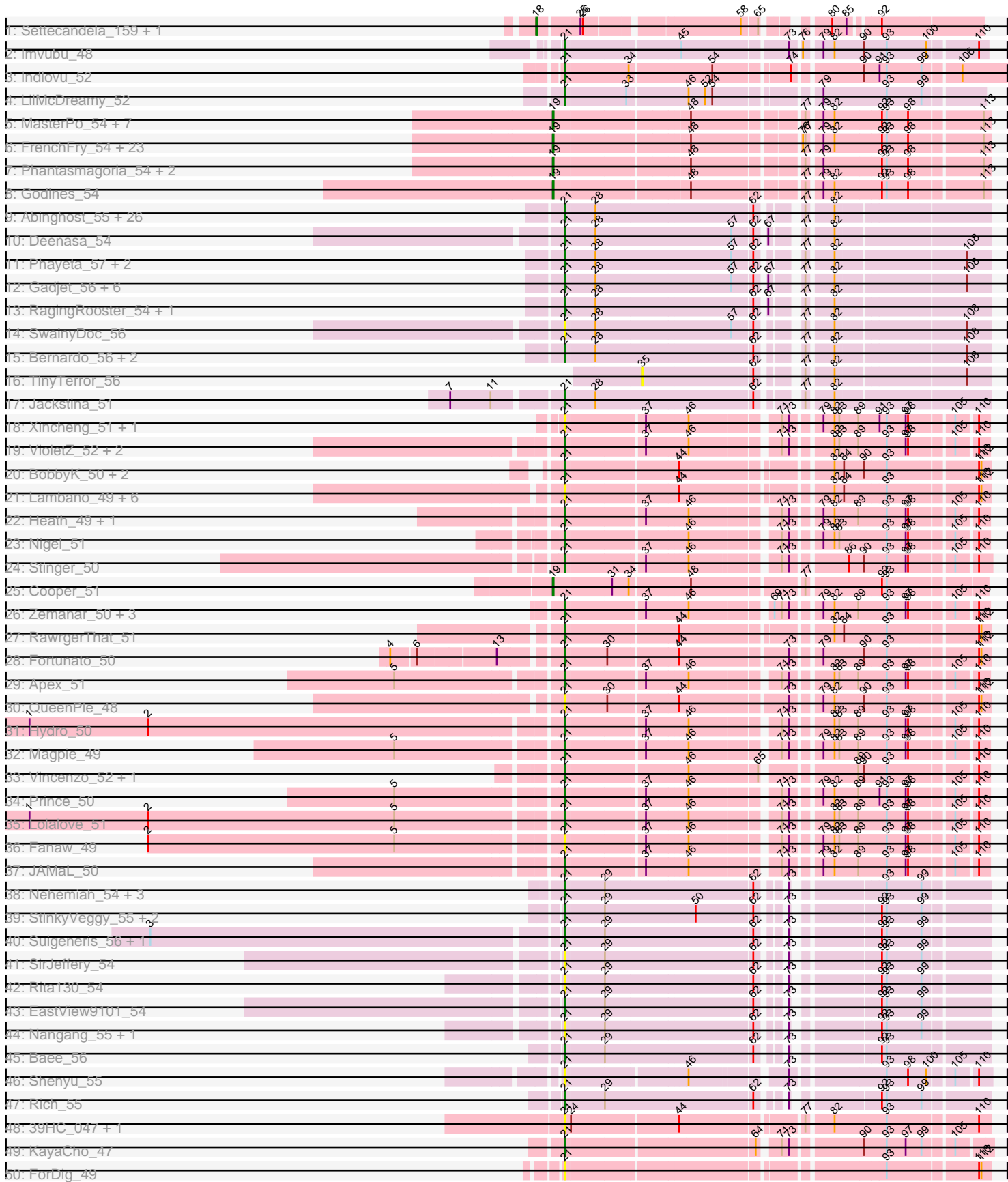
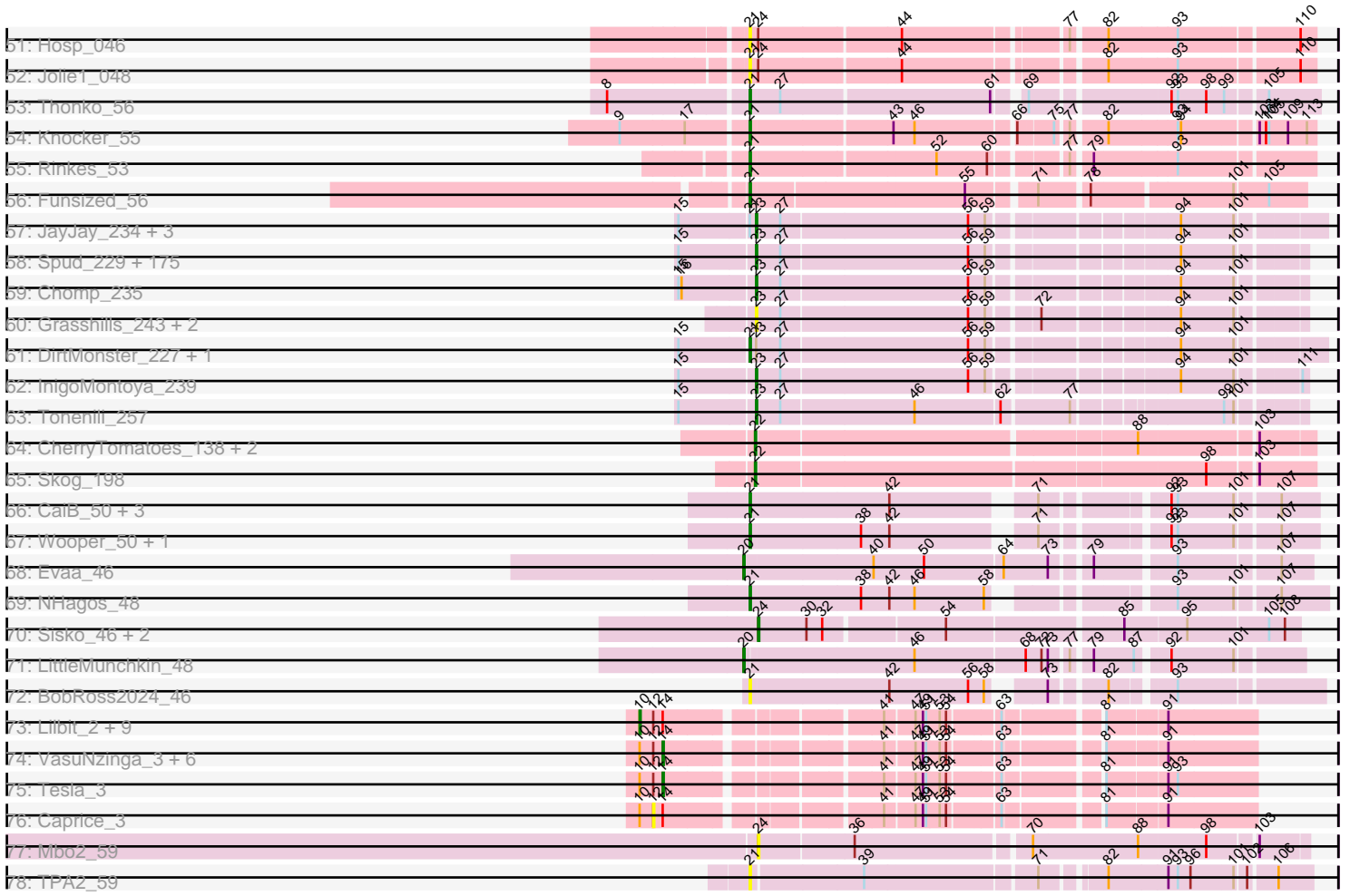


Pham 202590



Pham 202590



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 202590 Report

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

Pham number 202590 has 376 members, 68 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_159, Phrappuccino_159
- Track 2 : Imvubu_48
- Track 3 : Indlovu_52
- Track 4 : LilMcDreamy_52
- Track 5 : MasterPo_54, Blocker23_54, Coffee_54, Laurie_53, TA17A_54, Vic9_54, Boyle_54, LizLemon_54
- Track 6 : FrenchFry_54, Bananafish_54, Calamitous_54, Tinciduntolum_55, Holeinone_54, Lephleur_54, ItsyBitsy1_54, Kaleb_54, Lars_54, Brownie5_54, Rhinoforte_54, Tres_54, Kolhan_54, Sabella_53, Rosebush_53, Opia_54, Allegro_54, Glass_54, Hedgerow_54, LilSmirk_54, Eaglehorse_54, Kheth_54, Arbiter_53, Ares_54
- Track 7 : Phantasmagoria_54, Faze9_53, West99_54
- Track 8 : Godines_54
- Track 9 : Abinghost_55, Devonte_54, Compostia_55, HarveySr_54, GlenHope_56, Chalmers_54, Kronus_55, Nozo_55, Gervas_56, Athena_57, Yahalom_54, Philly_54, Ben11_55, Corofin_55, Morty007_55, Glubnar_55, Mortcellus_55, RomaT_55, OrangeOswald_55, Akoma_55, Marley1013_56, LestyG_54, SlippinJimmy_57, Rita1961_56, Obutu_56, Kamiyu_55, Phlyer_55
- Track 10 : Deenasa_54
- Track 11 : Phayeta_57, Chentzyk_56, MmasiCarm_56
- Track 12 : Gadget_56, SynergyX_55, Baloo_55, Audrey_55, ChaChing_55, Heathcliff_55, Yinz_55
- Track 13 : RagingRooster_54, Casbah_55
- Track 14 : SwainyDoc_56
- Track 15 : Bernardo_56, Halfpint_54, Chandler_55
- Track 16 : TinyTerror_56
- Track 17 : Jackstina_51
- Track 18 : Xincheng_51, JaguarMi_52
- Track 19 : VioletZ_52, Austelle_51, Mudslide_50
- Track 20 : BobbyK_50, Frederick_50, Mithril_49
- Track 21 : Lambano_49, GinPorsche_49, Epah_49, Antihero_49, Nanao_49, Hally898_49, Poster_49
- Track 22 : Heath_49, ChrisnMich_50
- Track 23 : Nigel_51
- Track 24 : Stinger_50
- Track 25 : Cooper_51
- Track 26 : Zemanar_50, Waleliano_49, Hangman_49, BrownCNA_51

- Track 27 : RawrgerThat_51
- Track 28 : Fortunato_50
- Track 29 : Apex_51
- Track 30 : QueenPie_48
- Track 31 : Hydro_50
- Track 32 : Magpie_49
- Track 33 : Vincenzo_52, AlanGrant_53
- Track 34 : Prince_50
- Track 35 : Lolalove_51
- Track 36 : Fanaw_49
- Track 37 : JAMaL_50
- Track 38 : Nehemiah_54, Phelemich_53, Mysterious_55, Reprobate_54
- Track 39 : StinkyVeggy_55, KarasumaRum_55, Acadian_55
- Track 40 : Suigeneris_56, Donny_56
- Track 41 : SirJeffery_54
- Track 42 : Rita130_54
- Track 43 : EastView9101_54
- Track 44 : Nangang_55, DigitDog_55
- Track 45 : Bae_56
- Track 46 : Shenyu_55
- Track 47 : Rich_55
- Track 48 : 39HC_047, 40BC_047
- Track 49 : KayaCho_47
- Track 50 : ForDig_49
- Track 51 : Hosp_046
- Track 52 : Jolie1_048
- Track 53 : Thonko_56
- Track 54 : Knocker_55
- Track 55 : Rinkes_53
- Track 56 : Funsized_56
- Track 57 : JayJay_234, Shifa_213, Flabslab_232, Sebata_238
- Track 58 : Spud_229, SilverDipper_240, Babyland_239, Blackdragon_230, GlutenPhree_235, Tainan_236, Momo_237, Ablatia_233, InterFolia_237, Quasimodo_239, LifeSavor_236, Darko_235, Capablanca_241, Phlegm_240, Tortoise16_234, Erdmann_236, Yassified_233, Adlitam_236, Shelob_237, Sauce_233, ParkTD_235, Bipolarisk_234, SmallFry_237, Rahel_238, Jedediah_237, Guwapp_232, ZygoTaiga_231, Audrick_238, Derek_232, Cane17_226, Cali_227, BananaFence_233, Turret_227, NuevoMundo_237, TinyTim_234, FrayBell_239, Ava3_233, Cactojaque_230, Lee7_235, Wally_234, Rizal_226, DTDevon_237, Ewok_235, BeanWater_229, Yucca_235, Fludd_236, LinStu_234, LolaVinca_232, Breeniome_235, Mangeria_237, Ghost_235, SVoro_232, Burrough_236, NedWong_235, Jemmno_236, ScottMcG_228, Amataga_237, Jaygup_233, Grungle_218, Naija_237, RoMag_231, ChaylaJr_235, Daffodil_241, Megamind_233, MoMoMixon_232, Letha_237, Delylah_238, Shaqnato_227, Pleione_240, Chergie21_233, Norm_236, Shrimp_238, Salacia_237, Gabriel_239, Zalkecks_235, JustHall_230, McWolfish_233, YoungMoneyMata_236, Concombre_241, Pio_242, FoxtrotP1_234, EmmaElysia_241, Bxz1_223, BadAgartude_230, LordLeafolot_238, Domi_230, Halldule_228, Maby2021_236, Roots515_239, Lukilu_225, YemiJoy2021_237, Melpomini_231, Mikro_230, ShiaLabeouf_234, Dietrick_225, StephanieG_230, Kamryn_235, Bread_231, Basquiat_233, Catera_226, Ngannou_231, Spec_230, Napoleon13_233, Nidhogg_237, ArcherS7_237, Patter_238, Blubba_224, Astraea_230, Bonray_238, BackyardAgain_231, Trinitium_232, McGee_237, Essence_234, EmToTheThree_236, Specks_240,

Phox_237, Demodog_242, Willis_236, Morizzled23_233, LRRHood_228, I3_246, Latch_236, Pivoine_237, Bangla1971_237, Pier_235, Iota_233, Littleton_239, Matsumoto_234, Koguma_235, Teardrop_234, Jessibeth14_236, Kboogie_240, ValleyTerrace_237, Issimir_229, QBert_228, Colt_227, JPickles_233, Jezreel_232, Phusco_235, Drazdys_233, Atlantean_236, Blackbrain_234, Gizmo_241, Loanshark_233, Shnickers_235, Ronan_232, EasyJones_237, Nappy_236, MikeLiesIn_236, PurduePete_236, Janiyra_239, Ading_238, ChickenPhender_232, JulietS_228, ErnieJ_229, Sprinklers_234, Belieber_228, Asterius_231, Dandelion_242, Bigswole_241, Zeenon_236, Delilah_234, StubbySaigey_242, Khaleesi_235, CharlieB_230, Izajani_232, SrishMeg2525_233, FudgeTart_230, Naval22_241, Gamgam_238, Tyke_233, JigglyPuff_242, Caravan_226, IkeLoa_230, CindyLou_237, DrPhinkDaddy_233

- Track 59 : Chomp_235
- Track 60 : Grasshills_243, EggyFarm_244, BigCity_244
- Track 61 : DirtMonster_227, HyRo_221
- Track 62 : InigoMontoya_239
- Track 63 : Tonenili_257
- Track 64 : CherryTomatoes_138, Pupper_137, SCentae_136
- Track 65 : Skog_198
- Track 66 : CaiB_50, MossRose_49, AnarQue_49, CloverMinnie_49
- Track 67 : Wooper_50, Yeshua_50
- Track 68 : Evaa_46
- Track 69 : NHagos_48
- Track 70 : Sisko_46, AnClar_47, Yago84_46
- Track 71 : LittleMunchkin_48
- Track 72 : BobRoss2024_46
- Track 73 : Lilbit_2, Poise_3, RedRaider77_3, Raela_2, JoieB_3, Beelzebub_3, Blackbeetle_3, Huphlepuuff_2, LittleLaf_2, Clarkson_2
- Track 74 : VasuNzinga_3, Gattaca_4, MosMoris_4, GoongGoong_3, Marvin_2, FeliMaine_2, Corazon_2
- Track 75 : Tesla_3
- Track 76 : Caprice_3
- Track 77 : Mbo2_59
- Track 78 : TPA2_59

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

The start number called the most often in the published annotations is 23, it was called in 162 of the 308 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_233, Ading_238, Adlitam_236, Amataga_237, ArcherS7_237, Asterius_231, Astraea_230, Atlantean_236, Audrick_238, Ava3_233, Babyland_239, BackyardAgain_231, BadAgartude_230, BananaFence_233, Bangla1971_237, Basquiat_233, BeanWater_229, Belieber_228, BigCity_244, Bigswole_241, Bipolarisk_234, Blackbrain_234, Blackdragon_230, Blubba_224, Bonray_238, Bread_231, Breeniome_235, Burrough_236, Bxz1_223, Cactojaque_230, Cali_227, Cane17_226, Capablanca_241, Caravan_226, Catera_226, Chargie21_233, CharlieB_230, ChaylaJr_235, ChickenPhender_232, Chomp_235, CindyLou_237, Colt_227, Concombre_241, DTDevon_237, Daffodil_241, Dandelion_242,

Darko_235, Delilah_234, Delylah_238, Demodog_242, Derek_232, Dietrick_225, Domi_230, DrPhinkDaddy_233, Drazdys_233, EasyJones_237, EggyFarm_244, EmToTheThree_236, EmmaElysia_241, Erdmann_236, ErnieJ_229, Essence_234, Ewok_235, Flabslab_232, Fludd_236, FoxtrotP1_234, FrayBell_239, FudgeTart_230, Gabriel_239, Gamgam_238, Ghost_235, Gizmo_241, GlutenPhree_235, Grasshills_243, Grungle_218, Guwapp_232, Halldule_228, I3_246, IkeLoa_230, InigoMontoya_239, InterFolia_237, Iota_233, Issimir_229, Izajani_232, JPickles_233, Janiyra_239, JayJay_234, Jaygup_233, Jedediah_237, Jemmno_236, Jessibeth14_236, Jezreel_232, JigglyPuff_242, JulietS_228, JustHall_230, Kamryn_235, Kboogie_240, Khaleesi_235, Koguma_235, LRRHood_228, Latch_236, Lee7_235, Lethe_237, LifeSavor_236, LinStu_234, Littleton_239, Loanshark_233, LolaVinca_232, LordLeafolot_238, Lukilu_225, Maby2021_236, Mangeria_237, Matsumoto_234, McGee_237, McWolfish_233, Megamind_233, Melpomini_231, MikeLiesIn_236, Mikro_230, MoMoMixon_232, Momo_237, Morizzled23_233, Naija_237, Napoleon13_233, Nappy_236, Naval22_241, NedWong_235, Ngannou_231, Nidhogg_237, Norm_236, NuevoMundo_237, ParkTD_235, Patter_238, Phlegm_240, Phox_237, Phusco_235, Pier_235, Pio_242, Pivoine_237, Pleione_240, PurduePete_236, QBert_228, Quasimodo_239, Rahel_238, Rizal_226, RoMag_231, Ronan_232, Roots515_239, SVoro_232, Salacia_237, Sauce_233, ScottMcG_228, Sebata_238, Shaqnato_227, Shelob_237, ShiaLabeouf_234, Shifa_213, Shnickers_235, Shrimp_238, SilverDipper_240, SmallFry_237, Spec_230, Specks_240, Sprinklers_234, Spud_229, SrishMeg2525_233, StephanieG_230, StubbySaigey_242, Tainan_236, Teardrop_234, TinyTim_234, Tonenili_257, Tortoise16_234, Trinitium_232, Turret_227, Tyke_233, ValleyTerrace_237, Wally_234, Willis_236, Yassified_233, YemiJoy2021_237, YoungMoneyMata_236, Yucca_235, Zalkecks_235, Zeenon_236, ZygoTaiga_231,

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

- DirtMonster_227, HyRo_221,

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

- 39HC_047, 40BC_047, Abinghost_55, Acadian_55, Akoma_55, AlanGrant_53, Allegro_54, AnClar_47, AnarQue_49, Antihero_49, Apex_51, Arbiter_53, Ares_54, Athena_57, Audrey_55, Austelle_51, Bae_56, Baloo_55, Bananafish_54, Beelzebub_3, Ben11_55, Bernardo_56, Blackbeetle_3, Blocker23_54, BobRoss2024_46, BobbyK_50, Boyle_54, BrownCNA_51, Brownie5_54, CaiB_50, Calamitous_54, Caprice_3, Casbah_55, ChaChing_55, Chalmers_54, Chandler_55, Chentzyk_56, CherryTomatoes_138, ChrisnMich_50, Clarkson_2, CloverMinnie_49, Coffee_54, Compostia_55, Cooper_51, Corazon_2, Corofin_55, Deenasa_54, Devonte_54, DigitDog_55, Donny_56, Eaglehorse_54, EastView9101_54, Epah_49, Evaa_46, Fanaw_49, Faze9_53, FeliMaine_2, ForDig_49, Fortunato_50, Frederick_50, FrenchFry_54, Funsized_56, Gadget_56, Gattaca_4, Gervas_56, GinPorsche_49, Glass_54, GlenHope_56, Glubnar_55, Godines_54, GoongGoong_3, Halfpint_54, Hally898_49, Hangman_49, HarveySr_54, Heath_49, Heathcliff_55, Hedgerow_54, Holeinone_54, Hosp_046, Huphlepuuff_2, Hydro_50, Imvubu_48, Indlovu_52, ItsyBitsy1_54, JAMaL_50, Jackstina_51, JaguarMi_52, JoieB_3, Jolie1_048, Kaleb_54, Kamiyu_55, KarasumaRum_55, KayaCho_47, Kheth_54, Knocker_55, Kolhan_54, Kronus_55, Lambano_49, Lars_54, Laurie_53, Lephleur_54, LestyG_54, LilMcDreamy_52, LilSmirk_54, Lilbit_2, LittleLaf_2, LittleMunchkin_48, LizLemon_54, Lolalove_51, Magpie_49, Marley1013_56, Marvin_2, MasterPo_54, Mbo2_59, Mithril_49, MmasiCarm_56, Mortcellus_55, Morty007_55, MosMoris_4, MossRose_49, Mudslide_50, Mysterious_55, NHagos_48, Nanao_49, Nangang_55, Nehemiah_54, Nigel_51, Nozo_55, Obutu_56,

Opia_54, OrangeOswald_55, Phantasmagoria_54, Phayeta_57, Phelemich_53, Philly_54, Phlyer_55, Phrappuccino_159, Poise_3, Poster_49, Prince_50, Pupper_137, QueenPie_48, Raela_2, RagingRooster_54, RawrgerThat_51, RedRaider77_3, Reprobate_54, Rhinoforte_54, Rich_55, Rinkes_53, Rita130_54, Rita1961_56, RomaT_55, Rosebush_53, SCentae_136, Sabella_53, Settecandela_159, Shenyu_55, SirJeffery_54, Sisko_46, Skog_198, SlippinJimmy_57, Stinger_50, StinkyVeggy_55, Suigeneris_56, SwainyDoc_56, SynergyX_55, TA17A_54, TPA2_59, Tesla_3, Thonko_56, Tinciduntolum_55, TinyTerror_56, Tres_54, VasuNzinga_3, Vic9_54, Vincenzo_52, VioletZ_52, Waleliano_49, West99_54, Wooper_50, Xincheng_51, Yago84_46, Yahalom_54, Yeshua_50, Yinz_55, Zemanar_50,

Summary by start number:

Start 10:

- Found in 19 of 376 (5.1%) of genes in pham
- Manual Annotations of this start: 9 of 308
- Called 52.6% of time when present
- Phage (with cluster) where this start called: Beelzebub_3 (S), Blackbeetle_3 (S), Clarkson_2 (S), Huphlepuuff_2 (S), JoieB_3 (S), Lilbit_2 (S), LittleLaf_2 (S), Poise_3 (S), Raela_2 (S), RedRaider77_3 (S),

Start 12:

- Found in 19 of 376 (5.1%) of genes in pham
- No Manual Annotations of this start.
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Caprice_3 (S),

Start 14:

- Found in 19 of 376 (5.1%) of genes in pham
- Manual Annotations of this start: 7 of 308
- Called 42.1% of time when present
- Phage (with cluster) where this start called: Corazon_2 (S), FeliMaine_2 (S), Gattaca_4 (S), GoongGoong_3 (S), Marvin_2 (S), MosMoris_4 (S), Tesla_3 (S), VasuNzinga_3 (S),

Start 18:

- Found in 2 of 376 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 308
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino_159 (AA), Settecandela_159 (AA),

Start 19:

- Found in 37 of 376 (9.8%) of genes in pham
- Manual Annotations of this start: 32 of 308
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_54 (B2), Arbiter_53 (B2), Ares_54 (B2), Bananafish_54 (B2), Blocker23_54 (B2), Boyle_54 (B2), Brownie5_54 (B2), Calamitous_54 (B2), Coffee_54 (B2), Cooper_51 (B4), Eaglehorse_54 (B2), Faze9_53 (B2), FrenchFry_54 (B2), Glass_54 (B2), Godines_54 (B2), Hedgerow_54 (B2), Holeinone_54 (B2), ItsyBitsy1_54 (B2), Kaleb_54 (B2), Kheth_54 (B2), Kolhan_54 (B2), Lars_54 (B2), Laurie_53 (B2), Lephleur_54 (B2), LilSmirk_54 (B2),

LizLemon_54 (B2), MasterPo_54 (B2), Opia_54 (B2), Phantasmagoria_54 (B2), Rhinoforte_54 (B2), Rosebush_53 (B2), Sabella_53 (B2), TA17A_54 (B2), Tinciduntolum_55 (B2), Tres_54 (B2), Vic9_54 (B2), West99_54 (B2),

Start 20:

- Found in 2 of 376 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 308
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa_46 (DR), LittleMunchkin_48 (DR),

Start 21:

- Found in 125 of 376 (33.2%) of genes in pham
- Manual Annotations of this start: 87 of 308
- Called 96.8% of time when present
- Phage (with cluster) where this start called: 39HC_047 (B6), 40BC_047 (B6), Abinghost_55 (B3), Acadian_55 (B5), Akoma_55 (B3), AlanGrant_53 (B4), AnarQue_49 (DR), Antihero_49 (B4), Apex_51 (B4), Athena_57 (B3), Audrey_55 (B3), Austelle_51 (B4), Baee_56 (B5), Baloo_55 (B3), Ben11_55 (B3), Bernardo_56 (B3), BobRoss2024_46 (DR), BobbyK_50 (B4), BrownCNA_51 (B4), CaiB_50 (DR), Casbah_55 (B3), ChaChing_55 (B3), Chalmers_54 (B3), Chandler_55 (B3), Chentzyk_56 (B3), ChrisnMich_50 (B4), CloverMinnie_49 (DR), Compostia_55 (B3), Corofin_55 (B3), Deenasa_54 (B3), Devonte_54 (B3), DigitDog_55 (B5), DirtMonster_227 (C1), Donny_56 (B5), EastView9101_54 (B5), Epah_49 (B4), Fanaw_49 (B4), ForDig_49 (B6), Fortunato_50 (B4), Frederick_50 (B4), Funsized_56 (B9), Gadget_56 (B3), Gervas_56 (B3), GinPorsche_49 (B4), GlenHope_56 (B3), Glubnar_55 (B3), Halfpint_54 (B3), Hally898_49 (B4), Hangman_49 (B4), HarveySr_54 (B3), Heath_49 (B4), Heathcliff_55 (B3), Hosp_046 (B6), HyRo_221 (C1), Hydro_50 (B4), Imvubu_48 (B10), Indlovu_52 (B11), JAMaL_50 (B4), Jackstina_51 (B3), JaguarMi_52 (B4), Jolie1_048 (B6), Kamiyu_55 (B3), KarasumaRum_55 (B5), KayaCho_47 (B6), Knocker_55 (B9), Kronus_55 (B3), Lambano_49 (B4), LestyG_54 (B3), LilMcDreamy_52 (B12), Lolalove_51 (B4), Magpie_49 (B4), Marley1013_56 (B3), Mithril_49 (B4), MmasiCarm_56 (B3), Mortcellus_55 (B3), Morty007_55 (B3), MossRose_49 (DR), Mudslide_50 (B4), Mysterious_55 (B5), NHagos_48 (DR), Nanao_49 (B4), Nangang_55 (B5), Nehemiah_54 (B5), Nigel_51 (B4), Nozo_55 (B3), Obutu_56 (B3), OrangeOswald_55 (B3), Phayeta_57 (B3), Phelemich_53 (B5), Philly_54 (B3), Phlyer_55 (B3), Poster_49 (B4), Prince_50 (B4), QueenPie_48 (B4), RagingRooster_54 (B3), RawrgerThat_51 (B4), Reprobate_54 (B5), Rich_55 (B5), Rinke_53 (B9), Rita130_54 (B5), Rita1961_56 (B3), RomaT_55 (B3), Shenyu_55 (B5), SirJeffery_54 (B5), SlippinJimmy_57 (B3), Stinger_50 (B4), StinkyVeggy_55 (B5), Suigeneris_56 (B5), SwainyDoc_56 (B3), SynergyX_55 (B3), TPA2_59 (singleton), Thonko_56 (B8), Vincenzo_52 (B4), VioletZ_52 (B4), Waleliano_49 (B4), Wooper_50 (DR), Xincheng_51 (B4), Yahalom_54 (B3), Yeshua_50 (DR), Yinz_55 (B3), Zemanar_50 (B4),

Start 22:

- Found in 4 of 376 (1.1%) of genes in pham
- Manual Annotations of this start: 4 of 308
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_138 (DO), Pupper_137 (DO), SCentae_136 (DO), Skog_198 (DO),

Start 23:

- Found in 188 of 376 (50.0%) of genes in pham
- Manual Annotations of this start: 162 of 308
- Called 98.9% of time when present
- Phage (with cluster) where this start called: Ablatia_233 (C1), Ading_238 (C1), Adlitam_236 (C1), Amataga_237 (C1), ArcherS7_237 (C1), Asterius_231 (C1), Astraea_230 (C1), Atlantean_236 (C1), Audrick_238 (C1), Ava3_233 (C1), Babyland_239 (C1), BackyardAgain_231 (C1), BadAgartude_230 (C1), BananaFence_233 (C1), Bangla1971_237 (C1), Basquiat_233 (C1), BeanWater_229 (C1), Belieber_228 (C1), BigCity_244 (C1), Bigswole_241 (C1), Bipolarisk_234 (C1), Blackbrain_234 (C1), Blackdragon_230 (C1), Blubba_224 (C1), Bonray_238 (C1), Bread_231 (C1), Breeniome_235 (C1), Burrough_236 (C1), Bxz1_223 (C1), Cactojaque_230 (C1), Cali_227 (C1), Cane17_226 (C1), Capablanca_241 (C1), Caravan_226 (C1), Catera_226 (C1), Chargie21_233 (C1), CharlieB_230 (C1), ChaylaJr_235 (C1), ChickenPhender_232 (C1), Chomp_235 (C1), CindyLou_237 (C1), Colt_227 (C1), Concombre_241 (C1), DTDevon_237 (C1), Daffodil_241 (C1), Dandelion_242 (C1), Darko_235 (C1), Delilah_234 (C1), Delylah_238 (C1), Demodog_242 (C1), Derek_232 (C1), Dietrick_225 (C1), Domi_230 (C1), DrPhinkDaddy_233 (C1), Drazdys_233 (C1), EasyJones_237 (C1), EggyFarm_244 (C1), EmToTheThree_236 (C1), EmmaElysia_241 (C1), Erdmann_236 (C1), ErnieJ_229 (C1), Essence_234 (C1), Ewok_235 (C1), Flabslab_232 (C1), Fludd_236 (C1), FoxtrotP1_234 (C1), FrayBell_239 (C1), FudgeTart_230 (C1), Gabriel_239 (C1), Gamgam_238 (C1), Ghost_235 (C1), Gizmo_241 (C1), GlutenPhree_235 (C1), Grasshills_243 (C1), Grungle_218 (C1), Guwapp_232 (C1), Halldule_228 (C1), I3_246 (C1), IkeLoa_230 (C1), InigoMontoya_239 (C1), InterFolia_237 (C1), Iota_233 (C1), Issimir_229 (C1), Izajani_232 (C1), JPickles_233 (C1), Janiyra_239 (C1), JayJay_234 (C1), Jaygup_233 (C1), Jedediah_237 (C1), Jemmno_236 (C1), Jessibeth14_236 (C1), Jezreel_232 (C1), JigglyPuff_242 (C1), JulietS_228 (C1), JustHall_230 (C1), Kamryn_235 (C1), Kboogie_240 (C1), Khaleesi_235 (C1), Koguma_235 (C1), LRRHood_228 (C1), Latch_236 (C1), Lee7_235 (C1), Lethe_237 (C1), LifeSavor_236 (C1), LinStu_234 (C1), Littleton_239 (C1), Loanshark_233 (C1), LolaVinca_232 (C1), LordLeafolot_238 (C1), Lukilu_225 (C1), Maby2021_236 (C1), Mangeria_237 (C1), Matsumoto_234 (C1), McGee_237 (C1), McWolfish_233 (C1), Megamind_233 (C1), Melpomini_231 (C1), MikeLiesIn_236 (C1), Mikro_230 (C1), MoMoMixon_232 (C1), Momo_237 (C1), Morizzled23_233 (C1), Naija_237 (C1), Napoleon13_233 (C1), Nappy_236 (C1), Naval22_241 (C1), NedWong_235 (C1), Ngannou_231 (C1), Nidhogg_237 (C1), Norm_236 (C1), NuevoMundo_237 (C1), ParkTD_235 (C1), Patter_238 (C1), Phlegm_240 (C1), Phox_237 (C1), Phusco_235 (C1), Pier_235 (C1), Pio_242 (C1), Pivoine_237 (C1), Pleione_240 (C1), PurduePete_236 (C1), QBert_228 (C1), Quasimodo_239 (C1), Rahel_238 (C1), Rizal_226 (C1), RoMag_231 (C1), Ronan_232 (C1), Roots515_239 (C1), SVoro_232 (C1), Salacia_237 (C1), Sauce_233 (C1), ScottMcG_228 (C1), Sebata_238 (C1), Shaq nato_227 (C1), Shelob_237 (C1), ShiaLabeouf_234 (C1), Shifa_213 (C1), Shnickers_235 (C1), Shrimp_238 (C1), SilverDipper_240 (C1), SmallFry_237 (C1), Spec_230 (C1), Specks_240 (C1), Sprinklers_234 (C1), Spud_229 (C1), SrishMeg2525_233 (C1), StephanieG_230 (C1), StubbySaigey_242 (C1), Tainan_236 (C1), Teardrop_234 (C1), TinyTim_234 (C1), Tonenili_257 (C1), Tortoise16_234 (C1), Trinitium_232 (C1), Turret_227 (C1), Tyke_233 (C1), ValleyTerrace_237 (C1), Wally_234 (C1), Willis_236 (C1), Yassified_233 (C1), YemiJoy2021_237 (C1), YoungMoneyMata_236 (C1), Yucca_235 (C1), Zalkecks_235 (C1), Zeenon_236 (C1), ZygoTaiga_231 (C1),

Start 24:

- Found in 8 of 376 (2.1%) of genes in pham

- Manual Annotations of this start: 3 of 308
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AnClar_47 (DR), Mbo2_59 (singleton), Sisko_46 (DR), Yago84_46 (DR),

Start 35:

- Found in 1 of 376 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TinyTerror_56 (B3),

Summary by clusters:

There are 16 clusters represented in this pham: AA, DO, singleton, B10, B8, B11, B6, B4, B5, S, B12, B2, B3, C1, DR, B9,

Info for manual annotations of cluster AA:

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

Info for manual annotations of cluster B10:

- Start number 21 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 21 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 21 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:

- Start number 19 was manually annotated 31 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 21 was manually annotated 39 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 19 was manually annotated 1 time for cluster B4.
- Start number 21 was manually annotated 24 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 21 was manually annotated 8 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 21 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B8:

- Start number 21 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 21 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster C1:

- Start number 21 was manually annotated 2 times for cluster C1.
- Start number 23 was manually annotated 162 times for cluster C1.

Info for manual annotations of cluster DO:

- Start number 22 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DR:

- Start number 20 was manually annotated 2 times for cluster DR.
- Start number 21 was manually annotated 6 times for cluster DR.
- Start number 24 was manually annotated 3 times for cluster DR.

Info for manual annotations of cluster S:

- Start number 10 was manually annotated 9 times for cluster S.
- Start number 14 was manually annotated 7 times for cluster S.

Gene Information:

Gene: 39HC_047 Start: 46065, Stop: 45586, Start Num: 21

Candidate Starts for 39HC_047:

(Start: 21 @46065 has 87 MA's), (Start: 24 @46059 has 3 MA's), (44, 45933), (77, 45795), (82, 45768), (93, 45705), (110, 45600),

Gene: 40BC_047 Start: 46065, Stop: 45586, Start Num: 21

Candidate Starts for 40BC_047:

(Start: 21 @46065 has 87 MA's), (Start: 24 @46059 has 3 MA's), (44, 45933), (77, 45795), (82, 45768), (93, 45705), (110, 45600),

Gene: Abinghost_55 Start: 48403, Stop: 47930, Start Num: 21

Candidate Starts for Abinghost_55:

(Start: 21 @48403 has 87 MA's), (28, 48367), (62, 48175), (77, 48139), (82, 48112),

Gene: Ablatia_233 Start: 130787, Stop: 131254, Start Num: 23

Candidate Starts for Ablatia_233:

(15, 130718), (Start: 23 @130787 has 162 MA's), (27, 130808), (56, 130982), (59, 130997), (94, 131150), (101, 131198),

Gene: Acadian_55 Start: 48973, Stop: 48512, Start Num: 21

Candidate Starts for Acadian_55:

(Start: 21 @48973 has 87 MA's), (29, 48925), (50, 48814), (62, 48745), (73, 48724), (92, 48637), (93, 48631), (99, 48589),

Gene: Ading_238 Start: 133220, Stop: 133687, Start Num: 23

Candidate Starts for Ading_238:

(15, 133151), (Start: 23 @133220 has 162 MA's), (27, 133241), (56, 133415), (59, 133430), (94, 133583), (101, 133631),

Gene: Adlitam_236 Start: 131824, Stop: 132291, Start Num: 23

Candidate Starts for Adlitam_236:

(15, 131755), (Start: 23 @131824 has 162 MA's), (27, 131845), (56, 132019), (59, 132034), (94, 132187), (101, 132235),

Gene: Akoma_55 Start: 48418, Stop: 47945, Start Num: 21

Candidate Starts for Akoma_55:

(Start: 21 @48418 has 87 MA's), (28, 48382), (62, 48190), (77, 48154), (82, 48127),

Gene: AlanGrant_53 Start: 49377, Stop: 48913, Start Num: 21

Candidate Starts for AlanGrant_53:

(Start: 21 @49377 has 87 MA's), (46, 49236), (65, 49152), (89, 49056), (90, 49050), (93, 49023), (110, 48924),

Gene: Allegro_54 Start: 47624, Stop: 47133, Start Num: 19

Candidate Starts for Allegro_54:

(Start: 19 @47624 has 32 MA's), (48, 47465), (76, 47345), (77, 47342), (79, 47327), (82, 47315), (92, 47258), (93, 47252), (98, 47225), (113, 47141),

Gene: Amataga_237 Start: 130823, Stop: 131290, Start Num: 23

Candidate Starts for Amataga_237:

(15, 130754), (Start: 23 @130823 has 162 MA's), (27, 130844), (56, 131018), (59, 131033), (94, 131186), (101, 131234),

Gene: AnClar_47 Start: 43032, Stop: 42556, Start Num: 24

Candidate Starts for AnClar_47:

(Start: 24 @43032 has 3 MA's), (30, 42987), (32, 42972), (54, 42867), (85, 42711), (95, 42654), (105, 42585), (108, 42570),

Gene: AnarQue_49 Start: 42622, Stop: 42155, Start Num: 21

Candidate Starts for AnarQue_49:

(Start: 21 @42622 has 87 MA's), (42, 42493), (71, 42379), (92, 42283), (93, 42277), (101, 42226), (107, 42190),

Gene: Antihero_49 Start: 47622, Stop: 47143, Start Num: 21

Candidate Starts for Antihero_49:

(Start: 21 @47622 has 87 MA's), (44, 47490), (82, 47325), (84, 47313), (93, 47262), (110, 47157), (112, 47154),

Gene: Apex_51 Start: 48844, Stop: 48383, Start Num: 21

Candidate Starts for Apex_51:

(5, 49039), (Start: 21 @48844 has 87 MA's), (37, 48751), (46, 48703), (71, 48607), (73, 48598), (82, 48556), (83, 48550), (89, 48526), (93, 48493), (97, 48469), (98, 48466), (105, 48418), (110, 48394),

Gene: Arbiter_53 Start: 47730, Stop: 47239, Start Num: 19

Candidate Starts for Arbiter_53:

(Start: 19 @47730 has 32 MA's), (48, 47571), (76, 47451), (77, 47448), (79, 47433), (82, 47421), (92, 47364), (93, 47358), (98, 47331), (113, 47247),

Gene: ArcherS7_237 Start: 132568, Stop: 133035, Start Num: 23

Candidate Starts for ArcherS7_237:

(15, 132499), (Start: 23 @132568 has 162 MA's), (27, 132589), (56, 132763), (59, 132778), (94, 132931), (101, 132979),

Gene: Ares_54 Start: 47699, Stop: 47208, Start Num: 19

Candidate Starts for Ares_54:

(Start: 19 @47699 has 32 MA's), (48, 47540), (76, 47420), (77, 47417), (79, 47402), (82, 47390), (92, 47333), (93, 47327), (98, 47300), (113, 47216),

Gene: Asterius_231 Start: 131232, Stop: 131699, Start Num: 23

Candidate Starts for Asterius_231:

(15, 131163), (Start: 23 @131232 has 162 MA's), (27, 131253), (56, 131427), (59, 131442), (94, 131595), (101, 131643),

Gene: Astraea_230 Start: 130427, Stop: 130894, Start Num: 23

Candidate Starts for Astraea_230:

(15, 130358), (Start: 23 @130427 has 162 MA's), (27, 130448), (56, 130622), (59, 130637), (94, 130790), (101, 130838),

Gene: Athena_57 Start: 49161, Stop: 48688, Start Num: 21

Candidate Starts for Athena_57:

(Start: 21 @49161 has 87 MA's), (28, 49125), (62, 48933), (77, 48897), (82, 48870),

Gene: Atlantean_236 Start: 130823, Stop: 131290, Start Num: 23

Candidate Starts for Atlantean_236:

(15, 130754), (Start: 23 @130823 has 162 MA's), (27, 130844), (56, 131018), (59, 131033), (94, 131186), (101, 131234),

Gene: Audrey_55 Start: 48409, Stop: 47936, Start Num: 21

Candidate Starts for Audrey_55:

(Start: 21 @48409 has 87 MA's), (28, 48373), (57, 48205), (62, 48181), (67, 48172), (77, 48145), (82, 48118), (108, 47965),

Gene: Audrick_238 Start: 130713, Stop: 131180, Start Num: 23

Candidate Starts for Audrick_238:

(15, 130644), (Start: 23 @130713 has 162 MA's), (27, 130734), (56, 130908), (59, 130923), (94, 131076), (101, 131124),

Gene: Austelle_51 Start: 49294, Stop: 48833, Start Num: 21

Candidate Starts for Austelle_51:

(Start: 21 @49294 has 87 MA's), (37, 49201), (46, 49153), (71, 49057), (73, 49048), (82, 49006), (83, 49000), (89, 48976), (93, 48943), (97, 48919), (98, 48916), (105, 48868), (110, 48844),

Gene: Ava3_233 Start: 131283, Stop: 131750, Start Num: 23

Candidate Starts for Ava3_233:

(15, 131214), (Start: 23 @131283 has 162 MA's), (27, 131304), (56, 131478), (59, 131493), (94, 131646), (101, 131694),

Gene: Babyland_239 Start: 131600, Stop: 132067, Start Num: 23

Candidate Starts for Babyland_239:

(15, 131531), (Start: 23 @131600 has 162 MA's), (27, 131621), (56, 131795), (59, 131810), (94, 131963), (101, 132011),

Gene: BackyardAgain_231 Start: 128973, Stop: 129440, Start Num: 23

Candidate Starts for BackyardAgain_231:

(15, 128904), (Start: 23 @128973 has 162 MA's), (27, 128994), (56, 129168), (59, 129183), (94, 129336), (101, 129384),

Gene: BadAgartude_230 Start: 130913, Stop: 131380, Start Num: 23

Candidate Starts for BadAgartude_230:

(15, 130844), (Start: 23 @130913 has 162 MA's), (27, 130934), (56, 131108), (59, 131123), (94, 131276), (101, 131324),

Gene: Bae_56 Start: 50252, Stop: 49791, Start Num: 21
Candidate Starts for Bae_56:
(Start: 21 @50252 has 87 MA's), (29, 50204), (62, 50024), (73, 50003), (92, 49916), (93, 49910),

Gene: Baloo_55 Start: 48412, Stop: 47939, Start Num: 21
Candidate Starts for Baloo_55:
(Start: 21 @48412 has 87 MA's), (28, 48376), (57, 48208), (62, 48184), (67, 48175), (77, 48148), (82, 48121), (108, 47968),

Gene: BananaFence_233 Start: 131056, Stop: 131523, Start Num: 23
Candidate Starts for BananaFence_233:
(15, 130987), (Start: 23 @131056 has 162 MA's), (27, 131077), (56, 131251), (59, 131266), (94, 131419), (101, 131467),

Gene: Bananafish_54 Start: 47633, Stop: 47142, Start Num: 19
Candidate Starts for Bananafish_54:
(Start: 19 @47633 has 32 MA's), (48, 47474), (76, 47354), (77, 47351), (79, 47336), (82, 47324), (92, 47267), (93, 47261), (98, 47234), (113, 47150),

Gene: Bangla1971_237 Start: 131532, Stop: 131999, Start Num: 23
Candidate Starts for Bangla1971_237:
(15, 131463), (Start: 23 @131532 has 162 MA's), (27, 131553), (56, 131727), (59, 131742), (94, 131895), (101, 131943),

Gene: Basquiat_233 Start: 129342, Stop: 129809, Start Num: 23
Candidate Starts for Basquiat_233:
(15, 129273), (Start: 23 @129342 has 162 MA's), (27, 129363), (56, 129537), (59, 129552), (94, 129705), (101, 129753),

Gene: BeanWater_229 Start: 130669, Stop: 131136, Start Num: 23
Candidate Starts for BeanWater_229:
(15, 130600), (Start: 23 @130669 has 162 MA's), (27, 130690), (56, 130864), (59, 130879), (94, 131032), (101, 131080),

Gene: Beelzebub_3 Start: 781, Stop: 1281, Start Num: 10
Candidate Starts for Beelzebub_3:
(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: Belieber_228 Start: 129469, Stop: 129936, Start Num: 23
Candidate Starts for Belieber_228:
(15, 129400), (Start: 23 @129469 has 162 MA's), (27, 129490), (56, 129664), (59, 129679), (94, 129832), (101, 129880),

Gene: Ben11_55 Start: 48694, Stop: 48221, Start Num: 21
Candidate Starts for Ben11_55:
(Start: 21 @48694 has 87 MA's), (28, 48658), (62, 48466), (77, 48430), (82, 48403),

Gene: Bernardo_56 Start: 48845, Stop: 48372, Start Num: 21
Candidate Starts for Bernardo_56:
(Start: 21 @48845 has 87 MA's), (28, 48809), (62, 48617), (77, 48581), (82, 48554), (108, 48401),

Gene: BigCity_244 Start: 133429, Stop: 133896, Start Num: 23

Candidate Starts for BigCity_244:

(Start: 23 @133429 has 162 MA's), (27, 133450), (56, 133624), (59, 133639), (72, 133678), (94, 133792), (101, 133840),

Gene: Bigswole_241 Start: 133391, Stop: 133858, Start Num: 23

Candidate Starts for Bigswole_241:

(15, 133322), (Start: 23 @133391 has 162 MA's), (27, 133412), (56, 133586), (59, 133601), (94, 133754), (101, 133802),

Gene: Bipolarisk_234 Start: 131551, Stop: 132018, Start Num: 23

Candidate Starts for Bipolarisk_234:

(15, 131482), (Start: 23 @131551 has 162 MA's), (27, 131572), (56, 131746), (59, 131761), (94, 131914), (101, 131962),

Gene: Blackbeetle_3 Start: 790, Stop: 1290, Start Num: 10

Candidate Starts for Blackbeetle_3:

(Start: 10 @790 has 9 MA's), (12, 802), (Start: 14 @811 has 7 MA's), (41, 988), (47, 1012), (49, 1018), (51, 1021), (53, 1033), (54, 1039), (63, 1081), (81, 1156), (91, 1207),

Gene: Blackbrain_234 Start: 131119, Stop: 131586, Start Num: 23

Candidate Starts for Blackbrain_234:

(15, 131050), (Start: 23 @131119 has 162 MA's), (27, 131140), (56, 131314), (59, 131329), (94, 131482), (101, 131530),

Gene: Blackdragon_230 Start: 131144, Stop: 131611, Start Num: 23

Candidate Starts for Blackdragon_230:

(15, 131075), (Start: 23 @131144 has 162 MA's), (27, 131165), (56, 131339), (59, 131354), (94, 131507), (101, 131555),

Gene: Blocker23_54 Start: 47746, Stop: 47255, Start Num: 19

Candidate Starts for Blocker23_54:

(Start: 19 @47746 has 32 MA's), (48, 47587), (77, 47464), (79, 47449), (82, 47437), (92, 47380), (93, 47374), (98, 47347), (113, 47263),

Gene: Blubba_224 Start: 134689, Stop: 135174, Start Num: 23

Candidate Starts for Blubba_224:

(15, 134620), (Start: 23 @134689 has 162 MA's), (27, 134710), (56, 134884), (59, 134899), (94, 135052), (101, 135100),

Gene: BobRoss2024_46 Start: 40623, Stop: 40150, Start Num: 21

Candidate Starts for BobRoss2024_46:

(Start: 21 @40623 has 87 MA's), (42, 40494), (56, 40422), (58, 40407), (73, 40371), (82, 40329), (93, 40278),

Gene: BobbyK_50 Start: 48250, Stop: 47771, Start Num: 21

Candidate Starts for BobbyK_50:

(Start: 21 @48250 has 87 MA's), (44, 48118), (82, 47953), (84, 47941), (90, 47917), (93, 47890), (110, 47785), (112, 47782),

Gene: Bonray_238 Start: 132919, Stop: 133386, Start Num: 23

Candidate Starts for Bonray_238:

(15, 132850), (Start: 23 @132919 has 162 MA's), (27, 132940), (56, 133114), (59, 133129), (94, 133282), (101, 133330),

Gene: Boyle_54 Start: 47766, Stop: 47275, Start Num: 19

Candidate Starts for Boyle_54:

(Start: 19 @47766 has 32 MA's), (48, 47607), (77, 47484), (79, 47469), (82, 47457), (92, 47400), (93, 47394), (98, 47367), (113, 47283),

Gene: Bread_231 Start: 130926, Stop: 131393, Start Num: 23

Candidate Starts for Bread_231:

(15, 130857), (Start: 23 @130926 has 162 MA's), (27, 130947), (56, 131121), (59, 131136), (94, 131289), (101, 131337),

Gene: Breeniome_235 Start: 130380, Stop: 130847, Start Num: 23

Candidate Starts for Breeniome_235:

(15, 130311), (Start: 23 @130380 has 162 MA's), (27, 130401), (56, 130575), (59, 130590), (94, 130743), (101, 130791),

Gene: BrownCNA_51 Start: 48520, Stop: 48059, Start Num: 21

Candidate Starts for BrownCNA_51:

(Start: 21 @48520 has 87 MA's), (37, 48427), (46, 48379), (69, 48292), (71, 48283), (73, 48274), (79, 48244), (82, 48232), (89, 48202), (93, 48169), (97, 48145), (98, 48142), (105, 48094), (110, 48070),

Gene: Brownie5_54 Start: 47782, Stop: 47291, Start Num: 19

Candidate Starts for Brownie5_54:

(Start: 19 @47782 has 32 MA's), (48, 47623), (76, 47503), (77, 47500), (79, 47485), (82, 47473), (92, 47416), (93, 47410), (98, 47383), (113, 47299),

Gene: Burrough_236 Start: 132696, Stop: 133163, Start Num: 23

Candidate Starts for Burrough_236:

(15, 132627), (Start: 23 @132696 has 162 MA's), (27, 132717), (56, 132891), (59, 132906), (94, 133059), (101, 133107),

Gene: Bxz1_223 Start: 132901, Stop: 133368, Start Num: 23

Candidate Starts for Bxz1_223:

(15, 132832), (Start: 23 @132901 has 162 MA's), (27, 132922), (56, 133096), (59, 133111), (94, 133264), (101, 133312),

Gene: Cactojaque_230 Start: 130065, Stop: 130532, Start Num: 23

Candidate Starts for Cactojaque_230:

(15, 129996), (Start: 23 @130065 has 162 MA's), (27, 130086), (56, 130260), (59, 130275), (94, 130428), (101, 130476),

Gene: CaiB_50 Start: 43465, Stop: 42998, Start Num: 21

Candidate Starts for CaiB_50:

(Start: 21 @43465 has 87 MA's), (42, 43336), (71, 43222), (92, 43126), (93, 43120), (101, 43069), (107, 43033),

Gene: Calamitous_54 Start: 47632, Stop: 47141, Start Num: 19

Candidate Starts for Calamitous_54:

(Start: 19 @47632 has 32 MA's), (48, 47473), (76, 47353), (77, 47350), (79, 47335), (82, 47323), (92, 47266), (93, 47260), (98, 47233), (113, 47149),

Gene: Cali_227 Start: 131294, Stop: 131761, Start Num: 23

Candidate Starts for Cali_227:

(15, 131225), (Start: 23 @131294 has 162 MA's), (27, 131315), (56, 131489), (59, 131504), (94, 131657), (101, 131705),

Gene: Cane17_226 Start: 135098, Stop: 135583, Start Num: 23

Candidate Starts for Cane17_226:

(15, 135029), (Start: 23 @135098 has 162 MA's), (27, 135119), (56, 135293), (59, 135308), (94, 135461), (101, 135509),

Gene: Capablanca_241 Start: 133548, Stop: 134015, Start Num: 23

Candidate Starts for Capablanca_241:

(15, 133479), (Start: 23 @133548 has 162 MA's), (27, 133569), (56, 133743), (59, 133758), (94, 133911), (101, 133959),

Gene: Caprice_3 Start: 802, Stop: 1290, Start Num: 12

Candidate Starts for Caprice_3:

(Start: 10 @790 has 9 MA's), (12, 802), (Start: 14 @811 has 7 MA's), (41, 988), (47, 1012), (49, 1018), (51, 1021), (53, 1033), (54, 1039), (63, 1081), (81, 1156), (91, 1207),

Gene: Caravan_226 Start: 131634, Stop: 132101, Start Num: 23

Candidate Starts for Caravan_226:

(15, 131565), (Start: 23 @131634 has 162 MA's), (27, 131655), (56, 131829), (59, 131844), (94, 131997), (101, 132045),

Gene: Casbah_55 Start: 48727, Stop: 48254, Start Num: 21

Candidate Starts for Casbah_55:

(Start: 21 @48727 has 87 MA's), (28, 48691), (62, 48499), (67, 48490), (77, 48463), (82, 48436),

Gene: Catera_226 Start: 130036, Stop: 130503, Start Num: 23

Candidate Starts for Catera_226:

(15, 129967), (Start: 23 @130036 has 162 MA's), (27, 130057), (56, 130231), (59, 130246), (94, 130399), (101, 130447),

Gene: ChaChing_55 Start: 48426, Stop: 47953, Start Num: 21

Candidate Starts for ChaChing_55:

(Start: 21 @48426 has 87 MA's), (28, 48390), (57, 48222), (62, 48198), (67, 48189), (77, 48162), (82, 48135), (108, 47982),

Gene: Chalmers_54 Start: 48901, Stop: 48428, Start Num: 21

Candidate Starts for Chalmers_54:

(Start: 21 @48901 has 87 MA's), (28, 48865), (62, 48673), (77, 48637), (82, 48610),

Gene: Chandler_55 Start: 49197, Stop: 48724, Start Num: 21

Candidate Starts for Chandler_55:

(Start: 21 @49197 has 87 MA's), (28, 49161), (62, 48969), (77, 48933), (82, 48906), (108, 48753),

Gene: Chargie21_233 Start: 129342, Stop: 129809, Start Num: 23

Candidate Starts for Chargie21_233:

(15, 129273), (Start: 23 @129342 has 162 MA's), (27, 129363), (56, 129537), (59, 129552), (94, 129705), (101, 129753),

Gene: CharlieB_230 Start: 131048, Stop: 131515, Start Num: 23

Candidate Starts for CharlieB_230:

(15, 130979), (Start: 23 @131048 has 162 MA's), (27, 131069), (56, 131243), (59, 131258), (94, 131411), (101, 131459),

Gene: ChaylaJr_235 Start: 130733, Stop: 131200, Start Num: 23

Candidate Starts for ChaylaJr_235:

(15, 130664), (Start: 23 @130733 has 162 MA's), (27, 130754), (56, 130928), (59, 130943), (94, 131096), (101, 131144),

Gene: Chentzyk_56 Start: 49236, Stop: 48763, Start Num: 21

Candidate Starts for Chentzyk_56:

(Start: 21 @49236 has 87 MA's), (28, 49200), (57, 49032), (62, 49008), (77, 48972), (82, 48945), (108, 48792),

Gene: CherryTomatoes_138 Start: 95998, Stop: 96492, Start Num: 22

Candidate Starts for CherryTomatoes_138:

(Start: 22 @95998 has 4 MA's), (88, 96340), (103, 96442),

Gene: ChickenPhender_232 Start: 129489, Stop: 129956, Start Num: 23

Candidate Starts for ChickenPhender_232:

(15, 129420), (Start: 23 @129489 has 162 MA's), (27, 129510), (56, 129684), (59, 129699), (94, 129852), (101, 129900),

Gene: Chomp_235 Start: 132925, Stop: 133392, Start Num: 23

Candidate Starts for Chomp_235:

(15, 132856), (16, 132859), (Start: 23 @132925 has 162 MA's), (27, 132946), (56, 133120), (59, 133135), (94, 133288), (101, 133336),

Gene: ChrisnMich_50 Start: 47606, Stop: 47145, Start Num: 21

Candidate Starts for ChrisnMich_50:

(Start: 21 @47606 has 87 MA's), (37, 47513), (46, 47465), (71, 47369), (73, 47360), (79, 47330), (82, 47318), (89, 47288), (93, 47255), (97, 47231), (98, 47228), (105, 47180), (110, 47156),

Gene: CindyLou_237 Start: 133185, Stop: 133652, Start Num: 23

Candidate Starts for CindyLou_237:

(15, 133116), (Start: 23 @133185 has 162 MA's), (27, 133206), (56, 133380), (59, 133395), (94, 133548), (101, 133596),

Gene: Clarkson_2 Start: 557, Stop: 1057, Start Num: 10

Candidate Starts for Clarkson_2:

(Start: 10 @557 has 9 MA's), (12, 569), (Start: 14 @578 has 7 MA's), (41, 755), (47, 779), (49, 785), (51, 788), (53, 800), (54, 806), (63, 848), (81, 923), (91, 974),

Gene: CloverMinnie_49 Start: 42548, Stop: 42081, Start Num: 21

Candidate Starts for CloverMinnie_49:

(Start: 21 @42548 has 87 MA's), (42, 42419), (71, 42305), (92, 42209), (93, 42203), (101, 42152), (107, 42116),

Gene: Coffee_54 Start: 47741, Stop: 47250, Start Num: 19

Candidate Starts for Coffee_54:

(Start: 19 @47741 has 32 MA's), (48, 47582), (77, 47459), (79, 47444), (82, 47432), (92, 47375), (93, 47369), (98, 47342), (113, 47258),

Gene: Colt_227 Start: 134329, Stop: 134814, Start Num: 23

Candidate Starts for Colt_227:

(15, 134260), (Start: 23 @134329 has 162 MA's), (27, 134350), (56, 134524), (59, 134539), (94, 134692), (101, 134740),

Gene: Compostia_55 Start: 48846, Stop: 48373, Start Num: 21

Candidate Starts for Compostia_55:

(Start: 21 @48846 has 87 MA's), (28, 48810), (62, 48618), (77, 48582), (82, 48555),

Gene: Concombres_241 Start: 133081, Stop: 133548, Start Num: 23

Candidate Starts for Concombres_241:

(15, 133012), (Start: 23 @133081 has 162 MA's), (27, 133102), (56, 133276), (59, 133291), (94, 133444), (101, 133492),

Gene: Cooper_51 Start: 47858, Stop: 47370, Start Num: 19

Candidate Starts for Cooper_51:

(Start: 19 @47858 has 32 MA's), (31, 47786), (34, 47765), (48, 47699), (77, 47573), (92, 47489), (93, 47483),

Gene: Corazon_2 Start: 802, Stop: 1281, Start Num: 14

Candidate Starts for Corazon_2:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: Corofin_55 Start: 48440, Stop: 47967, Start Num: 21

Candidate Starts for Corofin_55:

(Start: 21 @48440 has 87 MA's), (28, 48404), (62, 48212), (77, 48176), (82, 48149),

Gene: DTDevon_237 Start: 133564, Stop: 134031, Start Num: 23

Candidate Starts for DTDevon_237:

(15, 133495), (Start: 23 @133564 has 162 MA's), (27, 133585), (56, 133759), (59, 133774), (94, 133927), (101, 133975),

Gene: Daffodil_241 Start: 131851, Stop: 132318, Start Num: 23

Candidate Starts for Daffodil_241:

(15, 131782), (Start: 23 @131851 has 162 MA's), (27, 131872), (56, 132046), (59, 132061), (94, 132214), (101, 132262),

Gene: Dandelion_242 Start: 134454, Stop: 134921, Start Num: 23

Candidate Starts for Dandelion_242:

(15, 134385), (Start: 23 @134454 has 162 MA's), (27, 134475), (56, 134649), (59, 134664), (94, 134817), (101, 134865),

Gene: Darko_235 Start: 131060, Stop: 131527, Start Num: 23

Candidate Starts for Darko_235:

(15, 130991), (Start: 23 @131060 has 162 MA's), (27, 131081), (56, 131255), (59, 131270), (94, 131423), (101, 131471),

Gene: Deenasa_54 Start: 48857, Stop: 48384, Start Num: 21

Candidate Starts for Deenasa_54:

(Start: 21 @48857 has 87 MA's), (28, 48821), (57, 48653), (62, 48629), (67, 48620), (77, 48593), (82, 48566),

Gene: Delilah_234 Start: 131944, Stop: 132411, Start Num: 23

Candidate Starts for Delilah_234:

(15, 131875), (Start: 23 @131944 has 162 MA's), (27, 131965), (56, 132139), (59, 132154), (94, 132307), (101, 132355),

Gene: Delylah_238 Start: 132258, Stop: 132725, Start Num: 23

Candidate Starts for Delylah_238:

(15, 132189), (Start: 23 @132258 has 162 MA's), (27, 132279), (56, 132453), (59, 132468), (94, 132621), (101, 132669),

Gene: Demodog_242 Start: 133091, Stop: 133558, Start Num: 23

Candidate Starts for Demodog_242:

(15, 133022), (Start: 23 @133091 has 162 MA's), (27, 133112), (56, 133286), (59, 133301), (94, 133454), (101, 133502),

Gene: Derek_232 Start: 132202, Stop: 132669, Start Num: 23

Candidate Starts for Derek_232:

(15, 132133), (Start: 23 @132202 has 162 MA's), (27, 132223), (56, 132397), (59, 132412), (94, 132565), (101, 132613),

Gene: Devonte_54 Start: 48085, Stop: 47612, Start Num: 21

Candidate Starts for Devonte_54:

(Start: 21 @48085 has 87 MA's), (28, 48049), (62, 47857), (77, 47821), (82, 47794),

Gene: Dietrick_225 Start: 130065, Stop: 130532, Start Num: 23

Candidate Starts for Dietrick_225:

(15, 129996), (Start: 23 @130065 has 162 MA's), (27, 130086), (56, 130260), (59, 130275), (94, 130428), (101, 130476),

Gene: DigitDog_55 Start: 48969, Stop: 48508, Start Num: 21

Candidate Starts for DigitDog_55:

(Start: 21 @48969 has 87 MA's), (29, 48921), (62, 48741), (73, 48720), (92, 48633), (93, 48627), (99, 48585),

Gene: DirtMonster_227 Start: 131397, Stop: 131888, Start Num: 21

Candidate Starts for DirtMonster_227:

(15, 131334), (Start: 21 @131397 has 87 MA's), (Start: 23 @131403 has 162 MA's), (27, 131424), (56, 131598), (59, 131613), (94, 131766), (101, 131814),

Gene: Domi_230 Start: 131404, Stop: 131871, Start Num: 23

Candidate Starts for Domi_230:

(15, 131335), (Start: 23 @131404 has 162 MA's), (27, 131425), (56, 131599), (59, 131614), (94, 131767), (101, 131815),

Gene: Donny_56 Start: 49263, Stop: 48802, Start Num: 21

Candidate Starts for Donny_56:

(3, 49764), (Start: 21 @49263 has 87 MA's), (29, 49215), (62, 49035), (73, 49014), (92, 48927), (93, 48921), (99, 48879),

Gene: DrPhinkDaddy_233 Start: 132629, Stop: 133096, Start Num: 23

Candidate Starts for DrPhinkDaddy_233:

(15, 132560), (Start: 23 @132629 has 162 MA's), (27, 132650), (56, 132824), (59, 132839), (94, 132992), (101, 133040),

Gene: Drazdys_233 Start: 132209, Stop: 132676, Start Num: 23

Candidate Starts for Drazdys_233:

(15, 132140), (Start: 23 @132209 has 162 MA's), (27, 132230), (56, 132404), (59, 132419), (94, 132572), (101, 132620),

Gene: Eaglehorse_54 Start: 47667, Stop: 47176, Start Num: 19

Candidate Starts for Eaglehorse_54:

(Start: 19 @47667 has 32 MA's), (48, 47508), (76, 47388), (77, 47385), (79, 47370), (82, 47358), (92, 47301), (93, 47295), (98, 47268), (113, 47184),

Gene: EastView9101_54 Start: 48910, Stop: 48449, Start Num: 21

Candidate Starts for EastView9101_54:

(Start: 21 @48910 has 87 MA's), (29, 48862), (62, 48682), (73, 48661), (92, 48574), (93, 48568), (99, 48526),

Gene: EasyJones_237 Start: 130585, Stop: 131052, Start Num: 23

Candidate Starts for EasyJones_237:

(15, 130516), (Start: 23 @130585 has 162 MA's), (27, 130606), (56, 130780), (59, 130795), (94, 130948), (101, 130996),

Gene: EggyFarm_244 Start: 133430, Stop: 133897, Start Num: 23

Candidate Starts for EggyFarm_244:

(Start: 23 @133430 has 162 MA's), (27, 133451), (56, 133625), (59, 133640), (72, 133679), (94, 133793), (101, 133841),

Gene: EmToTheThree_236 Start: 131968, Stop: 132435, Start Num: 23

Candidate Starts for EmToTheThree_236:

(15, 131899), (Start: 23 @131968 has 162 MA's), (27, 131989), (56, 132163), (59, 132178), (94, 132331), (101, 132379),

Gene: EmmaElysia_241 Start: 133080, Stop: 133547, Start Num: 23

Candidate Starts for EmmaElysia_241:

(15, 133011), (Start: 23 @133080 has 162 MA's), (27, 133101), (56, 133275), (59, 133290), (94, 133443), (101, 133491),

Gene: Epah_49 Start: 47622, Stop: 47143, Start Num: 21

Candidate Starts for Epah_49:

(Start: 21 @47622 has 87 MA's), (44, 47490), (82, 47325), (84, 47313), (93, 47262), (110, 47157), (112, 47154),

Gene: Erdmann_236 Start: 131936, Stop: 132403, Start Num: 23

Candidate Starts for Erdmann_236:

(15, 131867), (Start: 23 @131936 has 162 MA's), (27, 131957), (56, 132131), (59, 132146), (94, 132299), (101, 132347),

Gene: ErnieJ_229 Start: 128764, Stop: 129231, Start Num: 23

Candidate Starts for ErnieJ_229:

(15, 128695), (Start: 23 @128764 has 162 MA's), (27, 128785), (56, 128959), (59, 128974), (94, 129127), (101, 129175),

Gene: Essence_234 Start: 131421, Stop: 131888, Start Num: 23

Candidate Starts for Essence_234:

(15, 131352), (Start: 23 @131421 has 162 MA's), (27, 131442), (56, 131616), (59, 131631), (94, 131784), (101, 131832),

Gene: Evaa_46 Start: 41052, Stop: 40558, Start Num: 20

Candidate Starts for Evaa_46:

(Start: 20 @41052 has 2 MA's), (40, 40932), (50, 40884), (64, 40812), (73, 40770), (79, 40740), (93, 40674), (107, 40587),

Gene: Ewok_235 Start: 131879, Stop: 132346, Start Num: 23

Candidate Starts for Ewok_235:

(15, 131810), (Start: 23 @131879 has 162 MA's), (27, 131900), (56, 132074), (59, 132089), (94, 132242), (101, 132290),

Gene: Fanaw_49 Start: 48294, Stop: 47833, Start Num: 21

Candidate Starts for Fanaw_49:

(2, 48801), (5, 48489), (Start: 21 @48294 has 87 MA's), (37, 48201), (46, 48153), (71, 48057), (73, 48048), (79, 48018), (82, 48006), (83, 48000), (89, 47976), (93, 47943), (97, 47919), (98, 47916), (105, 47868), (110, 47844),

Gene: Faze9_53 Start: 47761, Stop: 47270, Start Num: 19

Candidate Starts for Faze9_53:

(Start: 19 @47761 has 32 MA's), (48, 47602), (77, 47479), (79, 47464), (92, 47395), (93, 47389), (98, 47362), (113, 47278),

Gene: FeliMaine_2 Start: 579, Stop: 1058, Start Num: 14

Candidate Starts for FeliMaine_2:

(Start: 10 @558 has 9 MA's), (12, 570), (Start: 14 @579 has 7 MA's), (41, 756), (47, 780), (49, 786), (51, 789), (53, 801), (54, 807), (63, 849), (81, 924), (91, 975),

Gene: Flabslab_232 Start: 129100, Stop: 129585, Start Num: 23

Candidate Starts for Flabslab_232:

(15, 129031), (Start: 21 @129094 has 87 MA's), (Start: 23 @129100 has 162 MA's), (27, 129121), (56, 129295), (59, 129310), (94, 129463), (101, 129511),

Gene: Fludd_236 Start: 130297, Stop: 130764, Start Num: 23

Candidate Starts for Fludd_236:

(15, 130228), (Start: 23 @130297 has 162 MA's), (27, 130318), (56, 130492), (59, 130507), (94, 130660), (101, 130708),

Gene: ForDig_49 Start: 46304, Stop: 45825, Start Num: 21

Candidate Starts for ForDig_49:

(Start: 21 @46304 has 87 MA's), (93, 45944), (110, 45839), (112, 45836),

Gene: Fortunato_50 Start: 48287, Stop: 47805, Start Num: 21

Candidate Starts for Fortunato_50:

(4, 48473), (6, 48443), (13, 48350), (Start: 21 @48287 has 87 MA's), (30, 48236), (44, 48155), (73, 48029), (79, 47999), (90, 47951), (93, 47924), (110, 47819), (112, 47816),

Gene: FoxtrotP1_234 Start: 132522, Stop: 132989, Start Num: 23

Candidate Starts for FoxtrotP1_234:

(15, 132453), (Start: 23 @132522 has 162 MA's), (27, 132543), (56, 132717), (59, 132732), (94, 132885), (101, 132933),

Gene: FrayBell_239 Start: 130485, Stop: 130952, Start Num: 23

Candidate Starts for FrayBell_239:

(15, 130416), (Start: 23 @130485 has 162 MA's), (27, 130506), (56, 130680), (59, 130695), (94, 130848), (101, 130896),

Gene: Frederick_50 Start: 48247, Stop: 47768, Start Num: 21

Candidate Starts for Frederick_50:

(Start: 21 @48247 has 87 MA's), (44, 48115), (82, 47950), (84, 47938), (90, 47914), (93, 47887), (110, 47782), (112, 47779),

Gene: FrenchFry_54 Start: 47740, Stop: 47249, Start Num: 19

Candidate Starts for FrenchFry_54:

(Start: 19 @47740 has 32 MA's), (48, 47581), (76, 47461), (77, 47458), (79, 47443), (82, 47431), (92, 47374), (93, 47368), (98, 47341), (113, 47257),

Gene: FudgeTart_230 Start: 131026, Stop: 131493, Start Num: 23

Candidate Starts for FudgeTart_230:

(15, 130957), (Start: 23 @131026 has 162 MA's), (27, 131047), (56, 131221), (59, 131236), (94, 131389), (101, 131437),

Gene: Funsized_56 Start: 50763, Stop: 50284, Start Num: 21

Candidate Starts for Funsized_56:

(Start: 21 @50763 has 87 MA's), (55, 50568), (71, 50514), (78, 50472), (101, 50349), (105, 50319),

Gene: Gabriel_239 Start: 130456, Stop: 130923, Start Num: 23

Candidate Starts for Gabriel_239:

(15, 130387), (Start: 23 @130456 has 162 MA's), (27, 130477), (56, 130651), (59, 130666), (94, 130819), (101, 130867),

Gene: Gadget_56 Start: 48745, Stop: 48272, Start Num: 21

Candidate Starts for Gadget_56:

(Start: 21 @48745 has 87 MA's), (28, 48709), (57, 48541), (62, 48517), (67, 48508), (77, 48481), (82, 48454), (108, 48301),

Gene: Gamgam_238 Start: 130813, Stop: 131280, Start Num: 23

Candidate Starts for Gamgam_238:

(15, 130744), (Start: 23 @130813 has 162 MA's), (27, 130834), (56, 131008), (59, 131023), (94, 131176), (101, 131224),

Gene: Gattaca_4 Start: 802, Stop: 1281, Start Num: 14

Candidate Starts for Gattaca_4:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: Gervas_56 Start: 48853, Stop: 48380, Start Num: 21

Candidate Starts for Gervas_56:

(Start: 21 @48853 has 87 MA's), (28, 48817), (62, 48625), (77, 48589), (82, 48562),

Gene: Ghost_235 Start: 131437, Stop: 131904, Start Num: 23

Candidate Starts for Ghost_235:

(15, 131368), (Start: 23 @131437 has 162 MA's), (27, 131458), (56, 131632), (59, 131647), (94, 131800), (101, 131848),

Gene: GinPorsche_49 Start: 47622, Stop: 47143, Start Num: 21
Candidate Starts for GinPorsche_49:
(Start: 21 @47622 has 87 MA's), (44, 47490), (82, 47325), (84, 47313), (93, 47262), (110, 47157),
(112, 47154),

Gene: Gizmo_241 Start: 133853, Stop: 134320, Start Num: 23
Candidate Starts for Gizmo_241:
(15, 133784), (Start: 23 @133853 has 162 MA's), (27, 133874), (56, 134048), (59, 134063), (94,
134216), (101, 134264),

Gene: Glass_54 Start: 47745, Stop: 47254, Start Num: 19
Candidate Starts for Glass_54:
(Start: 19 @47745 has 32 MA's), (48, 47586), (76, 47466), (77, 47463), (79, 47448), (82, 47436), (92,
47379), (93, 47373), (98, 47346), (113, 47262),

Gene: GlenHope_56 Start: 48408, Stop: 47935, Start Num: 21
Candidate Starts for GlenHope_56:
(Start: 21 @48408 has 87 MA's), (28, 48372), (62, 48180), (77, 48144), (82, 48117),

Gene: Glubnar_55 Start: 48404, Stop: 47931, Start Num: 21
Candidate Starts for Glubnar_55:
(Start: 21 @48404 has 87 MA's), (28, 48368), (62, 48176), (77, 48140), (82, 48113),

Gene: GlutenPhree_235 Start: 130824, Stop: 131291, Start Num: 23
Candidate Starts for GlutenPhree_235:
(15, 130755), (Start: 23 @130824 has 162 MA's), (27, 130845), (56, 131019), (59, 131034), (94,
131187), (101, 131235),

Gene: Godines_54 Start: 47697, Stop: 47206, Start Num: 19
Candidate Starts for Godines_54:
(Start: 19 @47697 has 32 MA's), (48, 47538), (77, 47415), (79, 47400), (82, 47388), (92, 47331), (93,
47325), (98, 47298), (113, 47214),

Gene: GoongGoong_3 Start: 811, Stop: 1290, Start Num: 14
Candidate Starts for GoongGoong_3:
(Start: 10 @790 has 9 MA's), (12, 802), (Start: 14 @811 has 7 MA's), (41, 988), (47, 1012), (49, 1018),
(51, 1021), (53, 1033), (54, 1039), (63, 1081), (81, 1156), (91, 1207),

Gene: Grasshills_243 Start: 133429, Stop: 133896, Start Num: 23
Candidate Starts for Grasshills_243:
(Start: 23 @133429 has 162 MA's), (27, 133450), (56, 133624), (59, 133639), (72, 133678), (94,
133792), (101, 133840),

Gene: Grungle_218 Start: 128759, Stop: 129226, Start Num: 23
Candidate Starts for Grungle_218:
(15, 128690), (Start: 23 @128759 has 162 MA's), (27, 128780), (56, 128954), (59, 128969), (94,
129122), (101, 129170),

Gene: Guwapp_232 Start: 130271, Stop: 130738, Start Num: 23
Candidate Starts for Guwapp_232:
(15, 130202), (Start: 23 @130271 has 162 MA's), (27, 130292), (56, 130466), (59, 130481), (94,
130634), (101, 130682),

Gene: Halfpint_54 Start: 48229, Stop: 47756, Start Num: 21
Candidate Starts for Halfpint_54:
(Start: 21 @48229 has 87 MA's), (28, 48193), (62, 48001), (77, 47965), (82, 47938), (108, 47785),

Gene: Halldule_228 Start: 129941, Stop: 130408, Start Num: 23
Candidate Starts for Halldule_228:
(15, 129872), (Start: 23 @129941 has 162 MA's), (27, 129962), (56, 130136), (59, 130151), (94, 130304), (101, 130352),

Gene: Hally898_49 Start: 47637, Stop: 47158, Start Num: 21
Candidate Starts for Hally898_49:
(Start: 21 @47637 has 87 MA's), (44, 47505), (82, 47340), (84, 47328), (93, 47277), (110, 47172), (112, 47169),

Gene: Hangman_49 Start: 48338, Stop: 47877, Start Num: 21
Candidate Starts for Hangman_49:
(Start: 21 @48338 has 87 MA's), (37, 48245), (46, 48197), (69, 48110), (71, 48101), (73, 48092), (79, 48062), (82, 48050), (89, 48020), (93, 47987), (97, 47963), (98, 47960), (105, 47912), (110, 47888),

Gene: HarveySr_54 Start: 48081, Stop: 47608, Start Num: 21
Candidate Starts for HarveySr_54:
(Start: 21 @48081 has 87 MA's), (28, 48045), (62, 47853), (77, 47817), (82, 47790),

Gene: Heath_49 Start: 48246, Stop: 47785, Start Num: 21
Candidate Starts for Heath_49:
(Start: 21 @48246 has 87 MA's), (37, 48153), (46, 48105), (71, 48009), (73, 48000), (79, 47970), (82, 47958), (89, 47928), (93, 47895), (97, 47871), (98, 47868), (105, 47820), (110, 47796),

Gene: Heathcliff_55 Start: 48375, Stop: 47902, Start Num: 21
Candidate Starts for Heathcliff_55:
(Start: 21 @48375 has 87 MA's), (28, 48339), (57, 48171), (62, 48147), (67, 48138), (77, 48111), (82, 48084), (108, 47931),

Gene: Hedgerow_54 Start: 47754, Stop: 47263, Start Num: 19
Candidate Starts for Hedgerow_54:
(Start: 19 @47754 has 32 MA's), (48, 47595), (76, 47475), (77, 47472), (79, 47457), (82, 47445), (92, 47388), (93, 47382), (98, 47355), (113, 47271),

Gene: Holeinone_54 Start: 47605, Stop: 47114, Start Num: 19
Candidate Starts for Holeinone_54:
(Start: 19 @47605 has 32 MA's), (48, 47446), (76, 47326), (77, 47323), (79, 47308), (82, 47296), (92, 47239), (93, 47233), (98, 47206), (113, 47122),

Gene: Hosp_046 Start: 44495, Stop: 44016, Start Num: 21
Candidate Starts for Hosp_046:
(Start: 21 @44495 has 87 MA's), (Start: 24 @44489 has 3 MA's), (44, 44363), (77, 44225), (82, 44198), (93, 44135), (110, 44030),

Gene: Huphlepuuff_2 Start: 558, Stop: 1058, Start Num: 10
Candidate Starts for Huphlepuuff_2:
(Start: 10 @558 has 9 MA's), (12, 570), (Start: 14 @579 has 7 MA's), (41, 756), (47, 780), (49, 786), (51, 789), (53, 801), (54, 807), (63, 849), (81, 924), (91, 975),

Gene: HyRo_221 Start: 130778, Stop: 131269, Start Num: 21

Candidate Starts for HyRo_221:

(15, 130715), (Start: 21 @130778 has 87 MA's), (Start: 23 @130784 has 162 MA's), (27, 130805), (56, 130979), (59, 130994), (94, 131147), (101, 131195),

Gene: Hydro_50 Start: 48672, Stop: 48211, Start Num: 21

Candidate Starts for Hydro_50:

(1, 49329), (2, 49179), (Start: 21 @48672 has 87 MA's), (37, 48579), (46, 48531), (71, 48435), (73, 48426), (82, 48384), (83, 48378), (89, 48354), (93, 48321), (97, 48297), (98, 48294), (105, 48246), (110, 48222),

Gene: I3_246 Start: 132627, Stop: 133094, Start Num: 23

Candidate Starts for I3_246:

(15, 132558), (Start: 23 @132627 has 162 MA's), (27, 132648), (56, 132822), (59, 132837), (94, 132990), (101, 133038),

Gene: IkeLoa_230 Start: 131169, Stop: 131636, Start Num: 23

Candidate Starts for IkeLoa_230:

(15, 131100), (Start: 23 @131169 has 162 MA's), (27, 131190), (56, 131364), (59, 131379), (94, 131532), (101, 131580),

Gene: Imvubu_48 Start: 45835, Stop: 45356, Start Num: 21

Candidate Starts for Imvubu_48:

(Start: 21 @45835 has 87 MA's), (45, 45700), (73, 45577), (76, 45565), (79, 45547), (82, 45535), (90, 45499), (93, 45472), (100, 45424), (110, 45367),

Gene: Indlovu_52 Start: 48321, Stop: 47821, Start Num: 21

Candidate Starts for Indlovu_52:

(Start: 21 @48321 has 87 MA's), (34, 48243), (54, 48147), (74, 48063), (90, 47988), (91, 47970), (93, 47961), (99, 47919), (106, 47877),

Gene: InigoMontoya_239 Start: 131487, Stop: 131954, Start Num: 23

Candidate Starts for InigoMontoya_239:

(15, 131418), (Start: 23 @131487 has 162 MA's), (27, 131508), (56, 131682), (59, 131697), (94, 131850), (101, 131898), (111, 131949),

Gene: InterFolia_237 Start: 132290, Stop: 132757, Start Num: 23

Candidate Starts for InterFolia_237:

(15, 132221), (Start: 23 @132290 has 162 MA's), (27, 132311), (56, 132485), (59, 132500), (94, 132653), (101, 132701),

Gene: Iota_233 Start: 131199, Stop: 131666, Start Num: 23

Candidate Starts for Iota_233:

(15, 131130), (Start: 23 @131199 has 162 MA's), (27, 131220), (56, 131394), (59, 131409), (94, 131562), (101, 131610),

Gene: Issimir_229 Start: 131125, Stop: 131592, Start Num: 23

Candidate Starts for Issimir_229:

(15, 131056), (Start: 23 @131125 has 162 MA's), (27, 131146), (56, 131320), (59, 131335), (94, 131488), (101, 131536),

Gene: ItsyBitsy1_54 Start: 47622, Stop: 47131, Start Num: 19

Candidate Starts for ItsyBitsy1_54:

(Start: 19 @47622 has 32 MA's), (48, 47463), (76, 47343), (77, 47340), (79, 47325), (82, 47313), (92, 47256), (93, 47250), (98, 47223), (113, 47139),

Gene: Izajani_232 Start: 132019, Stop: 132486, Start Num: 23

Candidate Starts for Izajani_232:

(15, 131950), (Start: 23 @132019 has 162 MA's), (27, 132040), (56, 132214), (59, 132229), (94, 132382), (101, 132430),

Gene: JAMaL_50 Start: 48798, Stop: 48337, Start Num: 21

Candidate Starts for JAMaL_50:

(Start: 21 @48798 has 87 MA's), (37, 48705), (46, 48657), (71, 48561), (73, 48552), (79, 48522), (82, 48510), (89, 48480), (93, 48447), (97, 48423), (98, 48420), (105, 48372), (110, 48348),

Gene: JPickles_233 Start: 130175, Stop: 130642, Start Num: 23

Candidate Starts for JPickles_233:

(15, 130106), (Start: 23 @130175 has 162 MA's), (27, 130196), (56, 130370), (59, 130385), (94, 130538), (101, 130586),

Gene: Jackstina_51 Start: 48334, Stop: 47861, Start Num: 21

Candidate Starts for Jackstina_51:

(7, 48460), (11, 48409), (Start: 21 @48334 has 87 MA's), (28, 48298), (62, 48106), (77, 48070), (82, 48043),

Gene: JaguarMi_52 Start: 49739, Stop: 49278, Start Num: 21

Candidate Starts for JaguarMi_52:

(Start: 21 @49739 has 87 MA's), (37, 49646), (46, 49598), (71, 49502), (73, 49493), (79, 49463), (82, 49451), (83, 49445), (89, 49421), (91, 49397), (93, 49388), (97, 49364), (98, 49361), (105, 49313), (110, 49289),

Gene: Janiyra_239 Start: 131712, Stop: 132179, Start Num: 23

Candidate Starts for Janiyra_239:

(15, 131643), (Start: 23 @131712 has 162 MA's), (27, 131733), (56, 131907), (59, 131922), (94, 132075), (101, 132123),

Gene: JayJay_234 Start: 131602, Stop: 132087, Start Num: 23

Candidate Starts for JayJay_234:

(15, 131533), (Start: 21 @131596 has 87 MA's), (Start: 23 @131602 has 162 MA's), (27, 131623), (56, 131797), (59, 131812), (94, 131965), (101, 132013),

Gene: Jaygup_233 Start: 131346, Stop: 131813, Start Num: 23

Candidate Starts for Jaygup_233:

(15, 131277), (Start: 23 @131346 has 162 MA's), (27, 131367), (56, 131541), (59, 131556), (94, 131709), (101, 131757),

Gene: Jedediah_237 Start: 132399, Stop: 132866, Start Num: 23

Candidate Starts for Jedediah_237:

(15, 132330), (Start: 23 @132399 has 162 MA's), (27, 132420), (56, 132594), (59, 132609), (94, 132762), (101, 132810),

Gene: Jemmno_236 Start: 131118, Stop: 131585, Start Num: 23

Candidate Starts for Jemmno_236:

(15, 131049), (Start: 23 @131118 has 162 MA's), (27, 131139), (56, 131313), (59, 131328), (94, 131481), (101, 131529),

Gene: Jessibeth14_236 Start: 132594, Stop: 133061, Start Num: 23

Candidate Starts for Jessibeth14_236:

(15, 132525), (Start: 23 @132594 has 162 MA's), (27, 132615), (56, 132789), (59, 132804), (94, 132957), (101, 133005),

Gene: Jezreel_232 Start: 131663, Stop: 132130, Start Num: 23

Candidate Starts for Jezreel_232:

(15, 131594), (Start: 23 @131663 has 162 MA's), (27, 131684), (56, 131858), (59, 131873), (94, 132026), (101, 132074),

Gene: JigglyPuff_242 Start: 133089, Stop: 133556, Start Num: 23

Candidate Starts for JigglyPuff_242:

(15, 133020), (Start: 23 @133089 has 162 MA's), (27, 133110), (56, 133284), (59, 133299), (94, 133452), (101, 133500),

Gene: JoieB_3 Start: 780, Stop: 1280, Start Num: 10

Candidate Starts for JoieB_3:

(Start: 10 @780 has 9 MA's), (12, 792), (Start: 14 @801 has 7 MA's), (41, 978), (47, 1002), (49, 1008), (51, 1011), (53, 1023), (54, 1029), (63, 1071), (81, 1146), (91, 1197),

Gene: Jolie1_048 Start: 46283, Stop: 45804, Start Num: 21

Candidate Starts for Jolie1_048:

(Start: 21 @46283 has 87 MA's), (Start: 24 @46277 has 3 MA's), (44, 46151), (82, 45986), (93, 45923), (110, 45818),

Gene: JulietS_228 Start: 128698, Stop: 129165, Start Num: 23

Candidate Starts for JulietS_228:

(15, 128629), (Start: 23 @128698 has 162 MA's), (27, 128719), (56, 128893), (59, 128908), (94, 129061), (101, 129109),

Gene: JustHall_230 Start: 130648, Stop: 131115, Start Num: 23

Candidate Starts for JustHall_230:

(15, 130579), (Start: 23 @130648 has 162 MA's), (27, 130669), (56, 130843), (59, 130858), (94, 131011), (101, 131059),

Gene: Kaleb_54 Start: 47769, Stop: 47278, Start Num: 19

Candidate Starts for Kaleb_54:

(Start: 19 @47769 has 32 MA's), (48, 47610), (76, 47490), (77, 47487), (79, 47472), (82, 47460), (92, 47403), (93, 47397), (98, 47370), (113, 47286),

Gene: Kamiyu_55 Start: 48385, Stop: 47912, Start Num: 21

Candidate Starts for Kamiyu_55:

(Start: 21 @48385 has 87 MA's), (28, 48349), (62, 48157), (77, 48121), (82, 48094),

Gene: Kamryn_235 Start: 132238, Stop: 132705, Start Num: 23

Candidate Starts for Kamryn_235:

(15, 132169), (Start: 23 @132238 has 162 MA's), (27, 132259), (56, 132433), (59, 132448), (94, 132601), (101, 132649),

Gene: KarasumaRum_55 Start: 49120, Stop: 48659, Start Num: 21

Candidate Starts for KarasumaRum_55:

(Start: 21 @49120 has 87 MA's), (29, 49072), (50, 48961), (62, 48892), (73, 48871), (92, 48784), (93, 48778), (99, 48736),

Gene: KayaCho_47 Start: 46059, Stop: 45589, Start Num: 21

Candidate Starts for KayaCho_47:

(Start: 21 @46059 has 87 MA's), (64, 45837), (71, 45819), (73, 45810), (90, 45732), (93, 45705), (97, 45681), (99, 45663), (105, 45630),

Gene: Kboogie_240 Start: 131277, Stop: 131744, Start Num: 23

Candidate Starts for Kboogie_240:

(15, 131208), (Start: 23 @131277 has 162 MA's), (27, 131298), (56, 131472), (59, 131487), (94, 131640), (101, 131688),

Gene: Khaleesi_235 Start: 132061, Stop: 132528, Start Num: 23

Candidate Starts for Khaleesi_235:

(15, 131992), (Start: 23 @132061 has 162 MA's), (27, 132082), (56, 132256), (59, 132271), (94, 132424), (101, 132472),

Gene: Kheth_54 Start: 47658, Stop: 47167, Start Num: 19

Candidate Starts for Kheth_54:

(Start: 19 @47658 has 32 MA's), (48, 47499), (76, 47379), (77, 47376), (79, 47361), (82, 47349), (92, 47292), (93, 47286), (98, 47259), (113, 47175),

Gene: Knocker_55 Start: 50204, Stop: 49725, Start Num: 21

Candidate Starts for Knocker_55:

(9, 50315), (17, 50255), (Start: 21 @50204 has 87 MA's), (43, 50078), (46, 50060), (66, 49973), (75, 49943), (77, 49934), (82, 49907), (93, 49844), (94, 49841), (103, 49778), (104, 49772), (105, 49769), (109, 49751), (113, 49733),

Gene: Koguma_235 Start: 130918, Stop: 131385, Start Num: 23

Candidate Starts for Koguma_235:

(15, 130849), (Start: 23 @130918 has 162 MA's), (27, 130939), (56, 131113), (59, 131128), (94, 131281), (101, 131329),

Gene: Kolhan_54 Start: 47622, Stop: 47131, Start Num: 19

Candidate Starts for Kolhan_54:

(Start: 19 @47622 has 32 MA's), (48, 47463), (76, 47343), (77, 47340), (79, 47325), (82, 47313), (92, 47256), (93, 47250), (98, 47223), (113, 47139),

Gene: Kronus_55 Start: 49462, Stop: 48989, Start Num: 21

Candidate Starts for Kronus_55:

(Start: 21 @49462 has 87 MA's), (28, 49426), (62, 49234), (77, 49198), (82, 49171),

Gene: LRRHood_228 Start: 130270, Stop: 130737, Start Num: 23

Candidate Starts for LRRHood_228:

(15, 130201), (Start: 23 @130270 has 162 MA's), (27, 130291), (56, 130465), (59, 130480), (94, 130633), (101, 130681),

Gene: Lambano_49 Start: 47637, Stop: 47158, Start Num: 21

Candidate Starts for Lambano_49:

(Start: 21 @47637 has 87 MA's), (44, 47505), (82, 47340), (84, 47328), (93, 47277), (110, 47172), (112, 47169),

Gene: Lars_54 Start: 47729, Stop: 47238, Start Num: 19

Candidate Starts for Lars_54:

(Start: 19 @47729 has 32 MA's), (48, 47570), (76, 47450), (77, 47447), (79, 47432), (82, 47420), (92, 47363), (93, 47357), (98, 47330), (113, 47246),

Gene: Latch_236 Start: 130823, Stop: 131290, Start Num: 23

Candidate Starts for Latch_236:

(15, 130754), (Start: 23 @130823 has 162 MA's), (27, 130844), (56, 131018), (59, 131033), (94, 131186), (101, 131234),

Gene: Laurie_53 Start: 47114, Stop: 46623, Start Num: 19

Candidate Starts for Laurie_53:

(Start: 19 @47114 has 32 MA's), (48, 46955), (77, 46832), (79, 46817), (82, 46805), (92, 46748), (93, 46742), (98, 46715), (113, 46631),

Gene: Lee7_235 Start: 133475, Stop: 133942, Start Num: 23

Candidate Starts for Lee7_235:

(15, 133406), (Start: 23 @133475 has 162 MA's), (27, 133496), (56, 133670), (59, 133685), (94, 133838), (101, 133886),

Gene: Lephleur_54 Start: 47635, Stop: 47144, Start Num: 19

Candidate Starts for Lephleur_54:

(Start: 19 @47635 has 32 MA's), (48, 47476), (76, 47356), (77, 47353), (79, 47338), (82, 47326), (92, 47269), (93, 47263), (98, 47236), (113, 47152),

Gene: LestyG_54 Start: 48098, Stop: 47625, Start Num: 21

Candidate Starts for LestyG_54:

(Start: 21 @48098 has 87 MA's), (28, 48062), (62, 47870), (77, 47834), (82, 47807),

Gene: Lethe_237 Start: 132714, Stop: 133181, Start Num: 23

Candidate Starts for Lethe_237:

(15, 132645), (Start: 23 @132714 has 162 MA's), (27, 132735), (56, 132909), (59, 132924), (94, 133077), (101, 133125),

Gene: LifeSavor_236 Start: 132051, Stop: 132518, Start Num: 23

Candidate Starts for LifeSavor_236:

(15, 131982), (Start: 23 @132051 has 162 MA's), (27, 132072), (56, 132246), (59, 132261), (94, 132414), (101, 132462),

Gene: LilMcDreamy_52 Start: 48261, Stop: 47788, Start Num: 21

Candidate Starts for LilMcDreamy_52:

(Start: 21 @48261 has 87 MA's), (33, 48186), (46, 48117), (52, 48096), (54, 48087), (79, 47976), (93, 47901), (99, 47859),

Gene: LilSmirk_54 Start: 47632, Stop: 47141, Start Num: 19

Candidate Starts for LilSmirk_54:

(Start: 19 @47632 has 32 MA's), (48, 47473), (76, 47353), (77, 47350), (79, 47335), (82, 47323), (92, 47266), (93, 47260), (98, 47233), (113, 47149),

Gene: Lilbit_2 Start: 558, Stop: 1058, Start Num: 10

Candidate Starts for Lilbit_2:

(Start: 10 @558 has 9 MA's), (12, 570), (Start: 14 @579 has 7 MA's), (41, 756), (47, 780), (49, 786), (51, 789), (53, 801), (54, 807), (63, 849), (81, 924), (91, 975),

Gene: LinStu_234 Start: 130556, Stop: 131041, Start Num: 23

Candidate Starts for LinStu_234:

(15, 130487), (Start: 23 @130556 has 162 MA's), (27, 130577), (56, 130751), (59, 130766), (94, 130919), (101, 130967),

Gene: LittleLaf_2 Start: 558, Stop: 1058, Start Num: 10

Candidate Starts for LittleLaf_2:

(Start: 10 @558 has 9 MA's), (12, 570), (Start: 14 @579 has 7 MA's), (41, 756), (47, 780), (49, 786), (51, 789), (53, 801), (54, 807), (63, 849), (81, 924), (91, 975),

Gene: LittleMunchkin_48 Start: 43521, Stop: 43039, Start Num: 20

Candidate Starts for LittleMunchkin_48:

(Start: 20 @43521 has 2 MA's), (46, 43365), (68, 43263), (72, 43248), (73, 43242), (77, 43227), (79, 43212), (87, 43176), (92, 43152), (101, 43095),

Gene: Littleton_239 Start: 132060, Stop: 132527, Start Num: 23

Candidate Starts for Littleton_239:

(15, 131991), (Start: 23 @132060 has 162 MA's), (27, 132081), (56, 132255), (59, 132270), (94, 132423), (101, 132471),

Gene: LizLemon_54 Start: 47751, Stop: 47260, Start Num: 19

Candidate Starts for LizLemon_54:

(Start: 19 @47751 has 32 MA's), (48, 47592), (77, 47469), (79, 47454), (82, 47442), (92, 47385), (93, 47379), (98, 47352), (113, 47268),

Gene: Loanshark_233 Start: 131410, Stop: 131877, Start Num: 23

Candidate Starts for Loanshark_233:

(15, 131341), (Start: 23 @131410 has 162 MA's), (27, 131431), (56, 131605), (59, 131620), (94, 131773), (101, 131821),

Gene: LolaVinca_232 Start: 131720, Stop: 132187, Start Num: 23

Candidate Starts for LolaVinca_232:

(15, 131651), (Start: 23 @131720 has 162 MA's), (27, 131741), (56, 131915), (59, 131930), (94, 132083), (101, 132131),

Gene: Lolalove_51 Start: 48640, Stop: 48179, Start Num: 21

Candidate Starts for Lolalove_51:

(1, 49297), (2, 49147), (5, 48835), (Start: 21 @48640 has 87 MA's), (37, 48547), (46, 48499), (71, 48403), (73, 48394), (82, 48352), (83, 48346), (89, 48322), (93, 48289), (97, 48265), (98, 48262), (105, 48214), (110, 48190),

Gene: LordLeafolot_238 Start: 131333, Stop: 131800, Start Num: 23

Candidate Starts for LordLeafolot_238:

(15, 131264), (Start: 23 @131333 has 162 MA's), (27, 131354), (56, 131528), (59, 131543), (94, 131696), (101, 131744),

Gene: Lukilu_225 Start: 132274, Stop: 132741, Start Num: 23

Candidate Starts for Lukilu_225:

(15, 132205), (Start: 23 @132274 has 162 MA's), (27, 132295), (56, 132469), (59, 132484), (94, 132637), (101, 132685),

Gene: Maby2021_236 Start: 132514, Stop: 132981, Start Num: 23

Candidate Starts for Maby2021_236:

(15, 132445), (Start: 23 @132514 has 162 MA's), (27, 132535), (56, 132709), (59, 132724), (94, 132877), (101, 132925),

Gene: Magpie_49 Start: 48475, Stop: 48014, Start Num: 21

Candidate Starts for Magpie_49:

(5, 48670), (Start: 21 @48475 has 87 MA's), (37, 48382), (46, 48334), (71, 48238), (73, 48229), (79, 48199), (82, 48187), (83, 48181), (89, 48157), (93, 48124), (97, 48100), (98, 48097), (105, 48049), (110, 48025),

Gene: Mangeria_237 Start: 132616, Stop: 133101, Start Num: 23

Candidate Starts for Mangeria_237:

(15, 132547), (Start: 23 @132616 has 162 MA's), (27, 132637), (56, 132811), (59, 132826), (94, 132979), (101, 133027),

Gene: Marley1013_56 Start: 49347, Stop: 48874, Start Num: 21

Candidate Starts for Marley1013_56:

(Start: 21 @49347 has 87 MA's), (28, 49311), (62, 49119), (77, 49083), (82, 49056),

Gene: Marvin_2 Start: 802, Stop: 1281, Start Num: 14

Candidate Starts for Marvin_2:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: MasterPo_54 Start: 47644, Stop: 47153, Start Num: 19

Candidate Starts for MasterPo_54:

(Start: 19 @47644 has 32 MA's), (48, 47485), (77, 47362), (79, 47347), (82, 47335), (92, 47278), (93, 47272), (98, 47245), (113, 47161),

Gene: Matsumoto_234 Start: 131265, Stop: 131732, Start Num: 23

Candidate Starts for Matsumoto_234:

(15, 131196), (Start: 23 @131265 has 162 MA's), (27, 131286), (56, 131460), (59, 131475), (94, 131628), (101, 131676),

Gene: Mbo2_59 Start: 47195, Stop: 46707, Start Num: 24

Candidate Starts for Mbo2_59:

(Start: 24 @47195 has 3 MA's), (36, 47108), (70, 46952), (88, 46853), (98, 46790), (103, 46751),

Gene: McGee_237 Start: 131162, Stop: 131629, Start Num: 23

Candidate Starts for McGee_237:

(15, 131093), (Start: 23 @131162 has 162 MA's), (27, 131183), (56, 131357), (59, 131372), (94, 131525), (101, 131573),

Gene: McWolfish_233 Start: 131272, Stop: 131739, Start Num: 23

Candidate Starts for McWolfish_233:

(15, 131203), (Start: 23 @131272 has 162 MA's), (27, 131293), (56, 131467), (59, 131482), (94, 131635), (101, 131683),

Gene: Megamind_233 Start: 131597, Stop: 132064, Start Num: 23

Candidate Starts for Megamind_233:

(15, 131528), (Start: 23 @131597 has 162 MA's), (27, 131618), (56, 131792), (59, 131807), (94, 131960), (101, 132008),

Gene: Melpomini_231 Start: 130357, Stop: 130824, Start Num: 23
Candidate Starts for Melpomini_231:
(15, 130288), (Start: 23 @130357 has 162 MA's), (27, 130378), (56, 130552), (59, 130567), (94, 130720), (101, 130768),

Gene: MikeLiesIn_236 Start: 132733, Stop: 133200, Start Num: 23
Candidate Starts for MikeLiesIn_236:
(15, 132664), (Start: 23 @132733 has 162 MA's), (27, 132754), (56, 132928), (59, 132943), (94, 133096), (101, 133144),

Gene: Mikro_230 Start: 133245, Stop: 133712, Start Num: 23
Candidate Starts for Mikro_230:
(15, 133176), (Start: 23 @133245 has 162 MA's), (27, 133266), (56, 133440), (59, 133455), (94, 133608), (101, 133656),

Gene: Mithril_49 Start: 48260, Stop: 47781, Start Num: 21
Candidate Starts for Mithril_49:
(Start: 21 @48260 has 87 MA's), (44, 48128), (82, 47963), (84, 47951), (90, 47927), (93, 47900), (110, 47795), (112, 47792),

Gene: MmasiCarm_56 Start: 48903, Stop: 48430, Start Num: 21
Candidate Starts for MmasiCarm_56:
(Start: 21 @48903 has 87 MA's), (28, 48867), (57, 48699), (62, 48675), (77, 48639), (82, 48612), (108, 48459),

Gene: MoMoMixon_232 Start: 131738, Stop: 132205, Start Num: 23
Candidate Starts for MoMoMixon_232:
(15, 131669), (Start: 23 @131738 has 162 MA's), (27, 131759), (56, 131933), (59, 131948), (94, 132101), (101, 132149),

Gene: Momo_237 Start: 130823, Stop: 131290, Start Num: 23
Candidate Starts for Momo_237:
(15, 130754), (Start: 23 @130823 has 162 MA's), (27, 130844), (56, 131018), (59, 131033), (94, 131186), (101, 131234),

Gene: Morizzled23_233 Start: 130190, Stop: 130657, Start Num: 23
Candidate Starts for Morizzled23_233:
(15, 130121), (Start: 23 @130190 has 162 MA's), (27, 130211), (56, 130385), (59, 130400), (94, 130553), (101, 130601),

Gene: Mortcellus_55 Start: 49510, Stop: 49037, Start Num: 21
Candidate Starts for Mortcellus_55:
(Start: 21 @49510 has 87 MA's), (28, 49474), (62, 49282), (77, 49246), (82, 49219),

Gene: Morty007_55 Start: 49347, Stop: 48874, Start Num: 21
Candidate Starts for Morty007_55:
(Start: 21 @49347 has 87 MA's), (28, 49311), (62, 49119), (77, 49083), (82, 49056),

Gene: MosMoris_4 Start: 802, Stop: 1281, Start Num: 14
Candidate Starts for MosMoris_4:
(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: MossRose_49 Start: 42605, Stop: 42138, Start Num: 21
Candidate Starts for MossRose_49:
(Start: 21 @42605 has 87 MA's), (42, 42476), (71, 42362), (92, 42266), (93, 42260), (101, 42209),
(107, 42173),

Gene: Mudslide_50 Start: 48905, Stop: 48444, Start Num: 21
Candidate Starts for Mudslide_50:
(Start: 21 @48905 has 87 MA's), (37, 48812), (46, 48764), (71, 48668), (73, 48659), (82, 48617), (83,
48611), (89, 48587), (93, 48554), (97, 48530), (98, 48527), (105, 48479), (110, 48455),

Gene: Mysterious_55 Start: 49105, Stop: 48644, Start Num: 21
Candidate Starts for Mysterious_55:
(Start: 21 @49105 has 87 MA's), (29, 49057), (62, 48877), (73, 48856), (93, 48763), (99, 48721),

Gene: NHagos_48 Start: 41598, Stop: 41122, Start Num: 21
Candidate Starts for NHagos_48:
(Start: 21 @41598 has 87 MA's), (38, 41496), (42, 41469), (46, 41448), (58, 41382), (93, 41253), (101,
41202), (107, 41166),

Gene: Naija_237 Start: 131526, Stop: 131993, Start Num: 23
Candidate Starts for Naija_237:
(15, 131457), (Start: 23 @131526 has 162 MA's), (27, 131547), (56, 131721), (59, 131736), (94,
131889), (101, 131937),

Gene: Nanao_49 Start: 47627, Stop: 47148, Start Num: 21
Candidate Starts for Nanao_49:
(Start: 21 @47627 has 87 MA's), (44, 47495), (82, 47330), (84, 47318), (93, 47267), (110, 47162),
(112, 47159),

Gene: Nangang_55 Start: 49334, Stop: 48873, Start Num: 21
Candidate Starts for Nangang_55:
(Start: 21 @49334 has 87 MA's), (29, 49286), (62, 49106), (73, 49085), (92, 48998), (93, 48992), (99,
48950),

Gene: Napoleon13_233 Start: 130555, Stop: 131022, Start Num: 23
Candidate Starts for Napoleon13_233:
(15, 130486), (Start: 23 @130555 has 162 MA's), (27, 130576), (56, 130750), (59, 130765), (94,
130918), (101, 130966),

Gene: Nappy_236 Start: 133028, Stop: 133513, Start Num: 23
Candidate Starts for Nappy_236:
(15, 132959), (Start: 23 @133028 has 162 MA's), (27, 133049), (56, 133223), (59, 133238), (94,
133391), (101, 133439),

Gene: Naval22_241 Start: 133306, Stop: 133773, Start Num: 23
Candidate Starts for Naval22_241:
(15, 133237), (Start: 23 @133306 has 162 MA's), (27, 133327), (56, 133501), (59, 133516), (94,
133669), (101, 133717),

Gene: NedWong_235 Start: 131984, Stop: 132451, Start Num: 23
Candidate Starts for NedWong_235:
(15, 131915), (Start: 23 @131984 has 162 MA's), (27, 132005), (56, 132179), (59, 132194), (94,
132347), (101, 132395),

Gene: Nehemiah_54 Start: 49105, Stop: 48644, Start Num: 21
Candidate Starts for Nehemiah_54:
(Start: 21 @49105 has 87 MA's), (29, 49057), (62, 48877), (73, 48856), (93, 48763), (99, 48721),

Gene: Ngannou_231 Start: 130508, Stop: 130975, Start Num: 23
Candidate Starts for Ngannou_231:
(15, 130439), (Start: 23 @130508 has 162 MA's), (27, 130529), (56, 130703), (59, 130718), (94, 130871), (101, 130919),

Gene: Nidhogg_237 Start: 132352, Stop: 132819, Start Num: 23
Candidate Starts for Nidhogg_237:
(15, 132283), (Start: 23 @132352 has 162 MA's), (27, 132373), (56, 132547), (59, 132562), (94, 132715), (101, 132763),

Gene: Nigel_51 Start: 48614, Stop: 48153, Start Num: 21
Candidate Starts for Nigel_51:
(Start: 21 @48614 has 87 MA's), (46, 48473), (71, 48377), (73, 48368), (79, 48338), (82, 48326), (83, 48320), (93, 48263), (97, 48239), (98, 48236), (105, 48188), (110, 48164),

Gene: Norm_236 Start: 132253, Stop: 132720, Start Num: 23
Candidate Starts for Norm_236:
(15, 132184), (Start: 23 @132253 has 162 MA's), (27, 132274), (56, 132448), (59, 132463), (94, 132616), (101, 132664),

Gene: Nozo_55 Start: 49176, Stop: 48703, Start Num: 21
Candidate Starts for Nozo_55:
(Start: 21 @49176 has 87 MA's), (28, 49140), (62, 48948), (77, 48912), (82, 48885),

Gene: NuevoMundo_237 Start: 132808, Stop: 133275, Start Num: 23
Candidate Starts for NuevoMundo_237:
(15, 132739), (Start: 23 @132808 has 162 MA's), (27, 132829), (56, 133003), (59, 133018), (94, 133171), (101, 133219),

Gene: Obutu_56 Start: 48859, Stop: 48386, Start Num: 21
Candidate Starts for Obutu_56:
(Start: 21 @48859 has 87 MA's), (28, 48823), (62, 48631), (77, 48595), (82, 48568),

Gene: Opia_54 Start: 47638, Stop: 47147, Start Num: 19
Candidate Starts for Opia_54:
(Start: 19 @47638 has 32 MA's), (48, 47479), (76, 47359), (77, 47356), (79, 47341), (82, 47329), (92, 47272), (93, 47266), (98, 47239), (113, 47155),

Gene: OrangeOswald_55 Start: 48417, Stop: 47944, Start Num: 21
Candidate Starts for OrangeOswald_55:
(Start: 21 @48417 has 87 MA's), (28, 48381), (62, 48189), (77, 48153), (82, 48126),

Gene: ParkTD_235 Start: 131823, Stop: 132290, Start Num: 23
Candidate Starts for ParkTD_235:
(15, 131754), (Start: 23 @131823 has 162 MA's), (27, 131844), (56, 132018), (59, 132033), (94, 132186), (101, 132234),

Gene: Patter_238 Start: 131540, Stop: 132007, Start Num: 23

Candidate Starts for Patter_238:

(15, 131471), (Start: 23 @131540 has 162 MA's), (27, 131561), (56, 131735), (59, 131750), (94, 131903), (101, 131951),

Gene: Phantasmagoria_54 Start: 47636, Stop: 47145, Start Num: 19

Candidate Starts for Phantasmagoria_54:

(Start: 19 @47636 has 32 MA's), (48, 47477), (77, 47354), (79, 47339), (92, 47270), (93, 47264), (98, 47237), (113, 47153),

Gene: Phayeta_57 Start: 48740, Stop: 48267, Start Num: 21

Candidate Starts for Phayeta_57:

(Start: 21 @48740 has 87 MA's), (28, 48704), (57, 48536), (62, 48512), (77, 48476), (82, 48449), (108, 48296),

Gene: Phelemich_53 Start: 49104, Stop: 48643, Start Num: 21

Candidate Starts for Phelemich_53:

(Start: 21 @49104 has 87 MA's), (29, 49056), (62, 48876), (73, 48855), (93, 48762), (99, 48720),

Gene: Philly_54 Start: 48267, Stop: 47794, Start Num: 21

Candidate Starts for Philly_54:

(Start: 21 @48267 has 87 MA's), (28, 48231), (62, 48039), (77, 48003), (82, 47976),

Gene: Phlegm_240 Start: 132229, Stop: 132696, Start Num: 23

Candidate Starts for Phlegm_240:

(15, 132160), (Start: 23 @132229 has 162 MA's), (27, 132250), (56, 132424), (59, 132439), (94, 132592), (101, 132640),

Gene: Phlyer_55 Start: 49152, Stop: 48679, Start Num: 21

Candidate Starts for Phlyer_55:

(Start: 21 @49152 has 87 MA's), (28, 49116), (62, 48924), (77, 48888), (82, 48861),

Gene: Phox_237 Start: 131478, Stop: 131945, Start Num: 23

Candidate Starts for Phox_237:

(15, 131409), (Start: 23 @131478 has 162 MA's), (27, 131499), (56, 131673), (59, 131688), (94, 131841), (101, 131889),

Gene: Phrappuccino_159 Start: 108261, Stop: 108728, Start Num: 18

Candidate Starts for Phrappuccino_159:

(Start: 18 @108261 has 2 MA's), (25, 108306), (26, 108309), (58, 108486), (65, 108504), (80, 108558), (85, 108576), (92, 108606),

Gene: Phusco_235 Start: 131061, Stop: 131528, Start Num: 23

Candidate Starts for Phusco_235:

(15, 130992), (Start: 23 @131061 has 162 MA's), (27, 131082), (56, 131256), (59, 131271), (94, 131424), (101, 131472),

Gene: Pier_235 Start: 132354, Stop: 132821, Start Num: 23

Candidate Starts for Pier_235:

(15, 132285), (Start: 23 @132354 has 162 MA's), (27, 132375), (56, 132549), (59, 132564), (94, 132717), (101, 132765),

Gene: Pio_242 Start: 133557, Stop: 134024, Start Num: 23

Candidate Starts for Pio_242:

(15, 133488), (Start: 23 @133557 has 162 MA's), (27, 133578), (56, 133752), (59, 133767), (94, 133920), (101, 133968),

Gene: Pivoine_237 Start: 131526, Stop: 131993, Start Num: 23

Candidate Starts for Pivoine_237:

(15, 131457), (Start: 23 @131526 has 162 MA's), (27, 131547), (56, 131721), (59, 131736), (94, 131889), (101, 131937),

Gene: Pleione_240 Start: 132289, Stop: 132756, Start Num: 23

Candidate Starts for Pleione_240:

(15, 132220), (Start: 23 @132289 has 162 MA's), (27, 132310), (56, 132484), (59, 132499), (94, 132652), (101, 132700),

Gene: Poise_3 Start: 790, Stop: 1290, Start Num: 10

Candidate Starts for Poise_3:

(Start: 10 @790 has 9 MA's), (12, 802), (Start: 14 @811 has 7 MA's), (41, 988), (47, 1012), (49, 1018), (51, 1021), (53, 1033), (54, 1039), (63, 1081), (81, 1156), (91, 1207),

Gene: Poster_49 Start: 47628, Stop: 47149, Start Num: 21

Candidate Starts for Poster_49:

(Start: 21 @47628 has 87 MA's), (44, 47496), (82, 47331), (84, 47319), (93, 47268), (110, 47163), (112, 47160),

Gene: Prince_50 Start: 48815, Stop: 48354, Start Num: 21

Candidate Starts for Prince_50:

(5, 49010), (Start: 21 @48815 has 87 MA's), (37, 48722), (46, 48674), (71, 48578), (73, 48569), (79, 48539), (82, 48527), (89, 48497), (91, 48473), (93, 48464), (97, 48440), (98, 48437), (105, 48389), (110, 48365),

Gene: Pupper_137 Start: 96238, Stop: 96732, Start Num: 22

Candidate Starts for Pupper_137:

(Start: 22 @96238 has 4 MA's), (88, 96580), (103, 96682),

Gene: PurduePete_236 Start: 132554, Stop: 133021, Start Num: 23

Candidate Starts for PurduePete_236:

(15, 132485), (Start: 23 @132554 has 162 MA's), (27, 132575), (56, 132749), (59, 132764), (94, 132917), (101, 132965),

Gene: QBert_228 Start: 129877, Stop: 130344, Start Num: 23

Candidate Starts for QBert_228:

(15, 129808), (Start: 23 @129877 has 162 MA's), (27, 129898), (56, 130072), (59, 130087), (94, 130240), (101, 130288),

Gene: Quasimodo_239 Start: 131862, Stop: 132329, Start Num: 23

Candidate Starts for Quasimodo_239:

(15, 131793), (Start: 23 @131862 has 162 MA's), (27, 131883), (56, 132057), (59, 132072), (94, 132225), (101, 132273),

Gene: QueenPie_48 Start: 48361, Stop: 47879, Start Num: 21

Candidate Starts for QueenPie_48:

(Start: 21 @48361 has 87 MA's), (30, 48310), (44, 48229), (73, 48103), (79, 48073), (82, 48061), (90, 48025), (93, 47998), (110, 47893), (112, 47890),

Gene: Raela_2 Start: 790, Stop: 1290, Start Num: 10

Candidate Starts for Raela_2:

(Start: 10 @790 has 9 MA's), (12, 802), (Start: 14 @811 has 7 MA's), (41, 988), (47, 1012), (49, 1018), (51, 1021), (53, 1033), (54, 1039), (63, 1081), (81, 1156), (91, 1207),

Gene: RagingRooster_54 Start: 48098, Stop: 47625, Start Num: 21

Candidate Starts for RagingRooster_54:

(Start: 21 @48098 has 87 MA's), (28, 48062), (62, 47870), (67, 47861), (77, 47834), (82, 47807),

Gene: Rahel_238 Start: 131964, Stop: 132431, Start Num: 23

Candidate Starts for Rahel_238:

(15, 131895), (Start: 23 @131964 has 162 MA's), (27, 131985), (56, 132159), (59, 132174), (94, 132327), (101, 132375),

Gene: RawrgerThat_51 Start: 48688, Stop: 48209, Start Num: 21

Candidate Starts for RawrgerThat_51:

(Start: 21 @48688 has 87 MA's), (44, 48556), (82, 48391), (84, 48379), (93, 48328), (110, 48223), (112, 48220),

Gene: RedRaider77_3 Start: 781, Stop: 1281, Start Num: 10

Candidate Starts for RedRaider77_3:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: Reprobate_54 Start: 49109, Stop: 48648, Start Num: 21

Candidate Starts for Reprobate_54:

(Start: 21 @49109 has 87 MA's), (29, 49061), (62, 48881), (73, 48860), (93, 48767), (99, 48725),

Gene: Rhinoforte_54 Start: 47757, Stop: 47266, Start Num: 19

Candidate Starts for Rhinoforte_54:

(Start: 19 @47757 has 32 MA's), (48, 47598), (76, 47478), (77, 47475), (79, 47460), (82, 47448), (92, 47391), (93, 47385), (98, 47358), (113, 47274),

Gene: Rich_55 Start: 50543, Stop: 50082, Start Num: 21

Candidate Starts for Rich_55:

(Start: 21 @50543 has 87 MA's), (29, 50495), (62, 50315), (73, 50294), (92, 50207), (93, 50201), (99, 50159),

Gene: Rinkes_53 Start: 49227, Stop: 48748, Start Num: 21

Candidate Starts for Rinkes_53:

(Start: 21 @49227 has 87 MA's), (52, 49062), (60, 49014), (77, 48957), (79, 48942), (93, 48867),

Gene: Rita130_54 Start: 48981, Stop: 48520, Start Num: 21

Candidate Starts for Rita130_54:

(Start: 21 @48981 has 87 MA's), (29, 48933), (62, 48753), (73, 48732), (92, 48645), (93, 48639), (99, 48597),

Gene: Rita1961_56 Start: 48859, Stop: 48386, Start Num: 21

Candidate Starts for Rita1961_56:

(Start: 21 @48859 has 87 MA's), (28, 48823), (62, 48631), (77, 48595), (82, 48568),

Gene: Rizal_226 Start: 129779, Stop: 130246, Start Num: 23

Candidate Starts for Rizal_226:

(15, 129710), (Start: 23 @129779 has 162 MA's), (27, 129800), (56, 129974), (59, 129989), (94, 130142), (101, 130190),

Gene: RoMag_231 Start: 131560, Stop: 132027, Start Num: 23

Candidate Starts for RoMag_231:

(15, 131491), (Start: 23 @131560 has 162 MA's), (27, 131581), (56, 131755), (59, 131770), (94, 131923), (101, 131971),

Gene: RomaT_55 Start: 49007, Stop: 48534, Start Num: 21

Candidate Starts for RomaT_55:

(Start: 21 @49007 has 87 MA's), (28, 48971), (62, 48779), (77, 48743), (82, 48716),

Gene: Ronan_232 Start: 129949, Stop: 130416, Start Num: 23

Candidate Starts for Ronan_232:

(15, 129880), (Start: 23 @129949 has 162 MA's), (27, 129970), (56, 130144), (59, 130159), (94, 130312), (101, 130360),

Gene: Roots515_239 Start: 133105, Stop: 133572, Start Num: 23

Candidate Starts for Roots515_239:

(15, 133036), (Start: 23 @133105 has 162 MA's), (27, 133126), (56, 133300), (59, 133315), (94, 133468), (101, 133516),

Gene: Rosebush_53 Start: 47769, Stop: 47278, Start Num: 19

Candidate Starts for Rosebush_53:

(Start: 19 @47769 has 32 MA's), (48, 47610), (76, 47490), (77, 47487), (79, 47472), (82, 47460), (92, 47403), (93, 47397), (98, 47370), (113, 47286),

Gene: SCentae_136 Start: 96389, Stop: 96883, Start Num: 22

Candidate Starts for SCentae_136:

(Start: 22 @96389 has 4 MA's), (88, 96731), (103, 96833),

Gene: SVoro_232 Start: 131862, Stop: 132329, Start Num: 23

Candidate Starts for SVoro_232:

(15, 131793), (Start: 23 @131862 has 162 MA's), (27, 131883), (56, 132057), (59, 132072), (94, 132225), (101, 132273),

Gene: Sabella_53 Start: 47620, Stop: 47129, Start Num: 19

Candidate Starts for Sabella_53:

(Start: 19 @47620 has 32 MA's), (48, 47461), (76, 47341), (77, 47338), (79, 47323), (82, 47311), (92, 47254), (93, 47248), (98, 47221), (113, 47137),

Gene: Salacia_237 Start: 132980, Stop: 133447, Start Num: 23

Candidate Starts for Salacia_237:

(15, 132911), (Start: 23 @132980 has 162 MA's), (27, 133001), (56, 133175), (59, 133190), (94, 133343), (101, 133391),

Gene: Sauce_233 Start: 131288, Stop: 131755, Start Num: 23

Candidate Starts for Sauce_233:

(15, 131219), (Start: 23 @131288 has 162 MA's), (27, 131309), (56, 131483), (59, 131498), (94, 131651), (101, 131699),

Gene: ScottMcG_228 Start: 130558, Stop: 131025, Start Num: 23

Candidate Starts for ScottMcG_228:

(15, 130489), (Start: 23 @130558 has 162 MA's), (27, 130579), (56, 130753), (59, 130768), (94, 130921), (101, 130969),

Gene: Sebata_238 Start: 132793, Stop: 133278, Start Num: 23

Candidate Starts for Sebata_238:

(15, 132724), (Start: 21 @132787 has 87 MA's), (Start: 23 @132793 has 162 MA's), (27, 132814), (56, 132988), (59, 133003), (94, 133156), (101, 133204),

Gene: Settecandela_159 Start: 108261, Stop: 108728, Start Num: 18

Candidate Starts for Settecandela_159:

(Start: 18 @108261 has 2 MA's), (25, 108306), (26, 108309), (58, 108486), (65, 108504), (80, 108558), (85, 108576), (92, 108606),

Gene: Shaqnato_227 Start: 130686, Stop: 131153, Start Num: 23

Candidate Starts for Shaqnato_227:

(15, 130617), (Start: 23 @130686 has 162 MA's), (27, 130707), (56, 130881), (59, 130896), (94, 131049), (101, 131097),

Gene: Shelob_237 Start: 133423, Stop: 133890, Start Num: 23

Candidate Starts for Shelob_237:

(15, 133354), (Start: 23 @133423 has 162 MA's), (27, 133444), (56, 133618), (59, 133633), (94, 133786), (101, 133834),

Gene: Shenyu_55 Start: 49334, Stop: 48873, Start Num: 21

Candidate Starts for Shenyu_55:

(Start: 21 @49334 has 87 MA's), (46, 49193), (73, 49091), (93, 48986), (98, 48959), (100, 48938), (105, 48911), (110, 48887),

Gene: ShiaLabeouf_234 Start: 131282, Stop: 131749, Start Num: 23

Candidate Starts for ShiaLabeouf_234:

(15, 131213), (Start: 23 @131282 has 162 MA's), (27, 131303), (56, 131477), (59, 131492), (94, 131645), (101, 131693),

Gene: Shifa_213 Start: 130752, Stop: 131237, Start Num: 23

Candidate Starts for Shifa_213:

(15, 130683), (Start: 21 @130746 has 87 MA's), (Start: 23 @130752 has 162 MA's), (27, 130773), (56, 130947), (59, 130962), (94, 131115), (101, 131163),

Gene: Shnickers_235 Start: 131346, Stop: 131813, Start Num: 23

Candidate Starts for Shnickers_235:

(15, 131277), (Start: 23 @131346 has 162 MA's), (27, 131367), (56, 131541), (59, 131556), (94, 131709), (101, 131757),

Gene: Shrimp_238 Start: 132591, Stop: 133058, Start Num: 23

Candidate Starts for Shrimp_238:

(15, 132522), (Start: 23 @132591 has 162 MA's), (27, 132612), (56, 132786), (59, 132801), (94, 132954), (101, 133002),

Gene: SilverDipper_240 Start: 132082, Stop: 132549, Start Num: 23

Candidate Starts for SilverDipper_240:

(15, 132013), (Start: 23 @132082 has 162 MA's), (27, 132103), (56, 132277), (59, 132292), (94, 132445), (101, 132493),

Gene: SirJeffery_54 Start: 48983, Stop: 48522, Start Num: 21
Candidate Starts for SirJeffery_54:
(Start: 21 @48983 has 87 MA's), (29, 48935), (62, 48755), (73, 48734), (92, 48647), (93, 48641), (99, 48599),

Gene: Sisko_46 Start: 41036, Stop: 40560, Start Num: 24
Candidate Starts for Sisko_46:
(Start: 24 @41036 has 3 MA's), (30, 40991), (32, 40976), (54, 40871), (85, 40715), (95, 40658), (105, 40589), (108, 40574),

Gene: Skog_198 Start: 125939, Stop: 126439, Start Num: 22
Candidate Starts for Skog_198:
(Start: 22 @125939 has 4 MA's), (98, 126347), (103, 126386),

Gene: SlippinJimmy_57 Start: 49641, Stop: 49168, Start Num: 21
Candidate Starts for SlippinJimmy_57:
(Start: 21 @49641 has 87 MA's), (28, 49605), (62, 49413), (77, 49377), (82, 49350),

Gene: SmallFry_237 Start: 131440, Stop: 131907, Start Num: 23
Candidate Starts for SmallFry_237:
(15, 131371), (Start: 23 @131440 has 162 MA's), (27, 131461), (56, 131635), (59, 131650), (94, 131803), (101, 131851),

Gene: Spec_230 Start: 131509, Stop: 131976, Start Num: 23
Candidate Starts for Spec_230:
(15, 131440), (Start: 23 @131509 has 162 MA's), (27, 131530), (56, 131704), (59, 131719), (94, 131872), (101, 131920),

Gene: Specks_240 Start: 131931, Stop: 132398, Start Num: 23
Candidate Starts for Specks_240:
(15, 131862), (Start: 23 @131931 has 162 MA's), (27, 131952), (56, 132126), (59, 132141), (94, 132294), (101, 132342),

Gene: Sprinklers_234 Start: 131176, Stop: 131643, Start Num: 23
Candidate Starts for Sprinklers_234:
(15, 131107), (Start: 23 @131176 has 162 MA's), (27, 131197), (56, 131371), (59, 131386), (94, 131539), (101, 131587),

Gene: Spud_229 Start: 130897, Stop: 131364, Start Num: 23
Candidate Starts for Spud_229:
(15, 130828), (Start: 23 @130897 has 162 MA's), (27, 130918), (56, 131092), (59, 131107), (94, 131260), (101, 131308),

Gene: SrishMeg2525_233 Start: 132086, Stop: 132553, Start Num: 23
Candidate Starts for SrishMeg2525_233:
(15, 132017), (Start: 23 @132086 has 162 MA's), (27, 132107), (56, 132281), (59, 132296), (94, 132449), (101, 132497),

Gene: StephanieG_230 Start: 132083, Stop: 132550, Start Num: 23
Candidate Starts for StephanieG_230:
(15, 132014), (Start: 23 @132083 has 162 MA's), (27, 132104), (56, 132278), (59, 132293), (94, 132446), (101, 132494),

Gene: Stinger_50 Start: 47346, Stop: 46885, Start Num: 21

Candidate Starts for Stinger_50:

(Start: 21 @47346 has 87 MA's), (37, 47253), (46, 47205), (71, 47112), (73, 47103), (86, 47043), (90, 47025), (93, 46998), (97, 46974), (98, 46971), (105, 46923), (110, 46899),

Gene: StinkyVeggy_55 Start: 49120, Stop: 48659, Start Num: 21

Candidate Starts for StinkyVeggy_55:

(Start: 21 @49120 has 87 MA's), (29, 49072), (50, 48961), (62, 48892), (73, 48871), (92, 48784), (93, 48778), (99, 48736),

Gene: StubbySaigey_242 Start: 131616, Stop: 132083, Start Num: 23

Candidate Starts for StubbySaigey_242:

(15, 131547), (Start: 23 @131616 has 162 MA's), (27, 131637), (56, 131811), (59, 131826), (94, 131979), (101, 132027),

Gene: Suigeneris_56 Start: 49263, Stop: 48802, Start Num: 21

Candidate Starts for Suigeneris_56:

(3, 49764), (Start: 21 @49263 has 87 MA's), (29, 49215), (62, 49035), (73, 49014), (92, 48927), (93, 48921), (99, 48879),

Gene: SwainyDoc_56 Start: 48871, Stop: 48398, Start Num: 21

Candidate Starts for SwainyDoc_56:

(Start: 21 @48871 has 87 MA's), (28, 48835), (57, 48667), (62, 48643), (77, 48607), (82, 48580), (108, 48427),

Gene: SynergyX_55 Start: 48414, Stop: 47941, Start Num: 21

Candidate Starts for SynergyX_55:

(Start: 21 @48414 has 87 MA's), (28, 48378), (57, 48210), (62, 48186), (67, 48177), (77, 48150), (82, 48123), (108, 47970),

Gene: TA17A_54 Start: 47619, Stop: 47128, Start Num: 19

Candidate Starts for TA17A_54:

(Start: 19 @47619 has 32 MA's), (48, 47460), (77, 47337), (79, 47322), (82, 47310), (92, 47253), (93, 47247), (98, 47220), (113, 47136),

Gene: TPA2_59 Start: 47083, Stop: 46601, Start Num: 21

Candidate Starts for TPA2_59:

(Start: 21 @47083 has 87 MA's), (39, 46981), (71, 46828), (82, 46780), (91, 46726), (93, 46717), (96, 46705), (101, 46666), (102, 46657), (106, 46633),

Gene: Tainan_236 Start: 131060, Stop: 131527, Start Num: 23

Candidate Starts for Tainan_236:

(15, 130991), (Start: 23 @131060 has 162 MA's), (27, 131081), (56, 131255), (59, 131270), (94, 131423), (101, 131471),

Gene: Teardrop_234 Start: 130943, Stop: 131410, Start Num: 23

Candidate Starts for Teardrop_234:

(15, 130874), (Start: 23 @130943 has 162 MA's), (27, 130964), (56, 131138), (59, 131153), (94, 131306), (101, 131354),

Gene: Tesla_3 Start: 802, Stop: 1281, Start Num: 14

Candidate Starts for Tesla_3:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198), (93, 1207),

Gene: Thonko_56 Start: 47465, Stop: 46986, Start Num: 21

Candidate Starts for Thonko_56:

(8, 47591), (Start: 21 @47465 has 87 MA's), (27, 47438), (61, 47249), (69, 47231), (92, 47114), (93, 47108), (98, 47081), (99, 47066), (105, 47033),

Gene: Tinciduntolum_55 Start: 47781, Stop: 47290, Start Num: 19

Candidate Starts for Tinciduntolum_55:

(Start: 19 @47781 has 32 MA's), (48, 47622), (76, 47502), (77, 47499), (79, 47484), (82, 47472), (92, 47415), (93, 47409), (98, 47382), (113, 47298),

Gene: TinyTerror_56 Start: 48813, Stop: 48433, Start Num: 35

Candidate Starts for TinyTerror_56:

(35, 48813), (62, 48678), (77, 48642), (82, 48615), (108, 48462),

Gene: TinyTim_234 Start: 130910, Stop: 131377, Start Num: 23

Candidate Starts for TinyTim_234:

(15, 130841), (Start: 23 @130910 has 162 MA's), (27, 130931), (56, 131105), (59, 131120), (94, 131273), (101, 131321),

Gene: Tonenili_257 Start: 136733, Stop: 137203, Start Num: 23

Candidate Starts for Tonenili_257:

(15, 136664), (Start: 23 @136733 has 162 MA's), (27, 136754), (46, 136877), (62, 136955), (77, 137015), (99, 137138), (101, 137147),

Gene: Tortoise16_234 Start: 131372, Stop: 131839, Start Num: 23

Candidate Starts for Tortoise16_234:

(15, 131303), (Start: 23 @131372 has 162 MA's), (27, 131393), (56, 131567), (59, 131582), (94, 131735), (101, 131783),

Gene: Tres_54 Start: 47632, Stop: 47141, Start Num: 19

Candidate Starts for Tres_54:

(Start: 19 @47632 has 32 MA's), (48, 47473), (76, 47353), (77, 47350), (79, 47335), (82, 47323), (92, 47266), (93, 47260), (98, 47233), (113, 47149),

Gene: Trinitium_232 Start: 129664, Stop: 130131, Start Num: 23

Candidate Starts for Trinitium_232:

(15, 129595), (Start: 23 @129664 has 162 MA's), (27, 129685), (56, 129859), (59, 129874), (94, 130027), (101, 130075),

Gene: Turret_227 Start: 129246, Stop: 129713, Start Num: 23

Candidate Starts for Turret_227:

(15, 129177), (Start: 23 @129246 has 162 MA's), (27, 129267), (56, 129441), (59, 129456), (94, 129609), (101, 129657),

Gene: Tyke_233 Start: 133552, Stop: 134019, Start Num: 23

Candidate Starts for Tyke_233:

(15, 133483), (Start: 23 @133552 has 162 MA's), (27, 133573), (56, 133747), (59, 133762), (94, 133915), (101, 133963),

Gene: ValleyTerrace_237 Start: 130823, Stop: 131290, Start Num: 23

Candidate Starts for ValleyTerrace_237:

(15, 130754), (Start: 23 @130823 has 162 MA's), (27, 130844), (56, 131018), (59, 131033), (94, 131186), (101, 131234),

Gene: VasuNzinga_3 Start: 802, Stop: 1281, Start Num: 14

Candidate Starts for VasuNzinga_3:

(Start: 10 @781 has 9 MA's), (12, 793), (Start: 14 @802 has 7 MA's), (41, 979), (47, 1003), (49, 1009), (51, 1012), (53, 1024), (54, 1030), (63, 1072), (81, 1147), (91, 1198),

Gene: Vic9_54 Start: 48150, Stop: 47659, Start Num: 19

Candidate Starts for Vic9_54:

(Start: 19 @48150 has 32 MA's), (48, 47991), (77, 47868), (79, 47853), (82, 47841), (92, 47784), (93, 47778), (98, 47751), (113, 47667),

Gene: Vincenzo_52 Start: 49377, Stop: 48913, Start Num: 21

Candidate Starts for Vincenzo_52:

(Start: 21 @49377 has 87 MA's), (46, 49236), (65, 49152), (89, 49056), (90, 49050), (93, 49023), (110, 48924),

Gene: VioletZ_52 Start: 48734, Stop: 48273, Start Num: 21

Candidate Starts for VioletZ_52:

(Start: 21 @48734 has 87 MA's), (37, 48641), (46, 48593), (71, 48497), (73, 48488), (82, 48446), (83, 48440), (89, 48416), (93, 48383), (97, 48359), (98, 48356), (105, 48308), (110, 48284),

Gene: Waleliano_49 Start: 48252, Stop: 47791, Start Num: 21

Candidate Starts for Waleliano_49:

(Start: 21 @48252 has 87 MA's), (37, 48159), (46, 48111), (69, 48024), (71, 48015), (73, 48006), (79, 47976), (82, 47964), (89, 47934), (93, 47901), (97, 47877), (98, 47874), (105, 47826), (110, 47802),

Gene: Wally_234 Start: 130807, Stop: 131274, Start Num: 23

Candidate Starts for Wally_234:

(15, 130738), (Start: 23 @130807 has 162 MA's), (27, 130828), (56, 131002), (59, 131017), (94, 131170), (101, 131218),

Gene: West99_54 Start: 47778, Stop: 47287, Start Num: 19

Candidate Starts for West99_54:

(Start: 19 @47778 has 32 MA's), (48, 47619), (77, 47496), (79, 47481), (92, 47412), (93, 47406), (98, 47379), (113, 47295),

Gene: Willis_236 Start: 131746, Stop: 132213, Start Num: 23

Candidate Starts for Willis_236:

(15, 131677), (Start: 23 @131746 has 162 MA's), (27, 131767), (56, 131941), (59, 131956), (94, 132109), (101, 132157),

Gene: Wooper_50 Start: 42937, Stop: 42470, Start Num: 21

Candidate Starts for Wooper_50:

(Start: 21 @42937 has 87 MA's), (38, 42835), (42, 42808), (71, 42694), (92, 42598), (93, 42592), (101, 42541), (107, 42505),

Gene: Xincheng_51 Start: 49715, Stop: 49254, Start Num: 21

Candidate Starts for Xincheng_51:

(Start: 21 @49715 has 87 MA's), (37, 49622), (46, 49574), (71, 49478), (73, 49469), (79, 49439), (82, 49427), (83, 49421), (89, 49397), (91, 49373), (93, 49364), (97, 49340), (98, 49337), (105, 49289),

(110, 49265),

Gene: Yago84_46 Start: 41111, Stop: 40635, Start Num: 24

Candidate Starts for Yago84_46:

(Start: 24 @41111 has 3 MA's), (30, 41066), (32, 41051), (54, 40946), (85, 40790), (95, 40733), (105, 40664), (108, 40649),

Gene: Yahalom_54 Start: 48424, Stop: 47951, Start Num: 21

Candidate Starts for Yahalom_54:

(Start: 21 @48424 has 87 MA's), (28, 48388), (62, 48196), (77, 48160), (82, 48133),

Gene: Yassified_233 Start: 131159, Stop: 131626, Start Num: 23

Candidate Starts for Yassified_233:

(15, 131090), (Start: 23 @131159 has 162 MA's), (27, 131180), (56, 131354), (59, 131369), (94, 131522), (101, 131570),

Gene: YemiJoy2021_237 Start: 132477, Stop: 132944, Start Num: 23

Candidate Starts for YemiJoy2021_237:

(15, 132408), (Start: 23 @132477 has 162 MA's), (27, 132498), (56, 132672), (59, 132687), (94, 132840), (101, 132888),

Gene: Yeshua_50 Start: 42914, Stop: 42447, Start Num: 21

Candidate Starts for Yeshua_50:

(Start: 21 @42914 has 87 MA's), (38, 42812), (42, 42785), (71, 42671), (92, 42575), (93, 42569), (101, 42518), (107, 42482),

Gene: Yinz_55 Start: 48270, Stop: 47797, Start Num: 21

Candidate Starts for Yinz_55:

(Start: 21 @48270 has 87 MA's), (28, 48234), (57, 48066), (62, 48042), (67, 48033), (77, 48006), (82, 47979), (108, 47826),

Gene: YoungMoneyMata_236 Start: 131995, Stop: 132462, Start Num: 23

Candidate Starts for YoungMoneyMata_236:

(15, 131926), (Start: 23 @131995 has 162 MA's), (27, 132016), (56, 132190), (59, 132205), (94, 132358), (101, 132406),

Gene: Yucca_235 Start: 132469, Stop: 132936, Start Num: 23

Candidate Starts for Yucca_235:

(15, 132400), (Start: 23 @132469 has 162 MA's), (27, 132490), (56, 132664), (59, 132679), (94, 132832), (101, 132880),

Gene: Zalkecks_235 Start: 131575, Stop: 132042, Start Num: 23

Candidate Starts for Zalkecks_235:

(15, 131506), (Start: 23 @131575 has 162 MA's), (27, 131596), (56, 131770), (59, 131785), (94, 131938), (101, 131986),

Gene: Zeenon_236 Start: 132109, Stop: 132576, Start Num: 23

Candidate Starts for Zeenon_236:

(15, 132040), (Start: 23 @132109 has 162 MA's), (27, 132130), (56, 132304), (59, 132319), (94, 132472), (101, 132520),

Gene: Zemanar_50 Start: 48233, Stop: 47772, Start Num: 21

Candidate Starts for Zemanar_50:

(Start: 21 @48233 has 87 MA's), (37, 48140), (46, 48092), (69, 48005), (71, 47996), (73, 47987), (79, 47957), (82, 47945), (89, 47915), (93, 47882), (97, 47858), (98, 47855), (105, 47807), (110, 47783),

Gene: ZygoTaiga_231 Start: 132766, Stop: 133233, Start Num: 23

Candidate Starts for ZygoTaiga_231:

(15, 132697), (Start: 23 @132766 has 162 MA's), (27, 132787), (56, 132961), (59, 132976), (94, 133129), (101, 133177),