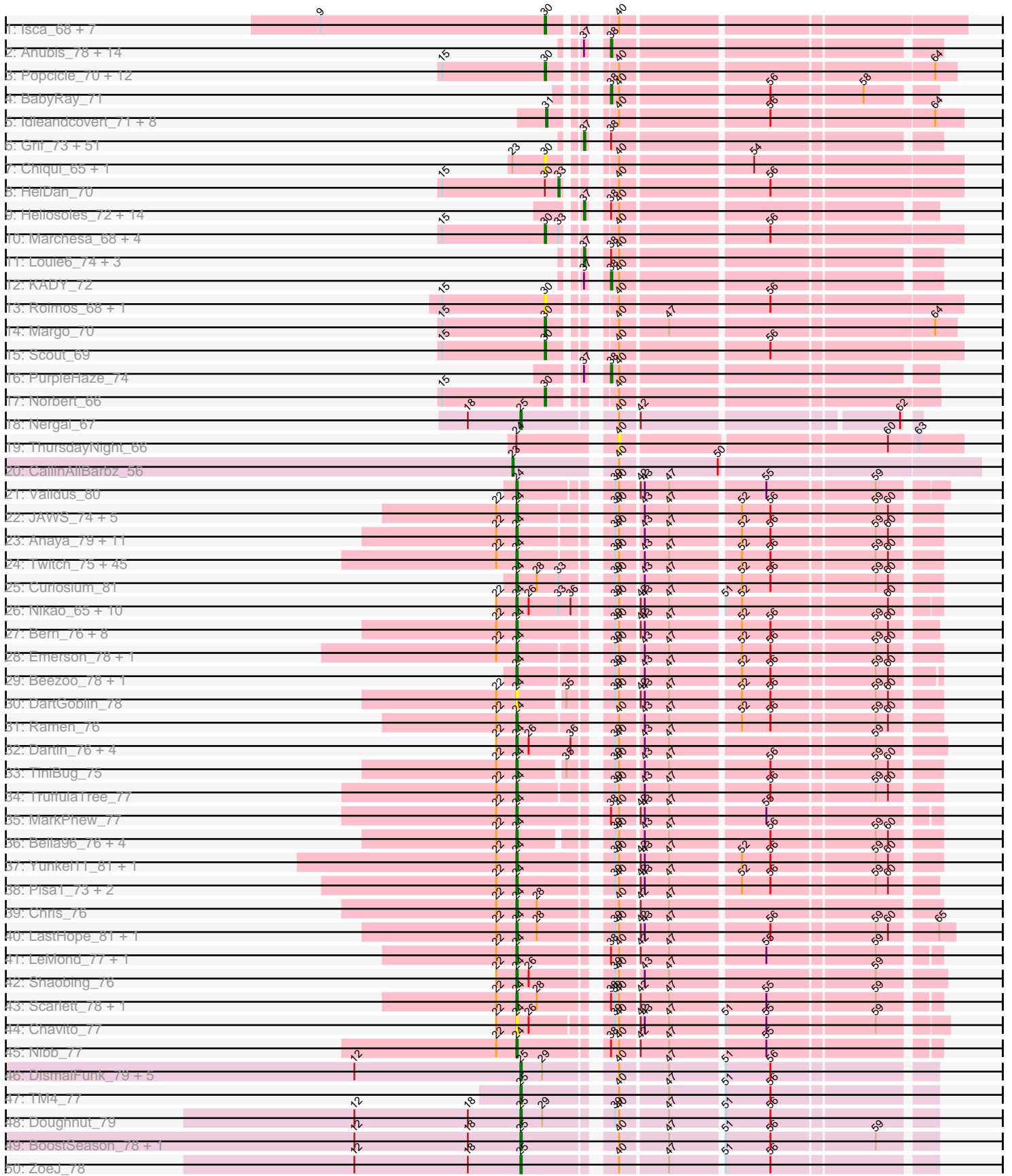


Pham 292443



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 292443 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292443 has 339 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Isca_68, MA5_70, Phantastic_72, MK4_70, JF2_68, Rockstar_69, B1_62, JF4_68
- Track 2 : Anubis_78, Bigflo_72, JenCasNa_76, Stagni_72, Gwennie_70, Sabinator_73, Taurus_76, MarQuardt_75, Croquant_72, Phoxy_75, Tiffany_74, Lowa_72, Jobu08_71, Spike509_75, JHC117_71
- Track 3 : Popcicle_70, Hookmount_70, Caviar_70, Pocahontas_69, Veracruz_67, Noella_70, EtoileNova_68, Texage_68, Todacoro_70, Lambert1_70, ResDef_68, QuinnKiro_69, Panamaxus_68
- Track 4 : BabyRay_71
- Track 5 : Idleandcovert_71, Giroux_73, BlueBird_73, Pistachio_70, Bugatti_70, Puppy_71, SaturnRing_70, Clammy_70, TNguyen7_71
- Track 6 : Grif_73, EpicPhail_76, LarryKay_75, Mainiac_74, Grub_73, Bxz2_70, Daishi_74, Ollie_75, Pembroke_75, BreSam8_75, MuchMore_78, Penny1_75, GtownJaz_75, Beauxregard13_74, Hercules11_75, HashRod_76, Marie_73, Cullens_75, Fernando_75, Microwolf_71, LugYA_78, DaHudson_74, Montavir_70, Watson_74, Sabia_73, StepMih_74, AgronaGT15_72, LBerry_76, PGHhamlin_77, PotatoSplit_76, Vix_71, MoneyMay_74, Lilith_73, Farber_75, MadMarie_73, Malinsilva_77, Colbster_71, Aglet_76, Methuselah_68, Soshari_77, Zetzy_72, Wooldri_77, SoilDragon_74, Rummer_74, Dieselweasel_75, P28Green_75, Phoebe_76, GingkoMaracino_75, Grum1_74, Snickers_75, AugsMagnumOpus_78, SoYo_72
- Track 7 : Chiqui_65, BabyJohn_65
- Track 8 : HelDan_70
- Track 9 : Heliosoles_72, Pawn_73, Kalnoky_75, JeppNRM_75, Manu_74, HaveUMetTed_75, Gemma_72, OlanP_73, PhishRPhriends_71, Groupthink_75, Marius_75, Kalb97_75, Calvinny_72, ClownCar_72, ACFishhook_72
- Track 10 : Marchesa_68, Fred313_68, Kachowdy_68, DropBear_68, Heathen_70
- Track 11 : Louie6_74, BuzzBuzz_69, Misomonster_76, TinyPebbles_74
- Track 12 : KADY_72
- Track 13 : Roimos_68, Zarafa_68
- Track 14 : Margo_70
- Track 15 : Scout_69
- Track 16 : PurpleHaze_74
- Track 17 : Norbert_66
- Track 18 : Nergal_67
- Track 19 : ThursdayNight_66
- Track 20 : CallinAllBarbz_56

- Track 21 : Validus_80
- Track 22 : JAWS_74, CheetoDust_75, Pokerus_76, Slimphazie_77, Tiri_75, Veliki_76
- Track 23 : Anaya_79, Illumine_81, Stinson_76, Ageofdapage_79, Clipper_80, Dole_80, TaiwanKao_77, Angelica_74, Megsy_77, Devera_83, MacKat_72, Sulley_74
- Track 24 : Twitch_75, Jeckyll_75, HedwigODU_75, AlishaPH_74, Zabiza_71, Atiba_76, Jayhawk_78, Llorens_75, QuincyRose_73, Belladonna_75, CaseJules_77, BarrelRoll_76, Capricorn_75, Boiiii_75, Hyperbowlee_74, Blizzard_75, Rosmarinus_75, Lunahalos_75, Rapunzel97_78, Ganymede_75, Durfee_75, Homura_74, Apocalypse_78, Jarvi_75, Spock_75, ShiaSurprise_76, Adephagia_74, Deby_75, Zavala_78, BGlluviae_75, BEEST_75, Padfoot_75, Piatt_74, BaghaKamala_74, Joy99_76, Inky_75, Dalmuri_75, Asayake_75, CallaLilly_75, Peel_75, CREW_74, Geraldini_79, ActinUp_76, Topper_75, Mynx_77, Tachez_75
- Track 25 : Curiosium_81
- Track 26 : Nikao_65, LilPharaoh_63, SgtBeansprout_63, Torres_65, Enkosi_64, Nutello_62, Teejan_64, Trice_62, Mdavu_63, Amelie_62, Binglebops_62
- Track 27 : Bern_76, DrHayes_75, SamuelLPlaqson_75, CrimD_77, Prithvi_78, LindNT_74, TreyKay_78, Urkel_75, Anma_75
- Track 28 : Emerson_78, Padpat_79
- Track 29 : Beezoo_78, YoureAdopted_75
- Track 30 : DartGoblin_78
- Track 31 : Ramen_76
- Track 32 : Dartin_76, Niklas_77, McMater_76, Peanam_77, Richo_76
- Track 33 : TiniBug_75
- Track 34 : TruffulaTree_77
- Track 35 : MarkPhew_77
- Track 36 : Bella96_76, MeaningOfLife_77, Murucutumbu_76, Adonis_75, LaterM_75
- Track 37 : Yunkel11_81, Efra2_82
- Track 38 : Pisa1_73, Guanica15_81, Pisa4_67
- Track 39 : Chris_76
- Track 40 : LastHope_81, TingHuaYa_78
- Track 41 : LeMond_77, Oscar_77
- Track 42 : Shaobing_76
- Track 43 : Scarlett_78, KiSi_78
- Track 44 : Chavito_77
- Track 45 : Nibb_77
- Track 46 : DismalFunk_79, Milly_79, Marcoliusprime_78, Strobilo_80, Findley_79, DismalStressor_79
- Track 47 : TM4_77
- Track 48 : Doughnut_79
- Track 49 : BoostSeason_78, Mufasa_78
- Track 50 : ZoeJ_78
- Track 51 : Pixie_75, TBond007_72
- Track 52 : TribbleTrouble_76
- Track 53 : ShedlockHolmes_78, Lea83_76
- Track 54 : Keshu_78
- Track 55 : Hurricane_76
- Track 56 : MacnCheese_78
- Track 57 : Pharb_74
- Track 58 : Malthus_41, Cheetobro_40, Kraw_40, Chancellor_40, Fionnbharth_40, Lebo14_40, OmniCritical_39, Qhanda_41, Eponine_42, Mitti_40, SamScheppers_39, Slarp_40, DanSyl44_43, Wintermute_40, YasnayaPolyana_40, Taquito_40

- Track 59 : Patt_39
- Track 60 : Y10_39, Juliette_42, Y2_39, JF1_40, Ruthiejr_41
- Track 61 : MissDaisy_39, Reptar3000_40
- Track 62 : Bobquesha_42
- Track 63 : DarthP_73
- Track 64 : Cain_79, Bryler_79
- Track 65 : Marshawn_74
- Track 66 : November_72, Hammy_73
- Track 67 : Ellie_71, Applecrisp_72
- Track 68 : Ximenita_81
- Track 69 : Lavahound_72, Fefferhead_74
- Track 70 : TClif_77
- Track 71 : SirPhilip_75
- Track 72 : Ekdilam_70
- Track 73 : Tigress9_81
- Track 74 : Sunflower1121_81, Shadow1_80
- Track 75 : Unicorn_78, PhelpsODU_78
- Track 76 : Krueger_80
- Track 77 : Syra333_79
- Track 78 : Phrank_79, Tierra_79
- Track 79 : Yuna_78
- Track 80 : Amohnition_73
- Track 81 : Amgine_73
- Track 82 : Estes_152, MrMagoo_154, Aziz_150, GenevaB15_153, GardenSalsa_152
- Track 83 : Rey_153
- Track 84 : Nanosmite_147
- Track 85 : EniyanLRS_140, MaryV_133, Wildcat_147
- Track 86 : Azrael100_140, Cosmo_147
- Track 87 : DS6A_42

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

The start number called the most often in the published annotations is 24, it was called in 140 of the 303 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp_76, Adephegia_74, Adonis_75, Ageofdapage_79, AlishaPH_74, Amelie_62, Amgine_73, Amohnition_73, Anaya_79, Angelica_74, Anma_75, Apocalypse_78, Applecrisp_72, Asayake_75, Atiba_76, BEEST_75, BGlluviae_75, BaghaKamala_74, BarrelRoll_76, Beezoo_78, Bella96_76, Belladonna_75, Bern_76, Biglebops_62, Blizzard_75, Boiiii_75, Bryler_79, CREW_74, Cain_79, CallaLilly_75, Capricorn_75, CaseJules_77, Chavito_77, CheetoDust_75, Chris_76, Clipper_80, CrimD_77, Curiosium_81, Dalmuri_75, DartGoblin_78, DarthP_73, Dartin_76, Deby_75, Devera_83, Dole_80, DrHayes_75, Durfee_75, Efra2_82, Ekdilam_70, Ellie_71, Emerson_78, Enkosi_64, Fefferhead_74, Ganymede_75, Geraldini_79, Guanica15_81, Hammy_73, HedwigODU_75, Homura_74, Hurricane_76, Hyperbowlee_74, Illumine_81, Inky_75, JAWS_74, Jarvi_75, Jayhawk_78, Jeckyll_75, Joy99_76, Keshu_78, KiSi_78, LastHope_81, LaterM_75, Lavahound_72, LeMond_77, Lea83_76, LilPharaoh_63, LindNT_74, Llorens_75, Lunahalos_75,

MacKat_72, MacnCheese_78, MarkPhew_77, Marshawn_74, McMater_76, Mdavu_63, MeaningOfLife_77, Megsy_77, Murucutumbu_76, Mynx_77, Nibb_77, Nikao_65, Niklas_77, November_72, Nutello_62, Oscar_77, Padfoot_75, Padpat_79, Peanam_77, Peel_75, Pharb_74, PhelpsODU_78, Phrank_79, Piatt_74, Pisa1_73, Pisa4_67, Pixie_75, Pokerus_76, Prithvi_78, QuincyRose_73, Ramen_76, Rapunzel97_78, Richo_76, Rosmarinus_75, SamuelLPlaqson_75, Scarlett_78, SgtBeansprout_63, Shadow1_80, Shaobing_76, ShedlockHolmes_78, ShiaSurprise_76, SirPhilip_75, Slimphazie_77, Spock_75, Stinson_76, Sulley_74, Sunflower1121_81, Syra333_79, TBond007_72, TClif_77, Tachez_75, TaiwanKao_77, Teejan_64, Tierra_79, Tigress9_81, TingHuaYa_78, TiniBug_75, Tiri_75, Topper_75, Torres_65, TreyKay_78, TripleTrouble_76, Trice_62, TruffulaTree_77, Twitch_75, Unicorn_78, Urkel_75, Validus_80, Veliki_76, Ximenita_81, YoureAdopted_75, Yuna_78, Yunkel11_81, Zabiza_71, Zavala_78,

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

- DS6A_42, Krueger_80, ThursdayNight_66,

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

- ACFishhook_72, Aglet_76, AgronaGT15_72, Anubis_78, AugsMagnumOpus_78, Aziz_150, Azrael100_140, B1_62, BabyJohn_65, BabyRay_71, Beauxregard13_74, Bigflo_72, BlueBird_73, Bobquesha_42, BoostSeason_78, BreSam8_75, Bugatti_70, BuzzBuzz_69, Bxz2_70, CallinAllBarbz_56, Calvinny_72, Caviar_70, Chancellor_40, Cheetobro_40, Chiqui_65, Clammy_70, ClownCar_72, Colbster_71, Cosmo_147, Croquant_72, Cullens_75, DaHudson_74, Daishi_74, DanSyl44_43, Dieselweasel_75, DismalFunk_79, DismalStressor_79, Doughnut_79, DropBear_68, EniyanLRS_140, EpicPhail_76, Eponine_42, Estes_152, EtoileNova_68, Farber_75, Fernando_75, Findley_79, Fionnbharth_40, Fred313_68, GardenSalsa_152, Gemma_72, GenevaB15_153, GingkoMaracino_75, Giroux_73, Grif_73, Groupthink_75, Grub_73, Grum1_74, GtownJaz_75, Gwennie_70, HashRod_76, HaveUMetTed_75, Heathen_70, HelDan_70, Heliosoles_72, Hercules11_75, Hookmount_70, Idleandcovert_71, Isca_68, JF1_40, JF2_68, JF4_68, JHC117_71, JenCasNa_76, JeppNRM_75, Jobu08_71, Juliette_42, KADY_72, Kachowdy_68, Kalb97_75, Kalnoky_75, Kraw_40, LBerry_76, Lambert1_70, LarryKay_75, Lebo14_40, Lilith_73, Louie6_74, Lowa_72, LugYA_78, MA5_70, MK4_70, MadMarie_73, Mainiac_74, Malinsilva_77, Malthus_41, Manu_74, MarQuardt_75, Marchesa_68, Marcoliusprime_78, Margo_70, Marie_73, Marius_75, MaryV_133, Methuselah_68, Microwolf_71, Milly_79, Misomonster_76, MissDaisy_39, Mitti_40, MoneyMay_74, Montavir_70, MrMagoo_154, MuchMore_78, Mufasa_78, Nanosmite_147, Nergal_67, Noella_70, Norbert_66, OlanP_73, Ollie_75, OmniCritical_39, P28Green_75, PGHhamlin_77, Panamaxus_68, Patt_39, Pawn_73, Pembroke_75, Penny1_75, Phantastic_72, PhishRPhriends_71, Phoebe_76, Phoxy_75, Pistachio_70, Pocahontas_69, Popcicle_70, PotatoSplit_76, Puppy_71, PurpleHaze_74, Qhanda_41, QuinnKiro_69, Reptar3000_40, ResDef_68, Rey_153, Rockstar_69, Roimos_68, Rummer_74, Ruthiejr_41, Sabia_73, Sabinator_73, SamScheppers_39, SaturnRing_70, Scout_69, Slarp_40, Snickers_75, SoYo_72, SoilDragon_74, Soshari_77, Spike509_75, Stagni_72, StepMih_74, Strobilo_80, TM4_77, TNguyen7_71, Taquito_40, Taurus_76, Texage_68, Tiffany_74, TinyPebbles_74, Todacoro_70, Veracruz_67, Vix_71, Watson_74, Wildcat_147, Wintermute_40, Wooldri_77, Y10_39, Y2_39, YasnayaPolyana_40, Zarafa_68, Zetzy_72, ZoeJ_78,

Summary by start number:

Start 20:

- Found in 16 of 339 (4.7%) of genes in pham
- Manual Annotations of this start: 14 of 303
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chancellor_40 (K4), Cheetobro_40 (K4), DanSyl44_43 (K4), Eponine_42 (K4), Fionnbharth_40 (K4), Kraw_40 (K4), Lebo14_40 (K4), Malthus_41 (K4), Mitti_40 (K4), OmniCritical_39 (K4), Qhanda_41 (K4), SamScheppers_39 (K4), Slarp_40 (K4), Taquito_40 (K4), Wintermute_40 (K4), YasnayaPolyana_40 (K4),

Start 21:

- Found in 9 of 339 (2.7%) of genes in pham
- Manual Annotations of this start: 8 of 303
- Called 88.9% of time when present
- Phage (with cluster) where this start called: JF1_40 (K4), Juliette_42 (K4), MissDaisy_39 (K4), Patt_39 (K4), Reptar3000_40 (K4), Ruthiejr_41 (K4), Y10_39 (K4), Y2_39 (K4),

Start 22:

- Found in 135 of 339 (39.8%) of genes in pham
- Manual Annotations of this start: 1 of 303
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Krueger_80 (K6),

Start 23:

- Found in 3 of 339 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 303
- Called 33.3% of time when present
- Phage (with cluster) where this start called: CallinAllBarbz_56 (FP),

Start 24:

- Found in 157 of 339 (46.3%) of genes in pham
- Manual Annotations of this start: 140 of 303
- Called 98.1% of time when present
- Phage (with cluster) where this start called: ActinUp_76 (K1), Adephagia_74 (K1), Adonis_75 (K1), Ageofdapage_79 (K1), AlishaPH_74 (K1), Amelie_62 (K1), Amgine_73 (K6), Amohntion_73 (K6), Anaya_79 (K1), Angelica_74 (K1), Anma_75 (K1), Apocalypse_78 (K1), Applecrisp_72 (K6), Asayake_75 (K1), Atiba_76 (K1), BEEST_75 (K1), BGlluviae_75 (K1), BaghaKamala_74 (K1), BarrelRoll_76 (K1), Beezoo_78 (K1), Bella96_76 (K1), Belladonna_75 (K1), Bern_76 (K1), Biglebops_62 (K1), Blizzard_75 (K1), Boiiii_75 (K1), Bryler_79 (K6), CREW_74 (K1), Cain_79 (K6), CallaLilly_75 (K1), Capricorn_75 (K1), CaseJules_77 (K1), Chavito_77 (K1), CheetoDust_75 (K1), Chris_76 (K1), Clipper_80 (K1), CrimD_77 (K1), Curiosium_81 (K1), Dalmuri_75 (K1), DartGoblin_78 (K1), DARTH_P_73 (K6), Dartin_76 (K1), Deby_75 (K1), Devera_83 (K1), Dole_80 (K1), DrHayes_75 (K1), Durfee_75 (K1), Efra2_82 (K1), Ekdilam_70 (K6), Ellie_71 (K6), Emerson_78 (K1), Enkosi_64 (K1), Fefferhead_74 (K6), Ganymede_75 (K1), Geraldini_79 (K1), Guanica15_81 (K1), Hammy_73 (K6), HedwigODU_75 (K1), Homura_74 (K1), Hurricane_76 (K3), Hyperbowlee_74 (K1), Illumine_81 (K1), Inky_75 (K1), JAWS_74 (K1), Jarvi_75 (K1), Jayhawk_78 (K1), Jeckyll_75 (K1), Joy99_76 (K1), Keshu_78 (K3), KiSi_78 (K1), LastHope_81 (K1), LaterM_75 (K1), Lavahound_72 (K6), LeMond_77 (K1), Lea83_76 (K3), LilPharaoh_63 (K1), LindNT_74 (K1), Llorens_75 (K1), Lunahalos_75 (K1), MackKat_72 (K1), MacnCheese_78 (K3), MarkPhew_77 (K1), Marshawn_74 (K6),

McMater_76 (K1), Mdavu_63 (K1), MeaningOfLife_77 (K1), Megsy_77 (K1), Murucutumbu_76 (K1), Mynx_77 (K1), Nibb_77 (K1), Nikao_65 (K1), Niklas_77 (K1), November_72 (K6), Nutello_62 (K1), Oscar_77 (K1), Padfoot_75 (K1), Padpat_79 (K1), Peanam_77 (K1), Peel_75 (K1), Pharb_74 (K3), PhelpsODU_78 (K6), Phrank_79 (K6), Piatt_74 (K1), Pisa1_73 (K1), Pisa4_67 (K1), Pixie_75 (K3), Pokerus_76 (K1), Prithvi_78 (K1), QuincyRose_73 (K1), Ramen_76 (K1), Rapunzel97_78 (K1), Richo_76 (K1), Rosmarinus_75 (K1), SamuelLPlaqson_75 (K1), Scarlett_78 (K1), SgtBeansprout_63 (K1), Shadow1_80 (K6), Shaobing_76 (K1), ShedlockHolmes_78 (K3), ShiaSurprise_76 (K1), SirPhilip_75 (K6), Slimphazie_77 (K1), Spock_75 (K1), Stinson_76 (K1), Sulley_74 (K1), Sunflower1121_81 (K6), Syra333_79 (K6), TBond007_72 (K3), TClif_77 (K6), Tachez_75 (K1), TaiwanKao_77 (K1), Teejan_64 (K1), Tierra_79 (K6), Tigress9_81 (K6), TingHuaYa_78 (K1), TiniBug_75 (K1), Tiri_75 (K1), Topper_75 (K1), Torres_65 (K1), TreyKay_78 (K1), TribbleTrouble_76 (K3), Trice_62 (K1), TruffulaTree_77 (K1), Twitch_75 (K1), Unicorn_78 (K6), Urkel_75 (K1), Validus_80 (K1), Veliki_76 (K1), Ximenita_81 (K6), YoureAdopted_75 (K1), Yuna_78 (K6), Yunkel11_81 (K1), Zabiza_71 (K1), Zavala_78 (K1),

Start 25:

- Found in 19 of 339 (5.6%) of genes in pham
- Manual Annotations of this start: 19 of 303
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_150 (M2), BoostSeason_78 (K2), DismalFunk_79 (K2), DismalStressor_79 (K2), Doughnut_79 (K2), Estes_152 (M2), Findley_79 (K2), GardenSalsa_152 (M2), GenevaB15_153 (M2), Marcoliusprime_78 (K2), Milly_79 (K2), MrMagoo_154 (M2), Mufasa_78 (K2), Nanosmite_147 (M3), Nergal_67 (AG), Rey_153 (M2), Strobilo_80 (K2), TM4_77 (K2), ZoeJ_78 (K2),

Start 26:

- Found in 19 of 339 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 303
- Called 5.3% of time when present
- Phage (with cluster) where this start called: DS6A_42 (singleton),

Start 27:

- Found in 25 of 339 (7.4%) of genes in pham
- No Manual Annotations of this start.
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Bobquesha_42 (K4),

Start 30:

- Found in 34 of 339 (10.0%) of genes in pham
- Manual Annotations of this start: 25 of 303
- Called 97.1% of time when present
- Phage (with cluster) where this start called: B1_62 (A3), BabyJohn_65 (A3), Caviar_70 (A3), Chiqui_65 (A3), DropBear_68 (A3), EtoileNova_68 (A3), Fred313_68 (A3), Heathen_70 (A3), Hookmount_70 (A3), Isca_68 (A3), JF2_68 (A3), JF4_68 (A3), Kachowdy_68 (A3), Lambert1_70 (A3), MA5_70 (A3), MK4_70 (A3), Marchesa_68 (A3), Margo_70 (A3), Noella_70 (A3), Norbert_66 (A3), Panamaxus_68 (A3), Phantastic_72 (A3), Pocahontas_69 (A3), Popcicle_70 (A3), QuinnKiro_69 (A3), ResDef_68 (A3), Rockstar_69 (A3), Roimos_68 (A3), Scout_69 (A3), Texage_68 (A3), Todacoro_70 (A3), Veracruz_67 (A3), Zarafa_68 (A3),

Start 31:

- Found in 9 of 339 (2.7%) of genes in pham
- Manual Annotations of this start: 6 of 303
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueBird_73 (A3), Bugatti_70 (A3), Clammy_70 (A3), Giroux_73 (A3), Idleandcovert_71 (A3), Pistachio_70 (A3), Puppy_71 (A3), SaturnRing_70 (A3), TNguyen7_71 (A3),

Start 33:

- Found in 20 of 339 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 303
- Called 5.0% of time when present
- Phage (with cluster) where this start called: HelDan_70 (A3),

Start 37:

- Found in 88 of 339 (26.0%) of genes in pham
- Manual Annotations of this start: 68 of 303
- Called 80.7% of time when present
- Phage (with cluster) where this start called: ACFishhook_72 (A3), Aglet_76 (A3), AgronaGT15_72 (A3), AugsMagnumOpus_78 (A3), Beauxregard13_74 (A3), BreSam8_75 (A3), BuzzBuzz_69 (A3), Bxz2_70 (A3), Calvinny_72 (A3), ClownCar_72 (A3), Colbster_71 (A3), Cullens_75 (A3), DaHudson_74 (A3), Daishi_74 (A3), Dieselweasel_75 (A3), EpicPhail_76 (A3), Farber_75 (A3), Fernando_75 (A3), Gemma_72 (A3), GingkoMaracino_75 (A3), Grif_73 (A3), Groupthink_75 (A3), Grub_73 (A3), Grum1_74 (A3), GtownJaz_75 (A3), HashRod_76 (A3), HaveUMetTed_75 (A3), Heliosoles_72 (A3), Hercules11_75 (A3), JeppNRM_75 (A3), Kalb97_75 (A3), Kalnok_75 (A3), LBerry_76 (A3), LarryKay_75 (A3), Lilith_73 (A3), Louie6_74 (A3), LugYA_78 (A3), MadMarie_73 (A3), Mainiac_74 (A3), Malinsilva_77 (A3), Manu_74 (A3), Marie_73 (A3), Marius_75 (A3), Methuselah_68 (A3), Microwolf_71 (A3), Misomonster_76 (A3), MoneyMay_74 (A3), Montavir_70 (A3), MuchMore_78 (A3), OlanP_73 (A3), Ollie_75 (A3), P28Green_75 (A3), PGHhamlin_77 (A3), Pawn_73 (A3), Pembroke_75 (A3), Penny1_75 (A3), PhishRPhriends_71 (A3), Phoebe_76 (A3), PotatoSplit_76 (A3), Rummer_74 (A3), Sabia_73 (A3), Snickers_75 (A3), SoYo_72 (A3), SoilDragon_74 (A3), Soshari_77 (A3), StepMih_74 (A3), TinyPebbles_74 (A3), Vix_71 (A3), Watson_74 (A3), Wooldri_77 (A3), Zetzy_72 (A3),

Start 38:

- Found in 122 of 339 (36.0%) of genes in pham
- Manual Annotations of this start: 14 of 303
- Called 14.8% of time when present
- Phage (with cluster) where this start called: Anubis_78 (A3), BabyRay_71 (A3), Bigflo_72 (A3), Croquant_72 (A3), Gwennie_70 (A3), JHC117_71 (A3), JenCasNa_76 (A3), Jobu08_71 (A3), KADY_72 (A3), Lowa_72 (A3), MarQuardt_75 (A3), Phoxy_75 (A3), PurpleHaze_74 (A3), Sabinator_73 (A3), Spike509_75 (A3), Stagni_72 (A3), Taurus_76 (A3), Tiffany_74 (A3),

Start 40:

- Found in 232 of 339 (68.4%) of genes in pham
- Manual Annotations of this start: 5 of 303
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Azrael100_140 (V), Cosmo_147 (V), EniyanLRS_140 (V), MaryV_133 (V), ThursdayNight_66 (AZ), Wildcat_147 (V),

Summary by clusters:

There are 13 clusters represented in this pham: FP, K3, singleton, AG, V, A3, K4, K2, K1, K6, M3, M2, AZ,

Info for manual annotations of cluster A3:

- Start number 30 was manually annotated 25 times for cluster A3.
- Start number 31 was manually annotated 6 times for cluster A3.
- Start number 33 was manually annotated 1 time for cluster A3.
- Start number 37 was manually annotated 68 times for cluster A3.
- Start number 38 was manually annotated 14 times for cluster A3.

Info for manual annotations of cluster AG:

- Start number 25 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster FP:

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

Info for manual annotations of cluster K1:

- Start number 24 was manually annotated 108 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 25 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 24 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 20 was manually annotated 14 times for cluster K4.
- Start number 21 was manually annotated 8 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 22 was manually annotated 1 time for cluster K6.
- Start number 24 was manually annotated 23 times for cluster K6.

Info for manual annotations of cluster M2:

- Start number 25 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 25 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 40 was manually annotated 5 times for cluster V.

Gene Information:

Gene: ACFishhook_72 Start: 42957, Stop: 42733, Start Num: 37

Candidate Starts for ACFishhook_72:

(Start: 37 @42957 has 68 MA's), (Start: 38 @42951 has 14 MA's), (Start: 40 @42945 has 5 MA's),

Gene: ActinUp_76 Start: 50161, Stop: 50433, Start Num: 24

Candidate Starts for ActinUp_76:

(Start: 22 @50146 has 1 MA's), (Start: 24 @50161 has 140 MA's), (39, 50215), (Start: 40 @50218 has 5 MA's), (43, 50233), (47, 50251), (52, 50299), (56, 50320), (59, 50392), (60, 50401),

Gene: Adephagia_74 Start: 49998, Stop: 50270, Start Num: 24

Candidate Starts for Adephagia_74:

(Start: 22 @49983 has 1 MA's), (Start: 24 @49998 has 140 MA's), (39, 50052), (Start: 40 @50055 has 5 MA's), (43, 50070), (47, 50088), (52, 50136), (56, 50157), (59, 50229), (60, 50238),

Gene: Adonis_75 Start: 50433, Stop: 50705, Start Num: 24

Candidate Starts for Adonis_75:

(Start: 22 @50418 has 1 MA's), (Start: 24 @50433 has 140 MA's), (39, 50490), (Start: 40 @50493 has 5 MA's), (43, 50508), (47, 50526), (56, 50595), (59, 50667), (60, 50676),

Gene: Ageofdapage_79 Start: 51358, Stop: 51630, Start Num: 24

Candidate Starts for Ageofdapage_79:

(Start: 22 @51343 has 1 MA's), (Start: 24 @51358 has 140 MA's), (39, 51415), (Start: 40 @51418 has 5 MA's), (43, 51433), (47, 51451), (52, 51499), (56, 51520), (59, 51592), (60, 51601),

Gene: Aglet_76 Start: 43069, Stop: 42842, Start Num: 37

Candidate Starts for Aglet_76:

(Start: 37 @43069 has 68 MA's), (Start: 38 @43063 has 14 MA's),

Gene: AgronaGT15_72 Start: 42917, Stop: 42690, Start Num: 37

Candidate Starts for AgronaGT15_72:

(Start: 37 @42917 has 68 MA's), (Start: 38 @42911 has 14 MA's),

Gene: AlishaPH_74 Start: 50259, Stop: 50531, Start Num: 24

Candidate Starts for AlishaPH_74:

(Start: 22 @50244 has 1 MA's), (Start: 24 @50259 has 140 MA's), (39, 50313), (Start: 40 @50316 has 5 MA's), (43, 50331), (47, 50349), (52, 50397), (56, 50418), (59, 50490), (60, 50499),

Gene: Amelie_62 Start: 47156, Stop: 47428, Start Num: 24

Candidate Starts for Amelie_62:

(Start: 22 @47141 has 1 MA's), (Start: 24 @47156 has 140 MA's), (Start: 26 @47165 has 1 MA's), (Start: 33 @47186 has 1 MA's), (36, 47195), (39, 47213), (Start: 40 @47216 has 5 MA's), (42, 47228), (43, 47231), (47, 47249), (51, 47285), (52, 47297), (60, 47399),

Gene: Amgine_73 Start: 50668, Stop: 50943, Start Num: 24

Candidate Starts for Amgine_73:

(Start: 22 @50653 has 1 MA's), (Start: 24 @50668 has 140 MA's), (28, 50683), (32, 50692), (43, 50743), (47, 50761), (56, 50830),

Gene: Amohnition_73 Start: 50538, Stop: 50810, Start Num: 24

Candidate Starts for Amohnition_73:

(Start: 24 @50538 has 140 MA's), (43, 50610), (47, 50628), (56, 50697),

Gene: Anaya_79 Start: 51056, Stop: 51328, Start Num: 24

Candidate Starts for Anaya_79:

(Start: 22 @51041 has 1 MA's), (Start: 24 @51056 has 140 MA's), (39, 51110), (Start: 40 @51113 has 5 MA's), (43, 51128), (47, 51146), (52, 51194), (56, 51215), (59, 51287), (60, 51296),

Gene: Angelica_74 Start: 50118, Stop: 50390, Start Num: 24

Candidate Starts for Angelica_74:

(Start: 22 @50103 has 1 MA's), (Start: 24 @50118 has 140 MA's), (39, 50175), (Start: 40 @50178 has 5 MA's), (43, 50193), (47, 50211), (52, 50259), (56, 50280), (59, 50352), (60, 50361),

Gene: Anma_75 Start: 50512, Stop: 50781, Start Num: 24

Candidate Starts for Anma_75:

(Start: 22 @50497 has 1 MA's), (Start: 24 @50512 has 140 MA's), (39, 50563), (Start: 40 @50566 has 5 MA's), (42, 50578), (43, 50581), (47, 50599), (52, 50647), (56, 50668), (59, 50740), (60, 50749),

Gene: Anubis_78 Start: 42949, Stop: 42728, Start Num: 38

Candidate Starts for Anubis_78:

(Start: 37 @42955 has 68 MA's), (Start: 38 @42949 has 14 MA's),

Gene: Apocalypse_78 Start: 50800, Stop: 51072, Start Num: 24

Candidate Starts for Apocalypse_78:

(Start: 22 @50785 has 1 MA's), (Start: 24 @50800 has 140 MA's), (39, 50854), (Start: 40 @50857 has 5 MA's), (43, 50872), (47, 50890), (52, 50938), (56, 50959), (59, 51031), (60, 51040),

Gene: Applecrisp_72 Start: 50112, Stop: 50384, Start Num: 24

Candidate Starts for Applecrisp_72:

(Start: 24 @50112 has 140 MA's), (Start: 40 @50169 has 5 MA's), (43, 50184), (47, 50202), (56, 50271),

Gene: Asayake_75 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Asayake_75:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Atiba_76 Start: 49961, Stop: 50233, Start Num: 24

Candidate Starts for Atiba_76:

(Start: 22 @49946 has 1 MA's), (Start: 24 @49961 has 140 MA's), (39, 50015), (Start: 40 @50018 has 5 MA's), (43, 50033), (47, 50051), (52, 50099), (56, 50120), (59, 50192), (60, 50201),

Gene: AugsMagnumOpus_78 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for AugsMagnumOpus_78:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Aziz_150 Start: 73022, Stop: 72717, Start Num: 25

Candidate Starts for Aziz_150:

(Start: 25 @73022 has 19 MA's), (44, 72941),

Gene: Azrael100_140 Start: 68576, Stop: 68298, Start Num: 40

Candidate Starts for Azrael100_140:

(10, 68795), (17, 68705), (Start: 40 @68576 has 5 MA's), (49, 68531), (53, 68480), (58, 68399), (61, 68378), (66, 68306), (67, 68303),

Gene: B1_62 Start: 41030, Stop: 40761, Start Num: 30

Candidate Starts for B1_62:

(9, 41195), (Start: 30 @41030 has 25 MA's), (Start: 40 @41000 has 5 MA's),

Gene: BEEST_75 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for BEEST_75:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: BGlluviae_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for BGlluviae_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: BabyJohn_65 Start: 42854, Stop: 42588, Start Num: 30

Candidate Starts for BabyJohn_65:

(Start: 23 @42878 has 1 MA's), (Start: 30 @42854 has 25 MA's), (Start: 40 @42824 has 5 MA's), (54, 42734),

Gene: BabyRay_71 Start: 42787, Stop: 42569, Start Num: 38

Candidate Starts for BabyRay_71:

(Start: 38 @42787 has 14 MA's), (Start: 40 @42781 has 5 MA's), (56, 42679), (58, 42616),

Gene: BaghaKamala_74 Start: 49547, Stop: 49819, Start Num: 24

Candidate Starts for BaghaKamala_74:

(Start: 22 @49532 has 1 MA's), (Start: 24 @49547 has 140 MA's), (39, 49601), (Start: 40 @49604 has 5 MA's), (43, 49619), (47, 49637), (52, 49685), (56, 49706), (59, 49778), (60, 49787),

Gene: BarrelRoll_76 Start: 50518, Stop: 50790, Start Num: 24

Candidate Starts for BarrelRoll_76:

(Start: 22 @50503 has 1 MA's), (Start: 24 @50518 has 140 MA's), (39, 50572), (Start: 40 @50575 has 5 MA's), (43, 50590), (47, 50608), (52, 50656), (56, 50677), (59, 50749), (60, 50758),

Gene: Beauxregard13_74 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for Beauxregard13_74:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Beezoo_78 Start: 51095, Stop: 51364, Start Num: 24

Candidate Starts for Beezoo_78:

(Start: 24 @51095 has 140 MA's), (39, 51149), (Start: 40 @51152 has 5 MA's), (43, 51167), (47, 51185), (52, 51233), (56, 51254), (59, 51326), (60, 51335),

Gene: Bella96_76 Start: 50379, Stop: 50648, Start Num: 24

Candidate Starts for Bella96_76:

(Start: 22 @50364 has 1 MA's), (Start: 24 @50379 has 140 MA's), (39, 50430), (Start: 40 @50433 has 5 MA's), (43, 50448), (47, 50466), (56, 50535), (59, 50607), (60, 50616),

Gene: Belladonna_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Belladonna_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Bern_76 Start: 49065, Stop: 49337, Start Num: 24

Candidate Starts for Bern_76:

(Start: 22 @49050 has 1 MA's), (Start: 24 @49065 has 140 MA's), (39, 49122), (Start: 40 @49125 has 5 MA's), (42, 49137), (43, 49140), (47, 49158), (52, 49206), (56, 49227), (59, 49299), (60, 49308),

Gene: Bigflo_72 Start: 43062, Stop: 42841, Start Num: 38

Candidate Starts for Bigflo_72:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Biglebops_62 Start: 47171, Stop: 47443, Start Num: 24

Candidate Starts for Biglebops_62:

(Start: 22 @47156 has 1 MA's), (Start: 24 @47171 has 140 MA's), (Start: 26 @47180 has 1 MA's),
(Start: 33 @47201 has 1 MA's), (36, 47210), (39, 47228), (Start: 40 @47231 has 5 MA's), (42, 47243),
(43, 47246), (47, 47264), (51, 47300), (52, 47312), (60, 47414),

Gene: Blizzard_75 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Blizzard_75:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has
5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: BlueBird_73 Start: 42858, Stop: 42592, Start Num: 31

Candidate Starts for BlueBird_73:

(Start: 31 @42858 has 6 MA's), (Start: 40 @42828 has 5 MA's), (56, 42726), (64, 42612),

Gene: Bobquesha_42 Start: 31200, Stop: 31451, Start Num: 27

Candidate Starts for Bobquesha_42:

(Start: 21 @31164 has 8 MA's), (27, 31200), (Start: 38 @31233 has 14 MA's), (Start: 40 @31239 has 5
MA's), (42, 31251), (47, 31272), (51, 31308), (56, 31341), (59, 31413),

Gene: Boiiii_75 Start: 50315, Stop: 50587, Start Num: 24

Candidate Starts for Boiiii_75:

(Start: 22 @50300 has 1 MA's), (Start: 24 @50315 has 140 MA's), (39, 50369), (Start: 40 @50372 has
5 MA's), (43, 50387), (47, 50405), (52, 50453), (56, 50474), (59, 50546), (60, 50555),

Gene: BoostSeason_78 Start: 51944, Stop: 52213, Start Num: 25

Candidate Starts for BoostSeason_78:

(12, 51821), (18, 51905), (Start: 25 @51944 has 19 MA's), (Start: 40 @52001 has 5 MA's), (47, 52034),
(51, 52070), (56, 52103), (59, 52175),

Gene: BreSam8_75 Start: 43062, Stop: 42835, Start Num: 37

Candidate Starts for BreSam8_75:

(Start: 37 @43062 has 68 MA's), (Start: 38 @43056 has 14 MA's),

Gene: Bryler_79 Start: 49944, Stop: 50216, Start Num: 24

Candidate Starts for Bryler_79:

(Start: 22 @49929 has 1 MA's), (Start: 24 @49944 has 140 MA's), (Start: 40 @50004 has 5 MA's), (42,
50016), (47, 50037),

Gene: Bugatti_70 Start: 42858, Stop: 42592, Start Num: 31

Candidate Starts for Bugatti_70:

(Start: 31 @42858 has 6 MA's), (Start: 40 @42828 has 5 MA's), (56, 42726), (64, 42612),

Gene: BuzzBuzz_69 Start: 43096, Stop: 42869, Start Num: 37

Candidate Starts for BuzzBuzz_69:

(Start: 37 @43096 has 68 MA's), (Start: 38 @43090 has 14 MA's), (Start: 40 @43084 has 5 MA's),

Gene: Bxz2_70 Start: 43103, Stop: 42876, Start Num: 37

Candidate Starts for Bxz2_70:

(Start: 37 @43103 has 68 MA's), (Start: 38 @43097 has 14 MA's),

Gene: CREW_74 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for CREW_74:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Cain_79 Start: 49932, Stop: 50204, Start Num: 24

Candidate Starts for Cain_79:

(Start: 22 @49917 has 1 MA's), (Start: 24 @49932 has 140 MA's), (Start: 40 @49992 has 5 MA's), (42, 50004), (47, 50025),

Gene: CallaLilly_75 Start: 50039, Stop: 50311, Start Num: 24

Candidate Starts for CallaLilly_75:

(Start: 22 @50024 has 1 MA's), (Start: 24 @50039 has 140 MA's), (39, 50093), (Start: 40 @50096 has 5 MA's), (43, 50111), (47, 50129), (52, 50177), (56, 50198), (59, 50270), (60, 50279),

Gene: CallinAllBarbz_56 Start: 38887, Stop: 39201, Start Num: 23

Candidate Starts for CallinAllBarbz_56:

(Start: 23 @38887 has 1 MA's), (Start: 40 @38953 has 5 MA's), (50, 39022),

Gene: Calvinny_72 Start: 42885, Stop: 42661, Start Num: 37

Candidate Starts for Calvinny_72:

(Start: 37 @42885 has 68 MA's), (Start: 38 @42879 has 14 MA's), (Start: 40 @42873 has 5 MA's),

Gene: Capricorn_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Capricorn_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: CaseJules_77 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for CaseJules_77:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Caviar_70 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for Caviar_70:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Chancellor_40 Start: 31427, Stop: 31726, Start Num: 20

Candidate Starts for Chancellor_40:

(Start: 20 @31427 has 14 MA's), (27, 31463), (Start: 38 @31508 has 14 MA's), (42, 31526), (47, 31547), (51, 31583), (56, 31616), (59, 31688),

Gene: Chavito_77 Start: 51039, Stop: 51314, Start Num: 24

Candidate Starts for Chavito_77:

(Start: 22 @51024 has 1 MA's), (Start: 24 @51039 has 140 MA's), (Start: 26 @51048 has 1 MA's), (39, 51093), (Start: 40 @51096 has 5 MA's), (42, 51108), (43, 51111), (47, 51129), (51, 51165), (55, 51195), (59, 51270),

Gene: CheetoDust_75 Start: 49713, Stop: 49985, Start Num: 24

Candidate Starts for CheetoDust_75:

(Start: 22 @49698 has 1 MA's), (Start: 24 @49713 has 140 MA's), (39, 49767), (Start: 40 @49770 has 5 MA's), (43, 49785), (47, 49803), (52, 49851), (56, 49872), (59, 49944), (60, 49953),

Gene: Cheetobro_40 Start: 31424, Stop: 31723, Start Num: 20

Candidate Starts for Cheetobro_40:

(Start: 20 @31424 has 14 MA's), (27, 31460), (Start: 38 @31505 has 14 MA's), (42, 31523), (47, 31544), (51, 31580), (56, 31613), (59, 31685),

Gene: Chiqui_65 Start: 42863, Stop: 42597, Start Num: 30

Candidate Starts for Chiqui_65:

(Start: 23 @42887 has 1 MA's), (Start: 30 @42863 has 25 MA's), (Start: 40 @42833 has 5 MA's), (54, 42743),

Gene: Chris_76 Start: 50718, Stop: 50993, Start Num: 24

Candidate Starts for Chris_76:

(Start: 22 @50703 has 1 MA's), (Start: 24 @50718 has 140 MA's), (28, 50733), (Start: 40 @50778 has 5 MA's), (42, 50790), (47, 50811),

Gene: Clammy_70 Start: 42858, Stop: 42592, Start Num: 31

Candidate Starts for Clammy_70:

(Start: 31 @42858 has 6 MA's), (Start: 40 @42828 has 5 MA's), (56, 42726), (64, 42612),

Gene: Clipper_80 Start: 51215, Stop: 51487, Start Num: 24

Candidate Starts for Clipper_80:

(Start: 22 @51200 has 1 MA's), (Start: 24 @51215 has 140 MA's), (39, 51272), (Start: 40 @51275 has 5 MA's), (43, 51290), (47, 51308), (52, 51356), (56, 51377), (59, 51449), (60, 51458),

Gene: ClownCar_72 Start: 42878, Stop: 42654, Start Num: 37

Candidate Starts for ClownCar_72:

(Start: 37 @42878 has 68 MA's), (Start: 38 @42872 has 14 MA's), (Start: 40 @42866 has 5 MA's),

Gene: Colbster_71 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for Colbster_71:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Cosmo_147 Start: 68740, Stop: 68462, Start Num: 40

Candidate Starts for Cosmo_147:

(10, 68959), (17, 68869), (Start: 40 @68740 has 5 MA's), (49, 68695), (53, 68644), (58, 68563), (61, 68542), (66, 68470), (67, 68467),

Gene: CrimD_77 Start: 51114, Stop: 51386, Start Num: 24

Candidate Starts for CrimD_77:

(Start: 22 @51099 has 1 MA's), (Start: 24 @51114 has 140 MA's), (39, 51171), (Start: 40 @51174 has 5 MA's), (42, 51186), (43, 51189), (47, 51207), (52, 51255), (56, 51276), (59, 51348), (60, 51357),

Gene: Croquant_72 Start: 43060, Stop: 42839, Start Num: 38

Candidate Starts for Croquant_72:

(Start: 37 @43066 has 68 MA's), (Start: 38 @43060 has 14 MA's),

Gene: Cullens_75 Start: 43068, Stop: 42841, Start Num: 37

Candidate Starts for Cullens_75:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Curiosium_81 Start: 50080, Stop: 50355, Start Num: 24

Candidate Starts for Curiosium_81:

(Start: 24 @50080 has 140 MA's), (28, 50095), (Start: 33 @50110 has 1 MA's), (39, 50137), (Start: 40 @50140 has 5 MA's), (43, 50155), (47, 50173), (52, 50221), (56, 50242), (59, 50314), (60, 50323),

Gene: DS6A_42 Start: 32699, Stop: 32980, Start Num: 26

Candidate Starts for DS6A_42:

(1, 32342), (2, 32414), (4, 32438), (5, 32462), (7, 32489), (8, 32516), (13, 32618), (16, 32636), (Start: 24 @32690 has 140 MA's), (Start: 26 @32699 has 1 MA's), (Start: 33 @32720 has 1 MA's), (39, 32750), (Start: 40 @32753 has 5 MA's), (46, 32780), (47, 32786), (51, 32822), (55, 32852), (56, 32855), (58, 32918), (59, 32927),

Gene: DaHudson_74 Start: 43061, Stop: 42834, Start Num: 37

Candidate Starts for DaHudson_74:

(Start: 37 @43061 has 68 MA's), (Start: 38 @43055 has 14 MA's),

Gene: Daishi_74 Start: 41936, Stop: 41709, Start Num: 37

Candidate Starts for Daishi_74:

(Start: 37 @41936 has 68 MA's), (Start: 38 @41930 has 14 MA's),

Gene: Dalmuri_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Dalmuri_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: DanSyl44_43 Start: 32293, Stop: 32592, Start Num: 20

Candidate Starts for DanSyl44_43:

(Start: 20 @32293 has 14 MA's), (27, 32329), (Start: 38 @32374 has 14 MA's), (42, 32392), (47, 32413), (51, 32449), (56, 32482), (59, 32554),

Gene: DartGoblin_78 Start: 50342, Stop: 50611, Start Num: 24

Candidate Starts for DartGoblin_78:

(Start: 22 @50327 has 1 MA's), (Start: 24 @50342 has 140 MA's), (35, 50372), (39, 50393), (Start: 40 @50396 has 5 MA's), (42, 50408), (43, 50411), (47, 50429), (52, 50477), (56, 50498), (59, 50570), (60, 50579),

Gene: DarthP_73 Start: 50395, Stop: 50667, Start Num: 24

Candidate Starts for DarthP_73:

(3, 50134), (6, 50197), (9, 50254), (11, 50278), (Start: 24 @50395 has 140 MA's), (Start: 40 @50452 has 5 MA's), (43, 50467), (47, 50485), (56, 50554),

Gene: Dartin_76 Start: 50287, Stop: 50565, Start Num: 24

Candidate Starts for Dartin_76:

(Start: 22 @50272 has 1 MA's), (Start: 24 @50287 has 140 MA's), (Start: 26 @50296 has 1 MA's), (36, 50326), (39, 50344), (Start: 40 @50347 has 5 MA's), (43, 50362), (47, 50380), (59, 50521),

Gene: Deby_75 Start: 50485, Stop: 50757, Start Num: 24

Candidate Starts for Deby_75:

(Start: 22 @50470 has 1 MA's), (Start: 24 @50485 has 140 MA's), (39, 50539), (Start: 40 @50542 has 5 MA's), (43, 50557), (47, 50575), (52, 50623), (56, 50644), (59, 50716), (60, 50725),

Gene: Devera_83 Start: 51910, Stop: 52182, Start Num: 24

Candidate Starts for Devera_83:

(Start: 22 @51895 has 1 MA's), (Start: 24 @51910 has 140 MA's), (39, 51967), (Start: 40 @51970 has 5 MA's), (43, 51985), (47, 52003), (52, 52051), (56, 52072), (59, 52144), (60, 52153),

Gene: Dieselweasel_75 Start: 43070, Stop: 42843, Start Num: 37

Candidate Starts for Dieselweasel_75:

(Start: 37 @43070 has 68 MA's), (Start: 38 @43064 has 14 MA's),

Gene: DismalFunk_79 Start: 52473, Stop: 52742, Start Num: 25

Candidate Starts for DismalFunk_79:

(12, 52350), (Start: 25 @52473 has 19 MA's), (29, 52488), (Start: 40 @52530 has 5 MA's), (47, 52563), (51, 52599), (56, 52632),

Gene: DismalStressor_79 Start: 52473, Stop: 52742, Start Num: 25

Candidate Starts for DismalStressor_79:

(12, 52350), (Start: 25 @52473 has 19 MA's), (29, 52488), (Start: 40 @52530 has 5 MA's), (47, 52563), (51, 52599), (56, 52632),

Gene: Dole_80 Start: 51913, Stop: 52185, Start Num: 24

Candidate Starts for Dole_80:

(Start: 22 @51898 has 1 MA's), (Start: 24 @51913 has 140 MA's), (39, 51970), (Start: 40 @51973 has 5 MA's), (43, 51988), (47, 52006), (52, 52054), (56, 52075), (59, 52147), (60, 52156),

Gene: Doughnut_79 Start: 52109, Stop: 52378, Start Num: 25

Candidate Starts for Doughnut_79:

(12, 51986), (18, 52070), (Start: 25 @52109 has 19 MA's), (29, 52124), (39, 52163), (Start: 40 @52166 has 5 MA's), (47, 52199), (51, 52235), (56, 52268),

Gene: DrHayes_75 Start: 50512, Stop: 50781, Start Num: 24

Candidate Starts for DrHayes_75:

(Start: 22 @50497 has 1 MA's), (Start: 24 @50512 has 140 MA's), (39, 50563), (Start: 40 @50566 has 5 MA's), (42, 50578), (43, 50581), (47, 50599), (52, 50647), (56, 50668), (59, 50740), (60, 50749),

Gene: DropBear_68 Start: 42778, Stop: 42512, Start Num: 30

Candidate Starts for DropBear_68:

(15, 42853), (Start: 30 @42778 has 25 MA's), (Start: 33 @42769 has 1 MA's), (Start: 40 @42748 has 5 MA's), (56, 42646),

Gene: Durfee_75 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Durfee_75:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Efra2_82 Start: 50946, Stop: 51221, Start Num: 24

Candidate Starts for Efra2_82:

(Start: 22 @50931 has 1 MA's), (Start: 24 @50946 has 140 MA's), (39, 51003), (Start: 40 @51006 has 5 MA's), (42, 51018), (43, 51021), (47, 51039), (52, 51087), (56, 51108), (59, 51180), (60, 51189),

Gene: Ekdilam_70 Start: 50603, Stop: 50875, Start Num: 24

Candidate Starts for Ekdilam_70:

(Start: 24 @50603 has 140 MA's), (Start: 40 @50660 has 5 MA's), (43, 50675), (47, 50693), (56, 50762),

Gene: Ellie_71 Start: 49839, Stop: 50111, Start Num: 24

Candidate Starts for Ellie_71:

(Start: 24 @49839 has 140 MA's), (Start: 40 @49896 has 5 MA's), (43, 49911), (47, 49929), (56, 49998),

Gene: Emerson_78 Start: 50552, Stop: 50824, Start Num: 24

Candidate Starts for Emerson_78:

(Start: 22 @50537 has 1 MA's), (Start: 24 @50552 has 140 MA's), (39, 50606), (Start: 40 @50609 has 5 MA's), (43, 50624), (47, 50642), (52, 50690), (56, 50711), (59, 50783), (60, 50792),

Gene: EniyanLRS_140 Start: 69081, Stop: 68803, Start Num: 40

Candidate Starts for EniyanLRS_140:

(10, 69288), (17, 69198), (Start: 40 @69081 has 5 MA's), (49, 69036), (53, 68985), (58, 68904), (61, 68883), (66, 68811), (67, 68808),

Gene: Enkosi_64 Start: 49769, Stop: 50041, Start Num: 24

Candidate Starts for Enkosi_64:

(Start: 22 @49754 has 1 MA's), (Start: 24 @49769 has 140 MA's), (Start: 26 @49778 has 1 MA's), (Start: 33 @49799 has 1 MA's), (36, 49808), (39, 49826), (Start: 40 @49829 has 5 MA's), (42, 49841), (43, 49844), (47, 49862), (51, 49898), (52, 49910), (60, 50012),

Gene: EpicPhail_76 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for EpicPhail_76:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Eponine_42 Start: 32180, Stop: 32479, Start Num: 20

Candidate Starts for Eponine_42:

(Start: 20 @32180 has 14 MA's), (27, 32216), (Start: 38 @32261 has 14 MA's), (42, 32279), (47, 32300), (51, 32336), (56, 32369), (59, 32441),

Gene: Estes_152 Start: 73391, Stop: 73086, Start Num: 25

Candidate Starts for Estes_152:

(Start: 25 @73391 has 19 MA's), (44, 73310),

Gene: EtoileNova_68 Start: 42821, Stop: 42561, Start Num: 30

Candidate Starts for EtoileNova_68:

(15, 42896), (Start: 30 @42821 has 25 MA's), (Start: 40 @42791 has 5 MA's), (64, 42575),

Gene: Farber_75 Start: 43058, Stop: 42831, Start Num: 37

Candidate Starts for Farber_75:

(Start: 37 @43058 has 68 MA's), (Start: 38 @43052 has 14 MA's),

Gene: Fefferhead_74 Start: 49897, Stop: 50172, Start Num: 24

Candidate Starts for Fefferhead_74:

(Start: 22 @49882 has 1 MA's), (Start: 24 @49897 has 140 MA's), (28, 49912), (32, 49921), (Start: 40 @49957 has 5 MA's), (43, 49972), (47, 49990), (56, 50059),

Gene: Fernando_75 Start: 43068, Stop: 42841, Start Num: 37

Candidate Starts for Fernando_75:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Findley_79 Start: 52491, Stop: 52760, Start Num: 25

Candidate Starts for Findley_79:

(12, 52368), (Start: 25 @52491 has 19 MA's), (29, 52506), (Start: 40 @52548 has 5 MA's), (47, 52581), (51, 52617), (56, 52650),

Gene: Fionnbharth_40 Start: 31415, Stop: 31714, Start Num: 20

Candidate Starts for Fionnbharth_40:

(Start: 20 @31415 has 14 MA's), (27, 31451), (Start: 38 @31496 has 14 MA's), (42, 31514), (47, 31535), (51, 31571), (56, 31604), (59, 31676),

Gene: Fred313_68 Start: 42472, Stop: 42206, Start Num: 30

Candidate Starts for Fred313_68:

(15, 42547), (Start: 30 @42472 has 25 MA's), (Start: 33 @42463 has 1 MA's), (Start: 40 @42442 has 5 MA's), (56, 42340),

Gene: Ganymede_75 Start: 50523, Stop: 50792, Start Num: 24

Candidate Starts for Ganymede_75:

(Start: 22 @50508 has 1 MA's), (Start: 24 @50523 has 140 MA's), (39, 50577), (Start: 40 @50580 has 5 MA's), (43, 50595), (47, 50613), (52, 50661), (56, 50682), (59, 50754), (60, 50763),

Gene: GardenSalsa_152 Start: 73558, Stop: 73253, Start Num: 25

Candidate Starts for GardenSalsa_152:

(Start: 25 @73558 has 19 MA's), (44, 73477),

Gene: Gemma_72 Start: 42881, Stop: 42657, Start Num: 37

Candidate Starts for Gemma_72:

(Start: 37 @42881 has 68 MA's), (Start: 38 @42875 has 14 MA's), (Start: 40 @42869 has 5 MA's),

Gene: GenevaB15_153 Start: 73022, Stop: 72717, Start Num: 25

Candidate Starts for GenevaB15_153:

(Start: 25 @73022 has 19 MA's), (44, 72941),

Gene: Geraldini_79 Start: 51113, Stop: 51382, Start Num: 24

Candidate Starts for Geraldini_79:

(Start: 22 @51098 has 1 MA's), (Start: 24 @51113 has 140 MA's), (39, 51167), (Start: 40 @51170 has 5 MA's), (43, 51185), (47, 51203), (52, 51251), (56, 51272), (59, 51344), (60, 51353),

Gene: GingkoMaracino_75 Start: 42954, Stop: 42727, Start Num: 37

Candidate Starts for GingkoMaracino_75:

(Start: 37 @42954 has 68 MA's), (Start: 38 @42948 has 14 MA's),

Gene: Giroux_73 Start: 42857, Stop: 42591, Start Num: 31

Candidate Starts for Giroux_73:

(Start: 31 @42857 has 6 MA's), (Start: 40 @42827 has 5 MA's), (56, 42725), (64, 42611),

Gene: Grif_73 Start: 43142, Stop: 42915, Start Num: 37

Candidate Starts for Grif_73:

(Start: 37 @43142 has 68 MA's), (Start: 38 @43136 has 14 MA's),

Gene: Groupthink_75 Start: 42885, Stop: 42661, Start Num: 37

Candidate Starts for Groupthink_75:

(Start: 37 @42885 has 68 MA's), (Start: 38 @42879 has 14 MA's), (Start: 40 @42873 has 5 MA's),

Gene: Grub_73 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for Grub_73:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Grum1_74 Start: 43068, Stop: 42841, Start Num: 37
Candidate Starts for Grum1_74:
(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: GtownJaz_75 Start: 43069, Stop: 42842, Start Num: 37
Candidate Starts for GtownJaz_75:
(Start: 37 @43069 has 68 MA's), (Start: 38 @43063 has 14 MA's),

Gene: Guanica15_81 Start: 50692, Stop: 50967, Start Num: 24
Candidate Starts for Guanica15_81:
(Start: 22 @50677 has 1 MA's), (Start: 24 @50692 has 140 MA's), (39, 50749), (Start: 40 @50752 has 5 MA's), (42, 50764), (43, 50767), (47, 50785), (52, 50833), (56, 50854), (59, 50926), (60, 50935),

Gene: Gwennie_70 Start: 43066, Stop: 42845, Start Num: 38
Candidate Starts for Gwennie_70:
(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Hammy_73 Start: 50380, Stop: 50652, Start Num: 24
Candidate Starts for Hammy_73:
(3, 50119), (6, 50182), (9, 50239), (11, 50263), (Start: 24 @50380 has 140 MA's), (43, 50452), (47, 50470), (56, 50539),

Gene: HashRod_76 Start: 43096, Stop: 42869, Start Num: 37
Candidate Starts for HashRod_76:
(Start: 37 @43096 has 68 MA's), (Start: 38 @43090 has 14 MA's),

Gene: HaveUMetTed_75 Start: 42870, Stop: 42646, Start Num: 37
Candidate Starts for HaveUMetTed_75:
(Start: 37 @42870 has 68 MA's), (Start: 38 @42864 has 14 MA's), (Start: 40 @42858 has 5 MA's),

Gene: Heathen_70 Start: 42567, Stop: 42301, Start Num: 30
Candidate Starts for Heathen_70:
(15, 42642), (Start: 30 @42567 has 25 MA's), (Start: 33 @42558 has 1 MA's), (Start: 40 @42537 has 5 MA's), (56, 42435),

Gene: HedwigODU_75 Start: 50161, Stop: 50433, Start Num: 24
Candidate Starts for HedwigODU_75:
(Start: 22 @50146 has 1 MA's), (Start: 24 @50161 has 140 MA's), (39, 50215), (Start: 40 @50218 has 5 MA's), (43, 50233), (47, 50251), (52, 50299), (56, 50320), (59, 50392), (60, 50401),

Gene: HelDan_70 Start: 42774, Stop: 42517, Start Num: 33
Candidate Starts for HelDan_70:
(15, 42858), (Start: 30 @42783 has 25 MA's), (Start: 33 @42774 has 1 MA's), (Start: 40 @42753 has 5 MA's), (56, 42651),

Gene: Heliosoles_72 Start: 42888, Stop: 42664, Start Num: 37
Candidate Starts for Heliosoles_72:
(Start: 37 @42888 has 68 MA's), (Start: 38 @42882 has 14 MA's), (Start: 40 @42876 has 5 MA's),

Gene: Hercules11_75 Start: 43077, Stop: 42850, Start Num: 37
Candidate Starts for Hercules11_75:
(Start: 37 @43077 has 68 MA's), (Start: 38 @43071 has 14 MA's),

Gene: Homura_74 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Homura_74:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Hookmount_70 Start: 42818, Stop: 42558, Start Num: 30

Candidate Starts for Hookmount_70:

(15, 42893), (Start: 30 @42818 has 25 MA's), (Start: 40 @42788 has 5 MA's), (64, 42572),

Gene: Hurricane_76 Start: 50335, Stop: 50607, Start Num: 24

Candidate Starts for Hurricane_76:

(Start: 24 @50335 has 140 MA's), (28, 50350), (42, 50404), (47, 50425), (56, 50494), (59, 50566), (60, 50575),

Gene: Hyperbowlee_74 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Hyperbowlee_74:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Idleandcovert_71 Start: 42858, Stop: 42592, Start Num: 31

Candidate Starts for Idleandcovert_71:

(Start: 31 @42858 has 6 MA's), (Start: 40 @42828 has 5 MA's), (56, 42726), (64, 42612),

Gene: Illumine_81 Start: 51912, Stop: 52184, Start Num: 24

Candidate Starts for Illumine_81:

(Start: 22 @51897 has 1 MA's), (Start: 24 @51912 has 140 MA's), (39, 51969), (Start: 40 @51972 has 5 MA's), (43, 51987), (47, 52005), (52, 52053), (56, 52074), (59, 52146), (60, 52155),

Gene: Inky_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Inky_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Isca_68 Start: 42335, Stop: 42066, Start Num: 30

Candidate Starts for Isca_68:

(9, 42500), (Start: 30 @42335 has 25 MA's), (Start: 40 @42305 has 5 MA's),

Gene: JAWS_74 Start: 50078, Stop: 50350, Start Num: 24

Candidate Starts for JAWS_74:

(Start: 22 @50063 has 1 MA's), (Start: 24 @50078 has 140 MA's), (39, 50132), (Start: 40 @50135 has 5 MA's), (43, 50150), (47, 50168), (52, 50216), (56, 50237), (59, 50309), (60, 50318),

Gene: JF1_40 Start: 31413, Stop: 31712, Start Num: 21

Candidate Starts for JF1_40:

(Start: 21 @31413 has 8 MA's), (27, 31449), (Start: 38 @31494 has 14 MA's), (42, 31512), (51, 31569), (56, 31602), (59, 31674),

Gene: JF2_68 Start: 41030, Stop: 40761, Start Num: 30

Candidate Starts for JF2_68:

(9, 41195), (Start: 30 @41030 has 25 MA's), (Start: 40 @41000 has 5 MA's),

Gene: JF4_68 Start: 41030, Stop: 40761, Start Num: 30

Candidate Starts for JF4_68:

(9, 41195), (Start: 30 @41030 has 25 MA's), (Start: 40 @41000 has 5 MA's),

Gene: JHC117_71 Start: 43060, Stop: 42839, Start Num: 38

Candidate Starts for JHC117_71:

(Start: 37 @43066 has 68 MA's), (Start: 38 @43060 has 14 MA's),

Gene: Jarvi_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Jarvi_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Jayhawk_78 Start: 50578, Stop: 50850, Start Num: 24

Candidate Starts for Jayhawk_78:

(Start: 22 @50563 has 1 MA's), (Start: 24 @50578 has 140 MA's), (39, 50632), (Start: 40 @50635 has 5 MA's), (43, 50650), (47, 50668), (52, 50716), (56, 50737), (59, 50809), (60, 50818),

Gene: Jeckyll_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Jeckyll_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: JenCasNa_76 Start: 43062, Stop: 42841, Start Num: 38

Candidate Starts for JenCasNa_76:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: JeppNRM_75 Start: 42886, Stop: 42662, Start Num: 37

Candidate Starts for JeppNRM_75:

(Start: 37 @42886 has 68 MA's), (Start: 38 @42880 has 14 MA's), (Start: 40 @42874 has 5 MA's),

Gene: Jobu08_71 Start: 42894, Stop: 42673, Start Num: 38

Candidate Starts for Jobu08_71:

(Start: 37 @42900 has 68 MA's), (Start: 38 @42894 has 14 MA's),

Gene: Joy99_76 Start: 50245, Stop: 50517, Start Num: 24

Candidate Starts for Joy99_76:

(Start: 22 @50230 has 1 MA's), (Start: 24 @50245 has 140 MA's), (39, 50299), (Start: 40 @50302 has 5 MA's), (43, 50317), (47, 50335), (52, 50383), (56, 50404), (59, 50476), (60, 50485),

Gene: Juliette_42 Start: 31572, Stop: 31871, Start Num: 21

Candidate Starts for Juliette_42:

(Start: 21 @31572 has 8 MA's), (27, 31608), (Start: 38 @31653 has 14 MA's), (42, 31671), (51, 31728), (56, 31761), (59, 31833),

Gene: KADY_72 Start: 43090, Stop: 42869, Start Num: 38

Candidate Starts for KADY_72:

(Start: 37 @43096 has 68 MA's), (Start: 38 @43090 has 14 MA's), (Start: 40 @43084 has 5 MA's),

Gene: Kachowdy_68 Start: 42819, Stop: 42553, Start Num: 30

Candidate Starts for Kachowdy_68:

(15, 42894), (Start: 30 @42819 has 25 MA's), (Start: 33 @42810 has 1 MA's), (Start: 40 @42789 has 5 MA's), (56, 42687),

Gene: Kalb97_75 Start: 42884, Stop: 42660, Start Num: 37

Candidate Starts for Kalb97_75:

(Start: 37 @42884 has 68 MA's), (Start: 38 @42878 has 14 MA's), (Start: 40 @42872 has 5 MA's),

Gene: Kalnoky_75 Start: 42882, Stop: 42658, Start Num: 37

Candidate Starts for Kalnoky_75:

(Start: 37 @42882 has 68 MA's), (Start: 38 @42876 has 14 MA's), (Start: 40 @42870 has 5 MA's),

Gene: Keshu_78 Start: 50490, Stop: 50765, Start Num: 24

Candidate Starts for Keshu_78:

(Start: 24 @50490 has 140 MA's), (28, 50505), (42, 50562), (43, 50565), (47, 50583), (56, 50652), (59, 50724), (60, 50733),

Gene: KiSi_78 Start: 50706, Stop: 50978, Start Num: 24

Candidate Starts for KiSi_78:

(Start: 22 @50691 has 1 MA's), (Start: 24 @50706 has 140 MA's), (28, 50721), (Start: 38 @50760 has 14 MA's), (39, 50763), (Start: 40 @50766 has 5 MA's), (42, 50778), (47, 50799), (55, 50865), (59, 50940),

Gene: Kraw_40 Start: 31339, Stop: 31638, Start Num: 20

Candidate Starts for Kraw_40:

(Start: 20 @31339 has 14 MA's), (27, 31375), (Start: 38 @31420 has 14 MA's), (42, 31438), (47, 31459), (51, 31495), (56, 31528), (59, 31600),

Gene: Krueger_80 Start: 50443, Stop: 50730, Start Num: 22

Candidate Starts for Krueger_80:

(Start: 22 @50443 has 1 MA's), (Start: 24 @50458 has 140 MA's), (28, 50473), (34, 50491), (Start: 40 @50518 has 5 MA's), (42, 50530), (47, 50551),

Gene: LBerry_76 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for LBerry_76:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Lambert1_70 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for Lambert1_70:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: LarryKay_75 Start: 43097, Stop: 42870, Start Num: 37

Candidate Starts for LarryKay_75:

(Start: 37 @43097 has 68 MA's), (Start: 38 @43091 has 14 MA's),

Gene: LastHope_81 Start: 49802, Stop: 50086, Start Num: 24

Candidate Starts for LastHope_81:

(Start: 22 @49787 has 1 MA's), (Start: 24 @49802 has 140 MA's), (28, 49817), (39, 49859), (Start: 40 @49862 has 5 MA's), (42, 49874), (43, 49877), (47, 49895), (56, 49964), (59, 50036), (60, 50045), (65, 50075),

Gene: LaterM_75 Start: 50776, Stop: 51048, Start Num: 24

Candidate Starts for LaterM_75:

(Start: 22 @50761 has 1 MA's), (Start: 24 @50776 has 140 MA's), (39, 50833), (Start: 40 @50836 has 5 MA's), (43, 50851), (47, 50869), (56, 50938), (59, 51010), (60, 51019),

Gene: Lavahound_72 Start: 50802, Stop: 51077, Start Num: 24

Candidate Starts for Lavahound_72:

(Start: 22 @50787 has 1 MA's), (Start: 24 @50802 has 140 MA's), (28, 50817), (32, 50826), (Start: 40 @50862 has 5 MA's), (43, 50877), (47, 50895), (56, 50964),

Gene: LeMond_77 Start: 50310, Stop: 50582, Start Num: 24

Candidate Starts for LeMond_77:

(Start: 22 @50295 has 1 MA's), (Start: 24 @50310 has 140 MA's), (Start: 38 @50364 has 14 MA's), (Start: 40 @50370 has 5 MA's), (42, 50382), (47, 50403), (55, 50469), (59, 50544),

Gene: Lea83_76 Start: 50414, Stop: 50686, Start Num: 24

Candidate Starts for Lea83_76:

(Start: 24 @50414 has 140 MA's), (28, 50429), (39, 50471), (Start: 40 @50474 has 5 MA's), (43, 50489), (47, 50507), (56, 50576),

Gene: Lebo14_40 Start: 31428, Stop: 31727, Start Num: 20

Candidate Starts for Lebo14_40:

(Start: 20 @31428 has 14 MA's), (27, 31464), (Start: 38 @31509 has 14 MA's), (42, 31527), (47, 31548), (51, 31584), (56, 31617), (59, 31689),

Gene: LilPharaoh_63 Start: 46884, Stop: 47156, Start Num: 24

Candidate Starts for LilPharaoh_63:

(Start: 22 @46869 has 1 MA's), (Start: 24 @46884 has 140 MA's), (Start: 26 @46893 has 1 MA's), (Start: 33 @46914 has 1 MA's), (36, 46923), (39, 46941), (Start: 40 @46944 has 5 MA's), (42, 46956), (43, 46959), (47, 46977), (51, 47013), (52, 47025), (60, 47127),

Gene: Lilith_73 Start: 43061, Stop: 42834, Start Num: 37

Candidate Starts for Lilith_73:

(Start: 37 @43061 has 68 MA's), (Start: 38 @43055 has 14 MA's),

Gene: LindNT_74 Start: 50578, Stop: 50853, Start Num: 24

Candidate Starts for LindNT_74:

(Start: 22 @50563 has 1 MA's), (Start: 24 @50578 has 140 MA's), (39, 50635), (Start: 40 @50638 has 5 MA's), (42, 50650), (43, 50653), (47, 50671), (52, 50719), (56, 50740), (59, 50812), (60, 50821),

Gene: Llorens_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Llorens_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Louie6_74 Start: 43098, Stop: 42871, Start Num: 37

Candidate Starts for Louie6_74:

(Start: 37 @43098 has 68 MA's), (Start: 38 @43092 has 14 MA's), (Start: 40 @43086 has 5 MA's),

Gene: Lowa_72 Start: 43054, Stop: 42833, Start Num: 38

Candidate Starts for Lowa_72:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: LugYA_78 Start: 43069, Stop: 42842, Start Num: 37

Candidate Starts for LugYA_78:

(Start: 37 @43069 has 68 MA's), (Start: 38 @43063 has 14 MA's),

Gene: Lunahalos_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Lunahalos_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: MA5_70 Start: 42239, Stop: 41970, Start Num: 30

Candidate Starts for MA5_70:

(9, 42404), (Start: 30 @42239 has 25 MA's), (Start: 40 @42209 has 5 MA's),

Gene: MK4_70 Start: 42314, Stop: 42045, Start Num: 30

Candidate Starts for MK4_70:

(9, 42479), (Start: 30 @42314 has 25 MA's), (Start: 40 @42284 has 5 MA's),

Gene: MacKat_72 Start: 46099, Stop: 46371, Start Num: 24

Candidate Starts for MacKat_72:

(Start: 22 @46084 has 1 MA's), (Start: 24 @46099 has 140 MA's), (39, 46156), (Start: 40 @46159 has 5 MA's), (43, 46174), (47, 46192), (52, 46240), (56, 46261), (59, 46333), (60, 46342),

Gene: MacnCheese_78 Start: 50941, Stop: 51216, Start Num: 24

Candidate Starts for MacnCheese_78:

(6, 50743), (11, 50824), (Start: 24 @50941 has 140 MA's), (34, 50971), (Start: 38 @50995 has 14 MA's), (42, 51013), (43, 51016), (47, 51034), (59, 51175),

Gene: MadMarie_73 Start: 43069, Stop: 42842, Start Num: 37

Candidate Starts for MadMarie_73:

(Start: 37 @43069 has 68 MA's), (Start: 38 @43063 has 14 MA's),

Gene: Mainiac_74 Start: 43061, Stop: 42834, Start Num: 37

Candidate Starts for Mainiac_74:

(Start: 37 @43061 has 68 MA's), (Start: 38 @43055 has 14 MA's),

Gene: Malinsilva_77 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for Malinsilva_77:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Malthus_41 Start: 31339, Stop: 31638, Start Num: 20

Candidate Starts for Malthus_41:

(Start: 20 @31339 has 14 MA's), (27, 31375), (Start: 38 @31420 has 14 MA's), (42, 31438), (47, 31459), (51, 31495), (56, 31528), (59, 31600),

Gene: Manu_74 Start: 42885, Stop: 42661, Start Num: 37

Candidate Starts for Manu_74:

(Start: 37 @42885 has 68 MA's), (Start: 38 @42879 has 14 MA's), (Start: 40 @42873 has 5 MA's),

Gene: MarQuardt_75 Start: 43064, Stop: 42843, Start Num: 38

Candidate Starts for MarQuardt_75:

(Start: 37 @43070 has 68 MA's), (Start: 38 @43064 has 14 MA's),

Gene: Marchesa_68 Start: 42769, Stop: 42503, Start Num: 30

Candidate Starts for Marchesa_68:

(15, 42844), (Start: 30 @42769 has 25 MA's), (Start: 33 @42760 has 1 MA's), (Start: 40 @42739 has 5 MA's), (56, 42637),

Gene: Marcoliusprime_78 Start: 52473, Stop: 52742, Start Num: 25

Candidate Starts for Marcoliusprime_78:

(12, 52350), (Start: 25 @52473 has 19 MA's), (29, 52488), (Start: 40 @52530 has 5 MA's), (47, 52563), (51, 52599), (56, 52632),

Gene: Margo_70 Start: 42843, Stop: 42583, Start Num: 30

Candidate Starts for Margo_70:

(15, 42918), (Start: 30 @42843 has 25 MA's), (Start: 40 @42813 has 5 MA's), (47, 42780), (64, 42597),

Gene: Marie_73 Start: 43068, Stop: 42841, Start Num: 37

Candidate Starts for Marie_73:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Marius_75 Start: 42882, Stop: 42658, Start Num: 37

Candidate Starts for Marius_75:

(Start: 37 @42882 has 68 MA's), (Start: 38 @42876 has 14 MA's), (Start: 40 @42870 has 5 MA's),

Gene: MarkPhew_77 Start: 50195, Stop: 50467, Start Num: 24

Candidate Starts for MarkPhew_77:

(Start: 22 @50180 has 1 MA's), (Start: 24 @50195 has 140 MA's), (Start: 38 @50249 has 14 MA's), (Start: 40 @50255 has 5 MA's), (42, 50267), (43, 50270), (47, 50288), (55, 50354),

Gene: Marshawn_74 Start: 50588, Stop: 50860, Start Num: 24

Candidate Starts for Marshawn_74:

(Start: 22 @50573 has 1 MA's), (Start: 24 @50588 has 140 MA's), (34, 50621), (41, 50657), (60, 50831),

Gene: MaryV_133 Start: 66927, Stop: 66649, Start Num: 40

Candidate Starts for MaryV_133:

(10, 67134), (17, 67044), (Start: 40 @66927 has 5 MA's), (49, 66882), (53, 66831), (58, 66750), (61, 66729), (66, 66657), (67, 66654),

Gene: McMater_76 Start: 50287, Stop: 50565, Start Num: 24

Candidate Starts for McMater_76:

(Start: 22 @50272 has 1 MA's), (Start: 24 @50287 has 140 MA's), (Start: 26 @50296 has 1 MA's), (36, 50326), (39, 50344), (Start: 40 @50347 has 5 MA's), (43, 50362), (47, 50380), (59, 50521),

Gene: Mdavu_63 Start: 47160, Stop: 47432, Start Num: 24

Candidate Starts for Mdavu_63:

(Start: 22 @47145 has 1 MA's), (Start: 24 @47160 has 140 MA's), (Start: 26 @47169 has 1 MA's), (Start: 33 @47190 has 1 MA's), (36, 47199), (39, 47217), (Start: 40 @47220 has 5 MA's), (42, 47232), (43, 47235), (47, 47253), (51, 47289), (52, 47301), (60, 47403),

Gene: MeaningOfLife_77 Start: 51068, Stop: 51340, Start Num: 24

Candidate Starts for MeaningOfLife_77:

(Start: 22 @51053 has 1 MA's), (Start: 24 @51068 has 140 MA's), (39, 51125), (Start: 40 @51128 has 5 MA's), (43, 51143), (47, 51161), (56, 51230), (59, 51302), (60, 51311),

Gene: Megsy_77 Start: 50206, Stop: 50481, Start Num: 24

Candidate Starts for Megsy_77:

(Start: 22 @50191 has 1 MA's), (Start: 24 @50206 has 140 MA's), (39, 50263), (Start: 40 @50266 has 5 MA's), (43, 50281), (47, 50299), (52, 50347), (56, 50368), (59, 50440), (60, 50449),

Gene: Methuselah_68 Start: 43092, Stop: 42865, Start Num: 37

Candidate Starts for Methuselah_68:

(Start: 37 @43092 has 68 MA's), (Start: 38 @43086 has 14 MA's),

Gene: Microwolf_71 Start: 43084, Stop: 42857, Start Num: 37

Candidate Starts for Microwolf_71:

(Start: 37 @43084 has 68 MA's), (Start: 38 @43078 has 14 MA's),

Gene: Milly_79 Start: 52464, Stop: 52733, Start Num: 25

Candidate Starts for Milly_79:

(12, 52341), (Start: 25 @52464 has 19 MA's), (29, 52479), (Start: 40 @52521 has 5 MA's), (47, 52554), (51, 52590), (56, 52623),

Gene: Misomonster_76 Start: 43095, Stop: 42868, Start Num: 37

Candidate Starts for Misomonster_76:

(Start: 37 @43095 has 68 MA's), (Start: 38 @43089 has 14 MA's), (Start: 40 @43083 has 5 MA's),

Gene: MissDaisy_39 Start: 31179, Stop: 31466, Start Num: 21

Candidate Starts for MissDaisy_39:

(Start: 21 @31179 has 8 MA's), (27, 31215), (Start: 38 @31248 has 14 MA's), (Start: 40 @31254 has 5 MA's), (42, 31266), (47, 31287), (51, 31323), (56, 31356), (59, 31428),

Gene: Mitti_40 Start: 31340, Stop: 31639, Start Num: 20

Candidate Starts for Mitti_40:

(Start: 20 @31340 has 14 MA's), (27, 31376), (Start: 38 @31421 has 14 MA's), (42, 31439), (47, 31460), (51, 31496), (56, 31529), (59, 31601),

Gene: MoneyMay_74 Start: 43068, Stop: 42841, Start Num: 37

Candidate Starts for MoneyMay_74:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Montavir_70 Start: 43068, Stop: 42841, Start Num: 37

Candidate Starts for Montavir_70:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: MrMagoo_154 Start: 73559, Stop: 73254, Start Num: 25

Candidate Starts for MrMagoo_154:

(Start: 25 @73559 has 19 MA's), (44, 73478),

Gene: MuchMore_78 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for MuchMore_78:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Mufasa_78 Start: 51931, Stop: 52200, Start Num: 25

Candidate Starts for Mufasa_78:

(12, 51808), (18, 51892), (Start: 25 @51931 has 19 MA's), (Start: 40 @51988 has 5 MA's), (47, 52021), (51, 52057), (56, 52090), (59, 52162),

Gene: Murucutumbu_76 Start: 51352, Stop: 51627, Start Num: 24

Candidate Starts for Murucutumbu_76:

(Start: 22 @51337 has 1 MA's), (Start: 24 @51352 has 140 MA's), (39, 51409), (Start: 40 @51412 has 5 MA's), (43, 51427), (47, 51445), (56, 51514), (59, 51586), (60, 51595),

Gene: Mynx_77 Start: 50847, Stop: 51119, Start Num: 24

Candidate Starts for Mynx_77:

(Start: 22 @50832 has 1 MA's), (Start: 24 @50847 has 140 MA's), (39, 50901), (Start: 40 @50904 has 5 MA's), (43, 50919), (47, 50937), (52, 50985), (56, 51006), (59, 51078), (60, 51087),

Gene: Nanosmite_147 Start: 72834, Stop: 72535, Start Num: 25

Candidate Starts for Nanosmite_147:

(19, 72867), (Start: 25 @72834 has 19 MA's), (45, 72753), (48, 72735), (57, 72660), (58, 72603),

Gene: Nergal_67 Start: 46690, Stop: 46941, Start Num: 25

Candidate Starts for Nergal_67:

(18, 46651), (Start: 25 @46690 has 19 MA's), (Start: 40 @46747 has 5 MA's), (42, 46759), (62, 46933),

Gene: Nibb_77 Start: 50011, Stop: 50283, Start Num: 24

Candidate Starts for Nibb_77:

(Start: 22 @49996 has 1 MA's), (Start: 24 @50011 has 140 MA's), (Start: 38 @50065 has 14 MA's), (Start: 40 @50071 has 5 MA's), (42, 50083), (47, 50104), (55, 50170),

Gene: Nikao_65 Start: 49769, Stop: 50041, Start Num: 24

Candidate Starts for Nikao_65:

(Start: 22 @49754 has 1 MA's), (Start: 24 @49769 has 140 MA's), (Start: 26 @49778 has 1 MA's), (Start: 33 @49799 has 1 MA's), (36, 49808), (39, 49826), (Start: 40 @49829 has 5 MA's), (42, 49841), (43, 49844), (47, 49862), (51, 49898), (52, 49910), (60, 50012),

Gene: Niklas_77 Start: 50348, Stop: 50626, Start Num: 24

Candidate Starts for Niklas_77:

(Start: 22 @50333 has 1 MA's), (Start: 24 @50348 has 140 MA's), (Start: 26 @50357 has 1 MA's), (36, 50387), (39, 50405), (Start: 40 @50408 has 5 MA's), (43, 50423), (47, 50441), (59, 50582),

Gene: Noella_70 Start: 42818, Stop: 42558, Start Num: 30

Candidate Starts for Noella_70:

(15, 42893), (Start: 30 @42818 has 25 MA's), (Start: 40 @42788 has 5 MA's), (64, 42572),

Gene: Norbert_66 Start: 42816, Stop: 42568, Start Num: 30

Candidate Starts for Norbert_66:

(15, 42891), (Start: 30 @42816 has 25 MA's), (Start: 40 @42786 has 5 MA's),

Gene: November_72 Start: 50276, Stop: 50551, Start Num: 24

Candidate Starts for November_72:

(3, 50015), (6, 50078), (9, 50135), (11, 50159), (Start: 24 @50276 has 140 MA's), (43, 50351), (47, 50369), (56, 50438),

Gene: Nutello_62 Start: 47156, Stop: 47428, Start Num: 24

Candidate Starts for Nutello_62:

(Start: 22 @47141 has 1 MA's), (Start: 24 @47156 has 140 MA's), (Start: 26 @47165 has 1 MA's), (Start: 33 @47186 has 1 MA's), (36, 47195), (39, 47213), (Start: 40 @47216 has 5 MA's), (42, 47228), (43, 47231), (47, 47249), (51, 47285), (52, 47297), (60, 47399),

Gene: OlanP_73 Start: 43058, Stop: 42834, Start Num: 37

Candidate Starts for OlanP_73:

(Start: 37 @43058 has 68 MA's), (Start: 38 @43052 has 14 MA's), (Start: 40 @43046 has 5 MA's),

Gene: Ollie_75 Start: 42939, Stop: 42712, Start Num: 37

Candidate Starts for Ollie_75:

(Start: 37 @42939 has 68 MA's), (Start: 38 @42933 has 14 MA's),

Gene: OmniCritical_39 Start: 31324, Stop: 31623, Start Num: 20

Candidate Starts for OmniCritical_39:

(Start: 20 @31324 has 14 MA's), (27, 31360), (Start: 38 @31405 has 14 MA's), (42, 31423), (47, 31444), (51, 31480), (56, 31513), (59, 31585),

Gene: Oscar_77 Start: 50230, Stop: 50502, Start Num: 24

Candidate Starts for Oscar_77:

(Start: 22 @50215 has 1 MA's), (Start: 24 @50230 has 140 MA's), (Start: 38 @50284 has 14 MA's), (Start: 40 @50290 has 5 MA's), (42, 50302), (47, 50323), (55, 50389), (59, 50464),

Gene: P28Green_75 Start: 43071, Stop: 42844, Start Num: 37

Candidate Starts for P28Green_75:

(Start: 37 @43071 has 68 MA's), (Start: 38 @43065 has 14 MA's),

Gene: PGHhamlin_77 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for PGHhamlin_77:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Padfoot_75 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Padfoot_75:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Padpat_79 Start: 50552, Stop: 50824, Start Num: 24

Candidate Starts for Padpat_79:

(Start: 22 @50537 has 1 MA's), (Start: 24 @50552 has 140 MA's), (39, 50606), (Start: 40 @50609 has 5 MA's), (43, 50624), (47, 50642), (52, 50690), (56, 50711), (59, 50783), (60, 50792),

Gene: Panamaxus_68 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for Panamaxus_68:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Patt_39 Start: 31155, Stop: 31442, Start Num: 21

Candidate Starts for Patt_39:

(Start: 21 @31155 has 8 MA's), (27, 31191), (Start: 38 @31224 has 14 MA's), (Start: 40 @31230 has 5 MA's), (42, 31242), (47, 31263), (51, 31299), (56, 31332), (59, 31404),

Gene: Pawn_73 Start: 42889, Stop: 42665, Start Num: 37

Candidate Starts for Pawn_73:

(Start: 37 @42889 has 68 MA's), (Start: 38 @42883 has 14 MA's), (Start: 40 @42877 has 5 MA's),

Gene: Peanam_77 Start: 50306, Stop: 50584, Start Num: 24

Candidate Starts for Peanam_77:

(Start: 22 @50291 has 1 MA's), (Start: 24 @50306 has 140 MA's), (Start: 26 @50315 has 1 MA's), (36, 50345), (39, 50363), (Start: 40 @50366 has 5 MA's), (43, 50381), (47, 50399), (59, 50540),

Gene: Peel_75 Start: 50118, Stop: 50390, Start Num: 24

Candidate Starts for Peel_75:

(Start: 22 @50103 has 1 MA's), (Start: 24 @50118 has 140 MA's), (39, 50172), (Start: 40 @50175 has 5 MA's), (43, 50190), (47, 50208), (52, 50256), (56, 50277), (59, 50349), (60, 50358),

Gene: Pembroke_75 Start: 43069, Stop: 42842, Start Num: 37

Candidate Starts for Pembroke_75:

(Start: 37 @43069 has 68 MA's), (Start: 38 @43063 has 14 MA's),

Gene: Penny1_75 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for Penny1_75:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Phantastic_72 Start: 42500, Stop: 42231, Start Num: 30

Candidate Starts for Phantastic_72:

(9, 42665), (Start: 30 @42500 has 25 MA's), (Start: 40 @42470 has 5 MA's),

Gene: Pharb_74 Start: 49614, Stop: 49889, Start Num: 24

Candidate Starts for Pharb_74:

(6, 49416), (9, 49473), (11, 49497), (Start: 24 @49614 has 140 MA's), (28, 49629), (34, 49647), (36, 49653), (39, 49671), (Start: 40 @49674 has 5 MA's), (42, 49686), (43, 49689), (47, 49707), (56, 49776), (59, 49848), (60, 49857),

Gene: PhelpsODU_78 Start: 50059, Stop: 50331, Start Num: 24

Candidate Starts for PhelpsODU_78:

(14, 49996), (Start: 22 @50044 has 1 MA's), (Start: 24 @50059 has 140 MA's), (Start: 40 @50119 has 5 MA's), (42, 50131), (47, 50152),

Gene: PhishRPhriends_71 Start: 42066, Stop: 41842, Start Num: 37

Candidate Starts for PhishRPhriends_71:

(Start: 37 @42066 has 68 MA's), (Start: 38 @42060 has 14 MA's), (Start: 40 @42054 has 5 MA's),

Gene: Phoebe_76 Start: 43061, Stop: 42834, Start Num: 37

Candidate Starts for Phoebe_76:

(Start: 37 @43061 has 68 MA's), (Start: 38 @43055 has 14 MA's),

Gene: Phoxy_75 Start: 43087, Stop: 42866, Start Num: 38

Candidate Starts for Phoxy_75:

(Start: 37 @43093 has 68 MA's), (Start: 38 @43087 has 14 MA's),

Gene: Phrank_79 Start: 49919, Stop: 50191, Start Num: 24

Candidate Starts for Phrank_79:

(Start: 22 @49904 has 1 MA's), (Start: 24 @49919 has 140 MA's), (Start: 40 @49979 has 5 MA's), (47, 50012),

Gene: Piatt_74 Start: 50313, Stop: 50585, Start Num: 24

Candidate Starts for Piatt_74:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: Pisa1_73 Start: 50611, Stop: 50883, Start Num: 24

Candidate Starts for Pisa1_73:

(Start: 22 @50596 has 1 MA's), (Start: 24 @50611 has 140 MA's), (39, 50668), (Start: 40 @50671 has 5 MA's), (42, 50683), (43, 50686), (47, 50704), (52, 50752), (56, 50773), (59, 50845), (60, 50854),

Gene: Pisa4_67 Start: 45980, Stop: 46252, Start Num: 24

Candidate Starts for Pisa4_67:

(Start: 22 @45965 has 1 MA's), (Start: 24 @45980 has 140 MA's), (39, 46037), (Start: 40 @46040 has 5 MA's), (42, 46052), (43, 46055), (47, 46073), (52, 46121), (56, 46142), (59, 46214), (60, 46223),

Gene: Pistachio_70 Start: 42405, Stop: 42139, Start Num: 31

Candidate Starts for Pistachio_70:

(Start: 31 @42405 has 6 MA's), (Start: 40 @42375 has 5 MA's), (56, 42273), (64, 42159),

Gene: Pixie_75 Start: 49917, Stop: 50186, Start Num: 24

Candidate Starts for Pixie_75:

(Start: 24 @49917 has 140 MA's), (28, 49932), (42, 49986), (43, 49989), (47, 50007), (56, 50076),

Gene: Pocahontas_69 Start: 42814, Stop: 42554, Start Num: 30

Candidate Starts for Pocahontas_69:

(15, 42889), (Start: 30 @42814 has 25 MA's), (Start: 40 @42784 has 5 MA's), (64, 42568),

Gene: Pokerus_76 Start: 50561, Stop: 50833, Start Num: 24

Candidate Starts for Pokerus_76:

(Start: 22 @50546 has 1 MA's), (Start: 24 @50561 has 140 MA's), (39, 50615), (Start: 40 @50618 has 5 MA's), (43, 50633), (47, 50651), (52, 50699), (56, 50720), (59, 50792), (60, 50801),

Gene: Popticle_70 Start: 42814, Stop: 42554, Start Num: 30

Candidate Starts for Popticle_70:

(15, 42889), (Start: 30 @42814 has 25 MA's), (Start: 40 @42784 has 5 MA's), (64, 42568),

Gene: PotatoSplit_76 Start: 43072, Stop: 42845, Start Num: 37

Candidate Starts for PotatoSplit_76:

(Start: 37 @43072 has 68 MA's), (Start: 38 @43066 has 14 MA's),

Gene: Prithvi_78 Start: 50578, Stop: 50853, Start Num: 24

Candidate Starts for Prithvi_78:

(Start: 22 @50563 has 1 MA's), (Start: 24 @50578 has 140 MA's), (39, 50635), (Start: 40 @50638 has 5 MA's), (42, 50650), (43, 50653), (47, 50671), (52, 50719), (56, 50740), (59, 50812), (60, 50821),

Gene: Puppy_71 Start: 42477, Stop: 42211, Start Num: 31

Candidate Starts for Puppy_71:

(Start: 31 @42477 has 6 MA's), (Start: 40 @42447 has 5 MA's), (56, 42345), (64, 42231),

Gene: PurpleHaze_74 Start: 42878, Stop: 42660, Start Num: 38

Candidate Starts for PurpleHaze_74:

(Start: 37 @42884 has 68 MA's), (Start: 38 @42878 has 14 MA's), (Start: 40 @42872 has 5 MA's),

Gene: Qhanda_41 Start: 31436, Stop: 31735, Start Num: 20

Candidate Starts for Qhanda_41:

(Start: 20 @31436 has 14 MA's), (27, 31472), (Start: 38 @31517 has 14 MA's), (42, 31535), (47, 31556), (51, 31592), (56, 31625), (59, 31697),

Gene: QuincyRose_73 Start: 50523, Stop: 50792, Start Num: 24

Candidate Starts for QuincyRose_73:

(Start: 22 @50508 has 1 MA's), (Start: 24 @50523 has 140 MA's), (39, 50577), (Start: 40 @50580 has 5 MA's), (43, 50595), (47, 50613), (52, 50661), (56, 50682), (59, 50754), (60, 50763),

Gene: QuinnKiro_69 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for QuinnKiro_69:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Ramen_76 Start: 49882, Stop: 50154, Start Num: 24

Candidate Starts for Ramen_76:

(Start: 22 @49867 has 1 MA's), (Start: 24 @49882 has 140 MA's), (Start: 40 @49939 has 5 MA's), (43, 49954), (47, 49972), (52, 50020), (56, 50041), (59, 50113), (60, 50122),

Gene: Rapunzel97_78 Start: 50533, Stop: 50805, Start Num: 24

Candidate Starts for Rapunzel97_78:

(Start: 22 @50518 has 1 MA's), (Start: 24 @50533 has 140 MA's), (39, 50587), (Start: 40 @50590 has 5 MA's), (43, 50605), (47, 50623), (52, 50671), (56, 50692), (59, 50764), (60, 50773),

Gene: Reptar3000_40 Start: 31146, Stop: 31433, Start Num: 21

Candidate Starts for Reptar3000_40:

(Start: 21 @31146 has 8 MA's), (27, 31182), (Start: 38 @31215 has 14 MA's), (Start: 40 @31221 has 5 MA's), (42, 31233), (47, 31254), (51, 31290), (56, 31323), (59, 31395),

Gene: ResDef_68 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for ResDef_68:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Rey_153 Start: 72809, Stop: 72504, Start Num: 25

Candidate Starts for Rey_153:

(Start: 25 @72809 has 19 MA's), (44, 72728), (47, 72713),

Gene: Richo_76 Start: 50287, Stop: 50565, Start Num: 24

Candidate Starts for Richo_76:

(Start: 22 @50272 has 1 MA's), (Start: 24 @50287 has 140 MA's), (Start: 26 @50296 has 1 MA's), (36, 50326), (39, 50344), (Start: 40 @50347 has 5 MA's), (43, 50362), (47, 50380), (59, 50521),

Gene: Rockstar_69 Start: 42323, Stop: 42054, Start Num: 30

Candidate Starts for Rockstar_69:

(9, 42488), (Start: 30 @42323 has 25 MA's), (Start: 40 @42293 has 5 MA's),

Gene: Roimos_68 Start: 42699, Stop: 42433, Start Num: 30

Candidate Starts for Roimos_68:

(15, 42774), (Start: 30 @42699 has 25 MA's), (Start: 40 @42669 has 5 MA's), (56, 42567),

Gene: Rosmarinus_75 Start: 50104, Stop: 50376, Start Num: 24

Candidate Starts for Rosmarinus_75:

(Start: 22 @50089 has 1 MA's), (Start: 24 @50104 has 140 MA's), (39, 50158), (Start: 40 @50161 has 5 MA's), (43, 50176), (47, 50194), (52, 50242), (56, 50263), (59, 50335), (60, 50344),

Gene: Rummer_74 Start: 43096, Stop: 42869, Start Num: 37

Candidate Starts for Rummer_74:

(Start: 37 @43096 has 68 MA's), (Start: 38 @43090 has 14 MA's),

Gene: Ruthiejr_41 Start: 31304, Stop: 31603, Start Num: 21

Candidate Starts for Ruthiejr_41:

(Start: 21 @31304 has 8 MA's), (27, 31340), (Start: 38 @31385 has 14 MA's), (42, 31403), (51, 31460), (56, 31493), (59, 31565),

Gene: Sabia_73 Start: 43076, Stop: 42849, Start Num: 37

Candidate Starts for Sabia_73:

(Start: 37 @43076 has 68 MA's), (Start: 38 @43070 has 14 MA's),

Gene: Sabinator_73 Start: 43061, Stop: 42840, Start Num: 38
Candidate Starts for Sabinator_73:
(Start: 37 @43067 has 68 MA's), (Start: 38 @43061 has 14 MA's),

Gene: SamScheppers_39 Start: 31818, Stop: 32117, Start Num: 20
Candidate Starts for SamScheppers_39:
(Start: 20 @31818 has 14 MA's), (27, 31854), (Start: 38 @31899 has 14 MA's), (42, 31917), (47, 31938), (51, 31974), (56, 32007), (59, 32079),

Gene: SamuelLPlaqson_75 Start: 50512, Stop: 50781, Start Num: 24
Candidate Starts for SamuelLPlaqson_75:
(Start: 22 @50497 has 1 MA's), (Start: 24 @50512 has 140 MA's), (39, 50563), (Start: 40 @50566 has 5 MA's), (42, 50578), (43, 50581), (47, 50599), (52, 50647), (56, 50668), (59, 50740), (60, 50749),

Gene: SaturnRing_70 Start: 42858, Stop: 42592, Start Num: 31
Candidate Starts for SaturnRing_70:
(Start: 31 @42858 has 6 MA's), (Start: 40 @42828 has 5 MA's), (56, 42726), (64, 42612),

Gene: Scarlett_78 Start: 50566, Stop: 50838, Start Num: 24
Candidate Starts for Scarlett_78:
(Start: 22 @50551 has 1 MA's), (Start: 24 @50566 has 140 MA's), (28, 50581), (Start: 38 @50620 has 14 MA's), (39, 50623), (Start: 40 @50626 has 5 MA's), (42, 50638), (47, 50659), (55, 50725), (59, 50800),

Gene: Scout_69 Start: 42030, Stop: 41764, Start Num: 30
Candidate Starts for Scout_69:
(15, 42105), (Start: 30 @42030 has 25 MA's), (Start: 40 @42000 has 5 MA's), (56, 41898),

Gene: SgtBeansprout_63 Start: 47156, Stop: 47428, Start Num: 24
Candidate Starts for SgtBeansprout_63:
(Start: 22 @47141 has 1 MA's), (Start: 24 @47156 has 140 MA's), (Start: 26 @47165 has 1 MA's), (Start: 33 @47186 has 1 MA's), (36, 47195), (39, 47213), (Start: 40 @47216 has 5 MA's), (42, 47228), (43, 47231), (47, 47249), (51, 47285), (52, 47297), (60, 47399),

Gene: Shadow1_80 Start: 50598, Stop: 50870, Start Num: 24
Candidate Starts for Shadow1_80:
(Start: 22 @50583 has 1 MA's), (Start: 24 @50598 has 140 MA's), (28, 50613), (34, 50631), (Start: 40 @50658 has 5 MA's), (42, 50670), (47, 50691),

Gene: Shaobing_76 Start: 50323, Stop: 50601, Start Num: 24
Candidate Starts for Shaobing_76:
(Start: 22 @50308 has 1 MA's), (Start: 24 @50323 has 140 MA's), (Start: 26 @50332 has 1 MA's), (39, 50380), (Start: 40 @50383 has 5 MA's), (43, 50398), (47, 50416), (59, 50557),

Gene: ShedlockHolmes_78 Start: 50418, Stop: 50690, Start Num: 24
Candidate Starts for ShedlockHolmes_78:
(Start: 24 @50418 has 140 MA's), (28, 50433), (39, 50475), (Start: 40 @50478 has 5 MA's), (43, 50493), (47, 50511), (56, 50580),

Gene: ShiaSurprise_76 Start: 50313, Stop: 50585, Start Num: 24
Candidate Starts for ShiaSurprise_76:

(Start: 22 @50298 has 1 MA's), (Start: 24 @50313 has 140 MA's), (39, 50367), (Start: 40 @50370 has 5 MA's), (43, 50385), (47, 50403), (52, 50451), (56, 50472), (59, 50544), (60, 50553),

Gene: SirPhilip_75 Start: 50824, Stop: 51099, Start Num: 24

Candidate Starts for SirPhilip_75:

(Start: 22 @50809 has 1 MA's), (Start: 24 @50824 has 140 MA's), (28, 50839), (34, 50857), (Start: 38 @50878 has 14 MA's), (42, 50896), (43, 50899), (47, 50917),

Gene: Slarp_40 Start: 31427, Stop: 31726, Start Num: 20

Candidate Starts for Slarp_40:

(Start: 20 @31427 has 14 MA's), (27, 31463), (Start: 38 @31508 has 14 MA's), (42, 31526), (47, 31547), (51, 31583), (56, 31616), (59, 31688),

Gene: Slimphazie_77 Start: 50533, Stop: 50805, Start Num: 24

Candidate Starts for Slimphazie_77:

(Start: 22 @50518 has 1 MA's), (Start: 24 @50533 has 140 MA's), (39, 50587), (Start: 40 @50590 has 5 MA's), (43, 50605), (47, 50623), (52, 50671), (56, 50692), (59, 50764), (60, 50773),

Gene: Snickers_75 Start: 43041, Stop: 42814, Start Num: 37

Candidate Starts for Snickers_75:

(Start: 37 @43041 has 68 MA's), (Start: 38 @43035 has 14 MA's),

Gene: SoYo_72 Start: 42980, Stop: 42753, Start Num: 37

Candidate Starts for SoYo_72:

(Start: 37 @42980 has 68 MA's), (Start: 38 @42974 has 14 MA's),

Gene: SoilDragon_74 Start: 42516, Stop: 42289, Start Num: 37

Candidate Starts for SoilDragon_74:

(Start: 37 @42516 has 68 MA's), (Start: 38 @42510 has 14 MA's),

Gene: Soshari_77 Start: 43092, Stop: 42865, Start Num: 37

Candidate Starts for Soshari_77:

(Start: 37 @43092 has 68 MA's), (Start: 38 @43086 has 14 MA's),

Gene: Spike509_75 Start: 43087, Stop: 42866, Start Num: 38

Candidate Starts for Spike509_75:

(Start: 37 @43093 has 68 MA's), (Start: 38 @43087 has 14 MA's),

Gene: Spock_75 Start: 50117, Stop: 50389, Start Num: 24

Candidate Starts for Spock_75:

(Start: 22 @50102 has 1 MA's), (Start: 24 @50117 has 140 MA's), (39, 50171), (Start: 40 @50174 has 5 MA's), (43, 50189), (47, 50207), (52, 50255), (56, 50276), (59, 50348), (60, 50357),

Gene: Stagni_72 Start: 43065, Stop: 42844, Start Num: 38

Candidate Starts for Stagni_72:

(Start: 37 @43071 has 68 MA's), (Start: 38 @43065 has 14 MA's),

Gene: StepMih_74 Start: 43062, Stop: 42835, Start Num: 37

Candidate Starts for StepMih_74:

(Start: 37 @43062 has 68 MA's), (Start: 38 @43056 has 14 MA's),

Gene: Stinson_76 Start: 50711, Stop: 50983, Start Num: 24

Candidate Starts for Stinson_76:

(Start: 22 @50696 has 1 MA's), (Start: 24 @50711 has 140 MA's), (39, 50768), (Start: 40 @50771 has 5 MA's), (43, 50786), (47, 50804), (52, 50852), (56, 50873), (59, 50945), (60, 50954),

Gene: Strobilo_80 Start: 52470, Stop: 52739, Start Num: 25

Candidate Starts for Strobilo_80:

(12, 52347), (Start: 25 @52470 has 19 MA's), (29, 52485), (Start: 40 @52527 has 5 MA's), (47, 52560), (51, 52596), (56, 52629),

Gene: Sulley_74 Start: 50144, Stop: 50416, Start Num: 24

Candidate Starts for Sulley_74:

(Start: 22 @50129 has 1 MA's), (Start: 24 @50144 has 140 MA's), (39, 50201), (Start: 40 @50204 has 5 MA's), (43, 50219), (47, 50237), (52, 50285), (56, 50306), (59, 50378), (60, 50387),

Gene: Sunflower1121_81 Start: 50744, Stop: 51016, Start Num: 24

Candidate Starts for Sunflower1121_81:

(Start: 22 @50729 has 1 MA's), (Start: 24 @50744 has 140 MA's), (28, 50759), (34, 50777), (Start: 40 @50804 has 5 MA's), (42, 50816), (47, 50837),

Gene: Syra333_79 Start: 50472, Stop: 50744, Start Num: 24

Candidate Starts for Syra333_79:

(Start: 22 @50457 has 1 MA's), (Start: 24 @50472 has 140 MA's), (28, 50487), (34, 50505), (Start: 40 @50532 has 5 MA's), (42, 50544), (47, 50565),

Gene: TBond007_72 Start: 49916, Stop: 50185, Start Num: 24

Candidate Starts for TBond007_72:

(Start: 24 @49916 has 140 MA's), (28, 49931), (42, 49985), (43, 49988), (47, 50006), (56, 50075),

Gene: TClif_77 Start: 50210, Stop: 50482, Start Num: 24

Candidate Starts for TClif_77:

(Start: 22 @50195 has 1 MA's), (Start: 24 @50210 has 140 MA's), (28, 50225), (39, 50267), (Start: 40 @50270 has 5 MA's), (47, 50303), (56, 50372),

Gene: TM4_77 Start: 46904, Stop: 47173, Start Num: 25

Candidate Starts for TM4_77:

(Start: 25 @46904 has 19 MA's), (Start: 40 @46961 has 5 MA's), (47, 46994), (51, 47030), (56, 47063),

Gene: TNguyen7_71 Start: 42818, Stop: 42552, Start Num: 31

Candidate Starts for TNguyen7_71:

(Start: 31 @42818 has 6 MA's), (Start: 40 @42788 has 5 MA's), (56, 42686), (64, 42572),

Gene: Tachez_75 Start: 49961, Stop: 50233, Start Num: 24

Candidate Starts for Tachez_75:

(Start: 22 @49946 has 1 MA's), (Start: 24 @49961 has 140 MA's), (39, 50015), (Start: 40 @50018 has 5 MA's), (43, 50033), (47, 50051), (52, 50099), (56, 50120), (59, 50192), (60, 50201),

Gene: TaiwanKao_77 Start: 50636, Stop: 50908, Start Num: 24

Candidate Starts for TaiwanKao_77:

(Start: 22 @50621 has 1 MA's), (Start: 24 @50636 has 140 MA's), (39, 50693), (Start: 40 @50696 has 5 MA's), (43, 50711), (47, 50729), (52, 50777), (56, 50798), (59, 50870), (60, 50879),

Gene: Taquito_40 Start: 31813, Stop: 32112, Start Num: 20

Candidate Starts for Taquito_40:

(Start: 20 @31813 has 14 MA's), (27, 31849), (Start: 38 @31894 has 14 MA's), (42, 31912), (47, 31933), (51, 31969), (56, 32002), (59, 32074),

Gene: Taurus_76 Start: 43062, Stop: 42841, Start Num: 38

Candidate Starts for Taurus_76:

(Start: 37 @43068 has 68 MA's), (Start: 38 @43062 has 14 MA's),

Gene: Teejan_64 Start: 49769, Stop: 50041, Start Num: 24

Candidate Starts for Teejan_64:

(Start: 22 @49754 has 1 MA's), (Start: 24 @49769 has 140 MA's), (Start: 26 @49778 has 1 MA's), (Start: 33 @49799 has 1 MA's), (36, 49808), (39, 49826), (Start: 40 @49829 has 5 MA's), (42, 49841), (43, 49844), (47, 49862), (51, 49898), (52, 49910), (60, 50012),

Gene: Texage_68 Start: 42818, Stop: 42558, Start Num: 30

Candidate Starts for Texage_68:

(15, 42893), (Start: 30 @42818 has 25 MA's), (Start: 40 @42788 has 5 MA's), (64, 42572),

Gene: ThursdayNight_66 Start: 42858, Stop: 43094, Start Num: 40

Candidate Starts for ThursdayNight_66:

(Start: 24 @42795 has 140 MA's), (Start: 40 @42858 has 5 MA's), (60, 43041), (63, 43062),

Gene: Tierra_79 Start: 50730, Stop: 51002, Start Num: 24

Candidate Starts for Tierra_79:

(Start: 22 @50715 has 1 MA's), (Start: 24 @50730 has 140 MA's), (Start: 40 @50790 has 5 MA's), (47, 50823),

Gene: Tiffany_74 Start: 42947, Stop: 42726, Start Num: 38

Candidate Starts for Tiffany_74:

(Start: 37 @42953 has 68 MA's), (Start: 38 @42947 has 14 MA's),

Gene: Tigress9_81 Start: 50787, Stop: 51059, Start Num: 24

Candidate Starts for Tigress9_81:

(Start: 22 @50772 has 1 MA's), (Start: 24 @50787 has 140 MA's), (28, 50802), (34, 50820), (Start: 40 @50847 has 5 MA's), (42, 50859), (47, 50880),

Gene: TingHuaYa_78 Start: 49873, Stop: 50157, Start Num: 24

Candidate Starts for TingHuaYa_78:

(Start: 22 @49858 has 1 MA's), (Start: 24 @49873 has 140 MA's), (28, 49888), (39, 49930), (Start: 40 @49933 has 5 MA's), (42, 49945), (43, 49948), (47, 49966), (56, 50035), (59, 50107), (60, 50116), (65, 50146),

Gene: TiniBug_75 Start: 50512, Stop: 50781, Start Num: 24

Candidate Starts for TiniBug_75:

(Start: 22 @50497 has 1 MA's), (Start: 24 @50512 has 140 MA's), (35, 50542), (39, 50563), (Start: 40 @50566 has 5 MA's), (43, 50581), (47, 50599), (56, 50668), (59, 50740), (60, 50749),

Gene: TinyPebbles_74 Start: 43098, Stop: 42871, Start Num: 37

Candidate Starts for TinyPebbles_74:

(Start: 37 @43098 has 68 MA's), (Start: 38 @43092 has 14 MA's), (Start: 40 @43086 has 5 MA's),

Gene: Tiri_75 Start: 50017, Stop: 50286, Start Num: 24

Candidate Starts for Tiri_75:

(Start: 22 @50002 has 1 MA's), (Start: 24 @50017 has 140 MA's), (39, 50071), (Start: 40 @50074 has 5 MA's), (43, 50089), (47, 50107), (52, 50155), (56, 50176), (59, 50248), (60, 50257),

Gene: Todacoro_70 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for Todacoro_70:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Topper_75 Start: 50116, Stop: 50388, Start Num: 24

Candidate Starts for Topper_75:

(Start: 22 @50101 has 1 MA's), (Start: 24 @50116 has 140 MA's), (39, 50170), (Start: 40 @50173 has 5 MA's), (43, 50188), (47, 50206), (52, 50254), (56, 50275), (59, 50347), (60, 50356),

Gene: Torres_65 Start: 49770, Stop: 50042, Start Num: 24

Candidate Starts for Torres_65:

(Start: 22 @49755 has 1 MA's), (Start: 24 @49770 has 140 MA's), (Start: 26 @49779 has 1 MA's), (Start: 33 @49800 has 1 MA's), (36, 49809), (39, 49827), (Start: 40 @49830 has 5 MA's), (42, 49842), (43, 49845), (47, 49863), (51, 49899), (52, 49911), (60, 50013),

Gene: TreyKay_78 Start: 50578, Stop: 50853, Start Num: 24

Candidate Starts for TreyKay_78:

(Start: 22 @50563 has 1 MA's), (Start: 24 @50578 has 140 MA's), (39, 50635), (Start: 40 @50638 has 5 MA's), (42, 50650), (43, 50653), (47, 50671), (52, 50719), (56, 50740), (59, 50812), (60, 50821),

Gene: TribbleTrouble_76 Start: 50522, Stop: 50797, Start Num: 24

Candidate Starts for TribbleTrouble_76:

(Start: 24 @50522 has 140 MA's), (28, 50537), (Start: 40 @50582 has 5 MA's), (43, 50597), (47, 50615), (56, 50684), (59, 50756), (60, 50765),

Gene: Trice_62 Start: 47157, Stop: 47429, Start Num: 24

Candidate Starts for Trice_62:

(Start: 22 @47142 has 1 MA's), (Start: 24 @47157 has 140 MA's), (Start: 26 @47166 has 1 MA's), (Start: 33 @47187 has 1 MA's), (36, 47196), (39, 47214), (Start: 40 @47217 has 5 MA's), (42, 47229), (43, 47232), (47, 47250), (51, 47286), (52, 47298), (60, 47400),

Gene: TruffulaTree_77 Start: 50529, Stop: 50801, Start Num: 24

Candidate Starts for TruffulaTree_77:

(Start: 22 @50514 has 1 MA's), (Start: 24 @50529 has 140 MA's), (39, 50583), (Start: 40 @50586 has 5 MA's), (43, 50601), (47, 50619), (56, 50688), (59, 50760), (60, 50769),

Gene: Twitch_75 Start: 50118, Stop: 50390, Start Num: 24

Candidate Starts for Twitch_75:

(Start: 22 @50103 has 1 MA's), (Start: 24 @50118 has 140 MA's), (39, 50172), (Start: 40 @50175 has 5 MA's), (43, 50190), (47, 50208), (52, 50256), (56, 50277), (59, 50349), (60, 50358),

Gene: Unicorn_78 Start: 50059, Stop: 50331, Start Num: 24

Candidate Starts for Unicorn_78:

(14, 49996), (Start: 22 @50044 has 1 MA's), (Start: 24 @50059 has 140 MA's), (Start: 40 @50119 has 5 MA's), (42, 50131), (47, 50152),

Gene: Urkel_75 Start: 50512, Stop: 50781, Start Num: 24

Candidate Starts for Urkel_75:

(Start: 22 @50497 has 1 MA's), (Start: 24 @50512 has 140 MA's), (39, 50563), (Start: 40 @50566 has 5 MA's), (42, 50578), (43, 50581), (47, 50599), (52, 50647), (56, 50668), (59, 50740), (60, 50749),

Gene: Validus_80 Start: 50873, Stop: 51148, Start Num: 24

Candidate Starts for Validus_80:

(Start: 24 @50873 has 140 MA's), (39, 50927), (Start: 40 @50930 has 5 MA's), (42, 50942), (43, 50945), (47, 50963), (55, 51029), (59, 51104),

Gene: Veliki_76 Start: 50069, Stop: 50341, Start Num: 24

Candidate Starts for Veliki_76:

(Start: 22 @50054 has 1 MA's), (Start: 24 @50069 has 140 MA's), (39, 50123), (Start: 40 @50126 has 5 MA's), (43, 50141), (47, 50159), (52, 50207), (56, 50228), (59, 50300), (60, 50309),

Gene: Veracruz_67 Start: 42817, Stop: 42557, Start Num: 30

Candidate Starts for Veracruz_67:

(15, 42892), (Start: 30 @42817 has 25 MA's), (Start: 40 @42787 has 5 MA's), (64, 42571),

Gene: Vix_71 Start: 43151, Stop: 42924, Start Num: 37

Candidate Starts for Vix_71:

(Start: 37 @43151 has 68 MA's), (Start: 38 @43145 has 14 MA's),

Gene: Watson_74 Start: 43060, Stop: 42833, Start Num: 37

Candidate Starts for Watson_74:

(Start: 37 @43060 has 68 MA's), (Start: 38 @43054 has 14 MA's),

Gene: Wildcat_147 Start: 68820, Stop: 68542, Start Num: 40

Candidate Starts for Wildcat_147:

(10, 69027), (17, 68937), (Start: 40 @68820 has 5 MA's), (49, 68775), (53, 68724), (58, 68643), (61, 68622), (66, 68550), (67, 68547),

Gene: Wintermute_40 Start: 31413, Stop: 31712, Start Num: 20

Candidate Starts for Wintermute_40:

(Start: 20 @31413 has 14 MA's), (27, 31449), (Start: 38 @31494 has 14 MA's), (42, 31512), (47, 31533), (51, 31569), (56, 31602), (59, 31674),

Gene: Wooldri_77 Start: 42980, Stop: 42753, Start Num: 37

Candidate Starts for Wooldri_77:

(Start: 37 @42980 has 68 MA's), (Start: 38 @42974 has 14 MA's),

Gene: Ximenita_81 Start: 50796, Stop: 51068, Start Num: 24

Candidate Starts for Ximenita_81:

(Start: 22 @50781 has 1 MA's), (Start: 24 @50796 has 140 MA's), (Start: 33 @50826 has 1 MA's), (Start: 40 @50856 has 5 MA's), (42, 50868), (47, 50889), (56, 50958),

Gene: Y10_39 Start: 31413, Stop: 31712, Start Num: 21

Candidate Starts for Y10_39:

(Start: 21 @31413 has 8 MA's), (27, 31449), (Start: 38 @31494 has 14 MA's), (42, 31512), (51, 31569), (56, 31602), (59, 31674),

Gene: Y2_39 Start: 31413, Stop: 31712, Start Num: 21

Candidate Starts for Y2_39:

(Start: 21 @31413 has 8 MA's), (27, 31449), (Start: 38 @31494 has 14 MA's), (42, 31512), (51, 31569), (56, 31602), (59, 31674),

Gene: YasnayaPolyana_40 Start: 31415, Stop: 31714, Start Num: 20

Candidate Starts for YasnayaPolyana_40:

(Start: 20 @31415 has 14 MA's), (27, 31451), (Start: 38 @31496 has 14 MA's), (42, 31514), (47, 31535), (51, 31571), (56, 31604), (59, 31676),

Gene: YoureAdopted_75 Start: 50480, Stop: 50749, Start Num: 24

Candidate Starts for YoureAdopted_75:

(Start: 24 @50480 has 140 MA's), (39, 50534), (Start: 40 @50537 has 5 MA's), (43, 50552), (47, 50570), (52, 50618), (56, 50639), (59, 50711), (60, 50720),

Gene: Yuna_78 Start: 51558, Stop: 51830, Start Num: 24

Candidate Starts for Yuna_78:

(Start: 22 @51543 has 1 MA's), (Start: 24 @51558 has 140 MA's), (28, 51573), (47, 51651),

Gene: Yunkel11_81 Start: 50697, Stop: 50972, Start Num: 24

Candidate Starts for Yunkel11_81:

(Start: 22 @50682 has 1 MA's), (Start: 24 @50697 has 140 MA's), (39, 50754), (Start: 40 @50757 has 5 MA's), (42, 50769), (43, 50772), (47, 50790), (52, 50838), (56, 50859), (59, 50931), (60, 50940),

Gene: Zabiza_71 Start: 46466, Stop: 46738, Start Num: 24

Candidate Starts for Zabiza_71:

(Start: 22 @46451 has 1 MA's), (Start: 24 @46466 has 140 MA's), (39, 46520), (Start: 40 @46523 has 5 MA's), (43, 46538), (47, 46556), (52, 46604), (56, 46625), (59, 46697), (60, 46706),

Gene: Zarafa_68 Start: 42792, Stop: 42526, Start Num: 30

Candidate Starts for Zarafa_68:

(15, 42867), (Start: 30 @42792 has 25 MA's), (Start: 40 @42762 has 5 MA's), (56, 42660),

Gene: Zavala_78 Start: 50607, Stop: 50879, Start Num: 24

Candidate Starts for Zavala_78:

(Start: 22 @50592 has 1 MA's), (Start: 24 @50607 has 140 MA's), (39, 50661), (Start: 40 @50664 has 5 MA's), (43, 50679), (47, 50697), (52, 50745), (56, 50766), (59, 50838), (60, 50847),

Gene: Zetzy_72 Start: 42631, Stop: 42404, Start Num: 37

Candidate Starts for Zetzy_72:

(Start: 37 @42631 has 68 MA's), (Start: 38 @42625 has 14 MA's),

Gene: ZoeJ_78 Start: 51905, Stop: 52174, Start Num: 25

Candidate Starts for ZoeJ_78:

(12, 51782), (18, 51866), (Start: 25 @51905 has 19 MA's), (Start: 40 @51962 has 5 MA's), (47, 51995), (51, 52031), (56, 52064),