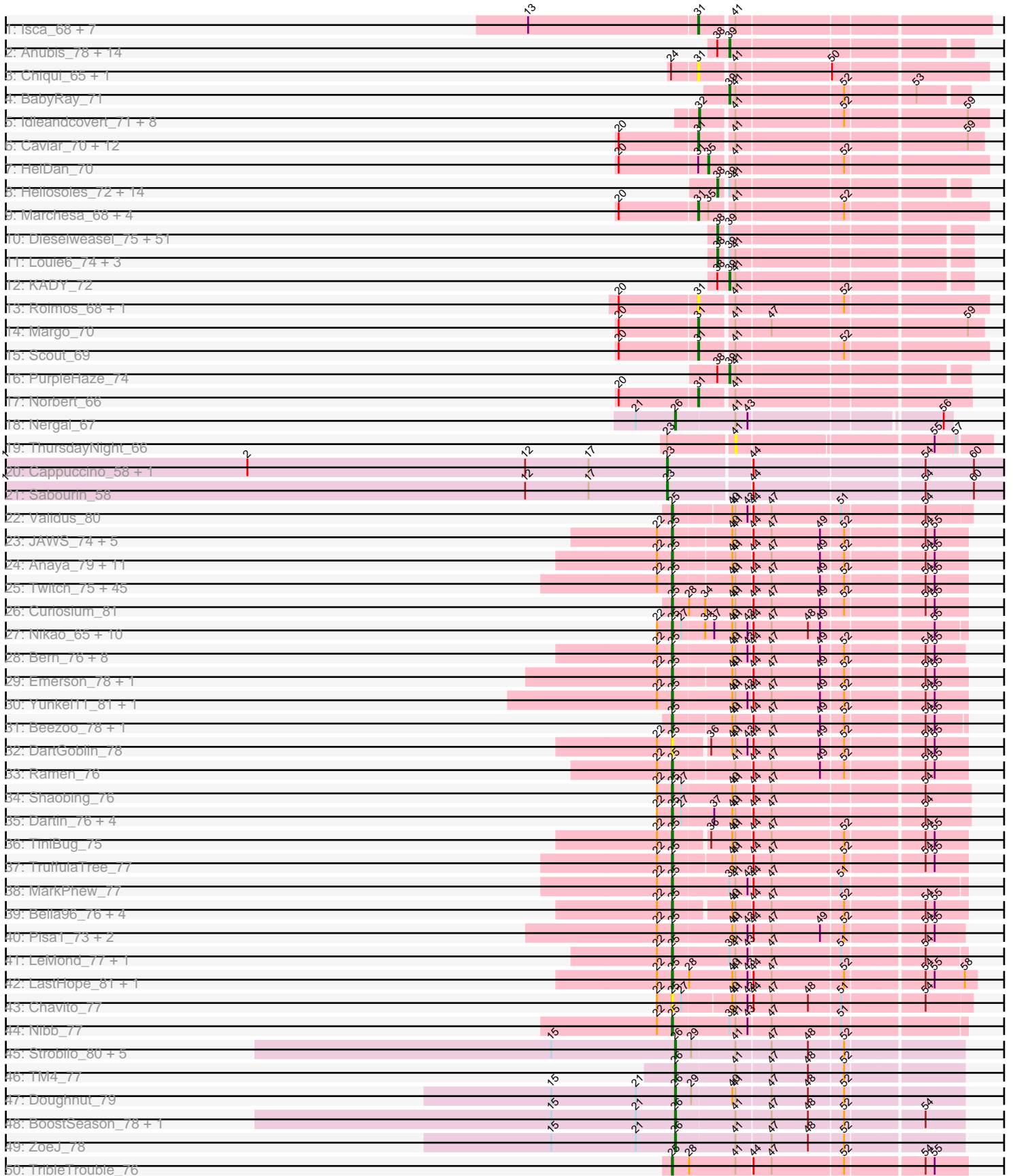
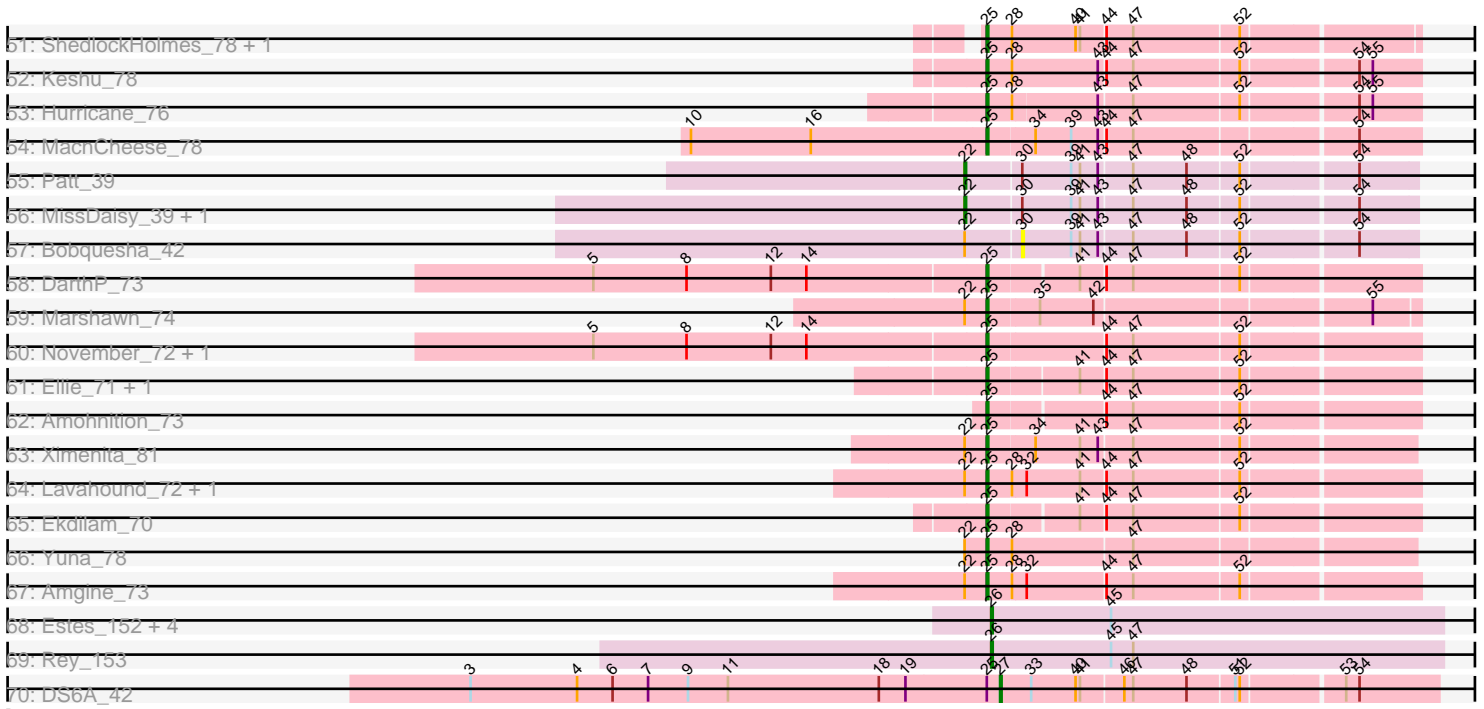


Pham 296178



Pham 296178



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 296178 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296178 has 295 members, 33 are drafts.

Phages represented in each track:

- Track 1 : Isca_68, Phantastic_72, MK4_70, JF2_68, B1_62, Rockstar_69, JF4_68, MA5_70
- Track 2 : Anubis_78, Bigflo_72, JenCasNa_76, Stagni_72, Gwennie_70, Sabinator_73, Spike509_75, JHC117_71, Taurus_76, MarQuardt_75, Croquant_72, Phoxy_75, Tiffany_74, Iowa_72, Jobu08_71
- Track 3 : Chiqui_65, BabyJohn_65
- 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 : Caviar_70, Pocahontas_69, Veracruz_67, Noella_70, EtoileNova_68, Texage_68, Popcicle_70, Todacoro_70, Lambert1_70, ResDef_68, QuinnKiro_69, Panamaxus_68, Hookmount_70
- Track 7 : HelDan_70
- Track 8 : 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 9 : Marchesa_68, DropBear_68, Kachowdy_68, Heathen_70, Fred313_68
- Track 10 : Dieselweasel_75, Mainiac_74, Grub_73, Bxz2_70, Cullens_75, Daishi_74, Ollie_75, Pembroke_75, BreSam8_75, MuchMore_78, Penny1_75, GtownJaz_75, Beauxregard13_74, EpicPhail_76, Hercules11_75, HashRod_76, Grif_73, Marie_73, Fernando_75, Microwolf_71, LugYA_78, Montavir_70, LarryKay_75, Sabia_73, StepMih_74, AgronaGT15_72, Soshari_77, PGHhamlin_77, PotatoSplit_76, Vix_71, MoneyMay_74, Lilith_73, Farber_75, MadMarie_73, Malinsilva_77, Colbster_71, Snickers_75, Aglet_76, Methuselah_68, LBerry_76, DaHudson_74, Zetzy_72, Wooldri_77, SoilDragon_74, Rummer_74, P28Green_75, Phoebe_76, GingkoMaracino_75, Grum1_74, Watson_74, AugsMagnumOpus_78, SoYo_72
- 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 : Cappuccino_58, Kalimba_58

- Track 21 : Sabourin_58
- Track 22 : Validus_80
- Track 23 : JAWS_74, CheetoDust_75, Pokerus_76, Slimphazie_77, Tiri_75, Veliki_76
- Track 24 : 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 25 : Twitch_75, Jeckyll_75, Ganymede_75, HedwigODU_75, AlishaPH_74, Zabiza_71, Atiba_76, Jayhawk_78, Llorens_75, Belladonna_75, CaseJules_77, Rapunzel97_78, BarrelRoll_76, Boiiii_75, Hyperbowlee_74, Blizzard_75, Rosmarinus_75, Lunahalos_75, Durfee_75, Homura_74, Apocalypse_78, Jarvi_75, Spock_75, Adephegia_74, ShiaSurprise_76, Deby_75, Zavala_78, BGlluviae_75, BEEST_75, Padfoot_75, Piatt_74, BaghaKamala_74, Joy99_76, Inky_75, Dalmuri_75, Asayake_75, CallaLilly_75, Capricorn_75, Peel_75, CREW_74, Geraldini_79, ActinUp_76, QuincyRose_73, Topper_75, Mynx_77, Tachez_75
- Track 26 : Curiosium_81
- Track 27 : Nikao_65, LilPharaoh_63, SgtBeansprout_63, Torres_65, Enkosi_64, Nutello_62, Teejan_64, Trice_62, Mdavu_63, Amelie_62, Binglebops_62
- Track 28 : Bern_76, DrHayes_75, SamuelLPlaqson_75, CrimD_77, Prithvi_78, LindNT_74, TreyKay_78, Urkel_75, Anma_75
- Track 29 : Emerson_78, Padpat_79
- Track 30 : Yunkel11_81, Efra2_82
- Track 31 : Beezoo_78, YoureAdopted_75
- Track 32 : DartGoblin_78
- Track 33 : Ramen_76
- Track 34 : Shaobing_76
- Track 35 : Dartin_76, Niklas_77, McMater_76, Peanam_77, Richo_76
- Track 36 : TiniBug_75
- Track 37 : TruffulaTree_77
- Track 38 : MarkPhew_77
- Track 39 : Bella96_76, MeaningOfLife_77, Murucutumbu_76, Adonis_75, LaterM_75
- Track 40 : Pisa1_73, Guanica15_81, Pisa4_67
- Track 41 : LeMond_77, Oscar_77
- Track 42 : LastHope_81, TingHuaYa_78
- Track 43 : Chavito_77
- Track 44 : Nibb_77
- Track 45 : Strobilo_80, DismalFunk_79, Milly_79, Marcoliusprime_78, Findley_79, DismalStressor_79
- Track 46 : TM4_77
- Track 47 : Doughnut_79
- Track 48 : BoostSeason_78, Mufasa_78
- Track 49 : ZoeJ_78
- Track 50 : TribbleTrouble_76
- Track 51 : ShedlockHolmes_78, Lea83_76
- Track 52 : Keshu_78
- Track 53 : Hurricane_76
- Track 54 : MacnCheese_78
- Track 55 : Patt_39
- Track 56 : MissDaisy_39, Reptar3000_40
- Track 57 : Bobquesha_42
- Track 58 : DarthP_73
- Track 59 : Marshawn_74
- Track 60 : November_72, Hammy_73

- Track 61 : Ellie_71, Applecrisp_72
- Track 62 : Amohnition_73
- Track 63 : Ximenita_81
- Track 64 : Lavahound_72, Fefferhead_74
- Track 65 : Ekdilam_70
- Track 66 : Yuna_78
- Track 67 : Amgine_73
- Track 68 : Estes_152, MrMagoo_154, Aziz_150, GenevaB15_153, GardenSalsa_152
- Track 69 : Rey_153
- Track 70 : 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 25, it was called in 123 of the 262 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, CREW_74, CallaLilly_75, Capricorn_75, CaseJules_77, Chavito_77, CheetoDust_75, Clipper_80, CrimD_77, Curiosium_81, Dalmuri_75, DartGoblin_78, DARTH_P_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, 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, Piatt_74, Pisa1_73, Pisa4_67, Pokerus_76, Prithvi_78, QuincyRose_73, Ramen_76, Rapunzel97_78, Richo_76, Rosmarinus_75, SamuelLPlaqson_75, SgtBeansprout_63, Shaobing_76, ShedlockHolmes_78, ShiaSurprise_76, Slimphazie_77, Spock_75, Stinson_76, Sulley_74, Tachez_75, TaiwanKao_77, Teejan_64, TingHuaYa_78, TiniBug_75, Tiri_75, Topper_75, Torres_65, TreyKay_78, TribbleTrouble_76, Trice_62, TruffulaTree_77, Twitch_75, 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,

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

- ACFishhook_72, Aglet_76, AgronaGT15_72, Anubis_78, AugsMagnumOpus_78, Aziz_150, B1_62, BabyJohn_65, BabyRay_71, Beauxregard13_74, Bigflo_72, BlueBird_73, Bobquesha_42, BoostSeason_78, BreSam8_75, Bugatti_70,

BuzzBuzz_69, Bxz2_70, Calvinny_72, Cappuccino_58, Caviar_70, Chiqui_65, Clammy_70, ClownCar_72, Colbster_71, Croquant_72, Cullens_75, DaHudson_74, Daishi_74, Dieselweasel_75, DismalFunk_79, DismalStressor_79, Doughnut_79, DropBear_68, EpicPhail_76, Estes_152, ÉtoileNova_68, Farber_75, Fernando_75, Findley_79, 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, JF2_68, JF4_68, JHC117_71, JenCasNa_76, JeppNRM_75, Jobu08_71, KADY_72, Kachowdy_68, Kalb97_75, Kalimba_58, Kalnoky_75, LBerry_76, Lambert1_70, LarryKay_75, Lilith_73, Louie6_74, Lowa_72, LugYA_78, MA5_70, MK4_70, MadMarie_73, Mainiac_74, Malinsilva_77, Manu_74, MarQuardt_75, Marchesa_68, Marcoliusprime_78, Margo_70, Marie_73, Marius_75, Methuselah_68, Microwolf_71, Milly_79, Misomonster_76, MissDaisy_39, MoneyMay_74, Montavir_70, MrMagoo_154, MuchMore_78, Mufasa_78, Nergal_67, Noella_70, Norbert_66, OlanP_73, Ollie_75, 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, QuinnKiro_69, Reptar3000_40, ResDef_68, Rey_153, Rockstar_69, Roimos_68, Rummer_74, Sabia_73, Sabinator_73, Sabourin_58, SaturnRing_70, Scout_69, Snickers_75, SoYo_72, SoilDragon_74, Soshari_77, Spike509_75, Stagni_72, StepMih_74, Strobilo_80, TM4_77, TNguyen7_71, Taurus_76, Texage_68, ThursdayNight_66, Tiffany_74, TinyPebbles_74, Todacoro_70, Veracruz_67, Vix_71, Watson_74, Woodri_77, Zarafa_68, Zetzy_72, ZoeJ_78,

Summary by start number:

Start 22:

- Found in 123 of 295 (41.7%) of genes in pham
- Manual Annotations of this start: 3 of 262
- Called 2.4% of time when present
- Phage (with cluster) where this start called: MissDaisy_39 (K4), Patt_39 (K4), Reptar3000_40 (K4),

Start 23:

- Found in 4 of 295 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 262
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cappuccino_58 (AZ5), Kalimba_58 (AZ5), Sabourin_58 (AZ5),

Start 25:

- Found in 137 of 295 (46.4%) of genes in pham
- Manual Annotations of this start: 123 of 262
- Called 99.3% 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), Amohnition_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), Boiii_75 (K1), CREW_74 (K1), CallaLilly_75 (K1),

Capricorn_75 (K1), CaseJules_77 (K1), Chavito_77 (K1), CheetoDust_75 (K1), Clipper_80 (K1), CrimD_77 (K1), Curiosium_81 (K1), Dalmuri_75 (K1), DartGoblin_78 (K1), DarthP_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), 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), MacKat_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), Piatt_74 (K1), Pisa1_73 (K1), Pisa4_67 (K1), Pokerus_76 (K1), Prithvi_78 (K1), QuincyRose_73 (K1), Ramen_76 (K1), Rapunzel97_78 (K1), Richo_76 (K1), Rosmarinus_75 (K1), SamuelLPlaqson_75 (K1), SgtBeansprout_63 (K1), Shaobing_76 (K1), ShedlockHolmes_78 (K3), ShiaSurprise_76 (K1), Slimphazie_77 (K1), Spock_75 (K1), Stinson_76 (K1), Sulley_74 (K1), Tachez_75 (K1), TaiwanKao_77 (K1), Teejan_64 (K1), 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), 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 26:

- Found in 18 of 295 (6.1%) of genes in pham
- Manual Annotations of this start: 18 of 262
- 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), Nergal_67 (AG), Rey_153 (M2), Strobilo_80 (K2), TM4_77 (K2), ZoeJ_78 (K2),

Start 27:

- Found in 19 of 295 (6.4%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 5.3% of time when present
- Phage (with cluster) where this start called: DS6A_42 (singleton),

Start 30:

- Found in 4 of 295 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Bobquesha_42 (K4),

Start 31:

- Found in 34 of 295 (11.5%) of genes in pham
- Manual Annotations of this start: 25 of 262
- 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 32:

- Found in 12 of 295 (4.1%) of genes in pham
- Manual Annotations of this start: 6 of 262
- Called 75.0% 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 35:

- Found in 7 of 295 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 14.3% of time when present
- Phage (with cluster) where this start called: HelDan_70 (A3),

Start 38:

- Found in 88 of 295 (29.8%) of genes in pham
- Manual Annotations of this start: 68 of 262
- 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), Kalnoky_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 39:

- Found in 98 of 295 (33.2%) of genes in pham
- Manual Annotations of this start: 14 of 262
- Called 18.4% 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 41:

- Found in 210 of 295 (71.2%) of genes in pham
- No Manual Annotations of this start.
- Called 0.5% of time when present
- Phage (with cluster) where this start called: ThursdayNight_66 (AZ),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, AG, K4, A3, K3, K2, K1, K6, M2, AZ, AZ5,

Info for manual annotations of cluster A3:

- Start number 31 was manually annotated 25 times for cluster A3.
- Start number 32 was manually annotated 6 times for cluster A3.
- Start number 35 was manually annotated 1 time for cluster A3.
- Start number 38 was manually annotated 68 times for cluster A3.
- Start number 39 was manually annotated 14 times for cluster A3.

Info for manual annotations of cluster AG:

- Start number 26 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AZ5:

- Start number 23 was manually annotated 3 times for cluster AZ5.

Info for manual annotations of cluster K1:

- Start number 25 was manually annotated 105 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 26 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 25 was manually annotated 6 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 22 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 25 was manually annotated 12 times for cluster K6.

Info for manual annotations of cluster M2:

- Start number 26 was manually annotated 6 times for cluster M2.

Gene Information:

Gene: ACFishhook_72 Start: 42957, Stop: 42733, Start Num: 38

Candidate Starts for ACFishhook_72:

(Start: 38 @42957 has 68 MA's), (Start: 39 @42951 has 14 MA's), (41, 42945),

Gene: ActinUp_76 Start: 50161, Stop: 50433, Start Num: 25

Candidate Starts for ActinUp_76:

(Start: 22 @50146 has 3 MA's), (Start: 25 @50161 has 123 MA's), (40, 50215), (41, 50218), (44, 50233), (47, 50251), (49, 50299), (52, 50320), (54, 50392), (55, 50401),

Gene: Adephagia_74 Start: 49998, Stop: 50270, Start Num: 25

Candidate Starts for Adephagia_74:

(Start: 22 @49983 has 3 MA's), (Start: 25 @49998 has 123 MA's), (40, 50052), (41, 50055), (44, 50070), (47, 50088), (49, 50136), (52, 50157), (54, 50229), (55, 50238),

Gene: Adonis_75 Start: 50433, Stop: 50705, Start Num: 25

Candidate Starts for Adonis_75:

(Start: 22 @50418 has 3 MA's), (Start: 25 @50433 has 123 MA's), (40, 50490), (41, 50493), (44, 50508), (47, 50526), (52, 50595), (54, 50667), (55, 50676),

Gene: Ageofdapage_79 Start: 51358, Stop: 51630, Start Num: 25

Candidate Starts for Ageofdapage_79:

(Start: 22 @51343 has 3 MA's), (Start: 25 @51358 has 123 MA's), (40, 51415), (41, 51418), (44, 51433), (47, 51451), (49, 51499), (52, 51520), (54, 51592), (55, 51601),

Gene: Aglet_76 Start: 43069, Stop: 42842, Start Num: 38

Candidate Starts for Aglet_76:

(Start: 38 @43069 has 68 MA's), (Start: 39 @43063 has 14 MA's),

Gene: AgronaGT15_72 Start: 42917, Stop: 42690, Start Num: 38

Candidate Starts for AgronaGT15_72:

(Start: 38 @42917 has 68 MA's), (Start: 39 @42911 has 14 MA's),

Gene: AlishaPH_74 Start: 50259, Stop: 50531, Start Num: 25

Candidate Starts for AlishaPH_74:

(Start: 22 @50244 has 3 MA's), (Start: 25 @50259 has 123 MA's), (40, 50313), (41, 50316), (44, 50331), (47, 50349), (49, 50397), (52, 50418), (54, 50490), (55, 50499),

Gene: Amelie_62 Start: 47156, Stop: 47428, Start Num: 25

Candidate Starts for Amelie_62:

(Start: 22 @47141 has 3 MA's), (Start: 25 @47156 has 123 MA's), (Start: 27 @47165 has 1 MA's), (34, 47186), (37, 47195), (40, 47213), (41, 47216), (43, 47228), (44, 47231), (47, 47249), (48, 47285), (49, 47297), (55, 47399),

Gene: Amgine_73 Start: 50668, Stop: 50943, Start Num: 25

Candidate Starts for Amgine_73:

(Start: 22 @50653 has 3 MA's), (Start: 25 @50668 has 123 MA's), (28, 50683), (Start: 32 @50692 has 6 MA's), (44, 50743), (47, 50761), (52, 50830),

Gene: Amohnition_73 Start: 50538, Stop: 50810, Start Num: 25

Candidate Starts for Amohnition_73:

(Start: 25 @50538 has 123 MA's), (44, 50610), (47, 50628), (52, 50697),

Gene: Anaya_79 Start: 51056, Stop: 51328, Start Num: 25

Candidate Starts for Anaya_79:

(Start: 22 @51041 has 3 MA's), (Start: 25 @51056 has 123 MA's), (40, 51110), (41, 51113), (44, 51128), (47, 51146), (49, 51194), (52, 51215), (54, 51287), (55, 51296),

Gene: Angelica_74 Start: 50118, Stop: 50390, Start Num: 25

Candidate Starts for Angelica_74:

(Start: 22 @50103 has 3 MA's), (Start: 25 @50118 has 123 MA's), (40, 50175), (41, 50178), (44, 50193), (47, 50211), (49, 50259), (52, 50280), (54, 50352), (55, 50361),

Gene: Anma_75 Start: 50512, Stop: 50781, Start Num: 25

Candidate Starts for Anma_75:

(Start: 22 @50497 has 3 MA's), (Start: 25 @50512 has 123 MA's), (40, 50563), (41, 50566), (43, 50578), (44, 50581), (47, 50599), (49, 50647), (52, 50668), (54, 50740), (55, 50749),

Gene: Anubis_78 Start: 42949, Stop: 42728, Start Num: 39

Candidate Starts for Anubis_78:

(Start: 38 @42955 has 68 MA's), (Start: 39 @42949 has 14 MA's),

Gene: Apocalypse_78 Start: 50800, Stop: 51072, Start Num: 25

Candidate Starts for Apocalypse_78:

(Start: 22 @50785 has 3 MA's), (Start: 25 @50800 has 123 MA's), (40, 50854), (41, 50857), (44, 50872), (47, 50890), (49, 50938), (52, 50959), (54, 51031), (55, 51040),

Gene: Applecrisp_72 Start: 50112, Stop: 50384, Start Num: 25

Candidate Starts for Applecrisp_72:

(Start: 25 @50112 has 123 MA's), (41, 50169), (44, 50184), (47, 50202), (52, 50271),

Gene: Asayake_75 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for Asayake_75:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Atiba_76 Start: 49961, Stop: 50233, Start Num: 25

Candidate Starts for Atiba_76:

(Start: 22 @49946 has 3 MA's), (Start: 25 @49961 has 123 MA's), (40, 50015), (41, 50018), (44, 50033), (47, 50051), (49, 50099), (52, 50120), (54, 50192), (55, 50201),

Gene: AugsMagnumOpus_78 Start: 43060, Stop: 42833, Start Num: 38

Candidate Starts for AugsMagnumOpus_78:

(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Aziz_150 Start: 73022, Stop: 72717, Start Num: 26

Candidate Starts for Aziz_150:

(Start: 26 @73022 has 18 MA's), (45, 72941),

Gene: B1_62 Start: 41030, Stop: 40761, Start Num: 31

Candidate Starts for B1_62:

(13, 41195), (Start: 31 @41030 has 25 MA's), (41, 41000),

Gene: BEEST_75 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for BEEST_75:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: BGlluviae_75 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for BGlluviae_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: BabyJohn_65 Start: 42854, Stop: 42588, Start Num: 31

Candidate Starts for BabyJohn_65:

(24, 42878), (Start: 31 @42854 has 25 MA's), (41, 42824), (50, 42734),

Gene: BabyRay_71 Start: 42787, Stop: 42569, Start Num: 39

Candidate Starts for BabyRay_71:

(Start: 39 @42787 has 14 MA's), (41, 42781), (52, 42679), (53, 42616),

Gene: BaghaKamala_74 Start: 49547, Stop: 49819, Start Num: 25

Candidate Starts for BaghaKamala_74:

(Start: 22 @49532 has 3 MA's), (Start: 25 @49547 has 123 MA's), (40, 49601), (41, 49604), (44, 49619), (47, 49637), (49, 49685), (52, 49706), (54, 49778), (55, 49787),

Gene: BarrelRoll_76 Start: 50518, Stop: 50790, Start Num: 25

Candidate Starts for BarrelRoll_76:

(Start: 22 @50503 has 3 MA's), (Start: 25 @50518 has 123 MA's), (40, 50572), (41, 50575), (44, 50590), (47, 50608), (49, 50656), (52, 50677), (54, 50749), (55, 50758),

Gene: Beauxregard13_74 Start: 43072, Stop: 42845, Start Num: 38

Candidate Starts for Beauxregard13_74:

(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Beezoo_78 Start: 51095, Stop: 51364, Start Num: 25

Candidate Starts for Beezoo_78:

(Start: 25 @51095 has 123 MA's), (40, 51149), (41, 51152), (44, 51167), (47, 51185), (49, 51233), (52, 51254), (54, 51326), (55, 51335),

Gene: Bella96_76 Start: 50379, Stop: 50648, Start Num: 25

Candidate Starts for Bella96_76:

(Start: 22 @50364 has 3 MA's), (Start: 25 @50379 has 123 MA's), (40, 50430), (41, 50433), (44, 50448), (47, 50466), (52, 50535), (54, 50607), (55, 50616),

Gene: Belladonna_75 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for Belladonna_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Bern_76 Start: 49065, Stop: 49337, Start Num: 25

Candidate Starts for Bern_76:

(Start: 22 @49050 has 3 MA's), (Start: 25 @49065 has 123 MA's), (40, 49122), (41, 49125), (43, 49137), (44, 49140), (47, 49158), (49, 49206), (52, 49227), (54, 49299), (55, 49308),

Gene: Bigflo_72 Start: 43062, Stop: 42841, Start Num: 39

Candidate Starts for Bigflo_72:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Biglebops_62 Start: 47171, Stop: 47443, Start Num: 25

Candidate Starts for Biglebops_62:

(Start: 22 @47156 has 3 MA's), (Start: 25 @47171 has 123 MA's), (Start: 27 @47180 has 1 MA's), (34, 47201), (37, 47210), (40, 47228), (41, 47231), (43, 47243), (44, 47246), (47, 47264), (48, 47300), (49,

47312), (55, 47414),

Gene: Blizzard_75 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for Blizzard_75:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: BlueBird_73 Start: 42858, Stop: 42592, Start Num: 32

Candidate Starts for BlueBird_73:

(Start: 32 @42858 has 6 MA's), (41, 42828), (52, 42726), (59, 42612),

Gene: Bobquesha_42 Start: 31200, Stop: 31451, Start Num: 30

Candidate Starts for Bobquesha_42:

(Start: 22 @31164 has 3 MA's), (30, 31200), (Start: 39 @31233 has 14 MA's), (41, 31239), (43, 31251), (47, 31272), (48, 31308), (52, 31341), (54, 31413),

Gene: Boiiii_75 Start: 50315, Stop: 50587, Start Num: 25

Candidate Starts for Boiiii_75:

(Start: 22 @50300 has 3 MA's), (Start: 25 @50315 has 123 MA's), (40, 50369), (41, 50372), (44, 50387), (47, 50405), (49, 50453), (52, 50474), (54, 50546), (55, 50555),

Gene: BoostSeason_78 Start: 51944, Stop: 52213, Start Num: 26

Candidate Starts for BoostSeason_78:

(15, 51821), (21, 51905), (Start: 26 @51944 has 18 MA's), (41, 52001), (47, 52034), (48, 52070), (52, 52103), (54, 52175),

Gene: BreSam8_75 Start: 43062, Stop: 42835, Start Num: 38

Candidate Starts for BreSam8_75:

(Start: 38 @43062 has 68 MA's), (Start: 39 @43056 has 14 MA's),

Gene: Bugatti_70 Start: 42858, Stop: 42592, Start Num: 32

Candidate Starts for Bugatti_70:

(Start: 32 @42858 has 6 MA's), (41, 42828), (52, 42726), (59, 42612),

Gene: BuzzBuzz_69 Start: 43096, Stop: 42869, Start Num: 38

Candidate Starts for BuzzBuzz_69:

(Start: 38 @43096 has 68 MA's), (Start: 39 @43090 has 14 MA's), (41, 43084),

Gene: Bxz2_70 Start: 43103, Stop: 42876, Start Num: 38

Candidate Starts for Bxz2_70:

(Start: 38 @43103 has 68 MA's), (Start: 39 @43097 has 14 MA's),

Gene: CREW_74 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for CREW_74:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: CallaLilly_75 Start: 50039, Stop: 50311, Start Num: 25

Candidate Starts for CallaLilly_75:

(Start: 22 @50024 has 3 MA's), (Start: 25 @50039 has 123 MA's), (40, 50093), (41, 50096), (44, 50111), (47, 50129), (49, 50177), (52, 50198), (54, 50270), (55, 50279),

Gene: Calvinny_72 Start: 42885, Stop: 42661, Start Num: 38

Candidate Starts for Calvinny_72:

(Start: 38 @42885 has 68 MA's), (Start: 39 @42879 has 14 MA's), (41, 42873),

Gene: Cappuccino_58 Start: 37929, Stop: 38255, Start Num: 23

Candidate Starts for Cappuccino_58:

(1, 37272), (2, 37512), (12, 37788), (17, 37851), (Start: 23 @37929 has 3 MA's), (44, 38007), (54, 38169), (60, 38217),

Gene: Capricorn_75 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for Capricorn_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: CaseJules_77 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for CaseJules_77:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Caviar_70 Start: 42817, Stop: 42557, Start Num: 31

Candidate Starts for Caviar_70:

(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Chavito_77 Start: 51039, Stop: 51314, Start Num: 25

Candidate Starts for Chavito_77:

(Start: 22 @51024 has 3 MA's), (Start: 25 @51039 has 123 MA's), (Start: 27 @51048 has 1 MA's), (40, 51093), (41, 51096), (43, 51108), (44, 51111), (47, 51129), (48, 51165), (51, 51195), (54, 51270),

Gene: CheetoDust_75 Start: 49713, Stop: 49985, Start Num: 25

Candidate Starts for CheetoDust_75:

(Start: 22 @49698 has 3 MA's), (Start: 25 @49713 has 123 MA's), (40, 49767), (41, 49770), (44, 49785), (47, 49803), (49, 49851), (52, 49872), (54, 49944), (55, 49953),

Gene: Chiqui_65 Start: 42863, Stop: 42597, Start Num: 31

Candidate Starts for Chiqui_65:

(24, 42887), (Start: 31 @42863 has 25 MA's), (41, 42833), (50, 42743),

Gene: Clammy_70 Start: 42858, Stop: 42592, Start Num: 32

Candidate Starts for Clammy_70:

(Start: 32 @42858 has 6 MA's), (41, 42828), (52, 42726), (59, 42612),

Gene: Clipper_80 Start: 51215, Stop: 51487, Start Num: 25

Candidate Starts for Clipper_80:

(Start: 22 @51200 has 3 MA's), (Start: 25 @51215 has 123 MA's), (40, 51272), (41, 51275), (44, 51290), (47, 51308), (49, 51356), (52, 51377), (54, 51449), (55, 51458),

Gene: ClownCar_72 Start: 42878, Stop: 42654, Start Num: 38

Candidate Starts for ClownCar_72:

(Start: 38 @42878 has 68 MA's), (Start: 39 @42872 has 14 MA's), (41, 42866),

Gene: Colbster_71 Start: 43072, Stop: 42845, Start Num: 38

Candidate Starts for Colbster_71:

(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: CrimD_77 Start: 51114, Stop: 51386, Start Num: 25

Candidate Starts for CrimD_77:

(Start: 22 @51099 has 3 MA's), (Start: 25 @51114 has 123 MA's), (40, 51171), (41, 51174), (43, 51186), (44, 51189), (47, 51207), (49, 51255), (52, 51276), (54, 51348), (55, 51357),

Gene: Croquant_72 Start: 43060, Stop: 42839, Start Num: 39

Candidate Starts for Croquant_72:

(Start: 38 @43066 has 68 MA's), (Start: 39 @43060 has 14 MA's),

Gene: Cullens_75 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for Cullens_75:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Curiosium_81 Start: 50080, Stop: 50355, Start Num: 25

Candidate Starts for Curiosium_81:

(Start: 25 @50080 has 123 MA's), (28, 50095), (34, 50110), (40, 50137), (41, 50140), (44, 50155), (47, 50173), (49, 50221), (52, 50242), (54, 50314), (55, 50323),

Gene: DS6A_42 Start: 32699, Stop: 32980, Start Num: 27

Candidate Starts for DS6A_42:

(3, 32342), (4, 32414), (6, 32438), (7, 32462), (9, 32489), (11, 32516), (18, 32618), (19, 32636), (Start: 25 @32690 has 123 MA's), (Start: 27 @32699 has 1 MA's), (33, 32720), (40, 32750), (41, 32753), (46, 32780), (47, 32786), (48, 32822), (51, 32852), (52, 32855), (53, 32918), (54, 32927),

Gene: DaHudson_74 Start: 43061, Stop: 42834, Start Num: 38

Candidate Starts for DaHudson_74:

(Start: 38 @43061 has 68 MA's), (Start: 39 @43055 has 14 MA's),

Gene: Daishi_74 Start: 41936, Stop: 41709, Start Num: 38

Candidate Starts for Daishi_74:

(Start: 38 @41936 has 68 MA's), (Start: 39 @41930 has 14 MA's),

Gene: Dalmuri_75 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for Dalmuri_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: DartGoblin_78 Start: 50342, Stop: 50611, Start Num: 25

Candidate Starts for DartGoblin_78:

(Start: 22 @50327 has 3 MA's), (Start: 25 @50342 has 123 MA's), (36, 50372), (40, 50393), (41, 50396), (43, 50408), (44, 50411), (47, 50429), (49, 50477), (52, 50498), (54, 50570), (55, 50579),

Gene: DarthP_73 Start: 50395, Stop: 50667, Start Num: 25

Candidate Starts for DarthP_73:

(5, 50134), (8, 50197), (12, 50254), (14, 50278), (Start: 25 @50395 has 123 MA's), (41, 50452), (44, 50467), (47, 50485), (52, 50554),

Gene: Dartin_76 Start: 50287, Stop: 50565, Start Num: 25

Candidate Starts for Dartin_76:

(Start: 22 @50272 has 3 MA's), (Start: 25 @50287 has 123 MA's), (Start: 27 @50296 has 1 MA's), (37, 50326), (40, 50344), (41, 50347), (44, 50362), (47, 50380), (54, 50521),

Gene: Deby_75 Start: 50485, Stop: 50757, Start Num: 25

Candidate Starts for Deby_75:

(Start: 22 @50470 has 3 MA's), (Start: 25 @50485 has 123 MA's), (40, 50539), (41, 50542), (44, 50557), (47, 50575), (49, 50623), (52, 50644), (54, 50716), (55, 50725),

Gene: Devera_83 Start: 51910, Stop: 52182, Start Num: 25

Candidate Starts for Devera_83:

(Start: 22 @51895 has 3 MA's), (Start: 25 @51910 has 123 MA's), (40, 51967), (41, 51970), (44, 51985), (47, 52003), (49, 52051), (52, 52072), (54, 52144), (55, 52153),

Gene: Dieselweasel_75 Start: 43070, Stop: 42843, Start Num: 38

Candidate Starts for Dieselweasel_75:

(Start: 38 @43070 has 68 MA's), (Start: 39 @43064 has 14 MA's),

Gene: DismalFunk_79 Start: 52473, Stop: 52742, Start Num: 26

Candidate Starts for DismalFunk_79:

(15, 52350), (Start: 26 @52473 has 18 MA's), (29, 52488), (41, 52530), (47, 52563), (48, 52599), (52, 52632),

Gene: DismalStressor_79 Start: 52473, Stop: 52742, Start Num: 26

Candidate Starts for DismalStressor_79:

(15, 52350), (Start: 26 @52473 has 18 MA's), (29, 52488), (41, 52530), (47, 52563), (48, 52599), (52, 52632),

Gene: Dole_80 Start: 51913, Stop: 52185, Start Num: 25

Candidate Starts for Dole_80:

(Start: 22 @51898 has 3 MA's), (Start: 25 @51913 has 123 MA's), (40, 51970), (41, 51973), (44, 51988), (47, 52006), (49, 52054), (52, 52075), (54, 52147), (55, 52156),

Gene: Doughnut_79 Start: 52109, Stop: 52378, Start Num: 26

Candidate Starts for Doughnut_79:

(15, 51986), (21, 52070), (Start: 26 @52109 has 18 MA's), (29, 52124), (40, 52163), (41, 52166), (47, 52199), (48, 52235), (52, 52268),

Gene: DrHayes_75 Start: 50512, Stop: 50781, Start Num: 25

Candidate Starts for DrHayes_75:

(Start: 22 @50497 has 3 MA's), (Start: 25 @50512 has 123 MA's), (40, 50563), (41, 50566), (43, 50578), (44, 50581), (47, 50599), (49, 50647), (52, 50668), (54, 50740), (55, 50749),

Gene: DropBear_68 Start: 42778, Stop: 42512, Start Num: 31

Candidate Starts for DropBear_68:

(20, 42853), (Start: 31 @42778 has 25 MA's), (Start: 35 @42769 has 1 MA's), (41, 42748), (52, 42646),

Gene: Durfee_75 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for Durfee_75:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Efra2_82 Start: 50946, Stop: 51221, Start Num: 25

Candidate Starts for Efra2_82:

(Start: 22 @50931 has 3 MA's), (Start: 25 @50946 has 123 MA's), (40, 51003), (41, 51006), (43, 51018), (44, 51021), (47, 51039), (49, 51087), (52, 51108), (54, 51180), (55, 51189),

Gene: Ekdilam_70 Start: 50603, Stop: 50875, Start Num: 25

Candidate Starts for Ekdilam_70:

(Start: 25 @50603 has 123 MA's), (41, 50660), (44, 50675), (47, 50693), (52, 50762),

Gene: Ellie_71 Start: 49839, Stop: 50111, Start Num: 25

Candidate Starts for Ellie_71:

(Start: 25 @49839 has 123 MA's), (41, 49896), (44, 49911), (47, 49929), (52, 49998),

Gene: Emerson_78 Start: 50552, Stop: 50824, Start Num: 25

Candidate Starts for Emerson_78:

(Start: 22 @50537 has 3 MA's), (Start: 25 @50552 has 123 MA's), (40, 50606), (41, 50609), (44, 50624), (47, 50642), (49, 50690), (52, 50711), (54, 50783), (55, 50792),

Gene: Enkosi_64 Start: 49769, Stop: 50041, Start Num: 25

Candidate Starts for Enkosi_64:

(Start: 22 @49754 has 3 MA's), (Start: 25 @49769 has 123 MA's), (Start: 27 @49778 has 1 MA's), (34, 49799), (37, 49808), (40, 49826), (41, 49829), (43, 49841), (44, 49844), (47, 49862), (48, 49898), (49, 49910), (55, 50012),

Gene: EpicPhail_76 Start: 43072, Stop: 42845, Start Num: 38

Candidate Starts for EpicPhail_76:

(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Estes_152 Start: 73391, Stop: 73086, Start Num: 26

Candidate Starts for Estes_152:

(Start: 26 @73391 has 18 MA's), (45, 73310),

Gene: EtoileNova_68 Start: 42821, Stop: 42561, Start Num: 31

Candidate Starts for EtoileNova_68:

(20, 42896), (Start: 31 @42821 has 25 MA's), (41, 42791), (59, 42575),

Gene: Farber_75 Start: 43058, Stop: 42831, Start Num: 38

Candidate Starts for Farber_75:

(Start: 38 @43058 has 68 MA's), (Start: 39 @43052 has 14 MA's),

Gene: Fefferhead_74 Start: 49897, Stop: 50172, Start Num: 25

Candidate Starts for Fefferhead_74:

(Start: 22 @49882 has 3 MA's), (Start: 25 @49897 has 123 MA's), (28, 49912), (Start: 32 @49921 has 6 MA's), (41, 49957), (44, 49972), (47, 49990), (52, 50059),

Gene: Fernando_75 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for Fernando_75:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Findley_79 Start: 52491, Stop: 52760, Start Num: 26

Candidate Starts for Findley_79:

(15, 52368), (Start: 26 @52491 has 18 MA's), (29, 52506), (41, 52548), (47, 52581), (48, 52617), (52, 52650),

Gene: Fred313_68 Start: 42472, Stop: 42206, Start Num: 31

Candidate Starts for Fred313_68:

(20, 42547), (Start: 31 @42472 has 25 MA's), (Start: 35 @42463 has 1 MA's), (41, 42442), (52, 42340),

Gene: Ganymede_75 Start: 50523, Stop: 50792, Start Num: 25

Candidate Starts for Ganymede_75:

(Start: 22 @50508 has 3 MA's), (Start: 25 @50523 has 123 MA's), (40, 50577), (41, 50580), (44, 50595), (47, 50613), (49, 50661), (52, 50682), (54, 50754), (55, 50763),

Gene: GardenSalsa_152 Start: 73558, Stop: 73253, Start Num: 26

Candidate Starts for GardenSalsa_152:

(Start: 26 @73558 has 18 MA's), (45, 73477),

Gene: Gemma_72 Start: 42881, Stop: 42657, Start Num: 38

Candidate Starts for Gemma_72:

(Start: 38 @42881 has 68 MA's), (Start: 39 @42875 has 14 MA's), (41, 42869),

Gene: GenevaB15_153 Start: 73022, Stop: 72717, Start Num: 26

Candidate Starts for GenevaB15_153:

(Start: 26 @73022 has 18 MA's), (45, 72941),

Gene: Geraldini_79 Start: 51113, Stop: 51382, Start Num: 25

Candidate Starts for Geraldini_79:

(Start: 22 @51098 has 3 MA's), (Start: 25 @51113 has 123 MA's), (40, 51167), (41, 51170), (44, 51185), (47, 51203), (49, 51251), (52, 51272), (54, 51344), (55, 51353),

Gene: GingkoMaracino_75 Start: 42954, Stop: 42727, Start Num: 38

Candidate Starts for GingkoMaracino_75:

(Start: 38 @42954 has 68 MA's), (Start: 39 @42948 has 14 MA's),

Gene: Giroux_73 Start: 42857, Stop: 42591, Start Num: 32

Candidate Starts for Giroux_73:

(Start: 32 @42857 has 6 MA's), (41, 42827), (52, 42725), (59, 42611),

Gene: Grif_73 Start: 43142, Stop: 42915, Start Num: 38

Candidate Starts for Grif_73:

(Start: 38 @43142 has 68 MA's), (Start: 39 @43136 has 14 MA's),

Gene: Groupthink_75 Start: 42885, Stop: 42661, Start Num: 38

Candidate Starts for Groupthink_75:

(Start: 38 @42885 has 68 MA's), (Start: 39 @42879 has 14 MA's), (41, 42873),

Gene: Grub_73 Start: 43060, Stop: 42833, Start Num: 38

Candidate Starts for Grub_73:

(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Grum1_74 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for Grum1_74:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: GtownJaz_75 Start: 43069, Stop: 42842, Start Num: 38

Candidate Starts for GtownJaz_75:

(Start: 38 @43069 has 68 MA's), (Start: 39 @43063 has 14 MA's),

Gene: Guanica15_81 Start: 50692, Stop: 50967, Start Num: 25

Candidate Starts for Guanica15_81:

(Start: 22 @50677 has 3 MA's), (Start: 25 @50692 has 123 MA's), (40, 50749), (41, 50752), (43, 50764), (44, 50767), (47, 50785), (49, 50833), (52, 50854), (54, 50926), (55, 50935),

Gene: Gwennie_70 Start: 43066, Stop: 42845, Start Num: 39
Candidate Starts for Gwennie_70:
(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Hammy_73 Start: 50380, Stop: 50652, Start Num: 25
Candidate Starts for Hammy_73:
(5, 50119), (8, 50182), (12, 50239), (14, 50263), (Start: 25 @50380 has 123 MA's), (44, 50452), (47, 50470), (52, 50539),

Gene: HashRod_76 Start: 43096, Stop: 42869, Start Num: 38
Candidate Starts for HashRod_76:
(Start: 38 @43096 has 68 MA's), (Start: 39 @43090 has 14 MA's),

Gene: HaveUMetTed_75 Start: 42870, Stop: 42646, Start Num: 38
Candidate Starts for HaveUMetTed_75:
(Start: 38 @42870 has 68 MA's), (Start: 39 @42864 has 14 MA's), (41, 42858),

Gene: Heathen_70 Start: 42567, Stop: 42301, Start Num: 31
Candidate Starts for Heathen_70:
(20, 42642), (Start: 31 @42567 has 25 MA's), (Start: 35 @42558 has 1 MA's), (41, 42537), (52, 42435),

Gene: HedwigODU_75 Start: 50161, Stop: 50433, Start Num: 25
Candidate Starts for HedwigODU_75:
(Start: 22 @50146 has 3 MA's), (Start: 25 @50161 has 123 MA's), (40, 50215), (41, 50218), (44, 50233), (47, 50251), (49, 50299), (52, 50320), (54, 50392), (55, 50401),

Gene: HelDan_70 Start: 42774, Stop: 42517, Start Num: 35
Candidate Starts for HelDan_70:
(20, 42858), (Start: 31 @42783 has 25 MA's), (Start: 35 @42774 has 1 MA's), (41, 42753), (52, 42651),

Gene: Heliosoles_72 Start: 42888, Stop: 42664, Start Num: 38
Candidate Starts for Heliosoles_72:
(Start: 38 @42888 has 68 MA's), (Start: 39 @42882 has 14 MA's), (41, 42876),

Gene: Hercules11_75 Start: 43077, Stop: 42850, Start Num: 38
Candidate Starts for Hercules11_75:
(Start: 38 @43077 has 68 MA's), (Start: 39 @43071 has 14 MA's),

Gene: Homura_74 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Homura_74:
(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Hookmount_70 Start: 42818, Stop: 42558, Start Num: 31
Candidate Starts for Hookmount_70:
(20, 42893), (Start: 31 @42818 has 25 MA's), (41, 42788), (59, 42572),

Gene: Hurricane_76 Start: 50335, Stop: 50607, Start Num: 25
Candidate Starts for Hurricane_76:
(Start: 25 @50335 has 123 MA's), (28, 50350), (43, 50404), (47, 50425), (52, 50494), (54, 50566), (55, 50575),

Gene: Hyperbowlee_74 Start: 50313, Stop: 50585, Start Num: 25
Candidate Starts for Hyperbowlee_74:
(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Idleandcovert_71 Start: 42858, Stop: 42592, Start Num: 32
Candidate Starts for Idleandcovert_71:
(Start: 32 @42858 has 6 MA's), (41, 42828), (52, 42726), (59, 42612),

Gene: Illumine_81 Start: 51912, Stop: 52184, Start Num: 25
Candidate Starts for Illumine_81:
(Start: 22 @51897 has 3 MA's), (Start: 25 @51912 has 123 MA's), (40, 51969), (41, 51972), (44, 51987), (47, 52005), (49, 52053), (52, 52074), (54, 52146), (55, 52155),

Gene: Inky_75 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Inky_75:
(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Isca_68 Start: 42335, Stop: 42066, Start Num: 31
Candidate Starts for Isca_68:
(13, 42500), (Start: 31 @42335 has 25 MA's), (41, 42305),

Gene: JAWS_74 Start: 50078, Stop: 50350, Start Num: 25
Candidate Starts for JAWS_74:
(Start: 22 @50063 has 3 MA's), (Start: 25 @50078 has 123 MA's), (40, 50132), (41, 50135), (44, 50150), (47, 50168), (49, 50216), (52, 50237), (54, 50309), (55, 50318),

Gene: JF2_68 Start: 41030, Stop: 40761, Start Num: 31
Candidate Starts for JF2_68:
(13, 41195), (Start: 31 @41030 has 25 MA's), (41, 41000),

Gene: JF4_68 Start: 41030, Stop: 40761, Start Num: 31
Candidate Starts for JF4_68:
(13, 41195), (Start: 31 @41030 has 25 MA's), (41, 41000),

Gene: JHC117_71 Start: 43060, Stop: 42839, Start Num: 39
Candidate Starts for JHC117_71:
(Start: 38 @43066 has 68 MA's), (Start: 39 @43060 has 14 MA's),

Gene: Jarvi_75 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Jarvi_75:
(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Jayhawk_78 Start: 50578, Stop: 50850, Start Num: 25
Candidate Starts for Jayhawk_78:
(Start: 22 @50563 has 3 MA's), (Start: 25 @50578 has 123 MA's), (40, 50632), (41, 50635), (44, 50650), (47, 50668), (49, 50716), (52, 50737), (54, 50809), (55, 50818),

Gene: Jeckyll_75 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Jeckyll_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: JenCasNa_76 Start: 43062, Stop: 42841, Start Num: 39
Candidate Starts for JenCasNa_76:
(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: JeppNRM_75 Start: 42886, Stop: 42662, Start Num: 38
Candidate Starts for JeppNRM_75:
(Start: 38 @42886 has 68 MA's), (Start: 39 @42880 has 14 MA's), (41, 42874),

Gene: Jobu08_71 Start: 42894, Stop: 42673, Start Num: 39
Candidate Starts for Jobu08_71:
(Start: 38 @42900 has 68 MA's), (Start: 39 @42894 has 14 MA's),

Gene: Joy99_76 Start: 50245, Stop: 50517, Start Num: 25
Candidate Starts for Joy99_76:
(Start: 22 @50230 has 3 MA's), (Start: 25 @50245 has 123 MA's), (40, 50299), (41, 50302), (44, 50317), (47, 50335), (49, 50383), (52, 50404), (54, 50476), (55, 50485),

Gene: KADY_72 Start: 43090, Stop: 42869, Start Num: 39
Candidate Starts for KADY_72:
(Start: 38 @43096 has 68 MA's), (Start: 39 @43090 has 14 MA's), (41, 43084),

Gene: Kachowdy_68 Start: 42819, Stop: 42553, Start Num: 31
Candidate Starts for Kachowdy_68:
(20, 42894), (Start: 31 @42819 has 25 MA's), (Start: 35 @42810 has 1 MA's), (41, 42789), (52, 42687),

Gene: Kalb97_75 Start: 42884, Stop: 42660, Start Num: 38
Candidate Starts for Kalb97_75:
(Start: 38 @42884 has 68 MA's), (Start: 39 @42878 has 14 MA's), (41, 42872),

Gene: Kalimba_58 Start: 37916, Stop: 38242, Start Num: 23
Candidate Starts for Kalimba_58:
(1, 37259), (2, 37499), (12, 37775), (17, 37838), (Start: 23 @37916 has 3 MA's), (44, 37994), (54, 38156), (60, 38204),

Gene: Kalnoky_75 Start: 42882, Stop: 42658, Start Num: 38
Candidate Starts for Kalnoky_75:
(Start: 38 @42882 has 68 MA's), (Start: 39 @42876 has 14 MA's), (41, 42870),

Gene: Keshu_78 Start: 50490, Stop: 50765, Start Num: 25
Candidate Starts for Keshu_78:
(Start: 25 @50490 has 123 MA's), (28, 50505), (43, 50562), (44, 50565), (47, 50583), (52, 50652), (54, 50724), (55, 50733),

Gene: LBerry_76 Start: 43072, Stop: 42845, Start Num: 38
Candidate Starts for LBerry_76:
(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Lambert1_70 Start: 42817, Stop: 42557, Start Num: 31
Candidate Starts for Lambert1_70:
(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: LarryKay_75 Start: 43097, Stop: 42870, Start Num: 38
Candidate Starts for LarryKay_75:
(Start: 38 @43097 has 68 MA's), (Start: 39 @43091 has 14 MA's),

Gene: LastHope_81 Start: 49802, Stop: 50086, Start Num: 25
Candidate Starts for LastHope_81:
(Start: 22 @49787 has 3 MA's), (Start: 25 @49802 has 123 MA's), (28, 49817), (40, 49859), (41, 49862), (43, 49874), (44, 49877), (47, 49895), (52, 49964), (54, 50036), (55, 50045), (58, 50075),

Gene: LaterM_75 Start: 50776, Stop: 51048, Start Num: 25
Candidate Starts for LaterM_75:
(Start: 22 @50761 has 3 MA's), (Start: 25 @50776 has 123 MA's), (40, 50833), (41, 50836), (44, 50851), (47, 50869), (52, 50938), (54, 51010), (55, 51019),

Gene: Lavahound_72 Start: 50802, Stop: 51077, Start Num: 25
Candidate Starts for Lavahound_72:
(Start: 22 @50787 has 3 MA's), (Start: 25 @50802 has 123 MA's), (28, 50817), (Start: 32 @50826 has 6 MA's), (41, 50862), (44, 50877), (47, 50895), (52, 50964),

Gene: LeMond_77 Start: 50310, Stop: 50582, Start Num: 25
Candidate Starts for LeMond_77:
(Start: 22 @50295 has 3 MA's), (Start: 25 @50310 has 123 MA's), (Start: 39 @50364 has 14 MA's), (41, 50370), (43, 50382), (47, 50403), (51, 50469), (54, 50544),

Gene: Lea83_76 Start: 50414, Stop: 50686, Start Num: 25
Candidate Starts for Lea83_76:
(Start: 25 @50414 has 123 MA's), (28, 50429), (40, 50471), (41, 50474), (44, 50489), (47, 50507), (52, 50576),

Gene: LilPharaoh_63 Start: 46884, Stop: 47156, Start Num: 25
Candidate Starts for LilPharaoh_63:
(Start: 22 @46869 has 3 MA's), (Start: 25 @46884 has 123 MA's), (Start: 27 @46893 has 1 MA's), (34, 46914), (37, 46923), (40, 46941), (41, 46944), (43, 46956), (44, 46959), (47, 46977), (48, 47013), (49, 47025), (55, 47127),

Gene: Lilit_73 Start: 43061, Stop: 42834, Start Num: 38
Candidate Starts for Lilit_73:
(Start: 38 @43061 has 68 MA's), (Start: 39 @43055 has 14 MA's),

Gene: LindNT_74 Start: 50578, Stop: 50853, Start Num: 25
Candidate Starts for LindNT_74:
(Start: 22 @50563 has 3 MA's), (Start: 25 @50578 has 123 MA's), (40, 50635), (41, 50638), (43, 50650), (44, 50653), (47, 50671), (49, 50719), (52, 50740), (54, 50812), (55, 50821),

Gene: Llorens_75 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Llorens_75:
(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Louie6_74 Start: 43098, Stop: 42871, Start Num: 38
Candidate Starts for Louie6_74:
(Start: 38 @43098 has 68 MA's), (Start: 39 @43092 has 14 MA's), (41, 43086),

Gene: Lova_72 Start: 43054, Stop: 42833, Start Num: 39
Candidate Starts for Lova_72:
(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: LugYA_78 Start: 43069, Stop: 42842, Start Num: 38
Candidate Starts for LugYA_78:
(Start: 38 @43069 has 68 MA's), (Start: 39 @43063 has 14 MA's),

Gene: Lunahalos_75 Start: 50116, Stop: 50388, Start Num: 25
Candidate Starts for Lunahalos_75:
(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: MA5_70 Start: 42239, Stop: 41970, Start Num: 31
Candidate Starts for MA5_70:
(13, 42404), (Start: 31 @42239 has 25 MA's), (41, 42209),

Gene: MK4_70 Start: 42314, Stop: 42045, Start Num: 31
Candidate Starts for MK4_70:
(13, 42479), (Start: 31 @42314 has 25 MA's), (41, 42284),

Gene: MacKat_72 Start: 46099, Stop: 46371, Start Num: 25
Candidate Starts for MacKat_72:
(Start: 22 @46084 has 3 MA's), (Start: 25 @46099 has 123 MA's), (40, 46156), (41, 46159), (44, 46174), (47, 46192), (49, 46240), (52, 46261), (54, 46333), (55, 46342),

Gene: MacnCheese_78 Start: 50941, Stop: 51216, Start Num: 25
Candidate Starts for MacnCheese_78:
(10, 50743), (16, 50824), (Start: 25 @50941 has 123 MA's), (34, 50971), (Start: 39 @50995 has 14 MA's), (43, 51013), (44, 51016), (47, 51034), (54, 51175),

Gene: MadMarie_73 Start: 43069, Stop: 42842, Start Num: 38
Candidate Starts for MadMarie_73:
(Start: 38 @43069 has 68 MA's), (Start: 39 @43063 has 14 MA's),

Gene: Mainiac_74 Start: 43061, Stop: 42834, Start Num: 38
Candidate Starts for Mainiac_74:
(Start: 38 @43061 has 68 MA's), (Start: 39 @43055 has 14 MA's),

Gene: Malinsilva_77 Start: 43060, Stop: 42833, Start Num: 38
Candidate Starts for Malinsilva_77:
(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Manu_74 Start: 42885, Stop: 42661, Start Num: 38
Candidate Starts for Manu_74:
(Start: 38 @42885 has 68 MA's), (Start: 39 @42879 has 14 MA's), (41, 42873),

Gene: MarQuardt_75 Start: 43064, Stop: 42843, Start Num: 39
Candidate Starts for MarQuardt_75:
(Start: 38 @43070 has 68 MA's), (Start: 39 @43064 has 14 MA's),

Gene: Marchesa_68 Start: 42769, Stop: 42503, Start Num: 31

Candidate Starts for Marchesa_68:

(20, 42844), (Start: 31 @42769 has 25 MA's), (Start: 35 @42760 has 1 MA's), (41, 42739), (52, 42637),

Gene: Marcoliusprime_78 Start: 52473, Stop: 52742, Start Num: 26

Candidate Starts for Marcoliusprime_78:

(15, 52350), (Start: 26 @52473 has 18 MA's), (29, 52488), (41, 52530), (47, 52563), (48, 52599), (52, 52632),

Gene: Margo_70 Start: 42843, Stop: 42583, Start Num: 31

Candidate Starts for Margo_70:

(20, 42918), (Start: 31 @42843 has 25 MA's), (41, 42813), (47, 42780), (59, 42597),

Gene: Marie_73 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for Marie_73:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Marius_75 Start: 42882, Stop: 42658, Start Num: 38

Candidate Starts for Marius_75:

(Start: 38 @42882 has 68 MA's), (Start: 39 @42876 has 14 MA's), (41, 42870),

Gene: MarkPhew_77 Start: 50195, Stop: 50467, Start Num: 25

Candidate Starts for MarkPhew_77:

(Start: 22 @50180 has 3 MA's), (Start: 25 @50195 has 123 MA's), (Start: 39 @50249 has 14 MA's), (41, 50255), (43, 50267), (44, 50270), (47, 50288), (51, 50354),

Gene: Marshawn_74 Start: 50588, Stop: 50860, Start Num: 25

Candidate Starts for Marshawn_74:

(Start: 22 @50573 has 3 MA's), (Start: 25 @50588 has 123 MA's), (Start: 35 @50621 has 1 MA's), (42, 50657), (55, 50831),

Gene: McMater_76 Start: 50287, Stop: 50565, Start Num: 25

Candidate Starts for McMater_76:

(Start: 22 @50272 has 3 MA's), (Start: 25 @50287 has 123 MA's), (Start: 27 @50296 has 1 MA's), (37, 50326), (40, 50344), (41, 50347), (44, 50362), (47, 50380), (54, 50521),

Gene: Mdavu_63 Start: 47160, Stop: 47432, Start Num: 25

Candidate Starts for Mdavu_63:

(Start: 22 @47145 has 3 MA's), (Start: 25 @47160 has 123 MA's), (Start: 27 @47169 has 1 MA's), (34, 47190), (37, 47199), (40, 47217), (41, 47220), (43, 47232), (44, 47235), (47, 47253), (48, 47289), (49, 47301), (55, 47403),

Gene: MeaningOfLife_77 Start: 51068, Stop: 51340, Start Num: 25

Candidate Starts for MeaningOfLife_77:

(Start: 22 @51053 has 3 MA's), (Start: 25 @51068 has 123 MA's), (40, 51125), (41, 51128), (44, 51143), (47, 51161), (52, 51230), (54, 51302), (55, 51311),

Gene: Megsy_77 Start: 50206, Stop: 50481, Start Num: 25

Candidate Starts for Megsy_77:

(Start: 22 @50191 has 3 MA's), (Start: 25 @50206 has 123 MA's), (40, 50263), (41, 50266), (44, 50281), (47, 50299), (49, 50347), (52, 50368), (54, 50440), (55, 50449),

Gene: Methuselah_68 Start: 43092, Stop: 42865, Start Num: 38

Candidate Starts for Methuselah_68:

(Start: 38 @43092 has 68 MA's), (Start: 39 @43086 has 14 MA's),

Gene: Microwolf_71 Start: 43084, Stop: 42857, Start Num: 38

Candidate Starts for Microwolf_71:

(Start: 38 @43084 has 68 MA's), (Start: 39 @43078 has 14 MA's),

Gene: Milly_79 Start: 52464, Stop: 52733, Start Num: 26

Candidate Starts for Milly_79:

(15, 52341), (Start: 26 @52464 has 18 MA's), (29, 52479), (41, 52521), (47, 52554), (48, 52590), (52, 52623),

Gene: Misomonster_76 Start: 43095, Stop: 42868, Start Num: 38

Candidate Starts for Misomonster_76:

(Start: 38 @43095 has 68 MA's), (Start: 39 @43089 has 14 MA's), (41, 43083),

Gene: MissDaisy_39 Start: 31179, Stop: 31466, Start Num: 22

Candidate Starts for MissDaisy_39:

(Start: 22 @31179 has 3 MA's), (30, 31215), (Start: 39 @31248 has 14 MA's), (41, 31254), (43, 31266), (47, 31287), (48, 31323), (52, 31356), (54, 31428),

Gene: MoneyMay_74 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for MoneyMay_74:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Montavir_70 Start: 43068, Stop: 42841, Start Num: 38

Candidate Starts for Montavir_70:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: MrMagoo_154 Start: 73559, Stop: 73254, Start Num: 26

Candidate Starts for MrMagoo_154:

(Start: 26 @73559 has 18 MA's), (45, 73478),

Gene: MuchMore_78 Start: 43060, Stop: 42833, Start Num: 38

Candidate Starts for MuchMore_78:

(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Mufasa_78 Start: 51931, Stop: 52200, Start Num: 26

Candidate Starts for Mufasa_78:

(15, 51808), (21, 51892), (Start: 26 @51931 has 18 MA's), (41, 51988), (47, 52021), (48, 52057), (52, 52090), (54, 52162),

Gene: Murucutumbu_76 Start: 51352, Stop: 51627, Start Num: 25

Candidate Starts for Murucutumbu_76:

(Start: 22 @51337 has 3 MA's), (Start: 25 @51352 has 123 MA's), (40, 51409), (41, 51412), (44, 51427), (47, 51445), (52, 51514), (54, 51586), (55, 51595),

Gene: Mynx_77 Start: 50847, Stop: 51119, Start Num: 25

Candidate Starts for Mynx_77:

(Start: 22 @50832 has 3 MA's), (Start: 25 @50847 has 123 MA's), (40, 50901), (41, 50904), (44, 50919), (47, 50937), (49, 50985), (52, 51006), (54, 51078), (55, 51087),

Gene: Nergal_67 Start: 46690, Stop: 46941, Start Num: 26

Candidate Starts for Nergal_67:

(21, 46651), (Start: 26 @46690 has 18 MA's), (41, 46747), (43, 46759), (56, 46933),

Gene: Nibb_77 Start: 50011, Stop: 50283, Start Num: 25

Candidate Starts for Nibb_77:

(Start: 22 @49996 has 3 MA's), (Start: 25 @50011 has 123 MA's), (Start: 39 @50065 has 14 MA's), (41, 50071), (43, 50083), (47, 50104), (51, 50170),

Gene: Nikao_65 Start: 49769, Stop: 50041, Start Num: 25

Candidate Starts for Nikao_65:

(Start: 22 @49754 has 3 MA's), (Start: 25 @49769 has 123 MA's), (Start: 27 @49778 has 1 MA's), (34, 49799), (37, 49808), (40, 49826), (41, 49829), (43, 49841), (44, 49844), (47, 49862), (48, 49898), (49, 49910), (55, 50012),

Gene: Niklas_77 Start: 50348, Stop: 50626, Start Num: 25

Candidate Starts for Niklas_77:

(Start: 22 @50333 has 3 MA's), (Start: 25 @50348 has 123 MA's), (Start: 27 @50357 has 1 MA's), (37, 50387), (40, 50405), (41, 50408), (44, 50423), (47, 50441), (54, 50582),

Gene: Noella_70 Start: 42818, Stop: 42558, Start Num: 31

Candidate Starts for Noella_70:

(20, 42893), (Start: 31 @42818 has 25 MA's), (41, 42788), (59, 42572),

Gene: Norbert_66 Start: 42816, Stop: 42568, Start Num: 31

Candidate Starts for Norbert_66:

(20, 42891), (Start: 31 @42816 has 25 MA's), (41, 42786),

Gene: November_72 Start: 50276, Stop: 50551, Start Num: 25

Candidate Starts for November_72:

(5, 50015), (8, 50078), (12, 50135), (14, 50159), (Start: 25 @50276 has 123 MA's), (44, 50351), (47, 50369), (52, 50438),

Gene: Nutello_62 Start: 47156, Stop: 47428, Start Num: 25

Candidate Starts for Nutello_62:

(Start: 22 @47141 has 3 MA's), (Start: 25 @47156 has 123 MA's), (Start: 27 @47165 has 1 MA's), (34, 47186), (37, 47195), (40, 47213), (41, 47216), (43, 47228), (44, 47231), (47, 47249), (48, 47285), (49, 47297), (55, 47399),

Gene: OlanP_73 Start: 43058, Stop: 42834, Start Num: 38

Candidate Starts for OlanP_73:

(Start: 38 @43058 has 68 MA's), (Start: 39 @43052 has 14 MA's), (41, 43046),

Gene: Ollie_75 Start: 42939, Stop: 42712, Start Num: 38

Candidate Starts for Ollie_75:

(Start: 38 @42939 has 68 MA's), (Start: 39 @42933 has 14 MA's),

Gene: Oscar_77 Start: 50230, Stop: 50502, Start Num: 25

Candidate Starts for Oscar_77:

(Start: 22 @50215 has 3 MA's), (Start: 25 @50230 has 123 MA's), (Start: 39 @50284 has 14 MA's), (41, 50290), (43, 50302), (47, 50323), (51, 50389), (54, 50464),

Gene: P28Green_75 Start: 43071, Stop: 42844, Start Num: 38

Candidate Starts for P28Green_75:

(Start: 38 @43071 has 68 MA's), (Start: 39 @43065 has 14 MA's),

Gene: PGHhamlin_77 Start: 43060, Stop: 42833, Start Num: 38
Candidate Starts for PGHhamlin_77:
(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Padfoot_75 Start: 50313, Stop: 50585, Start Num: 25
Candidate Starts for Padfoot_75:
(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Padpat_79 Start: 50552, Stop: 50824, Start Num: 25
Candidate Starts for Padpat_79:
(Start: 22 @50537 has 3 MA's), (Start: 25 @50552 has 123 MA's), (40, 50606), (41, 50609), (44, 50624), (47, 50642), (49, 50690), (52, 50711), (54, 50783), (55, 50792),

Gene: Panamaxus_68 Start: 42817, Stop: 42557, Start Num: 31
Candidate Starts for Panamaxus_68:
(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Patt_39 Start: 31155, Stop: 31442, Start Num: 22
Candidate Starts for Patt_39:
(Start: 22 @31155 has 3 MA's), (30, 31191), (Start: 39 @31224 has 14 MA's), (41, 31230), (43, 31242), (47, 31263), (48, 31299), (52, 31332), (54, 31404),

Gene: Pawn_73 Start: 42889, Stop: 42665, Start Num: 38
Candidate Starts for Pawn_73:
(Start: 38 @42889 has 68 MA's), (Start: 39 @42883 has 14 MA's), (41, 42877),

Gene: Peanam_77 Start: 50306, Stop: 50584, Start Num: 25
Candidate Starts for Peanam_77:
(Start: 22 @50291 has 3 MA's), (Start: 25 @50306 has 123 MA's), (Start: 27 @50315 has 1 MA's), (37, 50345), (40, 50363), (41, 50366), (44, 50381), (47, 50399), (54, 50540),

Gene: Peel_75 Start: 50118, Stop: 50390, Start Num: 25
Candidate Starts for Peel_75:
(Start: 22 @50103 has 3 MA's), (Start: 25 @50118 has 123 MA's), (40, 50172), (41, 50175), (44, 50190), (47, 50208), (49, 50256), (52, 50277), (54, 50349), (55, 50358),

Gene: Pembroke_75 Start: 43069, Stop: 42842, Start Num: 38
Candidate Starts for Pembroke_75:
(Start: 38 @43069 has 68 MA's), (Start: 39 @43063 has 14 MA's),

Gene: Penny1_75 Start: 43072, Stop: 42845, Start Num: 38
Candidate Starts for Penny1_75:
(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Phantastic_72 Start: 42500, Stop: 42231, Start Num: 31
Candidate Starts for Phantastic_72:
(13, 42665), (Start: 31 @42500 has 25 MA's), (41, 42470),

Gene: PhishRPhriends_71 Start: 42066, Stop: 41842, Start Num: 38
Candidate Starts for PhishRPhriends_71:
(Start: 38 @42066 has 68 MA's), (Start: 39 @42060 has 14 MA's), (41, 42054),

Gene: Phoebe_76 Start: 43061, Stop: 42834, Start Num: 38
Candidate Starts for Phoebe_76:
(Start: 38 @43061 has 68 MA's), (Start: 39 @43055 has 14 MA's),

Gene: Phoxy_75 Start: 43087, Stop: 42866, Start Num: 39
Candidate Starts for Phoxy_75:
(Start: 38 @43093 has 68 MA's), (Start: 39 @43087 has 14 MA's),

Gene: Piatt_74 Start: 50313, Stop: 50585, Start Num: 25
Candidate Starts for Piatt_74:
(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Pisa1_73 Start: 50611, Stop: 50883, Start Num: 25
Candidate Starts for Pisa1_73:
(Start: 22 @50596 has 3 MA's), (Start: 25 @50611 has 123 MA's), (40, 50668), (41, 50671), (43, 50683), (44, 50686), (47, 50704), (49, 50752), (52, 50773), (54, 50845), (55, 50854),

Gene: Pisa4_67 Start: 45980, Stop: 46252, Start Num: 25
Candidate Starts for Pisa4_67:
(Start: 22 @45965 has 3 MA's), (Start: 25 @45980 has 123 MA's), (40, 46037), (41, 46040), (43, 46052), (44, 46055), (47, 46073), (49, 46121), (52, 46142), (54, 46214), (55, 46223),

Gene: Pistachio_70 Start: 42405, Stop: 42139, Start Num: 32
Candidate Starts for Pistachio_70:
(Start: 32 @42405 has 6 MA's), (41, 42375), (52, 42273), (59, 42159),

Gene: Pocahontas_69 Start: 42814, Stop: 42554, Start Num: 31
Candidate Starts for Pocahontas_69:
(20, 42889), (Start: 31 @42814 has 25 MA's), (41, 42784), (59, 42568),

Gene: Pokerus_76 Start: 50561, Stop: 50833, Start Num: 25
Candidate Starts for Pokerus_76:
(Start: 22 @50546 has 3 MA's), (Start: 25 @50561 has 123 MA's), (40, 50615), (41, 50618), (44, 50633), (47, 50651), (49, 50699), (52, 50720), (54, 50792), (55, 50801),

Gene: Popcicle_70 Start: 42814, Stop: 42554, Start Num: 31
Candidate Starts for Popcicle_70:
(20, 42889), (Start: 31 @42814 has 25 MA's), (41, 42784), (59, 42568),

Gene: PotatoSplit_76 Start: 43072, Stop: 42845, Start Num: 38
Candidate Starts for PotatoSplit_76:
(Start: 38 @43072 has 68 MA's), (Start: 39 @43066 has 14 MA's),

Gene: Prithvi_78 Start: 50578, Stop: 50853, Start Num: 25
Candidate Starts for Prithvi_78:
(Start: 22 @50563 has 3 MA's), (Start: 25 @50578 has 123 MA's), (40, 50635), (41, 50638), (43, 50650), (44, 50653), (47, 50671), (49, 50719), (52, 50740), (54, 50812), (55, 50821),

Gene: Puppy_71 Start: 42477, Stop: 42211, Start Num: 32
Candidate Starts for Puppy_71:
(Start: 32 @42477 has 6 MA's), (41, 42447), (52, 42345), (59, 42231),

Gene: PurpleHaze_74 Start: 42878, Stop: 42660, Start Num: 39
Candidate Starts for PurpleHaze_74:
(Start: 38 @42884 has 68 MA's), (Start: 39 @42878 has 14 MA's), (41, 42872),

Gene: QuincyRose_73 Start: 50523, Stop: 50792, Start Num: 25
Candidate Starts for QuincyRose_73:
(Start: 22 @50508 has 3 MA's), (Start: 25 @50523 has 123 MA's), (40, 50577), (41, 50580), (44, 50595), (47, 50613), (49, 50661), (52, 50682), (54, 50754), (55, 50763),

Gene: QuinnKiro_69 Start: 42817, Stop: 42557, Start Num: 31
Candidate Starts for QuinnKiro_69:
(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Ramen_76 Start: 49882, Stop: 50154, Start Num: 25
Candidate Starts for Ramen_76:
(Start: 22 @49867 has 3 MA's), (Start: 25 @49882 has 123 MA's), (41, 49939), (44, 49954), (47, 49972), (49, 50020), (52, 50041), (54, 50113), (55, 50122),

Gene: Rapunzel97_78 Start: 50533, Stop: 50805, Start Num: 25
Candidate Starts for Rapunzel97_78:
(Start: 22 @50518 has 3 MA's), (Start: 25 @50533 has 123 MA's), (40, 50587), (41, 50590), (44, 50605), (47, 50623), (49, 50671), (52, 50692), (54, 50764), (55, 50773),

Gene: Reptar3000_40 Start: 31146, Stop: 31433, Start Num: 22
Candidate Starts for Reptar3000_40:
(Start: 22 @31146 has 3 MA's), (30, 31182), (Start: 39 @31215 has 14 MA's), (41, 31221), (43, 31233), (47, 31254), (48, 31290), (52, 31323), (54, 31395),

Gene: ResDef_68 Start: 42817, Stop: 42557, Start Num: 31
Candidate Starts for ResDef_68:
(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Rey_153 Start: 72809, Stop: 72504, Start Num: 26
Candidate Starts for Rey_153:
(Start: 26 @72809 has 18 MA's), (45, 72728), (47, 72713),

Gene: Richo_76 Start: 50287, Stop: 50565, Start Num: 25
Candidate Starts for Richo_76:
(Start: 22 @50272 has 3 MA's), (Start: 25 @50287 has 123 MA's), (Start: 27 @50296 has 1 MA's), (37, 50326), (40, 50344), (41, 50347), (44, 50362), (47, 50380), (54, 50521),

Gene: Rockstar_69 Start: 42323, Stop: 42054, Start Num: 31
Candidate Starts for Rockstar_69:
(13, 42488), (Start: 31 @42323 has 25 MA's), (41, 42293),

Gene: Roimos_68 Start: 42699, Stop: 42433, Start Num: 31
Candidate Starts for Roimos_68:
(20, 42774), (Start: 31 @42699 has 25 MA's), (41, 42669), (52, 42567),

Gene: Rosmarinus_75 Start: 50104, Stop: 50376, Start Num: 25
Candidate Starts for Rosmarinus_75:

(Start: 22 @50089 has 3 MA's), (Start: 25 @50104 has 123 MA's), (40, 50158), (41, 50161), (44, 50176), (47, 50194), (49, 50242), (52, 50263), (54, 50335), (55, 50344),

Gene: Rummer_74 Start: 43096, Stop: 42869, Start Num: 38

Candidate Starts for Rummer_74:

(Start: 38 @43096 has 68 MA's), (Start: 39 @43090 has 14 MA's),

Gene: Sabia_73 Start: 43076, Stop: 42849, Start Num: 38

Candidate Starts for Sabia_73:

(Start: 38 @43076 has 68 MA's), (Start: 39 @43070 has 14 MA's),

Gene: Sabinator_73 Start: 43061, Stop: 42840, Start Num: 39

Candidate Starts for Sabinator_73:

(Start: 38 @43067 has 68 MA's), (Start: 39 @43061 has 14 MA's),

Gene: Sabourin_58 Start: 37917, Stop: 38243, Start Num: 23

Candidate Starts for Sabourin_58:

(1, 37260), (12, 37776), (17, 37839), (Start: 23 @37917 has 3 MA's), (44, 37995), (54, 38157), (60, 38205),

Gene: SamuelLPlaqson_75 Start: 50512, Stop: 50781, Start Num: 25

Candidate Starts for SamuelLPlaqson_75:

(Start: 22 @50497 has 3 MA's), (Start: 25 @50512 has 123 MA's), (40, 50563), (41, 50566), (43, 50578), (44, 50581), (47, 50599), (49, 50647), (52, 50668), (54, 50740), (55, 50749),

Gene: SaturnRing_70 Start: 42858, Stop: 42592, Start Num: 32

Candidate Starts for SaturnRing_70:

(Start: 32 @42858 has 6 MA's), (41, 42828), (52, 42726), (59, 42612),

Gene: Scout_69 Start: 42030, Stop: 41764, Start Num: 31

Candidate Starts for Scout_69:

(20, 42105), (Start: 31 @42030 has 25 MA's), (41, 42000), (52, 41898),

Gene: SgtBeansprout_63 Start: 47156, Stop: 47428, Start Num: 25

Candidate Starts for SgtBeansprout_63:

(Start: 22 @47141 has 3 MA's), (Start: 25 @47156 has 123 MA's), (Start: 27 @47165 has 1 MA's), (34, 47186), (37, 47195), (40, 47213), (41, 47216), (43, 47228), (44, 47231), (47, 47249), (48, 47285), (49, 47297), (55, 47399),

Gene: Shaobing_76 Start: 50323, Stop: 50601, Start Num: 25

Candidate Starts for Shaobing_76:

(Start: 22 @50308 has 3 MA's), (Start: 25 @50323 has 123 MA's), (Start: 27 @50332 has 1 MA's), (40, 50380), (41, 50383), (44, 50398), (47, 50416), (54, 50557),

Gene: ShedlockHolmes_78 Start: 50418, Stop: 50690, Start Num: 25

Candidate Starts for ShedlockHolmes_78:

(Start: 25 @50418 has 123 MA's), (28, 50433), (40, 50475), (41, 50478), (44, 50493), (47, 50511), (52, 50580),

Gene: ShiaSurprise_76 Start: 50313, Stop: 50585, Start Num: 25

Candidate Starts for ShiaSurprise_76:

(Start: 22 @50298 has 3 MA's), (Start: 25 @50313 has 123 MA's), (40, 50367), (41, 50370), (44, 50385), (47, 50403), (49, 50451), (52, 50472), (54, 50544), (55, 50553),

Gene: Slimphazie_77 Start: 50533, Stop: 50805, Start Num: 25
Candidate Starts for Slimphazie_77:
(Start: 22 @50518 has 3 MA's), (Start: 25 @50533 has 123 MA's), (40, 50587), (41, 50590), (44, 50605), (47, 50623), (49, 50671), (52, 50692), (54, 50764), (55, 50773),

Gene: Snickers_75 Start: 43041, Stop: 42814, Start Num: 38
Candidate Starts for Snickers_75:
(Start: 38 @43041 has 68 MA's), (Start: 39 @43035 has 14 MA's),

Gene: SoYo_72 Start: 42980, Stop: 42753, Start Num: 38
Candidate Starts for SoYo_72:
(Start: 38 @42980 has 68 MA's), (Start: 39 @42974 has 14 MA's),

Gene: SoilDragon_74 Start: 42516, Stop: 42289, Start Num: 38
Candidate Starts for SoilDragon_74:
(Start: 38 @42516 has 68 MA's), (Start: 39 @42510 has 14 MA's),

Gene: Soshari_77 Start: 43092, Stop: 42865, Start Num: 38
Candidate Starts for Soshari_77:
(Start: 38 @43092 has 68 MA's), (Start: 39 @43086 has 14 MA's),

Gene: Spike509_75 Start: 43087, Stop: 42866, Start Num: 39
Candidate Starts for Spike509_75:
(Start: 38 @43093 has 68 MA's), (Start: 39 @43087 has 14 MA's),

Gene: Spock_75 Start: 50117, Stop: 50389, Start Num: 25
Candidate Starts for Spock_75:
(Start: 22 @50102 has 3 MA's), (Start: 25 @50117 has 123 MA's), (40, 50171), (41, 50174), (44, 50189), (47, 50207), (49, 50255), (52, 50276), (54, 50348), (55, 50357),

Gene: Stagni_72 Start: 43065, Stop: 42844, Start Num: 39
Candidate Starts for Stagni_72:
(Start: 38 @43071 has 68 MA's), (Start: 39 @43065 has 14 MA's),

Gene: StepMih_74 Start: 43062, Stop: 42835, Start Num: 38
Candidate Starts for StepMih_74:
(Start: 38 @43062 has 68 MA's), (Start: 39 @43056 has 14 MA's),

Gene: Stinson_76 Start: 50711, Stop: 50983, Start Num: 25
Candidate Starts for Stinson_76:
(Start: 22 @50696 has 3 MA's), (Start: 25 @50711 has 123 MA's), (40, 50768), (41, 50771), (44, 50786), (47, 50804), (49, 50852), (52, 50873), (54, 50945), (55, 50954),

Gene: Strobilo_80 Start: 52470, Stop: 52739, Start Num: 26
Candidate Starts for Strobilo_80:
(15, 52347), (Start: 26 @52470 has 18 MA's), (29, 52485), (41, 52527), (47, 52560), (48, 52596), (52, 52629),

Gene: Sulley_74 Start: 50144, Stop: 50416, Start Num: 25
Candidate Starts for Sulley_74:
(Start: 22 @50129 has 3 MA's), (Start: 25 @50144 has 123 MA's), (40, 50201), (41, 50204), (44, 50219), (47, 50237), (49, 50285), (52, 50306), (54, 50378), (55, 50387),

Gene: TM4_77 Start: 46904, Stop: 47173, Start Num: 26

Candidate Starts for TM4_77:

(Start: 26 @46904 has 18 MA's), (41, 46961), (47, 46994), (48, 47030), (52, 47063),

Gene: TNguyen7_71 Start: 42818, Stop: 42552, Start Num: 32

Candidate Starts for TNguyen7_71:

(Start: 32 @42818 has 6 MA's), (41, 42788), (52, 42686), (59, 42572),

Gene: Tachez_75 Start: 49961, Stop: 50233, Start Num: 25

Candidate Starts for Tachez_75:

(Start: 22 @49946 has 3 MA's), (Start: 25 @49961 has 123 MA's), (40, 50015), (41, 50018), (44, 50033), (47, 50051), (49, 50099), (52, 50120), (54, 50192), (55, 50201),

Gene: TaiwanKao_77 Start: 50636, Stop: 50908, Start Num: 25

Candidate Starts for TaiwanKao_77:

(Start: 22 @50621 has 3 MA's), (Start: 25 @50636 has 123 MA's), (40, 50693), (41, 50696), (44, 50711), (47, 50729), (49, 50777), (52, 50798), (54, 50870), (55, 50879),

Gene: Taurus_76 Start: 43062, Stop: 42841, Start Num: 39

Candidate Starts for Taurus_76:

(Start: 38 @43068 has 68 MA's), (Start: 39 @43062 has 14 MA's),

Gene: Teejan_64 Start: 49769, Stop: 50041, Start Num: 25

Candidate Starts for Teejan_64:

(Start: 22 @49754 has 3 MA's), (Start: 25 @49769 has 123 MA's), (Start: 27 @49778 has 1 MA's), (34, 49799), (37, 49808), (40, 49826), (41, 49829), (43, 49841), (44, 49844), (47, 49862), (48, 49898), (49, 49910), (55, 50012),

Gene: Texage_68 Start: 42818, Stop: 42558, Start Num: 31

Candidate Starts for Texage_68:

(20, 42893), (Start: 31 @42818 has 25 MA's), (41, 42788), (59, 42572),

Gene: ThursdayNight_66 Start: 42858, Stop: 43094, Start Num: 41

Candidate Starts for ThursdayNight_66:

(Start: 23 @42795 has 3 MA's), (41, 42858), (55, 43041), (57, 43062),

Gene: Tiffany_74 Start: 42947, Stop: 42726, Start Num: 39

Candidate Starts for Tiffany_74:

(Start: 38 @42953 has 68 MA's), (Start: 39 @42947 has 14 MA's),

Gene: TingHuaYa_78 Start: 49873, Stop: 50157, Start Num: 25

Candidate Starts for TingHuaYa_78:

(Start: 22 @49858 has 3 MA's), (Start: 25 @49873 has 123 MA's), (28, 49888), (40, 49930), (41, 49933), (43, 49945), (44, 49948), (47, 49966), (52, 50035), (54, 50107), (55, 50116), (58, 50146),

Gene: TiniBug_75 Start: 50512, Stop: 50781, Start Num: 25

Candidate Starts for TiniBug_75:

(Start: 22 @50497 has 3 MA's), (Start: 25 @50512 has 123 MA's), (36, 50542), (40, 50563), (41, 50566), (44, 50581), (47, 50599), (52, 50668), (54, 50740), (55, 50749),

Gene: TinyPebbles_74 Start: 43098, Stop: 42871, Start Num: 38

Candidate Starts for TinyPebbles_74:

(Start: 38 @43098 has 68 MA's), (Start: 39 @43092 has 14 MA's), (41, 43086),

Gene: Tiri_75 Start: 50017, Stop: 50286, Start Num: 25

Candidate Starts for Tiri_75:

(Start: 22 @50002 has 3 MA's), (Start: 25 @50017 has 123 MA's), (40, 50071), (41, 50074), (44, 50089), (47, 50107), (49, 50155), (52, 50176), (54, 50248), (55, 50257),

Gene: Todacoro_70 Start: 42817, Stop: 42557, Start Num: 31

Candidate Starts for Todacoro_70:

(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Topper_75 Start: 50116, Stop: 50388, Start Num: 25

Candidate Starts for Topper_75:

(Start: 22 @50101 has 3 MA's), (Start: 25 @50116 has 123 MA's), (40, 50170), (41, 50173), (44, 50188), (47, 50206), (49, 50254), (52, 50275), (54, 50347), (55, 50356),

Gene: Torres_65 Start: 49770, Stop: 50042, Start Num: 25

Candidate Starts for Torres_65:

(Start: 22 @49755 has 3 MA's), (Start: 25 @49770 has 123 MA's), (Start: 27 @49779 has 1 MA's), (34, 49800), (37, 49809), (40, 49827), (41, 49830), (43, 49842), (44, 49845), (47, 49863), (48, 49899), (49, 49911), (55, 50013),

Gene: TreyKay_78 Start: 50578, Stop: 50853, Start Num: 25

Candidate Starts for TreyKay_78:

(Start: 22 @50563 has 3 MA's), (Start: 25 @50578 has 123 MA's), (40, 50635), (41, 50638), (43, 50650), (44, 50653), (47, 50671), (49, 50719), (52, 50740), (54, 50812), (55, 50821),

Gene: TribbleTrouble_76 Start: 50522, Stop: 50797, Start Num: 25

Candidate Starts for TribbleTrouble_76:

(Start: 25 @50522 has 123 MA's), (28, 50537), (41, 50582), (44, 50597), (47, 50615), (52, 50684), (54, 50756), (55, 50765),

Gene: Trice_62 Start: 47157, Stop: 47429, Start Num: 25

Candidate Starts for Trice_62:

(Start: 22 @47142 has 3 MA's), (Start: 25 @47157 has 123 MA's), (Start: 27 @47166 has 1 MA's), (34, 47187), (37, 47196), (40, 47214), (41, 47217), (43, 47229), (44, 47232), (47, 47250), (48, 47286), (49, 47298), (55, 47400),

Gene: TruffulaTree_77 Start: 50529, Stop: 50801, Start Num: 25

Candidate Starts for TruffulaTree_77:

(Start: 22 @50514 has 3 MA's), (Start: 25 @50529 has 123 MA's), (40, 50583), (41, 50586), (44, 50601), (47, 50619), (52, 50688), (54, 50760), (55, 50769),

Gene: Twitch_75 Start: 50118, Stop: 50390, Start Num: 25

Candidate Starts for Twitch_75:

(Start: 22 @50103 has 3 MA's), (Start: 25 @50118 has 123 MA's), (40, 50172), (41, 50175), (44, 50190), (47, 50208), (49, 50256), (52, 50277), (54, 50349), (55, 50358),

Gene: Urkel_75 Start: 50512, Stop: 50781, Start Num: 25

Candidate Starts for Urkel_75:

(Start: 22 @50497 has 3 MA's), (Start: 25 @50512 has 123 MA's), (40, 50563), (41, 50566), (43, 50578), (44, 50581), (47, 50599), (49, 50647), (52, 50668), (54, 50740), (55, 50749),

Gene: Validus_80 Start: 50873, Stop: 51148, Start Num: 25

Candidate Starts for Validus_80:

(Start: 25 @50873 has 123 MA's), (40, 50927), (41, 50930), (43, 50942), (44, 50945), (47, 50963), (51, 51029), (54, 51104),

Gene: Veliki_76 Start: 50069, Stop: 50341, Start Num: 25

Candidate Starts for Veliki_76:

(Start: 22 @50054 has 3 MA's), (Start: 25 @50069 has 123 MA's), (40, 50123), (41, 50126), (44, 50141), (47, 50159), (49, 50207), (52, 50228), (54, 50300), (55, 50309),

Gene: Veracruz_67 Start: 42817, Stop: 42557, Start Num: 31

Candidate Starts for Veracruz_67:

(20, 42892), (Start: 31 @42817 has 25 MA's), (41, 42787), (59, 42571),

Gene: Vix_71 Start: 43151, Stop: 42924, Start Num: 38

Candidate Starts for Vix_71:

(Start: 38 @43151 has 68 MA's), (Start: 39 @43145 has 14 MA's),

Gene: Watson_74 Start: 43060, Stop: 42833, Start Num: 38

Candidate Starts for Watson_74:

(Start: 38 @43060 has 68 MA's), (Start: 39 @43054 has 14 MA's),

Gene: Wooldri_77 Start: 42980, Stop: 42753, Start Num: 38

Candidate Starts for Wooldri_77:

(Start: 38 @42980 has 68 MA's), (Start: 39 @42974 has 14 MA's),

Gene: Ximenita_81 Start: 50796, Stop: 51068, Start Num: 25

Candidate Starts for Ximenita_81:

(Start: 22 @50781 has 3 MA's), (Start: 25 @50796 has 123 MA's), (34, 50826), (41, 50856), (43, 50868), (47, 50889), (52, 50958),

Gene: YoureAdopted_75 Start: 50480, Stop: 50749, Start Num: 25

Candidate Starts for YoureAdopted_75:

(Start: 25 @50480 has 123 MA's), (40, 50534), (41, 50537), (44, 50552), (47, 50570), (49, 50618), (52, 50639), (54, 50711), (55, 50720),

Gene: Yuna_78 Start: 51558, Stop: 51830, Start Num: 25

Candidate Starts for Yuna_78:

(Start: 22 @51543 has 3 MA's), (Start: 25 @51558 has 123 MA's), (28, 51573), (47, 51651),

Gene: Yunkel11_81 Start: 50697, Stop: 50972, Start Num: 25

Candidate Starts for Yunkel11_81:

(Start: 22 @50682 has 3 MA's), (Start: 25 @50697 has 123 MA's), (40, 50754), (41, 50757), (43, 50769), (44, 50772), (47, 50790), (49, 50838), (52, 50859), (54, 50931), (55, 50940),

Gene: Zabiza_71 Start: 46466, Stop: 46738, Start Num: 25

Candidate Starts for Zabiza_71:

(Start: 22 @46451 has 3 MA's), (Start: 25 @46466 has 123 MA's), (40, 46520), (41, 46523), (44, 46538), (47, 46556), (49, 46604), (52, 46625), (54, 46697), (55, 46706),

Gene: Zarafa_68 Start: 42792, Stop: 42526, Start Num: 31

Candidate Starts for Zarafa_68:

(20, 42867), (Start: 31 @42792 has 25 MA's), (41, 42762), (52, 42660),

Gene: Zavala_78 Start: 50607, Stop: 50879, Start Num: 25

Candidate Starts for Zavala_78:

(Start: 22 @50592 has 3 MA's), (Start: 25 @50607 has 123 MA's), (40, 50661), (41, 50664), (44, 50679), (47, 50697), (49, 50745), (52, 50766), (54, 50838), (55, 50847),

Gene: Zetzy_72 Start: 42631, Stop: 42404, Start Num: 38

Candidate Starts for Zetzy_72:

(Start: 38 @42631 has 68 MA's), (Start: 39 @42625 has 14 MA's),

Gene: ZoeJ_78 Start: 51905, Stop: 52174, Start Num: 26

Candidate Starts for ZoeJ_78:

(15, 51782), (21, 51866), (Start: 26 @51905 has 18 MA's), (41, 51962), (47, 51995), (48, 52031), (52, 52064),