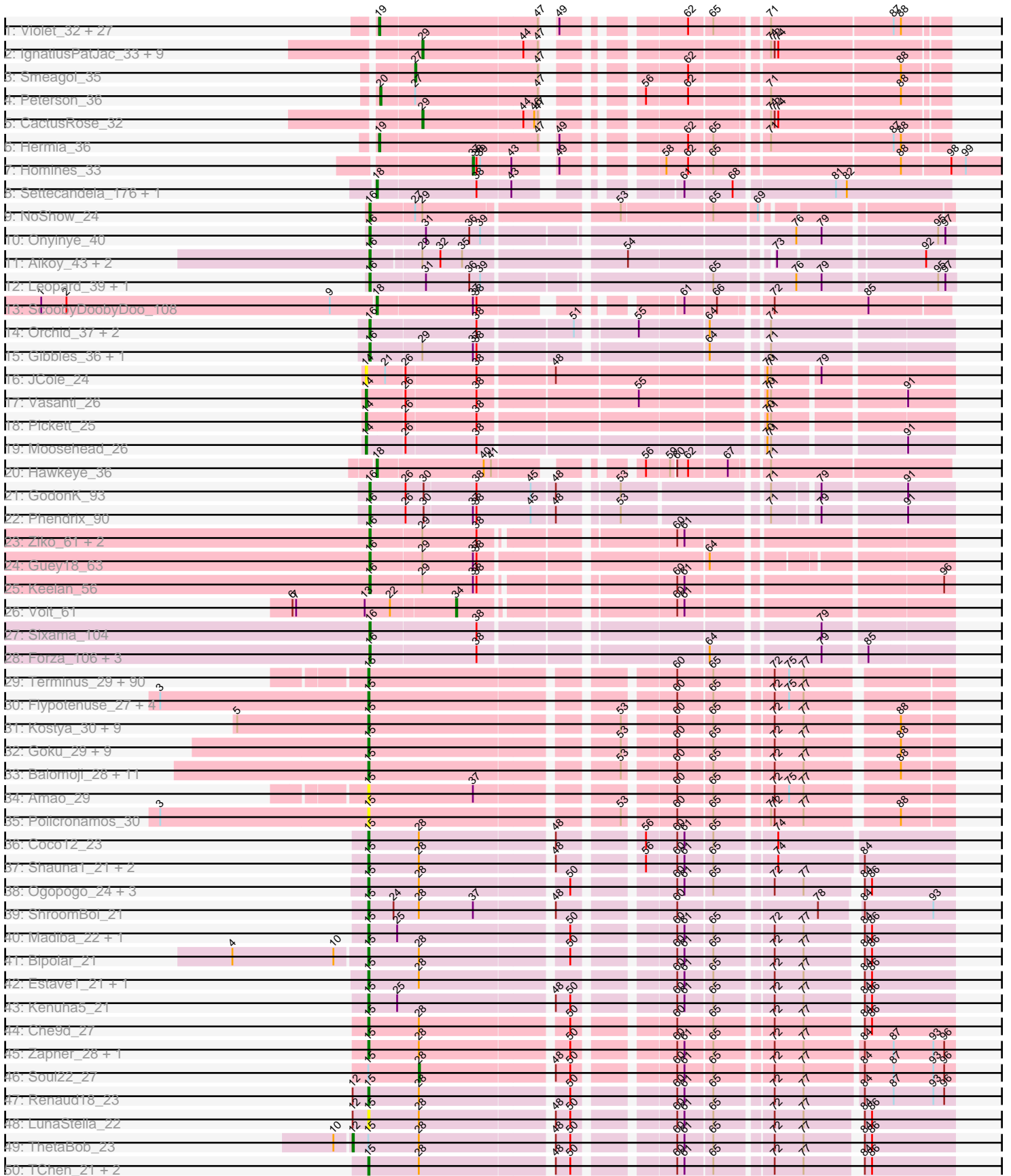


Pham 163286



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 163286 Report

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

Pham number 163286 has 336 members, 31 are drafts.

Phages represented in each track:

- Track 1 : Violet_32, MetalQZJ_33, Euphoria_33, Eyeball_33, Graduation_35, SwissCheese_35, PherrisBueller_34, Kenmech_36, Forsytheast_33, BaconJack_36, ILeeKay_35, Bones_33, RidgeCB_33, MaryBeth_33, Bruns_32, Corvo_34, GrecoEtereo_35, Dreamboat_34, Hope4ever_33, Licorice_35, Abbyshoes_35, Jasper_34, Dussy_34, Cueyllyss_33, Tripl3t_34, Papez_35, Moose_33, Beatrix_33
- Track 2 : IgnatiusPatJac_33, HarryOW_34, HanShotFirst_33, LilBib_34, Topgun_33, Smairt_34, Wilkins_33, Dexes_34, JC27_35, Pelly_34
- Track 3 : Smeagol_35
- Track 4 : Peterson_36
- Track 5 : CactusRose_32
- Track 6 : Hermia_36
- Track 7 : Homines_33
- Track 8 : Settecandela_176, Phrappuccino_176
- Track 9 : NoShow_24
- Track 10 : Onyinye_40
- Track 11 : Aikoy_43, Leopard_43, Onyinye_44
- Track 12 : Leopard_39, Aikoy_39
- Track 13 : ScoobyDoobyDoo_108
- Track 14 : Orchid_37, PatrickStar_38, Kampe_38
- Track 15 : Gibbles_36, RobinSparkles_40
- Track 16 : JCole_24
- Track 17 : Vasanti_26
- Track 18 : Pickett_25
- Track 19 : Moosehead_26
- Track 20 : Hawkeye_36
- Track 21 : GodonK_93
- Track 22 : Phendrix_90
- Track 23 : Ziko_61, Ronaldo_61, Fryberger_58
- Track 24 : Guey18_63
- Track 25 : Keelan_56
- Track 26 : Volt_61
- Track 27 : Sixama_104
- Track 28 : Forza_106, Boopy_106, BlueNGold_105, Mareelih_104
- Track 29 : Terminus_29, Palpatine_29, BaboJay_28, 244_31, Gemini_32, Murica_28, Teaspoon_30, Inca_28, ChosenOne_29, Maxxinista_30, Moldemort_30, Emmina_30, Tarkin_31, Hoonter_31, Bruin_29, Gage_31, Cjw1_29, JeTaime_31, ChotaBhai_29, Hopey_31, Kimchi_31, HanKaySha_30, BugsBunny_27,

Contagion_28, Filch_30, Argent26_31, Wiggin_32, HufflyPuff_28, Saints25_30, Lilpickle_28, Quallification_30, Easy2Say_31, StolenFromERC_31, Paperbeatsrock_31, Holt_30, DrDrey_30, FireRed_29, Mosby_28, PhatBacter_29, Phaux_28, ShereKhan_31, Manda_30, Dumbo_29, Rimmer_28, StellaBean_29, Petra64142_31, MadamMonkfish_29, TBrady12_31, Xandras_31, RiverMonster_29, MPhalcon_28, Elph10_30, Pumpkin_31, Tomaszewski_28, Ukulele_29, Pat3_28, Buck_28, Czyszczone1_30, Sassay_28, xkcd_30, NoSleep_30, Phrux_29, Porky_29, Kanye_31, Pharsalus_30, YassJohnny_30, Elite2014_28, BigBubba_30, SophKB_29, Stank_32, GoldenSpark_31, Highbury_30, Thresher_30, Miniwave_29, Nimrod_29, Stark_30, OrionPax_30, AmericanBeauty_32, Lilizi_31, Willez_28, DoctorDiddles_29, Goldilocks_30, MISSy_28, GooberAzure_31, Simpliphy_30, Bench_31, Lilac_31, Murphy_30, Misfit_29, Cookies_29, Adnama_32

- Track 30 : Flypotenuse_27, Harella_28, Nala_29, Glexan_27, Youngblood_29
- Track 31 : Kostya_30, Daikon_28, ShamWow_29, BilboSwaggins_29, Henry_30, Toto_29, CrystalP_29, IHOP_29, Phaja_29, Mindy_29
- Track 32 : Goku_29, Bask21_29, Marshmallow_29, Icee_28, SirDuracell_28, Sotrice96_29, NelitzaMV_29, Cactus_30, Eureka_29, Command613_30
- Track 33 : Balomoji_28, Dusk_28, BadStone_28, Gator_27, Tuco_30, Rakim_30, Barbarian_28, ABCat_28, Myrale_29, TeardropMSU_28, Asriel_28, Traaww1_27
- Track 34 : Amao_29
- Track 35 : Policronamos_30
- Track 36 : Coco12_23
- Track 37 : Shauna1_21, Phanphagia_21, Kingsley_22
- Track 38 : Ogopogo_24, Avani_27, Kersh_22, MadMen_22
- Track 39 : ShroomBoi_21
- Track 40 : Madiba_22, Demsculpinboyz_27
- Track 41 : Bipolar_21
- Track 42 : Estave1_21, Cornie_23
- Track 43 : Kenuha5_21
- Track 44 : Che9d_27
- Track 45 : Zapner_28, Jabbawokkie_29
- Track 46 : Soul22_27
- Track 47 : Renaud18_23
- Track 48 : LunaStella_22
- Track 49 : ThetaBob_23
- Track 50 : TChen_21, Pollywog_24, Yoshi_27
- Track 51 : Cborch11_33, Phreeze_32, Beckerton_32, Oaker_32, Megatron06_35, Konstantine_37, Damien_32
- Track 52 : Thumb_32
- Track 53 : Puissant_31
- Track 54 : Island3_23, Bogie_22, Brujita_23, Pygmy_22, Shipwreck_22
- Track 55 : Odette_40, Dove_39, Yeet_39, NihilNomen_40, Hughesyang_39, Schatzie_38, Ejimix_41, Pound_42, Bombitas_37
- Track 56 : JuicyJay_43, Beem_41, HokkenD_36, Halley_41, Klein_41, ThreeRngTarjay_39, Kalah2_41, Bagrid_40, Dallas_42, Zelink_42, Phoebus_40, Redno2_39, EricMillard_41
- Track 57 : Constella_35, Thibault_37, Bobby_42
- Track 58 : Courthouse_39, Porcelain_38, Ariel_39, Squint_38, Lucky2013_39, Superphikiman_39, MiaZeal_39, DmpstrDiver_40
- Track 59 : Hannaconda_36, KashFlow_33
- Track 60 : Bora_58, Winget_61, Firecracker_61, Dylan_60, Corndog_63, Zakhe101_60

- Track 61 : Krili_59, SchoolBus_60, Idergollasper_60, Schuy_58, Blessica_61, JangDynasty_60, Wildflower_58, Shida_60, YungJamal_65, Catdawg_60, NiebruSaylor_59, TelAviv_57, Vorrps_60, Ryadel_64, Ashwin_61, Alkhayr_58, Murai_61, FoulBall_57, Smooch_63, FAMILTON_61, Mori_60, MadKillah_61
- Track 62 : Beelzebub_99
- Track 63 : Tesla_91
- Track 64 : Poise_96, MosMoris_91, Caprice_88, Blackbeetle_96, Gattaca_94
- Track 65 : Clarkson_96, Corazon_90, LittleLaf_93, Lilbit_93, Huphlepuuff_97
- Track 66 : RedRaider77_95
- Track 67 : Raela_97
- Track 68 : Marvin_89, VasuNzinga_93
- Track 69 : JoieB_96
- Track 70 : Pringar_91
- Track 71 : EniyanLRS_43, Wildcat_46, Cosmo_46, MaryV_46
- Track 72 : Azrael100_45
- Track 73 : Kumao_33
- Track 74 : TPA4_27
- Track 75 : MooMoo_21
- Track 76 : REQ3_58
- Track 77 : GMA1_27

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

The start number called the most often in the published annotations is 15, it was called in 152 of the 305 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_31, ABCat_28, Adnama_32, Amao_29, AmericanBeauty_32, Argent26_31, Ariel_39, Asriel_28, Avani_27, BaboJay_28, BadStone_28, Balomoji_28, Barbarian_28, Bask21_29, Bench_31, BigBubba_30, BilboSwaggins_29, Bipolar_21, Bruin_29, Buck_28, BugsBunny_27, Cactus_30, Che9d_27, ChosenOne_29, ChotaBhai_29, Cjw1_29, Coco12_23, Command613_30, Contagion_28, Cookies_29, Cornie_23, Courthouse_39, CrystalP_29, Czyszczonek1_30, Daikon_28, Demsculpinboyz_27, DmpstrDiver_40, DoctorDiddles_29, DrDrey_30, Dumbo_29, Dusk_28, Easy2Say_31, Elite2014_28, Elph10_30, Emmina_30, Estave1_21, Eureka_29, Filch_30, FireRed_29, Flypotenuse_27, Gage_31, Gator_27, Gemini_32, Glexan_27, Goku_29, GoldenSpark_31, Goldilocks_30, GooberAzure_31, HanKaySha_30, Hannaconda_36, Harella_28, Henry_30, Highbury_30, Holt_30, Hoonter_31, Hopey_31, HuffyPuff_28, IHOP_29, Icee_28, Inca_28, Jabbawokkie_29, JeTaime_31, Kanye_31, KashFlow_33, Kenuha5_21, Kersh_22, Kimchi_31, Kingsley_22, Kostya_30, Lilac_31, Lilizi_31, Lilpickle_28, Lucky2013_39, LunaStella_22, MISSy_28, MPhalcon_28, MadMen_22, MadamMonkfish_29, Madiba_22, Manda_30, Marshmallow_29, Maxxinista_30, MiaZeal_39, Mindy_29, Miniwave_29, Misfit_29, Moldemort_30, MooMoo_21, Mosby_28, Murica_28, Murphy_30, Myrale_29, Nala_29, NelitzaMV_29, Nimrod_29, NoSleep_30, OgoPogo_24, OrionPax_30, Palpatine_29, Paperbeatsrock_31, Pat3_28, Petra64142_31, Phaja_29, Phanphagia_21, Pharsalus_30, PhatBacter_29, Phaux_28, Phrux_29, Policronamos_30, Pollywog_24, Porcelain_38, Porky_29, Pumpkin_31, Quallification_30, Rakim_30, Renaud18_23, Rimmer_28, RiverMonster_29, Saints25_30, Sassay_28, ShamWow_29, Shauna1_21,

ShereKhan_31, ShroomBoi_21, Simpliphy_30, SirDuracell_28, SophKB_29, Sotrice96_29, Squint_38, Stank_32, Stark_30, StellaBean_29, StolenFromERC_31, Superphikiman_39, TBrady12_31, TChen_21, Tarkin_31, TeardropMSU_28, Teaspoon_30, Terminus_29, Thresher_30, Tomaszewski_28, Toto_29, Traaww1_27, Tuco_30, Ukulele_29, Wiggin_32, Willez_28, Xandras_31, YassJohnny_30, Yoshi_27, Youngblood_29, Zapner_28, xkcd_30,

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

- Soul22_27, ThetaBob_23,

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

- Abbyshoes_35, Aikoy_39, Aikoy_43, Alkhayr_58, Ashwin_61, Azrael100_45, BaconJack_36, Bagrid_40, Beatrix_33, Beckerton_32, Beelzebub_99, Beem_41, Blackbeetle_96, Blessica_61, BlueNGold_105, Bobby_42, Bogie_22, Bombitas_37, Bones_33, Boopy_106, Bora_58, Brujita_23, Bruns_32, CactusRose_32, Caprice_88, Catdawg_60, Cborch11_33, Clarkson_96, Constella_35, Corazon_90, Corndog_63, Corvo_34, Cosmo_46, Cueylyss_33, Dallas_42, Damien_32, Dexes_34, Dove_39, Dreamboat_34, Dussy_34, Dylan_60, Ejimix_41, EniyanLRS_43, EricMillard_41, Euphoria_33, Eyeball_33, Familton_61, Firecracker_61, Forsytheast_33, Forza_106, FoulBall_57, Fryberger_58, GMA1_27, Gattaca_94, Gibbles_36, GodonK_93, Graduation_35, GrecoEtereo_35, Guey18_63, Halley_41, HanShotFirst_33, HarryOW_34, Hawkeye_36, Hermia_36, HokkenD_36, Homines_33, Hope4ever_33, Hughesyang_39, Huphlepuuff_97, ILeeKay_35, Idergollasper_60, IgnatiusPatJac_33, Island3_23, JC27_35, JCole_24, JangDynasty_60, Jasper_34, JoieB_96, JuicyJay_43, Kalah2_41, Kampe_38, Keelan_56, Kenmech_36, Klein_41, Konstantine_37, Krili_59, Kumao_33, Leopard_39, Leopard_43, Licorice_35, LilBib_34, Lilbit_93, LittleLaf_93, MadKillah_61, Mareelih_104, Marvin_89, MaryBeth_33, MaryV_46, Megatron06_35, MetalQZJ_33, Moose_33, Moosehead_26, Mori_60, MosMoris_91, Murai_61, NiebruSaylor_59, NihilNomen_40, NoShow_24, Oaker_32, Odette_40, Onyinye_40, Onyinye_44, Orchid_37, Papez_35, PatrickStar_38, Pelly_34, Peterson_36, Phendrix_90, PherrisBueller_34, Phoebus_40, Phrappuccino_176, Phreeze_32, Pickett_25, Poise_96, Pound_42, Pringar_91, Puissant_31, Pygmy_22, REQ3_58, Raela_97, RedRaider77_95, Redno2_39, RidgeCB_33, RobinSparkles_40, Ronaldo_61, Ryadel_64, Schatzie_38, SchoolBus_60, Schuy_58, ScoobyDoobyDoo_108, Settecandela_176, Shida_60, Shipwreck_22, Sixama_104, Smairt_34, Smeagol_35, Smooch_63, SwissCheese_35, TPA4_27, TelAviv_57, Tesla_91, Thibault_37, ThreeRngTarjay_39, Thumb_32, Topgun_33, Tripl3t_34, Vasanti_26, VasuNzinga_93, Violet_32, Volt_61, Vorrps_60, Wildcat_46, Wildflower_58, Wilkins_33, Winget_61, Yeet_39, YungJamal_65, Zakhe101_60, Zelink_42, Ziko_61,

Summary by start number:

Start 11:

- Found in 7 of 336 (2.1%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Beelzebub_99 (S),

Start 12:

- Found in 3 of 336 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 33.3% of time when present

- Phage (with cluster) where this start called: ThetaBob_23 (F4),

Start 14:

- Found in 4 of 336 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JCole_24 (CZ2), Moosehead_26 (CZ6), Pickett_25 (CZ2), Vasanti_26 (CZ2),

Start 15:

- Found in 166 of 336 (49.4%) of genes in pham
- Manual Annotations of this start: 152 of 305
- Called 98.8% of time when present
- Phage (with cluster) where this start called: 244_31 (E), ABCat_28 (E), Adnama_32 (E), Amao_29 (E), AmericanBeauty_32 (E), Argent26_31 (E), Ariel_39 (J), Asriel_28 (E), Avani_27 (F2), BaboJay_28 (E), BadStone_28 (E), Balomoji_28 (E), Barbarian_28 (E), Bask21_29 (E), Bench_31 (E), BigBubba_30 (E), BilboSwaggins_29 (E), Bipolar_21 (F1), Bruin_29 (E), Buck_28 (E), BugsBunny_27 (E), Cactus_30 (E), Che9d_27 (F2), ChosenOne_29 (E), ChotaBhai_29 (E), Cjw1_29 (E), Coco12_23 (F1), Command613_30 (E), Contagion_28 (E), Cookies_29 (E), Cornie_23 (F5), Courthouse_39 (J), CrystalP_29 (E), Czyszczo1_30 (E), Daikon_28 (E), Demsculpinboyz_27 (F2), DmpstrDiver_40 (J), DoctorDiddles_29 (E), DrDrey_30 (E), Dumbo_29 (E), Dusk_28 (E), Easy2Say_31 (E), Elite2014_28 (E), Elph10_30 (E), Emmina_30 (E), Estave1_21 (F1), Eureka_29 (E), Filch_30 (E), FireRed_29 (E), Flypotenuse_27 (E), Gage_31 (E), Gator_27 (E), Gemini_32 (E), Glexan_27 (E), Goku_29 (E), GoldenSpark_31 (E), Goldilocks_30 (E), GooberAzure_31 (E), HanKaySha_30 (E), Hannaconda_36 (J), Harella_28 (E), Henry_30 (E), Highbury_30 (E), Holt_30 (E), Hoonter_31 (E), Hopey_31 (E), HufflyPuff_28 (E), IHOP_29 (E), Icee_28 (E), Inca_28 (E), Jabbawokkie_29 (F2), JeTaime_31 (E), Kanye_31 (E), KashFlow_33 (J), Kenuha5_21 (F1), Kersh_22 (F1), Kimchi_31 (E), Kingsley_22 (F1), Kostya_30 (E), Lilac_31 (E), Lilizi_31 (E), Lilpickle_28 (E), Lucky2013_39 (J), LunaStella_22 (F4), MISSy_28 (E), MPhalcon_28 (E), MadMen_22 (F1), MadamMonkfish_29 (E), Madiba_22 (F1), Manda_30 (E), Marshmallow_29 (E), Maxxinista_30 (E), MiaZeal_39 (J), Mindy_29 (E), Miniwave_29 (E), Misfit_29 (E), Moldemort_30 (E), MooMoo_21 (singleton), Mosby_28 (E), Murica_28 (E), Murphy_30 (E), Myrale_29 (E), Nala_29 (E), NelitzaMV_29 (E), Nimrod_29 (E), NoSleep_30 (E), Ogopogo_24 (F1), OrionPax_30 (E), Palpatine_29 (E), Paperbeatsrock_31 (E), Pat3_28 (E), Petra64142_31 (E), Phaja_29 (E), Phanphagia_21 (F1), Pharsalus_30 (E), PhatBacter_29 (E), Phaux_28 (E), Phrux_29 (E), Policronamos_30 (E), Pollywog_24 (F1), Porcelain_38 (J), Porky_29 (E), Pumpkin_31 (E), Qualification_30 (E), Rakim_30 (E), Renaud18_23 (F4), Rimmer_28 (E), RiverMonster_29 (E), Saints25_30 (E), Sassay_28 (E), ShamWow_29 (E), Shauna1_21 (F1), ShereKhan_31 (E), ShroomBoi_21 (F1), Simpliphy_30 (E), SirDuracell_28 (E), SophKB_29 (E), Sotrice96_29 (E), Squint_38 (J), Stank_32 (E), Stark_30 (E), StellaBean_29 (E), StolenFromERC_31 (E), Superphikiman_39 (J), TBrady12_31 (E), TChen_21 (F4), Tarkin_31 (E), TeardropMSU_28 (E), Teaspoon_30 (E), Terminus_29 (E), Thresher_30 (E), Tomaszewski_28 (E), Toto_29 (E), Traaww1_27 (E), Tuco_30 (E), Ukulele_29 (E), Wiggin_32 (E), Willez_28 (E), Xandras_31 (E), YassJohnny_30 (E), Yoshi_27 (F2), Youngblood_29 (E), Zapner_28 (F2), xkcd_30 (E),

Start 16:

- Found in 27 of 336 (8.0%) of genes in pham

- Manual Annotations of this start: 24 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikoy_39 (AE), Aikoy_43 (AE), BlueNGold_105 (DS), Boopy_106 (DS), Forza_106 (DS), Fryberger_58 (DP), GMA1_27 (singleton), Gibbles_36 (CX), GodonK_93 (DK), Guey18_63 (DP), Kampe_38 (CX), Keelan_56 (DP), Leopard_39 (AE), Leopard_43 (AE), Mareelih_104 (DS), NoShow_24 (AB), Onyinye_40 (AE), Onyinye_44 (AE), Orchid_37 (CX), PatrickStar_38 (CX), Phendrix_90 (DK), REQ3_58 (singleton), RobinSparkles_40 (CX), Ronaldo_61 (DP), Sixama_104 (DS), TPA4_27 (singleton), Ziko_61 (DP),

Start 17:

- Found in 3 of 336 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobby_42 (J), Constella_35 (J), Thibault_37 (J),

Start 18:

- Found in 69 of 336 (20.5%) of genes in pham
- Manual Annotations of this start: 57 of 305
- Called 98.6% of time when present
- Phage (with cluster) where this start called: Alkhayr_58 (O), Ashwin_61 (O), Azrael100_45 (V), Beckerton_32 (H1), Blackbeetle_96 (S), Blessica_61 (O), Bogie_22 (P1), Bora_58 (O), Brujita_23 (I1), Caprice_88 (S), Catdawg_60 (O), Cborch11_33 (H1), Clarkson_96 (S), Corazon_90 (S), Corndog_63 (O), Cosmo_46 (V), Damien_32 (H1), Dylan_60 (O), EniyanLRS_43 (V), Familton_61 (O), Firecracker_61 (O), FoulBall_57 (O), Gattaca_94 (S), Hawkeye_36 (D2), Huphlepuuff_97 (S), Idergollasper_60 (O), Island3_23 (I1), JangDynasty_60 (O), JoieB_96 (S), Konstantine_37 (H1), Krili_59 (O), Lilbit_93 (S), LittleLaf_93 (S), MadKillah_61 (O), Marvin_89 (S), MaryV_46 (V), Megatron06_35 (H1), Mori_60 (O), MosMoris_91 (S), Murai_61 (O), NiebruSaylor_59 (O), Oaker_32 (H1), Phrappuccino_176 (AA), Phreeze_32 (H1), Poise_96 (S), Pringar_91 (S), Puissant_31 (H1), Pygmy_22 (P1), Raela_97 (S), RedRaider77_95 (S), Ryadel_64 (O), SchoolBus_60 (O), Schuy_58 (O), ScoobyDoobyDoo_108 (C2), Settecandela_176 (AA), Shida_60 (O), Shipwreck_22 (P1), Smooch_63 (O), TelAviv_57 (O), Tesla_91 (S), Thumb_32 (H1), VasuNzinga_93 (S), Vorrrps_60 (O), Wildcat_46 (V), Wildflower_58 (O), Winget_61 (O), YungJamal_65 (O), Zakhe101_60 (O),

Start 19:

- Found in 29 of 336 (8.6%) of genes in pham
- Manual Annotations of this start: 29 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abbyshoes_35 (A1), BaconJack_36 (A1), Beatrix_33 (A1), Bones_33 (A1), Bruns_32 (A1), Corvo_34 (A1), Cueyllyss_33 (A1), Dreamboat_34 (A1), Dussy_34 (A1), Euphoria_33 (A1), Eyeball_33 (A1), Forsytheast_33 (A1), Graduation_35 (A1), GrecoEtereo_35 (A1), Hermia_36 (A1), Hope4ever_33 (A1), ILeeKay_35 (A1), Jasper_34 (A1), Kenmech_36 (A1), Licorice_35 (A1), MaryBeth_33 (A1), MetalQZJ_33 (A1), Moose_33 (A1), Papez_35 (A1), PherrisBueller_34 (A1), RidgeCB_33 (A1), SwissCheese_35 (A1), Tripl3t_34 (A1), Violet_32 (A1),

Start 20:

- Found in 11 of 336 (3.3%) of genes in pham
- Manual Annotations of this start: 9 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bombitas_37 (J), Dove_39 (J), Ejimix_41 (J), Hughesyang_39 (J), Kumao_33 (singleton), NihilNomen_40 (J), Odette_40 (J), Peterson_36 (A1), Pound_42 (J), Schatzie_38 (J), Yeet_39 (J),

Start 23:

- Found in 18 of 336 (5.4%) of genes in pham
- Manual Annotations of this start: 12 of 305
- Called 72.2% of time when present
- Phage (with cluster) where this start called: Bagrid_40 (J), Beem_41 (J), Dallas_42 (J), EricMillard_41 (J), Halley_41 (J), HokkenD_36 (J), JuicyJay_43 (J), Kalah2_41 (J), Klein_41 (J), Phoebus_40 (J), Redno2_39 (J), ThreeRngTarjay_39 (J), Zelink_42 (J),

Start 27:

- Found in 3 of 336 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Smeagol_35 (A1),

Start 28:

- Found in 32 of 336 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Soul22_27 (F2),

Start 29:

- Found in 50 of 336 (14.9%) of genes in pham
- Manual Annotations of this start: 10 of 305
- Called 22.0% of time when present
- Phage (with cluster) where this start called: CactusRose_32 (A1), Dexes_34 (A1), HanShotFirst_33 (A1), HarryOW_34 (A1), IgnatiusPatJac_33 (A1), JC27_35 (A1), LilBib_34 (A1), Pelly_34 (A1), Smairt_34 (A1), Topgun_33 (A1), Wilkins_33 (A1),

Start 34:

- Found in 1 of 336 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Volt_61 (DP),

Start 37:

- Found in 33 of 336 (9.8%) of genes in pham
- Manual Annotations of this start: 1 of 305
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Homines_33 (A1),

Summary by clusters:

There are 25 clusters represented in this pham: singleton, DK, CZ2, CZ6, P1, AE, DS, DP, I1, A1, C2, AA, AB, E, J, O, S, CX, V, F1, F2, F4, F5, H1, D2,

Info for manual annotations of cluster A1:

- Start number 19 was manually annotated 29 times for cluster A1.
- Start number 20 was manually annotated 1 time for cluster A1.
- Start number 27 was manually annotated 1 time for cluster A1.
- Start number 29 was manually annotated 10 times for cluster A1.
- Start number 37 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AA:

- Start number 18 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AB:

- Start number 16 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster AE:

- Start number 16 was manually annotated 6 times for cluster AE.

Info for manual annotations of cluster C2:

- Start number 18 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CX:

- Start number 16 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster CZ2:

- Start number 14 was manually annotated 2 times for cluster CZ2.

Info for manual annotations of cluster CZ6:

- Start number 14 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster D2:

- Start number 18 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DK:

- Start number 16 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DP:

- Start number 16 was manually annotated 5 times for cluster DP.
- Start number 34 was manually annotated 1 time for cluster DP.

Info for manual annotations of cluster DS:

- Start number 16 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster E:

- Start number 15 was manually annotated 119 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 15 was manually annotated 13 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 15 was manually annotated 6 times for cluster F2.
- Start number 28 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:

- Start number 12 was manually annotated 1 time for cluster F4.

- Start number 15 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 15 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster H1:

- Start number 18 was manually annotated 7 times for cluster H1.

Info for manual annotations of cluster I1:

- Start number 18 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster J:

- Start number 15 was manually annotated 10 times for cluster J.
- Start number 17 was manually annotated 3 times for cluster J.
- Start number 20 was manually annotated 7 times for cluster J.
- Start number 23 was manually annotated 12 times for cluster J.

Info for manual annotations of cluster O:

- Start number 18 was manually annotated 22 times for cluster O.

Info for manual annotations of cluster P1:

- Start number 18 was manually annotated 2 times for cluster P1.

Info for manual annotations of cluster S:

- Start number 11 was manually annotated 1 time for cluster S.
- Start number 18 was manually annotated 15 times for cluster S.

Info for manual annotations of cluster V:

- Start number 18 was manually annotated 5 times for cluster V.

Gene Information:

Gene: 244_31 Start: 28830, Stop: 29258, Start Num: 15

Candidate Starts for 244_31:

(Start: 15 @28830 has 152 MA's), (60, 29055), (65, 29082), (72, 29124), (75, 29136), (77, 29148),

Gene: ABCat_28 Start: 28541, Stop: 28969, Start Num: 15

Candidate Starts for ABCat_28:

(Start: 15 @28541 has 152 MA's), (53, 28730), (60, 28766), (65, 28793), (72, 28835), (77, 28859), (88, 28928),

Gene: Abbysshoes_35 Start: 27637, Stop: 28038, Start Num: 19

Candidate Starts for Abbysshoes_35:

(Start: 19 @27637 has 29 MA's), (47, 27763), (49, 27766), (62, 27844), (65, 27862), (71, 27898), (87, 27997), (88, 28003),

Gene: Adnama_32 Start: 29057, Stop: 29485, Start Num: 15

Candidate Starts for Adnama_32:

(Start: 15 @29057 has 152 MA's), (60, 29282), (65, 29309), (72, 29351), (75, 29363), (77, 29375),

Gene: Aikoy_43 Start: 34014, Stop: 34448, Start Num: 16

Candidate Starts for Aikoy_43:

(Start: 16 @34014 has 24 MA's), (Start: 29 @34053 has 10 MA's), (32, 34068), (35, 34086), (54, 34209), (73, 34314), (92, 34425),

Gene: Aikoy_39 Start: 29482, Stop: 29922, Start Num: 16

Candidate Starts for Aikoy_39:

(Start: 16 @29482 has 24 MA's), (31, 29527), (36, 29563), (39, 29572), (65, 29740), (76, 29800), (79, 29821), (95, 29908), (97, 29914),

Gene: Alkhayr_58 Start: 39815, Stop: 40216, Start Num: 18

Candidate Starts for Alkhayr_58:

(Start: 18 @39815 has 57 MA's), (Start: 29 @39851 has 10 MA's), (Start: 37 @39893 has 1 MA's), (43, 39923), (61, 40019), (72, 40079), (85, 40154),

Gene: Amao_29 Start: 27754, Stop: 28182, Start Num: 15

Candidate Starts for Amao_29:

(Start: 15 @27754 has 152 MA's), (Start: 37 @27841 has 1 MA's), (60, 27979), (65, 28006), (72, 28048), (75, 28060), (77, 28072),

Gene: AmericanBeauty_32 Start: 28537, Stop: 28965, Start Num: 15

Candidate Starts for AmericanBeauty_32:

(Start: 15 @28537 has 152 MA's), (60, 28762), (65, 28789), (72, 28831), (75, 28843), (77, 28855),

Gene: Argent26_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for Argent26_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Ariel_39 Start: 33704, Stop: 34135, Start Num: 15

Candidate Starts for Ariel_39:

(Start: 15 @33704 has 152 MA's), (Start: 28 @33746 has 1 MA's), (48, 33848), (50, 33860), (53, 33893), (60, 33929), (61, 33935), (65, 33956), (74, 34001), (78, 34034), (84, 34061), (86, 34067),

Gene: Ashwin_61 Start: 40585, Stop: 40986, Start Num: 18

Candidate Starts for Ashwin_61:

(Start: 18 @40585 has 57 MA's), (Start: 29 @40621 has 10 MA's), (Start: 37 @40663 has 1 MA's), (43, 40693), (61, 40789), (72, 40849), (85, 40924),

Gene: Asriel_28 Start: 27410, Stop: 27838, Start Num: 15

Candidate Starts for Asriel_28:

(Start: 15 @27410 has 152 MA's), (53, 27599), (60, 27635), (65, 27662), (72, 27704), (77, 27728), (88, 27797),

Gene: Avani_27 Start: 23475, Stop: 23906, Start Num: 15

Candidate Starts for Avani_27:

(Start: 15 @23475 has 152 MA's), (Start: 28 @23517 has 1 MA's), (50, 23631), (60, 23700), (61, 23706), (65, 23727), (72, 23769), (77, 23793), (84, 23832), (86, 23838),

Gene: Azrael100_45 Start: 35022, Stop: 35429, Start Num: 18

Candidate Starts for Azrael100_45:

(Start: 18 @35022 has 57 MA's), (Start: 23 @35034 has 12 MA's), (61, 35226), (64, 35244), (65, 35247), (67, 35259), (85, 35361), (90, 35391), (96, 35424),

Gene: BaboJay_28 Start: 28100, Stop: 28528, Start Num: 15

Candidate Starts for BaboJay_28:

(Start: 15 @28100 has 152 MA's), (60, 28325), (65, 28352), (72, 28394), (75, 28406), (77, 28418),

Gene: BaconJack_36 Start: 27957, Stop: 28358, Start Num: 19

Candidate Starts for BaconJack_36:

(Start: 19 @27957 has 29 MA's), (47, 28083), (49, 28086), (62, 28164), (65, 28182), (71, 28218), (87, 28317), (88, 28323),

Gene: BadStone_28 Start: 28541, Stop: 28969, Start Num: 15

Candidate Starts for BadStone_28:

(Start: 15 @28541 has 152 MA's), (53, 28730), (60, 28766), (65, 28793), (72, 28835), (77, 28859), (88, 28928),

Gene: Bagrid_40 Start: 33113, Stop: 33502, Start Num: 23

Candidate Starts for Bagrid_40:

(Start: 23 @33113 has 12 MA's), (52, 33260), (58, 33293), (83, 33428),

Gene: Balomoji_28 Start: 28275, Stop: 28703, Start Num: 15

Candidate Starts for Balomoji_28:

(Start: 15 @28275 has 152 MA's), (53, 28464), (60, 28500), (65, 28527), (72, 28569), (77, 28593), (88, 28662),

Gene: Barbarian_28 Start: 27410, Stop: 27838, Start Num: 15

Candidate Starts for Barbarian_28:

(Start: 15 @27410 has 152 MA's), (53, 27599), (60, 27635), (65, 27662), (72, 27704), (77, 27728), (88, 27797),

Gene: Bask21_29 Start: 27727, Stop: 28155, Start Num: 15

Candidate Starts for Bask21_29:

(Start: 15 @27727 has 152 MA's), (53, 27916), (60, 27952), (65, 27979), (72, 28021), (77, 28045), (88, 28114),

Gene: Beatrix_33 Start: 28872, Stop: 29273, Start Num: 19

Candidate Starts for Beatrix_33:

(Start: 19 @28872 has 29 MA's), (47, 28998), (49, 29001), (62, 29079), (65, 29097), (71, 29133), (87, 29232), (88, 29238),

Gene: Beckerton_32 Start: 31246, Stop: 31653, Start Num: 18

Candidate Starts for Beckerton_32:

(Start: 18 @31246 has 57 MA's), (33, 31306), (39, 31330), (59, 31441), (61, 31450), (62, 31453), (63, 31459), (65, 31471), (72, 31510), (85, 31585), (90, 31615),

Gene: Beelzebub_99 Start: 55639, Stop: 56067, Start Num: 11

Candidate Starts for Beelzebub_99:

(Start: 11 @55639 has 1 MA's), (Start: 18 @55660 has 57 MA's), (43, 55768), (52, 55819), (61, 55864), (72, 55924), (79, 55963), (81, 55975), (87, 56020),

Gene: Beem_41 Start: 33679, Stop: 34068, Start Num: 23

Candidate Starts for Beem_41:

(Start: 23 @33679 has 12 MA's), (52, 33826), (58, 33859), (83, 33994),

Gene: Bench_31 Start: 28410, Stop: 28838, Start Num: 15

Candidate Starts for Bench_31:

(Start: 15 @28410 has 152 MA's), (60, 28635), (65, 28662), (72, 28704), (75, 28716), (77, 28728),

Gene: BigBubba_30 Start: 28313, Stop: 28741, Start Num: 15

Candidate Starts for BigBubba_30:

(Start: 15 @28313 has 152 MA's), (60, 28538), (65, 28565), (72, 28607), (75, 28619), (77, 28631),

Gene: BilboSwaggins_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for BilboSwaggins_29:

(5, 28441), (Start: 15 @28549 has 152 MA's), (53, 28738), (60, 28774), (65, 28801), (72, 28843), (77, 28867), (88, 28936),

Gene: Bipolar_21 Start: 23745, Stop: 24176, Start Num: 15

Candidate Starts for Bipolar_21:

(4, 23637), (10, 23721), (Start: 15 @23745 has 152 MA's), (Start: 28 @23787 has 1 MA's), (50, 23901), (60, 23970), (61, 23976), (65, 23997), (72, 24039), (77, 24063), (84, 24102), (86, 24108),

Gene: Blackbeetle_96 Start: 55161, Stop: 55568, Start Num: 18

Candidate Starts for Blackbeetle_96:

(Start: 18 @55161 has 57 MA's), (43, 55269), (52, 55320), (61, 55365), (72, 55425), (87, 55521),

Gene: Blessica_61 Start: 40414, Stop: 40815, Start Num: 18

Candidate Starts for Blessica_61:

(Start: 18 @40414 has 57 MA's), (Start: 29 @40450 has 10 MA's), (Start: 37 @40492 has 1 MA's), (43, 40522), (61, 40618), (72, 40678), (85, 40753),

Gene: BlueNGold_105 Start: 64502, Stop: 64939, Start Num: 16

Candidate Starts for BlueNGold_105:

(Start: 16 @64502 has 24 MA's), (38, 64589), (64, 64757), (79, 64838), (85, 64871),

Gene: Bobby_42 Start: 34506, Stop: 34910, Start Num: 17

Candidate Starts for Bobby_42:

(Start: 17 @34506 has 3 MA's), (33, 34569), (67, 34746), (72, 34773), (85, 34848),

Gene: Bogie_22 Start: 22761, Stop: 23162, Start Num: 18

Candidate Starts for Bogie_22:

(Start: 18 @22761 has 57 MA's), (58, 22953), (64, 22983), (67, 22998), (72, 23025), (85, 23100),

Gene: Bombitas_37 Start: 32684, Stop: 33082, Start Num: 20

Candidate Starts for Bombitas_37:

(Start: 20 @32684 has 9 MA's), (31, 32720), (43, 32789), (72, 32945), (80, 32987),

Gene: Bones_33 Start: 27330, Stop: 27731, Start Num: 19

Candidate Starts for Bones_33:

(Start: 19 @27330 has 29 MA's), (47, 27456), (49, 27459), (62, 27537), (65, 27555), (71, 27591), (87, 27690), (88, 27696),

Gene: Boopy_106 Start: 64514, Stop: 64951, Start Num: 16

Candidate Starts for Boopy_106:

(Start: 16 @64514 has 24 MA's), (38, 64601), (64, 64769), (79, 64850), (85, 64883),

Gene: Bora_58 Start: 39771, Stop: 40172, Start Num: 18

Candidate Starts for Bora_58:

(Start: 18 @39771 has 57 MA's), (Start: 29 @39807 has 10 MA's), (43, 39879), (61, 39975), (72, 40035), (85, 40110),

Gene: Bruin_29 Start: 28570, Stop: 28998, Start Num: 15

Candidate Starts for Bruin_29:

(Start: 15 @28570 has 152 MA's), (60, 28795), (65, 28822), (72, 28864), (75, 28876), (77, 28888),

Gene: Brujita_23 Start: 23116, Stop: 23517, Start Num: 18

Candidate Starts for Brujita_23:

(Start: 18 @23116 has 57 MA's), (58, 23308), (64, 23338), (67, 23353), (72, 23380), (85, 23455),

Gene: Bruns_32 Start: 27352, Stop: 27753, Start Num: 19

Candidate Starts for Bruns_32:

(Start: 19 @27352 has 29 MA's), (47, 27478), (49, 27481), (62, 27559), (65, 27577), (71, 27613), (87, 27712), (88, 27718),

Gene: Buck_28 Start: 28506, Stop: 28934, Start Num: 15

Candidate Starts for Buck_28:

(Start: 15 @28506 has 152 MA's), (60, 28731), (65, 28758), (72, 28800), (75, 28812), (77, 28824),

Gene: BugsBunny_27 Start: 28139, Stop: 28567, Start Num: 15

Candidate Starts for BugsBunny_27:

(Start: 15 @28139 has 152 MA's), (60, 28364), (65, 28391), (72, 28433), (75, 28445), (77, 28457),

Gene: Cactus_30 Start: 27760, Stop: 28188, Start Num: 15

Candidate Starts for Cactus_30:

(Start: 15 @27760 has 152 MA's), (53, 27949), (60, 27985), (65, 28012), (72, 28054), (77, 28078), (88, 28147),

Gene: CactusRose_32 Start: 27357, Stop: 27725, Start Num: 29

Candidate Starts for CactusRose_32:

(Start: 29 @27357 has 10 MA's), (44, 27438), (46, 27447), (47, 27450), (71, 27585), (72, 27588), (74, 27591),

Gene: Caprice_88 Start: 55099, Stop: 55506, Start Num: 18

Candidate Starts for Caprice_88:

(Start: 18 @55099 has 57 MA's), (43, 55207), (52, 55258), (61, 55303), (72, 55363), (87, 55459),

Gene: Catdawg_60 Start: 40150, Stop: 40551, Start Num: 18

Candidate Starts for Catdawg_60:

(Start: 18 @40150 has 57 MA's), (Start: 29 @40186 has 10 MA's), (Start: 37 @40228 has 1 MA's), (43, 40258), (61, 40354), (72, 40414), (85, 40489),

Gene: Cborch11_33 Start: 30711, Stop: 31118, Start Num: 18

Candidate Starts for Cborch11_33:

(Start: 18 @30711 has 57 MA's), (33, 30771), (39, 30795), (59, 30906), (61, 30915), (62, 30918), (63, 30924), (65, 30936), (72, 30975), (85, 31050), (90, 31080),

Gene: Che9d_27 Start: 23483, Stop: 23914, Start Num: 15

Candidate Starts for Che9d_27:

(Start: 15 @23483 has 152 MA's), (Start: 28 @23525 has 1 MA's), (50, 23639), (60, 23708), (65, 23735), (72, 23777), (77, 23801), (84, 23840), (86, 23846),

Gene: ChosenOne_29 Start: 27758, Stop: 28186, Start Num: 15
Candidate Starts for ChosenOne_29:
(Start: 15 @27758 has 152 MA's), (60, 27983), (65, 28010), (72, 28052), (75, 28064), (77, 28076),

Gene: ChotaBhai_29 Start: 27796, Stop: 28224, Start Num: 15
Candidate Starts for ChotaBhai_29:
(Start: 15 @27796 has 152 MA's), (60, 28021), (65, 28048), (72, 28090), (75, 28102), (77, 28114),

Gene: Cjw1_29 Start: 29310, Stop: 29738, Start Num: 15
Candidate Starts for Cjw1_29:
(Start: 15 @29310 has 152 MA's), (60, 29535), (65, 29562), (72, 29604), (75, 29616), (77, 29628),

Gene: Clarkson_96 Start: 55340, Stop: 55747, Start Num: 18
Candidate Starts for Clarkson_96:
(Start: 11 @55319 has 1 MA's), (Start: 18 @55340 has 57 MA's), (43, 55448), (52, 55499), (61, 55544), (72, 55604), (81, 55655), (87, 55700),

Gene: Coco12_23 Start: 24119, Stop: 24556, Start Num: 15
Candidate Starts for Coco12_23:
(Start: 15 @24119 has 152 MA's), (Start: 28 @24161 has 1 MA's), (48, 24263), (56, 24320), (60, 24344), (61, 24350), (65, 24371), (74, 24416),

Gene: Command613_30 Start: 28816, Stop: 29244, Start Num: 15
Candidate Starts for Command613_30:
(Start: 15 @28816 has 152 MA's), (53, 29005), (60, 29041), (65, 29068), (72, 29110), (77, 29134), (88, 29203),

Gene: Constella_35 Start: 32452, Stop: 32856, Start Num: 17
Candidate Starts for Constella_35:
(Start: 17 @32452 has 3 MA's), (33, 32515), (67, 32692), (72, 32719), (85, 32794),

Gene: Contagion_28 Start: 28054, Stop: 28482, Start Num: 15
Candidate Starts for Contagion_28:
(Start: 15 @28054 has 152 MA's), (60, 28279), (65, 28306), (72, 28348), (75, 28360), (77, 28372),

Gene: Cookies_29 Start: 28419, Stop: 28847, Start Num: 15
Candidate Starts for Cookies_29:
(Start: 15 @28419 has 152 MA's), (60, 28644), (65, 28671), (72, 28713), (75, 28725), (77, 28737),

Gene: Corazon_90 Start: 55534, Stop: 55941, Start Num: 18
Candidate Starts for Corazon_90:
(Start: 11 @55513 has 1 MA's), (Start: 18 @55534 has 57 MA's), (43, 55642), (52, 55693), (61, 55738), (72, 55798), (81, 55849), (87, 55894),

Gene: Corndog_63 Start: 41144, Stop: 41545, Start Num: 18
Candidate Starts for Corndog_63:
(Start: 18 @41144 has 57 MA's), (Start: 29 @41180 has 10 MA's), (43, 41252), (61, 41348), (72, 41408), (85, 41483),

Gene: Cornie_23 Start: 24610, Stop: 25041, Start Num: 15
Candidate Starts for Cornie_23:
(Start: 15 @24610 has 152 MA's), (Start: 28 @24652 has 1 MA's), (60, 24835), (61, 24841), (65, 24862), (72, 24904), (77, 24928), (84, 24967), (86, 24973),

Gene: Corvo_34 Start: 28389, Stop: 28790, Start Num: 19

Candidate Starts for Corvo_34:

(Start: 19 @28389 has 29 MA's), (47, 28515), (49, 28518), (62, 28596), (65, 28614), (71, 28650), (87, 28749), (88, 28755),

Gene: Cosmo_46 Start: 35023, Stop: 35430, Start Num: 18

Candidate Starts for Cosmo_46:

(Start: 18 @35023 has 57 MA's), (Start: 23 @35035 has 12 MA's), (61, 35227), (64, 35245), (65, 35248), (67, 35260), (74, 35290), (85, 35362), (90, 35392), (96, 35425),

Gene: Courthouse_39 Start: 34108, Stop: 34539, Start Num: 15

Candidate Starts for Courthouse_39:

(Start: 15 @34108 has 152 MA's), (Start: 28 @34150 has 1 MA's), (48, 34252), (50, 34264), (53, 34297), (60, 34333), (61, 34339), (65, 34360), (74, 34405), (78, 34438), (84, 34465), (86, 34471),

Gene: CrystalP_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for CrystalP_29:

(5, 28441), (Start: 15 @28549 has 152 MA's), (53, 28738), (60, 28774), (65, 28801), (72, 28843), (77, 28867), (88, 28936),

Gene: Cueyllyss_33 Start: 27563, Stop: 27964, Start Num: 19

Candidate Starts for Cueyllyss_33:

(Start: 19 @27563 has 29 MA's), (47, 27689), (49, 27692), (62, 27770), (65, 27788), (71, 27824), (87, 27923), (88, 27929),

Gene: Czyszczonek1_30 Start: 28295, Stop: 28723, Start Num: 15

Candidate Starts for Czyszczonek1_30:

(Start: 15 @28295 has 152 MA's), (60, 28520), (65, 28547), (72, 28589), (75, 28601), (77, 28613),

Gene: Daikon_28 Start: 28287, Stop: 28715, Start Num: 15

Candidate Starts for Daikon_28:

(5, 28179), (Start: 15 @28287 has 152 MA's), (53, 28476), (60, 28512), (65, 28539), (72, 28581), (77, 28605), (88, 28674),

Gene: Dallas_42 Start: 33204, Stop: 33593, Start Num: 23

Candidate Starts for Dallas_42:

(Start: 23 @33204 has 12 MA's), (52, 33351), (58, 33384), (83, 33519),

Gene: Damien_32 Start: 30712, Stop: 31119, Start Num: 18

Candidate Starts for Damien_32:

(Start: 18 @30712 has 57 MA's), (33, 30772), (39, 30796), (59, 30907), (61, 30916), (62, 30919), (63, 30925), (65, 30937), (72, 30976), (85, 31051), (90, 31081),

Gene: Demsculpinboyz_27 Start: 23468, Stop: 23899, Start Num: 15

Candidate Starts for Demsculpinboyz_27:

(Start: 15 @23468 has 152 MA's), (25, 23492), (50, 23624), (60, 23693), (61, 23699), (65, 23720), (72, 23762), (77, 23786), (84, 23825), (86, 23831),

Gene: Dexes_34 Start: 28150, Stop: 28518, Start Num: 29

Candidate Starts for Dexes_34:

(Start: 29 @28150 has 10 MA's), (44, 28231), (47, 28243), (71, 28378), (72, 28381), (74, 28384),

Gene: DmpstrDiver_40 Start: 36756, Stop: 37187, Start Num: 15

Candidate Starts for DmpstrDiver_40:

(Start: 15 @36756 has 152 MA's), (Start: 28 @36798 has 1 MA's), (48, 36900), (50, 36912), (53, 36945), (60, 36981), (61, 36987), (65, 37008), (74, 37053), (78, 37086), (84, 37113), (86, 37119),

Gene: DoctorDiddles_29 Start: 27712, Stop: 28140, Start Num: 15

Candidate Starts for DoctorDiddles_29:

(Start: 15 @27712 has 152 MA's), (60, 27937), (65, 27964), (72, 28006), (75, 28018), (77, 28030),

Gene: Dove_39 Start: 32683, Stop: 33081, Start Num: 20

Candidate Starts for Dove_39:

(Start: 20 @32683 has 9 MA's), (31, 32719), (43, 32788), (72, 32944), (80, 32986),

Gene: DrDrey_30 Start: 29042, Stop: 29470, Start Num: 15

Candidate Starts for DrDrey_30:

(Start: 15 @29042 has 152 MA's), (60, 29267), (65, 29294), (72, 29336), (75, 29348), (77, 29360),

Gene: Dreamboat_34 Start: 27395, Stop: 27796, Start Num: 19

Candidate Starts for Dreamboat_34:

(Start: 19 @27395 has 29 MA's), (47, 27521), (49, 27524), (62, 27602), (65, 27620), (71, 27656), (87, 27755), (88, 27761),

Gene: Dumbo_29 Start: 28017, Stop: 28445, Start Num: 15

Candidate Starts for Dumbo_29:

(Start: 15 @28017 has 152 MA's), (60, 28242), (65, 28269), (72, 28311), (75, 28323), (77, 28335),

Gene: Dusk_28 Start: 28201, Stop: 28629, Start Num: 15

Candidate Starts for Dusk_28:

(Start: 15 @28201 has 152 MA's), (53, 28390), (60, 28426), (65, 28453), (72, 28495), (77, 28519), (88, 28588),

Gene: Dussy_34 Start: 27657, Stop: 28058, Start Num: 19

Candidate Starts for Dussy_34:

(Start: 19 @27657 has 29 MA's), (47, 27783), (49, 27786), (62, 27864), (65, 27882), (71, 27918), (87, 28017), (88, 28023),

Gene: Dylan_60 Start: 40195, Stop: 40596, Start Num: 18

Candidate Starts for Dylan_60:

(Start: 18 @40195 has 57 MA's), (Start: 29 @40231 has 10 MA's), (43, 40303), (61, 40399), (72, 40459), (85, 40534),

Gene: Easy2Say_31 Start: 29800, Stop: 30228, Start Num: 15

Candidate Starts for Easy2Say_31:

(Start: 15 @29800 has 152 MA's), (60, 30025), (65, 30052), (72, 30094), (75, 30106), (77, 30118),

Gene: Ejimix_41 Start: 34413, Stop: 34811, Start Num: 20

Candidate Starts for Ejimix_41:

(Start: 20 @34413 has 9 MA's), (31, 34449), (43, 34518), (72, 34674), (80, 34716),

Gene: Elite2014_28 Start: 27757, Stop: 28185, Start Num: 15

Candidate Starts for Elite2014_28:

(Start: 15 @27757 has 152 MA's), (60, 27982), (65, 28009), (72, 28051), (75, 28063), (77, 28075),

Gene: Elph10_30 Start: 28020, Stop: 28448, Start Num: 15
Candidate Starts for Elph10_30:
(Start: 15 @28020 has 152 MA's), (60, 28245), (65, 28272), (72, 28314), (75, 28326), (77, 28338),

Gene: Emmina_30 Start: 28378, Stop: 28806, Start Num: 15
Candidate Starts for Emmina_30:
(Start: 15 @28378 has 152 MA's), (60, 28603), (65, 28630), (72, 28672), (75, 28684), (77, 28696),

Gene: EniyanLRS_43 Start: 34721, Stop: 35128, Start Num: 18
Candidate Starts for EniyanLRS_43:
(Start: 18 @34721 has 57 MA's), (Start: 23 @34733 has 12 MA's), (61, 34925), (64, 34943), (65, 34946), (67, 34958), (74, 34988), (85, 35060), (90, 35090), (96, 35123),

Gene: EricMillard_41 Start: 33965, Stop: 34354, Start Num: 23
Candidate Starts for EricMillard_41:
(Start: 23 @33965 has 12 MA's), (52, 34112), (58, 34145), (83, 34280),

Gene: Estave1_21 Start: 23840, Stop: 24271, Start Num: 15
Candidate Starts for Estave1_21:
(Start: 15 @23840 has 152 MA's), (Start: 28 @23882 has 1 MA's), (60, 24065), (61, 24071), (65, 24092), (72, 24134), (77, 24158), (84, 24197), (86, 24203),

Gene: Euphoria_33 Start: 27428, Stop: 27829, Start Num: 19
Candidate Starts for Euphoria_33:
(Start: 19 @27428 has 29 MA's), (47, 27554), (49, 27557), (62, 27635), (65, 27653), (71, 27689), (87, 27788), (88, 27794),

Gene: Eureka_29 Start: 28533, Stop: 28961, Start Num: 15
Candidate Starts for Eureka_29:
(Start: 15 @28533 has 152 MA's), (53, 28722), (60, 28758), (65, 28785), (72, 28827), (77, 28851), (88, 28920),

Gene: Eyeball_33 Start: 27233, Stop: 27634, Start Num: 19
Candidate Starts for Eyeball_33:
(Start: 19 @27233 has 29 MA's), (47, 27359), (49, 27362), (62, 27440), (65, 27458), (71, 27494), (87, 27593), (88, 27599),

Gene: Familton_61 Start: 40107, Stop: 40508, Start Num: 18
Candidate Starts for Familton_61:
(Start: 18 @40107 has 57 MA's), (Start: 29 @40143 has 10 MA's), (Start: 37 @40185 has 1 MA's), (43, 40215), (61, 40311), (72, 40371), (85, 40446),

Gene: Filch_30 Start: 28308, Stop: 28736, Start Num: 15
Candidate Starts for Filch_30:
(Start: 15 @28308 has 152 MA's), (60, 28533), (65, 28560), (72, 28602), (75, 28614), (77, 28626),

Gene: FireRed_29 Start: 28578, Stop: 29006, Start Num: 15
Candidate Starts for FireRed_29:
(Start: 15 @28578 has 152 MA's), (60, 28803), (65, 28830), (72, 28872), (75, 28884), (77, 28896),

Gene: Firecracker_61 Start: 40297, Stop: 40698, Start Num: 18
Candidate Starts for Firecracker_61:

(Start: 18 @40297 has 57 MA's), (Start: 29 @40333 has 10 MA's), (43, 40405), (61, 40501), (72, 40561), (85, 40636),

Gene: Flypotenuse_27 Start: 28146, Stop: 28574, Start Num: 15

Candidate Starts for Flypotenuse_27:

(3, 27975), (Start: 15 @28146 has 152 MA's), (60, 28371), (65, 28398), (72, 28440), (75, 28452), (77, 28464),

Gene: Forsytheast_33 Start: 27667, Stop: 28068, Start Num: 19

Candidate Starts for Forsytheast_33:

(Start: 19 @27667 has 29 MA's), (47, 27793), (49, 27796), (62, 27874), (65, 27892), (71, 27928), (87, 28027), (88, 28033),

Gene: Forza_106 Start: 64430, Stop: 64867, Start Num: 16

Candidate Starts for Forza_106:

(Start: 16 @64430 has 24 MA's), (38, 64517), (64, 64685), (79, 64766), (85, 64799),

Gene: FoulBall_57 Start: 40101, Stop: 40502, Start Num: 18

Candidate Starts for FoulBall_57:

(Start: 18 @40101 has 57 MA's), (Start: 29 @40137 has 10 MA's), (Start: 37 @40179 has 1 MA's), (43, 40209), (61, 40305), (72, 40365), (85, 40440),

Gene: Fryberger_58 Start: 31819, Stop: 32250, Start Num: 16

Candidate Starts for Fryberger_58:

(Start: 16 @31819 has 24 MA's), (Start: 29 @31861 has 10 MA's), (38, 31906), (60, 32044), (61, 32050),

Gene: GMA1_27 Start: 21102, Stop: 21533, Start Num: 16

Candidate Starts for GMA1_27:

(Start: 16 @21102 has 24 MA's), (Start: 37 @21186 has 1 MA's), (38, 21189), (39, 21192), (48, 21246), (50, 21258), (57, 21315), (60, 21327), (64, 21351), (79, 21432), (89, 21492),

Gene: Gage_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for Gage_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Gator_27 Start: 28157, Stop: 28585, Start Num: 15

Candidate Starts for Gator_27:

(Start: 15 @28157 has 152 MA's), (53, 28346), (60, 28382), (65, 28409), (72, 28451), (77, 28475), (88, 28544),

Gene: Gattaca_94 Start: 55573, Stop: 55980, Start Num: 18

Candidate Starts for Gattaca_94:

(Start: 18 @55573 has 57 MA's), (43, 55681), (52, 55732), (61, 55777), (72, 55837), (87, 55933),

Gene: Gemini_32 Start: 29057, Stop: 29485, Start Num: 15

Candidate Starts for Gemini_32:

(Start: 15 @29057 has 152 MA's), (60, 29282), (65, 29309), (72, 29351), (75, 29363), (77, 29375),

Gene: Gibbles_36 Start: 39171, Stop: 39608, Start Num: 16

Candidate Starts for Gibbles_36:

(Start: 16 @39171 has 24 MA's), (Start: 29 @39213 has 10 MA's), (Start: 37 @39255 has 1 MA's), (38, 39258), (64, 39426), (71, 39465),

Gene: Glexan_27 Start: 28146, Stop: 28574, Start Num: 15

Candidate Starts for Glexan_27:

(3, 27975), (Start: 15 @28146 has 152 MA's), (60, 28371), (65, 28398), (72, 28440), (75, 28452), (77, 28464),

Gene: GodonK_93 Start: 56582, Stop: 57016, Start Num: 16

Candidate Starts for GodonK_93:

(Start: 16 @56582 has 24 MA's), (26, 56612), (30, 56627), (38, 56669), (45, 56714), (48, 56732), (53, 56774), (71, 56882), (79, 56915), (91, 56978),

Gene: Goku_29 Start: 28262, Stop: 28690, Start Num: 15

Candidate Starts for Goku_29:

(Start: 15 @28262 has 152 MA's), (53, 28451), (60, 28487), (65, 28514), (72, 28556), (77, 28580), (88, 28649),

Gene: GoldenSpark_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for GoldenSpark_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Goldilocks_30 Start: 27960, Stop: 28388, Start Num: 15

Candidate Starts for Goldilocks_30:

(Start: 15 @27960 has 152 MA's), (60, 28185), (65, 28212), (72, 28254), (75, 28266), (77, 28278),

Gene: GooberAzure_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for GooberAzure_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Graduation_35 Start: 28150, Stop: 28551, Start Num: 19

Candidate Starts for Graduation_35:

(Start: 19 @28150 has 29 MA's), (47, 28276), (49, 28279), (62, 28357), (65, 28375), (71, 28411), (87, 28510), (88, 28516),

Gene: GrecoEtereo_35 Start: 28237, Stop: 28638, Start Num: 19

Candidate Starts for GrecoEtereo_35:

(Start: 19 @28237 has 29 MA's), (47, 28363), (49, 28366), (62, 28444), (65, 28462), (71, 28498), (87, 28597), (88, 28603),

Gene: Guey18_63 Start: 33017, Stop: 33448, Start Num: 16

Candidate Starts for Guey18_63:

(Start: 16 @33017 has 24 MA's), (Start: 29 @33059 has 10 MA's), (Start: 37 @33101 has 1 MA's), (38, 33104), (64, 33275),

Gene: Halley_41 Start: 33678, Stop: 34067, Start Num: 23

Candidate Starts for Halley_41:

(Start: 23 @33678 has 12 MA's), (52, 33825), (58, 33858), (83, 33993),

Gene: HanKaySha_30 Start: 28292, Stop: 28720, Start Num: 15

Candidate Starts for HanKaySha_30:

(Start: 15 @28292 has 152 MA's), (60, 28517), (65, 28544), (72, 28586), (75, 28598), (77, 28610),

Gene: HanShotFirst_33 Start: 27403, Stop: 27771, Start Num: 29

Candidate Starts for HanShotFirst_33:

(Start: 29 @27403 has 10 MA's), (44, 27484), (47, 27496), (71, 27631), (72, 27634), (74, 27637),

Gene: Hannaconda_36 Start: 32698, Stop: 33129, Start Num: 15

Candidate Starts for Hannaconda_36:

(Start: 15 @32698 has 152 MA's), (24, 32719), (Start: 28 @32740 has 1 MA's), (50, 32854), (60, 32923), (61, 32929), (65, 32950), (72, 32992), (74, 32995), (77, 33016), (84, 33055), (87, 33079),

Gene: Harella_28 Start: 28662, Stop: 29090, Start Num: 15

Candidate Starts for Harella_28:

(3, 28491), (Start: 15 @28662 has 152 MA's), (60, 28887), (65, 28914), (72, 28956), (75, 28968), (77, 28980),

Gene: HarryOW_34 Start: 27857, Stop: 28225, Start Num: 29

Candidate Starts for HarryOW_34:

(Start: 29 @27857 has 10 MA's), (44, 27938), (47, 27950), (71, 28085), (72, 28088), (74, 28091),

Gene: Hawkeye_36 Start: 29723, Stop: 30130, Start Num: 18

Candidate Starts for Hawkeye_36:

(Start: 18 @29723 has 57 MA's), (40, 29810), (41, 29816), (56, 29900), (59, 29918), (60, 29921), (62, 29930), (67, 29960), (71, 29984),

Gene: Henry_30 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for Henry_30:

(5, 28441), (Start: 15 @28549 has 152 MA's), (53, 28738), (60, 28774), (65, 28801), (72, 28843), (77, 28867), (88, 28936),

Gene: Hermia_36 Start: 28954, Stop: 29355, Start Num: 19

Candidate Starts for Hermia_36:

(Start: 19 @28954 has 29 MA's), (47, 29080), (49, 29083), (62, 29161), (65, 29179), (71, 29215), (87, 29314), (88, 29320),

Gene: Highbury_30 Start: 28208, Stop: 28636, Start Num: 15

Candidate Starts for Highbury_30:

(Start: 15 @28208 has 152 MA's), (60, 28433), (65, 28460), (72, 28502), (75, 28514), (77, 28526),

Gene: HokkenD_36 Start: 33227, Stop: 33616, Start Num: 23

Candidate Starts for HokkenD_36:

(Start: 23 @33227 has 12 MA's), (52, 33374), (58, 33407), (83, 33542),

Gene: Holt_30 Start: 27827, Stop: 28255, Start Num: 15

Candidate Starts for Holt_30:

(Start: 15 @27827 has 152 MA's), (60, 28052), (65, 28079), (72, 28121), (75, 28133), (77, 28145),

Gene: Homines_33 Start: 27796, Stop: 28203, Start Num: 37

Candidate Starts for Homines_33:

(Start: 37 @27796 has 1 MA's), (38, 27799), (39, 27802), (43, 27826), (49, 27850), (58, 27910), (62, 27928), (65, 27946), (88, 28087), (98, 28126), (99, 28138),

Gene: Hoonter_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for Hoonter_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Hope4ever_33 Start: 27840, Stop: 28241, Start Num: 19

Candidate Starts for Hope4ever_33:

(Start: 19 @27840 has 29 MA's), (47, 27966), (49, 27969), (62, 28047), (65, 28065), (71, 28101), (87, 28200), (88, 28206),

Gene: Hopey_31 Start: 28827, Stop: 29255, Start Num: 15

Candidate Starts for Hopey_31:

(Start: 15 @28827 has 152 MA's), (60, 29052), (65, 29079), (72, 29121), (75, 29133), (77, 29145),

Gene: HufflyPuff_28 Start: 28534, Stop: 28962, Start Num: 15

Candidate Starts for HufflyPuff_28:

(Start: 15 @28534 has 152 MA's), (60, 28759), (65, 28786), (72, 28828), (75, 28840), (77, 28852),

Gene: Hughesyang_39 Start: 33556, Stop: 33954, Start Num: 20

Candidate Starts for Hughesyang_39:

(Start: 20 @33556 has 9 MA's), (31, 33592), (43, 33661), (72, 33817), (80, 33859),

Gene: Huphleuff_97 Start: 55145, Stop: 55552, Start Num: 18

Candidate Starts for Huphleuff_97:

(Start: 11 @55124 has 1 MA's), (Start: 18 @55145 has 57 MA's), (43, 55253), (52, 55304), (61, 55349), (72, 55409), (81, 55460), (87, 55505),

Gene: IHOP_29 Start: 28725, Stop: 29153, Start Num: 15

Candidate Starts for IHOP_29:

(5, 28617), (Start: 15 @28725 has 152 MA's), (53, 28914), (60, 28950), (65, 28977), (72, 29019), (77, 29043), (88, 29112),

Gene: ILeeKay_35 Start: 27604, Stop: 28005, Start Num: 19

Candidate Starts for ILeeKay_35:

(Start: 19 @27604 has 29 MA's), (47, 27730), (49, 27733), (62, 27811), (65, 27829), (71, 27865), (87, 27964), (88, 27970),

Gene: Icee_28 Start: 28207, Stop: 28635, Start Num: 15

Candidate Starts for Icee_28:

(Start: 15 @28207 has 152 MA's), (53, 28396), (60, 28432), (65, 28459), (72, 28501), (77, 28525), (88, 28594),

Gene: Idergollasper_60 Start: 40101, Stop: 40502, Start Num: 18

Candidate Starts for Idergollasper_60:

(Start: 18 @40101 has 57 MA's), (Start: 29 @40137 has 10 MA's), (Start: 37 @40179 has 1 MA's), (43, 40209), (61, 40305), (72, 40365), (85, 40440),

Gene: IgnatiusPatJac_33 Start: 27718, Stop: 28086, Start Num: 29

Candidate Starts for IgnatiusPatJac_33:

(Start: 29 @27718 has 10 MA's), (44, 27799), (47, 27811), (71, 27946), (72, 27949), (74, 27952),

Gene: Inca_28 Start: 27229, Stop: 27657, Start Num: 15

Candidate Starts for Inca_28:

(Start: 15 @27229 has 152 MA's), (60, 27454), (65, 27481), (72, 27523), (75, 27535), (77, 27547),

Gene: Island3_23 Start: 23116, Stop: 23517, Start Num: 18

Candidate Starts for Island3_23:

(Start: 18 @23116 has 57 MA's), (58, 23308), (64, 23338), (67, 23353), (72, 23380), (85, 23455),

Gene: JC27_35 Start: 28372, Stop: 28740, Start Num: 29

Candidate Starts for JC27_35:

(Start: 29 @28372 has 10 MA's), (44, 28453), (47, 28465), (71, 28600), (72, 28603), (74, 28606),

Gene: JCole_24 Start: 20984, Stop: 21424, Start Num: 14

Candidate Starts for JCole_24:

(Start: 14 @20984 has 3 MA's), (21, 20999), (26, 21014), (38, 21071), (48, 21128), (70, 21284), (71, 21287), (79, 21323),

Gene: Jabbawokkie_29 Start: 24166, Stop: 24603, Start Num: 15

Candidate Starts for Jabbawokkie_29:

(Start: 15 @24166 has 152 MA's), (Start: 28 @24208 has 1 MA's), (50, 24322), (60, 24391), (61, 24397), (65, 24418), (72, 24460), (77, 24484), (84, 24529), (87, 24553), (93, 24586), (96, 24595),

Gene: JangDynasty_60 Start: 40187, Stop: 40588, Start Num: 18

Candidate Starts for JangDynasty_60:

(Start: 18 @40187 has 57 MA's), (Start: 29 @40223 has 10 MA's), (Start: 37 @40265 has 1 MA's), (43, 40295), (61, 40391), (72, 40451), (85, 40526),

Gene: Jasper_34 Start: 27281, Stop: 27682, Start Num: 19

Candidate Starts for Jasper_34:

(Start: 19 @27281 has 29 MA's), (47, 27407), (49, 27410), (62, 27488), (65, 27506), (71, 27542), (87, 27641), (88, 27647),

Gene: JeTaime_31 Start: 29351, Stop: 29779, Start Num: 15

Candidate Starts for JeTaime_31:

(Start: 15 @29351 has 152 MA's), (60, 29576), (65, 29603), (72, 29645), (75, 29657), (77, 29669),

Gene: JoieB_96 Start: 55748, Stop: 56155, Start Num: 18

Candidate Starts for JoieB_96:

(Start: 18 @55748 has 57 MA's), (43, 55856), (52, 55907), (61, 55952), (72, 56012), (79, 56051), (81, 56063), (87, 56108),

Gene: JuicyJay_43 Start: 35428, Stop: 35817, Start Num: 23

Candidate Starts for JuicyJay_43:

(Start: 23 @35428 has 12 MA's), (52, 35575), (58, 35608), (83, 35743),

Gene: Kalah2_41 Start: 34015, Stop: 34404, Start Num: 23

Candidate Starts for Kalah2_41:

(Start: 23 @34015 has 12 MA's), (52, 34162), (58, 34195), (83, 34330),

Gene: Kampe_38 Start: 38735, Stop: 39172, Start Num: 16

Candidate Starts for Kampe_38:

(Start: 16 @38735 has 24 MA's), (38, 38822), (51, 38894), (55, 38936), (64, 38990), (71, 39029),

Gene: Kanye_31 Start: 29536, Stop: 29964, Start Num: 15

Candidate Starts for Kanye_31:

(Start: 15 @29536 has 152 MA's), (60, 29761), (65, 29788), (72, 29830), (75, 29842), (77, 29854),

Gene: KashFlow_33 Start: 32319, Stop: 32750, Start Num: 15

Candidate Starts for KashFlow_33:

(Start: 15 @32319 has 152 MA's), (24, 32340), (Start: 28 @32361 has 1 MA's), (50, 32475), (60, 32544), (61, 32550), (65, 32571), (72, 32613), (74, 32616), (77, 32637), (84, 32676), (87, 32700),

Gene: Keelan_56 Start: 31817, Stop: 32248, Start Num: 16

Candidate Starts for Keelan_56:

(Start: 16 @31817 has 24 MA's), (Start: 29 @31859 has 10 MA's), (Start: 37 @31901 has 1 MA's), (38, 31904), (60, 32042), (61, 32048), (96, 32240),

Gene: Kenmech_36 Start: 28744, Stop: 29145, Start Num: 19

Candidate Starts for Kenmech_36:

(Start: 19 @28744 has 29 MA's), (47, 28870), (49, 28873), (62, 28951), (65, 28969), (71, 29005), (87, 29104), (88, 29110),

Gene: Kenuha5_21 Start: 23861, Stop: 24292, Start Num: 15

Candidate Starts for Kenuha5_21:

(Start: 15 @23861 has 152 MA's), (25, 23885), (48, 24005), (50, 24017), (60, 24086), (61, 24092), (65, 24113), (72, 24155), (77, 24179), (84, 24218), (86, 24224),

Gene: Kersh_22 Start: 23904, Stop: 24335, Start Num: 15

Candidate Starts for Kersh_22:

(Start: 15 @23904 has 152 MA's), (Start: 28 @23946 has 1 MA's), (50, 24060), (60, 24129), (61, 24135), (65, 24156), (72, 24198), (77, 24222), (84, 24261), (86, 24267),

Gene: Kimchi_31 Start: 28543, Stop: 28971, Start Num: 15

Candidate Starts for Kimchi_31:

(Start: 15 @28543 has 152 MA's), (60, 28768), (65, 28795), (72, 28837), (75, 28849), (77, 28861),

Gene: Kingsley_22 Start: 23580, Stop: 24017, Start Num: 15

Candidate Starts for Kingsley_22:

(Start: 15 @23580 has 152 MA's), (Start: 28 @23622 has 1 MA's), (48, 23724), (56, 23781), (60, 23805), (61, 23811), (65, 23832), (74, 23877), (84, 23943),

Gene: Klein_41 Start: 33239, Stop: 33628, Start Num: 23

Candidate Starts for Klein_41:

(Start: 23 @33239 has 12 MA's), (52, 33386), (58, 33419), (83, 33554),

Gene: Konstantine_37 Start: 31913, Stop: 32320, Start Num: 18

Candidate Starts for Konstantine_37:

(Start: 18 @31913 has 57 MA's), (33, 31973), (39, 31997), (59, 32108), (61, 32117), (62, 32120), (63, 32126), (65, 32138), (72, 32177), (85, 32252), (90, 32282),

Gene: Kostya_30 Start: 28550, Stop: 28978, Start Num: 15

Candidate Starts for Kostya_30:

(5, 28442), (Start: 15 @28550 has 152 MA's), (53, 28739), (60, 28775), (65, 28802), (72, 28844), (77, 28868), (88, 28937),

Gene: Krili_59 Start: 39611, Stop: 40012, Start Num: 18

Candidate Starts for Krili_59:

(Start: 18 @39611 has 57 MA's), (Start: 29 @39647 has 10 MA's), (Start: 37 @39689 has 1 MA's), (43, 39719), (61, 39815), (72, 39875), (85, 39950),

Gene: Kumao_33 Start: 30358, Stop: 30762, Start Num: 20

Candidate Starts for Kumao_33:

(Start: 20 @30358 has 9 MA's), (61, 30559), (64, 30577), (67, 30592), (72, 30619), (74, 30622), (79, 30658), (85, 30694), (88, 30721),

Gene: Leopard_43 Start: 34302, Stop: 34736, Start Num: 16

Candidate Starts for Leopard_43:

(Start: 16 @34302 has 24 MA's), (Start: 29 @34341 has 10 MA's), (32, 34356), (35, 34374), (54, 34497), (73, 34602), (92, 34713),

Gene: Leopard_39 Start: 29770, Stop: 30210, Start Num: 16

Candidate Starts for Leopard_39:

(Start: 16 @29770 has 24 MA's), (31, 29815), (36, 29851), (39, 29860), (65, 30028), (76, 30088), (79, 30109), (95, 30196), (97, 30202),

Gene: Licorice_35 Start: 28435, Stop: 28836, Start Num: 19

Candidate Starts for Licorice_35:

(Start: 19 @28435 has 29 MA's), (47, 28561), (49, 28564), (62, 28642), (65, 28660), (71, 28696), (87, 28795), (88, 28801),

Gene: LilBib_34 Start: 28680, Stop: 29048, Start Num: 29

Candidate Starts for LilBib_34:

(Start: 29 @28680 has 10 MA's), (44, 28761), (47, 28773), (71, 28908), (72, 28911), (74, 28914),

Gene: Lilac_31 Start: 28047, Stop: 28475, Start Num: 15

Candidate Starts for Lilac_31:

(Start: 15 @28047 has 152 MA's), (60, 28272), (65, 28299), (72, 28341), (75, 28353), (77, 28365),

Gene: Lilbit_93 Start: 55705, Stop: 56112, Start Num: 18

Candidate Starts for Lilbit_93:

(Start: 11 @55684 has 1 MA's), (Start: 18 @55705 has 57 MA's), (43, 55813), (52, 55864), (61, 55909), (72, 55969), (81, 56020), (87, 56065),

Gene: Lilizi_31 Start: 28255, Stop: 28683, Start Num: 15

Candidate Starts for Lilizi_31:

(Start: 15 @28255 has 152 MA's), (60, 28480), (65, 28507), (72, 28549), (75, 28561), (77, 28573),

Gene: Lilpickle_28 Start: 27757, Stop: 28185, Start Num: 15

Candidate Starts for Lilpickle_28:

(Start: 15 @27757 has 152 MA's), (60, 27982), (65, 28009), (72, 28051), (75, 28063), (77, 28075),

Gene: LittleLaf_93 Start: 55434, Stop: 55841, Start Num: 18

Candidate Starts for LittleLaf_93:

(Start: 11 @55413 has 1 MA's), (Start: 18 @55434 has 57 MA's), (43, 55542), (52, 55593), (61, 55638), (72, 55698), (81, 55749), (87, 55794),

Gene: Lucky2013_39 Start: 34235, Stop: 34666, Start Num: 15

Candidate Starts for Lucky2013_39:

(Start: 15 @34235 has 152 MA's), (Start: 28 @34277 has 1 MA's), (48, 34379), (50, 34391), (53, 34424), (60, 34460), (61, 34466), (65, 34487), (74, 34532), (78, 34565), (84, 34592), (86, 34598),

Gene: LunaStella_22 Start: 24249, Stop: 24680, Start Num: 15

Candidate Starts for LunaStella_22:

(Start: 12 @24237 has 1 MA's), (Start: 15 @24249 has 152 MA's), (Start: 28 @24291 has 1 MA's), (48, 24393), (50, 24405), (60, 24474), (61, 24480), (65, 24501), (72, 24543), (77, 24567), (84, 24606), (86, 24612),

Gene: MISSy_28 Start: 28062, Stop: 28490, Start Num: 15
Candidate Starts for MISSy_28:
(Start: 15 @28062 has 152 MA's), (60, 28287), (65, 28314), (72, 28356), (75, 28368), (77, 28380),

Gene: MPhalcon_28 Start: 28056, Stop: 28484, Start Num: 15
Candidate Starts for MPhalcon_28:
(Start: 15 @28056 has 152 MA's), (60, 28281), (65, 28308), (72, 28350), (75, 28362), (77, 28374),

Gene: MadKillah_61 Start: 39880, Stop: 40281, Start Num: 18
Candidate Starts for MadKillah_61:
(Start: 18 @39880 has 57 MA's), (Start: 29 @39916 has 10 MA's), (Start: 37 @39958 has 1 MA's),
(43, 39988), (61, 40084), (72, 40144), (85, 40219),

Gene: MadMen_22 Start: 23958, Stop: 24389, Start Num: 15
Candidate Starts for MadMen_22:
(Start: 15 @23958 has 152 MA's), (Start: 28 @24000 has 1 MA's), (50, 24114), (60, 24183), (61,
24189), (65, 24210), (72, 24252), (77, 24276), (84, 24315), (86, 24321),

Gene: MadamMonkfish_29 Start: 27968, Stop: 28396, Start Num: 15
Candidate Starts for MadamMonkfish_29:
(Start: 15 @27968 has 152 MA's), (60, 28193), (65, 28220), (72, 28262), (75, 28274), (77, 28286),

Gene: Madiba_22 Start: 23608, Stop: 24039, Start Num: 15
Candidate Starts for Madiba_22:
(Start: 15 @23608 has 152 MA's), (25, 23632), (50, 23764), (60, 23833), (61, 23839), (65, 23860), (72,
23902), (77, 23926), (84, 23965), (86, 23971),

Gene: Manda_30 Start: 29035, Stop: 29463, Start Num: 15
Candidate Starts for Manda_30:
(Start: 15 @29035 has 152 MA's), (60, 29260), (65, 29287), (72, 29329), (75, 29341), (77, 29353),

Gene: Mareelih_104 Start: 63932, Stop: 64369, Start Num: 16
Candidate Starts for Mareelih_104:
(Start: 16 @63932 has 24 MA's), (38, 64019), (64, 64187), (79, 64268), (85, 64301),

Gene: Marshmallow_29 Start: 28547, Stop: 28975, Start Num: 15
Candidate Starts for Marshmallow_29:
(Start: 15 @28547 has 152 MA's), (53, 28736), (60, 28772), (65, 28799), (72, 28841), (77, 28865), (88,
28934),

Gene: Marvin_89 Start: 55227, Stop: 55634, Start Num: 18
Candidate Starts for Marvin_89:
(Start: 18 @55227 has 57 MA's), (43, 55335), (52, 55386), (61, 55431), (72, 55491), (79, 55530), (81,
55542), (87, 55587),

Gene: MaryBeth_33 Start: 27595, Stop: 27996, Start Num: 19
Candidate Starts for MaryBeth_33:
(Start: 19 @27595 has 29 MA's), (47, 27721), (49, 27724), (62, 27802), (65, 27820), (71, 27856), (87,
27955), (88, 27961),

Gene: MaryV_46 Start: 35008, Stop: 35415, Start Num: 18
Candidate Starts for MaryV_46:

(Start: 18 @35008 has 57 MA's), (Start: 23 @35020 has 12 MA's), (61, 35212), (64, 35230), (65, 35233), (67, 35245), (74, 35275), (85, 35347), (90, 35377), (96, 35410),

Gene: Maxxinista_30 Start: 28017, Stop: 28445, Start Num: 15

Candidate Starts for Maxxinista_30:

(Start: 15 @28017 has 152 MA's), (60, 28242), (65, 28269), (72, 28311), (75, 28323), (77, 28335),

Gene: Megatron06_35 Start: 31245, Stop: 31652, Start Num: 18

Candidate Starts for Megatron06_35:

(Start: 18 @31245 has 57 MA's), (33, 31305), (39, 31329), (59, 31440), (61, 31449), (62, 31452), (63, 31458), (65, 31470), (72, 31509), (85, 31584), (90, 31614),

Gene: MetalQZJ_33 Start: 27595, Stop: 27996, Start Num: 19

Candidate Starts for MetalQZJ_33:

(Start: 19 @27595 has 29 MA's), (47, 27721), (49, 27724), (62, 27802), (65, 27820), (71, 27856), (87, 27955), (88, 27961),

Gene: MiaZeal_39 Start: 33919, Stop: 34350, Start Num: 15

Candidate Starts for MiaZeal_39:

(Start: 15 @33919 has 152 MA's), (Start: 28 @33961 has 1 MA's), (48, 34063), (50, 34075), (53, 34108), (60, 34144), (61, 34150), (65, 34171), (74, 34216), (78, 34249), (84, 34276), (86, 34282),

Gene: Mindy_29 Start: 28327, Stop: 28755, Start Num: 15

Candidate Starts for Mindy_29:

(5, 28219), (Start: 15 @28327 has 152 MA's), (53, 28516), (60, 28552), (65, 28579), (72, 28621), (77, 28645), (88, 28714),

Gene: Miniwave_29 Start: 28747, Stop: 29175, Start Num: 15

Candidate Starts for Miniwave_29:

(Start: 15 @28747 has 152 MA's), (60, 28972), (65, 28999), (72, 29041), (75, 29053), (77, 29065),

Gene: Misfit_29 Start: 28637, Stop: 29065, Start Num: 15

Candidate Starts for Misfit_29:

(Start: 15 @28637 has 152 MA's), (60, 28862), (65, 28889), (72, 28931), (75, 28943), (77, 28955),

Gene: Moldemort_30 Start: 28292, Stop: 28720, Start Num: 15

Candidate Starts for Moldemort_30:

(Start: 15 @28292 has 152 MA's), (60, 28517), (65, 28544), (72, 28586), (75, 28598), (77, 28610),

Gene: MooMoo_21 Start: 23416, Stop: 23847, Start Num: 15

Candidate Starts for MooMoo_21:

(5, 23311), (8, 23377), (Start: 15 @23416 has 152 MA's), (48, 23560), (61, 23647), (65, 23668), (72, 23710), (77, 23734), (78, 23746), (84, 23773), (86, 23779), (96, 23839),

Gene: Moose_33 Start: 27667, Stop: 28068, Start Num: 19

Candidate Starts for Moose_33:

(Start: 19 @27667 has 29 MA's), (47, 27793), (49, 27796), (62, 27874), (65, 27892), (71, 27928), (87, 28027), (88, 28033),

Gene: Moosehead_26 Start: 21145, Stop: 21585, Start Num: 14

Candidate Starts for Moosehead_26:

(Start: 14 @21145 has 3 MA's), (26, 21175), (38, 21232), (70, 21445), (71, 21448), (91, 21547),

Gene: Mori_60 Start: 40142, Stop: 40543, Start Num: 18

Candidate Starts for Mori_60:

(Start: 18 @40142 has 57 MA's), (Start: 29 @40178 has 10 MA's), (Start: 37 @40220 has 1 MA's), (43, 40250), (61, 40346), (72, 40406), (85, 40481),

Gene: MosMoris_91 Start: 55579, Stop: 55986, Start Num: 18

Candidate Starts for MosMoris_91:

(Start: 18 @55579 has 57 MA's), (43, 55687), (52, 55738), (61, 55783), (72, 55843), (87, 55939),

Gene: Mosby_28 Start: 28054, Stop: 28482, Start Num: 15

Candidate Starts for Mosby_28:

(Start: 15 @28054 has 152 MA's), (60, 28279), (65, 28306), (72, 28348), (75, 28360), (77, 28372),

Gene: Murai_61 Start: 40323, Stop: 40724, Start Num: 18

Candidate Starts for Murai_61:

(Start: 18 @40323 has 57 MA's), (Start: 29 @40359 has 10 MA's), (Start: 37 @40401 has 1 MA's), (43, 40431), (61, 40527), (72, 40587), (85, 40662),

Gene: Murica_28 Start: 28534, Stop: 28962, Start Num: 15

Candidate Starts for Murica_28:

(Start: 15 @28534 has 152 MA's), (60, 28759), (65, 28786), (72, 28828), (75, 28840), (77, 28852),

Gene: Murphy_30 Start: 28529, Stop: 28957, Start Num: 15

Candidate Starts for Murphy_30:

(Start: 15 @28529 has 152 MA's), (60, 28754), (65, 28781), (72, 28823), (75, 28835), (77, 28847),

Gene: Myrale_29 Start: 28412, Stop: 28840, Start Num: 15

Candidate Starts for Myrale_29:

(Start: 15 @28412 has 152 MA's), (53, 28601), (60, 28637), (65, 28664), (72, 28706), (77, 28730), (88, 28799),

Gene: Nala_29 Start: 28568, Stop: 28996, Start Num: 15

Candidate Starts for Nala_29:

(3, 28397), (Start: 15 @28568 has 152 MA's), (60, 28793), (65, 28820), (72, 28862), (75, 28874), (77, 28886),

Gene: NelitzaMV_29 Start: 28617, Stop: 29045, Start Num: 15

Candidate Starts for NelitzaMV_29:

(Start: 15 @28617 has 152 MA's), (53, 28806), (60, 28842), (65, 28869), (72, 28911), (77, 28935), (88, 29004),

Gene: NiebruSaylor_59 Start: 39530, Stop: 39931, Start Num: 18

Candidate Starts for NiebruSaylor_59:

(Start: 18 @39530 has 57 MA's), (Start: 29 @39566 has 10 MA's), (Start: 37 @39608 has 1 MA's), (43, 39638), (61, 39734), (72, 39794), (85, 39869),

Gene: NihilNomen_40 Start: 33704, Stop: 34102, Start Num: 20

Candidate Starts for NihilNomen_40:

(Start: 20 @33704 has 9 MA's), (31, 33740), (43, 33809), (72, 33965), (80, 34007),

Gene: Nimrod_29 Start: 28792, Stop: 29220, Start Num: 15

Candidate Starts for Nimrod_29:

(Start: 15 @28792 has 152 MA's), (60, 29017), (65, 29044), (72, 29086), (75, 29098), (77, 29110),

Gene: NoShow_24 Start: 22544, Stop: 22975, Start Num: 16

Candidate Starts for NoShow_24:

(Start: 16 @22544 has 24 MA's), (Start: 27 @22580 has 1 MA's), (Start: 29 @22586 has 10 MA's), (53, 22733), (65, 22805), (69, 22838),

Gene: NoSleep_30 Start: 28289, Stop: 28717, Start Num: 15

Candidate Starts for NoSleep_30:

(Start: 15 @28289 has 152 MA's), (60, 28514), (65, 28541), (72, 28583), (75, 28595), (77, 28607),

Gene: Oaker_32 Start: 30969, Stop: 31376, Start Num: 18

Candidate Starts for Oaker_32:

(Start: 18 @30969 has 57 MA's), (33, 31029), (39, 31053), (59, 31164), (61, 31173), (62, 31176), (63, 31182), (65, 31194), (72, 31233), (85, 31308), (90, 31338),

Gene: Odette_40 Start: 32937, Stop: 33335, Start Num: 20

Candidate Starts for Odette_40:

(Start: 20 @32937 has 9 MA's), (31, 32973), (43, 33042), (72, 33198), (80, 33240),

Gene: Ogopogo_24 Start: 24068, Stop: 24499, Start Num: 15

Candidate Starts for Ogopogo_24:

(Start: 15 @24068 has 152 MA's), (Start: 28 @24110 has 1 MA's), (50, 24224), (60, 24293), (61, 24299), (65, 24320), (72, 24362), (77, 24386), (84, 24425), (86, 24431),

Gene: Onyinye_40 Start: 29649, Stop: 30089, Start Num: 16

Candidate Starts for Onyinye_40:

(Start: 16 @29649 has 24 MA's), (31, 29694), (36, 29730), (39, 29739), (76, 29967), (79, 29988), (95, 30075), (97, 30081),

Gene: Onyinye_44 Start: 34181, Stop: 34615, Start Num: 16

Candidate Starts for Onyinye_44:

(Start: 16 @34181 has 24 MA's), (Start: 29 @34220 has 10 MA's), (32, 34235), (35, 34253), (54, 34376), (73, 34481), (92, 34592),

Gene: Orchid_37 Start: 38736, Stop: 39173, Start Num: 16

Candidate Starts for Orchid_37:

(Start: 16 @38736 has 24 MA's), (38, 38823), (51, 38895), (55, 38937), (64, 38991), (71, 39030),

Gene: OrionPax_30 Start: 28295, Stop: 28723, Start Num: 15

Candidate Starts for OrionPax_30:

(Start: 15 @28295 has 152 MA's), (60, 28520), (65, 28547), (72, 28589), (75, 28601), (77, 28613),

Gene: Palpatine_29 Start: 28564, Stop: 28992, Start Num: 15

Candidate Starts for Palpatine_29:

(Start: 15 @28564 has 152 MA's), (60, 28789), (65, 28816), (72, 28858), (75, 28870), (77, 28882),

Gene: Paperbeatsrock_31 Start: 29530, Stop: 29958, Start Num: 15

Candidate Starts for Paperbeatsrock_31:

(Start: 15 @29530 has 152 MA's), (60, 29755), (65, 29782), (72, 29824), (75, 29836), (77, 29848),

Gene: Papez_35 Start: 29148, Stop: 29549, Start Num: 19

Candidate Starts for Papez_35:

(Start: 19 @29148 has 29 MA's), (47, 29274), (49, 29277), (62, 29355), (65, 29373), (71, 29409), (87, 29508), (88, 29514),

Gene: Pat3_28 Start: 27276, Stop: 27704, Start Num: 15

Candidate Starts for Pat3_28:

(Start: 15 @27276 has 152 MA's), (60, 27501), (65, 27528), (72, 27570), (75, 27582), (77, 27594),

Gene: PatrickStar_38 Start: 38735, Stop: 39172, Start Num: 16

Candidate Starts for PatrickStar_38:

(Start: 16 @38735 has 24 MA's), (38, 38822), (51, 38894), (55, 38936), (64, 38990), (71, 39029),

Gene: Pelly_34 Start: 28171, Stop: 28539, Start Num: 29

Candidate Starts for Pelly_34:

(Start: 29 @28171 has 10 MA's), (44, 28252), (47, 28264), (71, 28399), (72, 28402), (74, 28405),

Gene: Peterson_36 Start: 29362, Stop: 29763, Start Num: 20

Candidate Starts for Peterson_36:

(Start: 20 @29362 has 9 MA's), (Start: 27 @29389 has 1 MA's), (47, 29488), (56, 29536), (62, 29569), (71, 29623), (88, 29728),

Gene: Petra64142_31 Start: 29010, Stop: 29438, Start Num: 15

Candidate Starts for Petra64142_31:

(Start: 15 @29010 has 152 MA's), (60, 29235), (65, 29262), (72, 29304), (75, 29316), (77, 29328),

Gene: Phaja_29 Start: 28725, Stop: 29153, Start Num: 15

Candidate Starts for Phaja_29:

(5, 28617), (Start: 15 @28725 has 152 MA's), (53, 28914), (60, 28950), (65, 28977), (72, 29019), (77, 29043), (88, 29112),

Gene: Phanphagia_21 Start: 23774, Stop: 24211, Start Num: 15

Candidate Starts for Phanphagia_21:

(Start: 15 @23774 has 152 MA's), (Start: 28 @23816 has 1 MA's), (48, 23918), (56, 23975), (60, 23999), (61, 24005), (65, 24026), (74, 24071), (84, 24137),

Gene: Pharsalus_30 Start: 29330, Stop: 29758, Start Num: 15

Candidate Starts for Pharsalus_30:

(Start: 15 @29330 has 152 MA's), (60, 29555), (65, 29582), (72, 29624), (75, 29636), (77, 29648),

Gene: PhatBacter_29 Start: 28578, Stop: 29006, Start Num: 15

Candidate Starts for PhatBacter_29:

(Start: 15 @28578 has 152 MA's), (60, 28803), (65, 28830), (72, 28872), (75, 28884), (77, 28896),

Gene: Phaux_28 Start: 28576, Stop: 29004, Start Num: 15

Candidate Starts for Phaux_28:

(Start: 15 @28576 has 152 MA's), (60, 28801), (65, 28828), (72, 28870), (75, 28882), (77, 28894),

Gene: Phendrix_90 Start: 56293, Stop: 56727, Start Num: 16

Candidate Starts for Phendrix_90:

(Start: 16 @56293 has 24 MA's), (26, 56323), (30, 56338), (Start: 37 @56377 has 1 MA's), (38, 56380), (45, 56425), (48, 56443), (53, 56485), (71, 56593), (79, 56626), (91, 56689),

Gene: PherrisBueller_34 Start: 27304, Stop: 27705, Start Num: 19

Candidate Starts for PherrisBueller_34:

(Start: 19 @27304 has 29 MA's), (47, 27430), (49, 27433), (62, 27511), (65, 27529), (71, 27565), (87, 27664), (88, 27670),

Gene: Phoebus_40 Start: 33965, Stop: 34354, Start Num: 23

Candidate Starts for Phoebus_40:

(Start: 23 @33965 has 12 MA's), (52, 34112), (58, 34145), (83, 34280),

Gene: Phrappuccino_176 Start: 115819, Stop: 116232, Start Num: 18

Candidate Starts for Phrappuccino_176:

(Start: 18 @115819 has 57 MA's), (38, 115900), (43, 115927), (61, 116023), (68, 116059), (81, 116137), (82, 116146),

Gene: Phreeze_32 Start: 30712, Stop: 31119, Start Num: 18

Candidate Starts for Phreeze_32:

(Start: 18 @30712 has 57 MA's), (33, 30772), (39, 30796), (59, 30907), (61, 30916), (62, 30919), (63, 30925), (65, 30937), (72, 30976), (85, 31051), (90, 31081),

Gene: Phrux_29 Start: 28291, Stop: 28719, Start Num: 15

Candidate Starts for Phrux_29:

(Start: 15 @28291 has 152 MA's), (60, 28516), (65, 28543), (72, 28585), (75, 28597), (77, 28609),

Gene: Pickett_25 Start: 20874, Stop: 21314, Start Num: 14

Candidate Starts for Pickett_25:

(Start: 14 @20874 has 3 MA's), (26, 20904), (38, 20961), (70, 21174), (71, 21177),

Gene: Poise_96 Start: 55161, Stop: 55568, Start Num: 18

Candidate Starts for Poise_96:

(Start: 18 @55161 has 57 MA's), (43, 55269), (52, 55320), (61, 55365), (72, 55425), (87, 55521),

Gene: Policronamos_30 Start: 28576, Stop: 29004, Start Num: 15

Candidate Starts for Policronamos_30:

(3, 28405), (Start: 15 @28576 has 152 MA's), (53, 28765), (60, 28801), (65, 28828), (71, 28867), (72, 28870), (77, 28894), (88, 28963),

Gene: Pollywog_24 Start: 24938, Stop: 25369, Start Num: 15

Candidate Starts for Pollywog_24:

(Start: 15 @24938 has 152 MA's), (Start: 28 @24980 has 1 MA's), (48, 25082), (50, 25094), (60, 25163), (61, 25169), (65, 25190), (72, 25232), (77, 25256), (84, 25295), (86, 25301),

Gene: Porcelain_38 Start: 33919, Stop: 34350, Start Num: 15

Candidate Starts for Porcelain_38:

(Start: 15 @33919 has 152 MA's), (Start: 28 @33961 has 1 MA's), (48, 34063), (50, 34075), (53, 34108), (60, 34144), (61, 34150), (65, 34171), (74, 34216), (78, 34249), (84, 34276), (86, 34282),

Gene: Porky_29 Start: 28387, Stop: 28815, Start Num: 15

Candidate Starts for Porky_29:

(Start: 15 @28387 has 152 MA's), (60, 28612), (65, 28639), (72, 28681), (75, 28693), (77, 28705),

Gene: Pound_42 Start: 34935, Stop: 35333, Start Num: 20

Candidate Starts for Pound_42:

(Start: 20 @34935 has 9 MA's), (31, 34971), (43, 35040), (72, 35196), (80, 35238),

Gene: Pringar_91 Start: 54946, Stop: 55353, Start Num: 18

Candidate Starts for Pringar_91:

(Start: 11 @54925 has 1 MA's), (Start: 18 @54946 has 57 MA's), (43, 55054), (52, 55105), (61, 55150), (72, 55210), (79, 55249), (81, 55261), (87, 55306),

Gene: Puissant_31 Start: 31180, Stop: 31587, Start Num: 18

Candidate Starts for Puissant_31:

(Start: 18 @31180 has 57 MA's), (38, 31261), (41, 31273), (52, 31339), (62, 31387), (72, 31444),

Gene: Pumpkin_31 Start: 28627, Stop: 29055, Start Num: 15

Candidate Starts for Pumpkin_31:

(Start: 15 @28627 has 152 MA's), (60, 28852), (65, 28879), (72, 28921), (75, 28933), (77, 28945),

Gene: Pygmy_22 Start: 22761, Stop: 23162, Start Num: 18

Candidate Starts for Pygmy_22:

(Start: 18 @22761 has 57 MA's), (58, 22953), (64, 22983), (67, 22998), (72, 23025), (85, 23100),

Gene: Quallification_30 Start: 28756, Stop: 29184, Start Num: 15

Candidate Starts for Quallification_30:

(Start: 15 @28756 has 152 MA's), (60, 28981), (65, 29008), (72, 29050), (75, 29062), (77, 29074),

Gene: REQ3_58 Start: 37388, Stop: 37825, Start Num: 16

Candidate Starts for REQ3_58:

(Start: 16 @37388 has 24 MA's), (31, 37433), (Start: 37 @37472 has 1 MA's), (38, 37475), (50, 37544), (94, 37811),

Gene: Raela_97 Start: 55712, Stop: 56119, Start Num: 18

Candidate Starts for Raela_97:

(Start: 18 @55712 has 57 MA's), (40, 55799), (43, 55820), (52, 55871), (61, 55916), (72, 55976), (81, 56027), (87, 56072),

Gene: Rakim_30 Start: 28655, Stop: 29083, Start Num: 15

Candidate Starts for Rakim_30:

(Start: 15 @28655 has 152 MA's), (53, 28844), (60, 28880), (65, 28907), (72, 28949), (77, 28973), (88, 29042),

Gene: RedRaider77_95 Start: 55106, Stop: 55513, Start Num: 18

Candidate Starts for RedRaider77_95:

(Start: 18 @55106 has 57 MA's), (43, 55214), (52, 55265), (61, 55310), (72, 55370), (81, 55421), (87, 55466),

Gene: Redno2_39 Start: 33428, Stop: 33817, Start Num: 23

Candidate Starts for Redno2_39:

(Start: 23 @33428 has 12 MA's), (52, 33575), (58, 33608), (83, 33743),

Gene: Renaud18_23 Start: 24145, Stop: 24582, Start Num: 15

Candidate Starts for Renaud18_23:

(Start: 12 @24133 has 1 MA's), (Start: 15 @24145 has 152 MA's), (Start: 28 @24187 has 1 MA's), (50, 24301), (60, 24370), (61, 24376), (65, 24397), (72, 24439), (77, 24463), (84, 24508), (87, 24532), (93, 24565), (96, 24574),

Gene: RidgeCB_33 Start: 27235, Stop: 27636, Start Num: 19

Candidate Starts for RidgeCB_33:

(Start: 19 @27235 has 29 MA's), (47, 27361), (49, 27364), (62, 27442), (65, 27460), (71, 27496), (87, 27595), (88, 27601),

Gene: Rimmer_28 Start: 28116, Stop: 28544, Start Num: 15

Candidate Starts for Rimmer_28:

(Start: 15 @28116 has 152 MA's), (60, 28341), (65, 28368), (72, 28410), (75, 28422), (77, 28434),

Gene: RiverMonster_29 Start: 28305, Stop: 28733, Start Num: 15

Candidate Starts for RiverMonster_29:

(Start: 15 @28305 has 152 MA's), (60, 28530), (65, 28557), (72, 28599), (75, 28611), (77, 28623),

Gene: RobinSparkles_40 Start: 39653, Stop: 40090, Start Num: 16

Candidate Starts for RobinSparkles_40:

(Start: 16 @39653 has 24 MA's), (Start: 29 @39695 has 10 MA's), (Start: 37 @39737 has 1 MA's), (38, 39740), (64, 39908), (71, 39947),

Gene: Ronaldo_61 Start: 32718, Stop: 33149, Start Num: 16

Candidate Starts for Ronaldo_61:

(Start: 16 @32718 has 24 MA's), (Start: 29 @32760 has 10 MA's), (38, 32805), (60, 32943), (61, 32949),

Gene: Ryadel_64 Start: 40911, Stop: 41312, Start Num: 18

Candidate Starts for Ryadel_64:

(Start: 18 @40911 has 57 MA's), (Start: 29 @40947 has 10 MA's), (Start: 37 @40989 has 1 MA's), (43, 41019), (61, 41115), (72, 41175), (85, 41250),

Gene: Saints25_30 Start: 28208, Stop: 28636, Start Num: 15

Candidate Starts for Saints25_30:

(Start: 15 @28208 has 152 MA's), (60, 28433), (65, 28460), (72, 28502), (75, 28514), (77, 28526),

Gene: Sassay_28 Start: 28054, Stop: 28482, Start Num: 15

Candidate Starts for Sassay_28:

(Start: 15 @28054 has 152 MA's), (60, 28279), (65, 28306), (72, 28348), (75, 28360), (77, 28372),

Gene: Schatzie_38 Start: 32685, Stop: 33083, Start Num: 20

Candidate Starts for Schatzie_38:

(Start: 20 @32685 has 9 MA's), (31, 32721), (43, 32790), (72, 32946), (80, 32988),

Gene: SchoolBus_60 Start: 40095, Stop: 40496, Start Num: 18

Candidate Starts for SchoolBus_60:

(Start: 18 @40095 has 57 MA's), (Start: 29 @40131 has 10 MA's), (Start: 37 @40173 has 1 MA's), (43, 40203), (61, 40299), (72, 40359), (85, 40434),

Gene: Schuy_58 Start: 39886, Stop: 40287, Start Num: 18

Candidate Starts for Schuy_58:

(Start: 18 @39886 has 57 MA's), (Start: 29 @39922 has 10 MA's), (Start: 37 @39964 has 1 MA's), (43, 39994), (61, 40090), (72, 40150), (85, 40225),

Gene: ScoobyDoobyDoo_108 Start: 59606, Stop: 60013, Start Num: 18

Candidate Starts for ScoobyDoobyDoo_108:

(1, 59330), (2, 59351), (9, 59570), (Start: 18 @59606 has 57 MA's), (Start: 37 @59684 has 1 MA's), (38, 59687), (61, 59810), (66, 59834), (72, 59870), (85, 59948),

Gene: Settecandela_176 Start: 115819, Stop: 116232, Start Num: 18

Candidate Starts for Settecandela_176:

(Start: 18 @115819 has 57 MA's), (38, 115900), (43, 115927), (61, 116023), (68, 116059), (81, 116137), (82, 116146),

Gene: ShamWow_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for ShamWow_29:

(5, 28441), (Start: 15 @28549 has 152 MA's), (53, 28738), (60, 28774), (65, 28801), (72, 28843), (77, 28867), (88, 28936),

Gene: Shauna1_21 Start: 23777, Stop: 24214, Start Num: 15

Candidate Starts for Shauna1_21:

(Start: 15 @23777 has 152 MA's), (Start: 28 @23819 has 1 MA's), (48, 23921), (56, 23978), (60, 24002), (61, 24008), (65, 24029), (74, 24074), (84, 24140),

Gene: ShereKhan_31 Start: 29533, Stop: 29961, Start Num: 15

Candidate Starts for ShereKhan_31:

(Start: 15 @29533 has 152 MA's), (60, 29758), (65, 29785), (72, 29827), (75, 29839), (77, 29851),

Gene: Shida_60 Start: 39793, Stop: 40194, Start Num: 18

Candidate Starts for Shida_60:

(Start: 18 @39793 has 57 MA's), (Start: 29 @39829 has 10 MA's), (Start: 37 @39871 has 1 MA's), (43, 39901), (61, 39997), (72, 40057), (85, 40132),

Gene: Shipwreck_22 Start: 22739, Stop: 23140, Start Num: 18

Candidate Starts for Shipwreck_22:

(Start: 18 @22739 has 57 MA's), (58, 22931), (64, 22961), (67, 22976), (72, 23003), (85, 23078),

Gene: ShroomBoi_21 Start: 23747, Stop: 24178, Start Num: 15

Candidate Starts for ShroomBoi_21:

(Start: 15 @23747 has 152 MA's), (24, 23768), (Start: 28 @23789 has 1 MA's), (Start: 37 @23834 has 1 MA's), (48, 23891), (60, 23972), (78, 24077), (84, 24104), (93, 24161),

Gene: Simpliphy_30 Start: 28295, Stop: 28723, Start Num: 15

Candidate Starts for Simpliphy_30:

(Start: 15 @28295 has 152 MA's), (60, 28520), (65, 28547), (72, 28589), (75, 28601), (77, 28613),

Gene: SirDuracell_28 Start: 27214, Stop: 27642, Start Num: 15

Candidate Starts for SirDuracell_28:

(Start: 15 @27214 has 152 MA's), (53, 27403), (60, 27439), (65, 27466), (72, 27508), (77, 27532), (88, 27601),

Gene: Sixama_104 Start: 63936, Stop: 64373, Start Num: 16

Candidate Starts for Sixama_104:

(Start: 16 @63936 has 24 MA's), (38, 64023), (79, 64272),

Gene: Smairt_34 Start: 28184, Stop: 28552, Start Num: 29

Candidate Starts for Smairt_34:

(Start: 29 @28184 has 10 MA's), (44, 28265), (47, 28277), (71, 28412), (72, 28415), (74, 28418),

Gene: Smeagol_35 Start: 28818, Stop: 29192, Start Num: 27

Candidate Starts for Smeagol_35:

(Start: 27 @28818 has 1 MA's), (47, 28917), (62, 28998), (88, 29157),

Gene: Smooch_63 Start: 41815, Stop: 42216, Start Num: 18

Candidate Starts for Smooch_63:

(Start: 18 @41815 has 57 MA's), (Start: 29 @41851 has 10 MA's), (Start: 37 @41893 has 1 MA's), (43, 41923), (61, 42019), (72, 42079), (85, 42154),

Gene: SophKB_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for SophKB_29:

(Start: 15 @28549 has 152 MA's), (60, 28774), (65, 28801), (72, 28843), (75, 28855), (77, 28867),

Gene: Sotrice96_29 Start: 28503, Stop: 28931, Start Num: 15

Candidate Starts for Sotrice96_29:

(Start: 15 @28503 has 152 MA's), (53, 28692), (60, 28728), (65, 28755), (72, 28797), (77, 28821), (88, 28890),

Gene: Soul22_27 Start: 23516, Stop: 23911, Start Num: 28

Candidate Starts for Soul22_27:

(Start: 15 @23474 has 152 MA's), (Start: 28 @23516 has 1 MA's), (48, 23618), (50, 23630), (60, 23699), (61, 23705), (65, 23726), (72, 23768), (77, 23792), (84, 23837), (87, 23861), (93, 23894), (96, 23903),

Gene: Squint_38 Start: 34038, Stop: 34469, Start Num: 15

Candidate Starts for Squint_38:

(Start: 15 @34038 has 152 MA's), (Start: 28 @34080 has 1 MA's), (48, 34182), (50, 34194), (53, 34227), (60, 34263), (61, 34269), (65, 34290), (74, 34335), (78, 34368), (84, 34395), (86, 34401),

Gene: Stank_32 Start: 29056, Stop: 29484, Start Num: 15

Candidate Starts for Stank_32:

(Start: 15 @29056 has 152 MA's), (60, 29281), (65, 29308), (72, 29350), (75, 29362), (77, 29374),

Gene: Stark_30 Start: 28308, Stop: 28736, Start Num: 15

Candidate Starts for Stark_30:

(Start: 15 @28308 has 152 MA's), (60, 28533), (65, 28560), (72, 28602), (75, 28614), (77, 28626),

Gene: StellaBean_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for StellaBean_29:

(Start: 15 @28549 has 152 MA's), (60, 28774), (65, 28801), (72, 28843), (75, 28855), (77, 28867),

Gene: StolenFromERC_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for StolenFromERC_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: Superphikiman_39 Start: 34101, Stop: 34532, Start Num: 15

Candidate Starts for Superphikiman_39:

(Start: 15 @34101 has 152 MA's), (Start: 28 @34143 has 1 MA's), (48, 34245), (50, 34257), (53, 34290), (60, 34326), (61, 34332), (65, 34353), (74, 34398), (78, 34431), (84, 34458), (86, 34464),

Gene: SwissCheese_35 Start: 28167, Stop: 28568, Start Num: 19

Candidate Starts for SwissCheese_35:

(Start: 19 @28167 has 29 MA's), (47, 28293), (49, 28296), (62, 28374), (65, 28392), (71, 28428), (87, 28527), (88, 28533),

Gene: TBrady12_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for TBrady12_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: TChen_21 Start: 24250, Stop: 24681, Start Num: 15

Candidate Starts for TChen_21:

(Start: 15 @24250 has 152 MA's), (Start: 28 @24292 has 1 MA's), (48, 24394), (50, 24406), (60, 24475), (61, 24481), (65, 24502), (72, 24544), (77, 24568), (84, 24607), (86, 24613),

Gene: TPA4_27 Start: 25382, Stop: 25834, Start Num: 16

Candidate Starts for TPA4_27:

(Start: 16 @25382 has 24 MA's), (42, 25487), (50, 25538), (54, 25574), (56, 25589), (64, 25637), (94, 25820), (96, 25826),

Gene: Tarkin_31 Start: 29539, Stop: 29967, Start Num: 15

Candidate Starts for Tarkin_31:

(Start: 15 @29539 has 152 MA's), (60, 29764), (65, 29791), (72, 29833), (75, 29845), (77, 29857),

Gene: TeardropMSU_28 Start: 28449, Stop: 28877, Start Num: 15

Candidate Starts for TeardropMSU_28:

(Start: 15 @28449 has 152 MA's), (53, 28638), (60, 28674), (65, 28701), (72, 28743), (77, 28767), (88, 28836),

Gene: Teaspoon_30 Start: 28503, Stop: 28931, Start Num: 15

Candidate Starts for Teaspoon_30:

(Start: 15 @28503 has 152 MA's), (60, 28728), (65, 28755), (72, 28797), (75, 28809), (77, 28821),

Gene: TelAviv_57 Start: 40068, Stop: 40469, Start Num: 18

Candidate Starts for TelAviv_57:

(Start: 18 @40068 has 57 MA's), (Start: 29 @40104 has 10 MA's), (Start: 37 @40146 has 1 MA's), (43, 40176), (61, 40272), (72, 40332), (85, 40407),

Gene: Terminus_29 Start: 28637, Stop: 29065, Start Num: 15

Candidate Starts for Terminus_29:

(Start: 15 @28637 has 152 MA's), (60, 28862), (65, 28889), (72, 28931), (75, 28943), (77, 28955),

Gene: Tesla_91 Start: 54955, Stop: 55362, Start Num: 18

Candidate Starts for Tesla_91:

(Start: 18 @54955 has 57 MA's), (40, 55042), (43, 55063), (52, 55114), (61, 55159), (72, 55219), (87, 55315),

Gene: ThetaBob_23 Start: 24052, Stop: 24495, Start Num: 12

Candidate Starts for ThetaBob_23:

(10, 24040), (Start: 12 @24052 has 1 MA's), (Start: 15 @24064 has 152 MA's), (Start: 28 @24106 has 1 MA's), (48, 24208), (50, 24220), (60, 24289), (61, 24295), (65, 24316), (72, 24358), (77, 24382), (84, 24421), (86, 24427),

Gene: Thibault_37 Start: 33811, Stop: 34215, Start Num: 17

Candidate Starts for Thibault_37:

(Start: 17 @33811 has 3 MA's), (33, 33874), (67, 34051), (72, 34078), (85, 34153),

Gene: ThreeRngTarjay_39 Start: 33815, Stop: 34204, Start Num: 23

Candidate Starts for ThreeRngTarjay_39:

(Start: 23 @33815 has 12 MA's), (52, 33962), (58, 33995), (83, 34130),

Gene: Thresher_30 Start: 29304, Stop: 29732, Start Num: 15

Candidate Starts for Thresher_30:

(Start: 15 @29304 has 152 MA's), (60, 29529), (65, 29556), (72, 29598), (75, 29610), (77, 29622),

Gene: Thumb_32 Start: 30709, Stop: 31116, Start Num: 18

Candidate Starts for Thumb_32:

(Start: 18 @30709 has 57 MA's), (33, 30769), (39, 30793), (59, 30904), (61, 30913), (62, 30916), (63, 30922), (65, 30934), (72, 30973), (79, 31012), (85, 31048), (90, 31078),

Gene: Tomaszewski_28 Start: 28147, Stop: 28575, Start Num: 15

Candidate Starts for Tomaszewski_28:

(Start: 15 @28147 has 152 MA's), (60, 28372), (65, 28399), (72, 28441), (75, 28453), (77, 28465),

Gene: Topgun_33 Start: 27344, Stop: 27712, Start Num: 29

Candidate Starts for Topgun_33:

(Start: 29 @27344 has 10 MA's), (44, 27425), (47, 27437), (71, 27572), (72, 27575), (74, 27578),

Gene: Toto_29 Start: 28549, Stop: 28977, Start Num: 15

Candidate Starts for Toto_29:

(5, 28441), (Start: 15 @28549 has 152 MA's), (53, 28738), (60, 28774), (65, 28801), (72, 28843), (77, 28867), (88, 28936),

Gene: Traaww1_27 Start: 28187, Stop: 28615, Start Num: 15

Candidate Starts for Traaww1_27:

(Start: 15 @28187 has 152 MA's), (53, 28376), (60, 28412), (65, 28439), (72, 28481), (77, 28505), (88, 28574),

Gene: Tripl3t_34 Start: 28311, Stop: 28712, Start Num: 19

Candidate Starts for Tripl3t_34:

(Start: 19 @28311 has 29 MA's), (47, 28437), (49, 28440), (62, 28518), (65, 28536), (71, 28572), (87, 28671), (88, 28677),

Gene: Tuco_30 Start: 29057, Stop: 29485, Start Num: 15

Candidate Starts for Tuco_30:

(Start: 15 @29057 has 152 MA's), (53, 29246), (60, 29282), (65, 29309), (72, 29351), (77, 29375), (88, 29444),

Gene: Ukulele_29 Start: 28308, Stop: 28736, Start Num: 15

Candidate Starts for Ukulele_29:

(Start: 15 @28308 has 152 MA's), (60, 28533), (65, 28560), (72, 28602), (75, 28614), (77, 28626),

Gene: Vasanti_26 Start: 21864, Stop: 22304, Start Num: 14

Candidate Starts for Vasanti_26:

(Start: 14 @21864 has 3 MA's), (26, 21894), (38, 21951), (55, 22074), (70, 22164), (71, 22167), (91, 22266),

Gene: VasuNzinga_93 Start: 55038, Stop: 55445, Start Num: 18

Candidate Starts for VasuNzinga_93:

(Start: 18 @55038 has 57 MA's), (43, 55146), (52, 55197), (61, 55242), (72, 55302), (79, 55341), (81, 55353), (87, 55398),

Gene: Violet_32 Start: 27984, Stop: 28385, Start Num: 19

Candidate Starts for Violet_32:

(Start: 19 @27984 has 29 MA's), (47, 28110), (49, 28113), (62, 28191), (65, 28209), (71, 28245), (87, 28344), (88, 28350),

Gene: Volt_61 Start: 32951, Stop: 33313, Start Num: 34

Candidate Starts for Volt_61:

(6, 32819), (7, 32822), (13, 32879), (22, 32900), (Start: 34 @32951 has 1 MA's), (60, 33107), (61, 33113),

Gene: Vorrps_60 Start: 40143, Stop: 40544, Start Num: 18

Candidate Starts for Vorrps_60:

(Start: 18 @40143 has 57 MA's), (Start: 29 @40179 has 10 MA's), (Start: 37 @40221 has 1 MA's), (43, 40251), (61, 40347), (72, 40407), (85, 40482),

Gene: Wiggin_32 Start: 29054, Stop: 29482, Start Num: 15

Candidate Starts for Wiggin_32:

(Start: 15 @29054 has 152 MA's), (60, 29279), (65, 29306), (72, 29348), (75, 29360), (77, 29372),

Gene: Wildcat_46 Start: 35018, Stop: 35425, Start Num: 18

Candidate Starts for Wildcat_46:

(Start: 18 @35018 has 57 MA's), (Start: 23 @35030 has 12 MA's), (61, 35222), (64, 35240), (65, 35243), (67, 35255), (74, 35285), (85, 35357), (90, 35387), (96, 35420),

Gene: Wildflower_58 Start: 39655, Stop: 40056, Start Num: 18

Candidate Starts for Wildflower_58:

(Start: 18 @39655 has 57 MA's), (Start: 29 @39691 has 10 MA's), (Start: 37 @39733 has 1 MA's), (43, 39763), (61, 39859), (72, 39919), (85, 39994),

Gene: Wilkins_33 Start: 27275, Stop: 27643, Start Num: 29

Candidate Starts for Wilkins_33:

(Start: 29 @27275 has 10 MA's), (44, 27356), (47, 27368), (71, 27503), (72, 27506), (74, 27509),

Gene: Willez_28 Start: 28054, Stop: 28482, Start Num: 15

Candidate Starts for Willez_28:

(Start: 15 @28054 has 152 MA's), (60, 28279), (65, 28306), (72, 28348), (75, 28360), (77, 28372),

Gene: Winget_61 Start: 40361, Stop: 40762, Start Num: 18

Candidate Starts for Winget_61:

(Start: 18 @40361 has 57 MA's), (Start: 29 @40397 has 10 MA's), (43, 40469), (61, 40565), (72, 40625), (85, 40700),

Gene: Xandras_31 Start: 28540, Stop: 28968, Start Num: 15

Candidate Starts for Xandras_31:

(Start: 15 @28540 has 152 MA's), (60, 28765), (65, 28792), (72, 28834), (75, 28846), (77, 28858),

Gene: YassJohnny_30 Start: 29065, Stop: 29493, Start Num: 15

Candidate Starts for YassJohnny_30:

(Start: 15 @29065 has 152 MA's), (60, 29290), (65, 29317), (72, 29359), (75, 29371), (77, 29383),

Gene: Yeet_39 Start: 32930, Stop: 33328, Start Num: 20

Candidate Starts for Yeet_39:

(Start: 20 @32930 has 9 MA's), (31, 32966), (43, 33035), (72, 33191), (80, 33233),

Gene: Yoshi_27 Start: 23473, Stop: 23904, Start Num: 15

Candidate Starts for Yoshi_27:

(Start: 15 @23473 has 152 MA's), (Start: 28 @23515 has 1 MA's), (48, 23617), (50, 23629), (60, 23698), (61, 23704), (65, 23725), (72, 23767), (77, 23791), (84, 23830), (86, 23836),

Gene: Youngblood_29 Start: 28710, Stop: 29138, Start Num: 15

Candidate Starts for Youngblood_29:

(3, 28539), (Start: 15 @28710 has 152 MA's), (60, 28935), (65, 28962), (72, 29004), (75, 29016), (77, 29028),

Gene: YungJamal_65 Start: 41553, Stop: 41954, Start Num: 18

Candidate Starts for YungJamal_65:

(Start: 18 @41553 has 57 MA's), (Start: 29 @41589 has 10 MA's), (Start: 37 @41631 has 1 MA's), (43, 41661), (61, 41757), (72, 41817), (85, 41892),

Gene: Zakhe101_60 Start: 40199, Stop: 40600, Start Num: 18

Candidate Starts for Zakhe101_60:

(Start: 18 @40199 has 57 MA's), (Start: 29 @40235 has 10 MA's), (43, 40307), (61, 40403), (72, 40463), (85, 40538),

Gene: Zapner_28 Start: 24167, Stop: 24604, Start Num: 15

Candidate Starts for Zapner_28:

(Start: 15 @24167 has 152 MA's), (Start: 28 @24209 has 1 MA's), (50, 24323), (60, 24392), (61, 24398), (65, 24419), (72, 24461), (77, 24485), (84, 24530), (87, 24554), (93, 24587), (96, 24596),

Gene: Zelink_42 Start: 34759, Stop: 35148, Start Num: 23

Candidate Starts for Zelink_42:

(Start: 23 @34759 has 12 MA's), (52, 34906), (58, 34939), (83, 35074),

Gene: Ziko_61 Start: 32704, Stop: 33135, Start Num: 16

Candidate Starts for Ziko_61:

(Start: 16 @32704 has 24 MA's), (Start: 29 @32746 has 10 MA's), (38, 32791), (60, 32929), (61, 32935),

Gene: xkcd_30 Start: 28719, Stop: 29147, Start Num: 15

Candidate Starts for xkcd_30:

(Start: 15 @28719 has 152 MA's), (60, 28944), (65, 28971), (72, 29013), (75, 29025), (77, 29037),