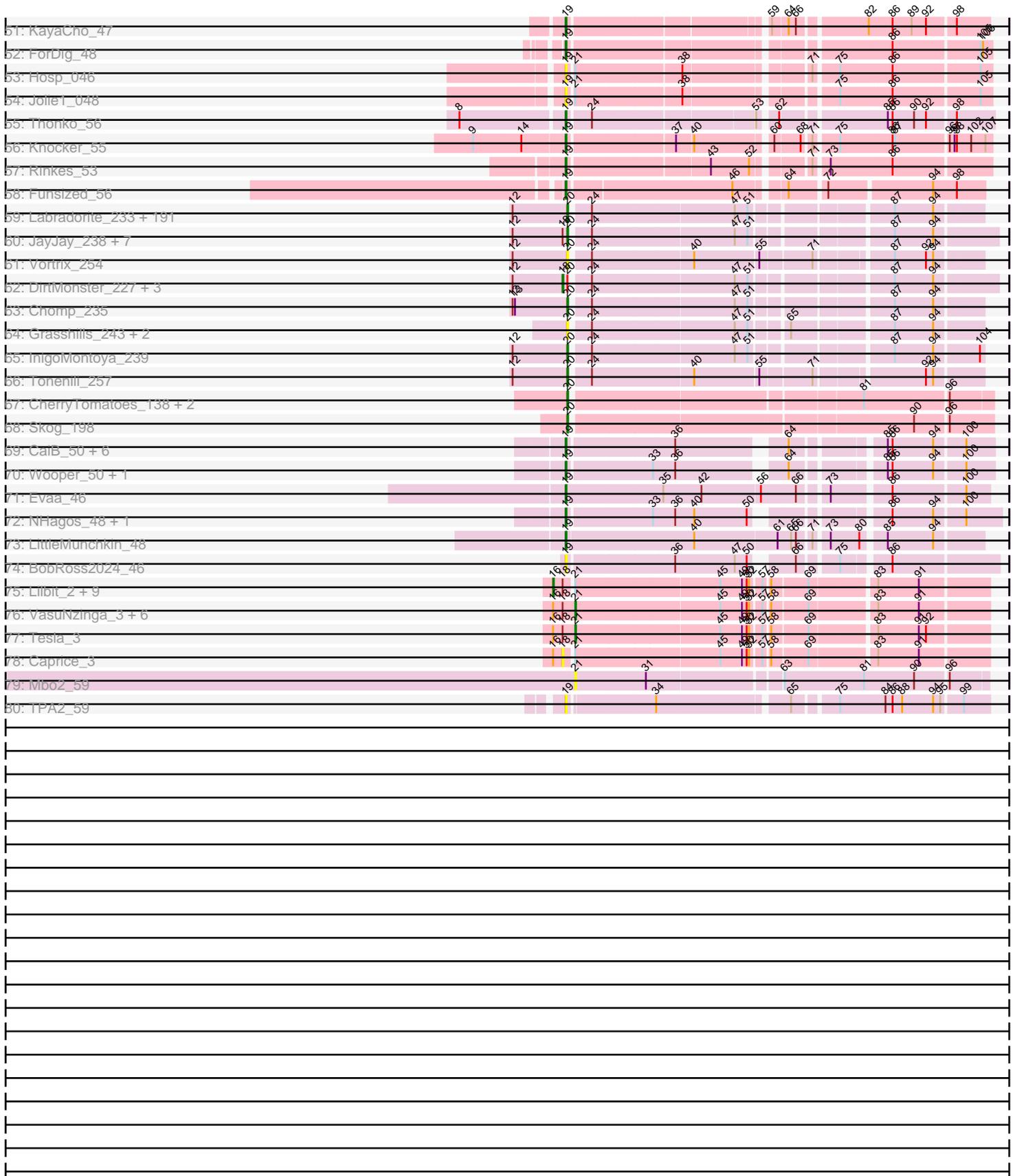# Pham 281885

Pham 281885

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 281885 Report

This analysis was run 02/23/26 on database version 636.

Pham number 281885 has 408 members, 80 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_55, Vic9_00053, Boyle_54, LizLemon_54
• Track 6 : FrenchFry_54, Bananafish_54, Calamitous_54, Tinciduntsolum_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 : PrinceCharming_54
• Track 10 : Abinghost_55, Devonte_54, Philly_54, Compostia_55, HarveySr_54, Mulaychimus_56, GlenHope_56, Chalmers_54, Kronus_55, Nozo_55, Athena_57, Yahalom_54, Gervas_56, Ben11_55, Marlia_56, Corofin_55, Morty007_55, Glubnar_56, Mortcellus_55, RomaT_55, OrangeOswald_55, Akoma_55, Marley1013_56, LestyG_54, SlippinJimmy_57, Rita1961_56, Obutu_56, Kamiyu_55, Phlyer_55
• Track 11 : Deenasa_54
• Track 12 : Phayeta_57, Chentzyk_56, MmasiCarm_56, Olivio_55
• Track 13 : Gadjet_56, SynergyX_55, Baloo_55, Audrey_55, ChaChing_55, Heathcliff_55, Yinz_55
• Track 14 : RagingRooster_54, Casbah_55
• Track 15 : SwainyDoc_56
• Track 16 : Bernardo_56, Halfpint_54, Chandler_55
• Track 17 : TinyTerror_56
• Track 18 : Jackstina_51
• Track 19 : Xincheng_51, JaguarMi_52
• Track 20 : VioletZ_52, Austelle_51, Mudslide_50
• Track 21 : BobbyK_50, Frederick_50, Mithril_49
• Track 22 : Lambano_49, GinPorsche_49, Epah_49, Hally898_49, Antihero_49, Nanao_49, Poster_49
• Track 23 : Nigel_51
• Track 24 : Stinger_50
• Track 25 : Cooper_51

- Track 26 : Zemanar_50, JoyceMaria_49, Waleliano_49, Hangman_49, BrownCNA_51
- Track 27 : Heath_49, ChrisnMich_50
- Track 28 : RawrgerThat_51
- Track 29 : Fortunato_50
- Track 30 : Apex_51
- Track 31 : QueenPie_48
- Track 32 : Hydro_50
- Track 33 : Magpie_49
- Track 34 : LittleDigger_49, Renkei_49
- Track 35 : Vincenzo_52, AlanGrant_53
- Track 36 : Prince_50
- Track 37 : Lolalove_51
- Track 38 : Fanaw_49
- Track 39 : JAMaL_50
- Track 40 : Nehemiah_54, Phelemich_53, Mysterious_53, Reprobate_54
- Track 41 : StinkyVeggy_55, KarasumaRum_55, Acadian_55
- Track 42 : Suigeneris_56, Donny_56
- Track 43 : SirJeffery_54
- Track 44 : Reccee_55, Rita130_54
- Track 45 : EastView9101_54
- Track 46 : Nangang_55, DigitDog_55
- Track 47 : Baee_56
- Track 48 : Shenyu_55
- Track 49 : Rich_55
- Track 50 : 39HC_047, 40BC_047
- Track 51 : KayaCho_47
- Track 52 : ForDig_48
- Track 53 : Hosp_046
- Track 54 : Jolie1_048
- Track 55 : Thonko_56
- Track 56 : Knocker_55
- Track 57 : Rinkes_53
- Track 58 : Funsized_56
- Track 59 : Labradorite_233, Spud_229, SilverDipper_240, Babyland_239, Blackdragon_230, Tainan_236, Momo_237, Ablatia_235, InterFolia_237, Quasimodo_239, LifeSavor_236, Darko_235, Capablanca_241, LordLeafolot_237, Tortoise16_234, Erdmann_236, Yassified_233, Adlitam_236, Shelob_237, Sauce_233, ParkTD_235, Bipolarisk_234, SmallFry_237, Rahel_238, Guwapp_232, ZygoTaiga_231, Audrick_238, Derek_232, Cane17_226, Cali_227, BananaFence_233, Turret_227, Jezreel_233, NuevoMundo_237, TinyTim_234, Fixie_235, FrayBell_239, Ava3_233, Dessert_233, Cactojaque_230, Lee7_235, Wally_234, Rizal_226, DTDevon_237, Ewok_235, BeanWater_229, GlutenPhree_237, Yucca_235, Fludd_236, LinStu_234, LolaVinca_232, Breeniome_235, Mangeria_237, Ghost_235, SVoro_231, PharkleMinkus_238, Burrough_236, OrediggerDelux_231, NedWong_235, Jemmno_236, ScottMcG_228, Amataga_237, Jaygup_233, Grungle_218, Naija_237, RoMag_231, ChaylaJr_235, Daffodil_241, Megamind_233, MoMoMixon_232, Delylah_238, Shaqnato_227, Pleione_240, Chargie21_233, Norm_236, Shrimp_238, Salacia_237, Gabriel_239, Fongie_236, Pupusa_239, Zalkecks_235, JustHall_230, McWolfish_233, YoungMoneyMata_236, Concombre_241, Pio_242, FoxtrotP1_234, EmmaElysia_241, Bxz1_223, BadAgartude_230, Phlegm_240, Domi_230, Halldule_228, Maby2021_236, Roots515_239, Lukilu_225, YemiJoy2021_237,

Melpomini_231, Mikro_230, ShiaLabeouf_234, Dietrick_225, Matsumoto_234, 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, Izajani_232, DrPhinkDaddy_233, Bonray_238, Bezza_224, BackyardAgain_231, Trinitium_232, McGee_237, Essence_234, EmToTheThree_236, Specks_240, Primadonna_230, Phox_237, Demodog_242, Substance289_232, Willis_236, Morizzled23_233, LRRHood_228, I3_246, Latch_236, Pivoine_237, Bangla1971_237, Pier_235, Iota_233, Jedediah_237, Littleton_239, Koguma_235, Teardrop_234, Jessibeth14_236, Kboogie_240, ValleyTerrace_237, Issimir_229, QBert_228, Cleatunium_228, Colt_227, JPickles_233, Phusco_235, Drazdys_233, Atlantean_236, Blackbrain_234, Gizmo_241, Loanshark_233, Rocha_232, Shnickers_235, Ronan_232, EasyJones_237, Nappy_236, MikeLiesIn_236, PurduePete_236, Janiyra_239, Ading_238, ChickenPhender_232, Bowman_233, Lethe_234, JulietS_225, ErnieJ_229, Sprinklers_234, Belieber_228, Dandelion_242, LookingGlass_234, Bigswole_241, Zeenon_236, Delilah_234, Asterius_236, StubbySaigey_242, Khaleesi_235, CharlieB_230, SrishMeg2525_233, FudgeTart_230, Naval22_241, Gamgam_238, Tyke_233, JigglyPuff_242, Caravan_226, Duckfeet_229, IkeLoa_230, CindyLou_237, BobaPhatt_227
• Track 60 : JayJay_238, Lunareta_235, Shifa_213, Flabslab_232, Moiqah_233, Sebata_238, Moby_233, Montpel_235
• Track 61 : Vortrix_254
• Track 62 : DirtMonster_227, DeejaClivia_225, HyRo_221, Maturis_232
• Track 63 : Chomp_235
• Track 64 : Grasshills_243, EggyFarm_244, BigCity_244
• Track 65 : InigoMontoya_239
• Track 66 : Tonenili_257
• Track 67 : CherryTomatoes_138, Pupper_137, SCentae_136
• Track 68 : Skog_198
• Track 69 : CaiB_50, MossRose_49, TraderJ_50, AnarQue_49, FelixTres_49, CloverMinnie_49, Blackpen_49
• Track 70 : Wooper_50, Yeshua_50
• Track 71 : Evaa_46
• Track 72 : NHagos_48, AksarBAT_48
• Track 73 : LittleMunchkin_48
• Track 74 : BobRoss2024_46
• Track 75 : Lilbit_2, Poise_3, RedRaider77_3, Raela_2, JoieB_3, Beelzebub_3, Blackbeetle_3, Huphlepuff_2, LittleLaf_2, Clarkson_2
• Track 76 : VasuNzinga_3, Gattaca_4, MosMoris_4, GoongGoong_3, Marvin_2, FeliMaine_2, Corazon_2
• Track 77 : Tesla_3
• Track 78 : Caprice_3
• Track 79 : Mbo2_59
• Track 80 : 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 20, it was called in 176 of the 328 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ablatia_235, Ading_238, Adlitam_236, Amataga_237, ArcherS7_237, Asterius_236, Astraea_230, Atlantean_236, Audrick_238, Ava3_233, Babyland_239, BackyardAgain_231, BadAgartude_230, BananaFence_233, Bangla1971_237, Basquiat_233, BeanWater_229, Belieber_228, Bezza_224, BigCity_244, Bigswole_241, Bipolarisk_234, Blackbrain_234, Blackdragon_230, Blubba_224, BobaPhatt_227, Bonray_238, Bowman_233, 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, CherryTomatoes_138, ChickenPhender_232, Chomp_235, CindyLou_237, Cleatunium_228, Colt_227, Concombre_241, DTDevon_237, Daffodil_241, Dandelion_242, Darko_235, Delilah_234, Delylah_238, Demodog_242, Derek_232, Dessert_233, Dietrick_225, Domi_230, DrPhinkDaddy_233, Drazdys_233, Duckfeet_229, EasyJones_237, EggyFarm_244, EmToTheThree_236, EmmaElysia_241, Erdmann_236, ErnieJ_229, Essence_234, Ewok_235, Fixie_235, Flabslab_232, Fludd_236, Fongie_236, FoxtrotP1_234, FrayBell_239, FudgeTart_230, Gabriel_239, Gamgam_238, Ghost_235, Gizmo_241, GlutenPhree_237, 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_238, Jaygup_233, Jedediah_237, Jemmno_236, Jessibeth14_236, Jezreel_233, JigglyPuff_242, JulietS_225, JustHall_230, Kamryn_235, Kboogie_240, Khaleesi_235, Koguma_235, LRRHood_228, Labradorite_233, Latch_236, Lee7_235, Lethe_234, LifeSavor_236, LinStu_234, Littleton_239, Loanshark_233, LolaVinca_232, LookingGlass_234, LordLeafolot_237, Lukilu_225, Lunareta_235, Maby2021_236, Mangeria_237, Matsumoto_234, McGee_237, McWolfish_233, Megamind_233, Melpomini_231, MikeLiesIn_236, Mikro_230, MoMoMixon_232, Moby_233, Moiqah_233, Momo_237, Montpel_235, Morizzled23_233, Naija_237, Napoleon13_233, Nappy_236, Naval22_241, NedWong_235, Ngannou_231, Nidhogg_237, Norm_236, NuevoMundo_237, OrediggerDelux_231, ParkTD_235, Patter_238, PharkleMinkus_238, Phlegm_240, Phox_237, Phusco_235, Pier_235, Pio_242, Pivoine_237, Pleione_240, Primadonna_230, Pupper_137, Pupusa_239, PurduePete_236, QBert_228, Quasimodo_239, Rahel_238, Rizal_226, RoMag_231, Rocha_232, Ronan_232, Roots515_239, SCentae_136, SVoro_231, Salacia_237, Sauce_233, ScottMcG_228, Sebata_238, Shaqnato_227, Shelob_237, ShiaLabeouf_234, Shifa_213, Shnickers_235, Shrimp_238, SilverDipper_240, Skog_198, SmallFry_237, Spec_230, Specks_240, Sprinklers_234, Spud_229, SrishMeg2525_233, StephanieG_230, StubbySaigey_242, Substance289_232, Tainan_236, Teardrop_234, TinyTim_234, Tonenili_257, Tortoise16_234, Trinitium_232, Turret_227, Tyke_233, ValleyTerrace_237, Vortrix_254, 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:
• DeejaClivia_225, DirtMonster_227, HyRo_221, Maturis_232,

Genes that do not have the "Most Annotated" start:
• 39HC_047, 40BC_047, Abinghost_55, Acadian_55, Akoma_55, AksarBAT_48, AlanGrant_53, Allegro_54, AnarQue_49, Antihero_49, Apex_51, Arbiter_53, Ares_54, Athena_57, Audrey_55, Austelle_51, Baee_56, Baloo_55, Bananafish_54, Beelzebub_3, Ben11_55, Bernardo_56, Blackbeetle_3, Blackpen_49, 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, 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, FelixTres_49, ForDig_48, Fortunato_50,
Frederick_50, FrenchFry_54, Funsized_56, Gadjet_56, Gattaca_4, Gervas_56,
GinPorsche_49, Glass_54, GlenHope_56, Glubnar_56, Godines_54,
GoongGoong_3, Halfpint_54, Hally898_49, Hangman_49, HarveySr_54, Heath_49,
Heathcliff_55, Hedgerow_54, Holeinone_54, Hosp_046, Huphlepuff_2, Hydro_50,
Imvubu_48, Indlovu_52, ItsyBitsy1_54, JAMaL_50, Jackstina_51, JaguarMi_52,
JoieB_3, Jolie1_048, JoyceMaria_49, 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,
LittleDigger_49, LittleLaf_2, LittleMunchkin_48, LizLemon_54, Lolalove_51,
Magpie_49, Marley1013_56, Marlia_56, Marvin_2, MasterPo_54, Mbo2_59,
Mithril_49, MmasiCarm_56, Mortcellus_55, Morty007_55, MosMoris_4,
MossRose_49, Mudslide_50, Mulaychimus_56, Mysterious_53, NHagos_48,
Nanao_49, Nangang_55, Nehemiah_54, Nigel_51, Nozo_55, Obutu_56, Olivio_55,
Opia_54, OrangeOswald_55, Phantasmagoria_54, Phayeta_57, Phelemich_53,
Philly_54, Phlyer_55, Phrappuccino_159, Poise_3, Poster_49, PrinceCharming_54,
Prince_50, QueenPie_48, Raela_2, RagingRooster_54, RawrgerThat_51,
Reccee_55, RedRaider77_3, Renkei_49, Reprobate_54, Rhinoforte_54, Rich_55,
Rinkes_53, Rita130_54, Rita1961_56, RomaT_55, Rosebush_53, Sabella_53,
Settecandela_159, Shenyu_55, SirJeffery_54, SlippinJimmy_57, Stinger_50,
StinkyVeggy_55, Suigeneris_56, SwainyDoc_56, SynergyX_55, TA17A_55,
TPA2_59, Tesla_3, Thonko_56, Tinciduntsolum_55, TinyTerror_56, TraderJ_50,
Tres_54, VasuNzinga_3, Vic9_00053, Vincenzo_52, VioletZ_52, Waleliano_49,
West99_54, Wooper_50, Xincheng_51, Yahalom_54, Yeshua_50, Yinz_55,
Zemanar_50,

Summary by start number:

Start 15:
• Found in 2 of 408 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 328
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phrappuccino_159 (AA),
Settecandela_159 (AA),

Start 16:
• Found in 19 of 408 (4.7%) of genes in pham
• Manual Annotations of this start: 10 of 328
• Called 52.6% of time when present
• Phage (with cluster) where this start called: Beelzebub_3 (S), Blackbeetle_3 (S),
Clarkson_2 (S), Huphlepuff_2 (S), JoieB_3 (S), Lilbit_2 (S), LittleLaf_2 (S), Poise_3
(S), Raela_2 (S), RedRaider77_3 (S),

Start 17:
• Found in 38 of 408 (9.3%) of genes in pham
• Manual Annotations of this start: 36 of 328
• 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), PrinceCharming_54 (B2), Rhinoforte_54 (B2), Rosebush_53 (B2), Sabella_53 (B2), TA17A_55 (B2), Tinciduntsolum_55 (B2), Tres_54 (B2), Vic9_00053 (B2), West99_54 (B2),

Start 18:
• Found in 31 of 408 (7.6%) of genes in pham
• Manual Annotations of this start: 2 of 328
• Called 16.1% of time when present
• Phage (with cluster) where this start called: Caprice_3 (S), DeejaClivia_225 (C1), DirtMonster_227 (C1), HyRo_221 (C1), Maturis_232 (C1),

Start 19:
• Found in 132 of 408 (32.4%) of genes in pham
• Manual Annotations of this start: 94 of 328
• Called 100.0% 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), AksarBAT_48 (DR), 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), Blackpen_49 (DR), 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), Donny_56 (B5), EastView9101_54 (B5), Epah_49 (B4), Evaa_46 (DR), Fanaw_49 (B4), FelixTres_49 (DR), ForDig_48 (B6), Fortunato_50 (B4), Frederick_50 (B4), Funsized_56 (B9), Gadjet_56 (B3), Gervas_56 (B3), GinPorsche_49 (B4), GlenHope_56 (B3), Glubnar_56 (B3), Halfpint_54 (B3), Hally898_49 (B4), Hangman_49 (B4), HarveySr_54 (B3), Heath_49 (B4), Heathcliff_55 (B3), Hosp_046 (B6), Hydro_50 (B4), Imvubu_48 (B10), Indlovu_52 (B11), JAMaL_50 (B4), Jackstina_51 (B3), JaguarMi_52 (B4), Jolie1_048 (B6), JoyceMaria_49 (B4), Kamiyu_55 (B3), KarasumaRum_55 (B5), KayaCho_47 (B6), Knocker_55 (B9), Kronus_55 (B3), Lambano_49 (B4), LestyG_54 (B3), LilMcDreamy_52 (B12), LittleDigger_49 (B4), LittleMunchkin_48 (DR), Lolalove_51 (B4), Magpie_49 (B4), Marley1013_56 (B3), Marlia_56 (B3), Mithril_49 (B4), MmasiCarm_56 (B3), Mortcellus_55 (B3), Morty007_55 (B3), MossRose_49 (DR), Mudslide_50 (B4), Mulaychimus_56 (B3), Mysterious_53 (B5), NHagos_48 (DR), Nanao_49 (B4), Nangang_55 (B5), Nehemiah_54 (B5), Nigel_51 (B4), Nozo_55 (B3), Obutu_56 (B3), Olivio_55 (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), Reccee_55 (B5), Renkei_49 (B4), Reprobate_54 (B5), Rich_55 (B5), Rinkes_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), TraderJ_50 (DR), 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 20:

• Found in 215 of 408 (52.7%) of genes in pham
• Manual Annotations of this start: 176 of 328
• Called 98.1% of time when present
• Phage (with cluster) where this start called: Ablatia_235 (C1), Ading_238 (C1), Adlitam_236 (C1), Amataga_237 (C1), ArcherS7_237 (C1), Asterius_236 (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), Bezza_224 (C1), BigCity_244 (C1), Bigswole_241 (C1), Bipolarisk_234 (C1), Blackbrain_234 (C1), Blackdragon_230 (C1), Blubba_224 (C1), BobaPhatt_227 (C1), Bonray_238 (C1), Bowman_233 (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), CherryTomatoes_138 (DO), ChickenPhender_232 (C1), Chomp_235 (C1), CindyLou_237 (C1), Cleatunium_228 (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), Dessert_233 (C1), Dietrick_225 (C1), Domi_230 (C1), DrPhinkDaddy_233 (C1), Drazdys_233 (C1), Duckfeet_229 (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), Fixie_235 (C1), Flabslab_232 (C1), Fludd_236 (C1), Fongie_236 (C1), FoxtrotP1_234 (C1), FrayBell_239 (C1), FudgeTart_230 (C1), Gabriel_239 (C1), Gamgam_238 (C1), Ghost_235 (C1), Gizmo_241 (C1), GlutenPhree_237 (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_238 (C1), Jaygup_233 (C1), Jedediah_237 (C1), Jemmno_236 (C1), Jessibeth14_236 (C1), Jezreel_233 (C1), JigglyPuff_242 (C1), JulietS_225 (C1), JustHall_230 (C1), Kamryn_235 (C1), Kboogie_240 (C1), Khaleesi_235 (C1), Koguma_235 (C1), LRRHood_228 (C1), Labradorite_233 (C1), Latch_236 (C1), Lee7_235 (C1), Lethe_234 (C1), LifeSavor_236 (C1), LinStu_234 (C1), Littleton_239 (C1), Loanshark_233 (C1), LolaVinca_232 (C1), LookingGlass_234 (C1), LordLeafolot_237 (C1), Lukilu_225 (C1), Lunareta_235 (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), Moby_233 (C1), Moiqah_233 (C1), Momo_237 (C1), Montpel_235 (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), OrediggerDelux_231 (C1), ParkTD_235 (C1), Patter_238 (C1), PharkleMinkus_238 (C1), Phlegm_240 (C1), Phox_237 (C1), Phusco_235 (C1), Pier_235 (C1), Pio_242 (C1), Pivoine_237 (C1), Pleione_240 (C1), Primadonna_230 (C1), Pupper_137 (DO), Pupusa_239 (C1), PurduePete_236 (C1), QBert_228 (C1), Quasimodo_239 (C1), Rahel_238 (C1), Rizal_226 (C1), RoMag_231 (C1), Rocha_232 (C1), Ronan_232 (C1), Roots515_239 (C1), SCentae_136 (DO), SVoro_231 (C1), Salacia_237 (C1), Sauce_233 (C1), ScottMcG_228 (C1), Sebata_238 (C1), Shaqnato_227 (C1), Shelob_237 (C1), ShiaLabeouf_234 (C1), Shifa_213 (C1), Shnickers_235 (C1), Shrimp_238 (C1), SilverDipper_240 (C1), Skog_198 (DO), SmallFry_237 (C1), Spec_230 (C1), Specks_240 (C1), Sprinklers_234 (C1), Spud_229 (C1), SrishMeg2525_233 (C1), StephanieG_230 (C1), StubbySaigey_242 (C1), Substance289_232 (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), Vortrix_254 (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 21:
• Found in 24 of 408 (5.9%) of genes in pham
• Manual Annotations of this start: 7 of 328
• Called 37.5% 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), Mbo2_59 (singleton), MosMoris_4 (S), Tesla_3 (S), VasuNzinga_3 (S),

Start 32:
• Found in 1 of 408 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 328
• 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 15 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster B10:
•Start number 19 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:
•Start number 19 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:
•Start number 19 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:
•Start number 17 was manually annotated 35 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 19 was manually annotated 43 times for cluster B3.
•Start number 32 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B4:
•Start number 17 was manually annotated 1 time for cluster B4.
•Start number 19 was manually annotated 24 times for cluster B4.

Info for manual annotations of cluster B5:
•Start number 19 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 19 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B8:
•Start number 19 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:
•Start number 19 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster C1:
•Start number 18 was manually annotated 2 times for cluster C1.
•Start number 20 was manually annotated 172 times for cluster C1.

Info for manual annotations of cluster DO:
•Start number 20 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DR:
•Start number 19 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster S:
•Start number 16 was manually annotated 10 times for cluster S.
•Start number 21 was manually annotated 7 times for cluster S.

Gene Information:

Gene: 39HC_047 Start: 46065, Stop: 45586, Start Num: 19
Candidate Starts for 39HC_047:
(Start: 19 @46065 has 94 MA's), (Start: 21 @46059 has 7 MA's), (38, 45933), (71, 45795), (75, 45768), (86, 45705), (105, 45600),

Gene: 40BC_047 Start: 46065, Stop: 45586, Start Num: 19
Candidate Starts for 40BC_047:
(Start: 19 @46065 has 94 MA's), (Start: 21 @46059 has 7 MA's), (38, 45933), (71, 45795), (75, 45768), (86, 45705), (105, 45600),

Gene: Abinghost_55 Start: 48403, Stop: 47930, Start Num: 19
Candidate Starts for Abinghost_55:
(Start: 19 @48403 has 94 MA's), (25, 48367), (54, 48175), (71, 48139), (75, 48112),

Gene: Ablatia_235 Start: 130787, Stop: 131254, Start Num: 20
Candidate Starts for Ablatia_235:
(12, 130718), (Start: 20 @130787 has 176 MA's), (24, 130808), (47, 130982), (51, 130997), (87, 131150), (94, 131198),

Gene: Acadian_55 Start: 48973, Stop: 48512, Start Num: 19
Candidate Starts for Acadian_55:
(Start: 19 @48973 has 94 MA's), (26, 48925), (42, 48814), (54, 48745), (66, 48724), (85, 48637), (86, 48631), (92, 48589),

Gene: Ading_238 Start: 133220, Stop: 133687, Start Num: 20
Candidate Starts for Ading_238:
(12, 133151), (Start: 20 @133220 has 176 MA's), (24, 133241), (47, 133415), (51, 133430), (87, 133583), (94, 133631),

Gene: Adlitam_236 Start: 131824, Stop: 132291, Start Num: 20
Candidate Starts for Adlitam_236:
(12, 131755), (Start: 20 @131824 has 176 MA's), (24, 131845), (47, 132019), (51, 132034), (87, 132187), (94, 132235),

Gene: Akoma_55 Start: 48418, Stop: 47945, Start Num: 19
Candidate Starts for Akoma_55:
(Start: 19 @48418 has 94 MA's), (25, 48382), (54, 48190), (71, 48154), (75, 48127),

Gene: AksarBAT_48 Start: 41599, Stop: 41123, Start Num: 19
Candidate Starts for AksarBAT_48:
(Start: 19 @41599 has 94 MA's), (33, 41497), (36, 41470), (40, 41449), (50, 41383), (86, 41254), (94, 41203), (100, 41167),

Gene: AlanGrant_53 Start: 49377, Stop: 48913, Start Num: 19
Candidate Starts for AlanGrant_53:
(Start: 19 @49377 has 94 MA's), (40, 49236), (60, 49152), (81, 49056), (82, 49050), (86, 49023), (103, 48924),

Gene: Allegro_54 Start: 47624, Stop: 47133, Start Num: 17
Candidate Starts for Allegro_54:
(Start: 17 @47624 has 36 MA's), (41, 47465), (70, 47345), (71, 47342), (73, 47327), (75, 47315), (85, 47258), (86, 47252), (90, 47225), (107, 47141),

Gene: Amataga_237 Start: 130823, Stop: 131290, Start Num: 20
Candidate Starts for Amataga_237:
(12, 130754), (Start: 20 @130823 has 176 MA's), (24, 130844), (47, 131018), (51, 131033), (87, 131186), (94, 131234),

Gene: AnarQue_49 Start: 42622, Stop: 42155, Start Num: 19
Candidate Starts for AnarQue_49:
(Start: 19 @42622 has 94 MA's), (36, 42493), (64, 42379), (85, 42283), (86, 42277), (94, 42226), (100, 42190),

Gene: Antihero_49 Start: 47622, Stop: 47143, Start Num: 19
Candidate Starts for Antihero_49:
(Start: 19 @47622 has 94 MA's), (38, 47490), (75, 47325), (77, 47313), (86, 47262), (105, 47157), (106, 47154),

Gene: Apex_51 Start: 48844, Stop: 48383, Start Num: 19
Candidate Starts for Apex_51:
(5, 49039), (Start: 19 @48844 has 94 MA's), (31, 48751), (40, 48703), (64, 48607), (66, 48598), (75, 48556), (76, 48550), (81, 48526), (86, 48493), (89, 48469), (90, 48466), (98, 48418), (103, 48394),

Gene: Arbiter_53 Start: 47730, Stop: 47239, Start Num: 17
Candidate Starts for Arbiter_53:
(Start: 17 @47730 has 36 MA's), (41, 47571), (70, 47451), (71, 47448), (73, 47433), (75, 47421), (85, 47364), (86, 47358), (90, 47331), (107, 47247),

Gene: ArcherS7_237 Start: 132568, Stop: 133035, Start Num: 20
Candidate Starts for ArcherS7_237:
(12, 132499), (Start: 20 @132568 has 176 MA's), (24, 132589), (47, 132763), (51, 132778), (87, 132931), (94, 132979),

Gene: Ares_54 Start: 47699, Stop: 47208, Start Num: 17
Candidate Starts for Ares_54:
(Start: 17 @47699 has 36 MA's), (41, 47540), (70, 47420), (71, 47417), (73, 47402), (75, 47390), (85, 47333), (86, 47327), (90, 47300), (107, 47216),

Gene: Asterius_236 Start: 131232, Stop: 131699, Start Num: 20
Candidate Starts for Asterius_236:
(12, 131163), (Start: 20 @131232 has 176 MA's), (24, 131253), (47, 131427), (51, 131442), (87, 131595), (94, 131643),

Gene: Astraea_230 Start: 130427, Stop: 130894, Start Num: 20
Candidate Starts for Astraea_230:
(12, 130358), (Start: 20 @130427 has 176 MA's), (24, 130448), (47, 130622), (51, 130637), (87, 130790), (94, 130838),

Gene: Athena_57 Start: 49161, Stop: 48688, Start Num: 19
Candidate Starts for Athena_57:
(Start: 19 @49161 has 94 MA's), (25, 49125), (54, 48933), (71, 48897), (75, 48870),

Gene: Atlantean_236 Start: 130823, Stop: 131290, Start Num: 20
Candidate Starts for Atlantean_236:
(12, 130754), (Start: 20 @130823 has 176 MA's), (24, 130844), (47, 131018), (51, 131033), (87, 131186), (94, 131234),

Gene: Audrey_55 Start: 48409, Stop: 47936, Start Num: 19
Candidate Starts for Audrey_55:
(Start: 19 @48409 has 94 MA's), (25, 48373), (48, 48205), (54, 48181), (60, 48172), (71, 48145), (75, 48118), (101, 47965),

Gene: Audrick_238 Start: 130713, Stop: 131180, Start Num: 20
Candidate Starts for Audrick_238:
(12, 130644), (Start: 20 @130713 has 176 MA's), (24, 130734), (47, 130908), (51, 130923), (87, 131076), (94, 131124),

Gene: Austelle_51 Start: 49294, Stop: 48833, Start Num: 19
Candidate Starts for Austelle_51:
(Start: 19 @49294 has 94 MA's), (31, 49201), (40, 49153), (64, 49057), (66, 49048), (75, 49006), (76, 49000), (81, 48976), (86, 48943), (89, 48919), (90, 48916), (98, 48868), (103, 48844),

Gene: Ava3_233 Start: 131283, Stop: 131750, Start Num: 20
Candidate Starts for Ava3_233:
(12, 131214), (Start: 20 @131283 has 176 MA's), (24, 131304), (47, 131478), (51, 131493), (87, 131646), (94, 131694),

Gene: Babyland_239 Start: 131600, Stop: 132067, Start Num: 20
Candidate Starts for Babyland_239:
(12, 131531), (Start: 20 @131600 has 176 MA's), (24, 131621), (47, 131795), (51, 131810), (87, 131963), (94, 132011),

Gene: BackyardAgain_231 Start: 128973, Stop: 129440, Start Num: 20
Candidate Starts for BackyardAgain_231:

(12, 128904), (Start: 20 @128973 has 176 MA's), (24, 128994), (47, 129168), (51, 129183), (87, 129336), (94, 129384),

Gene: BadAgartude_230 Start: 130913, Stop: 131380, Start Num: 20
Candidate Starts for BadAgartude_230:
(12, 130844), (Start: 20 @130913 has 176 MA's), (24, 130934), (47, 131108), (51, 131123), (87, 131276), (94, 131324),

Gene: Baee_56 Start: 50252, Stop: 49791, Start Num: 19
Candidate Starts for Baee_56:
(Start: 19 @50252 has 94 MA's), (26, 50204), (54, 50024), (66, 50003), (85, 49916), (86, 49910),

Gene: Baloo_55 Start: 48412, Stop: 47939, Start Num: 19
Candidate Starts for Baloo_55:
(Start: 19 @48412 has 94 MA's), (25, 48376), (48, 48208), (54, 48184), (60, 48175), (71, 48148), (75, 48121), (101, 47968),

Gene: BananaFence_233 Start: 131056, Stop: 131523, Start Num: 20
Candidate Starts for BananaFence_233:
(12, 130987), (Start: 20 @131056 has 176 MA's), (24, 131077), (47, 131251), (51, 131266), (87, 131419), (94, 131467),

Gene: Bananafish_54 Start: 47633, Stop: 47142, Start Num: 17
Candidate Starts for Bananafish_54:
(Start: 17 @47633 has 36 MA's), (41, 47474), (70, 47354), (71, 47351), (73, 47336), (75, 47324), (85, 47267), (86, 47261), (90, 47234), (107, 47150),

Gene: Bangla1971_237 Start: 131532, Stop: 131999, Start Num: 20
Candidate Starts for Bangla1971_237:
(12, 131463), (Start: 20 @131532 has 176 MA's), (24, 131553), (47, 131727), (51, 131742), (87, 131895), (94, 131943),

Gene: Basquiat_233 Start: 129342, Stop: 129809, Start Num: 20
Candidate Starts for Basquiat_233:
(12, 129273), (Start: 20 @129342 has 176 MA's), (24, 129363), (47, 129537), (51, 129552), (87, 129705), (94, 129753),

Gene: BeanWater_229 Start: 130669, Stop: 131136, Start Num: 20
Candidate Starts for BeanWater_229:
(12, 130600), (Start: 20 @130669 has 176 MA's), (24, 130690), (47, 130864), (51, 130879), (87, 131032), (94, 131080),

Gene: Beelzebub_3 Start: 781, Stop: 1281, Start Num: 16
Candidate Starts for Beelzebub_3:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: Belieber_228 Start: 129469, Stop: 129936, Start Num: 20
Candidate Starts for Belieber_228:
(12, 129400), (Start: 20 @129469 has 176 MA's), (24, 129490), (47, 129664), (51, 129679), (87, 129832), (94, 129880),

Gene: Ben11_55 Start: 48694, Stop: 48221, Start Num: 19

Candidate Starts for Ben11_55:
(Start: 19 @48694 has 94 MA's), (25, 48658), (54, 48466), (71, 48430), (75, 48403),

Gene: Bernardo_56 Start: 48845, Stop: 48372, Start Num: 19
Candidate Starts for Bernardo_56:
(Start: 19 @48845 has 94 MA's), (25, 48809), (54, 48617), (71, 48581), (75, 48554), (101, 48401),

Gene: Bezza_224 Start: 130368, Stop: 130835, Start Num: 20
Candidate Starts for Bezza_224:
(12, 130299), (Start: 20 @130368 has 176 MA's), (24, 130389), (47, 130563), (51, 130578), (87, 130731), (94, 130779),

Gene: BigCity_244 Start: 133429, Stop: 133896, Start Num: 20
Candidate Starts for BigCity_244:
(Start: 20 @133429 has 176 MA's), (24, 133450), (47, 133624), (51, 133639), (65, 133678), (87, 133792), (94, 133840),

Gene: Bigswole_241 Start: 133391, Stop: 133858, Start Num: 20
Candidate Starts for Bigswole_241:
(12, 133322), (Start: 20 @133391 has 176 MA's), (24, 133412), (47, 133586), (51, 133601), (87, 133754), (94, 133802),

Gene: Bipolarisk_234 Start: 131551, Stop: 132018, Start Num: 20
Candidate Starts for Bipolarisk_234:
(12, 131482), (Start: 20 @131551 has 176 MA's), (24, 131572), (47, 131746), (51, 131761), (87, 131914), (94, 131962),

Gene: Blackbeetle_3 Start: 790, Stop: 1290, Start Num: 16
Candidate Starts for Blackbeetle_3:
(Start: 16 @790 has 10 MA's), (Start: 18 @802 has 2 MA's), (Start: 21 @811 has 7 MA's), (45, 988), (49, 1012), (50, 1018), (52, 1021), (57, 1033), (58, 1039), (69, 1081), (83, 1156), (91, 1207),

Gene: Blackbrain_234 Start: 131119, Stop: 131586, Start Num: 20
Candidate Starts for Blackbrain_234:
(12, 131050), (Start: 20 @131119 has 176 MA's), (24, 131140), (47, 131314), (51, 131329), (87, 131482), (94, 131530),

Gene: Blackdragon_230 Start: 131144, Stop: 131611, Start Num: 20
Candidate Starts for Blackdragon_230:
(12, 131075), (Start: 20 @131144 has 176 MA's), (24, 131165), (47, 131339), (51, 131354), (87, 131507), (94, 131555),

Gene: Blackpen_49 Start: 42040, Stop: 41573, Start Num: 19
Candidate Starts for Blackpen_49:
(Start: 19 @42040 has 94 MA's), (36, 41911), (64, 41797), (85, 41701), (86, 41695), (94, 41644), (100, 41608),

Gene: Blocker23_54 Start: 47746, Stop: 47255, Start Num: 17
Candidate Starts for Blocker23_54:
(Start: 17 @47746 has 36 MA's), (41, 47587), (71, 47464), (73, 47449), (75, 47437), (85, 47380), (86, 47374), (90, 47347), (107, 47263),

Gene: Blubba_224 Start: 134689, Stop: 135174, Start Num: 20

Candidate Starts for Blubba_224:
(12, 134620), (Start: 20 @134689 has 176 MA's), (24, 134710), (47, 134884), (51, 134899), (87, 135052), (94, 135100),

Gene: BobRoss2024_46 Start: 40623, Stop: 40150, Start Num: 19
Candidate Starts for BobRoss2024_46:
(Start: 19 @40623 has 94 MA's), (36, 40494), (47, 40422), (50, 40407), (66, 40371), (75, 40329), (86, 40278),

Gene: BobaPhatt_227 Start: 130237, Stop: 130704, Start Num: 20
Candidate Starts for BobaPhatt_227:
(12, 130168), (Start: 20 @130237 has 176 MA's), (24, 130258), (47, 130432), (51, 130447), (87, 130600), (94, 130648),

Gene: BobbyK_50 Start: 48250, Stop: 47771, Start Num: 19
Candidate Starts for BobbyK_50:
(Start: 19 @48250 has 94 MA's), (38, 48118), (75, 47953), (77, 47941), (82, 47917), (86, 47890), (105, 47785), (106, 47782),

Gene: Bonray_238 Start: 132919, Stop: 133386, Start Num: 20
Candidate Starts for Bonray_238:
(12, 132850), (Start: 20 @132919 has 176 MA's), (24, 132940), (47, 133114), (51, 133129), (87, 133282), (94, 133330),

Gene: Bowman_233 Start: 132034, Stop: 132501, Start Num: 20
Candidate Starts for Bowman_233:
(12, 131965), (Start: 20 @132034 has 176 MA's), (24, 132055), (47, 132229), (51, 132244), (87, 132397), (94, 132445),

Gene: Boyle_54 Start: 47766, Stop: 47275, Start Num: 17
Candidate Starts for Boyle_54:
(Start: 17 @47766 has 36 MA's), (41, 47607), (71, 47484), (73, 47469), (75, 47457), (85, 47400), (86, 47394), (90, 47367), (107, 47283),

Gene: Bread_231 Start: 130926, Stop: 131393, Start Num: 20
Candidate Starts for Bread_231:
(12, 130857), (Start: 20 @130926 has 176 MA's), (24, 130947), (47, 131121), (51, 131136), (87, 131289), (94, 131337),

Gene: Breeniome_235 Start: 130380, Stop: 130847, Start Num: 20
Candidate Starts for Breeniome_235:
(12, 130311), (Start: 20 @130380 has 176 MA's), (24, 130401), (47, 130575), (51, 130590), (87, 130743), (94, 130791),

Gene: BrownCNA_51 Start: 48520, Stop: 48059, Start Num: 19
Candidate Starts for BrownCNA_51:
(Start: 19 @48520 has 94 MA's), (31, 48427), (40, 48379), (62, 48292), (64, 48283), (66, 48274), (73, 48244), (75, 48232), (81, 48202), (86, 48169), (89, 48145), (90, 48142), (98, 48094), (103, 48070),

Gene: Brownie5_54 Start: 47782, Stop: 47291, Start Num: 17
Candidate Starts for Brownie5_54:
(Start: 17 @47782 has 36 MA's), (41, 47623), (70, 47503), (71, 47500), (73, 47485), (75, 47473), (85, 47416), (86, 47410), (90, 47383), (107, 47299),

Gene: Burrough_236 Start: 132696, Stop: 133163, Start Num: 20
Candidate Starts for Burrough_236:
(12, 132627), (Start: 20 @132696 has 176 MA's), (24, 132717), (47, 132891), (51, 132906), (87, 133059), (94, 133107),

Gene: Bxz1_223 Start: 132901, Stop: 133368, Start Num: 20
Candidate Starts for Bxz1_223:
(12, 132832), (Start: 20 @132901 has 176 MA's), (24, 132922), (47, 133096), (51, 133111), (87, 133264), (94, 133312),

Gene: Cactojaque_230 Start: 130065, Stop: 130532, Start Num: 20
Candidate Starts for Cactojaque_230:
(12, 129996), (Start: 20 @130065 has 176 MA's), (24, 130086), (47, 130260), (51, 130275), (87, 130428), (94, 130476),

Gene: CaiB_50 Start: 43465, Stop: 42998, Start Num: 19
Candidate Starts for CaiB_50:
(Start: 19 @43465 has 94 MA's), (36, 43336), (64, 43222), (85, 43126), (86, 43120), (94, 43069), (100, 43033),

Gene: Calamitous_54 Start: 47632, Stop: 47141, Start Num: 17
Candidate Starts for Calamitous_54:
(Start: 17 @47632 has 36 MA's), (41, 47473), (70, 47353), (71, 47350), (73, 47335), (75, 47323), (85, 47266), (86, 47260), (90, 47233), (107, 47149),

Gene: Cali_227 Start: 131294, Stop: 131761, Start Num: 20
Candidate Starts for Cali_227:
(12, 131225), (Start: 20 @131294 has 176 MA's), (24, 131315), (47, 131489), (51, 131504), (87, 131657), (94, 131705),

Gene: Cane17_226 Start: 135098, Stop: 135583, Start Num: 20
Candidate Starts for Cane17_226:
(12, 135029), (Start: 20 @135098 has 176 MA's), (24, 135119), (47, 135293), (51, 135308), (87, 135461), (94, 135509),

Gene: Capablanca_241 Start: 133548, Stop: 134015, Start Num: 20
Candidate Starts for Capablanca_241:
(12, 133479), (Start: 20 @133548 has 176 MA's), (24, 133569), (47, 133743), (51, 133758), (87, 133911), (94, 133959),

Gene: Caprice_3 Start: 802, Stop: 1290, Start Num: 18
Candidate Starts for Caprice_3:
(Start: 16 @790 has 10 MA's), (Start: 18 @802 has 2 MA's), (Start: 21 @811 has 7 MA's), (45, 988), (49, 1012), (50, 1018), (52, 1021), (57, 1033), (58, 1039), (69, 1081), (83, 1156), (91, 1207),

Gene: Caravan_226 Start: 131634, Stop: 132101, Start Num: 20
Candidate Starts for Caravan_226:
(12, 131565), (Start: 20 @131634 has 176 MA's), (24, 131655), (47, 131829), (51, 131844), (87, 131997), (94, 132045),

Gene: Casbah_55 Start: 48727, Stop: 48254, Start Num: 19
Candidate Starts for Casbah_55:

(Start: 19 @48727 has 94 MA's), (25, 48691), (54, 48499), (60, 48490), (71, 48463), (75, 48436),

Gene: Catera_226 Start: 130036, Stop: 130503, Start Num: 20
Candidate Starts for Catera_226:
(12, 129967), (Start: 20 @130036 has 176 MA's), (24, 130057), (47, 130231), (51, 130246), (87, 130399), (94, 130447),

Gene: ChaChing_55 Start: 48426, Stop: 47953, Start Num: 19
Candidate Starts for ChaChing_55:
(Start: 19 @48426 has 94 MA's), (25, 48390), (48, 48222), (54, 48198), (60, 48189), (71, 48162), (75, 48135), (101, 47982),

Gene: Chalmers_54 Start: 48901, Stop: 48428, Start Num: 19
Candidate Starts for Chalmers_54:
(Start: 19 @48901 has 94 MA's), (25, 48865), (54, 48673), (71, 48637), (75, 48610),

Gene: Chandler_55 Start: 49197, Stop: 48724, Start Num: 19
Candidate Starts for Chandler_55:
(Start: 19 @49197 has 94 MA's), (25, 49161), (54, 48969), (71, 48933), (75, 48906), (101, 48753),

Gene: Chargie21_233 Start: 129342, Stop: 129809, Start Num: 20
Candidate Starts for Chargie21_233:
(12, 129273), (Start: 20 @129342 has 176 MA's), (24, 129363), (47, 129537), (51, 129552), (87, 129705), (94, 129753),

Gene: CharlieB_230 Start: 131048, Stop: 131515, Start Num: 20
Candidate Starts for CharlieB_230:
(12, 130979), (Start: 20 @131048 has 176 MA's), (24, 131069), (47, 131243), (51, 131258), (87, 131411), (94, 131459),

Gene: ChaylaJr_235 Start: 130733, Stop: 131200, Start Num: 20
Candidate Starts for ChaylaJr_235:
(12, 130664), (Start: 20 @130733 has 176 MA's), (24, 130754), (47, 130928), (51, 130943), (87, 131096), (94, 131144),

Gene: Chentzyk_56 Start: 49236, Stop: 48763, Start Num: 19
Candidate Starts for Chentzyk_56:
(Start: 19 @49236 has 94 MA's), (25, 49200), (48, 49032), (54, 49008), (71, 48972), (75, 48945), (101, 48792),

Gene: CherryTomatoes_138 Start: 95998, Stop: 96492, Start Num: 20
Candidate Starts for CherryTomatoes_138:
(Start: 20 @95998 has 176 MA's), (81, 96340), (96, 96442),

Gene: ChickenPhender_232 Start: 129489, Stop: 129956, Start Num: 20
Candidate Starts for ChickenPhender_232:
(12, 129420), (Start: 20 @129489 has 176 MA's), (24, 129510), (47, 129684), (51, 129699), (87, 129852), (94, 129900),

Gene: Chomp_235 Start: 132925, Stop: 133392, Start Num: 20
Candidate Starts for Chomp_235:
(12, 132856), (13, 132859), (Start: 20 @132925 has 176 MA's), (24, 132946), (47, 133120), (51, 133135), (87, 133288), (94, 133336),

Gene: ChrisnMich_50 Start: 47606, Stop: 47145, Start Num: 19
Candidate Starts for ChrisnMich_50:
(Start: 19 @47606 has 94 MA's), (31, 47513), (40, 47465), (64, 47369), (66, 47360), (73, 47330), (75, 47318), (81, 47288), (86, 47255), (89, 47231), (90, 47228), (98, 47180), (103, 47156),

Gene: CindyLou_237 Start: 133185, Stop: 133652, Start Num: 20
Candidate Starts for CindyLou_237:
(12, 133116), (Start: 20 @133185 has 176 MA's), (24, 133206), (47, 133380), (51, 133395), (87, 133548), (94, 133596),

Gene: Clarkson_2 Start: 557, Stop: 1057, Start Num: 16
Candidate Starts for Clarkson_2:
(Start: 16 @557 has 10 MA's), (Start: 18 @569 has 2 MA's), (Start: 21 @578 has 7 MA's), (45, 755), (49, 779), (50, 785), (52, 788), (57, 800), (58, 806), (69, 848), (83, 923), (91, 974),

Gene: Cleatunium_228 Start: 130746, Stop: 131213, Start Num: 20
Candidate Starts for Cleatunium_228:
(12, 130677), (Start: 20 @130746 has 176 MA's), (24, 130767), (47, 130941), (51, 130956), (87, 131109), (94, 131157),

Gene: CloverMinnie_49 Start: 42548, Stop: 42081, Start Num: 19
Candidate Starts for CloverMinnie_49:
(Start: 19 @42548 has 94 MA's), (36, 42419), (64, 42305), (85, 42209), (86, 42203), (94, 42152), (100, 42116),

Gene: Coffee_54 Start: 47741, Stop: 47250, Start Num: 17
Candidate Starts for Coffee_54:
(Start: 17 @47741 has 36 MA's), (41, 47582), (71, 47459), (73, 47444), (75, 47432), (85, 47375), (86, 47369), (90, 47342), (107, 47258),

Gene: Colt_227 Start: 134329, Stop: 134814, Start Num: 20
Candidate Starts for Colt_227:
(12, 134260), (Start: 20 @134329 has 176 MA's), (24, 134350), (47, 134524), (51, 134539), (87, 134692), (94, 134740),

Gene: Compostia_55 Start: 48846, Stop: 48373, Start Num: 19
Candidate Starts for Compostia_55:
(Start: 19 @48846 has 94 MA's), (25, 48810), (54, 48618), (71, 48582), (75, 48555),

Gene: Concombre_241 Start: 133081, Stop: 133548, Start Num: 20
Candidate Starts for Concombre_241:
(12, 133012), (Start: 20 @133081 has 176 MA's), (24, 133102), (47, 133276), (51, 133291), (87, 133444), (94, 133492),

Gene: Cooper_51 Start: 47858, Stop: 47370, Start Num: 17
Candidate Starts for Cooper_51:
(Start: 17 @47858 has 36 MA's), (28, 47786), (30, 47765), (41, 47699), (71, 47573), (85, 47489), (86, 47483),

Gene: Corazon_2 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for Corazon_2:

(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: Corofin_55 Start: 48440, Stop: 47967, Start Num: 19
Candidate Starts for Corofin_55:
(Start: 19 @48440 has 94 MA's), (25, 48404), (54, 48212), (71, 48176), (75, 48149),

Gene: DTDevon_237 Start: 133564, Stop: 134031, Start Num: 20
Candidate Starts for DTDevon_237:
(12, 133495), (Start: 20 @133564 has 176 MA's), (24, 133585), (47, 133759), (51, 133774), (87, 133927), (94, 133975),

Gene: Daffodil_241 Start: 131851, Stop: 132318, Start Num: 20
Candidate Starts for Daffodil_241:
(12, 131782), (Start: 20 @131851 has 176 MA's), (24, 131872), (47, 132046), (51, 132061), (87, 132214), (94, 132262),

Gene: Dandelion_242 Start: 134454, Stop: 134921, Start Num: 20
Candidate Starts for Dandelion_242:
(12, 134385), (Start: 20 @134454 has 176 MA's), (24, 134475), (47, 134649), (51, 134664), (87, 134817), (94, 134865),

Gene: Darko_235 Start: 131060, Stop: 131527, Start Num: 20
Candidate Starts for Darko_235:
(12, 130991), (Start: 20 @131060 has 176 MA's), (24, 131081), (47, 131255), (51, 131270), (87, 131423), (94, 131471),

Gene: DeejaClivia_225 Start: 129891, Stop: 130382, Start Num: 18
Candidate Starts for DeejaClivia_225:
(12, 129828), (Start: 18 @129891 has 2 MA's), (Start: 20 @129897 has 176 MA's), (24, 129918), (47, 130092), (51, 130107), (87, 130260), (94, 130308),

Gene: Deenasa_54 Start: 48857, Stop: 48384, Start Num: 19
Candidate Starts for Deenasa_54:
(Start: 19 @48857 has 94 MA's), (25, 48821), (48, 48653), (54, 48629), (60, 48620), (71, 48593), (75, 48566),

Gene: Delilah_234 Start: 131944, Stop: 132411, Start Num: 20
Candidate Starts for Delilah_234:
(12, 131875), (Start: 20 @131944 has 176 MA's), (24, 131965), (47, 132139), (51, 132154), (87, 132307), (94, 132355),

Gene: Delylah_238 Start: 132258, Stop: 132725, Start Num: 20
Candidate Starts for Delylah_238:
(12, 132189), (Start: 20 @132258 has 176 MA's), (24, 132279), (47, 132453), (51, 132468), (87, 132621), (94, 132669),

Gene: Demodog_242 Start: 133091, Stop: 133558, Start Num: 20
Candidate Starts for Demodog_242:
(12, 133022), (Start: 20 @133091 has 176 MA's), (24, 133112), (47, 133286), (51, 133301), (87, 133454), (94, 133502),

Gene: Derek_232 Start: 132202, Stop: 132669, Start Num: 20

Candidate Starts for Derek_232:
(12, 132133), (Start: 20 @132202 has 176 MA's), (24, 132223), (47, 132397), (51, 132412), (87, 132565), (94, 132613),

Gene: Dessert_233 Start: 131201, Stop: 131668, Start Num: 20
Candidate Starts for Dessert_233:
(12, 131132), (Start: 20 @131201 has 176 MA's), (24, 131222), (47, 131396), (51, 131411), (87, 131564), (94, 131612),

Gene: Devonte_54 Start: 48085, Stop: 47612, Start Num: 19
Candidate Starts for Devonte_54:
(Start: 19 @48085 has 94 MA's), (25, 48049), (54, 47857), (71, 47821), (75, 47794),

Gene: Dietrick_225 Start: 130065, Stop: 130532, Start Num: 20
Candidate Starts for Dietrick_225:
(12, 129996), (Start: 20 @130065 has 176 MA's), (24, 130086), (47, 130260), (51, 130275), (87, 130428), (94, 130476),

Gene: DigitDog_55 Start: 48969, Stop: 48508, Start Num: 19
Candidate Starts for DigitDog_55:
(Start: 19 @48969 has 94 MA's), (26, 48921), (54, 48741), (66, 48720), (85, 48633), (86, 48627), (92, 48585),

Gene: DirtMonster_227 Start: 131397, Stop: 131888, Start Num: 18
Candidate Starts for DirtMonster_227:
(12, 131334), (Start: 18 @131397 has 2 MA's), (Start: 20 @131403 has 176 MA's), (24, 131424), (47, 131598), (51, 131613), (87, 131766), (94, 131814),

Gene: Domi_230 Start: 131404, Stop: 131871, Start Num: 20
Candidate Starts for Domi_230:
(12, 131335), (Start: 20 @131404 has 176 MA's), (24, 131425), (47, 131599), (51, 131614), (87, 131767), (94, 131815),

Gene: Donny_56 Start: 49263, Stop: 48802, Start Num: 19
Candidate Starts for Donny_56:
(3, 49764), (Start: 19 @49263 has 94 MA's), (26, 49215), (54, 49035), (66, 49014), (85, 48927), (86, 48921), (92, 48879),

Gene: DrPhinkDaddy_233 Start: 132629, Stop: 133096, Start Num: 20
Candidate Starts for DrPhinkDaddy_233:
(12, 132560), (Start: 20 @132629 has 176 MA's), (24, 132650), (47, 132824), (51, 132839), (87, 132992), (94, 133040),

Gene: Drazdys_233 Start: 132209, Stop: 132676, Start Num: 20
Candidate Starts for Drazdys_233:
(12, 132140), (Start: 20 @132209 has 176 MA's), (24, 132230), (47, 132404), (51, 132419), (87, 132572), (94, 132620),

Gene: Duckfeet_229 Start: 131017, Stop: 131484, Start Num: 20
Candidate Starts for Duckfeet_229:
(12, 130948), (Start: 20 @131017 has 176 MA's), (24, 131038), (47, 131212), (51, 131227), (87, 131380), (94, 131428),

Gene: Eaglehorse_54 Start: 47667, Stop: 47176, Start Num: 17
Candidate Starts for Eaglehorse_54:
(Start: 17 @47667 has 36 MA's), (41, 47508), (70, 47388), (71, 47385), (73, 47370), (75, 47358), (85, 47301), (86, 47295), (90, 47268), (107, 47184),

Gene: EastView9101_54 Start: 48910, Stop: 48449, Start Num: 19
Candidate Starts for EastView9101_54:
(Start: 19 @48910 has 94 MA's), (26, 48862), (54, 48682), (66, 48661), (85, 48574), (86, 48568), (92, 48526),

Gene: EasyJones_237 Start: 130585, Stop: 131052, Start Num: 20
Candidate Starts for EasyJones_237:
(12, 130516), (Start: 20 @130585 has 176 MA's), (24, 130606), (47, 130780), (51, 130795), (87, 130948), (94, 130996),

Gene: EggyFarm_244 Start: 133430, Stop: 133897, Start Num: 20
Candidate Starts for EggyFarm_244:
(Start: 20 @133430 has 176 MA's), (24, 133451), (47, 133625), (51, 133640), (65, 133679), (87, 133793), (94, 133841),

Gene: EmToTheThree_236 Start: 131968, Stop: 132435, Start Num: 20
Candidate Starts for EmToTheThree_236:
(12, 131899), (Start: 20 @131968 has 176 MA's), (24, 131989), (47, 132163), (51, 132178), (87, 132331), (94, 132379),

Gene: EmmaElysia_241 Start: 133080, Stop: 133547, Start Num: 20
Candidate Starts for EmmaElysia_241:
(12, 133011), (Start: 20 @133080 has 176 MA's), (24, 133101), (47, 133275), (51, 133290), (87, 133443), (94, 133491),

Gene: Epah_49 Start: 47622, Stop: 47143, Start Num: 19
Candidate Starts for Epah_49:
(Start: 19 @47622 has 94 MA's), (38, 47490), (75, 47325), (77, 47313), (86, 47262), (105, 47157), (106, 47154),

Gene: Erdmann_236 Start: 131936, Stop: 132403, Start Num: 20
Candidate Starts for Erdmann_236:
(12, 131867), (Start: 20 @131936 has 176 MA's), (24, 131957), (47, 132131), (51, 132146), (87, 132299), (94, 132347),

Gene: ErnieJ_229 Start: 128764, Stop: 129231, Start Num: 20
Candidate Starts for ErnieJ_229:
(12, 128695), (Start: 20 @128764 has 176 MA's), (24, 128785), (47, 128959), (51, 128974), (87, 129127), (94, 129175),

Gene: Essence_234 Start: 131421, Stop: 131888, Start Num: 20
Candidate Starts for Essence_234:
(12, 131352), (Start: 20 @131421 has 176 MA's), (24, 131442), (47, 131616), (51, 131631), (87, 131784), (94, 131832),

Gene: Evaa_46 Start: 41052, Stop: 40558, Start Num: 19
Candidate Starts for Evaa_46:

(Start: 19 @41052 has 94 MA's), (35, 40932), (42, 40884), (56, 40812), (66, 40770), (73, 40740), (86, 40674), (100, 40587),

Gene: Ewok_235 Start: 131879, Stop: 132346, Start Num: 20
Candidate Starts for Ewok_235:
(12, 131810), (Start: 20 @131879 has 176 MA's), (24, 131900), (47, 132074), (51, 132089), (87, 132242), (94, 132290),

Gene: Fanaw_49 Start: 48294, Stop: 47833, Start Num: 19
Candidate Starts for Fanaw_49:
(2, 48801), (5, 48489), (Start: 19 @48294 has 94 MA's), (31, 48201), (40, 48153), (64, 48057), (66, 48048), (73, 48018), (75, 48006), (76, 48000), (81, 47976), (86, 47943), (89, 47919), (90, 47916), (98, 47868), (103, 47844),

Gene: Faze9_53 Start: 47761, Stop: 47270, Start Num: 17
Candidate Starts for Faze9_53:
(Start: 17 @47761 has 36 MA's), (41, 47602), (71, 47479), (73, 47464), (85, 47395), (86, 47389), (90, 47362), (107, 47278),

Gene: FeliMaine_2 Start: 579, Stop: 1058, Start Num: 21
Candidate Starts for FeliMaine_2:
(Start: 16 @558 has 10 MA's), (Start: 18 @570 has 2 MA's), (Start: 21 @579 has 7 MA's), (45, 756), (49, 780), (50, 786), (52, 789), (57, 801), (58, 807), (69, 849), (83, 924), (91, 975),

Gene: FelixTres_49 Start: 42586, Stop: 42119, Start Num: 19
Candidate Starts for FelixTres_49:
(Start: 19 @42586 has 94 MA's), (36, 42457), (64, 42343), (85, 42247), (86, 42241), (94, 42190), (100, 42154),

Gene: Fixie_235 Start: 132201, Stop: 132668, Start Num: 20
Candidate Starts for Fixie_235:
(12, 132132), (Start: 20 @132201 has 176 MA's), (24, 132222), (47, 132396), (51, 132411), (87, 132564), (94, 132612),

Gene: Flabslab_232 Start: 129100, Stop: 129585, Start Num: 20
Candidate Starts for Flabslab_232:
(12, 129031), (Start: 18 @129094 has 2 MA's), (Start: 20 @129100 has 176 MA's), (24, 129121), (47, 129295), (51, 129310), (87, 129463), (94, 129511),

Gene: Fludd_236 Start: 130297, Stop: 130764, Start Num: 20
Candidate Starts for Fludd_236:
(12, 130228), (Start: 20 @130297 has 176 MA's), (24, 130318), (47, 130492), (51, 130507), (87, 130660), (94, 130708),

Gene: Fongie_236 Start: 131877, Stop: 132344, Start Num: 20
Candidate Starts for Fongie_236:
(12, 131808), (Start: 20 @131877 has 176 MA's), (24, 131898), (47, 132072), (51, 132087), (87, 132240), (94, 132288),

Gene: ForDig_48 Start: 46304, Stop: 45825, Start Num: 19
Candidate Starts for ForDig_48:
(Start: 19 @46304 has 94 MA's), (86, 45944), (105, 45839), (106, 45836),

Gene: Fortunato_50 Start: 48287, Stop: 47805, Start Num: 19
Candidate Starts for Fortunato_50:
(4, 48473), (6, 48443), (11, 48350), (Start: 19 @48287 has 94 MA's), (27, 48236), (38, 48155), (66, 48029), (73, 47999), (82, 47951), (86, 47924), (105, 47819), (106, 47816),

Gene: FoxtrotP1_234 Start: 132522, Stop: 132989, Start Num: 20
Candidate Starts for FoxtrotP1_234:
(12, 132453), (Start: 20 @132522 has 176 MA's), (24, 132543), (47, 132717), (51, 132732), (87, 132885), (94, 132933),

Gene: FrayBell_239 Start: 130485, Stop: 130952, Start Num: 20
Candidate Starts for FrayBell_239:
(12, 130416), (Start: 20 @130485 has 176 MA's), (24, 130506), (47, 130680), (51, 130695), (87, 130848), (94, 130896),

Gene: Frederick_50 Start: 48247, Stop: 47768, Start Num: 19
Candidate Starts for Frederick_50:
(Start: 19 @48247 has 94 MA's), (38, 48115), (75, 47950), (77, 47938), (82, 47914), (86, 47887), (105, 47782), (106, 47779),

Gene: FrenchFry_54 Start: 47740, Stop: 47249, Start Num: 17
Candidate Starts for FrenchFry_54:
(Start: 17 @47740 has 36 MA's), (41, 47581), (70, 47461), (71, 47458), (73, 47443), (75, 47431), (85, 47374), (86, 47368), (90, 47341), (107, 47257),

Gene: FudgeTart_230 Start: 131026, Stop: 131493, Start Num: 20
Candidate Starts for FudgeTart_230:
(12, 130957), (Start: 20 @131026 has 176 MA's), (24, 131047), (47, 131221), (51, 131236), (87, 131389), (94, 131437),

Gene: Funsized_56 Start: 50763, Stop: 50284, Start Num: 19
Candidate Starts for Funsized_56:
(Start: 19 @50763 has 94 MA's), (46, 50568), (64, 50514), (72, 50472), (94, 50349), (98, 50319),

Gene: Gabriel_239 Start: 130456, Stop: 130923, Start Num: 20
Candidate Starts for Gabriel_239:
(12, 130387), (Start: 20 @130456 has 176 MA's), (24, 130477), (47, 130651), (51, 130666), (87, 130819), (94, 130867),

Gene: Gadjet_56 Start: 48745, Stop: 48272, Start Num: 19
Candidate Starts for Gadjet_56:
(Start: 19 @48745 has 94 MA's), (25, 48709), (48, 48541), (54, 48517), (60, 48508), (71, 48481), (75, 48454), (101, 48301),

Gene: Gamgam_238 Start: 130813, Stop: 131280, Start Num: 20
Candidate Starts for Gamgam_238:
(12, 130744), (Start: 20 @130813 has 176 MA's), (24, 130834), (47, 131008), (51, 131023), (87, 131176), (94, 131224),

Gene: Gattaca_4 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for Gattaca_4:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: Gervas_56 Start: 48853, Stop: 48380, Start Num: 19
Candidate Starts for Gervas_56:
(Start: 19 @48853 has 94 MA's), (25, 48817), (54, 48625), (71, 48589), (75, 48562),

Gene: Ghost_235 Start: 131437, Stop: 131904, Start Num: 20
Candidate Starts for Ghost_235:
(12, 131368), (Start: 20 @131437 has 176 MA's), (24, 131458), (47, 131632), (51, 131647), (87, 131800), (94, 131848),

Gene: GinPorsche_49 Start: 47622, Stop: 47143, Start Num: 19
Candidate Starts for GinPorsche_49:
(Start: 19 @47622 has 94 MA's), (38, 47490), (75, 47325), (77, 47313), (86, 47262), (105, 47157), (106, 47154),

Gene: Gizmo_241 Start: 133853, Stop: 134320, Start Num: 20
Candidate Starts for Gizmo_241:
(12, 133784), (Start: 20 @133853 has 176 MA's), (24, 133874), (47, 134048), (51, 134063), (87, 134216), (94, 134264),

Gene: Glass_54 Start: 47745, Stop: 47254, Start Num: 17
Candidate Starts for Glass_54:
(Start: 17 @47745 has 36 MA's), (41, 47586), (70, 47466), (71, 47463), (73, 47448), (75, 47436), (85, 47379), (86, 47373), (90, 47346), (107, 47262),

Gene: GlenHope_56 Start: 48408, Stop: 47935, Start Num: 19
Candidate Starts for GlenHope_56:
(Start: 19 @48408 has 94 MA's), (25, 48372), (54, 48180), (71, 48144), (75, 48117),

Gene: Glubnar_56 Start: 48404, Stop: 47931, Start Num: 19
Candidate Starts for Glubnar_56:
(Start: 19 @48404 has 94 MA's), (25, 48368), (54, 48176), (71, 48140), (75, 48113),

Gene: GlutenPhree_237 Start: 130824, Stop: 131291, Start Num: 20
Candidate Starts for GlutenPhree_237:
(12, 130755), (Start: 20 @130824 has 176 MA's), (24, 130845), (47, 131019), (51, 131034), (87, 131187), (94, 131235),

Gene: Godines_54 Start: 47697, Stop: 47206, Start Num: 17
Candidate Starts for Godines_54:
(Start: 17 @47697 has 36 MA's), (41, 47538), (71, 47415), (73, 47400), (75, 47388), (85, 47331), (86, 47325), (90, 47298), (107, 47214),

Gene: GoongGoong_3 Start: 811, Stop: 1290, Start Num: 21
Candidate Starts for GoongGoong_3:
(Start: 16 @790 has 10 MA's), (Start: 18 @802 has 2 MA's), (Start: 21 @811 has 7 MA's), (45, 988), (49, 1012), (50, 1018), (52, 1021), (57, 1033), (58, 1039), (69, 1081), (83, 1156), (91, 1207),

Gene: Grasshills_243 Start: 133429, Stop: 133896, Start Num: 20
Candidate Starts for Grasshills_243:
(Start: 20 @133429 has 176 MA's), (24, 133450), (47, 133624), (51, 133639), (65, 133678), (87, 133792), (94, 133840),

Gene: Grungle_218 Start: 128759, Stop: 129226, Start Num: 20
Candidate Starts for Grungle_218:
(12, 128690), (Start: 20 @128759 has 176 MA's), (24, 128780), (47, 128954), (51, 128969), (87, 129122), (94, 129170),

Gene: Guwapp_232 Start: 130271, Stop: 130738, Start Num: 20
Candidate Starts for Guwapp_232:
(12, 130202), (Start: 20 @130271 has 176 MA's), (24, 130292), (47, 130466), (51, 130481), (87, 130634), (94, 130682),

Gene: Halfpint_54 Start: 48229, Stop: 47756, Start Num: 19
Candidate Starts for Halfpint_54:
(Start: 19 @48229 has 94 MA's), (25, 48193), (54, 48001), (71, 47965), (75, 47938), (101, 47785),

Gene: Halldule_228 Start: 129941, Stop: 130408, Start Num: 20
Candidate Starts for Halldule_228:
(12, 129872), (Start: 20 @129941 has 176 MA's), (24, 129962), (47, 130136), (51, 130151), (87, 130304), (94, 130352),

Gene: Hally898_49 Start: 47637, Stop: 47158, Start Num: 19
Candidate Starts for Hally898_49:
(Start: 19 @47637 has 94 MA's), (38, 47505), (75, 47340), (77, 47328), (86, 47277), (105, 47172), (106, 47169),

Gene: Hangman_49 Start: 48338, Stop: 47877, Start Num: 19
Candidate Starts for Hangman_49:
(Start: 19 @48338 has 94 MA's), (31, 48245), (40, 48197), (62, 48110), (64, 48101), (66, 48092), (73, 48062), (75, 48050), (81, 48020), (86, 47987), (89, 47963), (90, 47960), (98, 47912), (103, 47888),

Gene: HarveySr_54 Start: 48081, Stop: 47608, Start Num: 19
Candidate Starts for HarveySr_54:
(Start: 19 @48081 has 94 MA's), (25, 48045), (54, 47853), (71, 47817), (75, 47790),

Gene: Heath_49 Start: 48246, Stop: 47785, Start Num: 19
Candidate Starts for Heath_49:
(Start: 19 @48246 has 94 MA's), (31, 48153), (40, 48105), (64, 48009), (66, 48000), (73, 47970), (75, 47958), (81, 47928), (86, 47895), (89, 47871), (90, 47868), (98, 47820), (103, 47796),

Gene: Heathcliff_55 Start: 48375, Stop: 47902, Start Num: 19
Candidate Starts for Heathcliff_55:
(Start: 19 @48375 has 94 MA's), (25, 48339), (48, 48171), (54, 48147), (60, 48138), (71, 48111), (75, 48084), (101, 47931),

Gene: Hedgerow_54 Start: 47754, Stop: 47263, Start Num: 17
Candidate Starts for Hedgerow_54:
(Start: 17 @47754 has 36 MA's), (41, 47595), (70, 47475), (71, 47472), (73, 47457), (75, 47445), (85, 47388), (86, 47382), (90, 47355), (107, 47271),

Gene: Holeinone_54 Start: 47605, Stop: 47114, Start Num: 17
Candidate Starts for Holeinone_54:
(Start: 17 @47605 has 36 MA's), (41, 47446), (70, 47326), (71, 47323), (73, 47308), (75, 47296), (85, 47239), (86, 47233), (90, 47206), (107, 47122),

Gene: Hosp_046 Start: 44495, Stop: 44016, Start Num: 19
Candidate Starts for Hosp_046:
(Start: 19 @44495 has 94 MA's), (Start: 21 @44489 has 7 MA's), (38, 44363), (71, 44225), (75, 44198), (86, 44135), (105, 44030),

Gene: Huphlepuff_2 Start: 558, Stop: 1058, Start Num: 16
Candidate Starts for Huphlepuff_2:
(Start: 16 @558 has 10 MA's), (Start: 18 @570 has 2 MA's), (Start: 21 @579 has 7 MA's), (45, 756), (49, 780), (50, 786), (52, 789), (57, 801), (58, 807), (69, 849), (83, 924), (91, 975),

Gene: HyRo_221 Start: 130778, Stop: 131269, Start Num: 18
Candidate Starts for HyRo_221:
(12, 130715), (Start: 18 @130778 has 2 MA's), (Start: 20 @130784 has 176 MA's), (24, 130805), (47, 130979), (51, 130994), (87, 131147), (94, 131195),

Gene: Hydro_50 Start: 48672, Stop: 48211, Start Num: 19
Candidate Starts for Hydro_50:
(1, 49329), (2, 49179), (Start: 19 @48672 has 94 MA's), (31, 48579), (40, 48531), (64, 48435), (66, 48426), (75, 48384), (76, 48378), (81, 48354), (86, 48321), (89, 48297), (90, 48294), (98, 48246), (103, 48222),

Gene: I3_246 Start: 132627, Stop: 133094, Start Num: 20
Candidate Starts for I3_246:
(12, 132558), (Start: 20 @132627 has 176 MA's), (24, 132648), (47, 132822), (51, 132837), (87, 132990), (94, 133038),

Gene: IkeLoa_230 Start: 131169, Stop: 131636, Start Num: 20
Candidate Starts for IkeLoa_230:
(12, 131100), (Start: 20 @131169 has 176 MA's), (24, 131190), (47, 131364), (51, 131379), (87, 131532), (94, 131580),

Gene: Imvubu_48 Start: 45835, Stop: 45356, Start Num: 19
Candidate Starts for Imvubu_48:
(Start: 19 @45835 has 94 MA's), (39, 45700), (66, 45577), (70, 45565), (73, 45547), (75, 45535), (82, 45499), (86, 45472), (93, 45424), (105, 45367),

Gene: Indlovu_52 Start: 48321, Stop: 47821, Start Num: 19
Candidate Starts for Indlovu_52:
(Start: 19 @48321 has 94 MA's), (30, 48243), (44, 48147), (67, 48063), (82, 47988), (84, 47970), (86, 47961), (92, 47919), (99, 47877),

Gene: InigoMontoya_239 Start: 131487, Stop: 131954, Start Num: 20
Candidate Starts for InigoMontoya_239:
(12, 131418), (Start: 20 @131487 has 176 MA's), (24, 131508), (47, 131682), (51, 131697), (87, 131850), (94, 131898), (104, 131949),

Gene: InterFolia_237 Start: 132290, Stop: 132757, Start Num: 20
Candidate Starts for InterFolia_237:
(12, 132221), (Start: 20 @132290 has 176 MA's), (24, 132311), (47, 132485), (51, 132500), (87, 132653), (94, 132701),

Gene: Iota_233 Start: 131199, Stop: 131666, Start Num: 20
Candidate Starts for Iota_233:

(12, 131130), (Start: 20 @131199 has 176 MA's), (24, 131220), (47, 131394), (51, 131409), (87, 131562), (94, 131610),

Gene: Issimir_229 Start: 131125, Stop: 131592, Start Num: 20
Candidate Starts for Issimir_229:
(12, 131056), (Start: 20 @131125 has 176 MA's), (24, 131146), (47, 131320), (51, 131335), (87, 131488), (94, 131536),

Gene: ItsyBitsy1_54 Start: 47622, Stop: 47131, Start Num: 17
Candidate Starts for ItsyBitsy1_54:
(Start: 17 @47622 has 36 MA's), (41, 47463), (70, 47343), (71, 47340), (73, 47325), (75, 47313), (85, 47256), (86, 47250), (90, 47223), (107, 47139),

Gene: Izajani_232 Start: 132019, Stop: 132486, Start Num: 20
Candidate Starts for Izajani_232:
(12, 131950), (Start: 20 @132019 has 176 MA's), (24, 132040), (47, 132214), (51, 132229), (87, 132382), (94, 132430),

Gene: JAMaL_50 Start: 48798, Stop: 48337, Start Num: 19
Candidate Starts for JAMaL_50:
(Start: 19 @48798 has 94 MA's), (31, 48705), (40, 48657), (64, 48561), (66, 48552), (73, 48522), (75, 48510), (81, 48480), (86, 48447), (89, 48423), (90, 48420), (98, 48372), (103, 48348),

Gene: JPickles_233 Start: 130175, Stop: 130642, Start Num: 20
Candidate Starts for JPickles_233:
(12, 130106), (Start: 20 @130175 has 176 MA's), (24, 130196), (47, 130370), (51, 130385), (87, 130538), (94, 130586),

Gene: Jackstina_51 Start: 48334, Stop: 47861, Start Num: 19
Candidate Starts for Jackstina_51:
(7, 48460), (10, 48409), (Start: 19 @48334 has 94 MA's), (25, 48298), (54, 48106), (71, 48070), (75, 48043),

Gene: JaguarMi_52 Start: 49739, Stop: 49278, Start Num: 19
Candidate Starts for JaguarMi_52:
(Start: 19 @49739 has 94 MA's), (31, 49646), (40, 49598), (64, 49502), (66, 49493), (73, 49463), (75, 49451), (76, 49445), (81, 49421), (84, 49397), (86, 49388), (89, 49364), (90, 49361), (98, 49313), (103, 49289),

Gene: Janiyra_239 Start: 131712, Stop: 132179, Start Num: 20
Candidate Starts for Janiyra_239:
(12, 131643), (Start: 20 @131712 has 176 MA's), (24, 131733), (47, 131907), (51, 131922), (87, 132075), (94, 132123),

Gene: JayJay_238 Start: 131602, Stop: 132087, Start Num: 20
Candidate Starts for JayJay_238:
(12, 131533), (Start: 18 @131596 has 2 MA's), (Start: 20 @131602 has 176 MA's), (24, 131623), (47, 131797), (51, 131812), (87, 131965), (94, 132013),

Gene: Jaygup_233 Start: 131346, Stop: 131813, Start Num: 20
Candidate Starts for Jaygup_233:
(12, 131277), (Start: 20 @131346 has 176 MA's), (24, 131367), (47, 131541), (51, 131556), (87, 131709), (94, 131757),

Gene: Jedediah_237 Start: 132399, Stop: 132866, Start Num: 20
Candidate Starts for Jedediah_237:
(12, 132330), (Start: 20 @132399 has 176 MA's), (24, 132420), (47, 132594), (51, 132609), (87, 132762), (94, 132810),

Gene: Jemmno_236 Start: 131118, Stop: 131585, Start Num: 20
Candidate Starts for Jemmno_236:
(12, 131049), (Start: 20 @131118 has 176 MA's), (24, 131139), (47, 131313), (51, 131328), (87, 131481), (94, 131529),

Gene: Jessibeth14_236 Start: 132594, Stop: 133061, Start Num: 20
Candidate Starts for Jessibeth14_236:
(12, 132525), (Start: 20 @132594 has 176 MA's), (24, 132615), (47, 132789), (51, 132804), (87, 132957), (94, 133005),

Gene: Jezreel_233 Start: 131663, Stop: 132130, Start Num: 20
Candidate Starts for Jezreel_233:
(12, 131594), (Start: 20 @131663 has 176 MA's), (24, 131684), (47, 131858), (51, 131873), (87, 132026), (94, 132074),

Gene: JigglyPuff_242 Start: 133089, Stop: 133556, Start Num: 20
Candidate Starts for JigglyPuff_242:
(12, 133020), (Start: 20 @133089 has 176 MA's), (24, 133110), (47, 133284), (51, 133299), (87, 133452), (94, 133500),

Gene: JoieB_3 Start: 780, Stop: 1280, Start Num: 16
Candidate Starts for JoieB_3:
(Start: 16 @780 has 10 MA's), (Start: 18 @792 has 2 MA's), (Start: 21 @801 has 7 MA's), (45, 978), (49, 1002), (50, 1008), (52, 1011), (57, 1023), (58, 1029), (69, 1071), (83, 1146), (91, 1197),

Gene: Jolie1_048 Start: 46283, Stop: 45804, Start Num: 19
Candidate Starts for Jolie1_048:
(Start: 19 @46283 has 94 MA's), (Start: 21 @46277 has 7 MA's), (38, 46151), (75, 45986), (86, 45923), (105, 45818),

Gene: JoyceMaria_49 Start: 48230, Stop: 47769, Start Num: 19
Candidate Starts for JoyceMaria_49:
(Start: 19 @48230 has 94 MA's), (31, 48137), (40, 48089), (62, 48002), (64, 47993), (66, 47984), (73, 47954), (75, 47942), (81, 47912), (86, 47879), (89, 47855), (90, 47852), (98, 47804), (103, 47780),

Gene: JulietS_225 Start: 128698, Stop: 129165, Start Num: 20
Candidate Starts for JulietS_225:
(12, 128629), (Start: 20 @128698 has 176 MA's), (24, 128719), (47, 128893), (51, 128908), (87, 129061), (94, 129109),

Gene: JustHall_230 Start: 130648, Stop: 131115, Start Num: 20
Candidate Starts for JustHall_230:
(12, 130579), (Start: 20 @130648 has 176 MA's), (24, 130669), (47, 130843), (51, 130858), (87, 131011), (94, 131059),

Gene: Kaleb_54 Start: 47769, Stop: 47278, Start Num: 17
Candidate Starts for Kaleb_54:

(Start: 17 @47769 has 36 MA's), (41, 47610), (70, 47490), (71, 47487), (73, 47472), (75, 47460), (85, 47403), (86, 47397), (90, 47370), (107, 47286),

Gene: Kamiyu_55 Start: 48385, Stop: 47912, Start Num: 19
Candidate Starts for Kamiyu_55:
(Start: 19 @48385 has 94 MA's), (25, 48349), (54, 48157), (71, 48121), (75, 48094),

Gene: Kamryn_235 Start: 132238, Stop: 132705, Start Num: 20
Candidate Starts for Kamryn_235:
(12, 132169), (Start: 20 @132238 has 176 MA's), (24, 132259), (47, 132433), (51, 132448), (87, 132601), (94, 132649),

Gene: KarasumaRum_55 Start: 49120, Stop: 48659, Start Num: 19
Candidate Starts for KarasumaRum_55:
(Start: 19 @49120 has 94 MA's), (26, 49072), (42, 48961), (54, 48892), (66, 48871), (85, 48784), (86, 48778), (92, 48736),

Gene: KayaCho_47 Start: 46059, Stop: 45589, Start Num: 19
Candidate Starts for KayaCho_47:
(Start: 19 @46059 has 94 MA's), (59, 45837), (64, 45819), (66, 45810), (82, 45732), (86, 45705), (89, 45681), (92, 45663), (98, 45630),

Gene: Kboogie_240 Start: 131277, Stop: 131744, Start Num: 20
Candidate Starts for Kboogie_240:
(12, 131208), (Start: 20 @131277 has 176 MA's), (24, 131298), (47, 131472), (51, 131487), (87, 131640), (94, 131688),

Gene: Khaleesi_235 Start: 132061, Stop: 132528, Start Num: 20
Candidate Starts for Khaleesi_235:
(12, 131992), (Start: 20 @132061 has 176 MA's), (24, 132082), (47, 132256), (51, 132271), (87, 132424), (94, 132472),

Gene: Kheth_54 Start: 47658, Stop: 47167, Start Num: 17
Candidate Starts for Kheth_54:
(Start: 17 @47658 has 36 MA's), (41, 47499), (70, 47379), (71, 47376), (73, 47361), (75, 47349), (85, 47292), (86, 47286), (90, 47259), (107, 47175),

Gene: Knocker_55 Start: 50204, Stop: 49725, Start Num: 19
Candidate Starts for Knocker_55:
(9, 50315), (14, 50255), (Start: 19 @50204 has 94 MA's), (37, 50078), (40, 50060), (60, 49973), (68, 49943), (71, 49934), (75, 49907), (86, 49844), (87, 49841), (96, 49778), (97, 49772), (98, 49769), (102, 49751), (107, 49733),

Gene: Koguma_235 Start: 130918, Stop: 131385, Start Num: 20
Candidate Starts for Koguma_235:
(12, 130849), (Start: 20 @130918 has 176 MA's), (24, 130939), (47, 131113), (51, 131128), (87, 131281), (94, 131329),

Gene: Kolhan_54 Start: 47622, Stop: 47131, Start Num: 17
Candidate Starts for Kolhan_54:
(Start: 17 @47622 has 36 MA's), (41, 47463), (70, 47343), (71, 47340), (73, 47325), (75, 47313), (85, 47256), (86, 47250), (90, 47223), (107, 47139),

Gene: Kronus_55 Start: 49462, Stop: 48989, Start Num: 19
Candidate Starts for Kronus_55:
(Start: 19 @49462 has 94 MA's), (25, 49426), (54, 49234), (71, 49198), (75, 49171),

Gene: LRRHood_228 Start: 130270, Stop: 130737, Start Num: 20
Candidate Starts for LRRHood_228:
(12, 130201), (Start: 20 @130270 has 176 MA's), (24, 130291), (47, 130465), (51, 130480), (87, 130633), (94, 130681),

Gene: Labradorite_233 Start: 130837, Stop: 131304, Start Num: 20
Candidate Starts for Labradorite_233:
(12, 130768), (Start: 20 @130837 has 176 MA's), (24, 130858), (47, 131032), (51, 131047), (87, 131200), (94, 131248),

Gene: Lambano_49 Start: 47637, Stop: 47158, Start Num: 19
Candidate Starts for Lambano_49:
(Start: 19 @47637 has 94 MA's), (38, 47505), (75, 47340), (77, 47328), (86, 47277), (105, 47172), (106, 47169),

Gene: Lars_54 Start: 47729, Stop: 47238, Start Num: 17
Candidate Starts for Lars_54:
(Start: 17 @47729 has 36 MA's), (41, 47570), (70, 47450), (71, 47447), (73, 47432), (75, 47420), (85, 47363), (86, 47357), (90, 47330), (107, 47246),

Gene: Latch_236 Start: 130823, Stop: 131290, Start Num: 20
Candidate Starts for Latch_236:
(12, 130754), (Start: 20 @130823 has 176 MA's), (24, 130844), (47, 131018), (51, 131033), (87, 131186), (94, 131234),

Gene: Laurie_53 Start: 47114, Stop: 46623, Start Num: 17
Candidate Starts for Laurie_53:
(Start: 17 @47114 has 36 MA's), (41, 46955), (71, 46832), (73, 46817), (75, 46805), (85, 46748), (86, 46742), (90, 46715), (107, 46631),

Gene: Lee7_235 Start: 133475, Stop: 133942, Start Num: 20
Candidate Starts for Lee7_235:
(12, 133406), (Start: 20 @133475 has 176 MA's), (24, 133496), (47, 133670), (51, 133685), (87, 133838), (94, 133886),

Gene: Lephleur_54 Start: 47635, Stop: 47144, Start Num: 17
Candidate Starts for Lephleur_54:
(Start: 17 @47635 has 36 MA's), (41, 47476), (70, 47356), (71, 47353), (73, 47338), (75, 47326), (85, 47269), (86, 47263), (90, 47236), (107, 47152),

Gene: LestyG_54 Start: 48098, Stop: 47625, Start Num: 19
Candidate Starts for LestyG_54:
(Start: 19 @48098 has 94 MA's), (25, 48062), (54, 47870), (71, 47834), (75, 47807),

Gene: Lethe_234 Start: 132714, Stop: 133181, Start Num: 20
Candidate Starts for Lethe_234:
(12, 132645), (Start: 20 @132714 has 176 MA's), (24, 132735), (47, 132909), (51, 132924), (87, 133077), (94, 133125),

Gene: LifeSavor_236 Start: 132051, Stop: 132518, Start Num: 20
Candidate Starts for LifeSavor_236:
(12, 131982), (Start: 20 @132051 has 176 MA's), (24, 132072), (47, 132246), (51, 132261), (87, 132414), (94, 132462),

Gene: LilMcDreamy_52 Start: 48261, Stop: 47788, Start Num: 19
Candidate Starts for LilMcDreamy_52:
(Start: 19 @48261 has 94 MA's), (29, 48186), (40, 48117), (43, 48096), (44, 48087), (73, 47976), (86, 47901), (92, 47859),

Gene: LilSmirk_54 Start: 47632, Stop: 47141, Start Num: 17
Candidate Starts for LilSmirk_54:
(Start: 17 @47632 has 36 MA's), (41, 47473), (70, 47353), (71, 47350), (73, 47335), (75, 47323), (85, 47266), (86, 47260), (90, 47233), (107, 47149),

Gene: Lilbit_2 Start: 558, Stop: 1058, Start Num: 16
Candidate Starts for Lilbit_2:
(Start: 16 @558 has 10 MA's), (Start: 18 @570 has 2 MA's), (Start: 21 @579 has 7 MA's), (45, 756), (49, 780), (50, 786), (52, 789), (57, 801), (58, 807), (69, 849), (83, 924), (91, 975),

Gene: LinStu_234 Start: 130556, Stop: 131041, Start Num: 20
Candidate Starts for LinStu_234:
(12, 130487), (Start: 20 @130556 has 176 MA's), (24, 130577), (47, 130751), (51, 130766), (87, 130919), (94, 130967),

Gene: LittleDigger_49 Start: 47650, Stop: 47171, Start Num: 19
Candidate Starts for LittleDigger_49:
(Start: 19 @47650 has 94 MA's), (38, 47518), (75, 47353), (77, 47341), (86, 47290), (105, 47185), (106, 47182),

Gene: LittleLaf_2 Start: 558, Stop: 1058, Start Num: 16
Candidate Starts for LittleLaf_2:
(Start: 16 @558 has 10 MA's), (Start: 18 @570 has 2 MA's), (Start: 21 @579 has 7 MA's), (45, 756), (49, 780), (50, 786), (52, 789), (57, 801), (58, 807), (69, 849), (83, 924), (91, 975),

Gene: LittleMunchkin_48 Start: 43521, Stop: 43039, Start Num: 19
Candidate Starts for LittleMunchkin_48:
(Start: 19 @43521 has 94 MA's), (40, 43365), (61, 43263), (65, 43248), (66, 43242), (71, 43227), (73, 43212), (80, 43176), (85, 43152), (94, 43095),

Gene: Littleton_239 Start: 132060, Stop: 132527, Start Num: 20
Candidate Starts for Littleton_239:
(12, 131991), (Start: 20 @132060 has 176 MA's), (24, 132081), (47, 132255), (51, 132270), (87, 132423), (94, 132471),

Gene: LizLemon_54 Start: 47751, Stop: 47260, Start Num: 17
Candidate Starts for LizLemon_54:
(Start: 17 @47751 has 36 MA's), (41, 47592), (71, 47469), (73, 47454), (75, 47442), (85, 47385), (86, 47379), (90, 47352), (107, 47268),

Gene: Loanshark_233 Start: 131410, Stop: 131877, Start Num: 20
Candidate Starts for Loanshark_233:

(12, 131341), (Start: 20 @131410 has 176 MA's), (24, 131431), (47, 131605), (51, 131620), (87, 131773), (94, 131821),

Gene: LolaVinca_232 Start: 131720, Stop: 132187, Start Num: 20
Candidate Starts for LolaVinca_232:
(12, 131651), (Start: 20 @131720 has 176 MA's), (24, 131741), (47, 131915), (51, 131930), (87, 132083), (94, 132131),

Gene: Lolalove_51 Start: 48640, Stop: 48179, Start Num: 19
Candidate Starts for Lolalove_51:
(1, 49297), (2, 49147), (5, 48835), (Start: 19 @48640 has 94 MA's), (31, 48547), (40, 48499), (64, 48403), (66, 48394), (75, 48352), (76, 48346), (81, 48322), (86, 48289), (89, 48265), (90, 48262), (98, 48214), (103, 48190),

Gene: LookingGlass_234 Start: 131568, Stop: 132035, Start Num: 20
Candidate Starts for LookingGlass_234:
(12, 131499), (Start: 20 @131568 has 176 MA's), (24, 131589), (47, 131763), (51, 131778), (87, 131931), (94, 131979),

Gene: LordLeafolot_237 Start: 131333, Stop: 131800, Start Num: 20
Candidate Starts for LordLeafolot_237:
(12, 131264), (Start: 20 @131333 has 176 MA's), (24, 131354), (47, 131528), (51, 131543), (87, 131696), (94, 131744),

Gene: Lukilu_225 Start: 132274, Stop: 132741, Start Num: 20
Candidate Starts for Lukilu_225:
(12, 132205), (Start: 20 @132274 has 176 MA's), (24, 132295), (47, 132469), (51, 132484), (87, 132637), (94, 132685),

Gene: Lunareta_235 Start: 132622, Stop: 133107, Start Num: 20
Candidate Starts for Lunareta_235:
(12, 132553), (Start: 18 @132616 has 2 MA's), (Start: 20 @132622 has 176 MA's), (24, 132643), (47, 132817), (51, 132832), (87, 132985), (94, 133033),

Gene: Maby2021_236 Start: 132514, Stop: 132981, Start Num: 20
Candidate Starts for Maby2021_236:
(12, 132445), (Start: 20 @132514 has 176 MA's), (24, 132535), (47, 132709), (51, 132724), (87, 132877), (94, 132925),

Gene: Magpie_49 Start: 48475, Stop: 48014, Start Num: 19
Candidate Starts for Magpie_49:
(5, 48670), (Start: 19 @48475 has 94 MA's), (31, 48382), (40, 48334), (64, 48238), (66, 48229), (73, 48199), (75, 48187), (76, 48181), (81, 48157), (86, 48124), (89, 48100), (90, 48097), (98, 48049), (103, 48025),

Gene: Mangeria_237 Start: 132616, Stop: 133101, Start Num: 20
Candidate Starts for Mangeria_237:
(12, 132547), (Start: 20 @132616 has 176 MA's), (24, 132637), (47, 132811), (51, 132826), (87, 132979), (94, 133027),

Gene: Marley1013_56 Start: 49347, Stop: 48874, Start Num: 19
Candidate Starts for Marley1013_56:
(Start: 19 @49347 has 94 MA's), (25, 49311), (54, 49119), (71, 49083), (75, 49056),

Gene: Marlia_56 Start: 48857, Stop: 48384, Start Num: 19
Candidate Starts for Marlia_56:
(Start: 19 @48857 has 94 MA's), (25, 48821), (54, 48629), (71, 48593), (75, 48566),

Gene: Marvin_2 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for Marvin_2:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: MasterPo_54 Start: 47644, Stop: 47153, Start Num: 17
Candidate Starts for MasterPo_54:
(Start: 17 @47644 has 36 MA's), (41, 47485), (71, 47362), (73, 47347), (75, 47335), (85, 47278), (86, 47272), (90, 47245), (107, 47161),

Gene: Matsumoto_234 Start: 131265, Stop: 131732, Start Num: 20
Candidate Starts for Matsumoto_234:
(12, 131196), (Start: 20 @131265 has 176 MA's), (24, 131286), (47, 131460), (51, 131475), (87, 131628), (94, 131676),

Gene: Maturis_232 Start: 131582, Stop: 132073, Start Num: 18
Candidate Starts for Maturis_232:
(12, 131519), (Start: 18 @131582 has 2 MA's), (Start: 20 @131588 has 176 MA's), (24, 131609), (47, 131783), (51, 131798), (87, 131951), (94, 131999),

Gene: Mbo2_59 Start: 47195, Stop: 46707, Start Num: 21
Candidate Starts for Mbo2_59:
(Start: 21 @47195 has 7 MA's), (31, 47108), (63, 46952), (81, 46853), (90, 46790), (96, 46751),

Gene: McGee_237 Start: 131162, Stop: 131629, Start Num: 20
Candidate Starts for McGee_237:
(12, 131093), (Start: 20 @131162 has 176 MA's), (24, 131183), (47, 131357), (51, 131372), (87, 131525), (94, 131573),

Gene: McWolfish_233 Start: 131272, Stop: 131739, Start Num: 20
Candidate Starts for McWolfish_233:
(12, 131203), (Start: 20 @131272 has 176 MA's), (24, 131293), (47, 131467), (51, 131482), (87, 131635), (94, 131683),

Gene: Megamind_233 Start: 131597, Stop: 132064, Start Num: 20
Candidate Starts for Megamind_233:
(12, 131528), (Start: 20 @131597 has 176 MA's), (24, 131618), (47, 131792), (51, 131807), (87, 131960), (94, 132008),

Gene: Melpomini_231 Start: 130357, Stop: 130824, Start Num: 20
Candidate Starts for Melpomini_231:
(12, 130288), (Start: 20 @130357 has 176 MA's), (24, 130378), (47, 130552), (51, 130567), (87, 130720), (94, 130768),

Gene: MikeLiesIn_236 Start: 132733, Stop: 133200, Start Num: 20
Candidate Starts for MikeLiesIn_236:
(12, 132664), (Start: 20 @132733 has 176 MA's), (24, 132754), (47, 132928), (51, 132943), (87, 133096), (94, 133144),

Gene: Mikro_230 Start: 133245, Stop: 133712, Start Num: 20
Candidate Starts for Mikro_230:
(12, 133176), (Start: 20 @133245 has 176 MA's), (24, 133266), (47, 133440), (51, 133455), (87, 133608), (94, 133656),

Gene: Mithril_49 Start: 48260, Stop: 47781, Start Num: 19
Candidate Starts for Mithril_49:
(Start: 19 @48260 has 94 MA's), (38, 48128), (75, 47963), (77, 47951), (82, 47927), (86, 47900), (105, 47795), (106, 47792),

Gene: MmasiCarm_56 Start: 48903, Stop: 48430, Start Num: 19
Candidate Starts for MmasiCarm_56:
(Start: 19 @48903 has 94 MA's), (25, 48867), (48, 48699), (54, 48675), (71, 48639), (75, 48612), (101, 48459),

Gene: MoMoMixon_232 Start: 131738, Stop: 132205, Start Num: 20
Candidate Starts for MoMoMixon_232:
(12, 131669), (Start: 20 @131738 has 176 MA's), (24, 131759), (47, 131933), (51, 131948), (87, 132101), (94, 132149),

Gene: Moby_233 Start: 130423, Stop: 130908, Start Num: 20
Candidate Starts for Moby_233:
(12, 130354), (Start: 18 @130417 has 2 MA's), (Start: 20 @130423 has 176 MA's), (24, 130444), (47, 130618), (51, 130633), (87, 130786), (94, 130834),

Gene: Moiqah_233 Start: 130400, Stop: 130885, Start Num: 20
Candidate Starts for Moiqah_233:
(12, 130331), (Start: 18 @130394 has 2 MA's), (Start: 20 @130400 has 176 MA's), (24, 130421), (47, 130595), (51, 130610), (87, 130763), (94, 130811),

Gene: Momo_237 Start: 130823, Stop: 131290, Start Num: 20
Candidate Starts for Momo_237:
(12, 130754), (Start: 20 @130823 has 176 MA's), (24, 130844), (47, 131018), (51, 131033), (87, 131186), (94, 131234),

Gene: Montpel_235 Start: 132620, Stop: 133105, Start Num: 20
Candidate Starts for Montpel_235:
(12, 132551), (Start: 18 @132614 has 2 MA's), (Start: 20 @132620 has 176 MA's), (24, 132641), (47, 132815), (51, 132830), (87, 132983), (94, 133031),

Gene: Morizzled23_233 Start: 130190, Stop: 130657, Start Num: 20
Candidate Starts for Morizzled23_233:
(12, 130121), (Start: 20 @130190 has 176 MA's), (24, 130211), (47, 130385), (51, 130400), (87, 130553), (94, 130601),

Gene: Mortcellus_55 Start: 49510, Stop: 49037, Start Num: 19
Candidate Starts for Mortcellus_55:
(Start: 19 @49510 has 94 MA's), (25, 49474), (54, 49282), (71, 49246), (75, 49219),

Gene: Morty007_55 Start: 49347, Stop: 48874, Start Num: 19
Candidate Starts for Morty007_55:
(Start: 19 @49347 has 94 MA's), (25, 49311), (54, 49119), (71, 49083), (75, 49056),

Gene: MosMoris_4 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for MosMoris_4:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: MossRose_49 Start: 42605, Stop: 42138, Start Num: 19
Candidate Starts for MossRose_49:
(Start: 19 @42605 has 94 MA's), (36, 42476), (64, 42362), (85, 42266), (86, 42260), (94, 42209), (100, 42173),

Gene: Mudslide_50 Start: 48905, Stop: 48444, Start Num: 19
Candidate Starts for Mudslide_50:
(Start: 19 @48905 has 94 MA's), (31, 48812), (40, 48764), (64, 48668), (66, 48659), (75, 48617), (76, 48611), (81, 48587), (86, 48554), (89, 48530), (90, 48527), (98, 48479), (103, 48455),

Gene: Mulaychimus_56 Start: 48839, Stop: 48366, Start Num: 19
Candidate Starts for Mulaychimus_56:
(Start: 19 @48839 has 94 MA's), (25, 48803), (54, 48611), (71, 48575), (75, 48548),

Gene: Mysterious_53 Start: 49105, Stop: 48644, Start Num: 19
Candidate Starts for Mysterious_53:
(Start: 19 @49105 has 94 MA's), (26, 49057), (54, 48877), (66, 48856), (86, 48763), (92, 48721),

Gene: NHagos_48 Start: 41598, Stop: 41122, Start Num: 19
Candidate Starts for NHagos_48:
(Start: 19 @41598 has 94 MA's), (33, 41496), (36, 41469), (40, 41448), (50, 41382), (86, 41253), (94, 41202), (100, 41166),

Gene: Naija_237 Start: 131526, Stop: 131993, Start Num: 20
Candidate Starts for Naija_237:
(12, 131457), (Start: 20 @131526 has 176 MA's), (24, 131547), (47, 131721), (51, 131736), (87, 131889), (94, 131937),

Gene: Nanao_49 Start: 47627, Stop: 47148, Start Num: 19
Candidate Starts for Nanao_49:
(Start: 19 @47627 has 94 MA's), (38, 47495), (75, 47330), (77, 47318), (86, 47267), (105, 47162), (106, 47159),

Gene: Nangang_55 Start: 49334, Stop: 48873, Start Num: 19
Candidate Starts for Nangang_55:
(Start: 19 @49334 has 94 MA's), (26, 49286), (54, 49106), (66, 49085), (85, 48998), (86, 48992), (92, 48950),

Gene: Napoleon13_233 Start: 130555, Stop: 131022, Start Num: 20
Candidate Starts for Napoleon13_233:
(12, 130486), (Start: 20 @130555 has 176 MA's), (24, 130576), (47, 130750), (51, 130765), (87, 130918), (94, 130966),

Gene: Nappy_236 Start: 133028, Stop: 133513, Start Num: 20
Candidate Starts for Nappy_236:
(12, 132959), (Start: 20 @133028 has 176 MA's), (24, 133049), (47, 133223), (51, 133238), (87, 133391), (94, 133439),

Gene: Naval22_241 Start: 133306, Stop: 133773, Start Num: 20
Candidate Starts for Naval22_241:
(12, 133237), (Start: 20 @133306 has 176 MA's), (24, 133327), (47, 133501), (51, 133516), (87, 133669), (94, 133717),

Gene: NedWong_235 Start: 131984, Stop: 132451, Start Num: 20
Candidate Starts for NedWong_235:
(12, 131915), (Start: 20 @131984 has 176 MA's), (24, 132005), (47, 132179), (51, 132194), (87, 132347), (94, 132395),

Gene: Nehemiah_54 Start: 49105, Stop: 48644, Start Num: 19
Candidate Starts for Nehemiah_54:
(Start: 19 @49105 has 94 MA's), (26, 49057), (54, 48877), (66, 48856), (86, 48763), (92, 48721),

Gene: Ngannou_231 Start: 130508, Stop: 130975, Start Num: 20
Candidate Starts for Ngannou_231:
(12, 130439), (Start: 20 @130508 has 176 MA's), (24, 130529), (47, 130703), (51, 130718), (87, 130871), (94, 130919),

Gene: Nidhogg_237 Start: 132352, Stop: 132819, Start Num: 20
Candidate Starts for Nidhogg_237:
(12, 132283), (Start: 20 @132352 has 176 MA's), (24, 132373), (47, 132547), (51, 132562), (87, 132715), (94, 132763),

Gene: Nigel_51 Start: 48614, Stop: 48153, Start Num: 19
Candidate Starts for Nigel_51:
(Start: 19 @48614 has 94 MA's), (40, 48473), (64, 48377), (66, 48368), (73, 48338), (75, 48326), (76, 48320), (86, 48263), (89, 48239), (90, 48236), (98, 48188), (103, 48164),

Gene: Norm_236 Start: 132253, Stop: 132720, Start Num: 20
Candidate Starts for Norm_236:
(12, 132184), (Start: 20 @132253 has 176 MA's), (24, 132274), (47, 132448), (51, 132463), (87, 132616), (94, 132664),

Gene: Nozo_55 Start: 49176, Stop: 48703, Start Num: 19
Candidate Starts for Nozo_55:
(Start: 19 @49176 has 94 MA's), (25, 49140), (54, 48948), (71, 48912), (75, 48885),

Gene: NuevoMundo_237 Start: 132808, Stop: 133275, Start Num: 20
Candidate Starts for NuevoMundo_237:
(12, 132739), (Start: 20 @132808 has 176 MA's), (24, 132829), (47, 133003), (51, 133018), (87, 133171), (94, 133219),

Gene: Obutu_56 Start: 48859, Stop: 48386, Start Num: 19
Candidate Starts for Obutu_56:
(Start: 19 @48859 has 94 MA's), (25, 48823), (54, 48631), (71, 48595), (75, 48568),

Gene: Olivio_55 Start: 48718, Stop: 48245, Start Num: 19
Candidate Starts for Olivio_55:
(Start: 19 @48718 has 94 MA's), (25, 48682), (48, 48514), (54, 48490), (71, 48454), (75, 48427), (101, 48274),

Gene: Opia_54 Start: 47638, Stop: 47147, Start Num: 17
Candidate Starts for Opia_54:
(Start: 17 @47638 has 36 MA's), (41, 47479), (70, 47359), (71, 47356), (73, 47341), (75, 47329), (85, 47272), (86, 47266), (90, 47239), (107, 47155),

Gene: OrangeOswald_55 Start: 48417, Stop: 47944, Start Num: 19
Candidate Starts for OrangeOswald_55:
(Start: 19 @48417 has 94 MA's), (25, 48381), (54, 48189), (71, 48153), (75, 48126),

Gene: OrediggerDelux_231 Start: 132479, Stop: 132946, Start Num: 20
Candidate Starts for OrediggerDelux_231:
(12, 132410), (Start: 20 @132479 has 176 MA's), (24, 132500), (47, 132674), (51, 132689), (87, 132842), (94, 132890),

Gene: ParkTD_235 Start: 131823, Stop: 132290, Start Num: 20
Candidate Starts for ParkTD_235:
(12, 131754), (Start: 20 @131823 has 176 MA's), (24, 131844), (47, 132018), (51, 132033), (87, 132186), (94, 132234),

Gene: Patter_238 Start: 131540, Stop: 132007, Start Num: 20
Candidate Starts for Patter_238:
(12, 131471), (Start: 20 @131540 has 176 MA's), (24, 131561), (47, 131735), (51, 131750), (87, 131903), (94, 131951),

Gene: Phantasmagoria_54 Start: 47636, Stop: 47145, Start Num: 17
Candidate Starts for Phantasmagoria_54:
(Start: 17 @47636 has 36 MA's), (41, 47477), (71, 47354), (73, 47339), (85, 47270), (86, 47264), (90, 47237), (107, 47153),

Gene: PharkleMinkus_238 Start: 130484, Stop: 130951, Start Num: 20
Candidate Starts for PharkleMinkus_238:
(12, 130415), (Start: 20 @130484 has 176 MA's), (24, 130505), (47, 130679), (51, 130694), (87, 130847), (94, 130895),

Gene: Phayeta_57 Start: 48740, Stop: 48267, Start Num: 19
Candidate Starts for Phayeta_57:
(Start: 19 @48740 has 94 MA's), (25, 48704), (48, 48536), (54, 48512), (71, 48476), (75, 48449), (101, 48296),

Gene: Phelemich_53 Start: 49104, Stop: 48643, Start Num: 19
Candidate Starts for Phelemich_53:
(Start: 19 @49104 has 94 MA's), (26, 49056), (54, 48876), (66, 48855), (86, 48762), (92, 48720),

Gene: Philly_54 Start: 48267, Stop: 47794, Start Num: 19
Candidate Starts for Philly_54:
(Start: 19 @48267 has 94 MA's), (25, 48231), (54, 48039), (71, 48003), (75, 47976),

Gene: Phlegm_240 Start: 132229, Stop: 132696, Start Num: 20
Candidate Starts for Phlegm_240:
(12, 132160), (Start: 20 @132229 has 176 MA's), (24, 132250), (47, 132424), (51, 132439), (87, 132592), (94, 132640),

Gene: Phlyer_55 Start: 49152, Stop: 48679, Start Num: 19

Candidate Starts for Phlyer_55:
(Start: 19 @49152 has 94 MA's), (25, 49116), (54, 48924), (71, 48888), (75, 48861),

Gene: Phox_237 Start: 131478, Stop: 131945, Start Num: 20
Candidate Starts for Phox_237:
(12, 131409), (Start: 20 @131478 has 176 MA's), (24, 131499), (47, 131673), (51, 131688), (87, 131841), (94, 131889),

Gene: Phrappuccino_159 Start: 108261, Stop: 108728, Start Num: 15
Candidate Starts for Phrappuccino_159:
(Start: 15 @108261 has 2 MA's), (22, 108306), (23, 108309), (50, 108486), (59, 108504), (74, 108558), (78, 108576), (85, 108606),

Gene: Phusco_235 Start: 131061, Stop: 131528, Start Num: 20
Candidate Starts for Phusco_235:
(12, 130992), (Start: 20 @131061 has 176 MA's), (24, 131082), (47, 131256), (51, 131271), (87, 131424), (94, 131472),

Gene: Pier_235 Start: 132354, Stop: 132821, Start Num: 20
Candidate Starts for Pier_235:
(12, 132285), (Start: 20 @132354 has 176 MA's), (24, 132375), (47, 132549), (51, 132564), (87, 132717), (94, 132765),

Gene: Pio_242 Start: 133557, Stop: 134024, Start Num: 20
Candidate Starts for Pio_242:
(12, 133488), (Start: 20 @133557 has 176 MA's), (24, 133578), (47, 133752), (51, 133767), (87, 133920), (94, 133968),

Gene: Pivoine_237 Start: 131526, Stop: 131993, Start Num: 20
Candidate Starts for Pivoine_237:
(12, 131457), (Start: 20 @131526 has 176 MA's), (24, 131547), (47, 131721), (51, 131736), (87, 131889), (94, 131937),

Gene: Pleione_240 Start: 132289, Stop: 132756, Start Num: 20
Candidate Starts for Pleione_240:
(12, 132220), (Start: 20 @132289 has 176 MA's), (24, 132310), (47, 132484), (51, 132499), (87, 132652), (94, 132700),

Gene: Poise_3 Start: 790, Stop: 1290, Start Num: 16
Candidate Starts for Poise_3:
(Start: 16 @790 has 10 MA's), (Start: 18 @802 has 2 MA's), (Start: 21 @811 has 7 MA's), (45, 988), (49, 1012), (50, 1018), (52, 1021), (57, 1033), (58, 1039), (69, 1081), (83, 1156), (91, 1207),

Gene: Poster_49 Start: 47628, Stop: 47149, Start Num: 19
Candidate Starts for Poster_49:
(Start: 19 @47628 has 94 MA's), (38, 47496), (75, 47331), (77, 47319), (86, 47268), (105, 47163), (106, 47160),

Gene: Primadonna_230 Start: 131189, Stop: 131656, Start Num: 20
Candidate Starts for Primadonna_230:
(12, 131120), (Start: 20 @131189 has 176 MA's), (24, 131210), (47, 131384), (51, 131399), (87, 131552), (94, 131600),

Gene: Prince_50 Start: 48815, Stop: 48354, Start Num: 19
Candidate Starts for Prince_50:
(5, 49010), (Start: 19 @48815 has 94 MA's), (31, 48722), (40, 48674), (64, 48578), (66, 48569), (73, 48539), (75, 48527), (81, 48497), (84, 48473), (86, 48464), (89, 48440), (90, 48437), (98, 48389), (103, 48365),

Gene: PrinceCharming_54 Start: 47735, Stop: 47244, Start Num: 17
Candidate Starts for PrinceCharming_54:
(Start: 17 @47735 has 36 MA's), (41, 47576), (70, 47456), (71, 47453), (73, 47438), (85, 47369), (86, 47363), (90, 47336), (107, 47252),

Gene: Pupper_137 Start: 96238, Stop: 96732, Start Num: 20
Candidate Starts for Pupper_137:
(Start: 20 @96238 has 176 MA's), (81, 96580), (96, 96682),

Gene: Pupusa_239 Start: 132853, Stop: 133320, Start Num: 20
Candidate Starts for Pupusa_239:
(12, 132784), (Start: 20 @132853 has 176 MA's), (24, 132874), (47, 133048), (51, 133063), (87, 133216), (94, 133264),

Gene: PurduePete_236 Start: 132554, Stop: 133021, Start Num: 20
Candidate Starts for PurduePete_236:
(12, 132485), (Start: 20 @132554 has 176 MA's), (24, 132575), (47, 132749), (51, 132764), (87, 132917), (94, 132965),

Gene: QBert_228 Start: 129877, Stop: 130344, Start Num: 20
Candidate Starts for QBert_228:
(12, 129808), (Start: 20 @129877 has 176 MA's), (24, 129898), (47, 130072), (51, 130087), (87, 130240), (94, 130288),

Gene: Quasimodo_239 Start: 131862, Stop: 132329, Start Num: 20
Candidate Starts for Quasimodo_239:
(12, 131793), (Start: 20 @131862 has 176 MA's), (24, 131883), (47, 132057), (51, 132072), (87, 132225), (94, 132273),

Gene: QueenPie_48 Start: 48361, Stop: 47879, Start Num: 19
Candidate Starts for QueenPie_48:
(Start: 19 @48361 has 94 MA's), (27, 48310), (38, 48229), (66, 48103), (73, 48073), (75, 48061), (82, 48025), (86, 47998), (105, 47893), (106, 47890),

Gene: Raela_2 Start: 790, Stop: 1290, Start Num: 16
Candidate Starts for Raela_2:
(Start: 16 @790 has 10 MA's), (Start: 18 @802 has 2 MA's), (Start: 21 @811 has 7 MA's), (45, 988), (49, 1012), (50, 1018), (52, 1021), (57, 1033), (58, 1039), (69, 1081), (83, 1156), (91, 1207),

Gene: RagingRooster_54 Start: 48098, Stop: 47625, Start Num: 19
Candidate Starts for RagingRooster_54:
(Start: 19 @48098 has 94 MA's), (25, 48062), (54, 47870), (60, 47861), (71, 47834), (75, 47807),

Gene: Rahel_238 Start: 131964, Stop: 132431, Start Num: 20
Candidate Starts for Rahel_238:
(12, 131895), (Start: 20 @131964 has 176 MA's), (24, 131985), (47, 132159), (51, 132174), (87, 132327), (94, 132375),

Gene: RawrgerThat_51 Start: 48688, Stop: 48209, Start Num: 19
Candidate Starts for RawrgerThat_51:
(Start: 19 @48688 has 94 MA's), (38, 48556), (75, 48391), (77, 48379), (86, 48328), (105, 48223), (106, 48220),

Gene: Reccee_55 Start: 49161, Stop: 48700, Start Num: 19
Candidate Starts for Reccee_55:
(Start: 19 @49161 has 94 MA's), (26, 49113), (54, 48933), (66, 48912), (85, 48825), (86, 48819), (92, 48777),

Gene: RedRaider77_3 Start: 781, Stop: 1281, Start Num: 16
Candidate Starts for RedRaider77_3:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: Renkei_49 Start: 47644, Stop: 47165, Start Num: 19
Candidate Starts for Renkei_49:
(Start: 19 @47644 has 94 MA's), (38, 47512), (75, 47347), (77, 47335), (86, 47284), (105, 47179), (106, 47176),

Gene: Reprobate_54 Start: 49109, Stop: 48648, Start Num: 19
Candidate Starts for Reprobate_54:
(Start: 19 @49109 has 94 MA's), (26, 49061), (54, 48881), (66, 48860), (86, 48767), (92, 48725),

Gene: Rhinoforte_54 Start: 47757, Stop: 47266, Start Num: 17
Candidate Starts for Rhinoforte_54:
(Start: 17 @47757 has 36 MA's), (41, 47598), (70, 47478), (71, 47475), (73, 47460), (75, 47448), (85, 47391), (86, 47385), (90, 47358), (107, 47274),

Gene: Rich_55 Start: 50543, Stop: 50082, Start Num: 19
Candidate Starts for Rich_55:
(Start: 19 @50543 has 94 MA's), (26, 50495), (54, 50315), (66, 50294), (85, 50207), (86, 50201), (92, 50159),

Gene: Rinkes_53 Start: 49227, Stop: 48748, Start Num: 19
Candidate Starts for Rinkes_53:
(Start: 19 @49227 has 94 MA's), (43, 49062), (52, 49014), (71, 48957), (73, 48942), (86, 48867),

Gene: Rita130_54 Start: 48981, Stop: 48520, Start Num: 19
Candidate Starts for Rita130_54:
(Start: 19 @48981 has 94 MA's), (26, 48933), (54, 48753), (66, 48732), (85, 48645), (86, 48639), (92, 48597),

Gene: Rita1961_56 Start: 48859, Stop: 48386, Start Num: 19
Candidate Starts for Rita1961_56:
(Start: 19 @48859 has 94 MA's), (25, 48823), (54, 48631), (71, 48595), (75, 48568),

Gene: Rizal_226 Start: 129779, Stop: 130246, Start Num: 20
Candidate Starts for Rizal_226:
(12, 129710), (Start: 20 @129779 has 176 MA's), (24, 129800), (47, 129974), (51, 129989), (87, 130142), (94, 130190),

Gene: RoMag_231 Start: 131560, Stop: 132027, Start Num: 20
Candidate Starts for RoMag_231:
(12, 131491), (Start: 20 @131560 has 176 MA's), (24, 131581), (47, 131755), (51, 131770), (87, 131923), (94, 131971),

Gene: Rocha_232 Start: 131113, Stop: 131580, Start Num: 20
Candidate Starts for Rocha_232:
(12, 131044), (Start: 20 @131113 has 176 MA's), (24, 131134), (47, 131308), (51, 131323), (87, 131476), (94, 131524),

Gene: RomaT_55 Start: 49007, Stop: 48534, Start Num: 19
Candidate Starts for RomaT_55:
(Start: 19 @49007 has 94 MA's), (25, 48971), (54, 48779), (71, 48743), (75, 48716),

Gene: Ronan_232 Start: 129949, Stop: 130416, Start Num: 20
Candidate Starts for Ronan_232:
(12, 129880), (Start: 20 @129949 has 176 MA's), (24, 129970), (47, 130144), (51, 130159), (87, 130312), (94, 130360),

Gene: Roots515_239 Start: 133105, Stop: 133572, Start Num: 20
Candidate Starts for Roots515_239:
(12, 133036), (Start: 20 @133105 has 176 MA's), (24, 133126), (47, 133300), (51, 133315), (87, 133468), (94, 133516),

Gene: Rosebush_53 Start: 47769, Stop: 47278, Start Num: 17
Candidate Starts for Rosebush_53:
(Start: 17 @47769 has 36 MA's), (41, 47610), (70, 47490), (71, 47487), (73, 47472), (75, 47460), (85, 47403), (86, 47397), (90, 47370), (107, 47286),

Gene: SCentae_136 Start: 96389, Stop: 96883, Start Num: 20
Candidate Starts for SCentae_136:
(Start: 20 @96389 has 176 MA's), (81, 96731), (96, 96833),

Gene: SVoro_231 Start: 131862, Stop: 132329, Start Num: 20
Candidate Starts for SVoro_231:
(12, 131793), (Start: 20 @131862 has 176 MA's), (24, 131883), (47, 132057), (51, 132072), (87, 132225), (94, 132273),

Gene: Sabella_53 Start: 47620, Stop: 47129, Start Num: 17
Candidate Starts for Sabella_53:
(Start: 17 @47620 has 36 MA's), (41, 47461), (70, 47341), (71, 47338), (73, 47323), (75, 47311), (85, 47254), (86, 47248), (90, 47221), (107, 47137),

Gene: Salacia_237 Start: 132980, Stop: 133447, Start Num: 20
Candidate Starts for Salacia_237:
(12, 132911), (Start: 20 @132980 has 176 MA's), (24, 133001), (47, 133175), (51, 133190), (87, 133343), (94, 133391),

Gene: Sauce_233 Start: 131288, Stop: 131755, Start Num: 20
Candidate Starts for Sauce_233:
(12, 131219), (Start: 20 @131288 has 176 MA's), (24, 131309), (47, 131483), (51, 131498), (87, 131651), (94, 131699),

Gene: ScottMcG_228 Start: 130558, Stop: 131025, Start Num: 20
Candidate Starts for ScottMcG_228:
(12, 130489), (Start: 20 @130558 has 176 MA's), (24, 130579), (47, 130753), (51, 130768), (87, 130921), (94, 130969),

Gene: Sebata_238 Start: 132793, Stop: 133278, Start Num: 20
Candidate Starts for Sebata_238:
(12, 132724), (Start: 18 @132787 has 2 MA's), (Start: 20 @132793 has 176 MA's), (24, 132814), (47, 132988), (51, 133003), (87, 133156), (94, 133204),

Gene: Settecandela_159 Start: 108261, Stop: 108728, Start Num: 15
Candidate Starts for Settecandela_159:
(Start: 15 @108261 has 2 MA's), (22, 108306), (23, 108309), (50, 108486), (59, 108504), (74, 108558), (78, 108576), (85, 108606),

Gene: Shaqnato_227 Start: 130686, Stop: 131153, Start Num: 20
Candidate Starts for Shaqnato_227:
(12, 130617), (Start: 20 @130686 has 176 MA's), (24, 130707), (47, 130881), (51, 130896), (87, 131049), (94, 131097),

Gene: Shelob_237 Start: 133423, Stop: 133890, Start Num: 20
Candidate Starts for Shelob_237:
(12, 133354), (Start: 20 @133423 has 176 MA's), (24, 133444), (47, 133618), (51, 133633), (87, 133786), (94, 133834),

Gene: Shenyu_55 Start: 49334, Stop: 48873, Start Num: 19
Candidate Starts for Shenyu_55:
(Start: 19 @49334 has 94 MA's), (40, 49193), (66, 49091), (86, 48986), (90, 48959), (93, 48938), (98, 48911), (103, 48887),

Gene: ShiaLabeouf_234 Start: 131282, Stop: 131749, Start Num: 20
Candidate Starts for ShiaLabeouf_234:
(12, 131213), (Start: 20 @131282 has 176 MA's), (24, 131303), (47, 131477), (51, 131492), (87, 131645), (94, 131693),

Gene: Shifa_213 Start: 130752, Stop: 131237, Start Num: 20
Candidate Starts for Shifa_213:
(12, 130683), (Start: 18 @130746 has 2 MA's), (Start: 20 @130752 has 176 MA's), (24, 130773), (47, 130947), (51, 130962), (87, 131115), (94, 131163),

Gene: Shnickers_235 Start: 131346, Stop: 131813, Start Num: 20
Candidate Starts for Shnickers_235:
(12, 131277), (Start: 20 @131346 has 176 MA's), (24, 131367), (47, 131541), (51, 131556), (87, 131709), (94, 131757),

Gene: Shrimp_238 Start: 132591, Stop: 133058, Start Num: 20
Candidate Starts for Shrimp_238:
(12, 132522), (Start: 20 @132591 has 176 MA's), (24, 132612), (47, 132786), (51, 132801), (87, 132954), (94, 133002),

Gene: SilverDipper_240 Start: 132082, Stop: 132549, Start Num: 20
Candidate Starts for SilverDipper_240:

(12, 132013), (Start: 20 @132082 has 176 MA's), (24, 132103), (47, 132277), (51, 132292), (87, 132445), (94, 132493),

Gene: SirJeffery_54 Start: 48983, Stop: 48522, Start Num: 19
Candidate Starts for SirJeffery_54:
(Start: 19 @48983 has 94 MA's), (26, 48935), (54, 48755), (66, 48734), (85, 48647), (86, 48641), (92, 48599),

Gene: Skog_198 Start: 125939, Stop: 126439, Start Num: 20
Candidate Starts for Skog_198:
(Start: 20 @125939 has 176 MA's), (90, 126347), (96, 126386),

Gene: SlippinJimmy_57 Start: 49641, Stop: 49168, Start Num: 19
Candidate Starts for SlippinJimmy_57:
(Start: 19 @49641 has 94 MA's), (25, 49605), (54, 49413), (71, 49377), (75, 49350),

Gene: SmallFry_237 Start: 131440, Stop: 131907, Start Num: 20
Candidate Starts for SmallFry_237:
(12, 131371), (Start: 20 @131440 has 176 MA's), (24, 131461), (47, 131635), (51, 131650), (87, 131803), (94, 131851),

Gene: Spec_230 Start: 131509, Stop: 131976, Start Num: 20
Candidate Starts for Spec_230:
(12, 131440), (Start: 20 @131509 has 176 MA's), (24, 131530), (47, 131704), (51, 131719), (87, 131872), (94, 131920),

Gene: Specks_240 Start: 131931, Stop: 132398, Start Num: 20
Candidate Starts for Specks_240:
(12, 131862), (Start: 20 @131931 has 176 MA's), (24, 131952), (47, 132126), (51, 132141), (87, 132294), (94, 132342),

Gene: Sprinklers_234 Start: 131176, Stop: 131643, Start Num: 20
Candidate Starts for Sprinklers_234:
(12, 131107), (Start: 20 @131176 has 176 MA's), (24, 131197), (47, 131371), (51, 131386), (87, 131539), (94, 131587),

Gene: Spud_229 Start: 130897, Stop: 131364, Start Num: 20
Candidate Starts for Spud_229:
(12, 130828), (Start: 20 @130897 has 176 MA's), (24, 130918), (47, 131092), (51, 131107), (87, 131260), (94, 131308),

Gene: SrishMeg2525_233 Start: 132086, Stop: 132553, Start Num: 20
Candidate Starts for SrishMeg2525_233:
(12, 132017), (Start: 20 @132086 has 176 MA's), (24, 132107), (47, 132281), (51, 132296), (87, 132449), (94, 132497),

Gene: StephanieG_230 Start: 132083, Stop: 132550, Start Num: 20
Candidate Starts for StephanieG_230:
(12, 132014), (Start: 20 @132083 has 176 MA's), (24, 132104), (47, 132278), (51, 132293), (87, 132446), (94, 132494),

Gene: Stinger_50 Start: 47346, Stop: 46885, Start Num: 19
Candidate Starts for Stinger_50:

(Start: 19 @47346 has 94 MA's), (31, 47253), (40, 47205), (64, 47112), (66, 47103), (79, 47043), (82, 47025), (86, 46998), (89, 46974), (90, 46971), (98, 46923), (103, 46899),

Gene: StinkyVeggy_55 Start: 49120, Stop: 48659, Start Num: 19
Candidate Starts for StinkyVeggy_55:
(Start: 19 @49120 has 94 MA's), (26, 49072), (42, 48961), (54, 48892), (66, 48871), (85, 48784), (86, 48778), (92, 48736),

Gene: StubbySaigey_242 Start: 131616, Stop: 132083, Start Num: 20
Candidate Starts for StubbySaigey_242:
(12, 131547), (Start: 20 @131616 has 176 MA's), (24, 131637), (47, 131811), (51, 131826), (87, 131979), (94, 132027),

Gene: Substance289_232 Start: 131488, Stop: 131955, Start Num: 20
Candidate Starts for Substance289_232:
(12, 131419), (Start: 20 @131488 has 176 MA's), (24, 131509), (47, 131683), (51, 131698), (87, 131851), (94, 131899),

Gene: Suigeneris_56 Start: 49263, Stop: 48802, Start Num: 19
Candidate Starts for Suigeneris_56:
(3, 49764), (Start: 19 @49263 has 94 MA's), (26, 49215), (54, 49035), (66, 49014), (85, 48927), (86, 48921), (92, 48879),

Gene: SwainyDoc_56 Start: 48871, Stop: 48398, Start Num: 19
Candidate Starts for SwainyDoc_56:
(Start: 19 @48871 has 94 MA's), (25, 48835), (48, 48667), (54, 48643), (71, 48607), (75, 48580), (101, 48427),

Gene: SynergyX_55 Start: 48414, Stop: 47941, Start Num: 19
Candidate Starts for SynergyX_55:
(Start: 19 @48414 has 94 MA's), (25, 48378), (48, 48210), (54, 48186), (60, 48177), (71, 48150), (75, 48123), (101, 47970),

Gene: TA17A_55 Start: 47619, Stop: 47128, Start Num: 17
Candidate Starts for TA17A_55:
(Start: 17 @47619 has 36 MA's), (41, 47460), (71, 47337), (73, 47322), (75, 47310), (85, 47253), (86, 47247), (90, 47220), (107, 47136),

Gene: TPA2_59 Start: 47083, Stop: 46601, Start Num: 19
Candidate Starts for TPA2_59:
(Start: 19 @47083 has 94 MA's), (34, 46981), (65, 46828), (75, 46780), (84, 46726), (86, 46717), (88, 46705), (94, 46666), (95, 46657), (99, 46633),

Gene: Tainan_236 Start: 131060, Stop: 131527, Start Num: 20
Candidate Starts for Tainan_236:
(12, 130991), (Start: 20 @131060 has 176 MA's), (24, 131081), (47, 131255), (51, 131270), (87, 131423), (94, 131471),

Gene: Teardrop_234 Start: 130943, Stop: 131410, Start Num: 20
Candidate Starts for Teardrop_234:
(12, 130874), (Start: 20 @130943 has 176 MA's), (24, 130964), (47, 131138), (51, 131153), (87, 131306), (94, 131354),

Gene: Tesla_3 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for Tesla_3:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198), (92, 1207),

Gene: Thonko_56 Start: 47465, Stop: 46986, Start Num: 19
Candidate Starts for Thonko_56:
(8, 47591), (Start: 19 @47465 has 94 MA's), (24, 47438), (53, 47249), (62, 47231), (85, 47114), (86, 47108), (90, 47081), (92, 47066), (98, 47033),

Gene: Tinciduntsolum_55 Start: 47781, Stop: 47290, Start Num: 17
Candidate Starts for Tinciduntsolum_55:
(Start: 17 @47781 has 36 MA's), (41, 47622), (70, 47502), (71, 47499), (73, 47484), (75, 47472), (85, 47415), (86, 47409), (90, 47382), (107, 47298),

Gene: TinyTerror_56 Start: 48813, Stop: 48433, Start Num: 32
Candidate Starts for TinyTerror_56:
(Start: 32 @48813 has 1 MA's), (54, 48678), (71, 48642), (75, 48615), (101, 48462),

Gene: TinyTim_234 Start: 130910, Stop: 131377, Start Num: 20
Candidate Starts for TinyTim_234:
(12, 130841), (Start: 20 @130910 has 176 MA's), (24, 130931), (47, 131105), (51, 131120), (87, 131273), (94, 131321),

Gene: Tonenili_257 Start: 136733, Stop: 137203, Start Num: 20
Candidate Starts for Tonenili_257:
(12, 136664), (Start: 20 @136733 has 176 MA's), (24, 136754), (40, 136877), (55, 136955), (71, 137015), (92, 137138), (94, 137147),

Gene: Tortoise16_234 Start: 131372, Stop: 131839, Start Num: 20
Candidate Starts for Tortoise16_234:
(12, 131303), (Start: 20 @131372 has 176 MA's), (24, 131393), (47, 131567), (51, 131582), (87, 131735), (94, 131783),

Gene: TraderJ_50 Start: 42928, Stop: 42461, Start Num: 19
Candidate Starts for TraderJ_50:
(Start: 19 @42928 has 94 MA's), (36, 42799), (64, 42685), (85, 42589), (86, 42583), (94, 42532), (100, 42496),

Gene: Tres_54 Start: 47632, Stop: 47141, Start Num: 17
Candidate Starts for Tres_54:
(Start: 17 @47632 has 36 MA's), (41, 47473), (70, 47353), (71, 47350), (73, 47335), (75, 47323), (85, 47266), (86, 47260), (90, 47233), (107, 47149),

Gene: Trinitium_232 Start: 129664, Stop: 130131, Start Num: 20
Candidate Starts for Trinitium_232:
(12, 129595), (Start: 20 @129664 has 176 MA's), (24, 129685), (47, 129859), (51, 129874), (87, 130027), (94, 130075),

Gene: Turret_227 Start: 129246, Stop: 129713, Start Num: 20
Candidate Starts for Turret_227:
(12, 129177), (Start: 20 @129246 has 176 MA's), (24, 129267), (47, 129441), (51, 129456), (87, 129609), (94, 129657),

Gene: Tyke_233 Start: 133552, Stop: 134019, Start Num: 20
Candidate Starts for Tyke_233:
(12, 133483), (Start: 20 @133552 has 176 MA's), (24, 133573), (47, 133747), (51, 133762), (87, 133915), (94, 133963),

Gene: ValleyTerrace_237 Start: 130823, Stop: 131290, Start Num: 20
Candidate Starts for ValleyTerrace_237:
(12, 130754), (Start: 20 @130823 has 176 MA's), (24, 130844), (47, 131018), (51, 131033), (87, 131186), (94, 131234),

Gene: VasuNzinga_3 Start: 802, Stop: 1281, Start Num: 21
Candidate Starts for VasuNzinga_3:
(Start: 16 @781 has 10 MA's), (Start: 18 @793 has 2 MA's), (Start: 21 @802 has 7 MA's), (45, 979), (49, 1003), (50, 1009), (52, 1012), (57, 1024), (58, 1030), (69, 1072), (83, 1147), (91, 1198),

Gene: Vic9_00053 Start: 48150, Stop: 47659, Start Num: 17
Candidate Starts for Vic9_00053:
(Start: 17 @48150 has 36 MA's), (41, 47991), (71, 47868), (73, 47853), (75, 47841), (85, 47784), (86, 47778), (90, 47751), (107, 47667),

Gene: Vincenzo_52 Start: 49377, Stop: 48913, Start Num: 19
Candidate Starts for Vincenzo_52:
(Start: 19 @49377 has 94 MA's), (40, 49236), (60, 49152), (81, 49056), (82, 49050), (86, 49023), (103, 48924),

Gene: VioletZ_52 Start: 48734, Stop: 48273, Start Num: 19
Candidate Starts for VioletZ_52:
(Start: 19 @48734 has 94 MA's), (31, 48641), (40, 48593), (64, 48497), (66, 48488), (75, 48446), (76, 48440), (81, 48416), (86, 48383), (89, 48359), (90, 48356), (98, 48308), (103, 48284),

Gene: Vortrix_254 Start: 135520, Stop: 135990, Start Num: 20
Candidate Starts for Vortrix_254:
(12, 135451), (Start: 20 @135520 has 176 MA's), (24, 135541), (40, 135664), (55, 135742), (71, 135802), (87, 135886), (92, 135925), (94, 135934),

Gene: Waleliano_49 Start: 48252, Stop: 47791, Start Num: 19
Candidate Starts for Waleliano_49:
(Start: 19 @48252 has 94 MA's), (31, 48159), (40, 48111), (62, 48024), (64, 48015), (66, 48006), (73, 47976), (75, 47964), (81, 47934), (86, 47901), (89, 47877), (90, 47874), (98, 47826), (103, 47802),

Gene: Wally_234 Start: 130807, Stop: 131274, Start Num: 20
Candidate Starts for Wally_234:
(12, 130738), (Start: 20 @130807 has 176 MA's), (24, 130828), (47, 131002), (51, 131017), (87, 131170), (94, 131218),

Gene: West99_54 Start: 47778, Stop: 47287, Start Num: 17
Candidate Starts for West99_54:
(Start: 17 @47778 has 36 MA's), (41, 47619), (71, 47496), (73, 47481), (85, 47412), (86, 47406), (90, 47379), (107, 47295),

Gene: Willis_236 Start: 131746, Stop: 132213, Start Num: 20
Candidate Starts for Willis_236:

(12, 131677), (Start: 20 @131746 has 176 MA's), (24, 131767), (47, 131941), (51, 131956), (87, 132109), (94, 132157),

Gene: Wooper_50 Start: 42937, Stop: 42470, Start Num: 19
Candidate Starts for Wooper_50:
(Start: 19 @42937 has 94 MA's), (33, 42835), (36, 42808), (64, 42694), (85, 42598), (86, 42592), (94, 42541), (100, 42505),

Gene: Xincheng_51 Start: 49715, Stop: 49254, Start Num: 19
Candidate Starts for Xincheng_51:
(Start: 19 @49715 has 94 MA's), (31, 49622), (40, 49574), (64, 49478), (66, 49469), (73, 49439), (75, 49427), (76, 49421), (81, 49397), (84, 49373), (86, 49364), (89, 49340), (90, 49337), (98, 49289), (103, 49265),

Gene: Yahalom_54 Start: 48424, Stop: 47951, Start Num: 19
Candidate Starts for Yahalom_54:
(Start: 19 @48424 has 94 MA's), (25, 48388), (54, 48196), (71, 48160), (75, 48133),

Gene: Yassified_233 Start: 131159, Stop: 131626, Start Num: 20
Candidate Starts for Yassified_233:
(12, 131090), (Start: 20 @131159 has 176 MA's), (24, 131180), (47, 131354), (51, 131369), (87, 131522), (94, 131570),

Gene: YemiJoy2021_237 Start: 132477, Stop: 132944, Start Num: 20
Candidate Starts for YemiJoy2021_237:
(12, 132408), (Start: 20 @132477 has 176 MA's), (24, 132498), (47, 132672), (51, 132687), (87, 132840), (94, 132888),

Gene: Yeshua_50 Start: 42914, Stop: 42447, Start Num: 19
Candidate Starts for Yeshua_50:
(Start: 19 @42914 has 94 MA's), (33, 42812), (36, 42785), (64, 42671), (85, 42575), (86, 42569), (94, 42518), (100, 42482),

Gene: Yinz_55 Start: 48270, Stop: 47797, Start Num: 19
Candidate Starts for Yinz_55:
(Start: 19 @48270 has 94 MA's), (25, 48234), (48, 48066), (54, 48042), (60, 48033), (71, 48006), (75, 47979), (101, 47826),

Gene: YoungMoneyMata_236 Start: 131995, Stop: 132462, Start Num: 20
Candidate Starts for YoungMoneyMata_236:
(12, 131926), (Start: 20 @131995 has 176 MA's), (24, 132016), (47, 132190), (51, 132205), (87, 132358), (94, 132406),

Gene: Yucca_235 Start: 132469, Stop: 132936, Start Num: 20
Candidate Starts for Yucca_235:
(12, 132400), (Start: 20 @132469 has 176 MA's), (24, 132490), (47, 132664), (51, 132679), (87, 132832), (94, 132880),

Gene: Zalkecks_235 Start: 131575, Stop: 132042, Start Num: 20
Candidate Starts for Zalkecks_235:
(12, 131506), (Start: 20 @131575 has 176 MA's), (24, 131596), (47, 131770), (51, 131785), (87, 131938), (94, 131986),

Gene: Zeenon_236 Start: 132109, Stop: 132576, Start Num: 20
Candidate Starts for Zeenon_236:
(12, 132040), (Start: 20 @132109 has 176 MA's), (24, 132130), (47, 132304), (51, 132319), (87, 132472), (94, 132520),

Gene: Zemanar_50 Start: 48233, Stop: 47772, Start Num: 19
Candidate Starts for Zemanar_50:
(Start: 19 @48233 has 94 MA's), (31, 48140), (40, 48092), (62, 48005), (64, 47996), (66, 47987), (73, 47957), (75, 47945), (81, 47915), (86, 47882), (89, 47858), (90, 47855), (98, 47807), (103, 47783),

Gene: ZygoTaiga_231 Start: 132766, Stop: 133233, Start Num: 20
Candidate Starts for ZygoTaiga_231:
(12, 132697), (Start: 20 @132766 has 176 MA's), (24, 132787), (47, 132961), (51, 132976), (87, 133129), (94, 133177),