookies_89, Courthouse_125, CrystalP_91, Czyszczonek_93, Daikon_93, DoctorDiddles_91, DrDrey_92, Dumbo_92, Easy2Say_93, Elite2014_91, Elph10_93, Emmina_92, FairyPath_92, Filch_94, FireRed_96, Flypotenuse_88, Gage_94, Gator_90, Gemini_97, Glexan_91, Goku_91, GoldenSpark_96, Goldilocks_95, GooberAzure_95, HanKaySha_93, Harella_92, Henry_90, Highbury_91, Holt_97, Hoonter_95, Hopey_93, IHOP_90, Icee_93, Inca_89, JeTaime_93, Kanye_89, KashFlow_128, Kimchi_96, Lilizi_93, Lilpickle_91, MISSy_93, MPhalcon_93, MadamMonkfish_92, Manda_94, Marshmallow_90, Mindy_91, Miniwave_87, Misfit_93, Moldemort_95, Murphy_92, Myrale_92, NelitzaMV_90, Nimrod_93, NoSleep_93, OrionPax_91, Palpatine_94, Paperbeatsrock_91, Pat3_89, Petra64142_97, Phaja_90, Pharsalus_89, Phaux_95, Phrux_90, Policronamos_96, Porky_91, Pumpkin_96, Quallification_93, Rakim_93, Rimmer_90, RiverMonster_93, Saints25_91, Sassay_87, ShamWow_92, ShereKhan_90, Simpliphy_91, SirDuracell_92, SophKB_89, Sotrice96_93, Squint_128, Stank_94, Stark_94, StellaBean_90, StolenFromERC_95, TBrady12_95, Tarkin_91, TeardropMSU_88, Teaspoon_93, Terminus_95, Thresher_95, Tomaszewski_87, Toto_90, Traaww1_88, Tuco_93, Ukulele_87, Wiggin_94, Willez_87, Xandras_91, YassJohnny_89, Youngblood_95, xkcd_95,

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

- ABCat_89, Cjw1_93, Command613_94, Dusk_89, Eureka_91, HufflyPuff_94, Kostya_92, Lilac_95, Maxxinista_95, Mosby_88, Murica_95, Nala_94, PhatBacter_96, Superphikiman_127,

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

- 32HC_51, Adora_62, Amochick_53, Amymech_53, ArchiDore_64, Ariel_130, Attis_61, AuntGwenStacy_60, BAKA_132, BBQValindra_59, Ball_40, BearBQ_69, Beem_134, Beenie_59, Bipper_58, Bobby_124, Bombitas_120, BotCity_76, BritBrat_65, ChuckDuck_53, Clark_64, CocoCinnamon_46, Cole_47, Confidence_64, Constance_53, Constella_122, Cracklewink_58, Daegal_55, Dallas_133, DeepSoil15_53, Dewey_51, DmpstrDiver_132, DobbysSock_59, Dolores_63, Dorito_56, Dove_118, Duke13_127, Easley_60, Eileen_48, Ein37_53, Ejimix_126, EricMillard_124, Evanesce_52, Forge_51, FosterFrank_54, Gancho_52, Giles_51, Gonephishing_124, Gravaiilla_52, Gusanita_51, HH92_52, Hadrien_53, Hail_51, Halley_134, Halloween_45, Hannaconda_123, Heinz_51, Hibiscus_51, Hilltopfarm_59, HokkenD_122, Hortense_65, Horus_71, Howe_65, Hughesyang_132, Hyzer_75, Investra_66, IsHungry_47, JuicyJay_129, Julie_49, JustASigh_51, Kalah2_123, KayMoney_52, Kinbote_53, Klein_129, Kudrefre_68, Kukla_59, LilHazelNut_53, LittleE_133, LordFarquaad_63, Lucky2013_125, Luke_53, Luna22_51, Maja_42, Malibo_67, Mcklovin_63, MiaZeal_130, MichaelScott_66, Minerva_131, NihilNomen_134, OBUpride_53, ODay_77, Octobien14_68, Odette_134, Ohgeesy_64, Omega_140, Optimus_123, Oregano_65, Phabuloso_74, Phoebus_133, PhriskyACE_62, Popper_52, Porcelain_128, Pound_121, Powerball_63, QuinnAvery_52, REQ2_59, Redno2_124, Rem711_50, RootBeer_44, Ruthy_63, Ryan_51, Samman98_65, Santhid_49, Schatzie_128, Sekhmet_62, Sephiroth_67, Shlim410_63, SoilAssassin_61, Spooky_85, Syleon_69, Thibault_114, Thimann_65, ThreeRngTarjay_128, Toron_69, Twinkle_64, Typha_59, Ubuntu_53, Vasanti_60, Wanda_131, Webster2_53, Weirido19_50, WinkNick_63, Wishmaker_51, Yeet_124, Zaheer_53, Zelink_127,

Summary by start number:

Start 7:

- Found in 6 of 271 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChuckDuck_53 (FA), Constance_53 (FA), Eileen_48 (FA), FosterFrank_54 (FA), KayMoney_52 (FA), RootBeer_44 (FA),

Start 17:

- Found in 2 of 271 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hyzer_75 (CZ1),

Start 18:

- Found in 23 of 271 (8.5%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 13.0% of time when present
- Phage (with cluster) where this start called: Attis_61 (CZ2), LordFarquaad_63 (CZ2), SoilAssassin_61 (CZ2),

Start 27:

- Found in 4 of 271 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 50.0% of time when present
- Phage (with cluster) where this start called: 32HC_51 (Z), Rem711_50 (Z),

Start 31:

- Found in 1 of 271 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla_59 (FJ),

Start 34:

- Found in 3 of 271 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Ruthy_63 (DW),

Start 38:

- Found in 2 of 271 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: CocoCinnamon_46 (FO),

Start 39:

- Found in 22 of 271 (8.1%) of genes in pham
- Manual Annotations of this start: 22 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amochick_53 (Q), Amymech_53 (Q), Daegal_55 (Q), DeepSoil15_53 (Q), Dewey_51 (Q), Ein37_53 (Q), Evanesce_52 (Q), Forge_51 (Q), Gancho_52 (Q), Giles_51 (Q), Gravaillia_52 (Q), HH92_52 (Q), Hadrien_53 (Q), Hail_51 (Q), Kinbote_53 (Q), LilHazelnut_53 (Q), Luke_53 (Q), Luna22_51 (Q), OBUpride_53 (Q), Ubuntu_53 (Q), Webster2_53 (Q), Wishmaker_51 (Q),

Start 43:

- Found in 135 of 271 (49.8%) of genes in pham
- Manual Annotations of this start: 113 of 243
- Called 89.6% of time when present
- Phage (with cluster) where this start called: 244_93 (E), Adnama_96 (E), Amao_92 (E), AmericanBeauty_96 (E), Argent26_96 (E), Asriel_90 (E), BaboJay_92 (E), BadStone_89 (E), Balomoji_92 (E), Barbarian_91 (E), Bask21_92 (E), Bench_95 (E), BigBubba_92 (E), BilboSwaggins_91 (E), Bruin_89 (E), Buck_93 (E), BugsBunny_92 (E), Cactus_95 (E), ChosenOne_92 (E), ChotaBhai_92 (E), Contagion_88 (E), Cookies_89 (E), Courthouse_125 (J), CrystalP_91 (E), Czyszczonek_93 (E), Daikon_93 (E), DoctorDiddles_91 (E), DrDrey_92 (E), Dumbo_92 (E), Easy2Say_93 (E), Elite2014_91 (E), Elph10_93 (E), Emmina_92 (E), FairyPath_92 (E), Filch_94 (E), FireRed_96 (E), Flypotenuse_88 (E), Gage_94 (E), Gator_90 (E), Gemini_97 (E), Glexan_91 (E), Goku_91 (E), GoldenSpark_96 (E), Goldilocks_95 (E), GooberAzure_95 (E), HankaySha_93 (E), Harella_92 (E), Henry_90 (E), Highbury_91 (E), Holt_97 (E), Hoonter_95 (E), Hopey_93 (E), IHOP_90 (E), Icee_93 (E), Inca_89 (E), JeTaime_93 (E), Kanye_89 (E), KashFlow_128 (J), Kimchi_96 (E), Lilizi_93 (E), Lilpickle_91 (E), MISSy_93 (E), MPhalcon_93 (E), MadamMonkfish_92 (E), Manda_94 (E), Marshmallow_90 (E), Mindy_91 (E), Miniwave_87 (E), Misfit_93 (E), Moldemort_95 (E), Murphy_92 (E), Myrale_92 (E), NelitzaMV_90 (E), Nimrod_93 (E), NoSleep_93 (E), OrionPax_91 (E), Palpatine_94 (E), Paperbeatsrock_91 (E), Pat3_89 (E), Petra64142_97 (E), Phaja_90 (E), Pharsalus_89 (E), Phaux_95 (E), Phrux_90 (E), Policronamos_96 (E), Porky_91 (E), Pumpkin_96 (E), Qualification_93 (E), Rakim_93 (E), Rimmer_90 (E), RiverMonster_93 (E), Saints25_91 (E),

Sassay_87 (E), ShamWow_92 (E), ShereKhan_90 (E), Simpliphy_91 (E), SirDuracell_92 (E), SophKB_89 (E), Sotrice96_93 (E), Squint_128 (J), Stank_94 (E), Stark_94 (E), StellaBean_90 (E), StolenFromERC_95 (E), TBrady12_95 (E), Tarkin_91 (E), TeardropMSU_88 (E), Teaspoon_93 (E), Terminus_95 (E), Thresher_95 (E), Tomaszewski_87 (E), Toto_90 (E), Traaww1_88 (E), Tuco_93 (E), Ukulele_87 (E), Wiggin_94 (E), Willez_87 (E), Xandras_91 (E), YassJohnny_89 (E), Youngblood_95 (E), xkcd_95 (E),

Start 44:

- Found in 25 of 271 (9.2%) of genes in pham
- Manual Annotations of this start: 22 of 243
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Adora_62 (CZ4), Beenie_59 (CZ4), Clark_64 (CZ4), Confidence_64 (CY1), DobbysSock_59 (CZ4), Dolores_63 (CZ4), Dorito_56 (CZ4), Easley_60 (CZ4), Hortense_65 (CZ4), Howe_65 (CZ4), Mcklovin_63 (CZ4), MichaelScott_66 (CZ4), Ohgeesy_64 (CZ), Oregano_65 (CZ4), Powerball_63 (CZ4), Samman98_65 (CZ4), Sekhmet_62 (CZ4), Shlim410_63 (CZ4), Spooky_85 (DN2), Thimann_65 (CZ4), Twinkle_64 (CZ4), WinkNick_63 (CZ4),

Start 45:

- Found in 38 of 271 (14.0%) of genes in pham
- Manual Annotations of this start: 36 of 243
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Ariel_130 (J), BAKA_132 (J), Beem_134 (J), Bobby_124 (J), Bombitas_120 (J), Constella_122 (J), Dallas_133 (J), DmpstrDiver_132 (J), Dove_118 (J), Duke13_127 (J), Ejimix_126 (J), EricMillard_124 (J), Halley_134 (J), Hannaconda_123 (J), HokkenD_122 (J), Hughesyang_132 (J), JuicyJay_129 (J), Kalah2_123 (J), Klein_129 (J), LittleE_133 (J), Lucky2013_125 (J), MiaZeal_130 (J), Minerva_131 (J), NihilNomen_134 (J), Odette_134 (J), Omega_140 (J), Optimus_123 (J), Phoebus_133 (J), Porcelain_128 (J), Pound_121 (J), Redno2_124 (J), Schatzie_128 (J), Thibault_114 (J), ThreeRngTarjay_128 (J), Wanda_131 (J), Yeet_124 (J), Zelink_127 (J),

Start 46:

- Found in 1 of 271 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_59 (DB),

Start 47:

- Found in 5 of 271 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_60 (Y), Bipper_58 (Y), Cracklewink_58 (Y), Hilltopfarm_59 (Y), Typha_59 (Y),

Start 48:

- Found in 3 of 271 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heinz_51 (DY), Hibiscus_51 (DY), Santhid_49 (DY),

Start 49:

- Found in 5 of 271 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Maja_42 (FO),

Start 50:

- Found in 2 of 271 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Malibo_67 (DW),

Start 51:

- Found in 131 of 271 (48.3%) of genes in pham
- Manual Annotations of this start: 13 of 243
- Called 9.9% of time when present
- Phage (with cluster) where this start called: ABCat_89 (E), Cjw1_93 (E), Command613_94 (E), Dusk_89 (E), Eureka_91 (E), HufflyPuff_94 (E), Kostya_92 (E), Lilac_95 (E), Maxxinsta_95 (E), Mosby_88 (E), Murica_95 (E), Nala_94 (E), PhatBacter_96 (E),

Start 53:

- Found in 11 of 271 (4.1%) of genes in pham
- Manual Annotations of this start: 5 of 243
- Called 54.5% of time when present
- Phage (with cluster) where this start called: BearBQ_69 (DN), BotCity_76 (DN), BritBrat_65 (CY2), Horus_71 (DN1), ODay_77 (DN), Phabuloso_74 (DN1),

Start 54:

- Found in 1 of 271 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Octobien14_68 (DU1),

Start 56:

- Found in 3 of 271 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre_68 (DU1), Sephiroth_67 (DU1), Syleon_69 (DU1),

Start 57:

- Found in 5 of 271 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Cole_47 (FF), Halloweekend_45 (FF), QuinnAvery_52 (FF), Ryan_51 (FF),

Start 58:

- Found in 1 of 271 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toron_69 (F6),

Start 59:

- Found in 4 of 271 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: REQ2_59 (singleton),

Start 60:

- Found in 2 of 271 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ball_40 (singleton),

Start 64:

- Found in 5 of 271 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gusanita_51 (FF), IsHungry_47 (FF), Julie_49 (FF), Popper_52 (FF), Zaheer_53 (FF),

Start 67:

- Found in 8 of 271 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Vasanti_60 (CZ2),

Start 70:

- Found in 24 of 271 (8.9%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Invectra_66 (CZ4), PhriskyACE_62 (CZ4),

Start 71:

- Found in 7 of 271 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 28.6% of time when present
- Phage (with cluster) where this start called: JustASigh_51 (AH), Weirido19_50 (AH),

Start 74:

- Found in 4 of 271 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Superphikiman_127 (J),

Start 82:

- Found in 31 of 271 (11.4%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: ArchiDore_64 (DW),

Start 89:

- Found in 101 of 271 (37.3%) of genes in pham

- No Manual Annotations of this start.
- Called 1.0% of time when present
- Phage (with cluster) where this start called: Gonephishing_124 (J),

Summary by clusters:

There are 25 clusters represented in this pham: DN, singleton, CZ2, CZ1, DB, CZ4, FA, FF, DY, DW, FJ, FO, DN1, DN2, DU1, CY2, CY1, E, AH, J, Q, CZ, Y, Z, F6,

Info for manual annotations of cluster AH:

- Start number 71 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster CY1:

- Start number 44 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 53 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 44 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 18 was manually annotated 3 times for cluster CZ2.
- Start number 67 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 44 was manually annotated 19 times for cluster CZ4.

Info for manual annotations of cluster DB:

- Start number 46 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

- Start number 53 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 53 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 44 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DU1:

- Start number 54 was manually annotated 1 time for cluster DU1.
- Start number 56 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DW:

- Start number 34 was manually annotated 1 time for cluster DW.
- Start number 50 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

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

Info for manual annotations of cluster E:

- Start number 43 was manually annotated 110 times for cluster E.
- Start number 51 was manually annotated 13 times for cluster E.

Info for manual annotations of cluster FA:

- Start number 7 was manually annotated 4 times for cluster FA.

Info for manual annotations of cluster FF:

- Start number 57 was manually annotated 3 times for cluster FF.
- Start number 64 was manually annotated 3 times for cluster FF.

Info for manual annotations of cluster FJ:

- Start number 31 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FO:

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

Info for manual annotations of cluster J:

- Start number 43 was manually annotated 3 times for cluster J.
- Start number 45 was manually annotated 36 times for cluster J.
- Start number 74 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster Q:

- Start number 39 was manually annotated 22 times for cluster Q.

Info for manual annotations of cluster Y:

- Start number 47 was manually annotated 4 times for cluster Y.

Info for manual annotations of cluster Z:

- Start number 27 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 244_93 Start: 55622, Stop: 56443, Start Num: 43

Candidate Starts for 244_93:

(Start: 43 @55622 has 113 MA's), (Start: 51 @55640 has 13 MA's), (55, 55646), (81, 55763), (93, 55823), (95, 55832), (138, 55970), (179, 56129), (180, 56138), (192, 56201), (205, 56282), (231, 56372),

Gene: 32HC_51 Start: 34909, Stop: 35787, Start Num: 27

Candidate Starts for 32HC_51:

(16, 34852), (Start: 27 @34909 has 1 MA's), (32, 34936), (36, 34951), (55, 34999), (77, 35086), (101, 35203), (185, 35488), (193, 35533), (221, 35659),

Gene: ABCat_89 Start: 56328, Stop: 57131, Start Num: 51

Candidate Starts for ABCat_89:

(Start: 43 @56310 has 113 MA's), (Start: 51 @56328 has 13 MA's), (55, 56334), (81, 56451), (93, 56511), (95, 56520), (138, 56658), (179, 56817), (180, 56826), (192, 56889), (205, 56970), (231, 57060),

Gene: Adnama_96 Start: 55918, Stop: 56739, Start Num: 43

Candidate Starts for Adnama_96:

(Start: 43 @55918 has 113 MA's), (Start: 51 @55936 has 13 MA's), (55, 55942), (81, 56059), (93, 56119), (95, 56128), (138, 56266), (179, 56425), (180, 56434), (192, 56497), (205, 56578), (231, 56668),

Gene: Adora_62 Start: 43256, Stop: 44095, Start Num: 44

Candidate Starts for Adora_62:

(11, 43076), (Start: 18 @43136 has 3 MA's), (Start: 44 @43256 has 22 MA's), (70, 43334), (89, 43436), (265, 44084),

Gene: Amao_92 Start: 55430, Stop: 56251, Start Num: 43

Candidate Starts for Amao_92:

(Start: 43 @55430 has 113 MA's), (Start: 51 @55448 has 13 MA's), (55, 55454), (81, 55571), (93, 55631), (95, 55640), (138, 55778), (179, 55937), (180, 55946), (192, 56009), (205, 56090), (231, 56180),

Gene: AmericanBeauty_96 Start: 56479, Stop: 57300, Start Num: 43

Candidate Starts for AmericanBeauty_96:

(Start: 43 @56479 has 113 MA's), (Start: 51 @56497 has 13 MA's), (55, 56503), (81, 56620), (93, 56680), (95, 56689), (138, 56827), (179, 56986), (180, 56995), (192, 57058), (205, 57139), (231, 57229),

Gene: Amochick_53 Start: 37915, Stop: 38778, Start Num: 39

Candidate Starts for Amochick_53:

(Start: 39 @37915 has 22 MA's), (66, 37981), (69, 38005), (78, 38044), (80, 38050), (82, 38065), (89, 38101), (90, 38107), (100, 38149), (103, 38158), (117, 38221), (122, 38239), (127, 38251), (135, 38269), (152, 38338), (154, 38347), (155, 38353), (165, 38374), (173, 38407), (181, 38440), (184, 38455), (199, 38554), (203, 38566), (207, 38578), (223, 38635), (231, 38662), (238, 38686), (249, 38719), (257, 38734), (264, 38767),

Gene: Amymech_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Amymech_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: ArchiDore_64 Start: 45888, Stop: 46604, Start Num: 82

Candidate Starts for ArchiDore_64:

(1, 45183), (4, 45528), (6, 45543), (12, 45591), (15, 45624), (17, 45633), (Start: 34 @45717 has 1 MA's), (82, 45888), (100, 45972), (104, 45984), (109, 46026), (184, 46296), (247, 46518),

Gene: Argent26_96 Start: 55839, Stop: 56660, Start Num: 43

Candidate Starts for Argent26_96:

(Start: 43 @55839 has 113 MA's), (Start: 51 @55857 has 13 MA's), (55, 55863), (81, 55980), (93, 56040), (95, 56049), (138, 56187), (179, 56346), (180, 56355), (192, 56418), (205, 56499), (231, 56589),

Gene: Ariel_130 Start: 68384, Stop: 69184, Start Num: 45

Candidate Starts for Ariel_130:

(Start: 45 @68384 has 36 MA's), (68, 68444), (76, 68495), (80, 68510), (89, 68561), (118, 68675), (136, 68708), (150, 68777), (154, 68795), (163, 68822), (170, 68846), (172, 68855),

Gene: Asriel_90 Start: 54255, Stop: 55076, Start Num: 43

Candidate Starts for Asriel_90:

(Start: 43 @54255 has 113 MA's), (Start: 51 @54273 has 13 MA's), (55, 54279), (81, 54396), (93, 54456), (95, 54465), (138, 54603), (179, 54762), (180, 54771), (192, 54834), (205, 54915), (231, 55005),

Gene: Attis_61 Start: 41335, Stop: 42336, Start Num: 18

Candidate Starts for Attis_61:

(9, 41272), (Start: 18 @41335 has 3 MA's), (33, 41413), (Start: 67 @41509 has 1 MA's), (102, 41683), (103, 41686), (104, 41689), (109, 41731), (119, 41764), (120, 41770), (138, 41812), (172, 41947), (183, 41998), (184, 42001), (210, 42133), (235, 42211), (254, 42259), (263, 42295), (272, 42325),

Gene: AuntGwenStacy_60 Start: 43522, Stop: 44343, Start Num: 47

Candidate Starts for AuntGwenStacy_60:

(24, 43438), (25, 43447), (30, 43462), (35, 43480), (Start: 47 @43522 has 4 MA's), (72, 43615), (73, 43618), (80, 43648), (84, 43675), (93, 43714), (96, 43732), (115, 43807), (120, 43825), (125, 43837), (141, 43867), (151, 43924), (153, 43933), (175, 43996), (183, 44041), (196, 44104), (204, 44143), (227, 44212), (232, 44230), (268, 44332),

Gene: BAKA_132 Start: 71349, Stop: 72104, Start Num: 45

Candidate Starts for BAKA_132:

(Start: 45 @71349 has 36 MA's), (89, 71505), (97, 71538), (103, 71562), (106, 71586), (125, 71640), (128, 71646), (130, 71652), (138, 71661), (143, 71688), (145, 71700), (155, 71745), (161, 71760), (182, 71832), (220, 72012), (238, 72060),

Gene: BBQValindra_59 Start: 41751, Stop: 42629, Start Num: 46

Candidate Starts for BBQValindra_59:

(Start: 44 @41748 has 22 MA's), (Start: 46 @41751 has 1 MA's), (Start: 67 @41802 has 1 MA's), (102, 41976), (104, 41982), (109, 42024), (138, 42105), (141, 42114), (151, 42171), (183, 42291), (254, 42552),

Gene: BaboJay_92 Start: 56501, Stop: 57322, Start Num: 43

Candidate Starts for BaboJay_92:

(Start: 43 @56501 has 113 MA's), (Start: 51 @56519 has 13 MA's), (55, 56525), (81, 56642), (93, 56702), (95, 56711), (138, 56849), (179, 57008), (180, 57017), (192, 57080), (205, 57161), (231, 57251),

Gene: BadStone_89 Start: 55879, Stop: 56700, Start Num: 43

Candidate Starts for BadStone_89:

(Start: 43 @55879 has 113 MA's), (Start: 51 @55897 has 13 MA's), (55, 55903), (81, 56020), (93, 56080), (95, 56089), (138, 56227), (179, 56386), (180, 56395), (192, 56458), (205, 56539), (231, 56629),

Gene: Ball_40 Start: 29611, Stop: 30444, Start Num: 60

Candidate Starts for Ball_40:

(60, 29611), (Start: 71 @29665 has 1 MA's), (89, 29758), (137, 29917), (143, 29944), (144, 29953), (146, 29956), (225, 30280), (256, 30361), (269, 30409),

Gene: Balomoji_92 Start: 56037, Stop: 56858, Start Num: 43

Candidate Starts for Balomoji_92:

(Start: 43 @56037 has 113 MA's), (Start: 51 @56055 has 13 MA's), (55, 56061), (65, 56091), (93, 56238), (95, 56247), (141, 56394), (179, 56544), (231, 56787),

Gene: Barbarian_91 Start: 54255, Stop: 55076, Start Num: 43

Candidate Starts for Barbarian_91:

(Start: 43 @54255 has 113 MA's), (Start: 51 @54273 has 13 MA's), (55, 54279), (81, 54396), (93, 54456), (95, 54465), (138, 54603), (179, 54762), (180, 54771), (192, 54834), (205, 54915), (231, 55005),

Gene: Bask21_92 Start: 54890, Stop: 55711, Start Num: 43

Candidate Starts for Bask21_92:

(Start: 43 @54890 has 113 MA's), (Start: 51 @54908 has 13 MA's), (55, 54914), (65, 54944), (93, 55091), (95, 55100), (141, 55247), (179, 55397), (231, 55640), (251, 55691),

Gene: BearBQ_69 Start: 43538, Stop: 44368, Start Num: 53

Candidate Starts for BearBQ_69:

(Start: 53 @43538 has 5 MA's), (82, 43664), (86, 43685), (94, 43718), (119, 43826), (120, 43832), (138, 43874), (139, 43877), (141, 43883), (143, 43901), (166, 43982), (169, 43985), (179, 44030), (182, 44051), (183, 44057), (194, 44111), (206, 44168), (208, 44171), (228, 44240), (235, 44267), (241, 44282), (254, 44315), (258, 44327), (261, 44336), (266, 44357),

Gene: Beem_134 Start: 72902, Stop: 73702, Start Num: 45

Candidate Starts for Beem_134:

(Start: 45 @72902 has 36 MA's), (68, 72962), (76, 73013), (80, 73028), (89, 73079), (118, 73193), (136, 73226), (150, 73295), (154, 73313), (163, 73340), (170, 73364), (172, 73373), (220, 73610), (238, 73658),

Gene: Beenie_59 Start: 41304, Stop: 42143, Start Num: 44

Candidate Starts for Beenie_59:

(Start: 18 @41181 has 3 MA's), (Start: 44 @41304 has 22 MA's), (70, 41382), (89, 41484), (265, 42132),

Gene: Bench_95 Start: 55974, Stop: 56795, Start Num: 43

Candidate Starts for Bench_95:

(Start: 43 @55974 has 113 MA's), (Start: 51 @55992 has 13 MA's), (55, 55998), (81, 56115), (93, 56175), (95, 56184), (138, 56322), (179, 56481), (180, 56490), (192, 56553), (205, 56634), (231, 56724),

Gene: BigBubba_92 Start: 55271, Stop: 56092, Start Num: 43

Candidate Starts for BigBubba_92:

(Start: 43 @55271 has 113 MA's), (Start: 51 @55289 has 13 MA's), (55, 55295), (81, 55412), (93, 55472), (95, 55481), (138, 55619), (179, 55778), (180, 55787), (192, 55850), (205, 55931), (231, 56021),

Gene: BilboSwaggins_91 Start: 56276, Stop: 57097, Start Num: 43

Candidate Starts for BilboSwaggins_91:

(Start: 43 @56276 has 113 MA's), (Start: 51 @56294 has 13 MA's), (55, 56300), (81, 56417), (93, 56477), (95, 56486), (138, 56624), (179, 56783), (180, 56792), (192, 56855), (205, 56936), (231, 57026),

Gene: Bipper_58 Start: 42349, Stop: 43125, Start Num: 47

Candidate Starts for Bipper_58:

(Start: 47 @42349 has 4 MA's), (73, 42442), (89, 42523), (106, 42598), (120, 42649), (125, 42661), (141, 42691), (156, 42766), (157, 42769), (175, 42820), (183, 42865), (191, 42898), (232, 43054), (237, 43066), (246, 43090), (255, 43108),

Gene: Bobby_124 Start: 73003, Stop: 73803, Start Num: 45

Candidate Starts for Bobby_124:

(Start: 45 @73003 has 36 MA's), (68, 73063), (80, 73129), (89, 73180), (118, 73294), (136, 73327), (150, 73396), (154, 73414), (163, 73441), (170, 73465), (172, 73474), (220, 73711), (238, 73759),

Gene: Bombitas_120 Start: 70313, Stop: 71113, Start Num: 45

Candidate Starts for Bombitas_120:

(Start: 45 @70313 has 36 MA's), (68, 70373), (76, 70424), (80, 70439), (89, 70490), (118, 70604), (136, 70637), (150, 70706), (154, 70724), (163, 70751), (170, 70775), (172, 70784), (220, 71021), (238, 71069),

Gene: BotCity_76 Start: 43774, Stop: 44604, Start Num: 53

Candidate Starts for BotCity_76:

(Start: 53 @43774 has 5 MA's), (82, 43900), (86, 43921), (94, 43954), (119, 44062), (120, 44068), (138, 44110), (139, 44113), (141, 44119), (143, 44137), (166, 44218), (169, 44221), (179, 44266), (183, 44293), (194, 44347), (206, 44404), (208, 44407), (226, 44470), (228, 44476), (235, 44503), (241, 44518), (254, 44551), (258, 44563), (261, 44572), (266, 44593),

Gene: BritBrat_65 Start: 43022, Stop: 43852, Start Num: 53

Candidate Starts for BritBrat_65:

(Start: 53 @43022 has 5 MA's), (86, 43169), (120, 43316), (138, 43358), (139, 43361), (141, 43367), (143, 43385), (166, 43466), (169, 43469), (182, 43535), (183, 43541), (194, 43595), (200, 43637), (206, 43652), (208, 43655), (226, 43718), (228, 43724), (233, 43745), (235, 43751), (241, 43766), (254, 43799), (258, 43811), (261, 43820), (266, 43841),

Gene: Bruin_89 Start: 54853, Stop: 55674, Start Num: 43

Candidate Starts for Bruin_89:

(Start: 43 @54853 has 113 MA's), (Start: 51 @54871 has 13 MA's), (55, 54877), (81, 54994), (93, 55054), (95, 55063), (138, 55201), (179, 55360), (180, 55369), (192, 55432), (205, 55513), (231, 55603),

Gene: Buck_93 Start: 56542, Stop: 57363, Start Num: 43

Candidate Starts for Buck_93:

(Start: 43 @56542 has 113 MA's), (Start: 51 @56560 has 13 MA's), (55, 56566), (65, 56596), (93, 56743), (95, 56752), (141, 56899), (179, 57049), (231, 57292),

Gene: BugsBunny_92 Start: 56382, Stop: 57203, Start Num: 43

Candidate Starts for BugsBunny_92:

(Start: 43 @56382 has 113 MA's), (Start: 51 @56400 has 13 MA's), (55, 56406), (81, 56523), (93, 56583), (95, 56592), (138, 56730), (179, 56889), (180, 56898), (192, 56961), (205, 57042), (231, 57132),

Gene: Cactus_95 Start: 54919, Stop: 55740, Start Num: 43

Candidate Starts for Cactus_95:

(Start: 43 @54919 has 113 MA's), (Start: 51 @54937 has 13 MA's), (55, 54943), (81, 55060), (93, 55120), (95, 55129), (138, 55267), (179, 55426), (180, 55435), (192, 55498), (205, 55579), (231, 55669),

Gene: ChosenOne_92 Start: 55334, Stop: 56155, Start Num: 43

Candidate Starts for ChosenOne_92:

(Start: 43 @55334 has 113 MA's), (Start: 51 @55352 has 13 MA's), (55, 55358), (81, 55475), (93, 55535), (95, 55544), (138, 55682), (179, 55841), (180, 55850), (192, 55913), (205, 55994), (231,

56084),

Gene: ChotaBhai_92 Start: 55255, Stop: 56076, Start Num: 43

Candidate Starts for ChotaBhai_92:

(Start: 43 @55255 has 113 MA's), (Start: 51 @55273 has 13 MA's), (55, 55279), (65, 55309), (93, 55456), (95, 55465), (141, 55612), (179, 55762), (231, 56005), (251, 56056),

Gene: ChuckDuck_53 Start: 34124, Stop: 35224, Start Num: 7

Candidate Starts for ChuckDuck_53:

(Start: 7 @34124 has 4 MA's), (59, 34358), (84, 34487), (89, 34511), (110, 34616), (126, 34667), (155, 34769), (160, 34784), (167, 34796), (198, 34952),

Gene: Cjw1_93 Start: 57316, Stop: 58119, Start Num: 51

Candidate Starts for Cjw1_93:

(Start: 43 @57298 has 113 MA's), (Start: 51 @57316 has 13 MA's), (55, 57322), (81, 57439), (93, 57499), (95, 57508), (138, 57646), (179, 57805), (180, 57814), (192, 57877), (205, 57958), (231, 58048),

Gene: Clark_64 Start: 41067, Stop: 41906, Start Num: 44

Candidate Starts for Clark_64:

(Start: 18 @40944 has 3 MA's), (Start: 44 @41067 has 22 MA's), (70, 41145), (89, 41247), (265, 41895),

Gene: CocoCinnamon_46 Start: 29916, Stop: 30803, Start Num: 38

Candidate Starts for CocoCinnamon_46:

(23, 29853), (26, 29868), (38, 29916), (87, 30102), (96, 30150), (108, 30204), (118, 30237), (137, 30276), (146, 30315), (153, 30351), (163, 30378), (190, 30480), (202, 30555), (220, 30627), (222, 30630), (246, 30696), (262, 30747),

Gene: Cole_47 Start: 33705, Stop: 34544, Start Num: 57

Candidate Starts for Cole_47:

(Start: 49 @33690 has 1 MA's), (Start: 53 @33696 has 5 MA's), (Start: 57 @33705 has 3 MA's), (77, 33792), (87, 33843), (96, 33891), (108, 33945), (109, 33951), (118, 33978), (137, 34017), (144, 34053), (146, 34056), (153, 34092), (163, 34119), (171, 34140), (190, 34221), (202, 34296), (220, 34368), (222, 34371), (246, 34437),

Gene: Command613_94 Start: 56391, Stop: 57194, Start Num: 51

Candidate Starts for Command613_94:

(Start: 43 @56373 has 113 MA's), (Start: 51 @56391 has 13 MA's), (55, 56397), (81, 56514), (93, 56574), (95, 56583), (138, 56721), (179, 56880), (180, 56889), (192, 56952), (205, 57033), (231, 57123),

Gene: Confidence_64 Start: 42274, Stop: 43167, Start Num: 44

Candidate Starts for Confidence_64:

(25, 42202), (Start: 27 @42205 has 1 MA's), (Start: 44 @42274 has 22 MA's), (102, 42505), (103, 42508), (104, 42511), (109, 42553), (138, 42634), (172, 42769), (183, 42820), (210, 42964), (254, 43090), (272, 43156),

Gene: Constance_53 Start: 34710, Stop: 35807, Start Num: 7

Candidate Starts for Constance_53:

(Start: 7 @34710 has 4 MA's), (59, 34944), (84, 35073), (89, 35097), (110, 35202), (123, 35244), (126, 35253), (155, 35355), (160, 35370), (167, 35382),

Gene: Constella_122 Start: 68436, Stop: 69236, Start Num: 45

Candidate Starts for Constella_122:

(Start: 45 @68436 has 36 MA's), (68, 68496), (76, 68547), (80, 68562), (89, 68613), (118, 68727), (136, 68760), (150, 68829), (154, 68847), (163, 68874), (170, 68898), (172, 68907), (220, 69144), (238, 69192),

Gene: Contagion_88 Start: 55134, Stop: 55955, Start Num: 43

Candidate Starts for Contagion_88:

(Start: 43 @55134 has 113 MA's), (Start: 51 @55152 has 13 MA's), (55, 55158), (81, 55275), (93, 55335), (95, 55344), (138, 55482), (179, 55641), (180, 55650), (192, 55713), (205, 55794), (231, 55884),

Gene: Cookies_89 Start: 55112, Stop: 55933, Start Num: 43

Candidate Starts for Cookies_89:

(Start: 43 @55112 has 113 MA's), (Start: 51 @55130 has 13 MA's), (55, 55136), (65, 55166), (93, 55313), (95, 55322), (141, 55469), (179, 55619), (231, 55862),

Gene: Courthouse_125 Start: 67981, Stop: 68739, Start Num: 43

Candidate Starts for Courthouse_125:

(Start: 43 @67981 has 113 MA's), (Start: 74 @68071 has 1 MA's), (89, 68140), (95, 68164), (97, 68173), (103, 68197), (106, 68221), (110, 68236), (114, 68248), (125, 68275), (130, 68287), (138, 68296), (145, 68335), (167, 68404), (182, 68467),

Gene: Cracklewink_58 Start: 42330, Stop: 43106, Start Num: 47

Candidate Starts for Cracklewink_58:

(Start: 47 @42330 has 4 MA's), (73, 42423), (89, 42504), (106, 42579), (125, 42642), (141, 42672), (156, 42747), (157, 42750), (175, 42801), (183, 42846), (191, 42879), (232, 43035), (237, 43047), (246, 43071), (255, 43089),

Gene: CrystalP_91 Start: 56276, Stop: 57097, Start Num: 43

Candidate Starts for CrystalP_91:

(Start: 43 @56276 has 113 MA's), (Start: 51 @56294 has 13 MA's), (55, 56300), (81, 56417), (93, 56477), (95, 56486), (138, 56624), (179, 56783), (180, 56792), (192, 56855), (205, 56936), (231, 57026),

Gene: Czyszczone1_93 Start: 55837, Stop: 56658, Start Num: 43

Candidate Starts for Czyszczone1_93:

(Start: 43 @55837 has 113 MA's), (Start: 51 @55855 has 13 MA's), (55, 55861), (81, 55978), (93, 56038), (95, 56047), (138, 56185), (179, 56344), (180, 56353), (192, 56416), (205, 56497), (231, 56587),

Gene: Daegal_55 Start: 38475, Stop: 39338, Start Num: 39

Candidate Starts for Daegal_55:

(Start: 39 @38475 has 22 MA's), (66, 38541), (69, 38565), (78, 38604), (80, 38610), (82, 38625), (89, 38661), (90, 38667), (100, 38709), (103, 38718), (117, 38781), (122, 38799), (127, 38811), (135, 38829), (152, 38898), (154, 38907), (155, 38913), (165, 38934), (173, 38967), (181, 39000), (184, 39015), (199, 39114), (203, 39126), (207, 39138), (223, 39195), (231, 39222), (238, 39246), (249, 39279), (257, 39294), (264, 39327),

Gene: Daikon_93 Start: 55864, Stop: 56685, Start Num: 43

Candidate Starts for Daikon_93:

(Start: 43 @55864 has 113 MA's), (Start: 51 @55882 has 13 MA's), (55, 55888), (65, 55918), (93, 56065), (95, 56074), (141, 56221), (179, 56371), (231, 56614),

Gene: Dallas_133 Start: 72414, Stop: 73169, Start Num: 45

Candidate Starts for Dallas_133:

(Start: 45 @72414 has 36 MA's), (89, 72570), (97, 72603), (103, 72627), (106, 72651), (125, 72705), (128, 72711), (130, 72717), (138, 72726), (143, 72753), (145, 72765), (155, 72810), (161, 72825), (182, 72897), (220, 73077), (238, 73125),

Gene: DeepSoil15_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for DeepSoil15_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Dewey_51 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Dewey_51:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: DmpstrDiver_132 Start: 71716, Stop: 72516, Start Num: 45

Candidate Starts for DmpstrDiver_132:

(Start: 45 @71716 has 36 MA's), (68, 71776), (76, 71827), (80, 71842), (89, 71893), (118, 72007), (136, 72040), (150, 72109), (154, 72127), (163, 72154), (170, 72178), (172, 72187), (220, 72424), (238, 72472),

Gene: DobbysSock_59 Start: 40715, Stop: 41554, Start Num: 44

Candidate Starts for DobbysSock_59:

(Start: 18 @40592 has 3 MA's), (Start: 44 @40715 has 22 MA's), (70, 40793), (89, 40895), (265, 41543),

Gene: DoctorDiddles_91 Start: 55299, Stop: 56120, Start Num: 43

Candidate Starts for DoctorDiddles_91:

(Start: 43 @55299 has 113 MA's), (Start: 51 @55317 has 13 MA's), (55, 55323), (65, 55353), (93, 55500), (95, 55509), (141, 55656), (179, 55806), (231, 56049), (251, 56100),

Gene: Dolores_63 Start: 40400, Stop: 41236, Start Num: 44

Candidate Starts for Dolores_63:

(11, 40220), (Start: 18 @40280 has 3 MA's), (Start: 44 @40400 has 22 MA's), (70, 40478), (89, 40580), (265, 41225),

Gene: Dorito_56 Start: 38217, Stop: 39053, Start Num: 44

Candidate Starts for Dorito_56:

(Start: 18 @38097 has 3 MA's), (Start: 44 @38217 has 22 MA's), (70, 38292), (89, 38394), (265, 39042),

Gene: Dove_118 Start: 67360, Stop: 68115, Start Num: 45

Candidate Starts for Dove_118:

(Start: 45 @67360 has 36 MA's), (89, 67516), (97, 67549), (103, 67573), (106, 67597), (125, 67651), (128, 67657), (130, 67663), (138, 67672), (143, 67699), (145, 67711), (155, 67756), (161, 67771),

(182, 67843), (220, 68023), (238, 68071),

Gene: DrDrey_92 Start: 56756, Stop: 57577, Start Num: 43

Candidate Starts for DrDrey_92:

(Start: 43 @56756 has 113 MA's), (Start: 51 @56774 has 13 MA's), (55, 56780), (81, 56897), (93, 56957), (95, 56966), (138, 57104), (179, 57263), (180, 57272), (192, 57335), (205, 57416), (231, 57506),

Gene: Duke13_127 Start: 69017, Stop: 69817, Start Num: 45

Candidate Starts for Duke13_127:

(Start: 45 @69017 has 36 MA's), (68, 69077), (76, 69128), (80, 69143), (89, 69194), (118, 69308), (136, 69341), (150, 69410), (154, 69428), (163, 69455), (170, 69479), (172, 69488), (220, 69725), (238, 69773),

Gene: Dumbo_92 Start: 55236, Stop: 56057, Start Num: 43

Candidate Starts for Dumbo_92:

(Start: 43 @55236 has 113 MA's), (Start: 51 @55254 has 13 MA's), (55, 55260), (81, 55377), (93, 55437), (95, 55446), (138, 55584), (179, 55743), (180, 55752), (192, 55815), (205, 55896), (231, 55986),

Gene: Dusk_89 Start: 55557, Stop: 56360, Start Num: 51

Candidate Starts for Dusk_89:

(Start: 43 @55539 has 113 MA's), (Start: 51 @55557 has 13 MA's), (55, 55563), (81, 55680), (93, 55740), (95, 55749), (138, 55887), (179, 56046), (180, 56055), (192, 56118), (205, 56199), (231, 56289),

Gene: Easley_60 Start: 39896, Stop: 40729, Start Num: 44

Candidate Starts for Easley_60:

(Start: 18 @39791 has 3 MA's), (Start: 44 @39896 has 22 MA's), (70, 39971), (89, 40073), (143, 40277), (265, 40718),

Gene: Easy2Say_93 Start: 56738, Stop: 57559, Start Num: 43

Candidate Starts for Easy2Say_93:

(Start: 43 @56738 has 113 MA's), (Start: 51 @56756 has 13 MA's), (55, 56762), (81, 56879), (93, 56939), (95, 56948), (138, 57086), (179, 57245), (180, 57254), (192, 57317), (205, 57398), (231, 57488),

Gene: Eileen_48 Start: 31825, Stop: 32925, Start Num: 7

Candidate Starts for Eileen_48:

(Start: 7 @31825 has 4 MA's), (89, 32212), (110, 32317), (126, 32368), (155, 32470), (160, 32485), (167, 32497), (197, 32644),

Gene: Ein37_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Ein37_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Ejimix_126 Start: 72482, Stop: 73237, Start Num: 45

Candidate Starts for Ejimix_126:

(Start: 45 @72482 has 36 MA's), (89, 72638), (97, 72671), (103, 72695), (106, 72719), (125, 72773), (128, 72779), (130, 72785), (138, 72794), (143, 72821), (145, 72833), (155, 72878), (161, 72893), (182, 72965), (220, 73145), (238, 73193),

Gene: Elite2014_91 Start: 55333, Stop: 56154, Start Num: 43

Candidate Starts for Elite2014_91:

(Start: 43 @55333 has 113 MA's), (Start: 51 @55351 has 13 MA's), (55, 55357), (81, 55474), (93, 55534), (95, 55543), (138, 55681), (179, 55840), (180, 55849), (192, 55912), (205, 55993), (231, 56083),

Gene: Elph10_93 Start: 55326, Stop: 56147, Start Num: 43

Candidate Starts for Elph10_93:

(Start: 43 @55326 has 113 MA's), (Start: 51 @55344 has 13 MA's), (55, 55350), (81, 55467), (93, 55527), (95, 55536), (138, 55674), (179, 55833), (180, 55842), (192, 55905), (205, 55986), (231, 56076),

Gene: Emmina_92 Start: 54959, Stop: 55780, Start Num: 43

Candidate Starts for Emmina_92:

(Start: 43 @54959 has 113 MA's), (Start: 51 @54977 has 13 MA's), (55, 54983), (81, 55100), (93, 55160), (95, 55169), (138, 55307), (179, 55466), (180, 55475), (192, 55538), (205, 55619), (231, 55709),

Gene: EricMillard_124 Start: 70986, Stop: 71741, Start Num: 45

Candidate Starts for EricMillard_124:

(Start: 45 @70986 has 36 MA's), (89, 71142), (97, 71175), (103, 71199), (106, 71223), (125, 71277), (128, 71283), (130, 71289), (138, 71298), (143, 71325), (145, 71337), (155, 71382), (161, 71397), (182, 71469), (220, 71649), (238, 71697),

Gene: Eureka_91 Start: 56264, Stop: 57067, Start Num: 51

Candidate Starts for Eureka_91:

(Start: 43 @56246 has 113 MA's), (Start: 51 @56264 has 13 MA's), (55, 56270), (81, 56387), (93, 56447), (95, 56456), (138, 56594), (179, 56753), (180, 56762), (192, 56825), (205, 56906), (231, 56996),

Gene: Evanesce_52 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Evanesce_52:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: FairyPath_92 Start: 56452, Stop: 57273, Start Num: 43

Candidate Starts for FairyPath_92:

(Start: 43 @56452 has 113 MA's), (Start: 51 @56470 has 13 MA's), (55, 56476), (81, 56593), (93, 56653), (95, 56662), (138, 56800), (179, 56959), (180, 56968), (192, 57031), (205, 57112), (231, 57202),

Gene: Filch_94 Start: 55531, Stop: 56352, Start Num: 43

Candidate Starts for Filch_94:

(Start: 43 @55531 has 113 MA's), (Start: 51 @55549 has 13 MA's), (55, 55555), (81, 55672), (93, 55732), (95, 55741), (138, 55879), (179, 56038), (180, 56047), (192, 56110), (205, 56191), (231, 56281),

Gene: FireRed_96 Start: 56549, Stop: 57370, Start Num: 43

Candidate Starts for FireRed_96:

(Start: 43 @56549 has 113 MA's), (Start: 51 @56567 has 13 MA's), (55, 56573), (81, 56690), (93, 56750), (95, 56759), (138, 56897), (179, 57056), (180, 57065), (192, 57128), (205, 57209), (231, 57299),

Gene: Flypotenuse_88 Start: 54909, Stop: 55730, Start Num: 43

Candidate Starts for Flypotenuse_88:

(Start: 43 @54909 has 113 MA's), (Start: 51 @54927 has 13 MA's), (55, 54933), (81, 55050), (93, 55110), (95, 55119), (138, 55257), (179, 55416), (180, 55425), (192, 55488), (205, 55569), (231, 55659),

Gene: Forge_51 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Forge_51:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: FosterFrank_54 Start: 33446, Stop: 34543, Start Num: 7

Candidate Starts for FosterFrank_54:

(Start: 7 @33446 has 4 MA's), (28, 33596), (89, 33833), (96, 33866), (126, 33989), (155, 34091), (160, 34106), (167, 34118), (197, 34265), (259, 34460),

Gene: Gage_94 Start: 55980, Stop: 56801, Start Num: 43

Candidate Starts for Gage_94:

(Start: 43 @55980 has 113 MA's), (Start: 51 @55998 has 13 MA's), (55, 56004), (81, 56121), (93, 56181), (95, 56190), (138, 56328), (179, 56487), (180, 56496), (192, 56559), (205, 56640), (231, 56730),

Gene: Gancho_52 Start: 37614, Stop: 38477, Start Num: 39

Candidate Starts for Gancho_52:

(Start: 39 @37614 has 22 MA's), (66, 37680), (69, 37704), (78, 37743), (80, 37749), (82, 37764), (89, 37800), (90, 37806), (100, 37848), (103, 37857), (117, 37920), (122, 37938), (127, 37950), (135, 37968), (152, 38037), (154, 38046), (155, 38052), (165, 38073), (173, 38106), (181, 38139), (184, 38154), (199, 38253), (203, 38265), (207, 38277), (223, 38334), (231, 38361), (238, 38385), (249, 38418), (257, 38433), (264, 38466),

Gene: Gator_90 Start: 55764, Stop: 56585, Start Num: 43

Candidate Starts for Gator_90:

(Start: 43 @55764 has 113 MA's), (Start: 51 @55782 has 13 MA's), (55, 55788), (65, 55818), (93, 55965), (95, 55974), (141, 56121), (179, 56271), (231, 56514),

Gene: Gemini_97 Start: 56356, Stop: 57177, Start Num: 43

Candidate Starts for Gemini_97:

(Start: 43 @56356 has 113 MA's), (Start: 51 @56374 has 13 MA's), (55, 56380), (81, 56497), (93, 56557), (95, 56566), (138, 56704), (179, 56863), (180, 56872), (192, 56935), (205, 57016), (231, 57106),

Gene: Giles_51 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Giles_51:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Glexan_91 Start: 56039, Stop: 56860, Start Num: 43

Candidate Starts for Glexan_91:

(Start: 43 @56039 has 113 MA's), (Start: 51 @56057 has 13 MA's), (55, 56063), (81, 56180), (93, 56240), (95, 56249), (138, 56387), (179, 56546), (180, 56555), (192, 56618), (205, 56699), (231, 56789),

Gene: Goku_91 Start: 55975, Stop: 56796, Start Num: 43

Candidate Starts for Goku_91:

(Start: 43 @55975 has 113 MA's), (Start: 51 @55993 has 13 MA's), (55, 55999), (81, 56116), (93, 56176), (95, 56185), (138, 56323), (179, 56482), (180, 56491), (192, 56554), (205, 56635), (231, 56725),

Gene: GoldenSpark_96 Start: 55839, Stop: 56660, Start Num: 43

Candidate Starts for GoldenSpark_96:

(Start: 43 @55839 has 113 MA's), (Start: 51 @55857 has 13 MA's), (55, 55863), (81, 55980), (93, 56040), (95, 56049), (138, 56187), (179, 56346), (180, 56355), (192, 56418), (205, 56499), (231, 56589),

Gene: Goldilocks_95 Start: 55197, Stop: 56018, Start Num: 43

Candidate Starts for Goldilocks_95:

(Start: 43 @55197 has 113 MA's), (Start: 51 @55215 has 13 MA's), (55, 55221), (81, 55338), (93, 55398), (95, 55407), (138, 55545), (179, 55704), (180, 55713), (192, 55776), (205, 55857), (231, 55947),

Gene: Gonephishing_124 Start: 67759, Stop: 68382, Start Num: 89

Candidate Starts for Gonephishing_124:

(Start: 45 @67582 has 36 MA's), (68, 67642), (76, 67693), (80, 67708), (89, 67759), (118, 67873), (136, 67906), (150, 67975), (154, 67993), (163, 68020), (170, 68044), (172, 68053),

Gene: GooberAzure_95 Start: 55839, Stop: 56660, Start Num: 43

Candidate Starts for GooberAzure_95:

(Start: 43 @55839 has 113 MA's), (Start: 51 @55857 has 13 MA's), (55, 55863), (81, 55980), (93, 56040), (95, 56049), (138, 56187), (179, 56346), (180, 56355), (192, 56418), (205, 56499), (231, 56589),

Gene: Gravaillia_52 Start: 37905, Stop: 38768, Start Num: 39

Candidate Starts for Gravaillia_52:

(Start: 39 @37905 has 22 MA's), (66, 37971), (69, 37995), (78, 38034), (80, 38040), (82, 38055), (89, 38091), (90, 38097), (100, 38139), (103, 38148), (117, 38211), (122, 38229), (127, 38241), (132, 38253), (135, 38259), (152, 38328), (154, 38337), (155, 38343), (165, 38364), (173, 38397), (181, 38430), (184, 38445), (199, 38544), (203, 38556), (207, 38568), (223, 38625), (231, 38652), (238, 38676), (242, 38685), (243, 38688), (249, 38709), (257, 38724), (264, 38757),

Gene: Gusanita_51 Start: 34996, Stop: 35799, Start Num: 64

Candidate Starts for Gusanita_51:

(Start: 64 @34996 has 3 MA's), (72, 35044), (73, 35047), (106, 35212), (107, 35215), (137, 35290), (147, 35335), (159, 35386), (160, 35389), (190, 35491), (246, 35707), (257, 35734),

Gene: HH92_52 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for HH92_52:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Hadrien_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Hadrien_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Hail_51 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Hail_51:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Halley_134 Start: 72798, Stop: 73553, Start Num: 45

Candidate Starts for Halley_134:

(Start: 45 @72798 has 36 MA's), (89, 72954), (97, 72987), (103, 73011), (106, 73035), (125, 73089), (128, 73095), (130, 73101), (138, 73110), (143, 73137), (145, 73149), (155, 73194), (161, 73209), (182, 73281), (220, 73461), (238, 73509),

Gene: Halloweekend_45 Start: 33347, Stop: 34186, Start Num: 57

Candidate Starts for Halloweekend_45:

(Start: 49 @33332 has 1 MA's), (Start: 53 @33338 has 5 MA's), (Start: 57 @33347 has 3 MA's), (87, 33485), (96, 33533), (108, 33587), (109, 33593), (118, 33620), (137, 33659), (144, 33695), (146, 33698), (153, 33734), (163, 33761), (171, 33782), (190, 33863), (220, 34010), (222, 34013), (246, 34079),

Gene: HanKaySha_93 Start: 55406, Stop: 56227, Start Num: 43

Candidate Starts for HanKaySha_93:

(Start: 43 @55406 has 113 MA's), (Start: 51 @55424 has 13 MA's), (55, 55430), (81, 55547), (93, 55607), (95, 55616), (138, 55754), (179, 55913), (180, 55922), (192, 55985), (205, 56066), (231, 56156),

Gene: Hannaconda_123 Start: 68235, Stop: 69035, Start Num: 45

Candidate Starts for Hannaconda_123:

(Start: 45 @68235 has 36 MA's), (68, 68295), (76, 68346), (80, 68361), (89, 68412), (118, 68526), (136, 68559), (150, 68628), (154, 68646), (163, 68673), (170, 68697), (172, 68706),

Gene: Harella_92 Start: 56555, Stop: 57376, Start Num: 43

Candidate Starts for Harella_92:

(Start: 43 @56555 has 113 MA's), (Start: 51 @56573 has 13 MA's), (55, 56579), (81, 56696), (93, 56756), (95, 56765), (138, 56903), (179, 57062), (180, 57071), (192, 57134), (205, 57215), (231,

57305),

Gene: Heinz_51 Start: 32603, Stop: 33430, Start Num: 48

Candidate Starts for Heinz_51:

(Start: 48 @32603 has 2 MA's), (70, 32672), (Start: 71 @32681 has 1 MA's), (86, 32759), (89, 32774), (119, 32915), (172, 33086), (179, 33110), (182, 33131), (183, 33137), (200, 33233), (252, 33380),

Gene: Henry_90 Start: 55716, Stop: 56537, Start Num: 43

Candidate Starts for Henry_90:

(Start: 43 @55716 has 113 MA's), (Start: 51 @55734 has 13 MA's), (55, 55740), (81, 55857), (93, 55917), (95, 55926), (138, 56064), (179, 56223), (180, 56232), (192, 56295), (205, 56376), (231, 56466),

Gene: Hibiscus_51 Start: 32552, Stop: 33379, Start Num: 48

Candidate Starts for Hibiscus_51:

(Start: 48 @32552 has 2 MA's), (70, 32621), (Start: 71 @32630 has 1 MA's), (86, 32708), (89, 32723), (119, 32864), (172, 33035), (179, 33059), (182, 33080), (183, 33086), (200, 33182), (252, 33329),

Gene: Highbury_91 Start: 55406, Stop: 56227, Start Num: 43

Candidate Starts for Highbury_91:

(Start: 43 @55406 has 113 MA's), (Start: 51 @55424 has 13 MA's), (55, 55430), (81, 55547), (93, 55607), (95, 55616), (138, 55754), (179, 55913), (180, 55922), (192, 55985), (205, 56066), (231, 56156),

Gene: Hilltopfarm_59 Start: 43214, Stop: 44035, Start Num: 47

Candidate Starts for Hilltopfarm_59:

(2, 42782), (3, 42899), (8, 43013), (24, 43130), (25, 43139), (30, 43154), (35, 43172), (Start: 47 @43214 has 4 MA's), (72, 43307), (73, 43310), (80, 43340), (84, 43367), (93, 43406), (96, 43424), (115, 43499), (120, 43517), (125, 43529), (141, 43559), (151, 43616), (153, 43625), (175, 43688), (183, 43733), (196, 43796), (204, 43835), (227, 43904), (232, 43922), (268, 44024),

Gene: HokkenD_122 Start: 71161, Stop: 71916, Start Num: 45

Candidate Starts for HokkenD_122:

(Start: 45 @71161 has 36 MA's), (89, 71317), (97, 71350), (103, 71374), (106, 71398), (125, 71452), (128, 71458), (130, 71464), (138, 71473), (143, 71500), (145, 71512), (155, 71557), (161, 71572), (182, 71644),

Gene: Holt_97 Start: 56253, Stop: 57074, Start Num: 43

Candidate Starts for Holt_97:

(Start: 43 @56253 has 113 MA's), (Start: 51 @56271 has 13 MA's), (55, 56277), (81, 56394), (93, 56454), (95, 56463), (138, 56601), (179, 56760), (180, 56769), (192, 56832), (205, 56913), (231, 57003),

Gene: Hoonter_95 Start: 55711, Stop: 56532, Start Num: 43

Candidate Starts for Hoonter_95:

(Start: 43 @55711 has 113 MA's), (Start: 51 @55729 has 13 MA's), (55, 55735), (81, 55852), (93, 55912), (95, 55921), (138, 56059), (179, 56218), (180, 56227), (192, 56290), (205, 56371), (231, 56461),

Gene: Hopey_93 Start: 56217, Stop: 57038, Start Num: 43

Candidate Starts for Hopey_93:

(Start: 43 @56217 has 113 MA's), (Start: 51 @56235 has 13 MA's), (55, 56241), (81, 56358), (93, 56418), (95, 56427), (138, 56565), (179, 56724), (180, 56733), (192, 56796), (205, 56877), (231,

56967),

Gene: Hortense_65 Start: 44611, Stop: 45450, Start Num: 44

Candidate Starts for Hortense_65:

(11, 44431), (Start: 18 @44491 has 3 MA's), (Start: 44 @44611 has 22 MA's), (70, 44689), (89, 44791), (265, 45439),

Gene: Horus_71 Start: 43494, Stop: 44324, Start Num: 53

Candidate Starts for Horus_71:

(Start: 53 @43494 has 5 MA's), (82, 43620), (86, 43641), (94, 43674), (119, 43782), (120, 43788), (138, 43830), (139, 43833), (141, 43839), (143, 43857), (166, 43938), (169, 43941), (179, 43986), (182, 44007), (183, 44013), (206, 44124), (208, 44127), (228, 44196), (233, 44217), (235, 44223), (241, 44238), (254, 44271), (261, 44292), (266, 44313),

Gene: Howe_65 Start: 44611, Stop: 45450, Start Num: 44

Candidate Starts for Howe_65:

(11, 44431), (Start: 18 @44491 has 3 MA's), (Start: 44 @44611 has 22 MA's), (70, 44689), (89, 44791), (265, 45439),

Gene: HufflyPuff_94 Start: 56319, Stop: 57122, Start Num: 51

Candidate Starts for HufflyPuff_94:

(Start: 43 @56301 has 113 MA's), (Start: 51 @56319 has 13 MA's), (55, 56325), (81, 56442), (93, 56502), (95, 56511), (138, 56649), (179, 56808), (180, 56817), (192, 56880), (205, 56961), (231, 57051),

Gene: Hughesyang_132 Start: 72523, Stop: 73323, Start Num: 45

Candidate Starts for Hughesyang_132:

(Start: 45 @72523 has 36 MA's), (68, 72583), (76, 72634), (80, 72649), (89, 72700), (118, 72814), (136, 72847), (150, 72916), (154, 72934), (163, 72961), (170, 72985), (172, 72994), (220, 73231), (238, 73279),

Gene: Hyzer_75 Start: 50006, Stop: 50998, Start Num: 17

Candidate Starts for Hyzer_75:

(5, 49919), (10, 49952), (17, 50006), (Start: 34 @50087 has 1 MA's), (100, 50342), (104, 50354), (109, 50396), (125, 50447), (138, 50477), (143, 50504), (204, 50771), (210, 50795), (235, 50873), (254, 50921), (272, 50987),

Gene: IHOP_90 Start: 55879, Stop: 56700, Start Num: 43

Candidate Starts for IHOP_90:

(Start: 43 @55879 has 113 MA's), (Start: 51 @55897 has 13 MA's), (55, 55903), (81, 56020), (93, 56080), (95, 56089), (138, 56227), (179, 56386), (180, 56395), (192, 56458), (205, 56539), (231, 56629),

Gene: Icee_93 Start: 55366, Stop: 56187, Start Num: 43

Candidate Starts for Icee_93:

(Start: 43 @55366 has 113 MA's), (Start: 51 @55384 has 13 MA's), (55, 55390), (81, 55507), (93, 55567), (95, 55576), (138, 55714), (179, 55873), (180, 55882), (192, 55945), (205, 56026), (231, 56116),

Gene: Inca_89 Start: 54368, Stop: 55189, Start Num: 43

Candidate Starts for Inca_89:

(Start: 43 @54368 has 113 MA's), (Start: 51 @54386 has 13 MA's), (55, 54392), (81, 54509), (93, 54569), (95, 54578), (138, 54716), (179, 54875), (180, 54884), (192, 54947), (205, 55028), (231,

55118),

Gene: Invecetra_66 Start: 42718, Stop: 43479, Start Num: 70

Candidate Starts for Invecetra_66:

(Start: 18 @42517 has 3 MA's), (Start: 44 @42640 has 22 MA's), (70, 42718), (89, 42820), (265, 43468),

Gene: IsHungry_47 Start: 33169, Stop: 33972, Start Num: 64

Candidate Starts for IsHungry_47:

(Start: 64 @33169 has 3 MA's), (72, 33217), (73, 33220), (106, 33385), (107, 33388), (121, 33436), (137, 33463), (147, 33508), (159, 33559), (160, 33562), (225, 33823),

Gene: JeTaime_93 Start: 56569, Stop: 57390, Start Num: 43

Candidate Starts for JeTaime_93:

(Start: 43 @56569 has 113 MA's), (Start: 51 @56587 has 13 MA's), (55, 56593), (81, 56710), (93, 56770), (95, 56779), (138, 56917), (179, 57076), (180, 57085), (192, 57148), (205, 57229), (231, 57319),

Gene: JuicyJay_129 Start: 74038, Stop: 74838, Start Num: 45

Candidate Starts for JuicyJay_129:

(Start: 45 @74038 has 36 MA's), (68, 74098), (76, 74149), (80, 74164), (89, 74215), (118, 74329), (136, 74362), (150, 74431), (154, 74449), (163, 74476), (170, 74500), (172, 74509), (220, 74746), (238, 74794),

Gene: Julie_49 Start: 34956, Stop: 35759, Start Num: 64

Candidate Starts for Julie_49:

(Start: 64 @34956 has 3 MA's), (72, 35004), (73, 35007), (106, 35172), (107, 35175), (121, 35223), (137, 35250), (147, 35295), (159, 35346), (160, 35349), (225, 35610),

Gene: JustASigh_51 Start: 35983, Stop: 36849, Start Num: 71

Candidate Starts for JustASigh_51:

(Start: 71 @35983 has 1 MA's), (84, 36049), (138, 36244), (142, 36262), (146, 36283), (188, 36436), (270, 36757), (273, 36796), (275, 36820), (276, 36829),

Gene: Kalah2_123 Start: 71329, Stop: 72129, Start Num: 45

Candidate Starts for Kalah2_123:

(Start: 45 @71329 has 36 MA's), (68, 71389), (76, 71440), (80, 71455), (89, 71506), (118, 71620), (136, 71653), (150, 71722), (154, 71740), (163, 71767), (170, 71791), (172, 71800), (220, 72037), (238, 72085),

Gene: Kanye_89 Start: 55463, Stop: 56284, Start Num: 43

Candidate Starts for Kanye_89:

(Start: 43 @55463 has 113 MA's), (Start: 51 @55481 has 13 MA's), (55, 55487), (81, 55604), (93, 55664), (95, 55673), (138, 55811), (179, 55970), (180, 55979), (192, 56042), (205, 56123), (231, 56213),

Gene: KashFlow_128 Start: 70014, Stop: 70772, Start Num: 43

Candidate Starts for KashFlow_128:

(Start: 43 @70014 has 113 MA's), (Start: 74 @70104 has 1 MA's), (89, 70173), (95, 70197), (97, 70206), (103, 70230), (106, 70254), (110, 70269), (114, 70281), (125, 70308), (130, 70320), (138, 70329), (145, 70368), (167, 70437), (182, 70500),

Gene: KayMoney_52 Start: 34053, Stop: 35150, Start Num: 7

Candidate Starts for KayMoney_52:

(Start: 7 @34053 has 4 MA's), (59, 34287), (84, 34416), (89, 34440), (110, 34545), (123, 34587), (126, 34596), (155, 34698), (160, 34713), (167, 34725),

Gene: Kimchi_96 Start: 55983, Stop: 56804, Start Num: 43

Candidate Starts for Kimchi_96:

(Start: 43 @55983 has 113 MA's), (Start: 51 @56001 has 13 MA's), (55, 56007), (81, 56124), (93, 56184), (95, 56193), (138, 56331), (179, 56490), (180, 56499), (192, 56562), (205, 56643), (231, 56733),

Gene: Kinbote_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Kinbote_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Klein_129 Start: 69719, Stop: 70474, Start Num: 45

Candidate Starts for Klein_129:

(Start: 45 @69719 has 36 MA's), (89, 69875), (97, 69908), (103, 69932), (106, 69956), (125, 70010), (128, 70016), (130, 70022), (138, 70031), (143, 70058), (145, 70070), (155, 70115), (161, 70130), (182, 70202), (220, 70382), (238, 70430),

Gene: Kostya_92 Start: 55999, Stop: 56802, Start Num: 51

Candidate Starts for Kostya_92:

(Start: 43 @55981 has 113 MA's), (Start: 51 @55999 has 13 MA's), (55, 56005), (81, 56122), (93, 56182), (95, 56191), (138, 56329), (179, 56488), (180, 56497), (192, 56560), (205, 56641), (231, 56731),

Gene: Kudfre_68 Start: 43455, Stop: 44261, Start Num: 56

Candidate Starts for Kudfre_68:

(Start: 56 @43455 has 3 MA's), (61, 43464), (78, 43548), (79, 43551), (80, 43554), (86, 43590), (89, 43605), (102, 43659), (118, 43713), (138, 43758), (146, 43797), (148, 43815), (154, 43836), (162, 43857), (174, 43896), (183, 43941), (185, 43947), (186, 43950), (195, 44007), (207, 44061), (212, 44088), (219, 44112), (224, 44127), (234, 44160), (240, 44175), (248, 44196), (267, 44253),

Gene: Kukla_59 Start: 36053, Stop: 36976, Start Num: 31

Candidate Starts for Kukla_59:

(Start: 31 @36053 has 1 MA's), (87, 36269), (96, 36314), (109, 36383), (126, 36437), (160, 36554), (167, 36566), (209, 36770), (214, 36788), (215, 36791), (267, 36941), (271, 36959),

Gene: LilHazelnut_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for LilHazelnut_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Lilac_95 Start: 55826, Stop: 56629, Start Num: 51

Candidate Starts for Lilac_95:

(Start: 43 @55808 has 113 MA's), (Start: 51 @55826 has 13 MA's), (55, 55832), (81, 55949), (93, 56009), (95, 56018), (138, 56156), (179, 56315), (180, 56324), (192, 56387), (205, 56468), (231, 56558),

Gene: Lilizi_93 Start: 55445, Stop: 56266, Start Num: 43

Candidate Starts for Lilizi_93:

(Start: 43 @55445 has 113 MA's), (Start: 51 @55463 has 13 MA's), (55, 55469), (81, 55586), (93, 55646), (95, 55655), (138, 55793), (179, 55952), (180, 55961), (192, 56024), (205, 56105), (231, 56195),

Gene: Lilpickle_91 Start: 55333, Stop: 56154, Start Num: 43

Candidate Starts for Lilpickle_91:

(Start: 43 @55333 has 113 MA's), (Start: 51 @55351 has 13 MA's), (55, 55357), (81, 55474), (93, 55534), (95, 55543), (138, 55681), (179, 55840), (180, 55849), (192, 55912), (205, 55993), (231, 56083),

Gene: LittleE_133 Start: 71226, Stop: 72026, Start Num: 45

Candidate Starts for LittleE_133:

(Start: 45 @71226 has 36 MA's), (68, 71286), (76, 71337), (80, 71352), (89, 71403), (118, 71517), (136, 71550), (150, 71619), (154, 71637), (163, 71664), (170, 71688), (172, 71697),

Gene: LordFarquaad_63 Start: 41316, Stop: 42317, Start Num: 18

Candidate Starts for LordFarquaad_63:

(9, 41253), (Start: 18 @41316 has 3 MA's), (33, 41394), (Start: 67 @41490 has 1 MA's), (102, 41664), (103, 41667), (104, 41670), (109, 41712), (119, 41745), (120, 41751), (138, 41793), (172, 41928), (183, 41979), (184, 41982), (210, 42114), (235, 42192), (254, 42240), (263, 42276), (272, 42306),

Gene: Lucky2013_125 Start: 68103, Stop: 68903, Start Num: 45

Candidate Starts for Lucky2013_125:

(Start: 45 @68103 has 36 MA's), (68, 68163), (76, 68214), (80, 68229), (89, 68280), (118, 68394), (136, 68427), (150, 68496), (154, 68514), (163, 68541), (170, 68565), (172, 68574),

Gene: Luke_53 Start: 37846, Stop: 38709, Start Num: 39

Candidate Starts for Luke_53:

(Start: 39 @37846 has 22 MA's), (66, 37912), (69, 37936), (78, 37975), (80, 37981), (82, 37996), (89, 38032), (90, 38038), (100, 38080), (103, 38089), (117, 38152), (122, 38170), (127, 38182), (135, 38200), (152, 38269), (154, 38278), (155, 38284), (165, 38305), (173, 38338), (181, 38371), (184, 38386), (199, 38485), (203, 38497), (207, 38509), (223, 38566), (231, 38593), (238, 38617), (249, 38650), (257, 38665), (264, 38698),

Gene: Luna22_51 Start: 37875, Stop: 38738, Start Num: 39

Candidate Starts for Luna22_51:

(Start: 39 @37875 has 22 MA's), (66, 37941), (69, 37965), (78, 38004), (80, 38010), (82, 38025), (89, 38061), (90, 38067), (100, 38109), (103, 38118), (117, 38181), (122, 38199), (127, 38211), (135, 38229), (152, 38298), (154, 38307), (155, 38313), (165, 38334), (173, 38367), (181, 38400), (184, 38415), (199, 38514), (203, 38526), (207, 38538), (223, 38595), (231, 38622), (238, 38646), (249, 38679), (257, 38694), (264, 38727),

Gene: MISSy_93 Start: 55561, Stop: 56382, Start Num: 43

Candidate Starts for MISSy_93:

(Start: 43 @55561 has 113 MA's), (Start: 51 @55579 has 13 MA's), (55, 55585), (81, 55702), (93, 55762), (95, 55771), (138, 55909), (179, 56068), (180, 56077), (192, 56140), (205, 56221), (231, 56311),

Gene: MPhalcon_93 Start: 55554, Stop: 56375, Start Num: 43

Candidate Starts for MPhalcon_93:

(Start: 43 @55554 has 113 MA's), (Start: 51 @55572 has 13 MA's), (55, 55578), (81, 55695), (93, 55755), (95, 55764), (138, 55902), (179, 56061), (180, 56070), (192, 56133), (205, 56214), (231, 56304),

Gene: MadamMonkfish_92 Start: 55060, Stop: 55881, Start Num: 43

Candidate Starts for MadamMonkfish_92:

(Start: 43 @55060 has 113 MA's), (Start: 51 @55078 has 13 MA's), (55, 55084), (81, 55201), (93, 55261), (95, 55270), (138, 55408), (179, 55567), (180, 55576), (192, 55639), (205, 55720), (231, 55810),

Gene: Maja_42 Start: 30329, Stop: 31183, Start Num: 49

Candidate Starts for Maja_42:

(Start: 49 @30329 has 1 MA's), (Start: 53 @30335 has 5 MA's), (Start: 57 @30344 has 3 MA's), (62, 30362), (83, 30464), (87, 30482), (96, 30530), (108, 30584), (118, 30617), (146, 30695), (153, 30731), (171, 30779), (190, 30860), (222, 31010), (246, 31076),

Gene: Malibo_67 Start: 44890, Stop: 45759, Start Num: 50

Candidate Starts for Malibo_67:

(Start: 50 @44890 has 1 MA's), (Start: 67 @44935 has 1 MA's), (102, 45109), (103, 45112), (104, 45115), (109, 45157), (138, 45238), (172, 45373), (184, 45427), (210, 45556), (235, 45634), (254, 45682), (272, 45748),

Gene: Manda_94 Start: 57137, Stop: 57958, Start Num: 43

Candidate Starts for Manda_94:

(Start: 43 @57137 has 113 MA's), (Start: 51 @57155 has 13 MA's), (55, 57161), (81, 57278), (93, 57338), (95, 57347), (138, 57485), (179, 57644), (180, 57653), (192, 57716), (205, 57797), (231, 57887),

Gene: Marshmallow_90 Start: 56609, Stop: 57430, Start Num: 43

Candidate Starts for Marshmallow_90:

(Start: 43 @56609 has 113 MA's), (Start: 51 @56627 has 13 MA's), (55, 56633), (81, 56750), (93, 56810), (95, 56819), (138, 56957), (179, 57116), (180, 57125), (192, 57188), (205, 57269), (231, 57359),

Gene: Maxxinista_95 Start: 55993, Stop: 56796, Start Num: 51

Candidate Starts for Maxxinista_95:

(Start: 43 @55975 has 113 MA's), (Start: 51 @55993 has 13 MA's), (55, 55999), (81, 56116), (93, 56176), (95, 56185), (138, 56323), (179, 56482), (180, 56491), (192, 56554), (205, 56635), (231, 56725),

Gene: Mcklovin_63 Start: 46941, Stop: 47825, Start Num: 44

Candidate Starts for Mcklovin_63:

(13, 46821), (Start: 44 @46941 has 22 MA's), (Start: 67 @46998 has 1 MA's), (102, 47172), (104, 47178), (109, 47220), (138, 47301), (172, 47436), (180, 47469), (183, 47487), (189, 47505), (210, 47622), (235, 47700),

Gene: MiaZeal_130 Start: 69241, Stop: 70041, Start Num: 45

Candidate Starts for MiaZeal_130:

(Start: 45 @69241 has 36 MA's), (68, 69301), (76, 69352), (80, 69367), (89, 69418), (118, 69532), (136, 69565), (150, 69634), (154, 69652), (163, 69679), (170, 69703), (172, 69712),

Gene: MichaelScott_66 Start: 42331, Stop: 43167, Start Num: 44

Candidate Starts for MichaelScott_66:

(Start: 18 @42211 has 3 MA's), (Start: 44 @42331 has 22 MA's), (70, 42406), (89, 42508), (265, 43156),

Gene: Mindy_91 Start: 54882, Stop: 55703, Start Num: 43

Candidate Starts for Mindy_91:

(Start: 43 @54882 has 113 MA's), (Start: 51 @54900 has 13 MA's), (55, 54906), (81, 55023), (93, 55083), (95, 55092), (138, 55230), (179, 55389), (180, 55398), (192, 55461), (205, 55542), (231, 55632),

Gene: Minerva_131 Start: 71124, Stop: 71924, Start Num: 45

Candidate Starts for Minerva_131:

(Start: 45 @71124 has 36 MA's), (68, 71184), (76, 71235), (80, 71250), (89, 71301), (118, 71415), (136, 71448), (150, 71517), (154, 71535), (163, 71562), (170, 71586), (172, 71595), (220, 71832), (238, 71880),

Gene: Miniwave_87 Start: 55377, Stop: 56198, Start Num: 43

Candidate Starts for Miniwave_87:

(Start: 43 @55377 has 113 MA's), (Start: 51 @55395 has 13 MA's), (55, 55401), (81, 55518), (93, 55578), (95, 55587), (138, 55725), (179, 55884), (180, 55893), (192, 55956), (205, 56037), (231, 56127),

Gene: Misfit_93 Start: 56851, Stop: 57672, Start Num: 43

Candidate Starts for Misfit_93:

(Start: 43 @56851 has 113 MA's), (Start: 51 @56869 has 13 MA's), (55, 56875), (81, 56992), (93, 57052), (95, 57061), (138, 57199), (179, 57358), (180, 57367), (192, 57430), (205, 57511), (231, 57601),

Gene: Moldemort_95 Start: 55518, Stop: 56339, Start Num: 43

Candidate Starts for Moldemort_95:

(Start: 43 @55518 has 113 MA's), (Start: 51 @55536 has 13 MA's), (55, 55542), (81, 55659), (93, 55719), (95, 55728), (138, 55866), (179, 56025), (180, 56034), (192, 56097), (205, 56178), (231, 56268),

Gene: Mosby_88 Start: 55152, Stop: 55955, Start Num: 51

Candidate Starts for Mosby_88:

(Start: 43 @55134 has 113 MA's), (Start: 51 @55152 has 13 MA's), (55, 55158), (81, 55275), (93, 55335), (95, 55344), (138, 55482), (179, 55641), (180, 55650), (192, 55713), (205, 55794), (231, 55884),

Gene: Murica_95 Start: 56795, Stop: 57598, Start Num: 51

Candidate Starts for Murica_95:

(Start: 43 @56777 has 113 MA's), (Start: 51 @56795 has 13 MA's), (55, 56801), (81, 56918), (93, 56978), (95, 56987), (138, 57125), (179, 57284), (180, 57293), (192, 57356), (205, 57437), (231, 57527),

Gene: Murphy_92 Start: 56218, Stop: 57039, Start Num: 43

Candidate Starts for Murphy_92:

(Start: 43 @56218 has 113 MA's), (Start: 51 @56236 has 13 MA's), (55, 56242), (81, 56359), (93, 56419), (95, 56428), (138, 56566), (179, 56725), (180, 56734), (192, 56797), (205, 56878), (231, 56968),

Gene: Myrale_92 Start: 56340, Stop: 57161, Start Num: 43

Candidate Starts for Myrale_92:

(Start: 43 @56340 has 113 MA's), (Start: 51 @56358 has 13 MA's), (55, 56364), (81, 56481), (93, 56541), (95, 56550), (138, 56688), (179, 56847), (180, 56856), (192, 56919), (205, 57000), (231, 57090),

Gene: Nala_94 Start: 56081, Stop: 56884, Start Num: 51

Candidate Starts for Nala_94:

(Start: 43 @56063 has 113 MA's), (Start: 51 @56081 has 13 MA's), (55, 56087), (81, 56204), (93, 56264), (95, 56273), (138, 56411), (179, 56570), (180, 56579), (192, 56642), (205, 56723), (231, 56813),

Gene: NelitzaMV_90 Start: 55423, Stop: 56244, Start Num: 43

Candidate Starts for NelitzaMV_90:

(Start: 43 @55423 has 113 MA's), (Start: 51 @55441 has 13 MA's), (55, 55447), (81, 55564), (93, 55624), (95, 55633), (138, 55771), (179, 55930), (180, 55939), (192, 56002), (205, 56083), (231, 56173),

Gene: NihilNomen_134 Start: 71983, Stop: 72783, Start Num: 45

Candidate Starts for NihilNomen_134:

(Start: 45 @71983 has 36 MA's), (68, 72043), (76, 72094), (80, 72109), (89, 72160), (118, 72274), (136, 72307), (150, 72376), (154, 72394), (163, 72421), (170, 72445), (172, 72454), (220, 72691), (238, 72739),

Gene: Nimrod_93 Start: 56766, Stop: 57587, Start Num: 43

Candidate Starts for Nimrod_93:

(Start: 43 @56766 has 113 MA's), (Start: 51 @56784 has 13 MA's), (55, 56790), (81, 56907), (93, 56967), (95, 56976), (138, 57114), (179, 57273), (180, 57282), (192, 57345), (205, 57426), (231, 57516),

Gene: NoSleep_93 Start: 55400, Stop: 56221, Start Num: 43

Candidate Starts for NoSleep_93:

(Start: 43 @55400 has 113 MA's), (Start: 51 @55418 has 13 MA's), (55, 55424), (81, 55541), (93, 55601), (95, 55610), (138, 55748), (179, 55907), (180, 55916), (192, 55979), (205, 56060), (231, 56150),

Gene: OBUpride_53 Start: 37905, Stop: 38768, Start Num: 39

Candidate Starts for OBUpride_53:

(Start: 39 @37905 has 22 MA's), (66, 37971), (69, 37995), (78, 38034), (80, 38040), (82, 38055), (89, 38091), (90, 38097), (100, 38139), (103, 38148), (117, 38211), (122, 38229), (127, 38241), (132, 38253), (135, 38259), (152, 38328), (154, 38337), (155, 38343), (165, 38364), (173, 38397), (181, 38430), (184, 38445), (199, 38544), (203, 38556), (207, 38568), (223, 38625), (231, 38652), (238, 38676), (242, 38685), (243, 38688), (249, 38709), (257, 38724), (264, 38757),

Gene: ODay_77 Start: 44730, Stop: 45560, Start Num: 53

Candidate Starts for ODay_77:

(Start: 53 @44730 has 5 MA's), (82, 44856), (86, 44877), (94, 44910), (119, 45018), (120, 45024), (134, 45060), (138, 45066), (139, 45069), (141, 45075), (143, 45093), (166, 45174), (169, 45177), (179, 45222), (180, 45231), (182, 45243), (183, 45249), (194, 45303), (206, 45360), (208, 45363), (226, 45426), (228, 45432), (235, 45459), (241, 45474), (254, 45507), (261, 45528), (266, 45549),

Gene: Octobien14_68 Start: 43746, Stop: 44540, Start Num: 54

Candidate Starts for Octobien14_68:

(14, 43581), (19, 43608), (22, 43617), (41, 43710), (52, 43743), (Start: 54 @43746 has 1 MA's), (81, 43854), (85, 43875), (88, 43887), (89, 43899), (96, 43932), (98, 43938), (100, 43947), (118, 44010), (153, 44130), (154, 44133), (175, 44196), (176, 44202), (178, 44211), (211, 44367), (217, 44388), (219, 44394), (229, 44424), (248, 44478), (264, 44529), (267, 44532),

Gene: Odette_134 Start: 73078, Stop: 73833, Start Num: 45

Candidate Starts for Odette_134:

(Start: 45 @73078 has 36 MA's), (89, 73234), (97, 73267), (103, 73291), (106, 73315), (125, 73369), (128, 73375), (130, 73381), (138, 73390), (143, 73417), (145, 73429), (155, 73474), (161, 73489), (182, 73561),

Gene: Ohgeesy_64 Start: 43662, Stop: 44552, Start Num: 44

Candidate Starts for Ohgeesy_64:

(25, 43590), (Start: 27 @43593 has 1 MA's), (Start: 44 @43662 has 22 MA's), (93, 43854), (102, 43893), (103, 43896), (104, 43899), (109, 43941), (138, 44022), (166, 44133), (172, 44157), (189, 44226), (227, 44391), (235, 44421), (263, 44505), (272, 44541),

Gene: Omega_140 Start: 72907, Stop: 73707, Start Num: 45

Candidate Starts for Omega_140:

(Start: 45 @72907 has 36 MA's), (68, 72967), (76, 73018), (80, 73033), (89, 73084), (118, 73198), (136, 73231), (150, 73300), (154, 73318), (163, 73345), (170, 73369), (172, 73378),

Gene: Optimus_123 Start: 69520, Stop: 70320, Start Num: 45

Candidate Starts for Optimus_123:

(Start: 45 @69520 has 36 MA's), (68, 69580), (76, 69631), (80, 69646), (89, 69697), (118, 69811), (136, 69844), (150, 69913), (154, 69931), (163, 69958), (170, 69982), (172, 69991), (220, 70228), (238, 70276),

Gene: Oregano_65 Start: 41205, Stop: 42041, Start Num: 44

Candidate Starts for Oregano_65:

(Start: 18 @41085 has 3 MA's), (Start: 44 @41205 has 22 MA's), (70, 41280), (89, 41382), (265, 42030),

Gene: OrionPax_91 Start: 55151, Stop: 55972, Start Num: 43

Candidate Starts for OrionPax_91:

(Start: 43 @55151 has 113 MA's), (Start: 51 @55169 has 13 MA's), (55, 55175), (81, 55292), (93, 55352), (95, 55361), (138, 55499), (179, 55658), (180, 55667), (192, 55730), (205, 55811), (231, 55901),

Gene: Palpatine_94 Start: 56804, Stop: 57625, Start Num: 43

Candidate Starts for Palpatine_94:

(Start: 43 @56804 has 113 MA's), (Start: 51 @56822 has 13 MA's), (55, 56828), (81, 56945), (93, 57005), (95, 57014), (138, 57152), (179, 57311), (180, 57320), (192, 57383), (205, 57464), (231, 57554),

Gene: Paperbeatsrock_91 Start: 56055, Stop: 56876, Start Num: 43

Candidate Starts for Paperbeatsrock_91:

(Start: 43 @56055 has 113 MA's), (Start: 51 @56073 has 13 MA's), (55, 56079), (81, 56196), (93, 56256), (95, 56265), (138, 56403), (179, 56562), (180, 56571), (192, 56634), (205, 56715), (231, 56805),

Gene: Pat3_89 Start: 54253, Stop: 55074, Start Num: 43

Candidate Starts for Pat3_89:

(Start: 43 @54253 has 113 MA's), (Start: 51 @54271 has 13 MA's), (55, 54277), (65, 54307), (93, 54454), (95, 54463), (141, 54610), (179, 54760), (231, 55003),

Gene: Petra64142_97 Start: 57258, Stop: 58079, Start Num: 43

Candidate Starts for Petra64142_97:

(Start: 43 @57258 has 113 MA's), (Start: 51 @57276 has 13 MA's), (55, 57282), (65, 57312), (93, 57459), (95, 57468), (141, 57615), (179, 57765), (231, 58008),

Gene: Phabuloso_74 Start: 42992, Stop: 43822, Start Num: 53

Candidate Starts for Phabuloso_74:

(Start: 53 @42992 has 5 MA's), (82, 43118), (86, 43139), (94, 43172), (119, 43280), (120, 43286), (138, 43328), (139, 43331), (141, 43337), (143, 43355), (166, 43436), (169, 43439), (179, 43484), (182, 43505), (183, 43511), (194, 43565), (206, 43622), (208, 43625), (226, 43688), (228, 43694), (235, 43721), (241, 43736), (254, 43769), (258, 43781), (261, 43790), (266, 43811),

Gene: Phaja_90 Start: 55881, Stop: 56702, Start Num: 43

Candidate Starts for Phaja_90:

(Start: 43 @55881 has 113 MA's), (Start: 51 @55899 has 13 MA's), (55, 55905), (81, 56022), (93, 56082), (95, 56091), (138, 56229), (179, 56388), (180, 56397), (192, 56460), (205, 56541), (231, 56631),

Gene: Pharsalus_89 Start: 55855, Stop: 56676, Start Num: 43

Candidate Starts for Pharsalus_89:

(Start: 43 @55855 has 113 MA's), (Start: 51 @55873 has 13 MA's), (55, 55879), (81, 55996), (93, 56056), (95, 56065), (138, 56203), (179, 56362), (180, 56371), (192, 56434), (205, 56515), (231, 56605),

Gene: PhatBacter_96 Start: 56567, Stop: 57370, Start Num: 51

Candidate Starts for PhatBacter_96:

(Start: 43 @56549 has 113 MA's), (Start: 51 @56567 has 13 MA's), (55, 56573), (81, 56690), (93, 56750), (95, 56759), (138, 56897), (179, 57056), (180, 57065), (192, 57128), (205, 57209), (231, 57299),

Gene: Phaux_95 Start: 57091, Stop: 57912, Start Num: 43

Candidate Starts for Phaux_95:

(Start: 43 @57091 has 113 MA's), (Start: 51 @57109 has 13 MA's), (55, 57115), (81, 57232), (93, 57292), (95, 57301), (138, 57439), (179, 57598), (180, 57607), (192, 57670), (205, 57751), (231, 57841),

Gene: Phoebus_133 Start: 73877, Stop: 74677, Start Num: 45

Candidate Starts for Phoebus_133:

(Start: 45 @73877 has 36 MA's), (68, 73937), (76, 73988), (80, 74003), (89, 74054), (118, 74168), (136, 74201), (150, 74270), (154, 74288), (163, 74315), (170, 74339), (172, 74348), (220, 74585), (238, 74633),

Gene: PhriskyACE_62 Start: 41297, Stop: 42058, Start Num: 70

Candidate Starts for PhriskyACE_62:

(Start: 18 @41102 has 3 MA's), (Start: 44 @41222 has 22 MA's), (70, 41297), (89, 41399), (252, 42002), (265, 42047),

Gene: Phrux_90 Start: 55367, Stop: 56188, Start Num: 43

Candidate Starts for Phrux_90:

(Start: 43 @55367 has 113 MA's), (Start: 51 @55385 has 13 MA's), (55, 55391), (81, 55508), (93, 55568), (95, 55577), (138, 55715), (179, 55874), (180, 55883), (192, 55946), (205, 56027), (231, 56117),

Gene: Policronamos_96 Start: 56822, Stop: 57643, Start Num: 43

Candidate Starts for Policronamos_96:

(Start: 43 @56822 has 113 MA's), (Start: 51 @56840 has 13 MA's), (55, 56846), (81, 56963), (93, 57023), (95, 57032), (138, 57170), (179, 57329), (180, 57338), (192, 57401), (205, 57482), (231, 57572),

Gene: Popper_52 Start: 34367, Stop: 35170, Start Num: 64

Candidate Starts for Popper_52:

(Start: 64 @34367 has 3 MA's), (72, 34415), (73, 34418), (106, 34583), (107, 34586), (121, 34634), (137, 34661), (147, 34706), (159, 34757), (160, 34760), (225, 35021),

Gene: Porcelain_128 Start: 69049, Stop: 69849, Start Num: 45

Candidate Starts for Porcelain_128:

(Start: 45 @69049 has 36 MA's), (68, 69109), (76, 69160), (80, 69175), (89, 69226), (118, 69340), (136, 69373), (150, 69442), (154, 69460), (163, 69487), (170, 69511), (172, 69520),

Gene: Porky_91 Start: 54967, Stop: 55788, Start Num: 43

Candidate Starts for Porky_91:

(Start: 43 @54967 has 113 MA's), (Start: 51 @54985 has 13 MA's), (55, 54991), (81, 55108), (93, 55168), (95, 55177), (138, 55315), (179, 55474), (180, 55483), (192, 55546), (205, 55627), (231, 55717),

Gene: Pound_121 Start: 70260, Stop: 71060, Start Num: 45

Candidate Starts for Pound_121:

(Start: 45 @70260 has 36 MA's), (68, 70320), (76, 70371), (80, 70386), (89, 70437), (118, 70551), (136, 70584), (150, 70653), (154, 70671), (163, 70698), (170, 70722), (172, 70731), (220, 70968), (238, 71016),

Gene: Powerball_63 Start: 41331, Stop: 42167, Start Num: 44

Candidate Starts for Powerball_63:

(Start: 18 @41208 has 3 MA's), (Start: 44 @41331 has 22 MA's), (70, 41406), (89, 41508), (252, 42111), (265, 42156),

Gene: Pumpkin_96 Start: 56743, Stop: 57564, Start Num: 43

Candidate Starts for Pumpkin_96:

(Start: 43 @56743 has 113 MA's), (Start: 51 @56761 has 13 MA's), (55, 56767), (81, 56884), (93, 56944), (95, 56953), (138, 57091), (179, 57250), (180, 57259), (192, 57322), (205, 57403), (231, 57493),

Gene: Quallification_93 Start: 56463, Stop: 57284, Start Num: 43

Candidate Starts for Quallification_93:

(Start: 43 @56463 has 113 MA's), (Start: 51 @56481 has 13 MA's), (55, 56487), (81, 56604), (93, 56664), (95, 56673), (138, 56811), (179, 56970), (180, 56979), (192, 57042), (205, 57123), (231, 57213),

Gene: QuinnAvery_52 Start: 34788, Stop: 35627, Start Num: 57

Candidate Starts for QuinnAvery_52:

(Start: 49 @34773 has 1 MA's), (Start: 53 @34779 has 5 MA's), (Start: 57 @34788 has 3 MA's), (87, 34926), (96, 34974), (108, 35028), (109, 35034), (118, 35061), (137, 35100), (144, 35136), (146,

35139), (153, 35175), (163, 35202), (171, 35223), (190, 35304), (202, 35379), (220, 35451), (222, 35454), (246, 35520),

Gene: REQ2_59 Start: 39789, Stop: 40529, Start Num: 59

Candidate Starts for REQ2_59:

(42, 39753), (59, 39789), (63, 39804), (72, 39855), (78, 39882), (89, 39939), (91, 39948), (92, 39951), (96, 39972), (111, 40032), (118, 40047), (123, 40062), (129, 40077), (133, 40086), (135, 40089), (140, 40095), (144, 40122), (149, 40143), (158, 40170), (177, 40230), (201, 40362), (245, 40488),

Gene: Rakim_93 Start: 55792, Stop: 56613, Start Num: 43

Candidate Starts for Rakim_93:

(Start: 43 @55792 has 113 MA's), (Start: 51 @55810 has 13 MA's), (55, 55816), (81, 55933), (93, 55993), (95, 56002), (138, 56140), (179, 56299), (180, 56308), (192, 56371), (205, 56452), (231, 56542),

Gene: Redno2_124 Start: 69310, Stop: 70065, Start Num: 45

Candidate Starts for Redno2_124:

(Start: 45 @69310 has 36 MA's), (89, 69466), (97, 69499), (103, 69523), (106, 69547), (125, 69601), (128, 69607), (130, 69613), (138, 69622), (143, 69649), (145, 69661), (155, 69706), (161, 69721), (182, 69793), (220, 69973), (238, 70021),

Gene: Rem711_50 Start: 34893, Stop: 35771, Start Num: 27

Candidate Starts for Rem711_50:

(16, 34836), (Start: 27 @34893 has 1 MA's), (32, 34920), (36, 34935), (55, 34983), (77, 35070), (101, 35187), (185, 35472), (193, 35517), (221, 35643),

Gene: Rimmer_90 Start: 55364, Stop: 56185, Start Num: 43

Candidate Starts for Rimmer_90:

(Start: 43 @55364 has 113 MA's), (Start: 51 @55382 has 13 MA's), (55, 55388), (65, 55418), (93, 55565), (95, 55574), (141, 55721), (179, 55871), (231, 56114),

Gene: RiverMonster_93 Start: 56263, Stop: 57084, Start Num: 43

Candidate Starts for RiverMonster_93:

(Start: 43 @56263 has 113 MA's), (Start: 51 @56281 has 13 MA's), (55, 56287), (81, 56404), (93, 56464), (95, 56473), (138, 56611), (179, 56770), (180, 56779), (192, 56842), (205, 56923), (231, 57013),

Gene: RootBeer_44 Start: 30900, Stop: 31997, Start Num: 7

Candidate Starts for RootBeer_44:

(Start: 7 @30900 has 4 MA's), (89, 31287), (126, 31443), (155, 31545), (160, 31560), (167, 31572), (259, 31914),

Gene: Ruthy_63 Start: 45360, Stop: 46259, Start Num: 34

Candidate Starts for Ruthy_63:

(21, 45288), (Start: 34 @45360 has 1 MA's), (Start: 67 @45447 has 1 MA's), (100, 45615), (104, 45627), (109, 45669), (183, 45936), (247, 46161), (260, 46191),

Gene: Ryan_51 Start: 34472, Stop: 35311, Start Num: 57

Candidate Starts for Ryan_51:

(Start: 49 @34457 has 1 MA's), (Start: 53 @34463 has 5 MA's), (Start: 57 @34472 has 3 MA's), (87, 34610), (96, 34658), (108, 34712), (109, 34718), (118, 34745), (137, 34784), (144, 34820), (146, 34823), (153, 34859), (163, 34886), (171, 34907), (190, 34988), (202, 35063), (220, 35135), (222, 35138), (246, 35204),

Gene: Saints25_91 Start: 55406, Stop: 56227, Start Num: 43

Candidate Starts for Saints25_91:

(Start: 43 @55406 has 113 MA's), (Start: 51 @55424 has 13 MA's), (55, 55430), (81, 55547), (93, 55607), (95, 55616), (138, 55754), (179, 55913), (180, 55922), (192, 55985), (205, 56066), (231, 56156),

Gene: Samman98_65 Start: 41170, Stop: 42009, Start Num: 44

Candidate Starts for Samman98_65:

(Start: 18 @41047 has 3 MA's), (Start: 44 @41170 has 22 MA's), (70, 41248), (89, 41350), (265, 41998),

Gene: Santhid_49 Start: 31927, Stop: 32751, Start Num: 48

Candidate Starts for Santhid_49:

(37, 31891), (Start: 48 @31927 has 2 MA's), (70, 31996), (120, 32245), (252, 32701),

Gene: Sassay_87 Start: 54096, Stop: 54917, Start Num: 43

Candidate Starts for Sassay_87:

(Start: 43 @54096 has 113 MA's), (Start: 51 @54114 has 13 MA's), (55, 54120), (81, 54237), (93, 54297), (95, 54306), (138, 54444), (179, 54603), (180, 54612), (192, 54675), (205, 54756), (231, 54846),

Gene: Schatzie_128 Start: 71973, Stop: 72773, Start Num: 45

Candidate Starts for Schatzie_128:

(Start: 45 @71973 has 36 MA's), (68, 72033), (76, 72084), (80, 72099), (89, 72150), (118, 72264), (136, 72297), (150, 72366), (154, 72384), (163, 72411), (170, 72435), (172, 72444), (220, 72681), (238, 72729),

Gene: Sekhmet_62 Start: 40799, Stop: 41635, Start Num: 44

Candidate Starts for Sekhmet_62:

(11, 40619), (Start: 18 @40679 has 3 MA's), (Start: 44 @40799 has 22 MA's), (70, 40877), (89, 40979), (265, 41624),

Gene: Sephiroth_67 Start: 43627, Stop: 44433, Start Num: 56

Candidate Starts for Sephiroth_67:

(Start: 56 @43627 has 3 MA's), (61, 43636), (78, 43720), (79, 43723), (80, 43726), (82, 43741), (86, 43762), (89, 43777), (102, 43831), (118, 43885), (138, 43930), (146, 43969), (148, 43987), (154, 44008), (162, 44029), (174, 44068), (183, 44113), (185, 44119), (186, 44122), (195, 44179), (207, 44233), (212, 44260), (219, 44284), (224, 44299), (234, 44332), (240, 44347), (248, 44368), (267, 44425),

Gene: ShamWow_92 Start: 56276, Stop: 57097, Start Num: 43

Candidate Starts for ShamWow_92:

(Start: 43 @56276 has 113 MA's), (Start: 51 @56294 has 13 MA's), (55, 56300), (81, 56417), (93, 56477), (95, 56486), (138, 56624), (179, 56783), (180, 56792), (192, 56855), (205, 56936), (231, 57026),

Gene: ShereKhan_90 Start: 56388, Stop: 57209, Start Num: 43

Candidate Starts for ShereKhan_90:

(Start: 43 @56388 has 113 MA's), (Start: 51 @56406 has 13 MA's), (55, 56412), (81, 56529), (93, 56589), (95, 56598), (138, 56736), (179, 56895), (180, 56904), (192, 56967), (205, 57048), (231, 57138),

Gene: Shlim410_63 Start: 44611, Stop: 45450, Start Num: 44

Candidate Starts for Shlim410_63:

(11, 44431), (Start: 18 @44491 has 3 MA's), (Start: 44 @44611 has 22 MA's), (70, 44689), (89, 44791), (265, 45439),

Gene: Simpliphy_91 Start: 55396, Stop: 56217, Start Num: 43

Candidate Starts for Simpliphy_91:

(Start: 43 @55396 has 113 MA's), (Start: 51 @55414 has 13 MA's), (55, 55420), (81, 55537), (93, 55597), (95, 55606), (138, 55744), (179, 55903), (180, 55912), (192, 55975), (205, 56056), (231, 56146),

Gene: SirDuracell_92 Start: 54769, Stop: 55590, Start Num: 43

Candidate Starts for SirDuracell_92:

(Start: 43 @54769 has 113 MA's), (Start: 51 @54787 has 13 MA's), (55, 54793), (81, 54910), (93, 54970), (95, 54979), (138, 55117), (179, 55276), (180, 55285), (192, 55348), (205, 55429), (231, 55519),

Gene: SoilAssassin_61 Start: 41334, Stop: 42335, Start Num: 18

Candidate Starts for SoilAssassin_61:

(9, 41271), (Start: 18 @41334 has 3 MA's), (33, 41412), (Start: 67 @41508 has 1 MA's), (102, 41682), (103, 41685), (104, 41688), (109, 41730), (119, 41763), (120, 41769), (138, 41811), (172, 41946), (183, 41997), (184, 42000), (210, 42132), (235, 42210), (254, 42258), (263, 42294), (272, 42324),

Gene: SophKB_89 Start: 55074, Stop: 55895, Start Num: 43

Candidate Starts for SophKB_89:

(Start: 43 @55074 has 113 MA's), (Start: 51 @55092 has 13 MA's), (55, 55098), (81, 55215), (93, 55275), (95, 55284), (138, 55422), (179, 55581), (180, 55590), (192, 55653), (205, 55734), (231, 55824),

Gene: Sotrice96_93 Start: 55662, Stop: 56483, Start Num: 43

Candidate Starts for Sotrice96_93:

(Start: 43 @55662 has 113 MA's), (Start: 51 @55680 has 13 MA's), (55, 55686), (81, 55803), (93, 55863), (95, 55872), (138, 56010), (179, 56169), (180, 56178), (192, 56241), (205, 56322), (231, 56412),

Gene: Spooky_85 Start: 47535, Stop: 48386, Start Num: 44

Candidate Starts for Spooky_85:

(Start: 44 @47535 has 22 MA's), (70, 47610), (Start: 71 @47619 has 1 MA's), (73, 47631), (89, 47712), (172, 48030), (182, 48075), (183, 48081),

Gene: Squint_128 Start: 69351, Stop: 70109, Start Num: 43

Candidate Starts for Squint_128:

(Start: 43 @69351 has 113 MA's), (Start: 74 @69441 has 1 MA's), (89, 69510), (95, 69534), (97, 69543), (103, 69567), (106, 69591), (110, 69606), (114, 69618), (125, 69645), (130, 69657), (138, 69666), (145, 69705), (167, 69774), (182, 69837),

Gene: Stank_94 Start: 56055, Stop: 56876, Start Num: 43

Candidate Starts for Stank_94:

(Start: 43 @56055 has 113 MA's), (Start: 51 @56073 has 13 MA's), (55, 56079), (81, 56196), (93, 56256), (95, 56265), (138, 56403), (179, 56562), (180, 56571), (192, 56634), (205, 56715), (231, 56805),

Gene: Stark_94 Start: 56146, Stop: 56967, Start Num: 43

Candidate Starts for Stark_94:

(Start: 43 @56146 has 113 MA's), (Start: 51 @56164 has 13 MA's), (55, 56170), (81, 56287), (93, 56347), (95, 56356), (138, 56494), (179, 56653), (180, 56662), (192, 56725), (205, 56806), (231, 56896),

Gene: StellaBean_90 Start: 55600, Stop: 56421, Start Num: 43

Candidate Starts for StellaBean_90:

(Start: 43 @55600 has 113 MA's), (Start: 51 @55618 has 13 MA's), (55, 55624), (81, 55741), (93, 55801), (95, 55810), (138, 55948), (179, 56107), (180, 56116), (192, 56179), (205, 56260), (231, 56350),

Gene: StolenFromERC_95 Start: 55980, Stop: 56801, Start Num: 43

Candidate Starts for StolenFromERC_95:

(Start: 43 @55980 has 113 MA's), (Start: 51 @55998 has 13 MA's), (55, 56004), (81, 56121), (93, 56181), (95, 56190), (138, 56328), (179, 56487), (180, 56496), (192, 56559), (205, 56640), (231, 56730),

Gene: Superphikiman_127 Start: 68353, Stop: 69021, Start Num: 74

Candidate Starts for Superphikiman_127:

(Start: 43 @68263 has 113 MA's), (Start: 74 @68353 has 1 MA's), (89, 68422), (95, 68446), (97, 68455), (103, 68479), (106, 68503), (110, 68518), (114, 68530), (125, 68557), (130, 68569), (138, 68578), (145, 68617), (167, 68686), (182, 68749),

Gene: Syleon_69 Start: 43568, Stop: 44374, Start Num: 56

Candidate Starts for Syleon_69:

(Start: 56 @43568 has 3 MA's), (61, 43577), (78, 43661), (79, 43664), (80, 43667), (82, 43682), (86, 43703), (89, 43718), (102, 43772), (118, 43826), (138, 43871), (146, 43910), (148, 43928), (154, 43949), (162, 43970), (174, 44009), (183, 44054), (185, 44060), (186, 44063), (195, 44120), (207, 44174), (212, 44201), (219, 44225), (224, 44240), (234, 44273), (240, 44288), (248, 44309), (267, 44366),

Gene: TBrady12_95 Start: 55816, Stop: 56637, Start Num: 43

Candidate Starts for TBrady12_95:

(Start: 43 @55816 has 113 MA's), (Start: 51 @55834 has 13 MA's), (55, 55840), (81, 55957), (93, 56017), (95, 56026), (138, 56164), (179, 56323), (180, 56332), (192, 56395), (205, 56476), (231, 56566),

Gene: Tarkin_91 Start: 56064, Stop: 56885, Start Num: 43

Candidate Starts for Tarkin_91:

(Start: 43 @56064 has 113 MA's), (Start: 51 @56082 has 13 MA's), (55, 56088), (81, 56205), (93, 56265), (95, 56274), (138, 56412), (179, 56571), (180, 56580), (192, 56643), (205, 56724), (231, 56814),

Gene: TeardropMSU_88 Start: 55064, Stop: 55885, Start Num: 43

Candidate Starts for TeardropMSU_88:

(Start: 43 @55064 has 113 MA's), (Start: 51 @55082 has 13 MA's), (55, 55088), (81, 55205), (93, 55265), (95, 55274), (138, 55412), (179, 55571), (180, 55580), (192, 55643), (205, 55724), (231, 55814),

Gene: Teaspoon_93 Start: 55916, Stop: 56737, Start Num: 43

Candidate Starts for Teaspoon_93:

(Start: 43 @55916 has 113 MA's), (Start: 51 @55934 has 13 MA's), (55, 55940), (81, 56057), (93, 56117), (95, 56126), (138, 56264), (179, 56423), (180, 56432), (192, 56495), (205, 56576), (231,

56666),

Gene: Terminus_95 Start: 56851, Stop: 57672, Start Num: 43

Candidate Starts for Terminus_95:

(Start: 43 @56851 has 113 MA's), (Start: 51 @56869 has 13 MA's), (55, 56875), (81, 56992), (93, 57052), (95, 57061), (138, 57199), (179, 57358), (180, 57367), (192, 57430), (205, 57511), (231, 57601),

Gene: Thibault_114 Start: 66645, Stop: 67445, Start Num: 45

Candidate Starts for Thibault_114:

(Start: 45 @66645 has 36 MA's), (68, 66705), (76, 66756), (80, 66771), (89, 66822), (118, 66936), (136, 66969), (150, 67038), (154, 67056), (163, 67083), (170, 67107), (172, 67116), (220, 67353), (238, 67401),

Gene: Thimann_65 Start: 41439, Stop: 42275, Start Num: 44

Candidate Starts for Thimann_65:

(Start: 18 @41319 has 3 MA's), (Start: 44 @41439 has 22 MA's), (70, 41514), (89, 41616), (265, 42264),

Gene: ThreeRngTarjay_128 Start: 72468, Stop: 73268, Start Num: 45

Candidate Starts for ThreeRngTarjay_128:

(Start: 45 @72468 has 36 MA's), (68, 72528), (76, 72579), (80, 72594), (89, 72645), (118, 72759), (136, 72792), (150, 72861), (154, 72879), (163, 72906), (170, 72930), (172, 72939), (220, 73176), (238, 73224),

Gene: Thresher_95 Start: 56926, Stop: 57747, Start Num: 43

Candidate Starts for Thresher_95:

(Start: 43 @56926 has 113 MA's), (Start: 51 @56944 has 13 MA's), (55, 56950), (81, 57067), (93, 57127), (95, 57136), (138, 57274), (179, 57433), (180, 57442), (192, 57505), (205, 57586), (231, 57676),

Gene: Tomaszewski_87 Start: 55227, Stop: 56048, Start Num: 43

Candidate Starts for Tomaszewski_87:

(Start: 43 @55227 has 113 MA's), (Start: 51 @55245 has 13 MA's), (55, 55251), (81, 55368), (93, 55428), (95, 55437), (138, 55575), (179, 55734), (180, 55743), (192, 55806), (205, 55887), (231, 55977),

Gene: Toron_69 Start: 42674, Stop: 43411, Start Num: 58

Candidate Starts for Toron_69:

(38, 42623), (58, 42674), (Start: 71 @42734 has 1 MA's), (75, 42755), (82, 42791), (84, 42803), (100, 42875), (102, 42881), (105, 42893), (112, 42911), (138, 42974), (144, 43010), (147, 43019), (151, 43040), (154, 43052), (161, 43073), (168, 43085), (180, 43133), (182, 43145), (191, 43184), (196, 43214), (213, 43301), (216, 43310), (218, 43313), (230, 43343), (231, 43346), (236, 43358), (239, 43367), (244, 43379), (250, 43394), (253, 43397),

Gene: Toto_90 Start: 56276, Stop: 57097, Start Num: 43

Candidate Starts for Toto_90:

(Start: 43 @56276 has 113 MA's), (Start: 51 @56294 has 13 MA's), (55, 56300), (81, 56417), (93, 56477), (95, 56486), (138, 56624), (179, 56783), (180, 56792), (192, 56855), (205, 56936), (231, 57026),

Gene: Traaww1_88 Start: 55084, Stop: 55905, Start Num: 43

Candidate Starts for Traaww1_88:

(Start: 43 @55084 has 113 MA's), (Start: 51 @55102 has 13 MA's), (55, 55108), (81, 55225), (93, 55285), (95, 55294), (138, 55432), (179, 55591), (180, 55600), (192, 55663), (205, 55744), (231, 55834),

Gene: Tuco_93 Start: 56823, Stop: 57644, Start Num: 43

Candidate Starts for Tuco_93:

(Start: 43 @56823 has 113 MA's), (Start: 51 @56841 has 13 MA's), (55, 56847), (81, 56964), (93, 57024), (95, 57033), (138, 57171), (179, 57330), (180, 57339), (192, 57402), (205, 57483), (231, 57573),

Gene: Twinkle_64 Start: 45670, Stop: 46509, Start Num: 44

Candidate Starts for Twinkle_64:

(11, 45490), (Start: 18 @45550 has 3 MA's), (Start: 44 @45670 has 22 MA's), (70, 45748), (89, 45850), (265, 46498),

Gene: Typha_59 Start: 43522, Stop: 44343, Start Num: 47

Candidate Starts for Typha_59:

(24, 43438), (25, 43447), (30, 43462), (35, 43480), (Start: 47 @43522 has 4 MA's), (72, 43615), (73, 43618), (80, 43648), (84, 43675), (93, 43714), (96, 43732), (115, 43807), (120, 43825), (125, 43837), (141, 43867), (151, 43924), (153, 43933), (175, 43996), (183, 44041), (196, 44104), (204, 44143), (227, 44212), (232, 44230), (268, 44332),

Gene: Ubuntu_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Ubuntu_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Ukulele_87 Start: 55209, Stop: 56030, Start Num: 43

Candidate Starts for Ukulele_87:

(Start: 43 @55209 has 113 MA's), (Start: 51 @55227 has 13 MA's), (55, 55233), (81, 55350), (93, 55410), (95, 55419), (138, 55557), (179, 55716), (180, 55725), (192, 55788), (205, 55869), (231, 55959),

Gene: Vasanti_60 Start: 40525, Stop: 41349, Start Num: 67

Candidate Starts for Vasanti_60:

(20, 40357), (29, 40414), (40, 40453), (Start: 50 @40480 has 1 MA's), (Start: 67 @40525 has 1 MA's), (102, 40699), (103, 40702), (104, 40705), (109, 40747), (120, 40786), (138, 40828), (184, 41017), (210, 41146), (235, 41224), (254, 41272), (272, 41338),

Gene: Wanda_131 Start: 69603, Stop: 70403, Start Num: 45

Candidate Starts for Wanda_131:

(Start: 45 @69603 has 36 MA's), (68, 69663), (76, 69714), (80, 69729), (89, 69780), (118, 69894), (136, 69927), (150, 69996), (154, 70014), (163, 70041), (170, 70065), (172, 70074), (220, 70311), (238, 70359),

Gene: Webster2_53 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Webster2_53:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184,

38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Weirido19_50 Start: 36157, Stop: 37002, Start Num: 71

Candidate Starts for Weirido19_50:

(60, 36112), (Start: 71 @36157 has 1 MA's), (79, 36196), (99, 36295), (113, 36364), (114, 36367), (124, 36400), (131, 36418), (142, 36442), (146, 36463), (164, 36523), (175, 36553), (187, 36607), (201, 36706), (274, 36985),

Gene: Wiggin_94 Start: 55485, Stop: 56306, Start Num: 43

Candidate Starts for Wiggin_94:

(Start: 43 @55485 has 113 MA's), (Start: 51 @55503 has 13 MA's), (55, 55509), (81, 55626), (93, 55686), (95, 55695), (138, 55833), (179, 55992), (180, 56001), (192, 56064), (205, 56145), (231, 56235),

Gene: Willez_87 Start: 54096, Stop: 54917, Start Num: 43

Candidate Starts for Willez_87:

(Start: 43 @54096 has 113 MA's), (Start: 51 @54114 has 13 MA's), (55, 54120), (81, 54237), (93, 54297), (95, 54306), (138, 54444), (179, 54603), (180, 54612), (192, 54675), (205, 54756), (231, 54846),

Gene: WinkNick_63 Start: 40323, Stop: 41159, Start Num: 44

Candidate Starts for WinkNick_63:

(11, 40143), (Start: 18 @40203 has 3 MA's), (Start: 44 @40323 has 22 MA's), (70, 40401), (89, 40503), (265, 41148),

Gene: Wishmaker_51 Start: 37891, Stop: 38754, Start Num: 39

Candidate Starts for Wishmaker_51:

(Start: 39 @37891 has 22 MA's), (66, 37957), (69, 37981), (78, 38020), (80, 38026), (82, 38041), (89, 38077), (90, 38083), (100, 38125), (103, 38134), (117, 38197), (122, 38215), (127, 38227), (135, 38245), (152, 38314), (154, 38323), (155, 38329), (165, 38350), (173, 38383), (181, 38416), (184, 38431), (199, 38530), (203, 38542), (207, 38554), (223, 38611), (231, 38638), (238, 38662), (249, 38695), (257, 38710), (264, 38743),

Gene: Xandras_91 Start: 55308, Stop: 56129, Start Num: 43

Candidate Starts for Xandras_91:

(Start: 43 @55308 has 113 MA's), (Start: 51 @55326 has 13 MA's), (55, 55332), (81, 55449), (93, 55509), (95, 55518), (138, 55656), (179, 55815), (180, 55824), (192, 55887), (205, 55968), (231, 56058),

Gene: YassJohnny_89 Start: 54949, Stop: 55770, Start Num: 43

Candidate Starts for YassJohnny_89:

(Start: 43 @54949 has 113 MA's), (Start: 51 @54967 has 13 MA's), (55, 54973), (81, 55090), (93, 55150), (95, 55159), (138, 55297), (179, 55456), (180, 55465), (192, 55528), (205, 55609), (231, 55699),

Gene: Yeet_124 Start: 71190, Stop: 71945, Start Num: 45

Candidate Starts for Yeet_124:

(Start: 45 @71190 has 36 MA's), (89, 71346), (97, 71379), (103, 71403), (106, 71427), (125, 71481), (128, 71487), (130, 71493), (138, 71502), (143, 71529), (145, 71541), (155, 71586), (161, 71601), (182, 71673),

Gene: Youngblood_95 Start: 56778, Stop: 57599, Start Num: 43

Candidate Starts for Youngblood_95:

(Start: 43 @56778 has 113 MA's), (Start: 51 @56796 has 13 MA's), (55, 56802), (81, 56919), (93, 56979), (95, 56988), (138, 57126), (179, 57285), (180, 57294), (192, 57357), (205, 57438), (231, 57528),

Gene: Zaheer_53 Start: 35680, Stop: 36483, Start Num: 64

Candidate Starts for Zaheer_53:

(63, 35677), (Start: 64 @35680 has 3 MA's), (73, 35731), (87, 35800), (106, 35896), (107, 35899), (116, 35929), (121, 35947), (137, 35974), (147, 36019), (159, 36070), (160, 36073), (190, 36175), (225, 36334), (246, 36391),

Gene: Zelink_127 Start: 72415, Stop: 73215, Start Num: 45

Candidate Starts for Zelink_127:

(Start: 45 @72415 has 36 MA's), (68, 72475), (76, 72526), (80, 72541), (89, 72592), (118, 72706), (136, 72739), (150, 72808), (154, 72826), (163, 72853), (170, 72877), (172, 72886), (220, 73123), (238, 73171),

Gene: xkcd_95 Start: 56962, Stop: 57783, Start Num: 43

Candidate Starts for xkcd_95:

(Start: 43 @56962 has 113 MA's), (Start: 51 @56980 has 13 MA's), (55, 56986), (81, 57103), (93, 57163), (95, 57172), (138, 57310), (179, 57469), (180, 57478), (192, 57541), (205, 57622), (231, 57712),