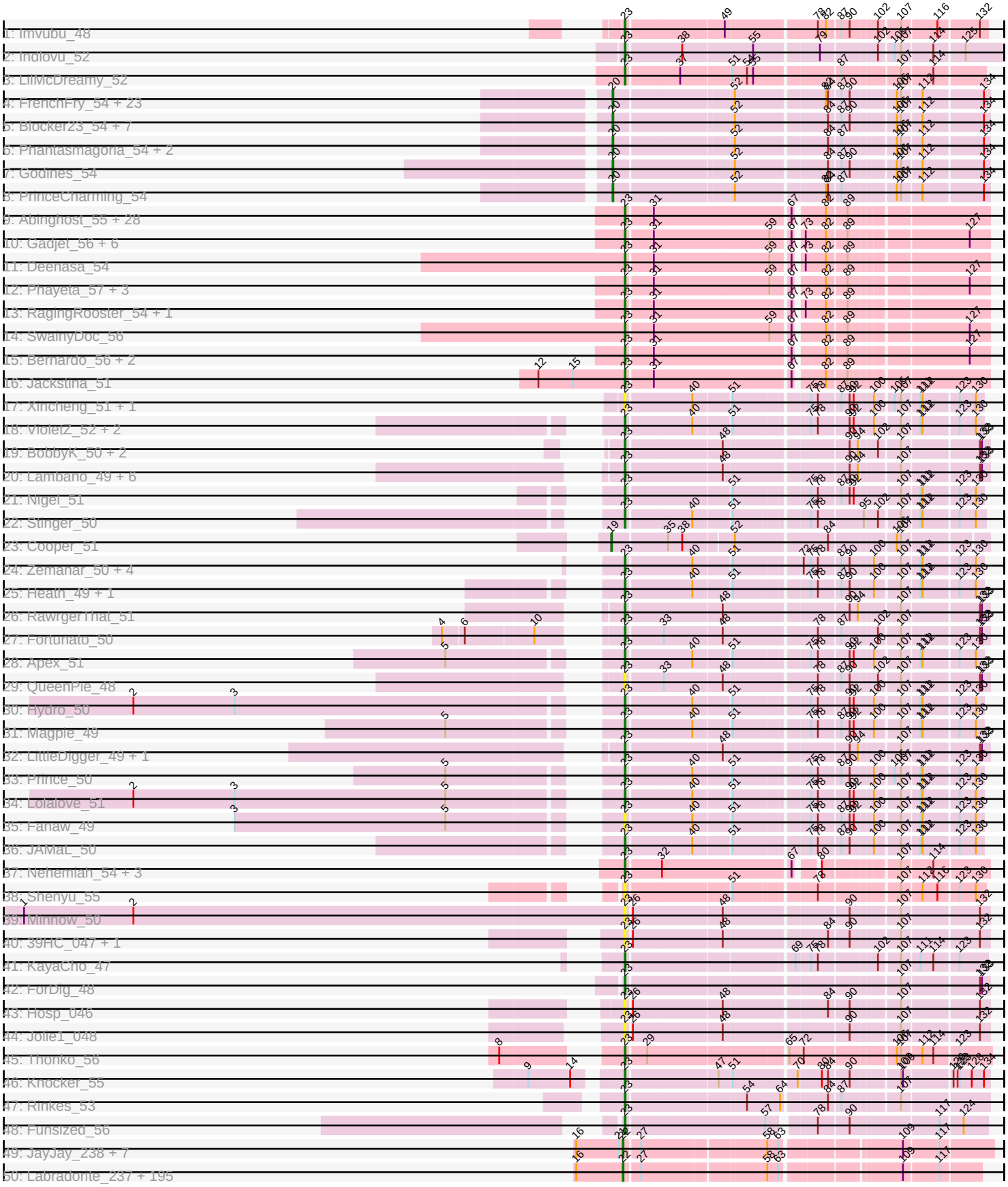
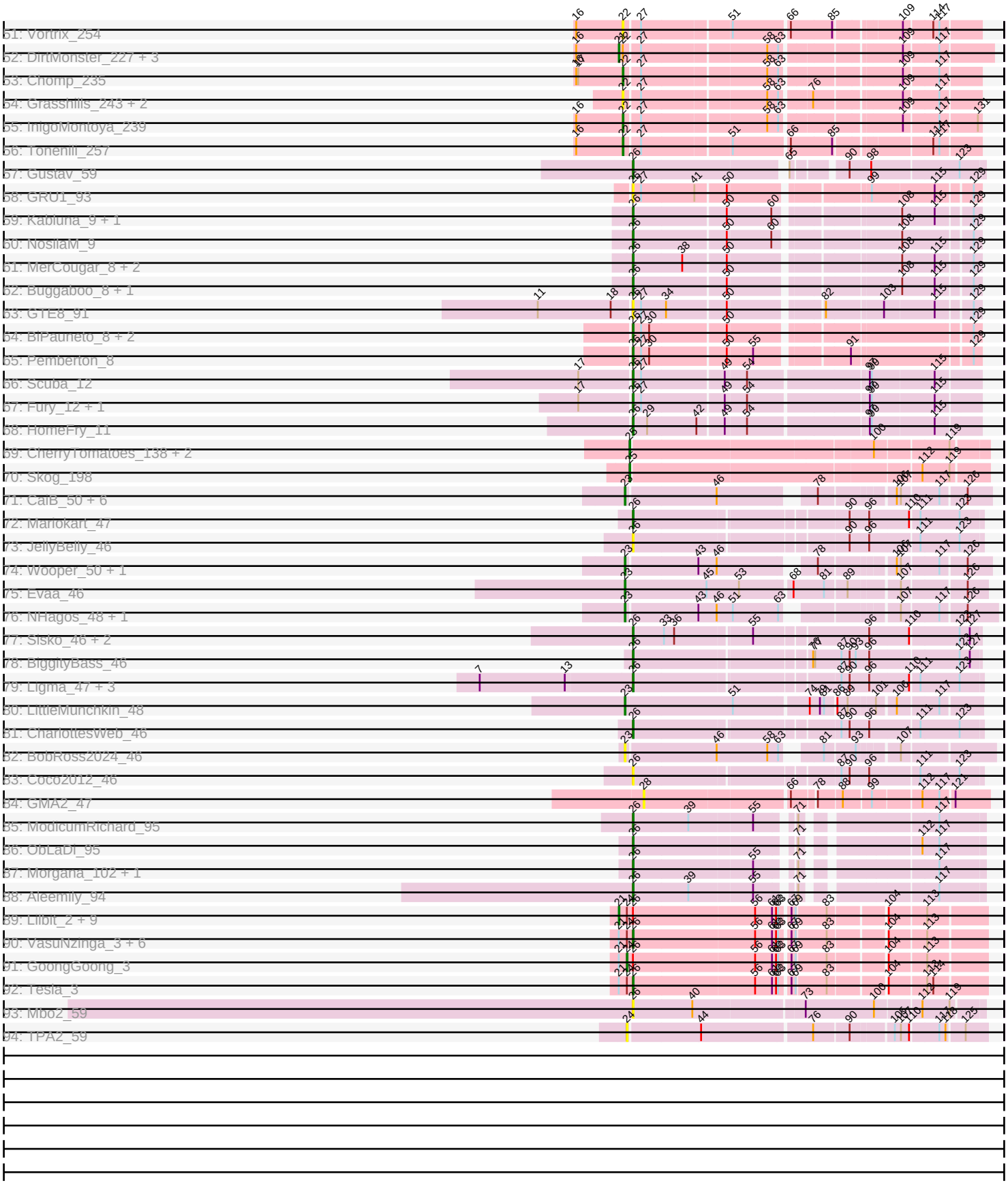
Pham 347101


1: Imvubu_48
2: Indlovu_52
3: LilMcDreamy_52
4: FrenchFry_54 + 23
5: Blocker23_54 + 7
6: Phantasmagoria_54 + 2
7: Godines_54
8: PrinceCharming_54
9: Abinghost_55 + 28
10: Gadjet_56 + 6
11: Deenasa_54
12: Phayeta_57 + 3
13: RagingRooster_54 + 1
14: SwaihyDoc_56
15: Bernardo_56 + 2
16: Jackstina_51
17: Xincheng_51 + 1
18: VioletZ_52 + 2
19: BobbyK_50 + 2
20: Lambano_49 + 6
21: Nigel_51
22: Stinger_50
23: Cooper_51
24: Zemanar_50 + 4
25: Heath_49 + 1
26: RawrgerThat_51
27: Fortunato_50
28: Apex_51
29: QueenPie_48
30: Hydro_50
31: Magpie_49
32: LittleDigger_49 + 1
33: Prince_50
34: Lolalove_51
35: Fanaw_49
36: JAMaL_50
37: Nehemiah_54 + 3
38: Shenyu_55
39: Minnow_50
40: 39HC_047 + 1
41: KayaCho_47
42: ForDig_48
43: Hosp_046
44: Jolie1_048
45: Thonko_56
46: Knocker_55
47: Rinkes_53
48: Funsized_56
49: JayJay_238 + 7
50: Labradorite_237 + 195

Pham 347101


51: Vortrix_254
52: DirtMonster_227 + 3
53: Chomp_235
54: Grasshills_243 + 2
55: InigoMontoya_239
56: Tonehill_257
57: Gustav_59
58: GRU1_93
59: Kabluna_9 + 1
60: NosilaM_9
61: MerCougar_8 + 2
62: Buggaboo_8 + 1
63: GTE8_91
64: BiPaulieto_8 + 2
65: Pemberton_8
66: Scuba_12
67: Fury_12 + 1
68: HomeFry_11
69: CherryTomatoes_138 + 2
70: Skog_198
71: CalB_50 + 6
72: Mariokart_47
73: JellyBelly_46
74: Wooper_50 + 1
75: Evaa_46
76: NHagos_48 + 1
77: Sisko_46 + 2
78: BigglyBass_46
79: Ligma_47 + 3
80: LittleMunchkin_48
81: CharlottesWeb_46
82: BobRoss2024_46
83: Coco2012_46
84: GMA2_47
85: ModicumRichard_95
86: ObLaDi_95
87: Morgana_102 + 1
88: Aleemily_94
89: Lilbit_2 + 9
90: VasuNzinga_3 + 6
91: GoongGoong_3
92: Tesla_3
93: Mboz_59
94: TPA2_59

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 347101 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347101 has 432 members, 61 are drafts.

Phages represented in each track:
• Track 1 : Imvubu_48
• Track 2 : Indlovu_52
• Track 3 : LilMcDreamy_52
• Track 4 : 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 5 : Blocker23_54, Coffee_54, MasterPo_54, Laurie_53, TA17A_55, Vic9_00053, Boyle_54, LizLemon_54
• Track 6 : Phantasmagoria_54, Faze9_53, West99_54
• Track 7 : Godines_54
• Track 8 : PrinceCharming_54
• Track 9 : Abinghost_55, Devonte_54, Compostia_55, HarveySr_54, Mulaychimus_56, GlenHope_56, Chalmers_54, Kronus_55, Nozo_55, Gervas_56, Athena_57, Yahalom_54, Philly_54, 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 10 : Gadjet_56, SynergyX_55, Baloo_55, Audrey_55, ChaChing_55, Heathcliff_55, Yinz_55
• Track 11 : Deenasa_54
• Track 12 : Phayeta_57, Chentzyk_56, MmasiCarm_56, Olivio_55
• Track 13 : RagingRooster_54, Casbah_55
• Track 14 : SwainyDoc_56
• Track 15 : Bernardo_56, Halfpint_54, Chandler_55
• Track 16 : Jackstina_51
• Track 17 : Xincheng_51, JaguarMi_52
• Track 18 : VioletZ_52, Austelle_51, Mudslide_50
• Track 19 : BobbyK_50, Frederick_50, Mithril_49
• Track 20 : Lambano_49, Antihero_49, Epah_49, Hally898_49, Nanao_49, GinPorsche_50, Poster_49
• Track 21 : Nigel_51
• Track 22 : Stinger_50
• Track 23 : Cooper_51
• Track 24 : Zemanar_50, JoyceMaria_49, Waleliano_49, Hangman_49, BrownCNA_51

• Track 25 : Heath_49, ChrisnMich_50
• Track 26 : RawrgerThat_51
• Track 27 : Fortunato_50
• Track 28 : Apex_51
• Track 29 : QueenPie_48
• Track 30 : Hydro_50
• Track 31 : Magpie_49
• Track 32 : LittleDigger_49, Renkei_49
• Track 33 : Prince_50
• Track 34 : Lolalove_51
• Track 35 : Fanaw_49
• Track 36 : JAMaL_50
• Track 37 : Nehemiah_54, Phelemich_53, Mysterious_53, Reprobate_54
• Track 38 : Shenyu_55
• Track 39 : Minnow_50
• Track 40 : 39HC_047, 40BC_047
• Track 41 : KayaCho_47
• Track 42 : ForDig_48
• Track 43 : Hosp_046
• Track 44 : Jolie1_048
• Track 45 : Thonko_56
• Track 46 : Knocker_55
• Track 47 : Rinkes_53
• Track 48 : Funsized_56
• Track 49 : JayJay_238, Lunareta_235, Shifa_213, Flabslab_232, Moiqah_233, Sebata_238, Moby_233, Montpel_235
• Track 50 : Labradorite_237, 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, 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, Puhon_237, TinyTim_234, FrayBell_239, Ava3_233, Cactojaque_230, Lee7_240, 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_236, Burrough_236, OrediggerDelux_237, NedWong_235, Jemmno_236, ErnieJ_229, ScottMcG_228, Amataga_237, Jaygup_233, Grungle_218, Naija_237, DrPhinkDaddy_233, LRRHood_228, ChaylaJr_235, Daffodil_241, Megamind_233, MoMoMixon_232, Delylah_238, Shaqnato_227, GoldenSnow_236, Pleione_240, Chargie21_233, Norm_236, Shrimp_238, Salacia_237, Gabriel_239, Fongie_236, Pupusa_239, Zalkecks_235, JustHall_230, McWolfish_233, YoungMoneyMata_236, Fixie_228, Concombre_241, Pio_242, FoxtrotP1_234, EmmaElysia_241, Bxz1_223, BadAgartude_230, Phlegm_240, Dietrick_225, Domi_230, Halldule_228, Maby2021_236, Roots515_239, Lukilu_225, YemiJoy2021_237, Melpomini_231, Mikro_230, ShiaLabeouf_234, StephanieG_230, Kamryn_235, Bread_231, Catera_226, Bowman_236, Basquiat_233, Ngannou_231, Yassified_233, Napoleon13_233, Nidhogg_237, ArcherS7_237, Patter_238, Blubba_224, Astraea_230, Izajani_232, SiwenD96_237, Bezza_229, Dessert_237, Bonray_238, BackyardAgain_231, Trinitium_232, McGee_237, Matsumoto_234, Essence_234, EmToTheThree_236, Specks_240, Primadonna_230, Phox_237, Demodog_242, Substance289_232, Willis_236, Morizzled23_233, I3_246, Latch_236, Pivoine_237, Bangla1971_237, Pier_235, Iota_233, Jedediah_237,

Littleton_239, Cleatunium_227, Koguma_235, Teardrop_234, Jessibeth14_236, Kboogie_240, ValleyTerrace_237, Issimir_229, QBert_228, Colt_227, Spec_231, JPickles_233, Phusco_235, Drazdys_233, Atlantean_236, Blackbrain_234, Maguvora_237, Gizmo_241, Loanshark_233, Rocha_232, Shnickers_235, Ronan_232, EasyJones_237, Nappy_236, MikeLiesIn_236, PurduePete_236, Janiyra_239, Ading_238, ChickenPhender_232, Lethe_234, JulietS_225, 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_243, Gamgam_238, Tyke_233, JigglyPuff_242, Caravan_226, Duckfeet_229, IkeLoa_230, BobaPhatt_229, CindyLou_237, RoMag_231

- Track 51 : Vortrix_254
- Track 52 : DirtMonster_227, DeejaClivia_225, HyRo_221, Maturis_232
- Track 53 : Chomp_235
- Track 54 : Grasshills_243, EggyFarm_244, BigCity_244
- Track 55 : InigoMontoya_239
- Track 56 : Tonenili_257
- Track 57 : Gustav_59
- Track 58 : GRU1_93
- Track 59 : Kabluna_9, Bonum_9
- Track 60 : NosilaM_9
- Track 61 : MerCougar_8, Outis_8, StarStruck_8
- Track 62 : Buggaboo_8, SuperSulley_8
- Track 63 : GTE8_91
- Track 64 : BiPauneto_8, Yndexa_8, Sukkupi_8
- Track 65 : Pemberton_8
- Track 66 : Scuba_12
- Track 67 : Fury_12, Pleakley_12
- Track 68 : HomeFry_11
- Track 69 : CherryTomatoes_138, Pupper_137, SCentae_136
- Track 70 : Skog_198
- Track 71 : CaiB_50, MossRose_49, TraderJ_50, AnarQue_49, FelixTres_49, CloverMinnie_49, Blackpen_49
- Track 72 : Mariokart_47
- Track 73 : JellyBelly_46
- Track 74 : Wooper_50, Yeshua_50
- Track 75 : Evaa_46
- Track 76 : NHagos_48, AksarBAT_48
- Track 77 : Sisko_46, AnClar_47, Yago84_46
- Track 78 : BiggityBass_46
- Track 79 : Ligma_47, Fresco_47, Axumite_47, Shatter_47
- Track 80 : LittleMunchkin_48
- Track 81 : CharlottesWeb_46
- Track 82 : BobRoss2024_46
- Track 83 : Coco2012_46
- Track 84 : GMA2_47
- Track 85 : ModicumRichard_95
- Track 86 : ObLaDi_95
- Track 87 : Morgana_102, Cafasso_96
- Track 88 : Aleemily_94
- Track 89 : Lilbit_2, Poise_3, Raela_2, JoieB_3, Beelzebub_3, Blackbeetle_3, Huphlepuff_2, LittleLaf_2, RedRaider77_3, Clarkson_2

• Track 90 : VasuNzinga_3, Gattaca_4, MosMoris_4, Marvin_2, Caprice_3, FeliMaine_2, Corazon_2
• Track 91 : GoongGoong_3
• Track 92 : Tesla_3
• Track 93 : Mbo2_59
• Track 94 : 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 22, it was called in 184 of the 371 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_229, BigCity_244, Bigswole_241, Bipolarisk_234, Blackbrain_234, Blackdragon_230, Blubba_224, BobaPhatt_229, Bonray_238, Bowman_236, Bread_231, Breeniome_235, Burrough_236, Bxz1_223, Cactojaque_230, Cali_227, Cane17_226, Capablanca_241, Caravan_226, Catera_226, Chargie21_233, CharlieB_230, ChaylaJr_235, ChickenPhender_232, Chomp_235, CindyLou_237, Cleatunium_227, Colt_227, Concombre_241, DTDevon_237, Daffodil_241, Dandelion_242, Darko_235, Delilah_234, Delylah_238, Demodog_242, Derek_232, Dessert_237, 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_228, Flabslab_232, Fludd_236, Fongie_236, FoxtrotP1_234, FrayBell_239, FudgeTart_230, Gabriel_239, Gamgam_238, Ghost_235, Gizmo_241, GlutenPhree_237, GoldenSnow_236, 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_237, Latch_236, Lee7_240, Lethe_234, LifeSavor_236, LinStu_234, Littleton_239, Loanshark_233, LolaVinca_232, LookingGlass_234, LordLeafolot_237, Lukilu_225, Lunareta_235, Maby2021_236, Maguvora_237, 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_243, NedWong_235, Ngannou_231, Nidhogg_237, Norm_236, NuevoMundo_237, OrediggerDelux_237, ParkTD_235, Patter_238, PharkleMinkus_236, Phlegm_240, Phox_237, Phusco_235, Pier_235, Pio_242, Pivoine_237, Pleione_240, Primadonna_230, Puhon_237, Pupusa_239, PurduePete_236, QBert_228, Quasimodo_239, Rahel_238, Rizal_226, RoMag_231, Rocha_232, Ronan_232, Roots515_239, SVoro_231, Salacia_237, Sauce_233, ScottMcG_228, Sebata_238, Shaqnato_227, Shelob_237, ShiaLabeouf_234, Shifa_213, Shnickers_235, Shrimp_238, SilverDipper_240, SiwenD96_237, SmallFry_237, Spec_231, 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, Akoma_55, AksarBAT_48, Aleemily_94, Allegro_54, AnClar_47, AnarQue_49, Antihero_49, Apex_51, Arbiter_53, Ares_54, Athena_57, Audrey_55, Austelle_51, Axumite_47, Baloo_55, Bananafish_54, Beelzebub_3, Ben11_55, Bernardo_56, BiPauneto_8, BiggityBass_46, Blackbeetle_3, Blackpen_49, Blocker23_54, BobRoss2024_46, BobbyK_50, Bonum_9, Boyle_54, BrownCNA_51, Brownie5_54, Buggaboo_8, Cafasso_96, CaiB_50, Calamitous_54, Caprice_3, Casbah_55, ChaChing_55, Chalmers_54, Chandler_55, CharlottesWeb_46, Chentzyk_56, CherryTomatoes_138, ChrisnMich_50, Clarkson_2, CloverMinnie_49, Coco2012_46, Coffee_54, Compostia_55, Cooper_51, Corazon_2, Corofin_55, Deenasa_54, Devonte_54, Eaglehorse_54, Epah_49, Evaa_46, Fanaw_49, Faze9_53, FeliMaine_2, FelixTres_49, ForDig_48, Fortunato_50, Frederick_50, FrenchFry_54, Fresco_47, Funsized_56, Fury_12, GMA2_47, GRU1_93, GTE8_91, Gadjet_56, Gattaca_4, Gervas_56, GinPorsche_50, Glass_54, GlenHope_56, Glubnar_56, Godines_54, GoongGoong_3, Gustav_59, Halfpint_54, Hally898_49, Hangman_49, HarveySr_54, Heath_49, Heathcliff_55, Hedgerow_54, Holeinone_54, HomeFry_11, Hosp_046, Huphlepuff_2, Hydro_50, Imvubu_48, Indlovu_52, ItsyBitsy1_54, JAMaL_50, Jackstina_51, JaguarMi_52, JellyBelly_46, JoieB_3, Jolie1_048, JoyceMaria_49, Kabluna_9, Kaleb_54, Kamiyu_55, KayaCho_47, Kheth_54, Knocker_55, Kolhan_54, Kronus_55, Lambano_49, Lars_54, Laurie_53, Lephleur_54, LestyG_54, Ligma_47, LilMcDreamy_52, LilSmirk_54, Lilbit_2, LittleDigger_49, LittleLaf_2, LittleMunchkin_48, LizLemon_54, Lolalove_51, Magpie_49, Mariokart_47, Marley1013_56, Marlia_56, Marvin_2, MasterPo_54, Mbo2_59, MerCougar_8, Minnow_50, Mithril_49, MmasiCarm_56, ModicumRichard_95, Morgana_102, Mortcellus_55, Morty007_55, MosMoris_4, MossRose_49, Mudslide_50, Mulaychimus_56, Mysterious_53, NHagos_48, Nanao_49, Nehemiah_54, Nigel_51, NosilaM_9, Nozo_55, ObLaDi_95, Obutu_56, Olivio_55, Opia_54, OrangeOswald_55, Outis_8, Pemberton_8, Phantasmagoria_54, Phayeta_57, Phelemich_53, Philly_54, Phlyer_55, Pleakley_12, Poise_3, Poster_49, PrinceCharming_54, Prince_50, Pupper_137, QueenPie_48, Raela_2, RagingRooster_54, RawrgerThat_51, RedRaider77_3, Renkei_49, Reprobate_54, Rhinoforte_54, Rinkes_53, Rita1961_56, RomaT_55, Rosebush_53, SCentae_136, Sabella_53, Scuba_12, Shatter_47, Shenyu_55, Sisko_46, Skog_198, SlippinJimmy_57, StarStruck_8, Stinger_50, Sukkupi_8, SuperSulley_8, SwainyDoc_56, SynergyX_55, TA17A_55, TPA2_59, Tesla_3, Thonko_56, Tinciduntsolum_55, TraderJ_50, Tres_54, VasuNzinga_3, Vic9_00053, VioletZ_52, Waleliano_49, West99_54, Wooper_50, Xincheng_51, Yago84_46, Yahalom_54, Yeshua_50, Yinz_55, Yndexa_8, Zemanar_50,

Summary by start number:

Start 19:
• Found in 1 of 432 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 371

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cooper_51 (B4),

Start 20:
• Found in 37 of 432 (8.6%) of genes in pham
• Manual Annotations of this start: 36 of 371
• 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), 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 21:
• Found in 31 of 432 (7.2%) of genes in pham
• Manual Annotations of this start: 12 of 371
• Called 45.2% of time when present
• Phage (with cluster) where this start called: Beelzebub_3 (S), Blackbeetle_3 (S), Clarkson_2 (S), DeejaClivia_225 (C1), DirtMonster_227 (C1), Huphlepuff_2 (S), HyRo_221 (C1), JoieB_3 (S), Lilbit_2 (S), LittleLaf_2 (S), Maturis_232 (C1), Poise_3 (S), Raela_2 (S), RedRaider77_3 (S),

Start 22:
• Found in 215 of 432 (49.8%) of genes in pham
• Manual Annotations of this start: 184 of 371
• 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_229 (C1), BigCity_244 (C1), Bigswole_241 (C1), Bipolarisk_234 (C1), Blackbrain_234 (C1), Blackdragon_230 (C1), Blubba_224 (C1), BobaPhatt_229 (C1), Bonray_238 (C1), Bowman_236 (C1), Bread_231 (C1), Breeniome_235 (C1), Burrough_236 (C1), Bxz1_223 (C1), Cactojaque_230 (C1), Cali_227 (C1), Cane17_226 (C1), Capablanca_241 (C1), Caravan_226 (C1), Catera_226 (C1), Chargie21_233 (C1), CharlieB_230 (C1), ChaylaJr_235 (C1), ChickenPhender_232 (C1), Chomp_235 (C1), CindyLou_237 (C1), Cleatunium_227 (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_237 (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_228 (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), GoldenSnow_236 (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_237 (C1), Latch_236 (C1), Lee7_240 (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), Maguvora_237 (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_243 (C1), NedWong_235 (C1), Ngannou_231 (C1), Nidhogg_237 (C1), Norm_236 (C1), NuevoMundo_237 (C1), OrediggerDelux_237 (C1), ParkTD_235 (C1), Patter_238 (C1), PharkleMinkus_236 (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), Puhon_237 (C1), 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), 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), SiwenD96_237 (C1), SmallFry_237 (C1), Spec_231 (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 23:
• Found in 117 of 432 (27.1%) of genes in pham
• Manual Annotations of this start: 93 of 371
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 39HC_047 (B6), 40BC_047 (B6), Abinghost_55 (B3), Akoma_55 (B3), AksarBAT_48 (DR), AnarQue_49 (DR), Antihero_49 (B4), Apex_51 (B4), Athena_57 (B3), Audrey_55 (B3), Austelle_51 (B4), 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), 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_50 (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), 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), Minnow_50 (B6), 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), 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), Renkei_49 (B4), Reprobate_54 (B5), Rinkes_53 (B9), Rita1961_56 (B3), RomaT_55 (B3), Shenyu_55 (B5), SlippinJimmy_57 (B3), Stinger_50 (B4), SwainyDoc_56 (B3), SynergyX_55 (B3), Thonko_56 (B8), TraderJ_50 (DR), 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 24:
• Found in 20 of 432 (4.6%) of genes in pham
• Manual Annotations of this start: 1 of 371
• Called 10.0% of time when present
• Phage (with cluster) where this start called: GoongGoong_3 (S), TPA2_59 (singleton),

Start 25:
• Found in 4 of 432 (0.9%) of genes in pham
• Manual Annotations of this start: 4 of 371
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_138 (DO), Pupper_137 (DO), SCentae_136 (DO), Skog_198 (DO),

Start 26:
• Found in 61 of 432 (14.1%) of genes in pham
• Manual Annotations of this start: 40 of 371
• Called 73.8% of time when present
• Phage (with cluster) where this start called: Aleemily_94 (DZ), AnClar_47 (DR), Axumite_47 (DR), BiPauneto_8 (CR4), BiggityBass_46 (DR), Bonum_9 (CR2), Buggaboo_8 (CR2), Cafasso_96 (DZ), Caprice_3 (S), CharlottesWeb_46 (DR), Coco2012_46 (DR), Corazon_2 (S), FeliMaine_2 (S), Fresco_47 (DR), Fury_12 (CR5), GRU1_93 (CR1), GTE8_91 (CR2), Gattaca_4 (S), Gustav_59 (CD), HomeFry_11 (CR5), JellyBelly_46 (DR), Kabluna_9 (CR2), Ligma_47 (DR), Mariokart_47 (DR), Marvin_2 (S), Mbo2_59 (singleton), MerCougar_8 (CR2), ModicumRichard_95 (DZ), Morgana_102 (DZ), MosMoris_4 (S), NosilaM_9 (CR2), ObLaDi_95 (DZ), Outis_8 (CR2), Pemberton_8 (CR4), Pleakley_12 (CR5), Scuba_12 (CR5), Shatter_47 (DR), Sisko_46 (DR), StarStruck_8 (CR2), Sukkupi_8 (CR4), SuperSulley_8 (CR2), Tesla_3 (S), VasuNzinga_3 (S), Yago84_46 (DR), Yndexa_8 (CR4),

Start 28:
• Found in 1 of 432 (0.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA2_47 (DS),

Summary by clusters:

There are 22 clusters represented in this pham: DO, singleton, DZ, B10, B11, DR, DS, C1, CD, S, CR2, CR1, CR4, CR5, B4, B5, B6, B2, B3, B12, B8, B9,

Info for manual annotations of cluster B10:
•Start number 23 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:
•Start number 23 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:
•Start number 23 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:
•Start number 20 was manually annotated 36 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 23 was manually annotated 45 times for cluster B3.

Info for manual annotations of cluster B4:
•Start number 19 was manually annotated 1 time for cluster B4.
•Start number 23 was manually annotated 26 times for cluster B4.

Info for manual annotations of cluster B5:
•Start number 23 was manually annotated 3 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 23 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B8:
•Start number 23 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:
•Start number 23 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster C1:
•Start number 21 was manually annotated 2 times for cluster C1.
•Start number 22 was manually annotated 184 times for cluster C1.

Info for manual annotations of cluster CD:
•Start number 26 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CR2:
•Start number 26 was manually annotated 8 times for cluster CR2.

Info for manual annotations of cluster CR4:
•Start number 26 was manually annotated 4 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 26 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster DO:
•Start number 25 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DR:
•Start number 23 was manually annotated 10 times for cluster DR.
•Start number 26 was manually annotated 10 times for cluster DR.

Info for manual annotations of cluster DZ:
•Start number 26 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster S:
•Start number 21 was manually annotated 10 times for cluster S.
•Start number 24 was manually annotated 1 time for cluster S.
•Start number 26 was manually annotated 8 times for cluster S.

Gene Information:

Gene: 39HC_047 Start: 46065, Stop: 45586, Start Num: 23
Candidate Starts for 39HC_047:
(Start: 23 @46065 has 93 MA's), (Start: 26 @46059 has 40 MA's), (48, 45933), (84, 45795), (90, 45768), (107, 45705), (132, 45600),

Gene: 40BC_047 Start: 46065, Stop: 45586, Start Num: 23
Candidate Starts for 40BC_047:
(Start: 23 @46065 has 93 MA's), (Start: 26 @46059 has 40 MA's), (48, 45933), (84, 45795), (90, 45768), (107, 45705), (132, 45600),

Gene: Abinghost_55 Start: 48403, Stop: 47930, Start Num: 23
Candidate Starts for Abinghost_55:
(Start: 23 @48403 has 93 MA's), (31, 48367), (67, 48175), (82, 48139), (89, 48112),

Gene: Ablatia_235 Start: 130787, Stop: 131254, Start Num: 22
Candidate Starts for Ablatia_235:
(16, 130718), (Start: 22 @130787 has 184 MA's), (27, 130808), (58, 130982), (63, 130997), (109, 131150), (117, 131198),

Gene: Ading_238 Start: 133220, Stop: 133687, Start Num: 22
Candidate Starts for Ading_238:
(16, 133151), (Start: 22 @133220 has 184 MA's), (27, 133241), (58, 133415), (63, 133430), (109, 133583), (117, 133631),

Gene: Adlitam_236 Start: 131824, Stop: 132291, Start Num: 22
Candidate Starts for Adlitam_236:
(16, 131755), (Start: 22 @131824 has 184 MA's), (27, 131845), (58, 132019), (63, 132034), (109, 132187), (117, 132235),

Gene: Akoma_55 Start: 48418, Stop: 47945, Start Num: 23
Candidate Starts for Akoma_55:
(Start: 23 @48418 has 93 MA's), (31, 48382), (67, 48190), (82, 48154), (89, 48127),

Gene: AksarBAT_48 Start: 41599, Stop: 41123, Start Num: 23
Candidate Starts for AksarBAT_48:

(Start: 23 @41599 has 93 MA's), (43, 41497), (46, 41470), (51, 41449), (63, 41383), (107, 41254), (117, 41203), (126, 41167),

Gene: Aleemily_94 Start: 55554, Stop: 56000, Start Num: 26
Candidate Starts for Aleemily_94:
(Start: 26 @55554 has 40 MA's), (39, 55635), (55, 55725), (71, 55770), (117, 55935),

Gene: Allegro_54 Start: 47624, Stop: 47133, Start Num: 20
Candidate Starts for Allegro_54:
(Start: 20 @47624 has 36 MA's), (52, 47465), (82, 47345), (84, 47342), (87, 47327), (90, 47315), (106, 47258), (107, 47252), (112, 47225), (134, 47141),

Gene: Amataga_237 Start: 130823, Stop: 131290, Start Num: 22
Candidate Starts for Amataga_237:
(16, 130754), (Start: 22 @130823 has 184 MA's), (27, 130844), (58, 131018), (63, 131033), (109, 131186), (117, 131234),

Gene: AnClar_47 Start: 43032, Stop: 42556, Start Num: 26
Candidate Starts for AnClar_47:
(Start: 26 @43032 has 40 MA's), (33, 42987), (36, 42972), (55, 42867), (96, 42711), (110, 42654), (123, 42585), (127, 42570),

Gene: AnarQue_49 Start: 42622, Stop: 42155, Start Num: 23
Candidate Starts for AnarQue_49:
(Start: 23 @42622 has 93 MA's), (46, 42493), (78, 42379), (106, 42283), (107, 42277), (117, 42226), (126, 42190),

Gene: Antihero_49 Start: 47622, Stop: 47143, Start Num: 23
Candidate Starts for Antihero_49:
(Start: 23 @47622 has 93 MA's), (48, 47490), (90, 47325), (94, 47313), (107, 47262), (132, 47157), (133, 47154),

Gene: Apex_51 Start: 48844, Stop: 48383, Start Num: 23
Candidate Starts for Apex_51:
(5, 49039), (Start: 23 @48844 has 93 MA's), (40, 48751), (51, 48703), (75, 48607), (78, 48598), (90, 48556), (92, 48550), (100, 48526), (107, 48493), (111, 48469), (112, 48466), (123, 48418), (130, 48394),

Gene: Arbiter_53 Start: 47730, Stop: 47239, Start Num: 20
Candidate Starts for Arbiter_53:
(Start: 20 @47730 has 36 MA's), (52, 47571), (82, 47451), (84, 47448), (87, 47433), (90, 47421), (106, 47364), (107, 47358), (112, 47331), (134, 47247),

Gene: ArcherS7_237 Start: 132568, Stop: 133035, Start Num: 22
Candidate Starts for ArcherS7_237:
(16, 132499), (Start: 22 @132568 has 184 MA's), (27, 132589), (58, 132763), (63, 132778), (109, 132931), (117, 132979),

Gene: Ares_54 Start: 47699, Stop: 47208, Start Num: 20
Candidate Starts for Ares_54:
(Start: 20 @47699 has 36 MA's), (52, 47540), (82, 47420), (84, 47417), (87, 47402), (90, 47390), (106, 47333), (107, 47327), (112, 47300), (134, 47216),

Gene: Asterius_236 Start: 131232, Stop: 131699, Start Num: 22
Candidate Starts for Asterius_236:
(16, 131163), (Start: 22 @131232 has 184 MA's), (27, 131253), (58, 131427), (63, 131442), (109, 131595), (117, 131643),

Gene: Astraea_230 Start: 130427, Stop: 130894, Start Num: 22
Candidate Starts for Astraea_230:
(16, 130358), (Start: 22 @130427 has 184 MA's), (27, 130448), (58, 130622), (63, 130637), (109, 130790), (117, 130838),

Gene: Athena_57 Start: 49161, Stop: 48688, Start Num: 23
Candidate Starts for Athena_57:
(Start: 23 @49161 has 93 MA's), (31, 49125), (67, 48933), (82, 48897), (89, 48870),

Gene: Atlantean_236 Start: 130823, Stop: 131290, Start Num: 22
Candidate Starts for Atlantean_236:
(16, 130754), (Start: 22 @130823 has 184 MA's), (27, 130844), (58, 131018), (63, 131033), (109, 131186), (117, 131234),

Gene: Audrey_55 Start: 48409, Stop: 47936, Start Num: 23
Candidate Starts for Audrey_55:
(Start: 23 @48409 has 93 MA's), (31, 48373), (59, 48205), (67, 48181), (73, 48172), (82, 48145), (89, 48118), (127, 47965),

Gene: Audrick_238 Start: 130713, Stop: 131180, Start Num: 22
Candidate Starts for Audrick_238:
(16, 130644), (Start: 22 @130713 has 184 MA's), (27, 130734), (58, 130908), (63, 130923), (109, 131076), (117, 131124),

Gene: Austelle_51 Start: 49294, Stop: 48833, Start Num: 23
Candidate Starts for Austelle_51:
(Start: 23 @49294 has 93 MA's), (40, 49201), (51, 49153), (75, 49057), (78, 49048), (90, 49006), (92, 49000), (100, 48976), (107, 48943), (111, 48919), (112, 48916), (123, 48868), (130, 48844),

Gene: Ava3_233 Start: 131283, Stop: 131750, Start Num: 22
Candidate Starts for Ava3_233:
(16, 131214), (Start: 22 @131283 has 184 MA's), (27, 131304), (58, 131478), (63, 131493), (109, 131646), (117, 131694),

Gene: Axumite_47 Start: 40708, Stop: 40232, Start Num: 26
Candidate Starts for Axumite_47:
(7, 40930), (13, 40804), (Start: 26 @40708 has 40 MA's), (87, 40429), (90, 40417), (96, 40390), (110, 40333), (111, 40321), (123, 40264),

Gene: Babyland_239 Start: 131600, Stop: 132067, Start Num: 22
Candidate Starts for Babyland_239:
(16, 131531), (Start: 22 @131600 has 184 MA's), (27, 131621), (58, 131795), (63, 131810), (109, 131963), (117, 132011),

Gene: BackyardAgain_231 Start: 128973, Stop: 129440, Start Num: 22
Candidate Starts for BackyardAgain_231:
(16, 128904), (Start: 22 @128973 has 184 MA's), (27, 128994), (58, 129168), (63, 129183), (109, 129336), (117, 129384),

Gene: BadAgartude_230 Start: 130913, Stop: 131380, Start Num: 22
Candidate Starts for BadAgartude_230:
(16, 130844), (Start: 22 @130913 has 184 MA's), (27, 130934), (58, 131108), (63, 131123), (109, 131276), (117, 131324),

Gene: Baloo_55 Start: 48412, Stop: 47939, Start Num: 23
Candidate Starts for Baloo_55:
(Start: 23 @48412 has 93 MA's), (31, 48376), (59, 48208), (67, 48184), (73, 48175), (82, 48148), (89, 48121), (127, 47968),

Gene: BananaFence_233 Start: 131056, Stop: 131523, Start Num: 22
Candidate Starts for BananaFence_233:
(16, 130987), (Start: 22 @131056 has 184 MA's), (27, 131077), (58, 131251), (63, 131266), (109, 131419), (117, 131467),

Gene: Bananafish_54 Start: 47633, Stop: 47142, Start Num: 20
Candidate Starts for Bananafish_54:
(Start: 20 @47633 has 36 MA's), (52, 47474), (82, 47354), (84, 47351), (87, 47336), (90, 47324), (106, 47267), (107, 47261), (112, 47234), (134, 47150),

Gene: Bangla1971_237 Start: 131532, Stop: 131999, Start Num: 22
Candidate Starts for Bangla1971_237:
(16, 131463), (Start: 22 @131532 has 184 MA's), (27, 131553), (58, 131727), (63, 131742), (109, 131895), (117, 131943),

Gene: Basquiat_233 Start: 129342, Stop: 129809, Start Num: 22
Candidate Starts for Basquiat_233:
(16, 129273), (Start: 22 @129342 has 184 MA's), (27, 129363), (58, 129537), (63, 129552), (109, 129705), (117, 129753),

Gene: BeanWater_229 Start: 130669, Stop: 131136, Start Num: 22
Candidate Starts for BeanWater_229:
(16, 130600), (Start: 22 @130669 has 184 MA's), (27, 130690), (58, 130864), (63, 130879), (109, 131032), (117, 131080),

Gene: Beelzebub_3 Start: 781, Stop: 1281, Start Num: 21
Candidate Starts for Beelzebub_3:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: Belieber_228 Start: 129469, Stop: 129936, Start Num: 22
Candidate Starts for Belieber_228:
(16, 129400), (Start: 22 @129469 has 184 MA's), (27, 129490), (58, 129664), (63, 129679), (109, 129832), (117, 129880),

Gene: Ben11_55 Start: 48694, Stop: 48221, Start Num: 23
Candidate Starts for Ben11_55:
(Start: 23 @48694 has 93 MA's), (31, 48658), (67, 48466), (82, 48430), (89, 48403),

Gene: Bernardo_56 Start: 48845, Stop: 48372, Start Num: 23
Candidate Starts for Bernardo_56:
(Start: 23 @48845 has 93 MA's), (31, 48809), (67, 48617), (82, 48581), (89, 48554), (127, 48401),

Gene: Bezza_229 Start: 130368, Stop: 130835, Start Num: 22
Candidate Starts for Bezza_229:
(16, 130299), (Start: 22 @130368 has 184 MA's), (27, 130389), (58, 130563), (63, 130578), (109, 130731), (117, 130779),

Gene: BiPauneto_8 Start: 3928, Stop: 4389, Start Num: 26
Candidate Starts for BiPauneto_8:
(Start: 26 @3928 has 40 MA's), (27, 3940), (30, 3952), (50, 4060), (129, 4378),

Gene: BigCity_244 Start: 133429, Stop: 133896, Start Num: 22
Candidate Starts for BigCity_244:
(Start: 22 @133429 has 184 MA's), (27, 133450), (58, 133624), (63, 133639), (76, 133678), (109, 133792), (117, 133840),

Gene: BiggityBass_46 Start: 42504, Stop: 42028, Start Num: 26
Candidate Starts for BiggityBass_46:
(Start: 26 @42504 has 40 MA's), (76, 42264), (77, 42261), (87, 42222), (90, 42210), (93, 42201), (96, 42183), (123, 42057), (127, 42042),

Gene: Bigswole_241 Start: 133391, Stop: 133858, Start Num: 22
Candidate Starts for Bigswole_241:
(16, 133322), (Start: 22 @133391 has 184 MA's), (27, 133412), (58, 133586), (63, 133601), (109, 133754), (117, 133802),

Gene: Bipolarisk_234 Start: 131551, Stop: 132018, Start Num: 22
Candidate Starts for Bipolarisk_234:
(16, 131482), (Start: 22 @131551 has 184 MA's), (27, 131572), (58, 131746), (63, 131761), (109, 131914), (117, 131962),

Gene: Blackbeetle_3 Start: 790, Stop: 1290, Start Num: 21
Candidate Starts for Blackbeetle_3:
(Start: 21 @790 has 12 MA's), (Start: 24 @802 has 1 MA's), (Start: 26 @811 has 40 MA's), (56, 988), (61, 1012), (62, 1018), (63, 1021), (67, 1033), (69, 1039), (83, 1081), (104, 1156), (113, 1207),

Gene: Blackbrain_234 Start: 131119, Stop: 131586, Start Num: 22
Candidate Starts for Blackbrain_234:
(16, 131050), (Start: 22 @131119 has 184 MA's), (27, 131140), (58, 131314), (63, 131329), (109, 131482), (117, 131530),

Gene: Blackdragon_230 Start: 131144, Stop: 131611, Start Num: 22
Candidate Starts for Blackdragon_230:
(16, 131075), (Start: 22 @131144 has 184 MA's), (27, 131165), (58, 131339), (63, 131354), (109, 131507), (117, 131555),

Gene: Blackpen_49 Start: 42040, Stop: 41573, Start Num: 23
Candidate Starts for Blackpen_49:
(Start: 23 @42040 has 93 MA's), (46, 41911), (78, 41797), (106, 41701), (107, 41695), (117, 41644), (126, 41608),

Gene: Blocker23_54 Start: 47746, Stop: 47255, Start Num: 20
Candidate Starts for Blocker23_54:

(Start: 20 @47746 has 36 MA's), (52, 47587), (84, 47464), (87, 47449), (90, 47437), (106, 47380), (107, 47374), (112, 47347), (134, 47263),

Gene: Blubba_224 Start: 134689, Stop: 135174, Start Num: 22
Candidate Starts for Blubba_224:
(16, 134620), (Start: 22 @134689 has 184 MA's), (27, 134710), (58, 134884), (63, 134899), (109, 135052), (117, 135100),

Gene: BobRoss2024_46 Start: 40623, Stop: 40150, Start Num: 23
Candidate Starts for BobRoss2024_46:
(Start: 23 @40623 has 93 MA's), (46, 40494), (58, 40422), (63, 40407), (81, 40371), (93, 40329), (107, 40278),

Gene: BobaPhatt_229 Start: 130237, Stop: 130704, Start Num: 22
Candidate Starts for BobaPhatt_229:
(16, 130168), (Start: 22 @130237 has 184 MA's), (27, 130258), (58, 130432), (63, 130447), (109, 130600), (117, 130648),

Gene: BobbyK_50 Start: 48250, Stop: 47771, Start Num: 23
Candidate Starts for BobbyK_50:
(Start: 23 @48250 has 93 MA's), (48, 48118), (90, 47953), (94, 47941), (102, 47917), (107, 47890), (132, 47785), (133, 47782),

Gene: Bonray_238 Start: 132919, Stop: 133386, Start Num: 22
Candidate Starts for Bonray_238:
(16, 132850), (Start: 22 @132919 has 184 MA's), (27, 132940), (58, 133114), (63, 133129), (109, 133282), (117, 133330),

Gene: Bonum_9 Start: 5341, Stop: 5799, Start Num: 26
Candidate Starts for Bonum_9:
(Start: 26 @5341 has 40 MA's), (50, 5473), (60, 5536), (108, 5695), (115, 5743), (129, 5788),

Gene: Bowman_236 Start: 132034, Stop: 132501, Start Num: 22
Candidate Starts for Bowman_236:
(16, 131965), (Start: 22 @132034 has 184 MA's), (27, 132055), (58, 132229), (63, 132244), (109, 132397), (117, 132445),

Gene: Boyle_54 Start: 47766, Stop: 47275, Start Num: 20
Candidate Starts for Boyle_54:
(Start: 20 @47766 has 36 MA's), (52, 47607), (84, 47484), (87, 47469), (90, 47457), (106, 47400), (107, 47394), (112, 47367), (134, 47283),

Gene: Bread_231 Start: 130926, Stop: 131393, Start Num: 22
Candidate Starts for Bread_231:
(16, 130857), (Start: 22 @130926 has 184 MA's), (27, 130947), (58, 131121), (63, 131136), (109, 131289), (117, 131337),

Gene: Breeniome_235 Start: 130380, Stop: 130847, Start Num: 22
Candidate Starts for Breeniome_235:
(16, 130311), (Start: 22 @130380 has 184 MA's), (27, 130401), (58, 130575), (63, 130590), (109, 130743), (117, 130791),

Gene: BrownCNA_51 Start: 48520, Stop: 48059, Start Num: 23

Candidate Starts for BrownCNA_51:
(Start: 23 @48520 has 93 MA's), (40, 48427), (51, 48379), (72, 48292), (75, 48283), (78, 48274), (87, 48244), (90, 48232), (100, 48202), (107, 48169), (111, 48145), (112, 48142), (123, 48094), (130, 48070),

Gene: Brownie5_54 Start: 47782, Stop: 47291, Start Num: 20
Candidate Starts for Brownie5_54:
(Start: 20 @47782 has 36 MA's), (52, 47623), (82, 47503), (84, 47500), (87, 47485), (90, 47473), (106, 47416), (107, 47410), (112, 47383), (134, 47299),

Gene: Buggaboo_8 Start: 4860, Stop: 5318, Start Num: 26
Candidate Starts for Buggaboo_8:
(Start: 26 @4860 has 40 MA's), (50, 4992), (108, 5214), (115, 5262), (129, 5307),

Gene: Burrough_236 Start: 132696, Stop: 133163, Start Num: 22
Candidate Starts for Burrough_236:
(16, 132627), (Start: 22 @132696 has 184 MA's), (27, 132717), (58, 132891), (63, 132906), (109, 133059), (117, 133107),

Gene: Bxz1_223 Start: 132901, Stop: 133368, Start Num: 22
Candidate Starts for Bxz1_223:
(16, 132832), (Start: 22 @132901 has 184 MA's), (27, 132922), (58, 133096), (63, 133111), (109, 133264), (117, 133312),

Gene: Cactojaque_230 Start: 130065, Stop: 130532, Start Num: 22
Candidate Starts for Cactojaque_230:
(16, 129996), (Start: 22 @130065 has 184 MA's), (27, 130086), (58, 130260), (63, 130275), (109, 130428), (117, 130476),

Gene: Cafasso_96 Start: 56105, Stop: 56551, Start Num: 26
Candidate Starts for Cafasso_96:
(Start: 26 @56105 has 40 MA's), (55, 56276), (71, 56321), (117, 56486),

Gene: CaiB_50 Start: 43465, Stop: 42998, Start Num: 23
Candidate Starts for CaiB_50:
(Start: 23 @43465 has 93 MA's), (46, 43336), (78, 43222), (106, 43126), (107, 43120), (117, 43069), (126, 43033),

Gene: Calamitous_54 Start: 47632, Stop: 47141, Start Num: 20
Candidate Starts for Calamitous_54:
(Start: 20 @47632 has 36 MA's), (52, 47473), (82, 47353), (84, 47350), (87, 47335), (90, 47323), (106, 47266), (107, 47260), (112, 47233), (134, 47149),

Gene: Cali_227 Start: 131294, Stop: 131761, Start Num: 22
Candidate Starts for Cali_227:
(16, 131225), (Start: 22 @131294 has 184 MA's), (27, 131315), (58, 131489), (63, 131504), (109, 131657), (117, 131705),

Gene: Cane17_226 Start: 135098, Stop: 135583, Start Num: 22
Candidate Starts for Cane17_226:
(16, 135029), (Start: 22 @135098 has 184 MA's), (27, 135119), (58, 135293), (63, 135308), (109, 135461), (117, 135509),

Gene: Capablanca_241 Start: 133548, Stop: 134015, Start Num: 22
Candidate Starts for Capablanca_241:
(16, 133479), (Start: 22 @133548 has 184 MA's), (27, 133569), (58, 133743), (63, 133758), (109, 133911), (117, 133959),

Gene: Caprice_3 Start: 811, Stop: 1290, Start Num: 26
Candidate Starts for Caprice_3:
(Start: 21 @790 has 12 MA's), (Start: 24 @802 has 1 MA's), (Start: 26 @811 has 40 MA's), (56, 988), (61, 1012), (62, 1018), (63, 1021), (67, 1033), (69, 1039), (83, 1081), (104, 1156), (113, 1207),

Gene: Caravan_226 Start: 131634, Stop: 132101, Start Num: 22
Candidate Starts for Caravan_226:
(16, 131565), (Start: 22 @131634 has 184 MA's), (27, 131655), (58, 131829), (63, 131844), (109, 131997), (117, 132045),

Gene: Casbah_55 Start: 48727, Stop: 48254, Start Num: 23
Candidate Starts for Casbah_55:
(Start: 23 @48727 has 93 MA's), (31, 48691), (67, 48499), (73, 48490), (82, 48463), (89, 48436),

Gene: Catera_226 Start: 130036, Stop: 130503, Start Num: 22
Candidate Starts for Catera_226:
(16, 129967), (Start: 22 @130036 has 184 MA's), (27, 130057), (58, 130231), (63, 130246), (109, 130399), (117, 130447),

Gene: ChaChing_55 Start: 48426, Stop: 47953, Start Num: 23
Candidate Starts for ChaChing_55:
(Start: 23 @48426 has 93 MA's), (31, 48390), (59, 48222), (67, 48198), (73, 48189), (82, 48162), (89, 48135), (127, 47982),

Gene: Chalmers_54 Start: 48901, Stop: 48428, Start Num: 23
Candidate Starts for Chalmers_54:
(Start: 23 @48901 has 93 MA's), (31, 48865), (67, 48673), (82, 48637), (89, 48610),

Gene: Chandler_55 Start: 49197, Stop: 48724, Start Num: 23
Candidate Starts for Chandler_55:
(Start: 23 @49197 has 93 MA's), (31, 49161), (67, 48969), (82, 48933), (89, 48906), (127, 48753),

Gene: Chargie21_233 Start: 129342, Stop: 129809, Start Num: 22
Candidate Starts for Chargie21_233:
(16, 129273), (Start: 22 @129342 has 184 MA's), (27, 129363), (58, 129537), (63, 129552), (109, 129705), (117, 129753),

Gene: CharlieB_230 Start: 131048, Stop: 131515, Start Num: 22
Candidate Starts for CharlieB_230:
(16, 130979), (Start: 22 @131048 has 184 MA's), (27, 131069), (58, 131243), (63, 131258), (109, 131411), (117, 131459),

Gene: CharlottesWeb_46 Start: 40078, Stop: 39602, Start Num: 26
Candidate Starts for CharlottesWeb_46:
(Start: 26 @40078 has 40 MA's), (87, 39799), (90, 39787), (96, 39760), (111, 39691), (123, 39634),

Gene: ChaylaJr_235 Start: 130733, Stop: 131200, Start Num: 22
Candidate Starts for ChaylaJr_235:

(16, 130664), (Start: 22 @130733 has 184 MA's), (27, 130754), (58, 130928), (63, 130943), (109, 131096), (117, 131144),

Gene: Chentzyk_56 Start: 49236, Stop: 48763, Start Num: 23
Candidate Starts for Chentzyk_56:
(Start: 23 @49236 has 93 MA's), (31, 49200), (59, 49032), (67, 49008), (82, 48972), (89, 48945), (127, 48792),

Gene: CherryTomatoes_138 Start: 95998, Stop: 96492, Start Num: 25
Candidate Starts for CherryTomatoes_138:
(Start: 25 @95998 has 4 MA's), (100, 96340), (119, 96442),

Gene: ChickenPhender_232 Start: 129489, Stop: 129956, Start Num: 22
Candidate Starts for ChickenPhender_232:
(16, 129420), (Start: 22 @129489 has 184 MA's), (27, 129510), (58, 129684), (63, 129699), (109, 129852), (117, 129900),

Gene: Chomp_235 Start: 132925, Stop: 133392, Start Num: 22
Candidate Starts for Chomp_235:
(16, 132856), (17, 132859), (Start: 22 @132925 has 184 MA's), (27, 132946), (58, 133120), (63, 133135), (109, 133288), (117, 133336),

Gene: ChrisnMich_50 Start: 47606, Stop: 47145, Start Num: 23
Candidate Starts for ChrisnMich_50:
(Start: 23 @47606 has 93 MA's), (40, 47513), (51, 47465), (75, 47369), (78, 47360), (87, 47330), (90, 47318), (100, 47288), (107, 47255), (111, 47231), (112, 47228), (123, 47180), (130, 47156),

Gene: CindyLou_237 Start: 133185, Stop: 133652, Start Num: 22
Candidate Starts for CindyLou_237:
(16, 133116), (Start: 22 @133185 has 184 MA's), (27, 133206), (58, 133380), (63, 133395), (109, 133548), (117, 133596),

Gene: Clarkson_2 Start: 557, Stop: 1057, Start Num: 21
Candidate Starts for Clarkson_2:
(Start: 21 @557 has 12 MA's), (Start: 24 @569 has 1 MA's), (Start: 26 @578 has 40 MA's), (56, 755), (61, 779), (62, 785), (63, 788), (67, 800), (69, 806), (83, 848), (104, 923), (113, 974),

Gene: Cleatunium_227 Start: 130746, Stop: 131213, Start Num: 22
Candidate Starts for Cleatunium_227:
(16, 130677), (Start: 22 @130746 has 184 MA's), (27, 130767), (58, 130941), (63, 130956), (109, 131109), (117, 131157),

Gene: CloverMinnie_49 Start: 42548, Stop: 42081, Start Num: 23
Candidate Starts for CloverMinnie_49:
(Start: 23 @42548 has 93 MA's), (46, 42419), (78, 42305), (106, 42209), (107, 42203), (117, 42152), (126, 42116),

Gene: Coco2012_46 Start: 40071, Stop: 39595, Start Num: 26
Candidate Starts for Coco2012_46:
(Start: 26 @40071 has 40 MA's), (87, 39792), (90, 39780), (96, 39753), (111, 39684), (123, 39627),

Gene: Coffee_54 Start: 47741, Stop: 47250, Start Num: 20
Candidate Starts for Coffee_54:

(Start: 20 @47741 has 36 MA's), (52, 47582), (84, 47459), (87, 47444), (90, 47432), (106, 47375), (107, 47369), (112, 47342), (134, 47258),

Gene: Colt_227 Start: 134329, Stop: 134814, Start Num: 22
Candidate Starts for Colt_227:
(16, 134260), (Start: 22 @134329 has 184 MA's), (27, 134350), (58, 134524), (63, 134539), (109, 134692), (117, 134740),

Gene: Compostia_55 Start: 48846, Stop: 48373, Start Num: 23
Candidate Starts for Compostia_55:
(Start: 23 @48846 has 93 MA's), (31, 48810), (67, 48618), (82, 48582), (89, 48555),

Gene: Concombre_241 Start: 133081, Stop: 133548, Start Num: 22
Candidate Starts for Concombre_241:
(16, 133012), (Start: 22 @133081 has 184 MA's), (27, 133102), (58, 133276), (63, 133291), (109, 133444), (117, 133492),

Gene: Cooper_51 Start: 47858, Stop: 47370, Start Num: 19
Candidate Starts for Cooper_51:
(Start: 19 @47858 has 1 MA's), (35, 47786), (38, 47765), (52, 47699), (84, 47573), (106, 47489), (107, 47483),

Gene: Corazon_2 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for Corazon_2:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: Corofin_55 Start: 48440, Stop: 47967, Start Num: 23
Candidate Starts for Corofin_55:
(Start: 23 @48440 has 93 MA's), (31, 48404), (67, 48212), (82, 48176), (89, 48149),

Gene: DTDevon_237 Start: 133564, Stop: 134031, Start Num: 22
Candidate Starts for DTDevon_237:
(16, 133495), (Start: 22 @133564 has 184 MA's), (27, 133585), (58, 133759), (63, 133774), (109, 133927), (117, 133975),

Gene: Daffodil_241 Start: 131851, Stop: 132318, Start Num: 22
Candidate Starts for Daffodil_241:
(16, 131782), (Start: 22 @131851 has 184 MA's), (27, 131872), (58, 132046), (63, 132061), (109, 132214), (117, 132262),

Gene: Dandelion_242 Start: 134454, Stop: 134921, Start Num: 22
Candidate Starts for Dandelion_242:
(16, 134385), (Start: 22 @134454 has 184 MA's), (27, 134475), (58, 134649), (63, 134664), (109, 134817), (117, 134865),

Gene: Darko_235 Start: 131060, Stop: 131527, Start Num: 22
Candidate Starts for Darko_235:
(16, 130991), (Start: 22 @131060 has 184 MA's), (27, 131081), (58, 131255), (63, 131270), (109, 131423), (117, 131471),

Gene: DeejaClivia_225 Start: 129891, Stop: 130382, Start Num: 21
Candidate Starts for DeejaClivia_225:

(16, 129828), (Start: 21 @129891 has 12 MA's), (Start: 22 @129897 has 184 MA's), (27, 129918), (58, 130092), (63, 130107), (109, 130260), (117, 130308),

Gene: Deenasa_54 Start: 48857, Stop: 48384, Start Num: 23
Candidate Starts for Deenasa_54:
(Start: 23 @48857 has 93 MA's), (31, 48821), (59, 48653), (67, 48629), (73, 48620), (82, 48593), (89, 48566),

Gene: Delilah_234 Start: 131944, Stop: 132411, Start Num: 22
Candidate Starts for Delilah_234:
(16, 131875), (Start: 22 @131944 has 184 MA's), (27, 131965), (58, 132139), (63, 132154), (109, 132307), (117, 132355),

Gene: Delylah_238 Start: 132258, Stop: 132725, Start Num: 22
Candidate Starts for Delylah_238:
(16, 132189), (Start: 22 @132258 has 184 MA's), (27, 132279), (58, 132453), (63, 132468), (109, 132621), (117, 132669),

Gene: Demodog_242 Start: 133091, Stop: 133558, Start Num: 22
Candidate Starts for Demodog_242:
(16, 133022), (Start: 22 @133091 has 184 MA's), (27, 133112), (58, 133286), (63, 133301), (109, 133454), (117, 133502),

Gene: Derek_232 Start: 132202, Stop: 132669, Start Num: 22
Candidate Starts for Derek_232:
(16, 132133), (Start: 22 @132202 has 184 MA's), (27, 132223), (58, 132397), (63, 132412), (109, 132565), (117, 132613),

Gene: Dessert_237 Start: 131201, Stop: 131668, Start Num: 22
Candidate Starts for Dessert_237:
(16, 131132), (Start: 22 @131201 has 184 MA's), (27, 131222), (58, 131396), (63, 131411), (109, 131564), (117, 131612),

Gene: Devonte_54 Start: 48085, Stop: 47612, Start Num: 23
Candidate Starts for Devonte_54:
(Start: 23 @48085 has 93 MA's), (31, 48049), (67, 47857), (82, 47821), (89, 47794),

Gene: Dietrick_225 Start: 130065, Stop: 130532, Start Num: 22
Candidate Starts for Dietrick_225:
(16, 129996), (Start: 22 @130065 has 184 MA's), (27, 130086), (58, 130260), (63, 130275), (109, 130428), (117, 130476),

Gene: DirtMonster_227 Start: 131397, Stop: 131888, Start Num: 21
Candidate Starts for DirtMonster_227:
(16, 131334), (Start: 21 @131397 has 12 MA's), (Start: 22 @131403 has 184 MA's), (27, 131424), (58, 131598), (63, 131613), (109, 131766), (117, 131814),

Gene: Domi_230 Start: 131404, Stop: 131871, Start Num: 22
Candidate Starts for Domi_230:
(16, 131335), (Start: 22 @131404 has 184 MA's), (27, 131425), (58, 131599), (63, 131614), (109, 131767), (117, 131815),

Gene: DrPhinkDaddy_233 Start: 132629, Stop: 133096, Start Num: 22

Candidate Starts for DrPhinkDaddy_233:
(16, 132560), (Start: 22 @132629 has 184 MA's), (27, 132650), (58, 132824), (63, 132839), (109, 132992), (117, 133040),

Gene: Drazdys_233 Start: 132209, Stop: 132676, Start Num: 22
Candidate Starts for Drazdys_233:
(16, 132140), (Start: 22 @132209 has 184 MA's), (27, 132230), (58, 132404), (63, 132419), (109, 132572), (117, 132620),

Gene: Duckfeet_229 Start: 131017, Stop: 131484, Start Num: 22
Candidate Starts for Duckfeet_229:
(16, 130948), (Start: 22 @131017 has 184 MA's), (27, 131038), (58, 131212), (63, 131227), (109, 131380), (117, 131428),

Gene: Eaglehorse_54 Start: 47667, Stop: 47176, Start Num: 20
Candidate Starts for Eaglehorse_54:
(Start: 20 @47667 has 36 MA's), (52, 47508), (82, 47388), (84, 47385), (87, 47370), (90, 47358), (106, 47301), (107, 47295), (112, 47268), (134, 47184),

Gene: EasyJones_237 Start: 130585, Stop: 131052, Start Num: 22
Candidate Starts for EasyJones_237:
(16, 130516), (Start: 22 @130585 has 184 MA's), (27, 130606), (58, 130780), (63, 130795), (109, 130948), (117, 130996),

Gene: EggyFarm_244 Start: 133430, Stop: 133897, Start Num: 22
Candidate Starts for EggyFarm_244:
(Start: 22 @133430 has 184 MA's), (27, 133451), (58, 133625), (63, 133640), (76, 133679), (109, 133793), (117, 133841),

Gene: EmToTheThree_236 Start: 131968, Stop: 132435, Start Num: 22
Candidate Starts for EmToTheThree_236:
(16, 131899), (Start: 22 @131968 has 184 MA's), (27, 131989), (58, 132163), (63, 132178), (109, 132331), (117, 132379),

Gene: EmmaElysia_241 Start: 133080, Stop: 133547, Start Num: 22
Candidate Starts for EmmaElysia_241:
(16, 133011), (Start: 22 @133080 has 184 MA's), (27, 133101), (58, 133275), (63, 133290), (109, 133443), (117, 133491),

Gene: Epah_49 Start: 47622, Stop: 47143, Start Num: 23
Candidate Starts for Epah_49:
(Start: 23 @47622 has 93 MA's), (48, 47490), (90, 47325), (94, 47313), (107, 47262), (132, 47157), (133, 47154),

Gene: Erdmann_236 Start: 131936, Stop: 132403, Start Num: 22
Candidate Starts for Erdmann_236:
(16, 131867), (Start: 22 @131936 has 184 MA's), (27, 131957), (58, 132131), (63, 132146), (109, 132299), (117, 132347),

Gene: ErnieJ_229 Start: 128764, Stop: 129231, Start Num: 22
Candidate Starts for ErnieJ_229:
(16, 128695), (Start: 22 @128764 has 184 MA's), (27, 128785), (58, 128959), (63, 128974), (109, 129127), (117, 129175),

Gene: Essence_234 Start: 131421, Stop: 131888, Start Num: 22
Candidate Starts for Essence_234:
(16, 131352), (Start: 22 @131421 has 184 MA's), (27, 131442), (58, 131616), (63, 131631), (109, 131784), (117, 131832),

Gene: Evaa_46 Start: 41052, Stop: 40558, Start Num: 23
Candidate Starts for Evaa_46:
(Start: 23 @41052 has 93 MA's), (45, 40932), (53, 40884), (68, 40812), (81, 40770), (89, 40740), (107, 40674), (126, 40587),

Gene: Ewok_235 Start: 131879, Stop: 132346, Start Num: 22
Candidate Starts for Ewok_235:
(16, 131810), (Start: 22 @131879 has 184 MA's), (27, 131900), (58, 132074), (63, 132089), (109, 132242), (117, 132290),

Gene: Fanaw_49 Start: 48294, Stop: 47833, Start Num: 23
Candidate Starts for Fanaw_49:
(3, 48801), (5, 48489), (Start: 23 @48294 has 93 MA's), (40, 48201), (51, 48153), (75, 48057), (78, 48048), (87, 48018), (90, 48006), (92, 48000), (100, 47976), (107, 47943), (111, 47919), (112, 47916), (123, 47868), (130, 47844),

Gene: Faze9_53 Start: 47761, Stop: 47270, Start Num: 20
Candidate Starts for Faze9_53:
(Start: 20 @47761 has 36 MA's), (52, 47602), (84, 47479), (87, 47464), (106, 47395), (107, 47389), (112, 47362), (134, 47278),

Gene: FeliMaine_2 Start: 579, Stop: 1058, Start Num: 26
Candidate Starts for FeliMaine_2:
(Start: 21 @558 has 12 MA's), (Start: 24 @570 has 1 MA's), (Start: 26 @579 has 40 MA's), (56, 756), (61, 780), (62, 786), (63, 789), (67, 801), (69, 807), (83, 849), (104, 924), (113, 975),

Gene: FelixTres_49 Start: 42586, Stop: 42119, Start Num: 23
Candidate Starts for FelixTres_49:
(Start: 23 @42586 has 93 MA's), (46, 42457), (78, 42343), (106, 42247), (107, 42241), (117, 42190), (126, 42154),

Gene: Fixie_228 Start: 132201, Stop: 132668, Start Num: 22
Candidate Starts for Fixie_228:
(16, 132132), (Start: 22 @132201 has 184 MA's), (27, 132222), (58, 132396), (63, 132411), (109, 132564), (117, 132612),

Gene: Flabslab_232 Start: 129100, Stop: 129585, Start Num: 22
Candidate Starts for Flabslab_232:
(16, 129031), (Start: 21 @129094 has 12 MA's), (Start: 22 @129100 has 184 MA's), (27, 129121), (58, 129295), (63, 129310), (109, 129463), (117, 129511),

Gene: Fludd_236 Start: 130297, Stop: 130764, Start Num: 22
Candidate Starts for Fludd_236:
(16, 130228), (Start: 22 @130297 has 184 MA's), (27, 130318), (58, 130492), (63, 130507), (109, 130660), (117, 130708),

Gene: Fongie_236 Start: 131877, Stop: 132344, Start Num: 22

Candidate Starts for Fongie_236:
(16, 131808), (Start: 22 @131877 has 184 MA's), (27, 131898), (58, 132072), (63, 132087), (109, 132240), (117, 132288),

Gene: ForDig_48 Start: 46304, Stop: 45825, Start Num: 23
Candidate Starts for ForDig_48:
(Start: 23 @46304 has 93 MA's), (107, 45944), (132, 45839), (133, 45836),

Gene: Fortunato_50 Start: 48287, Stop: 47805, Start Num: 23
Candidate Starts for Fortunato_50:
(4, 48473), (6, 48443), (10, 48350), (Start: 23 @48287 has 93 MA's), (33, 48236), (48, 48155), (78, 48029), (87, 47999), (102, 47951), (107, 47924), (132, 47819), (133, 47816),

Gene: FoxtrotP1_234 Start: 132522, Stop: 132989, Start Num: 22
Candidate Starts for FoxtrotP1_234:
(16, 132453), (Start: 22 @132522 has 184 MA's), (27, 132543), (58, 132717), (63, 132732), (109, 132885), (117, 132933),

Gene: FrayBell_239 Start: 130485, Stop: 130952, Start Num: 22
Candidate Starts for FrayBell_239:
(16, 130416), (Start: 22 @130485 has 184 MA's), (27, 130506), (58, 130680), (63, 130695), (109, 130848), (117, 130896),

Gene: Frederick_50 Start: 48247, Stop: 47768, Start Num: 23
Candidate Starts for Frederick_50:
(Start: 23 @48247 has 93 MA's), (48, 48115), (90, 47950), (94, 47938), (102, 47914), (107, 47887), (132, 47782), (133, 47779),

Gene: FrenchFry_54 Start: 47740, Stop: 47249, Start Num: 20
Candidate Starts for FrenchFry_54:
(Start: 20 @47740 has 36 MA's), (52, 47581), (82, 47461), (84, 47458), (87, 47443), (90, 47431), (106, 47374), (107, 47368), (112, 47341), (134, 47257),

Gene: Fresco_47 Start: 40708, Stop: 40232, Start Num: 26
Candidate Starts for Fresco_47:
(7, 40930), (13, 40804), (Start: 26 @40708 has 40 MA's), (87, 40429), (90, 40417), (96, 40390), (110, 40333), (111, 40321), (123, 40264),

Gene: FudgeTart_230 Start: 131026, Stop: 131493, Start Num: 22
Candidate Starts for FudgeTart_230:
(16, 130957), (Start: 22 @131026 has 184 MA's), (27, 131047), (58, 131221), (63, 131236), (109, 131389), (117, 131437),

Gene: Funsized_56 Start: 50763, Stop: 50284, Start Num: 23
Candidate Starts for Funsized_56:
(Start: 23 @50763 has 93 MA's), (57, 50568), (78, 50514), (90, 50472), (117, 50349), (124, 50319),

Gene: Fury_12 Start: 5438, Stop: 5917, Start Num: 26
Candidate Starts for Fury_12:
(17, 5363), (Start: 26 @5438 has 40 MA's), (27, 5450), (49, 5567), (54, 5597), (97, 5762), (99, 5765), (115, 5855),

Gene: GMA2_47 Start: 48456, Stop: 47995, Start Num: 28

Candidate Starts for GMA2_47:
(28, 48456), (66, 48252), (78, 48222), (88, 48189), (99, 48153), (112, 48087), (117, 48063), (121, 48045),

Gene: GRU1_93 Start: 64270, Stop: 64728, Start Num: 26
Candidate Starts for GRU1_93:
(Start: 26 @64270 has 40 MA's), (27, 64282), (41, 64360), (50, 64402), (99, 64582), (115, 64672), (129, 64717),

Gene: GTE8_91 Start: 66184, Stop: 66642, Start Num: 26
Candidate Starts for GTE8_91:
(11, 66049), (18, 66157), (Start: 26 @66184 has 40 MA's), (27, 66196), (34, 66232), (50, 66316), (82, 66436), (103, 66514), (115, 66586), (129, 66631),

Gene: Gabriel_239 Start: 130456, Stop: 130923, Start Num: 22
Candidate Starts for Gabriel_239:
(16, 130387), (Start: 22 @130456 has 184 MA's), (27, 130477), (58, 130651), (63, 130666), (109, 130819), (117, 130867),

Gene: Gadjet_56 Start: 48745, Stop: 48272, Start Num: 23
Candidate Starts for Gadjet_56:
(Start: 23 @48745 has 93 MA's), (31, 48709), (59, 48541), (67, 48517), (73, 48508), (82, 48481), (89, 48454), (127, 48301),

Gene: Gamgam_238 Start: 130813, Stop: 131280, Start Num: 22
Candidate Starts for Gamgam_238:
(16, 130744), (Start: 22 @130813 has 184 MA's), (27, 130834), (58, 131008), (63, 131023), (109, 131176), (117, 131224),

Gene: Gattaca_4 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for Gattaca_4:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: Gervas_56 Start: 48853, Stop: 48380, Start Num: 23
Candidate Starts for Gervas_56:
(Start: 23 @48853 has 93 MA's), (31, 48817), (67, 48625), (82, 48589), (89, 48562),

Gene: Ghost_235 Start: 131437, Stop: 131904, Start Num: 22
Candidate Starts for Ghost_235:
(16, 131368), (Start: 22 @131437 has 184 MA's), (27, 131458), (58, 131632), (63, 131647), (109, 131800), (117, 131848),

Gene: GinPorsche_50 Start: 47622, Stop: 47143, Start Num: 23
Candidate Starts for GinPorsche_50:
(Start: 23 @47622 has 93 MA's), (48, 47490), (90, 47325), (94, 47313), (107, 47262), (132, 47157), (133, 47154),

Gene: Gizmo_241 Start: 133853, Stop: 134320, Start Num: 22
Candidate Starts for Gizmo_241:
(16, 133784), (Start: 22 @133853 has 184 MA's), (27, 133874), (58, 134048), (63, 134063), (109, 134216), (117, 134264),

Gene: Glass_54 Start: 47745, Stop: 47254, Start Num: 20
Candidate Starts for Glass_54:
(Start: 20 @47745 has 36 MA's), (52, 47586), (82, 47466), (84, 47463), (87, 47448), (90, 47436), (106, 47379), (107, 47373), (112, 47346), (134, 47262),

Gene: GlenHope_56 Start: 48408, Stop: 47935, Start Num: 23
Candidate Starts for GlenHope_56:
(Start: 23 @48408 has 93 MA's), (31, 48372), (67, 48180), (82, 48144), (89, 48117),

Gene: Glubnar_56 Start: 48404, Stop: 47931, Start Num: 23
Candidate Starts for Glubnar_56:
(Start: 23 @48404 has 93 MA's), (31, 48368), (67, 48176), (82, 48140), (89, 48113),

Gene: GlutenPhree_237 Start: 130824, Stop: 131291, Start Num: 22
Candidate Starts for GlutenPhree_237:
(16, 130755), (Start: 22 @130824 has 184 MA's), (27, 130845), (58, 131019), (63, 131034), (109, 131187), (117, 131235),

Gene: Godines_54 Start: 47697, Stop: 47206, Start Num: 20
Candidate Starts for Godines_54:
(Start: 20 @47697 has 36 MA's), (52, 47538), (84, 47415), (87, 47400), (90, 47388), (106, 47331), (107, 47325), (112, 47298), (134, 47214),

Gene: GoldenSnow_236 Start: 132196, Stop: 132663, Start Num: 22
Candidate Starts for GoldenSnow_236:
(16, 132127), (Start: 22 @132196 has 184 MA's), (27, 132217), (58, 132391), (63, 132406), (109, 132559), (117, 132607),

Gene: GoongGoong_3 Start: 802, Stop: 1290, Start Num: 24
Candidate Starts for GoongGoong_3:
(Start: 21 @790 has 12 MA's), (Start: 24 @802 has 1 MA's), (Start: 26 @811 has 40 MA's), (56, 988), (61, 1012), (62, 1018), (63, 1021), (67, 1033), (69, 1039), (83, 1081), (104, 1156), (113, 1207),

Gene: Grasshills_243 Start: 133429, Stop: 133896, Start Num: 22
Candidate Starts for Grasshills_243:
(Start: 22 @133429 has 184 MA's), (27, 133450), (58, 133624), (63, 133639), (76, 133678), (109, 133792), (117, 133840),

Gene: Grungle_218 Start: 128759, Stop: 129226, Start Num: 22
Candidate Starts for Grungle_218:
(16, 128690), (Start: 22 @128759 has 184 MA's), (27, 128780), (58, 128954), (63, 128969), (109, 129122), (117, 129170),

Gene: Gustav_59 Start: 40519, Stop: 40055, Start Num: 26
Candidate Starts for Gustav_59:
(Start: 26 @40519 has 40 MA's), (65, 40309), (90, 40243), (98, 40213), (123, 40090),

Gene: Guwapp_232 Start: 130271, Stop: 130738, Start Num: 22
Candidate Starts for Guwapp_232:
(16, 130202), (Start: 22 @130271 has 184 MA's), (27, 130292), (58, 130466), (63, 130481), (109, 130634), (117, 130682),

Gene: Halfpint_54 Start: 48229, Stop: 47756, Start Num: 23

Candidate Starts for Halfpint_54:
(Start: 23 @48229 has 93 MA's), (31, 48193), (67, 48001), (82, 47965), (89, 47938), (127, 47785),

Gene: Halldule_228 Start: 129941, Stop: 130408, Start Num: 22
Candidate Starts for Halldule_228:
(16, 129872), (Start: 22 @129941 has 184 MA's), (27, 129962), (58, 130136), (63, 130151), (109, 130304), (117, 130352),

Gene: Hally898_49 Start: 47637, Stop: 47158, Start Num: 23
Candidate Starts for Hally898_49:
(Start: 23 @47637 has 93 MA's), (48, 47505), (90, 47340), (94, 47328), (107, 47277), (132, 47172), (133, 47169),

Gene: Hangman_49 Start: 48338, Stop: 47877, Start Num: 23
Candidate Starts for Hangman_49:
(Start: 23 @48338 has 93 MA's), (40, 48245), (51, 48197), (72, 48110), (75, 48101), (78, 48092), (87, 48062), (90, 48050), (100, 48020), (107, 47987), (111, 47963), (112, 47960), (123, 47912), (130, 47888),

Gene: HarveySr_54 Start: 48081, Stop: 47608, Start Num: 23
Candidate Starts for HarveySr_54:
(Start: 23 @48081 has 93 MA's), (31, 48045), (67, 47853), (82, 47817), (89, 47790),

Gene: Heath_49 Start: 48246, Stop: 47785, Start Num: 23
Candidate Starts for Heath_49:
(Start: 23 @48246 has 93 MA's), (40, 48153), (51, 48105), (75, 48009), (78, 48000), (87, 47970), (90, 47958), (100, 47928), (107, 47895), (111, 47871), (112, 47868), (123, 47820), (130, 47796),

Gene: Heathcliff_55 Start: 48375, Stop: 47902, Start Num: 23
Candidate Starts for Heathcliff_55:
(Start: 23 @48375 has 93 MA's), (31, 48339), (59, 48171), (67, 48147), (73, 48138), (82, 48111), (89, 48084), (127, 47931),

Gene: Hedgerow_54 Start: 47754, Stop: 47263, Start Num: 20
Candidate Starts for Hedgerow_54:
(Start: 20 @47754 has 36 MA's), (52, 47595), (82, 47475), (84, 47472), (87, 47457), (90, 47445), (106, 47388), (107, 47382), (112, 47355), (134, 47271),

Gene: Holeinone_54 Start: 47605, Stop: 47114, Start Num: 20
Candidate Starts for Holeinone_54:
(Start: 20 @47605 has 36 MA's), (52, 47446), (82, 47326), (84, 47323), (87, 47308), (90, 47296), (106, 47239), (107, 47233), (112, 47206), (134, 47122),

Gene: HomeFry_11 Start: 4943, Stop: 5422, Start Num: 26
Candidate Starts for HomeFry_11:
(Start: 26 @4943 has 40 MA's), (29, 4964), (42, 5036), (49, 5072), (54, 5102), (97, 5267), (99, 5270), (115, 5360),

Gene: Hosp_046 Start: 44495, Stop: 44016, Start Num: 23
Candidate Starts for Hosp_046:
(Start: 23 @44495 has 93 MA's), (Start: 26 @44489 has 40 MA's), (48, 44363), (84, 44225), (90, 44198), (107, 44135), (132, 44030),

Gene: Huphlepuff_2 Start: 558, Stop: 1058, Start Num: 21
Candidate Starts for Huphlepuff_2:
(Start: 21 @558 has 12 MA's), (Start: 24 @570 has 1 MA's), (Start: 26 @579 has 40 MA's), (56, 756), (61, 780), (62, 786), (63, 789), (67, 801), (69, 807), (83, 849), (104, 924), (113, 975),

Gene: HyRo_221 Start: 130778, Stop: 131269, Start Num: 21
Candidate Starts for HyRo_221:
(16, 130715), (Start: 21 @130778 has 12 MA's), (Start: 22 @130784 has 184 MA's), (27, 130805), (58, 130979), (63, 130994), (109, 131147), (117, 131195),

Gene: Hydro_50 Start: 48672, Stop: 48211, Start Num: 23
Candidate Starts for Hydro_50:
(2, 49329), (3, 49179), (Start: 23 @48672 has 93 MA's), (40, 48579), (51, 48531), (75, 48435), (78, 48426), (90, 48384), (92, 48378), (100, 48354), (107, 48321), (111, 48297), (112, 48294), (123, 48246), (130, 48222),

Gene: I3_246 Start: 132627, Stop: 133094, Start Num: 22
Candidate Starts for I3_246:
(16, 132558), (Start: 22 @132627 has 184 MA's), (27, 132648), (58, 132822), (63, 132837), (109, 132990), (117, 133038),

Gene: IkeLoa_230 Start: 131169, Stop: 131636, Start Num: 22
Candidate Starts for IkeLoa_230:
(16, 131100), (Start: 22 @131169 has 184 MA's), (27, 131190), (58, 131364), (63, 131379), (109, 131532), (117, 131580),

Gene: Imvubu_48 Start: 45835, Stop: 45356, Start Num: 23
Candidate Starts for Imvubu_48:
(Start: 23 @45835 has 93 MA's), (49, 45700), (78, 45577), (82, 45565), (87, 45547), (90, 45535), (102, 45499), (107, 45472), (116, 45424), (132, 45367),

Gene: Indlovu_52 Start: 48321, Stop: 47821, Start Num: 23
Candidate Starts for Indlovu_52:
(Start: 23 @48321 has 93 MA's), (38, 48243), (55, 48147), (79, 48063), (102, 47988), (105, 47970), (107, 47961), (114, 47919), (125, 47877),

Gene: InigoMontoya_239 Start: 131487, Stop: 131954, Start Num: 22
Candidate Starts for InigoMontoya_239:
(16, 131418), (Start: 22 @131487 has 184 MA's), (27, 131508), (58, 131682), (63, 131697), (109, 131850), (117, 131898), (131, 131949),

Gene: InterFolia_237 Start: 132290, Stop: 132757, Start Num: 22
Candidate Starts for InterFolia_237:
(16, 132221), (Start: 22 @132290 has 184 MA's), (27, 132311), (58, 132485), (63, 132500), (109, 132653), (117, 132701),

Gene: Iota_233 Start: 131199, Stop: 131666, Start Num: 22
Candidate Starts for Iota_233:
(16, 131130), (Start: 22 @131199 has 184 MA's), (27, 131220), (58, 131394), (63, 131409), (109, 131562), (117, 131610),

Gene: Issimir_229 Start: 131125, Stop: 131592, Start Num: 22
Candidate Starts for Issimir_229:

(16, 131056), (Start: 22 @131125 has 184 MA's), (27, 131146), (58, 131320), (63, 131335), (109, 131488), (117, 131536),

Gene: ItsyBitsy1_54 Start: 47622, Stop: 47131, Start Num: 20
Candidate Starts for ItsyBitsy1_54:
(Start: 20 @47622 has 36 MA's), (52, 47463), (82, 47343), (84, 47340), (87, 47325), (90, 47313), (106, 47256), (107, 47250), (112, 47223), (134, 47139),

Gene: Izajani_232 Start: 132019, Stop: 132486, Start Num: 22
Candidate Starts for Izajani_232:
(16, 131950), (Start: 22 @132019 has 184 MA's), (27, 132040), (58, 132214), (63, 132229), (109, 132382), (117, 132430),

Gene: JAMaL_50 Start: 48798, Stop: 48337, Start Num: 23
Candidate Starts for JAMaL_50:
(Start: 23 @48798 has 93 MA's), (40, 48705), (51, 48657), (75, 48561), (78, 48552), (87, 48522), (90, 48510), (100, 48480), (107, 48447), (111, 48423), (112, 48420), (123, 48372), (130, 48348),

Gene: JPickles_233 Start: 130175, Stop: 130642, Start Num: 22
Candidate Starts for JPickles_233:
(16, 130106), (Start: 22 @130175 has 184 MA's), (27, 130196), (58, 130370), (63, 130385), (109, 130538), (117, 130586),

Gene: Jackstina_51 Start: 48334, Stop: 47861, Start Num: 23
Candidate Starts for Jackstina_51:
(12, 48460), (15, 48409), (Start: 23 @48334 has 93 MA's), (31, 48298), (67, 48106), (82, 48070), (89, 48043),

Gene: JaguarMi_52 Start: 49739, Stop: 49278, Start Num: 23
Candidate Starts for JaguarMi_52:
(Start: 23 @49739 has 93 MA's), (40, 49646), (51, 49598), (75, 49502), (78, 49493), (87, 49463), (90, 49451), (92, 49445), (100, 49421), (105, 49397), (107, 49388), (111, 49364), (112, 49361), (123, 49313), (130, 49289),

Gene: Janiyra_239 Start: 131712, Stop: 132179, Start Num: 22
Candidate Starts for Janiyra_239:
(16, 131643), (Start: 22 @131712 has 184 MA's), (27, 131733), (58, 131907), (63, 131922), (109, 132075), (117, 132123),

Gene: JayJay_238 Start: 131602, Stop: 132087, Start Num: 22
Candidate Starts for JayJay_238:
(16, 131533), (Start: 21 @131596 has 12 MA's), (Start: 22 @131602 has 184 MA's), (27, 131623), (58, 131797), (63, 131812), (109, 131965), (117, 132013),

Gene: Jaygup_233 Start: 131346, Stop: 131813, Start Num: 22
Candidate Starts for Jaygup_233:
(16, 131277), (Start: 22 @131346 has 184 MA's), (27, 131367), (58, 131541), (63, 131556), (109, 131709), (117, 131757),

Gene: Jedediah_237 Start: 132399, Stop: 132866, Start Num: 22
Candidate Starts for Jedediah_237:
(16, 132330), (Start: 22 @132399 has 184 MA's), (27, 132420), (58, 132594), (63, 132609), (109, 132762), (117, 132810),

Gene: JellyBelly_46 Start: 40077, Stop: 39601, Start Num: 26
Candidate Starts for JellyBelly_46:
(Start: 26 @40077 has 40 MA's), (90, 39786), (96, 39759), (111, 39690), (123, 39633),

Gene: Jemmno_236 Start: 131118, Stop: 131585, Start Num: 22
Candidate Starts for Jemmno_236:
(16, 131049), (Start: 22 @131118 has 184 MA's), (27, 131139), (58, 131313), (63, 131328), (109, 131481), (117, 131529),

Gene: Jessibeth14_236 Start: 132594, Stop: 133061, Start Num: 22
Candidate Starts for Jessibeth14_236:
(16, 132525), (Start: 22 @132594 has 184 MA's), (27, 132615), (58, 132789), (63, 132804), (109, 132957), (117, 133005),

Gene: Jezreel_233 Start: 131663, Stop: 132130, Start Num: 22
Candidate Starts for Jezreel_233:
(16, 131594), (Start: 22 @131663 has 184 MA's), (27, 131684), (58, 131858), (63, 131873), (109, 132026), (117, 132074),

Gene: JigglyPuff_242 Start: 133089, Stop: 133556, Start Num: 22
Candidate Starts for JigglyPuff_242:
(16, 133020), (Start: 22 @133089 has 184 MA's), (27, 133110), (58, 133284), (63, 133299), (109, 133452), (117, 133500),

Gene: JoieB_3 Start: 780, Stop: 1280, Start Num: 21
Candidate Starts for JoieB_3:
(Start: 21 @780 has 12 MA's), (Start: 24 @792 has 1 MA's), (Start: 26 @801 has 40 MA's), (56, 978), (61, 1002), (62, 1008), (63, 1011), (67, 1023), (69, 1029), (83, 1071), (104, 1146), (113, 1197),

Gene: Jolie1_048 Start: 46283, Stop: 45804, Start Num: 23
Candidate Starts for Jolie1_048:
(Start: 23 @46283 has 93 MA's), (Start: 26 @46277 has 40 MA's), (48, 46151), (90, 45986), (107, 45923), (132, 45818),

Gene: JoyceMaria_49 Start: 48230, Stop: 47769, Start Num: 23
Candidate Starts for JoyceMaria_49:
(Start: 23 @48230 has 93 MA's), (40, 48137), (51, 48089), (72, 48002), (75, 47993), (78, 47984), (87, 47954), (90, 47942), (100, 47912), (107, 47879), (111, 47855), (112, 47852), (123, 47804), (130, 47780),

Gene: JulietS_225 Start: 128698, Stop: 129165, Start Num: 22
Candidate Starts for JulietS_225:
(16, 128629), (Start: 22 @128698 has 184 MA's), (27, 128719), (58, 128893), (63, 128908), (109, 129061), (117, 129109),

Gene: JustHall_230 Start: 130648, Stop: 131115, Start Num: 22
Candidate Starts for JustHall_230:
(16, 130579), (Start: 22 @130648 has 184 MA's), (27, 130669), (58, 130843), (63, 130858), (109, 131011), (117, 131059),

Gene: Kabluna_9 Start: 4732, Stop: 5190, Start Num: 26
Candidate Starts for Kabluna_9:

(Start: 26 @4732 has 40 MA's), (50, 4864), (60, 4927), (108, 5086), (115, 5134), (129, 5179),

Gene: Kaleb_54 Start: 47769, Stop: 47278, Start Num: 20
Candidate Starts for Kaleb_54:
(Start: 20 @47769 has 36 MA's), (52, 47610), (82, 47490), (84, 47487), (87, 47472), (90, 47460), (106, 47403), (107, 47397), (112, 47370), (134, 47286),

Gene: Kamiyu_55 Start: 48385, Stop: 47912, Start Num: 23
Candidate Starts for Kamiyu_55:
(Start: 23 @48385 has 93 MA's), (31, 48349), (67, 48157), (82, 48121), (89, 48094),

Gene: Kamryn_235 Start: 132238, Stop: 132705, Start Num: 22
Candidate Starts for Kamryn_235:
(16, 132169), (Start: 22 @132238 has 184 MA's), (27, 132259), (58, 132433), (63, 132448), (109, 132601), (117, 132649),

Gene: KayaCho_47 Start: 46059, Stop: 45589, Start Num: 23
Candidate Starts for KayaCho_47:
(Start: 23 @46059 has 93 MA's), (69, 45837), (75, 45819), (78, 45810), (102, 45732), (107, 45705), (111, 45681), (114, 45663), (123, 45630),

Gene: Kboogie_240 Start: 131277, Stop: 131744, Start Num: 22
Candidate Starts for Kboogie_240:
(16, 131208), (Start: 22 @131277 has 184 MA's), (27, 131298), (58, 131472), (63, 131487), (109, 131640), (117, 131688),

Gene: Khaleesi_235 Start: 132061, Stop: 132528, Start Num: 22
Candidate Starts for Khaleesi_235:
(16, 131992), (Start: 22 @132061 has 184 MA's), (27, 132082), (58, 132256), (63, 132271), (109, 132424), (117, 132472),

Gene: Kheth_54 Start: 47658, Stop: 47167, Start Num: 20
Candidate Starts for Kheth_54:
(Start: 20 @47658 has 36 MA's), (52, 47499), (82, 47379), (84, 47376), (87, 47361), (90, 47349), (106, 47292), (107, 47286), (112, 47259), (134, 47175),

Gene: Knocker_55 Start: 50204, Stop: 49725, Start Num: 23
Candidate Starts for Knocker_55:
(9, 50315), (14, 50255), (Start: 23 @50204 has 93 MA's), (47, 50078), (51, 50060), (70, 49973), (80, 49943), (84, 49934), (90, 49907), (107, 49844), (109, 49841), (120, 49778), (122, 49772), (123, 49769), (128, 49751), (134, 49733),

Gene: Koguma_235 Start: 130918, Stop: 131385, Start Num: 22
Candidate Starts for Koguma_235:
(16, 130849), (Start: 22 @130918 has 184 MA's), (27, 130939), (58, 131113), (63, 131128), (109, 131281), (117, 131329),

Gene: Kolhan_54 Start: 47622, Stop: 47131, Start Num: 20
Candidate Starts for Kolhan_54:
(Start: 20 @47622 has 36 MA's), (52, 47463), (82, 47343), (84, 47340), (87, 47325), (90, 47313), (106, 47256), (107, 47250), (112, 47223), (134, 47139),

Gene: Kronus_55 Start: 49462, Stop: 48989, Start Num: 23

Candidate Starts for Kronus_55:
(Start: 23 @49462 has 93 MA's), (31, 49426), (67, 49234), (82, 49198), (89, 49171),

Gene: LRRHood_228 Start: 130270, Stop: 130737, Start Num: 22
Candidate Starts for LRRHood_228:
(16, 130201), (Start: 22 @130270 has 184 MA's), (27, 130291), (58, 130465), (63, 130480), (109, 130633), (117, 130681),

Gene: Labradorite_237 Start: 130837, Stop: 131304, Start Num: 22
Candidate Starts for Labradorite_237:
(16, 130768), (Start: 22 @130837 has 184 MA's), (27, 130858), (58, 131032), (63, 131047), (109, 131200), (117, 131248),

Gene: Lambano_49 Start: 47637, Stop: 47158, Start Num: 23
Candidate Starts for Lambano_49:
(Start: 23 @47637 has 93 MA's), (48, 47505), (90, 47340), (94, 47328), (107, 47277), (132, 47172), (133, 47169),

Gene: Lars_54 Start: 47729, Stop: 47238, Start Num: 20
Candidate Starts for Lars_54:
(Start: 20 @47729 has 36 MA's), (52, 47570), (82, 47450), (84, 47447), (87, 47432), (90, 47420), (106, 47363), (107, 47357), (112, 47330), (134, 47246),

Gene: Latch_236 Start: 130823, Stop: 131290, Start Num: 22
Candidate Starts for Latch_236:
(16, 130754), (Start: 22 @130823 has 184 MA's), (27, 130844), (58, 131018), (63, 131033), (109, 131186), (117, 131234),

Gene: Laurie_53 Start: 47114, Stop: 46623, Start Num: 20
Candidate Starts for Laurie_53:
(Start: 20 @47114 has 36 MA's), (52, 46955), (84, 46832), (87, 46817), (90, 46805), (106, 46748), (107, 46742), (112, 46715), (134, 46631),

Gene: Lee7_240 Start: 133475, Stop: 133942, Start Num: 22
Candidate Starts for Lee7_240:
(16, 133406), (Start: 22 @133475 has 184 MA's), (27, 133496), (58, 133670), (63, 133685), (109, 133838), (117, 133886),

Gene: Lephleur_54 Start: 47635, Stop: 47144, Start Num: 20
Candidate Starts for Lephleur_54:
(Start: 20 @47635 has 36 MA's), (52, 47476), (82, 47356), (84, 47353), (87, 47338), (90, 47326), (106, 47269), (107, 47263), (112, 47236), (134, 47152),

Gene: LestyG_54 Start: 48098, Stop: 47625, Start Num: 23
Candidate Starts for LestyG_54:
(Start: 23 @48098 has 93 MA's), (31, 48062), (67, 47870), (82, 47834), (89, 47807),

Gene: Lethe_234 Start: 132714, Stop: 133181, Start Num: 22
Candidate Starts for Lethe_234:
(16, 132645), (Start: 22 @132714 has 184 MA's), (27, 132735), (58, 132909), (63, 132924), (109, 133077), (117, 133125),

Gene: LifeSavor_236 Start: 132051, Stop: 132518, Start Num: 22

Candidate Starts for LifeSavor_236:
(16, 131982), (Start: 22 @132051 has 184 MA's), (27, 132072), (58, 132246), (63, 132261), (109, 132414), (117, 132462),

Gene: Ligma_47 Start: 40708, Stop: 40232, Start Num: 26
Candidate Starts for Ligma_47:
(7, 40930), (13, 40804), (Start: 26 @40708 has 40 MA's), (87, 40429), (90, 40417), (96, 40390), (110, 40333), (111, 40321), (123, 40264),

Gene: LilMcDreamy_52 Start: 48261, Stop: 47788, Start Num: 23
Candidate Starts for LilMcDreamy_52:
(Start: 23 @48261 has 93 MA's), (37, 48186), (51, 48117), (54, 48096), (55, 48087), (87, 47976), (107, 47901), (114, 47859),

Gene: LilSmirk_54 Start: 47632, Stop: 47141, Start Num: 20
Candidate Starts for LilSmirk_54:
(Start: 20 @47632 has 36 MA's), (52, 47473), (82, 47353), (84, 47350), (87, 47335), (90, 47323), (106, 47266), (107, 47260), (112, 47233), (134, 47149),

Gene: Lilbit_2 Start: 558, Stop: 1058, Start Num: 21
Candidate Starts for Lilbit_2:
(Start: 21 @558 has 12 MA's), (Start: 24 @570 has 1 MA's), (Start: 26 @579 has 40 MA's), (56, 756), (61, 780), (62, 786), (63, 789), (67, 801), (69, 807), (83, 849), (104, 924), (113, 975),

Gene: LinStu_234 Start: 130556, Stop: 131041, Start Num: 22
Candidate Starts for LinStu_234:
(16, 130487), (Start: 22 @130556 has 184 MA's), (27, 130577), (58, 130751), (63, 130766), (109, 130919), (117, 130967),

Gene: LittleDigger_49 Start: 47650, Stop: 47171, Start Num: 23
Candidate Starts for LittleDigger_49:
(Start: 23 @47650 has 93 MA's), (48, 47518), (90, 47353), (94, 47341), (107, 47290), (132, 47185), (133, 47182),

Gene: LittleLaf_2 Start: 558, Stop: 1058, Start Num: 21
Candidate Starts for LittleLaf_2:
(Start: 21 @558 has 12 MA's), (Start: 24 @570 has 1 MA's), (Start: 26 @579 has 40 MA's), (56, 756), (61, 780), (62, 786), (63, 789), (67, 801), (69, 807), (83, 849), (104, 924), (113, 975),

Gene: LittleMunchkin_48 Start: 43521, Stop: 43039, Start Num: 23
Candidate Starts for LittleMunchkin_48:
(Start: 23 @43521 has 93 MA's), (51, 43365), (74, 43263), (79, 43248), (81, 43242), (86, 43227), (89, 43212), (101, 43176), (106, 43152), (117, 43095),

Gene: Littleton_239 Start: 132060, Stop: 132527, Start Num: 22
Candidate Starts for Littleton_239:
(16, 131991), (Start: 22 @132060 has 184 MA's), (27, 132081), (58, 132255), (63, 132270), (109, 132423), (117, 132471),

Gene: LizLemon_54 Start: 47751, Stop: 47260, Start Num: 20
Candidate Starts for LizLemon_54:
(Start: 20 @47751 has 36 MA's), (52, 47592), (84, 47469), (87, 47454), (90, 47442), (106, 47385), (107, 47379), (112, 47352), (134, 47268),

Gene: Loanshark_233 Start: 131410, Stop: 131877, Start Num: 22
Candidate Starts for Loanshark_233:
(16, 131341), (Start: 22 @131410 has 184 MA's), (27, 131431), (58, 131605), (63, 131620), (109, 131773), (117, 131821),

Gene: LolaVinca_232 Start: 131720, Stop: 132187, Start Num: 22
Candidate Starts for LolaVinca_232:
(16, 131651), (Start: 22 @131720 has 184 MA's), (27, 131741), (58, 131915), (63, 131930), (109, 132083), (117, 132131),

Gene: Lolalove_51 Start: 48640, Stop: 48179, Start Num: 23
Candidate Starts for Lolalove_51:
(2, 49297), (3, 49147), (5, 48835), (Start: 23 @48640 has 93 MA's), (40, 48547), (51, 48499), (75, 48403), (78, 48394), (90, 48352), (92, 48346), (100, 48322), (107, 48289), (111, 48265), (112, 48262), (123, 48214), (130, 48190),

Gene: LookingGlass_234 Start: 131568, Stop: 132035, Start Num: 22
Candidate Starts for LookingGlass_234:
(16, 131499), (Start: 22 @131568 has 184 MA's), (27, 131589), (58, 131763), (63, 131778), (109, 131931), (117, 131979),

Gene: LordLeafolot_237 Start: 131333, Stop: 131800, Start Num: 22
Candidate Starts for LordLeafolot_237:
(16, 131264), (Start: 22 @131333 has 184 MA's), (27, 131354), (58, 131528), (63, 131543), (109, 131696), (117, 131744),

Gene: Lukilu_225 Start: 132274, Stop: 132741, Start Num: 22
Candidate Starts for Lukilu_225:
(16, 132205), (Start: 22 @132274 has 184 MA's), (27, 132295), (58, 132469), (63, 132484), (109, 132637), (117, 132685),

Gene: Lunareta_235 Start: 132622, Stop: 133107, Start Num: 22
Candidate Starts for Lunareta_235:
(16, 132553), (Start: 21 @132616 has 12 MA's), (Start: 22 @132622 has 184 MA's), (27, 132643), (58, 132817), (63, 132832), (109, 132985), (117, 133033),

Gene: Maby2021_236 Start: 132514, Stop: 132981, Start Num: 22
Candidate Starts for Maby2021_236:
(16, 132445), (Start: 22 @132514 has 184 MA's), (27, 132535), (58, 132709), (63, 132724), (109, 132877), (117, 132925),

Gene: Magpie_49 Start: 48475, Stop: 48014, Start Num: 23
Candidate Starts for Magpie_49:
(5, 48670), (Start: 23 @48475 has 93 MA's), (40, 48382), (51, 48334), (75, 48238), (78, 48229), (87, 48199), (90, 48187), (92, 48181), (100, 48157), (107, 48124), (111, 48100), (112, 48097), (123, 48049), (130, 48025),

Gene: Maguvora_237 Start: 132243, Stop: 132710, Start Num: 22
Candidate Starts for Maguvora_237:
(16, 132174), (Start: 22 @132243 has 184 MA's), (27, 132264), (58, 132438), (63, 132453), (109, 132606), (117, 132654),

Gene: Mangeria_237 Start: 132616, Stop: 133101, Start Num: 22
Candidate Starts for Mangeria_237:
(16, 132547), (Start: 22 @132616 has 184 MA's), (27, 132637), (58, 132811), (63, 132826), (109, 132979), (117, 133027),

Gene: Mariokart_47 Start: 40855, Stop: 40379, Start Num: 26
Candidate Starts for Mariokart_47:
(Start: 26 @40855 has 40 MA's), (90, 40564), (96, 40537), (110, 40480), (111, 40468), (123, 40411),

Gene: Marley1013_56 Start: 49347, Stop: 48874, Start Num: 23
Candidate Starts for Marley1013_56:
(Start: 23 @49347 has 93 MA's), (31, 49311), (67, 49119), (82, 49083), (89, 49056),

Gene: Marlia_56 Start: 48857, Stop: 48384, Start Num: 23
Candidate Starts for Marlia_56:
(Start: 23 @48857 has 93 MA's), (31, 48821), (67, 48629), (82, 48593), (89, 48566),

Gene: Marvin_2 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for Marvin_2:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: MasterPo_54 Start: 47644, Stop: 47153, Start Num: 20
Candidate Starts for MasterPo_54:
(Start: 20 @47644 has 36 MA's), (52, 47485), (84, 47362), (87, 47347), (90, 47335), (106, 47278), (107, 47272), (112, 47245), (134, 47161),

Gene: Matsumoto_234 Start: 131265, Stop: 131732, Start Num: 22
Candidate Starts for Matsumoto_234:
(16, 131196), (Start: 22 @131265 has 184 MA's), (27, 131286), (58, 131460), (63, 131475), (109, 131628), (117, 131676),

Gene: Maturis_232 Start: 131582, Stop: 132073, Start Num: 21
Candidate Starts for Maturis_232:
(16, 131519), (Start: 21 @131582 has 12 MA's), (Start: 22 @131588 has 184 MA's), (27, 131609), (58, 131783), (63, 131798), (109, 131951), (117, 131999),

Gene: Mbo2_59 Start: 47195, Stop: 46707, Start Num: 26
Candidate Starts for Mbo2_59:
(Start: 26 @47195 has 40 MA's), (40, 47108), (73, 46952), (100, 46853), (112, 46790), (119, 46751),

Gene: McGee_237 Start: 131162, Stop: 131629, Start Num: 22
Candidate Starts for McGee_237:
(16, 131093), (Start: 22 @131162 has 184 MA's), (27, 131183), (58, 131357), (63, 131372), (109, 131525), (117, 131573),

Gene: McWolfish_233 Start: 131272, Stop: 131739, Start Num: 22
Candidate Starts for McWolfish_233:
(16, 131203), (Start: 22 @131272 has 184 MA's), (27, 131293), (58, 131467), (63, 131482), (109, 131635), (117, 131683),

Gene: Megamind_233 Start: 131597, Stop: 132064, Start Num: 22
Candidate Starts for Megamind_233:

(16, 131528), (Start: 22 @131597 has 184 MA's), (27, 131618), (58, 131792), (63, 131807), (109, 131960), (117, 132008),

Gene: Melpomini_231 Start: 130357, Stop: 130824, Start Num: 22
Candidate Starts for Melpomini_231:
(16, 130288), (Start: 22 @130357 has 184 MA's), (27, 130378), (58, 130552), (63, 130567), (109, 130720), (117, 130768),

Gene: MerCougar_8 Start: 5083, Stop: 5541, Start Num: 26
Candidate Starts for MerCougar_8:
(Start: 26 @5083 has 40 MA's), (38, 5155), (50, 5215), (108, 5437), (115, 5485), (129, 5530),

Gene: MikeLiesIn_236 Start: 132733, Stop: 133200, Start Num: 22
Candidate Starts for MikeLiesIn_236:
(16, 132664), (Start: 22 @132733 has 184 MA's), (27, 132754), (58, 132928), (63, 132943), (109, 133096), (117, 133144),

Gene: Mikro_230 Start: 133245, Stop: 133712, Start Num: 22
Candidate Starts for Mikro_230:
(16, 133176), (Start: 22 @133245 has 184 MA's), (27, 133266), (58, 133440), (63, 133455), (109, 133608), (117, 133656),

Gene: Minnow_50 Start: 46295, Stop: 45816, Start Num: 23
Candidate Starts for Minnow_50:
(1, 47174), (2, 47012), (Start: 23 @46295 has 93 MA's), (Start: 26 @46289 has 40 MA's), (48, 46163), (90, 45998), (107, 45935), (132, 45830),

Gene: Mithril_49 Start: 48260, Stop: 47781, Start Num: 23
Candidate Starts for Mithril_49:
(Start: 23 @48260 has 93 MA's), (48, 48128), (90, 47963), (94, 47951), (102, 47927), (107, 47900), (132, 47795), (133, 47792),

Gene: MmasiCarm_56 Start: 48903, Stop: 48430, Start Num: 23
Candidate Starts for MmasiCarm_56:
(Start: 23 @48903 has 93 MA's), (31, 48867), (59, 48699), (67, 48675), (82, 48639), (89, 48612), (127, 48459),

Gene: MoMoMixon_232 Start: 131738, Stop: 132205, Start Num: 22
Candidate Starts for MoMoMixon_232:
(16, 131669), (Start: 22 @131738 has 184 MA's), (27, 131759), (58, 131933), (63, 131948), (109, 132101), (117, 132149),

Gene: Moby_233 Start: 130423, Stop: 130908, Start Num: 22
Candidate Starts for Moby_233:
(16, 130354), (Start: 21 @130417 has 12 MA's), (Start: 22 @130423 has 184 MA's), (27, 130444), (58, 130618), (63, 130633), (109, 130786), (117, 130834),

Gene: ModicumRichard_95 Start: 55749, Stop: 56195, Start Num: 26
Candidate Starts for ModicumRichard_95:
(Start: 26 @55749 has 40 MA's), (39, 55830), (55, 55920), (71, 55965), (117, 56130),

Gene: Moiqah_233 Start: 130400, Stop: 130885, Start Num: 22
Candidate Starts for Moiqah_233:

(16, 130331), (Start: 21 @130394 has 12 MA's), (Start: 22 @130400 has 184 MA's), (27, 130421), (58, 130595), (63, 130610), (109, 130763), (117, 130811),

Gene: Momo_237 Start: 130823, Stop: 131290, Start Num: 22
Candidate Starts for Momo_237:
(16, 130754), (Start: 22 @130823 has 184 MA's), (27, 130844), (58, 131018), (63, 131033), (109, 131186), (117, 131234),

Gene: Montpel_235 Start: 132620, Stop: 133105, Start Num: 22
Candidate Starts for Montpel_235:
(16, 132551), (Start: 21 @132614 has 12 MA's), (Start: 22 @132620 has 184 MA's), (27, 132641), (58, 132815), (63, 132830), (109, 132983), (117, 133031),

Gene: Morgana_102 Start: 57954, Stop: 58400, Start Num: 26
Candidate Starts for Morgana_102:
(Start: 26 @57954 has 40 MA's), (55, 58125), (71, 58170), (117, 58335),

Gene: Morizzled23_233 Start: 130190, Stop: 130657, Start Num: 22
Candidate Starts for Morizzled23_233:
(16, 130121), (Start: 22 @130190 has 184 MA's), (27, 130211), (58, 130385), (63, 130400), (109, 130553), (117, 130601),

Gene: Mortcellus_55 Start: 49510, Stop: 49037, Start Num: 23
Candidate Starts for Mortcellus_55:
(Start: 23 @49510 has 93 MA's), (31, 49474), (67, 49282), (82, 49246), (89, 49219),

Gene: Morty007_55 Start: 49347, Stop: 48874, Start Num: 23
Candidate Starts for Morty007_55:
(Start: 23 @49347 has 93 MA's), (31, 49311), (67, 49119), (82, 49083), (89, 49056),

Gene: MosMoris_4 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for MosMoris_4:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: MossRose_49 Start: 42605, Stop: 42138, Start Num: 23
Candidate Starts for MossRose_49:
(Start: 23 @42605 has 93 MA's), (46, 42476), (78, 42362), (106, 42266), (107, 42260), (117, 42209), (126, 42173),

Gene: Mudslide_50 Start: 48905, Stop: 48444, Start Num: 23
Candidate Starts for Mudslide_50:
(Start: 23 @48905 has 93 MA's), (40, 48812), (51, 48764), (75, 48668), (78, 48659), (90, 48617), (92, 48611), (100, 48587), (107, 48554), (111, 48530), (112, 48527), (123, 48479), (130, 48455),

Gene: Mulaychimus_56 Start: 48839, Stop: 48366, Start Num: 23
Candidate Starts for Mulaychimus_56:
(Start: 23 @48839 has 93 MA's), (31, 48803), (67, 48611), (82, 48575), (89, 48548),

Gene: Mysterious_53 Start: 49105, Stop: 48644, Start Num: 23
Candidate Starts for Mysterious_53:
(Start: 23 @49105 has 93 MA's), (32, 49057), (67, 48877), (80, 48856), (107, 48763), (114, 48721),

Gene: NHagos_48 Start: 41598, Stop: 41122, Start Num: 23
Candidate Starts for NHagos_48:
(Start: 23 @41598 has 93 MA's), (43, 41496), (46, 41469), (51, 41448), (63, 41382), (107, 41253), (117, 41202), (126, 41166),

Gene: Naija_237 Start: 131526, Stop: 131993, Start Num: 22
Candidate Starts for Naija_237:
(16, 131457), (Start: 22 @131526 has 184 MA's), (27, 131547), (58, 131721), (63, 131736), (109, 131889), (117, 131937),

Gene: Nanao_49 Start: 47627, Stop: 47148, Start Num: 23
Candidate Starts for Nanao_49:
(Start: 23 @47627 has 93 MA's), (48, 47495), (90, 47330), (94, 47318), (107, 47267), (132, 47162), (133, 47159),

Gene: Napoleon13_233 Start: 130555, Stop: 131022, Start Num: 22
Candidate Starts for Napoleon13_233:
(16, 130486), (Start: 22 @130555 has 184 MA's), (27, 130576), (58, 130750), (63, 130765), (109, 130918), (117, 130966),

Gene: Nappy_236 Start: 133028, Stop: 133513, Start Num: 22
Candidate Starts for Nappy_236:
(16, 132959), (Start: 22 @133028 has 184 MA's), (27, 133049), (58, 133223), (63, 133238), (109, 133391), (117, 133439),

Gene: Naval22_243 Start: 133306, Stop: 133773, Start Num: 22
Candidate Starts for Naval22_243:
(16, 133237), (Start: 22 @133306 has 184 MA's), (27, 133327), (58, 133501), (63, 133516), (109, 133669), (117, 133717),

Gene: NedWong_235 Start: 131984, Stop: 132451, Start Num: 22
Candidate Starts for NedWong_235:
(16, 131915), (Start: 22 @131984 has 184 MA's), (27, 132005), (58, 132179), (63, 132194), (109, 132347), (117, 132395),

Gene: Nehemiah_54 Start: 49105, Stop: 48644, Start Num: 23
Candidate Starts for Nehemiah_54:
(Start: 23 @49105 has 93 MA's), (32, 49057), (67, 48877), (80, 48856), (107, 48763), (114, 48721),

Gene: Ngannou_231 Start: 130508, Stop: 130975, Start Num: 22
Candidate Starts for Ngannou_231:
(16, 130439), (Start: 22 @130508 has 184 MA's), (27, 130529), (58, 130703), (63, 130718), (109, 130871), (117, 130919),

Gene: Nidhogg_237 Start: 132352, Stop: 132819, Start Num: 22
Candidate Starts for Nidhogg_237:
(16, 132283), (Start: 22 @132352 has 184 MA's), (27, 132373), (58, 132547), (63, 132562), (109, 132715), (117, 132763),

Gene: Nigel_51 Start: 48614, Stop: 48153, Start Num: 23
Candidate Starts for Nigel_51:
(Start: 23 @48614 has 93 MA's), (51, 48473), (75, 48377), (78, 48368), (87, 48338), (90, 48326), (92, 48320), (107, 48263), (111, 48239), (112, 48236), (123, 48188), (130, 48164),

Gene: Norm_236 Start: 132253, Stop: 132720, Start Num: 22
Candidate Starts for Norm_236:
(16, 132184), (Start: 22 @132253 has 184 MA's), (27, 132274), (58, 132448), (63, 132463), (109, 132616), (117, 132664),

Gene: NosilaM_9 Start: 5620, Stop: 6078, Start Num: 26
Candidate Starts for NosilaM_9:
(Start: 26 @5620 has 40 MA's), (50, 5752), (60, 5815), (108, 5974), (129, 6067),

Gene: Nozo_55 Start: 49176, Stop: 48703, Start Num: 23
Candidate Starts for Nozo_55:
(Start: 23 @49176 has 93 MA's), (31, 49140), (67, 48948), (82, 48912), (89, 48885),

Gene: NuevoMundo_237 Start: 132808, Stop: 133275, Start Num: 22
Candidate Starts for NuevoMundo_237:
(16, 132739), (Start: 22 @132808 has 184 MA's), (27, 132829), (58, 133003), (63, 133018), (109, 133171), (117, 133219),

Gene: ObLaDi_95 Start: 55798, Stop: 56244, Start Num: 26
Candidate Starts for ObLaDi_95:
(Start: 26 @55798 has 40 MA's), (71, 56014), (112, 56155), (117, 56179),

Gene: Obutu_56 Start: 48859, Stop: 48386, Start Num: 23
Candidate Starts for Obutu_56:
(Start: 23 @48859 has 93 MA's), (31, 48823), (67, 48631), (82, 48595), (89, 48568),

Gene: Olivio_55 Start: 48718, Stop: 48245, Start Num: 23
Candidate Starts for Olivio_55:
(Start: 23 @48718 has 93 MA's), (31, 48682), (59, 48514), (67, 48490), (82, 48454), (89, 48427), (127, 48274),

Gene: Opia_54 Start: 47638, Stop: 47147, Start Num: 20
Candidate Starts for Opia_54:
(Start: 20 @47638 has 36 MA's), (52, 47479), (82, 47359), (84, 47356), (87, 47341), (90, 47329), (106, 47272), (107, 47266), (112, 47239), (134, 47155),

Gene: OrangeOswald_55 Start: 48417, Stop: 47944, Start Num: 23
Candidate Starts for OrangeOswald_55:
(Start: 23 @48417 has 93 MA's), (31, 48381), (67, 48189), (82, 48153), (89, 48126),

Gene: OrediggerDelux_237 Start: 132479, Stop: 132946, Start Num: 22
Candidate Starts for OrediggerDelux_237:
(16, 132410), (Start: 22 @132479 has 184 MA's), (27, 132500), (58, 132674), (63, 132689), (109, 132842), (117, 132890),

Gene: Outis_8 Start: 4774, Stop: 5232, Start Num: 26
Candidate Starts for Outis_8:
(Start: 26 @4774 has 40 MA's), (38, 4846), (50, 4906), (108, 5128), (115, 5176), (129, 5221),

Gene: ParkTD_235 Start: 131823, Stop: 132290, Start Num: 22
Candidate Starts for ParkTD_235:

(16, 131754), (Start: 22 @131823 has 184 MA's), (27, 131844), (58, 132018), (63, 132033), (109, 132186), (117, 132234),

Gene: Patter_238 Start: 131540, Stop: 132007, Start Num: 22
Candidate Starts for Patter_238:
(16, 131471), (Start: 22 @131540 has 184 MA's), (27, 131561), (58, 131735), (63, 131750), (109, 131903), (117, 131951),

Gene: Pemberton_8 Start: 3778, Stop: 4239, Start Num: 26
Candidate Starts for Pemberton_8:
(Start: 26 @3778 has 40 MA's), (27, 3790), (30, 3802), (50, 3910), (55, 3946), (91, 4066), (129, 4228),

Gene: Phantasmagoria_54 Start: 47636, Stop: 47145, Start Num: 20
Candidate Starts for Phantasmagoria_54:
(Start: 20 @47636 has 36 MA's), (52, 47477), (84, 47354), (87, 47339), (106, 47270), (107, 47264), (112, 47237), (134, 47153),

Gene: PharkleMinkus_236 Start: 130484, Stop: 130951, Start Num: 22
Candidate Starts for PharkleMinkus_236:
(16, 130415), (Start: 22 @130484 has 184 MA's), (27, 130505), (58, 130679), (63, 130694), (109, 130847), (117, 130895),

Gene: Phayeta_57 Start: 48740, Stop: 48267, Start Num: 23
Candidate Starts for Phayeta_57:
(Start: 23 @48740 has 93 MA's), (31, 48704), (59, 48536), (67, 48512), (82, 48476), (89, 48449), (127, 48296),

Gene: Phelemich_53 Start: 49104, Stop: 48643, Start Num: 23
Candidate Starts for Phelemich_53:
(Start: 23 @49104 has 93 MA's), (32, 49056), (67, 48876), (80, 48855), (107, 48762), (114, 48720),

Gene: Philly_54 Start: 48267, Stop: 47794, Start Num: 23
Candidate Starts for Philly_54:
(Start: 23 @48267 has 93 MA's), (31, 48231), (67, 48039), (82, 48003), (89, 47976),

Gene: Phlegm_240 Start: 132229, Stop: 132696, Start Num: 22
Candidate Starts for Phlegm_240:
(16, 132160), (Start: 22 @132229 has 184 MA's), (27, 132250), (58, 132424), (63, 132439), (109, 132592), (117, 132640),

Gene: Phlyer_55 Start: 49152, Stop: 48679, Start Num: 23
Candidate Starts for Phlyer_55:
(Start: 23 @49152 has 93 MA's), (31, 49116), (67, 48924), (82, 48888), (89, 48861),

Gene: Phox_237 Start: 131478, Stop: 131945, Start Num: 22
Candidate Starts for Phox_237:
(16, 131409), (Start: 22 @131478 has 184 MA's), (27, 131499), (58, 131673), (63, 131688), (109, 131841), (117, 131889),

Gene: Phusco_235 Start: 131061, Stop: 131528, Start Num: 22
Candidate Starts for Phusco_235:
(16, 130992), (Start: 22 @131061 has 184 MA's), (27, 131082), (58, 131256), (63, 131271), (109, 131424), (117, 131472),

Gene: Pier_235 Start: 132354, Stop: 132821, Start Num: 22
Candidate Starts for Pier_235:
(16, 132285), (Start: 22 @132354 has 184 MA's), (27, 132375), (58, 132549), (63, 132564), (109, 132717), (117, 132765),

Gene: Pio_242 Start: 133557, Stop: 134024, Start Num: 22
Candidate Starts for Pio_242:
(16, 133488), (Start: 22 @133557 has 184 MA's), (27, 133578), (58, 133752), (63, 133767), (109, 133920), (117, 133968),

Gene: Pivoine_237 Start: 131526, Stop: 131993, Start Num: 22
Candidate Starts for Pivoine_237:
(16, 131457), (Start: 22 @131526 has 184 MA's), (27, 131547), (58, 131721), (63, 131736), (109, 131889), (117, 131937),

Gene: Pleakley_12 Start: 5438, Stop: 5917, Start Num: 26
Candidate Starts for Pleakley_12:
(17, 5363), (Start: 26 @5438 has 40 MA's), (27, 5450), (49, 5567), (54, 5597), (97, 5762), (99, 5765), (115, 5855),

Gene: Pleione_240 Start: 132289, Stop: 132756, Start Num: 22
Candidate Starts for Pleione_240:
(16, 132220), (Start: 22 @132289 has 184 MA's), (27, 132310), (58, 132484), (63, 132499), (109, 132652), (117, 132700),

Gene: Poise_3 Start: 790, Stop: 1290, Start Num: 21
Candidate Starts for Poise_3:
(Start: 21 @790 has 12 MA's), (Start: 24 @802 has 1 MA's), (Start: 26 @811 has 40 MA's), (56, 988), (61, 1012), (62, 1018), (63, 1021), (67, 1033), (69, 1039), (83, 1081), (104, 1156), (113, 1207),

Gene: Poster_49 Start: 47628, Stop: 47149, Start Num: 23
Candidate Starts for Poster_49:
(Start: 23 @47628 has 93 MA's), (48, 47496), (90, 47331), (94, 47319), (107, 47268), (132, 47163), (133, 47160),

Gene: Primadonna_230 Start: 131189, Stop: 131656, Start Num: 22
Candidate Starts for Primadonna_230:
(16, 131120), (Start: 22 @131189 has 184 MA's), (27, 131210), (58, 131384), (63, 131399), (109, 131552), (117, 131600),

Gene: Prince_50 Start: 48815, Stop: 48354, Start Num: 23
Candidate Starts for Prince_50:
(5, 49010), (Start: 23 @48815 has 93 MA's), (40, 48722), (51, 48674), (75, 48578), (78, 48569), (87, 48539), (90, 48527), (100, 48497), (105, 48473), (107, 48464), (111, 48440), (112, 48437), (123, 48389), (130, 48365),

Gene: PrinceCharming_54 Start: 47735, Stop: 47244, Start Num: 20
Candidate Starts for PrinceCharming_54:
(Start: 20 @47735 has 36 MA's), (52, 47576), (82, 47456), (84, 47453), (87, 47438), (106, 47369), (107, 47363), (112, 47336), (134, 47252),

Gene: Puhon_237 Start: 132185, Stop: 132652, Start Num: 22

Candidate Starts for Puhon_237:
(16, 132116), (Start: 22 @132185 has 184 MA's), (27, 132206), (58, 132380), (63, 132395), (109, 132548), (117, 132596),

Gene: Pupper_137 Start: 96238, Stop: 96732, Start Num: 25
Candidate Starts for Pupper_137:
(Start: 25 @96238 has 4 MA's), (100, 96580), (119, 96682),

Gene: Pupusa_239 Start: 132853, Stop: 133320, Start Num: 22
Candidate Starts for Pupusa_239:
(16, 132784), (Start: 22 @132853 has 184 MA's), (27, 132874), (58, 133048), (63, 133063), (109, 133216), (117, 133264),

Gene: PurduePete_236 Start: 132554, Stop: 133021, Start Num: 22
Candidate Starts for PurduePete_236:
(16, 132485), (Start: 22 @132554 has 184 MA's), (27, 132575), (58, 132749), (63, 132764), (109, 132917), (117, 132965),

Gene: QBert_228 Start: 129877, Stop: 130344, Start Num: 22
Candidate Starts for QBert_228:
(16, 129808), (Start: 22 @129877 has 184 MA's), (27, 129898), (58, 130072), (63, 130087), (109, 130240), (117, 130288),

Gene: Quasimodo_239 Start: 131862, Stop: 132329, Start Num: 22
Candidate Starts for Quasimodo_239:
(16, 131793), (Start: 22 @131862 has 184 MA's), (27, 131883), (58, 132057), (63, 132072), (109, 132225), (117, 132273),

Gene: QueenPie_48 Start: 48361, Stop: 47879, Start Num: 23
Candidate Starts for QueenPie_48:
(Start: 23 @48361 has 93 MA's), (33, 48310), (48, 48229), (78, 48103), (87, 48073), (90, 48061), (102, 48025), (107, 47998), (132, 47893), (133, 47890),

Gene: Raela_2 Start: 790, Stop: 1290, Start Num: 21
Candidate Starts for Raela_2:
(Start: 21 @790 has 12 MA's), (Start: 24 @802 has 1 MA's), (Start: 26 @811 has 40 MA's), (56, 988), (61, 1012), (62, 1018), (63, 1021), (67, 1033), (69, 1039), (83, 1081), (104, 1156), (113, 1207),

Gene: RagingRooster_54 Start: 48098, Stop: 47625, Start Num: 23
Candidate Starts for RagingRooster_54:
(Start: 23 @48098 has 93 MA's), (31, 48062), (67, 47870), (73, 47861), (82, 47834), (89, 47807),

Gene: Rahel_238 Start: 131964, Stop: 132431, Start Num: 22
Candidate Starts for Rahel_238:
(16, 131895), (Start: 22 @131964 has 184 MA's), (27, 131985), (58, 132159), (63, 132174), (109, 132327), (117, 132375),

Gene: RawrgerThat_51 Start: 48688, Stop: 48209, Start Num: 23
Candidate Starts for RawrgerThat_51:
(Start: 23 @48688 has 93 MA's), (48, 48556), (90, 48391), (94, 48379), (107, 48328), (132, 48223), (133, 48220),

Gene: RedRaider77_3 Start: 781, Stop: 1281, Start Num: 21

Candidate Starts for RedRaider77_3:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: Renkei_49 Start: 47644, Stop: 47165, Start Num: 23
Candidate Starts for Renkei_49:
(Start: 23 @47644 has 93 MA's), (48, 47512), (90, 47347), (94, 47335), (107, 47284), (132, 47179), (133, 47176),

Gene: Reprobate_54 Start: 49109, Stop: 48648, Start Num: 23
Candidate Starts for Reprobate_54:
(Start: 23 @49109 has 93 MA's), (32, 49061), (67, 48881), (80, 48860), (107, 48767), (114, 48725),

Gene: Rhinoforte_54 Start: 47757, Stop: 47266, Start Num: 20
Candidate Starts for Rhinoforte_54:
(Start: 20 @47757 has 36 MA's), (52, 47598), (82, 47478), (84, 47475), (87, 47460), (90, 47448), (106, 47391), (107, 47385), (112, 47358), (134, 47274),

Gene: Rinkes_53 Start: 49227, Stop: 48748, Start Num: 23
Candidate Starts for Rinkes_53:
(Start: 23 @49227 has 93 MA's), (54, 49062), (64, 49014), (84, 48957), (87, 48942), (107, 48867),

Gene: Rita1961_56 Start: 48859, Stop: 48386, Start Num: 23
Candidate Starts for Rita1961_56:
(Start: 23 @48859 has 93 MA's), (31, 48823), (67, 48631), (82, 48595), (89, 48568),

Gene: Rizal_226 Start: 129779, Stop: 130246, Start Num: 22
Candidate Starts for Rizal_226:
(16, 129710), (Start: 22 @129779 has 184 MA's), (27, 129800), (58, 129974), (63, 129989), (109, 130142), (117, 130190),

Gene: RoMag_231 Start: 131560, Stop: 132027, Start Num: 22
Candidate Starts for RoMag_231:
(16, 131491), (Start: 22 @131560 has 184 MA's), (27, 131581), (58, 131755), (63, 131770), (109, 131923), (117, 131971),

Gene: Rocha_232 Start: 131113, Stop: 131580, Start Num: 22
Candidate Starts for Rocha_232:
(16, 131044), (Start: 22 @131113 has 184 MA's), (27, 131134), (58, 131308), (63, 131323), (109, 131476), (117, 131524),

Gene: RomaT_55 Start: 49007, Stop: 48534, Start Num: 23
Candidate Starts for RomaT_55:
(Start: 23 @49007 has 93 MA's), (31, 48971), (67, 48779), (82, 48743), (89, 48716),

Gene: Ronan_232 Start: 129949, Stop: 130416, Start Num: 22
Candidate Starts for Ronan_232:
(16, 129880), (Start: 22 @129949 has 184 MA's), (27, 129970), (58, 130144), (63, 130159), (109, 130312), (117, 130360),

Gene: Roots515_239 Start: 133105, Stop: 133572, Start Num: 22
Candidate Starts for Roots515_239:

(16, 133036), (Start: 22 @133105 has 184 MA's), (27, 133126), (58, 133300), (63, 133315), (109, 133468), (117, 133516),

Gene: Rosebush_53 Start: 47769, Stop: 47278, Start Num: 20
Candidate Starts for Rosebush_53:
(Start: 20 @47769 has 36 MA's), (52, 47610), (82, 47490), (84, 47487), (87, 47472), (90, 47460), (106, 47403), (107, 47397), (112, 47370), (134, 47286),

Gene: SCentae_136 Start: 96389, Stop: 96883, Start Num: 25
Candidate Starts for SCentae_136:
(Start: 25 @96389 has 4 MA's), (100, 96731), (119, 96833),

Gene: SVoro_231 Start: 131862, Stop: 132329, Start Num: 22
Candidate Starts for SVoro_231:
(16, 131793), (Start: 22 @131862 has 184 MA's), (27, 131883), (58, 132057), (63, 132072), (109, 132225), (117, 132273),

Gene: Sabella_53 Start: 47620, Stop: 47129, Start Num: 20
Candidate Starts for Sabella_53:
(Start: 20 @47620 has 36 MA's), (52, 47461), (82, 47341), (84, 47338), (87, 47323), (90, 47311), (106, 47254), (107, 47248), (112, 47221), (134, 47137),

Gene: Salacia_237 Start: 132980, Stop: 133447, Start Num: 22
Candidate Starts for Salacia_237:
(16, 132911), (Start: 22 @132980 has 184 MA's), (27, 133001), (58, 133175), (63, 133190), (109, 133343), (117, 133391),

Gene: Sauce_233 Start: 131288, Stop: 131755, Start Num: 22
Candidate Starts for Sauce_233:
(16, 131219), (Start: 22 @131288 has 184 MA's), (27, 131309), (58, 131483), (63, 131498), (109, 131651), (117, 131699),

Gene: ScottMcG_228 Start: 130558, Stop: 131025, Start Num: 22
Candidate Starts for ScottMcG_228:
(16, 130489), (Start: 22 @130558 has 184 MA's), (27, 130579), (58, 130753), (63, 130768), (109, 130921), (117, 130969),

Gene: Scuba_12 Start: 5536, Stop: 6015, Start Num: 26
Candidate Starts for Scuba_12:
(17, 5461), (Start: 26 @5536 has 40 MA's), (27, 5548), (49, 5665), (54, 5695), (97, 5860), (99, 5863), (115, 5953),

Gene: Sebata_238 Start: 132793, Stop: 133278, Start Num: 22
Candidate Starts for Sebata_238:
(16, 132724), (Start: 21 @132787 has 12 MA's), (Start: 22 @132793 has 184 MA's), (27, 132814), (58, 132988), (63, 133003), (109, 133156), (117, 133204),

Gene: Shaqnato_227 Start: 130686, Stop: 131153, Start Num: 22
Candidate Starts for Shaqnato_227:
(16, 130617), (Start: 22 @130686 has 184 MA's), (27, 130707), (58, 130881), (63, 130896), (109, 131049), (117, 131097),

Gene: Shatter_47 Start: 40708, Stop: 40232, Start Num: 26

Candidate Starts for Shatter_47:
(7, 40930), (13, 40804), (Start: 26 @40708 has 40 MA's), (87, 40429), (90, 40417), (96, 40390), (110, 40333), (111, 40321), (123, 40264),

Gene: Shelob_237 Start: 133423, Stop: 133890, Start Num: 22
Candidate Starts for Shelob_237:
(16, 133354), (Start: 22 @133423 has 184 MA's), (27, 133444), (58, 133618), (63, 133633), (109, 133786), (117, 133834),

Gene: Shenyu_55 Start: 49334, Stop: 48873, Start Num: 23
Candidate Starts for Shenyu_55:
(Start: 23 @49334 has 93 MA's), (51, 49193), (78, 49091), (107, 48986), (112, 48959), (116, 48938), (123, 48911), (130, 48887),

Gene: ShiaLabeouf_234 Start: 131282, Stop: 131749, Start Num: 22
Candidate Starts for ShiaLabeouf_234:
(16, 131213), (Start: 22 @131282 has 184 MA's), (27, 131303), (58, 131477), (63, 131492), (109, 131645), (117, 131693),

Gene: Shifa_213 Start: 130752, Stop: 131237, Start Num: 22
Candidate Starts for Shifa_213:
(16, 130683), (Start: 21 @130746 has 12 MA's), (Start: 22 @130752 has 184 MA's), (27, 130773), (58, 130947), (63, 130962), (109, 131115), (117, 131163),

Gene: Shnickers_235 Start: 131346, Stop: 131813, Start Num: 22
Candidate Starts for Shnickers_235:
(16, 131277), (Start: 22 @131346 has 184 MA's), (27, 131367), (58, 131541), (63, 131556), (109, 131709), (117, 131757),

Gene: Shrimp_238 Start: 132591, Stop: 133058, Start Num: 22
Candidate Starts for Shrimp_238:
(16, 132522), (Start: 22 @132591 has 184 MA's), (27, 132612), (58, 132786), (63, 132801), (109, 132954), (117, 133002),

Gene: SilverDipper_240 Start: 132082, Stop: 132549, Start Num: 22
Candidate Starts for SilverDipper_240:
(16, 132013), (Start: 22 @132082 has 184 MA's), (27, 132103), (58, 132277), (63, 132292), (109, 132445), (117, 132493),

Gene: Sisko_46 Start: 41036, Stop: 40560, Start Num: 26
Candidate Starts for Sisko_46:
(Start: 26 @41036 has 40 MA's), (33, 40991), (36, 40976), (55, 40871), (96, 40715), (110, 40658), (123, 40589), (127, 40574),

Gene: SiwenD96_237 Start: 132928, Stop: 133395, Start Num: 22
Candidate Starts for SiwenD96_237:
(16, 132859), (Start: 22 @132928 has 184 MA's), (27, 132949), (58, 133123), (63, 133138), (109, 133291), (117, 133339),

Gene: Skog_198 Start: 125939, Stop: 126439, Start Num: 25
Candidate Starts for Skog_198:
(Start: 25 @125939 has 4 MA's), (112, 126347), (119, 126386),

Gene: SlippinJimmy_57 Start: 49641, Stop: 49168, Start Num: 23
Candidate Starts for SlippinJimmy_57:
(Start: 23 @49641 has 93 MA's), (31, 49605), (67, 49413), (82, 49377), (89, 49350),

Gene: SmallFry_237 Start: 131440, Stop: 131907, Start Num: 22
Candidate Starts for SmallFry_237:
(16, 131371), (Start: 22 @131440 has 184 MA's), (27, 131461), (58, 131635), (63, 131650), (109, 131803), (117, 131851),

Gene: Spec_231 Start: 131509, Stop: 131976, Start Num: 22
Candidate Starts for Spec_231:
(16, 131440), (Start: 22 @131509 has 184 MA's), (27, 131530), (58, 131704), (63, 131719), (109, 131872), (117, 131920),

Gene: Specks_240 Start: 131931, Stop: 132398, Start Num: 22
Candidate Starts for Specks_240:
(16, 131862), (Start: 22 @131931 has 184 MA's), (27, 131952), (58, 132126), (63, 132141), (109, 132294), (117, 132342),

Gene: Sprinklers_234 Start: 131176, Stop: 131643, Start Num: 22
Candidate Starts for Sprinklers_234:
(16, 131107), (Start: 22 @131176 has 184 MA's), (27, 131197), (58, 131371), (63, 131386), (109, 131539), (117, 131587),

Gene: Spud_229 Start: 130897, Stop: 131364, Start Num: 22
Candidate Starts for Spud_229:
(16, 130828), (Start: 22 @130897 has 184 MA's), (27, 130918), (58, 131092), (63, 131107), (109, 131260), (117, 131308),

Gene: SrishMeg2525_233 Start: 132086, Stop: 132553, Start Num: 22
Candidate Starts for SrishMeg2525_233:
(16, 132017), (Start: 22 @132086 has 184 MA's), (27, 132107), (58, 132281), (63, 132296), (109, 132449), (117, 132497),

Gene: StarStruck_8 Start: 4774, Stop: 5232, Start Num: 26
Candidate Starts for StarStruck_8:
(Start: 26 @4774 has 40 MA's), (38, 4846), (50, 4906), (108, 5128), (115, 5176), (129, 5221),

Gene: StephanieG_230 Start: 132083, Stop: 132550, Start Num: 22
Candidate Starts for StephanieG_230:
(16, 132014), (Start: 22 @132083 has 184 MA's), (27, 132104), (58, 132278), (63, 132293), (109, 132446), (117, 132494),

Gene: Stinger_50 Start: 47346, Stop: 46885, Start Num: 23
Candidate Starts for Stinger_50:
(Start: 23 @47346 has 93 MA's), (40, 47253), (51, 47205), (75, 47112), (78, 47103), (95, 47043), (102, 47025), (107, 46998), (111, 46974), (112, 46971), (123, 46923), (130, 46899),

Gene: StubbySaigey_242 Start: 131616, Stop: 132083, Start Num: 22
Candidate Starts for StubbySaigey_242:
(16, 131547), (Start: 22 @131616 has 184 MA's), (27, 131637), (58, 131811), (63, 131826), (109, 131979), (117, 132027),

Gene: Substance289_232 Start: 131488, Stop: 131955, Start Num: 22
Candidate Starts for Substance289_232:
(16, 131419), (Start: 22 @131488 has 184 MA's), (27, 131509), (58, 131683), (63, 131698), (109, 131851), (117, 131899),

Gene: Sukkupi_8 Start: 3819, Stop: 4280, Start Num: 26
Candidate Starts for Sukkupi_8:
(Start: 26 @3819 has 40 MA's), (27, 3831), (30, 3843), (50, 3951), (129, 4269),

Gene: SuperSulley_8 Start: 4860, Stop: 5318, Start Num: 26
Candidate Starts for SuperSulley_8:
(Start: 26 @4860 has 40 MA's), (50, 4992), (108, 5214), (115, 5262), (129, 5307),

Gene: SwainyDoc_56 Start: 48871, Stop: 48398, Start Num: 23
Candidate Starts for SwainyDoc_56:
(Start: 23 @48871 has 93 MA's), (31, 48835), (59, 48667), (67, 48643), (82, 48607), (89, 48580), (127, 48427),

Gene: SynergyX_55 Start: 48414, Stop: 47941, Start Num: 23
Candidate Starts for SynergyX_55:
(Start: 23 @48414 has 93 MA's), (31, 48378), (59, 48210), (67, 48186), (73, 48177), (82, 48150), (89, 48123), (127, 47970),

Gene: TA17A_55 Start: 47619, Stop: 47128, Start Num: 20
Candidate Starts for TA17A_55:
(Start: 20 @47619 has 36 MA's), (52, 47460), (84, 47337), (87, 47322), (90, 47310), (106, 47253), (107, 47247), (112, 47220), (134, 47136),

Gene: TPA2_59 Start: 47083, Stop: 46601, Start Num: 24
Candidate Starts for TPA2_59:
(Start: 24 @47083 has 1 MA's), (44, 46981), (76, 46828), (90, 46780), (105, 46726), (107, 46717), (110, 46705), (117, 46666), (118, 46657), (125, 46633),

Gene: Tainan_236 Start: 131060, Stop: 131527, Start Num: 22
Candidate Starts for Tainan_236:
(16, 130991), (Start: 22 @131060 has 184 MA's), (27, 131081), (58, 131255), (63, 131270), (109, 131423), (117, 131471),

Gene: Teardrop_234 Start: 130943, Stop: 131410, Start Num: 22
Candidate Starts for Teardrop_234:
(16, 130874), (Start: 22 @130943 has 184 MA's), (27, 130964), (58, 131138), (63, 131153), (109, 131306), (117, 131354),

Gene: Tesla_3 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for Tesla_3:
(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198), (114, 1207),

Gene: Thonko_56 Start: 47465, Stop: 46986, Start Num: 23
Candidate Starts for Thonko_56:
(8, 47591), (Start: 23 @47465 has 93 MA's), (29, 47438), (65, 47249), (72, 47231), (106, 47114), (107, 47108), (112, 47081), (114, 47066), (123, 47033),

Gene: Tinciduntsolum_55 Start: 47781, Stop: 47290, Start Num: 20
Candidate Starts for Tinciduntsolum_55:
(Start: 20 @47781 has 36 MA's), (52, 47622), (82, 47502), (84, 47499), (87, 47484), (90, 47472), (106, 47415), (107, 47409), (112, 47382), (134, 47298),

Gene: TinyTim_234 Start: 130910, Stop: 131377, Start Num: 22
Candidate Starts for TinyTim_234:
(16, 130841), (Start: 22 @130910 has 184 MA's), (27, 130931), (58, 131105), (63, 131120), (109, 131273), (117, 131321),

Gene: Tonenili_257 Start: 136733, Stop: 137203, Start Num: 22
Candidate Starts for Tonenili_257:
(16, 136664), (Start: 22 @136733 has 184 MA's), (27, 136754), (51, 136877), (66, 136955), (85, 137015), (114, 137138), (117, 137147),

Gene: Tortoise16_234 Start: 131372, Stop: 131839, Start Num: 22
Candidate Starts for Tortoise16_234:
(16, 131303), (Start: 22 @131372 has 184 MA's), (27, 131393), (58, 131567), (63, 131582), (109, 131735), (117, 131783),

Gene: TraderJ_50 Start: 42928, Stop: 42461, Start Num: 23
Candidate Starts for TraderJ_50:
(Start: 23 @42928 has 93 MA's), (46, 42799), (78, 42685), (106, 42589), (107, 42583), (117, 42532), (126, 42496),

Gene: Tres_54 Start: 47632, Stop: 47141, Start Num: 20
Candidate Starts for Tres_54:
(Start: 20 @47632 has 36 MA's), (52, 47473), (82, 47353), (84, 47350), (87, 47335), (90, 47323), (106, 47266), (107, 47260), (112, 47233), (134, 47149),

Gene: Trinitium_232 Start: 129664, Stop: 130131, Start Num: 22
Candidate Starts for Trinitium_232:
(16, 129595), (Start: 22 @129664 has 184 MA's), (27, 129685), (58, 129859), (63, 129874), (109, 130027), (117, 130075),

Gene: Turret_227 Start: 129246, Stop: 129713, Start Num: 22
Candidate Starts for Turret_227:
(16, 129177), (Start: 22 @129246 has 184 MA's), (27, 129267), (58, 129441), (63, 129456), (109, 129609), (117, 129657),

Gene: Tyke_233 Start: 133552, Stop: 134019, Start Num: 22
Candidate Starts for Tyke_233:
(16, 133483), (Start: 22 @133552 has 184 MA's), (27, 133573), (58, 133747), (63, 133762), (109, 133915), (117, 133963),

Gene: ValleyTerrace_237 Start: 130823, Stop: 131290, Start Num: 22
Candidate Starts for ValleyTerrace_237:
(16, 130754), (Start: 22 @130823 has 184 MA's), (27, 130844), (58, 131018), (63, 131033), (109, 131186), (117, 131234),

Gene: VasuNzinga_3 Start: 802, Stop: 1281, Start Num: 26
Candidate Starts for VasuNzinga_3:

(Start: 21 @781 has 12 MA's), (Start: 24 @793 has 1 MA's), (Start: 26 @802 has 40 MA's), (56, 979), (61, 1003), (62, 1009), (63, 1012), (67, 1024), (69, 1030), (83, 1072), (104, 1147), (113, 1198),

Gene: Vic9_00053 Start: 48150, Stop: 47659, Start Num: 20
Candidate Starts for Vic9_00053:
(Start: 20 @48150 has 36 MA's), (52, 47991), (84, 47868), (87, 47853), (90, 47841), (106, 47784), (107, 47778), (112, 47751), (134, 47667),

Gene: VioletZ_52 Start: 48734, Stop: 48273, Start Num: 23
Candidate Starts for VioletZ_52:
(Start: 23 @48734 has 93 MA's), (40, 48641), (51, 48593), (75, 48497), (78, 48488), (90, 48446), (92, 48440), (100, 48416), (107, 48383), (111, 48359), (112, 48356), (123, 48308), (130, 48284),

Gene: Vortrix_254 Start: 135520, Stop: 135990, Start Num: 22
Candidate Starts for Vortrix_254:
(16, 135451), (Start: 22 @135520 has 184 MA's), (27, 135541), (51, 135664), (66, 135742), (85, 135802), (109, 135886), (114, 135925), (117, 135934),

Gene: Waleliano_49 Start: 48252, Stop: 47791, Start Num: 23
Candidate Starts for Waleliano_49:
(Start: 23 @48252 has 93 MA's), (40, 48159), (51, 48111), (72, 48024), (75, 48015), (78, 48006), (87, 47976), (90, 47964), (100, 47934), (107, 47901), (111, 47877), (112, 47874), (123, 47826), (130, 47802),

Gene: Wally_234 Start: 130807, Stop: 131274, Start Num: 22
Candidate Starts for Wally_234:
(16, 130738), (Start: 22 @130807 has 184 MA's), (27, 130828), (58, 131002), (63, 131017), (109, 131170), (117, 131218),

Gene: West99_54 Start: 47778, Stop: 47287, Start Num: 20
Candidate Starts for West99_54:
(Start: 20 @47778 has 36 MA's), (52, 47619), (84, 47496), (87, 47481), (106, 47412), (107, 47406), (112, 47379), (134, 47295),

Gene: Willis_236 Start: 131746, Stop: 132213, Start Num: 22
Candidate Starts for Willis_236:
(16, 131677), (Start: 22 @131746 has 184 MA's), (27, 131767), (58, 131941), (63, 131956), (109, 132109), (117, 132157),

Gene: Wooper_50 Start: 42937, Stop: 42470, Start Num: 23
Candidate Starts for Wooper_50:
(Start: 23 @42937 has 93 MA's), (43, 42835), (46, 42808), (78, 42694), (106, 42598), (107, 42592), (117, 42541), (126, 42505),

Gene: Xincheng_51 Start: 49715, Stop: 49254, Start Num: 23
Candidate Starts for Xincheng_51:
(Start: 23 @49715 has 93 MA's), (40, 49622), (51, 49574), (75, 49478), (78, 49469), (87, 49439), (90, 49427), (92, 49421), (100, 49397), (105, 49373), (107, 49364), (111, 49340), (112, 49337), (123, 49289), (130, 49265),

Gene: Yago84_46 Start: 41111, Stop: 40635, Start Num: 26
Candidate Starts for Yago84_46:

(Start: 26 @41111 has 40 MA's), (33, 41066), (36, 41051), (55, 40946), (96, 40790), (110, 40733), (123, 40664), (127, 40649),

Gene: Yahalom_54 Start: 48424, Stop: 47951, Start Num: 23
Candidate Starts for Yahalom_54:
(Start: 23 @48424 has 93 MA's), (31, 48388), (67, 48196), (82, 48160), (89, 48133),

Gene: Yassified_233 Start: 131159, Stop: 131626, Start Num: 22
Candidate Starts for Yassified_233:
(16, 131090), (Start: 22 @131159 has 184 MA's), (27, 131180), (58, 131354), (63, 131369), (109, 131522), (117, 131570),

Gene: YemiJoy2021_237 Start: 132477, Stop: 132944, Start Num: 22
Candidate Starts for YemiJoy2021_237:
(16, 132408), (Start: 22 @132477 has 184 MA's), (27, 132498), (58, 132672), (63, 132687), (109, 132840), (117, 132888),

Gene: Yeshua_50 Start: 42914, Stop: 42447, Start Num: 23
Candidate Starts for Yeshua_50:
(Start: 23 @42914 has 93 MA's), (43, 42812), (46, 42785), (78, 42671), (106, 42575), (107, 42569), (117, 42518), (126, 42482),

Gene: Yinz_55 Start: 48270, Stop: 47797, Start Num: 23
Candidate Starts for Yinz_55:
(Start: 23 @48270 has 93 MA's), (31, 48234), (59, 48066), (67, 48042), (73, 48033), (82, 48006), (89, 47979), (127, 47826),

Gene: Yndexa_8 Start: 3819, Stop: 4280, Start Num: 26
Candidate Starts for Yndexa_8:
(Start: 26 @3819 has 40 MA's), (27, 3831), (30, 3843), (50, 3951), (129, 4269),

Gene: YoungMoneyMata_236 Start: 131995, Stop: 132462, Start Num: 22
Candidate Starts for YoungMoneyMata_236:
(16, 131926), (Start: 22 @131995 has 184 MA's), (27, 132016), (58, 132190), (63, 132205), (109, 132358), (117, 132406),

Gene: Yucca_235 Start: 132469, Stop: 132936, Start Num: 22
Candidate Starts for Yucca_235:
(16, 132400), (Start: 22 @132469 has 184 MA's), (27, 132490), (58, 132664), (63, 132679), (109, 132832), (117, 132880),

Gene: Zalkecks_235 Start: 131575, Stop: 132042, Start Num: 22
Candidate Starts for Zalkecks_235:
(16, 131506), (Start: 22 @131575 has 184 MA's), (27, 131596), (58, 131770), (63, 131785), (109, 131938), (117, 131986),

Gene: Zeenon_236 Start: 132109, Stop: 132576, Start Num: 22
Candidate Starts for Zeenon_236:
(16, 132040), (Start: 22 @132109 has 184 MA's), (27, 132130), (58, 132304), (63, 132319), (109, 132472), (117, 132520),

Gene: Zemanar_50 Start: 48233, Stop: 47772, Start Num: 23
Candidate Starts for Zemanar_50:

(Start: 23 @48233 has 93 MA's), (40, 48140), (51, 48092), (72, 48005), (75, 47996), (78, 47987), (87, 47957), (90, 47945), (100, 47915), (107, 47882), (111, 47858), (112, 47855), (123, 47807), (130, 47783),

Gene: ZygoTaiga_231 Start: 132766, Stop: 133233, Start Num: 22
Candidate Starts for ZygoTaiga_231:
(16, 132697), (Start: 22 @132766 has 184 MA's), (27, 132787), (58, 132961), (63, 132976), (109, 133129), (117, 133177),