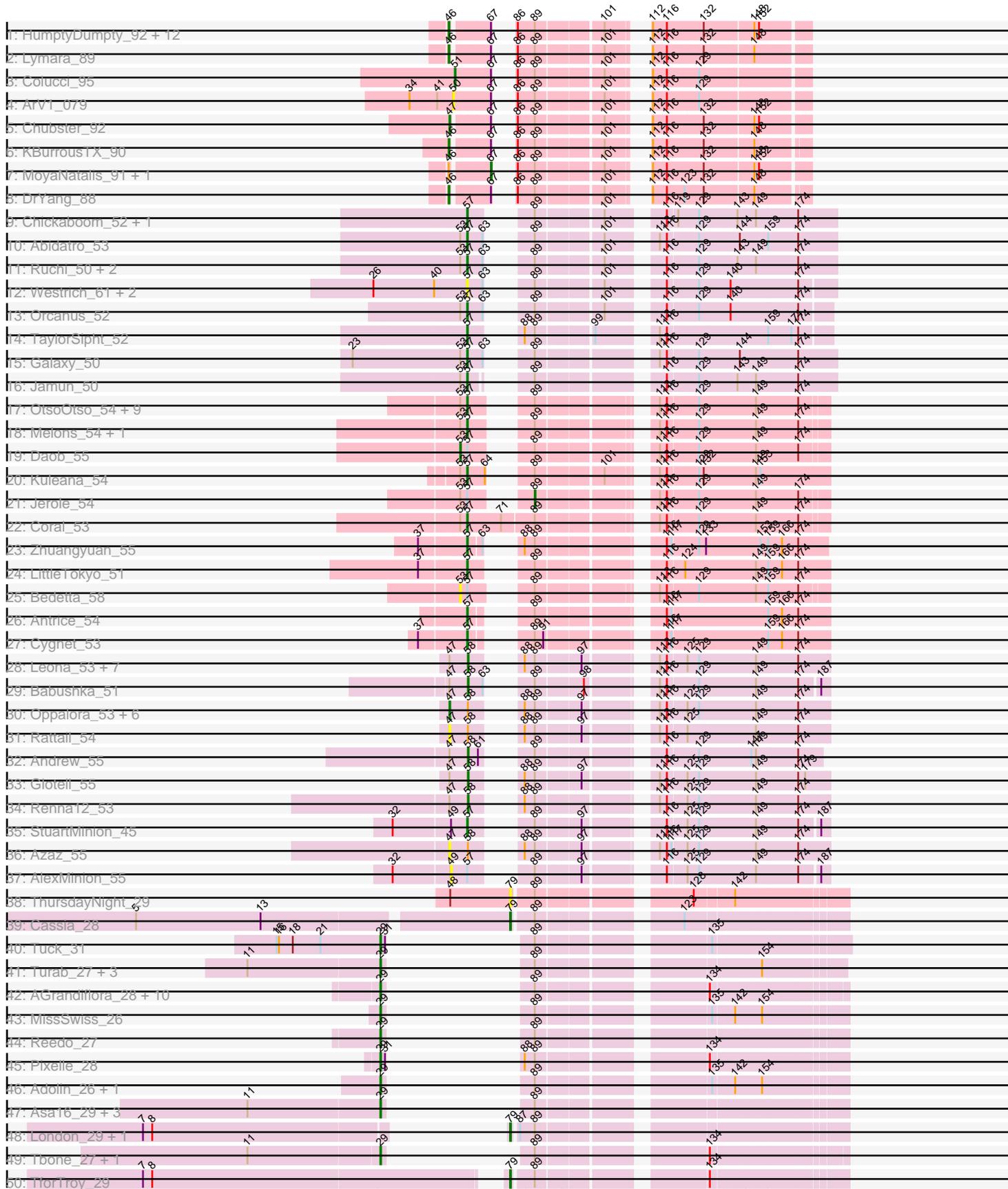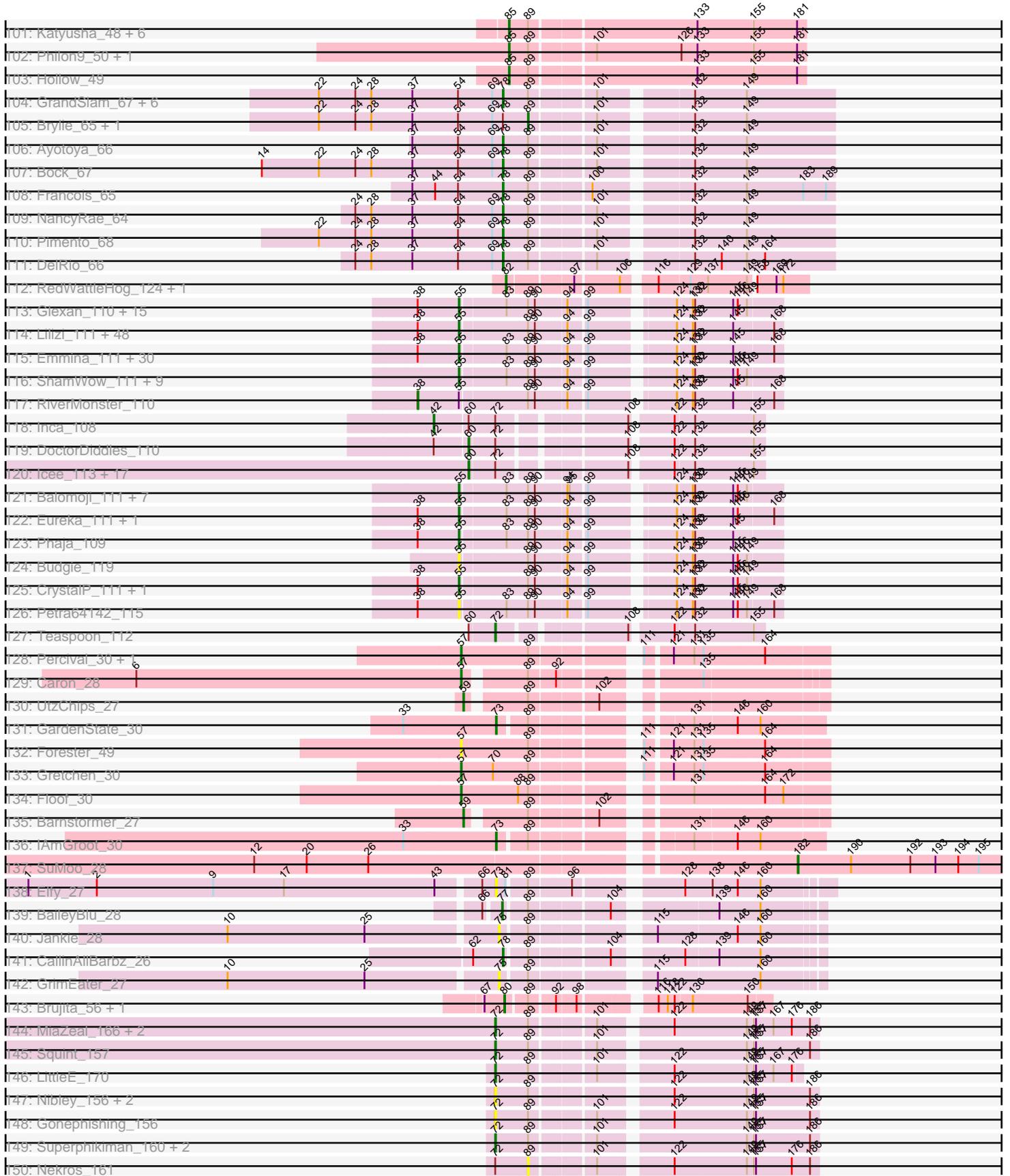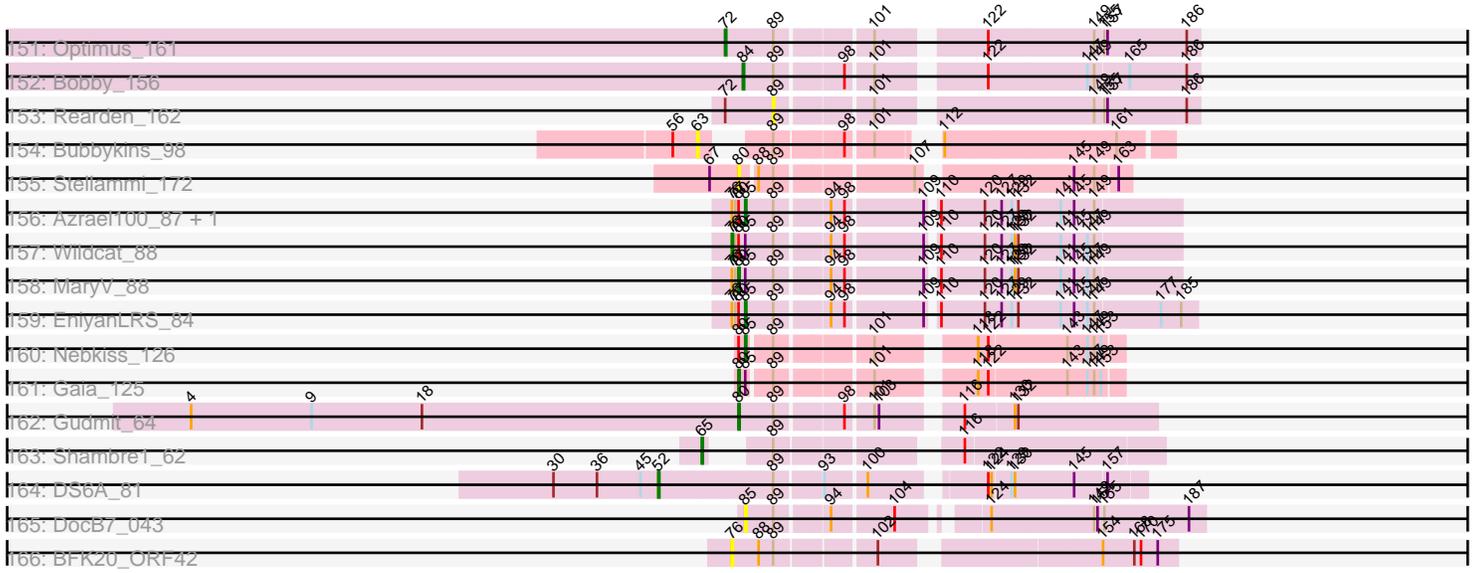Pham 290712

Pham 290712

Pham 290712

Pham 290712

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 290712 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290712 has 442 members, 74 are drafts.

Phages represented in each track:
• Track 1 : HumptyDumpty_92, RosiePosie_92, EdgarPoe_91, Conboy_90, Scavito_93, Linus_92, JayCookie_92, Chocolat_92, JaNo_91, PrincessTrina_93, Tophat_93, Kabreeze_92, Chipper1996_930
• Track 2 : Lymara_89
• Track 3 : Colucci_95
• Track 4 : ArV1_079
• Track 5 : Chubster_92
• Track 6 : KBurrousTX_90
• Track 7 : MoyaNatalis_91, Mordred_92
• Track 8 : DrYang_88
• Track 9 : Chickaboom_52, WileyE_52
• Track 10 : Abidatro_53
• Track 11 : Ruchi_50, Vulpecula_50, Basilisk_51
• Track 12 : Westrich_61, Pelletreau_62, Gravel_62
• Track 13 : Orcanus_52
• Track 14 : TaylorSipht_52
• Track 15 : Galaxy_50
• Track 16 : Jamun_50
• Track 17 : OtsoOtso_54, PhirstandPhine_61, Bibble12_57, Polka_53, Colusalem_54, HannahPhantana_54, Lunar_54, Kepler_54, Amelia_53, Cote_55
• Track 18 : Melons_54, Pineda_56
• Track 19 : Daob_55
• Track 20 : Kuleana_54
• Track 21 : Jerole_54
• Track 22 : Coral_53
• Track 23 : Zhuangyuan_55
• Track 24 : LittleTokyo_51
• Track 25 : Bedetta_58
• Track 26 : Antrice_54
• Track 27 : Cygnet_53
• Track 28 : Leona_53, AmiCi24_53, Juno112_53, PhluffyCoco_54, HamCheese_54, Atlantica_54, RedFox_54, DanHam62_54
• Track 29 : Babushka_51
• Track 30 : Oppalora_53, Fingolfin_54, KHumphrey_54, AdoptaAdorbs_53, Camara_54, Amphitrite_54, Laphuphu24k_53
• Track 31 : Rattail_54
• Track 32 : Andrew_55

- Track 33 : Glotell_55
- Track 34 : Renna12_53
- Track 35 : StuartMinion_45
- Track 36 : Azaz_55
- Track 37 : AlexMinion_55
- Track 38 : ThursdayNight_29
- Track 39 : Cassia_28
- Track 40 : Tuck_31
- Track 41 : Turab_27, AEgle_27, Adumb2043_27, Amploria_27
- Track 42 : AGrandiflora_28, JohnDoe_27, Simpson_29, Cyan_27, Kaylissa_27, Powerpuff_27, Tutumahutu_27, Flutur_27, YesChef_27, Joemato_27, Lego_27
- Track 43 : MissSwiss_26
- Track 44 : Reedo_27
- Track 45 : Pixelle_28
- Track 46 : Adolin_26, DrManhattan_26
- Track 47 : Asa16_29, Skelbel_30, Niobe_29, Eraser_29
- Track 48 : London_29, Subaru_30
- Track 49 : Tbone_27, Warda_27
- Track 50 : TforTroy_29
- Track 51 : Tian_28, Amyev_28
- Track 52 : Schaffner_28
- Track 53 : Janeemi_30
- Track 54 : Berrie_29
- Track 55 : Jstan_31
- Track 56 : Tallboi_28
- Track 57 : Mudpuppy_27
- Track 58 : Lizalica_27
- Track 59 : Pumpkins_28
- Track 60 : Phives_30, Community_29
- Track 61 : Iter_28, Ascela_28
- Track 62 : KeAlii_28
- Track 63 : IttyBittyPiggy_28
- Track 64 : ObiToo_30
- Track 65 : Wildwest_28
- Track 66 : VResidence_28
- Track 67 : Sue2_29
- Track 68 : Elezi_29
- Track 69 : Crewmate_31
- Track 70 : Nitro_28
- Track 71 : JuneStar_28
- Track 72 : Yang_28
- Track 73 : DrSierra_27
- Track 74 : Liebe_28, IUFootball_28, Maureen_28
- Track 75 : MaGuCo_26
- Track 76 : Snek_28, Tweety19_28
- Track 77 : FiveHead_36, LadyAstra_34, Origami_34, JohnThicc_35
- Track 78 : JasmineDragon_33, MiniMommy_32
- Track 79 : Emotion_33
- Track 80 : ShakeItOph_33
- Track 81 : VroomVroom_33
- Track 82 : AinMach_29
- Track 83 : E6_49
- Track 84 : GTE7_45, Austin_56, HayZem_56, GMA7_46, Amore2_57

- Track 85 : Dakiti_54, Linetti_54, BigShaq_54, Crete_55, Chelms_53
- Track 86 : Msay19_58, Poland_58
- Track 87 : Jellybones_56
- Track 88 : RemRem_55, Barbochs_52, Breezic_54, CathyBurgh_54, John316_57, Hotorobo_54, BillyBobJr_60, Beaver_57, Butterball_57, CinnamonToast_60, Monty_53, Boneham_58, Sam12_53, Lizzo_54
- Track 89 : RoyalG_53, SteveFrench_52
- Track 90 : BirksAndSocks_59, Kelzog_56, GourdThymes_54, Worcestershire_54, Squibbles_53, Adgers_56
- Track 91 : Ekhein_54, Exiguo_53, Flakey_53, Gorko_53
- Track 92 : Diabla_56
- Track 93 : Eggsie_51
- Track 94 : Sombrero_54
- Track 95 : FelixAlejandro_58
- Track 96 : PokyPuppy_53
- Track 97 : PierreThree_53
- Track 98 : BenoitCattle_54
- Track 99 : Bianmat_51, Jormungandr_51, Luker_52, Sticker17_51, Nimi13_51, Neoevie_51, Damp_51, Guillaume_51, Woes_51, GalacticEye_51, Charianelly_51, Teal_51, Newt_52, Minos_52, Shelley_51, Harambe_51, Lahirium_51, Lidong_51, Berries_51, MrWormie_51, Hello_51, Jams_51, Kaseim_51
- Track 100 : Hail2Pitt_50, Anamika_51
- Track 101 : Katyusha_48, Benczkowski14_48, Kvothe_48, Tredge_49, Teech_49, Teatealatte_49, Niagara_48
- Track 102 : Philon9_50, Vitaenoii_50
- Track 103 : Hollow_49
- Track 104 : GrandSlam_67, Nadeem_65, Parada_65, Hamood_67, Chop_67, Mulch_65, WheatThin_64
- Track 105 : Brylie_65, BetterKatz_65
- Track 106 : Ayotoya_66
- Track 107 : Bock_67
- Track 108 : Francois_65
- Track 109 : NancyRae_64
- Track 110 : Pimento_68
- Track 111 : DelRio_66
- Track 112 : RedWattleHog_124, Stormageddon_123
- Track 113 : Glexan_110, SophKB_109, Dusk_108, Mindy_110, Harella_112, ABCat_108, Cactus_115, Tuco_112, Rakim_112, IHOP_109, DrDrey_111, Sotrice96_112, TeardropMSU_107, BadStone_108, Daikon_112, Kostya_111
- Track 114 : Lilizi_111, NonchalantPear_109, Contagion_108, Bruin_108, GoldenSpark_115, MPhalcon_112, Becksu_109, Policronamos_114, Adnama_115, Pharsalus_108, MISSy_112, Gage_113, Hopey_111, Sassay_106, Miniwave_106, StolenFromERC_113, Pumpkin_112, Hoonter_114, Gemini_116, Thresher_112, Elph10_110, ShereKhan_109, Willez_106, Bench_113, Phrux_107, Tomaszewski_106, GooberAzure_114, Stark_111, Greep_115, Tarkin_110, xkcd_115, FairyPath_111, Youngblood_115, AmericanBeauty_114, BugsBunny_110, Mosby_108, HufflyPuff_113, Cjw1_111, Kanye_108, Misfit_112, Murica_115, Paperbeatsrock_110, Dumbo_111, Quallification_112, YassJohnny_108, Ptowny_107, Argent26_115, Terminus_114, Czyszczon1_111
- Track 115 : Emmina_111, Phaux_113, Murphy_110, NelitzaMV_108, Easy2Say_111, StellaBean_109, MollyToe_105, Simpliphy_109, Moldemort_113, Maxxinista_113, TeamEdward_111, FireRed_114, Rimmer_109, PhatBacter_114, HanKaySha_111, Elite2014_110, Lilpickle_110, Buck_112, PaddyBaddy_110,

Bogg_112, Palpatine_112, Highbury_107, OrionPax_109, NoSleep_111, Saints25_107, Brewer_105, ChosenOne_111, Lilac_112, Thimble_113, MadamMonkfish_110, Nala_113
• Track 116 : ShamWow_111, SirDuracell_111, Gator_109, Cookies_108, FoghornLeghorn_104, Henry_109, Bask21_111, Command613_113, Myrale_111, Toto_109
• Track 117 : RiverMonster_110
• Track 118 : Inca_108
• Track 119 : DoctorDiddles_110
• Track 120 : Icee_113, Porky_110, StormChicken_113, Nimrod_112, Goku_111, Stank_114, BigBubba_113, JeTaime_110, Kimchi_116, Wiggin_114, TBrady12_115, 244_113, BaboJay_111, Filch_114, Goldilocks_115, Xandras_111, Marshmallow_110, Holt_117
• Track 121 : Balomoji_111, Amao_111, Traaww1_107, ChotaBhai_111, Barbarian_110, Flypotenuse_107, Pat3_108, Asriel_109
• Track 122 : Eureka_111, Manda_112
• Track 123 : Phaja_109
• Track 124 : Budgie_119
• Track 125 : CrystalP_111, BilboSwaggins_109
• Track 126 : Petra64142_115
• Track 127 : Teaspoon_112
• Track 128 : Percival_30, SuperHands_30
• Track 129 : Caron_28
• Track 130 : UtzChips_27
• Track 131 : GardenState_30
• Track 132 : Forester_49
• Track 133 : Gretchen_30
• Track 134 : Floof_30
• Track 135 : Barnstormer_27
• Track 136 : IAmGroot_30
• Track 137 : SuMoo_28
• Track 138 : Elfy_27
• Track 139 : BaileyBlu_28
• Track 140 : Jankie_28
• Track 141 : CallinAllBarbz_26
• Track 142 : GrimEater_27
• Track 143 : Brujita_56, Island3_56
• Track 144 : MiaZeal_166, Lucky2013_159, Porcelain_163
• Track 145 : Squint_157
• Track 146 : LittleE_170
• Track 147 : Nibley_156, Shaboozey_161, BronnyJames_158
• Track 148 : Gonephishing_156
• Track 149 : Superphikiman_160, Courthouse_159, Ariel_162
• Track 150 : Nekros_161
• Track 151 : Optimus_161
• Track 152 : Bobby_156
• Track 153 : Rearden_162
• Track 154 : Bubbykins_98
• Track 155 : Stellammi_172
• Track 156 : Azrael100_87, Cosmo_88
• Track 157 : Wildcat_88
• Track 158 : MaryV_88
• Track 159 : EniyanLRS_84

- Track 160 : Nebkiss_126
- Track 161 : Gaia_125
- Track 162 : Gudmit_64
- Track 163 : Shambre1_62
- Track 164 : DS6A_81
- Track 165 : DocB7_043
- Track 166 : BFK20_ORF42

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

The start number called the most often in the published annotations is 55, it was called in 106 of the 368 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- ABCat_108, Adnama_115, Amao_111, AmericanBeauty_114, Argent26_115, Asriel_109, BadStone_108, Balomoji_111, Barbarian_110, Bask21_111, Becksu_109, Bench_113, BilboSwaggins_109, Bogg_112, Brewer_105, Bruin_108, Buck_112, Budgie_119, BugsBunny_110, Cactus_115, ChosenOne_111, ChotaBhai_111, Cjw1_111, Command613_113, Contagion_108, Cookies_108, CrystalP_111, Czyszczon1_111, Daikon_112, DrDrey_111, Dumbo_111, Dusk_108, Easy2Say_111, Elite2014_110, Elph10_110, Emmina_111, Eureka_111, FairyPath_111, FireRed_114, Flypotenuse_107, FoghornLeghorn_104, Gage_113, Gator_109, Gemini_116, Glexan_110, GoldenSpark_115, GooberAzure_114, Greep_115, HanKaySha_111, Harella_112, Henry_109, Highbury_107, Hoonter_114, Hopey_111, HufflyPuff_113, IHOP_109, Kanye_108, Kostya_111, Lilac_112, Lilizi_111, Lilpickle_110, MISSy_112, MPhalcon_112, MadamMonkfish_110, Manda_112, Maxxinista_113, Mindy_110, Miniwave_106, Misfit_112, Moldemort_113, MollyToe_105, Mosby_108, Murica_115, Murphy_110, Myrale_111, Nala_113, NelitzaMV_108, NoSleep_111, NonchalantPear_109, OrionPax_109, PaddyBaddy_110, Palpatine_112, Paperbeatsrock_110, Pat3_108, Petra64142_115, Phaja_109, Pharsalus_108, PhatBacter_114, Phaux_113, Phrux_107, Policronamos_114, Ptowny_107, Pumpkin_112, Quallification_112, Rakim_112, Rimmer_109, Saints25_107, Sassay_106, ShamWow_111, ShereKhan_109, Simpliphy_109, SirDuracell_111, SophKB_109, Sotrice96_112, Stark_111, StellaBean_109, StolenFromERC_113, Tarkin_110, TeamEdward_111, TeardropMSU_107, Terminus_114, Thimble_113, Thresher_112, Tomaszewski_106, Toto_109, Traaww1_107, Tuco_112, Willez_106, YassJohnny_108, Youngblood_115, xkcd_115,

Genes that have the "Most Annotated" start but do not call it:
- RiverMonster_110,

Genes that do not have the "Most Annotated" start:
- 244_113, AEgle_27, AGrandiflora_28, Abidatro_53, Adgers_56, Adolin_26, AdoptaAdorbs_53, Adumb2043_27, AinMach_29, AlexMinion_55, Amelia_53, AmiCi24_53, Amore2_57, Amphitrite_54, Amploria_27, Amyev_28, Anamika_51, Andrew_55, Antrice_54, ArV1_079, Ariel_162, Asa16_29, Ascela_28, Atlantica_54, Austin_56, Ayotoya_66, Azaz_55, Azrael100_87, BFK20_ORF42, BaboJay_111, Babushka_51, BaileyBlu_28, Barbochs_52, Barnstormer_27, Basilisk_51, Beaver_57, Bedetta_58, Benczkowski14_48, BenoitCattle_54, Berrie_29, Berries_51,

BetterKatz_65, Bianmat_51, Bibble12_57, BigBubba_113, BigShaq_54, BillyBobJr_60, BirksAndSocks_59, Bobby_156, Bock_67, Boneham_58, Breezic_54, BronnyJames_158, Brujita_56, Brylie_65, Bubbykins_98, Butterball_57, CallinAllBarbz_26, Camara_54, Caron_28, Cassia_28, CathyBurgh_54, Charianelly_51, Chelms_53, Chickaboom_52, Chipper1996_930, Chocolat_92, Chop_67, Chubster_92, CinnamonToast_60, Colucci_95, Colusalem_54, Community_29, Conboy_90, Coral_53, Cosmo_88, Cote_55, Courthouse_159, Crete_55, Crewmate_31, Cyan_27, Cygnet_53, DS6A_81, Dakiti_54, Damp_51, DanHam62_54, Daob_55, DelRio_66, Diabla_56, DocB7_043, DoctorDiddles_110, DrManhattan_26, DrSierra_27, DrYang_88, E6_49, EdgarPoe_91, Eggsie_51, Ekhein_54, Elezi_29, Elfy_27, Emotion_33, EniyanLRS_84, Eraser_29, Exiguo_53, FelixAlejandro_58, Filch_114, Fingolfin_54, FiveHead_36, Flakey_53, Floof_30, Flutur_27, Forester_49, Francois_65, GMA7_46, GTE7_45, Gaia_125, GalacticEye_51, Galaxy_50, GardenState_30, Glotell_55, Goku_111, Goldilocks_115, Gonephishing_156, Gorko_53, GourdThymes_54, GrandSlam_67, Gravel_62, Gretchen_30, GrimEater_27, Gudmit_64, Guillaume_51, Hail2Pitt_50, HamCheese_54, Hamood_67, HannahPhantana_54, Harambe_51, HayZem_56, Hello_51, Hollow_49, Holt_117, Hotorobo_54, HumptyDumpty_92, IAmGroot_30, IUFootball_28, Icee_113, Inca_108, Island3_56, Iter_28, IttyBittyPiggy_28, JaNo_91, Jams_51, Jamun_50, Janeemi_30, Jankie_28, JasmineDragon_33, JayCookie_92, JeTaime_110, Jellybones_56, Jerole_54, Joemato_27, John316_57, JohnDoe_27, JohnThicc_35, Jormungandr_51, Jstan_31, JuneStar_28, Juno112_53, KBurrousTX_90, KHumphrey_54, Kabreeze_92, Kaseim_51, Katyusha_48, Kaylissa_27, KeAlii_28, Kelzog_56, Kepler_54, Kimchi_116, Kuleana_54, Kvothe_48, LadyAstra_34, Lahirium_51, Laphuphu24k_53, Lego_27, Leona_53, Lidong_51, Liebe_28, Linetti_54, Linus_92, LittleE_170, LittleTokyo_51, Lizalica_27, Lizzo_54, London_29, Lucky2013_159, Luker_52, Lunar_54, Lymara_89, MaGuCo_26, Marshmallow_110, MaryV_88, Maureen_28, Melons_54, MiaZeal_166, MiniMommy_32, Minos_52, MissSwiss_26, Monty_53, Mordred_92, MoyaNatalis_91, MrWormie_51, Msay19_58, Mudpuppy_27, Mulch_65, Nadeem_65, NancyRae_64, Nebkiss_126, Nekros_161, Neoevie_51, Newt_52, Niagara_48, Nibley_156, Nimi13_51, Nimrod_112, Niobe_29, Nitro_28, ObiToo_30, Oppalora_53, Optimus_161, Orcanus_52, Origami_34, OtsoOtso_54, Parada_65, Pelletreau_62, Percival_30, Philon9_50, PhirstandPhine_61, Phives_30, PhluffyCoco_54, PierreThree_53, Pimento_68, Pineda_56, Pixelle_28, PokyPuppy_53, Poland_58, Polka_53, Porcelain_163, Porky_110, Powerpuff_27, PrincessTrina_93, Pumpkins_28, Rattail_54, Rearden_162, RedFox_54, RedWattleHog_124, Reedo_27, RemRem_55, Renna12_53, RosiePosie_92, RoyalG_53, Ruchi_50, Sam12_53, Scavito_93, Schaffner_28, Shaboozey_161, ShakeItOph_33, Shambre1_62, Shelley_51, Simpson_29, Skelbel_30, Snek_28, Sombrero_54, Squibbles_53, Squint_157, Stank_114, Stellammi_172, SteveFrench_52, Sticker17_51, StormChicken_113, Stormageddon_123, StuartMinion_45, SuMoo_28, Subaru_30, Sue2_29, SuperHands_30, Superphikiman_160, TBrady12_115, Tallboi_28, TaylorSipht_52, Tbone_27, Teal_51, Teaspoon_112, Teatealatte_49, Teech_49, TforTroy_29, ThursdayNight_29, Tian_28, Tophat_93, Tredge_49, Tuck_31, Turab_27, Tutumahutu_27, Tweety19_28, UtzChips_27, VResidence_28, Vitaenoii_50, VroomVroom_33, Vulpecula_50, Warda_27, Westrich_61, WheatThin_64, Wiggin_114, Wildcat_88, Wildwest_28, WileyE_52, Woes_51, Worcestershire_54, Xandras_111, Yang_28, YesChef_27, Zhuangyuan_55,

Summary by start number:

Start 27:

- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yang_28 (AZ1),

Start 29:
- Found in 41 of 442 (9.3%) of genes in pham
- Manual Annotations of this start: 31 of 368
- Called 95.1% of time when present
- Phage (with cluster) where this start called: AEgle_27 (AZ1), AGrandiflora_28 (AZ1), Adolin_26 (AZ1), Adumb2043_27 (AZ1), Amploria_27 (AZ1), Amyev_28 (AZ1), Asa16_29 (AZ1), Cyan_27 (AZ1), DrManhattan_26 (AZ1), DrSierra_27 (AZ1), Eraser_29 (AZ1), Flutur_27 (AZ), IttyBittyPiggy_28 (AZ1), Joemato_27 (AZ1), JohnDoe_27 (AZ1), Kaylissa_27 (AZ1), Lego_27 (AZ1), Lizalica_27 (AZ1), MissSwiss_26 (AZ1), Mudpuppy_27 (AZ1), Niobe_29 (AZ1), Nitro_28 (AZ1), Pixelle_28 (AZ1), Powerpuff_27 (AZ1), Reedo_27 (AZ1), Schaffner_28 (AZ1), Simpson_29 (AZ1), Skelbel_30 (AZ1), Snek_28 (AZ3), Tallboi_28 (AZ1), Tbone_27 (AZ1), Tian_28 (AZ1), Tuck_31 (AZ1), Turab_27 (AZ1), Tutumahutu_27 (AZ1), Tweety19_28 (AZ3), VResidence_28 (AZ1), Warda_27 (AZ1), YesChef_27 (AZ1),

Start 38:
- Found in 103 of 442 (23.3%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 1.0% of time when present
- Phage (with cluster) where this start called: RiverMonster_110 (E),

Start 42:
- Found in 2 of 442 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Inca_108 (E),

Start 46:
- Found in 18 of 442 (4.1%) of genes in pham
- Manual Annotations of this start: 16 of 368
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Chipper1996_930 (AR), Chocolat_92 (AR), Conboy_90 (AR), DrYang_88 (AR), EdgarPoe_91 (AR), HumptyDumpty_92 (AR), JaNo_91 (AR), JayCookie_92 (AR), KBurrousTX_90 (AR), Kabreeze_92 (AR), Linus_92 (AR), Lymara_89 (AR), PrincessTrina_93 (AR), RosiePosie_92 (AR), Scavito_93 (AR), Tophat_93 (AR),

Start 47:
- Found in 23 of 442 (5.2%) of genes in pham
- Manual Annotations of this start: 2 of 368
- Called 43.5% of time when present
- Phage (with cluster) where this start called: AdoptaAdorbs_53 (AS3), Amphitrite_54 (AS3), Azaz_55 (AS3), Camara_54 (AS3), Chubster_92 (AR), Fingolfin_54 (AS3), KHumphrey_54 (AS3), Laphuphu24k_53 (AS3), Oppalora_53 (AS3), Rattail_54 (AS3),

Start 49:
- Found in 2 of 442 (0.5%) of genes in pham

- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AlexMinion_55 (AS3),

Start 50:
- Found in 1 of 442 (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: ArV1_079 (AR),

Start 51:
- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_95 (AR),

Start 52:
- Found in 1 of 442 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A_81 (singleton),

Start 53:
- Found in 24 of 442 (5.4%) of genes in pham
- Manual Annotations of this start: 1 of 368
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Bedetta_58 (AS2), Daob_55 (AS2),

Start 55:
- Found in 122 of 442 (27.6%) of genes in pham
- Manual Annotations of this start: 106 of 368
- Called 99.2% of time when present
- Phage (with cluster) where this start called: ABCat_108 (E), Adnama_115 (E), Amao_111 (E), AmericanBeauty_114 (E), Argent26_115 (E), Asriel_109 (E), BadStone_108 (E), Balomoji_111 (E), Barbarian_110 (E), Bask21_111 (E), Becksu_109 (E), Bench_113 (E), BilboSwaggins_109 (E), Bogg_112 (E), Brewer_105 (E), Bruin_108 (E), Buck_112 (E), Budgie_119 (E), BugsBunny_110 (E), Cactus_115 (E), ChosenOne_111 (E), ChotaBhai_111 (E), Cjw1_111 (E), Command613_113 (E), Contagion_108 (E), Cookies_108 (E), CrystalP_111 (E), Czyszczon1_111 (E), Daikon_112 (E), DrDrey_111 (E), Dumbo_111 (E), Dusk_108 (E), Easy2Say_111 (E), Elite2014_110 (E), Elph10_110 (E), Emmina_111 (E), Eureka_111 (E), FairyPath_111 (E), FireRed_114 (E), Flypotenuse_107 (E), FoghornLeghorn_104 (E), Gage_113 (E), Gator_109 (E), Gemini_116 (E), Glexan_110 (E), GoldenSpark_115 (E), GooberAzure_114 (E), Greep_115 (E), HanKaySha_111 (E), Harella_112 (E), Henry_109 (E), Highbury_107 (E), Hoonter_114 (E), Hopey_111 (E), HufflyPuff_113 (E), IHOP_109 (E), Kanye_108 (E), Kostya_111 (E), Lilac_112 (E), Lilizi_111 (E), Lilpickle_110 (E), MISSy_112 (E), MPhalcon_112 (E), MadamMonkfish_110 (E), Manda_112 (E), Maxxinista_113 (E), Mindy_110 (E), Miniwave_106 (E), Misfit_112 (E), Moldemort_113 (E), MollyToe_105 (E), Mosby_108 (E), Murica_115 (E), Murphy_110 (E), Myrale_111 (E), Nala_113 (E), NelitzaMV_108 (E), NoSleep_111 (E), NonchalantPear_109 (E), OrionPax_109 (E), PaddyBaddy_110 (E), Palpatine_112 (E), Paperbeatsrock_110 (E), Pat3_108 (E), Petra64142_115 (E), Phaja_109 (E), Pharsalus_108 (E), PhatBacter_114 (E), Phaux_113 (E), Phrux_107

(E), Policronamos_114 (E), Ptowny_107 (E), Pumpkin_112 (E), Quallification_112 (E), Rakim_112 (E), Rimmer_109 (E), Saints25_107 (E), Sassay_106 (E), ShamWow_111 (E), ShereKhan_109 (E), Simpliphy_109 (E), SirDuracell_111 (E), SophKB_109 (E), Sotrice96_112 (E), Stark_111 (E), StellaBean_109 (E), StolenFromERC_113 (E), Tarkin_110 (E), TeamEdward_111 (E), TeardropMSU_107 (E), Terminus_114 (E), Thimble_113 (E), Thresher_112 (E), Tomaszewski_106 (E), Toto_109 (E), Traaww1_107 (E), Tuco_112 (E), Willez_106 (E), YassJohnny_108 (E), Youngblood_115 (E), xkcd_115 (E),

Start 57:
• Found in 42 of 442 (9.5%) of genes in pham
• Manual Annotations of this start: 30 of 368
• Called 90.5% of time when present
• Phage (with cluster) where this start called: Abidatro_53 (AS1), Amelia_53 (AS2), Antrice_54 (AS2), Basilisk_51 (AS1), Bibble12_57 (AS2), Caron_28 (EH), Chickaboom_52 (AS1), Colusalem_54 (AS2), Coral_53 (AS2), Cote_55 (AS2), Cygnet_53 (AS2), Floof_30 (EH), Forester_49 (EH), Galaxy_50 (AS1), Gravel_62 (AS1), Gretchen_30 (EH), HannahPhantana_54 (AS2), Jamun_50 (AS1), Kepler_54 (AS2), Kuleana_54 (AS2), LittleTokyo_51 (AS2), Lunar_54 (AS2), Melons_54 (AS2), Orcanus_52 (AS1), OtsoOtso_54 (AS2), Pelletreau_62 (AS1), Percival_30 (EH), PhirstandPhine_61 (AS2), Pineda_56 (AS2), Polka_53 (AS2), Ruchi_50 (AS1), StuartMinion_45 (AS3), SuperHands_30 (EH), TaylorSipht_52 (AS1), Vulpecula_50 (AS1), Westrich_61 (AS1), WileyE_52 (AS1), Zhuangyuan_55 (AS2),

Start 58:
• Found in 21 of 442 (4.8%) of genes in pham
• Manual Annotations of this start: 12 of 368
• Called 57.1% of time when present
• Phage (with cluster) where this start called: AmiCi24_53 (AS3), Andrew_55 (AS3), Atlantica_54 (AS3), Babushka_51 (AS3), DanHam62_54 (AS3), Glotell_55 (AS3), HamCheese_54 (AS3), Juno112_53 (AS3), Leona_53 (AS3), PhluffyCoco_54 (AS3), RedFox_54 (AS3), Renna12_53 (AS3),

Start 59:
• Found in 2 of 442 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barnstormer_27 (EH), UtzChips_27 (EH),

Start 60:
• Found in 21 of 442 (4.8%) of genes in pham
• Manual Annotations of this start: 18 of 368
• Called 90.5% of time when present
• Phage (with cluster) where this start called: 244_113 (E), BaboJay_111 (E), BigBubba_113 (E), DoctorDiddles_110 (E), Filch_114 (E), Goku_111 (E), Goldilocks_115 (E), Holt_117 (E), Icee_113 (E), JeTaime_110 (E), Kimchi_116 (E), Marshmallow_110 (E), Nimrod_112 (E), Porky_110 (E), Stank_114 (E), StormChicken_113 (E), TBrady12_115 (E), Wiggin_114 (E), Xandras_111 (E),

Start 63:
• Found in 12 of 442 (2.7%) of genes in pham
• No Manual Annotations of this start.

• Called 8.3% of time when present
• Phage (with cluster) where this start called: Bubbykins_98 (UNK),

Start 65:
• Found in 1 of 442 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shambre1_62 (singleton),

Start 67:
• Found in 24 of 442 (5.4%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Mordred_92 (AR), MoyaNatalis_91 (AR),

Start 68:
• Found in 1 of 442 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: E6_49 (BW),

Start 72:
• Found in 66 of 442 (14.9%) of genes in pham
• Manual Annotations of this start: 38 of 368
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Amore2_57 (CS1), Anamika_51 (CS3), Ariel_162 (J), Austin_56 (CS1), Berries_51 (CS3), Bianmat_51 (CS3), BronnyJames_158 (J), Charianelly_51 (CS3), Courthouse_159 (J), Damp_51 (CS3), GMA7_46 (CS1), GTE7_45 (CS1), GalacticEye_51 (CS3), Gonephishing_156 (J), Guillaume_51 (CS3), Hail2Pitt_50 (CS3), Harambe_51 (CS3), HayZem_56 (CS1), Hello_51 (CS3), Jams_51 (CS3), Jormungandr_51 (CS3), Kaseim_51 (CS3), Lahirium_51 (CS3), Lidong_51 (CS3), LittleE_170 (J), Lucky2013_159 (J), Luker_52 (CS3), MiaZeal_166 (J), Minos_52 (CS3), MrWormie_51 (CS3), Neoevie_51 (CS3), Newt_52 (CS3), Nibley_156 (J), Nimi13_51 (CS3), Optimus_161 (J), Porcelain_163 (J), Shaboozey_161 (J), Shelley_51 (CS3), Squint_157 (J), Sticker17_51 (CS3), Superphikiman_160 (J), Teal_51 (CS3), Teaspoon_112 (E), Woes_51 (CS3),

Start 73:
• Found in 4 of 442 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AinMach_29 (AZ7), Elfy_27 (FP), GardenState_30 (EH), IAmGroot_30 (EH),

Start 74:
• Found in 41 of 442 (9.3%) of genes in pham
• Manual Annotations of this start: 29 of 368
• Called 82.9% of time when present
• Phage (with cluster) where this start called: Adgers_56 (CS2), Barbochs_52 (CS2), Beaver_57 (CS2), BigShaq_54 (CS2), BillyBobJr_60 (CS2), BirksAndSocks_59 (CS2), Boneham_58 (CS2), Breezic_54 (CS2), Butterball_57 (CS2), CathyBurgh_54 (CS2), Chelms_53 (CS2), CinnamonToast_60 (CS2), Crete_55 (CS2), Dakiti_54 (CS2), Eggsie_51 (CS2), FelixAlejandro_58 (CS2), GourdThymes_54 (CS2),

Hotorobo_54 (CS2), Jellybones_56 (CS2), John316_57 (CS2), Kelzog_56 (CS2), Linetti_54 (CS2), Lizzo_54 (CS2), Monty_53 (CS2), Msay19_58 (CS2), PokyPuppy_53 (CS2), Poland_58 (CS2), RemRem_55 (CS2), RoyalG_53 (CS2), Sam12_53 (CS2), Sombrero_54 (CS2), Squibbles_53 (CS2), SteveFrench_52 (CS2), Worcestershire_54 (CS2),

Start 75:
• Found in 2 of 442 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GrimEater_27 (FP), Jankie_28 (FP),

Start 76:
• Found in 15 of 442 (3.4%) of genes in pham
• Manual Annotations of this start: 4 of 368
• Called 33.3% of time when present
• Phage (with cluster) where this start called: BFK20_ORF42 (singleton), BenoitCattle_54 (CS2), Diabla_56 (CS2), PierreThree_53 (CS2), Wildcat_88 (V),

Start 77:
• Found in 6 of 442 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 16.7% of time when present
• Phage (with cluster) where this start called: BaileyBlu_28 (FP),

Start 78:
• Found in 16 of 442 (3.6%) of genes in pham
• Manual Annotations of this start: 14 of 368
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Ayotoya_66 (DI), Bock_67 (DI), CallinAllBarbz_26 (FP), Chop_67 (DI), DelRio_66 (DI), Francois_65 (DI), GrandSlam_67 (DI), Hamood_67 (DI), Mulch_65 (DI), Nadeem_65 (DI), NancyRae_64 (DI), Parada_65 (DI), Pimento_68 (DI), WheatThin_64 (DI),

Start 79:
• Found in 31 of 442 (7.0%) of genes in pham
• Manual Annotations of this start: 22 of 368
• Called 96.8% of time when present
• Phage (with cluster) where this start called: Ascela_28 (AZ1), Berrie_29 (AZ1), Cassia_28 (AZ1), Community_29 (AZ1), Crewmate_31 (AZ1), Elezi_29 (AZ1), Emotion_33 (AZ4), FiveHead_36 (AZ4), IUFootball_28 (AZ2), Iter_28 (AZ1), Janeemi_30 (AZ1), JasmineDragon_33 (AZ4), JohnThicc_35 (AZ4), JuneStar_28 (AZ1), KeAlii_28 (AZ1), LadyAstra_34 (AZ4), Liebe_28 (AZ2), London_29 (AZ1), MaGuCo_26 (AZ2), Maureen_28 (AZ2), MiniMommy_32 (AZ4), ObiToo_30 (AZ1), Origami_34 (AZ4), Phives_30 (AZ1), Pumpkins_28 (AZ1), Subaru_30 (AZ1), Sue2_29 (AZ1), TforTroy_29 (AZ1), ThursdayNight_29 (AZ), VroomVroom_33 (AZ4),

Start 80:
• Found in 44 of 442 (10.0%) of genes in pham
• Manual Annotations of this start: 9 of 368
• Called 22.7% of time when present
• Phage (with cluster) where this start called: Brujita_56 (I1), Ekhein_54 (CS2), Exiguo_53 (CS2), Flakey_53 (CS2), Gaia_125 (X), Gorko_53 (CS2), Gudmit_64

(singleton), Island3_56 (I1), MaryV_88 (V), Stellammi_172 (UNK),

Start 82:
• Found in 2 of 442 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RedWattleHog_124 (DX), Stormageddon_123 (DX),

Start 84:
• Found in 1 of 442 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bobby_156 (J),

Start 85:
• Found in 18 of 442 (4.1%) of genes in pham
• Manual Annotations of this start: 14 of 368
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Azrael100_87 (V), Benczkowski14_48 (CS4), Cosmo_88 (V), DocB7_043 (singleton), EniyanLRS_84 (V), Hollow_49 (CS4), Katyusha_48 (CS4), Kvothe_48 (CS4), Nebkiss_126 (X), Niagara_48 (CS4), Philon9_50 (CS4), Teatealatte_49 (CS4), Teech_49 (CS4), Tredge_49 (CS4), Vitaenoii_50 (CS4),

Start 89:
• Found in 418 of 442 (94.6%) of genes in pham
• Manual Annotations of this start: 5 of 368
• Called 1.9% of time when present
• Phage (with cluster) where this start called: BetterKatz_65 (DI), Brylie_65 (DI), Jerole_54 (AS2), Jstan_31 (AZ1), Nekros_161 (J), Rearden_162 (J), ShakeItOph_33 (AZ4), Wildwest_28 (AZ1),

Start 182:
• Found in 1 of 442 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 368
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SuMoo_28 (EH),

Summary by clusters:

There are 26 clusters represented in this pham: FP, singleton, DI, BW, DX, AZ, I1, CS4, CS1, CS3, CS2, AS3, AS2, AS1, E, EH, J, AR, V, X, UNK, AZ1, AZ2, AZ3, AZ4, AZ7,

Info for manual annotations of cluster AR:
•Start number 46 was manually annotated 16 times for cluster AR.
•Start number 47 was manually annotated 1 time for cluster AR.
•Start number 51 was manually annotated 1 time for cluster AR.
•Start number 67 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster AS1:
•Start number 57 was manually annotated 10 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 53 was manually annotated 1 time for cluster AS2.
•Start number 57 was manually annotated 15 times for cluster AS2.
•Start number 89 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 47 was manually annotated 1 time for cluster AS3.
•Start number 57 was manually annotated 1 time for cluster AS3.
•Start number 58 was manually annotated 12 times for cluster AS3.

Info for manual annotations of cluster AZ1:
•Start number 27 was manually annotated 1 time for cluster AZ1.
•Start number 29 was manually annotated 29 times for cluster AZ1.
•Start number 79 was manually annotated 15 times for cluster AZ1.
•Start number 89 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 79 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:
•Start number 29 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:
•Start number 79 was manually annotated 4 times for cluster AZ4.
•Start number 89 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BW:
•Start number 68 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CS1:
•Start number 72 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 74 was manually annotated 29 times for cluster CS2.
•Start number 76 was manually annotated 3 times for cluster CS2.
•Start number 80 was manually annotated 4 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 72 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 85 was manually annotated 10 times for cluster CS4.

Info for manual annotations of cluster DI:
•Start number 78 was manually annotated 13 times for cluster DI.
•Start number 89 was manually annotated 2 times for cluster DI.

Info for manual annotations of cluster DX:
•Start number 82 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster E:
•Start number 38 was manually annotated 1 time for cluster E.
•Start number 42 was manually annotated 1 time for cluster E.
•Start number 55 was manually annotated 106 times for cluster E.
•Start number 60 was manually annotated 18 times for cluster E.
•Start number 72 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster EH:
•Start number 57 was manually annotated 4 times for cluster EH.
•Start number 59 was manually annotated 2 times for cluster EH.
•Start number 73 was manually annotated 2 times for cluster EH.
•Start number 182 was manually annotated 1 time for cluster EH.

Info for manual annotations of cluster FP:
•Start number 77 was manually annotated 1 time for cluster FP.
•Start number 78 was manually annotated 1 time for cluster FP.

Info for manual annotations of cluster I1:
•Start number 80 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster J:
•Start number 72 was manually annotated 9 times for cluster J.
•Start number 84 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster V:
•Start number 76 was manually annotated 1 time for cluster V.
•Start number 80 was manually annotated 1 time for cluster V.
•Start number 85 was manually annotated 3 times for cluster V.

Info for manual annotations of cluster X:
•Start number 80 was manually annotated 1 time for cluster X.
•Start number 85 was manually annotated 1 time for cluster X.

Gene Information:
Gene: 244_113 Start: 63341, Stop: 63673, Start Num: 60
Candidate Starts for 244_113:
(Start: 60 @63341 has 18 MA's), (Start: 72 @63371 has 38 MA's), (108, 63515), (122, 63563), (132, 63587), (155, 63659),

Gene: ABCat_108 Start: 64031, Stop: 64405, Start Num: 55
Candidate Starts for ABCat_108:
(Start: 38 @63977 has 1 MA's), (Start: 55 @64031 has 106 MA's), (83, 64085), (Start: 89 @64112 has 5 MA's), (90, 64121), (94, 64160), (99, 64181), (124, 64274), (130, 64292), (132, 64295), (145, 64343), (146, 64349), (149, 64361),

Gene: AEgle_27 Start: 22275, Stop: 22640, Start Num: 29
Candidate Starts for AEgle_27:
(11, 22110), (Start: 29 @22275 has 31 MA's), (Start: 89 @22299 has 5 MA's), (154, 22542),

Gene: AGrandiflora_28 Start: 22305, Stop: 22670, Start Num: 29
Candidate Starts for AGrandiflora_28:
(Start: 29 @22305 has 31 MA's), (Start: 89 @22329 has 5 MA's), (134, 22512),

Gene: Abidatro_53 Start: 33792, Stop: 34178, Start Num: 57
Candidate Starts for Abidatro_53:
(Start: 53 @33783 has 1 MA's), (Start: 57 @33792 has 30 MA's), (63, 33810), (Start: 89 @33831 has 5 MA's), (101, 33906), (113, 33954), (116, 33963), (129, 34002), (144, 34053), (159, 34089), (174, 34128),

Gene: Adgers_56 Start: 47963, Stop: 47601, Start Num: 74
Candidate Starts for Adgers_56:
(Start: 74 @47963 has 29 MA's), (Start: 80 @47954 has 9 MA's), (Start: 89 @47924 has 5 MA's), (101, 47849), (124, 47759), (133, 47732), (141, 47699), (149, 47669), (169, 47633),

Gene: Adnama_115 Start: 63320, Stop: 63694, Start Num: 55
Candidate Starts for Adnama_115:
(Start: 38 @63266 has 1 MA's), (Start: 55 @63320 has 106 MA's), (Start: 89 @63401 has 5 MA's), (90, 63410), (94, 63449), (99, 63470), (124, 63563), (130, 63581), (132, 63584), (145, 63632), (168, 63683),

Gene: Adolin_26 Start: 20726, Stop: 21094, Start Num: 29
Candidate Starts for Adolin_26:
(Start: 29 @20726 has 31 MA's), (Start: 89 @20750 has 5 MA's), (135, 20936), (142, 20963), (154, 20993),

Gene: AdoptaAdorbs_53 Start: 33010, Stop: 33405, Start Num: 47
Candidate Starts for AdoptaAdorbs_53:
(Start: 47 @33010 has 2 MA's), (Start: 58 @33034 has 12 MA's), (88, 33061), (Start: 89 @33073 has 5 MA's), (97, 33124), (113, 33193), (116, 33202), (125, 33226), (129, 33241), (149, 33313), (174, 33367),

Gene: Adumb2043_27 Start: 22274, Stop: 22639, Start Num: 29
Candidate Starts for Adumb2043_27:
(11, 22109), (Start: 29 @22274 has 31 MA's), (Start: 89 @22298 has 5 MA's), (154, 22541),

Gene: AinMach_29 Start: 23247, Stop: 23618, Start Num: 73
Candidate Starts for AinMach_29:
(Start: 47 @23190 has 2 MA's), (Start: 73 @23247 has 2 MA's), (Start: 89 @23277 has 5 MA's), (104, 23370), (128, 23442), (134, 23460), (162, 23535), (172, 23562),

Gene: AlexMinion_55 Start: 33036, Stop: 33425, Start Num: 49
Candidate Starts for AlexMinion_55:
(32, 32964), (49, 33036), (Start: 57 @33057 has 30 MA's), (Start: 89 @33096 has 5 MA's), (97, 33147), (116, 33225), (125, 33249), (129, 33264), (149, 33336), (174, 33390), (187, 33414),

Gene: Amao_111 Start: 63594, Stop: 63968, Start Num: 55
Candidate Starts for Amao_111:
(Start: 55 @63594 has 106 MA's), (83, 63648), (Start: 89 @63675 has 5 MA's), (90, 63684), (94, 63723), (95, 63726), (99, 63744), (124, 63837), (130, 63855), (132, 63858), (145, 63906), (146, 63912), (149, 63924),

Gene: Amelia_53 Start: 32651, Stop: 33019, Start Num: 57

Candidate Starts for Amelia_53:
(Start: 53 @32642 has 1 MA's), (Start: 57 @32651 has 30 MA's), (Start: 89 @32693 has 5 MA's), (113, 32810), (116, 32819), (129, 32858), (149, 32930), (174, 32984),

Gene: AmericanBeauty_114 Start: 63362, Stop: 63736, Start Num: 55
Candidate Starts for AmericanBeauty_114:
(Start: 38 @63308 has 1 MA's), (Start: 55 @63362 has 106 MA's), (Start: 89 @63443 has 5 MA's), (90, 63452), (94, 63491), (99, 63512), (124, 63605), (130, 63623), (132, 63626), (145, 63674), (168, 63725),

Gene: AmiCi24_53 Start: 33143, Stop: 33514, Start Num: 58
Candidate Starts for AmiCi24_53:
(Start: 47 @33119 has 2 MA's), (Start: 58 @33143 has 12 MA's), (88, 33170), (Start: 89 @33182 has 5 MA's), (97, 33233), (113, 33302), (116, 33311), (125, 33335), (129, 33350), (149, 33422), (174, 33476),

Gene: Amore2_57 Start: 48420, Stop: 48055, Start Num: 72
Candidate Starts for Amore2_57:
(Start: 72 @48420 has 38 MA's), (Start: 89 @48378 has 5 MA's), (114, 48240), (124, 48213), (140, 48156),

Gene: Amphitrite_54 Start: 33009, Stop: 33404, Start Num: 47
Candidate Starts for Amphitrite_54:
(Start: 47 @33009 has 2 MA's), (Start: 58 @33033 has 12 MA's), (88, 33060), (Start: 89 @33072 has 5 MA's), (97, 33123), (113, 33192), (116, 33201), (125, 33225), (129, 33240), (149, 33312), (174, 33366),

Gene: Amploria_27 Start: 22274, Stop: 22639, Start Num: 29
Candidate Starts for Amploria_27:
(11, 22109), (Start: 29 @22274 has 31 MA's), (Start: 89 @22298 has 5 MA's), (154, 22541),

Gene: Amyev_28 Start: 24196, Stop: 24564, Start Num: 29
Candidate Starts for Amyev_28:
(11, 24034), (Start: 29 @24196 has 31 MA's), (Start: 89 @24220 has 5 MA's), (134, 24403),

Gene: Anamika_51 Start: 48759, Stop: 48394, Start Num: 72
Candidate Starts for Anamika_51:
(Start: 72 @48759 has 38 MA's), (Start: 89 @48717 has 5 MA's), (106, 48612), (133, 48525), (141, 48492), (149, 48462),

Gene: Andrew_55 Start: 33040, Stop: 33402, Start Num: 58
Candidate Starts for Andrew_55:
(Start: 47 @33016 has 2 MA's), (Start: 58 @33040 has 12 MA's), (61, 33052), (Start: 89 @33079 has 5 MA's), (116, 33208), (129, 33247), (147, 33313), (149, 33319), (174, 33373),

Gene: Antrice_54 Start: 33012, Stop: 33383, Start Num: 57
Candidate Starts for Antrice_54:
(Start: 57 @33012 has 30 MA's), (Start: 89 @33048 has 5 MA's), (116, 33177), (117, 33183), (159, 33303), (166, 33321), (174, 33342),

Gene: ArV1_079 Start: 59307, Stop: 59669, Start Num: 50
Candidate Starts for ArV1_079:

(34, 59250), (41, 59286), (50, 59307), (Start: 67 @59352 has 1 MA's), (86, 59355), (Start: 89 @59376 has 5 MA's), (101, 59451), (112, 59481), (116, 59499), (129, 59538),

Gene: Argent26_115 Start: 63244, Stop: 63618, Start Num: 55
Candidate Starts for Argent26_115:
(Start: 38 @63190 has 1 MA's), (Start: 55 @63244 has 106 MA's), (Start: 89 @63325 has 5 MA's), (90, 63334), (94, 63373), (99, 63394), (124, 63487), (130, 63505), (132, 63508), (145, 63556), (168, 63607),

Gene: Ariel_162 Start: 83313, Stop: 83693, Start Num: 72
Candidate Starts for Ariel_162:
(Start: 72 @83313 has 38 MA's), (Start: 89 @83355 has 5 MA's), (101, 83430), (149, 83604), (155, 83610), (157, 83613), (186, 83682),

Gene: Asa16_29 Start: 24444, Stop: 24812, Start Num: 29
Candidate Starts for Asa16_29:
(11, 24279), (Start: 29 @24444 has 31 MA's), (Start: 89 @24468 has 5 MA's),

Gene: Ascela_28 Start: 22439, Stop: 22807, Start Num: 79
Candidate Starts for Ascela_28:
(Start: 79 @22439 has 22 MA's), (Start: 89 @22463 has 5 MA's), (135, 22649),

Gene: Asriel_109 Start: 61777, Stop: 62151, Start Num: 55
Candidate Starts for Asriel_109:
(Start: 55 @61777 has 106 MA's), (83, 61831), (Start: 89 @61858 has 5 MA's), (90, 61867), (94, 61906), (95, 61909), (99, 61927), (124, 62020), (130, 62038), (132, 62041), (145, 62089), (146, 62095), (149, 62107),

Gene: Atlantica_54 Start: 33145, Stop: 33516, Start Num: 58
Candidate Starts for Atlantica_54:
(Start: 47 @33121 has 2 MA's), (Start: 58 @33145 has 12 MA's), (88, 33172), (Start: 89 @33184 has 5 MA's), (97, 33235), (113, 33304), (116, 33313), (125, 33337), (129, 33352), (149, 33424), (174, 33478),

Gene: Austin_56 Start: 48418, Stop: 48053, Start Num: 72
Candidate Starts for Austin_56:
(Start: 72 @48418 has 38 MA's), (Start: 89 @48376 has 5 MA's), (114, 48238), (124, 48211), (140, 48154),

Gene: Ayotoya_66 Start: 43183, Stop: 43569, Start Num: 78
Candidate Starts for Ayotoya_66:
(37, 43066), (54, 43126), (69, 43171), (Start: 78 @43183 has 14 MA's), (Start: 89 @43213 has 5 MA's), (101, 43288), (132, 43390), (149, 43456),

Gene: Azaz_55 Start: 33201, Stop: 33596, Start Num: 47
Candidate Starts for Azaz_55:
(Start: 47 @33201 has 2 MA's), (Start: 58 @33225 has 12 MA's), (88, 33252), (Start: 89 @33264 has 5 MA's), (97, 33315), (113, 33384), (116, 33393), (117, 33399), (125, 33417), (129, 33432), (149, 33504), (174, 33558),

Gene: Azrael100_87 Start: 53907, Stop: 54263, Start Num: 85
Candidate Starts for Azrael100_87:

(Start: 76 @53895 has 4 MA's), (Start: 77 @53898 has 1 MA's), (Start: 80 @53901 has 9 MA's), (Start: 85 @53907 has 14 MA's), (Start: 89 @53931 has 5 MA's), (94, 53973), (98, 53985), (109, 54048), (110, 54054), (120, 54093), (127, 54108), (129, 54117), (132, 54123), (141, 54159), (145, 54171), (149, 54189),

Gene: BFK20_ORF42 Start: 32596, Stop: 32249, Start Num: 76
Candidate Starts for BFK20_ORF42:
(Start: 76 @32596 has 4 MA's), (88, 32572), (Start: 89 @32560 has 5 MA's), (102, 32482), (154, 32314), (168, 32287), (170, 32281), (175, 32266),

Gene: BaboJay_111 Start: 64514, Stop: 64846, Start Num: 60
Candidate Starts for BaboJay_111:
(Start: 60 @64514 has 18 MA's), (Start: 72 @64544 has 38 MA's), (108, 64688), (122, 64736), (132, 64760), (155, 64832),

Gene: Babushka_51 Start: 32952, Stop: 33320, Start Num: 58
Candidate Starts for Babushka_51:
(Start: 47 @32928 has 2 MA's), (Start: 58 @32952 has 12 MA's), (63, 32970), (Start: 89 @32991 has 5 MA's), (98, 33045), (113, 33111), (116, 33120), (129, 33159), (149, 33231), (174, 33285), (187, 33309),

Gene: BadStone_108 Start: 63579, Stop: 63953, Start Num: 55
Candidate Starts for BadStone_108:
(Start: 38 @63525 has 1 MA's), (Start: 55 @63579 has 106 MA's), (83, 63633), (Start: 89 @63660 has 5 MA's), (90, 63669), (94, 63708), (99, 63729), (124, 63822), (130, 63840), (132, 63843), (145, 63891), (146, 63897), (149, 63909),

Gene: BaileyBlu_28 Start: 22070, Stop: 22423, Start Num: 77
Candidate Starts for BaileyBlu_28:
(66, 22052), (Start: 77 @22070 has 1 MA's), (Start: 89 @22094 has 5 MA's), (104, 22187), (139, 22301), (160, 22349),

Gene: Balomoji_111 Start: 63560, Stop: 63934, Start Num: 55
Candidate Starts for Balomoji_111:
(Start: 55 @63560 has 106 MA's), (83, 63614), (Start: 89 @63641 has 5 MA's), (90, 63650), (94, 63689), (95, 63692), (99, 63710), (124, 63803), (130, 63821), (132, 63824), (145, 63872), (146, 63878), (149, 63890),

Gene: Barbarian_110 Start: 61777, Stop: 62151, Start Num: 55
Candidate Starts for Barbarian_110:
(Start: 55 @61777 has 106 MA's), (83, 61831), (Start: 89 @61858 has 5 MA's), (90, 61867), (94, 61906), (95, 61909), (99, 61927), (124, 62020), (130, 62038), (132, 62041), (145, 62089), (146, 62095), (149, 62107),

Gene: Barbochs_52 Start: 47707, Stop: 47345, Start Num: 74
Candidate Starts for Barbochs_52:
(Start: 74 @47707 has 29 MA's), (Start: 80 @47698 has 9 MA's), (Start: 89 @47668 has 5 MA's), (101, 47593), (124, 47503), (133, 47476), (141, 47443), (149, 47413), (169, 47377),

Gene: Barnstormer_27 Start: 22061, Stop: 22453, Start Num: 59
Candidate Starts for Barnstormer_27:
(Start: 59 @22061 has 2 MA's), (Start: 89 @22127 has 5 MA's), (102, 22205),

Gene: Basilisk_51 Start: 33012, Stop: 33398, Start Num: 57
Candidate Starts for Basilisk_51:
(Start: 53 @33003 has 1 MA's), (Start: 57 @33012 has 30 MA's), (63, 33030), (Start: 89 @33051 has 5 MA's), (101, 33126), (116, 33183), (129, 33222), (143, 33270), (149, 33294), (174, 33348),

Gene: Bask21_111 Start: 62396, Stop: 62770, Start Num: 55
Candidate Starts for Bask21_111:
(Start: 55 @62396 has 106 MA's), (83, 62450), (Start: 89 @62477 has 5 MA's), (90, 62486), (94, 62525), (99, 62546), (124, 62639), (130, 62657), (132, 62660), (145, 62708), (146, 62714), (149, 62726),

Gene: Beaver_57 Start: 49477, Stop: 49115, Start Num: 74
Candidate Starts for Beaver_57:
(Start: 74 @49477 has 29 MA's), (Start: 80 @49468 has 9 MA's), (Start: 89 @49438 has 5 MA's), (101, 49363), (124, 49273), (133, 49246), (141, 49213), (149, 49183), (169, 49147),

Gene: Becksu_109 Start: 63633, Stop: 64007, Start Num: 55
Candidate Starts for Becksu_109:
(Start: 38 @63579 has 1 MA's), (Start: 55 @63633 has 106 MA's), (Start: 89 @63714 has 5 MA's), (90, 63723), (94, 63762), (99, 63783), (124, 63876), (130, 63894), (132, 63897), (145, 63945), (168, 63996),

Gene: Bedetta_58 Start: 32801, Stop: 33178, Start Num: 53
Candidate Starts for Bedetta_58:
(Start: 53 @32801 has 1 MA's), (Start: 57 @32810 has 30 MA's), (Start: 89 @32852 has 5 MA's), (113, 32969), (116, 32978), (129, 33017), (149, 33089), (159, 33104), (174, 33143),

Gene: Bench_113 Start: 64001, Stop: 64375, Start Num: 55
Candidate Starts for Bench_113:
(Start: 38 @63947 has 1 MA's), (Start: 55 @64001 has 106 MA's), (Start: 89 @64082 has 5 MA's), (90, 64091), (94, 64130), (99, 64151), (124, 64244), (130, 64262), (132, 64265), (145, 64313), (168, 64364),

Gene: Benczkowski14_48 Start: 48592, Stop: 48224, Start Num: 85
Candidate Starts for Benczkowski14_48:
(Start: 85 @48592 has 14 MA's), (Start: 89 @48568 has 5 MA's), (133, 48361), (155, 48292), (181, 48235),

Gene: BenoitCattle_54 Start: 48067, Stop: 47708, Start Num: 76
Candidate Starts for BenoitCattle_54:
(56, 48118), (Start: 74 @48070 has 29 MA's), (Start: 76 @48067 has 4 MA's), (Start: 89 @48031 has 5 MA's), (101, 47956), (124, 47866), (133, 47839), (141, 47806), (149, 47776), (155, 47770), (169, 47740),

Gene: Berrie_29 Start: 23499, Stop: 23867, Start Num: 79
Candidate Starts for Berrie_29:
(Start: 79 @23499 has 22 MA's), (Start: 89 @23523 has 5 MA's), (123, 23676),

Gene: Berries_51 Start: 48731, Stop: 48366, Start Num: 72
Candidate Starts for Berries_51:
(Start: 72 @48731 has 38 MA's), (Start: 89 @48689 has 5 MA's), (106, 48584), (133, 48497), (140, 48467), (141, 48464), (149, 48434),

Gene: BetterKatz_65 Start: 42412, Stop: 42768, Start Num: 89
Candidate Starts for BetterKatz_65:
(22, 42142), (24, 42190), (28, 42211), (37, 42265), (54, 42325), (69, 42370), (Start: 78 @42382 has 14 MA's), (Start: 89 @42412 has 5 MA's), (101, 42487), (132, 42589), (149, 42655),

Gene: Bianmat_51 Start: 48771, Stop: 48406, Start Num: 72
Candidate Starts for Bianmat_51:
(Start: 72 @48771 has 38 MA's), (Start: 89 @48729 has 5 MA's), (106, 48624), (133, 48537), (140, 48507), (141, 48504), (149, 48474),

Gene: Bibble12_57 Start: 32646, Stop: 33014, Start Num: 57
Candidate Starts for Bibble12_57:
(Start: 53 @32637 has 1 MA's), (Start: 57 @32646 has 30 MA's), (Start: 89 @32688 has 5 MA's), (113, 32805), (116, 32814), (129, 32853), (149, 32925), (174, 32979),

Gene: BigBubba_113 Start: 62987, Stop: 63319, Start Num: 60
Candidate Starts for BigBubba_113:
(Start: 60 @62987 has 18 MA's), (Start: 72 @63017 has 38 MA's), (108, 63161), (122, 63209), (132, 63233), (155, 63305),

Gene: BigShaq_54 Start: 48075, Stop: 47713, Start Num: 74
Candidate Starts for BigShaq_54:
(56, 48123), (Start: 74 @48075 has 29 MA's), (Start: 76 @48072 has 4 MA's), (Start: 89 @48036 has 5 MA's), (101, 47961), (124, 47871), (133, 47844), (141, 47811), (149, 47781), (155, 47775), (169, 47745),

Gene: BilboSwaggins_109 Start: 64057, Stop: 64431, Start Num: 55
Candidate Starts for BilboSwaggins_109:
(Start: 38 @64003 has 1 MA's), (Start: 55 @64057 has 106 MA's), (Start: 89 @64138 has 5 MA's), (90, 64147), (94, 64186), (99, 64207), (124, 64300), (130, 64318), (132, 64321), (145, 64369), (146, 64375), (149, 64387),

Gene: BillyBobJr_60 Start: 49787, Stop: 49425, Start Num: 74
Candidate Starts for BillyBobJr_60:
(Start: 74 @49787 has 29 MA's), (Start: 80 @49778 has 9 MA's), (Start: 89 @49748 has 5 MA's), (101, 49673), (124, 49583), (133, 49556), (141, 49523), (149, 49493), (169, 49457),

Gene: BirksAndSocks_59 Start: 49827, Stop: 49465, Start Num: 74
Candidate Starts for BirksAndSocks_59:
(Start: 74 @49827 has 29 MA's), (Start: 80 @49818 has 9 MA's), (Start: 89 @49788 has 5 MA's), (101, 49713), (124, 49623), (133, 49596), (141, 49563), (149, 49533), (169, 49497),

Gene: Bobby_156 Start: 89177, Stop: 89539, Start Num: 84
Candidate Starts for Bobby_156:
(Start: 84 @89177 has 1 MA's), (Start: 89 @89201 has 5 MA's), (98, 89255), (101, 89276), (122, 89357), (147, 89444), (149, 89450), (165, 89477), (186, 89528),

Gene: Bock_67 Start: 42626, Stop: 43012, Start Num: 78
Candidate Starts for Bock_67:
(14, 42311), (22, 42386), (24, 42434), (28, 42455), (37, 42509), (54, 42569), (69, 42614), (Start: 78 @42626 has 14 MA's), (Start: 89 @42656 has 5 MA's), (101, 42731), (132, 42833), (149, 42899),

Gene: Bogg_112 Start: 63520, Stop: 63894, Start Num: 55

Candidate Starts for Bogg_112:
(Start: 38 @63466 has 1 MA's), (Start: 55 @63520 has 106 MA's), (83, 63574), (Start: 89 @63601 has 5 MA's), (90, 63610), (94, 63649), (99, 63670), (124, 63763), (130, 63781), (132, 63784), (145, 63832), (168, 63883),

Gene: Boneham_58 Start: 49728, Stop: 49366, Start Num: 74
Candidate Starts for Boneham_58:
(Start: 74 @49728 has 29 MA's), (Start: 80 @49719 has 9 MA's), (Start: 89 @49689 has 5 MA's), (101, 49614), (124, 49524), (133, 49497), (141, 49464), (149, 49434), (169, 49398),

Gene: Breezic_54 Start: 47720, Stop: 47358, Start Num: 74
Candidate Starts for Breezic_54:
(Start: 74 @47720 has 29 MA's), (Start: 80 @47711 has 9 MA's), (Start: 89 @47681 has 5 MA's), (101, 47606), (124, 47516), (133, 47489), (141, 47456), (149, 47426), (169, 47390),

Gene: Brewer_105 Start: 62157, Stop: 62531, Start Num: 55
Candidate Starts for Brewer_105:
(Start: 38 @62103 has 1 MA's), (Start: 55 @62157 has 106 MA's), (83, 62211), (Start: 89 @62238 has 5 MA's), (90, 62247), (94, 62286), (99, 62307), (124, 62400), (130, 62418), (132, 62421), (145, 62469), (168, 62520),

Gene: BronnyJames_158 Start: 84117, Stop: 84497, Start Num: 72
Candidate Starts for BronnyJames_158:
(Start: 72 @84117 has 38 MA's), (Start: 89 @84159 has 5 MA's), (122, 84315), (149, 84408), (155, 84414), (157, 84417), (186, 84486),

Gene: Bruin_108 Start: 62685, Stop: 63059, Start Num: 55
Candidate Starts for Bruin_108:
(Start: 38 @62631 has 1 MA's), (Start: 55 @62685 has 106 MA's), (Start: 89 @62766 has 5 MA's), (90, 62775), (94, 62814), (99, 62835), (124, 62928), (130, 62946), (132, 62949), (145, 62997), (168, 63048),

Gene: Brujita_56 Start: 37993, Stop: 38289, Start Num: 80
Candidate Starts for Brujita_56:
(Start: 67 @37969 has 1 MA's), (Start: 80 @37993 has 9 MA's), (Start: 89 @38017 has 5 MA's), (92, 38047), (98, 38071), (116, 38149), (118, 38161), (122, 38170), (130, 38191), (150, 38260),

Gene: Brylie_65 Start: 42235, Stop: 42591, Start Num: 89
Candidate Starts for Brylie_65:
(22, 41965), (24, 42013), (28, 42034), (37, 42088), (54, 42148), (69, 42193), (Start: 78 @42205 has 14 MA's), (Start: 89 @42235 has 5 MA's), (101, 42310), (132, 42412), (149, 42478),

Gene: Bubbykins_98 Start: 59847, Stop: 60170, Start Num: 63
Candidate Starts for Bubbykins_98:
(56, 59826), (63, 59847), (Start: 89 @59880 has 5 MA's), (98, 59934), (101, 59955), (112, 59985), (161, 60129),

Gene: Buck_112 Start: 64501, Stop: 64875, Start Num: 55
Candidate Starts for Buck_112:
(Start: 38 @64447 has 1 MA's), (Start: 55 @64501 has 106 MA's), (83, 64555), (Start: 89 @64582 has 5 MA's), (90, 64591), (94, 64630), (99, 64651), (124, 64744), (130, 64762), (132, 64765), (145, 64813), (168, 64864),

Gene: Budgie_119 Start: 63980, Stop: 64354, Start Num: 55
Candidate Starts for Budgie_119:
(Start: 55 @63980 has 106 MA's), (Start: 89 @64061 has 5 MA's), (90, 64070), (94, 64109), (99, 64130), (124, 64223), (130, 64241), (132, 64244), (145, 64292), (146, 64298), (149, 64310),

Gene: BugsBunny_110 Start: 63999, Stop: 64373, Start Num: 55
Candidate Starts for BugsBunny_110:
(Start: 38 @63945 has 1 MA's), (Start: 55 @63999 has 106 MA's), (Start: 89 @64080 has 5 MA's), (90, 64089), (94, 64128), (99, 64149), (124, 64242), (130, 64260), (132, 64263), (145, 64311), (168, 64362),

Gene: Butterball_57 Start: 49733, Stop: 49371, Start Num: 74
Candidate Starts for Butterball_57:
(Start: 74 @49733 has 29 MA's), (Start: 80 @49724 has 9 MA's), (Start: 89 @49694 has 5 MA's), (101, 49619), (124, 49529), (133, 49502), (141, 49469), (149, 49439), (169, 49403),

Gene: Cactus_115 Start: 62939, Stop: 63313, Start Num: 55
Candidate Starts for Cactus_115:
(Start: 38 @62885 has 1 MA's), (Start: 55 @62939 has 106 MA's), (83, 62993), (Start: 89 @63020 has 5 MA's), (90, 63029), (94, 63068), (99, 63089), (124, 63182), (130, 63200), (132, 63203), (145, 63251), (146, 63257), (149, 63269),

Gene: CallinAllBarbz_26 Start: 21897, Stop: 22250, Start Num: 78
Candidate Starts for CallinAllBarbz_26:
(62, 21858), (Start: 78 @21897 has 14 MA's), (Start: 89 @21921 has 5 MA's), (104, 22014), (128, 22086), (139, 22128), (160, 22176),

Gene: Camara_54 Start: 33012, Stop: 33407, Start Num: 47
Candidate Starts for Camara_54:
(Start: 47 @33012 has 2 MA's), (Start: 58 @33036 has 12 MA's), (88, 33063), (Start: 89 @33075 has 5 MA's), (97, 33126), (113, 33195), (116, 33204), (125, 33228), (129, 33243), (149, 33315), (174, 33369),

Gene: Caron_28 Start: 22040, Stop: 22432, Start Num: 57
Candidate Starts for Caron_28:
(6, 21614), (Start: 57 @22040 has 30 MA's), (Start: 89 @22109 has 5 MA's), (92, 22139), (135, 22286),

Gene: Cassia_28 Start: 22891, Stop: 23259, Start Num: 79
Candidate Starts for Cassia_28:
(5, 22426), (13, 22588), (Start: 79 @22891 has 22 MA's), (Start: 89 @22915 has 5 MA's), (123, 23068),

Gene: CathyBurgh_54 Start: 48297, Stop: 47935, Start Num: 74
Candidate Starts for CathyBurgh_54:
(Start: 74 @48297 has 29 MA's), (Start: 80 @48288 has 9 MA's), (Start: 89 @48258 has 5 MA's), (101, 48183), (124, 48093), (133, 48066), (141, 48033), (149, 48003), (169, 47967),

Gene: Charianelly_51 Start: 48481, Stop: 48116, Start Num: 72
Candidate Starts for Charianelly_51:
(Start: 72 @48481 has 38 MA's), (Start: 89 @48439 has 5 MA's), (106, 48334), (133, 48247), (140, 48217), (141, 48214), (149, 48184),

Gene: Chelms_53 Start: 48063, Stop: 47701, Start Num: 74
Candidate Starts for Chelms_53:

(56, 48111), (Start: 74 @48063 has 29 MA's), (Start: 76 @48060 has 4 MA's), (Start: 89 @48024 has 5 MA's), (101, 47949), (124, 47859), (133, 47832), (141, 47799), (149, 47769), (155, 47763), (169, 47733),

Gene: Chickaboom_52 Start: 33345, Stop: 33731, Start Num: 57
Candidate Starts for Chickaboom_52:
(Start: 57 @33345 has 30 MA's), (Start: 89 @33384 has 5 MA's), (101, 33459), (116, 33516), (119, 33528), (129, 33555), (143, 33603), (149, 33627), (174, 33681),

Gene: Chipper1996_930 Start: 60998, Stop: 61360, Start Num: 46
Candidate Starts for Chipper1996_930:
(Start: 46 @60998 has 16 MA's), (Start: 67 @61043 has 1 MA's), (86, 61046), (Start: 89 @61067 has 5 MA's), (101, 61142), (112, 61172), (116, 61190), (132, 61235), (148, 61295), (152, 61301),

Gene: Chocolat_92 Start: 60705, Stop: 61067, Start Num: 46
Candidate Starts for Chocolat_92:
(Start: 46 @60705 has 16 MA's), (Start: 67 @60750 has 1 MA's), (86, 60753), (Start: 89 @60774 has 5 MA's), (101, 60849), (112, 60879), (116, 60897), (132, 60942), (148, 61002), (152, 61008),

Gene: Chop_67 Start: 43371, Stop: 43757, Start Num: 78
Candidate Starts for Chop_67:
(22, 43131), (24, 43179), (28, 43200), (37, 43254), (54, 43314), (69, 43359), (Start: 78 @43371 has 14 MA's), (Start: 89 @43401 has 5 MA's), (101, 43476), (132, 43578), (149, 43644),

Gene: ChosenOne_111 Start: 62885, Stop: 63259, Start Num: 55
Candidate Starts for ChosenOne_111:
(Start: 38 @62831 has 1 MA's), (Start: 55 @62885 has 106 MA's), (83, 62939), (Start: 89 @62966 has 5 MA's), (90, 62975), (94, 63014), (99, 63035), (124, 63128), (130, 63146), (132, 63149), (145, 63197), (168, 63248),

Gene: ChotaBhai_111 Start: 63338, Stop: 63712, Start Num: 55
Candidate Starts for ChotaBhai_111:
(Start: 55 @63338 has 106 MA's), (83, 63392), (Start: 89 @63419 has 5 MA's), (90, 63428), (94, 63467), (95, 63470), (99, 63488), (124, 63581), (130, 63599), (132, 63602), (145, 63650), (146, 63656), (149, 63668),

Gene: Chubster_92 Start: 60945, Stop: 61307, Start Num: 47
Candidate Starts for Chubster_92:
(Start: 47 @60945 has 2 MA's), (Start: 67 @60990 has 1 MA's), (86, 60993), (Start: 89 @61014 has 5 MA's), (101, 61089), (112, 61119), (116, 61137), (132, 61182), (148, 61242), (152, 61248),

Gene: CinnamonToast_60 Start: 49787, Stop: 49425, Start Num: 74
Candidate Starts for CinnamonToast_60:
(Start: 74 @49787 has 29 MA's), (Start: 80 @49778 has 9 MA's), (Start: 89 @49748 has 5 MA's), (101, 49673), (124, 49583), (133, 49556), (141, 49523), (149, 49493), (169, 49457),

Gene: Cjw1_111 Start: 64694, Stop: 65068, Start Num: 55
Candidate Starts for Cjw1_111:
(Start: 38 @64640 has 1 MA's), (Start: 55 @64694 has 106 MA's), (Start: 89 @64775 has 5 MA's), (90, 64784), (94, 64823), (99, 64844), (124, 64937), (130, 64955), (132, 64958), (145, 65006), (168, 65057),

Gene: Colucci_95 Start: 61317, Stop: 61679, Start Num: 51

Candidate Starts for Colucci_95:
(Start: 51 @61317 has 1 MA's), (Start: 67 @61362 has 1 MA's), (86, 61365), (Start: 89 @61386 has 5 MA's), (101, 61461), (112, 61491), (116, 61509), (129, 61548),

Gene: Colusalem_54 Start: 32628, Stop: 32996, Start Num: 57
Candidate Starts for Colusalem_54:
(Start: 53 @32619 has 1 MA's), (Start: 57 @32628 has 30 MA's), (Start: 89 @32670 has 5 MA's), (113, 32787), (116, 32796), (129, 32835), (149, 32907), (174, 32961),

Gene: Command613_113 Start: 63553, Stop: 63927, Start Num: 55
Candidate Starts for Command613_113:
(Start: 55 @63553 has 106 MA's), (83, 63607), (Start: 89 @63634 has 5 MA's), (90, 63643), (94, 63682), (99, 63703), (124, 63796), (130, 63814), (132, 63817), (145, 63865), (146, 63871), (149, 63883),

Gene: Community_29 Start: 24629, Stop: 24997, Start Num: 79
Candidate Starts for Community_29:
(Start: 79 @24629 has 22 MA's), (Start: 89 @24653 has 5 MA's), (123, 24806), (178, 24947),

Gene: Conboy_90 Start: 60454, Stop: 60816, Start Num: 46
Candidate Starts for Conboy_90:
(Start: 46 @60454 has 16 MA's), (Start: 67 @60499 has 1 MA's), (86, 60502), (Start: 89 @60523 has 5 MA's), (101, 60598), (112, 60628), (116, 60646), (132, 60691), (148, 60751), (152, 60757),

Gene: Contagion_108 Start: 63047, Stop: 63421, Start Num: 55
Candidate Starts for Contagion_108:
(Start: 38 @62993 has 1 MA's), (Start: 55 @63047 has 106 MA's), (Start: 89 @63128 has 5 MA's), (90, 63137), (94, 63176), (99, 63197), (124, 63290), (130, 63308), (132, 63311), (145, 63359), (168, 63410),

Gene: Cookies_108 Start: 63324, Stop: 63698, Start Num: 55
Candidate Starts for Cookies_108:
(Start: 55 @63324 has 106 MA's), (83, 63378), (Start: 89 @63405 has 5 MA's), (90, 63414), (94, 63453), (99, 63474), (124, 63567), (130, 63585), (132, 63588), (145, 63636), (146, 63642), (149, 63654),

Gene: Coral_53 Start: 32516, Stop: 32923, Start Num: 57
Candidate Starts for Coral_53:
(Start: 53 @32507 has 1 MA's), (Start: 57 @32516 has 30 MA's), (71, 32558), (Start: 89 @32597 has 5 MA's), (113, 32714), (116, 32723), (129, 32762), (149, 32834), (174, 32888),

Gene: Cosmo_88 Start: 53908, Stop: 54264, Start Num: 85
Candidate Starts for Cosmo_88:
(Start: 76 @53896 has 4 MA's), (Start: 77 @53899 has 1 MA's), (Start: 80 @53902 has 9 MA's), (Start: 85 @53908 has 14 MA's), (Start: 89 @53932 has 5 MA's), (94, 53974), (98, 53986), (109, 54049), (110, 54055), (120, 54094), (127, 54109), (129, 54118), (132, 54124), (141, 54160), (145, 54172), (149, 54190),

Gene: Cote_55 Start: 32989, Stop: 33357, Start Num: 57
Candidate Starts for Cote_55:
(Start: 53 @32980 has 1 MA's), (Start: 57 @32989 has 30 MA's), (Start: 89 @33031 has 5 MA's), (113, 33148), (116, 33157), (129, 33196), (149, 33268), (174, 33322),

Gene: Courthouse_159 Start: 83757, Stop: 84137, Start Num: 72
Candidate Starts for Courthouse_159:
(Start: 72 @83757 has 38 MA's), (Start: 89 @83799 has 5 MA's), (101, 83874), (149, 84048), (155, 84054), (157, 84057), (186, 84126),

Gene: Crete_55 Start: 48341, Stop: 47979, Start Num: 74
Candidate Starts for Crete_55:
(56, 48389), (Start: 74 @48341 has 29 MA's), (Start: 76 @48338 has 4 MA's), (Start: 89 @48302 has 5 MA's), (101, 48227), (124, 48137), (133, 48110), (141, 48077), (149, 48047), (155, 48041), (169, 48011),

Gene: Crewmate_31 Start: 23149, Stop: 23517, Start Num: 79
Candidate Starts for Crewmate_31:
(8, 22744), (Start: 79 @23149 has 22 MA's), (Start: 89 @23173 has 5 MA's), (134, 23356), (135, 23359),

Gene: CrystalP_111 Start: 64057, Stop: 64431, Start Num: 55
Candidate Starts for CrystalP_111:
(Start: 38 @64003 has 1 MA's), (Start: 55 @64057 has 106 MA's), (Start: 89 @64138 has 5 MA's), (90, 64147), (94, 64186), (99, 64207), (124, 64300), (130, 64318), (132, 64321), (145, 64369), (146, 64375), (149, 64387),

Gene: Cyan_27 Start: 22364, Stop: 22729, Start Num: 29
Candidate Starts for Cyan_27:
(Start: 29 @22364 has 31 MA's), (Start: 89 @22388 has 5 MA's), (134, 22571),

Gene: Cygnet_53 Start: 33616, Stop: 33987, Start Num: 57
Candidate Starts for Cygnet_53:
(37, 33562), (Start: 57 @33616 has 30 MA's), (Start: 89 @33652 has 5 MA's), (91, 33661), (116, 33781), (117, 33787), (159, 33907), (166, 33925), (174, 33946),

Gene: Czyszczon1_111 Start: 63040, Stop: 63414, Start Num: 55
Candidate Starts for Czyszczon1_111:
(Start: 38 @62986 has 1 MA's), (Start: 55 @63040 has 106 MA's), (Start: 89 @63121 has 5 MA's), (90, 63130), (94, 63169), (99, 63190), (124, 63283), (130, 63301), (132, 63304), (145, 63352), (168, 63403),

Gene: DS6A_81 Start: 51791, Stop: 52174, Start Num: 52
Candidate Starts for DS6A_81:
(30, 51698), (36, 51737), (45, 51776), (Start: 52 @51791 has 1 MA's), (Start: 89 @51890 has 5 MA's), (93, 51926), (100, 51959), (122, 52043), (124, 52046), (129, 52061), (130, 52064), (145, 52115), (157, 52142),

Gene: Daikon_112 Start: 62856, Stop: 63230, Start Num: 55
Candidate Starts for Daikon_112:
(Start: 38 @62802 has 1 MA's), (Start: 55 @62856 has 106 MA's), (83, 62910), (Start: 89 @62937 has 5 MA's), (90, 62946), (94, 62985), (99, 63006), (124, 63099), (130, 63117), (132, 63120), (145, 63168), (146, 63174), (149, 63186),

Gene: Dakiti_54 Start: 48931, Stop: 48569, Start Num: 74
Candidate Starts for Dakiti_54:
(56, 48979), (Start: 74 @48931 has 29 MA's), (Start: 76 @48928 has 4 MA's), (Start: 89 @48892 has 5 MA's), (101, 48817), (124, 48727), (133, 48700), (141, 48667), (149, 48637), (155, 48631), (169,

48601),

Gene: Damp_51 Start: 47645, Stop: 47280, Start Num: 72
Candidate Starts for Damp_51:
(Start: 72 @47645 has 38 MA's), (Start: 89 @47603 has 5 MA's), (106, 47498), (133, 47411), (140, 47381), (141, 47378), (149, 47348),

Gene: DanHam62_54 Start: 33144, Stop: 33515, Start Num: 58
Candidate Starts for DanHam62_54:
(Start: 47 @33120 has 2 MA's), (Start: 58 @33144 has 12 MA's), (88, 33171), (Start: 89 @33183 has 5 MA's), (97, 33234), (113, 33303), (116, 33312), (125, 33336), (129, 33351), (149, 33423), (174, 33477),

Gene: Daob_55 Start: 32991, Stop: 33368, Start Num: 53
Candidate Starts for Daob_55:
(Start: 53 @32991 has 1 MA's), (Start: 57 @33000 has 30 MA's), (Start: 89 @33042 has 5 MA's), (113, 33159), (116, 33168), (129, 33207), (149, 33279), (174, 33333),

Gene: DelRio_66 Start: 43392, Stop: 43778, Start Num: 78
Candidate Starts for DelRio_66:
(24, 43200), (28, 43221), (37, 43275), (54, 43335), (69, 43380), (Start: 78 @43392 has 14 MA's), (Start: 89 @43422 has 5 MA's), (101, 43497), (132, 43599), (140, 43632), (149, 43665), (164, 43689),

Gene: Diabla_56 Start: 49398, Stop: 49039, Start Num: 76
Candidate Starts for Diabla_56:
(Start: 74 @49401 has 29 MA's), (Start: 76 @49398 has 4 MA's), (Start: 80 @49392 has 9 MA's), (Start: 89 @49362 has 5 MA's), (149, 49107), (169, 49071),

Gene: DocB7_043 Start: 40188, Stop: 39829, Start Num: 85
Candidate Starts for DocB7_043:
(Start: 85 @40188 has 14 MA's), (Start: 89 @40164 has 5 MA's), (94, 40122), (104, 40071), (124, 40014), (149, 39924), (151, 39921), (155, 39918), (187, 39843),

Gene: DoctorDiddles_110 Start: 62868, Stop: 63200, Start Num: 60
Candidate Starts for DoctorDiddles_110:
(Start: 42 @62826 has 1 MA's), (Start: 60 @62868 has 18 MA's), (Start: 72 @62898 has 38 MA's), (108, 63042), (122, 63090), (132, 63114), (155, 63186),

Gene: DrDrey_111 Start: 64717, Stop: 65091, Start Num: 55
Candidate Starts for DrDrey_111:
(Start: 38 @64663 has 1 MA's), (Start: 55 @64717 has 106 MA's), (83, 64771), (Start: 89 @64798 has 5 MA's), (90, 64807), (94, 64846), (99, 64867), (124, 64960), (130, 64978), (132, 64981), (145, 65029), (146, 65035), (149, 65047),

Gene: DrManhattan_26 Start: 20716, Stop: 21084, Start Num: 29
Candidate Starts for DrManhattan_26:
(Start: 29 @20716 has 31 MA's), (Start: 89 @20740 has 5 MA's), (135, 20926), (142, 20953), (154, 20983),

Gene: DrSierra_27 Start: 21394, Stop: 21762, Start Num: 29
Candidate Starts for DrSierra_27:
(Start: 29 @21394 has 31 MA's), (Start: 89 @21418 has 5 MA's),

Gene: DrYang_88 Start: 60507, Stop: 60866, Start Num: 46
Candidate Starts for DrYang_88:
(Start: 46 @60507 has 16 MA's), (Start: 67 @60552 has 1 MA's), (86, 60555), (Start: 89 @60576 has 5 MA's), (101, 60651), (112, 60681), (116, 60699), (123, 60720), (132, 60744), (148, 60804),

Gene: Dumbo_111 Start: 63077, Stop: 63451, Start Num: 55
Candidate Starts for Dumbo_111:
(Start: 38 @63023 has 1 MA's), (Start: 55 @63077 has 106 MA's), (Start: 89 @63158 has 5 MA's), (90, 63167), (94, 63206), (99, 63227), (124, 63320), (130, 63338), (132, 63341), (145, 63389), (168, 63440),

Gene: Dusk_108 Start: 63239, Stop: 63613, Start Num: 55
Candidate Starts for Dusk_108:
(Start: 38 @63185 has 1 MA's), (Start: 55 @63239 has 106 MA's), (83, 63293), (Start: 89 @63320 has 5 MA's), (90, 63329), (94, 63368), (99, 63389), (124, 63482), (130, 63500), (132, 63503), (145, 63551), (146, 63557), (149, 63569),

Gene: E6_49 Start: 32814, Stop: 33161, Start Num: 68
Candidate Starts for E6_49:
(Start: 68 @32814 has 1 MA's), (Start: 89 @32838 has 5 MA's), (91, 32847), (105, 32937), (129, 33006), (147, 33072), (174, 33132), (184, 33153),

Gene: Easy2Say_111 Start: 63711, Stop: 64085, Start Num: 55
Candidate Starts for Easy2Say_111:
(Start: 38 @63657 has 1 MA's), (Start: 55 @63711 has 106 MA's), (83, 63765), (Start: 89 @63792 has 5 MA's), (90, 63801), (94, 63840), (99, 63861), (124, 63954), (130, 63972), (132, 63975), (145, 64023), (168, 64074),

Gene: EdgarPoe_91 Start: 60862, Stop: 61224, Start Num: 46
Candidate Starts for EdgarPoe_91:
(Start: 46 @60862 has 16 MA's), (Start: 67 @60907 has 1 MA's), (86, 60910), (Start: 89 @60931 has 5 MA's), (101, 61006), (112, 61036), (116, 61054), (132, 61099), (148, 61159), (152, 61165),

Gene: Eggsie_51 Start: 47363, Stop: 47001, Start Num: 74
Candidate Starts for Eggsie_51:
(Start: 74 @47363 has 29 MA's), (Start: 76 @47360 has 4 MA's), (Start: 80 @47354 has 9 MA's), (Start: 89 @47324 has 5 MA's), (98, 47270), (149, 47069), (169, 47033),

Gene: Ekhein_54 Start: 47416, Stop: 47060, Start Num: 80
Candidate Starts for Ekhein_54:
(Start: 74 @47425 has 29 MA's), (Start: 80 @47416 has 9 MA's), (Start: 89 @47386 has 5 MA's), (101, 47311), (124, 47221), (133, 47194), (141, 47161), (149, 47131), (169, 47095),

Gene: Elezi_29 Start: 24459, Stop: 24827, Start Num: 79
Candidate Starts for Elezi_29:
(7, 24144), (8, 24156), (Start: 79 @24459 has 22 MA's), (87, 24465), (Start: 89 @24483 has 5 MA's), (134, 24666),

Gene: Elfy_27 Start: 21866, Stop: 22246, Start Num: 73
Candidate Starts for Elfy_27:
(1, 21266), (2, 21356), (9, 21509), (17, 21602), (43, 21797), (66, 21848), (Start: 73 @21866 has 2 MA's), (81, 21878), (Start: 89 @21899 has 5 MA's), (96, 21950), (128, 22067), (138, 22103), (146, 22133), (160, 22160),

Gene: Elite2014_110 Start: 62884, Stop: 63258, Start Num: 55
Candidate Starts for Elite2014_110:
(Start: 38 @62830 has 1 MA's), (Start: 55 @62884 has 106 MA's), (83, 62938), (Start: 89 @62965 has 5 MA's), (90, 62974), (94, 63013), (99, 63034), (124, 63127), (130, 63145), (132, 63148), (145, 63196), (168, 63247),

Gene: Elph10_110 Start: 62723, Stop: 63097, Start Num: 55
Candidate Starts for Elph10_110:
(Start: 38 @62669 has 1 MA's), (Start: 55 @62723 has 106 MA's), (Start: 89 @62804 has 5 MA's), (90, 62813), (94, 62852), (99, 62873), (124, 62966), (130, 62984), (132, 62987), (145, 63035), (168, 63086),

Gene: Emmina_111 Start: 62662, Stop: 63036, Start Num: 55
Candidate Starts for Emmina_111:
(Start: 38 @62608 has 1 MA's), (Start: 55 @62662 has 106 MA's), (83, 62716), (Start: 89 @62743 has 5 MA's), (90, 62752), (94, 62791), (99, 62812), (124, 62905), (130, 62923), (132, 62926), (145, 62974), (168, 63025),

Gene: Emotion_33 Start: 24307, Stop: 24687, Start Num: 79
Candidate Starts for Emotion_33:
(Start: 79 @24307 has 22 MA's), (Start: 89 @24331 has 5 MA's), (104, 24424), (164, 24592),

Gene: EniyanLRS_84 Start: 53647, Stop: 54018, Start Num: 85
Candidate Starts for EniyanLRS_84:
(Start: 76 @53635 has 4 MA's), (Start: 77 @53638 has 1 MA's), (Start: 80 @53641 has 9 MA's), (Start: 85 @53647 has 14 MA's), (Start: 89 @53671 has 5 MA's), (94, 53713), (98, 53725), (109, 53788), (110, 53794), (120, 53833), (127, 53848), (129, 53857), (132, 53863), (141, 53899), (145, 53911), (147, 53923), (149, 53929), (177, 53986), (185, 54004),

Gene: Eraser_29 Start: 24451, Stop: 24819, Start Num: 29
Candidate Starts for Eraser_29:
(11, 24286), (Start: 29 @24451 has 31 MA's), (Start: 89 @24475 has 5 MA's),

Gene: Eureka_111 Start: 63850, Stop: 64224, Start Num: 55
Candidate Starts for Eureka_111:
(Start: 38 @63796 has 1 MA's), (Start: 55 @63850 has 106 MA's), (83, 63904), (Start: 89 @63931 has 5 MA's), (90, 63940), (94, 63979), (99, 64000), (124, 64093), (130, 64111), (132, 64114), (145, 64162), (146, 64168), (168, 64213),

Gene: Exiguo_53 Start: 47428, Stop: 47075, Start Num: 80
Candidate Starts for Exiguo_53:
(Start: 74 @47437 has 29 MA's), (Start: 80 @47428 has 9 MA's), (Start: 89 @47398 has 5 MA's), (101, 47323), (124, 47233), (133, 47206), (141, 47173), (149, 47143), (169, 47107),

Gene: FairyPath_111 Start: 64155, Stop: 64529, Start Num: 55
Candidate Starts for FairyPath_111:
(Start: 38 @64101 has 1 MA's), (Start: 55 @64155 has 106 MA's), (Start: 89 @64236 has 5 MA's), (90, 64245), (94, 64284), (99, 64305), (124, 64398), (130, 64416), (132, 64419), (145, 64467), (168, 64518),

Gene: FelixAlejandro_58 Start: 49931, Stop: 49569, Start Num: 74
Candidate Starts for FelixAlejandro_58:

(Start: 74 @49931 has 29 MA's), (Start: 80 @49922 has 9 MA's), (Start: 89 @49892 has 5 MA's), (101, 49817), (124, 49727), (130, 49706), (133, 49700), (141, 49667), (149, 49637), (169, 49601),

Gene: Filch_114 Start: 63550, Stop: 63882, Start Num: 60
Candidate Starts for Filch_114:
(Start: 60 @63550 has 18 MA's), (Start: 72 @63580 has 38 MA's), (108, 63724), (122, 63772), (132, 63796), (155, 63868),

Gene: Fingolfin_54 Start: 33123, Stop: 33518, Start Num: 47
Candidate Starts for Fingolfin_54:
(Start: 47 @33123 has 2 MA's), (Start: 58 @33147 has 12 MA's), (88, 33174), (Start: 89 @33186 has 5 MA's), (97, 33237), (113, 33306), (116, 33315), (125, 33339), (129, 33354), (149, 33426), (174, 33480),

Gene: FireRed_114 Start: 64126, Stop: 64500, Start Num: 55
Candidate Starts for FireRed_114:
(Start: 38 @64072 has 1 MA's), (Start: 55 @64126 has 106 MA's), (83, 64180), (Start: 89 @64207 has 5 MA's), (90, 64216), (94, 64255), (99, 64276), (124, 64369), (130, 64387), (132, 64390), (145, 64438), (168, 64489),

Gene: FiveHead_36 Start: 23809, Stop: 24183, Start Num: 79
Candidate Starts for FiveHead_36:
(Start: 79 @23809 has 22 MA's), (Start: 89 @23833 has 5 MA's), (101, 23908), (104, 23926), (128, 23998), (136, 24022), (173, 24121),

Gene: Flakey_53 Start: 48292, Stop: 47939, Start Num: 80
Candidate Starts for Flakey_53:
(Start: 74 @48301 has 29 MA's), (Start: 80 @48292 has 9 MA's), (Start: 89 @48262 has 5 MA's), (101, 48187), (124, 48097), (133, 48070), (141, 48037), (149, 48007), (169, 47971),

Gene: Floof_30 Start: 23138, Stop: 23557, Start Num: 57
Candidate Starts for Floof_30:
(Start: 57 @23138 has 30 MA's), (88, 23213), (Start: 89 @23225 has 5 MA's), (131, 23393), (164, 23477), (172, 23501),

Gene: Flutur_27 Start: 22595, Stop: 22960, Start Num: 29
Candidate Starts for Flutur_27:
(Start: 29 @22595 has 31 MA's), (Start: 89 @22619 has 5 MA's), (134, 22802),

Gene: Flypotenuse_107 Start: 62431, Stop: 62805, Start Num: 55
Candidate Starts for Flypotenuse_107:
(Start: 55 @62431 has 106 MA's), (83, 62485), (Start: 89 @62512 has 5 MA's), (90, 62521), (94, 62560), (95, 62563), (99, 62581), (124, 62674), (130, 62692), (132, 62695), (145, 62743), (146, 62749), (149, 62761),

Gene: FoghornLeghorn_104 Start: 61016, Stop: 61390, Start Num: 55
Candidate Starts for FoghornLeghorn_104:
(Start: 55 @61016 has 106 MA's), (83, 61070), (Start: 89 @61097 has 5 MA's), (90, 61106), (94, 61145), (99, 61166), (124, 61259), (130, 61277), (132, 61280), (145, 61328), (146, 61334), (149, 61346),

Gene: Forester_49 Start: 24607, Stop: 25026, Start Num: 57
Candidate Starts for Forester_49:

(Start: 57 @24607 has 30 MA's), (Start: 89 @24694 has 5 MA's), (111, 24805), (121, 24835), (131, 24862), (135, 24871), (164, 24946),

Gene: Francois_65 Start: 42391, Stop: 42777, Start Num: 78
Candidate Starts for Francois_65:
(37, 42274), (44, 42304), (54, 42334), (Start: 78 @42391 has 14 MA's), (Start: 89 @42421 has 5 MA's), (100, 42490), (132, 42598), (149, 42664), (183, 42736), (189, 42766),

Gene: GMA7_46 Start: 42634, Stop: 42269, Start Num: 72
Candidate Starts for GMA7_46:
(Start: 72 @42634 has 38 MA's), (Start: 89 @42592 has 5 MA's), (114, 42454), (124, 42427), (140, 42370),

Gene: GTE7_45 Start: 42665, Stop: 42300, Start Num: 72
Candidate Starts for GTE7_45:
(Start: 72 @42665 has 38 MA's), (Start: 89 @42623 has 5 MA's), (114, 42485), (124, 42458), (140, 42401),

Gene: Gage_113 Start: 63382, Stop: 63756, Start Num: 55
Candidate Starts for Gage_113:
(Start: 38 @63328 has 1 MA's), (Start: 55 @63382 has 106 MA's), (Start: 89 @63463 has 5 MA's), (90, 63472), (94, 63511), (99, 63532), (124, 63625), (130, 63643), (132, 63646), (145, 63694), (168, 63745),

Gene: Gaia_125 Start: 69310, Stop: 69603, Start Num: 80
Candidate Starts for Gaia_125:
(Start: 80 @69310 has 9 MA's), (Start: 85 @69316 has 14 MA's), (Start: 89 @69334 has 5 MA's), (101, 69409), (118, 69481), (122, 69490), (143, 69556), (147, 69574), (149, 69580), (153, 69586),

Gene: GalacticEye_51 Start: 48442, Stop: 48077, Start Num: 72
Candidate Starts for GalacticEye_51:
(Start: 72 @48442 has 38 MA's), (Start: 89 @48400 has 5 MA's), (106, 48295), (133, 48208), (140, 48178), (141, 48175), (149, 48145),

Gene: Galaxy_50 Start: 32207, Stop: 32593, Start Num: 57
Candidate Starts for Galaxy_50:
(23, 32063), (Start: 53 @32198 has 1 MA's), (Start: 57 @32207 has 30 MA's), (63, 32225), (Start: 89 @32246 has 5 MA's), (113, 32369), (116, 32378), (129, 32417), (144, 32468), (174, 32543),

Gene: GardenState_30 Start: 22984, Stop: 23337, Start Num: 73
Candidate Starts for GardenState_30:
(33, 22870), (Start: 73 @22984 has 2 MA's), (Start: 89 @23017 has 5 MA's), (131, 23182), (146, 23230), (160, 23257),

Gene: Gator_109 Start: 63291, Stop: 63665, Start Num: 55
Candidate Starts for Gator_109:
(Start: 55 @63291 has 106 MA's), (83, 63345), (Start: 89 @63372 has 5 MA's), (90, 63381), (94, 63420), (99, 63441), (124, 63534), (130, 63552), (132, 63555), (145, 63603), (146, 63609), (149, 63621),

Gene: Gemini_116 Start: 63761, Stop: 64135, Start Num: 55
Candidate Starts for Gemini_116:

(Start: 38 @63707 has 1 MA's), (Start: 55 @63761 has 106 MA's), (Start: 89 @63842 has 5 MA's), (90, 63851), (94, 63890), (99, 63911), (124, 64004), (130, 64022), (132, 64025), (145, 64073), (168, 64124),

Gene: Glexan_110 Start: 63441, Stop: 63815, Start Num: 55
Candidate Starts for Glexan_110:
(Start: 38 @63387 has 1 MA's), (Start: 55 @63441 has 106 MA's), (83, 63495), (Start: 89 @63522 has 5 MA's), (90, 63531), (94, 63570), (99, 63591), (124, 63684), (130, 63702), (132, 63705), (145, 63753), (146, 63759), (149, 63771),

Gene: Glotell_55 Start: 33191, Stop: 33562, Start Num: 58
Candidate Starts for Glotell_55:
(Start: 47 @33167 has 2 MA's), (Start: 58 @33191 has 12 MA's), (88, 33218), (Start: 89 @33230 has 5 MA's), (97, 33281), (113, 33350), (116, 33359), (125, 33383), (129, 33398), (149, 33470), (174, 33524), (179, 33533),

Gene: Goku_111 Start: 64093, Stop: 64425, Start Num: 60
Candidate Starts for Goku_111:
(Start: 60 @64093 has 18 MA's), (Start: 72 @64123 has 38 MA's), (108, 64267), (122, 64315), (132, 64339), (155, 64411),

Gene: GoldenSpark_115 Start: 63244, Stop: 63618, Start Num: 55
Candidate Starts for GoldenSpark_115:
(Start: 38 @63190 has 1 MA's), (Start: 55 @63244 has 106 MA's), (Start: 89 @63325 has 5 MA's), (90, 63334), (94, 63373), (99, 63394), (124, 63487), (130, 63505), (132, 63508), (145, 63556), (168, 63607),

Gene: Goldilocks_115 Start: 63774, Stop: 64106, Start Num: 60
Candidate Starts for Goldilocks_115:
(Start: 60 @63774 has 18 MA's), (Start: 72 @63804 has 38 MA's), (108, 63948), (122, 63996), (132, 64020), (155, 64092),

Gene: Gonephishing_156 Start: 85217, Stop: 85597, Start Num: 72
Candidate Starts for Gonephishing_156:
(Start: 72 @85217 has 38 MA's), (Start: 89 @85259 has 5 MA's), (101, 85334), (122, 85415), (149, 85508), (155, 85514), (157, 85517), (186, 85586),

Gene: GooberAzure_114 Start: 63244, Stop: 63618, Start Num: 55
Candidate Starts for GooberAzure_114:
(Start: 38 @63190 has 1 MA's), (Start: 55 @63244 has 106 MA's), (Start: 89 @63325 has 5 MA's), (90, 63334), (94, 63373), (99, 63394), (124, 63487), (130, 63505), (132, 63508), (145, 63556), (168, 63607),

Gene: Gorko_53 Start: 47420, Stop: 47067, Start Num: 80
Candidate Starts for Gorko_53:
(Start: 74 @47429 has 29 MA's), (Start: 80 @47420 has 9 MA's), (Start: 89 @47390 has 5 MA's), (101, 47315), (124, 47225), (133, 47198), (141, 47165), (149, 47135), (169, 47099),

Gene: GourdThymes_54 Start: 48303, Stop: 47941, Start Num: 74
Candidate Starts for GourdThymes_54:
(Start: 74 @48303 has 29 MA's), (Start: 80 @48294 has 9 MA's), (Start: 89 @48264 has 5 MA's), (101, 48189), (124, 48099), (133, 48072), (141, 48039), (149, 48009), (169, 47973),

Gene: GrandSlam_67 Start: 43371, Stop: 43757, Start Num: 78
Candidate Starts for GrandSlam_67:
(22, 43131), (24, 43179), (28, 43200), (37, 43254), (54, 43314), (69, 43359), (Start: 78 @43371 has 14 MA's), (Start: 89 @43401 has 5 MA's), (101, 43476), (132, 43578), (149, 43644),

Gene: Gravel_62 Start: 34684, Stop: 35061, Start Num: 57
Candidate Starts for Gravel_62:
(26, 34564), (40, 34642), (Start: 57 @34684 has 30 MA's), (63, 34702), (Start: 89 @34723 has 5 MA's), (101, 34798), (116, 34855), (129, 34894), (140, 34933), (174, 35020),

Gene: Greep_115 Start: 64816, Stop: 65190, Start Num: 55
Candidate Starts for Greep_115:
(Start: 38 @64762 has 1 MA's), (Start: 55 @64816 has 106 MA's), (Start: 89 @64897 has 5 MA's), (90, 64906), (94, 64945), (99, 64966), (124, 65059), (130, 65077), (132, 65080), (145, 65128), (168, 65179),

Gene: Gretchen_30 Start: 24301, Stop: 24720, Start Num: 57
Candidate Starts for Gretchen_30:
(Start: 57 @24301 has 30 MA's), (70, 24343), (Start: 89 @24388 has 5 MA's), (111, 24499), (121, 24529), (131, 24556), (135, 24565), (164, 24640),

Gene: GrimEater_27 Start: 21875, Stop: 22234, Start Num: 75
Candidate Starts for GrimEater_27:
(10, 21530), (25, 21710), (75, 21875), (Start: 89 @21905 has 5 MA's), (115, 22034), (160, 22160),

Gene: Gudmit_64 Start: 38580, Stop: 38909, Start Num: 80
Candidate Starts for Gudmit_64:
(4, 38091), (9, 38199), (18, 38298), (Start: 80 @38580 has 9 MA's), (Start: 89 @38610 has 5 MA's), (98, 38664), (101, 38685), (103, 38688), (116, 38742), (130, 38784), (132, 38787),

Gene: Guillaume_51 Start: 48492, Stop: 48127, Start Num: 72
Candidate Starts for Guillaume_51:
(Start: 72 @48492 has 38 MA's), (Start: 89 @48450 has 5 MA's), (106, 48345), (133, 48258), (140, 48228), (141, 48225), (149, 48195),

Gene: Hail2Pitt_50 Start: 48968, Stop: 48603, Start Num: 72
Candidate Starts for Hail2Pitt_50:
(Start: 72 @48968 has 38 MA's), (Start: 89 @48926 has 5 MA's), (106, 48821), (133, 48734), (141, 48701), (149, 48671),

Gene: HamCheese_54 Start: 33131, Stop: 33502, Start Num: 58
Candidate Starts for HamCheese_54:
(Start: 47 @33107 has 2 MA's), (Start: 58 @33131 has 12 MA's), (88, 33158), (Start: 89 @33170 has 5 MA's), (97, 33221), (113, 33290), (116, 33299), (125, 33323), (129, 33338), (149, 33410), (174, 33464),

Gene: Hamood_67 Start: 43371, Stop: 43757, Start Num: 78
Candidate Starts for Hamood_67:
(22, 43131), (24, 43179), (28, 43200), (37, 43254), (54, 43314), (69, 43359), (Start: 78 @43371 has 14 MA's), (Start: 89 @43401 has 5 MA's), (101, 43476), (132, 43578), (149, 43644),

Gene: HanKaySha_111 Start: 63432, Stop: 63806, Start Num: 55
Candidate Starts for HanKaySha_111:

(Start: 38 @63378 has 1 MA's), (Start: 55 @63432 has 106 MA's), (83, 63486), (Start: 89 @63513 has 5 MA's), (90, 63522), (94, 63561), (99, 63582), (124, 63675), (130, 63693), (132, 63696), (145, 63744), (168, 63795),

Gene: HannahPhantana_54 Start: 32646, Stop: 33014, Start Num: 57
Candidate Starts for HannahPhantana_54:
(Start: 53 @32637 has 1 MA's), (Start: 57 @32646 has 30 MA's), (Start: 89 @32688 has 5 MA's), (113, 32805), (116, 32814), (129, 32853), (149, 32925), (174, 32979),

Gene: Harambe_51 Start: 48759, Stop: 48394, Start Num: 72
Candidate Starts for Harambe_51:
(Start: 72 @48759 has 38 MA's), (Start: 89 @48717 has 5 MA's), (106, 48612), (133, 48525), (140, 48495), (141, 48492), (149, 48462),

Gene: Harella_112 Start: 63957, Stop: 64331, Start Num: 55
Candidate Starts for Harella_112:
(Start: 38 @63903 has 1 MA's), (Start: 55 @63957 has 106 MA's), (83, 64011), (Start: 89 @64038 has 5 MA's), (90, 64047), (94, 64086), (99, 64107), (124, 64200), (130, 64218), (132, 64221), (145, 64269), (146, 64275), (149, 64287),

Gene: HayZem_56 Start: 48417, Stop: 48052, Start Num: 72
Candidate Starts for HayZem_56:
(Start: 72 @48417 has 38 MA's), (Start: 89 @48375 has 5 MA's), (114, 48237), (124, 48210), (140, 48153),

Gene: Hello_51 Start: 48721, Stop: 48356, Start Num: 72
Candidate Starts for Hello_51:
(Start: 72 @48721 has 38 MA's), (Start: 89 @48679 has 5 MA's), (106, 48574), (133, 48487), (140, 48457), (141, 48454), (149, 48424),

Gene: Henry_109 Start: 63242, Stop: 63616, Start Num: 55
Candidate Starts for Henry_109:
(Start: 55 @63242 has 106 MA's), (83, 63296), (Start: 89 @63323 has 5 MA's), (90, 63332), (94, 63371), (99, 63392), (124, 63485), (130, 63503), (132, 63506), (145, 63554), (146, 63560), (149, 63572),

Gene: Highbury_107 Start: 61589, Stop: 61963, Start Num: 55
Candidate Starts for Highbury_107:
(Start: 38 @61535 has 1 MA's), (Start: 55 @61589 has 106 MA's), (83, 61643), (Start: 89 @61670 has 5 MA's), (90, 61679), (94, 61718), (99, 61739), (124, 61832), (130, 61850), (132, 61853), (145, 61901), (168, 61952),

Gene: Hollow_49 Start: 48928, Stop: 48560, Start Num: 85
Candidate Starts for Hollow_49:
(Start: 85 @48928 has 14 MA's), (Start: 89 @48904 has 5 MA's), (133, 48697), (155, 48628), (181, 48571),

Gene: Holt_117 Start: 64172, Stop: 64504, Start Num: 60
Candidate Starts for Holt_117:
(Start: 60 @64172 has 18 MA's), (Start: 72 @64202 has 38 MA's), (108, 64346), (122, 64394), (132, 64418), (155, 64490),

Gene: Hoonter_114 Start: 63737, Stop: 64111, Start Num: 55

Candidate Starts for Hoonter_114:
(Start: 38 @63683 has 1 MA's), (Start: 55 @63737 has 106 MA's), (Start: 89 @63818 has 5 MA's), (90, 63827), (94, 63866), (99, 63887), (124, 63980), (130, 63998), (132, 64001), (145, 64049), (168, 64100),

Gene: Hopey_111 Start: 64043, Stop: 64417, Start Num: 55
Candidate Starts for Hopey_111:
(Start: 38 @63989 has 1 MA's), (Start: 55 @64043 has 106 MA's), (Start: 89 @64124 has 5 MA's), (90, 64133), (94, 64172), (99, 64193), (124, 64286), (130, 64304), (132, 64307), (145, 64355), (168, 64406),

Gene: Hotorobo_54 Start: 48308, Stop: 47946, Start Num: 74
Candidate Starts for Hotorobo_54:
(Start: 74 @48308 has 29 MA's), (Start: 80 @48299 has 9 MA's), (Start: 89 @48269 has 5 MA's), (101, 48194), (124, 48104), (133, 48077), (141, 48044), (149, 48014), (169, 47978),

Gene: HufflyPuff_113 Start: 64352, Stop: 64726, Start Num: 55
Candidate Starts for HufflyPuff_113:
(Start: 38 @64298 has 1 MA's), (Start: 55 @64352 has 106 MA's), (Start: 89 @64433 has 5 MA's), (90, 64442), (94, 64481), (99, 64502), (124, 64595), (130, 64613), (132, 64616), (145, 64664), (168, 64715),

Gene: HumptyDumpty_92 Start: 60665, Stop: 61027, Start Num: 46
Candidate Starts for HumptyDumpty_92:
(Start: 46 @60665 has 16 MA's), (Start: 67 @60710 has 1 MA's), (86, 60713), (Start: 89 @60734 has 5 MA's), (101, 60809), (112, 60839), (116, 60857), (132, 60902), (148, 60962), (152, 60968),

Gene: IAmGroot_30 Start: 23648, Stop: 24001, Start Num: 73
Candidate Starts for IAmGroot_30:
(33, 23534), (Start: 73 @23648 has 2 MA's), (Start: 89 @23681 has 5 MA's), (131, 23846), (146, 23894), (160, 23921),

Gene: IHOP_109 Start: 62960, Stop: 63334, Start Num: 55
Candidate Starts for IHOP_109:
(Start: 38 @62906 has 1 MA's), (Start: 55 @62960 has 106 MA's), (83, 63014), (Start: 89 @63041 has 5 MA's), (90, 63050), (94, 63089), (99, 63110), (124, 63203), (130, 63221), (132, 63224), (145, 63272), (146, 63278), (149, 63290),

Gene: IUFootball_28 Start: 23243, Stop: 23641, Start Num: 79
Candidate Starts for IUFootball_28:
(Start: 79 @23243 has 22 MA's), (Start: 89 @23267 has 5 MA's), (93, 23303), (128, 23432), (142, 23480), (156, 23513), (191, 23630),

Gene: Icee_113 Start: 63282, Stop: 63614, Start Num: 60
Candidate Starts for Icee_113:
(Start: 60 @63282 has 18 MA's), (Start: 72 @63312 has 38 MA's), (108, 63456), (122, 63504), (132, 63528), (155, 63600),

Gene: Inca_108 Start: 61449, Stop: 61823, Start Num: 42
Candidate Starts for Inca_108:
(Start: 42 @61449 has 1 MA's), (Start: 60 @61491 has 18 MA's), (Start: 72 @61521 has 38 MA's), (108, 61665), (122, 61713), (132, 61737), (155, 61809),

Gene: Island3_56 Start: 37993, Stop: 38289, Start Num: 80
Candidate Starts for Island3_56:
(Start: 67 @37969 has 1 MA's), (Start: 80 @37993 has 9 MA's), (Start: 89 @38017 has 5 MA's), (92, 38047), (98, 38071), (116, 38149), (118, 38161), (122, 38170), (130, 38191), (150, 38260),

Gene: Iter_28 Start: 22439, Stop: 22807, Start Num: 79
Candidate Starts for Iter_28:
(Start: 79 @22439 has 22 MA's), (Start: 89 @22463 has 5 MA's), (135, 22649),

Gene: IttyBittyPiggy_28 Start: 22679, Stop: 23044, Start Num: 29
Candidate Starts for IttyBittyPiggy_28:
(Start: 29 @22679 has 31 MA's), (Start: 89 @22703 has 5 MA's), (101, 22778), (135, 22889), (188, 23027),

Gene: JaNo_91 Start: 60636, Stop: 60998, Start Num: 46
Candidate Starts for JaNo_91:
(Start: 46 @60636 has 16 MA's), (Start: 67 @60681 has 1 MA's), (86, 60684), (Start: 89 @60705 has 5 MA's), (101, 60780), (112, 60810), (116, 60828), (132, 60873), (148, 60933), (152, 60939),

Gene: Jams_51 Start: 47931, Stop: 47566, Start Num: 72
Candidate Starts for Jams_51:
(Start: 72 @47931 has 38 MA's), (Start: 89 @47889 has 5 MA's), (106, 47784), (133, 47697), (140, 47667), (141, 47664), (149, 47634),

Gene: Jamun_50 Start: 33451, Stop: 33831, Start Num: 57
Candidate Starts for Jamun_50:
(Start: 53 @33442 has 1 MA's), (Start: 57 @33451 has 30 MA's), (Start: 89 @33484 has 5 MA's), (116, 33616), (129, 33655), (143, 33703), (149, 33727), (174, 33781),

Gene: Janeemi_30 Start: 24658, Stop: 25026, Start Num: 79
Candidate Starts for Janeemi_30:
(Start: 79 @24658 has 22 MA's), (Start: 89 @24682 has 5 MA's), (123, 24835), (135, 24868),

Gene: Jankie_28 Start: 21876, Stop: 22235, Start Num: 75
Candidate Starts for Jankie_28:
(10, 21531), (25, 21711), (75, 21876), (Start: 89 @21906 has 5 MA's), (115, 22035), (146, 22134), (160, 22161),

Gene: JasmineDragon_33 Start: 23709, Stop: 24083, Start Num: 79
Candidate Starts for JasmineDragon_33:
(Start: 79 @23709 has 22 MA's), (Start: 89 @23733 has 5 MA's), (104, 23826), (128, 23898), (141, 23946), (173, 24021),

Gene: JayCookie_92 Start: 61198, Stop: 61560, Start Num: 46
Candidate Starts for JayCookie_92:
(Start: 46 @61198 has 16 MA's), (Start: 67 @61243 has 1 MA's), (86, 61246), (Start: 89 @61267 has 5 MA's), (101, 61342), (112, 61372), (116, 61390), (132, 61435), (148, 61495), (152, 61501),

Gene: JeTaime_110 Start: 63384, Stop: 63716, Start Num: 60
Candidate Starts for JeTaime_110:
(Start: 60 @63384 has 18 MA's), (Start: 72 @63414 has 38 MA's), (108, 63558), (122, 63606), (132, 63630), (155, 63702),

Gene: Jellybones_56 Start: 49403, Stop: 49041, Start Num: 74
Candidate Starts for Jellybones_56:
(Start: 74 @49403 has 29 MA's), (Start: 80 @49394 has 9 MA's), (Start: 89 @49364 has 5 MA's), (101, 49289), (124, 49199), (133, 49172), (141, 49139), (149, 49109), (155, 49103),

Gene: Jerole_54 Start: 32812, Stop: 33138, Start Num: 89
Candidate Starts for Jerole_54:
(Start: 53 @32761 has 1 MA's), (Start: 57 @32770 has 30 MA's), (Start: 89 @32812 has 5 MA's), (113, 32929), (116, 32938), (129, 32977), (149, 33049), (174, 33103),

Gene: Joemato_27 Start: 22364, Stop: 22729, Start Num: 29
Candidate Starts for Joemato_27:
(Start: 29 @22364 has 31 MA's), (Start: 89 @22388 has 5 MA's), (134, 22571),

Gene: John316_57 Start: 49466, Stop: 49104, Start Num: 74
Candidate Starts for John316_57:
(Start: 74 @49466 has 29 MA's), (Start: 80 @49457 has 9 MA's), (Start: 89 @49427 has 5 MA's), (101, 49352), (124, 49262), (133, 49235), (141, 49202), (149, 49172), (169, 49136),

Gene: JohnDoe_27 Start: 22359, Stop: 22724, Start Num: 29
Candidate Starts for JohnDoe_27:
(Start: 29 @22359 has 31 MA's), (Start: 89 @22383 has 5 MA's), (134, 22566),

Gene: JohnThicc_35 Start: 23809, Stop: 24183, Start Num: 79
Candidate Starts for JohnThicc_35:
(Start: 79 @23809 has 22 MA's), (Start: 89 @23833 has 5 MA's), (101, 23908), (104, 23926), (128, 23998), (136, 24022), (173, 24121),

Gene: Jormungandr_51 Start: 48474, Stop: 48109, Start Num: 72
Candidate Starts for Jormungandr_51:
(Start: 72 @48474 has 38 MA's), (Start: 89 @48432 has 5 MA's), (106, 48327), (133, 48240), (140, 48210), (141, 48207), (149, 48177),

Gene: Jstan_31 Start: 24469, Stop: 24813, Start Num: 89
Candidate Starts for Jstan_31:
(11, 24280), (Start: 29 @24445 has 31 MA's), (Start: 89 @24469 has 5 MA's),

Gene: JuneStar_28 Start: 24589, Stop: 24957, Start Num: 79
Candidate Starts for JuneStar_28:
(11, 24424), (Start: 79 @24589 has 22 MA's), (Start: 89 @24613 has 5 MA's),

Gene: Juno112_53 Start: 33147, Stop: 33518, Start Num: 58
Candidate Starts for Juno112_53:
(Start: 47 @33123 has 2 MA's), (Start: 58 @33147 has 12 MA's), (88, 33174), (Start: 89 @33186 has 5 MA's), (97, 33237), (113, 33306), (116, 33315), (125, 33339), (129, 33354), (149, 33426), (174, 33480),

Gene: KBurrousTX_90 Start: 62135, Stop: 62494, Start Num: 46
Candidate Starts for KBurrousTX_90:
(Start: 46 @62135 has 16 MA's), (Start: 67 @62180 has 1 MA's), (86, 62183), (Start: 89 @62204 has 5 MA's), (101, 62279), (112, 62309), (116, 62327), (132, 62372), (148, 62432),

Gene: KHumphrey_54 Start: 33011, Stop: 33406, Start Num: 47

Candidate Starts for KHumphrey_54:
(Start: 47 @33011 has 2 MA's), (Start: 58 @33035 has 12 MA's), (88, 33062), (Start: 89 @33074 has 5 MA's), (97, 33125), (113, 33194), (116, 33203), (125, 33227), (129, 33242), (149, 33314), (174, 33368),

Gene: Kabreeze_92 Start: 60722, Stop: 61084, Start Num: 46
Candidate Starts for Kabreeze_92:
(Start: 46 @60722 has 16 MA's), (Start: 67 @60767 has 1 MA's), (86, 60770), (Start: 89 @60791 has 5 MA's), (101, 60866), (112, 60896), (116, 60914), (132, 60959), (148, 61019), (152, 61025),

Gene: Kanye_108 Start: 63493, Stop: 63867, Start Num: 55
Candidate Starts for Kanye_108:
(Start: 38 @63439 has 1 MA's), (Start: 55 @63493 has 106 MA's), (Start: 89 @63574 has 5 MA's), (90, 63583), (94, 63622), (99, 63643), (124, 63736), (130, 63754), (132, 63757), (145, 63805), (168, 63856),

Gene: Kaseim_51 Start: 47916, Stop: 47551, Start Num: 72
Candidate Starts for Kaseim_51:
(Start: 72 @47916 has 38 MA's), (Start: 89 @47874 has 5 MA's), (106, 47769), (133, 47682), (140, 47652), (141, 47649), (149, 47619),

Gene: Katyusha_48 Start: 48592, Stop: 48224, Start Num: 85
Candidate Starts for Katyusha_48:
(Start: 85 @48592 has 14 MA's), (Start: 89 @48568 has 5 MA's), (133, 48361), (155, 48292), (181, 48235),

Gene: Kaylissa_27 Start: 22354, Stop: 22719, Start Num: 29
Candidate Starts for Kaylissa_27:
(Start: 29 @22354 has 31 MA's), (Start: 89 @22378 has 5 MA's), (134, 22561),

Gene: KeAlii_28 Start: 22518, Stop: 22889, Start Num: 79
Candidate Starts for KeAlii_28:
(11, 22341), (Start: 79 @22518 has 22 MA's), (Start: 89 @22542 has 5 MA's),

Gene: Kelzog_56 Start: 48315, Stop: 47953, Start Num: 74
Candidate Starts for Kelzog_56:
(Start: 74 @48315 has 29 MA's), (Start: 80 @48306 has 9 MA's), (Start: 89 @48276 has 5 MA's), (101, 48201), (124, 48111), (133, 48084), (141, 48051), (149, 48021), (169, 47985),

Gene: Kepler_54 Start: 32767, Stop: 33135, Start Num: 57
Candidate Starts for Kepler_54:
(Start: 53 @32758 has 1 MA's), (Start: 57 @32767 has 30 MA's), (Start: 89 @32809 has 5 MA's), (113, 32926), (116, 32935), (129, 32974), (149, 33046), (174, 33100),

Gene: Kimchi_116 Start: 63899, Stop: 64231, Start Num: 60
Candidate Starts for Kimchi_116:
(Start: 60 @63899 has 18 MA's), (Start: 72 @63929 has 38 MA's), (108, 64073), (122, 64121), (132, 64145), (155, 64217),

Gene: Kostya_111 Start: 63062, Stop: 63436, Start Num: 55
Candidate Starts for Kostya_111:
(Start: 38 @63008 has 1 MA's), (Start: 55 @63062 has 106 MA's), (83, 63116), (Start: 89 @63143 has 5 MA's), (90, 63152), (94, 63191), (99, 63212), (124, 63305), (130, 63323), (132, 63326), (145, 63374),

(146, 63380), (149, 63392),

Gene: Kuleana_54 Start: 32362, Stop: 32733, Start Num: 57
Candidate Starts for Kuleana_54:
(Start: 53 @32353 has 1 MA's), (Start: 57 @32362 has 30 MA's), (64, 32383), (Start: 89 @32404 has 5 MA's), (101, 32479), (113, 32521), (116, 32530), (129, 32569), (132, 32575), (149, 32641), (153, 32647),

Gene: Kvothe_48 Start: 48491, Stop: 48123, Start Num: 85
Candidate Starts for Kvothe_48:
(Start: 85 @48491 has 14 MA's), (Start: 89 @48467 has 5 MA's), (133, 48260), (155, 48191), (181, 48134),

Gene: LadyAstra_34 Start: 23749, Stop: 24123, Start Num: 79
Candidate Starts for LadyAstra_34:
(Start: 79 @23749 has 22 MA's), (Start: 89 @23773 has 5 MA's), (101, 23848), (104, 23866), (128, 23938), (136, 23962), (173, 24061),

Gene: Lahirium_51 Start: 48996, Stop: 48631, Start Num: 72
Candidate Starts for Lahirium_51:
(Start: 72 @48996 has 38 MA's), (Start: 89 @48954 has 5 MA's), (106, 48849), (133, 48762), (140, 48732), (141, 48729), (149, 48699),

Gene: Laphuphu24k_53 Start: 33107, Stop: 33502, Start Num: 47
Candidate Starts for Laphuphu24k_53:
(Start: 47 @33107 has 2 MA's), (Start: 58 @33131 has 12 MA's), (88, 33158), (Start: 89 @33170 has 5 MA's), (97, 33221), (113, 33290), (116, 33299), (125, 33323), (129, 33338), (149, 33410), (174, 33464),

Gene: Lego_27 Start: 22308, Stop: 22673, Start Num: 29
Candidate Starts for Lego_27:
(Start: 29 @22308 has 31 MA's), (Start: 89 @22332 has 5 MA's), (134, 22515),

Gene: Leona_53 Start: 33226, Stop: 33597, Start Num: 58
Candidate Starts for Leona_53:
(Start: 47 @33202 has 2 MA's), (Start: 58 @33226 has 12 MA's), (88, 33253), (Start: 89 @33265 has 5 MA's), (97, 33316), (113, 33385), (116, 33394), (125, 33418), (129, 33433), (149, 33505), (174, 33559),

Gene: Lidong_51 Start: 48731, Stop: 48366, Start Num: 72
Candidate Starts for Lidong_51:
(Start: 72 @48731 has 38 MA's), (Start: 89 @48689 has 5 MA's), (106, 48584), (133, 48497), (140, 48467), (141, 48464), (149, 48434),

Gene: Liebe_28 Start: 23243, Stop: 23641, Start Num: 79
Candidate Starts for Liebe_28:
(Start: 79 @23243 has 22 MA's), (Start: 89 @23267 has 5 MA's), (93, 23303), (128, 23432), (142, 23480), (156, 23513), (191, 23630),

Gene: Lilac_112 Start: 64186, Stop: 64560, Start Num: 55
Candidate Starts for Lilac_112:
(Start: 38 @64132 has 1 MA's), (Start: 55 @64186 has 106 MA's), (83, 64240), (Start: 89 @64267 has 5 MA's), (90, 64276), (94, 64315), (99, 64336), (124, 64429), (130, 64447), (132, 64450), (145, 64498),

(168, 64549),

Gene: Lilizi_111 Start: 63472, Stop: 63846, Start Num: 55
Candidate Starts for Lilizi_111:
(Start: 38 @63418 has 1 MA's), (Start: 55 @63472 has 106 MA's), (Start: 89 @63553 has 5 MA's), (90, 63562), (94, 63601), (99, 63622), (124, 63715), (130, 63733), (132, 63736), (145, 63784), (168, 63835),

Gene: Lilpickle_110 Start: 62884, Stop: 63258, Start Num: 55
Candidate Starts for Lilpickle_110:
(Start: 38 @62830 has 1 MA's), (Start: 55 @62884 has 106 MA's), (83, 62938), (Start: 89 @62965 has 5 MA's), (90, 62974), (94, 63013), (99, 63034), (124, 63127), (130, 63145), (132, 63148), (145, 63196), (168, 63247),

Gene: Linetti_54 Start: 49072, Stop: 48710, Start Num: 74
Candidate Starts for Linetti_54:
(56, 49120), (Start: 74 @49072 has 29 MA's), (Start: 76 @49069 has 4 MA's), (Start: 89 @49033 has 5 MA's), (101, 48958), (124, 48868), (133, 48841), (141, 48808), (149, 48778), (155, 48772), (169, 48742),

Gene: Linus_92 Start: 61170, Stop: 61532, Start Num: 46
Candidate Starts for Linus_92:
(Start: 46 @61170 has 16 MA's), (Start: 67 @61215 has 1 MA's), (86, 61218), (Start: 89 @61239 has 5 MA's), (101, 61314), (112, 61344), (116, 61362), (132, 61407), (148, 61467), (152, 61473),

Gene: LittleE_170 Start: 88113, Stop: 88469, Start Num: 72
Candidate Starts for LittleE_170:
(Start: 72 @88113 has 38 MA's), (Start: 89 @88155 has 5 MA's), (101, 88230), (122, 88311), (149, 88404), (155, 88410), (157, 88413), (167, 88434), (176, 88458),

Gene: LittleTokyo_51 Start: 31575, Stop: 31949, Start Num: 57
Candidate Starts for LittleTokyo_51:
(37, 31518), (Start: 57 @31575 has 30 MA's), (Start: 89 @31614 has 5 MA's), (116, 31743), (124, 31764), (149, 31854), (159, 31869), (166, 31887), (174, 31908),

Gene: Lizalica_27 Start: 22357, Stop: 22722, Start Num: 29
Candidate Starts for Lizalica_27:
(11, 22192), (Start: 29 @22357 has 31 MA's), (Start: 89 @22381 has 5 MA's), (134, 22564),

Gene: Lizzo_54 Start: 48297, Stop: 47935, Start Num: 74
Candidate Starts for Lizzo_54:
(Start: 74 @48297 has 29 MA's), (Start: 80 @48288 has 9 MA's), (Start: 89 @48258 has 5 MA's), (101, 48183), (124, 48093), (133, 48066), (141, 48033), (149, 48003), (169, 47967),

Gene: London_29 Start: 24459, Stop: 24827, Start Num: 79
Candidate Starts for London_29:
(7, 24144), (8, 24156), (Start: 79 @24459 has 22 MA's), (87, 24465), (Start: 89 @24483 has 5 MA's),

Gene: Lucky2013_159 Start: 83586, Stop: 83966, Start Num: 72
Candidate Starts for Lucky2013_159:
(Start: 72 @83586 has 38 MA's), (Start: 89 @83628 has 5 MA's), (101, 83703), (122, 83784), (149, 83877), (155, 83883), (157, 83886), (167, 83907), (176, 83931), (186, 83955),

Gene: Luker_52 Start: 48949, Stop: 48584, Start Num: 72
Candidate Starts for Luker_52:
(Start: 72 @48949 has 38 MA's), (Start: 89 @48907 has 5 MA's), (106, 48802), (133, 48715), (140, 48685), (141, 48682), (149, 48652),

Gene: Lunar_54 Start: 32679, Stop: 33047, Start Num: 57
Candidate Starts for Lunar_54:
(Start: 53 @32670 has 1 MA's), (Start: 57 @32679 has 30 MA's), (Start: 89 @32721 has 5 MA's), (113, 32838), (116, 32847), (129, 32886), (149, 32958), (174, 33012),

Gene: Lymara_89 Start: 59643, Stop: 60005, Start Num: 46
Candidate Starts for Lymara_89:
(Start: 46 @59643 has 16 MA's), (Start: 67 @59688 has 1 MA's), (86, 59691), (Start: 89 @59712 has 5 MA's), (101, 59787), (112, 59817), (116, 59835), (132, 59880), (148, 59940),

Gene: MISSy_112 Start: 64169, Stop: 64543, Start Num: 55
Candidate Starts for MISSy_112:
(Start: 38 @64115 has 1 MA's), (Start: 55 @64169 has 106 MA's), (Start: 89 @64250 has 5 MA's), (90, 64259), (94, 64298), (99, 64319), (124, 64412), (130, 64430), (132, 64433), (145, 64481), (168, 64532),

Gene: MPhalcon_112 Start: 63587, Stop: 63961, Start Num: 55
Candidate Starts for MPhalcon_112:
(Start: 38 @63533 has 1 MA's), (Start: 55 @63587 has 106 MA's), (Start: 89 @63668 has 5 MA's), (90, 63677), (94, 63716), (99, 63737), (124, 63830), (130, 63848), (132, 63851), (145, 63899), (168, 63950),

Gene: MaGuCo_26 Start: 22035, Stop: 22442, Start Num: 79
Candidate Starts for MaGuCo_26:
(3, 21519), (13, 21711), (35, 21909), (39, 21936), (Start: 79 @22035 has 22 MA's), (Start: 89 @22059 has 5 MA's), (128, 22224), (156, 22305), (191, 22431),

Gene: MadamMonkfish_110 Start: 62894, Stop: 63268, Start Num: 55
Candidate Starts for MadamMonkfish_110:
(Start: 38 @62840 has 1 MA's), (Start: 55 @62894 has 106 MA's), (83, 62948), (Start: 89 @62975 has 5 MA's), (90, 62984), (94, 63023), (99, 63044), (124, 63137), (130, 63155), (132, 63158), (145, 63206), (168, 63257),

Gene: Manda_112 Start: 63624, Stop: 63998, Start Num: 55
Candidate Starts for Manda_112:
(Start: 38 @63570 has 1 MA's), (Start: 55 @63624 has 106 MA's), (83, 63678), (Start: 89 @63705 has 5 MA's), (90, 63714), (94, 63753), (99, 63774), (124, 63867), (130, 63885), (132, 63888), (145, 63936), (146, 63942), (168, 63987),

Gene: Marshmallow_110 Start: 64096, Stop: 64428, Start Num: 60
Candidate Starts for Marshmallow_110:
(Start: 60 @64096 has 18 MA's), (Start: 72 @64126 has 38 MA's), (108, 64270), (122, 64318), (132, 64342), (155, 64414),

Gene: MaryV_88 Start: 53723, Stop: 54085, Start Num: 80
Candidate Starts for MaryV_88:
(Start: 76 @53717 has 4 MA's), (Start: 77 @53720 has 1 MA's), (Start: 80 @53723 has 9 MA's), (Start: 85 @53729 has 14 MA's), (Start: 89 @53753 has 5 MA's), (94, 53795), (98, 53807), (109, 53870),

(110, 53876), (120, 53915), (127, 53930), (129, 53939), (130, 53942), (132, 53945), (141, 53981), (145, 53993), (147, 54005), (149, 54011),

Gene: Maureen_28 Start: 23243, Stop: 23641, Start Num: 79
Candidate Starts for Maureen_28:
(Start: 79 @23243 has 22 MA's), (Start: 89 @23267 has 5 MA's), (93, 23303), (128, 23432), (142, 23480), (156, 23513), (191, 23630),

Gene: Maxxinista_113 Start: 63371, Stop: 63745, Start Num: 55
Candidate Starts for Maxxinista_113:
(Start: 38 @63317 has 1 MA's), (Start: 55 @63371 has 106 MA's), (83, 63425), (Start: 89 @63452 has 5 MA's), (90, 63461), (94, 63500), (99, 63521), (124, 63614), (130, 63632), (132, 63635), (145, 63683), (168, 63734),

Gene: Melons_54 Start: 32493, Stop: 32861, Start Num: 57
Candidate Starts for Melons_54:
(Start: 53 @32484 has 1 MA's), (Start: 57 @32493 has 30 MA's), (Start: 89 @32535 has 5 MA's), (113, 32652), (116, 32661), (129, 32700), (149, 32772), (174, 32826),

Gene: MiaZeal_166 Start: 84733, Stop: 85113, Start Num: 72
Candidate Starts for MiaZeal_166:
(Start: 72 @84733 has 38 MA's), (Start: 89 @84775 has 5 MA's), (101, 84850), (122, 84931), (149, 85024), (155, 85030), (157, 85033), (167, 85054), (176, 85078), (186, 85102),

Gene: Mindy_110 Start: 62903, Stop: 63277, Start Num: 55
Candidate Starts for Mindy_110:
(Start: 38 @62849 has 1 MA's), (Start: 55 @62903 has 106 MA's), (83, 62957), (Start: 89 @62984 has 5 MA's), (90, 62993), (94, 63032), (99, 63053), (124, 63146), (130, 63164), (132, 63167), (145, 63215), (146, 63221), (149, 63233),

Gene: MiniMommy_32 Start: 23710, Stop: 24084, Start Num: 79
Candidate Starts for MiniMommy_32:
(Start: 79 @23710 has 22 MA's), (Start: 89 @23734 has 5 MA's), (104, 23827), (128, 23899), (141, 23947), (173, 24022),

Gene: Miniwave_106 Start: 63080, Stop: 63454, Start Num: 55
Candidate Starts for Miniwave_106:
(Start: 38 @63026 has 1 MA's), (Start: 55 @63080 has 106 MA's), (Start: 89 @63161 has 5 MA's), (90, 63170), (94, 63209), (99, 63230), (124, 63323), (130, 63341), (132, 63344), (145, 63392), (168, 63443),

Gene: Minos_52 Start: 48473, Stop: 48108, Start Num: 72
Candidate Starts for Minos_52:
(Start: 72 @48473 has 38 MA's), (Start: 89 @48431 has 5 MA's), (106, 48326), (133, 48239), (140, 48209), (141, 48206), (149, 48176),

Gene: Misfit_112 Start: 64683, Stop: 65057, Start Num: 55
Candidate Starts for Misfit_112:
(Start: 38 @64629 has 1 MA's), (Start: 55 @64683 has 106 MA's), (Start: 89 @64764 has 5 MA's), (90, 64773), (94, 64812), (99, 64833), (124, 64926), (130, 64944), (132, 64947), (145, 64995), (168, 65046),

Gene: MissSwiss_26 Start: 20779, Stop: 21147, Start Num: 29

Candidate Starts for MissSwiss_26:
(Start: 29 @20779 has 31 MA's), (Start: 89 @20803 has 5 MA's), (135, 20989), (142, 21016), (154, 21046),

Gene: Moldemort_113 Start: 63352, Stop: 63726, Start Num: 55
Candidate Starts for Moldemort_113:
(Start: 38 @63298 has 1 MA's), (Start: 55 @63352 has 106 MA's), (83, 63406), (Start: 89 @63433 has 5 MA's), (90, 63442), (94, 63481), (99, 63502), (124, 63595), (130, 63613), (132, 63616), (145, 63664), (168, 63715),

Gene: MollyToe_105 Start: 61460, Stop: 61834, Start Num: 55
Candidate Starts for MollyToe_105:
(Start: 38 @61406 has 1 MA's), (Start: 55 @61460 has 106 MA's), (83, 61514), (Start: 89 @61541 has 5 MA's), (90, 61550), (94, 61589), (99, 61610), (124, 61703), (130, 61721), (132, 61724), (145, 61772), (168, 61823),

Gene: Monty_53 Start: 47447, Stop: 47085, Start Num: 74
Candidate Starts for Monty_53:
(Start: 74 @47447 has 29 MA's), (Start: 80 @47438 has 9 MA's), (Start: 89 @47408 has 5 MA's), (101, 47333), (124, 47243), (133, 47216), (141, 47183), (149, 47153), (169, 47117),

Gene: Mordred_92 Start: 60806, Stop: 61123, Start Num: 67
Candidate Starts for Mordred_92:
(Start: 46 @60761 has 16 MA's), (Start: 67 @60806 has 1 MA's), (86, 60809), (Start: 89 @60830 has 5 MA's), (101, 60905), (112, 60935), (116, 60953), (132, 60998), (148, 61058), (152, 61064),

Gene: Mosby_108 Start: 63047, Stop: 63421, Start Num: 55
Candidate Starts for Mosby_108:
(Start: 38 @62993 has 1 MA's), (Start: 55 @63047 has 106 MA's), (Start: 89 @63128 has 5 MA's), (90, 63137), (94, 63176), (99, 63197), (124, 63290), (130, 63308), (132, 63311), (145, 63359), (168, 63410),

Gene: MoyaNatalis_91 Start: 60689, Stop: 61006, Start Num: 67
Candidate Starts for MoyaNatalis_91:
(Start: 46 @60644 has 16 MA's), (Start: 67 @60689 has 1 MA's), (86, 60692), (Start: 89 @60713 has 5 MA's), (101, 60788), (112, 60818), (116, 60836), (132, 60881), (148, 60941), (152, 60947),

Gene: MrWormie_51 Start: 47634, Stop: 47269, Start Num: 72
Candidate Starts for MrWormie_51:
(Start: 72 @47634 has 38 MA's), (Start: 89 @47592 has 5 MA's), (106, 47487), (133, 47400), (140, 47370), (141, 47367), (149, 47337),

Gene: Msay19_58 Start: 49817, Stop: 49455, Start Num: 74
Candidate Starts for Msay19_58:
(Start: 74 @49817 has 29 MA's), (Start: 80 @49808 has 9 MA's), (Start: 89 @49778 has 5 MA's), (101, 49703), (124, 49613), (130, 49592), (133, 49586), (141, 49553), (149, 49523), (155, 49517),

Gene: Mudpuppy_27 Start: 22359, Stop: 22724, Start Num: 29
Candidate Starts for Mudpuppy_27:
(11, 22197), (Start: 29 @22359 has 31 MA's), (Start: 89 @22383 has 5 MA's), (134, 22566),

Gene: Mulch_65 Start: 42205, Stop: 42591, Start Num: 78
Candidate Starts for Mulch_65:

(22, 41965), (24, 42013), (28, 42034), (37, 42088), (54, 42148), (69, 42193), (Start: 78 @42205 has 14 MA's), (Start: 89 @42235 has 5 MA's), (101, 42310), (132, 42412), (149, 42478),

Gene: Murica_115 Start: 65386, Stop: 65760, Start Num: 55
Candidate Starts for Murica_115:
(Start: 38 @65332 has 1 MA's), (Start: 55 @65386 has 106 MA's), (Start: 89 @65467 has 5 MA's), (90, 65476), (94, 65515), (99, 65536), (124, 65629), (130, 65647), (132, 65650), (145, 65698), (168, 65749),

Gene: Murphy_110 Start: 63744, Stop: 64118, Start Num: 55
Candidate Starts for Murphy_110:
(Start: 38 @63690 has 1 MA's), (Start: 55 @63744 has 106 MA's), (83, 63798), (Start: 89 @63825 has 5 MA's), (90, 63834), (94, 63873), (99, 63894), (124, 63987), (130, 64005), (132, 64008), (145, 64056), (168, 64107),

Gene: Myrale_111 Start: 63841, Stop: 64215, Start Num: 55
Candidate Starts for Myrale_111:
(Start: 55 @63841 has 106 MA's), (83, 63895), (Start: 89 @63922 has 5 MA's), (90, 63931), (94, 63970), (99, 63991), (124, 64084), (130, 64102), (132, 64105), (145, 64153), (146, 64159), (149, 64171),

Gene: Nadeem_65 Start: 42193, Stop: 42579, Start Num: 78
Candidate Starts for Nadeem_65:
(22, 41953), (24, 42001), (28, 42022), (37, 42076), (54, 42136), (69, 42181), (Start: 78 @42193 has 14 MA's), (Start: 89 @42223 has 5 MA's), (101, 42298), (132, 42400), (149, 42466),

Gene: Nala_113 Start: 64096, Stop: 64470, Start Num: 55
Candidate Starts for Nala_113:
(Start: 38 @64042 has 1 MA's), (Start: 55 @64096 has 106 MA's), (83, 64150), (Start: 89 @64177 has 5 MA's), (90, 64186), (94, 64225), (99, 64246), (124, 64339), (130, 64357), (132, 64360), (145, 64408), (168, 64459),

Gene: NancyRae_64 Start: 42143, Stop: 42529, Start Num: 78
Candidate Starts for NancyRae_64:
(24, 41951), (28, 41972), (37, 42026), (54, 42086), (69, 42131), (Start: 78 @42143 has 14 MA's), (Start: 89 @42173 has 5 MA's), (101, 42248), (132, 42350), (149, 42416),

Gene: Nebkiss_126 Start: 68242, Stop: 68529, Start Num: 85
Candidate Starts for Nebkiss_126:
(Start: 80 @68236 has 9 MA's), (Start: 85 @68242 has 14 MA's), (Start: 89 @68260 has 5 MA's), (101, 68335), (118, 68407), (122, 68416), (143, 68482), (147, 68500), (149, 68506), (153, 68512),

Gene: Nekros_161 Start: 86575, Stop: 86913, Start Num: 89
Candidate Starts for Nekros_161:
(Start: 72 @86533 has 38 MA's), (Start: 89 @86575 has 5 MA's), (101, 86650), (122, 86731), (149, 86824), (155, 86830), (157, 86833), (176, 86878), (186, 86902),

Gene: NelitzaMV_108 Start: 62069, Stop: 62443, Start Num: 55
Candidate Starts for NelitzaMV_108:
(Start: 38 @62015 has 1 MA's), (Start: 55 @62069 has 106 MA's), (83, 62123), (Start: 89 @62150 has 5 MA's), (90, 62159), (94, 62198), (99, 62219), (124, 62312), (130, 62330), (132, 62333), (145, 62381), (168, 62432),

Gene: Neoevie_51 Start: 48735, Stop: 48370, Start Num: 72
Candidate Starts for Neoevie_51:
(Start: 72 @48735 has 38 MA's), (Start: 89 @48693 has 5 MA's), (106, 48588), (133, 48501), (140, 48471), (141, 48468), (149, 48438),

Gene: Newt_52 Start: 48963, Stop: 48598, Start Num: 72
Candidate Starts for Newt_52:
(Start: 72 @48963 has 38 MA's), (Start: 89 @48921 has 5 MA's), (106, 48816), (133, 48729), (140, 48699), (141, 48696), (149, 48666),

Gene: Niagara_48 Start: 48582, Stop: 48214, Start Num: 85
Candidate Starts for Niagara_48:
(Start: 85 @48582 has 14 MA's), (Start: 89 @48558 has 5 MA's), (133, 48351), (155, 48282), (181, 48225),

Gene: Nibley_156 Start: 83694, Stop: 84074, Start Num: 72
Candidate Starts for Nibley_156:
(Start: 72 @83694 has 38 MA's), (Start: 89 @83736 has 5 MA's), (122, 83892), (149, 83985), (155, 83991), (157, 83994), (186, 84063),

Gene: Nimi13_51 Start: 48482, Stop: 48117, Start Num: 72
Candidate Starts for Nimi13_51:
(Start: 72 @48482 has 38 MA's), (Start: 89 @48440 has 5 MA's), (106, 48335), (133, 48248), (140, 48218), (141, 48215), (149, 48185),

Gene: Nimrod_112 Start: 64244, Stop: 64576, Start Num: 60
Candidate Starts for Nimrod_112:
(Start: 60 @64244 has 18 MA's), (Start: 72 @64274 has 38 MA's), (108, 64418), (122, 64466), (132, 64490), (155, 64562),

Gene: Niobe_29 Start: 24445, Stop: 24813, Start Num: 29
Candidate Starts for Niobe_29:
(11, 24280), (Start: 29 @24445 has 31 MA's), (Start: 89 @24469 has 5 MA's),

Gene: Nitro_28 Start: 23769, Stop: 24137, Start Num: 29
Candidate Starts for Nitro_28:
(11, 23607), (Start: 29 @23769 has 31 MA's), (Start: 89 @23793 has 5 MA's), (97, 23844), (134, 23976),

Gene: NoSleep_111 Start: 62904, Stop: 63278, Start Num: 55
Candidate Starts for NoSleep_111:
(Start: 38 @62850 has 1 MA's), (Start: 55 @62904 has 106 MA's), (83, 62958), (Start: 89 @62985 has 5 MA's), (90, 62994), (94, 63033), (99, 63054), (124, 63147), (130, 63165), (132, 63168), (145, 63216), (168, 63267),

Gene: NonchalantPear_109 Start: 62337, Stop: 62711, Start Num: 55
Candidate Starts for NonchalantPear_109:
(Start: 38 @62283 has 1 MA's), (Start: 55 @62337 has 106 MA's), (Start: 89 @62418 has 5 MA's), (90, 62427), (94, 62466), (99, 62487), (124, 62580), (130, 62598), (132, 62601), (145, 62649), (168, 62700),

Gene: ObiToo_30 Start: 22889, Stop: 23257, Start Num: 79
Candidate Starts for ObiToo_30:

(8, 22481), (Start: 79 @22889 has 22 MA's), (Start: 89 @22913 has 5 MA's), (134, 23096), (135, 23099),

Gene: Oppalora_53 Start: 33121, Stop: 33516, Start Num: 47
Candidate Starts for Oppalora_53:
(Start: 47 @33121 has 2 MA's), (Start: 58 @33145 has 12 MA's), (88, 33172), (Start: 89 @33184 has 5 MA's), (97, 33235), (113, 33304), (116, 33313), (125, 33337), (129, 33352), (149, 33424), (174, 33478),

Gene: Optimus_161 Start: 87411, Stop: 87791, Start Num: 72
Candidate Starts for Optimus_161:
(Start: 72 @87411 has 38 MA's), (Start: 89 @87453 has 5 MA's), (101, 87528), (122, 87609), (149, 87702), (155, 87708), (157, 87711), (186, 87780),

Gene: Orcanus_52 Start: 34039, Stop: 34413, Start Num: 57
Candidate Starts for Orcanus_52:
(Start: 53 @34030 has 1 MA's), (Start: 57 @34039 has 30 MA's), (63, 34057), (Start: 89 @34078 has 5 MA's), (101, 34153), (116, 34210), (129, 34249), (140, 34288), (174, 34375),

Gene: Origami_34 Start: 23749, Stop: 24123, Start Num: 79
Candidate Starts for Origami_34:
(Start: 79 @23749 has 22 MA's), (Start: 89 @23773 has 5 MA's), (101, 23848), (104, 23866), (128, 23938), (136, 23962), (173, 24061),

Gene: OrionPax_109 Start: 62977, Stop: 63351, Start Num: 55
Candidate Starts for OrionPax_109:
(Start: 38 @62923 has 1 MA's), (Start: 55 @62977 has 106 MA's), (83, 63031), (Start: 89 @63058 has 5 MA's), (90, 63067), (94, 63106), (99, 63127), (124, 63220), (130, 63238), (132, 63241), (145, 63289), (168, 63340),

Gene: OtsoOtso_54 Start: 32500, Stop: 32868, Start Num: 57
Candidate Starts for OtsoOtso_54:
(Start: 53 @32491 has 1 MA's), (Start: 57 @32500 has 30 MA's), (Start: 89 @32542 has 5 MA's), (113, 32659), (116, 32668), (129, 32707), (149, 32779), (174, 32833),

Gene: PaddyBaddy_110 Start: 63095, Stop: 63469, Start Num: 55
Candidate Starts for PaddyBaddy_110:
(Start: 38 @63041 has 1 MA's), (Start: 55 @63095 has 106 MA's), (83, 63149), (Start: 89 @63176 has 5 MA's), (90, 63185), (94, 63224), (99, 63245), (124, 63338), (130, 63356), (132, 63359), (145, 63407), (168, 63458),

Gene: Palpatine_112 Start: 64381, Stop: 64755, Start Num: 55
Candidate Starts for Palpatine_112:
(Start: 38 @64327 has 1 MA's), (Start: 55 @64381 has 106 MA's), (83, 64435), (Start: 89 @64462 has 5 MA's), (90, 64471), (94, 64510), (99, 64531), (124, 64624), (130, 64642), (132, 64645), (145, 64693), (168, 64744),

Gene: Paperbeatsrock_110 Start: 63758, Stop: 64132, Start Num: 55
Candidate Starts for Paperbeatsrock_110:
(Start: 38 @63704 has 1 MA's), (Start: 55 @63758 has 106 MA's), (Start: 89 @63839 has 5 MA's), (90, 63848), (94, 63887), (99, 63908), (124, 64001), (130, 64019), (132, 64022), (145, 64070), (168, 64121),

Gene: Parada_65 Start: 42205, Stop: 42591, Start Num: 78
Candidate Starts for Parada_65:
(22, 41965), (24, 42013), (28, 42034), (37, 42088), (54, 42148), (69, 42193), (Start: 78 @42205 has 14 MA's), (Start: 89 @42235 has 5 MA's), (101, 42310), (132, 42412), (149, 42478),

Gene: Pat3_108 Start: 62397, Stop: 62771, Start Num: 55
Candidate Starts for Pat3_108:
(Start: 55 @62397 has 106 MA's), (83, 62451), (Start: 89 @62478 has 5 MA's), (90, 62487), (94, 62526), (95, 62529), (99, 62547), (124, 62640), (130, 62658), (132, 62661), (145, 62709), (146, 62715), (149, 62727),

Gene: Pelletreau_62 Start: 34684, Stop: 35061, Start Num: 57
Candidate Starts for Pelletreau_62:
(26, 34564), (40, 34642), (Start: 57 @34684 has 30 MA's), (63, 34702), (Start: 89 @34723 has 5 MA's), (101, 34798), (116, 34855), (129, 34894), (140, 34933), (174, 35020),

Gene: Percival_30 Start: 24132, Stop: 24551, Start Num: 57
Candidate Starts for Percival_30:
(Start: 57 @24132 has 30 MA's), (Start: 89 @24219 has 5 MA's), (111, 24330), (121, 24360), (131, 24387), (135, 24396), (164, 24471),

Gene: Petra64142_115 Start: 64226, Stop: 64600, Start Num: 55
Candidate Starts for Petra64142_115:
(Start: 38 @64172 has 1 MA's), (Start: 55 @64226 has 106 MA's), (83, 64280), (Start: 89 @64307 has 5 MA's), (90, 64316), (94, 64355), (99, 64376), (124, 64469), (130, 64487), (132, 64490), (145, 64538), (146, 64544), (149, 64556), (168, 64589),

Gene: Phaja_109 Start: 62962, Stop: 63336, Start Num: 55
Candidate Starts for Phaja_109:
(Start: 38 @62908 has 1 MA's), (Start: 55 @62962 has 106 MA's), (83, 63016), (Start: 89 @63043 has 5 MA's), (90, 63052), (94, 63091), (99, 63112), (124, 63205), (130, 63223), (132, 63226), (145, 63274),

Gene: Pharsalus_108 Start: 63457, Stop: 63831, Start Num: 55
Candidate Starts for Pharsalus_108:
(Start: 38 @63403 has 1 MA's), (Start: 55 @63457 has 106 MA's), (Start: 89 @63538 has 5 MA's), (90, 63547), (94, 63586), (99, 63607), (124, 63700), (130, 63718), (132, 63721), (145, 63769), (168, 63820),

Gene: PhatBacter_114 Start: 64126, Stop: 64500, Start Num: 55
Candidate Starts for PhatBacter_114:
(Start: 38 @64072 has 1 MA's), (Start: 55 @64126 has 106 MA's), (83, 64180), (Start: 89 @64207 has 5 MA's), (90, 64216), (94, 64255), (99, 64276), (124, 64369), (130, 64387), (132, 64390), (145, 64438), (168, 64489),

Gene: Phaux_113 Start: 64686, Stop: 65060, Start Num: 55
Candidate Starts for Phaux_113:
(Start: 38 @64632 has 1 MA's), (Start: 55 @64686 has 106 MA's), (83, 64740), (Start: 89 @64767 has 5 MA's), (90, 64776), (94, 64815), (99, 64836), (124, 64929), (130, 64947), (132, 64950), (145, 64998), (168, 65049),

Gene: Philon9_50 Start: 49613, Stop: 49245, Start Num: 85
Candidate Starts for Philon9_50:

(Start: 85 @49613 has 14 MA's), (Start: 89 @49589 has 5 MA's), (101, 49514), (126, 49403), (133, 49382), (155, 49313), (181, 49256),

Gene: PhirstandPhine_61 Start: 32639, Stop: 33007, Start Num: 57
Candidate Starts for PhirstandPhine_61:
(Start: 53 @32630 has 1 MA's), (Start: 57 @32639 has 30 MA's), (Start: 89 @32681 has 5 MA's), (113, 32798), (116, 32807), (129, 32846), (149, 32918), (174, 32972),

Gene: Phives_30 Start: 24466, Stop: 24834, Start Num: 79
Candidate Starts for Phives_30:
(Start: 79 @24466 has 22 MA's), (Start: 89 @24490 has 5 MA's), (123, 24643), (178, 24784),

Gene: PhluffyCoco_54 Start: 33245, Stop: 33616, Start Num: 58
Candidate Starts for PhluffyCoco_54:
(Start: 47 @33221 has 2 MA's), (Start: 58 @33245 has 12 MA's), (88, 33272), (Start: 89 @33284 has 5 MA's), (97, 33335), (113, 33404), (116, 33413), (125, 33437), (129, 33452), (149, 33524), (174, 33578),

Gene: Phrux_107 Start: 62764, Stop: 63138, Start Num: 55
Candidate Starts for Phrux_107:
(Start: 38 @62710 has 1 MA's), (Start: 55 @62764 has 106 MA's), (Start: 89 @62845 has 5 MA's), (90, 62854), (94, 62893), (99, 62914), (124, 63007), (130, 63025), (132, 63028), (145, 63076), (168, 63127),

Gene: PierreThree_53 Start: 48715, Stop: 48356, Start Num: 76
Candidate Starts for PierreThree_53:
(Start: 74 @48718 has 29 MA's), (Start: 76 @48715 has 4 MA's), (Start: 89 @48679 has 5 MA's), (101, 48604), (124, 48514), (133, 48487), (141, 48454), (149, 48424), (155, 48418), (169, 48388),

Gene: Pimento_68 Start: 42324, Stop: 42710, Start Num: 78
Candidate Starts for Pimento_68:
(22, 42084), (24, 42132), (28, 42153), (37, 42207), (54, 42267), (69, 42312), (Start: 78 @42324 has 14 MA's), (Start: 89 @42354 has 5 MA's), (101, 42429), (132, 42531), (149, 42597),

Gene: Pineda_56 Start: 32808, Stop: 33176, Start Num: 57
Candidate Starts for Pineda_56:
(Start: 53 @32799 has 1 MA's), (Start: 57 @32808 has 30 MA's), (Start: 89 @32850 has 5 MA's), (113, 32967), (116, 32976), (129, 33015), (149, 33087), (174, 33141),

Gene: Pixelle_28 Start: 24216, Stop: 24584, Start Num: 29
Candidate Starts for Pixelle_28:
(Start: 29 @24216 has 31 MA's), (31, 24222), (88, 24228), (Start: 89 @24240 has 5 MA's), (134, 24423),

Gene: PokyPuppy_53 Start: 48755, Stop: 48393, Start Num: 74
Candidate Starts for PokyPuppy_53:
(Start: 74 @48755 has 29 MA's), (Start: 89 @48716 has 5 MA's), (101, 48641), (102, 48638), (124, 48551), (133, 48524), (141, 48491), (146, 48473), (149, 48461), (155, 48455),

Gene: Poland_58 Start: 49796, Stop: 49434, Start Num: 74
Candidate Starts for Poland_58:
(Start: 74 @49796 has 29 MA's), (Start: 80 @49787 has 9 MA's), (Start: 89 @49757 has 5 MA's), (101, 49682), (124, 49592), (130, 49571), (133, 49565), (141, 49532), (149, 49502), (155, 49496),

Gene: Policronamos_114 Start: 64390, Stop: 64764, Start Num: 55
Candidate Starts for Policronamos_114:
(Start: 38 @64336 has 1 MA's), (Start: 55 @64390 has 106 MA's), (Start: 89 @64471 has 5 MA's), (90, 64480), (94, 64519), (99, 64540), (124, 64633), (130, 64651), (132, 64654), (145, 64702), (168, 64753),

Gene: Polka_53 Start: 32500, Stop: 32868, Start Num: 57
Candidate Starts for Polka_53:
(Start: 53 @32491 has 1 MA's), (Start: 57 @32500 has 30 MA's), (Start: 89 @32542 has 5 MA's), (113, 32659), (116, 32668), (129, 32707), (149, 32779), (174, 32833),

Gene: Porcelain_163 Start: 84532, Stop: 84912, Start Num: 72
Candidate Starts for Porcelain_163:
(Start: 72 @84532 has 38 MA's), (Start: 89 @84574 has 5 MA's), (101, 84649), (122, 84730), (149, 84823), (155, 84829), (157, 84832), (167, 84853), (176, 84877), (186, 84901),

Gene: Porky_110 Start: 63022, Stop: 63354, Start Num: 60
Candidate Starts for Porky_110:
(Start: 60 @63022 has 18 MA's), (Start: 72 @63052 has 38 MA's), (108, 63196), (122, 63244), (132, 63268), (155, 63340),

Gene: Powerpuff_27 Start: 22359, Stop: 22724, Start Num: 29
Candidate Starts for Powerpuff_27:
(Start: 29 @22359 has 31 MA's), (Start: 89 @22383 has 5 MA's), (134, 22566),

Gene: PrincessTrina_93 Start: 60952, Stop: 61314, Start Num: 46
Candidate Starts for PrincessTrina_93:
(Start: 46 @60952 has 16 MA's), (Start: 67 @60997 has 1 MA's), (86, 61000), (Start: 89 @61021 has 5 MA's), (101, 61096), (112, 61126), (116, 61144), (132, 61189), (148, 61249), (152, 61255),

Gene: Ptowny_107 Start: 61798, Stop: 62172, Start Num: 55
Candidate Starts for Ptowny_107:
(Start: 38 @61744 has 1 MA's), (Start: 55 @61798 has 106 MA's), (Start: 89 @61879 has 5 MA's), (90, 61888), (94, 61927), (99, 61948), (124, 62041), (130, 62059), (132, 62062), (145, 62110), (168, 62161),

Gene: Pumpkin_112 Start: 63104, Stop: 63478, Start Num: 55
Candidate Starts for Pumpkin_112:
(Start: 38 @63050 has 1 MA's), (Start: 55 @63104 has 106 MA's), (Start: 89 @63185 has 5 MA's), (90, 63194), (94, 63233), (99, 63254), (124, 63347), (130, 63365), (132, 63368), (145, 63416), (168, 63467),

Gene: Pumpkins_28 Start: 23311, Stop: 23679, Start Num: 79
Candidate Starts for Pumpkins_28:
(5, 22846), (Start: 79 @23311 has 22 MA's), (Start: 89 @23335 has 5 MA's), (135, 23521),

Gene: Quallification_112 Start: 64172, Stop: 64546, Start Num: 55
Candidate Starts for Quallification_112:
(Start: 38 @64118 has 1 MA's), (Start: 55 @64172 has 106 MA's), (Start: 89 @64253 has 5 MA's), (90, 64262), (94, 64301), (99, 64322), (124, 64415), (130, 64433), (132, 64436), (145, 64484), (168, 64535),

Gene: Rakim_112 Start: 63174, Stop: 63548, Start Num: 55
Candidate Starts for Rakim_112:
(Start: 38 @63120 has 1 MA's), (Start: 55 @63174 has 106 MA's), (83, 63228), (Start: 89 @63255 has 5 MA's), (90, 63264), (94, 63303), (99, 63324), (124, 63417), (130, 63435), (132, 63438), (145, 63486), (146, 63492), (149, 63504),

Gene: Rattail_54 Start: 33307, Stop: 33702, Start Num: 47
Candidate Starts for Rattail_54:
(Start: 47 @33307 has 2 MA's), (Start: 58 @33331 has 12 MA's), (88, 33358), (Start: 89 @33370 has 5 MA's), (97, 33421), (113, 33490), (116, 33499), (125, 33523), (149, 33610), (174, 33664),

Gene: Rearden_162 Start: 84962, Stop: 85300, Start Num: 89
Candidate Starts for Rearden_162:
(Start: 72 @84920 has 38 MA's), (Start: 89 @84962 has 5 MA's), (101, 85037), (149, 85211), (155, 85217), (157, 85220), (186, 85289),

Gene: RedFox_54 Start: 33244, Stop: 33615, Start Num: 58
Candidate Starts for RedFox_54:
(Start: 47 @33220 has 2 MA's), (Start: 58 @33244 has 12 MA's), (88, 33271), (Start: 89 @33283 has 5 MA's), (97, 33334), (113, 33403), (116, 33412), (125, 33436), (129, 33451), (149, 33523), (174, 33577),

Gene: RedWattleHog_124 Start: 92547, Stop: 92891, Start Num: 82
Candidate Starts for RedWattleHog_124:
(Start: 82 @92547 has 2 MA's), (97, 92622), (106, 92676), (116, 92709), (129, 92748), (137, 92769), (149, 92820), (158, 92826), (169, 92850), (172, 92859),

Gene: Reedo_27 Start: 20942, Stop: 21310, Start Num: 29
Candidate Starts for Reedo_27:
(Start: 29 @20942 has 31 MA's), (Start: 89 @20966 has 5 MA's),

Gene: RemRem_55 Start: 47437, Stop: 47075, Start Num: 74
Candidate Starts for RemRem_55:
(Start: 74 @47437 has 29 MA's), (Start: 80 @47428 has 9 MA's), (Start: 89 @47398 has 5 MA's), (101, 47323), (124, 47233), (133, 47206), (141, 47173), (149, 47143), (169, 47107),

Gene: Renna12_53 Start: 33097, Stop: 33468, Start Num: 58
Candidate Starts for Renna12_53:
(Start: 47 @33073 has 2 MA's), (Start: 58 @33097 has 12 MA's), (88, 33124), (Start: 89 @33136 has 5 MA's), (113, 33256), (116, 33265), (125, 33289), (129, 33304), (149, 33376), (174, 33430),

Gene: Rimmer_109 Start: 63563, Stop: 63937, Start Num: 55
Candidate Starts for Rimmer_109:
(Start: 38 @63509 has 1 MA's), (Start: 55 @63563 has 106 MA's), (83, 63617), (Start: 89 @63644 has 5 MA's), (90, 63653), (94, 63692), (99, 63713), (124, 63806), (130, 63824), (132, 63827), (145, 63875), (168, 63926),

Gene: RiverMonster_110 Start: 63605, Stop: 64033, Start Num: 38
Candidate Starts for RiverMonster_110:
(Start: 38 @63605 has 1 MA's), (Start: 55 @63659 has 106 MA's), (Start: 89 @63740 has 5 MA's), (90, 63749), (94, 63788), (99, 63809), (124, 63902), (130, 63920), (132, 63923), (145, 63971), (168, 64022),

Gene: RosiePosie_92 Start: 60817, Stop: 61179, Start Num: 46
Candidate Starts for RosiePosie_92:
(Start: 46 @60817 has 16 MA's), (Start: 67 @60862 has 1 MA's), (86, 60865), (Start: 89 @60886 has 5 MA's), (101, 60961), (112, 60991), (116, 61009), (132, 61054), (148, 61114), (152, 61120),

Gene: RoyalG_53 Start: 48012, Stop: 47650, Start Num: 74
Candidate Starts for RoyalG_53:
(Start: 74 @48012 has 29 MA's), (Start: 80 @48003 has 9 MA's), (Start: 89 @47973 has 5 MA's), (98, 47919), (102, 47895), (149, 47718), (169, 47682),

Gene: Ruchi_50 Start: 32934, Stop: 33320, Start Num: 57
Candidate Starts for Ruchi_50:
(Start: 53 @32925 has 1 MA's), (Start: 57 @32934 has 30 MA's), (63, 32952), (Start: 89 @32973 has 5 MA's), (101, 33048), (116, 33105), (129, 33144), (143, 33192), (149, 33216), (174, 33270),

Gene: Saints25_107 Start: 61589, Stop: 61963, Start Num: 55
Candidate Starts for Saints25_107:
(Start: 38 @61535 has 1 MA's), (Start: 55 @61589 has 106 MA's), (83, 61643), (Start: 89 @61670 has 5 MA's), (90, 61679), (94, 61718), (99, 61739), (124, 61832), (130, 61850), (132, 61853), (145, 61901), (168, 61952),

Gene: Sam12_53 Start: 47437, Stop: 47075, Start Num: 74
Candidate Starts for Sam12_53:
(Start: 74 @47437 has 29 MA's), (Start: 80 @47428 has 9 MA's), (Start: 89 @47398 has 5 MA's), (101, 47323), (124, 47233), (133, 47206), (141, 47173), (149, 47143), (169, 47107),

Gene: Sassay_106 Start: 62009, Stop: 62383, Start Num: 55
Candidate Starts for Sassay_106:
(Start: 38 @61955 has 1 MA's), (Start: 55 @62009 has 106 MA's), (Start: 89 @62090 has 5 MA's), (90, 62099), (94, 62138), (99, 62159), (124, 62252), (130, 62270), (132, 62273), (145, 62321), (168, 62372),

Gene: Scavito_93 Start: 60810, Stop: 61172, Start Num: 46
Candidate Starts for Scavito_93:
(Start: 46 @60810 has 16 MA's), (Start: 67 @60855 has 1 MA's), (86, 60858), (Start: 89 @60879 has 5 MA's), (101, 60954), (112, 60984), (116, 61002), (132, 61047), (148, 61107), (152, 61113),

Gene: Schaffner_28 Start: 23536, Stop: 23904, Start Num: 29
Candidate Starts for Schaffner_28:
(15, 23401), (16, 23404), (18, 23422), (19, 23431), (21, 23458), (Start: 29 @23536 has 31 MA's), (Start: 89 @23560 has 5 MA's),

Gene: Shaboozey_161 Start: 84138, Stop: 84518, Start Num: 72
Candidate Starts for Shaboozey_161:
(Start: 72 @84138 has 38 MA's), (Start: 89 @84180 has 5 MA's), (122, 84336), (149, 84429), (155, 84435), (157, 84438), (186, 84507),

Gene: ShakeItOph_33 Start: 23733, Stop: 24083, Start Num: 89
Candidate Starts for ShakeItOph_33:
(Start: 79 @23709 has 22 MA's), (Start: 89 @23733 has 5 MA's), (104, 23826), (128, 23898), (141, 23946), (173, 24021),

Gene: ShamWow_111 Start: 64057, Stop: 64431, Start Num: 55

Candidate Starts for ShamWow_111:
(Start: 55 @64057 has 106 MA's), (83, 64111), (Start: 89 @64138 has 5 MA's), (90, 64147), (94, 64186), (99, 64207), (124, 64300), (130, 64318), (132, 64321), (145, 64369), (146, 64375), (149, 64387),

Gene: Shambre1_62 Start: 40086, Stop: 40415, Start Num: 65
Candidate Starts for Shambre1_62:
(Start: 65 @40086 has 1 MA's), (Start: 89 @40113 has 5 MA's), (116, 40245),

Gene: Shelley_51 Start: 47958, Stop: 47593, Start Num: 72
Candidate Starts for Shelley_51:
(Start: 72 @47958 has 38 MA's), (Start: 89 @47916 has 5 MA's), (106, 47811), (133, 47724), (140, 47694), (141, 47691), (149, 47661),

Gene: ShereKhan_109 Start: 64418, Stop: 64792, Start Num: 55
Candidate Starts for ShereKhan_109:
(Start: 38 @64364 has 1 MA's), (Start: 55 @64418 has 106 MA's), (Start: 89 @64499 has 5 MA's), (90, 64508), (94, 64547), (99, 64568), (124, 64661), (130, 64679), (132, 64682), (145, 64730), (168, 64781),

Gene: Simpliphy_109 Start: 63230, Stop: 63604, Start Num: 55
Candidate Starts for Simpliphy_109:
(Start: 38 @63176 has 1 MA's), (Start: 55 @63230 has 106 MA's), (83, 63284), (Start: 89 @63311 has 5 MA's), (90, 63320), (94, 63359), (99, 63380), (124, 63473), (130, 63491), (132, 63494), (145, 63542), (168, 63593),

Gene: Simpson_29 Start: 22364, Stop: 22729, Start Num: 29
Candidate Starts for Simpson_29:
(Start: 29 @22364 has 31 MA's), (Start: 89 @22388 has 5 MA's), (134, 22571),

Gene: SirDuracell_111 Start: 62896, Stop: 63270, Start Num: 55
Candidate Starts for SirDuracell_111:
(Start: 55 @62896 has 106 MA's), (83, 62950), (Start: 89 @62977 has 5 MA's), (90, 62986), (94, 63025), (99, 63046), (124, 63139), (130, 63157), (132, 63160), (145, 63208), (146, 63214), (149, 63226),

Gene: Skelbel_30 Start: 24445, Stop: 24813, Start Num: 29
Candidate Starts for Skelbel_30:
(11, 24280), (Start: 29 @24445 has 31 MA's), (Start: 89 @24469 has 5 MA's),

Gene: Snek_28 Start: 21512, Stop: 21880, Start Num: 29
Candidate Starts for Snek_28:
(Start: 29 @21512 has 31 MA's), (Start: 89 @21536 has 5 MA's),

Gene: Sombrero_54 Start: 47804, Stop: 47439, Start Num: 74
Candidate Starts for Sombrero_54:
(Start: 74 @47804 has 29 MA's), (Start: 80 @47795 has 9 MA's), (Start: 89 @47765 has 5 MA's), (101, 47690), (124, 47600), (133, 47573), (141, 47540), (149, 47510), (155, 47504),

Gene: SophKB_109 Start: 63219, Stop: 63593, Start Num: 55
Candidate Starts for SophKB_109:
(Start: 38 @63165 has 1 MA's), (Start: 55 @63219 has 106 MA's), (83, 63273), (Start: 89 @63300 has 5 MA's), (90, 63309), (94, 63348), (99, 63369), (124, 63462), (130, 63480), (132, 63483), (145, 63531),

(146, 63537), (149, 63549),

Gene: Sotrice96_112 Start: 63683, Stop: 64057, Start Num: 55
Candidate Starts for Sotrice96_112:
(Start: 38 @63629 has 1 MA's), (Start: 55 @63683 has 106 MA's), (83, 63737), (Start: 89 @63764 has 5 MA's), (90, 63773), (94, 63812), (99, 63833), (124, 63926), (130, 63944), (132, 63947), (145, 63995), (146, 64001), (149, 64013),

Gene: Squibbles_53 Start: 48300, Stop: 47935, Start Num: 74
Candidate Starts for Squibbles_53:
(Start: 74 @48300 has 29 MA's), (Start: 80 @48291 has 9 MA's), (Start: 89 @48261 has 5 MA's), (101, 48186), (124, 48096), (133, 48069), (141, 48036), (149, 48006), (169, 47970),

Gene: Squint_157 Start: 84398, Stop: 84778, Start Num: 72
Candidate Starts for Squint_157:
(Start: 72 @84398 has 38 MA's), (Start: 89 @84440 has 5 MA's), (101, 84515), (149, 84689), (155, 84695), (157, 84698), (186, 84767),

Gene: Stank_114 Start: 63971, Stop: 64303, Start Num: 60
Candidate Starts for Stank_114:
(Start: 60 @63971 has 18 MA's), (Start: 72 @64001 has 38 MA's), (108, 64145), (122, 64193), (132, 64217), (155, 64289),

Gene: Stark_111 Start: 63543, Stop: 63917, Start Num: 55
Candidate Starts for Stark_111:
(Start: 38 @63489 has 1 MA's), (Start: 55 @63543 has 106 MA's), (Start: 89 @63624 has 5 MA's), (90, 63633), (94, 63672), (99, 63693), (124, 63786), (130, 63804), (132, 63807), (145, 63855), (168, 63906),

Gene: StellaBean_109 Start: 63840, Stop: 64214, Start Num: 55
Candidate Starts for StellaBean_109:
(Start: 38 @63786 has 1 MA's), (Start: 55 @63840 has 106 MA's), (83, 63894), (Start: 89 @63921 has 5 MA's), (90, 63930), (94, 63969), (99, 63990), (124, 64083), (130, 64101), (132, 64104), (145, 64152), (168, 64203),

Gene: Stellammi_172 Start: 74641, Stop: 74943, Start Num: 80
Candidate Starts for Stellammi_172:
(Start: 67 @74617 has 1 MA's), (Start: 80 @74641 has 9 MA's), (88, 74653), (Start: 89 @74665 has 5 MA's), (107, 74776), (145, 74896), (149, 74914), (163, 74932),

Gene: SteveFrench_52 Start: 48252, Stop: 47890, Start Num: 74
Candidate Starts for SteveFrench_52:
(Start: 74 @48252 has 29 MA's), (Start: 80 @48243 has 9 MA's), (Start: 89 @48213 has 5 MA's), (98, 48159), (102, 48135), (149, 47958), (169, 47922),

Gene: Sticker17_51 Start: 48473, Stop: 48108, Start Num: 72
Candidate Starts for Sticker17_51:
(Start: 72 @48473 has 38 MA's), (Start: 89 @48431 has 5 MA's), (106, 48326), (133, 48239), (140, 48209), (141, 48206), (149, 48176),

Gene: StolenFromERC_113 Start: 63382, Stop: 63756, Start Num: 55
Candidate Starts for StolenFromERC_113:

(Start: 38 @63328 has 1 MA's), (Start: 55 @63382 has 106 MA's), (Start: 89 @63463 has 5 MA's), (90, 63472), (94, 63511), (99, 63532), (124, 63625), (130, 63643), (132, 63646), (145, 63694), (168, 63745),

Gene: StormChicken_113 Start: 64241, Stop: 64573, Start Num: 60
Candidate Starts for StormChicken_113:
(Start: 60 @64241 has 18 MA's), (Start: 72 @64271 has 38 MA's), (108, 64415), (122, 64463), (132, 64487), (155, 64559),

Gene: Stormageddon_123 Start: 92481, Stop: 92825, Start Num: 82
Candidate Starts for Stormageddon_123:
(Start: 82 @92481 has 2 MA's), (97, 92556), (106, 92610), (116, 92643), (129, 92682), (137, 92703), (149, 92754), (158, 92760), (169, 92784), (172, 92793),

Gene: StuartMinion_45 Start: 29956, Stop: 30324, Start Num: 57
Candidate Starts for StuartMinion_45:
(32, 29863), (49, 29935), (Start: 57 @29956 has 30 MA's), (Start: 89 @29995 has 5 MA's), (97, 30046), (116, 30124), (125, 30148), (129, 30163), (149, 30235), (174, 30289), (187, 30313),

Gene: SuMoo_28 Start: 21704, Stop: 22096, Start Num: 182
Candidate Starts for SuMoo_28:
(12, 21047), (20, 21116), (26, 21197), (Start: 182 @21704 has 1 MA's), (190, 21773), (192, 21851), (193, 21884), (194, 21914), (195, 21941),

Gene: Subaru_30 Start: 24459, Stop: 24827, Start Num: 79
Candidate Starts for Subaru_30:
(7, 24144), (8, 24156), (Start: 79 @24459 has 22 MA's), (87, 24465), (Start: 89 @24483 has 5 MA's),

Gene: Sue2_29 Start: 23242, Stop: 23610, Start Num: 79
Candidate Starts for Sue2_29:
(11, 23062), (Start: 79 @23242 has 22 MA's), (Start: 89 @23266 has 5 MA's), (141, 23476), (180, 23563),

Gene: SuperHands_30 Start: 24618, Stop: 25037, Start Num: 57
Candidate Starts for SuperHands_30:
(Start: 57 @24618 has 30 MA's), (Start: 89 @24705 has 5 MA's), (111, 24816), (121, 24846), (131, 24873), (135, 24882), (164, 24957),

Gene: Superphikiman_160 Start: 83453, Stop: 83833, Start Num: 72
Candidate Starts for Superphikiman_160:
(Start: 72 @83453 has 38 MA's), (Start: 89 @83495 has 5 MA's), (101, 83570), (149, 83744), (155, 83750), (157, 83753), (186, 83822),

Gene: TBrady12_115 Start: 63408, Stop: 63740, Start Num: 60
Candidate Starts for TBrady12_115:
(Start: 60 @63408 has 18 MA's), (Start: 72 @63438 has 38 MA's), (108, 63582), (122, 63630), (132, 63654), (155, 63726),

Gene: Tallboi_28 Start: 23797, Stop: 24162, Start Num: 29
Candidate Starts for Tallboi_28:
(Start: 29 @23797 has 31 MA's), (Start: 89 @23821 has 5 MA's), (134, 24004),

Gene: Tarkin_110 Start: 64283, Stop: 64657, Start Num: 55

Candidate Starts for Tarkin_110:
(Start: 38 @64229 has 1 MA's), (Start: 55 @64283 has 106 MA's), (Start: 89 @64364 has 5 MA's), (90, 64373), (94, 64412), (99, 64433), (124, 64526), (130, 64544), (132, 64547), (145, 64595), (168, 64646),

Gene: TaylorSipht_52 Start: 33579, Stop: 33953, Start Num: 57
Candidate Starts for TaylorSipht_52:
(Start: 57 @33579 has 30 MA's), (88, 33606), (Start: 89 @33618 has 5 MA's), (99, 33681), (113, 33741), (116, 33750), (159, 33876), (171, 33906), (174, 33915),

Gene: Tbone_27 Start: 22383, Stop: 22748, Start Num: 29
Candidate Starts for Tbone_27:
(11, 22221), (Start: 29 @22383 has 31 MA's), (Start: 89 @22407 has 5 MA's), (134, 22590),

Gene: Teal_51 Start: 48940, Stop: 48575, Start Num: 72
Candidate Starts for Teal_51:
(Start: 72 @48940 has 38 MA's), (Start: 89 @48898 has 5 MA's), (106, 48793), (133, 48706), (140, 48676), (141, 48673), (149, 48643),

Gene: TeamEdward_111 Start: 63924, Stop: 64298, Start Num: 55
Candidate Starts for TeamEdward_111:
(Start: 38 @63870 has 1 MA's), (Start: 55 @63924 has 106 MA's), (83, 63978), (Start: 89 @64005 has 5 MA's), (90, 64014), (94, 64053), (99, 64074), (124, 64167), (130, 64185), (132, 64188), (145, 64236), (168, 64287),

Gene: TeardropMSU_107 Start: 62785, Stop: 63159, Start Num: 55
Candidate Starts for TeardropMSU_107:
(Start: 38 @62731 has 1 MA's), (Start: 55 @62785 has 106 MA's), (83, 62839), (Start: 89 @62866 has 5 MA's), (90, 62875), (94, 62914), (99, 62935), (124, 63028), (130, 63046), (132, 63049), (145, 63097), (146, 63103), (149, 63115),

Gene: Teaspoon_112 Start: 63986, Stop: 64288, Start Num: 72
Candidate Starts for Teaspoon_112:
(Start: 60 @63956 has 18 MA's), (Start: 72 @63986 has 38 MA's), (108, 64130), (122, 64178), (132, 64202), (155, 64274),

Gene: Teatealatte_49 Start: 48494, Stop: 48126, Start Num: 85
Candidate Starts for Teatealatte_49:
(Start: 85 @48494 has 14 MA's), (Start: 89 @48470 has 5 MA's), (133, 48263), (155, 48194), (181, 48137),

Gene: Teech_49 Start: 48295, Stop: 47927, Start Num: 85
Candidate Starts for Teech_49:
(Start: 85 @48295 has 14 MA's), (Start: 89 @48271 has 5 MA's), (133, 48064), (155, 47995), (181, 47938),

Gene: Terminus_114 Start: 64683, Stop: 65057, Start Num: 55
Candidate Starts for Terminus_114:
(Start: 38 @64629 has 1 MA's), (Start: 55 @64683 has 106 MA's), (Start: 89 @64764 has 5 MA's), (90, 64773), (94, 64812), (99, 64833), (124, 64926), (130, 64944), (132, 64947), (145, 64995), (168, 65046),

Gene: TforTroy_29 Start: 23185, Stop: 23553, Start Num: 79

Candidate Starts for TforTroy_29:
(7, 22750), (8, 22762), (Start: 79 @23185 has 22 MA's), (Start: 89 @23209 has 5 MA's), (134, 23392),

Gene: Thimble_113 Start: 62644, Stop: 63018, Start Num: 55
Candidate Starts for Thimble_113:
(Start: 38 @62590 has 1 MA's), (Start: 55 @62644 has 106 MA's), (83, 62698), (Start: 89 @62725 has 5 MA's), (90, 62734), (94, 62773), (99, 62794), (124, 62887), (130, 62905), (132, 62908), (145, 62956), (168, 63007),

Gene: Thresher_112 Start: 64323, Stop: 64697, Start Num: 55
Candidate Starts for Thresher_112:
(Start: 38 @64269 has 1 MA's), (Start: 55 @64323 has 106 MA's), (Start: 89 @64404 has 5 MA's), (90, 64413), (94, 64452), (99, 64473), (124, 64566), (130, 64584), (132, 64587), (145, 64635), (168, 64686),

Gene: ThursdayNight_29 Start: 22976, Stop: 23344, Start Num: 79
Candidate Starts for ThursdayNight_29:
(48, 22898), (Start: 79 @22976 has 22 MA's), (Start: 89 @23000 has 5 MA's), (128, 23165), (142, 23213),

Gene: Tian_28 Start: 24196, Stop: 24564, Start Num: 29
Candidate Starts for Tian_28:
(11, 24034), (Start: 29 @24196 has 31 MA's), (Start: 89 @24220 has 5 MA's), (134, 24403),

Gene: Tomaszewski_106 Start: 63221, Stop: 63595, Start Num: 55
Candidate Starts for Tomaszewski_106:
(Start: 38 @63167 has 1 MA's), (Start: 55 @63221 has 106 MA's), (Start: 89 @63302 has 5 MA's), (90, 63311), (94, 63350), (99, 63371), (124, 63464), (130, 63482), (132, 63485), (145, 63533), (168, 63584),

Gene: Tophat_93 Start: 60999, Stop: 61361, Start Num: 46
Candidate Starts for Tophat_93:
(Start: 46 @60999 has 16 MA's), (Start: 67 @61044 has 1 MA's), (86, 61047), (Start: 89 @61068 has 5 MA's), (101, 61143), (112, 61173), (116, 61191), (132, 61236), (148, 61296), (152, 61302),

Gene: Toto_109 Start: 64057, Stop: 64431, Start Num: 55
Candidate Starts for Toto_109:
(Start: 55 @64057 has 106 MA's), (83, 64111), (Start: 89 @64138 has 5 MA's), (90, 64147), (94, 64186), (99, 64207), (124, 64300), (130, 64318), (132, 64321), (145, 64369), (146, 64375), (149, 64387),

Gene: Traaww1_107 Start: 62606, Stop: 62980, Start Num: 55
Candidate Starts for Traaww1_107:
(Start: 55 @62606 has 106 MA's), (83, 62660), (Start: 89 @62687 has 5 MA's), (90, 62696), (94, 62735), (95, 62738), (99, 62756), (124, 62849), (130, 62867), (132, 62870), (145, 62918), (146, 62924), (149, 62936),

Gene: Tredge_49 Start: 48494, Stop: 48126, Start Num: 85
Candidate Starts for Tredge_49:
(Start: 85 @48494 has 14 MA's), (Start: 89 @48470 has 5 MA's), (133, 48263), (155, 48194), (181, 48137),

Gene: Tuck_31 Start: 25007, Stop: 25378, Start Num: 29

Candidate Starts for Tuck_31:
(15, 24872), (16, 24875), (18, 24893), (21, 24929), (Start: 29 @25007 has 31 MA's), (31, 25013), (Start: 89 @25031 has 5 MA's), (135, 25217),

Gene: Tuco_112 Start: 64844, Stop: 65218, Start Num: 55
Candidate Starts for Tuco_112:
(Start: 38 @64790 has 1 MA's), (Start: 55 @64844 has 106 MA's), (83, 64898), (Start: 89 @64925 has 5 MA's), (90, 64934), (94, 64973), (99, 64994), (124, 65087), (130, 65105), (132, 65108), (145, 65156), (146, 65162), (149, 65174),

Gene: Turab_27 Start: 22274, Stop: 22639, Start Num: 29
Candidate Starts for Turab_27:
(11, 22109), (Start: 29 @22274 has 31 MA's), (Start: 89 @22298 has 5 MA's), (154, 22541),

Gene: Tutumahutu_27 Start: 22358, Stop: 22723, Start Num: 29
Candidate Starts for Tutumahutu_27:
(Start: 29 @22358 has 31 MA's), (Start: 89 @22382 has 5 MA's), (134, 22565),

Gene: Tweety19_28 Start: 21511, Stop: 21879, Start Num: 29
Candidate Starts for Tweety19_28:
(Start: 29 @21511 has 31 MA's), (Start: 89 @21535 has 5 MA's),

Gene: UtzChips_27 Start: 22046, Stop: 22438, Start Num: 59
Candidate Starts for UtzChips_27:
(Start: 59 @22046 has 2 MA's), (Start: 89 @22112 has 5 MA's), (102, 22190),

Gene: VResidence_28 Start: 22506, Stop: 22880, Start Num: 29
Candidate Starts for VResidence_28:
(Start: 29 @22506 has 31 MA's), (Start: 89 @22530 has 5 MA's), (135, 22716),

Gene: Vitaenoii_50 Start: 49612, Stop: 49244, Start Num: 85
Candidate Starts for Vitaenoii_50:
(Start: 85 @49612 has 14 MA's), (Start: 89 @49588 has 5 MA's), (101, 49513), (126, 49402), (133, 49381), (155, 49312), (181, 49255),

Gene: VroomVroom_33 Start: 23804, Stop: 24178, Start Num: 79
Candidate Starts for VroomVroom_33:
(Start: 79 @23804 has 22 MA's), (Start: 89 @23828 has 5 MA's), (104, 23921), (128, 23993), (136, 24017), (141, 24041), (173, 24116),

Gene: Vulpecula_50 Start: 32594, Stop: 32980, Start Num: 57
Candidate Starts for Vulpecula_50:
(Start: 53 @32585 has 1 MA's), (Start: 57 @32594 has 30 MA's), (63, 32612), (Start: 89 @32633 has 5 MA's), (101, 32708), (116, 32765), (129, 32804), (143, 32852), (149, 32876), (174, 32930),

Gene: Warda_27 Start: 22358, Stop: 22723, Start Num: 29
Candidate Starts for Warda_27:
(11, 22196), (Start: 29 @22358 has 31 MA's), (Start: 89 @22382 has 5 MA's), (134, 22565),

Gene: Westrich_61 Start: 34608, Stop: 34985, Start Num: 57
Candidate Starts for Westrich_61:
(26, 34488), (40, 34566), (Start: 57 @34608 has 30 MA's), (63, 34626), (Start: 89 @34647 has 5 MA's), (101, 34722), (116, 34779), (129, 34818), (140, 34857), (174, 34944),

Gene: WheatThin_64 Start: 42193, Stop: 42579, Start Num: 78
Candidate Starts for WheatThin_64:
(22, 41953), (24, 42001), (28, 42022), (37, 42076), (54, 42136), (69, 42181), (Start: 78 @42193 has 14 MA's), (Start: 89 @42223 has 5 MA's), (101, 42298), (132, 42400), (149, 42466),

Gene: Wiggin_114 Start: 63401, Stop: 63733, Start Num: 60
Candidate Starts for Wiggin_114:
(Start: 60 @63401 has 18 MA's), (Start: 72 @63431 has 38 MA's), (108, 63575), (122, 63623), (132, 63647), (155, 63719),

Gene: Wildcat_88 Start: 53727, Stop: 54095, Start Num: 76
Candidate Starts for Wildcat_88:
(Start: 76 @53727 has 4 MA's), (Start: 77 @53730 has 1 MA's), (Start: 80 @53733 has 9 MA's), (Start: 85 @53739 has 14 MA's), (Start: 89 @53763 has 5 MA's), (94, 53805), (98, 53817), (109, 53880), (110, 53886), (120, 53925), (127, 53940), (129, 53949), (130, 53952), (132, 53955), (141, 53991), (145, 54003), (147, 54015), (149, 54021),

Gene: Wildwest_28 Start: 22362, Stop: 22703, Start Num: 89
Candidate Starts for Wildwest_28:
(Start: 29 @22338 has 31 MA's), (Start: 89 @22362 has 5 MA's), (135, 22548),

Gene: WileyE_52 Start: 33345, Stop: 33731, Start Num: 57
Candidate Starts for WileyE_52:
(Start: 57 @33345 has 30 MA's), (Start: 89 @33384 has 5 MA's), (101, 33459), (116, 33516), (119, 33528), (129, 33555), (143, 33603), (149, 33627), (174, 33681),

Gene: Willez_106 Start: 62009, Stop: 62383, Start Num: 55
Candidate Starts for Willez_106:
(Start: 38 @61955 has 1 MA's), (Start: 55 @62009 has 106 MA's), (Start: 89 @62090 has 5 MA's), (90, 62099), (94, 62138), (99, 62159), (124, 62252), (130, 62270), (132, 62273), (145, 62321), (168, 62372),

Gene: Woes_51 Start: 48991, Stop: 48626, Start Num: 72
Candidate Starts for Woes_51:
(Start: 72 @48991 has 38 MA's), (Start: 89 @48949 has 5 MA's), (106, 48844), (133, 48757), (140, 48727), (141, 48724), (149, 48694),

Gene: Worcestershire_54 Start: 47439, Stop: 47077, Start Num: 74
Candidate Starts for Worcestershire_54:
(Start: 74 @47439 has 29 MA's), (Start: 80 @47430 has 9 MA's), (Start: 89 @47400 has 5 MA's), (101, 47325), (124, 47235), (133, 47208), (141, 47175), (149, 47145), (169, 47109),

Gene: Xandras_111 Start: 63224, Stop: 63556, Start Num: 60
Candidate Starts for Xandras_111:
(Start: 60 @63224 has 18 MA's), (Start: 72 @63254 has 38 MA's), (108, 63398), (122, 63446), (132, 63470), (155, 63542),

Gene: Yang_28 Start: 22698, Stop: 23066, Start Num: 27
Candidate Starts for Yang_28:
(Start: 27 @22698 has 1 MA's), (Start: 89 @22722 has 5 MA's), (101, 22797),

Gene: YassJohnny_108 Start: 62030, Stop: 62404, Start Num: 55

Candidate Starts for YassJohnny_108:
(Start: 38 @61976 has 1 MA's), (Start: 55 @62030 has 106 MA's), (Start: 89 @62111 has 5 MA's), (90, 62120), (94, 62159), (99, 62180), (124, 62273), (130, 62291), (132, 62294), (145, 62342), (168, 62393),

Gene: YesChef_27 Start: 22359, Stop: 22724, Start Num: 29
Candidate Starts for YesChef_27:
(Start: 29 @22359 has 31 MA's), (Start: 89 @22383 has 5 MA's), (134, 22566),

Gene: Youngblood_115 Start: 64179, Stop: 64553, Start Num: 55
Candidate Starts for Youngblood_115:
(Start: 38 @64125 has 1 MA's), (Start: 55 @64179 has 106 MA's), (Start: 89 @64260 has 5 MA's), (90, 64269), (94, 64308), (99, 64329), (124, 64422), (130, 64440), (132, 64443), (145, 64491), (168, 64542),

Gene: Zhuangyuan_55 Start: 33443, Stop: 33811, Start Num: 57
Candidate Starts for Zhuangyuan_55:
(37, 33389), (Start: 57 @33443 has 30 MA's), (63, 33458), (88, 33467), (Start: 89 @33479 has 5 MA's), (116, 33608), (117, 33614), (129, 33647), (133, 33656), (153, 33725), (159, 33734), (166, 33752), (174, 33773),

Gene: xkcd_115 Start: 64364, Stop: 64738, Start Num: 55
Candidate Starts for xkcd_115:
(Start: 38 @64310 has 1 MA's), (Start: 55 @64364 has 106 MA's), (Start: 89 @64445 has 5 MA's), (90, 64454), (94, 64493), (99, 64514), (124, 64607), (130, 64625), (132, 64628), (145, 64676), (168, 64727),