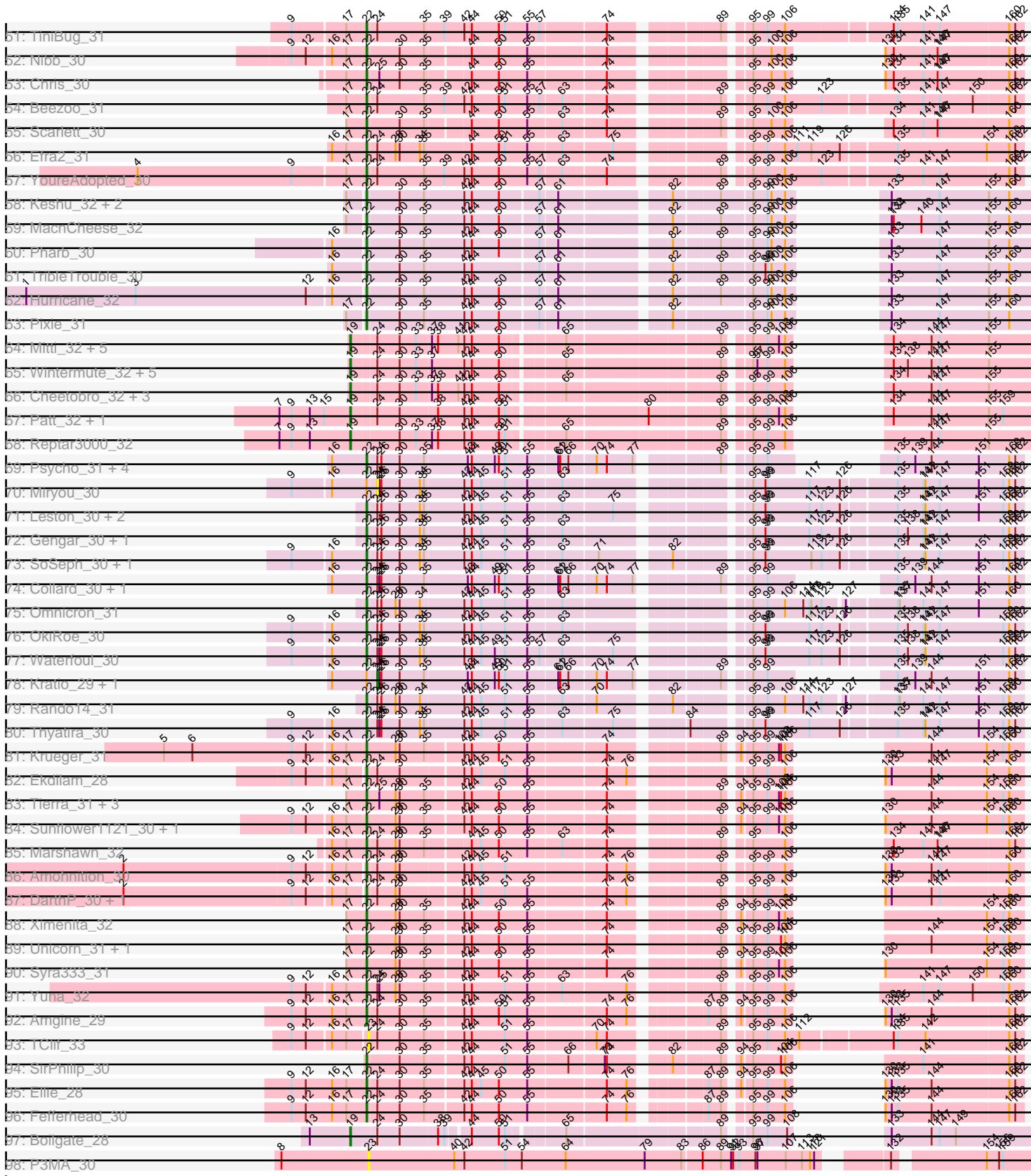


Pham 163277



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 163277 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163277 has 362 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Journey13_9
- Track 2 : TopsytheTRex_10
- Track 3 : MissWhite_11
- Track 4 : Milcery_8, Tarynearal_7, Cuco_8, Micasa_7, Bonamassa_8, HuhtaEnerson15_8, George_7, Swirley_8, LittleCherry_8
- Track 5 : PetterN_9, Chadwick_9, Scorpio_9
- Track 6 : Aragog_8, Discoknowium_8, Bluefalcon_7, Jovo_8
- Track 7 : Tiger_8, Lev2_8, PickleBack_8, Phlorence_8, Conspiracy_8, ForGetIt_8, Archetta_8
- Track 8 : AgentM_8
- Track 9 : Coog_8, Midas2_8, MarysWell_7, Theia_7, Dublin_7
- Track 10 : Airmid_8, Benedict_8, EITiger69_8
- Track 11 : SydNat_8, Zolita_7, Ghouboy_8
- Track 12 : Jabiru_8
- Track 13 : UnionJack_8
- Track 14 : Naca_8
- Track 15 : Stephig9_8, Dixon_8
- Track 16 : Expelliarmus_7, Phillis_8, Smeadley_8, Danforth_7, Groundhog_7, Astro_8
- Track 17 : Saintus_8
- Track 18 : NearlyHeadless_8
- Track 19 : Roary_8
- Track 20 : Indlulamithi_36
- Track 21 : Nergal_27
- Track 22 : MalagasyRose_31
- Track 23 : Stark_36, Gemini_38, Maxxinista_36, Elph10_36, Tarkin_37, Moldemort_36, Emmina_36, Gage_37, Nimrod_35, AmericanBeauty_38, StellaBean_35, Sassay_34, BugsBunny_33, Tomaszewski_34, TBrady12_37, MadamMonkfish_35, Glexan_33, Kostya_36, Harella_34, Kanye_37, SirDuracell_34, TeardropMSU_34, GoldenSpark_37, Thresher_36, 244_37, ChotaBhai_35, Simpliphy_36, Lilpickle_34, HanKaySha_36, Phaja_35, Argent26_37, Rakim_36, Manda_36, Ukulele_35, YassJohnny_36, SophKB_35, Youngblood_35, Adnama_38, Pat3_34, Hopey_37, Command613_36, Dusk_34, Balomoji_34, Miniwave_35, JeTaime_37, Icee_34, MPhalcon_34, BaboJay_34, BadStone_34, Saints25_36, Asriel_34, Kimchi_37, ShereKhan_37, Stank_38, Bask21_35, Qualification_36, Tuco_36, Easy2Say_37, StolenFromERC_37, Contagion_34, Cactus_36, Mindy_35, Hoonter_37, Traaww1_33, Flypotenuse_33, Mosby_34, Lilac_37, Filch_36,

Barbarian_34, Sotrice96_35, Eureka_35, Amao_35, NelitzaMV_35, Czyszczone1_36, RiverMonster_35, BigBubba_36, Terminus_35, GooberAzure_37, Goldilocks_36, Bench_37, Murphy_36, IHOP_35, Gator_33, Elite2014_34, Cjw1_35, Misfit_35, Goku_35, ChosenOne_35, Henry_36, Myrale_35, Bruin_35, Wiggin_38, Xandras_37, Willez_34, DrDrey_36, Paperbeatsrock_37, Holt_36, Nala_35, Daikon_34, Marshmallow_35, Cookies_35, Porky_35, Pumpkin_37, Teaspoon_36, Highbury_36, NoSleep_36, ABCat_34, Lilizi_37, OrionPax_36, Pharsalus_36

- Track 24 : HufflyPuff_34, Petra64142_37, FireRed_35, Rimmer_34, MISSy_34, BilboSwaggins_35, PhatBacter_35, xkcd_36, Palpatine_35, Phaux_34, Phrux_35, CrystalP_35, Policronamos_36, ShamWow_35, Buck_34, Toto_35, Murica_34, Inca_34
- Track 25 : Dumbo_35
- Track 26 : DoctorDiddles_35
- Track 27 : Mdavu_27, Enkosi_27, Amelie_27, Nikao_27, LilPharaoh_27, Binglebops_27, SgtBeansprout_27, Nutello_27
- Track 28 : MarkPheW_31
- Track 29 : Spock_31, Padfoot_31, BEEST_31, Asayake_31, Hyperbowlee_31, Topper_31, Twitch_31, CaseJules_31, Blizzard_31, Llorens_31, Homura_31, ShiaSurprise_31, Sulley_31, Joy99_31, Dalmuri_31, Jeckyll_31, Belladonna_31, Peel_31, CREW_31, Angelica_31, AlishaPH_31, Rosmarinus_31, Lunahalos_31, Durfee_31, Inky_31, Deby_31, Piatt_31, BaghaKamala_31, BGIlluviae_31, Capricorn_31, Boiiii_31, Jarvi_31
- Track 30 : Oscar_30, KiSi_30
- Track 31 : Jayhawk_32, Slimphazie_31, BarrelRoll_31, ActinUp_31, Zabiza_32, HedwigODU_31, Veliki_31, Atiba_31, Adephagia_31, Tachez_31, Rapunzel97_31
- Track 32 : Dole_31, Devera_31, Illumine_31
- Track 33 : Tiri_31, QuincyRose_30, Adonis_31, MeaningOfLife_31, Mynx_31, Ganymede_32, Zavala_31, Geraldini_31, Pokerus_30
- Track 34 : LeMond_30
- Track 35 : Validus_31
- Track 36 : Emerson_31, Padpat_31
- Track 37 : Urkel_31, SamuelLPlaqson_31, DrHayes_31
- Track 38 : Ageofdapage_31, Anaya_32, Prithvi_31, CrimD_31, LindNT_31, Stinson_32, TreyKay_31, LaterM_31, Megsy_32
- Track 39 : Apocalypse_31
- Track 40 : Niklas_31, Shaobing_31, Peanam_31
- Track 41 : Bella96_31
- Track 42 : TaiwanKao_32
- Track 43 : JAWS_31
- Track 44 : Guanica15_31, Yunkel11_31
- Track 45 : Curiosium_32
- Track 46 : TruffulaTree_31
- Track 47 : CheetoDust_31
- Track 48 : LastHope_31
- Track 49 : Ramen_31
- Track 50 : Murucutumbu_31
- Track 51 : TiniBug_31
- Track 52 : Nibb_30
- Track 53 : Chris_30
- Track 54 : Beezoo_31
- Track 55 : Scarlett_30
- Track 56 : Efra2_31
- Track 57 : YoureAdopted_30

- Track 58 : Keshu_32, ShedlockHolmes_32, TBond007_31
- Track 59 : MacnCheese_32
- Track 60 : Pharb_30
- Track 61 : TribbleTrouble_30
- Track 62 : Hurricane_32
- Track 63 : Pixie_31
- Track 64 : Mitti_32, Eponine_34, SamScheppers_32, Ruthiejr_33, OmniCritical_32, Taquito_32
- Track 65 : Wintermute_32, Malthus_33, JF1_32, Y2_32, Y10_32, Fionnbharth_32
- Track 66 : Cheetobro_32, Chancellor_32, Slarp_32, Juliette_34
- Track 67 : Patt_32, MissDaisy_32
- Track 68 : Reptar3000_32
- Track 69 : Psycho_31, Larva_31, Dadosky_31, Edugator_30, AlleyCat_31
- Track 70 : Miryou_30
- Track 71 : Leston_30, Guillsminger_30, Paola_30
- Track 72 : Gengar_30, Feyre_30
- Track 73 : SoSeph_30, Heftyboy_30
- Track 74 : Collard_30, InvictusManeo_30
- Track 75 : Omnicron_31
- Track 76 : OkiRoe_30
- Track 77 : Waterfoul_30
- Track 78 : Kratio_29, Agent47_30
- Track 79 : Rando14_31
- Track 80 : Thyatira_30
- Track 81 : Krueger_31
- Track 82 : Ekdilam_28
- Track 83 : Tierra_31, Phrank_31, Bryler_31, Cain_31
- Track 84 : Sunflower1121_30, Shadow1_30
- Track 85 : Marshawn_32
- Track 86 : Amohnition_30
- Track 87 : DarthP_30, Hammy_30
- Track 88 : Ximenita_32
- Track 89 : Unicorn_31, PhelpsODU_31
- Track 90 : Syra333_31
- Track 91 : Yuna_32
- Track 92 : Amgine_29
- Track 93 : TClif_33
- Track 94 : SirPhilip_30
- Track 95 : Ellie_28
- Track 96 : Fefferhead_30
- Track 97 : Boilgate_28
- Track 98 : P3MA_30

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

The start number called the most often in the published annotations is 22, it was called in 196 of the 341 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_31, Adephegia_31, Adonis_31, AgentM_8, Ageofdapage_31, Airmid_8, AlishaPH_31, AlleyCat_31, Amelie_27, Amgine_29, Amohnition_30, Anaya_32, Angelica_31, Apocalypse_31, Aragog_8, Archetta_8, Asayake_31, Astro_8, Atiba_31, BEEST_31, BGIlluviae_31, BaghaKamala_31, BarrelRoll_31, Beezoo_31, Bella96_31, Belladonna_31, Benedict_8, Biglebops_27, Blizzard_31, Bluefalcon_7, Boiiii_31, Bonamassa_8, Bryler_31, CREW_31, Cain_31, Capricorn_31, CaseJules_31, Chadwick_9, CheetoDust_31, Chris_30, Collard_30, Conspiracy_8, Coog_8, CrimD_31, Cuco_8, Curiosium_32, Dadosky_31, Dalmuri_31, Danforth_7, DarthP_30, Deby_31, Devera_31, Discoknowium_8, Dixon_8, Dole_31, DrHayes_31, Dublin_7, Durfee_31, Edugator_30, Efra2_31, Ekdilam_28, EITiger69_8, Ellie_28, Emerson_31, Enkosi_27, Expelliarmus_7, Fefferhead_30, Feyre_30, ForGetIt_8, Ganymede_32, Gengar_30, George_7, Geraldini_31, Ghouboy_8, Groundhog_7, Guanica15_31, Guillsminger_30, Hammy_30, HedwigODU_31, Heftyboy_30, Homura_31, HuhtaEnerson15_8, Hurricane_32, Hyperbowlee_31, Illumine_31, Inky_31, InvictusManeo_30, JAWS_31, Jabiru_8, Jarvi_31, Jayhawk_32, Jeckyll_31, Jovo_8, Joy99_31, Keshu_32, KiSi_30, Krueger_31, Larva_31, LastHope_31, LaterM_31, LeMond_30, Leston_30, Lev2_8, LilPharaoh_27, LindNT_31, LittleCherry_8, Llorens_31, Lunahalos_31, MacnCheese_32, MalagasyRose_31, MarkPhew_31, Marshawn_32, MarysWell_7, Mdavu_27, MeaningOfLife_31, Megsy_32, Micasa_7, Midas2_8, Milcery_8, Murucutumbu_31, Mynx_31, Naca_8, NearlyHeadless_8, Nibb_30, Nikao_27, Niklas_31, Nutello_27, OkiRoe_30, Omnicron_31, Oscar_30, Padfoot_31, Padpat_31, Paola_30, Peanam_31, Peel_31, PetterN_9, Pharb_30, PhelpsODU_31, Phillis_8, Phlorence_8, Phrank_31, Piatt_31, PickleBack_8, Pixie_31, Pokerus_30, Prithvi_31, Psycho_31, QuincyRose_30, Ramen_31, Rando14_31, Rapunzel97_31, Roary_8, Rosmarinus_31, Saintus_8, SamuelLPlaqson_31, Scarlett_30, Scorpia_9, SgtBeansprout_27, Shadow1_30, Shaobing_31, ShedlockHolmes_32, ShiaSurprise_31, SirPhilip_30, Slimphazie_31, Smeadley_8, SoSeph_30, Spock_31, Stephig9_8, Stinson_32, Sulley_31, Sunflower1121_30, Swirley_8, SydNat_8, Syra333_31, TBond007_31, Tachez_31, TaiwanKao_32, Tarynearal_7, Theia_7, Thyatira_30, Tierra_31, Tiger_8, TiniBug_31, Tiri_31, Topper_31, TreyKay_31, TribbleTrouble_30, TruffulaTree_31, Twitch_31, Unicorn_31, UnionJack_8, Urkel_31, Validus_31, Veliki_31, Waterfoul_30, Ximenita_32, YoureAdopted_30, Yuna_32, Yunkel11_31, Zabiza_32, Zavala_31, Zolita_7,

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

- Agent47_30, Kratio_29, Miryou_30,

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

- 244_37, ABCat_34, Adnama_38, Amao_35, AmericanBeauty_38, Argent26_37, Asriel_34, BaboJay_34, BadStone_34, Balomoji_34, Barbarian_34, Bask21_35, Bench_37, BigBubba_36, BilboSwaggins_35, Boilgate_28, Bruin_35, Buck_34, BugsBunny_33, Cactus_36, Chancellor_32, Cheetobro_32, ChosenOne_35, ChotaBhai_35, Cjw1_35, Command613_36, Contagion_34, Cookies_35, CrystalP_35, Czystczon1_36, Daikon_34, DoctorDiddles_35, DrDrey_36, Dumbo_35, Dusk_34, Easy2Say_37, Elite2014_34, Elph10_36, Emmina_36, Eponine_34, Eureka_35, Filch_36, Fionnbharth_32, FireRed_35, Flypotenuse_33, Gage_37, Gator_33, Gemini_38, Glexan_33, Goku_35, GoldenSpark_37, Goldilocks_36, GooberAzure_37, HanKaySha_36, Harella_34, Henry_36, Highbury_36, Holt_36, Hoonter_37, Hopey_37, HufflyPuff_34, IHOP_35, Icee_34, Inca_34, Indlulamithi_36, JF1_32, JeTaime_37, Journey13_9, Juliette_34, Kanye_37, Kimchi_37, Kostya_36, Lilac_37, Lilizi_37, Lilpickle_34, MISSy_34, MPhalcon_34, MadamMonkfish_35, Malthus_33, Manda_36, Marshmallow_35, Maxxinista_36,

Mindy_35, Miniwave_35, Misfit_35, MissDaisy_32, MissWhite_11, Mitti_32, Moldemort_36, Mosby_34, Murica_34, Murphy_36, Myrale_35, Nala_35, NelitzaMV_35, Nergal_27, Nimrod_35, NoSleep_36, OmniCritical_32, OrionPax_36, P3MA_30, Palpatine_35, Paperbeatsrock_37, Pat3_34, Patt_32, Petra64142_37, Phaja_35, Pharsalus_36, PhatBacter_35, Phaux_34, Phrux_35, Policronamos_36, Porky_35, Pumpkin_37, Quallification_36, Rakim_36, Reptar3000_32, Rimmer_34, RiverMonster_35, Ruthiejr_33, Saints25_36, SamScheppers_32, Sassay_34, ShamWow_35, ShereKhan_37, Simpliphy_36, SirDuracell_34, Slarp_32, SophKB_35, Sotrice96_35, Stank_38, Stark_36, StellaBean_35, StolenFromERC_37, TBrady12_37, TClif_33, Taquito_32, Tarkin_37, TeardropMSU_34, Teaspoon_36, Terminus_35, Thresher_36, TopsytheTRex_10, Tomaszewski_34, Toto_35, Traaww1_33, Tuco_36, Ukulele_35, Wiggin_38, Willez_34, Wintermute_32, Xandras_37, Y10_32, Y2_32, YassJohnny_36, Youngblood_35, xkcd_36,

Summary by start number:

Start 16:

- Found in 180 of 362 (49.7%) of genes in pham
- Manual Annotations of this start: 119 of 341
- Called 72.2% of time when present
- Phage (with cluster) where this start called: 244_37 (E), ABCat_34 (E), Adnama_38 (E), Amao_35 (E), AmericanBeauty_38 (E), Argent26_37 (E), Asriel_34 (E), BaboJay_34 (E), BadStone_34 (E), Balomoji_34 (E), Barbarian_34 (E), Bask21_35 (E), Bench_37 (E), BigBubba_36 (E), BilboSwaggins_35 (E), Bruin_35 (E), Buck_34 (E), BugsBunny_33 (E), Cactus_36 (E), ChosenOne_35 (E), ChotaBhai_35 (E), Cjw1_35 (E), Command613_36 (E), Contagion_34 (E), Cookies_35 (E), CrystalP_35 (E), Czyszczonek_36 (E), Daikon_34 (E), DoctorDiddles_35 (E), DrDrey_36 (E), Dumbo_35 (E), Dusk_34 (E), Easy2Say_37 (E), Elite2014_34 (E), Elph10_36 (E), Emmina_36 (E), Eureka_35 (E), Filch_36 (E), FireRed_35 (E), Flypotenuse_33 (E), Gage_37 (E), Gator_33 (E), Gemini_38 (E), Glexan_33 (E), Goku_35 (E), GoldenSpark_37 (E), Goldilocks_36 (E), GooberAzure_37 (E), HanKaySha_36 (E), Harella_34 (E), Henry_36 (E), Highbury_36 (E), Holt_36 (E), Hoonter_37 (E), Hopey_37 (E), HufflyPuff_34 (E), IHOP_35 (E), Icee_34 (E), Inca_34 (E), JeTaime_37 (E), Kanye_37 (E), Kimchi_37 (E), Kostya_36 (E), Lilac_37 (E), Lilizi_37 (E), Lilpickle_34 (E), MISSy_34 (E), MPhalcon_34 (E), MadamMonkfish_35 (E), Manda_36 (E), Marshmallow_35 (E), Maxxinista_36 (E), Mindy_35 (E), Miniwave_35 (E), Misfit_35 (E), Moldemort_36 (E), Mosby_34 (E), Murica_34 (E), Murphy_36 (E), Myrale_35 (E), Nala_35 (E), NelitzaMV_35 (E), Nimrod_35 (E), NoSleep_36 (E), OrionPax_36 (E), Palpatine_35 (E), Paperbeatsrock_37 (E), Pat3_34 (E), Petra64142_37 (E), Phaja_35 (E), Pharsalus_36 (E), PhatBacter_35 (E), Phaux_34 (E), Phrux_35 (E), Policronamos_36 (E), Porky_35 (E), Pumpkin_37 (E), Quallification_36 (E), Rakim_36 (E), Rimmer_34 (E), RiverMonster_35 (E), Saints25_36 (E), Sassay_34 (E), ShamWow_35 (E), ShereKhan_37 (E), Simpliphy_36 (E), SirDuracell_34 (E), SophKB_35 (E), Sotrice96_35 (E), Stank_38 (E), Stark_36 (E), StellaBean_35 (E), StolenFromERC_37 (E), TBrady12_37 (E), Tarkin_37 (E), TeardropMSU_34 (E), Teaspoon_36 (E), Terminus_35 (E), Thresher_36 (E), Tomaszewski_34 (E), Toto_35 (E), Traaww1_33 (E), Tuco_36 (E), Ukulele_35 (E), Wiggin_38 (E), Willez_34 (E), Xandras_37 (E), YassJohnny_36 (E), Youngblood_35 (E), xkcd_36 (E),

Start 19:

- Found in 20 of 362 (5.5%) of genes in pham
- Manual Annotations of this start: 20 of 341

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate_28 (K8), Chancellor_32 (K4), Cheetobro_32 (K4), Eponine_34 (K4), Fionnbharth_32 (K4), JF1_32 (K4), Juliette_34 (K4), Malthus_33 (K4), MissDaisy_32 (K4), Mitti_32 (K4), OmniCritical_32 (K4), Patt_32 (K4), Reptar3000_32 (K4), Ruthiejr_33 (K4), SamScheppers_32 (K4), Slarp_32 (K4), Taquito_32 (K4), Wintermute_32 (K4), Y10_32 (K4), Y2_32 (K4),

Start 20:

- Found in 1 of 362 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 341
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi_36 (AC),

Start 22:

- Found in 205 of 362 (56.6%) of genes in pham
- Manual Annotations of this start: 196 of 341
- Called 98.5% of time when present
- Phage (with cluster) where this start called: ActinUp_31 (K1), Adephagia_31 (K1), Adonis_31 (K1), AgentM_8 (A5), Ageofdapage_31 (K1), Airmid_8 (A5), AlishaPH_31 (K1), AlleyCat_31 (K5), Amelie_27 (K1), Amgine_29 (K6), Amohntion_30 (K6), Anaya_32 (K1), Angelica_31 (K1), Apocalypse_31 (K1), Aragog_8 (A5), Archetta_8 (A5), Asayake_31 (K1), Astro_8 (A8), Atiba_31 (K1), BEEST_31 (K1), BGIlluviae_31 (K1), BaghaKamala_31 (K1), BarrelRoll_31 (K1), Beezoo_31 (K1), Bella96_31 (K1), Belladonna_31 (K1), Benedict_8 (A5), Binglebops_27 (K1), Blizzard_31 (K1), Bluefalcon_7 (A5), Boiiii_31 (K1), Bonamassa_8 (A5), Bryler_31 (K6), CREW_31 (K1), Cain_31 (K6), Capricorn_31 (K1), CaseJules_31 (K1), Chadwick_9 (A5), CheetoDust_31 (K1), Chris_30 (K1), Collard_30 (K5), Conspiracy_8 (A5), Coog_8 (A5), CrimD_31 (K1), Cuco_8 (A5), Curiosium_32 (K1), Dadosky_31 (K5), Dalmuri_31 (K1), Danforth_7 (A8), DARTH_30 (K6), Deby_31 (K1), Devera_31 (K1), Discoknowium_8 (A5), Dixon_8 (A8), Dole_31 (K1), DrHayes_31 (K1), Dublin_7 (A5), Durfee_31 (K1), Edugator_30 (K5), Efra2_31 (K1), Ekdilam_28 (K6), EITiger69_8 (A5), Ellie_28 (K6), Emerson_31 (K1), Enkosi_27 (K1), Expelliarmus_7 (A8), Fefferhead_30 (K6), Feyre_30 (K5), ForGetIt_8 (A5), Ganymede_32 (K1), Gengar_30 (K5), George_7 (A5), Geraldini_31 (K1), Ghouliboy_8 (A5), Groundhog_7 (A8), Guanica15_31 (K1), Guillsminger_30 (K5), Hammy_30 (K6), HedwigODU_31 (K1), Heftyboy_30 (K5), Homura_31 (K1), HuhtaEnerson15_8 (A5), Hurricane_32 (K3), Hyperbowlee_31 (K1), Illumine_31 (K1), Inky_31 (K1), InvictusManeo_30 (K5), JAWS_31 (K1), Jabiru_8 (A5), Jarvi_31 (K1), Jayhawk_32 (K1), Jeckyll_31 (K1), Jovo_8 (A5), Joy99_31 (K1), Keshu_32 (K3), KiSi_30 (K1), Krueger_31 (K6), Larva_31 (K5), LastHope_31 (K1), LaterM_31 (K1), LeMond_30 (K1), Leston_30 (K5), Lev2_8 (A5), LilPharaoh_27 (K1), LindNT_31 (K1), LittleCherry_8 (A5), Llorens_31 (K1), Lunahalos_31 (K1), MacnCheese_32 (K3), MalagasyRose_31 (AG), MarkPhew_31 (K1), Marshawn_32 (K6), MarysWell_7 (A5), Mdavu_27 (K1), MeaningOfLife_31 (K1), Megsy_32 (K1), Micasa_7 (A5), Midas2_8 (A5), Milcery_8 (A5), Murucutumbu_31 (K1), Mynx_31 (K1), Naca_8 (A5), NearlyHeadless_8 (A8), Nibb_30 (K1), Nikao_27 (K1), Niklas_31 (K1), Nutello_27 (K1), OkiRoe_30 (K5), Omnicron_31 (K5), Oscar_30 (K1), Padfoot_31 (K1), Padpat_31 (K1), Paola_30 (K5), Peanam_31 (K1), Peel_31 (K1), PetterN_9 (A5), Pharb_30 (K3), PhelpsODU_31 (K6), Phillis_8 (A8), Phlorence_8 (A5), Phrank_31 (K6), Piatt_31 (K1), PickleBack_8 (A5), Pixie_31 (K3), Pokerus_30 (K1), Prithvi_31 (K1), Psycho_31 (K5), QuincyRose_30 (K1), Ramen_31 (K1), Rando14_31 (K5), Rapunzel97_31 (K1), Roary_8 (A8), Rosmarinus_31 (K1), Saintus_8 (A8), SamuelLPlaqson_31 (K1), Scarlett_30 (K1), Scorpia_9 (A5), SgtBeansprout_27 (K1), Shadow1_30 (K6),

Shaobing_31 (K1), ShedlockHolmes_32 (K3), ShiaSurprise_31 (K1), SirPhilip_30 (K6), Slimphazie_31 (K1), Smeadley_8 (A8), SoSeph_30 (K5), Spock_31 (K1), Stepbig9_8 (A8), Stinson_32 (K1), Sulley_31 (K1), Sunflower1121_30 (K6), Swirley_8 (A5), SydNat_8 (A5), Syra333_31 (K6), TBond007_31 (K3), Tachez_31 (K1), TaiwanKao_32 (K1), Tarynearal_7 (A5), Theia_7 (A5), Thyatira_30 (K5), Tierra_31 (K6), Tiger_8 (A5), TiniBug_31 (K1), Tiri_31 (K1), Topper_31 (K1), TreyKay_31 (K1), TribbleTrouble_30 (K3), TruffulaTree_31 (K1), Twitch_31 (K1), Unicorn_31 (K6), UnionJack_8 (A5), Urkel_31 (K1), Validus_31 (K1), Veliki_31 (K1), Waterfoul_30 (K5), Ximenita_32 (K6), YoureAdopted_30 (K1), Yuna_32 (K6), Yunkel11_31 (K1), Zabiza_32 (K1), Zavala_31 (K1), Zolita_7 (A5),

Start 23:

- Found in 6 of 362 (1.7%) of genes in pham
- Manual Annotations of this start: 4 of 341
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Journey13_9 (A2), MissWhite_11 (A2), Nergal_27 (AG), P3MA_30 (UNK), TClif_33 (K6), TopsytheTRex_10 (A2),

Start 24:

- Found in 138 of 362 (38.1%) of genes in pham
- Manual Annotations of this start: 1 of 341
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Agent47_30 (K5), Kratio_29 (K5), Miryou_30 (K5),

Summary by clusters:

There are 13 clusters represented in this pham: AC, UNK, E, AG, K3, K1, A2, A5, K6, K5, K4, A8, K8,

Info for manual annotations of cluster A2:

- Start number 23 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A5:

- Start number 22 was manually annotated 37 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 22 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster AC:

- Start number 20 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster AG:

- Start number 22 was manually annotated 1 time for cluster AG.
- Start number 23 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster E:

- Start number 16 was manually annotated 119 times for cluster E.

Info for manual annotations of cluster K1:

- Start number 22 was manually annotated 99 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 22 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 19 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 22 was manually annotated 19 times for cluster K5.
- Start number 24 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster K6:

- Start number 22 was manually annotated 21 times for cluster K6.

Info for manual annotations of cluster K8:

- Start number 19 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: 244_37 Start: 32138, Stop: 32995, Start Num: 16

Candidate Starts for 244_37:

(Start: 16 @32138 has 119 MA's), (21, 32177), (27, 32207), (30, 32228), (35, 32264), (39, 32294), (50, 32369), (57, 32417), (58, 32420), (62, 32444), (63, 32447), (67, 32462), (88, 32633), (114, 32747), (120, 32762), (122, 32768), (133, 32810), (134, 32813), (144, 32867), (153, 32945), (161, 32978),

Gene: ABCat_34 Start: 31850, Stop: 32707, Start Num: 16

Candidate Starts for ABCat_34:

(Start: 16 @31850 has 119 MA's), (21, 31889), (27, 31919), (30, 31940), (35, 31976), (39, 32006), (50, 32081), (57, 32129), (58, 32132), (62, 32156), (63, 32159), (67, 32174), (88, 32345), (114, 32459), (120, 32474), (122, 32480), (133, 32522), (134, 32525), (144, 32579), (153, 32657), (161, 32690),

Gene: ActinUp_31 Start: 26463, Stop: 27335, Start Num: 22

Candidate Starts for ActinUp_31:

(17, 26436), (Start: 22 @26463 has 196 MA's), (Start: 24 @26475 has 1 MA's), (35, 26544), (39, 26571), (42, 26601), (44, 26610), (50, 26646), (51, 26655), (55, 26688), (57, 26706), (63, 26736), (73, 26793), (74, 26796), (89, 26931), (95, 26958), (99, 26979), (106, 27003), (123, 27054), (135, 27156), (141, 27192), (147, 27216), (160, 27315), (162, 27324),

Gene: Adephagia_31 Start: 26460, Stop: 27332, Start Num: 22

Candidate Starts for Adephagia_31:

(17, 26433), (Start: 22 @26460 has 196 MA's), (Start: 24 @26472 has 1 MA's), (35, 26541), (39, 26568), (42, 26598), (44, 26607), (50, 26643), (51, 26652), (55, 26685), (57, 26703), (63, 26733), (73, 26790), (74, 26793), (89, 26928), (95, 26955), (99, 26976), (106, 27000), (123, 27051), (135, 27153), (141, 27189), (147, 27213), (160, 27312), (162, 27321),

Gene: Adnama_38 Start: 32365, Stop: 33222, Start Num: 16

Candidate Starts for Adnama_38:

(Start: 16 @32365 has 119 MA's), (21, 32404), (27, 32434), (30, 32455), (35, 32491), (39, 32521), (50, 32596), (57, 32644), (58, 32647), (62, 32671), (63, 32674), (67, 32689), (88, 32860), (114, 32974), (120, 32989), (122, 32995), (133, 33037), (134, 33040), (144, 33094), (153, 33172), (161, 33205),

Gene: Adonis_31 Start: 26466, Stop: 27338, Start Num: 22

Candidate Starts for Adonis_31:

(17, 26439), (Start: 22 @26466 has 196 MA's), (Start: 24 @26478 has 1 MA's), (35, 26547), (39, 26574), (42, 26604), (44, 26613), (50, 26649), (51, 26658), (55, 26691), (57, 26709), (63, 26739), (74, 26799), (89, 26934), (95, 26961), (99, 26982), (106, 27006), (123, 27057), (135, 27159), (141, 27195), (147, 27219), (160, 27318), (162, 27327),

Gene: Agent47_30 Start: 27239, Stop: 27988, Start Num: 24

Candidate Starts for Agent47_30:

(Start: 16 @27179 has 119 MA's), (Start: 22 @27227 has 196 MA's), (Start: 24 @27239 has 1 MA's), (25, 27242), (26, 27245), (30, 27272), (35, 27308), (43, 27368), (44, 27374), (49, 27404), (50, 27410), (51, 27419), (55, 27452), (61, 27494), (62, 27497), (66, 27509), (70, 27545), (74, 27560), (77, 27596), (89, 27695), (95, 27722), (99, 27743), (135, 27806), (139, 27830), (144, 27854), (151, 27923), (160, 27968), (162, 27977),

Gene: AgentM_8 Start: 5433, Stop: 6242, Start Num: 22

Candidate Starts for AgentM_8:

(Start: 22 @5433 has 196 MA's), (32, 5496), (33, 5505), (36, 5526), (40, 5562), (48, 5610), (56, 5667), (60, 5691), (88, 5922), (95, 5979), (163, 6228),

Gene: Ageofdapage_31 Start: 26403, Stop: 27275, Start Num: 22

Candidate Starts for Ageofdapage_31:

(17, 26376), (Start: 22 @26403 has 196 MA's), (Start: 24 @26415 has 1 MA's), (35, 26484), (39, 26511), (42, 26541), (44, 26550), (50, 26586), (51, 26595), (55, 26628), (57, 26646), (74, 26736), (89, 26871), (95, 26898), (99, 26919), (106, 26943), (123, 26994), (135, 27096), (141, 27132), (147, 27156), (160, 27255), (162, 27264),

Gene: Airmid_8 Start: 5180, Stop: 5989, Start Num: 22

Candidate Starts for Airmid_8:

(Start: 22 @5180 has 196 MA's), (29, 5225), (40, 5309), (42, 5324), (48, 5357), (83, 5627), (88, 5669), (93, 5708), (95, 5726), (101, 5756), (160, 5954),

Gene: AlishaPH_31 Start: 26453, Stop: 27325, Start Num: 22

Candidate Starts for AlishaPH_31:

(4, 26123), (9, 26351), (17, 26426), (Start: 22 @26453 has 196 MA's), (Start: 24 @26465 has 1 MA's), (35, 26534), (39, 26561), (42, 26591), (44, 26600), (50, 26636), (51, 26645), (55, 26678), (57, 26696), (63, 26726), (74, 26786), (89, 26921), (95, 26948), (99, 26969), (106, 26993), (123, 27044), (135, 27146), (141, 27182), (147, 27206), (160, 27305), (162, 27314),

Gene: AlleyCat_31 Start: 27158, Stop: 27919, Start Num: 22

Candidate Starts for AlleyCat_31:

(Start: 16 @27110 has 119 MA's), (Start: 22 @27158 has 196 MA's), (Start: 24 @27170 has 1 MA's), (26, 27176), (30, 27203), (35, 27239), (43, 27299), (44, 27305), (49, 27335), (50, 27341), (51, 27350), (55, 27383), (61, 27425), (62, 27428), (66, 27440), (70, 27476), (74, 27491), (77, 27527), (89, 27626), (95, 27653), (99, 27674), (135, 27737), (139, 27761), (144, 27785), (151, 27854), (160, 27899), (162, 27908),

Gene: Amao_35 Start: 31062, Stop: 31919, Start Num: 16

Candidate Starts for Amao_35:

(Start: 16 @31062 has 119 MA's), (21, 31101), (27, 31131), (30, 31152), (35, 31188), (39, 31218), (50, 31293), (57, 31341), (58, 31344), (62, 31368), (63, 31371), (67, 31386), (88, 31557), (114, 31671), (120, 31686), (122, 31692), (133, 31734), (134, 31737), (144, 31791), (153, 31869), (161, 31902),

Gene: Amelie_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for Amelie_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: AmericanBeauty_38 Start: 31845, Stop: 32702, Start Num: 16

Candidate Starts for AmericanBeauty_38:

(Start: 16 @31845 has 119 MA's), (21, 31884), (27, 31914), (30, 31935), (35, 31971), (39, 32001), (50, 32076), (57, 32124), (58, 32127), (62, 32151), (63, 32154), (67, 32169), (88, 32340), (114, 32454), (120, 32469), (122, 32475), (133, 32517), (134, 32520), (144, 32574), (153, 32652), (161, 32685),

Gene: Amgine_29 Start: 26539, Stop: 27276, Start Num: 22

Candidate Starts for Amgine_29:

(9, 26428), (12, 26449), (Start: 16 @26488 has 119 MA's), (17, 26509), (Start: 22 @26539 has 196 MA's), (Start: 24 @26551 has 1 MA's), (30, 26584), (35, 26620), (42, 26668), (44, 26677), (50, 26713), (51, 26722), (55, 26755), (74, 26863), (76, 26890), (87, 26977), (89, 26995), (94, 27010), (95, 27022), (99, 27043), (106, 27067), (130, 27079), (133, 27088), (135, 27097), (144, 27145), (160, 27256), (162, 27265),

Gene: Amohndition_30 Start: 26969, Stop: 27709, Start Num: 22

Candidate Starts for Amohndition_30:

(2, 26624), (9, 26870), (12, 26891), (Start: 16 @26924 has 119 MA's), (17, 26945), (Start: 22 @26969 has 196 MA's), (Start: 24 @26981 has 1 MA's), (28, 27008), (30, 27014), (42, 27098), (44, 27107), (45, 27119), (51, 27152), (74, 27293), (76, 27320), (89, 27428), (95, 27455), (99, 27476), (106, 27500), (130, 27512), (133, 27521), (144, 27578), (147, 27590), (160, 27689),

Gene: Anaya_32 Start: 26479, Stop: 27351, Start Num: 22

Candidate Starts for Anaya_32:

(17, 26452), (Start: 22 @26479 has 196 MA's), (Start: 24 @26491 has 1 MA's), (35, 26560), (39, 26587), (42, 26617), (44, 26626), (50, 26662), (51, 26671), (55, 26704), (57, 26722), (74, 26812), (89, 26947), (95, 26974), (99, 26995), (106, 27019), (123, 27070), (135, 27172), (141, 27208), (147, 27232), (160, 27331), (162, 27340),

Gene: Angelica_31 Start: 26428, Stop: 27282, Start Num: 22

Candidate Starts for Angelica_31:

(4, 26098), (9, 26326), (17, 26401), (Start: 22 @26428 has 196 MA's), (Start: 24 @26440 has 1 MA's), (35, 26509), (39, 26536), (42, 26566), (44, 26575), (50, 26611), (51, 26620), (55, 26653), (57, 26671), (63, 26701), (74, 26761), (89, 26896), (95, 26923), (99, 26944), (106, 26968), (123, 27001), (135, 27103), (141, 27139), (147, 27163), (160, 27262), (162, 27271),

Gene: Apocalypse_31 Start: 26431, Stop: 27303, Start Num: 22

Candidate Starts for Apocalypse_31:

(17, 26404), (Start: 22 @26431 has 196 MA's), (Start: 24 @26443 has 1 MA's), (35, 26512), (39, 26539), (42, 26569), (44, 26578), (50, 26614), (51, 26623), (55, 26656), (57, 26674), (74, 26764), (89, 26899), (95, 26926), (99, 26947), (106, 26971), (123, 27022), (135, 27124), (141, 27160), (147, 27184), (160, 27283), (162, 27292),

Gene: Aragog_8 Start: 5463, Stop: 6272, Start Num: 22

Candidate Starts for Aragog_8:

(Start: 22 @5463 has 196 MA's), (32, 5526), (33, 5535), (36, 5556), (40, 5592), (48, 5640), (56, 5697), (60, 5721), (83, 5910), (88, 5952), (95, 6009), (163, 6258),

Gene: Archetta_8 Start: 5172, Stop: 5981, Start Num: 22

Candidate Starts for Archetta_8:

(Start: 22 @5172 has 196 MA's), (32, 5235), (33, 5244), (36, 5265), (40, 5301), (48, 5349), (56, 5406), (60, 5430), (88, 5661), (95, 5718), (163, 5967),

Gene: Argent26_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for Argent26_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Asayake_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Asayake_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Asriel_34 Start: 30719, Stop: 31576, Start Num: 16

Candidate Starts for Asriel_34:

(Start: 16 @30719 has 119 MA's), (21, 30758), (27, 30788), (30, 30809), (35, 30845), (39, 30875), (50, 30950), (57, 30998), (58, 31001), (62, 31025), (63, 31028), (67, 31043), (88, 31214), (114, 31328), (120, 31343), (122, 31349), (133, 31391), (134, 31394), (144, 31448), (153, 31526), (161, 31559),

Gene: Astro_8 Start: 4873, Stop: 5682, Start Num: 22

Candidate Starts for Astro_8:

(Start: 22 @4873 has 196 MA's), (35, 4957), (40, 5002), (50, 5062), (59, 5128), (88, 5362), (93, 5401), (95, 5419), (102, 5452), (109, 5470), (131, 5515), (145, 5539), (163, 5668),

Gene: Atiba_31 Start: 26423, Stop: 27295, Start Num: 22

Candidate Starts for Atiba_31:

(17, 26396), (Start: 22 @26423 has 196 MA's), (Start: 24 @26435 has 1 MA's), (35, 26504), (39, 26531), (42, 26561), (44, 26570), (50, 26606), (51, 26615), (55, 26648), (57, 26666), (63, 26696), (73, 26753), (74, 26756), (89, 26891), (95, 26918), (99, 26939), (106, 26963), (123, 27014), (135, 27116), (141, 27152), (147, 27176), (160, 27275), (162, 27284),

Gene: BEEST_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for BEEST_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: BGlluviae_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for BGlluviae_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: BaboJay_34 Start: 31408, Stop: 32265, Start Num: 16

Candidate Starts for BaboJay_34:

(Start: 16 @31408 has 119 MA's), (21, 31447), (27, 31477), (30, 31498), (35, 31534), (39, 31564), (50, 31639), (57, 31687), (58, 31690), (62, 31714), (63, 31717), (67, 31732), (88, 31903), (114, 32017), (120, 32032), (122, 32038), (133, 32080), (134, 32083), (144, 32137), (153, 32215), (161, 32248),

Gene: BadStone_34 Start: 31850, Stop: 32707, Start Num: 16

Candidate Starts for BadStone_34:

(Start: 16 @31850 has 119 MA's), (21, 31889), (27, 31919), (30, 31940), (35, 31976), (39, 32006), (50, 32081), (57, 32129), (58, 32132), (62, 32156), (63, 32159), (67, 32174), (88, 32345), (114, 32459), (120, 32474), (122, 32480), (133, 32522), (134, 32525), (144, 32579), (153, 32657), (161, 32690),

Gene: BaghaKamala_31 Start: 26423, Stop: 27295, Start Num: 22

Candidate Starts for BaghaKamala_31:

(4, 26093), (9, 26321), (17, 26396), (Start: 22 @26423 has 196 MA's), (Start: 24 @26435 has 1 MA's), (35, 26504), (39, 26531), (42, 26561), (44, 26570), (50, 26606), (51, 26615), (55, 26648), (57, 26666), (63, 26696), (74, 26756), (89, 26891), (95, 26918), (99, 26939), (106, 26963), (123, 27014), (135, 27116), (141, 27152), (147, 27176), (160, 27275), (162, 27284),

Gene: Balomoji_34 Start: 31584, Stop: 32441, Start Num: 16

Candidate Starts for Balomoji_34:

(Start: 16 @31584 has 119 MA's), (21, 31623), (27, 31653), (30, 31674), (35, 31710), (39, 31740), (50, 31815), (57, 31863), (58, 31866), (62, 31890), (63, 31893), (67, 31908), (88, 32079), (114, 32193), (120, 32208), (122, 32214), (133, 32256), (134, 32259), (144, 32313), (153, 32391), (161, 32424),

Gene: Barbarian_34 Start: 30719, Stop: 31576, Start Num: 16

Candidate Starts for Barbarian_34:

(Start: 16 @30719 has 119 MA's), (21, 30758), (27, 30788), (30, 30809), (35, 30845), (39, 30875), (50, 30950), (57, 30998), (58, 31001), (62, 31025), (63, 31028), (67, 31043), (88, 31214), (114, 31328), (120, 31343), (122, 31349), (133, 31391), (134, 31394), (144, 31448), (153, 31526), (161, 31559),

Gene: BarrelRoll_31 Start: 26446, Stop: 27318, Start Num: 22

Candidate Starts for BarrelRoll_31:

(17, 26419), (Start: 22 @26446 has 196 MA's), (Start: 24 @26458 has 1 MA's), (35, 26527), (39, 26554), (42, 26584), (44, 26593), (50, 26629), (51, 26638), (55, 26671), (57, 26689), (63, 26719), (73, 26776), (74, 26779), (89, 26914), (95, 26941), (99, 26962), (106, 26986), (123, 27037), (135, 27139), (141, 27175), (147, 27199), (160, 27298), (162, 27307),

Gene: Bask21_35 Start: 31036, Stop: 31893, Start Num: 16

Candidate Starts for Bask21_35:

(Start: 16 @31036 has 119 MA's), (21, 31075), (27, 31105), (30, 31126), (35, 31162), (39, 31192), (50, 31267), (57, 31315), (58, 31318), (62, 31342), (63, 31345), (67, 31360), (88, 31531), (114, 31645), (120, 31660), (122, 31666), (133, 31708), (134, 31711), (144, 31765), (153, 31843), (161, 31876),

Gene: Beezoo_31 Start: 26471, Stop: 27343, Start Num: 22

Candidate Starts for Beezoo_31:

(17, 26444), (Start: 22 @26471 has 196 MA's), (Start: 24 @26483 has 1 MA's), (35, 26552), (39, 26579), (42, 26609), (44, 26618), (50, 26654), (51, 26663), (55, 26696), (57, 26714), (63, 26744), (74, 26804), (89, 26939), (95, 26966), (99, 26987), (106, 27011), (123, 27062), (135, 27164), (141, 27200), (147, 27224), (150, 27272), (160, 27323), (162, 27332),

Gene: Bella96_31 Start: 26364, Stop: 27236, Start Num: 22

Candidate Starts for Bella96_31:

(17, 26337), (Start: 22 @26364 has 196 MA's), (Start: 24 @26376 has 1 MA's), (35, 26445), (39, 26472), (42, 26502), (44, 26511), (50, 26547), (51, 26556), (55, 26589), (74, 26697), (89, 26832), (95,

26859), (99, 26880), (106, 26904), (135, 27057), (141, 27093), (147, 27117), (160, 27216), (162, 27225),

Gene: Belladonna_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Belladonna_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Bench_37 Start: 31718, Stop: 32575, Start Num: 16

Candidate Starts for Bench_37:

(Start: 16 @31718 has 119 MA's), (21, 31757), (27, 31787), (30, 31808), (35, 31844), (39, 31874), (50, 31949), (57, 31997), (58, 32000), (62, 32024), (63, 32027), (67, 32042), (88, 32213), (114, 32327), (120, 32342), (122, 32348), (133, 32390), (134, 32393), (144, 32447), (153, 32525), (161, 32558),

Gene: Benedict_8 Start: 5182, Stop: 5991, Start Num: 22

Candidate Starts for Benedict_8:

(Start: 22 @5182 has 196 MA's), (29, 5227), (40, 5311), (42, 5326), (48, 5359), (83, 5629), (88, 5671), (93, 5710), (95, 5728), (101, 5758), (160, 5956),

Gene: BigBubba_36 Start: 31621, Stop: 32478, Start Num: 16

Candidate Starts for BigBubba_36:

(Start: 16 @31621 has 119 MA's), (21, 31660), (27, 31690), (30, 31711), (35, 31747), (39, 31777), (50, 31852), (57, 31900), (58, 31903), (62, 31927), (63, 31930), (67, 31945), (88, 32116), (114, 32230), (120, 32245), (122, 32251), (133, 32293), (134, 32296), (144, 32350), (153, 32428), (161, 32461),

Gene: Biglebops_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for Biglebops_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: BilboSwaggins_35 Start: 31858, Stop: 32715, Start Num: 16

Candidate Starts for BilboSwaggins_35:

(Start: 16 @31858 has 119 MA's), (21, 31897), (27, 31927), (30, 31948), (35, 31984), (39, 32014), (50, 32089), (57, 32137), (58, 32140), (62, 32164), (63, 32167), (67, 32182), (88, 32353), (110, 32452), (114, 32467), (120, 32482), (122, 32488), (133, 32530), (134, 32533), (144, 32587), (153, 32665), (161, 32698),

Gene: Blizzard_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Blizzard_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Bluefalcon_7 Start: 5433, Stop: 6242, Start Num: 22

Candidate Starts for Bluefalcon_7:

(Start: 22 @5433 has 196 MA's), (32, 5496), (33, 5505), (36, 5526), (40, 5562), (48, 5610), (56, 5667), (60, 5691), (83, 5880), (88, 5922), (95, 5979), (163, 6228),

Gene: Boiiii_31 Start: 26496, Stop: 27368, Start Num: 22

Candidate Starts for Boiiii_31:

(4, 26166), (9, 26394), (17, 26469), (Start: 22 @26496 has 196 MA's), (Start: 24 @26508 has 1 MA's), (35, 26577), (39, 26604), (42, 26634), (44, 26643), (50, 26679), (51, 26688), (55, 26721), (57, 26739), (63, 26769), (74, 26829), (89, 26964), (95, 26991), (99, 27012), (106, 27036), (123, 27087), (135, 27189), (141, 27225), (147, 27249), (160, 27348), (162, 27357),

Gene: Boilgate_28 Start: 28389, Stop: 29168, Start Num: 19

Candidate Starts for Boilgate_28:

(13, 28332), (Start: 19 @28389 has 20 MA's), (Start: 24 @28422 has 1 MA's), (30, 28455), (38, 28509), (39, 28518), (44, 28545), (50, 28581), (51, 28590), (65, 28662), (89, 28869), (95, 28896), (99, 28917), (108, 28944), (133, 28962), (144, 29019), (147, 29031), (149, 29055),

Gene: Bonamassa_8 Start: 5355, Stop: 6164, Start Num: 22

Candidate Starts for Bonamassa_8:

(Start: 22 @5355 has 196 MA's), (32, 5418), (33, 5427), (40, 5484), (48, 5532), (60, 5613), (83, 5802), (88, 5844), (95, 5901), (105, 5943), (163, 6150),

Gene: Bruin_35 Start: 31878, Stop: 32735, Start Num: 16

Candidate Starts for Bruin_35:

(Start: 16 @31878 has 119 MA's), (21, 31917), (27, 31947), (30, 31968), (35, 32004), (39, 32034), (50, 32109), (57, 32157), (58, 32160), (62, 32184), (63, 32187), (67, 32202), (88, 32373), (114, 32487), (120, 32502), (122, 32508), (133, 32550), (134, 32553), (144, 32607), (153, 32685), (161, 32718),

Gene: Bryler_31 Start: 25864, Stop: 26607, Start Num: 22

Candidate Starts for Bryler_31:

(17, 25837), (Start: 22 @25864 has 196 MA's), (25, 25882), (28, 25906), (30, 25912), (35, 25948), (42, 25996), (44, 26005), (50, 26041), (55, 26083), (74, 26191), (89, 26326), (94, 26341), (95, 26353), (99, 26374), (103, 26389), (104, 26392), (106, 26398), (144, 26476), (154, 26557), (159, 26578), (160, 26587),

Gene: Buck_34 Start: 31814, Stop: 32671, Start Num: 16

Candidate Starts for Buck_34:

(Start: 16 @31814 has 119 MA's), (21, 31853), (27, 31883), (30, 31904), (35, 31940), (39, 31970), (50, 32045), (57, 32093), (58, 32096), (62, 32120), (63, 32123), (67, 32138), (88, 32309), (110, 32408), (114, 32423), (120, 32438), (122, 32444), (133, 32486), (134, 32489), (144, 32543), (153, 32621), (161, 32654),

Gene: BugsBunny_33 Start: 31447, Stop: 32304, Start Num: 16

Candidate Starts for BugsBunny_33:

(Start: 16 @31447 has 119 MA's), (21, 31486), (27, 31516), (30, 31537), (35, 31573), (39, 31603), (50, 31678), (57, 31726), (58, 31729), (62, 31753), (63, 31756), (67, 31771), (88, 31942), (114, 32056), (120, 32071), (122, 32077), (133, 32119), (134, 32122), (144, 32176), (153, 32254), (161, 32287),

Gene: CREW_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for CREW_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Cactus_36 Start: 31069, Stop: 31926, Start Num: 16

Candidate Starts for Cactus_36:

(Start: 16 @31069 has 119 MA's), (21, 31108), (27, 31138), (30, 31159), (35, 31195), (39, 31225), (50, 31300), (57, 31348), (58, 31351), (62, 31375), (63, 31378), (67, 31393), (88, 31564), (114, 31678), (120, 31693), (122, 31699), (133, 31741), (134, 31744), (144, 31798), (153, 31876), (161, 31909),

Gene: Cain_31 Start: 25852, Stop: 26595, Start Num: 22

Candidate Starts for Cain_31:

(17, 25825), (Start: 22 @25852 has 196 MA's), (25, 25870), (28, 25894), (30, 25900), (35, 25936), (42, 25984), (44, 25993), (50, 26029), (55, 26071), (74, 26179), (89, 26314), (94, 26329), (95, 26341), (99, 26362), (103, 26377), (104, 26380), (106, 26386), (144, 26464), (154, 26545), (159, 26566), (160, 26575),

Gene: Capricorn_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Capricorn_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: CaseJules_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for CaseJules_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Chadwick_9 Start: 5150, Stop: 5959, Start Num: 22

Candidate Starts for Chadwick_9:

(14, 5087), (18, 5126), (Start: 22 @5150 has 196 MA's), (32, 5213), (40, 5279), (42, 5294), (48, 5327), (83, 5597), (88, 5639), (93, 5678), (95, 5696), (101, 5726), (160, 5924),

Gene: Chancellor_32 Start: 27640, Stop: 28431, Start Num: 19

Candidate Starts for Chancellor_32:

(Start: 19 @27640 has 20 MA's), (Start: 24 @27673 has 1 MA's), (30, 27706), (33, 27730), (37, 27751), (38, 27760), (41, 27790), (42, 27799), (44, 27808), (50, 27844), (65, 27925), (89, 28132), (95, 28159), (99, 28180), (106, 28204), (134, 28228), (144, 28282), (147, 28294), (155, 28366),

Gene: CheetoDust_31 Start: 26471, Stop: 27343, Start Num: 22

Candidate Starts for CheetoDust_31:

(17, 26444), (Start: 22 @26471 has 196 MA's), (Start: 24 @26483 has 1 MA's), (35, 26552), (39, 26579), (42, 26609), (44, 26618), (50, 26654), (51, 26663), (55, 26696), (57, 26714), (63, 26744), (74, 26804), (89, 26939), (95, 26966), (99, 26987), (106, 27011), (123, 27062), (141, 27200), (147, 27224), (160, 27323), (162, 27332),

Gene: Cheetobro_32 Start: 27637, Stop: 28428, Start Num: 19

Candidate Starts for Cheetobro_32:

(Start: 19 @27637 has 20 MA's), (Start: 24 @27670 has 1 MA's), (30, 27703), (33, 27727), (37, 27748), (38, 27757), (41, 27787), (42, 27796), (44, 27805), (50, 27841), (65, 27922), (89, 28129), (95, 28156), (99, 28177), (106, 28201), (134, 28225), (144, 28279), (147, 28291), (155, 28363),

Gene: ChosenOne_35 Start: 31066, Stop: 31923, Start Num: 16

Candidate Starts for ChosenOne_35:

(Start: 16 @31066 has 119 MA's), (21, 31105), (27, 31135), (30, 31156), (35, 31192), (39, 31222), (50, 31297), (57, 31345), (58, 31348), (62, 31372), (63, 31375), (67, 31390), (88, 31561), (114, 31675),

(120, 31690), (122, 31696), (133, 31738), (134, 31741), (144, 31795), (153, 31873), (161, 31906),

Gene: ChotaBhai_35 Start: 31104, Stop: 31961, Start Num: 16

Candidate Starts for ChotaBhai_35:

(Start: 16 @31104 has 119 MA's), (21, 31143), (27, 31173), (30, 31194), (35, 31230), (39, 31260), (50, 31335), (57, 31383), (58, 31386), (62, 31410), (63, 31413), (67, 31428), (88, 31599), (114, 31713), (120, 31728), (122, 31734), (133, 31776), (134, 31779), (144, 31833), (153, 31911), (161, 31944),

Gene: Chris_30 Start: 25746, Stop: 26486, Start Num: 22

Candidate Starts for Chris_30:

(17, 25719), (Start: 22 @25746 has 196 MA's), (25, 25761), (30, 25791), (35, 25827), (44, 25884), (50, 25920), (55, 25962), (74, 26070), (95, 26232), (100, 26259), (106, 26277), (130, 26289), (134, 26301), (141, 26343), (146, 26364), (147, 26367), (160, 26466), (162, 26475),

Gene: Cjw1_35 Start: 32618, Stop: 33475, Start Num: 16

Candidate Starts for Cjw1_35:

(Start: 16 @32618 has 119 MA's), (21, 32657), (27, 32687), (30, 32708), (35, 32744), (39, 32774), (50, 32849), (57, 32897), (58, 32900), (62, 32924), (63, 32927), (67, 32942), (88, 33113), (114, 33227), (120, 33242), (122, 33248), (133, 33290), (134, 33293), (144, 33347), (153, 33425), (161, 33458),

Gene: Collard_30 Start: 27188, Stop: 27949, Start Num: 22

Candidate Starts for Collard_30:

(Start: 16 @27140 has 119 MA's), (Start: 22 @27188 has 196 MA's), (Start: 24 @27200 has 1 MA's), (25, 27203), (26, 27206), (30, 27233), (35, 27269), (43, 27329), (44, 27335), (49, 27365), (50, 27371), (51, 27380), (55, 27413), (61, 27455), (62, 27458), (66, 27470), (70, 27506), (74, 27521), (77, 27557), (89, 27656), (95, 27683), (99, 27704), (135, 27767), (139, 27791), (144, 27815), (151, 27884), (160, 27929), (162, 27938),

Gene: Command613_36 Start: 32125, Stop: 32982, Start Num: 16

Candidate Starts for Command613_36:

(Start: 16 @32125 has 119 MA's), (21, 32164), (27, 32194), (30, 32215), (35, 32251), (39, 32281), (50, 32356), (57, 32404), (58, 32407), (62, 32431), (63, 32434), (67, 32449), (88, 32620), (114, 32734), (120, 32749), (122, 32755), (133, 32797), (134, 32800), (144, 32854), (153, 32932), (161, 32965),

Gene: Conspiracy_8 Start: 5173, Stop: 5982, Start Num: 22

Candidate Starts for Conspiracy_8:

(Start: 22 @5173 has 196 MA's), (32, 5236), (33, 5245), (36, 5266), (40, 5302), (48, 5350), (56, 5407), (60, 5431), (88, 5662), (95, 5719), (163, 5968),

Gene: Contagion_34 Start: 31362, Stop: 32219, Start Num: 16

Candidate Starts for Contagion_34:

(Start: 16 @31362 has 119 MA's), (21, 31401), (27, 31431), (30, 31452), (35, 31488), (39, 31518), (50, 31593), (57, 31641), (58, 31644), (62, 31668), (63, 31671), (67, 31686), (88, 31857), (114, 31971), (120, 31986), (122, 31992), (133, 32034), (134, 32037), (144, 32091), (153, 32169), (161, 32202),

Gene: Coog_8 Start: 5323, Stop: 6132, Start Num: 22

Candidate Starts for Coog_8:

(Start: 22 @5323 has 196 MA's), (32, 5386), (33, 5395), (40, 5452), (48, 5500), (83, 5770), (88, 5812), (95, 5869), (105, 5911), (163, 6118),

Gene: Cookies_35 Start: 31727, Stop: 32584, Start Num: 16

Candidate Starts for Cookies_35:

(Start: 16 @31727 has 119 MA's), (21, 31766), (27, 31796), (30, 31817), (35, 31853), (39, 31883), (50, 31958), (57, 32006), (58, 32009), (62, 32033), (63, 32036), (67, 32051), (88, 32222), (114, 32336), (120, 32351), (122, 32357), (133, 32399), (134, 32402), (144, 32456), (153, 32534), (161, 32567),

Gene: CrimD_31 Start: 26431, Stop: 27303, Start Num: 22

Candidate Starts for CrimD_31:

(17, 26404), (Start: 22 @26431 has 196 MA's), (Start: 24 @26443 has 1 MA's), (35, 26512), (39, 26539), (42, 26569), (44, 26578), (50, 26614), (51, 26623), (55, 26656), (57, 26674), (74, 26764), (89, 26899), (95, 26926), (99, 26947), (106, 26971), (123, 27022), (135, 27124), (141, 27160), (147, 27184), (160, 27283), (162, 27292),

Gene: CrystalP_35 Start: 31858, Stop: 32715, Start Num: 16

Candidate Starts for CrystalP_35:

(Start: 16 @31858 has 119 MA's), (21, 31897), (27, 31927), (30, 31948), (35, 31984), (39, 32014), (50, 32089), (57, 32137), (58, 32140), (62, 32164), (63, 32167), (67, 32182), (88, 32353), (110, 32452), (114, 32467), (120, 32482), (122, 32488), (133, 32530), (134, 32533), (144, 32587), (153, 32665), (161, 32698),

Gene: Cuco_8 Start: 5354, Stop: 6163, Start Num: 22

Candidate Starts for Cuco_8:

(Start: 22 @5354 has 196 MA's), (32, 5417), (33, 5426), (40, 5483), (48, 5531), (60, 5612), (83, 5801), (88, 5843), (95, 5900), (105, 5942), (163, 6149),

Gene: Curiosium_32 Start: 26281, Stop: 27129, Start Num: 22

Candidate Starts for Curiosium_32:

(Start: 16 @26233 has 119 MA's), (17, 26254), (Start: 22 @26281 has 196 MA's), (Start: 24 @26293 has 1 MA's), (28, 26320), (30, 26326), (34, 26356), (44, 26425), (51, 26470), (55, 26503), (57, 26521), (70, 26596), (82, 26683), (89, 26746), (95, 26773), (99, 26794), (106, 26818), (117, 26854), (135, 26950), (141, 26986), (147, 27010), (162, 27118),

Gene: Czyszczone1_36 Start: 31603, Stop: 32460, Start Num: 16

Candidate Starts for Czyszczone1_36:

(Start: 16 @31603 has 119 MA's), (21, 31642), (27, 31672), (30, 31693), (35, 31729), (39, 31759), (50, 31834), (57, 31882), (58, 31885), (62, 31909), (63, 31912), (67, 31927), (88, 32098), (114, 32212), (120, 32227), (122, 32233), (133, 32275), (134, 32278), (144, 32332), (153, 32410), (161, 32443),

Gene: Dadosky_31 Start: 27159, Stop: 27920, Start Num: 22

Candidate Starts for Dadosky_31:

(Start: 16 @27111 has 119 MA's), (Start: 22 @27159 has 196 MA's), (Start: 24 @27171 has 1 MA's), (26, 27177), (30, 27204), (35, 27240), (43, 27300), (44, 27306), (49, 27336), (50, 27342), (51, 27351), (55, 27384), (61, 27426), (62, 27429), (66, 27441), (70, 27477), (74, 27492), (77, 27528), (89, 27627), (95, 27654), (99, 27675), (135, 27738), (139, 27762), (144, 27786), (151, 27855), (160, 27900), (162, 27909),

Gene: Daikon_34 Start: 31596, Stop: 32453, Start Num: 16

Candidate Starts for Daikon_34:

(Start: 16 @31596 has 119 MA's), (21, 31635), (27, 31665), (30, 31686), (35, 31722), (39, 31752), (50, 31827), (57, 31875), (58, 31878), (62, 31902), (63, 31905), (67, 31920), (88, 32091), (114, 32205), (120, 32220), (122, 32226), (133, 32268), (134, 32271), (144, 32325), (153, 32403), (161, 32436),

Gene: Dalmuri_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Dalmuri_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Danforth_7 Start: 4852, Stop: 5661, Start Num: 22

Candidate Starts for Danforth_7:

(Start: 22 @4852 has 196 MA's), (35, 4936), (40, 4981), (50, 5041), (59, 5107), (88, 5341), (93, 5380), (95, 5398), (102, 5431), (109, 5449), (131, 5494), (145, 5518), (163, 5647),

Gene: DarthP_30 Start: 26891, Stop: 27631, Start Num: 22

Candidate Starts for DarthP_30:

(2, 26546), (9, 26792), (12, 26813), (Start: 16 @26846 has 119 MA's), (17, 26867), (Start: 22 @26891 has 196 MA's), (Start: 24 @26903 has 1 MA's), (28, 26930), (30, 26936), (42, 27020), (44, 27029), (45, 27041), (51, 27074), (55, 27107), (74, 27215), (76, 27242), (89, 27350), (95, 27377), (99, 27398), (106, 27422), (130, 27434), (133, 27443), (144, 27500), (147, 27512), (160, 27611),

Gene: Deby_31 Start: 26428, Stop: 27300, Start Num: 22

Candidate Starts for Deby_31:

(4, 26098), (9, 26326), (17, 26401), (Start: 22 @26428 has 196 MA's), (Start: 24 @26440 has 1 MA's), (35, 26509), (39, 26536), (42, 26566), (44, 26575), (50, 26611), (51, 26620), (55, 26653), (57, 26671), (63, 26701), (74, 26761), (89, 26896), (95, 26923), (99, 26944), (106, 26968), (123, 27019), (135, 27121), (141, 27157), (147, 27181), (160, 27280), (162, 27289),

Gene: Devera_31 Start: 26468, Stop: 27340, Start Num: 22

Candidate Starts for Devera_31:

(17, 26441), (Start: 22 @26468 has 196 MA's), (Start: 24 @26480 has 1 MA's), (35, 26549), (39, 26576), (42, 26606), (44, 26615), (50, 26651), (51, 26660), (55, 26693), (57, 26711), (74, 26801), (89, 26936), (95, 26963), (99, 26984), (106, 27008), (128, 27110), (135, 27161), (141, 27197), (147, 27221), (160, 27320), (162, 27329),

Gene: Discoknowium_8 Start: 5463, Stop: 6272, Start Num: 22

Candidate Starts for Discoknowium_8:

(Start: 22 @5463 has 196 MA's), (32, 5526), (33, 5535), (36, 5556), (40, 5592), (48, 5640), (56, 5697), (60, 5721), (83, 5910), (88, 5952), (95, 6009), (163, 6258),

Gene: Dixon_8 Start: 4871, Stop: 5680, Start Num: 22

Candidate Starts for Dixon_8:

(Start: 22 @4871 has 196 MA's), (35, 4955), (40, 5000), (50, 5060), (59, 5126), (88, 5360), (90, 5378), (93, 5399), (95, 5417), (102, 5450), (109, 5468), (131, 5513), (145, 5537), (163, 5666),

Gene: DoctorDiddles_35 Start: 31020, Stop: 31877, Start Num: 16

Candidate Starts for DoctorDiddles_35:

(Start: 16 @31020 has 119 MA's), (21, 31059), (27, 31089), (30, 31110), (35, 31146), (39, 31176), (50, 31251), (57, 31299), (58, 31302), (62, 31326), (63, 31329), (67, 31344), (88, 31515), (114, 31629), (117, 31638), (120, 31644), (122, 31650), (133, 31692), (134, 31695), (144, 31749), (153, 31827), (161, 31860),

Gene: Dole_31 Start: 26470, Stop: 27342, Start Num: 22

Candidate Starts for Dole_31:

(17, 26443), (Start: 22 @26470 has 196 MA's), (Start: 24 @26482 has 1 MA's), (35, 26551), (39, 26578), (42, 26608), (44, 26617), (50, 26653), (51, 26662), (55, 26695), (57, 26713), (74, 26803), (89, 26938), (95, 26965), (99, 26986), (106, 27010), (128, 27112), (135, 27163), (141, 27199), (147,

27223), (160, 27322), (162, 27331),

Gene: DrDrey_36 Start: 32350, Stop: 33207, Start Num: 16

Candidate Starts for DrDrey_36:

(Start: 16 @32350 has 119 MA's), (21, 32389), (27, 32419), (30, 32440), (35, 32476), (39, 32506), (50, 32581), (57, 32629), (58, 32632), (62, 32656), (63, 32659), (67, 32674), (88, 32845), (114, 32959), (120, 32974), (122, 32980), (133, 33022), (134, 33025), (144, 33079), (153, 33157), (161, 33190),

Gene: DrHayes_31 Start: 26382, Stop: 27254, Start Num: 22

Candidate Starts for DrHayes_31:

(9, 26280), (17, 26355), (Start: 22 @26382 has 196 MA's), (Start: 24 @26394 has 1 MA's), (35, 26463), (39, 26490), (42, 26520), (44, 26529), (50, 26565), (51, 26574), (55, 26607), (57, 26625), (74, 26715), (89, 26850), (95, 26877), (99, 26898), (106, 26922), (123, 26973), (135, 27075), (141, 27111), (147, 27135), (160, 27234), (162, 27243),

Gene: Dublin_7 Start: 5322, Stop: 6131, Start Num: 22

Candidate Starts for Dublin_7:

(Start: 22 @5322 has 196 MA's), (32, 5385), (33, 5394), (40, 5451), (48, 5499), (83, 5769), (88, 5811), (95, 5868), (105, 5910), (163, 6117),

Gene: Dumbo_35 Start: 31325, Stop: 32182, Start Num: 16

Candidate Starts for Dumbo_35:

(Start: 16 @31325 has 119 MA's), (21, 31364), (27, 31394), (30, 31415), (35, 31451), (39, 31481), (50, 31556), (57, 31604), (58, 31607), (62, 31631), (63, 31634), (67, 31649), (88, 31820), (114, 31934), (120, 31949), (122, 31955), (133, 31997), (134, 32000), (143, 32051), (144, 32054), (153, 32132), (161, 32165),

Gene: Durfee_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Durfee_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Dusk_34 Start: 31510, Stop: 32367, Start Num: 16

Candidate Starts for Dusk_34:

(Start: 16 @31510 has 119 MA's), (21, 31549), (27, 31579), (30, 31600), (35, 31636), (39, 31666), (50, 31741), (57, 31789), (58, 31792), (62, 31816), (63, 31819), (67, 31834), (88, 32005), (114, 32119), (120, 32134), (122, 32140), (133, 32182), (134, 32185), (144, 32239), (153, 32317), (161, 32350),

Gene: Easy2Say_37 Start: 33108, Stop: 33965, Start Num: 16

Candidate Starts for Easy2Say_37:

(Start: 16 @33108 has 119 MA's), (21, 33147), (27, 33177), (30, 33198), (35, 33234), (39, 33264), (50, 33339), (57, 33387), (58, 33390), (62, 33414), (63, 33417), (67, 33432), (88, 33603), (114, 33717), (120, 33732), (122, 33738), (133, 33780), (134, 33783), (144, 33837), (153, 33915), (161, 33948),

Gene: Edugator_30 Start: 27158, Stop: 27919, Start Num: 22

Candidate Starts for Edugator_30:

(Start: 16 @27110 has 119 MA's), (Start: 22 @27158 has 196 MA's), (Start: 24 @27170 has 1 MA's), (26, 27176), (30, 27203), (35, 27239), (43, 27299), (44, 27305), (49, 27335), (50, 27341), (51, 27350), (55, 27383), (61, 27425), (62, 27428), (66, 27440), (70, 27476), (74, 27491), (77, 27527), (89, 27626), (95, 27653), (99, 27674), (135, 27737), (139, 27761), (144, 27785), (151, 27854), (160, 27899), (162, 27908),

Gene: Efra2_31 Start: 25702, Stop: 26571, Start Num: 22

Candidate Starts for Efra2_31:

(Start: 16 @25654 has 119 MA's), (17, 25675), (Start: 22 @25702 has 196 MA's), (Start: 24 @25714 has 1 MA's), (28, 25741), (30, 25747), (34, 25777), (35, 25783), (44, 25846), (50, 25882), (51, 25891), (55, 25924), (63, 25972), (75, 26041), (95, 26194), (99, 26215), (106, 26239), (111, 26257), (119, 26278), (126, 26317), (135, 26392), (154, 26521), (160, 26551), (162, 26560),

Gene: Ekdilam_28 Start: 26650, Stop: 27390, Start Num: 22

Candidate Starts for Ekdilam_28:

(9, 26551), (12, 26572), (Start: 16 @26605 has 119 MA's), (17, 26626), (Start: 22 @26650 has 196 MA's), (Start: 24 @26662 has 1 MA's), (30, 26695), (42, 26779), (44, 26788), (45, 26800), (51, 26833), (55, 26866), (74, 26974), (76, 27001), (95, 27136), (99, 27157), (106, 27181), (130, 27193), (133, 27202), (144, 27259), (147, 27271), (154, 27340), (160, 27370),

Gene: EITiger69_8 Start: 5180, Stop: 5989, Start Num: 22

Candidate Starts for EITiger69_8:

(Start: 22 @5180 has 196 MA's), (29, 5225), (40, 5309), (42, 5324), (48, 5357), (83, 5627), (88, 5669), (93, 5708), (95, 5726), (101, 5756), (160, 5954),

Gene: Elite2014_34 Start: 31065, Stop: 31922, Start Num: 16

Candidate Starts for Elite2014_34:

(Start: 16 @31065 has 119 MA's), (21, 31104), (27, 31134), (30, 31155), (35, 31191), (39, 31221), (50, 31296), (57, 31344), (58, 31347), (62, 31371), (63, 31374), (67, 31389), (88, 31560), (114, 31674), (120, 31689), (122, 31695), (133, 31737), (134, 31740), (144, 31794), (153, 31872), (161, 31905),

Gene: Ellie_28 Start: 26652, Stop: 27389, Start Num: 22

Candidate Starts for Ellie_28:

(9, 26541), (12, 26562), (Start: 16 @26601 has 119 MA's), (17, 26622), (Start: 22 @26652 has 196 MA's), (Start: 24 @26664 has 1 MA's), (30, 26697), (35, 26733), (42, 26781), (44, 26790), (45, 26802), (50, 26826), (55, 26868), (74, 26976), (76, 27003), (87, 27090), (89, 27108), (94, 27123), (95, 27135), (99, 27156), (106, 27180), (130, 27192), (133, 27201), (135, 27210), (144, 27258), (160, 27369), (162, 27378),

Gene: Elph10_36 Start: 31328, Stop: 32185, Start Num: 16

Candidate Starts for Elph10_36:

(Start: 16 @31328 has 119 MA's), (21, 31367), (27, 31397), (30, 31418), (35, 31454), (39, 31484), (50, 31559), (57, 31607), (58, 31610), (62, 31634), (63, 31637), (67, 31652), (88, 31823), (114, 31937), (120, 31952), (122, 31958), (133, 32000), (134, 32003), (144, 32057), (153, 32135), (161, 32168),

Gene: Emerson_31 Start: 26454, Stop: 27326, Start Num: 22

Candidate Starts for Emerson_31:

(17, 26427), (Start: 22 @26454 has 196 MA's), (Start: 24 @26466 has 1 MA's), (35, 26535), (39, 26562), (42, 26592), (44, 26601), (50, 26637), (51, 26646), (55, 26679), (57, 26697), (63, 26727), (73, 26784), (74, 26787), (89, 26922), (95, 26949), (99, 26970), (106, 26994), (123, 27045), (135, 27147), (141, 27183), (150, 27255), (160, 27306), (162, 27315),

Gene: Emmina_36 Start: 31686, Stop: 32543, Start Num: 16

Candidate Starts for Emmina_36:

(Start: 16 @31686 has 119 MA's), (21, 31725), (27, 31755), (30, 31776), (35, 31812), (39, 31842), (50, 31917), (57, 31965), (58, 31968), (62, 31992), (63, 31995), (67, 32010), (88, 32181), (114, 32295), (120, 32310), (122, 32316), (133, 32358), (134, 32361), (144, 32415), (153, 32493), (161, 32526),

Gene: Enkosi_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for Enkosi_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: Eponine_34 Start: 28394, Stop: 29185, Start Num: 19

Candidate Starts for Eponine_34:

(Start: 19 @28394 has 20 MA's), (Start: 24 @28427 has 1 MA's), (30, 28460), (33, 28484), (37, 28505), (38, 28514), (41, 28544), (42, 28553), (44, 28562), (50, 28598), (65, 28679), (89, 28886), (95, 28913), (99, 28934), (103, 28949), (106, 28958), (134, 28982), (144, 29036), (147, 29048), (155, 29120),

Gene: Eureka_35 Start: 31841, Stop: 32698, Start Num: 16

Candidate Starts for Eureka_35:

(Start: 16 @31841 has 119 MA's), (21, 31880), (27, 31910), (30, 31931), (35, 31967), (39, 31997), (50, 32072), (57, 32120), (58, 32123), (62, 32147), (63, 32150), (67, 32165), (88, 32336), (114, 32450), (120, 32465), (122, 32471), (133, 32513), (134, 32516), (144, 32570), (153, 32648), (161, 32681),

Gene: Expelliarmus_7 Start: 4838, Stop: 5647, Start Num: 22

Candidate Starts for Expelliarmus_7:

(Start: 22 @4838 has 196 MA's), (35, 4922), (40, 4967), (50, 5027), (59, 5093), (88, 5327), (93, 5366), (95, 5384), (102, 5417), (109, 5435), (131, 5480), (145, 5504), (163, 5633),

Gene: Fefferhead_30 Start: 26852, Stop: 27589, Start Num: 22

Candidate Starts for Fefferhead_30:

(9, 26741), (12, 26762), (Start: 16 @26801 has 119 MA's), (17, 26822), (Start: 22 @26852 has 196 MA's), (Start: 24 @26864 has 1 MA's), (30, 26897), (35, 26933), (42, 26981), (44, 26990), (50, 27026), (55, 27068), (74, 27176), (76, 27203), (87, 27290), (89, 27308), (95, 27335), (99, 27356), (106, 27380), (130, 27392), (133, 27401), (135, 27410), (144, 27458), (160, 27569), (162, 27578),

Gene: Feyre_30 Start: 26964, Stop: 27836, Start Num: 22

Candidate Starts for Feyre_30:

(Start: 22 @26964 has 196 MA's), (Start: 24 @26976 has 1 MA's), (26, 26982), (30, 27009), (34, 27039), (35, 27045), (42, 27099), (44, 27108), (45, 27120), (51, 27153), (55, 27186), (63, 27234), (95, 27456), (98, 27474), (99, 27477), (117, 27537), (123, 27555), (126, 27582), (135, 27654), (138, 27669), (141, 27690), (142, 27693), (147, 27714), (159, 27807), (160, 27816), (162, 27825),

Gene: Filch_36 Start: 31616, Stop: 32473, Start Num: 16

Candidate Starts for Filch_36:

(Start: 16 @31616 has 119 MA's), (21, 31655), (27, 31685), (30, 31706), (35, 31742), (39, 31772), (50, 31847), (57, 31895), (58, 31898), (62, 31922), (63, 31925), (67, 31940), (88, 32111), (114, 32225), (120, 32240), (122, 32246), (133, 32288), (134, 32291), (144, 32345), (153, 32423), (161, 32456),

Gene: Fionnbharth_32 Start: 27630, Stop: 28421, Start Num: 19

Candidate Starts for Fionnbharth_32:

(Start: 19 @27630 has 20 MA's), (Start: 24 @27663 has 1 MA's), (30, 27696), (33, 27720), (37, 27741), (42, 27789), (44, 27798), (50, 27834), (65, 27915), (89, 28122), (95, 28149), (97, 28155), (99, 28170), (106, 28194), (134, 28218), (138, 28239), (144, 28272), (147, 28284), (155, 28356),

Gene: FireRed_35 Start: 31886, Stop: 32743, Start Num: 16

Candidate Starts for FireRed_35:

(Start: 16 @31886 has 119 MA's), (21, 31925), (27, 31955), (30, 31976), (35, 32012), (39, 32042), (50, 32117), (57, 32165), (58, 32168), (62, 32192), (63, 32195), (67, 32210), (88, 32381), (110, 32480), (114, 32495), (120, 32510), (122, 32516), (133, 32558), (134, 32561), (144, 32615), (153, 32693), (161, 32726),

Gene: Flypotenuse_33 Start: 31454, Stop: 32311, Start Num: 16

Candidate Starts for Flypotenuse_33:

(Start: 16 @31454 has 119 MA's), (21, 31493), (27, 31523), (30, 31544), (35, 31580), (39, 31610), (50, 31685), (57, 31733), (58, 31736), (62, 31760), (63, 31763), (67, 31778), (88, 31949), (114, 32063), (120, 32078), (122, 32084), (133, 32126), (134, 32129), (144, 32183), (153, 32261), (161, 32294),

Gene: ForGetIt_8 Start: 5199, Stop: 6008, Start Num: 22

Candidate Starts for ForGetIt_8:

(Start: 22 @5199 has 196 MA's), (32, 5262), (33, 5271), (36, 5292), (40, 5328), (48, 5376), (56, 5433), (60, 5457), (88, 5688), (95, 5745), (163, 5994),

Gene: Gage_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for Gage_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Ganymede_32 Start: 26474, Stop: 27346, Start Num: 22

Candidate Starts for Ganymede_32:

(17, 26447), (Start: 22 @26474 has 196 MA's), (Start: 24 @26486 has 1 MA's), (35, 26555), (39, 26582), (42, 26612), (44, 26621), (50, 26657), (51, 26666), (55, 26699), (57, 26717), (63, 26747), (74, 26807), (89, 26942), (95, 26969), (99, 26990), (106, 27014), (123, 27065), (135, 27167), (141, 27203), (147, 27227), (160, 27326), (162, 27335),

Gene: Gator_33 Start: 31466, Stop: 32323, Start Num: 16

Candidate Starts for Gator_33:

(Start: 16 @31466 has 119 MA's), (21, 31505), (27, 31535), (30, 31556), (35, 31592), (39, 31622), (50, 31697), (57, 31745), (58, 31748), (62, 31772), (63, 31775), (67, 31790), (88, 31961), (114, 32075), (120, 32090), (122, 32096), (133, 32138), (134, 32141), (144, 32195), (153, 32273), (161, 32306),

Gene: Gemini_38 Start: 32365, Stop: 33222, Start Num: 16

Candidate Starts for Gemini_38:

(Start: 16 @32365 has 119 MA's), (21, 32404), (27, 32434), (30, 32455), (35, 32491), (39, 32521), (50, 32596), (57, 32644), (58, 32647), (62, 32671), (63, 32674), (67, 32689), (88, 32860), (114, 32974), (120, 32989), (122, 32995), (133, 33037), (134, 33040), (144, 33094), (153, 33172), (161, 33205),

Gene: Gengar_30 Start: 27074, Stop: 27946, Start Num: 22

Candidate Starts for Gengar_30:

(Start: 22 @27074 has 196 MA's), (Start: 24 @27086 has 1 MA's), (26, 27092), (30, 27119), (34, 27149), (35, 27155), (42, 27209), (44, 27218), (45, 27230), (51, 27263), (55, 27296), (63, 27344), (95, 27566), (98, 27584), (99, 27587), (117, 27647), (123, 27665), (126, 27692), (135, 27764), (138, 27779), (141, 27800), (142, 27803), (147, 27824), (159, 27917), (160, 27926), (162, 27935),

Gene: George_7 Start: 5355, Stop: 6164, Start Num: 22

Candidate Starts for George_7:

(Start: 22 @5355 has 196 MA's), (32, 5418), (33, 5427), (40, 5484), (48, 5532), (60, 5613), (83, 5802), (88, 5844), (95, 5901), (105, 5943), (163, 6150),

Gene: Geraldini_31 Start: 26471, Stop: 27343, Start Num: 22

Candidate Starts for Geraldini_31:

(17, 26444), (Start: 22 @26471 has 196 MA's), (Start: 24 @26483 has 1 MA's), (35, 26552), (39, 26579), (42, 26609), (44, 26618), (50, 26654), (51, 26663), (55, 26696), (57, 26714), (63, 26744), (74, 26804), (89, 26939), (95, 26966), (99, 26987), (106, 27011), (123, 27062), (135, 27164), (141, 27200), (147, 27224), (160, 27323), (162, 27332),

Gene: Ghouboy_8 Start: 5432, Stop: 6241, Start Num: 22

Candidate Starts for Ghouboy_8:

(Start: 22 @5432 has 196 MA's), (32, 5495), (33, 5504), (40, 5561), (48, 5609), (56, 5666), (60, 5690), (83, 5879), (88, 5921), (95, 5978), (163, 6227),

Gene: Glexan_33 Start: 31454, Stop: 32311, Start Num: 16

Candidate Starts for Glexan_33:

(Start: 16 @31454 has 119 MA's), (21, 31493), (27, 31523), (30, 31544), (35, 31580), (39, 31610), (50, 31685), (57, 31733), (58, 31736), (62, 31760), (63, 31763), (67, 31778), (88, 31949), (114, 32063), (120, 32078), (122, 32084), (133, 32126), (134, 32129), (144, 32183), (153, 32261), (161, 32294),

Gene: Goku_35 Start: 31570, Stop: 32427, Start Num: 16

Candidate Starts for Goku_35:

(Start: 16 @31570 has 119 MA's), (21, 31609), (27, 31639), (30, 31660), (35, 31696), (39, 31726), (50, 31801), (57, 31849), (58, 31852), (62, 31876), (63, 31879), (67, 31894), (88, 32065), (114, 32179), (120, 32194), (122, 32200), (133, 32242), (134, 32245), (144, 32299), (153, 32377), (161, 32410),

Gene: GoldenSpark_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for GoldenSpark_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Goldilocks_36 Start: 31268, Stop: 32125, Start Num: 16

Candidate Starts for Goldilocks_36:

(Start: 16 @31268 has 119 MA's), (21, 31307), (27, 31337), (30, 31358), (35, 31394), (39, 31424), (50, 31499), (57, 31547), (58, 31550), (62, 31574), (63, 31577), (67, 31592), (88, 31763), (114, 31877), (120, 31892), (122, 31898), (133, 31940), (134, 31943), (144, 31997), (153, 32075), (161, 32108),

Gene: GooberAzure_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for GooberAzure_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Groundhog_7 Start: 4839, Stop: 5648, Start Num: 22

Candidate Starts for Groundhog_7:

(Start: 22 @4839 has 196 MA's), (35, 4923), (40, 4968), (50, 5028), (59, 5094), (88, 5328), (93, 5367), (95, 5385), (102, 5418), (109, 5436), (131, 5481), (145, 5505), (163, 5634),

Gene: Guanica15_31 Start: 25719, Stop: 26588, Start Num: 22

Candidate Starts for Guanica15_31:

(Start: 16 @25671 has 119 MA's), (17, 25692), (Start: 22 @25719 has 196 MA's), (Start: 24 @25731 has 1 MA's), (28, 25758), (30, 25764), (34, 25794), (35, 25800), (44, 25863), (50, 25899), (51, 25908), (55, 25941), (63, 25989), (75, 26058), (95, 26211), (99, 26232), (106, 26256), (111, 26274), (119, 26295), (126, 26334), (135, 26409), (141, 26445), (154, 26538), (160, 26568), (162, 26577),

Gene: Guillsminger_30 Start: 27046, Stop: 27918, Start Num: 22

Candidate Starts for Guillsminger_30:

(Start: 22 @27046 has 196 MA's), (Start: 24 @27058 has 1 MA's), (26, 27064), (30, 27091), (34, 27121), (35, 27127), (42, 27181), (44, 27190), (45, 27202), (51, 27235), (55, 27268), (63, 27316), (75, 27385), (95, 27538), (98, 27556), (99, 27559), (117, 27619), (123, 27637), (126, 27664), (135, 27736), (141, 27772), (142, 27775), (147, 27796), (151, 27853), (159, 27889), (160, 27898), (162, 27907),

Gene: Hammy_30 Start: 26882, Stop: 27622, Start Num: 22

Candidate Starts for Hammy_30:

(2, 26537), (9, 26783), (12, 26804), (Start: 16 @26837 has 119 MA's), (17, 26858), (Start: 22 @26882 has 196 MA's), (Start: 24 @26894 has 1 MA's), (28, 26921), (30, 26927), (42, 27011), (44, 27020), (45, 27032), (51, 27065), (55, 27098), (74, 27206), (76, 27233), (89, 27341), (95, 27368), (99, 27389), (106, 27413), (130, 27425), (133, 27434), (144, 27491), (147, 27503), (160, 27602),

Gene: HanKaySha_36 Start: 31600, Stop: 32457, Start Num: 16

Candidate Starts for HanKaySha_36:

(Start: 16 @31600 has 119 MA's), (21, 31639), (27, 31669), (30, 31690), (35, 31726), (39, 31756), (50, 31831), (57, 31879), (58, 31882), (62, 31906), (63, 31909), (67, 31924), (88, 32095), (114, 32209), (120, 32224), (122, 32230), (133, 32272), (134, 32275), (144, 32329), (153, 32407), (161, 32440),

Gene: Harella_34 Start: 31970, Stop: 32827, Start Num: 16

Candidate Starts for Harella_34:

(Start: 16 @31970 has 119 MA's), (21, 32009), (27, 32039), (30, 32060), (35, 32096), (39, 32126), (50, 32201), (57, 32249), (58, 32252), (62, 32276), (63, 32279), (67, 32294), (88, 32465), (114, 32579), (120, 32594), (122, 32600), (133, 32642), (134, 32645), (144, 32699), (153, 32777), (161, 32810),

Gene: HedwigODU_31 Start: 26463, Stop: 27335, Start Num: 22

Candidate Starts for HedwigODU_31:

(17, 26436), (Start: 22 @26463 has 196 MA's), (Start: 24 @26475 has 1 MA's), (35, 26544), (39, 26571), (42, 26601), (44, 26610), (50, 26646), (51, 26655), (55, 26688), (57, 26706), (63, 26736), (73, 26793), (74, 26796), (89, 26931), (95, 26958), (99, 26979), (106, 27003), (123, 27054), (135, 27156), (141, 27192), (147, 27216), (160, 27315), (162, 27324),

Gene: Heftyboy_30 Start: 27195, Stop: 28064, Start Num: 22

Candidate Starts for Heftyboy_30:

(9, 27093), (Start: 16 @27147 has 119 MA's), (Start: 22 @27195 has 196 MA's), (Start: 24 @27207 has 1 MA's), (26, 27213), (30, 27240), (34, 27270), (35, 27276), (42, 27330), (44, 27339), (45, 27351), (51, 27384), (55, 27417), (63, 27465), (71, 27513), (82, 27597), (95, 27687), (98, 27705), (99, 27708), (119, 27771), (123, 27786), (126, 27810), (135, 27882), (141, 27918), (142, 27921), (147, 27942), (151, 27999), (159, 28035), (160, 28044), (162, 28053),

Gene: Henry_36 Start: 31858, Stop: 32715, Start Num: 16

Candidate Starts for Henry_36:

(Start: 16 @31858 has 119 MA's), (21, 31897), (27, 31927), (30, 31948), (35, 31984), (39, 32014), (50, 32089), (57, 32137), (58, 32140), (62, 32164), (63, 32167), (67, 32182), (88, 32353), (114, 32467), (120, 32482), (122, 32488), (133, 32530), (134, 32533), (144, 32587), (153, 32665), (161, 32698),

Gene: Highbury_36 Start: 31516, Stop: 32373, Start Num: 16

Candidate Starts for Highbury_36:

(Start: 16 @31516 has 119 MA's), (21, 31555), (27, 31585), (30, 31606), (35, 31642), (39, 31672), (50, 31747), (57, 31795), (58, 31798), (62, 31822), (63, 31825), (67, 31840), (88, 32011), (114, 32125), (120, 32140), (122, 32146), (133, 32188), (134, 32191), (144, 32245), (153, 32323), (161, 32356),

Gene: Holt_36 Start: 31135, Stop: 31992, Start Num: 16

Candidate Starts for Holt_36:

(Start: 16 @31135 has 119 MA's), (21, 31174), (27, 31204), (30, 31225), (35, 31261), (39, 31291), (50, 31366), (57, 31414), (58, 31417), (62, 31441), (63, 31444), (67, 31459), (88, 31630), (114, 31744), (120, 31759), (122, 31765), (133, 31807), (134, 31810), (144, 31864), (153, 31942), (161, 31975),

Gene: Homura_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Homura_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Hoonter_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for Hoonter_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Hopey_37 Start: 32135, Stop: 32992, Start Num: 16

Candidate Starts for Hopey_37:

(Start: 16 @32135 has 119 MA's), (21, 32174), (27, 32204), (30, 32225), (35, 32261), (39, 32291), (50, 32366), (57, 32414), (58, 32417), (62, 32441), (63, 32444), (67, 32459), (88, 32630), (114, 32744), (120, 32759), (122, 32765), (133, 32807), (134, 32810), (144, 32864), (153, 32942), (161, 32975),

Gene: HufflyPuff_34 Start: 31842, Stop: 32699, Start Num: 16

Candidate Starts for HufflyPuff_34:

(Start: 16 @31842 has 119 MA's), (21, 31881), (27, 31911), (30, 31932), (35, 31968), (39, 31998), (50, 32073), (57, 32121), (58, 32124), (62, 32148), (63, 32151), (67, 32166), (88, 32337), (110, 32436), (114, 32451), (120, 32466), (122, 32472), (133, 32514), (134, 32517), (144, 32571), (153, 32649), (161, 32682),

Gene: HuhtaEnerson15_8 Start: 5355, Stop: 6164, Start Num: 22

Candidate Starts for HuhtaEnerson15_8:

(Start: 22 @5355 has 196 MA's), (32, 5418), (33, 5427), (40, 5484), (48, 5532), (60, 5613), (83, 5802), (88, 5844), (95, 5901), (105, 5943), (163, 6150),

Gene: Hurricane_32 Start: 27396, Stop: 28184, Start Num: 22

Candidate Starts for Hurricane_32:

(1, 26904), (3, 27066), (12, 27318), (Start: 16 @27351 has 119 MA's), (Start: 22 @27396 has 196 MA's), (30, 27441), (35, 27477), (42, 27534), (44, 27543), (50, 27579), (57, 27633), (61, 27657), (82, 27798), (89, 27861), (95, 27903), (99, 27924), (100, 27930), (106, 27948), (133, 27978), (147, 28047), (155, 28119), (160, 28149),

Gene: Hyperbowlee_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Hyperbowlee_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: IHOP_35 Start: 32035, Stop: 32892, Start Num: 16

Candidate Starts for IHOP_35:

(Start: 16 @32035 has 119 MA's), (21, 32074), (27, 32104), (30, 32125), (35, 32161), (39, 32191), (50, 32266), (57, 32314), (58, 32317), (62, 32341), (63, 32344), (67, 32359), (88, 32530), (114, 32644), (120, 32659), (122, 32665), (133, 32707), (134, 32710), (144, 32764), (153, 32842), (161, 32875),

Gene: Icee_34 Start: 31516, Stop: 32373, Start Num: 16

Candidate Starts for Icee_34:

(Start: 16 @31516 has 119 MA's), (21, 31555), (27, 31585), (30, 31606), (35, 31642), (39, 31672), (50, 31747), (57, 31795), (58, 31798), (62, 31822), (63, 31825), (67, 31840), (88, 32011), (114, 32125), (120, 32140), (122, 32146), (133, 32188), (134, 32191), (144, 32245), (153, 32323), (161, 32356),

Gene: Illumine_31 Start: 26470, Stop: 27342, Start Num: 22

Candidate Starts for Illumine_31:

(17, 26443), (Start: 22 @26470 has 196 MA's), (Start: 24 @26482 has 1 MA's), (35, 26551), (39, 26578), (42, 26608), (44, 26617), (50, 26653), (51, 26662), (55, 26695), (57, 26713), (74, 26803), (89, 26938), (95, 26965), (99, 26986), (106, 27010), (128, 27112), (135, 27163), (141, 27199), (147, 27223), (160, 27322), (162, 27331),

Gene: Inca_34 Start: 30537, Stop: 31394, Start Num: 16

Candidate Starts for Inca_34:

(Start: 16 @30537 has 119 MA's), (21, 30576), (27, 30606), (30, 30627), (35, 30663), (39, 30693), (50, 30768), (57, 30816), (58, 30819), (62, 30843), (63, 30846), (67, 30861), (88, 31032), (110, 31131), (114, 31146), (120, 31161), (122, 31167), (133, 31209), (134, 31212), (144, 31266), (153, 31344), (161, 31377),

Gene: Indlulamithi_36 Start: 31658, Stop: 32464, Start Num: 20

Candidate Starts for Indlulamithi_36:

(11, 31580), (Start: 20 @31658 has 1 MA's), (31, 31724), (46, 31844), (52, 31880), (53, 31886), (59, 31925), (62, 31949), (69, 31988), (72, 32009), (81, 32078), (88, 32165), (95, 32204), (97, 32210), (105, 32246), (133, 32276), (157, 32429), (158, 32432),

Gene: Inky_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Inky_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: InvictusManeo_30 Start: 27231, Stop: 27992, Start Num: 22

Candidate Starts for InvictusManeo_30:

(Start: 16 @27183 has 119 MA's), (Start: 22 @27231 has 196 MA's), (Start: 24 @27243 has 1 MA's), (25, 27246), (26, 27249), (30, 27276), (35, 27312), (43, 27372), (44, 27378), (49, 27408), (50, 27414), (51, 27423), (55, 27456), (61, 27498), (62, 27501), (66, 27513), (70, 27549), (74, 27564), (77, 27600), (89, 27699), (95, 27726), (99, 27747), (135, 27810), (139, 27834), (144, 27858), (151, 27927), (160, 27972), (162, 27981),

Gene: JAWS_31 Start: 26448, Stop: 27320, Start Num: 22

Candidate Starts for JAWS_31:

(4, 26118), (9, 26346), (17, 26421), (Start: 22 @26448 has 196 MA's), (Start: 24 @26460 has 1 MA's), (35, 26529), (39, 26556), (42, 26586), (44, 26595), (50, 26631), (51, 26640), (55, 26673), (57, 26691), (63, 26721), (74, 26781), (89, 26916), (95, 26943), (99, 26964), (106, 26988), (135, 27141), (141, 27177), (160, 27300), (162, 27309),

Gene: JF1_32 Start: 27629, Stop: 28420, Start Num: 19

Candidate Starts for JF1_32:

(Start: 19 @27629 has 20 MA's), (Start: 24 @27662 has 1 MA's), (30, 27695), (33, 27719), (37, 27740), (42, 27788), (44, 27797), (50, 27833), (65, 27914), (89, 28121), (95, 28148), (97, 28154), (99, 28169), (106, 28193), (134, 28217), (138, 28238), (144, 28271), (147, 28283), (155, 28355),

Gene: Jabiru_8 Start: 5180, Stop: 5989, Start Num: 22

Candidate Starts for Jabiru_8:

(Start: 22 @5180 has 196 MA's), (29, 5225), (40, 5309), (42, 5324), (48, 5357), (83, 5627), (88, 5669), (93, 5708), (95, 5726), (101, 5756), (116, 5798),

Gene: Jarvi_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Jarvi_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Jayhawk_32 Start: 26461, Stop: 27333, Start Num: 22

Candidate Starts for Jayhawk_32:

(17, 26434), (Start: 22 @26461 has 196 MA's), (Start: 24 @26473 has 1 MA's), (35, 26542), (39, 26569), (42, 26599), (44, 26608), (50, 26644), (51, 26653), (55, 26686), (57, 26704), (63, 26734), (73, 26791), (74, 26794), (89, 26929), (95, 26956), (99, 26977), (106, 27001), (123, 27052), (135, 27154), (141, 27190), (147, 27214), (160, 27313), (162, 27322),

Gene: JeTaime_37 Start: 32659, Stop: 33516, Start Num: 16

Candidate Starts for JeTaime_37:

(Start: 16 @32659 has 119 MA's), (21, 32698), (27, 32728), (30, 32749), (35, 32785), (39, 32815), (50, 32890), (57, 32938), (58, 32941), (62, 32965), (63, 32968), (67, 32983), (88, 33154), (114, 33268), (120, 33283), (122, 33289), (133, 33331), (134, 33334), (144, 33388), (153, 33466), (161, 33499),

Gene: Jeckyll_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Jeckyll_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Journey13_9 Start: 5628, Stop: 6563, Start Num: 23

Candidate Starts for Journey13_9:

(Start: 23 @5628 has 4 MA's), (37, 5721), (40, 5754), (47, 5796), (48, 5802), (59, 5880), (60, 5883), (83, 6072), (88, 6114), (93, 6153), (95, 6171), (105, 6213), (109, 6222), (124, 6273), (129, 6336), (141, 6405), (151, 6486), (163, 6549),

Gene: Jovo_8 Start: 5464, Stop: 6273, Start Num: 22

Candidate Starts for Jovo_8:

(Start: 22 @5464 has 196 MA's), (32, 5527), (33, 5536), (36, 5557), (40, 5593), (48, 5641), (56, 5698), (60, 5722), (83, 5911), (88, 5953), (95, 6010), (163, 6259),

Gene: Joy99_31 Start: 26423, Stop: 27295, Start Num: 22

Candidate Starts for Joy99_31:

(4, 26093), (9, 26321), (17, 26396), (Start: 22 @26423 has 196 MA's), (Start: 24 @26435 has 1 MA's), (35, 26504), (39, 26531), (42, 26561), (44, 26570), (50, 26606), (51, 26615), (55, 26648), (57, 26666),

(63, 26696), (74, 26756), (89, 26891), (95, 26918), (99, 26939), (106, 26963), (123, 27014), (135, 27116), (141, 27152), (147, 27176), (160, 27275), (162, 27284),

Gene: Juliette_34 Start: 27788, Stop: 28579, Start Num: 19

Candidate Starts for Juliette_34:

(Start: 19 @27788 has 20 MA's), (Start: 24 @27821 has 1 MA's), (30, 27854), (33, 27878), (37, 27899), (38, 27908), (41, 27938), (42, 27947), (44, 27956), (50, 27992), (65, 28073), (89, 28280), (95, 28307), (99, 28328), (106, 28352), (134, 28376), (144, 28430), (147, 28442), (155, 28514),

Gene: Kanye_37 Start: 32844, Stop: 33701, Start Num: 16

Candidate Starts for Kanye_37:

(Start: 16 @32844 has 119 MA's), (21, 32883), (27, 32913), (30, 32934), (35, 32970), (39, 33000), (50, 33075), (57, 33123), (58, 33126), (62, 33150), (63, 33153), (67, 33168), (88, 33339), (114, 33453), (120, 33468), (122, 33474), (133, 33516), (134, 33519), (144, 33573), (153, 33651), (161, 33684),

Gene: Keshu_32 Start: 27384, Stop: 28172, Start Num: 22

Candidate Starts for Keshu_32:

(17, 27360), (Start: 22 @27384 has 196 MA's), (30, 27429), (35, 27465), (42, 27522), (44, 27531), (50, 27567), (57, 27621), (61, 27645), (82, 27786), (89, 27849), (95, 27891), (99, 27912), (100, 27918), (106, 27936), (133, 27966), (147, 28035), (155, 28107), (160, 28137),

Gene: KiSi_30 Start: 25623, Stop: 26363, Start Num: 22

Candidate Starts for KiSi_30:

(9, 25521), (12, 25542), (Start: 16 @25575 has 119 MA's), (17, 25596), (Start: 22 @25623 has 196 MA's), (30, 25668), (35, 25704), (44, 25761), (50, 25797), (55, 25839), (63, 25887), (74, 25947), (89, 26082), (95, 26109), (100, 26136), (106, 26154), (134, 26178), (141, 26220), (146, 26241), (147, 26244), (160, 26343),

Gene: Kimchi_37 Start: 31851, Stop: 32708, Start Num: 16

Candidate Starts for Kimchi_37:

(Start: 16 @31851 has 119 MA's), (21, 31890), (27, 31920), (30, 31941), (35, 31977), (39, 32007), (50, 32082), (57, 32130), (58, 32133), (62, 32157), (63, 32160), (67, 32175), (88, 32346), (114, 32460), (120, 32475), (122, 32481), (133, 32523), (134, 32526), (144, 32580), (153, 32658), (161, 32691),

Gene: Kostya_36 Start: 31859, Stop: 32716, Start Num: 16

Candidate Starts for Kostya_36:

(Start: 16 @31859 has 119 MA's), (21, 31898), (27, 31928), (30, 31949), (35, 31985), (39, 32015), (50, 32090), (57, 32138), (58, 32141), (62, 32165), (63, 32168), (67, 32183), (88, 32354), (114, 32468), (120, 32483), (122, 32489), (133, 32531), (134, 32534), (144, 32588), (153, 32666), (161, 32699),

Gene: Kratio_29 Start: 26874, Stop: 27623, Start Num: 24

Candidate Starts for Kratio_29:

(Start: 16 @26814 has 119 MA's), (Start: 22 @26862 has 196 MA's), (Start: 24 @26874 has 1 MA's), (25, 26877), (26, 26880), (30, 26907), (35, 26943), (43, 27003), (44, 27009), (49, 27039), (50, 27045), (51, 27054), (55, 27087), (61, 27129), (62, 27132), (66, 27144), (70, 27180), (74, 27195), (77, 27231), (89, 27330), (95, 27357), (99, 27378), (135, 27441), (139, 27465), (144, 27489), (151, 27558), (160, 27603), (162, 27612),

Gene: Krueger_31 Start: 25731, Stop: 26474, Start Num: 22

Candidate Starts for Krueger_31:

(5, 25440), (6, 25482), (9, 25629), (12, 25650), (Start: 16 @25683 has 119 MA's), (17, 25704), (Start: 22 @25731 has 196 MA's), (28, 25773), (30, 25779), (35, 25815), (42, 25863), (44, 25872), (50, 25908), (55, 25950), (74, 26058), (89, 26193), (94, 26208), (95, 26220), (99, 26241), (103, 26256),

(104, 26259), (106, 26265), (144, 26343), (154, 26424), (159, 26445), (160, 26454),

Gene: Larva_31 Start: 27026, Stop: 27787, Start Num: 22

Candidate Starts for Larva_31:

(Start: 16 @26978 has 119 MA's), (Start: 22 @27026 has 196 MA's), (Start: 24 @27038 has 1 MA's), (26, 27044), (30, 27071), (35, 27107), (43, 27167), (44, 27173), (49, 27203), (50, 27209), (51, 27218), (55, 27251), (61, 27293), (62, 27296), (66, 27308), (70, 27344), (74, 27359), (77, 27395), (89, 27494), (95, 27521), (99, 27542), (135, 27605), (139, 27629), (144, 27653), (151, 27722), (160, 27767), (162, 27776),

Gene: LastHope_31 Start: 25598, Stop: 26452, Start Num: 22

Candidate Starts for LastHope_31:

(9, 25496), (12, 25517), (Start: 16 @25550 has 119 MA's), (17, 25571), (Start: 22 @25598 has 196 MA's), (Start: 24 @25610 has 1 MA's), (25, 25613), (28, 25637), (30, 25643), (34, 25673), (42, 25733), (44, 25742), (55, 25820), (89, 26063), (94, 26078), (95, 26090), (99, 26111), (106, 26135), (126, 26207), (135, 26273), (142, 26312), (147, 26333), (162, 26441),

Gene: LaterM_31 Start: 26387, Stop: 27259, Start Num: 22

Candidate Starts for LaterM_31:

(17, 26360), (Start: 22 @26387 has 196 MA's), (Start: 24 @26399 has 1 MA's), (35, 26468), (39, 26495), (42, 26525), (44, 26534), (50, 26570), (51, 26579), (55, 26612), (57, 26630), (74, 26720), (89, 26855), (95, 26882), (99, 26903), (106, 26927), (123, 26978), (135, 27080), (141, 27116), (147, 27140), (160, 27239), (162, 27248),

Gene: LeMond_30 Start: 25694, Stop: 26434, Start Num: 22

Candidate Starts for LeMond_30:

(9, 25592), (12, 25613), (Start: 16 @25646 has 119 MA's), (17, 25667), (Start: 22 @25694 has 196 MA's), (30, 25739), (35, 25775), (44, 25832), (50, 25868), (55, 25910), (74, 26018), (89, 26153), (95, 26180), (106, 26225), (134, 26249), (141, 26291), (146, 26312), (147, 26315), (160, 26414),

Gene: Leston_30 Start: 27176, Stop: 28048, Start Num: 22

Candidate Starts for Leston_30:

(Start: 22 @27176 has 196 MA's), (Start: 24 @27188 has 1 MA's), (26, 27194), (30, 27221), (34, 27251), (35, 27257), (42, 27311), (44, 27320), (45, 27332), (51, 27365), (55, 27398), (63, 27446), (75, 27515), (95, 27668), (98, 27686), (99, 27689), (117, 27749), (123, 27767), (126, 27794), (135, 27866), (141, 27902), (142, 27905), (147, 27926), (151, 27983), (159, 28019), (160, 28028), (162, 28037),

Gene: Lev2_8 Start: 5172, Stop: 5981, Start Num: 22

Candidate Starts for Lev2_8:

(Start: 22 @5172 has 196 MA's), (32, 5235), (33, 5244), (36, 5265), (40, 5301), (48, 5349), (56, 5406), (60, 5430), (88, 5661), (95, 5718), (163, 5967),

Gene: LilPharaoh_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for LilPharaoh_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: Lilac_37 Start: 31355, Stop: 32212, Start Num: 16

Candidate Starts for Lilac_37:

(Start: 16 @31355 has 119 MA's), (21, 31394), (27, 31424), (30, 31445), (35, 31481), (39, 31511), (50, 31586), (57, 31634), (58, 31637), (62, 31661), (63, 31664), (67, 31679), (88, 31850), (114, 31964),

(120, 31979), (122, 31985), (133, 32027), (134, 32030), (144, 32084), (153, 32162), (161, 32195),

Gene: Lilizi_37 Start: 31563, Stop: 32420, Start Num: 16

Candidate Starts for Lilizi_37:

(Start: 16 @31563 has 119 MA's), (21, 31602), (27, 31632), (30, 31653), (35, 31689), (39, 31719), (50, 31794), (57, 31842), (58, 31845), (62, 31869), (63, 31872), (67, 31887), (88, 32058), (114, 32172), (120, 32187), (122, 32193), (133, 32235), (134, 32238), (144, 32292), (153, 32370), (161, 32403),

Gene: Lilpickle_34 Start: 31065, Stop: 31922, Start Num: 16

Candidate Starts for Lilpickle_34:

(Start: 16 @31065 has 119 MA's), (21, 31104), (27, 31134), (30, 31155), (35, 31191), (39, 31221), (50, 31296), (57, 31344), (58, 31347), (62, 31371), (63, 31374), (67, 31389), (88, 31560), (114, 31674), (120, 31689), (122, 31695), (133, 31737), (134, 31740), (144, 31794), (153, 31872), (161, 31905),

Gene: LindNT_31 Start: 26427, Stop: 27299, Start Num: 22

Candidate Starts for LindNT_31:

(17, 26400), (Start: 22 @26427 has 196 MA's), (Start: 24 @26439 has 1 MA's), (35, 26508), (39, 26535), (42, 26565), (44, 26574), (50, 26610), (51, 26619), (55, 26652), (57, 26670), (74, 26760), (89, 26895), (95, 26922), (99, 26943), (106, 26967), (123, 27018), (135, 27120), (141, 27156), (147, 27180), (160, 27279), (162, 27288),

Gene: LittleCherry_8 Start: 5356, Stop: 6165, Start Num: 22

Candidate Starts for LittleCherry_8:

(Start: 22 @5356 has 196 MA's), (32, 5419), (33, 5428), (40, 5485), (48, 5533), (60, 5614), (83, 5803), (88, 5845), (95, 5902), (105, 5944), (163, 6151),

Gene: Llorens_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Llorens_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Lunahalos_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Lunahalos_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: MISSy_34 Start: 31371, Stop: 32228, Start Num: 16

Candidate Starts for MISSy_34:

(Start: 16 @31371 has 119 MA's), (21, 31410), (27, 31440), (30, 31461), (35, 31497), (39, 31527), (50, 31602), (57, 31650), (58, 31653), (62, 31677), (63, 31680), (67, 31695), (88, 31866), (110, 31965), (114, 31980), (120, 31995), (122, 32001), (133, 32043), (134, 32046), (144, 32100), (153, 32178), (161, 32211),

Gene: MPhalcon_34 Start: 31364, Stop: 32221, Start Num: 16

Candidate Starts for MPhalcon_34:

(Start: 16 @31364 has 119 MA's), (21, 31403), (27, 31433), (30, 31454), (35, 31490), (39, 31520), (50, 31595), (57, 31643), (58, 31646), (62, 31670), (63, 31673), (67, 31688), (88, 31859), (114, 31973), (120, 31988), (122, 31994), (133, 32036), (134, 32039), (144, 32093), (153, 32171), (161, 32204),

Gene: MacnCheese_32 Start: 27431, Stop: 28219, Start Num: 22

Candidate Starts for MacnCheese_32:

(17, 27407), (Start: 22 @27431 has 196 MA's), (30, 27476), (35, 27512), (42, 27569), (44, 27578), (50, 27614), (57, 27668), (61, 27692), (82, 27833), (89, 27896), (95, 27938), (99, 27959), (100, 27965), (106, 27983), (133, 28013), (134, 28016), (140, 28055), (147, 28082), (155, 28154), (160, 28184),

Gene: MadamMonkfish_35 Start: 31276, Stop: 32133, Start Num: 16

Candidate Starts for MadamMonkfish_35:

(Start: 16 @31276 has 119 MA's), (21, 31315), (27, 31345), (30, 31366), (35, 31402), (39, 31432), (50, 31507), (57, 31555), (58, 31558), (62, 31582), (63, 31585), (67, 31600), (88, 31771), (114, 31885), (120, 31900), (122, 31906), (133, 31948), (134, 31951), (144, 32005), (153, 32083), (161, 32116),

Gene: MalagasyRose_31 Start: 25844, Stop: 26686, Start Num: 22

Candidate Starts for MalagasyRose_31:

(17, 25817), (Start: 22 @25844 has 196 MA's), (Start: 24 @25856 has 1 MA's), (28, 25883), (30, 25889), (34, 25919), (38, 25943), (42, 25979), (44, 25988), (50, 26024), (55, 26066), (73, 26171), (94, 26324), (95, 26336), (99, 26357), (106, 26381), (114, 26408), (117, 26417), (135, 26507), (142, 26546), (147, 26567), (160, 26666),

Gene: Malthus_33 Start: 27553, Stop: 28344, Start Num: 19

Candidate Starts for Malthus_33:

(Start: 19 @27553 has 20 MA's), (Start: 24 @27586 has 1 MA's), (30, 27619), (33, 27643), (37, 27664), (42, 27712), (44, 27721), (50, 27757), (65, 27838), (89, 28045), (95, 28072), (97, 28078), (99, 28093), (106, 28117), (134, 28141), (138, 28162), (144, 28195), (147, 28207), (155, 28279),

Gene: Manda_36 Start: 32343, Stop: 33200, Start Num: 16

Candidate Starts for Manda_36:

(Start: 16 @32343 has 119 MA's), (21, 32382), (27, 32412), (30, 32433), (35, 32469), (39, 32499), (50, 32574), (57, 32622), (58, 32625), (62, 32649), (63, 32652), (67, 32667), (88, 32838), (114, 32952), (120, 32967), (122, 32973), (133, 33015), (134, 33018), (144, 33072), (153, 33150), (161, 33183),

Gene: MarkPhew_31 Start: 25592, Stop: 26332, Start Num: 22

Candidate Starts for MarkPhew_31:

(9, 25490), (12, 25511), (Start: 16 @25544 has 119 MA's), (17, 25565), (Start: 22 @25592 has 196 MA's), (28, 25631), (30, 25637), (35, 25673), (44, 25730), (50, 25766), (55, 25808), (63, 25856), (74, 25916), (95, 26078), (100, 26105), (106, 26123), (130, 26135), (141, 26189), (147, 26213), (160, 26312), (162, 26321),

Gene: Marshawn_32 Start: 26272, Stop: 27012, Start Num: 22

Candidate Starts for Marshawn_32:

(Start: 16 @26224 has 119 MA's), (17, 26245), (Start: 22 @26272 has 196 MA's), (Start: 24 @26284 has 1 MA's), (28, 26311), (30, 26317), (35, 26353), (44, 26410), (45, 26422), (50, 26446), (55, 26488), (63, 26536), (74, 26596), (89, 26731), (95, 26758), (106, 26803), (134, 26827), (141, 26869), (146, 26890), (147, 26893), (160, 26992), (162, 27001),

Gene: Marshmallow_35 Start: 31856, Stop: 32713, Start Num: 16

Candidate Starts for Marshmallow_35:

(Start: 16 @31856 has 119 MA's), (21, 31895), (27, 31925), (30, 31946), (35, 31982), (39, 32012), (50, 32087), (57, 32135), (58, 32138), (62, 32162), (63, 32165), (67, 32180), (88, 32351), (114, 32465), (120, 32480), (122, 32486), (133, 32528), (134, 32531), (144, 32585), (153, 32663), (161, 32696),

Gene: MarysWell_7 Start: 5323, Stop: 6132, Start Num: 22

Candidate Starts for MarysWell_7:

(Start: 22 @5323 has 196 MA's), (32, 5386), (33, 5395), (40, 5452), (48, 5500), (83, 5770), (88, 5812), (95, 5869), (105, 5911), (163, 6118),

Gene: Maxxinista_36 Start: 31325, Stop: 32182, Start Num: 16

Candidate Starts for Maxxinista_36:

(Start: 16 @31325 has 119 MA's), (21, 31364), (27, 31394), (30, 31415), (35, 31451), (39, 31481), (50, 31556), (57, 31604), (58, 31607), (62, 31631), (63, 31634), (67, 31649), (88, 31820), (114, 31934), (120, 31949), (122, 31955), (133, 31997), (134, 32000), (144, 32054), (153, 32132), (161, 32165),

Gene: Mdavu_27 Start: 25966, Stop: 26724, Start Num: 22

Candidate Starts for Mdavu_27:

(10, 25864), (Start: 16 @25918 has 119 MA's), (17, 25939), (Start: 22 @25966 has 196 MA's), (30, 26011), (35, 26047), (43, 26107), (44, 26113), (49, 26143), (55, 26191), (61, 26233), (74, 26299), (77, 26335), (89, 26434), (95, 26461), (99, 26482), (100, 26488), (130, 26527), (134, 26539), (135, 26545), (139, 26569), (144, 26593), (160, 26704), (162, 26713),

Gene: MeaningOfLife_31 Start: 26430, Stop: 27302, Start Num: 22

Candidate Starts for MeaningOfLife_31:

(17, 26403), (Start: 22 @26430 has 196 MA's), (Start: 24 @26442 has 1 MA's), (35, 26511), (39, 26538), (42, 26568), (44, 26577), (50, 26613), (51, 26622), (55, 26655), (57, 26673), (63, 26703), (74, 26763), (89, 26898), (95, 26925), (99, 26946), (106, 26970), (123, 27021), (135, 27123), (141, 27159), (147, 27183), (160, 27282), (162, 27291),

Gene: Megsy_32 Start: 26430, Stop: 27302, Start Num: 22

Candidate Starts for Megsy_32:

(17, 26403), (Start: 22 @26430 has 196 MA's), (Start: 24 @26442 has 1 MA's), (35, 26511), (39, 26538), (42, 26568), (44, 26577), (50, 26613), (51, 26622), (55, 26655), (57, 26673), (74, 26763), (89, 26898), (95, 26925), (99, 26946), (106, 26970), (123, 27021), (135, 27123), (141, 27159), (147, 27183), (160, 27282), (162, 27291),

Gene: Micasa_7 Start: 5324, Stop: 6133, Start Num: 22

Candidate Starts for Micasa_7:

(Start: 22 @5324 has 196 MA's), (32, 5387), (33, 5396), (40, 5453), (48, 5501), (60, 5582), (83, 5771), (88, 5813), (95, 5870), (105, 5912), (163, 6119),

Gene: Midas2_8 Start: 5323, Stop: 6132, Start Num: 22

Candidate Starts for Midas2_8:

(Start: 22 @5323 has 196 MA's), (32, 5386), (33, 5395), (40, 5452), (48, 5500), (83, 5770), (88, 5812), (95, 5869), (105, 5911), (163, 6118),

Gene: Milcery_8 Start: 5360, Stop: 6169, Start Num: 22

Candidate Starts for Milcery_8:

(Start: 22 @5360 has 196 MA's), (32, 5423), (33, 5432), (40, 5489), (48, 5537), (60, 5618), (83, 5807), (88, 5849), (95, 5906), (105, 5948), (163, 6155),

Gene: Mindy_35 Start: 31636, Stop: 32493, Start Num: 16

Candidate Starts for Mindy_35:

(Start: 16 @31636 has 119 MA's), (21, 31675), (27, 31705), (30, 31726), (35, 31762), (39, 31792), (50, 31867), (57, 31915), (58, 31918), (62, 31942), (63, 31945), (67, 31960), (88, 32131), (114, 32245), (120, 32260), (122, 32266), (133, 32308), (134, 32311), (144, 32365), (153, 32443), (161, 32476),

Gene: Miniwave_35 Start: 32055, Stop: 32912, Start Num: 16

Candidate Starts for Miniwave_35:

(Start: 16 @32055 has 119 MA's), (21, 32094), (27, 32124), (30, 32145), (35, 32181), (39, 32211), (50, 32286), (57, 32334), (58, 32337), (62, 32361), (63, 32364), (67, 32379), (88, 32550), (114, 32664), (120, 32679), (122, 32685), (133, 32727), (134, 32730), (144, 32784), (153, 32862), (161, 32895),

Gene: Miryou_30 Start: 27043, Stop: 27903, Start Num: 24

Candidate Starts for Miryou_30:

(9, 26929), (Start: 16 @26983 has 119 MA's), (Start: 22 @27031 has 196 MA's), (Start: 24 @27043 has 1 MA's), (25, 27046), (26, 27049), (30, 27076), (34, 27106), (35, 27112), (42, 27166), (44, 27175), (45, 27187), (51, 27220), (55, 27253), (63, 27301), (95, 27523), (98, 27541), (99, 27544), (117, 27604), (126, 27649), (135, 27721), (141, 27757), (142, 27760), (147, 27781), (151, 27838), (159, 27874), (160, 27883), (162, 27892),

Gene: Misfit_35 Start: 31945, Stop: 32802, Start Num: 16

Candidate Starts for Misfit_35:

(Start: 16 @31945 has 119 MA's), (21, 31984), (27, 32014), (30, 32035), (35, 32071), (39, 32101), (50, 32176), (57, 32224), (58, 32227), (62, 32251), (63, 32254), (67, 32269), (88, 32440), (114, 32554), (120, 32569), (122, 32575), (133, 32617), (134, 32620), (144, 32674), (153, 32752), (161, 32785),

Gene: MissDaisy_32 Start: 27396, Stop: 28187, Start Num: 19

Candidate Starts for MissDaisy_32:

(7, 27291), (9, 27309), (13, 27336), (15, 27357), (Start: 19 @27396 has 20 MA's), (Start: 24 @27429 has 1 MA's), (30, 27462), (38, 27516), (42, 27555), (44, 27564), (50, 27600), (51, 27609), (80, 27792), (89, 27888), (95, 27915), (99, 27936), (103, 27951), (106, 27960), (134, 27984), (144, 28038), (147, 28050), (155, 28122), (159, 28143),

Gene: MissWhite_11 Start: 5672, Stop: 6478, Start Num: 23

Candidate Starts for MissWhite_11:

(Start: 23 @5672 has 4 MA's), (40, 5798), (48, 5846), (50, 5858), (59, 5924), (78, 6056), (85, 6140), (88, 6158), (93, 6197), (95, 6215), (148, 6350), (151, 6401), (163, 6464),

Gene: Mitti_32 Start: 27554, Stop: 28345, Start Num: 19

Candidate Starts for Mitti_32:

(Start: 19 @27554 has 20 MA's), (Start: 24 @27587 has 1 MA's), (30, 27620), (33, 27644), (37, 27665), (38, 27674), (41, 27704), (42, 27713), (44, 27722), (50, 27758), (65, 27839), (89, 28046), (95, 28073), (99, 28094), (103, 28109), (106, 28118), (134, 28142), (144, 28196), (147, 28208), (155, 28280),

Gene: Moldemort_36 Start: 31600, Stop: 32457, Start Num: 16

Candidate Starts for Moldemort_36:

(Start: 16 @31600 has 119 MA's), (21, 31639), (27, 31669), (30, 31690), (35, 31726), (39, 31756), (50, 31831), (57, 31879), (58, 31882), (62, 31906), (63, 31909), (67, 31924), (88, 32095), (114, 32209), (120, 32224), (122, 32230), (133, 32272), (134, 32275), (144, 32329), (153, 32407), (161, 32440),

Gene: Mosby_34 Start: 31362, Stop: 32219, Start Num: 16

Candidate Starts for Mosby_34:

(Start: 16 @31362 has 119 MA's), (21, 31401), (27, 31431), (30, 31452), (35, 31488), (39, 31518), (50, 31593), (57, 31641), (58, 31644), (62, 31668), (63, 31671), (67, 31686), (88, 31857), (114, 31971), (120, 31986), (122, 31992), (133, 32034), (134, 32037), (144, 32091), (153, 32169), (161, 32202),

Gene: Murica_34 Start: 31842, Stop: 32699, Start Num: 16

Candidate Starts for Murica_34:

(Start: 16 @31842 has 119 MA's), (21, 31881), (27, 31911), (30, 31932), (35, 31968), (39, 31998), (50, 32073), (57, 32121), (58, 32124), (62, 32148), (63, 32151), (67, 32166), (88, 32337), (110, 32436),

(114, 32451), (120, 32466), (122, 32472), (133, 32514), (134, 32517), (144, 32571), (153, 32649), (161, 32682),

Gene: Murphy_36 Start: 31837, Stop: 32694, Start Num: 16

Candidate Starts for Murphy_36:

(Start: 16 @31837 has 119 MA's), (21, 31876), (27, 31906), (30, 31927), (35, 31963), (39, 31993), (50, 32068), (57, 32116), (58, 32119), (62, 32143), (63, 32146), (67, 32161), (88, 32332), (114, 32446), (120, 32461), (122, 32467), (133, 32509), (134, 32512), (144, 32566), (153, 32644), (161, 32677),

Gene: Murucutumbu_31 Start: 26406, Stop: 27278, Start Num: 22

Candidate Starts for Murucutumbu_31:

(9, 26304), (17, 26379), (Start: 22 @26406 has 196 MA's), (Start: 24 @26418 has 1 MA's), (35, 26487), (39, 26514), (42, 26544), (44, 26553), (50, 26589), (51, 26598), (55, 26631), (57, 26649), (74, 26739), (89, 26874), (95, 26901), (99, 26922), (106, 26946), (123, 26997), (135, 27099), (141, 27135), (147, 27159), (160, 27258), (162, 27267),

Gene: Mynx_31 Start: 26477, Stop: 27349, Start Num: 22

Candidate Starts for Mynx_31:

(17, 26450), (Start: 22 @26477 has 196 MA's), (Start: 24 @26489 has 1 MA's), (35, 26558), (39, 26585), (42, 26615), (44, 26624), (50, 26660), (51, 26669), (55, 26702), (57, 26720), (63, 26750), (74, 26810), (89, 26945), (95, 26972), (99, 26993), (106, 27017), (123, 27068), (135, 27170), (141, 27206), (147, 27230), (160, 27329), (162, 27338),

Gene: Myrale_35 Start: 31721, Stop: 32578, Start Num: 16

Candidate Starts for Myrale_35:

(Start: 16 @31721 has 119 MA's), (21, 31760), (27, 31790), (30, 31811), (35, 31847), (39, 31877), (50, 31952), (57, 32000), (58, 32003), (62, 32027), (63, 32030), (67, 32045), (88, 32216), (114, 32330), (120, 32345), (122, 32351), (133, 32393), (134, 32396), (144, 32450), (153, 32528), (161, 32561),

Gene: Naca_8 Start: 5264, Stop: 6073, Start Num: 22

Candidate Starts for Naca_8:

(14, 5201), (18, 5240), (Start: 22 @5264 has 196 MA's), (32, 5327), (40, 5393), (48, 5441), (83, 5711), (88, 5753), (93, 5792), (95, 5810), (101, 5840), (160, 6038),

Gene: Nala_35 Start: 31876, Stop: 32733, Start Num: 16

Candidate Starts for Nala_35:

(Start: 16 @31876 has 119 MA's), (21, 31915), (27, 31945), (30, 31966), (35, 32002), (39, 32032), (50, 32107), (57, 32155), (58, 32158), (62, 32182), (63, 32185), (67, 32200), (88, 32371), (114, 32485), (120, 32500), (122, 32506), (133, 32548), (134, 32551), (144, 32605), (153, 32683), (161, 32716),

Gene: NearlyHeadless_8 Start: 4875, Stop: 5684, Start Num: 22

Candidate Starts for NearlyHeadless_8:

(Start: 22 @4875 has 196 MA's), (35, 4959), (40, 5004), (50, 5064), (59, 5130), (68, 5178), (74, 5217), (88, 5364), (93, 5403), (95, 5421), (102, 5454), (109, 5472), (145, 5541), (163, 5670),

Gene: NelitzaMV_35 Start: 31926, Stop: 32783, Start Num: 16

Candidate Starts for NelitzaMV_35:

(Start: 16 @31926 has 119 MA's), (21, 31965), (27, 31995), (30, 32016), (35, 32052), (39, 32082), (50, 32157), (57, 32205), (58, 32208), (62, 32232), (63, 32235), (67, 32250), (88, 32421), (114, 32535), (120, 32550), (122, 32556), (133, 32598), (134, 32601), (144, 32655), (153, 32733), (161, 32766),

Gene: Nergal_27 Start: 24122, Stop: 24985, Start Num: 23

Candidate Starts for Nergal_27:

(12, 24038), (Start: 16 @24071 has 119 MA's), (Start: 23 @24122 has 4 MA's), (Start: 24 @24134 has 1 MA's), (26, 24140), (30, 24167), (35, 24203), (37, 24212), (42, 24251), (44, 24260), (50, 24296), (51, 24305), (57, 24356), (74, 24446), (89, 24581), (94, 24596), (95, 24608), (99, 24629), (106, 24653), (111, 24671), (122, 24701), (135, 24806), (142, 24845), (146, 24863), (160, 24965), (162, 24974),

Gene: Nibb_30 Start: 25727, Stop: 26467, Start Num: 22

Candidate Starts for Nibb_30:

(9, 25625), (12, 25646), (Start: 16 @25679 has 119 MA's), (17, 25700), (Start: 22 @25727 has 196 MA's), (30, 25772), (35, 25808), (44, 25865), (50, 25901), (55, 25943), (74, 26051), (95, 26213), (100, 26240), (106, 26258), (130, 26270), (134, 26282), (141, 26324), (146, 26345), (147, 26348), (160, 26447), (162, 26456),

Gene: Nikao_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for Nikao_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: Niklas_31 Start: 25853, Stop: 26614, Start Num: 22

Candidate Starts for Niklas_31:

(17, 25823), (Start: 22 @25853 has 196 MA's), (30, 25898), (35, 25934), (43, 25994), (44, 26000), (49, 26030), (50, 26036), (51, 26045), (55, 26078), (61, 26120), (70, 26171), (74, 26186), (89, 26321), (95, 26348), (99, 26369), (100, 26375), (106, 26393), (134, 26426), (135, 26432), (144, 26480), (152, 26552), (160, 26594), (162, 26603),

Gene: Nimrod_35 Start: 32100, Stop: 32957, Start Num: 16

Candidate Starts for Nimrod_35:

(Start: 16 @32100 has 119 MA's), (21, 32139), (27, 32169), (30, 32190), (35, 32226), (39, 32256), (50, 32331), (57, 32379), (58, 32382), (62, 32406), (63, 32409), (67, 32424), (88, 32595), (114, 32709), (120, 32724), (122, 32730), (133, 32772), (134, 32775), (144, 32829), (153, 32907), (161, 32940),

Gene: NoSleep_36 Start: 31597, Stop: 32454, Start Num: 16

Candidate Starts for NoSleep_36:

(Start: 16 @31597 has 119 MA's), (21, 31636), (27, 31666), (30, 31687), (35, 31723), (39, 31753), (50, 31828), (57, 31876), (58, 31879), (62, 31903), (63, 31906), (67, 31921), (88, 32092), (114, 32206), (120, 32221), (122, 32227), (133, 32269), (134, 32272), (144, 32326), (153, 32404), (161, 32437),

Gene: Nutello_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for Nutello_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: OkiRoe_30 Start: 27047, Stop: 27919, Start Num: 22

Candidate Starts for OkiRoe_30:

(9, 26945), (Start: 16 @26999 has 119 MA's), (Start: 22 @27047 has 196 MA's), (Start: 24 @27059 has 1 MA's), (26, 27065), (30, 27092), (34, 27122), (35, 27128), (42, 27182), (44, 27191), (45, 27203), (51, 27236), (55, 27269), (63, 27317), (95, 27539), (98, 27557), (99, 27560), (117, 27620), (123, 27638), (126, 27665), (135, 27737), (138, 27752), (141, 27773), (142, 27776), (147, 27797), (159, 27890), (160, 27899), (162, 27908),

Gene: OmniCritical_32 Start: 27538, Stop: 28329, Start Num: 19

Candidate Starts for OmniCritical_32:

(Start: 19 @27538 has 20 MA's), (Start: 24 @27571 has 1 MA's), (30, 27604), (33, 27628), (37, 27649), (38, 27658), (41, 27688), (42, 27697), (44, 27706), (50, 27742), (65, 27823), (89, 28030), (95, 28057), (99, 28078), (103, 28093), (106, 28102), (134, 28126), (144, 28180), (147, 28192), (155, 28264),

Gene: Omnicron_31 Start: 25950, Stop: 26807, Start Num: 22

Candidate Starts for Omnicron_31:

(Start: 22 @25950 has 196 MA's), (Start: 24 @25962 has 1 MA's), (26, 25968), (28, 25989), (30, 25995), (34, 26025), (42, 26085), (44, 26094), (45, 26106), (51, 26139), (55, 26172), (63, 26220), (95, 26442), (99, 26463), (106, 26487), (114, 26514), (117, 26523), (119, 26526), (123, 26538), (127, 26565), (135, 26625), (137, 26628), (141, 26661), (147, 26685), (151, 26742), (160, 26787),

Gene: OrionPax_36 Start: 31603, Stop: 32460, Start Num: 16

Candidate Starts for OrionPax_36:

(Start: 16 @31603 has 119 MA's), (21, 31642), (27, 31672), (30, 31693), (35, 31729), (39, 31759), (50, 31834), (57, 31882), (58, 31885), (62, 31909), (63, 31912), (67, 31927), (88, 32098), (114, 32212), (120, 32227), (122, 32233), (133, 32275), (134, 32278), (144, 32332), (153, 32410), (161, 32443),

Gene: Oscar_30 Start: 25695, Stop: 26435, Start Num: 22

Candidate Starts for Oscar_30:

(9, 25593), (12, 25614), (Start: 16 @25647 has 119 MA's), (17, 25668), (Start: 22 @25695 has 196 MA's), (30, 25740), (35, 25776), (44, 25833), (50, 25869), (55, 25911), (63, 25959), (74, 26019), (89, 26154), (95, 26181), (100, 26208), (106, 26226), (134, 26250), (141, 26292), (146, 26313), (147, 26316), (160, 26415),

Gene: P3MA_30 Start: 24007, Stop: 24912, Start Num: 23

Candidate Starts for P3MA_30:

(8, 23887), (Start: 23 @24007 has 4 MA's), (40, 24133), (42, 24148), (51, 24202), (54, 24226), (64, 24289), (79, 24403), (83, 24457), (86, 24484), (89, 24511), (91, 24526), (92, 24529), (93, 24538), (96, 24562), (97, 24565), (107, 24607), (113, 24631), (118, 24643), (121, 24649), (132, 24724), (154, 24844), (156, 24859), (159, 24865),

Gene: Padfoot_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Padfoot_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Padpat_31 Start: 26454, Stop: 27326, Start Num: 22

Candidate Starts for Padpat_31:

(17, 26427), (Start: 22 @26454 has 196 MA's), (Start: 24 @26466 has 1 MA's), (35, 26535), (39, 26562), (42, 26592), (44, 26601), (50, 26637), (51, 26646), (55, 26679), (57, 26697), (63, 26727), (73, 26784), (74, 26787), (89, 26922), (95, 26949), (99, 26970), (106, 26994), (123, 27045), (135, 27147), (141, 27183), (150, 27255), (160, 27306), (162, 27315),

Gene: Palpatine_35 Start: 31872, Stop: 32729, Start Num: 16

Candidate Starts for Palpatine_35:

(Start: 16 @31872 has 119 MA's), (21, 31911), (27, 31941), (30, 31962), (35, 31998), (39, 32028), (50, 32103), (57, 32151), (58, 32154), (62, 32178), (63, 32181), (67, 32196), (88, 32367), (110, 32466), (114, 32481), (120, 32496), (122, 32502), (133, 32544), (134, 32547), (144, 32601), (153, 32679),

(161, 32712),

Gene: Paola_30 Start: 27046, Stop: 27918, Start Num: 22

Candidate Starts for Paola_30:

(Start: 22 @27046 has 196 MA's), (Start: 24 @27058 has 1 MA's), (26, 27064), (30, 27091), (34, 27121), (35, 27127), (42, 27181), (44, 27190), (45, 27202), (51, 27235), (55, 27268), (63, 27316), (75, 27385), (95, 27538), (98, 27556), (99, 27559), (117, 27619), (123, 27637), (126, 27664), (135, 27736), (141, 27772), (142, 27775), (147, 27796), (151, 27853), (159, 27889), (160, 27898), (162, 27907),

Gene: Paperbeatsrock_37 Start: 32838, Stop: 33695, Start Num: 16

Candidate Starts for Paperbeatsrock_37:

(Start: 16 @32838 has 119 MA's), (21, 32877), (27, 32907), (30, 32928), (35, 32964), (39, 32994), (50, 33069), (57, 33117), (58, 33120), (62, 33144), (63, 33147), (67, 33162), (88, 33333), (114, 33447), (120, 33462), (122, 33468), (133, 33510), (134, 33513), (144, 33567), (153, 33645), (161, 33678),

Gene: Pat3_34 Start: 30584, Stop: 31441, Start Num: 16

Candidate Starts for Pat3_34:

(Start: 16 @30584 has 119 MA's), (21, 30623), (27, 30653), (30, 30674), (35, 30710), (39, 30740), (50, 30815), (57, 30863), (58, 30866), (62, 30890), (63, 30893), (67, 30908), (88, 31079), (114, 31193), (120, 31208), (122, 31214), (133, 31256), (134, 31259), (144, 31313), (153, 31391), (161, 31424),

Gene: Patt_32 Start: 27372, Stop: 28163, Start Num: 19

Candidate Starts for Patt_32:

(7, 27267), (9, 27285), (13, 27312), (15, 27333), (Start: 19 @27372 has 20 MA's), (Start: 24 @27405 has 1 MA's), (30, 27438), (38, 27492), (42, 27531), (44, 27540), (50, 27576), (51, 27585), (80, 27768), (89, 27864), (95, 27891), (99, 27912), (103, 27927), (106, 27936), (134, 27960), (144, 28014), (147, 28026), (155, 28098), (159, 28119),

Gene: Peanam_31 Start: 25850, Stop: 26611, Start Num: 22

Candidate Starts for Peanam_31:

(17, 25820), (Start: 22 @25850 has 196 MA's), (30, 25895), (35, 25931), (43, 25991), (44, 25997), (49, 26027), (50, 26033), (51, 26042), (55, 26075), (61, 26117), (70, 26168), (74, 26183), (89, 26318), (95, 26345), (99, 26366), (100, 26372), (106, 26390), (134, 26423), (135, 26429), (144, 26477), (152, 26549), (160, 26591), (162, 26600),

Gene: Peel_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Peel_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Petra64142_37 Start: 32318, Stop: 33175, Start Num: 16

Candidate Starts for Petra64142_37:

(Start: 16 @32318 has 119 MA's), (21, 32357), (27, 32387), (30, 32408), (35, 32444), (39, 32474), (50, 32549), (57, 32597), (58, 32600), (62, 32624), (63, 32627), (67, 32642), (88, 32813), (110, 32912), (114, 32927), (120, 32942), (122, 32948), (133, 32990), (134, 32993), (144, 33047), (153, 33125), (161, 33158),

Gene: PetterN_9 Start: 5151, Stop: 5960, Start Num: 22

Candidate Starts for PetterN_9:

(14, 5088), (18, 5127), (Start: 22 @5151 has 196 MA's), (32, 5214), (40, 5280), (42, 5295), (48, 5328), (83, 5598), (88, 5640), (93, 5679), (95, 5697), (101, 5727), (160, 5925),

Gene: Phaja_35 Start: 32034, Stop: 32891, Start Num: 16

Candidate Starts for Phaja_35:

(Start: 16 @32034 has 119 MA's), (21, 32073), (27, 32103), (30, 32124), (35, 32160), (39, 32190), (50, 32265), (57, 32313), (58, 32316), (62, 32340), (63, 32343), (67, 32358), (88, 32529), (114, 32643), (120, 32658), (122, 32664), (133, 32706), (134, 32709), (144, 32763), (153, 32841), (161, 32874),

Gene: Pharb_30 Start: 26706, Stop: 27494, Start Num: 22

Candidate Starts for Pharb_30:

(Start: 16 @26661 has 119 MA's), (Start: 22 @26706 has 196 MA's), (30, 26751), (35, 26787), (42, 26844), (44, 26853), (50, 26889), (57, 26943), (61, 26967), (82, 27108), (89, 27171), (95, 27213), (99, 27234), (100, 27240), (106, 27258), (133, 27288), (147, 27357), (155, 27429), (160, 27459),

Gene: Pharsalus_36 Start: 32638, Stop: 33495, Start Num: 16

Candidate Starts for Pharsalus_36:

(Start: 16 @32638 has 119 MA's), (21, 32677), (27, 32707), (30, 32728), (35, 32764), (39, 32794), (50, 32869), (57, 32917), (58, 32920), (62, 32944), (63, 32947), (67, 32962), (88, 33133), (114, 33247), (120, 33262), (122, 33268), (133, 33310), (134, 33313), (144, 33367), (153, 33445), (161, 33478),

Gene: PhatBacter_35 Start: 31886, Stop: 32743, Start Num: 16

Candidate Starts for PhatBacter_35:

(Start: 16 @31886 has 119 MA's), (21, 31925), (27, 31955), (30, 31976), (35, 32012), (39, 32042), (50, 32117), (57, 32165), (58, 32168), (62, 32192), (63, 32195), (67, 32210), (88, 32381), (110, 32480), (114, 32495), (120, 32510), (122, 32516), (133, 32558), (134, 32561), (144, 32615), (153, 32693), (161, 32726),

Gene: Phaux_34 Start: 31884, Stop: 32741, Start Num: 16

Candidate Starts for Phaux_34:

(Start: 16 @31884 has 119 MA's), (21, 31923), (27, 31953), (30, 31974), (35, 32010), (39, 32040), (50, 32115), (57, 32163), (58, 32166), (62, 32190), (63, 32193), (67, 32208), (88, 32379), (110, 32478), (114, 32493), (120, 32508), (122, 32514), (133, 32556), (134, 32559), (144, 32613), (153, 32691), (161, 32724),

Gene: PhelpsODU_31 Start: 25890, Stop: 26633, Start Num: 22

Candidate Starts for PhelpsODU_31:

(17, 25863), (Start: 22 @25890 has 196 MA's), (28, 25932), (30, 25938), (35, 25974), (42, 26022), (44, 26031), (50, 26067), (55, 26109), (74, 26217), (89, 26352), (94, 26367), (95, 26379), (99, 26400), (104, 26418), (106, 26424), (144, 26502), (154, 26583), (159, 26604), (160, 26613),

Gene: Phillis_8 Start: 4833, Stop: 5642, Start Num: 22

Candidate Starts for Phillis_8:

(Start: 22 @4833 has 196 MA's), (35, 4917), (40, 4962), (50, 5022), (59, 5088), (88, 5322), (93, 5361), (95, 5379), (102, 5412), (109, 5430), (131, 5475), (145, 5499), (163, 5628),

Gene: Phlorence_8 Start: 5463, Stop: 6272, Start Num: 22

Candidate Starts for Phlorence_8:

(Start: 22 @5463 has 196 MA's), (32, 5526), (33, 5535), (36, 5556), (40, 5592), (48, 5640), (56, 5697), (60, 5721), (88, 5952), (95, 6009), (163, 6258),

Gene: Phrank_31 Start: 25840, Stop: 26583, Start Num: 22

Candidate Starts for Phrank_31:

(17, 25813), (Start: 22 @25840 has 196 MA's), (25, 25858), (28, 25882), (30, 25888), (35, 25924), (42, 25972), (44, 25981), (50, 26017), (55, 26059), (74, 26167), (89, 26302), (94, 26317), (95, 26329), (99,

26350), (103, 26365), (104, 26368), (106, 26374), (144, 26452), (154, 26533), (159, 26554), (160, 26563),

Gene: Phrux_35 Start: 31599, Stop: 32456, Start Num: 16

Candidate Starts for Phrux_35:

(Start: 16 @31599 has 119 MA's), (21, 31638), (27, 31668), (30, 31689), (35, 31725), (39, 31755), (50, 31830), (57, 31878), (58, 31881), (62, 31905), (63, 31908), (67, 31923), (88, 32094), (110, 32193), (114, 32208), (120, 32223), (122, 32229), (133, 32271), (134, 32274), (144, 32328), (153, 32406), (161, 32439),

Gene: Piatt_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Piatt_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: PickleBack_8 Start: 5173, Stop: 5982, Start Num: 22

Candidate Starts for PickleBack_8:

(Start: 22 @5173 has 196 MA's), (32, 5236), (33, 5245), (36, 5266), (40, 5302), (48, 5350), (56, 5407), (60, 5431), (88, 5662), (95, 5719), (163, 5968),

Gene: Pixie_31 Start: 26938, Stop: 27726, Start Num: 22

Candidate Starts for Pixie_31:

(17, 26914), (Start: 22 @26938 has 196 MA's), (30, 26983), (35, 27019), (42, 27076), (44, 27085), (50, 27121), (57, 27175), (61, 27199), (82, 27340), (95, 27445), (99, 27466), (100, 27472), (106, 27490), (133, 27520), (147, 27589), (155, 27661), (160, 27691),

Gene: Pokerus_30 Start: 26411, Stop: 27283, Start Num: 22

Candidate Starts for Pokerus_30:

(17, 26384), (Start: 22 @26411 has 196 MA's), (Start: 24 @26423 has 1 MA's), (35, 26492), (39, 26519), (42, 26549), (44, 26558), (50, 26594), (51, 26603), (55, 26636), (57, 26654), (63, 26684), (74, 26744), (89, 26879), (95, 26906), (99, 26927), (106, 26951), (123, 27002), (135, 27104), (141, 27140), (147, 27164), (160, 27263), (162, 27272),

Gene: Policronamos_36 Start: 31884, Stop: 32741, Start Num: 16

Candidate Starts for Policronamos_36:

(Start: 16 @31884 has 119 MA's), (21, 31923), (27, 31953), (30, 31974), (35, 32010), (39, 32040), (50, 32115), (57, 32163), (58, 32166), (62, 32190), (63, 32193), (67, 32208), (88, 32379), (110, 32478), (114, 32493), (120, 32508), (122, 32514), (133, 32556), (134, 32559), (144, 32613), (153, 32691), (161, 32724),

Gene: Porky_35 Start: 31695, Stop: 32552, Start Num: 16

Candidate Starts for Porky_35:

(Start: 16 @31695 has 119 MA's), (21, 31734), (27, 31764), (30, 31785), (35, 31821), (39, 31851), (50, 31926), (57, 31974), (58, 31977), (62, 32001), (63, 32004), (67, 32019), (88, 32190), (114, 32304), (120, 32319), (122, 32325), (133, 32367), (134, 32370), (144, 32424), (153, 32502), (161, 32535),

Gene: Prithvi_31 Start: 26427, Stop: 27299, Start Num: 22

Candidate Starts for Prithvi_31:

(17, 26400), (Start: 22 @26427 has 196 MA's), (Start: 24 @26439 has 1 MA's), (35, 26508), (39, 26535), (42, 26565), (44, 26574), (50, 26610), (51, 26619), (55, 26652), (57, 26670), (74, 26760), (89, 26895), (95, 26922), (99, 26943), (106, 26967), (123, 27018), (135, 27120), (141, 27156), (147,

27180), (160, 27279), (162, 27288),

Gene: Psycho_31 Start: 27156, Stop: 27917, Start Num: 22

Candidate Starts for Psycho_31:

(Start: 16 @27108 has 119 MA's), (Start: 22 @27156 has 196 MA's), (Start: 24 @27168 has 1 MA's), (26, 27174), (30, 27201), (35, 27237), (43, 27297), (44, 27303), (49, 27333), (50, 27339), (51, 27348), (55, 27381), (61, 27423), (62, 27426), (66, 27438), (70, 27474), (74, 27489), (77, 27525), (89, 27624), (95, 27651), (99, 27672), (135, 27735), (139, 27759), (144, 27783), (151, 27852), (160, 27897), (162, 27906),

Gene: Pumpkin_37 Start: 31935, Stop: 32792, Start Num: 16

Candidate Starts for Pumpkin_37:

(Start: 16 @31935 has 119 MA's), (21, 31974), (27, 32004), (30, 32025), (35, 32061), (39, 32091), (50, 32166), (57, 32214), (58, 32217), (62, 32241), (63, 32244), (67, 32259), (88, 32430), (114, 32544), (120, 32559), (122, 32565), (133, 32607), (134, 32610), (144, 32664), (153, 32742), (161, 32775),

Gene: Quallification_36 Start: 32064, Stop: 32921, Start Num: 16

Candidate Starts for Quallification_36:

(Start: 16 @32064 has 119 MA's), (21, 32103), (27, 32133), (30, 32154), (35, 32190), (39, 32220), (50, 32295), (57, 32343), (58, 32346), (62, 32370), (63, 32373), (67, 32388), (88, 32559), (114, 32673), (120, 32688), (122, 32694), (133, 32736), (134, 32739), (144, 32793), (153, 32871), (161, 32904),

Gene: QuincyRose_30 Start: 26474, Stop: 27346, Start Num: 22

Candidate Starts for QuincyRose_30:

(17, 26447), (Start: 22 @26474 has 196 MA's), (Start: 24 @26486 has 1 MA's), (35, 26555), (39, 26582), (42, 26612), (44, 26621), (50, 26657), (51, 26666), (55, 26699), (57, 26717), (63, 26747), (74, 26807), (89, 26942), (95, 26969), (99, 26990), (106, 27014), (123, 27065), (135, 27167), (141, 27203), (147, 27227), (160, 27326), (162, 27335),

Gene: Rakim_36 Start: 31964, Stop: 32821, Start Num: 16

Candidate Starts for Rakim_36:

(Start: 16 @31964 has 119 MA's), (21, 32003), (27, 32033), (30, 32054), (35, 32090), (39, 32120), (50, 32195), (57, 32243), (58, 32246), (62, 32270), (63, 32273), (67, 32288), (88, 32459), (114, 32573), (120, 32588), (122, 32594), (133, 32636), (134, 32639), (144, 32693), (153, 32771), (161, 32804),

Gene: Ramen_31 Start: 26460, Stop: 27332, Start Num: 22

Candidate Starts for Ramen_31:

(17, 26433), (Start: 22 @26460 has 196 MA's), (Start: 24 @26472 has 1 MA's), (35, 26541), (39, 26568), (42, 26598), (44, 26607), (50, 26643), (51, 26652), (55, 26685), (57, 26703), (63, 26733), (74, 26793), (89, 26928), (95, 26955), (99, 26976), (106, 27000), (135, 27153), (141, 27189), (160, 27312), (162, 27321),

Gene: Rando14_31 Start: 25909, Stop: 26766, Start Num: 22

Candidate Starts for Rando14_31:

(Start: 22 @25909 has 196 MA's), (Start: 24 @25921 has 1 MA's), (26, 25927), (28, 25948), (30, 25954), (34, 25984), (42, 26044), (44, 26053), (45, 26065), (51, 26098), (55, 26131), (63, 26179), (70, 26224), (82, 26311), (95, 26401), (99, 26422), (106, 26446), (114, 26473), (117, 26482), (123, 26497), (127, 26524), (135, 26584), (137, 26587), (141, 26620), (147, 26644), (151, 26701), (159, 26737), (160, 26746),

Gene: Rapunzel97_31 Start: 26461, Stop: 27333, Start Num: 22

Candidate Starts for Rapunzel97_31:

(17, 26434), (Start: 22 @26461 has 196 MA's), (Start: 24 @26473 has 1 MA's), (35, 26542), (39, 26569), (42, 26599), (44, 26608), (50, 26644), (51, 26653), (55, 26686), (57, 26704), (63, 26734), (73, 26791), (74, 26794), (89, 26929), (95, 26956), (99, 26977), (106, 27001), (123, 27052), (135, 27154), (141, 27190), (147, 27214), (160, 27313), (162, 27322),

Gene: Reptar3000_32 Start: 27365, Stop: 28156, Start Num: 19

Candidate Starts for Reptar3000_32:

(7, 27263), (9, 27281), (13, 27308), (Start: 19 @27365 has 20 MA's), (30, 27431), (33, 27455), (37, 27476), (38, 27485), (42, 27524), (44, 27533), (50, 27569), (51, 27578), (65, 27650), (89, 27857), (95, 27884), (99, 27905), (106, 27929), (144, 28007), (147, 28019), (155, 28091),

Gene: Rimmer_34 Start: 31424, Stop: 32281, Start Num: 16

Candidate Starts for Rimmer_34:

(Start: 16 @31424 has 119 MA's), (21, 31463), (27, 31493), (30, 31514), (35, 31550), (39, 31580), (50, 31655), (57, 31703), (58, 31706), (62, 31730), (63, 31733), (67, 31748), (88, 31919), (110, 32018), (114, 32033), (120, 32048), (122, 32054), (133, 32096), (134, 32099), (144, 32153), (153, 32231), (161, 32264),

Gene: RiverMonster_35 Start: 31613, Stop: 32470, Start Num: 16

Candidate Starts for RiverMonster_35:

(Start: 16 @31613 has 119 MA's), (21, 31652), (27, 31682), (30, 31703), (35, 31739), (39, 31769), (50, 31844), (57, 31892), (58, 31895), (62, 31919), (63, 31922), (67, 31937), (88, 32108), (114, 32222), (120, 32237), (122, 32243), (133, 32285), (134, 32288), (144, 32342), (153, 32420), (161, 32453),

Gene: Roary_8 Start: 4837, Stop: 5646, Start Num: 22

Candidate Starts for Roary_8:

(Start: 22 @4837 has 196 MA's), (35, 4921), (40, 4966), (59, 5092), (88, 5326), (93, 5365), (95, 5383), (102, 5416), (109, 5434), (131, 5479), (145, 5503), (163, 5632),

Gene: Rosmarinus_31 Start: 26482, Stop: 27354, Start Num: 22

Candidate Starts for Rosmarinus_31:

(4, 26152), (9, 26380), (17, 26455), (Start: 22 @26482 has 196 MA's), (Start: 24 @26494 has 1 MA's), (35, 26563), (39, 26590), (42, 26620), (44, 26629), (50, 26665), (51, 26674), (55, 26707), (57, 26725), (63, 26755), (74, 26815), (89, 26950), (95, 26977), (99, 26998), (106, 27022), (123, 27073), (135, 27175), (141, 27211), (147, 27235), (160, 27334), (162, 27343),

Gene: Ruthiejr_33 Start: 27519, Stop: 28310, Start Num: 19

Candidate Starts for Ruthiejr_33:

(Start: 19 @27519 has 20 MA's), (Start: 24 @27552 has 1 MA's), (30, 27585), (33, 27609), (37, 27630), (38, 27639), (41, 27669), (42, 27678), (44, 27687), (50, 27723), (65, 27804), (89, 28011), (95, 28038), (99, 28059), (103, 28074), (106, 28083), (134, 28107), (144, 28161), (147, 28173), (155, 28245),

Gene: Saints25_36 Start: 31516, Stop: 32373, Start Num: 16

Candidate Starts for Saints25_36:

(Start: 16 @31516 has 119 MA's), (21, 31555), (27, 31585), (30, 31606), (35, 31642), (39, 31672), (50, 31747), (57, 31795), (58, 31798), (62, 31822), (63, 31825), (67, 31840), (88, 32011), (114, 32125), (120, 32140), (122, 32146), (133, 32188), (134, 32191), (144, 32245), (153, 32323), (161, 32356),

Gene: Saintus_8 Start: 4850, Stop: 5659, Start Num: 22

Candidate Starts for Saintus_8:

(Start: 22 @4850 has 196 MA's), (35, 4934), (40, 4979), (59, 5105), (88, 5339), (93, 5378), (95, 5396), (102, 5429), (109, 5447), (145, 5516), (163, 5645),

Gene: SamScheppers_32 Start: 28032, Stop: 28823, Start Num: 19

Candidate Starts for SamScheppers_32:

(Start: 19 @28032 has 20 MA's), (Start: 24 @28065 has 1 MA's), (30, 28098), (33, 28122), (37, 28143), (38, 28152), (41, 28182), (42, 28191), (44, 28200), (50, 28236), (65, 28317), (89, 28524), (95, 28551), (99, 28572), (103, 28587), (106, 28596), (134, 28620), (144, 28674), (147, 28686), (155, 28758),

Gene: SamuelLPlaqson_31 Start: 26382, Stop: 27254, Start Num: 22

Candidate Starts for SamuelLPlaqson_31:

(9, 26280), (17, 26355), (Start: 22 @26382 has 196 MA's), (Start: 24 @26394 has 1 MA's), (35, 26463), (39, 26490), (42, 26520), (44, 26529), (50, 26565), (51, 26574), (55, 26607), (57, 26625), (74, 26715), (89, 26850), (95, 26877), (99, 26898), (106, 26922), (123, 26973), (135, 27075), (141, 27111), (147, 27135), (160, 27234), (162, 27243),

Gene: Sassay_34 Start: 31362, Stop: 32219, Start Num: 16

Candidate Starts for Sassay_34:

(Start: 16 @31362 has 119 MA's), (21, 31401), (27, 31431), (30, 31452), (35, 31488), (39, 31518), (50, 31593), (57, 31641), (58, 31644), (62, 31668), (63, 31671), (67, 31686), (88, 31857), (114, 31971), (120, 31986), (122, 31992), (133, 32034), (134, 32037), (144, 32091), (153, 32169), (161, 32202),

Gene: Scarlett_30 Start: 25696, Stop: 26436, Start Num: 22

Candidate Starts for Scarlett_30:

(17, 25669), (Start: 22 @25696 has 196 MA's), (30, 25741), (35, 25777), (44, 25834), (50, 25870), (55, 25912), (63, 25960), (74, 26020), (89, 26155), (95, 26182), (100, 26209), (106, 26227), (134, 26251), (141, 26293), (146, 26314), (147, 26317), (160, 26416),

Gene: Scorpia_9 Start: 5152, Stop: 5961, Start Num: 22

Candidate Starts for Scorpia_9:

(14, 5089), (18, 5128), (Start: 22 @5152 has 196 MA's), (32, 5215), (40, 5281), (42, 5296), (48, 5329), (83, 5599), (88, 5641), (93, 5680), (95, 5698), (101, 5728), (160, 5926),

Gene: SgtBeansprout_27 Start: 25978, Stop: 26736, Start Num: 22

Candidate Starts for SgtBeansprout_27:

(10, 25876), (Start: 16 @25930 has 119 MA's), (17, 25951), (Start: 22 @25978 has 196 MA's), (30, 26023), (35, 26059), (43, 26119), (44, 26125), (49, 26155), (55, 26203), (61, 26245), (74, 26311), (77, 26347), (89, 26446), (95, 26473), (99, 26494), (100, 26500), (130, 26539), (134, 26551), (135, 26557), (139, 26581), (144, 26605), (160, 26716), (162, 26725),

Gene: Shadow1_30 Start: 25713, Stop: 26456, Start Num: 22

Candidate Starts for Shadow1_30:

(9, 25611), (12, 25632), (Start: 16 @25665 has 119 MA's), (17, 25686), (Start: 22 @25713 has 196 MA's), (28, 25755), (30, 25761), (35, 25797), (42, 25845), (44, 25854), (50, 25890), (55, 25932), (74, 26040), (89, 26175), (94, 26190), (95, 26202), (99, 26223), (103, 26238), (106, 26247), (130, 26259), (144, 26325), (154, 26406), (159, 26427), (160, 26436),

Gene: ShamWow_35 Start: 31858, Stop: 32715, Start Num: 16

Candidate Starts for ShamWow_35:

(Start: 16 @31858 has 119 MA's), (21, 31897), (27, 31927), (30, 31948), (35, 31984), (39, 32014), (50, 32089), (57, 32137), (58, 32140), (62, 32164), (63, 32167), (67, 32182), (88, 32353), (110, 32452), (114, 32467), (120, 32482), (122, 32488), (133, 32530), (134, 32533), (144, 32587), (153, 32665), (161, 32698),

Gene: Shaobing_31 Start: 25850, Stop: 26611, Start Num: 22

Candidate Starts for Shaobing_31:

(17, 25820), (Start: 22 @25850 has 196 MA's), (30, 25895), (35, 25931), (43, 25991), (44, 25997), (49, 26027), (50, 26033), (51, 26042), (55, 26075), (61, 26117), (70, 26168), (74, 26183), (89, 26318), (95, 26345), (99, 26366), (100, 26372), (106, 26390), (134, 26423), (135, 26429), (144, 26477), (152, 26549), (160, 26591), (162, 26600),

Gene: ShedlockHolmes_32 Start: 27460, Stop: 28248, Start Num: 22

Candidate Starts for ShedlockHolmes_32:

(17, 27436), (Start: 22 @27460 has 196 MA's), (30, 27505), (35, 27541), (42, 27598), (44, 27607), (50, 27643), (57, 27697), (61, 27721), (82, 27862), (89, 27925), (95, 27967), (99, 27988), (100, 27994), (106, 28012), (133, 28042), (147, 28111), (155, 28183), (160, 28213),

Gene: ShereKhan_37 Start: 32841, Stop: 33698, Start Num: 16

Candidate Starts for ShereKhan_37:

(Start: 16 @32841 has 119 MA's), (21, 32880), (27, 32910), (30, 32931), (35, 32967), (39, 32997), (50, 33072), (57, 33120), (58, 33123), (62, 33147), (63, 33150), (67, 33165), (88, 33336), (114, 33450), (120, 33465), (122, 33471), (133, 33513), (134, 33516), (144, 33570), (153, 33648), (161, 33681),

Gene: ShiaSurprise_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for ShiaSurprise_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Simpliphy_36 Start: 31603, Stop: 32460, Start Num: 16

Candidate Starts for Simpliphy_36:

(Start: 16 @31603 has 119 MA's), (21, 31642), (27, 31672), (30, 31693), (35, 31729), (39, 31759), (50, 31834), (57, 31882), (58, 31885), (62, 31909), (63, 31912), (67, 31927), (88, 32098), (114, 32212), (120, 32227), (122, 32233), (133, 32275), (134, 32278), (144, 32332), (153, 32410), (161, 32443),

Gene: SirDuracell_34 Start: 30523, Stop: 31380, Start Num: 16

Candidate Starts for SirDuracell_34:

(Start: 16 @30523 has 119 MA's), (21, 30562), (27, 30592), (30, 30613), (35, 30649), (39, 30679), (50, 30754), (57, 30802), (58, 30805), (62, 30829), (63, 30832), (67, 30847), (88, 31018), (114, 31132), (120, 31147), (122, 31153), (133, 31195), (134, 31198), (144, 31252), (153, 31330), (161, 31363),

Gene: SirPhilip_30 Start: 25363, Stop: 26103, Start Num: 22

Candidate Starts for SirPhilip_30:

(Start: 22 @25363 has 196 MA's), (30, 25408), (35, 25444), (42, 25492), (44, 25501), (51, 25546), (55, 25579), (66, 25636), (73, 25684), (74, 25687), (82, 25759), (89, 25822), (94, 25837), (95, 25849), (104, 25888), (106, 25894), (141, 25960), (160, 26083), (162, 26092),

Gene: Slarp_32 Start: 27640, Stop: 28431, Start Num: 19

Candidate Starts for Slarp_32:

(Start: 19 @27640 has 20 MA's), (Start: 24 @27673 has 1 MA's), (30, 27706), (33, 27730), (37, 27751), (38, 27760), (41, 27790), (42, 27799), (44, 27808), (50, 27844), (65, 27925), (89, 28132), (95, 28159), (99, 28180), (106, 28204), (134, 28228), (144, 28282), (147, 28294), (155, 28366),

Gene: Slimphazie_31 Start: 26461, Stop: 27333, Start Num: 22

Candidate Starts for Slimphazie_31:

(17, 26434), (Start: 22 @26461 has 196 MA's), (Start: 24 @26473 has 1 MA's), (35, 26542), (39, 26569), (42, 26599), (44, 26608), (50, 26644), (51, 26653), (55, 26686), (57, 26704), (63, 26734), (73, 26791), (74, 26794), (89, 26929), (95, 26956), (99, 26977), (106, 27001), (123, 27052), (135, 27154), (141, 27190), (147, 27214), (160, 27313), (162, 27322),

Gene: Smeadley_8 Start: 4870, Stop: 5679, Start Num: 22

Candidate Starts for Smeadley_8:

(Start: 22 @4870 has 196 MA's), (35, 4954), (40, 4999), (50, 5059), (59, 5125), (88, 5359), (93, 5398), (95, 5416), (102, 5449), (109, 5467), (131, 5512), (145, 5536), (163, 5665),

Gene: SoSeph_30 Start: 27195, Stop: 28064, Start Num: 22

Candidate Starts for SoSeph_30:

(9, 27093), (Start: 16 @27147 has 119 MA's), (Start: 22 @27195 has 196 MA's), (Start: 24 @27207 has 1 MA's), (26, 27213), (30, 27240), (34, 27270), (35, 27276), (42, 27330), (44, 27339), (45, 27351), (51, 27384), (55, 27417), (63, 27465), (71, 27513), (82, 27597), (95, 27687), (98, 27705), (99, 27708), (119, 27771), (123, 27786), (126, 27810), (135, 27882), (141, 27918), (142, 27921), (147, 27942), (151, 27999), (159, 28035), (160, 28044), (162, 28053),

Gene: SophKB_35 Start: 31857, Stop: 32714, Start Num: 16

Candidate Starts for SophKB_35:

(Start: 16 @31857 has 119 MA's), (21, 31896), (27, 31926), (30, 31947), (35, 31983), (39, 32013), (50, 32088), (57, 32136), (58, 32139), (62, 32163), (63, 32166), (67, 32181), (88, 32352), (114, 32466), (120, 32481), (122, 32487), (133, 32529), (134, 32532), (144, 32586), (153, 32664), (161, 32697),

Gene: Sotrice96_35 Start: 31812, Stop: 32669, Start Num: 16

Candidate Starts for Sotrice96_35:

(Start: 16 @31812 has 119 MA's), (21, 31851), (27, 31881), (30, 31902), (35, 31938), (39, 31968), (50, 32043), (57, 32091), (58, 32094), (62, 32118), (63, 32121), (67, 32136), (88, 32307), (114, 32421), (120, 32436), (122, 32442), (133, 32484), (134, 32487), (144, 32541), (153, 32619), (161, 32652),

Gene: Spock_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Spock_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Stank_38 Start: 32364, Stop: 33221, Start Num: 16

Candidate Starts for Stank_38:

(Start: 16 @32364 has 119 MA's), (21, 32403), (27, 32433), (30, 32454), (35, 32490), (39, 32520), (50, 32595), (57, 32643), (58, 32646), (62, 32670), (63, 32673), (67, 32688), (88, 32859), (114, 32973), (120, 32988), (122, 32994), (133, 33036), (134, 33039), (144, 33093), (153, 33171), (161, 33204),

Gene: Stark_36 Start: 31616, Stop: 32473, Start Num: 16

Candidate Starts for Stark_36:

(Start: 16 @31616 has 119 MA's), (21, 31655), (27, 31685), (30, 31706), (35, 31742), (39, 31772), (50, 31847), (57, 31895), (58, 31898), (62, 31922), (63, 31925), (67, 31940), (88, 32111), (114, 32225), (120, 32240), (122, 32246), (133, 32288), (134, 32291), (144, 32345), (153, 32423), (161, 32456),

Gene: StellaBean_35 Start: 31857, Stop: 32714, Start Num: 16

Candidate Starts for StellaBean_35:

(Start: 16 @31857 has 119 MA's), (21, 31896), (27, 31926), (30, 31947), (35, 31983), (39, 32013), (50, 32088), (57, 32136), (58, 32139), (62, 32163), (63, 32166), (67, 32181), (88, 32352), (114, 32466),

(120, 32481), (122, 32487), (133, 32529), (134, 32532), (144, 32586), (153, 32664), (161, 32697),

Gene: Stephig9_8 Start: 4838, Stop: 5647, Start Num: 22

Candidate Starts for Stephig9_8:

(Start: 22 @4838 has 196 MA's), (35, 4922), (40, 4967), (50, 5027), (59, 5093), (88, 5327), (90, 5345), (93, 5366), (95, 5384), (102, 5417), (109, 5435), (131, 5480), (145, 5504), (163, 5633),

Gene: Stinson_32 Start: 26696, Stop: 27568, Start Num: 22

Candidate Starts for Stinson_32:

(17, 26669), (Start: 22 @26696 has 196 MA's), (Start: 24 @26708 has 1 MA's), (35, 26777), (39, 26804), (42, 26834), (44, 26843), (50, 26879), (51, 26888), (55, 26921), (57, 26939), (74, 27029), (89, 27164), (95, 27191), (99, 27212), (106, 27236), (123, 27287), (135, 27389), (141, 27425), (147, 27449), (160, 27548), (162, 27557),

Gene: StolenFromERC_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for StolenFromERC_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Sulley_31 Start: 26427, Stop: 27299, Start Num: 22

Candidate Starts for Sulley_31:

(4, 26097), (9, 26325), (17, 26400), (Start: 22 @26427 has 196 MA's), (Start: 24 @26439 has 1 MA's), (35, 26508), (39, 26535), (42, 26565), (44, 26574), (50, 26610), (51, 26619), (55, 26652), (57, 26670), (63, 26700), (74, 26760), (89, 26895), (95, 26922), (99, 26943), (106, 26967), (123, 27018), (135, 27120), (141, 27156), (147, 27180), (160, 27279), (162, 27288),

Gene: Sunflower1121_30 Start: 25725, Stop: 26468, Start Num: 22

Candidate Starts for Sunflower1121_30:

(9, 25623), (12, 25644), (Start: 16 @25677 has 119 MA's), (17, 25698), (Start: 22 @25725 has 196 MA's), (28, 25767), (30, 25773), (35, 25809), (42, 25857), (44, 25866), (50, 25902), (55, 25944), (74, 26052), (89, 26187), (94, 26202), (95, 26214), (99, 26235), (103, 26250), (106, 26259), (130, 26271), (144, 26337), (154, 26418), (159, 26439), (160, 26448),

Gene: Swirley_8 Start: 5325, Stop: 6134, Start Num: 22

Candidate Starts for Swirley_8:

(Start: 22 @5325 has 196 MA's), (32, 5388), (33, 5397), (40, 5454), (48, 5502), (60, 5583), (83, 5772), (88, 5814), (95, 5871), (105, 5913), (163, 6120),

Gene: SydNat_8 Start: 5432, Stop: 6241, Start Num: 22

Candidate Starts for SydNat_8:

(Start: 22 @5432 has 196 MA's), (32, 5495), (33, 5504), (40, 5561), (48, 5609), (56, 5666), (60, 5690), (83, 5879), (88, 5921), (95, 5978), (163, 6227),

Gene: Syra333_31 Start: 25735, Stop: 26478, Start Num: 22

Candidate Starts for Syra333_31:

(17, 25708), (Start: 22 @25735 has 196 MA's), (28, 25777), (30, 25783), (35, 25819), (42, 25867), (44, 25876), (50, 25912), (55, 25954), (74, 26062), (89, 26197), (94, 26212), (95, 26224), (99, 26245), (103, 26260), (106, 26269), (130, 26281), (154, 26428), (159, 26449), (160, 26458),

Gene: TBond007_31 Start: 26937, Stop: 27725, Start Num: 22

Candidate Starts for TBond007_31:

(17, 26913), (Start: 22 @26937 has 196 MA's), (30, 26982), (35, 27018), (42, 27075), (44, 27084), (50, 27120), (57, 27174), (61, 27198), (82, 27339), (89, 27402), (95, 27444), (99, 27465), (100, 27471), (106, 27489), (133, 27519), (147, 27588), (155, 27660), (160, 27690),

Gene: TBrady12_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for TBrady12_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: TClif_33 Start: 26185, Stop: 27048, Start Num: 23

Candidate Starts for TClif_33:

(9, 26083), (12, 26104), (Start: 16 @26137 has 119 MA's), (17, 26158), (Start: 23 @26185 has 4 MA's), (Start: 24 @26197 has 1 MA's), (30, 26230), (35, 26266), (42, 26314), (44, 26323), (51, 26368), (55, 26401), (70, 26494), (74, 26509), (89, 26644), (95, 26671), (99, 26692), (106, 26716), (112, 26737), (134, 26863), (135, 26869), (142, 26908), (160, 27028), (162, 27037),

Gene: Tachez_31 Start: 26423, Stop: 27295, Start Num: 22

Candidate Starts for Tachez_31:

(17, 26396), (Start: 22 @26423 has 196 MA's), (Start: 24 @26435 has 1 MA's), (35, 26504), (39, 26531), (42, 26561), (44, 26570), (50, 26606), (51, 26615), (55, 26648), (57, 26666), (63, 26696), (73, 26753), (74, 26756), (89, 26891), (95, 26918), (99, 26939), (106, 26963), (123, 27014), (135, 27116), (141, 27152), (147, 27176), (160, 27275), (162, 27284),

Gene: TaiwanKao_32 Start: 26427, Stop: 27299, Start Num: 22

Candidate Starts for TaiwanKao_32:

(17, 26400), (Start: 22 @26427 has 196 MA's), (Start: 24 @26439 has 1 MA's), (35, 26508), (39, 26535), (42, 26565), (44, 26574), (50, 26610), (51, 26619), (55, 26652), (57, 26670), (74, 26760), (89, 26895), (95, 26922), (99, 26943), (106, 26967), (123, 27018), (128, 27069), (135, 27120), (141, 27156), (147, 27180), (160, 27279), (162, 27288),

Gene: Taquito_32 Start: 28079, Stop: 28870, Start Num: 19

Candidate Starts for Taquito_32:

(Start: 19 @28079 has 20 MA's), (Start: 24 @28112 has 1 MA's), (30, 28145), (33, 28169), (37, 28190), (38, 28199), (41, 28229), (42, 28238), (44, 28247), (50, 28283), (65, 28364), (89, 28571), (95, 28598), (99, 28619), (103, 28634), (106, 28643), (134, 28667), (144, 28721), (147, 28733), (155, 28805),

Gene: Tarkin_37 Start: 32847, Stop: 33704, Start Num: 16

Candidate Starts for Tarkin_37:

(Start: 16 @32847 has 119 MA's), (21, 32886), (27, 32916), (30, 32937), (35, 32973), (39, 33003), (50, 33078), (57, 33126), (58, 33129), (62, 33153), (63, 33156), (67, 33171), (88, 33342), (114, 33456), (120, 33471), (122, 33477), (133, 33519), (134, 33522), (144, 33576), (153, 33654), (161, 33687),

Gene: Tarynearal_7 Start: 5352, Stop: 6161, Start Num: 22

Candidate Starts for Tarynearal_7:

(Start: 22 @5352 has 196 MA's), (32, 5415), (33, 5424), (40, 5481), (48, 5529), (60, 5610), (83, 5799), (88, 5841), (95, 5898), (105, 5940), (163, 6147),

Gene: TeardropMSU_34 Start: 31758, Stop: 32615, Start Num: 16

Candidate Starts for TeardropMSU_34:

(Start: 16 @31758 has 119 MA's), (21, 31797), (27, 31827), (30, 31848), (35, 31884), (39, 31914), (50, 31989), (57, 32037), (58, 32040), (62, 32064), (63, 32067), (67, 32082), (88, 32253), (114, 32367),

(120, 32382), (122, 32388), (133, 32430), (134, 32433), (144, 32487), (153, 32565), (161, 32598),

Gene: Teaspoon_36 Start: 31811, Stop: 32668, Start Num: 16

Candidate Starts for Teaspoon_36:

(Start: 16 @31811 has 119 MA's), (21, 31850), (27, 31880), (30, 31901), (35, 31937), (39, 31967), (50, 32042), (57, 32090), (58, 32093), (62, 32117), (63, 32120), (67, 32135), (88, 32306), (114, 32420), (120, 32435), (122, 32441), (133, 32483), (134, 32486), (144, 32540), (153, 32618), (161, 32651),

Gene: Terminus_35 Start: 31945, Stop: 32802, Start Num: 16

Candidate Starts for Terminus_35:

(Start: 16 @31945 has 119 MA's), (21, 31984), (27, 32014), (30, 32035), (35, 32071), (39, 32101), (50, 32176), (57, 32224), (58, 32227), (62, 32251), (63, 32254), (67, 32269), (88, 32440), (114, 32554), (120, 32569), (122, 32575), (133, 32617), (134, 32620), (144, 32674), (153, 32752), (161, 32785),

Gene: Theia_7 Start: 5291, Stop: 6100, Start Num: 22

Candidate Starts for Theia_7:

(Start: 22 @5291 has 196 MA's), (32, 5354), (33, 5363), (40, 5420), (48, 5468), (83, 5738), (88, 5780), (95, 5837), (105, 5879), (163, 6086),

Gene: Thresher_36 Start: 32612, Stop: 33469, Start Num: 16

Candidate Starts for Thresher_36:

(Start: 16 @32612 has 119 MA's), (21, 32651), (27, 32681), (30, 32702), (35, 32738), (39, 32768), (50, 32843), (57, 32891), (58, 32894), (62, 32918), (63, 32921), (67, 32936), (88, 33107), (114, 33221), (120, 33236), (122, 33242), (133, 33284), (134, 33287), (144, 33341), (153, 33419), (161, 33452),

Gene: Thyatira_30 Start: 27046, Stop: 27918, Start Num: 22

Candidate Starts for Thyatira_30:

(9, 26944), (Start: 16 @26998 has 119 MA's), (Start: 22 @27046 has 196 MA's), (Start: 24 @27058 has 1 MA's), (25, 27061), (26, 27064), (30, 27091), (34, 27121), (35, 27127), (42, 27181), (44, 27190), (45, 27202), (51, 27235), (55, 27268), (63, 27316), (75, 27385), (84, 27469), (95, 27538), (98, 27556), (99, 27559), (117, 27619), (126, 27664), (135, 27736), (141, 27772), (142, 27775), (147, 27796), (151, 27853), (159, 27889), (160, 27898), (162, 27907),

Gene: Tierra_31 Start: 26561, Stop: 27304, Start Num: 22

Candidate Starts for Tierra_31:

(17, 26534), (Start: 22 @26561 has 196 MA's), (25, 26579), (28, 26603), (30, 26609), (35, 26645), (42, 26693), (44, 26702), (50, 26738), (55, 26780), (74, 26888), (89, 27023), (94, 27038), (95, 27050), (99, 27071), (103, 27086), (104, 27089), (106, 27095), (144, 27173), (154, 27254), (159, 27275), (160, 27284),

Gene: Tiger_8 Start: 5172, Stop: 5981, Start Num: 22

Candidate Starts for Tiger_8:

(Start: 22 @5172 has 196 MA's), (32, 5235), (33, 5244), (36, 5265), (40, 5301), (48, 5349), (56, 5406), (60, 5430), (88, 5661), (95, 5718), (163, 5967),

Gene: TiniBug_31 Start: 26379, Stop: 27251, Start Num: 22

Candidate Starts for TiniBug_31:

(9, 26277), (17, 26352), (Start: 22 @26379 has 196 MA's), (Start: 24 @26391 has 1 MA's), (35, 26460), (39, 26487), (42, 26517), (44, 26526), (50, 26562), (51, 26571), (55, 26604), (57, 26622), (74, 26712), (89, 26847), (95, 26874), (99, 26895), (106, 26919), (134, 27066), (135, 27072), (141, 27108), (147, 27132), (160, 27231), (162, 27240),

Gene: TipsytheTRex_10 Start: 5561, Stop: 6493, Start Num: 23

Candidate Starts for TopsytheTRex_10:

(Start: 23 @5561 has 4 MA's), (36, 5651), (40, 5687), (48, 5735), (74, 5888), (88, 6035), (89, 6047), (93, 6074), (115, 6167), (121, 6182), (125, 6203), (136, 6308), (139, 6332),

Gene: Tiri_31 Start: 26466, Stop: 27338, Start Num: 22

Candidate Starts for Tiri_31:

(17, 26439), (Start: 22 @26466 has 196 MA's), (Start: 24 @26478 has 1 MA's), (35, 26547), (39, 26574), (42, 26604), (44, 26613), (50, 26649), (51, 26658), (55, 26691), (57, 26709), (63, 26739), (74, 26799), (89, 26934), (95, 26961), (99, 26982), (106, 27006), (123, 27057), (135, 27159), (141, 27195), (147, 27219), (160, 27318), (162, 27327),

Gene: Tomaszewski_34 Start: 31455, Stop: 32312, Start Num: 16

Candidate Starts for Tomaszewski_34:

(Start: 16 @31455 has 119 MA's), (21, 31494), (27, 31524), (30, 31545), (35, 31581), (39, 31611), (50, 31686), (57, 31734), (58, 31737), (62, 31761), (63, 31764), (67, 31779), (88, 31950), (114, 32064), (120, 32079), (122, 32085), (133, 32127), (134, 32130), (144, 32184), (153, 32262), (161, 32295),

Gene: Topper_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Topper_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Toto_35 Start: 31858, Stop: 32715, Start Num: 16

Candidate Starts for Toto_35:

(Start: 16 @31858 has 119 MA's), (21, 31897), (27, 31927), (30, 31948), (35, 31984), (39, 32014), (50, 32089), (57, 32137), (58, 32140), (62, 32164), (63, 32167), (67, 32182), (88, 32353), (110, 32452), (114, 32467), (120, 32482), (122, 32488), (133, 32530), (134, 32533), (144, 32587), (153, 32665), (161, 32698),

Gene: Traaww1_33 Start: 31496, Stop: 32353, Start Num: 16

Candidate Starts for Traaww1_33:

(Start: 16 @31496 has 119 MA's), (21, 31535), (27, 31565), (30, 31586), (35, 31622), (39, 31652), (50, 31727), (57, 31775), (58, 31778), (62, 31802), (63, 31805), (67, 31820), (88, 31991), (114, 32105), (120, 32120), (122, 32126), (133, 32168), (134, 32171), (144, 32225), (153, 32303), (161, 32336),

Gene: TreyKay_31 Start: 26427, Stop: 27299, Start Num: 22

Candidate Starts for TreyKay_31:

(17, 26400), (Start: 22 @26427 has 196 MA's), (Start: 24 @26439 has 1 MA's), (35, 26508), (39, 26535), (42, 26565), (44, 26574), (50, 26610), (51, 26619), (55, 26652), (57, 26670), (74, 26760), (89, 26895), (95, 26922), (99, 26943), (106, 26967), (123, 27018), (135, 27120), (141, 27156), (147, 27180), (160, 27279), (162, 27288),

Gene: TribbleTrouble_30 Start: 26988, Stop: 27776, Start Num: 22

Candidate Starts for TribbleTrouble_30:

(Start: 16 @26943 has 119 MA's), (Start: 22 @26988 has 196 MA's), (30, 27033), (35, 27069), (42, 27126), (44, 27135), (57, 27225), (61, 27249), (82, 27390), (89, 27453), (95, 27495), (98, 27513), (99, 27516), (100, 27522), (106, 27540), (133, 27570), (147, 27639), (155, 27711), (160, 27741),

Gene: TruffulaTree_31 Start: 26457, Stop: 27329, Start Num: 22

Candidate Starts for TruffulaTree_31:

(4, 26127), (9, 26355), (17, 26430), (Start: 22 @26457 has 196 MA's), (Start: 24 @26469 has 1 MA's), (35, 26538), (39, 26565), (42, 26595), (44, 26604), (50, 26640), (51, 26649), (55, 26682), (57, 26700), (63, 26730), (73, 26787), (74, 26790), (89, 26925), (95, 26952), (99, 26973), (106, 26997), (123, 27048), (135, 27150), (141, 27186), (147, 27210), (160, 27309), (162, 27318),

Gene: Tuco_36 Start: 32366, Stop: 33223, Start Num: 16

Candidate Starts for Tuco_36:

(Start: 16 @32366 has 119 MA's), (21, 32405), (27, 32435), (30, 32456), (35, 32492), (39, 32522), (50, 32597), (57, 32645), (58, 32648), (62, 32672), (63, 32675), (67, 32690), (88, 32861), (114, 32975), (120, 32990), (122, 32996), (133, 33038), (134, 33041), (144, 33095), (153, 33173), (161, 33206),

Gene: Twitch_31 Start: 26494, Stop: 27366, Start Num: 22

Candidate Starts for Twitch_31:

(4, 26164), (9, 26392), (17, 26467), (Start: 22 @26494 has 196 MA's), (Start: 24 @26506 has 1 MA's), (35, 26575), (39, 26602), (42, 26632), (44, 26641), (50, 26677), (51, 26686), (55, 26719), (57, 26737), (63, 26767), (74, 26827), (89, 26962), (95, 26989), (99, 27010), (106, 27034), (123, 27085), (135, 27187), (141, 27223), (147, 27247), (160, 27346), (162, 27355),

Gene: Ukulele_35 Start: 31616, Stop: 32473, Start Num: 16

Candidate Starts for Ukulele_35:

(Start: 16 @31616 has 119 MA's), (21, 31655), (27, 31685), (30, 31706), (35, 31742), (39, 31772), (50, 31847), (57, 31895), (58, 31898), (62, 31922), (63, 31925), (67, 31940), (88, 32111), (114, 32225), (120, 32240), (122, 32246), (133, 32288), (134, 32291), (144, 32345), (153, 32423), (161, 32456),

Gene: Unicorn_31 Start: 25890, Stop: 26633, Start Num: 22

Candidate Starts for Unicorn_31:

(17, 25863), (Start: 22 @25890 has 196 MA's), (28, 25932), (30, 25938), (35, 25974), (42, 26022), (44, 26031), (50, 26067), (55, 26109), (74, 26217), (89, 26352), (94, 26367), (95, 26379), (99, 26400), (104, 26418), (106, 26424), (144, 26502), (154, 26583), (159, 26604), (160, 26613),

Gene: UnionJack_8 Start: 4891, Stop: 5700, Start Num: 22

Candidate Starts for UnionJack_8:

(Start: 22 @4891 has 196 MA's), (33, 4963), (40, 5020), (48, 5068), (60, 5149), (83, 5338), (88, 5380), (95, 5437), (163, 5686),

Gene: Urkel_31 Start: 26382, Stop: 27254, Start Num: 22

Candidate Starts for Urkel_31:

(9, 26280), (17, 26355), (Start: 22 @26382 has 196 MA's), (Start: 24 @26394 has 1 MA's), (35, 26463), (39, 26490), (42, 26520), (44, 26529), (50, 26565), (51, 26574), (55, 26607), (57, 26625), (74, 26715), (89, 26850), (95, 26877), (99, 26898), (106, 26922), (123, 26973), (135, 27075), (141, 27111), (147, 27135), (160, 27234), (162, 27243),

Gene: Validus_31 Start: 25785, Stop: 26546, Start Num: 22

Candidate Starts for Validus_31:

(Start: 22 @25785 has 196 MA's), (30, 25830), (35, 25866), (44, 25932), (49, 25962), (50, 25968), (51, 25977), (55, 26010), (61, 26052), (70, 26103), (74, 26118), (89, 26253), (95, 26280), (99, 26301), (100, 26307), (106, 26325), (134, 26358), (135, 26364), (144, 26412), (151, 26481), (160, 26526), (162, 26535),

Gene: Veliki_31 Start: 26497, Stop: 27369, Start Num: 22

Candidate Starts for Veliki_31:

(17, 26470), (Start: 22 @26497 has 196 MA's), (Start: 24 @26509 has 1 MA's), (35, 26578), (39, 26605), (42, 26635), (44, 26644), (50, 26680), (51, 26689), (55, 26722), (57, 26740), (63, 26770), (73,

26827), (74, 26830), (89, 26965), (95, 26992), (99, 27013), (106, 27037), (123, 27088), (135, 27190), (141, 27226), (147, 27250), (160, 27349), (162, 27358),

Gene: Waterfoul_30 Start: 27070, Stop: 27942, Start Num: 22

Candidate Starts for Waterfoul_30:

(9, 26968), (Start: 16 @27022 has 119 MA's), (Start: 22 @27070 has 196 MA's), (Start: 24 @27082 has 1 MA's), (25, 27085), (26, 27088), (30, 27115), (34, 27145), (35, 27151), (42, 27205), (44, 27214), (45, 27226), (49, 27244), (51, 27259), (55, 27292), (57, 27310), (63, 27340), (75, 27409), (95, 27562), (98, 27580), (99, 27583), (117, 27643), (123, 27661), (126, 27688), (135, 27760), (138, 27775), (141, 27796), (142, 27799), (147, 27820), (159, 27913), (160, 27922), (162, 27931),

Gene: Wiggin_38 Start: 32362, Stop: 33219, Start Num: 16

Candidate Starts for Wiggin_38:

(Start: 16 @32362 has 119 MA's), (21, 32401), (27, 32431), (30, 32452), (35, 32488), (39, 32518), (50, 32593), (57, 32641), (58, 32644), (62, 32668), (63, 32671), (67, 32686), (88, 32857), (114, 32971), (120, 32986), (122, 32992), (133, 33034), (134, 33037), (144, 33091), (153, 33169), (161, 33202),

Gene: Willez_34 Start: 31362, Stop: 32219, Start Num: 16

Candidate Starts for Willez_34:

(Start: 16 @31362 has 119 MA's), (21, 31401), (27, 31431), (30, 31452), (35, 31488), (39, 31518), (50, 31593), (57, 31641), (58, 31644), (62, 31668), (63, 31671), (67, 31686), (88, 31857), (114, 31971), (120, 31986), (122, 31992), (133, 32034), (134, 32037), (144, 32091), (153, 32169), (161, 32202),

Gene: Wintermute_32 Start: 27629, Stop: 28420, Start Num: 19

Candidate Starts for Wintermute_32:

(Start: 19 @27629 has 20 MA's), (Start: 24 @27662 has 1 MA's), (30, 27695), (33, 27719), (37, 27740), (42, 27788), (44, 27797), (50, 27833), (65, 27914), (89, 28121), (95, 28148), (97, 28154), (99, 28169), (106, 28193), (134, 28217), (138, 28238), (144, 28271), (147, 28283), (155, 28355),

Gene: Xandras_37 Start: 31848, Stop: 32705, Start Num: 16

Candidate Starts for Xandras_37:

(Start: 16 @31848 has 119 MA's), (21, 31887), (27, 31917), (30, 31938), (35, 31974), (39, 32004), (50, 32079), (57, 32127), (58, 32130), (62, 32154), (63, 32157), (67, 32172), (88, 32343), (114, 32457), (120, 32472), (122, 32478), (133, 32520), (134, 32523), (144, 32577), (153, 32655), (161, 32688),

Gene: Ximenita_32 Start: 25917, Stop: 26660, Start Num: 22

Candidate Starts for Ximenita_32:

(17, 25890), (Start: 22 @25917 has 196 MA's), (28, 25959), (30, 25965), (35, 26001), (42, 26049), (44, 26058), (50, 26094), (55, 26136), (74, 26244), (89, 26379), (94, 26394), (95, 26406), (99, 26427), (103, 26442), (106, 26451), (154, 26610), (159, 26631), (160, 26640),

Gene: Y10_32 Start: 27629, Stop: 28420, Start Num: 19

Candidate Starts for Y10_32:

(Start: 19 @27629 has 20 MA's), (Start: 24 @27662 has 1 MA's), (30, 27695), (33, 27719), (37, 27740), (42, 27788), (44, 27797), (50, 27833), (65, 27914), (89, 28121), (95, 28148), (97, 28154), (99, 28169), (106, 28193), (134, 28217), (138, 28238), (144, 28271), (147, 28283), (155, 28355),

Gene: Y2_32 Start: 27629, Stop: 28420, Start Num: 19

Candidate Starts for Y2_32:

(Start: 19 @27629 has 20 MA's), (Start: 24 @27662 has 1 MA's), (30, 27695), (33, 27719), (37, 27740), (42, 27788), (44, 27797), (50, 27833), (65, 27914), (89, 28121), (95, 28148), (97, 28154), (99, 28169), (106, 28193), (134, 28217), (138, 28238), (144, 28271), (147, 28283), (155, 28355),

Gene: YassJohnny_36 Start: 32373, Stop: 33230, Start Num: 16

Candidate Starts for YassJohnny_36:

(Start: 16 @32373 has 119 MA's), (21, 32412), (27, 32442), (30, 32463), (35, 32499), (39, 32529), (50, 32604), (57, 32652), (58, 32655), (62, 32679), (63, 32682), (67, 32697), (88, 32868), (114, 32982), (120, 32997), (122, 33003), (133, 33045), (134, 33048), (144, 33102), (153, 33180), (161, 33213),

Gene: Youngblood_35 Start: 32018, Stop: 32875, Start Num: 16

Candidate Starts for Youngblood_35:

(Start: 16 @32018 has 119 MA's), (21, 32057), (27, 32087), (30, 32108), (35, 32144), (39, 32174), (50, 32249), (57, 32297), (58, 32300), (62, 32324), (63, 32327), (67, 32342), (88, 32513), (114, 32627), (120, 32642), (122, 32648), (133, 32690), (134, 32693), (144, 32747), (153, 32825), (161, 32858),

Gene: YoureAdopted_30 Start: 26430, Stop: 27302, Start Num: 22

Candidate Starts for YoureAdopted_30:

(4, 26100), (9, 26328), (17, 26403), (Start: 22 @26430 has 196 MA's), (Start: 24 @26442 has 1 MA's), (35, 26511), (39, 26538), (42, 26568), (44, 26577), (50, 26613), (55, 26655), (57, 26673), (63, 26703), (74, 26763), (89, 26898), (95, 26925), (99, 26946), (106, 26970), (123, 27021), (135, 27123), (141, 27159), (147, 27183), (160, 27282), (162, 27291),

Gene: Yuna_32 Start: 26320, Stop: 27069, Start Num: 22

Candidate Starts for Yuna_32:

(9, 26218), (12, 26239), (Start: 16 @26272 has 119 MA's), (17, 26293), (Start: 22 @26320 has 196 MA's), (Start: 24 @26332 has 1 MA's), (25, 26335), (28, 26359), (30, 26365), (35, 26401), (42, 26449), (44, 26458), (51, 26503), (55, 26536), (63, 26584), (76, 26671), (89, 26779), (95, 26806), (99, 26827), (106, 26851), (141, 26926), (147, 26950), (150, 26998), (159, 27040), (160, 27049),

Gene: Yunkel11_31 Start: 25718, Stop: 26587, Start Num: 22

Candidate Starts for Yunkel11_31:

(Start: 16 @25670 has 119 MA's), (17, 25691), (Start: 22 @25718 has 196 MA's), (Start: 24 @25730 has 1 MA's), (28, 25757), (30, 25763), (34, 25793), (35, 25799), (44, 25862), (50, 25898), (51, 25907), (55, 25940), (63, 25988), (75, 26057), (95, 26210), (99, 26231), (106, 26255), (111, 26273), (119, 26294), (126, 26333), (135, 26408), (141, 26444), (154, 26537), (160, 26567), (162, 26576),

Gene: Zabiza_32 Start: 26461, Stop: 27333, Start Num: 22

Candidate Starts for Zabiza_32:

(17, 26434), (Start: 22 @26461 has 196 MA's), (Start: 24 @26473 has 1 MA's), (35, 26542), (39, 26569), (42, 26599), (44, 26608), (50, 26644), (51, 26653), (55, 26686), (57, 26704), (63, 26734), (73, 26791), (74, 26794), (89, 26929), (95, 26956), (99, 26977), (106, 27001), (123, 27052), (135, 27154), (141, 27190), (147, 27214), (160, 27313), (162, 27322),

Gene: Zavala_31 Start: 26436, Stop: 27308, Start Num: 22

Candidate Starts for Zavala_31:

(17, 26409), (Start: 22 @26436 has 196 MA's), (Start: 24 @26448 has 1 MA's), (35, 26517), (39, 26544), (42, 26574), (44, 26583), (50, 26619), (51, 26628), (55, 26661), (57, 26679), (63, 26709), (74, 26769), (89, 26904), (95, 26931), (99, 26952), (106, 26976), (123, 27027), (135, 27129), (141, 27165), (147, 27189), (160, 27288), (162, 27297),

Gene: Zolita_7 Start: 5433, Stop: 6242, Start Num: 22

Candidate Starts for Zolita_7:

(Start: 22 @5433 has 196 MA's), (32, 5496), (33, 5505), (40, 5562), (48, 5610), (56, 5667), (60, 5691), (83, 5880), (88, 5922), (95, 5979), (163, 6228),

Gene: xkcd_36 Start: 32027, Stop: 32884, Start Num: 16

Candidate Starts for xkcd_36:

(Start: 16 @32027 has 119 MA's), (21, 32066), (27, 32096), (30, 32117), (35, 32153), (39, 32183), (50, 32258), (57, 32306), (58, 32309), (62, 32333), (63, 32336), (67, 32351), (88, 32522), (110, 32621), (114, 32636), (120, 32651), (122, 32657), (133, 32699), (134, 32702), (144, 32756), (153, 32834), (161, 32867),