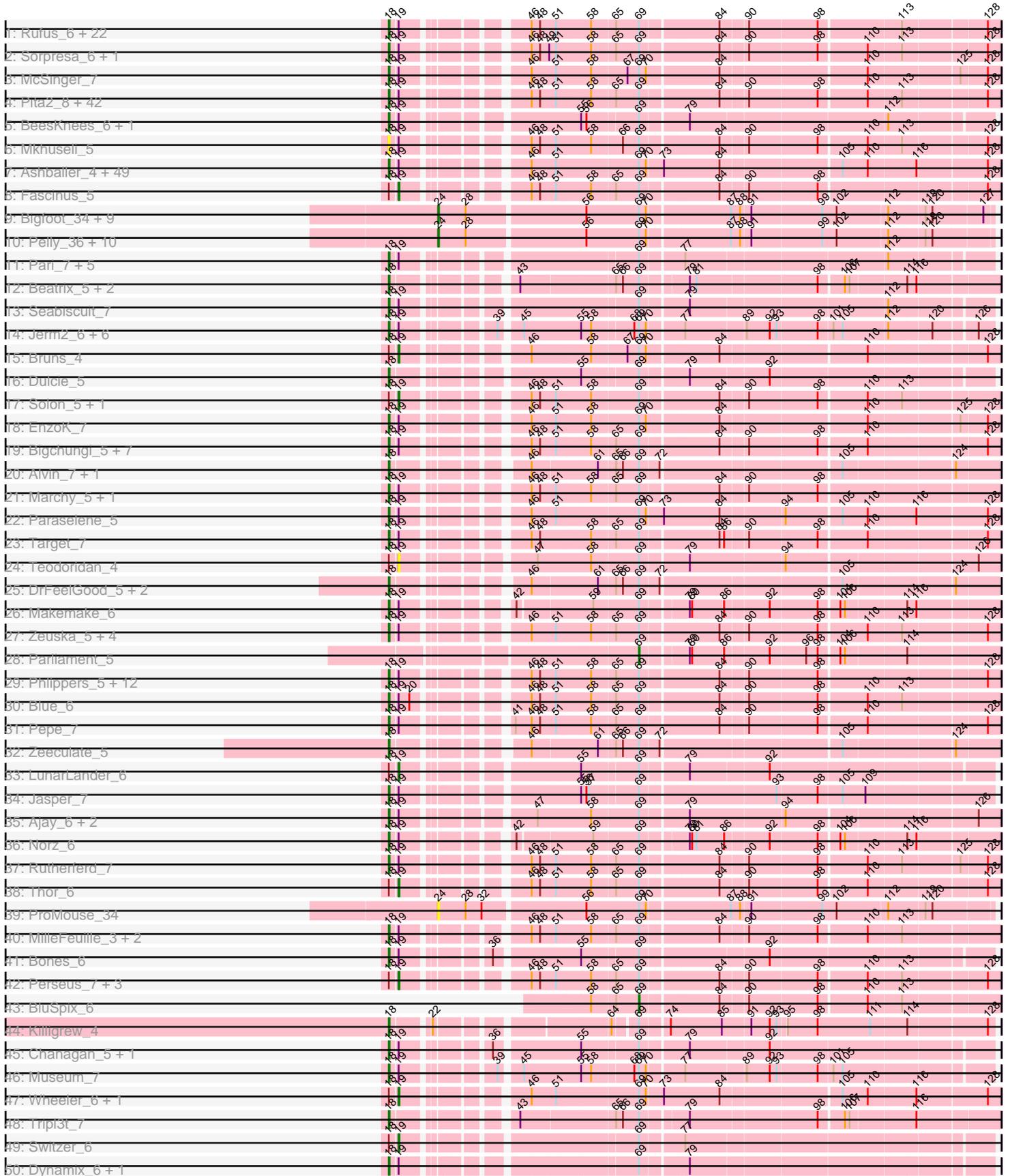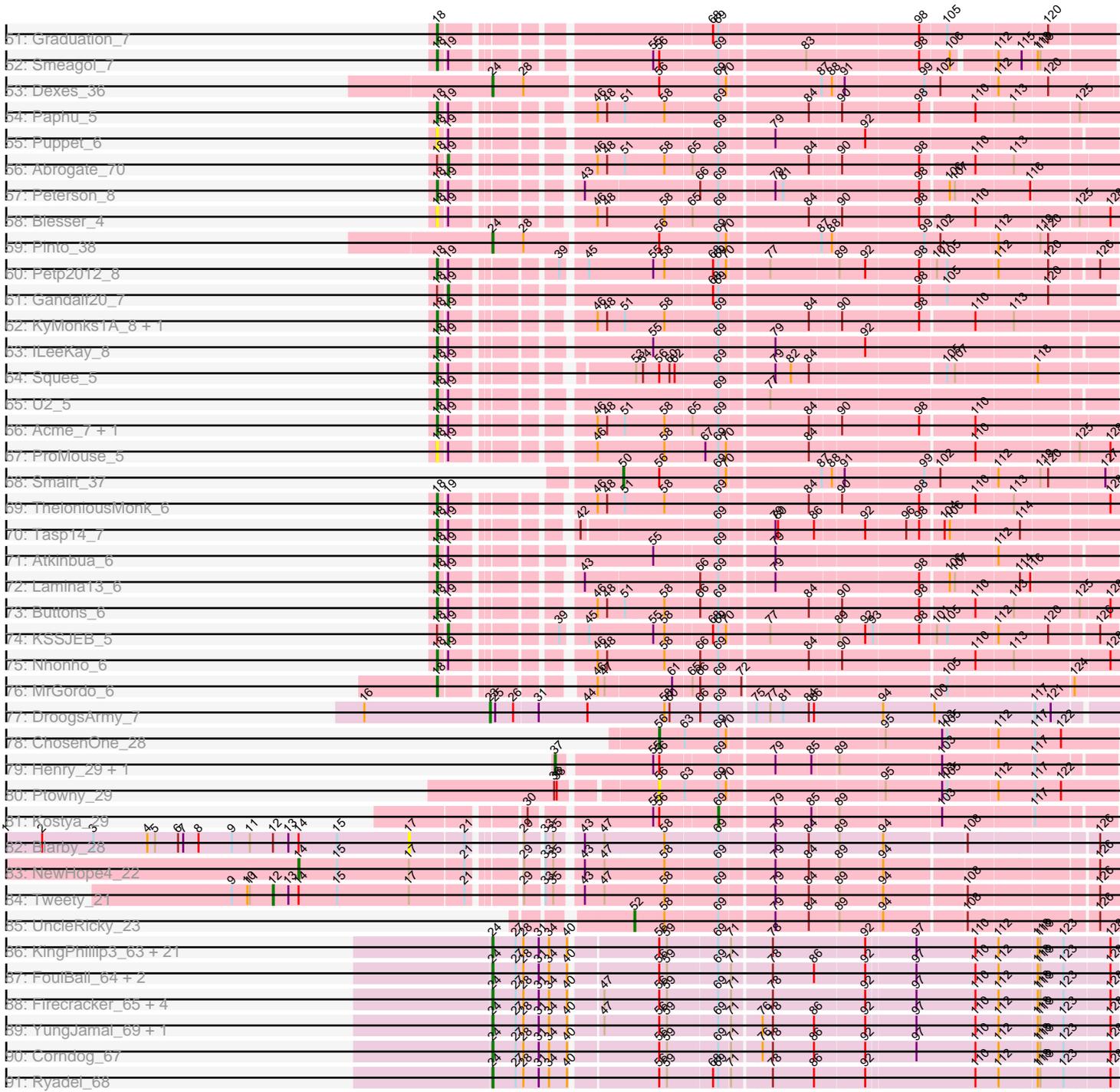# Pham 283418

Pham 283418

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 283418 Report

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

Pham number 283418 has 307 members, 40 are drafts.

Phages represented in each track:
• Track 1 : Rufus_6, Molly_7, NEHalo_6, Niza_7, BaconJack_7, Zephyr_6, Agaliana_6, Ciao_6, Greg_7, Corvo_6, MPlant7149_5, MaryBeth_6, Ohno789_5, Espresso_6, Arlo_5, Rubeus_6, ChristmasHams_6, Lopton_7, Fajezeel_7, JC27_7, Ichabod_6, MetalQZJ_6, Sibs6_7
• Track 2 : Sorpresa_6, Sandaddy_5
• Track 3 : McSinger_7
• Track 4 : Pita2_8, Raid_7, Euphoria_6, TwoPeat_7, GMonster_5, Topgun_6, KBG_6, LilBib_5, Smairt_7, Applejack_6, Swole_8, JackSparrow_6, Sumter_5, StewieG_5, SwissCheese_6, PascalRango_5, Trouble_6, Dexes_7, HanShotFirst_6, Pelly_7, Hami1_6, BPBiebs31_7, ShortQueendom_4, PhrostyMug_5, Rhynn_6, Tote_8, Sanya_5, Nerujay_6, Mule_5, Sagefire_7, Inyanga_5, Gachnar_6, Sunshine924_5, Whitspit_6, PattyP_7, JuliaChild_8, Iqorha_5, BigPaolini_7, Aeneas_7, PSullivan_8, Wilkins_6, Forsytheast_5, Moose_5
• Track 5 : BeesKnees_6, Rohr_7
• Track 6 : Mkhuseli_5
• Track 7 : Ashballer_4, Marge_6, Bxb1_5, BillKnuckles_6, CatBus_6, Noxious_6, Slagathor_6, QTRlifeCrisis_5, Froghopper_7, PowerRanger_5, Petruchio_6, Hermia_7, Kenmech_7, Lockley_6, Levia_5, Watermelon_8, KikiBouba_6, Manatee_6, Traft412_8, Homines_6, Monet_6, Carlyle_8, CartmannCramer_5, Gyzlar_7, Aldrich_6, GrecoEtereo_7, Seanderson_7, Kugel_7, Dussy_7, A6_04, Lesedi_5, DD5_6, Abbyshoes_7, Fushigi_6, Scowl_7, Magnito_5, Anglerfish_6, HarryOW_7, Violet_5, BK1_04, Arcanine_6, Gwendoluna_6, Marcell_6, Kykar_4, GroundGoblin_6, PhineBark_4, Rajelicia_5, DirtDevil_6, Licorice_8, Turj99_5
• Track 8 : Fascinus_5
• Track 9 : Bigfoot_34, JC27_37, Kykar_35, A6_33, PowerRanger_38, Inyanga_34, BK1_33, Iqorha_34, Phlippers_34, Fascinus_35
• Track 10 : Pelly_36, CactusRose_34, GageAP_37, IgnatiusPatJac_35, HanShotFirst_35, Froghopper_36, Wilkins_35, Topgun_35, Blackflame_35, HarryOW_36, LilBib_36
• Track 11 : Pari_7, Bircsak_6, Briton15_7, HermioneGrange_7, DreamCatcher_7, Hope4ever_6
• Track 12 : Beatrix_5, Bexan_5, StrongArm_5
• Track 13 : Seabiscuit_7
• Track 14 : Jerm2_6, Bob3_5, Burton_6, Fenn_6, PinkPlastic_4, Naira_6, BigMau_7
• Track 15 : Bruns_4
• Track 16 : Dulcie_5
• Track 17 : Solon_5, Edtherson_6

- Track 18 : EnzoK_7
- Track 19 : Bigchungi_5, Snazzy_4, Ringer_5, Marco3_6, STLscum_7, Bethlehem_6, SarFire_6, Ruotula_5
- Track 20 : Alvin_7, Crispicous1_5
- Track 21 : Marchy_5, Payneful_6
- Track 22 : Paraselene_5
- Track 23 : Target_7
- Track 24 : Teodoridan_4
- Track 25 : DrFeelGood_5, Big3_6, Michley_6
- Track 26 : Makemake_6
- Track 27 : Zeuska_5, AFIS_6, SpikeBT_6, Barriga_6, Papez_6
- Track 28 : Parliament_5
- Track 29 : Phlippers_5, Altman_7, Francis47_6, CactusRose_5, GageAP_7, Oogway_5, Pinto_8, ConceptII_6, PacerPaul_6, Kanely_7, Adahisdi_7, Bigfoot_5, Maroc7_5
- Track 30 : Blue_6
- Track 31 : Pepe_7
- Track 32 : Zeeculate_5
- Track 33 : LunarLander_6
- Track 34 : Jasper_7
- Track 35 : Ajay_6, BarrowTuph_5, Alsfro_10
- Track 36 : Norz_6
- Track 37 : Rutherferd_7
- Track 38 : Thor_6
- Track 39 : ProMouse_34
- Track 40 : MilleFeuille_3, IgnatiusPatJac_5, Marsha_6
- Track 41 : Bones_6
- Track 42 : Perseus_7, Doom_6, RidgeCB_6, Blackflame_5
- Track 43 : BluSpix_6
- Track 44 : Killigrew_4
- Track 45 : Chanagan_5, Eyeball_6
- Track 46 : Museum_7
- Track 47 : Wheeler_6, Treddle_6
- Track 48 : Tripl3t_7
- Track 49 : Switzer_6
- Track 50 : Dynamix_6, McGuire_6
- Track 51 : Graduation_7
- Track 52 : Smeagol_7
- Track 53 : Dexes_36
- Track 54 : Paphu_5
- Track 55 : Puppet_6
- Track 56 : Abrogate_70
- Track 57 : Peterson_8
- Track 58 : Blesser_4
- Track 59 : Pinto_38
- Track 60 : Petp2012_8
- Track 61 : Gandalf20_7
- Track 62 : KyMonks1A_8, Magnar_6
- Track 63 : ILeeKay_8
- Track 64 : Squee_5
- Track 65 : U2_5
- Track 66 : Acme_7, Pippin_7
- Track 67 : ProMouse_5

• Track 68 : Smairt_37
• Track 69 : TheloniousMonk_6
• Track 70 : Tasp14_7
• Track 71 : Atkinbua_6
• Track 72 : Lamina13_6
• Track 73 : Buttons_6
• Track 74 : KSSJEB_5
• Track 75 : Nhonho_6
• Track 76 : MrGordo_6
• Track 77 : DroogsArmy_7
• Track 78 : ChosenOne_28
• Track 79 : Henry_29, Daikon_27
• Track 80 : Ptowny_29
• Track 81 : Kostya_29
• Track 82 : Blarby_28
• Track 83 : NewHope4_22
• Track 84 : Tweety_21
• Track 85 : UncleRicky_23
• Track 86 : KingPhillip3_63, Imara_62, Mori_64, SchoolBus_64, Idergollasper_64, Schuy_65, Wogge42_63, Shida_64, Blessica_65, JangDynasty_64, Alkhayr_64, TelAviv_61, Catdawg_64, YoyoKar_62, Vorrps_64, Murai_65, Winget_65, Familton_65, Bora_62, Vagabond_64, MadKillah_65, Zebo_64
• Track 87 : FoulBall_64, Krili_63, NiebruSaylor_63
• Track 88 : Firecracker_65, Dylan_64, Ashwin_66, Wildflower_64, Zakhe101_64
• Track 89 : YungJamal_69, Smooch_67
• Track 90 : Corndog_67
• Track 91 : Ryadel_68

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

The start number called the most often in the published annotations is 18, it was called in 194 of the 267 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A6_04, AFIS_6, Abbyshoes_7, Acme_7, Adahisdi_7, Aeneas_7, Agaliana_6, Ajay_6, Aldrich_6, Alsfro_10, Altman_7, Alvin_7, Anglerfish_6, Applejack_6, Arcanine_6, Arlo_5, Ashballer_4, Atkinbua_6, BK1_04, BPBiebs31_7, BaconJack_7, Barriga_6, BarrowTuph_5, Beatrix_5, BeesKnees_6, Bethlehem_6, Bexan_5, Big3_6, BigMau_7, BigPaolini_7, Bigchungi_5, Bigfoot_5, BillKnuckles_6, Bircsak_6, Blesser_4, Blue_6, Bob3_5, Bones_6, Briton15_7, Burton_6, Buttons_6, Bxb1_5, CactusRose_5, Carlyle_8, CartmannCramer_5, CatBus_6, Chanagan_5, ChristmasHams_6, Ciao_6, ConceptII_6, Corvo_6, Crispicous1_5, DD5_6, Dexes_7, DirtDevil_6, DrFeelGood_5, DreamCatcher_7, Dulcie_5, Dussy_7, Dynamix_6, EnzoK_7, Espresso_6, Euphoria_6, Eyeball_6, Fajezeel_7, Fenn_6, Forsytheast_5, Francis47_6, Froghopper_7, Fushigi_6, GMonster_5, Gachnar_6, GageAP_7, Graduation_7, GrecoEtereo_7, Greg_7, GroundGoblin_6, Gwendoluna_6, Gyzlar_7, Hami1_6, HanShotFirst_6, HarryOW_7, Hermia_7, HermioneGrange_7, Homines_6, Hope4ever_6, ILeeKay_8, Ichabod_6, IgnatiusPatJac_5, Inyanga_5, Iqorha_5, JC27_7, JackSparrow_6, Jasper_7, Jerm2_6, JuliaChild_8, KBG_6, Kanely_7, Kenmech_7, KikiBouba_6, Killigrew_4, Kugel_7, KyMonks1A_8, Kykar_4,

Lamina13_6, Lesedi_5, Levia_5, Licorice_8, LilBib_5, Lockley_6, Lopton_7, MPlant7149_5, Magnar_6, Magnito_5, Makemake_6, Manatee_6, Marcell_6, Marchy_5, Marco3_6, Marge_6, Maroc7_5, Marsha_6, MaryBeth_6, McGuire_6, McSinger_7, MetalQZJ_6, Michley_6, MilleFeuille_3, Mkhuseli_5, Molly_7, Monet_6, Moose_5, MrGordo_6, Mule_5, Museum_7, NEHalo_6, Naira_6, Nerujay_6, Nhonho_6, Niza_7, Norz_6, Noxious_6, Ohno789_5, Oogway_5, PSullivan_8, PacerPaul_6, Papez_6, Paphu_5, Paraselene_5, Pari_7, PascalRango_5, PattyP_7, Payneful_6, Pelly_7, Pepe_7, Peterson_8, Petp2012_8, Petruchio_6, PhineBark_4, Phlippers_5, PhrostyMug_5, PinkPlastic_4, Pinto_8, Pippin_7, Pita2_8, PowerRanger_5, ProMouse_5, Puppet_6, QTRlifeCrisis_5, Raid_7, Rajelicia_5, Rhynn_6, Ringer_5, Rohr_7, Rubeus_6, Rufus_6, Ruotula_5, Rutherferd_7, STLscum_7, Sagefire_7, Sandaddy_5, Sanya_5, SarFire_6, Scowl_7, Seabiscuit_7, Seanderson_7, ShortQueendom_4, Sibs6_7, Slagathor_6, Smairt_7, Smeagol_7, Snazzy_4, Sorpresa_6, SpikeBT_6, Squee_5, StewieG_5, StrongArm_5, Sumter_5, Sunshine924_5, SwissCheese_6, Swole_8, Target_7, Tasp14_7, TheloniousMonk_6, Topgun_6, Tote_8, Traft412_8, Tripl3t_7, Trouble_6, Turj99_5, TwoPeat_7, U2_5, Violet_5, Watermelon_8, Whitspit_6, Wilkins_6, Zeeculate_5, Zephyr_6, Zeuska_5,

Genes that have the "Most Annotated" start but do not call it:
• Abrogate_70, Blackflame_5, Bruns_4, Doom_6, Edtherson_6, Fascinus_5, Gandalf20_7, KSSJEB_5, LunarLander_6, Perseus_7, RidgeCB_6, Solon_5, Switzer_6, Teodoridan_4, Thor_6, Treddle_6, Wheeler_6,

Genes that do not have the "Most Annotated" start:
• A6_33, Alkhayr_64, Ashwin_66, BK1_33, Bigfoot_34, Blackflame_35, Blarby_28, Blessica_65, BluSpix_6, Bora_62, CactusRose_34, Catdawg_64, ChosenOne_28, Corndog_67, Daikon_27, Dexes_36, DroogsArmy_7, Dylan_64, Familton_65, Fascinus_35, Firecracker_65, FoulBall_64, Froghopper_36, GageAP_37, HanShotFirst_35, HarryOW_36, Henry_29, Idergollasper_64, IgnatiusPatJac_35, Imara_62, Inyanga_34, Iqorha_34, JC27_37, JangDynasty_64, KingPhillip3_63, Kostya_29, Krili_63, Kykar_35, LilBib_36, MadKillah_65, Mori_64, Murai_65, NewHope4_22, NiebruSaylor_63, Parliament_5, Pelly_36, Phlippers_34, Pinto_38, PowerRanger_38, ProMouse_34, Ptowny_29, Ryadel_68, SchoolBus_64, Schuy_65, Shida_64, Smairt_37, Smooch_67, TelAviv_61, Topgun_35, Tweety_21, UncleRicky_23, Vagabond_64, Vorrps_64, Wildflower_64, Wilkins_35, Winget_65, Wogge42_63, YoyoKar_62, YungJamal_69, Zakhe101_64, Zebo_64,

Summary by start number:

Start 12:
• Found in 2 of 307 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Tweety_21 (F1),

Start 14:
• Found in 3 of 307 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 33.3% of time when present
• Phage (with cluster) where this start called: NewHope4_22 (F1),

Start 17:
• Found in 3 of 307 (1.0%) of genes in pham

- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Blarby_28 (F),

Start 18:
- Found in 236 of 307 (76.9%) of genes in pham
- Manual Annotations of this start: 194 of 267
- Called 92.8% of time when present
- Phage (with cluster) where this start called: A6_04 (A1), AFIS_6 (A1), Abbyshoes_7 (A1), Acme_7 (A1), Adahisdi_7 (A1), Aeneas_7 (A1), Agaliana_6 (A1), Ajay_6 (A1), Aldrich_6 (A1), Alsfro_10 (A1), Altman_7 (A1), Alvin_7 (A1), Anglerfish_6 (A1), Applejack_6 (A1), Arcanine_6 (A1), Arlo_5 (A1), Ashballer_4 (A1), Atkinbua_6 (A1), BK1_04 (A1), BPBiebs31_7 (A1), BaconJack_7 (A1), Barriga_6 (A1), BarrowTuph_5 (A1), Beatrix_5 (A1), BeesKnees_6 (A1), Bethlehem_6 (A1), Bexan_5 (A1), Big3_6 (A1), BigMau_7 (A1), BigPaolini_7 (A1), Bigchungi_5 (A1), Bigfoot_5 (A1), BillKnuckles_6 (A1), Bircsak_6 (A1), Blesser_4 (A1), Blue_6 (A1), Bob3_5 (A1), Bones_6 (A1), Briton15_7 (A1), Burton_6 (A1), Buttons_6 (A1), Bxb1_5 (A1), CactusRose_5 (A1), Carlyle_8 (A1), CartmannCramer_5 (A1), CatBus_6 (A1), Chanagan_5 (A1), ChristmasHams_6 (A1), Ciao_6 (A1), ConceptII_6 (A1), Corvo_6 (A1), Crispicous1_5 (A1), DD5_6 (A1), Dexes_7 (A1), DirtDevil_6 (A1), DrFeelGood_5 (A1), DreamCatcher_7 (A1), Dulcie_5 (A1), Dussy_7 (A1), Dynamix_6 (A1), EnzoK_7 (A1), Espresso_6 (A1), Euphoria_6 (A1), Eyeball_6 (A1), Fajezeel_7 (A1), Fenn_6 (A1), Forsytheast_5 (A1), Francis47_6 (A1), Froghopper_7 (A1), Fushigi_6 (A1), GMonster_5 (A1), Gachnar_6 (A1), GageAP_7 (A1), Graduation_7 (A1), GrecoEtereo_7 (A1), Greg_7 (A1), GroundGoblin_6 (A1), Gwendoluna_6 (A1), Gyzlar_7 (A1), Hami1_6 (A1), HanShotFirst_6 (A1), HarryOW_7 (A1), Hermia_7 (A1), HermioneGrange_7 (A1), Homines_6 (A1), Hope4ever_6 (A1), ILeeKay_8 (A1), Ichabod_6 (A1), IgnatiusPatJac_5 (A1), Inyanga_5 (A1), Iqorha_5 (A1), JC27_7 (A1), JackSparrow_6 (A1), Jasper_7 (A1), Jerm2_6 (A1), JuliaChild_8 (A1), KBG_6 (A1), Kanely_7 (A1), Kenmech_7 (A1), KikiBouba_6 (A1), Killigrew_4 (A1), Kugel_7 (A1), KyMonks1A_8 (A1), Kykar_4 (A1), Lamina13_6 (A1), Lesedi_5 (A1), Levia_5 (A1), Licorice_8 (A1), LilBib_5 (A1), Lockley_6 (A1), Lopton_7 (A1), MPlant7149_5 (A1), Magnar_6 (A1), Magnito_5 (A1), Makemake_6 (A1), Manatee_6 (A1), Marcell_6 (A1), Marchy_5 (A1), Marco3_6 (A1), Marge_6 (A1), Maroc7_5 (A1), Marsha_6 (A1), MaryBeth_6 (A1), McGuire_6 (A1), McSinger_7 (A1), MetalQZJ_6 (A1), Michley_6 (A1), MilleFeuille_3 (A1), Mkhuseli_5 (A1), Molly_7 (A1), Monet_6 (A1), Moose_5 (A1), MrGordo_6 (A1), Mule_5 (A1), Museum_7 (A1), NEHalo_6 (A1), Naira_6 (A1), Nerujay_6 (A1), Nhonho_6 (A1), Niza_7 (A1), Norz_6 (A1), Noxious_6 (A1), Ohno789_5 (A1), Oogway_5 (A1), PSullivan_8 (A1), PacerPaul_6 (A1), Papez_6 (A1), Paphu_5 (A1), Paraselene_5 (A1), Pari_7 (A1), PascalRango_5 (A1), PattyP_7 (A1), Payneful_6 (A1), Pelly_7 (A1), Pepe_7 (A1), Peterson_8 (A1), Petp2012_8 (A1), Petruchio_6 (A1), PhineBark_4 (A1), Phlippers_5 (A1), PhrostyMug_5 (A1), PinkPlastic_4 (A1), Pinto_8 (A1), Pippin_7 (A1), Pita2_8 (A1), PowerRanger_5 (A1), ProMouse_5 (A1), Puppet_6 (A1), QTRlifeCrisis_5 (A1), Raid_7 (A1), Rajelicia_5 (A1), Rhynn_6 (A1), Ringer_5 (A1), Rohr_7 (A1), Rubeus_6 (A1), Rufus_6 (A1), Ruotula_5 (A1), Rutherferd_7 (A1), STLscum_7 (A1), Sagefire_7 (A1), Sandaddy_5 (A1), Sanya_5 (A1), SarFire_6 (A1), Scowl_7 (A1), Seabiscuit_7 (A1), Seanderson_7 (A1), ShortQueendom_4 (A1), Sibs6_7 (A1), Slagathor_6 (A1), Smairt_7 (A1), Smeagol_7 (A1), Snazzy_4 (A1), Sorpresa_6 (A1), SpikeBT_6 (A1), Squee_5 (A1), StewieG_5 (A1), StrongArm_5 (A1), Sumter_5 (A1), Sunshine924_5 (A1), SwissCheese_6 (A1), Swole_8 (A1), Target_7 (A1), Tasp14_7 (A1), TheloniousMonk_6 (A1), Topgun_6 (A1), Tote_8 (A1), Traft412_8 (A1), Tripl3t_7 (A1), Trouble_6 (A1), Turj99_5 (A1), TwoPeat_7 (A1), U2_5 (A1), Violet_5 (A1),

Watermelon_8 (A1), Whitspit_6 (A1), Wilkins_6 (A1), Zeeculate_5 (A1), Zephyr_6 (A1), Zeuska_5 (A1),

Start 19:
• Found in 222 of 307 (72.3%) of genes in pham
• Manual Annotations of this start: 15 of 267
• Called 7.7% of time when present
• Phage (with cluster) where this start called: Abrogate_70 (A1), Blackflame_5 (A1), Bruns_4 (A1), Doom_6 (A1), Edtherson_6 (A1), Fascinus_5 (A1), Gandalf20_7 (A1), KSSJEB_5 (A1), LunarLander_6 (A1), Perseus_7 (A1), RidgeCB_6 (A1), Solon_5 (A1), Switzer_6 (A1), Teodoridan_4 (A1), Thor_6 (A1), Treddle_6 (A1), Wheeler_6 (A1),

Start 23:
• Found in 1 of 307 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DroogsArmy_7 (A7),

Start 24:
• Found in 58 of 307 (18.9%) of genes in pham
• Manual Annotations of this start: 48 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A6_33 (A1), Alkhayr_64 (O), Ashwin_66 (O), BK1_33 (A1), Bigfoot_34 (A1), Blackflame_35 (A1), Blessica_65 (O), Bora_62 (O), CactusRose_34 (A1), Catdawg_64 (O), Corndog_67 (O), Dexes_36 (A1), Dylan_64 (O), Familton_65 (O), Fascinus_35 (A1), Firecracker_65 (O), FoulBall_64 (O), Froghopper_36 (A1), GageAP_37 (A1), HanShotFirst_35 (A1), HarryOW_36 (A1), Idergollasper_64 (O), IgnatiusPatJac_35 (A1), Imara_62 (O), Inyanga_34 (A1), Iqorha_34 (A1), JC27_37 (A1), JangDynasty_64 (O), KingPhillip3_63 (O), Krili_63 (O), Kykar_35 (A1), LilBib_36 (A1), MadKillah_65 (O), Mori_64 (O), Murai_65 (O), NiebruSaylor_63 (O), Pelly_36 (A1), Phlippers_34 (A1), Pinto_38 (A1), PowerRanger_38 (A1), ProMouse_34 (A1), Ryadel_68 (O), SchoolBus_64 (O), Schuy_65 (O), Shida_64 (O), Smooch_67 (O), TelAviv_61 (O), Topgun_35 (A1), Vagabond_64 (O), Vorrps_64 (O), Wildflower_64 (O), Wilkins_35 (A1), Winget_65 (O), Wogge42_63 (O), YoyoKar_62 (O), YungJamal_69 (O), Zakhe101_64 (O), Zebo_64 (O),

Start 37:
• Found in 2 of 307 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Daikon_27 (E), Henry_29 (E),

Start 50:
• Found in 1 of 307 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Smairt_37 (A1),

Start 52:
• Found in 1 of 307 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 267

• Called 100.0% of time when present
• Phage (with cluster) where this start called: UncleRicky_23 (F1),

Start 56:
• Found in 69 of 307 (22.5%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 2.9% of time when present
• Phage (with cluster) where this start called: ChosenOne_28 (E), Ptowny_29 (E),

Start 69:
• Found in 307 of 307 (100.0%) of genes in pham
• Manual Annotations of this start: 3 of 267
• Called 1.0% of time when present
• Phage (with cluster) where this start called: BluSpix_6 (A1), Kostya_29 (E),
Parliament_5 (A1),

Summary by clusters:

There are 6 clusters represented in this pham: F1, E, F, O, A1, A7,

Info for manual annotations of cluster A1:
•Start number 18 was manually annotated 194 times for cluster A1.
•Start number 19 was manually annotated 15 times for cluster A1.
•Start number 24 was manually annotated 18 times for cluster A1.
•Start number 50 was manually annotated 1 time for cluster A1.
•Start number 69 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster A7:
•Start number 23 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster E:
•Start number 37 was manually annotated 1 time for cluster E.
•Start number 56 was manually annotated 1 time for cluster E.
•Start number 69 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster F1:
•Start number 12 was manually annotated 1 time for cluster F1.
•Start number 14 was manually annotated 1 time for cluster F1.
•Start number 52 was manually annotated 1 time for cluster F1.

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

Gene Information:
Gene: A6_33 Start: 27619, Stop: 28305, Start Num: 24
Candidate Starts for A6_33:
(Start: 24 @27619 has 48 MA's), (28, 27655), (Start: 56 @27802 has 1 MA's), (Start: 69 @27871 has 3 MA's), (70, 27880), (87, 27982), (88, 27994), (91, 28006), (99, 28096), (102, 28114), (112, 28177), (119, 28222), (120, 28231), (127, 28294),

Gene: A6_04 Start: 2921, Stop: 3631, Start Num: 18
Candidate Starts for A6_04:
(Start: 18 @2921 has 194 MA's), (Start: 19 @2930 has 15 MA's), (46, 3053), (51, 3083), (Start: 69 @3185 has 3 MA's), (70, 3194), (73, 3215), (84, 3287), (105, 3434), (110, 3467), (116, 3527), (128, 3614),

Gene: AFIS_6 Start: 3288, Stop: 3989, Start Num: 18
Candidate Starts for AFIS_6:
(Start: 18 @3288 has 194 MA's), (Start: 19 @3297 has 15 MA's), (46, 3420), (51, 3450), (58, 3492), (65, 3522), (Start: 69 @3552 has 3 MA's), (84, 3648), (90, 3681), (98, 3768), (110, 3828), (113, 3870), (128, 3972),

Gene: Abbyshoes_7 Start: 3368, Stop: 4078, Start Num: 18
Candidate Starts for Abbyshoes_7:
(Start: 18 @3368 has 194 MA's), (Start: 19 @3377 has 15 MA's), (46, 3500), (51, 3530), (Start: 69 @3632 has 3 MA's), (70, 3641), (73, 3662), (84, 3734), (105, 3881), (110, 3914), (116, 3974), (128, 4061),

Gene: Abrogate_70 Start: 4028, Stop: 4720, Start Num: 19
Candidate Starts for Abrogate_70:
(Start: 18 @4019 has 194 MA's), (Start: 19 @4028 has 15 MA's), (46, 4151), (48, 4160), (51, 4181), (58, 4223), (65, 4253), (Start: 69 @4283 has 3 MA's), (84, 4379), (90, 4412), (98, 4499), (110, 4559), (113, 4601),

Gene: Acme_7 Start: 3201, Stop: 3902, Start Num: 18
Candidate Starts for Acme_7:
(Start: 18 @3201 has 194 MA's), (Start: 19 @3210 has 15 MA's), (46, 3333), (48, 3342), (51, 3363), (58, 3405), (65, 3435), (Start: 69 @3465 has 3 MA's), (84, 3561), (90, 3594), (98, 3681), (110, 3741),

Gene: Adahisdi_7 Start: 3595, Stop: 4296, Start Num: 18
Candidate Starts for Adahisdi_7:
(Start: 18 @3595 has 194 MA's), (Start: 19 @3604 has 15 MA's), (46, 3727), (48, 3736), (51, 3757), (58, 3799), (65, 3829), (Start: 69 @3859 has 3 MA's), (84, 3955), (90, 3988), (98, 4075), (128, 4279),

Gene: Aeneas_7 Start: 3480, Stop: 4181, Start Num: 18
Candidate Starts for Aeneas_7:
(Start: 18 @3480 has 194 MA's), (Start: 19 @3489 has 15 MA's), (46, 3612), (48, 3621), (51, 3642), (58, 3684), (65, 3714), (Start: 69 @3744 has 3 MA's), (84, 3840), (90, 3873), (98, 3960), (110, 4020), (113, 4062), (128, 4164),

Gene: Agaliana_6 Start: 3404, Stop: 4105, Start Num: 18
Candidate Starts for Agaliana_6:
(Start: 18 @3404 has 194 MA's), (Start: 19 @3413 has 15 MA's), (46, 3536), (48, 3545), (51, 3566), (58, 3608), (65, 3638), (Start: 69 @3668 has 3 MA's), (84, 3764), (90, 3797), (98, 3884), (113, 3986), (128, 4088),

Gene: Ajay_6 Start: 3432, Stop: 4136, Start Num: 18
Candidate Starts for Ajay_6:
(Start: 18 @3432 has 194 MA's), (Start: 19 @3441 has 15 MA's), (47, 3570), (58, 3636), (Start: 69 @3696 has 3 MA's), (79, 3753), (94, 3873), (126, 4107),

Gene: Aldrich_6 Start: 3342, Stop: 4052, Start Num: 18

Candidate Starts for Aldrich_6:
(Start: 18 @3342 has 194 MA's), (Start: 19 @3351 has 15 MA's), (46, 3474), (51, 3504), (Start: 69 @3606 has 3 MA's), (70, 3615), (73, 3636), (84, 3708), (105, 3855), (110, 3888), (116, 3948), (128, 4035),

Gene: Alkhayr_64 Start: 41056, Stop: 41742, Start Num: 24
Candidate Starts for Alkhayr_64:
(Start: 24 @41056 has 48 MA's), (27, 41083), (28, 41092), (31, 41110), (34, 41122), (40, 41143), (Start: 56 @41236 has 1 MA's), (59, 41245), (Start: 69 @41302 has 3 MA's), (71, 41314), (78, 41356), (92, 41461), (97, 41515), (110, 41584), (112, 41611), (118, 41653), (119, 41656), (123, 41683), (128, 41734),

Gene: Alsfro_10 Start: 4116, Stop: 4820, Start Num: 18
Candidate Starts for Alsfro_10:
(Start: 18 @4116 has 194 MA's), (Start: 19 @4125 has 15 MA's), (47, 4254), (58, 4320), (Start: 69 @4380 has 3 MA's), (79, 4437), (94, 4557), (126, 4791),

Gene: Altman_7 Start: 3938, Stop: 4639, Start Num: 18
Candidate Starts for Altman_7:
(Start: 18 @3938 has 194 MA's), (Start: 19 @3947 has 15 MA's), (46, 4070), (48, 4079), (51, 4100), (58, 4142), (65, 4172), (Start: 69 @4202 has 3 MA's), (84, 4298), (90, 4331), (98, 4418), (128, 4622),

Gene: Alvin_7 Start: 3646, Stop: 4338, Start Num: 18
Candidate Starts for Alvin_7:
(Start: 18 @3646 has 194 MA's), (46, 3775), (61, 3856), (65, 3877), (66, 3886), (Start: 69 @3907 has 3 MA's), (72, 3931), (105, 4150), (124, 4285),

Gene: Anglerfish_6 Start: 2963, Stop: 3673, Start Num: 18
Candidate Starts for Anglerfish_6:
(Start: 18 @2963 has 194 MA's), (Start: 19 @2972 has 15 MA's), (46, 3095), (51, 3125), (Start: 69 @3227 has 3 MA's), (70, 3236), (73, 3257), (84, 3329), (105, 3476), (110, 3509), (116, 3569), (128, 3656),

Gene: Applejack_6 Start: 3338, Stop: 4039, Start Num: 18
Candidate Starts for Applejack_6:
(Start: 18 @3338 has 194 MA's), (Start: 19 @3347 has 15 MA's), (46, 3470), (48, 3479), (51, 3500), (58, 3542), (65, 3572), (Start: 69 @3602 has 3 MA's), (84, 3698), (90, 3731), (98, 3818), (110, 3878), (113, 3920), (128, 4022),

Gene: Arcanine_6 Start: 2929, Stop: 3639, Start Num: 18
Candidate Starts for Arcanine_6:
(Start: 18 @2929 has 194 MA's), (Start: 19 @2938 has 15 MA's), (46, 3061), (51, 3091), (Start: 69 @3193 has 3 MA's), (70, 3202), (73, 3223), (84, 3295), (105, 3442), (110, 3475), (116, 3535), (128, 3622),

Gene: Arlo_5 Start: 2963, Stop: 3664, Start Num: 18
Candidate Starts for Arlo_5:
(Start: 18 @2963 has 194 MA's), (Start: 19 @2972 has 15 MA's), (46, 3095), (48, 3104), (51, 3125), (58, 3167), (65, 3197), (Start: 69 @3227 has 3 MA's), (84, 3323), (90, 3356), (98, 3443), (113, 3545), (128, 3647),

Gene: Ashballer_4 Start: 2832, Stop: 3542, Start Num: 18
Candidate Starts for Ashballer_4:

(Start: 18 @2832 has 194 MA's), (Start: 19 @2841 has 15 MA's), (46, 2964), (51, 2994), (Start: 69 @3096 has 3 MA's), (70, 3105), (73, 3126), (84, 3198), (105, 3345), (110, 3378), (116, 3438), (128, 3525),

Gene: Ashwin_66 Start: 41826, Stop: 42512, Start Num: 24
Candidate Starts for Ashwin_66:
(Start: 24 @41826 has 48 MA's), (27, 41853), (28, 41862), (31, 41880), (34, 41892), (40, 41913), (47, 41943), (Start: 56 @42006 has 1 MA's), (59, 42015), (Start: 69 @42072 has 3 MA's), (71, 42084), (78, 42126), (92, 42231), (97, 42285), (110, 42354), (112, 42381), (118, 42423), (119, 42426), (123, 42453), (128, 42504),

Gene: Atkinbua_6 Start: 3001, Stop: 3690, Start Num: 18
Candidate Starts for Atkinbua_6:
(Start: 18 @3001 has 194 MA's), (Start: 19 @3010 has 15 MA's), (55, 3193), (Start: 69 @3262 has 3 MA's), (79, 3319), (112, 3565),

Gene: BK1_33 Start: 27619, Stop: 28305, Start Num: 24
Candidate Starts for BK1_33:
(Start: 24 @27619 has 48 MA's), (28, 27655), (Start: 56 @27802 has 1 MA's), (Start: 69 @27871 has 3 MA's), (70, 27880), (87, 27982), (88, 27994), (91, 28006), (99, 28096), (102, 28114), (112, 28177), (119, 28222), (120, 28231), (127, 28294),

Gene: BK1_04 Start: 2921, Stop: 3631, Start Num: 18
Candidate Starts for BK1_04:
(Start: 18 @2921 has 194 MA's), (Start: 19 @2930 has 15 MA's), (46, 3053), (51, 3083), (Start: 69 @3185 has 3 MA's), (70, 3194), (73, 3215), (84, 3287), (105, 3434), (110, 3467), (116, 3527), (128, 3614),

Gene: BPBiebs31_7 Start: 3602, Stop: 4303, Start Num: 18
Candidate Starts for BPBiebs31_7:
(Start: 18 @3602 has 194 MA's), (Start: 19 @3611 has 15 MA's), (46, 3734), (48, 3743), (51, 3764), (58, 3806), (65, 3836), (Start: 69 @3866 has 3 MA's), (84, 3962), (90, 3995), (98, 4082), (110, 4142), (113, 4184), (128, 4286),

Gene: BaconJack_7 Start: 3186, Stop: 3887, Start Num: 18
Candidate Starts for BaconJack_7:
(Start: 18 @3186 has 194 MA's), (Start: 19 @3195 has 15 MA's), (46, 3318), (48, 3327), (51, 3348), (58, 3390), (65, 3420), (Start: 69 @3450 has 3 MA's), (84, 3546), (90, 3579), (98, 3666), (113, 3768), (128, 3870),

Gene: Barriga_6 Start: 3218, Stop: 3919, Start Num: 18
Candidate Starts for Barriga_6:
(Start: 18 @3218 has 194 MA's), (Start: 19 @3227 has 15 MA's), (46, 3350), (51, 3380), (58, 3422), (65, 3452), (Start: 69 @3482 has 3 MA's), (84, 3578), (90, 3611), (98, 3698), (110, 3758), (113, 3800), (128, 3902),

Gene: BarrowTuph_5 Start: 3285, Stop: 3989, Start Num: 18
Candidate Starts for BarrowTuph_5:
(Start: 18 @3285 has 194 MA's), (Start: 19 @3294 has 15 MA's), (47, 3423), (58, 3489), (Start: 69 @3549 has 3 MA's), (79, 3606), (94, 3726), (126, 3960),

Gene: Beatrix_5 Start: 3035, Stop: 3730, Start Num: 18
Candidate Starts for Beatrix_5:

(Start: 18 @3035 has 194 MA's), (43, 3152), (65, 3269), (66, 3278), (Start: 69 @3299 has 3 MA's), (79, 3353), (81, 3362), (98, 3512), (106, 3542), (107, 3548), (114, 3617), (116, 3629),

Gene: BeesKnees_6 Start: 3082, Stop: 3771, Start Num: 18
Candidate Starts for BeesKnees_6:
(Start: 18 @3082 has 194 MA's), (Start: 19 @3091 has 15 MA's), (55, 3274), (Start: 56 @3280 has 1 MA's), (Start: 69 @3343 has 3 MA's), (79, 3400), (112, 3646),

Gene: Bethlehem_6 Start: 3609, Stop: 4310, Start Num: 18
Candidate Starts for Bethlehem_6:
(Start: 18 @3609 has 194 MA's), (Start: 19 @3618 has 15 MA's), (46, 3741), (48, 3750), (51, 3771), (58, 3813), (65, 3843), (Start: 69 @3873 has 3 MA's), (84, 3969), (90, 4002), (98, 4089), (110, 4149), (128, 4293),

Gene: Bexan_5 Start: 3035, Stop: 3730, Start Num: 18
Candidate Starts for Bexan_5:
(Start: 18 @3035 has 194 MA's), (43, 3152), (65, 3269), (66, 3278), (Start: 69 @3299 has 3 MA's), (79, 3353), (81, 3362), (98, 3512), (106, 3542), (107, 3548), (114, 3617), (116, 3629),

Gene: Big3_6 Start: 2980, Stop: 3672, Start Num: 18
Candidate Starts for Big3_6:
(Start: 18 @2980 has 194 MA's), (46, 3109), (61, 3190), (65, 3211), (66, 3220), (Start: 69 @3241 has 3 MA's), (72, 3265), (105, 3484), (124, 3619),

Gene: BigMau_7 Start: 3086, Stop: 3775, Start Num: 18
Candidate Starts for BigMau_7:
(Start: 18 @3086 has 194 MA's), (Start: 19 @3095 has 15 MA's), (39, 3188), (45, 3209), (55, 3278), (58, 3290), (68, 3341), (Start: 69 @3347 has 3 MA's), (70, 3356), (77, 3398), (89, 3473), (92, 3503), (93, 3512), (98, 3563), (101, 3581), (105, 3593), (112, 3650), (120, 3704), (126, 3755),

Gene: BigPaolini_7 Start: 3995, Stop: 4696, Start Num: 18
Candidate Starts for BigPaolini_7:
(Start: 18 @3995 has 194 MA's), (Start: 19 @4004 has 15 MA's), (46, 4127), (48, 4136), (51, 4157), (58, 4199), (65, 4229), (Start: 69 @4259 has 3 MA's), (84, 4355), (90, 4388), (98, 4475), (110, 4535), (113, 4577), (128, 4679),

Gene: Bigchungi_5 Start: 2863, Stop: 3564, Start Num: 18
Candidate Starts for Bigchungi_5:
(Start: 18 @2863 has 194 MA's), (Start: 19 @2872 has 15 MA's), (46, 2995), (48, 3004), (51, 3025), (58, 3067), (65, 3097), (Start: 69 @3127 has 3 MA's), (84, 3223), (90, 3256), (98, 3343), (110, 3403), (128, 3547),

Gene: Bigfoot_34 Start: 27850, Stop: 28536, Start Num: 24
Candidate Starts for Bigfoot_34:
(Start: 24 @27850 has 48 MA's), (28, 27886), (Start: 56 @28033 has 1 MA's), (Start: 69 @28102 has 3 MA's), (70, 28111), (87, 28213), (88, 28225), (91, 28237), (99, 28327), (102, 28345), (112, 28408), (119, 28453), (120, 28462), (127, 28525),

Gene: Bigfoot_5 Start: 3094, Stop: 3795, Start Num: 18
Candidate Starts for Bigfoot_5:
(Start: 18 @3094 has 194 MA's), (Start: 19 @3103 has 15 MA's), (46, 3226), (48, 3235), (51, 3256), (58, 3298), (65, 3328), (Start: 69 @3358 has 3 MA's), (84, 3454), (90, 3487), (98, 3574), (128, 3778),

Gene: BillKnuckles_6 Start: 3460, Stop: 4170, Start Num: 18
Candidate Starts for BillKnuckles_6:
(Start: 18 @3460 has 194 MA's), (Start: 19 @3469 has 15 MA's), (46, 3592), (51, 3622), (Start: 69 @3724 has 3 MA's), (70, 3733), (73, 3754), (84, 3826), (105, 3973), (110, 4006), (116, 4066), (128, 4153),

Gene: Bircsak_6 Start: 3571, Stop: 4260, Start Num: 18
Candidate Starts for Bircsak_6:
(Start: 18 @3571 has 194 MA's), (Start: 19 @3580 has 15 MA's), (Start: 69 @3832 has 3 MA's), (77, 3883), (112, 4135),

Gene: Blackflame_35 Start: 28070, Stop: 28756, Start Num: 24
Candidate Starts for Blackflame_35:
(Start: 24 @28070 has 48 MA's), (28, 28106), (Start: 56 @28253 has 1 MA's), (Start: 69 @28322 has 3 MA's), (70, 28331), (87, 28433), (88, 28445), (91, 28457), (99, 28547), (102, 28565), (112, 28628), (119, 28673), (120, 28682),

Gene: Blackflame_5 Start: 2881, Stop: 3573, Start Num: 19
Candidate Starts for Blackflame_5:
(Start: 18 @2872 has 194 MA's), (Start: 19 @2881 has 15 MA's), (46, 3004), (48, 3013), (51, 3034), (58, 3076), (65, 3106), (Start: 69 @3136 has 3 MA's), (84, 3232), (90, 3265), (98, 3352), (110, 3412), (113, 3454), (128, 3556),

Gene: Blarby_28 Start: 22525, Stop: 23256, Start Num: 17
Candidate Starts for Blarby_28:
(1, 22054), (2, 22096), (3, 22156), (4, 22219), (5, 22228), (6, 22255), (7, 22261), (8, 22279), (9, 22318), (11, 22339), (Start: 12 @22366 has 1 MA's), (13, 22384), (Start: 14 @22396 has 1 MA's), (15, 22441), (17, 22525), (21, 22585), (29, 22627), (33, 22645), (35, 22654), (43, 22678), (47, 22699), (58, 22765), (Start: 69 @22825 has 3 MA's), (79, 22882), (84, 22921), (89, 22954), (94, 23002), (108, 23092), (126, 23230),

Gene: Blesser_4 Start: 2808, Stop: 3509, Start Num: 18
Candidate Starts for Blesser_4:
(Start: 18 @2808 has 194 MA's), (Start: 19 @2817 has 15 MA's), (46, 2940), (48, 2949), (58, 3012), (65, 3042), (Start: 69 @3072 has 3 MA's), (84, 3168), (90, 3201), (98, 3288), (110, 3348), (125, 3459), (128, 3492),

Gene: Blessica_65 Start: 41655, Stop: 42341, Start Num: 24
Candidate Starts for Blessica_65:
(Start: 24 @41655 has 48 MA's), (27, 41682), (28, 41691), (31, 41709), (34, 41721), (40, 41742), (Start: 56 @41835 has 1 MA's), (59, 41844), (Start: 69 @41901 has 3 MA's), (71, 41913), (78, 41955), (92, 42060), (97, 42114), (110, 42183), (112, 42210), (118, 42252), (119, 42255), (123, 42282), (128, 42333),

Gene: BluSpix_6 Start: 3625, Stop: 4062, Start Num: 69
Candidate Starts for BluSpix_6:
(58, 3565), (65, 3595), (Start: 69 @3625 has 3 MA's), (84, 3721), (90, 3754), (98, 3841), (110, 3901), (113, 3943),

Gene: Blue_6 Start: 3463, Stop: 4164, Start Num: 18
Candidate Starts for Blue_6:
(Start: 18 @3463 has 194 MA's), (Start: 19 @3472 has 15 MA's), (20, 3484), (46, 3595), (48, 3604), (51, 3625), (58, 3667), (65, 3697), (Start: 69 @3727 has 3 MA's), (84, 3823), (90, 3856), (98, 3943),

(110, 4003), (113, 4045),

Gene: Bob3_5 Start: 2926, Stop: 3615, Start Num: 18
Candidate Starts for Bob3_5:
(Start: 18 @2926 has 194 MA's), (Start: 19 @2935 has 15 MA's), (39, 3028), (45, 3049), (55, 3118), (58, 3130), (68, 3181), (Start: 69 @3187 has 3 MA's), (70, 3196), (77, 3238), (89, 3313), (92, 3343), (93, 3352), (98, 3403), (101, 3421), (105, 3433), (112, 3490), (120, 3544), (126, 3595),

Gene: Bones_6 Start: 3119, Stop: 3808, Start Num: 18
Candidate Starts for Bones_6:
(Start: 18 @3119 has 194 MA's), (Start: 19 @3128 has 15 MA's), (36, 3215), (55, 3311), (Start: 69 @3380 has 3 MA's), (92, 3536),

Gene: Bora_62 Start: 41012, Stop: 41698, Start Num: 24
Candidate Starts for Bora_62:
(Start: 24 @41012 has 48 MA's), (27, 41039), (28, 41048), (31, 41066), (34, 41078), (40, 41099), (Start: 56 @41192 has 1 MA's), (59, 41201), (Start: 69 @41258 has 3 MA's), (71, 41270), (78, 41312), (92, 41417), (97, 41471), (110, 41540), (112, 41567), (118, 41609), (119, 41612), (123, 41639), (128, 41690),

Gene: Briton15_7 Start: 3137, Stop: 3826, Start Num: 18
Candidate Starts for Briton15_7:
(Start: 18 @3137 has 194 MA's), (Start: 19 @3146 has 15 MA's), (Start: 69 @3398 has 3 MA's), (77, 3449), (112, 3701),

Gene: Bruns_4 Start: 2779, Stop: 3474, Start Num: 19
Candidate Starts for Bruns_4:
(Start: 18 @2770 has 194 MA's), (Start: 19 @2779 has 15 MA's), (46, 2902), (58, 2974), (67, 3019), (Start: 69 @3034 has 3 MA's), (70, 3043), (84, 3133), (110, 3313), (128, 3457),

Gene: Burton_6 Start: 2987, Stop: 3676, Start Num: 18
Candidate Starts for Burton_6:
(Start: 18 @2987 has 194 MA's), (Start: 19 @2996 has 15 MA's), (39, 3089), (45, 3110), (55, 3179), (58, 3191), (68, 3242), (Start: 69 @3248 has 3 MA's), (70, 3257), (77, 3299), (89, 3374), (92, 3404), (93, 3413), (98, 3464), (101, 3482), (105, 3494), (112, 3551), (120, 3605), (126, 3656),

Gene: Buttons_6 Start: 2980, Stop: 3681, Start Num: 18
Candidate Starts for Buttons_6:
(Start: 18 @2980 has 194 MA's), (Start: 19 @2989 has 15 MA's), (46, 3112), (48, 3121), (51, 3142), (58, 3184), (66, 3223), (Start: 69 @3244 has 3 MA's), (84, 3340), (90, 3373), (98, 3460), (110, 3520), (113, 3562), (125, 3631), (128, 3664),

Gene: Bxb1_5 Start: 3371, Stop: 4081, Start Num: 18
Candidate Starts for Bxb1_5:
(Start: 18 @3371 has 194 MA's), (Start: 19 @3380 has 15 MA's), (46, 3503), (51, 3533), (Start: 69 @3635 has 3 MA's), (70, 3644), (73, 3665), (84, 3737), (105, 3884), (110, 3917), (116, 3977), (128, 4064),

Gene: CactusRose_34 Start: 27944, Stop: 28630, Start Num: 24
Candidate Starts for CactusRose_34:
(Start: 24 @27944 has 48 MA's), (28, 27980), (Start: 56 @28127 has 1 MA's), (Start: 69 @28196 has 3 MA's), (70, 28205), (87, 28307), (88, 28319), (91, 28331), (99, 28421), (102, 28439), (112, 28502), (119, 28547), (120, 28556),

Gene: CactusRose_5 Start: 3093, Stop: 3794, Start Num: 18
Candidate Starts for CactusRose_5:
(Start: 18 @3093 has 194 MA's), (Start: 19 @3102 has 15 MA's), (46, 3225), (48, 3234), (51, 3255), (58, 3297), (65, 3327), (Start: 69 @3357 has 3 MA's), (84, 3453), (90, 3486), (98, 3573), (128, 3777),

Gene: Carlyle_8 Start: 3934, Stop: 4644, Start Num: 18
Candidate Starts for Carlyle_8:
(Start: 18 @3934 has 194 MA's), (Start: 19 @3943 has 15 MA's), (46, 4066), (51, 4096), (Start: 69 @4198 has 3 MA's), (70, 4207), (73, 4228), (84, 4300), (105, 4447), (110, 4480), (116, 4540), (128, 4627),

Gene: CartmannCramer_5 Start: 3299, Stop: 4009, Start Num: 18
Candidate Starts for CartmannCramer_5:
(Start: 18 @3299 has 194 MA's), (Start: 19 @3308 has 15 MA's), (46, 3431), (51, 3461), (Start: 69 @3563 has 3 MA's), (70, 3572), (73, 3593), (84, 3665), (105, 3812), (110, 3845), (116, 3905), (128, 3992),

Gene: CatBus_6 Start: 3534, Stop: 4244, Start Num: 18
Candidate Starts for CatBus_6:
(Start: 18 @3534 has 194 MA's), (Start: 19 @3543 has 15 MA's), (46, 3666), (51, 3696), (Start: 69 @3798 has 3 MA's), (70, 3807), (73, 3828), (84, 3900), (105, 4047), (110, 4080), (116, 4140), (128, 4227),

Gene: Catdawg_64 Start: 41391, Stop: 42077, Start Num: 24
Candidate Starts for Catdawg_64:
(Start: 24 @41391 has 48 MA's), (27, 41418), (28, 41427), (31, 41445), (34, 41457), (40, 41478), (Start: 56 @41571 has 1 MA's), (59, 41580), (Start: 69 @41637 has 3 MA's), (71, 41649), (78, 41691), (92, 41796), (97, 41850), (110, 41919), (112, 41946), (118, 41988), (119, 41991), (123, 42018), (128, 42069),

Gene: Chanagan_5 Start: 2952, Stop: 3641, Start Num: 18
Candidate Starts for Chanagan_5:
(Start: 18 @2952 has 194 MA's), (Start: 19 @2961 has 15 MA's), (36, 3048), (55, 3144), (Start: 69 @3213 has 3 MA's), (79, 3270), (92, 3369),

Gene: ChosenOne_28 Start: 27173, Stop: 27688, Start Num: 56
Candidate Starts for ChosenOne_28:
(Start: 56 @27173 has 1 MA's), (63, 27203), (Start: 69 @27242 has 3 MA's), (70, 27251), (95, 27422), (103, 27488), (105, 27494), (112, 27551), (117, 27593), (122, 27623),

Gene: ChristmasHams_6 Start: 3404, Stop: 4105, Start Num: 18
Candidate Starts for ChristmasHams_6:
(Start: 18 @3404 has 194 MA's), (Start: 19 @3413 has 15 MA's), (46, 3536), (48, 3545), (51, 3566), (58, 3608), (65, 3638), (Start: 69 @3668 has 3 MA's), (84, 3764), (90, 3797), (98, 3884), (113, 3986), (128, 4088),

Gene: Ciao_6 Start: 3325, Stop: 4026, Start Num: 18
Candidate Starts for Ciao_6:
(Start: 18 @3325 has 194 MA's), (Start: 19 @3334 has 15 MA's), (46, 3457), (48, 3466), (51, 3487), (58, 3529), (65, 3559), (Start: 69 @3589 has 3 MA's), (84, 3685), (90, 3718), (98, 3805), (113, 3907), (128, 4009),

Gene: ConceptII_6 Start: 3574, Stop: 4275, Start Num: 18
Candidate Starts for ConceptII_6:
(Start: 18 @3574 has 194 MA's), (Start: 19 @3583 has 15 MA's), (46, 3706), (48, 3715), (51, 3736), (58, 3778), (65, 3808), (Start: 69 @3838 has 3 MA's), (84, 3934), (90, 3967), (98, 4054), (128, 4258),

Gene: Corndog_67 Start: 42385, Stop: 43071, Start Num: 24
Candidate Starts for Corndog_67:
(Start: 24 @42385 has 48 MA's), (27, 42412), (28, 42421), (31, 42439), (34, 42451), (40, 42472), (Start: 56 @42565 has 1 MA's), (59, 42574), (Start: 69 @42631 has 3 MA's), (71, 42643), (76, 42673), (78, 42685), (86, 42733), (92, 42790), (97, 42844), (110, 42913), (112, 42940), (118, 42982), (119, 42985), (123, 43012), (128, 43063),

Gene: Corvo_6 Start: 3520, Stop: 4221, Start Num: 18
Candidate Starts for Corvo_6:
(Start: 18 @3520 has 194 MA's), (Start: 19 @3529 has 15 MA's), (46, 3652), (48, 3661), (51, 3682), (58, 3724), (65, 3754), (Start: 69 @3784 has 3 MA's), (84, 3880), (90, 3913), (98, 4000), (113, 4102), (128, 4204),

Gene: Crispicous1_5 Start: 2816, Stop: 3508, Start Num: 18
Candidate Starts for Crispicous1_5:
(Start: 18 @2816 has 194 MA's), (46, 2945), (61, 3026), (65, 3047), (66, 3056), (Start: 69 @3077 has 3 MA's), (72, 3101), (105, 3320), (124, 3455),

Gene: DD5_6 Start: 3502, Stop: 4212, Start Num: 18
Candidate Starts for DD5_6:
(Start: 18 @3502 has 194 MA's), (Start: 19 @3511 has 15 MA's), (46, 3634), (51, 3664), (Start: 69 @3766 has 3 MA's), (70, 3775), (73, 3796), (84, 3868), (105, 4015), (110, 4048), (116, 4108), (128, 4195),

Gene: Daikon_27 Start: 27616, Stop: 28206, Start Num: 37
Candidate Starts for Daikon_27:
(Start: 37 @27616 has 1 MA's), (55, 27712), (Start: 56 @27718 has 1 MA's), (Start: 69 @27781 has 3 MA's), (79, 27838), (85, 27880), (89, 27907), (103, 28021), (117, 28123),

Gene: Dexes_7 Start: 3958, Stop: 4659, Start Num: 18
Candidate Starts for Dexes_7:
(Start: 18 @3958 has 194 MA's), (Start: 19 @3967 has 15 MA's), (46, 4090), (48, 4099), (51, 4120), (58, 4162), (65, 4192), (Start: 69 @4222 has 3 MA's), (84, 4318), (90, 4351), (98, 4438), (110, 4498), (113, 4540), (128, 4642),

Gene: Dexes_36 Start: 28737, Stop: 29423, Start Num: 24
Candidate Starts for Dexes_36:
(Start: 24 @28737 has 48 MA's), (28, 28773), (Start: 56 @28920 has 1 MA's), (Start: 69 @28989 has 3 MA's), (70, 28998), (87, 29100), (88, 29112), (91, 29124), (99, 29214), (102, 29232), (112, 29295), (120, 29349),

Gene: DirtDevil_6 Start: 3342, Stop: 4052, Start Num: 18
Candidate Starts for DirtDevil_6:
(Start: 18 @3342 has 194 MA's), (Start: 19 @3351 has 15 MA's), (46, 3474), (51, 3504), (Start: 69 @3606 has 3 MA's), (70, 3615), (73, 3636), (84, 3708), (105, 3855), (110, 3888), (116, 3948), (128, 4035),

Gene: Doom_6 Start: 3605, Stop: 4297, Start Num: 19

Candidate Starts for Doom_6:
(Start: 18 @3596 has 194 MA's), (Start: 19 @3605 has 15 MA's), (46, 3728), (48, 3737), (51, 3758), (58, 3800), (65, 3830), (Start: 69 @3860 has 3 MA's), (84, 3956), (90, 3989), (98, 4076), (110, 4136), (113, 4178), (128, 4280),

Gene: DrFeelGood_5 Start: 3134, Stop: 3826, Start Num: 18
Candidate Starts for DrFeelGood_5:
(Start: 18 @3134 has 194 MA's), (46, 3263), (61, 3344), (65, 3365), (66, 3374), (Start: 69 @3395 has 3 MA's), (72, 3419), (105, 3638), (124, 3773),

Gene: DreamCatcher_7 Start: 3730, Stop: 4419, Start Num: 18
Candidate Starts for DreamCatcher_7:
(Start: 18 @3730 has 194 MA's), (Start: 19 @3739 has 15 MA's), (Start: 69 @3991 has 3 MA's), (77, 4042), (112, 4294),

Gene: DroogsArmy_7 Start: 4452, Stop: 5159, Start Num: 23
Candidate Starts for DroogsArmy_7:
(16, 4305), (Start: 23 @4452 has 1 MA's), (25, 4458), (26, 4479), (31, 4506), (44, 4563), (58, 4650), (60, 4656), (66, 4692), (Start: 69 @4713 has 3 MA's), (75, 4749), (77, 4764), (81, 4779), (84, 4809), (86, 4815), (94, 4896), (100, 4956), (117, 5070), (121, 5088),

Gene: Dulcie_5 Start: 3031, Stop: 3720, Start Num: 18
Candidate Starts for Dulcie_5:
(Start: 18 @3031 has 194 MA's), (55, 3223), (Start: 69 @3292 has 3 MA's), (79, 3349), (92, 3448),

Gene: Dussy_7 Start: 3368, Stop: 4078, Start Num: 18
Candidate Starts for Dussy_7:
(Start: 18 @3368 has 194 MA's), (Start: 19 @3377 has 15 MA's), (46, 3500), (51, 3530), (Start: 69 @3632 has 3 MA's), (70, 3641), (73, 3662), (84, 3734), (105, 3881), (110, 3914), (116, 3974), (128, 4061),

Gene: Dylan_64 Start: 41438, Stop: 42124, Start Num: 24
Candidate Starts for Dylan_64:
(Start: 24 @41438 has 48 MA's), (27, 41465), (28, 41474), (31, 41492), (34, 41504), (40, 41525), (47, 41555), (Start: 56 @41618 has 1 MA's), (59, 41627), (Start: 69 @41684 has 3 MA's), (71, 41696), (78, 41738), (92, 41843), (97, 41897), (110, 41966), (112, 41993), (118, 42035), (119, 42038), (123, 42065), (128, 42116),

Gene: Dynamix_6 Start: 3084, Stop: 3773, Start Num: 18
Candidate Starts for Dynamix_6:
(Start: 18 @3084 has 194 MA's), (Start: 19 @3093 has 15 MA's), (Start: 69 @3345 has 3 MA's), (79, 3402),

Gene: Edtherson_6 Start: 3299, Stop: 3991, Start Num: 19
Candidate Starts for Edtherson_6:
(Start: 18 @3290 has 194 MA's), (Start: 19 @3299 has 15 MA's), (46, 3422), (48, 3431), (51, 3452), (58, 3494), (Start: 69 @3554 has 3 MA's), (84, 3650), (90, 3683), (98, 3770), (110, 3830), (113, 3872),

Gene: EnzoK_7 Start: 3584, Stop: 4288, Start Num: 18
Candidate Starts for EnzoK_7:
(Start: 18 @3584 has 194 MA's), (Start: 19 @3593 has 15 MA's), (46, 3716), (51, 3746), (58, 3788), (Start: 69 @3848 has 3 MA's), (70, 3857), (84, 3947), (110, 4127), (125, 4238), (128, 4271),

Gene: Espresso_6 Start: 3449, Stop: 4150, Start Num: 18
Candidate Starts for Espresso_6:
(Start: 18 @3449 has 194 MA's), (Start: 19 @3458 has 15 MA's), (46, 3581), (48, 3590), (51, 3611),
(58, 3653), (65, 3683), (Start: 69 @3713 has 3 MA's), (84, 3809), (90, 3842), (98, 3929), (113, 4031),
(128, 4133),

Gene: Euphoria_6 Start: 3347, Stop: 4048, Start Num: 18
Candidate Starts for Euphoria_6:
(Start: 18 @3347 has 194 MA's), (Start: 19 @3356 has 15 MA's), (46, 3479), (48, 3488), (51, 3509),
(58, 3551), (65, 3581), (Start: 69 @3611 has 3 MA's), (84, 3707), (90, 3740), (98, 3827), (110, 3887),
(113, 3929), (128, 4031),

Gene: Eyeball_6 Start: 3127, Stop: 3816, Start Num: 18
Candidate Starts for Eyeball_6:
(Start: 18 @3127 has 194 MA's), (Start: 19 @3136 has 15 MA's), (36, 3223), (55, 3319), (Start: 69
@3388 has 3 MA's), (79, 3445), (92, 3544),

Gene: Fajezeel_7 Start: 3169, Stop: 3870, Start Num: 18
Candidate Starts for Fajezeel_7:
(Start: 18 @3169 has 194 MA's), (Start: 19 @3178 has 15 MA's), (46, 3301), (48, 3310), (51, 3331),
(58, 3373), (65, 3403), (Start: 69 @3433 has 3 MA's), (84, 3529), (90, 3562), (98, 3649), (113, 3751),
(128, 3853),

Gene: Familton_65 Start: 41348, Stop: 42034, Start Num: 24
Candidate Starts for Familton_65:
(Start: 24 @41348 has 48 MA's), (27, 41375), (28, 41384), (31, 41402), (34, 41414), (40, 41435),
(Start: 56 @41528 has 1 MA's), (59, 41537), (Start: 69 @41594 has 3 MA's), (71, 41606), (78, 41648),
(92, 41753), (97, 41807), (110, 41876), (112, 41903), (118, 41945), (119, 41948), (123, 41975), (128,
42026),

Gene: Fascinus_5 Start: 3104, Stop: 3796, Start Num: 19
Candidate Starts for Fascinus_5:
(Start: 18 @3095 has 194 MA's), (Start: 19 @3104 has 15 MA's), (46, 3227), (48, 3236), (51, 3257),
(58, 3299), (65, 3329), (Start: 69 @3359 has 3 MA's), (84, 3455), (90, 3488), (98, 3575), (128, 3779),

Gene: Fascinus_35 Start: 28001, Stop: 28687, Start Num: 24
Candidate Starts for Fascinus_35:
(Start: 24 @28001 has 48 MA's), (28, 28037), (Start: 56 @28184 has 1 MA's), (Start: 69 @28253 has 3
MA's), (70, 28262), (87, 28364), (88, 28376), (91, 28388), (99, 28478), (102, 28496), (112, 28559),
(119, 28604), (120, 28613), (127, 28676),

Gene: Fenn_6 Start: 3315, Stop: 4004, Start Num: 18
Candidate Starts for Fenn_6:
(Start: 18 @3315 has 194 MA's), (Start: 19 @3324 has 15 MA's), (39, 3417), (45, 3438), (55, 3507),
(58, 3519), (68, 3570), (Start: 69 @3576 has 3 MA's), (70, 3585), (77, 3627), (89, 3702), (92, 3732),
(93, 3741), (98, 3792), (101, 3810), (105, 3822), (112, 3879), (120, 3933), (126, 3984),

Gene: Firecracker_65 Start: 41538, Stop: 42224, Start Num: 24
Candidate Starts for Firecracker_65:
(Start: 24 @41538 has 48 MA's), (27, 41565), (28, 41574), (31, 41592), (34, 41604), (40, 41625), (47,
41655), (Start: 56 @41718 has 1 MA's), (59, 41727), (Start: 69 @41784 has 3 MA's), (71, 41796), (78,
41838), (92, 41943), (97, 41997), (110, 42066), (112, 42093), (118, 42135), (119, 42138), (123,
42165), (128, 42216),

Gene: Forsytheast_5 Start: 3359, Stop: 4060, Start Num: 18
Candidate Starts for Forsytheast_5:
(Start: 18 @3359 has 194 MA's), (Start: 19 @3368 has 15 MA's), (46, 3491), (48, 3500), (51, 3521), (58, 3563), (65, 3593), (Start: 69 @3623 has 3 MA's), (84, 3719), (90, 3752), (98, 3839), (110, 3899), (113, 3941), (128, 4043),

Gene: FoulBall_64 Start: 41342, Stop: 42028, Start Num: 24
Candidate Starts for FoulBall_64:
(Start: 24 @41342 has 48 MA's), (27, 41369), (28, 41378), (31, 41396), (34, 41408), (40, 41429), (Start: 56 @41522 has 1 MA's), (59, 41531), (Start: 69 @41588 has 3 MA's), (71, 41600), (78, 41642), (86, 41690), (92, 41747), (97, 41801), (110, 41870), (112, 41897), (118, 41939), (119, 41942), (123, 41969), (128, 42020),

Gene: Francis47_6 Start: 3617, Stop: 4318, Start Num: 18
Candidate Starts for Francis47_6:
(Start: 18 @3617 has 194 MA's), (Start: 19 @3626 has 15 MA's), (46, 3749), (48, 3758), (51, 3779), (58, 3821), (65, 3851), (Start: 69 @3881 has 3 MA's), (84, 3977), (90, 4010), (98, 4097), (128, 4301),

Gene: Froghopper_7 Start: 3029, Stop: 3739, Start Num: 18
Candidate Starts for Froghopper_7:
(Start: 18 @3029 has 194 MA's), (Start: 19 @3038 has 15 MA's), (46, 3161), (51, 3191), (Start: 69 @3293 has 3 MA's), (70, 3302), (73, 3323), (84, 3395), (105, 3542), (110, 3575), (116, 3635), (128, 3722),

Gene: Froghopper_36 Start: 28015, Stop: 28701, Start Num: 24
Candidate Starts for Froghopper_36:
(Start: 24 @28015 has 48 MA's), (28, 28051), (Start: 56 @28198 has 1 MA's), (Start: 69 @28267 has 3 MA's), (70, 28276), (87, 28378), (88, 28390), (91, 28402), (99, 28492), (102, 28510), (112, 28573), (119, 28618), (120, 28627),

Gene: Fushigi_6 Start: 3249, Stop: 3959, Start Num: 18
Candidate Starts for Fushigi_6:
(Start: 18 @3249 has 194 MA's), (Start: 19 @3258 has 15 MA's), (46, 3381), (51, 3411), (Start: 69 @3513 has 3 MA's), (70, 3522), (73, 3543), (84, 3615), (105, 3762), (110, 3795), (116, 3855), (128, 3942),

Gene: GMonster_5 Start: 2964, Stop: 3665, Start Num: 18
Candidate Starts for GMonster_5:
(Start: 18 @2964 has 194 MA's), (Start: 19 @2973 has 15 MA's), (46, 3096), (48, 3105), (51, 3126), (58, 3168), (65, 3198), (Start: 69 @3228 has 3 MA's), (84, 3324), (90, 3357), (98, 3444), (110, 3504), (113, 3546), (128, 3648),

Gene: Gachnar_6 Start: 3379, Stop: 4080, Start Num: 18
Candidate Starts for Gachnar_6:
(Start: 18 @3379 has 194 MA's), (Start: 19 @3388 has 15 MA's), (46, 3511), (48, 3520), (51, 3541), (58, 3583), (65, 3613), (Start: 69 @3643 has 3 MA's), (84, 3739), (90, 3772), (98, 3859), (110, 3919), (113, 3961), (128, 4063),

Gene: GageAP_37 Start: 28786, Stop: 29472, Start Num: 24
Candidate Starts for GageAP_37:
(Start: 24 @28786 has 48 MA's), (28, 28822), (Start: 56 @28969 has 1 MA's), (Start: 69 @29038 has 3 MA's), (70, 29047), (87, 29149), (88, 29161), (91, 29173), (99, 29263), (102, 29281), (112, 29344),

(119, 29389), (120, 29398),

Gene: GageAP_7 Start: 3583, Stop: 4284, Start Num: 18
Candidate Starts for GageAP_7:
(Start: 18 @3583 has 194 MA's), (Start: 19 @3592 has 15 MA's), (46, 3715), (48, 3724), (51, 3745), (58, 3787), (65, 3817), (Start: 69 @3847 has 3 MA's), (84, 3943), (90, 3976), (98, 4063), (128, 4267),

Gene: Gandalf20_7 Start: 3468, Stop: 4154, Start Num: 19
Candidate Starts for Gandalf20_7:
(Start: 18 @3459 has 194 MA's), (Start: 19 @3468 has 15 MA's), (68, 3714), (Start: 69 @3720 has 3 MA's), (98, 3939), (105, 3969), (120, 4080),

Gene: Graduation_7 Start: 3446, Stop: 4141, Start Num: 18
Candidate Starts for Graduation_7:
(Start: 18 @3446 has 194 MA's), (68, 3701), (Start: 69 @3707 has 3 MA's), (98, 3926), (105, 3956), (120, 4067),

Gene: GrecoEtereo_7 Start: 3653, Stop: 4363, Start Num: 18
Candidate Starts for GrecoEtereo_7:
(Start: 18 @3653 has 194 MA's), (Start: 19 @3662 has 15 MA's), (46, 3785), (51, 3815), (Start: 69 @3917 has 3 MA's), (70, 3926), (73, 3947), (84, 4019), (105, 4166), (110, 4199), (116, 4259), (128, 4346),

Gene: Greg_7 Start: 3169, Stop: 3870, Start Num: 18
Candidate Starts for Greg_7:
(Start: 18 @3169 has 194 MA's), (Start: 19 @3178 has 15 MA's), (46, 3301), (48, 3310), (51, 3331), (58, 3373), (65, 3403), (Start: 69 @3433 has 3 MA's), (84, 3529), (90, 3562), (98, 3649), (113, 3751), (128, 3853),

Gene: GroundGoblin_6 Start: 3342, Stop: 4052, Start Num: 18
Candidate Starts for GroundGoblin_6:
(Start: 18 @3342 has 194 MA's), (Start: 19 @3351 has 15 MA's), (46, 3474), (51, 3504), (Start: 69 @3606 has 3 MA's), (70, 3615), (73, 3636), (84, 3708), (105, 3855), (110, 3888), (116, 3948), (128, 4035),

Gene: Gwendoluna_6 Start: 3451, Stop: 4161, Start Num: 18
Candidate Starts for Gwendoluna_6:
(Start: 18 @3451 has 194 MA's), (Start: 19 @3460 has 15 MA's), (46, 3583), (51, 3613), (Start: 69 @3715 has 3 MA's), (70, 3724), (73, 3745), (84, 3817), (105, 3964), (110, 3997), (116, 4057), (128, 4144),

Gene: Gyzlar_7 Start: 3788, Stop: 4498, Start Num: 18
Candidate Starts for Gyzlar_7:
(Start: 18 @3788 has 194 MA's), (Start: 19 @3797 has 15 MA's), (46, 3920), (51, 3950), (Start: 69 @4052 has 3 MA's), (70, 4061), (73, 4082), (84, 4154), (105, 4301), (110, 4334), (116, 4394), (128, 4481),

Gene: Hami1_6 Start: 3357, Stop: 4058, Start Num: 18
Candidate Starts for Hami1_6:
(Start: 18 @3357 has 194 MA's), (Start: 19 @3366 has 15 MA's), (46, 3489), (48, 3498), (51, 3519), (58, 3561), (65, 3591), (Start: 69 @3621 has 3 MA's), (84, 3717), (90, 3750), (98, 3837), (110, 3897), (113, 3939), (128, 4041),

Gene: HanShotFirst_35 Start: 27990, Stop: 28676, Start Num: 24
Candidate Starts for HanShotFirst_35:
(Start: 24 @27990 has 48 MA's), (28, 28026), (Start: 56 @28173 has 1 MA's), (Start: 69 @28242 has 3 MA's), (70, 28251), (87, 28353), (88, 28365), (91, 28377), (99, 28467), (102, 28485), (112, 28548), (119, 28593), (120, 28602),

Gene: HanShotFirst_6 Start: 2962, Stop: 3663, Start Num: 18
Candidate Starts for HanShotFirst_6:
(Start: 18 @2962 has 194 MA's), (Start: 19 @2971 has 15 MA's), (46, 3094), (48, 3103), (51, 3124), (58, 3166), (65, 3196), (Start: 69 @3226 has 3 MA's), (84, 3322), (90, 3355), (98, 3442), (110, 3502), (113, 3544), (128, 3646),

Gene: HarryOW_36 Start: 28444, Stop: 29130, Start Num: 24
Candidate Starts for HarryOW_36:
(Start: 24 @28444 has 48 MA's), (28, 28480), (Start: 56 @28627 has 1 MA's), (Start: 69 @28696 has 3 MA's), (70, 28705), (87, 28807), (88, 28819), (91, 28831), (99, 28921), (102, 28939), (112, 29002), (119, 29047), (120, 29056),

Gene: HarryOW_7 Start: 3653, Stop: 4363, Start Num: 18
Candidate Starts for HarryOW_7:
(Start: 18 @3653 has 194 MA's), (Start: 19 @3662 has 15 MA's), (46, 3785), (51, 3815), (Start: 69 @3917 has 3 MA's), (70, 3926), (73, 3947), (84, 4019), (105, 4166), (110, 4199), (116, 4259), (128, 4346),

Gene: Henry_29 Start: 27878, Stop: 28468, Start Num: 37
Candidate Starts for Henry_29:
(Start: 37 @27878 has 1 MA's), (55, 27974), (Start: 56 @27980 has 1 MA's), (Start: 69 @28043 has 3 MA's), (79, 28100), (85, 28142), (89, 28169), (103, 28283), (117, 28385),

Gene: Hermia_7 Start: 3534, Stop: 4244, Start Num: 18
Candidate Starts for Hermia_7:
(Start: 18 @3534 has 194 MA's), (Start: 19 @3543 has 15 MA's), (46, 3666), (51, 3696), (Start: 69 @3798 has 3 MA's), (70, 3807), (73, 3828), (84, 3900), (105, 4047), (110, 4080), (116, 4140), (128, 4227),

Gene: HermioneGrange_7 Start: 3087, Stop: 3776, Start Num: 18
Candidate Starts for HermioneGrange_7:
(Start: 18 @3087 has 194 MA's), (Start: 19 @3096 has 15 MA's), (Start: 69 @3348 has 3 MA's), (77, 3399), (112, 3651),

Gene: Homines_6 Start: 3366, Stop: 4076, Start Num: 18
Candidate Starts for Homines_6:
(Start: 18 @3366 has 194 MA's), (Start: 19 @3375 has 15 MA's), (46, 3498), (51, 3528), (Start: 69 @3630 has 3 MA's), (70, 3639), (73, 3660), (84, 3732), (105, 3879), (110, 3912), (116, 3972), (128, 4059),

Gene: Hope4ever_6 Start: 3493, Stop: 4182, Start Num: 18
Candidate Starts for Hope4ever_6:
(Start: 18 @3493 has 194 MA's), (Start: 19 @3502 has 15 MA's), (Start: 69 @3754 has 3 MA's), (77, 3805), (112, 4057),

Gene: ILeeKay_8 Start: 3564, Stop: 4253, Start Num: 18
Candidate Starts for ILeeKay_8:

(Start: 18 @3564 has 194 MA's), (Start: 19 @3573 has 15 MA's), (55, 3756), (Start: 69 @3825 has 3 MA's), (79, 3882), (92, 3981),

Gene: Ichabod_6 Start: 3086, Stop: 3787, Start Num: 18
Candidate Starts for Ichabod_6:
(Start: 18 @3086 has 194 MA's), (Start: 19 @3095 has 15 MA's), (46, 3218), (48, 3227), (51, 3248), (58, 3290), (65, 3320), (Start: 69 @3350 has 3 MA's), (84, 3446), (90, 3479), (98, 3566), (113, 3668), (128, 3770),

Gene: Idergollasper_64 Start: 41342, Stop: 42028, Start Num: 24
Candidate Starts for Idergollasper_64:
(Start: 24 @41342 has 48 MA's), (27, 41369), (28, 41378), (31, 41396), (34, 41408), (40, 41429), (Start: 56 @41522 has 1 MA's), (59, 41531), (Start: 69 @41588 has 3 MA's), (71, 41600), (78, 41642), (92, 41747), (97, 41801), (110, 41870), (112, 41897), (118, 41939), (119, 41942), (123, 41969), (128, 42020),

Gene: IgnatiusPatJac_35 Start: 28305, Stop: 28991, Start Num: 24
Candidate Starts for IgnatiusPatJac_35:
(Start: 24 @28305 has 48 MA's), (28, 28341), (Start: 56 @28488 has 1 MA's), (Start: 69 @28557 has 3 MA's), (70, 28566), (87, 28668), (88, 28680), (91, 28692), (99, 28782), (102, 28800), (112, 28863), (119, 28908), (120, 28917),

Gene: IgnatiusPatJac_5 Start: 3362, Stop: 4063, Start Num: 18
Candidate Starts for IgnatiusPatJac_5:
(Start: 18 @3362 has 194 MA's), (Start: 19 @3371 has 15 MA's), (46, 3494), (48, 3503), (51, 3524), (58, 3566), (65, 3596), (Start: 69 @3626 has 3 MA's), (84, 3722), (90, 3755), (98, 3842), (110, 3902), (113, 3944),

Gene: Imara_62 Start: 41142, Stop: 41828, Start Num: 24
Candidate Starts for Imara_62:
(Start: 24 @41142 has 48 MA's), (27, 41169), (28, 41178), (31, 41196), (34, 41208), (40, 41229), (Start: 56 @41322 has 1 MA's), (59, 41331), (Start: 69 @41388 has 3 MA's), (71, 41400), (78, 41442), (92, 41547), (97, 41601), (110, 41670), (112, 41697), (118, 41739), (119, 41742), (123, 41769), (128, 41820),

Gene: Inyanga_34 Start: 27827, Stop: 28513, Start Num: 24
Candidate Starts for Inyanga_34:
(Start: 24 @27827 has 48 MA's), (28, 27863), (Start: 56 @28010 has 1 MA's), (Start: 69 @28079 has 3 MA's), (70, 28088), (87, 28190), (88, 28202), (91, 28214), (99, 28304), (102, 28322), (112, 28385), (119, 28430), (120, 28439), (127, 28502),

Gene: Inyanga_5 Start: 3144, Stop: 3845, Start Num: 18
Candidate Starts for Inyanga_5:
(Start: 18 @3144 has 194 MA's), (Start: 19 @3153 has 15 MA's), (46, 3276), (48, 3285), (51, 3306), (58, 3348), (65, 3378), (Start: 69 @3408 has 3 MA's), (84, 3504), (90, 3537), (98, 3624), (110, 3684), (113, 3726), (128, 3828),

Gene: Iqorha_34 Start: 27826, Stop: 28512, Start Num: 24
Candidate Starts for Iqorha_34:
(Start: 24 @27826 has 48 MA's), (28, 27862), (Start: 56 @28009 has 1 MA's), (Start: 69 @28078 has 3 MA's), (70, 28087), (87, 28189), (88, 28201), (91, 28213), (99, 28303), (102, 28321), (112, 28384), (119, 28429), (120, 28438), (127, 28501),

Gene: Iqorha_5 Start: 3144, Stop: 3845, Start Num: 18
Candidate Starts for Iqorha_5:
(Start: 18 @3144 has 194 MA's), (Start: 19 @3153 has 15 MA's), (46, 3276), (48, 3285), (51, 3306), (58, 3348), (65, 3378), (Start: 69 @3408 has 3 MA's), (84, 3504), (90, 3537), (98, 3624), (110, 3684), (113, 3726), (128, 3828),

Gene: JC27_37 Start: 28962, Stop: 29648, Start Num: 24
Candidate Starts for JC27_37:
(Start: 24 @28962 has 48 MA's), (28, 28998), (Start: 56 @29145 has 1 MA's), (Start: 69 @29214 has 3 MA's), (70, 29223), (87, 29325), (88, 29337), (91, 29349), (99, 29439), (102, 29457), (112, 29520), (119, 29565), (120, 29574), (127, 29637),

Gene: JC27_7 Start: 3784, Stop: 4485, Start Num: 18
Candidate Starts for JC27_7:
(Start: 18 @3784 has 194 MA's), (Start: 19 @3793 has 15 MA's), (46, 3916), (48, 3925), (51, 3946), (58, 3988), (65, 4018), (Start: 69 @4048 has 3 MA's), (84, 4144), (90, 4177), (98, 4264), (113, 4366), (128, 4468),

Gene: JackSparrow_6 Start: 3351, Stop: 4052, Start Num: 18
Candidate Starts for JackSparrow_6:
(Start: 18 @3351 has 194 MA's), (Start: 19 @3360 has 15 MA's), (46, 3483), (48, 3492), (51, 3513), (58, 3555), (65, 3585), (Start: 69 @3615 has 3 MA's), (84, 3711), (90, 3744), (98, 3831), (110, 3891), (113, 3933), (128, 4035),

Gene: JangDynasty_64 Start: 41428, Stop: 42114, Start Num: 24
Candidate Starts for JangDynasty_64:
(Start: 24 @41428 has 48 MA's), (27, 41455), (28, 41464), (31, 41482), (34, 41494), (40, 41515), (Start: 56 @41608 has 1 MA's), (59, 41617), (Start: 69 @41674 has 3 MA's), (71, 41686), (78, 41728), (92, 41833), (97, 41887), (110, 41956), (112, 41983), (118, 42025), (119, 42028), (123, 42055), (128, 42106),

Gene: Jasper_7 Start: 3199, Stop: 3897, Start Num: 18
Candidate Starts for Jasper_7:
(Start: 18 @3199 has 194 MA's), (Start: 19 @3208 has 15 MA's), (55, 3391), (Start: 56 @3397 has 1 MA's), (57, 3400), (Start: 69 @3460 has 3 MA's), (93, 3628), (98, 3679), (105, 3709), (109, 3739),

Gene: Jerm2_6 Start: 3086, Stop: 3775, Start Num: 18
Candidate Starts for Jerm2_6:
(Start: 18 @3086 has 194 MA's), (Start: 19 @3095 has 15 MA's), (39, 3188), (45, 3209), (55, 3278), (58, 3290), (68, 3341), (Start: 69 @3347 has 3 MA's), (70, 3356), (77, 3398), (89, 3473), (92, 3503), (93, 3512), (98, 3563), (101, 3581), (105, 3593), (112, 3650), (120, 3704), (126, 3755),

Gene: JuliaChild_8 Start: 3828, Stop: 4529, Start Num: 18
Candidate Starts for JuliaChild_8:
(Start: 18 @3828 has 194 MA's), (Start: 19 @3837 has 15 MA's), (46, 3960), (48, 3969), (51, 3990), (58, 4032), (65, 4062), (Start: 69 @4092 has 3 MA's), (84, 4188), (90, 4221), (98, 4308), (110, 4368), (113, 4410), (128, 4512),

Gene: KBG_6 Start: 3719, Stop: 4420, Start Num: 18
Candidate Starts for KBG_6:
(Start: 18 @3719 has 194 MA's), (Start: 19 @3728 has 15 MA's), (46, 3851), (48, 3860), (51, 3881), (58, 3923), (65, 3953), (Start: 69 @3983 has 3 MA's), (84, 4079), (90, 4112), (98, 4199), (110, 4259), (113, 4301), (128, 4403),

Gene: KSSJEB_5 Start: 2853, Stop: 3533, Start Num: 19
Candidate Starts for KSSJEB_5:
(Start: 18 @2844 has 194 MA's), (Start: 19 @2853 has 15 MA's), (39, 2946), (45, 2967), (55, 3036), (58, 3048), (68, 3099), (Start: 69 @3105 has 3 MA's), (70, 3114), (77, 3156), (89, 3231), (92, 3261), (93, 3270), (98, 3321), (101, 3339), (105, 3351), (112, 3408), (120, 3462), (126, 3513),

Gene: Kanely_7 Start: 3938, Stop: 4639, Start Num: 18
Candidate Starts for Kanely_7:
(Start: 18 @3938 has 194 MA's), (Start: 19 @3947 has 15 MA's), (46, 4070), (48, 4079), (51, 4100), (58, 4142), (65, 4172), (Start: 69 @4202 has 3 MA's), (84, 4298), (90, 4331), (98, 4418), (128, 4622),

Gene: Kenmech_7 Start: 3368, Stop: 4078, Start Num: 18
Candidate Starts for Kenmech_7:
(Start: 18 @3368 has 194 MA's), (Start: 19 @3377 has 15 MA's), (46, 3500), (51, 3530), (Start: 69 @3632 has 3 MA's), (70, 3641), (73, 3662), (84, 3734), (105, 3881), (110, 3914), (116, 3974), (128, 4061),

Gene: KikiBouba_6 Start: 3343, Stop: 4053, Start Num: 18
Candidate Starts for KikiBouba_6:
(Start: 18 @3343 has 194 MA's), (Start: 19 @3352 has 15 MA's), (46, 3475), (51, 3505), (Start: 69 @3607 has 3 MA's), (70, 3616), (73, 3637), (84, 3709), (105, 3856), (110, 3889), (116, 3949), (128, 4036),

Gene: Killigrew_4 Start: 2819, Stop: 3508, Start Num: 18
Candidate Starts for Killigrew_4:
(Start: 18 @2819 has 194 MA's), (22, 2858), (64, 3044), (Start: 69 @3071 has 3 MA's), (74, 3104), (85, 3170), (91, 3206), (92, 3230), (93, 3239), (95, 3248), (98, 3287), (111, 3356), (114, 3401), (128, 3500),

Gene: KingPhillip3_63 Start: 41357, Stop: 42043, Start Num: 24
Candidate Starts for KingPhillip3_63:
(Start: 24 @41357 has 48 MA's), (27, 41384), (28, 41393), (31, 41411), (34, 41423), (40, 41444), (Start: 56 @41537 has 1 MA's), (59, 41546), (Start: 69 @41603 has 3 MA's), (71, 41615), (78, 41657), (92, 41762), (97, 41816), (110, 41885), (112, 41912), (118, 41954), (119, 41957), (123, 41984), (128, 42035),

Gene: Kostya_29 Start: 28044, Stop: 28469, Start Num: 69
Candidate Starts for Kostya_29:
(30, 27855), (55, 27975), (Start: 56 @27981 has 1 MA's), (Start: 69 @28044 has 3 MA's), (79, 28101), (85, 28143), (89, 28170), (103, 28284), (117, 28386),

Gene: Krili_63 Start: 40852, Stop: 41538, Start Num: 24
Candidate Starts for Krili_63:
(Start: 24 @40852 has 48 MA's), (27, 40879), (28, 40888), (31, 40906), (34, 40918), (40, 40939), (Start: 56 @41032 has 1 MA's), (59, 41041), (Start: 69 @41098 has 3 MA's), (71, 41110), (78, 41152), (86, 41200), (92, 41257), (97, 41311), (110, 41380), (112, 41407), (118, 41449), (119, 41452), (123, 41479), (128, 41530),

Gene: Kugel_7 Start: 3406, Stop: 4116, Start Num: 18
Candidate Starts for Kugel_7:
(Start: 18 @3406 has 194 MA's), (Start: 19 @3415 has 15 MA's), (46, 3538), (51, 3568), (Start: 69 @3670 has 3 MA's), (70, 3679), (73, 3700), (84, 3772), (105, 3919), (110, 3952), (116, 4012), (128, 4099),

Gene: KyMonks1A_8 Start: 3672, Stop: 4373, Start Num: 18
Candidate Starts for KyMonks1A_8:
(Start: 18 @3672 has 194 MA's), (Start: 19 @3681 has 15 MA's), (46, 3804), (48, 3813), (51, 3834), (58, 3876), (Start: 69 @3936 has 3 MA's), (84, 4032), (90, 4065), (98, 4152), (110, 4212), (113, 4254),

Gene: Kykar_35 Start: 28019, Stop: 28705, Start Num: 24
Candidate Starts for Kykar_35:
(Start: 24 @28019 has 48 MA's), (28, 28055), (Start: 56 @28202 has 1 MA's), (Start: 69 @28271 has 3 MA's), (70, 28280), (87, 28382), (88, 28394), (91, 28406), (99, 28496), (102, 28514), (112, 28577), (119, 28622), (120, 28631), (127, 28694),

Gene: Kykar_4 Start: 2883, Stop: 3593, Start Num: 18
Candidate Starts for Kykar_4:
(Start: 18 @2883 has 194 MA's), (Start: 19 @2892 has 15 MA's), (46, 3015), (51, 3045), (Start: 69 @3147 has 3 MA's), (70, 3156), (73, 3177), (84, 3249), (105, 3396), (110, 3429), (116, 3489), (128, 3576),

Gene: Lamina13_6 Start: 2960, Stop: 3655, Start Num: 18
Candidate Starts for Lamina13_6:
(Start: 18 @2960 has 194 MA's), (Start: 19 @2969 has 15 MA's), (43, 3077), (66, 3203), (Start: 69 @3224 has 3 MA's), (79, 3278), (98, 3437), (106, 3467), (107, 3473), (114, 3542), (116, 3554),

Gene: Lesedi_5 Start: 3098, Stop: 3808, Start Num: 18
Candidate Starts for Lesedi_5:
(Start: 18 @3098 has 194 MA's), (Start: 19 @3107 has 15 MA's), (46, 3230), (51, 3260), (Start: 69 @3362 has 3 MA's), (70, 3371), (73, 3392), (84, 3464), (105, 3611), (110, 3644), (116, 3704), (128, 3791),

Gene: Levia_5 Start: 2818, Stop: 3528, Start Num: 18
Candidate Starts for Levia_5:
(Start: 18 @2818 has 194 MA's), (Start: 19 @2827 has 15 MA's), (46, 2950), (51, 2980), (Start: 69 @3082 has 3 MA's), (70, 3091), (73, 3112), (84, 3184), (105, 3331), (110, 3364), (116, 3424), (128, 3511),

Gene: Licorice_8 Start: 3957, Stop: 4667, Start Num: 18
Candidate Starts for Licorice_8:
(Start: 18 @3957 has 194 MA's), (Start: 19 @3966 has 15 MA's), (46, 4089), (51, 4119), (Start: 69 @4221 has 3 MA's), (70, 4230), (73, 4251), (84, 4323), (105, 4470), (110, 4503), (116, 4563), (128, 4650),

Gene: LilBib_5 Start: 3141, Stop: 3842, Start Num: 18
Candidate Starts for LilBib_5:
(Start: 18 @3141 has 194 MA's), (Start: 19 @3150 has 15 MA's), (46, 3273), (48, 3282), (51, 3303), (58, 3345), (65, 3375), (Start: 69 @3405 has 3 MA's), (84, 3501), (90, 3534), (98, 3621), (110, 3681), (113, 3723), (128, 3825),

Gene: LilBib_36 Start: 29268, Stop: 29954, Start Num: 24
Candidate Starts for LilBib_36:
(Start: 24 @29268 has 48 MA's), (28, 29304), (Start: 56 @29451 has 1 MA's), (Start: 69 @29520 has 3 MA's), (70, 29529), (87, 29631), (88, 29643), (91, 29655), (99, 29745), (102, 29763), (112, 29826), (119, 29871), (120, 29880),

Gene: Lockley_6 Start: 3279, Stop: 3989, Start Num: 18
Candidate Starts for Lockley_6:
(Start: 18 @3279 has 194 MA's), (Start: 19 @3288 has 15 MA's), (46, 3411), (51, 3441), (Start: 69 @3543 has 3 MA's), (70, 3552), (73, 3573), (84, 3645), (105, 3792), (110, 3825), (116, 3885), (128, 3972),

Gene: Lopton_7 Start: 3693, Stop: 4394, Start Num: 18
Candidate Starts for Lopton_7:
(Start: 18 @3693 has 194 MA's), (Start: 19 @3702 has 15 MA's), (46, 3825), (48, 3834), (51, 3855), (58, 3897), (65, 3927), (Start: 69 @3957 has 3 MA's), (84, 4053), (90, 4086), (98, 4173), (113, 4275), (128, 4377),

Gene: LunarLander_6 Start: 3118, Stop: 3798, Start Num: 19
Candidate Starts for LunarLander_6:
(Start: 18 @3109 has 194 MA's), (Start: 19 @3118 has 15 MA's), (55, 3301), (Start: 69 @3370 has 3 MA's), (79, 3427), (92, 3526),

Gene: MPlant7149_5 Start: 2926, Stop: 3627, Start Num: 18
Candidate Starts for MPlant7149_5:
(Start: 18 @2926 has 194 MA's), (Start: 19 @2935 has 15 MA's), (46, 3058), (48, 3067), (51, 3088), (58, 3130), (65, 3160), (Start: 69 @3190 has 3 MA's), (84, 3286), (90, 3319), (98, 3406), (113, 3508), (128, 3610),

Gene: MadKillah_65 Start: 41121, Stop: 41807, Start Num: 24
Candidate Starts for MadKillah_65:
(Start: 24 @41121 has 48 MA's), (27, 41148), (28, 41157), (31, 41175), (34, 41187), (40, 41208), (Start: 56 @41301 has 1 MA's), (59, 41310), (Start: 69 @41367 has 3 MA's), (71, 41379), (78, 41421), (92, 41526), (97, 41580), (110, 41649), (112, 41676), (118, 41718), (119, 41721), (123, 41748), (128, 41799),

Gene: Magnar_6 Start: 3078, Stop: 3779, Start Num: 18
Candidate Starts for Magnar_6:
(Start: 18 @3078 has 194 MA's), (Start: 19 @3087 has 15 MA's), (46, 3210), (48, 3219), (51, 3240), (58, 3282), (Start: 69 @3342 has 3 MA's), (84, 3438), (90, 3471), (98, 3558), (110, 3618), (113, 3660),

Gene: Magnito_5 Start: 2814, Stop: 3524, Start Num: 18
Candidate Starts for Magnito_5:
(Start: 18 @2814 has 194 MA's), (Start: 19 @2823 has 15 MA's), (46, 2946), (51, 2976), (Start: 69 @3078 has 3 MA's), (70, 3087), (73, 3108), (84, 3180), (105, 3327), (110, 3360), (116, 3420), (128, 3507),

Gene: Makemake_6 Start: 3551, Stop: 4240, Start Num: 18
Candidate Starts for Makemake_6:
(Start: 18 @3551 has 194 MA's), (Start: 19 @3560 has 15 MA's), (42, 3662), (59, 3752), (Start: 69 @3809 has 3 MA's), (79, 3863), (80, 3866), (86, 3908), (92, 3962), (98, 4022), (104, 4046), (106, 4052), (114, 4127), (116, 4139),

Gene: Manatee_6 Start: 3013, Stop: 3723, Start Num: 18
Candidate Starts for Manatee_6:
(Start: 18 @3013 has 194 MA's), (Start: 19 @3022 has 15 MA's), (46, 3145), (51, 3175), (Start: 69 @3277 has 3 MA's), (70, 3286), (73, 3307), (84, 3379), (105, 3526), (110, 3559), (116, 3619), (128, 3706),

Gene: Marcell_6 Start: 3274, Stop: 3984, Start Num: 18
Candidate Starts for Marcell_6:
(Start: 18 @3274 has 194 MA's), (Start: 19 @3283 has 15 MA's), (46, 3406), (51, 3436), (Start: 69 @3538 has 3 MA's), (70, 3547), (73, 3568), (84, 3640), (105, 3787), (110, 3820), (116, 3880), (128, 3967),

Gene: Marchy_5 Start: 2910, Stop: 3611, Start Num: 18
Candidate Starts for Marchy_5:
(Start: 18 @2910 has 194 MA's), (Start: 19 @2919 has 15 MA's), (46, 3042), (48, 3051), (51, 3072), (58, 3114), (65, 3144), (Start: 69 @3174 has 3 MA's), (84, 3270), (90, 3303), (98, 3390),

Gene: Marco3_6 Start: 3576, Stop: 4277, Start Num: 18
Candidate Starts for Marco3_6:
(Start: 18 @3576 has 194 MA's), (Start: 19 @3585 has 15 MA's), (46, 3708), (48, 3717), (51, 3738), (58, 3780), (65, 3810), (Start: 69 @3840 has 3 MA's), (84, 3936), (90, 3969), (98, 4056), (110, 4116), (128, 4260),

Gene: Marge_6 Start: 3295, Stop: 4005, Start Num: 18
Candidate Starts for Marge_6:
(Start: 18 @3295 has 194 MA's), (Start: 19 @3304 has 15 MA's), (46, 3427), (51, 3457), (Start: 69 @3559 has 3 MA's), (70, 3568), (73, 3589), (84, 3661), (105, 3808), (110, 3841), (116, 3901), (128, 3988),

Gene: Maroc7_5 Start: 3096, Stop: 3797, Start Num: 18
Candidate Starts for Maroc7_5:
(Start: 18 @3096 has 194 MA's), (Start: 19 @3105 has 15 MA's), (46, 3228), (48, 3237), (51, 3258), (58, 3300), (65, 3330), (Start: 69 @3360 has 3 MA's), (84, 3456), (90, 3489), (98, 3576), (128, 3780),

Gene: Marsha_6 Start: 3549, Stop: 4250, Start Num: 18
Candidate Starts for Marsha_6:
(Start: 18 @3549 has 194 MA's), (Start: 19 @3558 has 15 MA's), (46, 3681), (48, 3690), (51, 3711), (58, 3753), (65, 3783), (Start: 69 @3813 has 3 MA's), (84, 3909), (90, 3942), (98, 4029), (110, 4089), (113, 4131),

Gene: MaryBeth_6 Start: 3520, Stop: 4221, Start Num: 18
Candidate Starts for MaryBeth_6:
(Start: 18 @3520 has 194 MA's), (Start: 19 @3529 has 15 MA's), (46, 3652), (48, 3661), (51, 3682), (58, 3724), (65, 3754), (Start: 69 @3784 has 3 MA's), (84, 3880), (90, 3913), (98, 4000), (113, 4102), (128, 4204),

Gene: McGuire_6 Start: 3080, Stop: 3769, Start Num: 18
Candidate Starts for McGuire_6:
(Start: 18 @3080 has 194 MA's), (Start: 19 @3089 has 15 MA's), (Start: 69 @3341 has 3 MA's), (79, 3398),

Gene: McSinger_7 Start: 3478, Stop: 4182, Start Num: 18
Candidate Starts for McSinger_7:
(Start: 18 @3478 has 194 MA's), (Start: 19 @3487 has 15 MA's), (46, 3610), (51, 3640), (58, 3682), (67, 3727), (Start: 69 @3742 has 3 MA's), (70, 3751), (84, 3841), (110, 4021), (125, 4132), (128, 4165),

Gene: MetalQZJ_6 Start: 3520, Stop: 4221, Start Num: 18
Candidate Starts for MetalQZJ_6:

(Start: 18 @3520 has 194 MA's), (Start: 19 @3529 has 15 MA's), (46, 3652), (48, 3661), (51, 3682), (58, 3724), (65, 3754), (Start: 69 @3784 has 3 MA's), (84, 3880), (90, 3913), (98, 4000), (113, 4102), (128, 4204),

Gene: Michley_6 Start: 3280, Stop: 3972, Start Num: 18
Candidate Starts for Michley_6:
(Start: 18 @3280 has 194 MA's), (46, 3409), (61, 3490), (65, 3511), (66, 3520), (Start: 69 @3541 has 3 MA's), (72, 3565), (105, 3784), (124, 3919),

Gene: MilleFeuille_3 Start: 2843, Stop: 3544, Start Num: 18
Candidate Starts for MilleFeuille_3:
(Start: 18 @2843 has 194 MA's), (Start: 19 @2852 has 15 MA's), (46, 2975), (48, 2984), (51, 3005), (58, 3047), (65, 3077), (Start: 69 @3107 has 3 MA's), (84, 3203), (90, 3236), (98, 3323), (110, 3383), (113, 3425),

Gene: Mkhuseli_5 Start: 2925, Stop: 3626, Start Num: 18
Candidate Starts for Mkhuseli_5:
(Start: 18 @2925 has 194 MA's), (Start: 19 @2934 has 15 MA's), (46, 3057), (48, 3066), (51, 3087), (58, 3129), (66, 3168), (Start: 69 @3189 has 3 MA's), (84, 3285), (90, 3318), (98, 3405), (110, 3465), (113, 3507), (128, 3609),

Gene: Molly_7 Start: 3126, Stop: 3827, Start Num: 18
Candidate Starts for Molly_7:
(Start: 18 @3126 has 194 MA's), (Start: 19 @3135 has 15 MA's), (46, 3258), (48, 3267), (51, 3288), (58, 3330), (65, 3360), (Start: 69 @3390 has 3 MA's), (84, 3486), (90, 3519), (98, 3606), (113, 3708), (128, 3810),

Gene: Monet_6 Start: 3249, Stop: 3959, Start Num: 18
Candidate Starts for Monet_6:
(Start: 18 @3249 has 194 MA's), (Start: 19 @3258 has 15 MA's), (46, 3381), (51, 3411), (Start: 69 @3513 has 3 MA's), (70, 3522), (73, 3543), (84, 3615), (105, 3762), (110, 3795), (116, 3855), (128, 3942),

Gene: Moose_5 Start: 3359, Stop: 4060, Start Num: 18
Candidate Starts for Moose_5:
(Start: 18 @3359 has 194 MA's), (Start: 19 @3368 has 15 MA's), (46, 3491), (48, 3500), (51, 3521), (58, 3563), (65, 3593), (Start: 69 @3623 has 3 MA's), (84, 3719), (90, 3752), (98, 3839), (110, 3899), (113, 3941), (128, 4043),

Gene: Mori_64 Start: 41383, Stop: 42069, Start Num: 24
Candidate Starts for Mori_64:
(Start: 24 @41383 has 48 MA's), (27, 41410), (28, 41419), (31, 41437), (34, 41449), (40, 41470), (Start: 56 @41563 has 1 MA's), (59, 41572), (Start: 69 @41629 has 3 MA's), (71, 41641), (78, 41683), (92, 41788), (97, 41842), (110, 41911), (112, 41938), (118, 41980), (119, 41983), (123, 42010), (128, 42061),

Gene: MrGordo_6 Start: 3113, Stop: 3805, Start Num: 18
Candidate Starts for MrGordo_6:
(Start: 18 @3113 has 194 MA's), (46, 3242), (47, 3248), (61, 3323), (65, 3344), (66, 3353), (Start: 69 @3374 has 3 MA's), (72, 3398), (105, 3617), (124, 3752),

Gene: Mule_5 Start: 3184, Stop: 3885, Start Num: 18
Candidate Starts for Mule_5:

(Start: 18 @3184 has 194 MA's), (Start: 19 @3193 has 15 MA's), (46, 3316), (48, 3325), (51, 3346), (58, 3388), (65, 3418), (Start: 69 @3448 has 3 MA's), (84, 3544), (90, 3577), (98, 3664), (110, 3724), (113, 3766), (128, 3868),

Gene: Murai_65 Start: 41564, Stop: 42250, Start Num: 24
Candidate Starts for Murai_65:
(Start: 24 @41564 has 48 MA's), (27, 41591), (28, 41600), (31, 41618), (34, 41630), (40, 41651), (Start: 56 @41744 has 1 MA's), (59, 41753), (Start: 69 @41810 has 3 MA's), (71, 41822), (78, 41864), (92, 41969), (97, 42023), (110, 42092), (112, 42119), (118, 42161), (119, 42164), (123, 42191), (128, 42242),

Gene: Museum_7 Start: 2926, Stop: 3615, Start Num: 18
Candidate Starts for Museum_7:
(Start: 18 @2926 has 194 MA's), (Start: 19 @2935 has 15 MA's), (39, 3028), (45, 3049), (55, 3118), (58, 3130), (68, 3181), (Start: 69 @3187 has 3 MA's), (70, 3196), (77, 3238), (89, 3313), (92, 3343), (93, 3352), (98, 3403), (101, 3421), (105, 3433),

Gene: NEHalo_6 Start: 2920, Stop: 3621, Start Num: 18
Candidate Starts for NEHalo_6:
(Start: 18 @2920 has 194 MA's), (Start: 19 @2929 has 15 MA's), (46, 3052), (48, 3061), (51, 3082), (58, 3124), (65, 3154), (Start: 69 @3184 has 3 MA's), (84, 3280), (90, 3313), (98, 3400), (113, 3502), (128, 3604),

Gene: Naira_6 Start: 3315, Stop: 4004, Start Num: 18
Candidate Starts for Naira_6:
(Start: 18 @3315 has 194 MA's), (Start: 19 @3324 has 15 MA's), (39, 3417), (45, 3438), (55, 3507), (58, 3519), (68, 3570), (Start: 69 @3576 has 3 MA's), (70, 3585), (77, 3627), (89, 3702), (92, 3732), (93, 3741), (98, 3792), (101, 3810), (105, 3822), (112, 3879), (120, 3933), (126, 3984),

Gene: Nerujay_6 Start: 3213, Stop: 3914, Start Num: 18
Candidate Starts for Nerujay_6:
(Start: 18 @3213 has 194 MA's), (Start: 19 @3222 has 15 MA's), (46, 3345), (48, 3354), (51, 3375), (58, 3417), (65, 3447), (Start: 69 @3477 has 3 MA's), (84, 3573), (90, 3606), (98, 3693), (110, 3753), (113, 3795), (128, 3897),

Gene: NewHope4_22 Start: 22169, Stop: 23029, Start Num: 14
Candidate Starts for NewHope4_22:
(Start: 14 @22169 has 1 MA's), (15, 22214), (17, 22298), (21, 22358), (29, 22400), (33, 22418), (35, 22427), (43, 22451), (47, 22472), (58, 22538), (Start: 69 @22598 has 3 MA's), (79, 22655), (84, 22694), (89, 22727), (94, 22775), (126, 23003),

Gene: Nhonho_6 Start: 3216, Stop: 3917, Start Num: 18
Candidate Starts for Nhonho_6:
(Start: 18 @3216 has 194 MA's), (Start: 19 @3225 has 15 MA's), (46, 3348), (48, 3357), (58, 3420), (66, 3459), (Start: 69 @3480 has 3 MA's), (84, 3576), (90, 3609), (110, 3756), (113, 3798), (128, 3900),

Gene: NiebruSaylor_63 Start: 40771, Stop: 41457, Start Num: 24
Candidate Starts for NiebruSaylor_63:
(Start: 24 @40771 has 48 MA's), (27, 40798), (28, 40807), (31, 40825), (34, 40837), (40, 40858), (Start: 56 @40951 has 1 MA's), (59, 40960), (Start: 69 @41017 has 3 MA's), (71, 41029), (78, 41071), (86, 41119), (92, 41176), (97, 41230), (110, 41299), (112, 41326), (118, 41368), (119, 41371), (123, 41398), (128, 41449),

Gene: Niza_7 Start: 3932, Stop: 4633, Start Num: 18
Candidate Starts for Niza_7:
(Start: 18 @3932 has 194 MA's), (Start: 19 @3941 has 15 MA's), (46, 4064), (48, 4073), (51, 4094), (58, 4136), (65, 4166), (Start: 69 @4196 has 3 MA's), (84, 4292), (90, 4325), (98, 4412), (113, 4514), (128, 4616),

Gene: Norz_6 Start: 3312, Stop: 4001, Start Num: 18
Candidate Starts for Norz_6:
(Start: 18 @3312 has 194 MA's), (Start: 19 @3321 has 15 MA's), (42, 3423), (59, 3513), (Start: 69 @3570 has 3 MA's), (79, 3624), (80, 3627), (81, 3633), (86, 3669), (92, 3723), (98, 3783), (104, 3807), (106, 3813), (114, 3888), (116, 3900),

Gene: Noxious_6 Start: 3534, Stop: 4244, Start Num: 18
Candidate Starts for Noxious_6:
(Start: 18 @3534 has 194 MA's), (Start: 19 @3543 has 15 MA's), (46, 3666), (51, 3696), (Start: 69 @3798 has 3 MA's), (70, 3807), (73, 3828), (84, 3900), (105, 4047), (110, 4080), (116, 4140), (128, 4227),

Gene: Ohno789_5 Start: 2769, Stop: 3470, Start Num: 18
Candidate Starts for Ohno789_5:
(Start: 18 @2769 has 194 MA's), (Start: 19 @2778 has 15 MA's), (46, 2901), (48, 2910), (51, 2931), (58, 2973), (65, 3003), (Start: 69 @3033 has 3 MA's), (84, 3129), (90, 3162), (98, 3249), (113, 3351), (128, 3453),

Gene: Oogway_5 Start: 3340, Stop: 4041, Start Num: 18
Candidate Starts for Oogway_5:
(Start: 18 @3340 has 194 MA's), (Start: 19 @3349 has 15 MA's), (46, 3472), (48, 3481), (51, 3502), (58, 3544), (65, 3574), (Start: 69 @3604 has 3 MA's), (84, 3700), (90, 3733), (98, 3820), (128, 4024),

Gene: PSullivan_8 Start: 3828, Stop: 4529, Start Num: 18
Candidate Starts for PSullivan_8:
(Start: 18 @3828 has 194 MA's), (Start: 19 @3837 has 15 MA's), (46, 3960), (48, 3969), (51, 3990), (58, 4032), (65, 4062), (Start: 69 @4092 has 3 MA's), (84, 4188), (90, 4221), (98, 4308), (110, 4368), (113, 4410), (128, 4512),

Gene: PacerPaul_6 Start: 3617, Stop: 4318, Start Num: 18
Candidate Starts for PacerPaul_6:
(Start: 18 @3617 has 194 MA's), (Start: 19 @3626 has 15 MA's), (46, 3749), (48, 3758), (51, 3779), (58, 3821), (65, 3851), (Start: 69 @3881 has 3 MA's), (84, 3977), (90, 4010), (98, 4097), (128, 4301),

Gene: Papez_6 Start: 3435, Stop: 4136, Start Num: 18
Candidate Starts for Papez_6:
(Start: 18 @3435 has 194 MA's), (Start: 19 @3444 has 15 MA's), (46, 3567), (51, 3597), (58, 3639), (65, 3669), (Start: 69 @3699 has 3 MA's), (84, 3795), (90, 3828), (98, 3915), (110, 3975), (113, 4017), (128, 4119),

Gene: Paphu_5 Start: 2806, Stop: 3507, Start Num: 18
Candidate Starts for Paphu_5:
(Start: 18 @2806 has 194 MA's), (Start: 19 @2815 has 15 MA's), (46, 2938), (48, 2947), (51, 2968), (58, 3010), (Start: 69 @3070 has 3 MA's), (84, 3166), (90, 3199), (98, 3286), (110, 3346), (113, 3388), (125, 3457),

Gene: Paraselene_5 Start: 3090, Stop: 3800, Start Num: 18

Candidate Starts for Paraselene_5:
(Start: 18 @3090 has 194 MA's), (Start: 19 @3099 has 15 MA's), (46, 3222), (51, 3252), (Start: 69 @3354 has 3 MA's), (70, 3363), (73, 3384), (84, 3456), (94, 3534), (105, 3603), (110, 3636), (116, 3696), (128, 3783),

Gene: Pari_7 Start: 3580, Stop: 4269, Start Num: 18
Candidate Starts for Pari_7:
(Start: 18 @3580 has 194 MA's), (Start: 19 @3589 has 15 MA's), (Start: 69 @3841 has 3 MA's), (77, 3892), (112, 4144),

Gene: Parliament_5 Start: 3442, Stop: 3873, Start Num: 69
Candidate Starts for Parliament_5:
(Start: 69 @3442 has 3 MA's), (79, 3496), (80, 3499), (86, 3541), (92, 3595), (96, 3640), (98, 3655), (104, 3679), (106, 3685), (114, 3760),

Gene: PascalRango_5 Start: 2963, Stop: 3664, Start Num: 18
Candidate Starts for PascalRango_5:
(Start: 18 @2963 has 194 MA's), (Start: 19 @2972 has 15 MA's), (46, 3095), (48, 3104), (51, 3125), (58, 3167), (65, 3197), (Start: 69 @3227 has 3 MA's), (84, 3323), (90, 3356), (98, 3443), (110, 3503), (113, 3545), (128, 3647),

Gene: PattyP_7 Start: 3121, Stop: 3822, Start Num: 18
Candidate Starts for PattyP_7:
(Start: 18 @3121 has 194 MA's), (Start: 19 @3130 has 15 MA's), (46, 3253), (48, 3262), (51, 3283), (58, 3325), (65, 3355), (Start: 69 @3385 has 3 MA's), (84, 3481), (90, 3514), (98, 3601), (110, 3661), (113, 3703), (128, 3805),

Gene: Payneful_6 Start: 2910, Stop: 3611, Start Num: 18
Candidate Starts for Payneful_6:
(Start: 18 @2910 has 194 MA's), (Start: 19 @2919 has 15 MA's), (46, 3042), (48, 3051), (51, 3072), (58, 3114), (65, 3144), (Start: 69 @3174 has 3 MA's), (84, 3270), (90, 3303), (98, 3390),

Gene: Pelly_36 Start: 28758, Stop: 29444, Start Num: 24
Candidate Starts for Pelly_36:
(Start: 24 @28758 has 48 MA's), (28, 28794), (Start: 56 @28941 has 1 MA's), (Start: 69 @29010 has 3 MA's), (70, 29019), (87, 29121), (88, 29133), (91, 29145), (99, 29235), (102, 29253), (112, 29316), (119, 29361), (120, 29370),

Gene: Pelly_7 Start: 3760, Stop: 4461, Start Num: 18
Candidate Starts for Pelly_7:
(Start: 18 @3760 has 194 MA's), (Start: 19 @3769 has 15 MA's), (46, 3892), (48, 3901), (51, 3922), (58, 3964), (65, 3994), (Start: 69 @4024 has 3 MA's), (84, 4120), (90, 4153), (98, 4240), (110, 4300), (113, 4342), (128, 4444),

Gene: Pepe_7 Start: 3783, Stop: 4484, Start Num: 18
Candidate Starts for Pepe_7:
(Start: 18 @3783 has 194 MA's), (Start: 19 @3792 has 15 MA's), (41, 3894), (46, 3915), (48, 3924), (51, 3945), (58, 3987), (65, 4017), (Start: 69 @4047 has 3 MA's), (84, 4143), (90, 4176), (98, 4263), (110, 4323), (128, 4467),

Gene: Perseus_7 Start: 3489, Stop: 4181, Start Num: 19
Candidate Starts for Perseus_7:

(Start: 18 @3480 has 194 MA's), (Start: 19 @3489 has 15 MA's), (46, 3612), (48, 3621), (51, 3642), (58, 3684), (65, 3714), (Start: 69 @3744 has 3 MA's), (84, 3840), (90, 3873), (98, 3960), (110, 4020), (113, 4062), (128, 4164),

Gene: Peterson_8 Start: 4615, Stop: 5310, Start Num: 18
Candidate Starts for Peterson_8:
(Start: 18 @4615 has 194 MA's), (Start: 19 @4624 has 15 MA's), (43, 4732), (66, 4858), (Start: 69 @4879 has 3 MA's), (79, 4933), (81, 4942), (98, 5092), (106, 5122), (107, 5128), (116, 5209),

Gene: Petp2012_8 Start: 3288, Stop: 3977, Start Num: 18
Candidate Starts for Petp2012_8:
(Start: 18 @3288 has 194 MA's), (Start: 19 @3297 has 15 MA's), (39, 3390), (45, 3411), (55, 3480), (58, 3492), (68, 3543), (Start: 69 @3549 has 3 MA's), (70, 3558), (77, 3600), (89, 3675), (92, 3705), (98, 3765), (101, 3783), (105, 3795), (112, 3852), (120, 3906), (126, 3957),

Gene: Petruchio_6 Start: 3029, Stop: 3739, Start Num: 18
Candidate Starts for Petruchio_6:
(Start: 18 @3029 has 194 MA's), (Start: 19 @3038 has 15 MA's), (46, 3161), (51, 3191), (Start: 69 @3293 has 3 MA's), (70, 3302), (73, 3323), (84, 3395), (105, 3542), (110, 3575), (116, 3635), (128, 3722),

Gene: PhineBark_4 Start: 2818, Stop: 3528, Start Num: 18
Candidate Starts for PhineBark_4:
(Start: 18 @2818 has 194 MA's), (Start: 19 @2827 has 15 MA's), (46, 2950), (51, 2980), (Start: 69 @3082 has 3 MA's), (70, 3091), (73, 3112), (84, 3184), (105, 3331), (110, 3364), (116, 3424), (128, 3511),

Gene: Phlippers_5 Start: 3297, Stop: 3998, Start Num: 18
Candidate Starts for Phlippers_5:
(Start: 18 @3297 has 194 MA's), (Start: 19 @3306 has 15 MA's), (46, 3429), (48, 3438), (51, 3459), (58, 3501), (65, 3531), (Start: 69 @3561 has 3 MA's), (84, 3657), (90, 3690), (98, 3777), (128, 3981),

Gene: Phlippers_34 Start: 29139, Stop: 29825, Start Num: 24
Candidate Starts for Phlippers_34:
(Start: 24 @29139 has 48 MA's), (28, 29175), (Start: 56 @29322 has 1 MA's), (Start: 69 @29391 has 3 MA's), (70, 29400), (87, 29502), (88, 29514), (91, 29526), (99, 29616), (102, 29634), (112, 29697), (119, 29742), (120, 29751), (127, 29814),

Gene: PhrostyMug_5 Start: 3184, Stop: 3885, Start Num: 18
Candidate Starts for PhrostyMug_5:
(Start: 18 @3184 has 194 MA's), (Start: 19 @3193 has 15 MA's), (46, 3316), (48, 3325), (51, 3346), (58, 3388), (65, 3418), (Start: 69 @3448 has 3 MA's), (84, 3544), (90, 3577), (98, 3664), (110, 3724), (113, 3766), (128, 3868),

Gene: PinkPlastic_4 Start: 2843, Stop: 3532, Start Num: 18
Candidate Starts for PinkPlastic_4:
(Start: 18 @2843 has 194 MA's), (Start: 19 @2852 has 15 MA's), (39, 2945), (45, 2966), (55, 3035), (58, 3047), (68, 3098), (Start: 69 @3104 has 3 MA's), (70, 3113), (77, 3155), (89, 3230), (92, 3260), (93, 3269), (98, 3320), (101, 3338), (105, 3350), (112, 3407), (120, 3461), (126, 3512),

Gene: Pinto_8 Start: 3470, Stop: 4171, Start Num: 18
Candidate Starts for Pinto_8:

(Start: 18 @3470 has 194 MA's), (Start: 19 @3479 has 15 MA's), (46, 3602), (48, 3611), (51, 3632), (58, 3674), (65, 3704), (Start: 69 @3734 has 3 MA's), (84, 3830), (90, 3863), (98, 3950), (128, 4154),

Gene: Pinto_38 Start: 28671, Stop: 29357, Start Num: 24
Candidate Starts for Pinto_38:
(Start: 24 @28671 has 48 MA's), (28, 28707), (Start: 56 @28854 has 1 MA's), (Start: 69 @28923 has 3 MA's), (70, 28932), (87, 29034), (88, 29046), (99, 29148), (102, 29166), (112, 29229), (119, 29274), (120, 29283),

Gene: Pippin_7 Start: 3169, Stop: 3870, Start Num: 18
Candidate Starts for Pippin_7:
(Start: 18 @3169 has 194 MA's), (Start: 19 @3178 has 15 MA's), (46, 3301), (48, 3310), (51, 3331), (58, 3373), (65, 3403), (Start: 69 @3433 has 3 MA's), (84, 3529), (90, 3562), (98, 3649), (110, 3709),

Gene: Pita2_8 Start: 3828, Stop: 4529, Start Num: 18
Candidate Starts for Pita2_8:
(Start: 18 @3828 has 194 MA's), (Start: 19 @3837 has 15 MA's), (46, 3960), (48, 3969), (51, 3990), (58, 4032), (65, 4062), (Start: 69 @4092 has 3 MA's), (84, 4188), (90, 4221), (98, 4308), (110, 4368), (113, 4410), (128, 4512),

Gene: PowerRanger_5 Start: 3083, Stop: 3793, Start Num: 18
Candidate Starts for PowerRanger_5:
(Start: 18 @3083 has 194 MA's), (Start: 19 @3092 has 15 MA's), (46, 3215), (51, 3245), (Start: 69 @3347 has 3 MA's), (70, 3356), (73, 3377), (84, 3449), (105, 3596), (110, 3629), (116, 3689), (128, 3776),

Gene: PowerRanger_38 Start: 29574, Stop: 30260, Start Num: 24
Candidate Starts for PowerRanger_38:
(Start: 24 @29574 has 48 MA's), (28, 29610), (Start: 56 @29757 has 1 MA's), (Start: 69 @29826 has 3 MA's), (70, 29835), (87, 29937), (88, 29949), (91, 29961), (99, 30051), (102, 30069), (112, 30132), (119, 30177), (120, 30186), (127, 30249),

Gene: ProMouse_34 Start: 28562, Stop: 29248, Start Num: 24
Candidate Starts for ProMouse_34:
(Start: 24 @28562 has 48 MA's), (28, 28598), (32, 28619), (Start: 56 @28745 has 1 MA's), (Start: 69 @28814 has 3 MA's), (70, 28823), (87, 28925), (88, 28937), (91, 28949), (99, 29039), (102, 29057), (112, 29120), (119, 29165), (120, 29174),

Gene: ProMouse_5 Start: 3154, Stop: 3858, Start Num: 18
Candidate Starts for ProMouse_5:
(Start: 18 @3154 has 194 MA's), (Start: 19 @3163 has 15 MA's), (46, 3286), (58, 3358), (67, 3403), (Start: 69 @3418 has 3 MA's), (70, 3427), (84, 3517), (110, 3697), (125, 3808), (128, 3841),

Gene: Ptowny_29 Start: 27347, Stop: 27862, Start Num: 56
Candidate Starts for Ptowny_29:
(36, 27245), (38, 27248), (Start: 56 @27347 has 1 MA's), (63, 27377), (Start: 69 @27416 has 3 MA's), (70, 27425), (95, 27596), (103, 27662), (105, 27668), (112, 27725), (117, 27767), (122, 27797),

Gene: Puppet_6 Start: 3446, Stop: 4135, Start Num: 18
Candidate Starts for Puppet_6:
(Start: 18 @3446 has 194 MA's), (Start: 19 @3455 has 15 MA's), (Start: 69 @3707 has 3 MA's), (79, 3764), (92, 3863),

Gene: QTRlifeCrisis_5 Start: 3245, Stop: 3955, Start Num: 18
Candidate Starts for QTRlifeCrisis_5:
(Start: 18 @3245 has 194 MA's), (Start: 19 @3254 has 15 MA's), (46, 3377), (51, 3407), (Start: 69 @3509 has 3 MA's), (70, 3518), (73, 3539), (84, 3611), (105, 3758), (110, 3791), (116, 3851), (128, 3938),

Gene: Raid_7 Start: 3099, Stop: 3800, Start Num: 18
Candidate Starts for Raid_7:
(Start: 18 @3099 has 194 MA's), (Start: 19 @3108 has 15 MA's), (46, 3231), (48, 3240), (51, 3261), (58, 3303), (65, 3333), (Start: 69 @3363 has 3 MA's), (84, 3459), (90, 3492), (98, 3579), (110, 3639), (113, 3681), (128, 3783),

Gene: Rajelicia_5 Start: 2958, Stop: 3668, Start Num: 18
Candidate Starts for Rajelicia_5:
(Start: 18 @2958 has 194 MA's), (Start: 19 @2967 has 15 MA's), (46, 3090), (51, 3120), (Start: 69 @3222 has 3 MA's), (70, 3231), (73, 3252), (84, 3324), (105, 3471), (110, 3504), (116, 3564), (128, 3651),

Gene: Rhynn_6 Start: 3404, Stop: 4105, Start Num: 18
Candidate Starts for Rhynn_6:
(Start: 18 @3404 has 194 MA's), (Start: 19 @3413 has 15 MA's), (46, 3536), (48, 3545), (51, 3566), (58, 3608), (65, 3638), (Start: 69 @3668 has 3 MA's), (84, 3764), (90, 3797), (98, 3884), (110, 3944), (113, 3986), (128, 4088),

Gene: RidgeCB_6 Start: 2935, Stop: 3627, Start Num: 19
Candidate Starts for RidgeCB_6:
(Start: 18 @2926 has 194 MA's), (Start: 19 @2935 has 15 MA's), (46, 3058), (48, 3067), (51, 3088), (58, 3130), (65, 3160), (Start: 69 @3190 has 3 MA's), (84, 3286), (90, 3319), (98, 3406), (110, 3466), (113, 3508), (128, 3610),

Gene: Ringer_5 Start: 3413, Stop: 4114, Start Num: 18
Candidate Starts for Ringer_5:
(Start: 18 @3413 has 194 MA's), (Start: 19 @3422 has 15 MA's), (46, 3545), (48, 3554), (51, 3575), (58, 3617), (65, 3647), (Start: 69 @3677 has 3 MA's), (84, 3773), (90, 3806), (98, 3893), (110, 3953), (128, 4097),

Gene: Rohr_7 Start: 3620, Stop: 4309, Start Num: 18
Candidate Starts for Rohr_7:
(Start: 18 @3620 has 194 MA's), (Start: 19 @3629 has 15 MA's), (55, 3812), (Start: 56 @3818 has 1 MA's), (Start: 69 @3881 has 3 MA's), (79, 3938), (112, 4184),

Gene: Rubeus_6 Start: 2927, Stop: 3628, Start Num: 18
Candidate Starts for Rubeus_6:
(Start: 18 @2927 has 194 MA's), (Start: 19 @2936 has 15 MA's), (46, 3059), (48, 3068), (51, 3089), (58, 3131), (65, 3161), (Start: 69 @3191 has 3 MA's), (84, 3287), (90, 3320), (98, 3407), (113, 3509), (128, 3611),

Gene: Rufus_6 Start: 2984, Stop: 3685, Start Num: 18
Candidate Starts for Rufus_6:
(Start: 18 @2984 has 194 MA's), (Start: 19 @2993 has 15 MA's), (46, 3116), (48, 3125), (51, 3146), (58, 3188), (65, 3218), (Start: 69 @3248 has 3 MA's), (84, 3344), (90, 3377), (98, 3464), (113, 3566), (128, 3668),

Gene: Ruotula_5 Start: 3545, Stop: 4246, Start Num: 18
Candidate Starts for Ruotula_5:
(Start: 18 @3545 has 194 MA's), (Start: 19 @3554 has 15 MA's), (46, 3677), (48, 3686), (51, 3707),
(58, 3749), (65, 3779), (Start: 69 @3809 has 3 MA's), (84, 3905), (90, 3938), (98, 4025), (110, 4085),
(128, 4229),

Gene: Rutherferd_7 Start: 3445, Stop: 4146, Start Num: 18
Candidate Starts for Rutherferd_7:
(Start: 18 @3445 has 194 MA's), (Start: 19 @3454 has 15 MA's), (46, 3577), (48, 3586), (51, 3607),
(58, 3649), (65, 3679), (Start: 69 @3709 has 3 MA's), (84, 3805), (90, 3838), (98, 3925), (110, 3985),
(113, 4027), (125, 4096), (128, 4129),

Gene: Ryadel_68 Start: 42152, Stop: 42838, Start Num: 24
Candidate Starts for Ryadel_68:
(Start: 24 @42152 has 48 MA's), (27, 42179), (28, 42188), (31, 42206), (34, 42218), (40, 42239),
(Start: 56 @42332 has 1 MA's), (59, 42341), (68, 42392), (Start: 69 @42398 has 3 MA's), (71, 42410),
(78, 42452), (86, 42500), (92, 42557), (110, 42680), (112, 42707), (118, 42749), (119, 42752), (123,
42779), (128, 42830),

Gene: STLscum_7 Start: 3537, Stop: 4238, Start Num: 18
Candidate Starts for STLscum_7:
(Start: 18 @3537 has 194 MA's), (Start: 19 @3546 has 15 MA's), (46, 3669), (48, 3678), (51, 3699),
(58, 3741), (65, 3771), (Start: 69 @3801 has 3 MA's), (84, 3897), (90, 3930), (98, 4017), (110, 4077),
(128, 4221),

Gene: Sagefire_7 Start: 3600, Stop: 4301, Start Num: 18
Candidate Starts for Sagefire_7:
(Start: 18 @3600 has 194 MA's), (Start: 19 @3609 has 15 MA's), (46, 3732), (48, 3741), (51, 3762),
(58, 3804), (65, 3834), (Start: 69 @3864 has 3 MA's), (84, 3960), (90, 3993), (98, 4080), (110, 4140),
(113, 4182), (128, 4284),

Gene: Sandaddy_5 Start: 3321, Stop: 4022, Start Num: 18
Candidate Starts for Sandaddy_5:
(Start: 18 @3321 has 194 MA's), (Start: 19 @3330 has 15 MA's), (46, 3453), (48, 3462), (49, 3474),
(51, 3483), (58, 3525), (65, 3555), (Start: 69 @3585 has 3 MA's), (84, 3681), (90, 3714), (98, 3801),
(110, 3861), (113, 3903), (128, 4005),

Gene: Sanya_5 Start: 3983, Stop: 4684, Start Num: 18
Candidate Starts for Sanya_5:
(Start: 18 @3983 has 194 MA's), (Start: 19 @3992 has 15 MA's), (46, 4115), (48, 4124), (51, 4145),
(58, 4187), (65, 4217), (Start: 69 @4247 has 3 MA's), (84, 4343), (90, 4376), (98, 4463), (110, 4523),
(113, 4565), (128, 4667),

Gene: SarFire_6 Start: 3182, Stop: 3883, Start Num: 18
Candidate Starts for SarFire_6:
(Start: 18 @3182 has 194 MA's), (Start: 19 @3191 has 15 MA's), (46, 3314), (48, 3323), (51, 3344),
(58, 3386), (65, 3416), (Start: 69 @3446 has 3 MA's), (84, 3542), (90, 3575), (98, 3662), (110, 3722),
(128, 3866),

Gene: SchoolBus_64 Start: 41336, Stop: 42022, Start Num: 24
Candidate Starts for SchoolBus_64:
(Start: 24 @41336 has 48 MA's), (27, 41363), (28, 41372), (31, 41390), (34, 41402), (40, 41423),
(Start: 56 @41516 has 1 MA's), (59, 41525), (Start: 69 @41582 has 3 MA's), (71, 41594), (78, 41636),

(92, 41741), (97, 41795), (110, 41864), (112, 41891), (118, 41933), (119, 41936), (123, 41963), (128, 42014),

Gene: Schuy_65 Start: 41127, Stop: 41813, Start Num: 24
Candidate Starts for Schuy_65:
(Start: 24 @41127 has 48 MA's), (27, 41154), (28, 41163), (31, 41181), (34, 41193), (40, 41214), (Start: 56 @41307 has 1 MA's), (59, 41316), (Start: 69 @41373 has 3 MA's), (71, 41385), (78, 41427), (92, 41532), (97, 41586), (110, 41655), (112, 41682), (118, 41724), (119, 41727), (123, 41754), (128, 41805),

Gene: Scowl_7 Start: 3865, Stop: 4575, Start Num: 18
Candidate Starts for Scowl_7:
(Start: 18 @3865 has 194 MA's), (Start: 19 @3874 has 15 MA's), (46, 3997), (51, 4027), (Start: 69 @4129 has 3 MA's), (70, 4138), (73, 4159), (84, 4231), (105, 4378), (110, 4411), (116, 4471), (128, 4558),

Gene: Seabiscuit_7 Start: 3080, Stop: 3769, Start Num: 18
Candidate Starts for Seabiscuit_7:
(Start: 18 @3080 has 194 MA's), (Start: 19 @3089 has 15 MA's), (Start: 69 @3341 has 3 MA's), (79, 3398), (112, 3644),

Gene: Seanderson_7 Start: 3844, Stop: 4554, Start Num: 18
Candidate Starts for Seanderson_7:
(Start: 18 @3844 has 194 MA's), (Start: 19 @3853 has 15 MA's), (46, 3976), (51, 4006), (Start: 69 @4108 has 3 MA's), (70, 4117), (73, 4138), (84, 4210), (105, 4357), (110, 4390), (116, 4450), (128, 4537),

Gene: Shida_64 Start: 41034, Stop: 41720, Start Num: 24
Candidate Starts for Shida_64:
(Start: 24 @41034 has 48 MA's), (27, 41061), (28, 41070), (31, 41088), (34, 41100), (40, 41121), (Start: 56 @41214 has 1 MA's), (59, 41223), (Start: 69 @41280 has 3 MA's), (71, 41292), (78, 41334), (92, 41439), (97, 41493), (110, 41562), (112, 41589), (118, 41631), (119, 41634), (123, 41661), (128, 41712),

Gene: ShortQueendom_4 Start: 2779, Stop: 3480, Start Num: 18
Candidate Starts for ShortQueendom_4:
(Start: 18 @2779 has 194 MA's), (Start: 19 @2788 has 15 MA's), (46, 2911), (48, 2920), (51, 2941), (58, 2983), (65, 3013), (Start: 69 @3043 has 3 MA's), (84, 3139), (90, 3172), (98, 3259), (110, 3319), (113, 3361), (128, 3463),

Gene: Sibs6_7 Start: 3120, Stop: 3821, Start Num: 18
Candidate Starts for Sibs6_7:
(Start: 18 @3120 has 194 MA's), (Start: 19 @3129 has 15 MA's), (46, 3252), (48, 3261), (51, 3282), (58, 3324), (65, 3354), (Start: 69 @3384 has 3 MA's), (84, 3480), (90, 3513), (98, 3600), (113, 3702), (128, 3804),

Gene: Slagathor_6 Start: 2929, Stop: 3639, Start Num: 18
Candidate Starts for Slagathor_6:
(Start: 18 @2929 has 194 MA's), (Start: 19 @2938 has 15 MA's), (46, 3061), (51, 3091), (Start: 69 @3193 has 3 MA's), (70, 3202), (73, 3223), (84, 3295), (105, 3442), (110, 3475), (116, 3535), (128, 3622),

Gene: Smairt_7 Start: 3793, Stop: 4494, Start Num: 18

Candidate Starts for Smairt_7:
(Start: 18 @3793 has 194 MA's), (Start: 19 @3802 has 15 MA's), (46, 3925), (48, 3934), (51, 3955), (58, 3997), (65, 4027), (Start: 69 @4057 has 3 MA's), (84, 4153), (90, 4186), (98, 4273), (110, 4333), (113, 4375), (128, 4477),

Gene: Smairt_37 Start: 28913, Stop: 29458, Start Num: 50
Candidate Starts for Smairt_37:
(Start: 50 @28913 has 1 MA's), (Start: 56 @28955 has 1 MA's), (Start: 69 @29024 has 3 MA's), (70, 29033), (87, 29135), (88, 29147), (91, 29159), (99, 29249), (102, 29267), (112, 29330), (119, 29375), (120, 29384), (127, 29447),

Gene: Smeagol_7 Start: 4108, Stop: 4797, Start Num: 18
Candidate Starts for Smeagol_7:
(Start: 18 @4108 has 194 MA's), (Start: 19 @4117 has 15 MA's), (55, 4300), (Start: 56 @4306 has 1 MA's), (Start: 69 @4372 has 3 MA's), (83, 4465), (98, 4591), (106, 4624), (112, 4669), (115, 4696), (118, 4711), (119, 4714),

Gene: Smooch_67 Start: 43056, Stop: 43742, Start Num: 24
Candidate Starts for Smooch_67:
(Start: 24 @43056 has 48 MA's), (27, 43083), (28, 43092), (31, 43110), (34, 43122), (40, 43143), (47, 43173), (Start: 56 @43236 has 1 MA's), (59, 43245), (Start: 69 @43302 has 3 MA's), (71, 43314), (76, 43344), (78, 43356), (86, 43404), (92, 43461), (97, 43515), (110, 43584), (112, 43611), (118, 43653), (119, 43656), (123, 43683), (128, 43734),

Gene: Snazzy_4 Start: 2824, Stop: 3525, Start Num: 18
Candidate Starts for Snazzy_4:
(Start: 18 @2824 has 194 MA's), (Start: 19 @2833 has 15 MA's), (46, 2956), (48, 2965), (51, 2986), (58, 3028), (65, 3058), (Start: 69 @3088 has 3 MA's), (84, 3184), (90, 3217), (98, 3304), (110, 3364), (128, 3508),

Gene: Solon_5 Start: 2826, Stop: 3518, Start Num: 19
Candidate Starts for Solon_5:
(Start: 18 @2817 has 194 MA's), (Start: 19 @2826 has 15 MA's), (46, 2949), (48, 2958), (51, 2979), (58, 3021), (Start: 69 @3081 has 3 MA's), (84, 3177), (90, 3210), (98, 3297), (110, 3357), (113, 3399),

Gene: Sorpresa_6 Start: 3321, Stop: 4022, Start Num: 18
Candidate Starts for Sorpresa_6:
(Start: 18 @3321 has 194 MA's), (Start: 19 @3330 has 15 MA's), (46, 3453), (48, 3462), (49, 3474), (51, 3483), (58, 3525), (65, 3555), (Start: 69 @3585 has 3 MA's), (84, 3681), (90, 3714), (98, 3801), (110, 3861), (113, 3903), (128, 4005),

Gene: SpikeBT_6 Start: 3193, Stop: 3894, Start Num: 18
Candidate Starts for SpikeBT_6:
(Start: 18 @3193 has 194 MA's), (Start: 19 @3202 has 15 MA's), (46, 3325), (51, 3355), (58, 3397), (65, 3427), (Start: 69 @3457 has 3 MA's), (84, 3553), (90, 3586), (98, 3673), (110, 3733), (113, 3775), (128, 3877),

Gene: Squee_5 Start: 2943, Stop: 3623, Start Num: 18
Candidate Starts for Squee_5:
(Start: 18 @2943 has 194 MA's), (Start: 19 @2952 has 15 MA's), (53, 3108), (54, 3114), (Start: 56 @3132 has 1 MA's), (60, 3144), (62, 3150), (Start: 69 @3198 has 3 MA's), (79, 3255), (82, 3273), (84, 3294), (105, 3441), (107, 3450), (118, 3537),

Gene: StewieG_5 Start: 3192, Stop: 3893, Start Num: 18
Candidate Starts for StewieG_5:
(Start: 18 @3192 has 194 MA's), (Start: 19 @3201 has 15 MA's), (46, 3324), (48, 3333), (51, 3354), (58, 3396), (65, 3426), (Start: 69 @3456 has 3 MA's), (84, 3552), (90, 3585), (98, 3672), (110, 3732), (113, 3774), (128, 3876),

Gene: StrongArm_5 Start: 3035, Stop: 3730, Start Num: 18
Candidate Starts for StrongArm_5:
(Start: 18 @3035 has 194 MA's), (43, 3152), (65, 3269), (66, 3278), (Start: 69 @3299 has 3 MA's), (79, 3353), (81, 3362), (98, 3512), (106, 3542), (107, 3548), (114, 3617), (116, 3629),

Gene: Sumter_5 Start: 2916, Stop: 3617, Start Num: 18
Candidate Starts for Sumter_5:
(Start: 18 @2916 has 194 MA's), (Start: 19 @2925 has 15 MA's), (46, 3048), (48, 3057), (51, 3078), (58, 3120), (65, 3150), (Start: 69 @3180 has 3 MA's), (84, 3276), (90, 3309), (98, 3396), (110, 3456), (113, 3498), (128, 3600),

Gene: Sunshine924_5 Start: 2897, Stop: 3598, Start Num: 18
Candidate Starts for Sunshine924_5:
(Start: 18 @2897 has 194 MA's), (Start: 19 @2906 has 15 MA's), (46, 3029), (48, 3038), (51, 3059), (58, 3101), (65, 3131), (Start: 69 @3161 has 3 MA's), (84, 3257), (90, 3290), (98, 3377), (110, 3437), (113, 3479), (128, 3581),

Gene: SwissCheese_6 Start: 3359, Stop: 4060, Start Num: 18
Candidate Starts for SwissCheese_6:
(Start: 18 @3359 has 194 MA's), (Start: 19 @3368 has 15 MA's), (46, 3491), (48, 3500), (51, 3521), (58, 3563), (65, 3593), (Start: 69 @3623 has 3 MA's), (84, 3719), (90, 3752), (98, 3839), (110, 3899), (113, 3941), (128, 4043),

Gene: Switzer_6 Start: 2969, Stop: 3649, Start Num: 19
Candidate Starts for Switzer_6:
(Start: 18 @2960 has 194 MA's), (Start: 19 @2969 has 15 MA's), (Start: 69 @3221 has 3 MA's), (77, 3272),

Gene: Swole_8 Start: 3828, Stop: 4529, Start Num: 18
Candidate Starts for Swole_8:
(Start: 18 @3828 has 194 MA's), (Start: 19 @3837 has 15 MA's), (46, 3960), (48, 3969), (51, 3990), (58, 4032), (65, 4062), (Start: 69 @4092 has 3 MA's), (84, 4188), (90, 4221), (98, 4308), (110, 4368), (113, 4410), (128, 4512),

Gene: Target_7 Start: 3616, Stop: 4317, Start Num: 18
Candidate Starts for Target_7:
(Start: 18 @3616 has 194 MA's), (Start: 19 @3625 has 15 MA's), (46, 3748), (48, 3757), (58, 3820), (65, 3850), (Start: 69 @3880 has 3 MA's), (84, 3976), (86, 3982), (90, 4009), (98, 4096), (110, 4156), (128, 4300),

Gene: Tasp14_7 Start: 3616, Stop: 4305, Start Num: 18
Candidate Starts for Tasp14_7:
(Start: 18 @3616 has 194 MA's), (Start: 19 @3625 has 15 MA's), (42, 3727), (Start: 69 @3874 has 3 MA's), (79, 3928), (80, 3931), (86, 3973), (92, 4027), (96, 4072), (98, 4087), (104, 4111), (106, 4117), (114, 4192),

Gene: TelAviv_61 Start: 41309, Stop: 41995, Start Num: 24

Candidate Starts for TelAviv_61:
(Start: 24 @41309 has 48 MA's), (27, 41336), (28, 41345), (31, 41363), (34, 41375), (40, 41396),
(Start: 56 @41489 has 1 MA's), (59, 41498), (Start: 69 @41555 has 3 MA's), (71, 41567), (78, 41609),
(92, 41714), (97, 41768), (110, 41837), (112, 41864), (118, 41906), (119, 41909), (123, 41936), (128,
41987),

Gene: Teodoridan_4 Start: 2771, Stop: 3466, Start Num: 19
Candidate Starts for Teodoridan_4:
(Start: 18 @2762 has 194 MA's), (Start: 19 @2771 has 15 MA's), (47, 2900), (58, 2966), (Start: 69
@3026 has 3 MA's), (79, 3083), (94, 3203), (126, 3437),

Gene: TheloniousMonk_6 Start: 3244, Stop: 3945, Start Num: 18
Candidate Starts for TheloniousMonk_6:
(Start: 18 @3244 has 194 MA's), (Start: 19 @3253 has 15 MA's), (46, 3376), (48, 3385), (51, 3406),
(58, 3448), (Start: 69 @3508 has 3 MA's), (84, 3604), (90, 3637), (98, 3724), (110, 3784), (113, 3826),
(128, 3928),

Gene: Thor_6 Start: 3191, Stop: 3883, Start Num: 19
Candidate Starts for Thor_6:
(Start: 18 @3182 has 194 MA's), (Start: 19 @3191 has 15 MA's), (46, 3314), (48, 3323), (51, 3344),
(58, 3386), (65, 3416), (Start: 69 @3446 has 3 MA's), (84, 3542), (90, 3575), (98, 3662), (110, 3722),
(128, 3866),

Gene: Topgun_6 Start: 3108, Stop: 3809, Start Num: 18
Candidate Starts for Topgun_6:
(Start: 18 @3108 has 194 MA's), (Start: 19 @3117 has 15 MA's), (46, 3240), (48, 3249), (51, 3270),
(58, 3312), (65, 3342), (Start: 69 @3372 has 3 MA's), (84, 3468), (90, 3501), (98, 3588), (110, 3648),
(113, 3690), (128, 3792),

Gene: Topgun_35 Start: 27931, Stop: 28617, Start Num: 24
Candidate Starts for Topgun_35:
(Start: 24 @27931 has 48 MA's), (28, 27967), (Start: 56 @28114 has 1 MA's), (Start: 69 @28183 has 3
MA's), (70, 28192), (87, 28294), (88, 28306), (91, 28318), (99, 28408), (102, 28426), (112, 28489),
(119, 28534), (120, 28543),

Gene: Tote_8 Start: 3828, Stop: 4529, Start Num: 18
Candidate Starts for Tote_8:
(Start: 18 @3828 has 194 MA's), (Start: 19 @3837 has 15 MA's), (46, 3960), (48, 3969), (51, 3990),
(58, 4032), (65, 4062), (Start: 69 @4092 has 3 MA's), (84, 4188), (90, 4221), (98, 4308), (110, 4368),
(113, 4410), (128, 4512),

Gene: Traft412_8 Start: 4006, Stop: 4716, Start Num: 18
Candidate Starts for Traft412_8:
(Start: 18 @4006 has 194 MA's), (Start: 19 @4015 has 15 MA's), (46, 4138), (51, 4168), (Start: 69
@4270 has 3 MA's), (70, 4279), (73, 4300), (84, 4372), (105, 4519), (110, 4552), (116, 4612), (128,
4699),

Gene: Treddle_6 Start: 3259, Stop: 3960, Start Num: 19
Candidate Starts for Treddle_6:
(Start: 18 @3250 has 194 MA's), (Start: 19 @3259 has 15 MA's), (46, 3382), (51, 3412), (Start: 69
@3514 has 3 MA's), (70, 3523), (73, 3544), (84, 3616), (105, 3763), (110, 3796), (116, 3856), (128,
3943),

Gene: Tripl3t_7 Start: 4022, Stop: 4717, Start Num: 18
Candidate Starts for Tripl3t_7:
(Start: 18 @4022 has 194 MA's), (43, 4139), (65, 4256), (66, 4265), (Start: 69 @4286 has 3 MA's), (79, 4340), (98, 4499), (106, 4529), (107, 4535), (116, 4616),

Gene: Trouble_6 Start: 3659, Stop: 4360, Start Num: 18
Candidate Starts for Trouble_6:
(Start: 18 @3659 has 194 MA's), (Start: 19 @3668 has 15 MA's), (46, 3791), (48, 3800), (51, 3821), (58, 3863), (65, 3893), (Start: 69 @3923 has 3 MA's), (84, 4019), (90, 4052), (98, 4139), (110, 4199), (113, 4241), (128, 4343),

Gene: Turj99_5 Start: 3094, Stop: 3804, Start Num: 18
Candidate Starts for Turj99_5:
(Start: 18 @3094 has 194 MA's), (Start: 19 @3103 has 15 MA's), (46, 3226), (51, 3256), (Start: 69 @3358 has 3 MA's), (70, 3367), (73, 3388), (84, 3460), (105, 3607), (110, 3640), (116, 3700), (128, 3787),

Gene: Tweety_21 Start: 22143, Stop: 23033, Start Num: 12
Candidate Starts for Tweety_21:
(9, 22095), (10, 22113), (11, 22116), (Start: 12 @22143 has 1 MA's), (13, 22161), (Start: 14 @22173 has 1 MA's), (15, 22218), (17, 22302), (21, 22362), (29, 22404), (33, 22422), (35, 22431), (43, 22455), (47, 22476), (58, 22542), (Start: 69 @22602 has 3 MA's), (79, 22659), (84, 22698), (89, 22731), (94, 22779), (108, 22869), (126, 23007),

Gene: TwoPeat_7 Start: 3621, Stop: 4322, Start Num: 18
Candidate Starts for TwoPeat_7:
(Start: 18 @3621 has 194 MA's), (Start: 19 @3630 has 15 MA's), (46, 3753), (48, 3762), (51, 3783), (58, 3825), (65, 3855), (Start: 69 @3885 has 3 MA's), (84, 3981), (90, 4014), (98, 4101), (110, 4161), (113, 4203), (128, 4305),

Gene: U2_5 Start: 2962, Stop: 3651, Start Num: 18
Candidate Starts for U2_5:
(Start: 18 @2962 has 194 MA's), (Start: 19 @2971 has 15 MA's), (Start: 69 @3223 has 3 MA's), (77, 3274),

Gene: UncleRicky_23 Start: 23775, Stop: 24299, Start Num: 52
Candidate Starts for UncleRicky_23:
(Start: 52 @23775 has 1 MA's), (58, 23808), (Start: 69 @23868 has 3 MA's), (79, 23925), (84, 23964), (89, 23997), (94, 24045), (108, 24135), (126, 24273),

Gene: Vagabond_64 Start: 41172, Stop: 41858, Start Num: 24
Candidate Starts for Vagabond_64:
(Start: 24 @41172 has 48 MA's), (27, 41199), (28, 41208), (31, 41226), (34, 41238), (40, 41259), (Start: 56 @41352 has 1 MA's), (59, 41361), (Start: 69 @41418 has 3 MA's), (71, 41430), (78, 41472), (92, 41577), (97, 41631), (110, 41700), (112, 41727), (118, 41769), (119, 41772), (123, 41799), (128, 41850),

Gene: Violet_5 Start: 2907, Stop: 3617, Start Num: 18
Candidate Starts for Violet_5:
(Start: 18 @2907 has 194 MA's), (Start: 19 @2916 has 15 MA's), (46, 3039), (51, 3069), (Start: 69 @3171 has 3 MA's), (70, 3180), (73, 3201), (84, 3273), (105, 3420), (110, 3453), (116, 3513), (128, 3600),

Gene: Vorrps_64 Start: 41384, Stop: 42070, Start Num: 24
Candidate Starts for Vorrps_64:
(Start: 24 @41384 has 48 MA's), (27, 41411), (28, 41420), (31, 41438), (34, 41450), (40, 41471),
(Start: 56 @41564 has 1 MA's), (59, 41573), (Start: 69 @41630 has 3 MA's), (71, 41642), (78, 41684),
(92, 41789), (97, 41843), (110, 41912), (112, 41939), (118, 41981), (119, 41984), (123, 42011), (128,
42062),

Gene: Watermelon_8 Start: 4201, Stop: 4911, Start Num: 18
Candidate Starts for Watermelon_8:
(Start: 18 @4201 has 194 MA's), (Start: 19 @4210 has 15 MA's), (46, 4333), (51, 4363), (Start: 69
@4465 has 3 MA's), (70, 4474), (73, 4495), (84, 4567), (105, 4714), (110, 4747), (116, 4807), (128,
4894),

Gene: Wheeler_6 Start: 3376, Stop: 4077, Start Num: 19
Candidate Starts for Wheeler_6:
(Start: 18 @3367 has 194 MA's), (Start: 19 @3376 has 15 MA's), (46, 3499), (51, 3529), (Start: 69
@3631 has 3 MA's), (70, 3640), (73, 3661), (84, 3733), (105, 3880), (110, 3913), (116, 3973), (128,
4060),

Gene: Whitspit_6 Start: 3418, Stop: 4119, Start Num: 18
Candidate Starts for Whitspit_6:
(Start: 18 @3418 has 194 MA's), (Start: 19 @3427 has 15 MA's), (46, 3550), (48, 3559), (51, 3580),
(58, 3622), (65, 3652), (Start: 69 @3682 has 3 MA's), (84, 3778), (90, 3811), (98, 3898), (110, 3958),
(113, 4000), (128, 4102),

Gene: Wildflower_64 Start: 40896, Stop: 41582, Start Num: 24
Candidate Starts for Wildflower_64:
(Start: 24 @40896 has 48 MA's), (27, 40923), (28, 40932), (31, 40950), (34, 40962), (40, 40983), (47,
41013), (Start: 56 @41076 has 1 MA's), (59, 41085), (Start: 69 @41142 has 3 MA's), (71, 41154), (78,
41196), (92, 41301), (97, 41355), (110, 41424), (112, 41451), (118, 41493), (119, 41496), (123,
41523), (128, 41574),

Gene: Wilkins_35 Start: 27862, Stop: 28548, Start Num: 24
Candidate Starts for Wilkins_35:
(Start: 24 @27862 has 48 MA's), (28, 27898), (Start: 56 @28045 has 1 MA's), (Start: 69 @28114 has 3
MA's), (70, 28123), (87, 28225), (88, 28237), (91, 28249), (99, 28339), (102, 28357), (112, 28420),
(119, 28465), (120, 28474),

Gene: Wilkins_6 Start: 3108, Stop: 3809, Start Num: 18
Candidate Starts for Wilkins_6:
(Start: 18 @3108 has 194 MA's), (Start: 19 @3117 has 15 MA's), (46, 3240), (48, 3249), (51, 3270),
(58, 3312), (65, 3342), (Start: 69 @3372 has 3 MA's), (84, 3468), (90, 3501), (98, 3588), (110, 3648),
(113, 3690), (128, 3792),

Gene: Winget_65 Start: 41602, Stop: 42288, Start Num: 24
Candidate Starts for Winget_65:
(Start: 24 @41602 has 48 MA's), (27, 41629), (28, 41638), (31, 41656), (34, 41668), (40, 41689),
(Start: 56 @41782 has 1 MA's), (59, 41791), (Start: 69 @41848 has 3 MA's), (71, 41860), (78, 41902),
(92, 42007), (97, 42061), (110, 42130), (112, 42157), (118, 42199), (119, 42202), (123, 42229), (128,
42280),

Gene: Wogge42_63 Start: 41043, Stop: 41729, Start Num: 24
Candidate Starts for Wogge42_63:

(Start: 24 @41043 has 48 MA's), (27, 41070), (28, 41079), (31, 41097), (34, 41109), (40, 41130), (Start: 56 @41223 has 1 MA's), (59, 41232), (Start: 69 @41289 has 3 MA's), (71, 41301), (78, 41343), (92, 41448), (97, 41502), (110, 41571), (112, 41598), (118, 41640), (119, 41643), (123, 41670), (128, 41721),

Gene: YoyoKar_62 Start: 40886, Stop: 41572, Start Num: 24
Candidate Starts for YoyoKar_62:
(Start: 24 @40886 has 48 MA's), (27, 40913), (28, 40922), (31, 40940), (34, 40952), (40, 40973), (Start: 56 @41066 has 1 MA's), (59, 41075), (Start: 69 @41132 has 3 MA's), (71, 41144), (78, 41186), (92, 41291), (97, 41345), (110, 41414), (112, 41441), (118, 41483), (119, 41486), (123, 41513), (128, 41564),

Gene: YungJamal_69 Start: 42794, Stop: 43480, Start Num: 24
Candidate Starts for YungJamal_69:
(Start: 24 @42794 has 48 MA's), (27, 42821), (28, 42830), (31, 42848), (34, 42860), (40, 42881), (47, 42911), (Start: 56 @42974 has 1 MA's), (59, 42983), (Start: 69 @43040 has 3 MA's), (71, 43052), (76, 43082), (78, 43094), (86, 43142), (92, 43199), (97, 43253), (110, 43322), (112, 43349), (118, 43391), (119, 43394), (123, 43421), (128, 43472),

Gene: Zakhe101_64 Start: 41442, Stop: 42128, Start Num: 24
Candidate Starts for Zakhe101_64:
(Start: 24 @41442 has 48 MA's), (27, 41469), (28, 41478), (31, 41496), (34, 41508), (40, 41529), (47, 41559), (Start: 56 @41622 has 1 MA's), (59, 41631), (Start: 69 @41688 has 3 MA's), (71, 41700), (78, 41742), (92, 41847), (97, 41901), (110, 41970), (112, 41997), (118, 42039), (119, 42042), (123, 42069), (128, 42120),

Gene: Zebo_64 Start: 41345, Stop: 42031, Start Num: 24
Candidate Starts for Zebo_64:
(Start: 24 @41345 has 48 MA's), (27, 41372), (28, 41381), (31, 41399), (34, 41411), (40, 41432), (Start: 56 @41525 has 1 MA's), (59, 41534), (Start: 69 @41591 has 3 MA's), (71, 41603), (78, 41645), (92, 41750), (97, 41804), (110, 41873), (112, 41900), (118, 41942), (119, 41945), (123, 41972), (128, 42023),

Gene: Zeeculate_5 Start: 3085, Stop: 3777, Start Num: 18
Candidate Starts for Zeeculate_5:
(Start: 18 @3085 has 194 MA's), (46, 3214), (61, 3295), (65, 3316), (66, 3325), (Start: 69 @3346 has 3 MA's), (72, 3370), (105, 3589), (124, 3724),

Gene: Zephyr_6 Start: 3214, Stop: 3915, Start Num: 18
Candidate Starts for Zephyr_6:
(Start: 18 @3214 has 194 MA's), (Start: 19 @3223 has 15 MA's), (46, 3346), (48, 3355), (51, 3376), (58, 3418), (65, 3448), (Start: 69 @3478 has 3 MA's), (84, 3574), (90, 3607), (98, 3694), (113, 3796), (128, 3898),

Gene: Zeuska_5 Start: 3138, Stop: 3839, Start Num: 18
Candidate Starts for Zeuska_5:
(Start: 18 @3138 has 194 MA's), (Start: 19 @3147 has 15 MA's), (46, 3270), (51, 3300), (58, 3342), (65, 3372), (Start: 69 @3402 has 3 MA's), (84, 3498), (90, 3531), (98, 3618), (110, 3678), (113, 3720), (128, 3822),