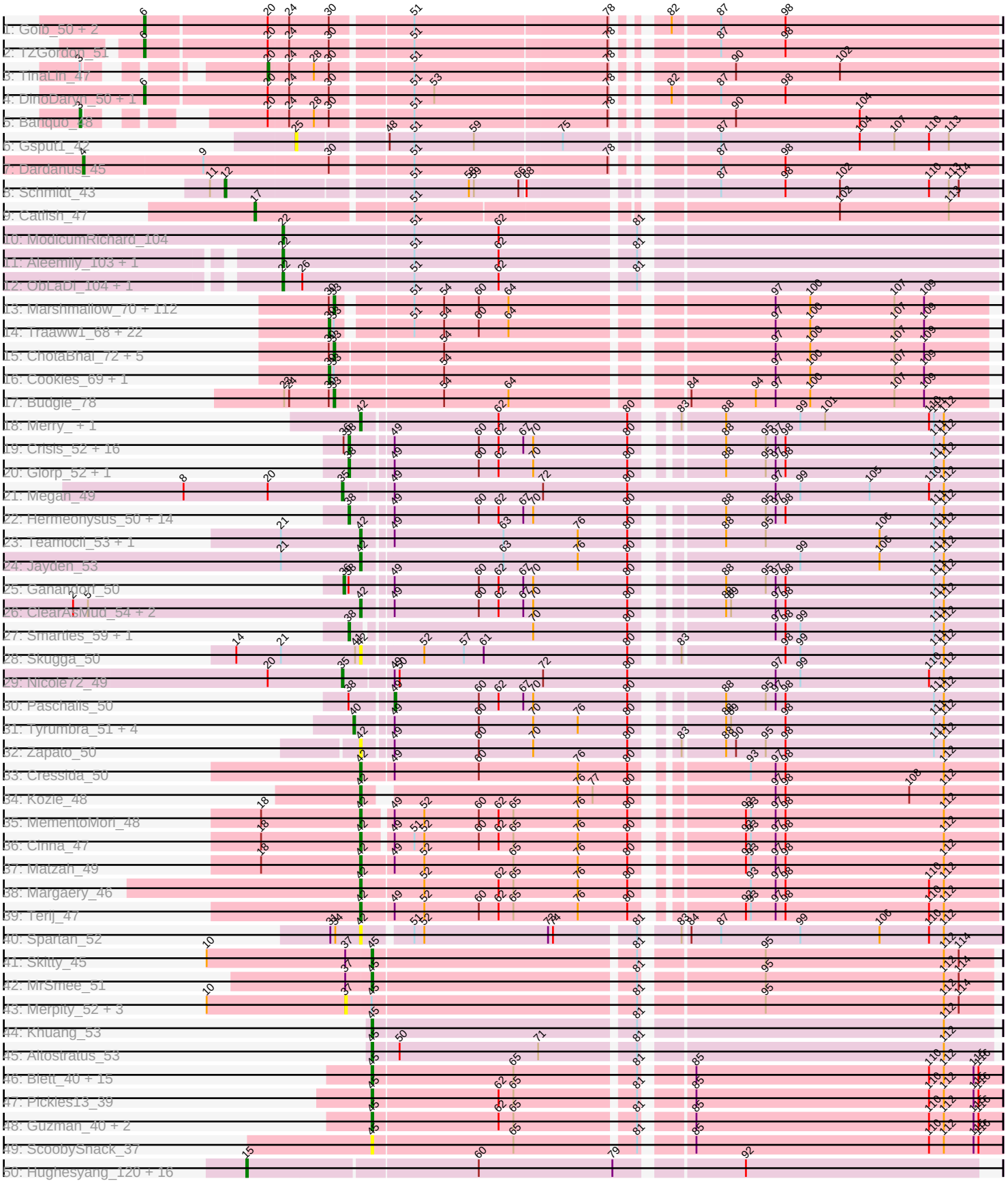
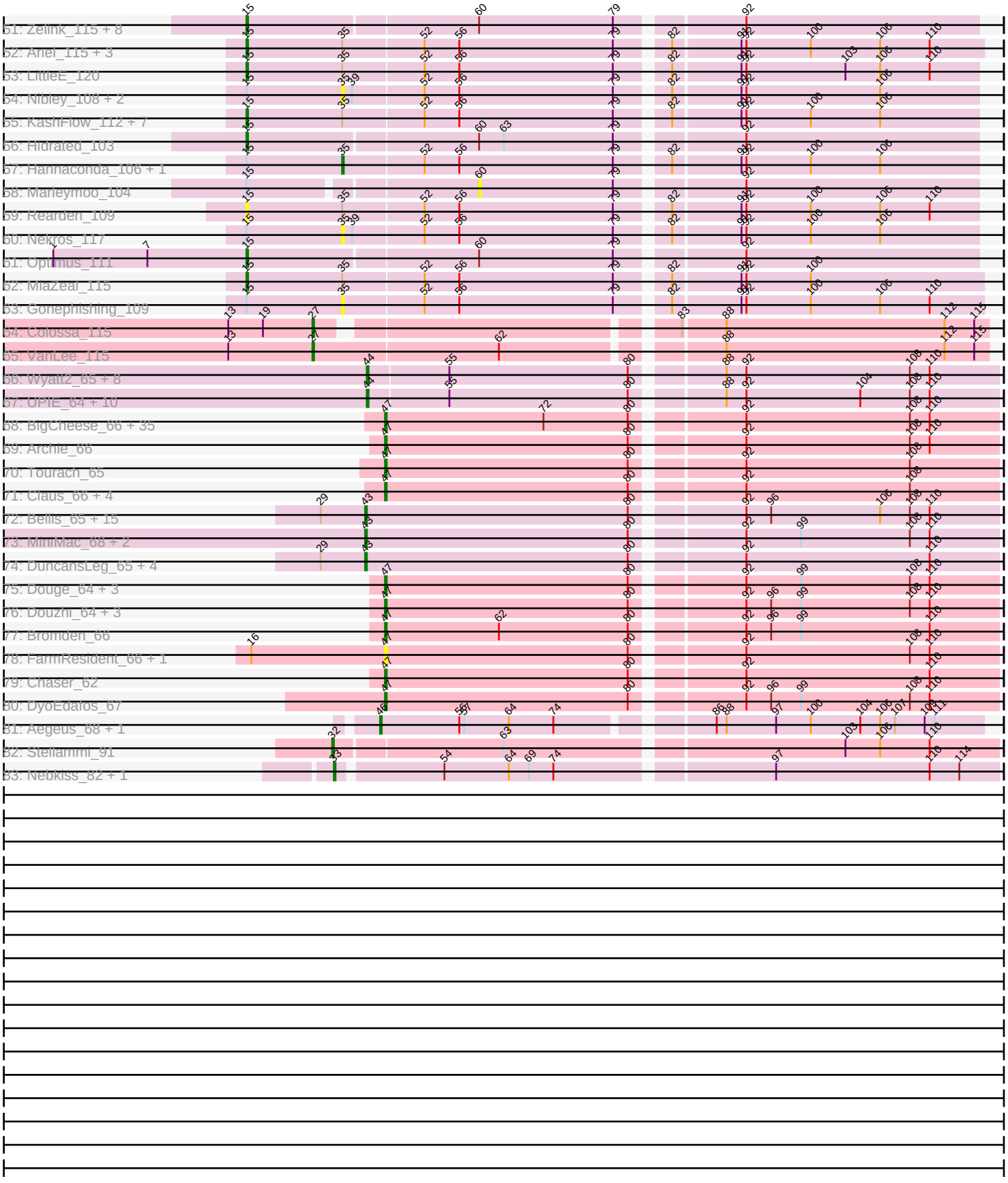
Pham 340779


1: Golb_50 + 2
2: TZGorddu_51
3: TinaLin_47
4: DinoDarryn_50 + 1
5: Banquo_48
6: Gsputt_42
7: Dardanus_45
8: Schmidt_43
9: Catfish_47
10: ModicumRichard_104
11: Aleemily_103 + 1
12: ObLaDi_104 + 1
13: Marshmallow_70 + 112
14: Traaww1_68 + 22
15: ChotaBhai_72 + 5
16: Cookies_69 + 1
17: Budgie_78
18: Merry_ + 1
19: Crisis_52 + 16
20: Glorp_52 + 1
21: Megan_49
22: Hermeonysus_50 + 14
23: Teamocil_53 + 1
24: Jayden_53
25: Ganarjoon_50
26: ClearAsMud_54 + 2
27: Smarties_59 + 1
28: Skugga_50
29: Nicole72_49
30: Paschalis_50
31: Tyrumbra_51 + 4
32: Zapato_50
33: Cressida_50
34: Kozie_48
35: MementoMori_48
36: Cinna_47
37: Matzah_49
38: Margaery_46
39: Tenj_47
40: Spartan_52
41: Skitty_45
42: MrSmee_51
43: Merpity_52 + 3
44: Khuang_53
45: Altostratus_53
46: Blett_40 + 15
47: Pickles13_39
48: Guzman_40 + 2
49: ScoobySnack_37
50: Hughesyang_120 + 16

Pham 340779


51: Zelink_115 + 8
52: Ariel_115 + 3
53: LittleE_120
54: Nibley_108 + 2
55: KashFlow_112 + 7
56: Hidrated_103
57: Hannaconda_106 + 1
58: Maneymoo_104
59: Rearden_109
60: Nekros_117
61: Optimus_111
62: MiaZeal_115
63: Gonephishing_109
64: Colossa_115
65: VanLee_115
66: Wyatt2_65 + 8
67: UPIE_64 + 10
68: BigCheese_66 + 35
69: Archie_66
70: Tourach_65
71: Claus_66 + 4
72: Bellis_65 + 15
73: MiniMac_68 + 2
74: DuncansLeg_65 + 4
75: Douge_64 + 3
76: Douzhi_64 + 3
77: Bromden_66
78: FarmResident_66 + 1
79: Chaser_62
80: DyoEdalos_67
81: Aegeus_68 + 1
82: Stellammi_91
83: Nebkiss_82 + 1

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 340779 Report

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

Pham number 340779 has 412 members, 61 are drafts.

Phages represented in each track:
• Track 1 : Goib_50, Splinter_49, Vendetta_49
• Track 2 : TZGordon_51
• Track 3 : TinaLin_47
• Track 4 : DinoDaryn_50, Huffy_50
• Track 5 : Banquo_48
• Track 6 : Gsput1_42
• Track 7 : Dardanus_45
• Track 8 : Schmidt_43
• Track 9 : Catfish_47
• Track 10 : ModicumRichard_104
• Track 11 : Aleemily_103, Morgana_111
• Track 12 : ObLaDi_104, Cafasso_105
• Track 13 : Marshmallow_70, GoldenSpark_76, PaddyBaddy_72, FoghornLeghorn_66, Bogg_72, Miniwave_67, Teaspoon_73, Highbury_71, NoSleep_73, Nala_74, Lilizi_73, Thresher_74, Kanye_69, Murica_75, Gemini_77, 244_73, MISSy_73, HufflyPuff_75, Moldemort_75, Gage_74, Petra64142_76, Henry_70, HanKaySha_72, Becksu_71, ABCat_69, StellaBean_70, BilboSwaggins_70, MollyToe_67, YassJohnny_69, Myrale_72, Manda_73, Rimmer_73, Kostya_72, Cactus_75, Youngblood_75, Icee_73, MPhalcon_73, Balomoji_72, Saints25_71, BaboJay_69, FairyPath_73, Inca_69, Sassay_67, JeTaime_72, Palpatine_74, Simpliphy_71, Bruin_69, Livelaughbron_74, Lilpickle_71, Contagion_68, ChosenOne_72, StolenFromERC_75, Rakim_73, Flypotenuse_68, Ptowny_69, Emmina_72, MadamMonkfish_72, Stank_75, Mindy_71, Dumbo_72, Hoonter_75, Lilac_74, Phaux_74, Tomaszewski_67, NelitzaMV_70, Adnama_76, SophKB_69, BigBubba_72, Hopey_72, GooberAzure_75, Goldilocks_75, Terminus_75, Bench_75, CrystalP_71, Dusk_69, Cjw1_72, BugsBunny_72, Kimchi_76, Asriel_71, Policronamos_75, Argent26_76, Xandras_71, Tuco_73, Quallification_73, NonchalantPear_72, Daikon_74, Filch_73, Easy2Say_73, OrionPax_71, ShamWow_72, Porky_71, Pumpkin_75, xkcd_75, Czyszczon1_73, Elph10_72, AmericanBeauty_76, Toto_70, Murphy_72, Command613_74, Stark_73, StormChicken_74, Brewer_68, Elite2014_71, Misfit_73, Maxxinista_74, Phrux_69, Wiggin_74, FireRed_76, RiverMonster_72, Holt_77, Paperbeatsrock_71, Thimble_73, Willez_67
• Track 14 : Traaww1_68, Buck_73, Glexan_71, Greep_76, Pharsalus_69, BadStone_69, Phaja_70, Mosby_68, TBrady12_75, IHOP_70, PhatBacter_76, Nimrod_73, ShereKhan_71, Ukulele_67, Eureka_70, Goku_70, Barbarian_71, TeardropMSU_68, DrDrey_72, Sotrice96_73, Harella_72, Gator_70, Tarkin_71

• Track 15 : ChotaBhai_72, SirDuracell_71, Bask21_72, TeamEdward_74, Amao_72, DoctorDiddles_71
• Track 16 : Cookies_69, Pat3_70
• Track 17 : Budgie_78
• Track 18 : Merry_, Sunny_
• Track 19 : Crisis_52, PierreOrion_51, Jollipop_51, Selwyn23_52, Piperis_51, Pulchra_52, EarickHC_51, Quhwah_54, LittleFortune_52, Rockwell_50, PhedwardCullen_50, Savannah_50, Scumberland_52, Cranjis_52, KaiHaiDragon_51, Phorgeous_50, PiperSansNom_51
• Track 20 : Glorp_52, Yeti_51
• Track 21 : Megan_49
• Track 22 : Hermeonysus_50, CrazyRich_50, Kowalski_50, Honeyfin_52, BeagleBug_50, Shotgun_50, BrazzalePHS_50, Lucretia_51, Busephilis_50, Jefe_51, Antares_51, Onika_50, Phrancesco_51, Germa_52, Ramiel05_50
• Track 23 : Teamocil_53, Gina_53
• Track 24 : Jayden_53
• Track 25 : Ganandorf_50
• Track 26 : ClearAsMud_54, SirFrank_51, NoodlelyBoi_52
• Track 27 : Smarties_59, Ariadne_59
• Track 28 : Skugga_50
• Track 29 : Nicole72_49
• Track 30 : Paschalis_50
• Track 31 : Tyrumbra_51, Fireman_53, Shrubaron_53, RobsFeet_54, Metamorphoo_53
• Track 32 : Zapato_50
• Track 33 : Cressida_50
• Track 34 : Kozie_48
• Track 35 : MementoMori_48
• Track 36 : Cinna_47
• Track 37 : Matzah_49
• Track 38 : Margaery_46
• Track 39 : Terij_47
• Track 40 : Spartan_52
• Track 41 : Skitty_45
• Track 42 : MrSmee_51
• Track 43 : Merpity_52, Neroxid_48, Skyerus_43, Raya_48
• Track 44 : Khuang_53
• Track 45 : Altostratus_53
• Track 46 : Blett_40, Winchester007_42, Dropshot_40, NCRodriguez_41, Antuna_41, Violeta_42, CookieDog_40, Mariel_41, Carrillo_42, Warren_40, Appa_40, Phingu_43, PhillyJawn_41, Losacky_41, MenE_41, Bush_41
• Track 47 : Pickles13_39
• Track 48 : Guzman_40, Jakelyne_42, Phonegingi_40
• Track 49 : ScoobySnack_37
• Track 50 : Hughesyang_120, Constella_103, Phoebus_121, Redno2_114, JuicyJay_117, Xiaokay_109, Halley_123, Thibault_101, Dallas_121, Beem_122, DmpstrDiver_121, Minerva_118, Pound_110, NihilNomen_122, Dove_106, Bagrid_121, Ejimix_115
• Track 51 : Zelink_115, Kalah2_112, EricMillard_112, Duke13_115, Klein_117, Wanda_120, ThreeRngTarjay_116, BAKA_120, Bobby_113
• Track 52 : Ariel_115, Squint_113, Courthouse_110, Superphikiman_112
• Track 53 : LittleE_120
• Track 54 : Nibley_108, Shaboozey_113, BronnyJames_113

• Track 55 : KashFlow_112, Bombitas_108, Lucky2013_112, Schatzie_115, Porcelain_115, HokkenD_110, Yeet_111, Omega_126
• Track 56 : Hidrated_103
• Track 57 : Hannaconda_106, Odette_122
• Track 58 : Marleymoo_104
• Track 59 : Rearden_109
• Track 60 : Nekros_117
• Track 61 : Optimus_111
• Track 62 : MiaZeal_115
• Track 63 : Gonephishing_109
• Track 64 : Colossa_115
• Track 65 : VanLee_115
• Track 66 : Wyatt2_65, Silverleaf_64, AvadaKedavra_64, Tyson_64, Poochiewood_64, Acquire49_64, Rose5_64, CicholasNage_63, JoeDirt_63
• Track 67 : UPIE_64, LeBron_63, Appletree2_64, Calm_65, OhShagHennessy_62, Halena_62, MAckerman_63, Zaria_65, Enceladus_62, DirkDirk_61, Wamburgrxpress_64
• Track 68 : BigCheese_66, Faith1_66, DrSeegs_66, Finemlucis_66, GuuelaD_65, Soap141_66, Molivier_57, Crossroads_66, Itos_65, Rumpelstiltskin_65, Vetrix_66, Winky_66, Wigglewiggle_66, Zakai_67, Lewan_67, Lynnae_67, BobsGarage_66, Gardann_67, Breezona_66, Sarshaun_66, LilDestine_66, Netyap_67, Wilder_67, Kahlid_66, Miley16_66, ChengKai98_66, Hiraya_66, Nicholasp3_66, MkaliMitinis3_67, Underpass_57, Loadrie_65, Gabriela_63, OverPar_67, SoJulia_68, Hafay_67, Rossetti_67
• Track 69 : Archie_66
• Track 70 : Tourach_65
• Track 71 : Claus_66, DanBing_66, DHan_67, Baoshan_65, ZhongYanYuan_64
• Track 72 : Bellis_65, Kingsolomon_64, MsGreen_65, Snenia_64, Finnry_65, Jubie_64, TriFive_66, Lumos_66, Krypton555_66, Nicholas_64, Clautastrophe_64, Jobypre_65, Samty_65, Whirlwind_65, Moostard_64, Red305_65
• Track 73 : MiniMac_68, MiniLon_68, Lolly9_64
• Track 74 : DuncansLeg_65, Ellson_64, LiyuLake_64, KirDoubleO7_63, BourbonZero_65
• Track 75 : Douge_64, Bazzle_66, Kropertea_63, PYPDinur_62
• Track 76 : Douzhi_64, Sheng711_64, ChutneyChips_64, BrainDrainer_64
• Track 77 : Bromden_66
• Track 78 : FarmResident_66, Quby_64
• Track 79 : Chaser_62
• Track 80 : DyoEdafos_67
• Track 81 : Aegeus_68, Baudelaire_68
• Track 82 : Stellammi_91
• Track 83 : Nebkiss_82, Gaia_83

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

The start number called the most often in the published annotations is 33, it was called in 112 of the 351 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• 244_73, ABCat_69, Adnama_76, Amao_72, AmericanBeauty_76, Argent26_76, Asriel_71, BaboJay_69, Balomoji_72, Bask21_72, Becksu_71, Bench_75, BigBubba_72, BilboSwaggins_70, Bogg_72, Brewer_68, Bruin_69, Budgie_78, BugsBunny_72, Cactus_75, ChosenOne_72, ChotaBhai_72, Cjw1_72, Command613_74, Contagion_68, CrystalP_71, Czyszczon1_73, Daikon_74, DoctorDiddles_71, Dumbo_72, Dusk_69, Easy2Say_73, Elite2014_71, Elph10_72, Emmina_72, FairyPath_73, Filch_73, FireRed_76, Flypotenuse_68, FoghornLeghorn_66, Gage_74, Gaia_83, Gemini_77, GoldenSpark_76, Goldilocks_75, GooberAzure_75, HanKaySha_72, Henry_70, Highbury_71, Holt_77, Hoonter_75, Hopey_72, HufflyPuff_75, Icee_73, Inca_69, JeTaime_72, Kanye_69, Kimchi_76, Kostya_72, Lilac_74, Lilizi_73, Lilpickle_71, Livelaughbron_74, MISSy_73, MPhalcon_73, MadamMonkfish_72, Manda_73, Marshmallow_70, Maxxinista_74, Mindy_71, Miniwave_67, Misfit_73, Moldemort_75, MollyToe_67, Murica_75, Murphy_72, Myrale_72, Nala_74, Nebkiss_82, NelitzaMV_70, NoSleep_73, NonchalantPear_72, OrionPax_71, PaddyBaddy_72, Palpatine_74, Paperbeatsrock_71, Petra64142_76, Phaux_74, Phrux_69, Policronamos_75, Porky_71, Ptowny_69, Pumpkin_75, Quallification_73, Rakim_73, Rimmer_73, RiverMonster_72, Saints25_71, Sassay_67, ShamWow_72, Simpliphy_71, SirDuracell_71, SophKB_69, Stank_75, Stark_73, StellaBean_70, StolenFromERC_75, StormChicken_74, TeamEdward_74, Teaspoon_73, Terminus_75, Thimble_73, Thresher_74, Tomaszewski_67, Toto_70, Tuco_73, Wiggin_74, Willez_67, Xandras_71, YassJohnny_69, Youngblood_75, xkcd_75,

Genes that have the "Most Annotated" start but do not call it:
• BadStone_69, Barbarian_71, Buck_73, Cookies_69, DrDrey_72, Eureka_70, Gator_70, Glexan_71, Goku_70, Greep_76, Harella_72, IHOP_70, Mosby_68, Nimrod_73, Pat3_70, Phaja_70, Pharsalus_69, PhatBacter_76, ShereKhan_71, Sotrice96_73, TBrady12_75, Tarkin_71, TeardropMSU_68, Traaww1_68, Ukulele_67,

Genes that do not have the "Most Annotated" start:
• Acquire49_64, Aegeus_68, Aleemily_103, Altostratus_53, Antares_51, Antuna_41, Appa_40, Appletree2_64, Archie_66, Ariadne_59, Ariel_115, AvadaKedavra_64, BAKA_120, Bagrid_121, Banquo_48, Baoshan_65, Baudelaire_68, Bazzle_66, BeagleBug_50, Beem_122, Bellis_65, BigCheese_66, Blett_40, Bobby_113, BobsGarage_66, Bombitas_108, BourbonZero_65, BrainDrainer_64, BrazzalePHS_50, Breezona_66, Bromden_66, BronnyJames_113, Busephilis_50, Bush_41, Cafasso_105, Calm_65, Carrillo_42, Catfish_47, Chaser_62, ChengKai98_66, ChutneyChips_64, CicholasNage_63, Cinna_47, Claus_66, Clautastrophe_64, ClearAsMud_54, Colossa_115, Constella_103, CookieDog_40, Courthouse_110, Cranjis_52, CrazyRich_50, Cressida_50, Crisis_52, Crossroads_66, DHan_67, Dallas_121, DanBing_66, Dardanus_45, DinoDaryn_50, DirkDirk_61, DmpstrDiver_121, Douge_64, Douzhi_64, Dove_106, DrSeegs_66, Dropshot_40, Duke13_115, DuncansLeg_65, DyoEdafos_67, EarickHC_51, Ejimix_115, Ellson_64, Enceladus_62, EricMillard_112, Faith1_66, FarmResident_66, Finemlucis_66, Finnry_65, Fireman_53, Gabriela_63, Ganandorf_50, Gardann_67, Germa_52, Gina_53, Glorp_52, Goib_50, Gonephishing_109, Gsput1_42, GuuelaD_65, Guzman_40, Hafay_67, Halena_62, Halley_123, Hannaconda_106, Hermeonysus_50, Hidrated_103, Hiraya_66, HokkenD_110, Honeyfin_52, Huffy_50, Hughesyang_120, Itos_65, Jakelyne_42, Jayden_53, Jefe_51, Jobypre_65, JoeDirt_63, Jollipop_51, Jubie_64, JuicyJay_117, Kahlid_66, KaiHaiDragon_51, Kalah2_112, KashFlow_112, Khuang_53, Kingsolomon_64, KirDoubleO7_63, Klein_117, Kowalski_50, Kozie_48, Kropertea_63, Krypton555_66, LeBron_63,

Lewan_67, LilDestine_66, LittleE_120, LittleFortune_52, LiyuLake_64, Loadrie_65, Lolly9_64, Losacky_41, Lucky2013_112, Lucretia_51, Lumos_66, Lynnae_67, MAckerman_63, Margaery_46, Mariel_41, Marleymoo_104, Matzah_49, Megan_49, MementoMori_48, MenE_41, Merpity_52, Merry_, Metamorphoo_53, MiaZeal_115, Miley16_66, Minerva_118, MiniLon_68, MiniMac_68, MkaliMitinis3_67, ModicumRichard_104, Molivier_57, Moostard_64, Morgana_111, MrSmee_51, MsGreen_65, NCRodriguez_41, Nekros_117, Neroxid_48, Netyap_67, Nibley_108, Nicholas_64, Nicholasp3_66, Nicole72_49, NihilNomen_122, NoodlelyBoi_52, ObLaDi_104, Odette_122, OhShagHennessy_62, Omega_126, Onika_50, Optimus_111, OverPar_67, PYPDinur_62, Paschalis_50, PhedwardCullen_50, PhillyJawn_41, Phingu_43, Phoebus_121, Phonegingi_40, Phorgeous_50, Phrancesco_51, Pickles13_39, PierreOrion_51, PiperSansNom_51, Piperis_51, Poochiewood_64, Porcelain_115, Pound_110, Pulchra_52, Quby_64, Quhwah_54, Ramiel05_50, Raya_48, Rearden_109, Red305_65, Redno2_114, RobsFeet_54, Rockwell_50, Rose5_64, Rossetti_67, Rumpelstiltskin_65, Samty_65, Sarshaun_66, Savannah_50, Schatzie_115, Schmidt_43, ScoobySnack_37, Scumberland_52, Selwyn23_52, Shaboozey_113, Sheng711_64, Shotgun_50, Shrubaron_53, Silverleaf_64, SirFrank_51, Skitty_45, Skugga_50, Skyerus_43, Smarties_59, Snenia_64, SoJulia_68, Soap141_66, Spartan_52, Splinter_49, Squint_113, Stellammi_91, Sunny_, Superphikiman_112, TZGordon_51, Teamocil_53, Terij_47, Thibault_101, ThreeRngTarjay_116, TinaLin_47, Tourach_65, TriFive_66, Tyrumbra_51, Tyson_64, UPIE_64, Underpass_57, VanLee_115, Vendetta_49, Vetrix_66, Violeta_42, Wamburgrxpress_64, Wanda_120, Warren_40, Whirlwind_65, Wigglewiggle_66, Wilder_67, Winchester007_42, Winky_66, Wyatt2_65, Xiaokay_109, Yeet_111, Yeti_51, Zakai_67, Zapato_50, Zaria_65, Zelink_115, ZhongYanYuan_64,

Summary by start number:

Start 3:
• Found in 2 of 412 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Banquo_48 (CU1),

Start 4:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dardanus_45 (CU3),

Start 6:
• Found in 6 of 412 (1.5%) of genes in pham
• Manual Annotations of this start: 6 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DinoDaryn_50 (CU1), Goib_50 (CU1), Huffy_50 (CU1), Splinter_49 (CU1), TZGordon_51 (CU1), Vendetta_49 (CU1),

Start 12:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schmidt_43 (CU4),

Start 15:
• Found in 51 of 412 (12.4%) of genes in pham
• Manual Annotations of this start: 40 of 351
• Called 84.3% of time when present
• Phage (with cluster) where this start called: Ariel_115 (J), BAKA_120 (J), Bagrid_121 (J), Beem_122 (J), Bobby_113 (J), Bombitas_108 (J), Constella_103 (J), Courthouse_110 (J), Dallas_121 (J), DmpstrDiver_121 (J), Dove_106 (J), Duke13_115 (J), Ejimix_115 (J), EricMillard_112 (J), Halley_123 (J), Hidrated_103 (J), HokkenD_110 (J), Hughesyang_120 (J), JuicyJay_117 (J), Kalah2_112 (J), KashFlow_112 (J), Klein_117 (J), LittleE_120 (J), Lucky2013_112 (J), MiaZeal_115 (J), Minerva_118 (J), NihilNomen_122 (J), Omega_126 (J), Optimus_111 (J), Phoebus_121 (J), Porcelain_115 (J), Pound_110 (J), Rearden_109 (J), Redno2_114 (J), Schatzie_115 (J), Squint_113 (J), Superphikiman_112 (J), Thibault_101 (J), ThreeRngTarjay_116 (J), Wanda_120 (J), Xiaokay_109 (J), Yeet_111 (J), Zelink_115 (J),

Start 17:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Catfish_47 (CU5),

Start 20:
• Found in 10 of 412 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 10.0% of time when present
• Phage (with cluster) where this start called: TinaLin_47 (CU1),

Start 22:
• Found in 5 of 412 (1.2%) of genes in pham
• Manual Annotations of this start: 5 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_103 (DZ), Cafasso_105 (DZ), ModicumRichard_104 (DZ), Morgana_111 (DZ), ObLaDi_104 (DZ),

Start 25:
• Found in 1 of 412 (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: Gsput1_42 (CU2),

Start 27:
• Found in 2 of 412 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_115 (KA), VanLee_115 (KA),

Start 30:
• Found in 154 of 412 (37.4%) of genes in pham
• Manual Annotations of this start: 24 of 351
• Called 16.2% of time when present

• Phage (with cluster) where this start called: BadStone_69 (E), Barbarian_71 (E), Buck_73 (E), Cookies_69 (E), DrDrey_72 (E), Eureka_70 (E), Gator_70 (E), Glexan_71 (E), Goku_70 (E), Greep_76 (E), Harella_72 (E), IHOP_70 (E), Mosby_68 (E), Nimrod_73 (E), Pat3_70 (E), Phaja_70 (E), Pharsalus_69 (E), PhatBacter_76 (E), ShereKhan_71 (E), Sotrice96_73 (E), TBrady12_75 (E), Tarkin_71 (E), TeardropMSU_68 (E), Traaww1_68 (E), Ukulele_67 (E),

Start 32:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Stellammi_91 (UNK),

Start 33:
• Found in 147 of 412 (35.7%) of genes in pham
• Manual Annotations of this start: 112 of 351
• Called 83.0% of time when present
• Phage (with cluster) where this start called: 244_73 (E), ABCat_69 (E), Adnama_76 (E), Amao_72 (E), AmericanBeauty_76 (E), Argent26_76 (E), Asriel_71 (E), BaboJay_69 (E), Balomoji_72 (E), Bask21_72 (E), Becksu_71 (E), Bench_75 (E), BigBubba_72 (E), BilboSwaggins_70 (E), Bogg_72 (E), Brewer_68 (E), Bruin_69 (E), Budgie_78 (E), BugsBunny_72 (E), Cactus_75 (E), ChosenOne_72 (E), ChotaBhai_72 (E), Cjw1_72 (E), Command613_74 (E), Contagion_68 (E), CrystalP_71 (E), Czyszczon1_73 (E), Daikon_74 (E), DoctorDiddles_71 (E), Dumbo_72 (E), Dusk_69 (E), Easy2Say_73 (E), Elite2014_71 (E), Elph10_72 (E), Emmina_72 (E), FairyPath_73 (E), Filch_73 (E), FireRed_76 (E), Flypotenuse_68 (E), FoghornLeghorn_66 (E), Gage_74 (E), Gaia_83 (X), Gemini_77 (E), GoldenSpark_76 (E), Goldilocks_75 (E), GooberAzure_75 (E), HanKaySha_72 (E), Henry_70 (E), Highbury_71 (E), Holt_77 (E), Hoonter_75 (E), Hopey_72 (E), HufflyPuff_75 (E), Icee_73 (E), Inca_69 (E), JeTaime_72 (E), Kanye_69 (E), Kimchi_76 (E), Kostya_72 (E), Lilac_74 (E), Lilizi_73 (E), Lilpickle_71 (E), Livelaughbron_74 (E), MISSy_73 (E), MPhalcon_73 (E), MadamMonkfish_72 (E), Manda_73 (E), Marshmallow_70 (E), Maxxinista_74 (E), Mindy_71 (E), Miniwave_67 (E), Misfit_73 (E), Moldemort_75 (E), MollyToe_67 (E), Murica_75 (E), Murphy_72 (E), Myrale_72 (E), Nala_74 (E), Nebkiss_82 (X), NelitzaMV_70 (E), NoSleep_73 (E), NonchalantPear_72 (E), OrionPax_71 (E), PaddyBaddy_72 (E), Palpatine_74 (E), Paperbeatsrock_71 (E), Petra64142_76 (E), Phaux_74 (E), Phrux_69 (E), Policronamos_75 (E), Porky_71 (E), Ptowny_69 (E), Pumpkin_75 (E), Quallification_73 (E), Rakim_73 (E), Rimmer_73 (E), RiverMonster_72 (E), Saints25_71 (E), Sassay_67 (E), ShamWow_72 (E), Simpliphy_71 (E), SirDuracell_71 (E), SophKB_69 (E), Stank_75 (E), Stark_73 (E), StellaBean_70 (E), StolenFromERC_75 (E), StormChicken_74 (E), TeamEdward_74 (E), Teaspoon_73 (E), Terminus_75 (E), Thimble_73 (E), Thresher_74 (E), Tomaszewski_67 (E), Toto_70 (E), Tuco_73 (E), Wiggin_74 (E), Willez_67 (E), Xandras_71 (E), YassJohnny_69 (E), Youngblood_75 (E), xkcd_75 (E),

Start 35:
• Found in 24 of 412 (5.8%) of genes in pham
• Manual Annotations of this start: 3 of 351
• Called 37.5% of time when present
• Phage (with cluster) where this start called: BronnyJames_113 (J), Gonephishing_109 (J), Hannaconda_106 (J), Megan_49 (EC), Nekros_117 (J), Nibley_108 (J), Nicole72_49 (EC), Odette_122 (J), Shaboozey_113 (J),

Start 36:
• Found in 18 of 412 (4.4%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 5.6% of time when present
• Phage (with cluster) where this start called: Ganandorf_50 (EC),

Start 37:
• Found in 6 of 412 (1.5%) of genes in pham
• No Manual Annotations of this start.
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Merpity_52 (FQ1), Neroxid_48 (FQ2), Raya_48 (FQ2), Skyerus_43 (FQ2),

Start 38:
• Found in 38 of 412 (9.2%) of genes in pham
• Manual Annotations of this start: 32 of 351
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Antares_51 (EC), Ariadne_59 (EC), BeagleBug_50 (EC), BrazzalePHS_50 (EC), Busephilis_50 (EC), Cranjis_52 (EC), CrazyRich_50 (EC), Crisis_52 (EC), EarickHC_51 (EC), Germa_52 (EC), Glorp_52 (EC), Hermeonysus_50 (EC), Honeyfin_52 (EC), Jefe_51 (EC), Jollipop_51 (EC), KaiHaiDragon_51 (EC), Kowalski_50 (EC), LittleFortune_52 (EC), Lucretia_51 (EC), Onika_50 (EC), PhedwardCullen_50 (EC), Phorgeous_50 (EC), Phrancesco_51 (EC), PierreOrion_51 (EC), PiperSansNom_51 (EC), Piperis_51 (EC), Pulchra_52 (EC), Quhwah_54 (EC), Ramiel05_50 (EC), Rockwell_50 (EC), Savannah_50 (EC), Scumberland_52 (EC), Selwyn23_52 (EC), Shotgun_50 (EC), Smarties_59 (EC), Yeti_51 (EC),

Start 40:
• Found in 5 of 412 (1.2%) of genes in pham
• Manual Annotations of this start: 5 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fireman_53 (EC), Metamorphoo_53 (EC), RobsFeet_54 (EC), Shrubaron_53 (EC), Tyrumbra_51 (EC),

Start 42:
• Found in 18 of 412 (4.4%) of genes in pham
• Manual Annotations of this start: 15 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cinna_47 (EI), ClearAsMud_54 (EC), Cressida_50 (EI), Gina_53 (EC), Jayden_53 (EC), Kozie_48 (EI), Margaery_46 (EI), Matzah_49 (EI), MementoMori_48 (EI), Merry_ (EC), NoodlelyBoi_52 (EC), SirFrank_51 (EC), Skugga_50 (EC), Spartan_52 (ES), Sunny_ (EC), Teamocil_53 (EC), Terij_47 (EI), Zapato_50 (EC),

Start 43:
• Found in 24 of 412 (5.8%) of genes in pham
• Manual Annotations of this start: 19 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bellis_65 (L3), BourbonZero_65 (L3), Clautastrophe_64 (L3), DuncansLeg_65 (L3), Ellson_64 (L3), Finnry_65 (L3), Jobypre_65 (L3), Jubie_64 (L3), Kingsolomon_64 (L3), KirDoubleO7_63 (L3),

Krypton555_66 (L3), LiyuLake_64 (L3), Lolly9_64 (L3), Lumos_66 (L3), MiniLon_68 (L3), MiniMac_68 (L3), Moostard_64 (L3), MsGreen_65 (L3), Nicholas_64 (L3), Red305_65 (L3), Samty_65 (L3), Snenia_64 (L3), TriFive_66 (L3), Whirlwind_65 (L3),

Start 44:
• Found in 20 of 412 (4.9%) of genes in pham
• Manual Annotations of this start: 19 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acquire49_64 (L1), Appletree2_64 (L1), AvadaKedavra_64 (L1), Calm_65 (L1), CicholasNage_63 (L1), DirkDirk_61 (L1), Enceladus_62 (L1), Halena_62 (L1), JoeDirt_63 (L1), LeBron_63 (L1), MAckerman_63 (L1), OhShagHennessy_62 (L1), Poochiewood_64 (L1), Rose5_64 (L1), Silverleaf_64 (L1), Tyson_64 (L1), UPIE_64 (L1), Wamburgrxpress_64 (L1), Wyatt2_65 (L1), Zaria_65 (L1),

Start 45:
• Found in 29 of 412 (7.0%) of genes in pham
• Manual Annotations of this start: 21 of 351
• Called 86.2% of time when present
• Phage (with cluster) where this start called: Altostratus_53 (FS), Antuna_41 (GA), Appa_40 (GA), Blett_40 (GA), Bush_41 (GA), Carrillo_42 (GA), CookieDog_40 (GA), Dropshot_40 (GA), Guzman_40 (GA), Jakelyne_42 (GA), Khuang_53 (FS), Losacky_41 (GA), Mariel_41 (GA), MenE_41 (GA), MrSmee_51 (FQ1), NCRodriguez_41 (GA), PhillyJawn_41 (GA), Phingu_43 (GA), Phonegingi_40 (GA), Pickles13_39 (GA), ScoobySnack_37 (GA), Skitty_45 (FQ1), Violeta_42 (GA), Warren_40 (GA), Winchester007_42 (GA),

Start 46:
• Found in 2 of 412 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aegeus_68 (L5), Baudelaire_68 (L5),

Start 47:
• Found in 56 of 412 (13.6%) of genes in pham
• Manual Annotations of this start: 38 of 351
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archie_66 (L2), Baoshan_65 (L2), Bazzle_66 (L2), BigCheese_66 (L2), BobsGarage_66 (L2), BrainDrainer_64 (L4), Breezona_66 (L2), Bromden_66 (L4), Chaser_62 (L4), ChengKai98_66 (L2), ChutneyChips_64 (L4), Claus_66 (L2), Crossroads_66 (L2), DHan_67 (L2), DanBing_66 (L2), Douge_64 (L4), Douzhi_64 (L4), DrSeegs_66 (L2), DyoEdafos_67 (L4), Faith1_66 (L2), FarmResident_66 (L4), Finemlucis_66 (L2), Gabriela_63 (L2), Gardann_67 (L2), GuuelaD_65 (L2), Hafay_67 (L2), Hiraya_66 (L2), Itos_65 (L2), Kahlid_66 (L2), Kropertea_63 (L4), Lewan_67 (L2), LilDestine_66 (L2), Loadrie_65 (L2), Lynnae_67 (L2), Miley16_66 (L2), MkaliMitinis3_67 (L2), Molivier_57 (L2), Netyap_67 (L2), Nicholasp3_66 (L2), OverPar_67 (L2), PYPDinur_62 (L4), Quby_64 (L4), Rossetti_67 (L2), Rumpelstiltskin_65 (L2), Sarshaun_66 (L2), Sheng711_64 (L4), SoJulia_68 (L2), Soap141_66 (L2), Tourach_65 (L2), Underpass_57 (L2), Vetrix_66 (L2), Wigglewiggle_66 (L2), Wilder_67 (L2), Winky_66 (L2), Zakai_67 (L2), ZhongYanYuan_64 (L2),

Start 49:

• Found in 54 of 412 (13.1%) of genes in pham
• Manual Annotations of this start: 1 of 351
• Called 1.9% of time when present
• Phage (with cluster) where this start called: Paschalis_50 (EC),

Start 60:
• Found in 214 of 412 (51.9%) of genes in pham
• No Manual Annotations of this start.
• Called 0.5% of time when present
• Phage (with cluster) where this start called: Marleymoo_104 (J),

Summary by clusters:

There are 23 clusters represented in this pham: FS, DZ, EI, CU5, CU4, CU3, CU2, CU1, E, J, EC, L4, L5, L2, L3, GA, L1, X, UNK, ES, KA, FQ2, FQ1,

Info for manual annotations of cluster CU1:
•Start number 3 was manually annotated 1 time for cluster CU1.
•Start number 6 was manually annotated 6 times for cluster CU1.
•Start number 20 was manually annotated 1 time for cluster CU1.

Info for manual annotations of cluster CU3:
•Start number 4 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:
•Start number 12 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:
•Start number 17 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DZ:
•Start number 22 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster E:
•Start number 30 was manually annotated 24 times for cluster E.
•Start number 33 was manually annotated 110 times for cluster E.

Info for manual annotations of cluster EC:
•Start number 35 was manually annotated 2 times for cluster EC.
•Start number 36 was manually annotated 1 time for cluster EC.
•Start number 38 was manually annotated 32 times for cluster EC.
•Start number 40 was manually annotated 5 times for cluster EC.
•Start number 42 was manually annotated 8 times for cluster EC.
•Start number 49 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster EI:
•Start number 42 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster FQ1:
•Start number 45 was manually annotated 2 times for cluster FQ1.

Info for manual annotations of cluster FS:
•Start number 45 was manually annotated 2 times for cluster FS.

Info for manual annotations of cluster GA:
•Start number 45 was manually annotated 17 times for cluster GA.

Info for manual annotations of cluster J:
•Start number 15 was manually annotated 40 times for cluster J.
•Start number 35 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster KA:
•Start number 27 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster L1:
•Start number 44 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 47 was manually annotated 32 times for cluster L2.

Info for manual annotations of cluster L3:
•Start number 43 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 47 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 46 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster UNK:
•Start number 32 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster X:
•Start number 33 was manually annotated 2 times for cluster X.

Gene Information:

Gene: 244_73 Start: 47057, Stop: 47425, Start Num: 33
Candidate Starts for 244_73:
(Start: 30 @47054 has 24 MA's), (Start: 33 @47057 has 112 MA's), (51, 47096), (54, 47114), (60, 47135), (64, 47153), (97, 47297), (100, 47318), (107, 47369), (109, 47387),

Gene: ABCat_69 Start: 47404, Stop: 47772, Start Num: 33
Candidate Starts for ABCat_69:
(Start: 30 @47401 has 24 MA's), (Start: 33 @47404 has 112 MA's), (51, 47443), (54, 47461), (60, 47482), (64, 47500), (97, 47644), (100, 47665), (107, 47716), (109, 47734),

Gene: Acquire49_64 Start: 44276, Stop: 44644, Start Num: 44
Candidate Starts for Acquire49_64:
(Start: 44 @44276 has 19 MA's), (55, 44324), (80, 44432), (88, 44480), (92, 44492), (108, 44591), (110, 44603),

Gene: Adnama_76 Start: 47430, Stop: 47798, Start Num: 33
Candidate Starts for Adnama_76:
(Start: 30 @47427 has 24 MA's), (Start: 33 @47430 has 112 MA's), (51, 47469), (54, 47487), (60, 47508), (64, 47526), (97, 47670), (100, 47691), (107, 47742), (109, 47760),

Gene: Aegeus_68 Start: 45674, Stop: 46021, Start Num: 46
Candidate Starts for Aegeus_68:
(Start: 46 @45674 has 2 MA's), (56, 45722), (57, 45725), (64, 45752), (74, 45779), (86, 45860), (88, 45866), (97, 45896), (100, 45917), (104, 45947), (106, 45959), (107, 45968), (109, 45986), (111, 45992),

Gene: Aleemily_103 Start: 59266, Stop: 59679, Start Num: 22
Candidate Starts for Aleemily_103:
(Start: 22 @59266 has 5 MA's), (51, 59344), (62, 59395), (81, 59473),

Gene: Altostratus_53 Start: 31059, Stop: 31415, Start Num: 45
Candidate Starts for Altostratus_53:
(Start: 45 @31059 has 21 MA's), (50, 31074), (71, 31158), (81, 31212), (112, 31386),

Gene: Amao_72 Start: 46818, Stop: 47192, Start Num: 33
Candidate Starts for Amao_72:
(Start: 30 @46815 has 24 MA's), (Start: 33 @46818 has 112 MA's), (54, 46881), (97, 47064), (100, 47085), (107, 47136), (109, 47154),

Gene: AmericanBeauty_76 Start: 47573, Stop: 47941, Start Num: 33
Candidate Starts for AmericanBeauty_76:
(Start: 30 @47570 has 24 MA's), (Start: 33 @47573 has 112 MA's), (51, 47612), (54, 47630), (60, 47651), (64, 47669), (97, 47813), (100, 47834), (107, 47885), (109, 47903),

Gene: Antares_51 Start: 34982, Stop: 35350, Start Num: 38
Candidate Starts for Antares_51:
(Start: 38 @34982 has 32 MA's), (Start: 49 @35003 has 1 MA's), (60, 35054), (62, 35066), (67, 35081), (70, 35087), (80, 35144), (88, 35186), (95, 35210), (97, 35216), (98, 35222), (111, 35312), (112, 35318),

Gene: Antuna_41 Start: 25343, Stop: 25705, Start Num: 45
Candidate Starts for Antuna_41:
(Start: 45 @25343 has 21 MA's), (65, 25427), (81, 25496), (85, 25520), (110, 25661), (112, 25670), (115, 25688), (116, 25691),

Gene: Appa_40 Start: 25265, Stop: 25627, Start Num: 45
Candidate Starts for Appa_40:
(Start: 45 @25265 has 21 MA's), (65, 25349), (81, 25418), (85, 25442), (110, 25583), (112, 25592), (115, 25610), (116, 25613),

Gene: Appletree2_64 Start: 44100, Stop: 44468, Start Num: 44
Candidate Starts for Appletree2_64:
(Start: 44 @44100 has 19 MA's), (55, 44148), (80, 44256), (88, 44304), (92, 44316), (104, 44385), (108, 44415), (110, 44427),

Gene: Archie_66 Start: 46205, Stop: 46564, Start Num: 47
Candidate Starts for Archie_66:

(Start: 47 @46205 has 38 MA's), (80, 46352), (92, 46412), (108, 46511), (110, 46523),

Gene: Argent26_76 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for Argent26_76:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: Ariadne_59 Start: 36518, Stop: 36883, Start Num: 38
Candidate Starts for Ariadne_59:
(Start: 38 @36518 has 32 MA's), (70, 36620), (80, 36677), (97, 36749), (98, 36755), (99, 36764), (111, 36845), (112, 36851),

Gene: Ariel_115 Start: 62422, Stop: 62853, Start Num: 15
Candidate Starts for Ariel_115:
(Start: 15 @62422 has 40 MA's), (Start: 35 @62479 has 3 MA's), (52, 62527), (56, 62548), (79, 62641), (82, 62668), (91, 62707), (92, 62710), (100, 62749), (106, 62791), (110, 62821),

Gene: Asriel_71 Start: 45767, Stop: 46135, Start Num: 33
Candidate Starts for Asriel_71:
(Start: 30 @45764 has 24 MA's), (Start: 33 @45767 has 112 MA's), (51, 45806), (54, 45824), (60, 45845), (64, 45863), (97, 46007), (100, 46028), (107, 46079), (109, 46097),

Gene: AvadaKedavra_64 Start: 44349, Stop: 44717, Start Num: 44
Candidate Starts for AvadaKedavra_64:
(Start: 44 @44349 has 19 MA's), (55, 44397), (80, 44505), (88, 44553), (92, 44565), (108, 44664), (110, 44676),

Gene: BAKA_120 Start: 66715, Stop: 67140, Start Num: 15
Candidate Starts for BAKA_120:
(Start: 15 @66715 has 40 MA's), (60, 66850), (79, 66931), (92, 67000),

Gene: BaboJay_69 Start: 46604, Stop: 46972, Start Num: 33
Candidate Starts for BaboJay_69:
(Start: 30 @46601 has 24 MA's), (Start: 33 @46604 has 112 MA's), (51, 46643), (54, 46661), (60, 46682), (64, 46700), (97, 46844), (100, 46865), (107, 46916), (109, 46934),

Gene: BadStone_69 Start: 46970, Stop: 47341, Start Num: 30
Candidate Starts for BadStone_69:
(Start: 30 @46970 has 24 MA's), (Start: 33 @46973 has 112 MA's), (51, 47012), (54, 47030), (60, 47051), (64, 47069), (97, 47213), (100, 47234), (107, 47285), (109, 47303),

Gene: Bagrid_121 Start: 66676, Stop: 67101, Start Num: 15
Candidate Starts for Bagrid_121:
(Start: 15 @66676 has 40 MA's), (60, 66811), (79, 66892), (92, 66961),

Gene: Balomoji_72 Start: 47534, Stop: 47902, Start Num: 33
Candidate Starts for Balomoji_72:
(Start: 30 @47531 has 24 MA's), (Start: 33 @47534 has 112 MA's), (51, 47573), (54, 47591), (60, 47612), (64, 47630), (97, 47774), (100, 47795), (107, 47846), (109, 47864),

Gene: Banquo_48 Start: 31763, Stop: 32242, Start Num: 3
Candidate Starts for Banquo_48:

(Start: 3 @31763 has 1 MA's), (Start: 20 @31835 has 1 MA's), (24, 31847), (28, 31862), (Start: 30 @31871 has 24 MA's), (51, 31916), (78, 32030), (90, 32084), (104, 32159),

Gene: Baoshan_65 Start: 45900, Stop: 46259, Start Num: 47
Candidate Starts for Baoshan_65:
(Start: 47 @45900 has 38 MA's), (80, 46047), (92, 46107), (108, 46206),

Gene: Barbarian_71 Start: 45764, Stop: 46135, Start Num: 30
Candidate Starts for Barbarian_71:
(Start: 30 @45764 has 24 MA's), (Start: 33 @45767 has 112 MA's), (51, 45806), (54, 45824), (60, 45845), (64, 45863), (97, 46007), (100, 46028), (107, 46079), (109, 46097),

Gene: Bask21_72 Start: 46381, Stop: 46755, Start Num: 33
Candidate Starts for Bask21_72:
(Start: 30 @46378 has 24 MA's), (Start: 33 @46381 has 112 MA's), (54, 46444), (97, 46627), (100, 46648), (107, 46699), (109, 46717),

Gene: Baudelaire_68 Start: 45674, Stop: 46021, Start Num: 46
Candidate Starts for Baudelaire_68:
(Start: 46 @45674 has 2 MA's), (56, 45722), (57, 45725), (64, 45752), (74, 45779), (86, 45860), (88, 45866), (97, 45896), (100, 45917), (104, 45947), (106, 45959), (107, 45968), (109, 45986), (111, 45992),

Gene: Bazzle_66 Start: 46275, Stop: 46634, Start Num: 47
Candidate Starts for Bazzle_66:
(Start: 47 @46275 has 38 MA's), (80, 46422), (92, 46482), (99, 46515), (108, 46581), (110, 46593),

Gene: BeagleBug_50 Start: 34763, Stop: 35131, Start Num: 38
Candidate Starts for BeagleBug_50:
(Start: 38 @34763 has 32 MA's), (Start: 49 @34784 has 1 MA's), (60, 34835), (62, 34847), (67, 34862), (70, 34868), (80, 34925), (88, 34967), (95, 34991), (97, 34997), (98, 35003), (111, 35093), (112, 35099),

Gene: Becksu_71 Start: 47606, Stop: 47974, Start Num: 33
Candidate Starts for Becksu_71:
(Start: 30 @47603 has 24 MA's), (Start: 33 @47606 has 112 MA's), (51, 47645), (54, 47663), (60, 47684), (64, 47702), (97, 47846), (100, 47867), (107, 47918), (109, 47936),

Gene: Beem_122 Start: 68044, Stop: 68469, Start Num: 15
Candidate Starts for Beem_122:
(Start: 15 @68044 has 40 MA's), (60, 68179), (79, 68260), (92, 68329),

Gene: Bellis_65 Start: 46112, Stop: 46483, Start Num: 43
Candidate Starts for Bellis_65:
(29, 46085), (Start: 43 @46112 has 19 MA's), (80, 46271), (92, 46331), (96, 46346), (106, 46412), (108, 46430), (110, 46442),

Gene: Bench_75 Start: 47074, Stop: 47442, Start Num: 33
Candidate Starts for Bench_75:
(Start: 30 @47071 has 24 MA's), (Start: 33 @47074 has 112 MA's), (51, 47113), (54, 47131), (60, 47152), (64, 47170), (97, 47314), (100, 47335), (107, 47386), (109, 47404),

Gene: BigBubba_72 Start: 46786, Stop: 47154, Start Num: 33

Candidate Starts for BigBubba_72:
(Start: 30 @46783 has 24 MA's), (Start: 33 @46786 has 112 MA's), (51, 46825), (54, 46843), (60, 46864), (64, 46882), (97, 47026), (100, 47047), (107, 47098), (109, 47116),

Gene: BigCheese_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for BigCheese_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: BilboSwaggins_70 Start: 47412, Stop: 47780, Start Num: 33
Candidate Starts for BilboSwaggins_70:
(Start: 30 @47409 has 24 MA's), (Start: 33 @47412 has 112 MA's), (51, 47451), (54, 47469), (60, 47490), (64, 47508), (97, 47652), (100, 47673), (107, 47724), (109, 47742),

Gene: Blett_40 Start: 25445, Stop: 25807, Start Num: 45
Candidate Starts for Blett_40:
(Start: 45 @25445 has 21 MA's), (65, 25529), (81, 25598), (85, 25622), (110, 25763), (112, 25772), (115, 25790), (116, 25793),

Gene: Bobby_113 Start: 68143, Stop: 68562, Start Num: 15
Candidate Starts for Bobby_113:
(Start: 15 @68143 has 40 MA's), (60, 68272), (79, 68353), (92, 68422),

Gene: BobsGarage_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for BobsGarage_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: Bogg_72 Start: 46353, Stop: 46721, Start Num: 33
Candidate Starts for Bogg_72:
(Start: 30 @46350 has 24 MA's), (Start: 33 @46353 has 112 MA's), (51, 46392), (54, 46410), (60, 46431), (64, 46449), (97, 46593), (100, 46614), (107, 46665), (109, 46683),

Gene: Bombitas_108 Start: 63987, Stop: 64415, Start Num: 15
Candidate Starts for Bombitas_108:
(Start: 15 @63987 has 40 MA's), (Start: 35 @64044 has 3 MA's), (52, 64092), (56, 64113), (79, 64206), (82, 64233), (91, 64272), (92, 64275), (100, 64314), (106, 64356),

Gene: BourbonZero_65 Start: 46157, Stop: 46528, Start Num: 43
Candidate Starts for BourbonZero_65:
(29, 46130), (Start: 43 @46157 has 19 MA's), (80, 46316), (92, 46376), (110, 46487),

Gene: BrainDrainer_64 Start: 44845, Stop: 45204, Start Num: 47
Candidate Starts for BrainDrainer_64:
(Start: 47 @44845 has 38 MA's), (80, 44992), (92, 45052), (96, 45067), (99, 45085), (108, 45151), (110, 45163),

Gene: BrazzalePHS_50 Start: 34778, Stop: 35146, Start Num: 38
Candidate Starts for BrazzalePHS_50:
(Start: 38 @34778 has 32 MA's), (Start: 49 @34799 has 1 MA's), (60, 34850), (62, 34862), (67, 34877), (70, 34883), (80, 34940), (88, 34982), (95, 35006), (97, 35012), (98, 35018), (111, 35108), (112, 35114),

Gene: Breezona_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for Breezona_66:

(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: Brewer_68 Start: 45873, Stop: 46241, Start Num: 33
Candidate Starts for Brewer_68:
(Start: 30 @45870 has 24 MA's), (Start: 33 @45873 has 112 MA's), (51, 45912), (54, 45930), (60, 45951), (64, 45969), (97, 46113), (100, 46134), (107, 46185), (109, 46203),

Gene: Bromden_66 Start: 45946, Stop: 46305, Start Num: 47
Candidate Starts for Bromden_66:
(Start: 47 @45946 has 38 MA's), (62, 46015), (80, 46093), (92, 46153), (96, 46168), (99, 46186), (110, 46264),

Gene: BronnyJames_113 Start: 62968, Stop: 63339, Start Num: 35
Candidate Starts for BronnyJames_113:
(Start: 15 @62911 has 40 MA's), (Start: 35 @62968 has 3 MA's), (39, 62974), (52, 63016), (56, 63037), (79, 63130), (82, 63157), (91, 63196), (92, 63199), (106, 63280),

Gene: Bruin_69 Start: 45950, Stop: 46318, Start Num: 33
Candidate Starts for Bruin_69:
(Start: 30 @45947 has 24 MA's), (Start: 33 @45950 has 112 MA's), (51, 45989), (54, 46007), (60, 46028), (64, 46046), (97, 46190), (100, 46211), (107, 46262), (109, 46280),

Gene: Buck_73 Start: 47658, Stop: 48029, Start Num: 30
Candidate Starts for Buck_73:
(Start: 30 @47658 has 24 MA's), (Start: 33 @47661 has 112 MA's), (51, 47700), (54, 47718), (60, 47739), (64, 47757), (97, 47901), (100, 47922), (107, 47973), (109, 47991),

Gene: Budgie_78 Start: 47436, Stop: 47810, Start Num: 33
Candidate Starts for Budgie_78:
(23, 47406), (24, 47409), (Start: 30 @47433 has 24 MA's), (Start: 33 @47436 has 112 MA's), (54, 47499), (64, 47538), (84, 47631), (94, 47670), (97, 47682), (100, 47703), (107, 47754), (109, 47772),

Gene: BugsBunny_72 Start: 47482, Stop: 47850, Start Num: 33
Candidate Starts for BugsBunny_72:
(Start: 30 @47479 has 24 MA's), (Start: 33 @47482 has 112 MA's), (51, 47521), (54, 47539), (60, 47560), (64, 47578), (97, 47722), (100, 47743), (107, 47794), (109, 47812),

Gene: Busephilis_50 Start: 34718, Stop: 35086, Start Num: 38
Candidate Starts for Busephilis_50:
(Start: 38 @34718 has 32 MA's), (Start: 49 @34739 has 1 MA's), (60, 34790), (62, 34802), (67, 34817), (70, 34823), (80, 34880), (88, 34922), (95, 34946), (97, 34952), (98, 34958), (111, 35048), (112, 35054),

Gene: Bush_41 Start: 25393, Stop: 25755, Start Num: 45
Candidate Starts for Bush_41:
(Start: 45 @25393 has 21 MA's), (65, 25477), (81, 25546), (85, 25570), (110, 25711), (112, 25720), (115, 25738), (116, 25741),

Gene: Cactus_75 Start: 46428, Stop: 46796, Start Num: 33
Candidate Starts for Cactus_75:
(Start: 30 @46425 has 24 MA's), (Start: 33 @46428 has 112 MA's), (51, 46467), (54, 46485), (60, 46506), (64, 46524), (97, 46668), (100, 46689), (107, 46740), (109, 46758),

Gene: Cafasso_105 Start: 59817, Stop: 60230, Start Num: 22
Candidate Starts for Cafasso_105:
(Start: 22 @59817 has 5 MA's), (26, 59829), (51, 59895), (62, 59946), (81, 60024),

Gene: Calm_65 Start: 44276, Stop: 44644, Start Num: 44
Candidate Starts for Calm_65:
(Start: 44 @44276 has 19 MA's), (55, 44324), (80, 44432), (88, 44480), (92, 44492), (104, 44561), (108, 44591), (110, 44603),

Gene: Carrillo_42 Start: 25366, Stop: 25728, Start Num: 45
Candidate Starts for Carrillo_42:
(Start: 45 @25366 has 21 MA's), (65, 25450), (81, 25519), (85, 25543), (110, 25684), (112, 25693), (115, 25711), (116, 25714),

Gene: Catfish_47 Start: 33340, Stop: 33759, Start Num: 17
Candidate Starts for Catfish_47:
(Start: 17 @33340 has 1 MA's), (51, 33430), (102, 33664), (113, 33730),

Gene: Chaser_62 Start: 44617, Stop: 44976, Start Num: 47
Candidate Starts for Chaser_62:
(Start: 47 @44617 has 38 MA's), (80, 44764), (92, 44824), (110, 44935),

Gene: ChengKai98_66 Start: 45992, Stop: 46351, Start Num: 47
Candidate Starts for ChengKai98_66:
(Start: 47 @45992 has 38 MA's), (72, 46088), (80, 46139), (92, 46199), (108, 46298), (110, 46310),

Gene: ChosenOne_72 Start: 46431, Stop: 46799, Start Num: 33
Candidate Starts for ChosenOne_72:
(Start: 30 @46428 has 24 MA's), (Start: 33 @46431 has 112 MA's), (51, 46470), (54, 46488), (60, 46509), (64, 46527), (97, 46671), (100, 46692), (107, 46743), (109, 46761),

Gene: ChotaBhai_72 Start: 46746, Stop: 47120, Start Num: 33
Candidate Starts for ChotaBhai_72:
(Start: 30 @46743 has 24 MA's), (Start: 33 @46746 has 112 MA's), (54, 46809), (97, 46992), (100, 47013), (107, 47064), (109, 47082),

Gene: ChutneyChips_64 Start: 44869, Stop: 45228, Start Num: 47
Candidate Starts for ChutneyChips_64:
(Start: 47 @44869 has 38 MA's), (80, 45016), (92, 45076), (96, 45091), (99, 45109), (108, 45175), (110, 45187),

Gene: CicholasNage_63 Start: 44312, Stop: 44680, Start Num: 44
Candidate Starts for CicholasNage_63:
(Start: 44 @44312 has 19 MA's), (55, 44360), (80, 44468), (88, 44516), (92, 44528), (108, 44627), (110, 44639),

Gene: Cinna_47 Start: 34999, Stop: 35361, Start Num: 42
Candidate Starts for Cinna_47:
(18, 34939), (Start: 42 @34999 has 15 MA's), (Start: 49 @35014 has 1 MA's), (51, 35026), (52, 35032), (60, 35065), (62, 35077), (65, 35086), (76, 35125), (80, 35155), (92, 35209), (93, 35212), (97, 35227), (98, 35233), (112, 35329),

Gene: Cjw1_72 Start: 48128, Stop: 48496, Start Num: 33

Candidate Starts for Cjw1_72:
(Start: 30 @48125 has 24 MA's), (Start: 33 @48128 has 112 MA's), (51, 48167), (54, 48185), (60, 48206), (64, 48224), (97, 48368), (100, 48389), (107, 48440), (109, 48458),

Gene: Claus_66 Start: 46038, Stop: 46397, Start Num: 47
Candidate Starts for Claus_66:
(Start: 47 @46038 has 38 MA's), (80, 46185), (92, 46245), (108, 46344),

Gene: Clautastrophe_64 Start: 46109, Stop: 46480, Start Num: 43
Candidate Starts for Clautastrophe_64:
(29, 46082), (Start: 43 @46109 has 19 MA's), (80, 46268), (92, 46328), (96, 46343), (106, 46409), (108, 46427), (110, 46439),

Gene: ClearAsMud_54 Start: 35188, Stop: 35550, Start Num: 42
Candidate Starts for ClearAsMud_54:
(2, 35014), (5, 35023), (Start: 42 @35188 has 15 MA's), (Start: 49 @35203 has 1 MA's), (60, 35254), (62, 35266), (67, 35281), (70, 35287), (80, 35344), (88, 35386), (89, 35389), (97, 35416), (98, 35422), (111, 35512), (112, 35518),

Gene: Colossa_115 Start: 60159, Stop: 60536, Start Num: 27
Candidate Starts for Colossa_115:
(13, 60108), (19, 60129), (Start: 27 @60159 has 2 MA's), (83, 60354), (88, 60378), (112, 60510), (115, 60528),

Gene: Command613_74 Start: 47467, Stop: 47835, Start Num: 33
Candidate Starts for Command613_74:
(Start: 30 @47464 has 24 MA's), (Start: 33 @47467 has 112 MA's), (51, 47506), (54, 47524), (60, 47545), (64, 47563), (97, 47707), (100, 47728), (107, 47779), (109, 47797),

Gene: Constella_103 Start: 60814, Stop: 61239, Start Num: 15
Candidate Starts for Constella_103:
(Start: 15 @60814 has 40 MA's), (60, 60949), (79, 61030), (92, 61099),

Gene: Contagion_68 Start: 46231, Stop: 46599, Start Num: 33
Candidate Starts for Contagion_68:
(Start: 30 @46228 has 24 MA's), (Start: 33 @46231 has 112 MA's), (51, 46270), (54, 46288), (60, 46309), (64, 46327), (97, 46471), (100, 46492), (107, 46543), (109, 46561),

Gene: CookieDog_40 Start: 25366, Stop: 25728, Start Num: 45
Candidate Starts for CookieDog_40:
(Start: 45 @25366 has 21 MA's), (65, 25450), (81, 25519), (85, 25543), (110, 25684), (112, 25693), (115, 25711), (116, 25714),

Gene: Cookies_69 Start: 46600, Stop: 46977, Start Num: 30
Candidate Starts for Cookies_69:
(Start: 30 @46600 has 24 MA's), (Start: 33 @46603 has 112 MA's), (54, 46666), (97, 46849), (100, 46870), (107, 46921), (109, 46939),

Gene: Courthouse_110 Start: 62022, Stop: 62453, Start Num: 15
Candidate Starts for Courthouse_110:
(Start: 15 @62022 has 40 MA's), (Start: 35 @62079 has 3 MA's), (52, 62127), (56, 62148), (79, 62241), (82, 62268), (91, 62307), (92, 62310), (100, 62349), (106, 62391), (110, 62421),

Gene: Cranjis_52 Start: 34937, Stop: 35305, Start Num: 38
Candidate Starts for Cranjis_52:
(Start: 36 @34934 has 1 MA's), (Start: 38 @34937 has 32 MA's), (Start: 49 @34958 has 1 MA's), (60, 35009), (62, 35021), (67, 35036), (70, 35042), (80, 35099), (88, 35141), (95, 35165), (97, 35171), (98, 35177), (111, 35267), (112, 35273),

Gene: CrazyRich_50 Start: 34746, Stop: 35114, Start Num: 38
Candidate Starts for CrazyRich_50:
(Start: 38 @34746 has 32 MA's), (Start: 49 @34767 has 1 MA's), (60, 34818), (62, 34830), (67, 34845), (70, 34851), (80, 34908), (88, 34950), (95, 34974), (97, 34980), (98, 34986), (111, 35076), (112, 35082),

Gene: Cressida_50 Start: 34623, Stop: 34988, Start Num: 42
Candidate Starts for Cressida_50:
(Start: 42 @34623 has 15 MA's), (Start: 49 @34641 has 1 MA's), (60, 34692), (76, 34752), (80, 34782), (93, 34839), (97, 34854), (98, 34860), (112, 34956),

Gene: Crisis_52 Start: 34737, Stop: 35105, Start Num: 38
Candidate Starts for Crisis_52:
(Start: 36 @34734 has 1 MA's), (Start: 38 @34737 has 32 MA's), (Start: 49 @34758 has 1 MA's), (60, 34809), (62, 34821), (67, 34836), (70, 34842), (80, 34899), (88, 34941), (95, 34965), (97, 34971), (98, 34977), (111, 35067), (112, 35073),

Gene: Crossroads_66 Start: 46035, Stop: 46394, Start Num: 47
Candidate Starts for Crossroads_66:
(Start: 47 @46035 has 38 MA's), (72, 46131), (80, 46182), (92, 46242), (108, 46341), (110, 46353),

Gene: CrystalP_71 Start: 47412, Stop: 47780, Start Num: 33
Candidate Starts for CrystalP_71:
(Start: 30 @47409 has 24 MA's), (Start: 33 @47412 has 112 MA's), (51, 47451), (54, 47469), (60, 47490), (64, 47508), (97, 47652), (100, 47673), (107, 47724), (109, 47742),

Gene: Czyszczon1_73 Start: 46937, Stop: 47305, Start Num: 33
Candidate Starts for Czyszczon1_73:
(Start: 30 @46934 has 24 MA's), (Start: 33 @46937 has 112 MA's), (51, 46976), (54, 46994), (60, 47015), (64, 47033), (97, 47177), (100, 47198), (107, 47249), (109, 47267),

Gene: DHan_67 Start: 45938, Stop: 46297, Start Num: 47
Candidate Starts for DHan_67:
(Start: 47 @45938 has 38 MA's), (80, 46085), (92, 46145), (108, 46244),

Gene: Daikon_74 Start: 47555, Stop: 47923, Start Num: 33
Candidate Starts for Daikon_74:
(Start: 30 @47552 has 24 MA's), (Start: 33 @47555 has 112 MA's), (51, 47594), (54, 47612), (60, 47633), (64, 47651), (97, 47795), (100, 47816), (107, 47867), (109, 47885),

Gene: Dallas_121 Start: 67559, Stop: 67984, Start Num: 15
Candidate Starts for Dallas_121:
(Start: 15 @67559 has 40 MA's), (60, 67694), (79, 67775), (92, 67844),

Gene: DanBing_66 Start: 45907, Stop: 46266, Start Num: 47
Candidate Starts for DanBing_66:
(Start: 47 @45907 has 38 MA's), (80, 46054), (92, 46114), (108, 46213),

Gene: Dardanus_45 Start: 30778, Stop: 31296, Start Num: 4
Candidate Starts for Dardanus_45:
(Start: 4 @30778 has 1 MA's), (9, 30850), (Start: 30 @30925 has 24 MA's), (51, 30970), (78, 31084), (87, 31129), (98, 31168),

Gene: DinoDaryn_50 Start: 32295, Stop: 32774, Start Num: 6
Candidate Starts for DinoDaryn_50:
(Start: 6 @32295 has 6 MA's), (Start: 20 @32367 has 1 MA's), (24, 32379), (Start: 30 @32403 has 24 MA's), (51, 32448), (53, 32460), (78, 32562), (82, 32580), (87, 32607), (98, 32646),

Gene: DirkDirk_61 Start: 43686, Stop: 44054, Start Num: 44
Candidate Starts for DirkDirk_61:
(Start: 44 @43686 has 19 MA's), (55, 43734), (80, 43842), (88, 43890), (92, 43902), (104, 43971), (108, 44001), (110, 44013),

Gene: DmpstrDiver_121 Start: 66965, Stop: 67390, Start Num: 15
Candidate Starts for DmpstrDiver_121:
(Start: 15 @66965 has 40 MA's), (60, 67100), (79, 67181), (92, 67250),

Gene: DoctorDiddles_71 Start: 46790, Stop: 47164, Start Num: 33
Candidate Starts for DoctorDiddles_71:
(Start: 30 @46787 has 24 MA's), (Start: 33 @46790 has 112 MA's), (54, 46853), (97, 47036), (100, 47057), (107, 47108), (109, 47126),

Gene: Douge_64 Start: 44611, Stop: 44970, Start Num: 47
Candidate Starts for Douge_64:
(Start: 47 @44611 has 38 MA's), (80, 44758), (92, 44818), (99, 44851), (108, 44917), (110, 44929),

Gene: Douzhi_64 Start: 44664, Stop: 45023, Start Num: 47
Candidate Starts for Douzhi_64:
(Start: 47 @44664 has 38 MA's), (80, 44811), (92, 44871), (96, 44886), (99, 44904), (108, 44970), (110, 44982),

Gene: Dove_106 Start: 62473, Stop: 62898, Start Num: 15
Candidate Starts for Dove_106:
(Start: 15 @62473 has 40 MA's), (60, 62608), (79, 62689), (92, 62758),

Gene: DrDrey_72 Start: 47850, Stop: 48221, Start Num: 30
Candidate Starts for DrDrey_72:
(Start: 30 @47850 has 24 MA's), (Start: 33 @47853 has 112 MA's), (51, 47892), (54, 47910), (60, 47931), (64, 47949), (97, 48093), (100, 48114), (107, 48165), (109, 48183),

Gene: DrSeegs_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for DrSeegs_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: Dropshot_40 Start: 25100, Stop: 25462, Start Num: 45
Candidate Starts for Dropshot_40:
(Start: 45 @25100 has 21 MA's), (65, 25184), (81, 25253), (85, 25277), (110, 25418), (112, 25427), (115, 25445), (116, 25448),

Gene: Duke13_115 Start: 64383, Stop: 64808, Start Num: 15

Candidate Starts for Duke13_115:
(Start: 15 @64383 has 40 MA's), (60, 64518), (79, 64599), (92, 64668),

Gene: Dumbo_72 Start: 46336, Stop: 46704, Start Num: 33
Candidate Starts for Dumbo_72:
(Start: 30 @46333 has 24 MA's), (Start: 33 @46336 has 112 MA's), (51, 46375), (54, 46393), (60, 46414), (64, 46432), (97, 46576), (100, 46597), (107, 46648), (109, 46666),

Gene: DuncansLeg_65 Start: 46145, Stop: 46516, Start Num: 43
Candidate Starts for DuncansLeg_65:
(29, 46118), (Start: 43 @46145 has 19 MA's), (80, 46304), (92, 46364), (110, 46475),

Gene: Dusk_69 Start: 46633, Stop: 47001, Start Num: 33
Candidate Starts for Dusk_69:
(Start: 30 @46630 has 24 MA's), (Start: 33 @46633 has 112 MA's), (51, 46672), (54, 46690), (60, 46711), (64, 46729), (97, 46873), (100, 46894), (107, 46945), (109, 46963),

Gene: DyoEdafos_67 Start: 45106, Stop: 45465, Start Num: 47
Candidate Starts for DyoEdafos_67:
(Start: 47 @45106 has 38 MA's), (80, 45253), (92, 45313), (96, 45328), (99, 45346), (108, 45412), (110, 45424),

Gene: EarickHC_51 Start: 34660, Stop: 35028, Start Num: 38
Candidate Starts for EarickHC_51:
(Start: 36 @34657 has 1 MA's), (Start: 38 @34660 has 32 MA's), (Start: 49 @34681 has 1 MA's), (60, 34732), (62, 34744), (67, 34759), (70, 34765), (80, 34822), (88, 34864), (95, 34888), (97, 34894), (98, 34900), (111, 34990), (112, 34996),

Gene: Easy2Say_73 Start: 47877, Stop: 48245, Start Num: 33
Candidate Starts for Easy2Say_73:
(Start: 30 @47874 has 24 MA's), (Start: 33 @47877 has 112 MA's), (51, 47916), (54, 47934), (60, 47955), (64, 47973), (97, 48117), (100, 48138), (107, 48189), (109, 48207),

Gene: Ejimix_115 Start: 68093, Stop: 68518, Start Num: 15
Candidate Starts for Ejimix_115:
(Start: 15 @68093 has 40 MA's), (60, 68228), (79, 68309), (92, 68378),

Gene: Elite2014_71 Start: 46430, Stop: 46798, Start Num: 33
Candidate Starts for Elite2014_71:
(Start: 30 @46427 has 24 MA's), (Start: 33 @46430 has 112 MA's), (51, 46469), (54, 46487), (60, 46508), (64, 46526), (97, 46670), (100, 46691), (107, 46742), (109, 46760),

Gene: Ellson_64 Start: 46173, Stop: 46544, Start Num: 43
Candidate Starts for Ellson_64:
(29, 46146), (Start: 43 @46173 has 19 MA's), (80, 46332), (92, 46392), (110, 46503),

Gene: Elph10_72 Start: 46435, Stop: 46803, Start Num: 33
Candidate Starts for Elph10_72:
(Start: 30 @46432 has 24 MA's), (Start: 33 @46435 has 112 MA's), (51, 46474), (54, 46492), (60, 46513), (64, 46531), (97, 46675), (100, 46696), (107, 46747), (109, 46765),

Gene: Emmina_72 Start: 46337, Stop: 46705, Start Num: 33
Candidate Starts for Emmina_72:

(Start: 30 @46334 has 24 MA's), (Start: 33 @46337 has 112 MA's), (51, 46376), (54, 46394), (60, 46415), (64, 46433), (97, 46577), (100, 46598), (107, 46649), (109, 46667),

Gene: Enceladus_62 Start: 44158, Stop: 44526, Start Num: 44
Candidate Starts for Enceladus_62:
(Start: 44 @44158 has 19 MA's), (55, 44206), (80, 44314), (88, 44362), (92, 44374), (104, 44443), (108, 44473), (110, 44485),

Gene: EricMillard_112 Start: 66352, Stop: 66777, Start Num: 15
Candidate Starts for EricMillard_112:
(Start: 15 @66352 has 40 MA's), (60, 66487), (79, 66568), (92, 66637),

Gene: Eureka_70 Start: 46898, Stop: 47269, Start Num: 30
Candidate Starts for Eureka_70:
(Start: 30 @46898 has 24 MA's), (Start: 33 @46901 has 112 MA's), (51, 46940), (54, 46958), (60, 46979), (64, 46997), (97, 47141), (100, 47162), (107, 47213), (109, 47231),

Gene: FairyPath_73 Start: 47546, Stop: 47914, Start Num: 33
Candidate Starts for FairyPath_73:
(Start: 30 @47543 has 24 MA's), (Start: 33 @47546 has 112 MA's), (51, 47585), (54, 47603), (60, 47624), (64, 47642), (97, 47786), (100, 47807), (107, 47858), (109, 47876),

Gene: Faith1_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for Faith1_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: FarmResident_66 Start: 44620, Stop: 44979, Start Num: 47
Candidate Starts for FarmResident_66:
(16, 44539), (Start: 47 @44620 has 38 MA's), (80, 44767), (92, 44827), (108, 44926), (110, 44938),

Gene: Filch_73 Start: 46362, Stop: 46730, Start Num: 33
Candidate Starts for Filch_73:
(Start: 30 @46359 has 24 MA's), (Start: 33 @46362 has 112 MA's), (51, 46401), (54, 46419), (60, 46440), (64, 46458), (97, 46602), (100, 46623), (107, 46674), (109, 46692),

Gene: Finemlucis_66 Start: 46278, Stop: 46637, Start Num: 47
Candidate Starts for Finemlucis_66:
(Start: 47 @46278 has 38 MA's), (72, 46374), (80, 46425), (92, 46485), (108, 46584), (110, 46596),

Gene: Finnry_65 Start: 46373, Stop: 46744, Start Num: 43
Candidate Starts for Finnry_65:
(29, 46346), (Start: 43 @46373 has 19 MA's), (80, 46532), (92, 46592), (96, 46607), (106, 46673), (108, 46691), (110, 46703),

Gene: FireRed_76 Start: 47927, Stop: 48295, Start Num: 33
Candidate Starts for FireRed_76:
(Start: 30 @47924 has 24 MA's), (Start: 33 @47927 has 112 MA's), (51, 47966), (54, 47984), (60, 48005), (64, 48023), (97, 48167), (100, 48188), (107, 48239), (109, 48257),

Gene: Fireman_53 Start: 36588, Stop: 36953, Start Num: 40
Candidate Starts for Fireman_53:
(Start: 40 @36588 has 5 MA's), (Start: 49 @36606 has 1 MA's), (60, 36657), (70, 36690), (76, 36717), (80, 36747), (88, 36789), (89, 36792), (98, 36825), (111, 36915), (112, 36921),

Gene: Flypotenuse_68 Start: 46418, Stop: 46786, Start Num: 33
Candidate Starts for Flypotenuse_68:
(Start: 30 @46415 has 24 MA's), (Start: 33 @46418 has 112 MA's), (51, 46457), (54, 46475), (60, 46496), (64, 46514), (97, 46658), (100, 46679), (107, 46730), (109, 46748),

Gene: FoghornLeghorn_66 Start: 45434, Stop: 45802, Start Num: 33
Candidate Starts for FoghornLeghorn_66:
(Start: 30 @45431 has 24 MA's), (Start: 33 @45434 has 112 MA's), (51, 45473), (54, 45491), (60, 45512), (64, 45530), (97, 45674), (100, 45695), (107, 45746), (109, 45764),

Gene: Gabriela_63 Start: 44407, Stop: 44766, Start Num: 47
Candidate Starts for Gabriela_63:
(Start: 47 @44407 has 38 MA's), (72, 44503), (80, 44554), (92, 44614), (108, 44713), (110, 44725),

Gene: Gage_74 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for Gage_74:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: Gaia_83 Start: 49827, Stop: 50210, Start Num: 33
Candidate Starts for Gaia_83:
(Start: 33 @49827 has 112 MA's), (54, 49887), (64, 49926), (69, 49938), (74, 49953), (97, 50076), (110, 50169), (114, 50187),

Gene: Ganandorf_50 Start: 34796, Stop: 35167, Start Num: 36
Candidate Starts for Ganandorf_50:
(Start: 36 @34796 has 1 MA's), (Start: 38 @34799 has 32 MA's), (Start: 49 @34820 has 1 MA's), (60, 34871), (62, 34883), (67, 34898), (70, 34904), (80, 34961), (88, 35003), (95, 35027), (97, 35033), (98, 35039), (111, 35129), (112, 35135),

Gene: Gardann_67 Start: 45993, Stop: 46352, Start Num: 47
Candidate Starts for Gardann_67:
(Start: 47 @45993 has 38 MA's), (72, 46089), (80, 46140), (92, 46200), (108, 46299), (110, 46311),

Gene: Gator_70 Start: 47261, Stop: 47632, Start Num: 30
Candidate Starts for Gator_70:
(Start: 30 @47261 has 24 MA's), (Start: 33 @47264 has 112 MA's), (51, 47303), (54, 47321), (60, 47342), (64, 47360), (97, 47504), (100, 47525), (107, 47576), (109, 47594),

Gene: Gemini_77 Start: 47728, Stop: 48096, Start Num: 33
Candidate Starts for Gemini_77:
(Start: 30 @47725 has 24 MA's), (Start: 33 @47728 has 112 MA's), (51, 47767), (54, 47785), (60, 47806), (64, 47824), (97, 47968), (100, 47989), (107, 48040), (109, 48058),

Gene: Germa_52 Start: 34628, Stop: 34996, Start Num: 38
Candidate Starts for Germa_52:
(Start: 38 @34628 has 32 MA's), (Start: 49 @34649 has 1 MA's), (60, 34700), (62, 34712), (67, 34727), (70, 34733), (80, 34790), (88, 34832), (95, 34856), (97, 34862), (98, 34868), (111, 34958), (112, 34964),

Gene: Gina_53 Start: 34699, Stop: 35061, Start Num: 42
Candidate Starts for Gina_53:

(21, 34651), (Start: 42 @34699 has 15 MA's), (Start: 49 @34714 has 1 MA's), (63, 34780), (76, 34825), (80, 34855), (88, 34897), (95, 34921), (106, 34990), (111, 35023), (112, 35029),

Gene: Glexan_71 Start: 47545, Stop: 47916, Start Num: 30
Candidate Starts for Glexan_71:
(Start: 30 @47545 has 24 MA's), (Start: 33 @47548 has 112 MA's), (51, 47587), (54, 47605), (60, 47626), (64, 47644), (97, 47788), (100, 47809), (107, 47860), (109, 47878),

Gene: Glorp_52 Start: 34800, Stop: 35168, Start Num: 38
Candidate Starts for Glorp_52:
(Start: 38 @34800 has 32 MA's), (Start: 49 @34821 has 1 MA's), (60, 34872), (62, 34884), (70, 34905), (80, 34962), (88, 35004), (95, 35028), (97, 35034), (98, 35040), (111, 35130), (112, 35136),

Gene: Goib_50 Start: 32682, Stop: 33161, Start Num: 6
Candidate Starts for Goib_50:
(Start: 6 @32682 has 6 MA's), (Start: 20 @32754 has 1 MA's), (24, 32766), (Start: 30 @32790 has 24 MA's), (51, 32835), (78, 32949), (82, 32967), (87, 32994), (98, 33033),

Gene: Goku_70 Start: 46627, Stop: 46998, Start Num: 30
Candidate Starts for Goku_70:
(Start: 30 @46627 has 24 MA's), (Start: 33 @46630 has 112 MA's), (51, 46669), (54, 46687), (60, 46708), (64, 46726), (97, 46870), (100, 46891), (107, 46942), (109, 46960),

Gene: GoldenSpark_76 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for GoldenSpark_76:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: Goldilocks_75 Start: 46709, Stop: 47077, Start Num: 33
Candidate Starts for Goldilocks_75:
(Start: 30 @46706 has 24 MA's), (Start: 33 @46709 has 112 MA's), (51, 46748), (54, 46766), (60, 46787), (64, 46805), (97, 46949), (100, 46970), (107, 47021), (109, 47039),

Gene: Gonephishing_109 Start: 61506, Stop: 61880, Start Num: 35
Candidate Starts for Gonephishing_109:
(Start: 15 @61449 has 40 MA's), (Start: 35 @61506 has 3 MA's), (52, 61554), (56, 61575), (79, 61668), (82, 61695), (91, 61734), (92, 61737), (100, 61776), (106, 61818), (110, 61848),

Gene: GooberAzure_75 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for GooberAzure_75:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: Greep_76 Start: 48210, Stop: 48581, Start Num: 30
Candidate Starts for Greep_76:
(Start: 30 @48210 has 24 MA's), (Start: 33 @48213 has 112 MA's), (51, 48252), (54, 48270), (60, 48291), (64, 48309), (97, 48453), (100, 48474), (107, 48525), (109, 48543),

Gene: Gsput1_42 Start: 31462, Stop: 31854, Start Num: 25
Candidate Starts for Gsput1_42:
(25, 31462), (48, 31510), (51, 31525), (59, 31561), (75, 31612), (87, 31687), (104, 31771), (107, 31792), (110, 31813), (113, 31825),

Gene: GuuelaD_65 Start: 46072, Stop: 46431, Start Num: 47
Candidate Starts for GuuelaD_65:
(Start: 47 @46072 has 38 MA's), (72, 46168), (80, 46219), (92, 46279), (108, 46378), (110, 46390),

Gene: Guzman_40 Start: 25364, Stop: 25726, Start Num: 45
Candidate Starts for Guzman_40:
(Start: 45 @25364 has 21 MA's), (62, 25439), (65, 25448), (81, 25517), (85, 25541), (110, 25682), (112, 25691), (115, 25709), (116, 25712),

Gene: Hafay_67 Start: 46061, Stop: 46420, Start Num: 47
Candidate Starts for Hafay_67:
(Start: 47 @46061 has 38 MA's), (72, 46157), (80, 46208), (92, 46268), (108, 46367), (110, 46379),

Gene: Halena_62 Start: 43723, Stop: 44091, Start Num: 44
Candidate Starts for Halena_62:
(Start: 44 @43723 has 19 MA's), (55, 43771), (80, 43879), (88, 43927), (92, 43939), (104, 44008), (108, 44038), (110, 44050),

Gene: Halley_123 Start: 68409, Stop: 68834, Start Num: 15
Candidate Starts for Halley_123:
(Start: 15 @68409 has 40 MA's), (60, 68544), (79, 68625), (92, 68694),

Gene: HanKaySha_72 Start: 46515, Stop: 46883, Start Num: 33
Candidate Starts for HanKaySha_72:
(Start: 30 @46512 has 24 MA's), (Start: 33 @46515 has 112 MA's), (51, 46554), (54, 46572), (60, 46593), (64, 46611), (97, 46755), (100, 46776), (107, 46827), (109, 46845),

Gene: Hannaconda_106 Start: 60452, Stop: 60823, Start Num: 35
Candidate Starts for Hannaconda_106:
(Start: 15 @60395 has 40 MA's), (Start: 35 @60452 has 3 MA's), (52, 60500), (56, 60521), (79, 60614), (82, 60641), (91, 60680), (92, 60683), (100, 60722), (106, 60764),

Gene: Harella_72 Start: 48061, Stop: 48432, Start Num: 30
Candidate Starts for Harella_72:
(Start: 30 @48061 has 24 MA's), (Start: 33 @48064 has 112 MA's), (51, 48103), (54, 48121), (60, 48142), (64, 48160), (97, 48304), (100, 48325), (107, 48376), (109, 48394),

Gene: Henry_70 Start: 46852, Stop: 47220, Start Num: 33
Candidate Starts for Henry_70:
(Start: 30 @46849 has 24 MA's), (Start: 33 @46852 has 112 MA's), (51, 46891), (54, 46909), (60, 46930), (64, 46948), (97, 47092), (100, 47113), (107, 47164), (109, 47182),

Gene: Hermeonysus_50 Start: 34666, Stop: 35034, Start Num: 38
Candidate Starts for Hermeonysus_50:
(Start: 38 @34666 has 32 MA's), (Start: 49 @34687 has 1 MA's), (60, 34738), (62, 34750), (67, 34765), (70, 34771), (80, 34828), (88, 34870), (95, 34894), (97, 34900), (98, 34906), (111, 34996), (112, 35002),

Gene: Hidrated_103 Start: 64213, Stop: 64638, Start Num: 15
Candidate Starts for Hidrated_103:
(Start: 15 @64213 has 40 MA's), (60, 64348), (63, 64363), (79, 64429), (92, 64498),

Gene: Highbury_71 Start: 46503, Stop: 46871, Start Num: 33

Candidate Starts for Highbury_71:
(Start: 30 @46500 has 24 MA's), (Start: 33 @46503 has 112 MA's), (51, 46542), (54, 46560), (60, 46581), (64, 46599), (97, 46743), (100, 46764), (107, 46815), (109, 46833),

Gene: Hiraya_66 Start: 46027, Stop: 46386, Start Num: 47
Candidate Starts for Hiraya_66:
(Start: 47 @46027 has 38 MA's), (72, 46123), (80, 46174), (92, 46234), (108, 46333), (110, 46345),

Gene: HokkenD_110 Start: 65502, Stop: 65930, Start Num: 15
Candidate Starts for HokkenD_110:
(Start: 15 @65502 has 40 MA's), (Start: 35 @65559 has 3 MA's), (52, 65607), (56, 65628), (79, 65721), (82, 65748), (91, 65787), (92, 65790), (100, 65829), (106, 65871),

Gene: Holt_77 Start: 47625, Stop: 47993, Start Num: 33
Candidate Starts for Holt_77:
(Start: 30 @47622 has 24 MA's), (Start: 33 @47625 has 112 MA's), (51, 47664), (54, 47682), (60, 47703), (64, 47721), (97, 47865), (100, 47886), (107, 47937), (109, 47955),

Gene: Honeyfin_52 Start: 34987, Stop: 35355, Start Num: 38
Candidate Starts for Honeyfin_52:
(Start: 38 @34987 has 32 MA's), (Start: 49 @35008 has 1 MA's), (60, 35059), (62, 35071), (67, 35086), (70, 35092), (80, 35149), (88, 35191), (95, 35215), (97, 35221), (98, 35227), (111, 35317), (112, 35323),

Gene: Hoonter_75 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for Hoonter_75:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: Hopey_72 Start: 47047, Stop: 47415, Start Num: 33
Candidate Starts for Hopey_72:
(Start: 30 @47044 has 24 MA's), (Start: 33 @47047 has 112 MA's), (51, 47086), (54, 47104), (60, 47125), (64, 47143), (97, 47287), (100, 47308), (107, 47359), (109, 47377),

Gene: HufflyPuff_75 Start: 47880, Stop: 48248, Start Num: 33
Candidate Starts for HufflyPuff_75:
(Start: 30 @47877 has 24 MA's), (Start: 33 @47880 has 112 MA's), (51, 47919), (54, 47937), (60, 47958), (64, 47976), (97, 48120), (100, 48141), (107, 48192), (109, 48210),

Gene: Huffy_50 Start: 32295, Stop: 32774, Start Num: 6
Candidate Starts for Huffy_50:
(Start: 6 @32295 has 6 MA's), (Start: 20 @32367 has 1 MA's), (24, 32379), (Start: 30 @32403 has 24 MA's), (51, 32448), (53, 32460), (78, 32562), (82, 32580), (87, 32607), (98, 32646),

Gene: Hughesyang_120 Start: 67865, Stop: 68290, Start Num: 15
Candidate Starts for Hughesyang_120:
(Start: 15 @67865 has 40 MA's), (60, 68000), (79, 68081), (92, 68150),

Gene: IHOP_70 Start: 46973, Stop: 47344, Start Num: 30
Candidate Starts for IHOP_70:
(Start: 30 @46973 has 24 MA's), (Start: 33 @46976 has 112 MA's), (51, 47015), (54, 47033), (60, 47054), (64, 47072), (97, 47216), (100, 47237), (107, 47288), (109, 47306),

Gene: Icee_73 Start: 46875, Stop: 47243, Start Num: 33
Candidate Starts for Icee_73:
(Start: 30 @46872 has 24 MA's), (Start: 33 @46875 has 112 MA's), (51, 46914), (54, 46932), (60, 46953), (64, 46971), (97, 47115), (100, 47136), (107, 47187), (109, 47205),

Gene: Inca_69 Start: 45504, Stop: 45872, Start Num: 33
Candidate Starts for Inca_69:
(Start: 30 @45501 has 24 MA's), (Start: 33 @45504 has 112 MA's), (51, 45543), (54, 45561), (60, 45582), (64, 45600), (97, 45744), (100, 45765), (107, 45816), (109, 45834),

Gene: Itos_65 Start: 44863, Stop: 45222, Start Num: 47
Candidate Starts for Itos_65:
(Start: 47 @44863 has 38 MA's), (72, 44959), (80, 45010), (92, 45070), (108, 45169), (110, 45181),

Gene: Jakelyne_42 Start: 25475, Stop: 25837, Start Num: 45
Candidate Starts for Jakelyne_42:
(Start: 45 @25475 has 21 MA's), (62, 25550), (65, 25559), (81, 25628), (85, 25652), (110, 25793), (112, 25802), (115, 25820), (116, 25823),

Gene: Jayden_53 Start: 35380, Stop: 35742, Start Num: 42
Candidate Starts for Jayden_53:
(21, 35332), (Start: 42 @35380 has 15 MA's), (63, 35461), (76, 35506), (80, 35536), (99, 35623), (106, 35671), (111, 35704), (112, 35710),

Gene: JeTaime_72 Start: 47699, Stop: 48067, Start Num: 33
Candidate Starts for JeTaime_72:
(Start: 30 @47696 has 24 MA's), (Start: 33 @47699 has 112 MA's), (51, 47738), (54, 47756), (60, 47777), (64, 47795), (97, 47939), (100, 47960), (107, 48011), (109, 48029),

Gene: Jefe_51 Start: 34724, Stop: 35092, Start Num: 38
Candidate Starts for Jefe_51:
(Start: 38 @34724 has 32 MA's), (Start: 49 @34745 has 1 MA's), (60, 34796), (62, 34808), (67, 34823), (70, 34829), (80, 34886), (88, 34928), (95, 34952), (97, 34958), (98, 34964), (111, 35054), (112, 35060),

Gene: Jobypre_65 Start: 46109, Stop: 46480, Start Num: 43
Candidate Starts for Jobypre_65:
(29, 46082), (Start: 43 @46109 has 19 MA's), (80, 46268), (92, 46328), (96, 46343), (106, 46409), (108, 46427), (110, 46439),

Gene: JoeDirt_63 Start: 44591, Stop: 44959, Start Num: 44
Candidate Starts for JoeDirt_63:
(Start: 44 @44591 has 19 MA's), (55, 44639), (80, 44747), (88, 44795), (92, 44807), (108, 44906), (110, 44918),

Gene: Jollipop_51 Start: 35063, Stop: 35431, Start Num: 38
Candidate Starts for Jollipop_51:
(Start: 36 @35060 has 1 MA's), (Start: 38 @35063 has 32 MA's), (Start: 49 @35084 has 1 MA's), (60, 35135), (62, 35147), (67, 35162), (70, 35168), (80, 35225), (88, 35267), (95, 35291), (97, 35297), (98, 35303), (111, 35393), (112, 35399),

Gene: Jubie_64 Start: 46244, Stop: 46615, Start Num: 43
Candidate Starts for Jubie_64:

(29, 46217), (Start: 43 @46244 has 19 MA's), (80, 46403), (92, 46463), (96, 46478), (106, 46544), (108, 46562), (110, 46574),

Gene: JuicyJay_117 Start: 69179, Stop: 69604, Start Num: 15
Candidate Starts for JuicyJay_117:
(Start: 15 @69179 has 40 MA's), (60, 69314), (79, 69395), (92, 69464),

Gene: Kahlid_66 Start: 45963, Stop: 46322, Start Num: 47
Candidate Starts for Kahlid_66:
(Start: 47 @45963 has 38 MA's), (72, 46059), (80, 46110), (92, 46170), (108, 46269), (110, 46281),

Gene: KaiHaiDragon_51 Start: 34660, Stop: 35028, Start Num: 38
Candidate Starts for KaiHaiDragon_51:
(Start: 36 @34657 has 1 MA's), (Start: 38 @34660 has 32 MA's), (Start: 49 @34681 has 1 MA's), (60, 34732), (62, 34744), (67, 34759), (70, 34765), (80, 34822), (88, 34864), (95, 34888), (97, 34894), (98, 34900), (111, 34990), (112, 34996),

Gene: Kalah2_112 Start: 66578, Stop: 67003, Start Num: 15
Candidate Starts for Kalah2_112:
(Start: 15 @66578 has 40 MA's), (60, 66713), (79, 66794), (92, 66863),

Gene: Kanye_69 Start: 46557, Stop: 46925, Start Num: 33
Candidate Starts for Kanye_69:
(Start: 30 @46554 has 24 MA's), (Start: 33 @46557 has 112 MA's), (51, 46596), (54, 46614), (60, 46635), (64, 46653), (97, 46797), (100, 46818), (107, 46869), (109, 46887),

Gene: KashFlow_112 Start: 62900, Stop: 63328, Start Num: 15
Candidate Starts for KashFlow_112:
(Start: 15 @62900 has 40 MA's), (Start: 35 @62957 has 3 MA's), (52, 63005), (56, 63026), (79, 63119), (82, 63146), (91, 63185), (92, 63188), (100, 63227), (106, 63269),

Gene: Khuang_53 Start: 31255, Stop: 31611, Start Num: 45
Candidate Starts for Khuang_53:
(Start: 45 @31255 has 21 MA's), (81, 31408), (112, 31582),

Gene: Kimchi_76 Start: 47214, Stop: 47582, Start Num: 33
Candidate Starts for Kimchi_76:
(Start: 30 @47211 has 24 MA's), (Start: 33 @47214 has 112 MA's), (51, 47253), (54, 47271), (60, 47292), (64, 47310), (97, 47454), (100, 47475), (107, 47526), (109, 47544),

Gene: Kingsolomon_64 Start: 46116, Stop: 46487, Start Num: 43
Candidate Starts for Kingsolomon_64:
(29, 46089), (Start: 43 @46116 has 19 MA's), (80, 46275), (92, 46335), (96, 46350), (106, 46416), (108, 46434), (110, 46446),

Gene: KirDoubleO7_63 Start: 46147, Stop: 46518, Start Num: 43
Candidate Starts for KirDoubleO7_63:
(29, 46120), (Start: 43 @46147 has 19 MA's), (80, 46306), (92, 46366), (110, 46477),

Gene: Klein_117 Start: 64935, Stop: 65360, Start Num: 15
Candidate Starts for Klein_117:
(Start: 15 @64935 has 40 MA's), (60, 65070), (79, 65151), (92, 65220),

Gene: Kostya_72 Start: 47075, Stop: 47443, Start Num: 33
Candidate Starts for Kostya_72:
(Start: 30 @47072 has 24 MA's), (Start: 33 @47075 has 112 MA's), (51, 47114), (54, 47132), (60, 47153), (64, 47171), (97, 47315), (100, 47336), (107, 47387), (109, 47405),

Gene: Kowalski_50 Start: 34773, Stop: 35141, Start Num: 38
Candidate Starts for Kowalski_50:
(Start: 38 @34773 has 32 MA's), (Start: 49 @34794 has 1 MA's), (60, 34845), (62, 34857), (67, 34872), (70, 34878), (80, 34935), (88, 34977), (95, 35001), (97, 35007), (98, 35013), (111, 35103), (112, 35109),

Gene: Kozie_48 Start: 35042, Stop: 35398, Start Num: 42
Candidate Starts for Kozie_48:
(Start: 42 @35042 has 15 MA's), (76, 35162), (77, 35171), (80, 35192), (97, 35264), (98, 35270), (108, 35345), (112, 35366),

Gene: Kropertea_63 Start: 44771, Stop: 45130, Start Num: 47
Candidate Starts for Kropertea_63:
(Start: 47 @44771 has 38 MA's), (80, 44918), (92, 44978), (99, 45011), (108, 45077), (110, 45089),

Gene: Krypton555_66 Start: 46335, Stop: 46706, Start Num: 43
Candidate Starts for Krypton555_66:
(29, 46308), (Start: 43 @46335 has 19 MA's), (80, 46494), (92, 46554), (96, 46569), (106, 46635), (108, 46653), (110, 46665),

Gene: LeBron_63 Start: 43727, Stop: 44095, Start Num: 44
Candidate Starts for LeBron_63:
(Start: 44 @43727 has 19 MA's), (55, 43775), (80, 43883), (88, 43931), (92, 43943), (104, 44012), (108, 44042), (110, 44054),

Gene: Lewan_67 Start: 46017, Stop: 46376, Start Num: 47
Candidate Starts for Lewan_67:
(Start: 47 @46017 has 38 MA's), (72, 46113), (80, 46164), (92, 46224), (108, 46323), (110, 46335),

Gene: LilDestine_66 Start: 45990, Stop: 46349, Start Num: 47
Candidate Starts for LilDestine_66:
(Start: 47 @45990 has 38 MA's), (72, 46086), (80, 46137), (92, 46197), (108, 46296), (110, 46308),

Gene: Lilac_74 Start: 46832, Stop: 47200, Start Num: 33
Candidate Starts for Lilac_74:
(Start: 30 @46829 has 24 MA's), (Start: 33 @46832 has 112 MA's), (51, 46871), (54, 46889), (60, 46910), (64, 46928), (97, 47072), (100, 47093), (107, 47144), (109, 47162),

Gene: Lilizi_73 Start: 46545, Stop: 46913, Start Num: 33
Candidate Starts for Lilizi_73:
(Start: 30 @46542 has 24 MA's), (Start: 33 @46545 has 112 MA's), (51, 46584), (54, 46602), (60, 46623), (64, 46641), (97, 46785), (100, 46806), (107, 46857), (109, 46875),

Gene: Lilpickle_71 Start: 46430, Stop: 46798, Start Num: 33
Candidate Starts for Lilpickle_71:
(Start: 30 @46427 has 24 MA's), (Start: 33 @46430 has 112 MA's), (51, 46469), (54, 46487), (60, 46508), (64, 46526), (97, 46670), (100, 46691), (107, 46742), (109, 46760),

Gene: LittleE_120 Start: 66315, Stop: 66743, Start Num: 15
Candidate Starts for LittleE_120:
(Start: 15 @66315 has 40 MA's), (Start: 35 @66372 has 3 MA's), (52, 66420), (56, 66441), (79, 66534), (82, 66561), (91, 66600), (92, 66603), (103, 66663), (106, 66684), (110, 66714),

Gene: LittleFortune_52 Start: 35029, Stop: 35397, Start Num: 38
Candidate Starts for LittleFortune_52:
(Start: 36 @35026 has 1 MA's), (Start: 38 @35029 has 32 MA's), (Start: 49 @35050 has 1 MA's), (60, 35101), (62, 35113), (67, 35128), (70, 35134), (80, 35191), (88, 35233), (95, 35257), (97, 35263), (98, 35269), (111, 35359), (112, 35365),

Gene: Livelaughbron_74 Start: 48008, Stop: 48376, Start Num: 33
Candidate Starts for Livelaughbron_74:
(Start: 30 @48005 has 24 MA's), (Start: 33 @48008 has 112 MA's), (51, 48047), (54, 48065), (60, 48086), (64, 48104), (97, 48248), (100, 48269), (107, 48320), (109, 48338),

Gene: LiyuLake_64 Start: 46163, Stop: 46534, Start Num: 43
Candidate Starts for LiyuLake_64:
(29, 46136), (Start: 43 @46163 has 19 MA's), (80, 46322), (92, 46382), (110, 46493),

Gene: Loadrie_65 Start: 46045, Stop: 46404, Start Num: 47
Candidate Starts for Loadrie_65:
(Start: 47 @46045 has 38 MA's), (72, 46141), (80, 46192), (92, 46252), (108, 46351), (110, 46363),

Gene: Lolly9_64 Start: 45932, Stop: 46303, Start Num: 43
Candidate Starts for Lolly9_64:
(Start: 43 @45932 has 19 MA's), (80, 46091), (92, 46151), (99, 46184), (108, 46250), (110, 46262),

Gene: Losacky_41 Start: 25485, Stop: 25847, Start Num: 45
Candidate Starts for Losacky_41:
(Start: 45 @25485 has 21 MA's), (65, 25569), (81, 25638), (85, 25662), (110, 25803), (112, 25812), (115, 25830), (116, 25833),

Gene: Lucky2013_112 Start: 62463, Stop: 62891, Start Num: 15
Candidate Starts for Lucky2013_112:
(Start: 15 @62463 has 40 MA's), (Start: 35 @62520 has 3 MA's), (52, 62568), (56, 62589), (79, 62682), (82, 62709), (91, 62748), (92, 62751), (100, 62790), (106, 62832),

Gene: Lucretia_51 Start: 34716, Stop: 35084, Start Num: 38
Candidate Starts for Lucretia_51:
(Start: 38 @34716 has 32 MA's), (Start: 49 @34737 has 1 MA's), (60, 34788), (62, 34800), (67, 34815), (70, 34821), (80, 34878), (88, 34920), (95, 34944), (97, 34950), (98, 34956), (111, 35046), (112, 35052),

Gene: Lumos_66 Start: 46106, Stop: 46477, Start Num: 43
Candidate Starts for Lumos_66:
(29, 46079), (Start: 43 @46106 has 19 MA's), (80, 46265), (92, 46325), (96, 46340), (106, 46406), (108, 46424), (110, 46436),

Gene: Lynnae_67 Start: 45988, Stop: 46347, Start Num: 47
Candidate Starts for Lynnae_67:
(Start: 47 @45988 has 38 MA's), (72, 46084), (80, 46135), (92, 46195), (108, 46294), (110, 46306),

Gene: MAckerman_63 Start: 43716, Stop: 44084, Start Num: 44
Candidate Starts for MAckerman_63:
(Start: 44 @43716 has 19 MA's), (55, 43764), (80, 43872), (88, 43920), (92, 43932), (104, 44001), (108, 44031), (110, 44043),

Gene: MISSy_73 Start: 46936, Stop: 47304, Start Num: 33
Candidate Starts for MISSy_73:
(Start: 30 @46933 has 24 MA's), (Start: 33 @46936 has 112 MA's), (51, 46975), (54, 46993), (60, 47014), (64, 47032), (97, 47176), (100, 47197), (107, 47248), (109, 47266),

Gene: MPhalcon_73 Start: 46929, Stop: 47297, Start Num: 33
Candidate Starts for MPhalcon_73:
(Start: 30 @46926 has 24 MA's), (Start: 33 @46929 has 112 MA's), (51, 46968), (54, 46986), (60, 47007), (64, 47025), (97, 47169), (100, 47190), (107, 47241), (109, 47259),

Gene: MadamMonkfish_72 Start: 46154, Stop: 46522, Start Num: 33
Candidate Starts for MadamMonkfish_72:
(Start: 30 @46151 has 24 MA's), (Start: 33 @46154 has 112 MA's), (51, 46193), (54, 46211), (60, 46232), (64, 46250), (97, 46394), (100, 46415), (107, 46466), (109, 46484),

Gene: Manda_73 Start: 48013, Stop: 48381, Start Num: 33
Candidate Starts for Manda_73:
(Start: 30 @48010 has 24 MA's), (Start: 33 @48013 has 112 MA's), (51, 48052), (54, 48070), (60, 48091), (64, 48109), (97, 48253), (100, 48274), (107, 48325), (109, 48343),

Gene: Margaery_46 Start: 34231, Stop: 34596, Start Num: 42
Candidate Starts for Margaery_46:
(Start: 42 @34231 has 15 MA's), (52, 34267), (62, 34312), (65, 34321), (76, 34360), (80, 34390), (93, 34447), (97, 34462), (98, 34468), (110, 34555), (112, 34564),

Gene: Mariel_41 Start: 25834, Stop: 26196, Start Num: 45
Candidate Starts for Mariel_41:
(Start: 45 @25834 has 21 MA's), (65, 25918), (81, 25987), (85, 26011), (110, 26152), (112, 26161), (115, 26179), (116, 26182),

Gene: Marleymoo_104 Start: 64018, Stop: 64308, Start Num: 60
Candidate Starts for Marleymoo_104:
(Start: 15 @63889 has 40 MA's), (60, 64018), (79, 64099), (92, 64168),

Gene: Marshmallow_70 Start: 47706, Stop: 48074, Start Num: 33
Candidate Starts for Marshmallow_70:
(Start: 30 @47703 has 24 MA's), (Start: 33 @47706 has 112 MA's), (51, 47745), (54, 47763), (60, 47784), (64, 47802), (97, 47946), (100, 47967), (107, 48018), (109, 48036),

Gene: Matzah_49 Start: 35080, Stop: 35445, Start Num: 42
Candidate Starts for Matzah_49:
(18, 35020), (Start: 42 @35080 has 15 MA's), (Start: 49 @35098 has 1 MA's), (52, 35116), (65, 35170), (76, 35209), (80, 35239), (92, 35293), (93, 35296), (97, 35311), (98, 35317), (112, 35413),

Gene: Maxxinista_74 Start: 46805, Stop: 47173, Start Num: 33
Candidate Starts for Maxxinista_74:
(Start: 30 @46802 has 24 MA's), (Start: 33 @46805 has 112 MA's), (51, 46844), (54, 46862), (60, 46883), (64, 46901), (97, 47045), (100, 47066), (107, 47117), (109, 47135),

Gene: Megan_49 Start: 38181, Stop: 38573, Start Num: 35
Candidate Starts for Megan_49:
(8, 38085), (Start: 20 @38136 has 1 MA's), (Start: 35 @38181 has 3 MA's), (Start: 49 @38208 has 1 MA's), (72, 38298), (80, 38349), (97, 38439), (99, 38454), (105, 38496), (110, 38532), (112, 38541),

Gene: MementoMori_48 Start: 34687, Stop: 35049, Start Num: 42
Candidate Starts for MementoMori_48:
(18, 34627), (Start: 42 @34687 has 15 MA's), (Start: 49 @34702 has 1 MA's), (52, 34720), (60, 34753), (62, 34765), (65, 34774), (76, 34813), (80, 34843), (92, 34897), (93, 34900), (97, 34915), (98, 34921), (112, 35017),

Gene: MenE_41 Start: 25365, Stop: 25727, Start Num: 45
Candidate Starts for MenE_41:
(Start: 45 @25365 has 21 MA's), (65, 25449), (81, 25518), (85, 25542), (110, 25683), (112, 25692), (115, 25710), (116, 25713),

Gene: Merpity_52 Start: 30800, Stop: 31171, Start Num: 37
Candidate Starts for Merpity_52:
(10, 30716), (37, 30800), (Start: 45 @30815 has 21 MA's), (81, 30968), (95, 31034), (112, 31142), (114, 31151),

Gene: Merry_ Start: 36252, Stop: 36614, Start Num: 42
Candidate Starts for Merry_:
(Start: 42 @36252 has 15 MA's), (62, 36330), (80, 36408), (83, 36426), (88, 36450), (99, 36495), (101, 36510), (110, 36573), (111, 36576), (112, 36582),

Gene: Metamorphoo_53 Start: 35850, Stop: 36215, Start Num: 40
Candidate Starts for Metamorphoo_53:
(Start: 40 @35850 has 5 MA's), (Start: 49 @35868 has 1 MA's), (60, 35919), (70, 35952), (76, 35979), (80, 36009), (88, 36051), (89, 36054), (98, 36087), (111, 36177), (112, 36183),

Gene: MiaZeal_115 Start: 63094, Stop: 63525, Start Num: 15
Candidate Starts for MiaZeal_115:
(Start: 15 @63094 has 40 MA's), (Start: 35 @63151 has 3 MA's), (52, 63199), (56, 63220), (79, 63313), (82, 63340), (91, 63379), (92, 63382), (100, 63421),

Gene: Miley16_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for Miley16_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: Mindy_71 Start: 46018, Stop: 46386, Start Num: 33
Candidate Starts for Mindy_71:
(Start: 30 @46015 has 24 MA's), (Start: 33 @46018 has 112 MA's), (51, 46057), (54, 46075), (60, 46096), (64, 46114), (97, 46258), (100, 46279), (107, 46330), (109, 46348),

Gene: Minerva_118 Start: 66466, Stop: 66891, Start Num: 15
Candidate Starts for Minerva_118:
(Start: 15 @66466 has 40 MA's), (60, 66601), (79, 66682), (92, 66751),

Gene: MiniLon_68 Start: 45933, Stop: 46304, Start Num: 43
Candidate Starts for MiniLon_68:
(Start: 43 @45933 has 19 MA's), (80, 46092), (92, 46152), (99, 46185), (108, 46251), (110, 46263),

Gene: MiniMac_68 Start: 45931, Stop: 46302, Start Num: 43
Candidate Starts for MiniMac_68:
(Start: 43 @45931 has 19 MA's), (80, 46090), (92, 46150), (99, 46183), (108, 46249), (110, 46261),

Gene: Miniwave_67 Start: 46471, Stop: 46839, Start Num: 33
Candidate Starts for Miniwave_67:
(Start: 30 @46468 has 24 MA's), (Start: 33 @46471 has 112 MA's), (51, 46510), (54, 46528), (60, 46549), (64, 46567), (97, 46711), (100, 46732), (107, 46783), (109, 46801),

Gene: Misfit_73 Start: 47948, Stop: 48316, Start Num: 33
Candidate Starts for Misfit_73:
(Start: 30 @47945 has 24 MA's), (Start: 33 @47948 has 112 MA's), (51, 47987), (54, 48005), (60, 48026), (64, 48044), (97, 48188), (100, 48209), (107, 48260), (109, 48278),

Gene: MkaliMitinis3_67 Start: 46029, Stop: 46388, Start Num: 47
Candidate Starts for MkaliMitinis3_67:
(Start: 47 @46029 has 38 MA's), (72, 46125), (80, 46176), (92, 46236), (108, 46335), (110, 46347),

Gene: ModicumRichard_104 Start: 59473, Stop: 59886, Start Num: 22
Candidate Starts for ModicumRichard_104:
(Start: 22 @59473 has 5 MA's), (51, 59551), (62, 59602), (81, 59680),

Gene: Moldemort_75 Start: 47030, Stop: 47398, Start Num: 33
Candidate Starts for Moldemort_75:
(Start: 30 @47027 has 24 MA's), (Start: 33 @47030 has 112 MA's), (51, 47069), (54, 47087), (60, 47108), (64, 47126), (97, 47270), (100, 47291), (107, 47342), (109, 47360),

Gene: Molivier_57 Start: 41019, Stop: 41378, Start Num: 47
Candidate Starts for Molivier_57:
(Start: 47 @41019 has 38 MA's), (72, 41115), (80, 41166), (92, 41226), (108, 41325), (110, 41337),

Gene: MollyToe_67 Start: 45781, Stop: 46149, Start Num: 33
Candidate Starts for MollyToe_67:
(Start: 30 @45778 has 24 MA's), (Start: 33 @45781 has 112 MA's), (51, 45820), (54, 45838), (60, 45859), (64, 45877), (97, 46021), (100, 46042), (107, 46093), (109, 46111),

Gene: Moostard_64 Start: 46112, Stop: 46483, Start Num: 43
Candidate Starts for Moostard_64:
(29, 46085), (Start: 43 @46112 has 19 MA's), (80, 46271), (92, 46331), (96, 46346), (106, 46412), (108, 46430), (110, 46442),

Gene: Morgana_111 Start: 61669, Stop: 62082, Start Num: 22
Candidate Starts for Morgana_111:
(Start: 22 @61669 has 5 MA's), (51, 61747), (62, 61798), (81, 61876),

Gene: Mosby_68 Start: 46228, Stop: 46599, Start Num: 30
Candidate Starts for Mosby_68:
(Start: 30 @46228 has 24 MA's), (Start: 33 @46231 has 112 MA's), (51, 46270), (54, 46288), (60, 46309), (64, 46327), (97, 46471), (100, 46492), (107, 46543), (109, 46561),

Gene: MrSmee_51 Start: 30789, Stop: 31145, Start Num: 45
Candidate Starts for MrSmee_51:

(37, 30774), (Start: 45 @30789 has 21 MA's), (81, 30942), (95, 31008), (112, 31116), (114, 31125),

Gene: MsGreen_65 Start: 46109, Stop: 46480, Start Num: 43
Candidate Starts for MsGreen_65:
(29, 46082), (Start: 43 @46109 has 19 MA's), (80, 46268), (92, 46328), (96, 46343), (106, 46409), (108, 46427), (110, 46439),

Gene: Murica_75 Start: 47880, Stop: 48248, Start Num: 33
Candidate Starts for Murica_75:
(Start: 30 @47877 has 24 MA's), (Start: 33 @47880 has 112 MA's), (51, 47919), (54, 47937), (60, 47958), (64, 47976), (97, 48120), (100, 48141), (107, 48192), (109, 48210),

Gene: Murphy_72 Start: 47317, Stop: 47685, Start Num: 33
Candidate Starts for Murphy_72:
(Start: 30 @47314 has 24 MA's), (Start: 33 @47317 has 112 MA's), (51, 47356), (54, 47374), (60, 47395), (64, 47413), (97, 47557), (100, 47578), (107, 47629), (109, 47647),

Gene: Myrale_72 Start: 47571, Stop: 47939, Start Num: 33
Candidate Starts for Myrale_72:
(Start: 30 @47568 has 24 MA's), (Start: 33 @47571 has 112 MA's), (51, 47610), (54, 47628), (60, 47649), (64, 47667), (97, 47811), (100, 47832), (107, 47883), (109, 47901),

Gene: NCRodriguez_41 Start: 25587, Stop: 25949, Start Num: 45
Candidate Starts for NCRodriguez_41:
(Start: 45 @25587 has 21 MA's), (65, 25671), (81, 25740), (85, 25764), (110, 25905), (112, 25914), (115, 25932), (116, 25935),

Gene: Nala_74 Start: 47441, Stop: 47809, Start Num: 33
Candidate Starts for Nala_74:
(Start: 30 @47438 has 24 MA's), (Start: 33 @47441 has 112 MA's), (51, 47480), (54, 47498), (60, 47519), (64, 47537), (97, 47681), (100, 47702), (107, 47753), (109, 47771),

Gene: Nebkiss_82 Start: 48439, Stop: 48822, Start Num: 33
Candidate Starts for Nebkiss_82:
(Start: 33 @48439 has 112 MA's), (54, 48499), (64, 48538), (69, 48550), (74, 48565), (97, 48688), (110, 48781), (114, 48799),

Gene: Nekros_117 Start: 65677, Stop: 66048, Start Num: 35
Candidate Starts for Nekros_117:
(Start: 15 @65620 has 40 MA's), (Start: 35 @65677 has 3 MA's), (39, 65683), (52, 65725), (56, 65746), (79, 65839), (82, 65866), (91, 65905), (92, 65908), (100, 65947), (106, 65989),

Gene: NelitzaMV_70 Start: 46517, Stop: 46885, Start Num: 33
Candidate Starts for NelitzaMV_70:
(Start: 30 @46514 has 24 MA's), (Start: 33 @46517 has 112 MA's), (51, 46556), (54, 46574), (60, 46595), (64, 46613), (97, 46757), (100, 46778), (107, 46829), (109, 46847),

Gene: Neroxid_48 Start: 29553, Stop: 29924, Start Num: 37
Candidate Starts for Neroxid_48:
(10, 29469), (37, 29553), (Start: 45 @29568 has 21 MA's), (81, 29721), (95, 29787), (112, 29895), (114, 29904),

Gene: Netyap_67 Start: 45958, Stop: 46317, Start Num: 47

Candidate Starts for Netyap_67:
(Start: 47 @45958 has 38 MA's), (72, 46054), (80, 46105), (92, 46165), (108, 46264), (110, 46276),

Gene: Nibley_108 Start: 62545, Stop: 62916, Start Num: 35
Candidate Starts for Nibley_108:
(Start: 15 @62488 has 40 MA's), (Start: 35 @62545 has 3 MA's), (39, 62551), (52, 62593), (56, 62614), (79, 62707), (82, 62734), (91, 62773), (92, 62776), (106, 62857),

Gene: Nicholas_64 Start: 46116, Stop: 46487, Start Num: 43
Candidate Starts for Nicholas_64:
(29, 46089), (Start: 43 @46116 has 19 MA's), (80, 46275), (92, 46335), (96, 46350), (106, 46416), (108, 46434), (110, 46446),

Gene: Nicholasp3_66 Start: 45993, Stop: 46352, Start Num: 47
Candidate Starts for Nicholasp3_66:
(Start: 47 @45993 has 38 MA's), (72, 46089), (80, 46140), (92, 46200), (108, 46299), (110, 46311),

Gene: Nicole72_49 Start: 38581, Stop: 38973, Start Num: 35
Candidate Starts for Nicole72_49:
(Start: 20 @38536 has 1 MA's), (Start: 35 @38581 has 3 MA's), (Start: 49 @38608 has 1 MA's), (50, 38611), (72, 38698), (80, 38749), (97, 38839), (99, 38854), (110, 38932), (112, 38941),

Gene: NihilNomen_122 Start: 67131, Stop: 67556, Start Num: 15
Candidate Starts for NihilNomen_122:
(Start: 15 @67131 has 40 MA's), (60, 67266), (79, 67347), (92, 67416),

Gene: Nimrod_73 Start: 48135, Stop: 48506, Start Num: 30
Candidate Starts for Nimrod_73:
(Start: 30 @48135 has 24 MA's), (Start: 33 @48138 has 112 MA's), (51, 48177), (54, 48195), (60, 48216), (64, 48234), (97, 48378), (100, 48399), (107, 48450), (109, 48468),

Gene: NoSleep_73 Start: 46775, Stop: 47143, Start Num: 33
Candidate Starts for NoSleep_73:
(Start: 30 @46772 has 24 MA's), (Start: 33 @46775 has 112 MA's), (51, 46814), (54, 46832), (60, 46853), (64, 46871), (97, 47015), (100, 47036), (107, 47087), (109, 47105),

Gene: NonchalantPear_72 Start: 46625, Stop: 46993, Start Num: 33
Candidate Starts for NonchalantPear_72:
(Start: 30 @46622 has 24 MA's), (Start: 33 @46625 has 112 MA's), (51, 46664), (54, 46682), (60, 46703), (64, 46721), (97, 46865), (100, 46886), (107, 46937), (109, 46955),

Gene: NoodlelyBoi_52 Start: 35400, Stop: 35762, Start Num: 42
Candidate Starts for NoodlelyBoi_52:
(2, 35226), (5, 35235), (Start: 42 @35400 has 15 MA's), (Start: 49 @35415 has 1 MA's), (60, 35466), (62, 35478), (67, 35493), (70, 35499), (80, 35556), (88, 35598), (89, 35601), (97, 35628), (98, 35634), (111, 35724), (112, 35730),

Gene: ObLaDi_104 Start: 59501, Stop: 59914, Start Num: 22
Candidate Starts for ObLaDi_104:
(Start: 22 @59501 has 5 MA's), (26, 59513), (51, 59579), (62, 59630), (81, 59708),

Gene: Odette_122 Start: 67103, Stop: 67474, Start Num: 35
Candidate Starts for Odette_122:

(Start: 15 @67046 has 40 MA's), (Start: 35 @67103 has 3 MA's), (52, 67151), (56, 67172), (79, 67265), (82, 67292), (91, 67331), (92, 67334), (100, 67373), (106, 67415),

Gene: OhShagHennessy_62 Start: 43167, Stop: 43535, Start Num: 44
Candidate Starts for OhShagHennessy_62:
(Start: 44 @43167 has 19 MA's), (55, 43215), (80, 43323), (88, 43371), (92, 43383), (104, 43452), (108, 43482), (110, 43494),

Gene: Omega_126 Start: 67464, Stop: 67892, Start Num: 15
Candidate Starts for Omega_126:
(Start: 15 @67464 has 40 MA's), (Start: 35 @67521 has 3 MA's), (52, 67569), (56, 67590), (79, 67683), (82, 67710), (91, 67749), (92, 67752), (100, 67791), (106, 67833),

Gene: Onika_50 Start: 34748, Stop: 35116, Start Num: 38
Candidate Starts for Onika_50:
(Start: 38 @34748 has 32 MA's), (Start: 49 @34769 has 1 MA's), (60, 34820), (62, 34832), (67, 34847), (70, 34853), (80, 34910), (88, 34952), (95, 34976), (97, 34982), (98, 34988), (111, 35078), (112, 35084),

Gene: Optimus_111 Start: 64886, Stop: 65311, Start Num: 15
Candidate Starts for Optimus_111:
(1, 64769), (7, 64826), (Start: 15 @64886 has 40 MA's), (60, 65021), (79, 65102), (92, 65171),

Gene: OrionPax_71 Start: 46523, Stop: 46891, Start Num: 33
Candidate Starts for OrionPax_71:
(Start: 30 @46520 has 24 MA's), (Start: 33 @46523 has 112 MA's), (51, 46562), (54, 46580), (60, 46601), (64, 46619), (97, 46763), (100, 46784), (107, 46835), (109, 46853),

Gene: OverPar_67 Start: 46045, Stop: 46404, Start Num: 47
Candidate Starts for OverPar_67:
(Start: 47 @46045 has 38 MA's), (72, 46141), (80, 46192), (92, 46252), (108, 46351), (110, 46363),

Gene: PYPDinur_62 Start: 44694, Stop: 45053, Start Num: 47
Candidate Starts for PYPDinur_62:
(Start: 47 @44694 has 38 MA's), (80, 44841), (92, 44901), (99, 44934), (108, 45000), (110, 45012),

Gene: PaddyBaddy_72 Start: 46529, Stop: 46897, Start Num: 33
Candidate Starts for PaddyBaddy_72:
(Start: 30 @46526 has 24 MA's), (Start: 33 @46529 has 112 MA's), (51, 46568), (54, 46586), (60, 46607), (64, 46625), (97, 46769), (100, 46790), (107, 46841), (109, 46859),

Gene: Palpatine_74 Start: 47907, Stop: 48275, Start Num: 33
Candidate Starts for Palpatine_74:
(Start: 30 @47904 has 24 MA's), (Start: 33 @47907 has 112 MA's), (51, 47946), (54, 47964), (60, 47985), (64, 48003), (97, 48147), (100, 48168), (107, 48219), (109, 48237),

Gene: Paperbeatsrock_71 Start: 47149, Stop: 47517, Start Num: 33
Candidate Starts for Paperbeatsrock_71:
(Start: 30 @47146 has 24 MA's), (Start: 33 @47149 has 112 MA's), (51, 47188), (54, 47206), (60, 47227), (64, 47245), (97, 47389), (100, 47410), (107, 47461), (109, 47479),

Gene: Paschalis_50 Start: 34776, Stop: 35123, Start Num: 49
Candidate Starts for Paschalis_50:

(Start: 38 @34755 has 32 MA's), (Start: 49 @34776 has 1 MA's), (60, 34827), (62, 34839), (67, 34854), (70, 34860), (80, 34917), (88, 34959), (95, 34983), (97, 34989), (98, 34995), (111, 35085), (112, 35091),

Gene: Pat3_70 Start: 45672, Stop: 46049, Start Num: 30
Candidate Starts for Pat3_70:
(Start: 30 @45672 has 24 MA's), (Start: 33 @45675 has 112 MA's), (54, 45738), (97, 45921), (100, 45942), (107, 45993), (109, 46011),

Gene: Petra64142_76 Start: 48377, Stop: 48745, Start Num: 33
Candidate Starts for Petra64142_76:
(Start: 30 @48374 has 24 MA's), (Start: 33 @48377 has 112 MA's), (51, 48416), (54, 48434), (60, 48455), (64, 48473), (97, 48617), (100, 48638), (107, 48689), (109, 48707),

Gene: Phaja_70 Start: 46972, Stop: 47343, Start Num: 30
Candidate Starts for Phaja_70:
(Start: 30 @46972 has 24 MA's), (Start: 33 @46975 has 112 MA's), (51, 47014), (54, 47032), (60, 47053), (64, 47071), (97, 47215), (100, 47236), (107, 47287), (109, 47305),

Gene: Pharsalus_69 Start: 46946, Stop: 47317, Start Num: 30
Candidate Starts for Pharsalus_69:
(Start: 30 @46946 has 24 MA's), (Start: 33 @46949 has 112 MA's), (51, 46988), (54, 47006), (60, 47027), (64, 47045), (97, 47189), (100, 47210), (107, 47261), (109, 47279),

Gene: PhatBacter_76 Start: 47921, Stop: 48292, Start Num: 30
Candidate Starts for PhatBacter_76:
(Start: 30 @47921 has 24 MA's), (Start: 33 @47924 has 112 MA's), (51, 47963), (54, 47981), (60, 48002), (64, 48020), (97, 48164), (100, 48185), (107, 48236), (109, 48254),

Gene: Phaux_74 Start: 47919, Stop: 48287, Start Num: 33
Candidate Starts for Phaux_74:
(Start: 30 @47916 has 24 MA's), (Start: 33 @47919 has 112 MA's), (51, 47958), (54, 47976), (60, 47997), (64, 48015), (97, 48159), (100, 48180), (107, 48231), (109, 48249),

Gene: PhedwardCullen_50 Start: 34506, Stop: 34874, Start Num: 38
Candidate Starts for PhedwardCullen_50:
(Start: 36 @34503 has 1 MA's), (Start: 38 @34506 has 32 MA's), (Start: 49 @34527 has 1 MA's), (60, 34578), (62, 34590), (67, 34605), (70, 34611), (80, 34668), (88, 34710), (95, 34734), (97, 34740), (98, 34746), (111, 34836), (112, 34842),

Gene: PhillyJawn_41 Start: 25262, Stop: 25624, Start Num: 45
Candidate Starts for PhillyJawn_41:
(Start: 45 @25262 has 21 MA's), (65, 25346), (81, 25415), (85, 25439), (110, 25580), (112, 25589), (115, 25607), (116, 25610),

Gene: Phingu_43 Start: 25478, Stop: 25840, Start Num: 45
Candidate Starts for Phingu_43:
(Start: 45 @25478 has 21 MA's), (65, 25562), (81, 25631), (85, 25655), (110, 25796), (112, 25805), (115, 25823), (116, 25826),

Gene: Phoebus_121 Start: 68989, Stop: 69414, Start Num: 15
Candidate Starts for Phoebus_121:
(Start: 15 @68989 has 40 MA's), (60, 69124), (79, 69205), (92, 69274),

Gene: Phonegingi_40 Start: 25311, Stop: 25673, Start Num: 45
Candidate Starts for Phonegingi_40:
(Start: 45 @25311 has 21 MA's), (62, 25386), (65, 25395), (81, 25464), (85, 25488), (110, 25629), (112, 25638), (115, 25656), (116, 25659),

Gene: Phorgeous_50 Start: 34618, Stop: 34986, Start Num: 38
Candidate Starts for Phorgeous_50:
(Start: 36 @34615 has 1 MA's), (Start: 38 @34618 has 32 MA's), (Start: 49 @34639 has 1 MA's), (60, 34690), (62, 34702), (67, 34717), (70, 34723), (80, 34780), (88, 34822), (95, 34846), (97, 34852), (98, 34858), (111, 34948), (112, 34954),

Gene: Phrancesco_51 Start: 34908, Stop: 35276, Start Num: 38
Candidate Starts for Phrancesco_51:
(Start: 38 @34908 has 32 MA's), (Start: 49 @34929 has 1 MA's), (60, 34980), (62, 34992), (67, 35007), (70, 35013), (80, 35070), (88, 35112), (95, 35136), (97, 35142), (98, 35148), (111, 35238), (112, 35244),

Gene: Phrux_69 Start: 46515, Stop: 46883, Start Num: 33
Candidate Starts for Phrux_69:
(Start: 30 @46512 has 24 MA's), (Start: 33 @46515 has 112 MA's), (51, 46554), (54, 46572), (60, 46593), (64, 46611), (97, 46755), (100, 46776), (107, 46827), (109, 46845),

Gene: Pickles13_39 Start: 25575, Stop: 25937, Start Num: 45
Candidate Starts for Pickles13_39:
(Start: 45 @25575 has 21 MA's), (62, 25650), (65, 25659), (81, 25728), (85, 25752), (110, 25893), (112, 25902), (115, 25920), (116, 25923),

Gene: PierreOrion_51 Start: 34922, Stop: 35290, Start Num: 38
Candidate Starts for PierreOrion_51:
(Start: 36 @34919 has 1 MA's), (Start: 38 @34922 has 32 MA's), (Start: 49 @34943 has 1 MA's), (60, 34994), (62, 35006), (67, 35021), (70, 35027), (80, 35084), (88, 35126), (95, 35150), (97, 35156), (98, 35162), (111, 35252), (112, 35258),

Gene: PiperSansNom_51 Start: 35062, Stop: 35430, Start Num: 38
Candidate Starts for PiperSansNom_51:
(Start: 36 @35059 has 1 MA's), (Start: 38 @35062 has 32 MA's), (Start: 49 @35083 has 1 MA's), (60, 35134), (62, 35146), (67, 35161), (70, 35167), (80, 35224), (88, 35266), (95, 35290), (97, 35296), (98, 35302), (111, 35392), (112, 35398),

Gene: Piperis_51 Start: 34741, Stop: 35109, Start Num: 38
Candidate Starts for Piperis_51:
(Start: 36 @34738 has 1 MA's), (Start: 38 @34741 has 32 MA's), (Start: 49 @34762 has 1 MA's), (60, 34813), (62, 34825), (67, 34840), (70, 34846), (80, 34903), (88, 34945), (95, 34969), (97, 34975), (98, 34981), (111, 35071), (112, 35077),

Gene: Policronamos_75 Start: 47919, Stop: 48287, Start Num: 33
Candidate Starts for Policronamos_75:
(Start: 30 @47916 has 24 MA's), (Start: 33 @47919 has 112 MA's), (51, 47958), (54, 47976), (60, 47997), (64, 48015), (97, 48159), (100, 48180), (107, 48231), (109, 48249),

Gene: Poochiewood_64 Start: 44599, Stop: 44967, Start Num: 44
Candidate Starts for Poochiewood_64:

(Start: 44 @44599 has 19 MA's), (55, 44647), (80, 44755), (88, 44803), (92, 44815), (108, 44914), (110, 44926),

Gene: Porcelain_115 Start: 63409, Stop: 63837, Start Num: 15
Candidate Starts for Porcelain_115:
(Start: 15 @63409 has 40 MA's), (Start: 35 @63466 has 3 MA's), (52, 63514), (56, 63535), (79, 63628), (82, 63655), (91, 63694), (92, 63697), (100, 63736), (106, 63778),

Gene: Porky_71 Start: 46345, Stop: 46713, Start Num: 33
Candidate Starts for Porky_71:
(Start: 30 @46342 has 24 MA's), (Start: 33 @46345 has 112 MA's), (51, 46384), (54, 46402), (60, 46423), (64, 46441), (97, 46585), (100, 46606), (107, 46657), (109, 46675),

Gene: Pound_110 Start: 65485, Stop: 65910, Start Num: 15
Candidate Starts for Pound_110:
(Start: 15 @65485 has 40 MA's), (60, 65620), (79, 65701), (92, 65770),

Gene: Ptowny_69 Start: 45811, Stop: 46179, Start Num: 33
Candidate Starts for Ptowny_69:
(Start: 30 @45808 has 24 MA's), (Start: 33 @45811 has 112 MA's), (51, 45850), (54, 45868), (60, 45889), (64, 45907), (97, 46051), (100, 46072), (107, 46123), (109, 46141),

Gene: Pulchra_52 Start: 35138, Stop: 35506, Start Num: 38
Candidate Starts for Pulchra_52:
(Start: 36 @35135 has 1 MA's), (Start: 38 @35138 has 32 MA's), (Start: 49 @35159 has 1 MA's), (60, 35210), (62, 35222), (67, 35237), (70, 35243), (80, 35300), (88, 35342), (95, 35366), (97, 35372), (98, 35378), (111, 35468), (112, 35474),

Gene: Pumpkin_75 Start: 47573, Stop: 47941, Start Num: 33
Candidate Starts for Pumpkin_75:
(Start: 30 @47570 has 24 MA's), (Start: 33 @47573 has 112 MA's), (51, 47612), (54, 47630), (60, 47651), (64, 47669), (97, 47813), (100, 47834), (107, 47885), (109, 47903),

Gene: Quallification_73 Start: 47557, Stop: 47925, Start Num: 33
Candidate Starts for Quallification_73:
(Start: 30 @47554 has 24 MA's), (Start: 33 @47557 has 112 MA's), (51, 47596), (54, 47614), (60, 47635), (64, 47653), (97, 47797), (100, 47818), (107, 47869), (109, 47887),

Gene: Quby_64 Start: 44585, Stop: 44944, Start Num: 47
Candidate Starts for Quby_64:
(16, 44504), (Start: 47 @44585 has 38 MA's), (80, 44732), (92, 44792), (108, 44891), (110, 44903),

Gene: Quhwah_54 Start: 35370, Stop: 35738, Start Num: 38
Candidate Starts for Quhwah_54:
(Start: 36 @35367 has 1 MA's), (Start: 38 @35370 has 32 MA's), (Start: 49 @35391 has 1 MA's), (60, 35442), (62, 35454), (67, 35469), (70, 35475), (80, 35532), (88, 35574), (95, 35598), (97, 35604), (98, 35610), (111, 35700), (112, 35706),

Gene: Rakim_73 Start: 47029, Stop: 47397, Start Num: 33
Candidate Starts for Rakim_73:
(Start: 30 @47026 has 24 MA's), (Start: 33 @47029 has 112 MA's), (51, 47068), (54, 47086), (60, 47107), (64, 47125), (97, 47269), (100, 47290), (107, 47341), (109, 47359),

Gene: Ramiel05_50 Start: 34773, Stop: 35141, Start Num: 38
Candidate Starts for Ramiel05_50:
(Start: 38 @34773 has 32 MA's), (Start: 49 @34794 has 1 MA's), (60, 34845), (62, 34857), (67, 34872), (70, 34878), (80, 34935), (88, 34977), (95, 35001), (97, 35007), (98, 35013), (111, 35103), (112, 35109),

Gene: Raya_48 Start: 29553, Stop: 29924, Start Num: 37
Candidate Starts for Raya_48:
(10, 29469), (37, 29553), (Start: 45 @29568 has 21 MA's), (81, 29721), (95, 29787), (112, 29895), (114, 29904),

Gene: Rearden_109 Start: 63121, Stop: 63549, Start Num: 15
Candidate Starts for Rearden_109:
(Start: 15 @63121 has 40 MA's), (Start: 35 @63178 has 3 MA's), (52, 63226), (56, 63247), (79, 63340), (82, 63367), (91, 63406), (92, 63409), (100, 63448), (106, 63490), (110, 63520),

Gene: Red305_65 Start: 46109, Stop: 46480, Start Num: 43
Candidate Starts for Red305_65:
(29, 46082), (Start: 43 @46109 has 19 MA's), (80, 46268), (92, 46328), (96, 46343), (106, 46409), (108, 46427), (110, 46439),

Gene: Redno2_114 Start: 64921, Stop: 65346, Start Num: 15
Candidate Starts for Redno2_114:
(Start: 15 @64921 has 40 MA's), (60, 65056), (79, 65137), (92, 65206),

Gene: Rimmer_73 Start: 47271, Stop: 47639, Start Num: 33
Candidate Starts for Rimmer_73:
(Start: 30 @47268 has 24 MA's), (Start: 33 @47271 has 112 MA's), (51, 47310), (54, 47328), (60, 47349), (64, 47367), (97, 47511), (100, 47532), (107, 47583), (109, 47601),

Gene: RiverMonster_72 Start: 47093, Stop: 47461, Start Num: 33
Candidate Starts for RiverMonster_72:
(Start: 30 @47090 has 24 MA's), (Start: 33 @47093 has 112 MA's), (51, 47132), (54, 47150), (60, 47171), (64, 47189), (97, 47333), (100, 47354), (107, 47405), (109, 47423),

Gene: RobsFeet_54 Start: 36149, Stop: 36514, Start Num: 40
Candidate Starts for RobsFeet_54:
(Start: 40 @36149 has 5 MA's), (Start: 49 @36167 has 1 MA's), (60, 36218), (70, 36251), (76, 36278), (80, 36308), (88, 36350), (89, 36353), (98, 36386), (111, 36476), (112, 36482),

Gene: Rockwell_50 Start: 34773, Stop: 35141, Start Num: 38
Candidate Starts for Rockwell_50:
(Start: 36 @34770 has 1 MA's), (Start: 38 @34773 has 32 MA's), (Start: 49 @34794 has 1 MA's), (60, 34845), (62, 34857), (67, 34872), (70, 34878), (80, 34935), (88, 34977), (95, 35001), (97, 35007), (98, 35013), (111, 35103), (112, 35109),

Gene: Rose5_64 Start: 44611, Stop: 44979, Start Num: 44
Candidate Starts for Rose5_64:
(Start: 44 @44611 has 19 MA's), (55, 44659), (80, 44767), (88, 44815), (92, 44827), (108, 44926), (110, 44938),

Gene: Rossetti_67 Start: 46539, Stop: 46898, Start Num: 47
Candidate Starts for Rossetti_67:

(Start: 47 @46539 has 38 MA's), (72, 46635), (80, 46686), (92, 46746), (108, 46845), (110, 46857),

Gene: Rumpelstiltskin_65 Start: 45386, Stop: 45745, Start Num: 47
Candidate Starts for Rumpelstiltskin_65:
(Start: 47 @45386 has 38 MA's), (72, 45482), (80, 45533), (92, 45593), (108, 45692), (110, 45704),

Gene: Saints25_71 Start: 46503, Stop: 46871, Start Num: 33
Candidate Starts for Saints25_71:
(Start: 30 @46500 has 24 MA's), (Start: 33 @46503 has 112 MA's), (51, 46542), (54, 46560), (60, 46581), (64, 46599), (97, 46743), (100, 46764), (107, 46815), (109, 46833),

Gene: Samty_65 Start: 46117, Stop: 46488, Start Num: 43
Candidate Starts for Samty_65:
(29, 46090), (Start: 43 @46117 has 19 MA's), (80, 46276), (92, 46336), (96, 46351), (106, 46417), (108, 46435), (110, 46447),

Gene: Sarshaun_66 Start: 46053, Stop: 46412, Start Num: 47
Candidate Starts for Sarshaun_66:
(Start: 47 @46053 has 38 MA's), (72, 46149), (80, 46200), (92, 46260), (108, 46359), (110, 46371),

Gene: Sassay_67 Start: 45193, Stop: 45561, Start Num: 33
Candidate Starts for Sassay_67:
(Start: 30 @45190 has 24 MA's), (Start: 33 @45193 has 112 MA's), (51, 45232), (54, 45250), (60, 45271), (64, 45289), (97, 45433), (100, 45454), (107, 45505), (109, 45523),

Gene: Savannah_50 Start: 34800, Stop: 35168, Start Num: 38
Candidate Starts for Savannah_50:
(Start: 36 @34797 has 1 MA's), (Start: 38 @34800 has 32 MA's), (Start: 49 @34821 has 1 MA's), (60, 34872), (62, 34884), (67, 34899), (70, 34905), (80, 34962), (88, 35004), (95, 35028), (97, 35034), (98, 35040), (111, 35130), (112, 35136),

Gene: Schatzie_115 Start: 65928, Stop: 66356, Start Num: 15
Candidate Starts for Schatzie_115:
(Start: 15 @65928 has 40 MA's), (Start: 35 @65985 has 3 MA's), (52, 66033), (56, 66054), (79, 66147), (82, 66174), (91, 66213), (92, 66216), (100, 66255), (106, 66297),

Gene: Schmidt_43 Start: 29642, Stop: 30076, Start Num: 12
Candidate Starts for Schmidt_43:
(11, 29633), (Start: 12 @29642 has 1 MA's), (51, 29747), (58, 29780), (59, 29783), (66, 29810), (68, 29813), (87, 29909), (98, 29948), (102, 29981), (110, 30035), (113, 30047), (114, 30053),

Gene: ScoobySnack_37 Start: 25080, Stop: 25442, Start Num: 45
Candidate Starts for ScoobySnack_37:
(Start: 45 @25080 has 21 MA's), (65, 25164), (81, 25233), (85, 25257), (110, 25398), (112, 25407), (115, 25425), (116, 25428),

Gene: Scumberland_52 Start: 34995, Stop: 35363, Start Num: 38
Candidate Starts for Scumberland_52:
(Start: 36 @34992 has 1 MA's), (Start: 38 @34995 has 32 MA's), (Start: 49 @35016 has 1 MA's), (60, 35067), (62, 35079), (67, 35094), (70, 35100), (80, 35157), (88, 35199), (95, 35223), (97, 35229), (98, 35235), (111, 35325), (112, 35331),

Gene: Selwyn23_52 Start: 34972, Stop: 35340, Start Num: 38

Candidate Starts for Selwyn23_52:
(Start: 36 @34969 has 1 MA's), (Start: 38 @34972 has 32 MA's), (Start: 49 @34993 has 1 MA's), (60, 35044), (62, 35056), (67, 35071), (70, 35077), (80, 35134), (88, 35176), (95, 35200), (97, 35206), (98, 35212), (111, 35302), (112, 35308),

Gene: Shaboozey_113 Start: 62989, Stop: 63360, Start Num: 35
Candidate Starts for Shaboozey_113:
(Start: 15 @62932 has 40 MA's), (Start: 35 @62989 has 3 MA's), (39, 62995), (52, 63037), (56, 63058), (79, 63151), (82, 63178), (91, 63217), (92, 63220), (106, 63301),

Gene: ShamWow_72 Start: 47412, Stop: 47780, Start Num: 33
Candidate Starts for ShamWow_72:
(Start: 30 @47409 has 24 MA's), (Start: 33 @47412 has 112 MA's), (51, 47451), (54, 47469), (60, 47490), (64, 47508), (97, 47652), (100, 47673), (107, 47724), (109, 47742),

Gene: Sheng711_64 Start: 44671, Stop: 45030, Start Num: 47
Candidate Starts for Sheng711_64:
(Start: 47 @44671 has 38 MA's), (80, 44818), (92, 44878), (96, 44893), (99, 44911), (108, 44977), (110, 44989),

Gene: ShereKhan_71 Start: 47478, Stop: 47849, Start Num: 30
Candidate Starts for ShereKhan_71:
(Start: 30 @47478 has 24 MA's), (Start: 33 @47481 has 112 MA's), (51, 47520), (54, 47538), (60, 47559), (64, 47577), (97, 47721), (100, 47742), (107, 47793), (109, 47811),

Gene: Shotgun_50 Start: 34599, Stop: 34967, Start Num: 38
Candidate Starts for Shotgun_50:
(Start: 38 @34599 has 32 MA's), (Start: 49 @34620 has 1 MA's), (60, 34671), (62, 34683), (67, 34698), (70, 34704), (80, 34761), (88, 34803), (95, 34827), (97, 34833), (98, 34839), (111, 34929), (112, 34935),

Gene: Shrubaron_53 Start: 35762, Stop: 36127, Start Num: 40
Candidate Starts for Shrubaron_53:
(Start: 40 @35762 has 5 MA's), (Start: 49 @35780 has 1 MA's), (60, 35831), (70, 35864), (76, 35891), (80, 35921), (88, 35963), (89, 35966), (98, 35999), (111, 36089), (112, 36095),

Gene: Silverleaf_64 Start: 44346, Stop: 44714, Start Num: 44
Candidate Starts for Silverleaf_64:
(Start: 44 @44346 has 19 MA's), (55, 44394), (80, 44502), (88, 44550), (92, 44562), (108, 44661), (110, 44673),

Gene: Simpliphy_71 Start: 46493, Stop: 46861, Start Num: 33
Candidate Starts for Simpliphy_71:
(Start: 30 @46490 has 24 MA's), (Start: 33 @46493 has 112 MA's), (51, 46532), (54, 46550), (60, 46571), (64, 46589), (97, 46733), (100, 46754), (107, 46805), (109, 46823),

Gene: SirDuracell_71 Start: 45770, Stop: 46144, Start Num: 33
Candidate Starts for SirDuracell_71:
(Start: 30 @45767 has 24 MA's), (Start: 33 @45770 has 112 MA's), (54, 45833), (97, 46016), (100, 46037), (107, 46088), (109, 46106),

Gene: SirFrank_51 Start: 34970, Stop: 35332, Start Num: 42
Candidate Starts for SirFrank_51:

(2, 34796), (5, 34805), (Start: 42 @34970 has 15 MA's), (Start: 49 @34985 has 1 MA's), (60, 35036), (62, 35048), (67, 35063), (70, 35069), (80, 35126), (88, 35168), (89, 35171), (97, 35198), (98, 35204), (111, 35294), (112, 35300),

Gene: Skitty_45 Start: 28631, Stop: 28987, Start Num: 45
Candidate Starts for Skitty_45:
(10, 28532), (37, 28616), (Start: 45 @28631 has 21 MA's), (81, 28784), (95, 28850), (112, 28958), (114, 28967),

Gene: Skugga_50 Start: 34720, Stop: 35082, Start Num: 42
Candidate Starts for Skugga_50:
(14, 34645), (21, 34672), (41, 34717), (Start: 42 @34720 has 15 MA's), (52, 34753), (57, 34777), (61, 34789), (80, 34876), (83, 34894), (98, 34954), (99, 34963), (111, 35044), (112, 35050),

Gene: Skyerus_43 Start: 27671, Stop: 28042, Start Num: 37
Candidate Starts for Skyerus_43:
(10, 27587), (37, 27671), (Start: 45 @27686 has 21 MA's), (81, 27839), (95, 27905), (112, 28013), (114, 28022),

Gene: Smarties_59 Start: 36518, Stop: 36883, Start Num: 38
Candidate Starts for Smarties_59:
(Start: 38 @36518 has 32 MA's), (70, 36620), (80, 36677), (97, 36749), (98, 36755), (99, 36764), (111, 36845), (112, 36851),

Gene: Snenia_64 Start: 46110, Stop: 46481, Start Num: 43
Candidate Starts for Snenia_64:
(29, 46083), (Start: 43 @46110 has 19 MA's), (80, 46269), (92, 46329), (96, 46344), (106, 46410), (108, 46428), (110, 46440),

Gene: SoJulia_68 Start: 46222, Stop: 46581, Start Num: 47
Candidate Starts for SoJulia_68:
(Start: 47 @46222 has 38 MA's), (72, 46318), (80, 46369), (92, 46429), (108, 46528), (110, 46540),

Gene: Soap141_66 Start: 46053, Stop: 46412, Start Num: 47
Candidate Starts for Soap141_66:
(Start: 47 @46053 has 38 MA's), (72, 46149), (80, 46200), (92, 46260), (108, 46359), (110, 46371),

Gene: SophKB_69 Start: 46168, Stop: 46536, Start Num: 33
Candidate Starts for SophKB_69:
(Start: 30 @46165 has 24 MA's), (Start: 33 @46168 has 112 MA's), (51, 46207), (54, 46225), (60, 46246), (64, 46264), (97, 46408), (100, 46429), (107, 46480), (109, 46498),

Gene: Sotrice96_73 Start: 47168, Stop: 47539, Start Num: 30
Candidate Starts for Sotrice96_73:
(Start: 30 @47168 has 24 MA's), (Start: 33 @47171 has 112 MA's), (51, 47210), (54, 47228), (60, 47249), (64, 47267), (97, 47411), (100, 47432), (107, 47483), (109, 47501),

Gene: Spartan_52 Start: 39797, Stop: 40162, Start Num: 42
Candidate Starts for Spartan_52:
(31, 39779), (34, 39782), (Start: 42 @39797 has 15 MA's), (51, 39824), (52, 39830), (73, 39905), (74, 39908), (81, 39953), (83, 39971), (84, 39974), (87, 39992), (99, 40040), (106, 40088), (110, 40118), (112, 40127),

Gene: Splinter_49 Start: 32705, Stop: 33184, Start Num: 6
Candidate Starts for Splinter_49:
(Start: 6 @32705 has 6 MA's), (Start: 20 @32777 has 1 MA's), (24, 32789), (Start: 30 @32813 has 24 MA's), (51, 32858), (78, 32972), (82, 32990), (87, 33017), (98, 33056),

Gene: Squint_113 Start: 63213, Stop: 63644, Start Num: 15
Candidate Starts for Squint_113:
(Start: 15 @63213 has 40 MA's), (Start: 35 @63270 has 3 MA's), (52, 63318), (56, 63339), (79, 63432), (82, 63459), (91, 63498), (92, 63501), (100, 63540), (106, 63582), (110, 63612),

Gene: Stank_75 Start: 47429, Stop: 47797, Start Num: 33
Candidate Starts for Stank_75:
(Start: 30 @47426 has 24 MA's), (Start: 33 @47429 has 112 MA's), (51, 47468), (54, 47486), (60, 47507), (64, 47525), (97, 47669), (100, 47690), (107, 47741), (109, 47759),

Gene: Stark_73 Start: 46976, Stop: 47344, Start Num: 33
Candidate Starts for Stark_73:
(Start: 30 @46973 has 24 MA's), (Start: 33 @46976 has 112 MA's), (51, 47015), (54, 47033), (60, 47054), (64, 47072), (97, 47216), (100, 47237), (107, 47288), (109, 47306),

Gene: StellaBean_70 Start: 46736, Stop: 47104, Start Num: 33
Candidate Starts for StellaBean_70:
(Start: 30 @46733 has 24 MA's), (Start: 33 @46736 has 112 MA's), (51, 46775), (54, 46793), (60, 46814), (64, 46832), (97, 46976), (100, 46997), (107, 47048), (109, 47066),

Gene: Stellammi_91 Start: 46685, Stop: 47071, Start Num: 32
Candidate Starts for Stellammi_91:
(Start: 32 @46685 has 1 MA's), (63, 46784), (103, 46979), (106, 47000), (110, 47030),

Gene: StolenFromERC_75 Start: 47211, Stop: 47579, Start Num: 33
Candidate Starts for StolenFromERC_75:
(Start: 30 @47208 has 24 MA's), (Start: 33 @47211 has 112 MA's), (51, 47250), (54, 47268), (60, 47289), (64, 47307), (97, 47451), (100, 47472), (107, 47523), (109, 47541),

Gene: StormChicken_74 Start: 47878, Stop: 48246, Start Num: 33
Candidate Starts for StormChicken_74:
(Start: 30 @47875 has 24 MA's), (Start: 33 @47878 has 112 MA's), (51, 47917), (54, 47935), (60, 47956), (64, 47974), (97, 48118), (100, 48139), (107, 48190), (109, 48208),

Gene: Sunny_ Start: 36254, Stop: 36616, Start Num: 42
Candidate Starts for Sunny_:
(Start: 42 @36254 has 15 MA's), (62, 36332), (80, 36410), (83, 36428), (88, 36452), (99, 36497), (101, 36512), (110, 36575), (111, 36578), (112, 36584),

Gene: Superphikiman_112 Start: 62304, Stop: 62735, Start Num: 15
Candidate Starts for Superphikiman_112:
(Start: 15 @62304 has 40 MA's), (Start: 35 @62361 has 3 MA's), (52, 62409), (56, 62430), (79, 62523), (82, 62550), (91, 62589), (92, 62592), (100, 62631), (106, 62673), (110, 62703),

Gene: TBrady12_75 Start: 46907, Stop: 47278, Start Num: 30
Candidate Starts for TBrady12_75:
(Start: 30 @46907 has 24 MA's), (Start: 33 @46910 has 112 MA's), (51, 46949), (54, 46967), (60, 46988), (64, 47006), (97, 47150), (100, 47171), (107, 47222), (109, 47240),

Gene: TZGordon_51 Start: 32201, Stop: 32680, Start Num: 6
Candidate Starts for TZGordon_51:
(Start: 6 @32201 has 6 MA's), (Start: 20 @32273 has 1 MA's), (24, 32285), (Start: 30 @32309 has 24 MA's), (51, 32354), (78, 32468), (87, 32513), (98, 32552),

Gene: Tarkin_71 Start: 47155, Stop: 47526, Start Num: 30
Candidate Starts for Tarkin_71:
(Start: 30 @47155 has 24 MA's), (Start: 33 @47158 has 112 MA's), (51, 47197), (54, 47215), (60, 47236), (64, 47254), (97, 47398), (100, 47419), (107, 47470), (109, 47488),

Gene: TeamEdward_74 Start: 47872, Stop: 48246, Start Num: 33
Candidate Starts for TeamEdward_74:
(Start: 30 @47869 has 24 MA's), (Start: 33 @47872 has 112 MA's), (54, 47935), (97, 48118), (100, 48139), (107, 48190), (109, 48208),

Gene: Teamocil_53 Start: 34798, Stop: 35160, Start Num: 42
Candidate Starts for Teamocil_53:
(21, 34750), (Start: 42 @34798 has 15 MA's), (Start: 49 @34813 has 1 MA's), (63, 34879), (76, 34924), (80, 34954), (88, 34996), (95, 35020), (106, 35089), (111, 35122), (112, 35128),

Gene: TeardropMSU_68 Start: 46155, Stop: 46526, Start Num: 30
Candidate Starts for TeardropMSU_68:
(Start: 30 @46155 has 24 MA's), (Start: 33 @46158 has 112 MA's), (51, 46197), (54, 46215), (60, 46236), (64, 46254), (97, 46398), (100, 46419), (107, 46470), (109, 46488),

Gene: Teaspoon_73 Start: 47052, Stop: 47420, Start Num: 33
Candidate Starts for Teaspoon_73:
(Start: 30 @47049 has 24 MA's), (Start: 33 @47052 has 112 MA's), (51, 47091), (54, 47109), (60, 47130), (64, 47148), (97, 47292), (100, 47313), (107, 47364), (109, 47382),

Gene: Terij_47 Start: 33710, Stop: 34075, Start Num: 42
Candidate Starts for Terij_47:
(Start: 42 @33710 has 15 MA's), (Start: 49 @33728 has 1 MA's), (52, 33746), (60, 33779), (62, 33791), (65, 33800), (76, 33839), (80, 33869), (92, 33923), (93, 33926), (97, 33941), (98, 33947), (110, 34034), (112, 34043),

Gene: Terminus_75 Start: 47948, Stop: 48316, Start Num: 33
Candidate Starts for Terminus_75:
(Start: 30 @47945 has 24 MA's), (Start: 33 @47948 has 112 MA's), (51, 47987), (54, 48005), (60, 48026), (64, 48044), (97, 48188), (100, 48209), (107, 48260), (109, 48278),

Gene: Thibault_101 Start: 61096, Stop: 61521, Start Num: 15
Candidate Starts for Thibault_101:
(Start: 15 @61096 has 40 MA's), (60, 61231), (79, 61312), (92, 61381),

Gene: Thimble_73 Start: 46393, Stop: 46761, Start Num: 33
Candidate Starts for Thimble_73:
(Start: 30 @46390 has 24 MA's), (Start: 33 @46393 has 112 MA's), (51, 46432), (54, 46450), (60, 46471), (64, 46489), (97, 46633), (100, 46654), (107, 46705), (109, 46723),

Gene: ThreeRngTarjay_116 Start: 67810, Stop: 68235, Start Num: 15
Candidate Starts for ThreeRngTarjay_116:

(Start: 15 @67810 has 40 MA's), (60, 67945), (79, 68026), (92, 68095),

Gene: Thresher_74 Start: 48035, Stop: 48403, Start Num: 33
Candidate Starts for Thresher_74:
(Start: 30 @48032 has 24 MA's), (Start: 33 @48035 has 112 MA's), (51, 48074), (54, 48092), (60, 48113), (64, 48131), (97, 48275), (100, 48296), (107, 48347), (109, 48365),

Gene: TinaLin_47 Start: 31514, Stop: 31921, Start Num: 20
Candidate Starts for TinaLin_47:
(Start: 3 @31436 has 1 MA's), (Start: 20 @31514 has 1 MA's), (24, 31526), (28, 31541), (Start: 30 @31550 has 24 MA's), (51, 31595), (78, 31709), (90, 31763), (102, 31826),

Gene: Tomaszewski_67 Start: 46330, Stop: 46698, Start Num: 33
Candidate Starts for Tomaszewski_67:
(Start: 30 @46327 has 24 MA's), (Start: 33 @46330 has 112 MA's), (51, 46369), (54, 46387), (60, 46408), (64, 46426), (97, 46570), (100, 46591), (107, 46642), (109, 46660),

Gene: Toto_70 Start: 47412, Stop: 47780, Start Num: 33
Candidate Starts for Toto_70:
(Start: 30 @47409 has 24 MA's), (Start: 33 @47412 has 112 MA's), (51, 47451), (54, 47469), (60, 47490), (64, 47508), (97, 47652), (100, 47673), (107, 47724), (109, 47742),

Gene: Tourach_65 Start: 46039, Stop: 46398, Start Num: 47
Candidate Starts for Tourach_65:
(Start: 47 @46039 has 38 MA's), (80, 46186), (92, 46246), (108, 46345),

Gene: Traaww1_68 Start: 46593, Stop: 46964, Start Num: 30
Candidate Starts for Traaww1_68:
(Start: 30 @46593 has 24 MA's), (Start: 33 @46596 has 112 MA's), (51, 46635), (54, 46653), (60, 46674), (64, 46692), (97, 46836), (100, 46857), (107, 46908), (109, 46926),

Gene: TriFive_66 Start: 46109, Stop: 46480, Start Num: 43
Candidate Starts for TriFive_66:
(29, 46082), (Start: 43 @46109 has 19 MA's), (80, 46268), (92, 46328), (96, 46343), (106, 46409), (108, 46427), (110, 46439),

Gene: Tuco_73 Start: 47920, Stop: 48288, Start Num: 33
Candidate Starts for Tuco_73:
(Start: 30 @47917 has 24 MA's), (Start: 33 @47920 has 112 MA's), (51, 47959), (54, 47977), (60, 47998), (64, 48016), (97, 48160), (100, 48181), (107, 48232), (109, 48250),

Gene: Tyrumbra_51 Start: 35928, Stop: 36293, Start Num: 40
Candidate Starts for Tyrumbra_51:
(Start: 40 @35928 has 5 MA's), (Start: 49 @35946 has 1 MA's), (60, 35997), (70, 36030), (76, 36057), (80, 36087), (88, 36129), (89, 36132), (98, 36165), (111, 36255), (112, 36261),

Gene: Tyson_64 Start: 44613, Stop: 44981, Start Num: 44
Candidate Starts for Tyson_64:
(Start: 44 @44613 has 19 MA's), (55, 44661), (80, 44769), (88, 44817), (92, 44829), (108, 44928), (110, 44940),

Gene: UPIE_64 Start: 44137, Stop: 44505, Start Num: 44
Candidate Starts for UPIE_64:

(Start: 44 @44137 has 19 MA's), (55, 44185), (80, 44293), (88, 44341), (92, 44353), (104, 44422), (108, 44452), (110, 44464),

Gene: Ukulele_67 Start: 46303, Stop: 46674, Start Num: 30
Candidate Starts for Ukulele_67:
(Start: 30 @46303 has 24 MA's), (Start: 33 @46306 has 112 MA's), (51, 46345), (54, 46363), (60, 46384), (64, 46402), (97, 46546), (100, 46567), (107, 46618), (109, 46636),

Gene: Underpass_57 Start: 41029, Stop: 41388, Start Num: 47
Candidate Starts for Underpass_57:
(Start: 47 @41029 has 38 MA's), (72, 41125), (80, 41176), (92, 41236), (108, 41335), (110, 41347),

Gene: VanLee_115 Start: 60226, Stop: 60615, Start Num: 27
Candidate Starts for VanLee_115:
(13, 60175), (Start: 27 @60226 has 2 MA's), (62, 60337), (88, 60457), (112, 60589), (115, 60607),

Gene: Vendetta_49 Start: 32705, Stop: 33184, Start Num: 6
Candidate Starts for Vendetta_49:
(Start: 6 @32705 has 6 MA's), (Start: 20 @32777 has 1 MA's), (24, 32789), (Start: 30 @32813 has 24 MA's), (51, 32858), (78, 32972), (82, 32990), (87, 33017), (98, 33056),

Gene: Vetrix_66 Start: 45997, Stop: 46356, Start Num: 47
Candidate Starts for Vetrix_66:
(Start: 47 @45997 has 38 MA's), (72, 46093), (80, 46144), (92, 46204), (108, 46303), (110, 46315),

Gene: Violeta_42 Start: 25357, Stop: 25719, Start Num: 45
Candidate Starts for Violeta_42:
(Start: 45 @25357 has 21 MA's), (65, 25441), (81, 25510), (85, 25534), (110, 25675), (112, 25684), (115, 25702), (116, 25705),

Gene: Wamburgrxpress_64 Start: 44167, Stop: 44535, Start Num: 44
Candidate Starts for Wamburgrxpress_64:
(Start: 44 @44167 has 19 MA's), (55, 44215), (80, 44323), (88, 44371), (92, 44383), (104, 44452), (108, 44482), (110, 44494),

Gene: Wanda_120 Start: 65212, Stop: 65637, Start Num: 15
Candidate Starts for Wanda_120:
(Start: 15 @65212 has 40 MA's), (60, 65347), (79, 65428), (92, 65497),

Gene: Warren_40 Start: 25318, Stop: 25680, Start Num: 45
Candidate Starts for Warren_40:
(Start: 45 @25318 has 21 MA's), (65, 25402), (81, 25471), (85, 25495), (110, 25636), (112, 25645), (115, 25663), (116, 25666),

Gene: Whirlwind_65 Start: 45925, Stop: 46296, Start Num: 43
Candidate Starts for Whirlwind_65:
(29, 45898), (Start: 43 @45925 has 19 MA's), (80, 46084), (92, 46144), (96, 46159), (106, 46225), (108, 46243), (110, 46255),

Gene: Wiggin_74 Start: 46997, Stop: 47365, Start Num: 33
Candidate Starts for Wiggin_74:
(Start: 30 @46994 has 24 MA's), (Start: 33 @46997 has 112 MA's), (51, 47036), (54, 47054), (60, 47075), (64, 47093), (97, 47237), (100, 47258), (107, 47309), (109, 47327),

Gene: Wigglewiggle_66 Start: 46017, Stop: 46376, Start Num: 47
Candidate Starts for Wigglewiggle_66:
(Start: 47 @46017 has 38 MA's), (72, 46113), (80, 46164), (92, 46224), (108, 46323), (110, 46335),

Gene: Wilder_67 Start: 45963, Stop: 46322, Start Num: 47
Candidate Starts for Wilder_67:
(Start: 47 @45963 has 38 MA's), (72, 46059), (80, 46110), (92, 46170), (108, 46269), (110, 46281),

Gene: Willez_67 Start: 45193, Stop: 45561, Start Num: 33
Candidate Starts for Willez_67:
(Start: 30 @45190 has 24 MA's), (Start: 33 @45193 has 112 MA's), (51, 45232), (54, 45250), (60, 45271), (64, 45289), (97, 45433), (100, 45454), (107, 45505), (109, 45523),

Gene: Winchester007_42 Start: 25400, Stop: 25762, Start Num: 45
Candidate Starts for Winchester007_42:
(Start: 45 @25400 has 21 MA's), (65, 25484), (81, 25553), (85, 25577), (110, 25718), (112, 25727), (115, 25745), (116, 25748),

Gene: Winky_66 Start: 45957, Stop: 46316, Start Num: 47
Candidate Starts for Winky_66:
(Start: 47 @45957 has 38 MA's), (72, 46053), (80, 46104), (92, 46164), (108, 46263), (110, 46275),

Gene: Wyatt2_65 Start: 44611, Stop: 44979, Start Num: 44
Candidate Starts for Wyatt2_65:
(Start: 44 @44611 has 19 MA's), (55, 44659), (80, 44767), (88, 44815), (92, 44827), (108, 44926), (110, 44938),

Gene: Xandras_71 Start: 46408, Stop: 46776, Start Num: 33
Candidate Starts for Xandras_71:
(Start: 30 @46405 has 24 MA's), (Start: 33 @46408 has 112 MA's), (51, 46447), (54, 46465), (60, 46486), (64, 46504), (97, 46648), (100, 46669), (107, 46720), (109, 46738),

Gene: Xiaokay_109 Start: 63992, Stop: 64417, Start Num: 15
Candidate Starts for Xiaokay_109:
(Start: 15 @63992 has 40 MA's), (60, 64127), (79, 64208), (92, 64277),

Gene: YassJohnny_69 Start: 46369, Stop: 46737, Start Num: 33
Candidate Starts for YassJohnny_69:
(Start: 30 @46366 has 24 MA's), (Start: 33 @46369 has 112 MA's), (51, 46408), (54, 46426), (60, 46447), (64, 46465), (97, 46609), (100, 46630), (107, 46681), (109, 46699),

Gene: Yeet_111 Start: 64866, Stop: 65294, Start Num: 15
Candidate Starts for Yeet_111:
(Start: 15 @64866 has 40 MA's), (Start: 35 @64923 has 3 MA's), (52, 64971), (56, 64992), (79, 65085), (82, 65112), (91, 65151), (92, 65154), (100, 65193), (106, 65235),

Gene: Yeti_51 Start: 34774, Stop: 35142, Start Num: 38
Candidate Starts for Yeti_51:
(Start: 38 @34774 has 32 MA's), (Start: 49 @34795 has 1 MA's), (60, 34846), (62, 34858), (70, 34879), (80, 34936), (88, 34978), (95, 35002), (97, 35008), (98, 35014), (111, 35104), (112, 35110),

Gene: Youngblood_75 Start: 47875, Stop: 48243, Start Num: 33

Candidate Starts for Youngblood_75:
(Start: 30 @47872 has 24 MA's), (Start: 33 @47875 has 112 MA's), (51, 47914), (54, 47932), (60, 47953), (64, 47971), (97, 48115), (100, 48136), (107, 48187), (109, 48205),

Gene: Zakai_67 Start: 46283, Stop: 46642, Start Num: 47
Candidate Starts for Zakai_67:
(Start: 47 @46283 has 38 MA's), (72, 46379), (80, 46430), (92, 46490), (108, 46589), (110, 46601),

Gene: Zapato_50 Start: 34919, Stop: 35281, Start Num: 42
Candidate Starts for Zapato_50:
(Start: 42 @34919 has 15 MA's), (Start: 49 @34934 has 1 MA's), (60, 34985), (70, 35018), (80, 35075), (83, 35093), (88, 35117), (90, 35123), (95, 35141), (98, 35153), (111, 35243), (112, 35249),

Gene: Zaria_65 Start: 44276, Stop: 44644, Start Num: 44
Candidate Starts for Zaria_65:
(Start: 44 @44276 has 19 MA's), (55, 44324), (80, 44432), (88, 44480), (92, 44492), (104, 44561), (108, 44591), (110, 44603),

Gene: Zelink_115 Start: 67757, Stop: 68182, Start Num: 15
Candidate Starts for Zelink_115:
(Start: 15 @67757 has 40 MA's), (60, 67892), (79, 67973), (92, 68042),

Gene: ZhongYanYuan_64 Start: 45852, Stop: 46211, Start Num: 47
Candidate Starts for ZhongYanYuan_64:
(Start: 47 @45852 has 38 MA's), (80, 45999), (92, 46059), (108, 46158),

Gene: xkcd_75 Start: 48065, Stop: 48433, Start Num: 33
Candidate Starts for xkcd_75:
(Start: 30 @48062 has 24 MA's), (Start: 33 @48065 has 112 MA's), (51, 48104), (54, 48122), (60, 48143), (64, 48161), (97, 48305), (100, 48326), (107, 48377), (109, 48395),