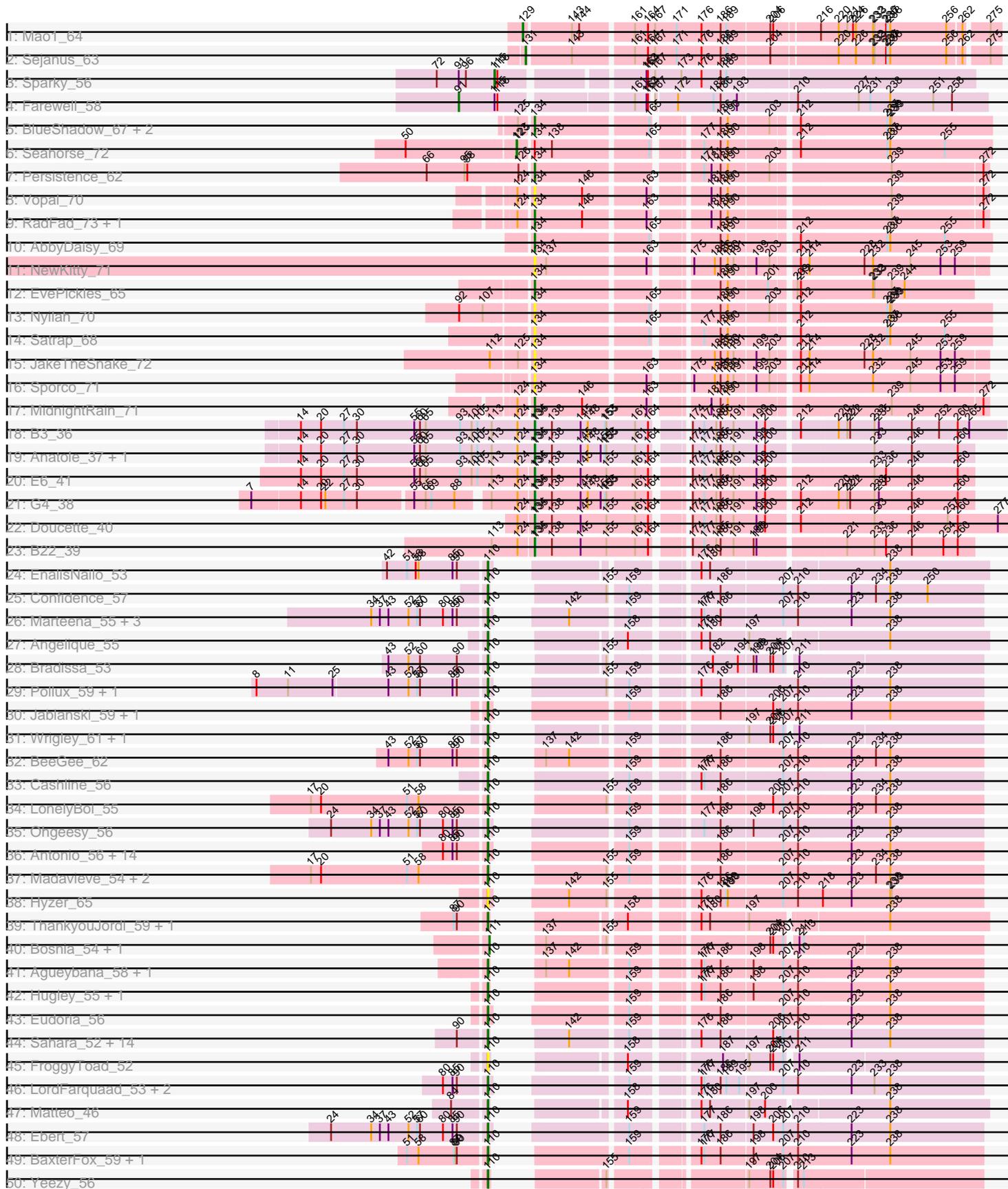
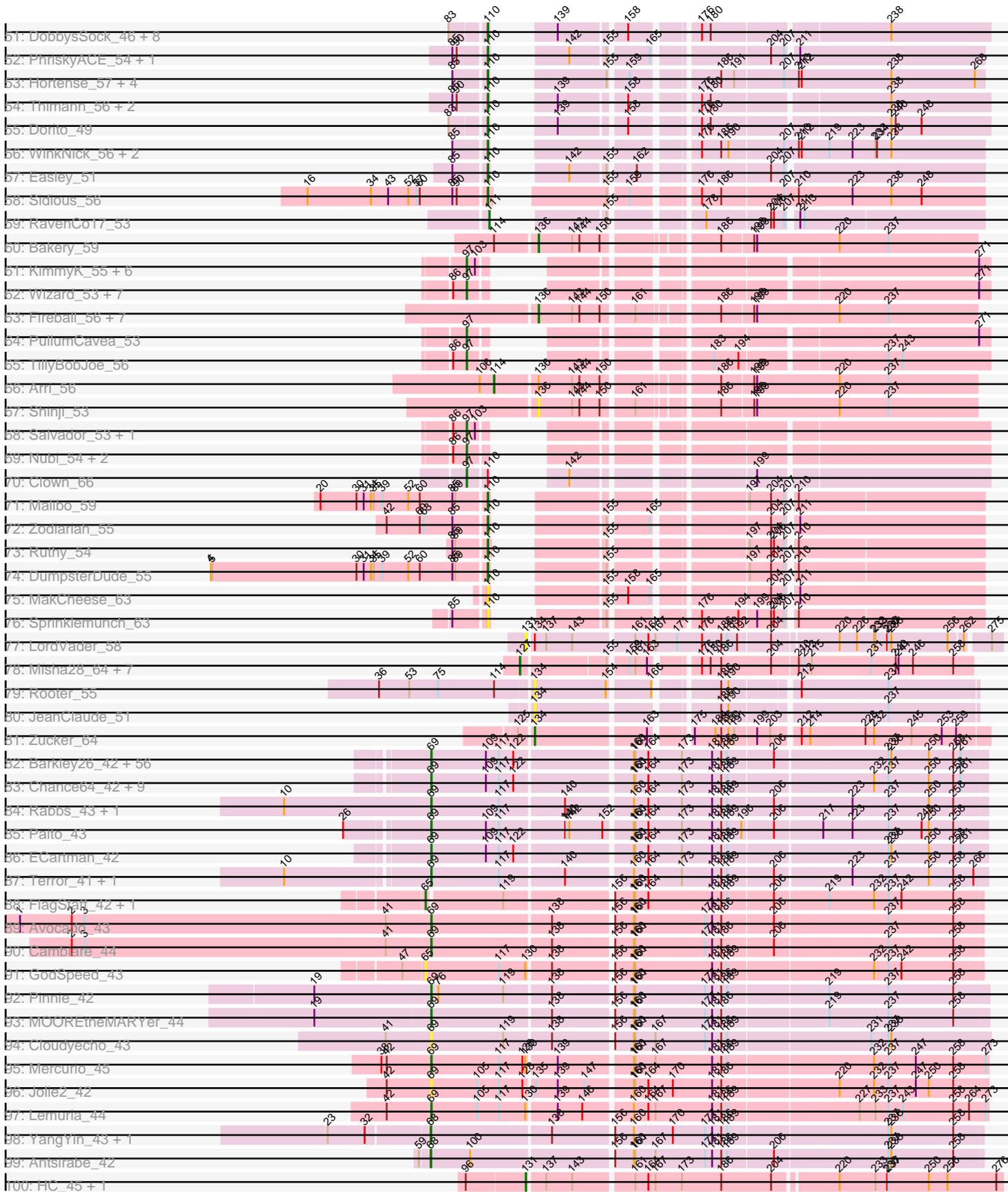


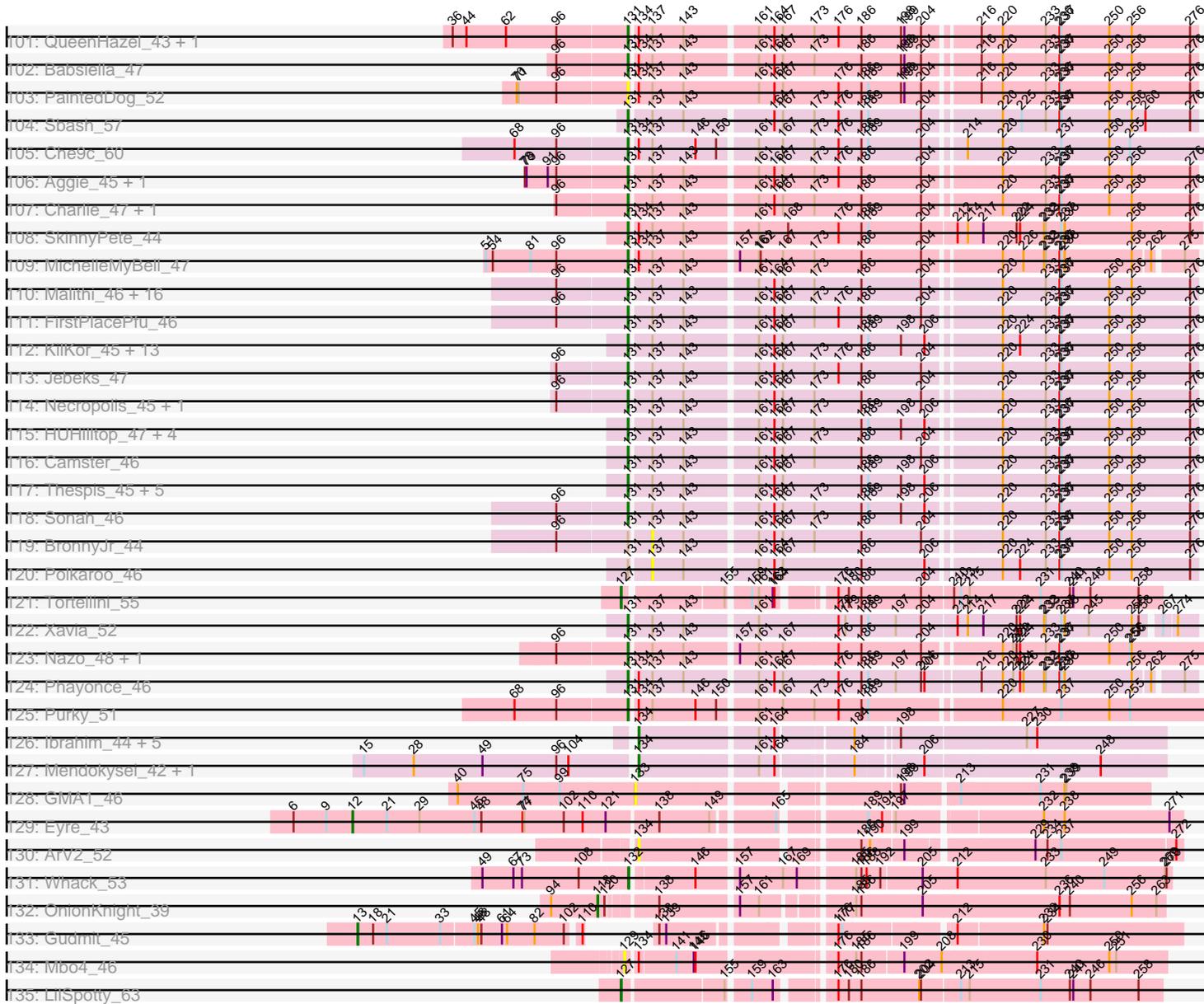
Pham 290748



Pham 290748



Pham 290748



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 290748 Report

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

Pham number 290748 has 348 members, 50 are drafts.

Phages represented in each track:

- Track 1 : Mao1_64
- Track 2 : Sejanus_63
- Track 3 : Sparky_56
- Track 4 : Farewell_58
- Track 5 : BlueShadow_67, Anekin_71, CosmicBrownie_64
- Track 6 : Seahorse_72
- Track 7 : Persistence_62
- Track 8 : Vopal_70
- Track 9 : RadFad_73, Hillester_73
- Track 10 : AbbyDaisy_69
- Track 11 : NewKitty_71
- Track 12 : EvePickles_65
- Track 13 : Nyilah_70
- Track 14 : Satrap_68
- Track 15 : JakeTheSnake_72
- Track 16 : Sporco_71
- Track 17 : MidnightRain_71
- Track 18 : B3_36
- Track 19 : Anatole_37, E1_37
- Track 20 : E6_41
- Track 21 : G4_38
- Track 22 : Doucette_40
- Track 23 : B22_39
- Track 24 : EnalisNailo_53
- Track 25 : Confidence_57
- Track 26 : Marteena_55, BoyNamedSue_58, AlumE_58, EMSquaredA_56
- Track 27 : Angelique_55
- Track 28 : Bradissa_53
- Track 29 : Pollux_59, Floral_57
- Track 30 : Jablanski_59, Pytheas_59
- Track 31 : Wrigley_61, Posh_59
- Track 32 : BeeGee_62
- Track 33 : Cashline_56
- Track 34 : LonelyBoi_55
- Track 35 : Ohgeesy_56
- Track 36 : Antonio_56, Bialota_54, Zirinka_53, Suscepit_56, Trumpet_56, Polly_53, Yeet412_51, Lilas_55, Tayonia_56, Kita_57, EdnaMode_50, Neobush_56,

Pickett_49, Manasvini_57, Zameen_56

- Track 37 : Madavieve_54, Bunnybear_52, Maridalia_60
- Track 38 : Hyzer_65
- Track 39 : ThankyouJordi_59, WelcomeAyanna_59
- Track 40 : Bosnia_54, JCole_50
- Track 41 : Agueybana_58, Madeline_57
- Track 42 : Hugley_55, Herod_57
- Track 43 : Eudoria_56
- Track 44 : Sahara_52, Jalleen_53, Savage_53, Mocha12_53, Cynthia_53, Whiteclaw_53, Clap_53, Haley23_53, GemG_53, Gizermo_53, Sproutie_53, Bjanes7_50, Nettuno_49, Lamberg_49, TuertoX_53
- Track 45 : FroggyToad_52
- Track 46 : LordFarquaad_53, Attis_51, SoilAssassin_51
- Track 47 : Matteo_46
- Track 48 : Ebert_57
- Track 49 : BaxterFox_59, PantheRoc_59
- Track 50 : Yeezy_56
- Track 51 : DobbysSock_46, Clark_53, MichaelScott_54, Tuti_57, Samman98_54, Oregano_57, Invectra_55, Annalisa_54, Beenie_47
- Track 52 : PhriskyACE_54, Powerball_55
- Track 53 : Hortense_57, Twinkle_56, Adora_54, Shlim410_55, Howe_57
- Track 54 : Thimann_56, Suerte_50, Mcklovin_53
- Track 55 : Dorito_49
- Track 56 : WinkNick_56, Sekhmet_55, Dolores_55
- Track 57 : Easley_51
- Track 58 : Sidious_56
- Track 59 : RavenCo17_53
- Track 60 : Bakery_59
- Track 61 : KimmyK_55, Fugax_57, Barb_56, ClamChowder_56, Phlop_53, Egi03_54, PinkCoffee_56
- Track 62 : Wizard_53, Valary_56, RogerDodger_57, CherryCola_57, Halo3_54, VanDeWege_57, Gezellig_53, CoveyB_56
- Track 63 : Fireball_56, Twister6_56, Mutzi_53, Jambalaya_53, Danyall_55, Portcullis_55, Savbucketdawg_53, YungMoney_56
- Track 64 : PullumCavea_53
- Track 65 : TillyBobJoe_56
- Track 66 : Arri_56
- Track 67 : Shinji_53
- Track 68 : Salvador_53, Evamon_53
- Track 69 : Nubi_54, Togo_53, SmokingBunny_54
- Track 70 : Clown_66
- Track 71 : Malibo_59
- Track 72 : Zodiariah_55
- Track 73 : Ruthy_54
- Track 74 : DumpsterDude_55
- Track 75 : MakCheese_63
- Track 76 : Sprinklemunch_63
- Track 77 : LordVader_58
- Track 78 : Misha28_64, Piper2020_67, Aloeri_67, TootsiePop_64, Awesomesauce_66, DocMcStuffins_66, Cubone_52, ChickenDinner_66
- Track 79 : Rooter_55
- Track 80 : JeanClaude_51
- Track 81 : Zucker_64

- Track 82 : Barkley26_42, Olga_42, Gideon_42, Darionha_42, Jeilious_42, AizenPogi_42, Gomashi_42, JorRay_42, Annihilator_42, Peeb_42, ShaboiShabazz_42, Coleslaw_42, Grizzly_42, Halo_42, Neoh_42, Angel_42, Schiebel_42, Avrafan_42, Plagueis_42, BPs_42, Ruriko_42, AzulaCat_42, Richarlison_42, GoldenAsh_42, ZoMa_42, LouisV14_44, Zombie_42, Phish_42, MZKinsey_42, DingDing_42, Kareem_42, Crespo_42, Marmie_42, PinkYoshi_42, Camri_42, CassieYates_42, OctaviousRex_42, BQuat_42, Maliketh_42, Hope_42, TinaBug_42, Renaissance_42, Cedasite_42, BruceB_42, Jane_42, Wendigo_42, Cherrybomb426_42, Phreak_42, Mowgli_42, Frosty24_42, CLED96_42, TomBrady_42, DMoney_42, Remy19_42, Sweets_42, Kasen3_42, Sizemore_42
- Track 83 : Chance64_42, DNAll_0041, Periodt_42, Liefie_42, Jolene_42, Phloodle_42, Jonghyun_41, Hotshotbaby7_42, Aroostook_42, Rattrick_42
- Track 84 : Rabbs_43, Sneeze_43
- Track 85 : Paito_43
- Track 86 : ECartman_42
- Track 87 : Terror_41, Taheera_41
- Track 88 : FlagStaff_42, Pace1224_42
- Track 89 : Avocado_43
- Track 90 : Cambiare_44
- Track 91 : GodSpeed_43
- Track 92 : Pinnie_42
- Track 93 : MOOREtheMARYer_44
- Track 94 : Cloudyecho_43
- Track 95 : Mercurio_45
- Track 96 : Jolie2_42
- Track 97 : Lemuria_44
- Track 98 : YangYin_43, Stargaze_43
- Track 99 : Antsirabe_42
- Track 100 : HC_45, Jung_44
- Track 101 : QueenHazel_43, Xula_42
- Track 102 : Babsiella_47
- Track 103 : PaintedDog_52
- Track 104 : Sbash_57
- Track 105 : Che9c_60
- Track 106 : Aggie_45, Silvy_45
- Track 107 : Charlie_47, Journey_46
- Track 108 : SkinnyPete_44
- Track 109 : MichelleMyBell_47
- Track 110 : Malithi_46, Vidya_45, Kari_45, Mangethe_46, Bartholomew_45, Venti_46, GaloreK_45, Langerak_46, Donovan_46, Techage_45, Arib1_46, Phegasus_46, Etoile_45, Chubbello_45, Zilizebeth_46, Fishburne_45, Majeke_46
- Track 111 : FirstPlacePfu_46
- Track 112 : KilKor_45, Juniormint_46, GreaseLightnin_46, StevieRay_45, Bunnies_46, CactusJack_45, PeanutPie_46, Phalm_45, Bhagsy_46, Philonius_47, Willsammy_44, Glaske_45, Megiddo_45, Ksquared_45
- Track 113 : Jebeks_47
- Track 114 : Necropolis_45, Dynamo_46
- Track 115 : HUHilltop_47, Phineas_47, Pygmy_49, Shipwreck_49, Bogie_49
- Track 116 : Camster_46
- Track 117 : Thespis_45, Xeno_47, Brusacoram_45, Atcoo_45, Gavriela_45, StressBall_45
- Track 118 : Sonah_46
- Track 119 : BronnyJr_44

- Track 120 : Polkaroo_46
- Track 121 : Tortellini_55
- Track 122 : Xavia_52
- Track 123 : Nazo_48, BigNuz_47
- Track 124 : Phayonce_46
- Track 125 : Purky_51
- Track 126 : Ibrahim_44, Whitty_43, Bernal13_44, ZenTime222_43, RonRayGun_44, Nairb_43
- Track 127 : Mendokysei_42, Nette_45
- Track 128 : GMA1_46
- Track 129 : Eyre_43
- Track 130 : ArV2_52
- Track 131 : Whack_53
- Track 132 : OnionKnight_39
- Track 133 : Gudmit_45
- Track 134 : Mbo4_46
- Track 135 : LilSpotty_63

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

The start number called the most often in the published annotations is 110, it was called in 90 of the 298 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adora_54, Agueybana_58, AlumE_58, Angelique_55, Annalisa_54, Antonio_56, Attis_51, BaxterFox_59, BeeGee_62, Beenie_47, Bialota_54, Bjanes7_50, BoyNamedSue_58, Bradissa_53, Bunnybear_52, Cashline_56, Clap_53, Clark_53, Confidence_57, Cynthia_53, DobbysSock_46, Dolores_55, Dorito_49, DumpsterDude_55, EMSquaredA_56, Easley_51, Ebert_57, EdnaMode_50, EnalisNailo_53, Eudoria_56, Floral_57, FroggyToad_52, GemG_53, Gizermo_53, Haley23_53, Herod_57, Hortense_57, Howe_57, Hugley_55, Hyzer_65, Invectra_55, Jablanski_59, Jalleen_53, Kita_57, Lamberg_49, Lilas_55, LonelyBoi_55, LordFarquaad_53, Madavieve_54, Madeline_57, MakCheese_63, Malibo_59, Manasvini_57, Maridalia_60, Marteena_55, Matteo_46, Mcklovin_53, MichaelScott_54, Mocha12_53, Neobush_56, Nettuno_49, Ohgeesy_56, Oregano_57, PantheRoc_59, PhriskyACE_54, Pickett_49, Pollux_59, Polly_53, Posh_59, Powerball_55, Pytheas_59, Ruthy_54, Sahara_52, Samman98_54, Savage_53, Sekhmet_55, Shlim410_55, Sidious_56, SoilAssassin_51, Sprinklemunch_63, Sproutie_53, Suerte_50, Suscepit_56, Tayonia_56, ThankyouJordi_59, Thimann_56, Trumpet_56, TuertoX_53, Tuti_57, Twinkle_56, WelcomeAyanna_59, Whiteclaw_53, WinkNick_56, Wrigley_61, Yeet412_51, Yeezy_56, Zameen_56, Zirinka_53, Zodiariah_55,

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

- Clown_66, Eyre_43, Gudmit_45,

Genes that do not have the "Most Annotated" start:

- AbbyDaisy_69, Aggie_45, AizenPogi_42, Aloeri_67, Anatole_37, Anekin_71, Angel_42, Annihilator_42, Antsirabe_42, ArV2_52, Arib1_46, Aroostook_42, Arri_56, Atcoo_45, Avocado_43, Avrafan_42, Awesomesauce_66, AzulaCat_42, B22_39,

B3_36, BPs_42, BQuat_42, Babsiella_47, Bakery_59, Barb_56, Barkley26_42, Bartholomew_45, Bernal13_44, Bhagsy_46, BigNuz_47, BlueShadow_67, Bogie_49, Bosnia_54, BronnyJr_44, BruceB_42, Brusacoram_45, Bunnies_46, CLED96_42, CactusJack_45, Cambiare_44, Camri_42, Camster_46, CassieYates_42, Cedasite_42, Chance64_42, Charlie_47, Che9c_60, CherryCola_57, Cherrybomb426_42, ChickenDinner_66, Chubbello_45, ClamChowder_56, Cloudyecho_43, Coleslaw_42, CosmicBrownie_64, CoveyB_56, Crespo_42, Cubone_52, DMoney_42, DNAIII_0041, Danyall_55, Darionha_42, DingDing_42, DocMcStuffins_66, Donovan_46, Doucette_40, Dynamo_46, E1_37, E6_41, ECartman_42, Egi03_54, Etoile_45, Evamon_53, EvePickles_65, Farewell_58, Fireball_56, FirstPlacePfu_46, Fishburne_45, FlagStaff_42, Frosty24_42, Fugax_57, G4_38, GMA1_46, GaloreK_45, Gavriela_45, Gezellig_53, Gideon_42, Glaske_45, GodSpeed_43, GoldenAsh_42, Gomashi_42, GreaseLightnin_46, Grizzly_42, HC_45, HUHilltop_47, Halo3_54, Halo_42, Hillester_73, Hope_42, Hotshotbaby7_42, Ibrahim_44, JCole_50, JakeTheSnake_72, Jambalaya_53, Jane_42, JeanClaude_51, Jebeks_47, Jeilious_42, Jolene_42, Jolie2_42, Jonghyun_41, JorRay_42, Journey_46, Jung_44, Juniormint_46, Kareem_42, Kari_45, Kasen3_42, KilKor_45, KimmyK_55, Ksquared_45, Langerak_46, Lemuria_44, Liefie_42, LilSpotty_63, LordVader_58, LouisV14_44, MOOREtheMARYer_44, MZKinsey_42, Majeke_46, Maliketh_42, Malithi_46, Mangethe_46, Mao1_64, Marmie_42, Mbo4_46, Megiddo_45, Mendokyse_42, Mercurio_45, MichelleMyBell_47, MidnightRain_71, Misha28_64, Mowgli_42, Mutzi_53, Nairb_43, Nazo_48, Necropolis_45, Neoh_42, Nette_45, NewKitty_71, Nubi_54, Nyilah_70, OctaviousRex_42, Olga_42, OnionKnight_39, Pace1224_42, PaintedDog_52, Paito_43, PeanutPie_46, Peeb_42, Periodt_42, Persistence_62, Phalm_45, Phayonce_46, Phegasus_46, Philonius_47, Phineas_47, Phish_42, Phloodle_42, Phlop_53, Phreak_42, PinkCoffee_56, PinkYoshi_42, Pinnie_42, Piper2020_67, Plagueis_42, Polkaroo_46, Portcullis_55, PullumCavea_53, Purky_51, Pygmy_49, QueenHazel_43, Rabbs_43, RadFad_73, Rattrick_42, RavenCo17_53, Remy19_42, Renaissance_42, Richarlison_42, RogerDodger_57, RonRayGun_44, Rooter_55, Ruriko_42, Salvador_53, Satrap_68, Savbucketdawg_53, Sbash_57, Schiebel_42, Seahorse_72, Sejanus_63, ShaboiShabazz_42, Shinji_53, Shipwreck_49, Silvy_45, Sizemore_42, SkinnyPete_44, SmokingBunny_54, Sneeze_43, Sonah_46, Sparky_56, Sporco_71, Stargaze_43, StevieRay_45, StressBall_45, Sweets_42, Taheera_41, Techage_45, Terror_41, Thespis_45, TillyBobJoe_56, TinaBug_42, Togo_53, TomBrady_42, TootsiePop_64, Tortellini_55, Twister6_56, Valary_56, VanDeWege_57, Venti_46, Vidya_45, Vopal_70, Wendigo_42, Whack_53, Whitty_43, Willsammy_44, Wizard_53, Xavia_52, Xeno_47, Xula_42, YangYin_43, YungMoney_56, ZenTime222_43, Zilizabeth_46, ZoMa_42, Zombie_42, Zucker_64,

Summary by start number:

Start 12:

- Found in 1 of 348 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Eyre_43 (singleton),

Start 13:

- Found in 1 of 348 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit_45 (singleton),

Start 65:

- Found in 8 of 348 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 37.5% of time when present
- Phage (with cluster) where this start called: FlagStaff_42 (G2), GodSpeed_43 (G2), Pace1224_42 (G2),

Start 68:

- Found in 5 of 348 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 298
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Antsirabe_42 (G5), Stargaze_43 (G5), YangYin_43 (G5),

Start 69:

- Found in 82 of 348 (23.6%) of genes in pham
- Manual Annotations of this start: 68 of 298
- Called 98.8% of time when present
- Phage (with cluster) where this start called: AizenPogi_42 (G1), Angel_42 (G1), Annihilator_42 (G1), Aroostook_42 (G1), Avocado_43 (G2), Avrafan_42 (G1), AzulaCat_42 (G1), BPs_42 (G1), BQuat_42 (G1), Barkley26_42 (G1), BruceB_42 (G1), CLÉD96_42 (G1), Cambiare_44 (G2), Camri_42 (G1), CassieYates_42 (G1), Cedasite_42 (G1), Chance64_42 (G1), Cherrybomb426_42 (G1), Cloudyecho_43 (G3), Coleslaw_42 (G1), Crespo_42 (G1), DMoney_42 (G1), DNAIII_0041 (G1), Darionha_42 (G1), DingDing_42 (G1), ECartman_42 (G1), Frosty24_42 (G1), Gideon_42 (G1), GoldenAsh_42 (G1), Gomashi_42 (G1), Grizzly_42 (G1), Halo_42 (G1), Hope_42 (G1), Hotshotbaby7_42 (G1), Jane_42 (G1), Jeilious_42 (G), Jolene_42 (G1), Jolie2_42 (G4), Jonghyun_41 (G1), JorRay_42 (G1), Kareem_42 (G1), Kasen3_42 (G1), Lemuria_44 (G4), Liefie_42 (G1), LouisV14_44 (G1), MOOREtheMARYer_44 (G3), MZKinsey_42 (G1), Maliketh_42 (G1), Marmie_42 (G1), Mercurio_45 (G4), Mowgli_42 (G1), Neoh_42 (G), OctaviousRex_42 (G1), Olga_42 (G1), Paito_43 (G1), Peeb_42 (G1), Periodt_42 (G1), Phish_42 (G1), Phloodle_42 (G1), Phreak_42 (G1), PinkYoshi_42 (G1), Pinnie_42 (G3), Plagueis_42 (G1), Rabbs_43 (G1), Rattrick_42 (G1), Remy19_42 (G1), Renaissance_42 (G1), Richarlison_42 (G1), Ruriko_42 (G1), Schiebel_42 (G1), ShaboiShabazz_42 (G1), Sizemore_42 (G1), Sneeze_43 (G1), Sweets_42 (G1), Taheera_41 (G1), Terror_41 (G1), TinaBug_42 (G1), TomBrady_42 (G1), Wendigo_42 (G1), ZoMa_42 (G1), Zombie_42 (G1),

Start 91:

- Found in 4 of 348 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Farewell_58 (AF),

Start 97:

- Found in 23 of 348 (6.6%) of genes in pham
- Manual Annotations of this start: 22 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barb_56 (DC1), CherryCola_57 (DC1), ClamChowder_56 (DC1), Clown_66 (DC2), CoveyB_56 (DC1), Egi03_54 (DC1), Evamon_53 (DC1), Fugax_57 (DC1), Gezellig_53 (DC1), Halo3_54 (DC1),

KimmyK_55 (DC1), Nubi_54 (DC1), Phlop_53 (DC1), PinkCoffee_56 (DC1), PullumCavea_53 (DC1), RogerDodger_57 (DC1), Salvador_53 (DC1), SmokingBunny_54 (DC1), TillyBobJoe_56 (DC1), Togo_53 (DC1), Valary_56 (DC1), VanDeWege_57 (DC1), Wizard_53 (DC1),

Start 110:

- Found in 102 of 348 (29.3%) of genes in pham
- Manual Annotations of this start: 90 of 298
- Called 97.1% of time when present
- Phage (with cluster) where this start called: Adora_54 (CZ4), Agueybana_58 (CZ1), AlumE_58 (CZ1), Angelique_55 (CY1), Annalisa_54 (CZ4), Antonio_56 (CZ1), Attis_51 (CZ2), BaxterFox_59 (CZ3), BeeGee_62 (CY5), Beenie_47 (CZ4), Bialota_54 (CZ1), Bjanes7_50 (CZ2), BoyNamedSue_58 (CZ1), Bradissa_53 (CY1), Bunnybear_52 (CZ), Cashline_56 (CY6), Clap_53 (CZ2), Clark_53 (CZ4), Confidence_57 (CY1), Cynthia_53 (CZ2), DobbysSock_46 (CZ4), Dolores_55 (CZ4), Dorito_49 (CZ4), DumpsterDude_55 (DW), EMSquaredA_56 (CY1), Easley_51 (CZ4), Ebert_57 (CZ2), EdnaMode_50 (CZ2), EnalisNailo_53 (CY1), Eudoria_56 (CZ1), Floral_57 (CY1), FroggyToad_52 (CZ2), GemG_53 (CZ2), Gizermo_53 (CZ2), Haley23_53 (CZ2), Herod_57 (CZ1), Hortense_57 (CZ4), Howe_57 (CZ4), Hugley_55 (CZ1), Hyzer_65 (CZ1), Invectra_55 (CZ4), Jablanski_59 (CY3), Jalleen_53 (CZ2), Kita_57 (CZ1), Lamberg_49 (CZ2), Lilas_55 (CY1), LonelyBoi_55 (CY7), LordFarquaad_53 (CZ2), Madavieve_54 (CZ1), Madeline_57 (CZ1), MakCheese_63 (DW), Malibo_59 (DW), Manasvini_57 (CZ1), Maridalia_60 (CZ1), Marteena_55 (CY1), Matteo_46 (CZ2), Mcklovin_53 (CZ4), MichaelScott_54 (CZ4), Mocha12_53 (CZ2), Neobush_56 (CZ1), Nettuno_49 (CZ2), Ohgeesy_56 (CZ), Oregono_57 (CZ4), PantheRoc_59 (CZ3), PhriskyACE_54 (CZ4), Pickett_49 (CZ2), Pollux_59 (CY1), Polly_53 (CZ1), Posh_59 (CY4), Powerball_55 (CZ4), Pytheas_59 (CY3), Ruthy_54 (DW), Sahara_52 (CZ2), Samman98_54 (CZ4), Savage_53 (CZ2), Sekhmet_55 (CZ4), Shlim410_55 (CZ4), Sidious_56 (CZ7), SoilAssassin_51 (CZ2), Sprinklemunch_63 (DW), Sproutie_53 (CZ2), Suerte_50 (CZ4), Suscepit_56 (CZ1), Tayonia_56 (CZ1), ThankyouJordi_59 (CZ1), Thimann_56 (CZ4), Trumpet_56 (CZ1), TuertoX_53 (CZ2), Tuti_57 (CZ4), Twinkle_56 (CZ4), WelcomeAyanna_59 (CZ1), Whiteclaw_53 (CZ2), WinkNick_56 (CZ4), Wrigley_61 (CY4), Yeet412_51 (CZ2), Yeezy_56 (CZ3), Zameen_56 (CZ1), Zirinka_53 (CZ1), Zodiariah_55 (DW),

Start 111:

- Found in 3 of 348 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bosnia_54 (CZ1), JCole_50 (CZ2), RavenCo17_53 (CZ8),

Start 114:

- Found in 3 of 348 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Arri_56 (DC1),

Start 115:

- Found in 2 of 348 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sparky_56 (AF),

Start 118:

- Found in 1 of 348 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OnionKnight_39 (singleton),

Start 123:

- Found in 1 of 348 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Seahorse_72 (AY),

Start 127:

- Found in 10 of 348 (2.9%) of genes in pham
- Manual Annotations of this start: 9 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloeri_67 (F1), Awesomesauce_66 (F1), ChickenDinner_66 (F1), Cubone_52 (N), DocMcStuffins_66 (F1), LilSpotty_63 (singleton), Misha28_64 (F1), Piper2020_67 (F1), TootsiePop_64 (F1), Tortellini_55 (P2),

Start 129:

- Found in 2 of 348 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mao1_64 (AD), Mbo4_46 (singleton),

Start 131:

- Found in 71 of 348 (20.4%) of genes in pham
- Manual Annotations of this start: 63 of 298
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Aggie_45 (N), Arib1_46 (P1), Atcoo_45 (P1), Babsiella_47 (I1), Bartholomew_45 (P1), Bhagsy_46 (P1), BigNuz_47 (P4), Bogie_49 (P1), Brusacoram_45 (P1), Bunnies_46 (P1), CactusJack_45 (P1), Camster_46 (P1), Charlie_47 (N), Che9c_60 (I2), Chubbello_45 (P1), Donovan_46 (P1), Dynamo_46 (P1), Etoile_45 (P1), FirstPlacePfu_46 (P1), Fishburne_45 (P1), GaloreK_45 (P1), Gavriela_45 (P1), Glaske_45 (P1), GreaseLightnin_46 (P1), HC_45 (I1), HUHilltop_47 (P1), Jebeks_47 (P1), Journey_46 (N), Jung_44 (P1), Juniormint_46 (P1), Kari_45 (P1), KilKor_45 (P1), Ksquared_45 (P1), Langerak_46 (P1), LordVader_58 (F), Majeke_46 (P1), Malithi_46 (P1), Mangethe_46 (P1), Megiddo_45 (P1), MichelleMyBell_47 (N), Nazo_48 (P4), Necropolis_45 (P1), PaintedDog_52 (I1), PeanutPie_46 (P1), Phalm_45 (P1), Phayonce_46 (P5), Phegasus_46 (P1), Philonius_47 (N), Phineas_47 (P1), Purky_51 (P6), Pygmy_49 (P1), QueenHazel_43 (I1), Sbash_57 (I2), Sejanus_63 (AD), Shipwreck_49 (P1), Silvy_45 (N), SkinnyPete_44 (N), Sonah_46 (P1), StevieRay_45 (P1), StressBall_45 (P1), Techage_45 (P1), Thespis_45 (P1), Venti_46 (P1), Vidya_45 (P1), Willsammy_44 (P1), Xavia_52 (P3), Xeno_47 (N), Xula_42 (I1), Zilizebeth_46 (P1),

Start 132:

- Found in 1 of 348 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 298
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Whack_53 (singleton),

Start 133:

- Found in 1 of 348 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA1_46 (singleton),

Start 134:

- Found in 46 of 348 (13.2%) of genes in pham
- Manual Annotations of this start: 23 of 298
- Called 73.9% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_69 (AY), Anatole_37 (BV), Anekin_71 (AY), ArV2_52 (singleton), B22_39 (BW), B3_36 (BV), Bernal13_44 (T), BlueShadow_67 (AY), CosmicBrownie_64 (AY), Doucette_40 (BW), E1_37 (BV), E6_41 (BW), EvePickles_65 (AY), G4_38 (BW), Hillester_73 (AY), Ibrahim_44 (T), JakeTheSnake_72 (AY), JeanClaude_51 (FB), Mendokysei_42 (T), MidnightRain_71 (AY), Nairb_43 (T), Nette_45 (T), NewKitty_71 (AY), Nyilah_70 (AY), Persistence_62 (AY), RadFad_73 (AY), RonRayGun_44 (T), Rooter_55 (FB), Satrap_68 (AY), Sporco_71 (AY), Vopal_70 (AY), Whitty_43 (T), ZenTime222_43 (T), Zucker_64 (FN),

Start 136:

- Found in 11 of 348 (3.2%) of genes in pham
- Manual Annotations of this start: 9 of 298
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Bakery_59 (DC1), Danyall_55 (DC1), Fireball_56 (DC1), Jambalaya_53 (DC1), Mutzi_53 (DC1), Portcullis_55 (DC1), Savbucketdawg_53 (DC1), Shinji_53 (DC1), Twister6_56 (DC1), YungMoney_56 (DC1),

Start 137:

- Found in 76 of 348 (21.8%) of genes in pham
- No Manual Annotations of this start.
- Called 2.6% of time when present
- Phage (with cluster) where this start called: BronnyJr_44 (P1), Polkaroo_46 (P1),

Summary by clusters:

There are 42 clusters represented in this pham: P2, CZ8, I2, CZ2, CZ3, CZ1, singleton, CZ4, G, AY, BV, BW, DW, CY7, FN, CY6, G5, G4, G3, G2, G1, I1, CY4, P5, CY3, P3, CY1, P1, P6, AD, P4, AF, N, CZ, T, CY5, DC2, DC1, CZ7, F1, FB, F,

Info for manual annotations of cluster AD:

- Start number 129 was manually annotated 1 time for cluster AD.
- Start number 131 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AF:

- Start number 91 was manually annotated 1 time for cluster AF.
- Start number 115 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AY:

- Start number 123 was manually annotated 1 time for cluster AY.
- Start number 134 was manually annotated 8 times for cluster AY.

Info for manual annotations of cluster BV:

- Start number 134 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 134 was manually annotated 4 times for cluster BW.

Info for manual annotations of cluster CY1:

- Start number 110 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY3:

- Start number 110 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 110 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 110 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 110 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 110 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:

- Start number 110 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 110 was manually annotated 20 times for cluster CZ1.
- Start number 111 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 110 was manually annotated 22 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 110 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 110 was manually annotated 22 times for cluster CZ4.

Info for manual annotations of cluster CZ7:

- Start number 110 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:

- Start number 111 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DC1:

- Start number 97 was manually annotated 21 times for cluster DC1.
- Start number 114 was manually annotated 1 time for cluster DC1.
- Start number 136 was manually annotated 9 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 97 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DW:

- Start number 110 was manually annotated 4 times for cluster DW.

Info for manual annotations of cluster F1:

- Start number 127 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster FN:

- Start number 134 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster G1:

- Start number 69 was manually annotated 62 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 65 was manually annotated 1 time for cluster G2.
- Start number 69 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 69 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 69 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 68 was manually annotated 2 times for cluster G5.

Info for manual annotations of cluster I1:

- Start number 131 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 131 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:

- Start number 131 was manually annotated 8 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 131 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 127 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 131 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 131 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 131 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 131 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster T:

- Start number 134 was manually annotated 7 times for cluster T.

Gene Information:

Gene: AbbyDaisy_69 Start: 36824, Stop: 37663, Start Num: 134

Candidate Starts for AbbyDaisy_69:

(Start: 134 @36824 has 23 MA's), (165, 37034), (186, 37145), (190, 37160), (212, 37280), (237, 37448), (238, 37454), (255, 37565),

Gene: Adora_54 Start: 39285, Stop: 40148, Start Num: 110

Candidate Starts for Adora_54:

(85, 39222), (Start: 110 @39285 has 90 MA's), (155, 39435), (159, 39468), (186, 39618), (191, 39645), (207, 39741), (210, 39768), (212, 39774), (238, 39954), (268, 40128),

Gene: Aggie_45 Start: 31200, Stop: 32129, Start Num: 131

Candidate Starts for Aggie_45:

(78, 31029), (79, 31032), (Start: 91 @31065 has 1 MA's), (96, 31080), (Start: 131 @31200 has 63 MA's), (137, 31230), (143, 31284), (161, 31401), (164, 31428), (167, 31443), (173, 31497), (176, 31539), (186, 31578), (204, 31680), (220, 31794), (233, 31866), (236, 31890), (237, 31893), (250, 31977), (256, 32016), (276, 32118),

Gene: Agueybana_58 Start: 40560, Stop: 41423, Start Num: 110

Candidate Starts for Agueybana_58:

(Start: 110 @40560 has 90 MA's), (137, 40584), (142, 40632), (159, 40743), (176, 40854), (177, 40860), (186, 40893), (198, 40956), (207, 41016), (210, 41043), (223, 41151), (238, 41229),

Gene: AizenPogi_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for AizenPogi_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Aloeri_67 Start: 41043, Stop: 41897, Start Num: 127

Candidate Starts for Aloeri_67:

(Start: 127 @41043 has 9 MA's), (155, 41205), (159, 41238), (161, 41250), (163, 41274), (176, 41349), (180, 41367), (186, 41388), (204, 41490), (210, 41541), (213, 41553), (215, 41568), (231, 41685), (240, 41736), (241, 41742), (246, 41772), (258, 41856),

Gene: AlumE_58 Start: 40324, Stop: 41199, Start Num: 110

Candidate Starts for AlumE_58:

(34, 40093), (37, 40111), (43, 40129), (52, 40171), (57, 40189), (60, 40195), (80, 40243), (85, 40261), (90, 40270), (Start: 110 @40324 has 90 MA's), (142, 40408), (159, 40519), (176, 40630), (177, 40636), (186, 40669), (207, 40792), (210, 40819), (223, 40927), (238, 41005),

Gene: Anatole_37 Start: 26633, Stop: 27484, Start Num: 134

Candidate Starts for Anatole_37:

(14, 26144), (20, 26186), (27, 26234), (30, 26261), (55, 26381), (60, 26393), (Start: 65 @26405 has 1 MA's), (93, 26477), (101, 26501), (105, 26513), (113, 26543), (124, 26597), (Start: 134 @26633 has 23 MA's), (135, 26636), (138, 26669), (145, 26726), (148, 26741), (151, 26768), (153, 26777), (155, 26780), (161, 26840), (164, 26867), (174, 26921), (177, 26945), (185, 26969), (186, 26978), (191, 27005), (199, 27053), (200, 27071), (233, 27278), (246, 27356), (260, 27452),

Gene: Anekin_71 Start: 36816, Stop: 37655, Start Num: 134

Candidate Starts for Anekin_71:

(125, 36792), (Start: 134 @36816 has 23 MA's), (165, 37026), (186, 37137), (190, 37152), (203, 37230), (212, 37272), (237, 37440), (238, 37446), (239, 37449),

Gene: Angel_42 Start: 31892, Stop: 32977, Start Num: 69

Candidate Starts for Angel_42:

(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282), (164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777), (238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: Angelique_55 Start: 40522, Stop: 41361, Start Num: 110

Candidate Starts for Angelique_55:

(Start: 110 @40522 has 90 MA's), (158, 40693), (176, 40807), (180, 40825), (197, 40900), (238, 41155),

Gene: Annalisa_54 Start: 36687, Stop: 37526, Start Num: 110

Candidate Starts for Annalisa_54:

(83, 36624), (Start: 110 @36687 has 90 MA's), (139, 36735), (158, 36858), (176, 36972), (180, 36990), (238, 37320),

Gene: Annihilator_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for Annihilator_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (206, 32567), (237, 32783), (238, 32789), (250, 32867), (258, 32915), (261, 32930),

Gene: Antonio_56 Start: 38840, Stop: 39715, Start Num: 110

Candidate Starts for Antonio_56:

(80, 38759), (85, 38777), (90, 38786), (Start: 110 @38840 has 90 MA's), (159, 39035), (186, 39185), (207, 39308), (210, 39335), (223, 39443), (238, 39521),

Gene: Antsirabe_42 Start: 32945, Stop: 34024, Start Num: 68

Candidate Starts for Antsirabe_42:

(59, 32927), (Start: 68 @32945 has 2 MA's), (100, 33026), (156, 33293), (160, 33332), (161, 33335), (167, 33377), (177, 33479), (181, 33494), (186, 33512), (189, 33524), (206, 33614), (237, 33833), (238, 33839), (258, 33965),

Gene: ArV2_52 Start: 29030, Stop: 29857, Start Num: 134

Candidate Starts for ArV2_52:

(Start: 134 @29030 has 23 MA's), (186, 29351), (190, 29366), (199, 29420), (229, 29609), (234, 29630), (237, 29654), (272, 29846),

Gene: Arib1_46 Start: 31623, Stop: 32552, Start Num: 131

Candidate Starts for Arib1_46:

(96, 31503), (Start: 131 @31623 has 63 MA's), (137, 31653), (143, 31707), (161, 31824), (164, 31851), (167, 31866), (173, 31920), (186, 32001), (204, 32103), (220, 32217), (233, 32289), (236, 32313),

(237, 32316), (250, 32400), (256, 32439), (276, 32541),

Gene: Aroostook_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Aroostook_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: Arri_56 Start: 40968, Stop: 41882, Start Num: 114

Candidate Starts for Arri_56:

(106, 40938), (Start: 114 @40968 has 1 MA's), (Start: 136 @41049 has 9 MA's), (143, 41118), (144, 41133), (150, 41175), (186, 41373), (198, 41436), (199, 41442), (220, 41601), (237, 41700),

Gene: Atcoo_45 Start: 32107, Stop: 33033, Start Num: 131

Candidate Starts for Atcoo_45:

(Start: 131 @32107 has 63 MA's), (137, 32134), (143, 32188), (161, 32305), (164, 32332), (167, 32347), (186, 32482), (189, 32494), (198, 32551), (206, 32590), (220, 32698), (233, 32770), (236, 32794), (237, 32797), (250, 32881), (256, 32920), (276, 33022),

Gene: Attis_51 Start: 35973, Stop: 36848, Start Num: 110

Candidate Starts for Attis_51:

(80, 35892), (85, 35910), (90, 35919), (Start: 110 @35973 has 90 MA's), (159, 36168), (176, 36279), (177, 36285), (186, 36318), (189, 36330), (195, 36357), (207, 36441), (210, 36468), (223, 36576), (233, 36621), (238, 36654),

Gene: Avocado_43 Start: 33992, Stop: 35071, Start Num: 69

Candidate Starts for Avocado_43:

(1, 33143), (2, 33251), (3, 33278), (41, 33899), (Start: 69 @33992 has 68 MA's), (138, 34226), (156, 34340), (160, 34379), (161, 34382), (177, 34526), (181, 34541), (186, 34559), (206, 34661), (237, 34880), (258, 35012),

Gene: Avrafan_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Avrafan_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Awesomesauce_66 Start: 40126, Stop: 40980, Start Num: 127

Candidate Starts for Awesomesauce_66:

(Start: 127 @40126 has 9 MA's), (155, 40288), (159, 40321), (161, 40333), (163, 40357), (176, 40432), (180, 40450), (186, 40471), (204, 40573), (210, 40624), (213, 40636), (215, 40651), (231, 40768), (240, 40819), (241, 40825), (246, 40855), (258, 40939),

Gene: AzulaCat_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for AzulaCat_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: B22_39 Start: 26398, Stop: 27249, Start Num: 134

Candidate Starts for B22_39:

(113, 26314), (124, 26368), (Start: 134 @26398 has 23 MA's), (135, 26401), (138, 26434), (145, 26491), (155, 26545), (161, 26605), (164, 26632), (174, 26686), (177, 26710), (185, 26734), (186,

26743), (191, 26770), (198, 26812), (199, 26818), (221, 26986), (233, 27043), (236, 27067), (246, 27121), (254, 27187), (260, 27217),

Gene: B3_36 Start: 25890, Stop: 26810, Start Num: 134

Candidate Starts for B3_36:

(14, 25401), (20, 25443), (27, 25491), (30, 25518), (55, 25638), (60, 25650), (Start: 65 @25662 has 1 MA's), (93, 25734), (101, 25758), (105, 25770), (113, 25800), (124, 25854), (Start: 134 @25890 has 23 MA's), (135, 25893), (138, 25926), (145, 25983), (148, 25998), (153, 26034), (155, 26037), (161, 26097), (164, 26124), (174, 26178), (177, 26202), (185, 26226), (186, 26235), (191, 26262), (199, 26310), (200, 26328), (212, 26385), (220, 26460), (221, 26478), (222, 26484), (233, 26535), (235, 26544), (246, 26613), (252, 26670), (260, 26709), (265, 26733),

Gene: BPs_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for BPs_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: BQuat_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for BQuat_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (206, 32567), (237, 32783), (238, 32789), (250, 32867), (258, 32915), (261, 32930),

Gene: Babsiella_47 Start: 32479, Stop: 33405, Start Num: 131

Candidate Starts for Babsiella_47:

(96, 32359), (Start: 131 @32479 has 63 MA's), (Start: 134 @32488 has 23 MA's), (137, 32506), (143, 32560), (161, 32677), (164, 32704), (167, 32719), (173, 32773), (186, 32854), (198, 32923), (199, 32929), (204, 32956), (216, 33037), (220, 33070), (233, 33142), (236, 33166), (237, 33169), (250, 33253), (256, 33292), (276, 33394),

Gene: Bakery_59 Start: 42229, Stop: 43062, Start Num: 136

Candidate Starts for Bakery_59:

(Start: 114 @42148 has 1 MA's), (Start: 136 @42229 has 9 MA's), (143, 42298), (144, 42313), (150, 42355), (186, 42553), (198, 42616), (199, 42622), (220, 42781), (237, 42880),

Gene: Barb_56 Start: 41203, Stop: 42051, Start Num: 97

Candidate Starts for Barb_56:

(Start: 97 @41203 has 22 MA's), (103, 41218), (271, 42031),

Gene: Barkley26_42 Start: 31914, Stop: 32999, Start Num: 69

Candidate Starts for Barkley26_42:

(Start: 69 @31914 has 68 MA's), (109, 32028), (117, 32052), (122, 32082), (160, 32301), (161, 32304), (164, 32331), (173, 32400), (181, 32463), (186, 32481), (189, 32493), (206, 32583), (237, 32799), (238, 32805), (250, 32883), (258, 32931), (261, 32946),

Gene: Bartholomew_45 Start: 31617, Stop: 32546, Start Num: 131

Candidate Starts for Bartholomew_45:

(96, 31497), (Start: 131 @31617 has 63 MA's), (137, 31647), (143, 31701), (161, 31818), (164, 31845), (167, 31860), (173, 31914), (186, 31995), (204, 32097), (220, 32211), (233, 32283), (236, 32307), (237, 32310), (250, 32394), (256, 32433), (276, 32535),

Gene: BaxterFox_59 Start: 41045, Stop: 41908, Start Num: 110

Candidate Starts for BaxterFox_59:

(51, 40889), (58, 40913), (87, 40985), (89, 40988), (90, 40991), (Start: 110 @41045 has 90 MA's), (159, 41228), (176, 41339), (177, 41345), (186, 41378), (198, 41441), (207, 41501), (210, 41528), (223, 41636), (238, 41714),

Gene: BeeGee_62 Start: 40767, Stop: 41630, Start Num: 110

Candidate Starts for BeeGee_62:

(43, 40572), (52, 40614), (57, 40632), (60, 40638), (85, 40704), (90, 40713), (Start: 110 @40767 has 90 MA's), (137, 40791), (142, 40839), (159, 40950), (186, 41100), (207, 41223), (210, 41250), (223, 41358), (234, 41406), (238, 41436),

Gene: Beenie_47 Start: 36265, Stop: 37104, Start Num: 110

Candidate Starts for Beenie_47:

(83, 36202), (Start: 110 @36265 has 90 MA's), (139, 36313), (158, 36436), (176, 36550), (180, 36568), (238, 36898),

Gene: Bernal13_44 Start: 32597, Stop: 33427, Start Num: 134

Candidate Starts for Bernal13_44:

(Start: 134 @32597 has 23 MA's), (161, 32786), (164, 32813), (184, 32924), (198, 32987), (227, 33191), (230, 33206),

Gene: Bhagsy_46 Start: 31612, Stop: 32538, Start Num: 131

Candidate Starts for Bhagsy_46:

(Start: 131 @31612 has 63 MA's), (137, 31639), (143, 31693), (161, 31810), (164, 31837), (167, 31852), (186, 31987), (189, 31999), (198, 32056), (206, 32095), (220, 32203), (224, 32233), (233, 32275), (236, 32299), (237, 32302), (250, 32386), (256, 32425), (276, 32527),

Gene: Bialota_54 Start: 39472, Stop: 40347, Start Num: 110

Candidate Starts for Bialota_54:

(80, 39391), (85, 39409), (90, 39418), (Start: 110 @39472 has 90 MA's), (159, 39667), (186, 39817), (207, 39940), (210, 39967), (223, 40075), (238, 40153),

Gene: BigNuz_47 Start: 33511, Stop: 34458, Start Num: 131

Candidate Starts for BigNuz_47:

(96, 33391), (Start: 131 @33511 has 63 MA's), (137, 33538), (143, 33592), (157, 33676), (161, 33709), (167, 33751), (176, 33847), (186, 33886), (204, 33988), (220, 34102), (221, 34120), (222, 34126), (224, 34132), (233, 34174), (236, 34198), (237, 34201), (250, 34285), (255, 34321), (256, 34324),

Gene: Bjaner7_50 Start: 34872, Stop: 35735, Start Num: 110

Candidate Starts for Bjaner7_50:

(90, 34818), (Start: 110 @34872 has 90 MA's), (142, 34944), (159, 35055), (176, 35166), (186, 35205), (206, 35307), (207, 35328), (210, 35355), (223, 35463), (238, 35541),

Gene: BlueShadow_67 Start: 35827, Stop: 36666, Start Num: 134

Candidate Starts for BlueShadow_67:

(125, 35803), (Start: 134 @35827 has 23 MA's), (165, 36037), (186, 36148), (190, 36163), (203, 36241), (212, 36283), (237, 36451), (238, 36457), (239, 36460),

Gene: Bogie_49 Start: 33878, Stop: 34804, Start Num: 131

Candidate Starts for Bogie_49:

(Start: 131 @33878 has 63 MA's), (137, 33905), (143, 33959), (161, 34076), (164, 34103), (167, 34118), (173, 34172), (186, 34253), (189, 34265), (198, 34322), (206, 34361), (220, 34469), (233, 34541), (236, 34565), (237, 34568), (250, 34652), (256, 34691), (276, 34793),

Gene: Bosnia_54 Start: 40928, Stop: 41755, Start Num: 111

Candidate Starts for Bosnia_54:

(Start: 111 @40928 has 2 MA's), (137, 40949), (155, 41066), (204, 41345), (206, 41351), (207, 41372), (211, 41387), (213, 41396),

Gene: BoyNamedSue_58 Start: 40324, Stop: 41199, Start Num: 110

Candidate Starts for BoyNamedSue_58:

(34, 40093), (37, 40111), (43, 40129), (52, 40171), (57, 40189), (60, 40195), (80, 40243), (85, 40261), (90, 40270), (Start: 110 @40324 has 90 MA's), (142, 40408), (159, 40519), (176, 40630), (177, 40636), (186, 40669), (207, 40792), (210, 40819), (223, 40927), (238, 41005),

Gene: Bradissa_53 Start: 39968, Stop: 40798, Start Num: 110

Candidate Starts for Bradissa_53:

(43, 39776), (52, 39818), (60, 39842), (90, 39914), (Start: 110 @39968 has 90 MA's), (155, 40109), (182, 40277), (194, 40328), (198, 40355), (199, 40361), (204, 40388), (206, 40394), (207, 40415), (211, 40430),

Gene: BronnyJr_44 Start: 32143, Stop: 33042, Start Num: 137

Candidate Starts for BronnyJr_44:

(96, 31993), (Start: 131 @32113 has 63 MA's), (137, 32143), (143, 32197), (161, 32314), (164, 32341), (167, 32356), (173, 32410), (186, 32491), (204, 32593), (220, 32707), (233, 32779), (236, 32803), (237, 32806), (250, 32890), (256, 32929), (276, 33031),

Gene: BruceB_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for BruceB_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Brusacoram_45 Start: 31613, Stop: 32539, Start Num: 131

Candidate Starts for Brusacoram_45:

(Start: 131 @31613 has 63 MA's), (137, 31640), (143, 31694), (161, 31811), (164, 31838), (167, 31853), (186, 31988), (189, 32000), (198, 32057), (206, 32096), (220, 32204), (233, 32276), (236, 32300), (237, 32303), (250, 32387), (256, 32426), (276, 32528),

Gene: Bunnies_46 Start: 31627, Stop: 32553, Start Num: 131

Candidate Starts for Bunnies_46:

(Start: 131 @31627 has 63 MA's), (137, 31654), (143, 31708), (161, 31825), (164, 31852), (167, 31867), (186, 32002), (189, 32014), (198, 32071), (206, 32110), (220, 32218), (224, 32248), (233, 32290), (236, 32314), (237, 32317), (250, 32401), (256, 32440), (276, 32542),

Gene: Bunnybear_52 Start: 38350, Stop: 39213, Start Num: 110

Candidate Starts for Bunnybear_52:

(17, 37996), (20, 38017), (51, 38197), (58, 38221), (Start: 110 @38350 has 90 MA's), (155, 38500), (159, 38533), (186, 38683), (207, 38806), (210, 38833), (223, 38941), (234, 38989), (238, 39019),

Gene: CLED96_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for CLED96_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: CactusJack_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for CactusJack_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (224, 32498), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: Cambiare_44 Start: 34235, Stop: 35314, Start Num: 69

Candidate Starts for Cambiare_44:

(2, 33494), (3, 33521), (41, 34142), (Start: 69 @34235 has 68 MA's), (138, 34469), (156, 34583), (160, 34622), (161, 34625), (177, 34769), (181, 34784), (186, 34802), (206, 34904), (237, 35123), (258, 35255),

Gene: Camri_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Camri_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Camster_46 Start: 31634, Stop: 32560, Start Num: 131

Candidate Starts for Camster_46:

(Start: 131 @31634 has 63 MA's), (137, 31661), (143, 31715), (161, 31832), (164, 31859), (167, 31874), (173, 31928), (186, 32009), (204, 32111), (220, 32225), (233, 32297), (236, 32321), (237, 32324), (250, 32408), (256, 32447), (276, 32549),

Gene: Cashline_56 Start: 40617, Stop: 41480, Start Num: 110

Candidate Starts for Cashline_56:

(Start: 110 @40617 has 90 MA's), (159, 40800), (176, 40911), (177, 40917), (186, 40950), (207, 41073), (210, 41100), (223, 41208), (238, 41286),

Gene: CassieYates_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for CassieYates_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Cedasite_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Cedasite_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Chance64_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Chance64_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: Charlie_47 Start: 30994, Stop: 31923, Start Num: 131

Candidate Starts for Charlie_47:

(96, 30874), (Start: 131 @30994 has 63 MA's), (137, 31024), (143, 31078), (161, 31195), (164, 31222), (167, 31237), (173, 31291), (186, 31372), (204, 31474), (220, 31588), (233, 31660), (236, 31684), (237, 31687), (250, 31771), (256, 31810), (276, 31912),

Gene: Che9c_60 Start: 42706, Stop: 43650, Start Num: 131

Candidate Starts for Che9c_60:

(Start: 68 @42514 has 2 MA's), (96, 42586), (Start: 131 @42706 has 63 MA's), (Start: 134 @42712 has 23 MA's), (137, 42730), (146, 42805), (150, 42841), (161, 42901), (167, 42943), (173, 42997), (176, 43039), (186, 43078), (189, 43090), (204, 43180), (214, 43240), (220, 43294), (237, 43393), (250, 43477), (255, 43513),

Gene: CherryCola_57 Start: 41836, Stop: 42684, Start Num: 97

Candidate Starts for CherryCola_57:

(86, 41809), (Start: 97 @41836 has 22 MA's), (271, 42664),

Gene: Cherrybomb426_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Cherrybomb426_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: ChickenDinner_66 Start: 41043, Stop: 41897, Start Num: 127

Candidate Starts for ChickenDinner_66:

(Start: 127 @41043 has 9 MA's), (155, 41205), (159, 41238), (161, 41250), (163, 41274), (176, 41349), (180, 41367), (186, 41388), (204, 41490), (210, 41541), (213, 41553), (215, 41568), (231, 41685), (240, 41736), (241, 41742), (246, 41772), (258, 41856),

Gene: Chubbello_45 Start: 31613, Stop: 32542, Start Num: 131

Candidate Starts for Chubbello_45:

(96, 31493), (Start: 131 @31613 has 63 MA's), (137, 31643), (143, 31697), (161, 31814), (164, 31841), (167, 31856), (173, 31910), (186, 31991), (204, 32093), (220, 32207), (233, 32279), (236, 32303), (237, 32306), (250, 32390), (256, 32429), (276, 32531),

Gene: ClamChowder_56 Start: 41203, Stop: 42051, Start Num: 97

Candidate Starts for ClamChowder_56:

(Start: 97 @41203 has 22 MA's), (103, 41218), (271, 42031),

Gene: Clap_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Clap_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Clark_53 Start: 36082, Stop: 36921, Start Num: 110

Candidate Starts for Clark_53:

(83, 36019), (Start: 110 @36082 has 90 MA's), (139, 36130), (158, 36253), (176, 36367), (180, 36385), (238, 36715),

Gene: Cloudyecho_43 Start: 33692, Stop: 34786, Start Num: 69

Candidate Starts for Cloudyecho_43:

(41, 33599), (Start: 69 @33692 has 68 MA's), (119, 33839), (138, 33926), (156, 34040), (160, 34079), (161, 34082), (167, 34124), (177, 34226), (181, 34241), (186, 34259), (189, 34271), (231, 34544), (237, 34580), (238, 34586),

Gene: Clown_66 Start: 45838, Stop: 46686, Start Num: 97

Candidate Starts for Clown_66:

(Start: 97 @45838 has 22 MA's), (Start: 110 @45871 has 90 MA's), (142, 45919), (199, 46240),

Gene: Coleslaw_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for Coleslaw_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (206, 32567), (237, 32783), (238, 32789), (250, 32867), (258, 32915), (261, 32930),

Gene: Confidence_57 Start: 38465, Stop: 39328, Start Num: 110

Candidate Starts for Confidence_57:

(Start: 110 @38465 has 90 MA's), (155, 38615), (159, 38648), (186, 38798), (207, 38921), (210, 38948), (223, 39056), (234, 39104), (238, 39134), (250, 39212),

Gene: CosmicBrownie_64 Start: 34550, Stop: 35389, Start Num: 134

Candidate Starts for CosmicBrownie_64:

(125, 34526), (Start: 134 @34550 has 23 MA's), (165, 34760), (186, 34871), (190, 34886), (203, 34964), (212, 35006), (237, 35174), (238, 35180), (239, 35183),

Gene: CoveyB_56 Start: 40881, Stop: 41729, Start Num: 97

Candidate Starts for CoveyB_56:

(86, 40854), (Start: 97 @40881 has 22 MA's), (271, 41709),

Gene: Crespo_42 Start: 31908, Stop: 32993, Start Num: 69

Candidate Starts for Crespo_42:

(Start: 69 @31908 has 68 MA's), (109, 32022), (117, 32046), (122, 32076), (160, 32295), (161, 32298), (164, 32325), (173, 32394), (181, 32457), (186, 32475), (189, 32487), (206, 32577), (237, 32793), (238, 32799), (250, 32877), (258, 32925), (261, 32940),

Gene: Cubone_52 Start: 31835, Stop: 32689, Start Num: 127

Candidate Starts for Cubone_52:

(Start: 127 @31835 has 9 MA's), (155, 31997), (159, 32030), (161, 32042), (163, 32066), (176, 32141), (180, 32159), (186, 32180), (204, 32282), (210, 32333), (213, 32345), (215, 32360), (231, 32477), (240, 32528), (241, 32534), (246, 32564), (258, 32648),

Gene: Cynthia_53 Start: 35049, Stop: 35912, Start Num: 110

Candidate Starts for Cynthia_53:

(90, 34995), (Start: 110 @35049 has 90 MA's), (142, 35121), (159, 35232), (176, 35343), (186, 35382), (206, 35484), (207, 35505), (210, 35532), (223, 35640), (238, 35718),

Gene: DMoney_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for DMoney_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: DNAIII_0041 Start: 30541, Stop: 31626, Start Num: 69

Candidate Starts for DNAIII_0041:

(Start: 69 @30541 has 68 MA's), (109, 30655), (117, 30679), (122, 30709), (160, 30928), (161, 30931), (164, 30958), (173, 31027), (181, 31090), (186, 31108), (189, 31120), (232, 31396), (237, 31426), (250, 31510), (258, 31558), (261, 31573),

Gene: Danyall_55 Start: 40890, Stop: 41723, Start Num: 136

Candidate Starts for Danyall_55:

(Start: 136 @40890 has 9 MA's), (143, 40959), (144, 40974), (150, 41016), (161, 41076), (186, 41214), (198, 41277), (199, 41283), (220, 41442), (237, 41541),

Gene: Darionha_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Darionha_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: DingDing_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for DingDing_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: DobbysSock_46 Start: 34924, Stop: 35763, Start Num: 110

Candidate Starts for DobbysSock_46:

(83, 34861), (Start: 110 @34924 has 90 MA's), (139, 34972), (158, 35095), (176, 35209), (180, 35227), (238, 35557),

Gene: DocMcStuffins_66 Start: 41043, Stop: 41897, Start Num: 127

Candidate Starts for DocMcStuffins_66:

(Start: 127 @41043 has 9 MA's), (155, 41205), (159, 41238), (161, 41250), (163, 41274), (176, 41349), (180, 41367), (186, 41388), (204, 41490), (210, 41541), (213, 41553), (215, 41568), (231, 41685), (240, 41736), (241, 41742), (246, 41772), (258, 41856),

Gene: Dolores_55 Start: 36820, Stop: 37683, Start Num: 110

Candidate Starts for Dolores_55:

(85, 36757), (Start: 110 @36820 has 90 MA's), (176, 37114), (186, 37153), (190, 37168), (207, 37276), (210, 37303), (212, 37309), (219, 37363), (223, 37411), (233, 37456), (234, 37459), (238, 37489),

Gene: Donovan_46 Start: 31640, Stop: 32569, Start Num: 131

Candidate Starts for Donovan_46:

(96, 31520), (Start: 131 @31640 has 63 MA's), (137, 31670), (143, 31724), (161, 31841), (164, 31868), (167, 31883), (173, 31937), (186, 32018), (204, 32120), (220, 32234), (233, 32306), (236, 32330), (237, 32333), (250, 32417), (256, 32456), (276, 32558),

Gene: Dorito_49 Start: 34569, Stop: 35408, Start Num: 110

Candidate Starts for Dorito_49:

(83, 34506), (Start: 110 @34569 has 90 MA's), (139, 34617), (158, 34740), (176, 34854), (180, 34872), (238, 35202), (240, 35211), (248, 35265),

Gene: Doucette_40 Start: 27776, Stop: 28702, Start Num: 134

Candidate Starts for Doucette_40:

(124, 27746), (Start: 134 @27776 has 23 MA's), (135, 27779), (138, 27812), (145, 27869), (155, 27923), (161, 27983), (164, 28010), (174, 28064), (177, 28088), (185, 28112), (186, 28121), (191, 28148), (199, 28196), (200, 28214), (212, 28271), (233, 28421), (246, 28499), (257, 28574), (260, 28595), (277, 28679),

Gene: DumpsterDude_55 Start: 42126, Stop: 42956, Start Num: 110

Candidate Starts for DumpsterDude_55:

(4, 41562), (5, 41565), (30, 41865), (31, 41880), (34, 41895), (35, 41901), (39, 41919), (52, 41973), (60, 41997), (85, 42063), (89, 42069), (Start: 110 @42126 has 90 MA's), (155, 42267), (197, 42504), (204, 42546), (207, 42573), (210, 42585),

Gene: Dynamo_46 Start: 32100, Stop: 33029, Start Num: 131

Candidate Starts for Dynamo_46:

(96, 31980), (Start: 131 @32100 has 63 MA's), (137, 32130), (143, 32184), (161, 32301), (164, 32328), (167, 32343), (173, 32397), (186, 32478), (204, 32580), (220, 32694), (233, 32766), (236, 32790), (237, 32793), (250, 32877), (256, 32916), (276, 33018),

Gene: E1_37 Start: 26633, Stop: 27484, Start Num: 134

Candidate Starts for E1_37:

(14, 26144), (20, 26186), (27, 26234), (30, 26261), (55, 26381), (60, 26393), (Start: 65 @26405 has 1 MA's), (93, 26477), (101, 26501), (105, 26513), (113, 26543), (124, 26597), (Start: 134 @26633 has 23 MA's), (135, 26636), (138, 26669), (145, 26726), (148, 26741), (151, 26768), (153, 26777), (155, 26780), (161, 26840), (164, 26867), (174, 26921), (177, 26945), (185, 26969), (186, 26978), (191, 27005), (199, 27053), (200, 27071), (233, 27278), (246, 27356), (260, 27452),

Gene: E6_41 Start: 29214, Stop: 30065, Start Num: 134

Candidate Starts for E6_41:

(14, 28731), (20, 28773), (27, 28821), (30, 28848), (55, 28968), (60, 28980), (Start: 65 @28992 has 1 MA's), (93, 29064), (101, 29088), (105, 29100), (113, 29130), (124, 29184), (Start: 134 @29214 has 23 MA's), (135, 29217), (138, 29250), (145, 29307), (155, 29361), (161, 29421), (164, 29448), (174, 29502), (177, 29526), (185, 29550), (186, 29559), (191, 29586), (199, 29634), (200, 29652), (233, 29859), (236, 29883), (246, 29937), (260, 30033),

Gene: ECartman_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for ECartman_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: EMSquaredA_56 Start: 39499, Stop: 40374, Start Num: 110

Candidate Starts for EMSquaredA_56:

(34, 39268), (37, 39286), (43, 39304), (52, 39346), (57, 39364), (60, 39370), (80, 39418), (85, 39436), (90, 39445), (Start: 110 @39499 has 90 MA's), (142, 39583), (159, 39694), (176, 39805), (177, 39811), (186, 39844), (207, 39967), (210, 39994), (223, 40102), (238, 40180),

Gene: Easley_51 Start: 36057, Stop: 36890, Start Num: 110

Candidate Starts for Easley_51:

(85, 35994), (Start: 110 @36057 has 90 MA's), (142, 36129), (155, 36198), (162, 36246), (204, 36477), (207, 36504),

Gene: Ebert_57 Start: 35471, Stop: 36346, Start Num: 110

Candidate Starts for Ebert_57:

(24, 35156), (34, 35240), (37, 35258), (43, 35276), (52, 35318), (57, 35336), (60, 35342), (80, 35390), (85, 35408), (90, 35417), (Start: 110 @35471 has 90 MA's), (159, 35666), (177, 35783), (186, 35816), (198, 35879), (206, 35918), (207, 35939), (210, 35966), (223, 36074), (238, 36152),

Gene: EdnaMode_50 Start: 34661, Stop: 35536, Start Num: 110

Candidate Starts for EdnaMode_50:

(80, 34580), (85, 34598), (90, 34607), (Start: 110 @34661 has 90 MA's), (159, 34856), (186, 35006), (207, 35129), (210, 35156), (223, 35264), (238, 35342),

Gene: Egi03_54 Start: 40684, Stop: 41532, Start Num: 97

Candidate Starts for Egi03_54:

(Start: 97 @40684 has 22 MA's), (103, 40699), (271, 41512),

Gene: EnalisNailo_53 Start: 39490, Stop: 40341, Start Num: 110

Candidate Starts for EnalisNailo_53:

(42, 39295), (51, 39337), (56, 39355), (58, 39361), (85, 39427), (90, 39436), (Start: 110 @39490 has 90 MA's), (176, 39787), (180, 39805), (238, 40135),

Gene: Etoile_45 Start: 31617, Stop: 32546, Start Num: 131

Candidate Starts for Etoile_45:

(96, 31497), (Start: 131 @31617 has 63 MA's), (137, 31647), (143, 31701), (161, 31818), (164, 31845), (167, 31860), (173, 31914), (186, 31995), (204, 32097), (220, 32211), (233, 32283), (236, 32307), (237, 32310), (250, 32394), (256, 32433), (276, 32535),

Gene: Eudoria_56 Start: 38840, Stop: 39715, Start Num: 110

Candidate Starts for Eudoria_56:

(Start: 110 @38840 has 90 MA's), (159, 39035), (186, 39185), (207, 39308), (210, 39335), (223, 39443), (238, 39521),

Gene: Evamon_53 Start: 40929, Stop: 41777, Start Num: 97

Candidate Starts for Evamon_53:

(86, 40902), (Start: 97 @40929 has 22 MA's), (103, 40944),

Gene: EvePickles_65 Start: 36266, Stop: 37069, Start Num: 134

Candidate Starts for EvePickles_65:

(Start: 134 @36266 has 23 MA's), (186, 36587), (190, 36602), (201, 36680), (209, 36719), (212, 36725), (232, 36863), (233, 36866), (239, 36902), (244, 36929),

Gene: Eyre_43 Start: 29570, Stop: 30892, Start Num: 12

Candidate Starts for Eyre_43:

(6, 29468), (9, 29525), (Start: 12 @29570 has 1 MA's), (21, 29630), (29, 29687), (45, 29783), (48, 29795), (74, 29867), (77, 29870), (102, 29936), (Start: 110 @29969 has 90 MA's), (121, 30008), (138, 30089), (149, 30176), (165, 30266), (189, 30389), (194, 30413), (197, 30431), (232, 30650), (238, 30686), (271, 30869),

Gene: Farewell_58 Start: 39058, Stop: 40056, Start Num: 91

Candidate Starts for Farewell_58:

(Start: 91 @39058 has 1 MA's), (Start: 115 @39133 has 1 MA's), (116, 39139), (161, 39382), (163, 39406), (164, 39409), (167, 39412), (172, 39451), (183, 39520), (186, 39532), (193, 39562), (210, 39670), (227, 39790), (231, 39811), (238, 39853), (251, 39943), (258, 39982),

Gene: Fireball_56 Start: 41525, Stop: 42358, Start Num: 136

Candidate Starts for Fireball_56:

(Start: 136 @41525 has 9 MA's), (143, 41594), (144, 41609), (150, 41651), (161, 41711), (186, 41849), (198, 41912), (199, 41918), (220, 42077), (237, 42176),

Gene: FirstPlacePfu_46 Start: 31649, Stop: 32578, Start Num: 131

Candidate Starts for FirstPlacePfu_46:

(96, 31529), (Start: 131 @31649 has 63 MA's), (137, 31679), (143, 31733), (161, 31850), (164, 31877), (167, 31892), (173, 31946), (176, 31988), (186, 32027), (204, 32129), (220, 32243), (233, 32315), (236, 32339), (237, 32342), (250, 32426), (256, 32465), (276, 32567),

Gene: Fishburne_45 Start: 31617, Stop: 32546, Start Num: 131

Candidate Starts for Fishburne_45:

(96, 31497), (Start: 131 @31617 has 63 MA's), (137, 31647), (143, 31701), (161, 31818), (164, 31845), (167, 31860), (173, 31914), (186, 31995), (204, 32097), (220, 32211), (233, 32283), (236, 32307), (237, 32310), (250, 32394), (256, 32433), (276, 32535),

Gene: FlagStaff_42 Start: 33012, Stop: 34091, Start Num: 65

Candidate Starts for FlagStaff_42:

(Start: 65 @33012 has 1 MA's), (119, 33159), (156, 33360), (160, 33399), (161, 33402), (164, 33429), (181, 33561), (186, 33579), (189, 33591), (206, 33681), (219, 33783), (232, 33870), (237, 33900), (242, 33927), (258, 34032),

Gene: Floral_57 Start: 41384, Stop: 42259, Start Num: 110

Candidate Starts for Floral_57:

(8, 40919), (11, 40985), (25, 41078), (43, 41189), (52, 41231), (57, 41249), (60, 41255), (85, 41321), (90, 41330), (Start: 110 @41384 has 90 MA's), (155, 41546), (159, 41579), (176, 41690), (186, 41729), (210, 41879), (223, 41987), (238, 42065),

Gene: FroggyToad_52 Start: 35451, Stop: 36281, Start Num: 110

Candidate Starts for FroggyToad_52:

(Start: 110 @35451 has 90 MA's), (158, 35622), (187, 35781), (197, 35829), (204, 35871), (206, 35877), (207, 35898), (211, 35913),

Gene: Frosty24_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Frosty24_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Fugax_57 Start: 41195, Stop: 42043, Start Num: 97

Candidate Starts for Fugax_57:

(Start: 97 @41195 has 22 MA's), (103, 41210), (271, 42023),

Gene: G4_38 Start: 26748, Stop: 27599, Start Num: 134

Candidate Starts for G4_38:

(7, 26205), (14, 26304), (20, 26346), (22, 26355), (27, 26394), (30, 26421), (55, 26529), (Start: 65 @26550 has 1 MA's), (Start: 69 @26562 has 68 MA's), (88, 26610), (113, 26664), (124, 26718), (Start: 134 @26748 has 23 MA's), (135, 26751), (138, 26784), (145, 26841), (148, 26856), (151, 26883), (153, 26892), (155, 26895), (161, 26955), (164, 26982), (174, 27036), (177, 27060), (185, 27084), (186, 27093), (191, 27120), (199, 27168), (200, 27186), (212, 27243), (220, 27318), (221, 27336), (222, 27342), (233, 27393), (235, 27402), (246, 27471), (260, 27567),

Gene: GMA1_46 Start: 29913, Stop: 30710, Start Num: 133

Candidate Starts for GMA1_46:

(40, 29616), (75, 29730), (99, 29793), (133, 29913), (198, 30309), (199, 30315), (213, 30393), (231, 30519), (238, 30561), (239, 30564),

Gene: GaloreK_45 Start: 31613, Stop: 32542, Start Num: 131

Candidate Starts for GaloreK_45:

(96, 31493), (Start: 131 @31613 has 63 MA's), (137, 31643), (143, 31697), (161, 31814), (164, 31841), (167, 31856), (173, 31910), (186, 31991), (204, 32093), (220, 32207), (233, 32279), (236, 32303), (237, 32306), (250, 32390), (256, 32429), (276, 32531),

Gene: Gavriela_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for Gavriela_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: GemG_53 Start: 35055, Stop: 35918, Start Num: 110

Candidate Starts for GemG_53:

(90, 35001), (Start: 110 @35055 has 90 MA's), (142, 35127), (159, 35238), (176, 35349), (186, 35388), (206, 35490), (207, 35511), (210, 35538), (223, 35646), (238, 35724),

Gene: Gezellig_53 Start: 41034, Stop: 41882, Start Num: 97

Candidate Starts for Gezellig_53:

(86, 41007), (Start: 97 @41034 has 22 MA's), (271, 41862),

Gene: Gideon_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Gideon_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Gizermo_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Gizermo_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Glaske_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for Glaske_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (224, 32498), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: GodSpeed_43 Start: 33106, Stop: 34194, Start Num: 65

Candidate Starts for GodSpeed_43:

(47, 33064), (Start: 65 @33106 has 1 MA's), (117, 33253), (130, 33307), (138, 33349), (156, 33463), (160, 33502), (161, 33505), (181, 33664), (186, 33682), (189, 33694), (232, 33973), (237, 34003), (242, 34030), (258, 34135),

Gene: GoldenAsh_42 Start: 31892, Stop: 32977, Start Num: 69

Candidate Starts for GoldenAsh_42:

(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282), (164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777), (238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: Gomashi_42 Start: 31908, Stop: 32993, Start Num: 69

Candidate Starts for Gomashi_42:

(Start: 69 @31908 has 68 MA's), (109, 32022), (117, 32046), (122, 32076), (160, 32295), (161, 32298), (164, 32325), (173, 32394), (181, 32457), (186, 32475), (189, 32487), (206, 32577), (237, 32793), (238, 32799), (250, 32877), (258, 32925), (261, 32940),

Gene: GreaseLightnin_46 Start: 31856, Stop: 32782, Start Num: 131

Candidate Starts for GreaseLightnin_46:

(Start: 131 @31856 has 63 MA's), (137, 31883), (143, 31937), (161, 32054), (164, 32081), (167, 32096), (186, 32231), (189, 32243), (198, 32300), (206, 32339), (220, 32447), (224, 32477), (233, 32519), (236, 32543), (237, 32546), (250, 32630), (256, 32669), (276, 32771),

Gene: Grizzly_42 Start: 31892, Stop: 32977, Start Num: 69

Candidate Starts for Grizzly_42:

(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282), (164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777), (238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: Gudmit_45 Start: 29257, Stop: 30438, Start Num: 13

Candidate Starts for Gudmit_45:

(Start: 13 @29257 has 1 MA's), (18, 29284), (21, 29308), (33, 29401), (45, 29455), (46, 29461), (48, 29467), (61, 29503), (64, 29512), (82, 29560), (102, 29608), (Start: 110 @29626 has 90 MA's), (138, 29638), (139, 29650), (176, 29887), (177, 29893), (212, 30067), (232, 30199), (234, 30205),

Gene: HC_45 Start: 31260, Stop: 32189, Start Num: 131

Candidate Starts for HC_45:

(96, 31140), (Start: 131 @31260 has 63 MA's), (137, 31290), (143, 31344), (161, 31461), (164, 31488), (167, 31503), (173, 31557), (186, 31638), (204, 31740), (220, 31854), (233, 31926), (236, 31950), (237, 31953), (250, 32037), (256, 32076), (276, 32178),

Gene: HUHilltop_47 Start: 32135, Stop: 33061, Start Num: 131

Candidate Starts for HUHilltop_47:

(Start: 131 @32135 has 63 MA's), (137, 32162), (143, 32216), (161, 32333), (164, 32360), (167, 32375), (173, 32429), (186, 32510), (189, 32522), (198, 32579), (206, 32618), (220, 32726), (233, 32798), (236, 32822), (237, 32825), (250, 32909), (256, 32948), (276, 33050),

Gene: Haley23_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Haley23_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Halo_42 Start: 31902, Stop: 32987, Start Num: 69

Candidate Starts for Halo_42:

(Start: 69 @31902 has 68 MA's), (109, 32016), (117, 32040), (122, 32070), (160, 32289), (161, 32292), (164, 32319), (173, 32388), (181, 32451), (186, 32469), (189, 32481), (206, 32571), (237, 32787), (238, 32793), (250, 32871), (258, 32919), (261, 32934),

Gene: Halo3_54 Start: 41619, Stop: 42467, Start Num: 97

Candidate Starts for Halo3_54:

(86, 41592), (Start: 97 @41619 has 22 MA's), (271, 42447),

Gene: Herod_57 Start: 41310, Stop: 42173, Start Num: 110

Candidate Starts for Herod_57:

(Start: 110 @41310 has 90 MA's), (159, 41493), (176, 41604), (177, 41610), (186, 41643), (198, 41706), (207, 41766), (210, 41793), (223, 41901), (238, 41979),

Gene: Hillester_73 Start: 37290, Stop: 38117, Start Num: 134

Candidate Starts for Hillester_73:

(124, 37269), (Start: 134 @37290 has 23 MA's), (146, 37377), (163, 37494), (181, 37593), (186, 37611), (190, 37626), (239, 37923), (272, 38106),

Gene: Hope_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Hope_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Hortense_57 Start: 40640, Stop: 41503, Start Num: 110

Candidate Starts for Hortense_57:

(85, 40577), (Start: 110 @40640 has 90 MA's), (155, 40790), (159, 40823), (186, 40973), (191, 41000), (207, 41096), (210, 41123), (212, 41129), (238, 41309), (268, 41483),

Gene: Hotshotbaby7_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Hotshotbaby7_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: Howe_57 Start: 40640, Stop: 41503, Start Num: 110

Candidate Starts for Howe_57:

(85, 40577), (Start: 110 @40640 has 90 MA's), (155, 40790), (159, 40823), (186, 40973), (191, 41000), (207, 41096), (210, 41123), (212, 41129), (238, 41309), (268, 41483),

Gene: Hugley_55 Start: 41290, Stop: 42153, Start Num: 110

Candidate Starts for Hugley_55:

(Start: 110 @41290 has 90 MA's), (159, 41473), (176, 41584), (177, 41590), (186, 41623), (198, 41686), (207, 41746), (210, 41773), (223, 41881), (238, 41959),

Gene: Hyzer_65 Start: 43242, Stop: 44117, Start Num: 110

Candidate Starts for Hyzer_65:

(Start: 110 @43242 has 90 MA's), (142, 43326), (155, 43404), (176, 43548), (186, 43587), (189, 43599), (190, 43602), (207, 43710), (210, 43737), (218, 43785), (223, 43845), (238, 43923), (239, 43926),

Gene: Ibrahim_44 Start: 33043, Stop: 33873, Start Num: 134

Candidate Starts for Ibrahim_44:

(Start: 134 @33043 has 23 MA's), (161, 33232), (164, 33259), (184, 33370), (198, 33433), (227, 33637), (230, 33652),

Gene: Invecetra_55 Start: 37656, Stop: 38495, Start Num: 110

Candidate Starts for Invecetra_55:

(83, 37593), (Start: 110 @37656 has 90 MA's), (139, 37704), (158, 37827), (176, 37941), (180, 37959), (238, 38289),

Gene: JCole_50 Start: 33782, Stop: 34609, Start Num: 111

Candidate Starts for JCole_50:

(Start: 111 @33782 has 2 MA's), (137, 33803), (155, 33920), (204, 34199), (206, 34205), (207, 34226), (211, 34241), (213, 34250),

Gene: Jablanski_59 Start: 42318, Stop: 43193, Start Num: 110

Candidate Starts for Jablanski_59:

(Start: 110 @42318 has 90 MA's), (159, 42513), (186, 42663), (206, 42765), (207, 42786), (210, 42813), (223, 42921), (238, 42999),

Gene: JakeTheSnake_72 Start: 37974, Stop: 38801, Start Num: 134

Candidate Starts for JakeTheSnake_72:

(112, 37899), (125, 37950), (Start: 134 @37974 has 23 MA's), (184, 38283), (186, 38295), (190, 38310), (191, 38322), (199, 38364), (203, 38388), (212, 38430), (214, 38448), (228, 38550), (232, 38568), (245, 38646), (253, 38709), (259, 38736),

Gene: Jalleen_53 Start: 34690, Stop: 35553, Start Num: 110

Candidate Starts for Jalleen_53:

(90, 34636), (Start: 110 @34690 has 90 MA's), (142, 34762), (159, 34873), (176, 34984), (186, 35023), (206, 35125), (207, 35146), (210, 35173), (223, 35281), (238, 35359),

Gene: Jambalaya_53 Start: 40688, Stop: 41521, Start Num: 136

Candidate Starts for Jambalaya_53:

(Start: 136 @40688 has 9 MA's), (143, 40757), (144, 40772), (150, 40814), (161, 40874), (186, 41012), (198, 41075), (199, 41081), (220, 41240), (237, 41339),

Gene: Jane_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Jane_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: JeanClaude_51 Start: 28174, Stop: 28977, Start Num: 134

Candidate Starts for JeanClaude_51:

(Start: 134 @28174 has 23 MA's), (186, 28495), (190, 28510), (237, 28798),

Gene: Jebeks_47 Start: 31677, Stop: 32606, Start Num: 131

Candidate Starts for Jebeks_47:

(96, 31557), (Start: 131 @31677 has 63 MA's), (137, 31707), (143, 31761), (161, 31878), (164, 31905), (167, 31920), (173, 31974), (176, 32016), (186, 32055), (204, 32157), (220, 32271), (233, 32343), (236, 32367), (237, 32370), (250, 32454), (256, 32493), (276, 32595),

Gene: Jeilious_42 Start: 31906, Stop: 32991, Start Num: 69

Candidate Starts for Jeilious_42:

(Start: 69 @31906 has 68 MA's), (109, 32020), (117, 32044), (122, 32074), (160, 32293), (161, 32296), (164, 32323), (173, 32392), (181, 32455), (186, 32473), (189, 32485), (206, 32575), (237, 32791), (238, 32797), (250, 32875), (258, 32923), (261, 32938),

Gene: Jolene_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Jolene_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: Jolie2_42 Start: 32418, Stop: 33506, Start Num: 69

Candidate Starts for Jolie2_42:

(42, 32328), (Start: 69 @32418 has 68 MA's), (105, 32511), (117, 32556), (128, 32604), (135, 32619), (139, 32661), (147, 32718), (160, 32802), (161, 32805), (164, 32832), (170, 32883), (181, 32964), (186, 32982), (220, 33207), (232, 33273), (237, 33303), (247, 33360), (250, 33387), (258, 33435),

Gene: Jonghyun_41 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Jonghyun_41:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: JorRay_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for JorRay_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Journey_46 Start: 30994, Stop: 31923, Start Num: 131

Candidate Starts for Journey_46:

(96, 30874), (Start: 131 @30994 has 63 MA's), (137, 31024), (143, 31078), (161, 31195), (164, 31222), (167, 31237), (173, 31291), (186, 31372), (204, 31474), (220, 31588), (233, 31660), (236, 31684), (237, 31687), (250, 31771), (256, 31810), (276, 31912),

Gene: Jung_44 Start: 31575, Stop: 32504, Start Num: 131

Candidate Starts for Jung_44:

(96, 31455), (Start: 131 @31575 has 63 MA's), (137, 31605), (143, 31659), (161, 31776), (164, 31803), (167, 31818), (173, 31872), (186, 31953), (204, 32055), (220, 32169), (233, 32241), (236, 32265), (237, 32268), (250, 32352), (256, 32391), (276, 32493),

Gene: Juniormint_46 Start: 31649, Stop: 32575, Start Num: 131

Candidate Starts for Juniormint_46:

(Start: 131 @31649 has 63 MA's), (137, 31676), (143, 31730), (161, 31847), (164, 31874), (167, 31889), (186, 32024), (189, 32036), (198, 32093), (206, 32132), (220, 32240), (224, 32270), (233, 32312), (236, 32336), (237, 32339), (250, 32423), (256, 32462), (276, 32564),

Gene: Kareem_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Kareem_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Kari_45 Start: 31614, Stop: 32543, Start Num: 131

Candidate Starts for Kari_45:

(96, 31494), (Start: 131 @31614 has 63 MA's), (137, 31644), (143, 31698), (161, 31815), (164, 31842), (167, 31857), (173, 31911), (186, 31992), (204, 32094), (220, 32208), (233, 32280), (236, 32304), (237, 32307), (250, 32391), (256, 32430), (276, 32532),

Gene: Kasen3_42 Start: 31893, Stop: 32978, Start Num: 69

Candidate Starts for Kasen3_42:

(Start: 69 @31893 has 68 MA's), (109, 32007), (117, 32031), (122, 32061), (160, 32280), (161, 32283), (164, 32310), (173, 32379), (181, 32442), (186, 32460), (189, 32472), (206, 32562), (237, 32778), (238, 32784), (250, 32862), (258, 32910), (261, 32925),

Gene: KilKor_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for KilKor_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (224, 32498), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: KimmyK_55 Start: 41637, Stop: 42485, Start Num: 97

Candidate Starts for KimmyK_55:

(Start: 97 @41637 has 22 MA's), (103, 41652), (271, 42465),

Gene: Kita_57 Start: 38849, Stop: 39724, Start Num: 110

Candidate Starts for Kita_57:

(80, 38768), (85, 38786), (90, 38795), (Start: 110 @38849 has 90 MA's), (159, 39044), (186, 39194), (207, 39317), (210, 39344), (223, 39452), (238, 39530),

Gene: Ksquared_45 Start: 31627, Stop: 32553, Start Num: 131

Candidate Starts for Ksquared_45:

(Start: 131 @31627 has 63 MA's), (137, 31654), (143, 31708), (161, 31825), (164, 31852), (167, 31867), (186, 32002), (189, 32014), (198, 32071), (206, 32110), (220, 32218), (224, 32248), (233, 32290), (236, 32314), (237, 32317), (250, 32401), (256, 32440), (276, 32542),

Gene: Lamberg_49 Start: 33560, Stop: 34423, Start Num: 110

Candidate Starts for Lamberg_49:

(90, 33506), (Start: 110 @33560 has 90 MA's), (142, 33632), (159, 33743), (176, 33854), (186, 33893), (206, 33995), (207, 34016), (210, 34043), (223, 34151), (238, 34229),

Gene: Langerak_46 Start: 31633, Stop: 32562, Start Num: 131

Candidate Starts for Langerak_46:

(96, 31513), (Start: 131 @31633 has 63 MA's), (137, 31663), (143, 31717), (161, 31834), (164, 31861), (167, 31876), (173, 31930), (186, 32011), (204, 32113), (220, 32227), (233, 32299), (236, 32323), (237, 32326), (250, 32410), (256, 32449), (276, 32551),

Gene: Lemuria_44 Start: 33756, Stop: 34844, Start Num: 69

Candidate Starts for Lemuria_44:

(42, 33666), (Start: 69 @33756 has 68 MA's), (105, 33849), (117, 33894), (130, 33948), (139, 33999), (146, 34050), (160, 34140), (164, 34170), (167, 34185), (181, 34302), (186, 34320), (189, 34332), (227, 34587), (233, 34614), (237, 34641), (243, 34671), (258, 34773), (264, 34806), (273, 34839),

Gene: Liefie_42 Start: 31905, Stop: 32990, Start Num: 69

Candidate Starts for Liefie_42:

(Start: 69 @31905 has 68 MA's), (109, 32019), (117, 32043), (122, 32073), (160, 32292), (161, 32295), (164, 32322), (173, 32391), (181, 32454), (186, 32472), (189, 32484), (232, 32760), (237, 32790), (250, 32874), (258, 32922), (261, 32937),

Gene: LilSpotty_63 Start: 38834, Stop: 39688, Start Num: 127

Candidate Starts for LilSpotty_63:

(Start: 127 @38834 has 9 MA's), (155, 38996), (159, 39029), (163, 39065), (176, 39140), (180, 39158), (186, 39179), (202, 39278), (204, 39281), (213, 39344), (215, 39359), (231, 39476), (240, 39527), (241, 39533), (246, 39563), (258, 39647),

Gene: Lilas_55 Start: 41222, Stop: 42097, Start Num: 110

Candidate Starts for Lilas_55:

(80, 41141), (85, 41159), (90, 41168), (Start: 110 @41222 has 90 MA's), (159, 41417), (186, 41567), (207, 41690), (210, 41717), (223, 41825), (238, 41903),

Gene: LonelyBoi_55 Start: 41380, Stop: 42243, Start Num: 110

Candidate Starts for LonelyBoi_55:

(17, 41026), (20, 41047), (51, 41227), (58, 41251), (Start: 110 @41380 has 90 MA's), (155, 41530), (159, 41563), (186, 41713), (206, 41815), (207, 41836), (210, 41863), (223, 41971), (234, 42019), (238, 42049),

Gene: LordFarquaad_53 Start: 35954, Stop: 36829, Start Num: 110

Candidate Starts for LordFarquaad_53:

(80, 35873), (85, 35891), (90, 35900), (Start: 110 @35954 has 90 MA's), (159, 36149), (176, 36260), (177, 36266), (186, 36299), (189, 36311), (195, 36338), (207, 36422), (210, 36449), (223, 36557), (233, 36602), (238, 36635),

Gene: LordVader_58 Start: 35894, Stop: 36799, Start Num: 131

Candidate Starts for LordVader_58:

(Start: 131 @35894 has 63 MA's), (Start: 134 @35903 has 23 MA's), (137, 35921), (143, 35975), (161, 36092), (164, 36119), (167, 36134), (171, 36179), (176, 36230), (186, 36269), (189, 36281), (192, 36302), (204, 36365), (220, 36485), (226, 36521), (232, 36554), (233, 36557), (236, 36581), (237, 36584), (238, 36590), (256, 36707), (262, 36734), (275, 36779),

Gene: LouisV14_44 Start: 34172, Stop: 35257, Start Num: 69

Candidate Starts for LouisV14_44:

(Start: 69 @34172 has 68 MA's), (109, 34286), (117, 34310), (122, 34340), (160, 34559), (161, 34562), (164, 34589), (173, 34658), (181, 34721), (186, 34739), (189, 34751), (206, 34841), (237, 35057), (238, 35063), (250, 35141), (258, 35189), (261, 35204),

Gene: MOOREtheMARYer_44 Start: 33458, Stop: 34549, Start Num: 69

Candidate Starts for MOOREtheMARYer_44:

(19, 33224), (Start: 69 @33458 has 68 MA's), (138, 33692), (156, 33806), (160, 33845), (161, 33848), (177, 33992), (181, 34007), (186, 34025), (219, 34229), (237, 34346), (258, 34478),

Gene: MZKinsey_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for MZKinsey_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Madavieve_54 Start: 39306, Stop: 40169, Start Num: 110

Candidate Starts for Madavieve_54:

(17, 38952), (20, 38973), (51, 39153), (58, 39177), (Start: 110 @39306 has 90 MA's), (155, 39456), (159, 39489), (186, 39639), (207, 39762), (210, 39789), (223, 39897), (234, 39945), (238, 39975),

Gene: Madeline_57 Start: 40750, Stop: 41613, Start Num: 110

Candidate Starts for Madeline_57:

(Start: 110 @40750 has 90 MA's), (137, 40774), (142, 40822), (159, 40933), (176, 41044), (177, 41050), (186, 41083), (198, 41146), (207, 41206), (210, 41233), (223, 41341), (238, 41419),

Gene: Majeke_46 Start: 31658, Stop: 32587, Start Num: 131

Candidate Starts for Majeke_46:

(96, 31538), (Start: 131 @31658 has 63 MA's), (137, 31688), (143, 31742), (161, 31859), (164, 31886), (167, 31901), (173, 31955), (186, 32036), (204, 32138), (220, 32252), (233, 32324), (236, 32348), (237, 32351), (250, 32435), (256, 32474), (276, 32576),

Gene: MakCheese_63 Start: 41738, Stop: 42571, Start Num: 110

Candidate Starts for MakCheese_63:

(Start: 110 @41738 has 90 MA's), (155, 41879), (158, 41909), (165, 41951), (204, 42158), (207, 42185), (211, 42200),

Gene: Malibo_59 Start: 40468, Stop: 41298, Start Num: 110

Candidate Starts for Malibo_59:

(20, 40132), (30, 40207), (31, 40222), (34, 40237), (35, 40243), (39, 40261), (52, 40315), (60, 40339), (85, 40405), (89, 40411), (Start: 110 @40468 has 90 MA's), (197, 40846), (204, 40888), (207, 40915),

(210, 40927),

Gene: Maliketh_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Maliketh_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Malithi_46 Start: 31533, Stop: 32462, Start Num: 131

Candidate Starts for Malithi_46:

(96, 31413), (Start: 131 @31533 has 63 MA's), (137, 31563), (143, 31617), (161, 31734), (164, 31761), (167, 31776), (173, 31830), (186, 31911), (204, 32013), (220, 32127), (233, 32199), (236, 32223), (237, 32226), (250, 32310), (256, 32349), (276, 32451),

Gene: Manasvini_57 Start: 38864, Stop: 39739, Start Num: 110

Candidate Starts for Manasvini_57:

(80, 38783), (85, 38801), (90, 38810), (Start: 110 @38864 has 90 MA's), (159, 39059), (186, 39209), (207, 39332), (210, 39359), (223, 39467), (238, 39545),

Gene: Mangethe_46 Start: 31658, Stop: 32587, Start Num: 131

Candidate Starts for Mangethe_46:

(96, 31538), (Start: 131 @31658 has 63 MA's), (137, 31688), (143, 31742), (161, 31859), (164, 31886), (167, 31901), (173, 31955), (186, 32036), (204, 32138), (220, 32252), (233, 32324), (236, 32348), (237, 32351), (250, 32435), (256, 32474), (276, 32576),

Gene: Mao1_64 Start: 47563, Stop: 48474, Start Num: 129

Candidate Starts for Mao1_64:

(Start: 129 @47563 has 1 MA's), (143, 47650), (144, 47665), (161, 47767), (164, 47794), (167, 47809), (171, 47854), (176, 47905), (186, 47944), (189, 47956), (204, 48040), (206, 48046), (216, 48127), (220, 48160), (221, 48178), (224, 48190), (226, 48196), (232, 48229), (233, 48232), (236, 48256), (237, 48259), (238, 48265), (256, 48382), (262, 48409), (275, 48454),

Gene: Maridalia_60 Start: 40096, Stop: 40959, Start Num: 110

Candidate Starts for Maridalia_60:

(17, 39742), (20, 39763), (51, 39943), (58, 39967), (Start: 110 @40096 has 90 MA's), (155, 40246), (159, 40279), (186, 40429), (207, 40552), (210, 40579), (223, 40687), (234, 40735), (238, 40765),

Gene: Marmie_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Marmie_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Marteena_55 Start: 39499, Stop: 40374, Start Num: 110

Candidate Starts for Marteena_55:

(34, 39268), (37, 39286), (43, 39304), (52, 39346), (57, 39364), (60, 39370), (80, 39418), (85, 39436), (90, 39445), (Start: 110 @39499 has 90 MA's), (142, 39583), (159, 39694), (176, 39805), (177, 39811), (186, 39844), (207, 39967), (210, 39994), (223, 40102), (238, 40180),

Gene: Matteo_46 Start: 32611, Stop: 33450, Start Num: 110

Candidate Starts for Matteo_46:

(84, 32548), (Start: 110 @32611 has 90 MA's), (158, 32782), (176, 32896), (180, 32914), (197, 32989), (200, 33022), (238, 33244),

Gene: Mbo4_46 Start: 35910, Stop: 36782, Start Num: 129

Candidate Starts for Mbo4_46:

(Start: 129 @35910 has 1 MA's), (Start: 134 @35925 has 23 MA's), (141, 35985), (145, 36015), (146, 36018), (176, 36231), (185, 36261), (186, 36270), (199, 36339), (208, 36402), (230, 36558), (250, 36684), (251, 36696),

Gene: Mcklovin_53 Start: 42095, Stop: 42934, Start Num: 110

Candidate Starts for Mcklovin_53:

(85, 42032), (90, 42041), (Start: 110 @42095 has 90 MA's), (139, 42143), (158, 42266), (176, 42380), (180, 42398), (238, 42728),

Gene: Megiddo_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for Megiddo_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (224, 32498), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: Mendokysei_42 Start: 32149, Stop: 32979, Start Num: 134

Candidate Starts for Mendokysei_42:

(15, 31687), (28, 31774), (49, 31894), (96, 32023), (104, 32044), (Start: 134 @32149 has 23 MA's), (161, 32338), (164, 32365), (184, 32476), (206, 32578), (248, 32869),

Gene: Mercurio_45 Start: 34295, Stop: 35383, Start Num: 69

Candidate Starts for Mercurio_45:

(38, 34193), (42, 34202), (Start: 69 @34295 has 68 MA's), (117, 34433), (128, 34481), (130, 34487), (139, 34538), (160, 34679), (161, 34682), (167, 34724), (181, 34841), (186, 34859), (189, 34871), (232, 35150), (237, 35180), (247, 35237), (258, 35312), (273, 35378),

Gene: MichaelScott_54 Start: 37559, Stop: 38398, Start Num: 110

Candidate Starts for MichaelScott_54:

(83, 37496), (Start: 110 @37559 has 90 MA's), (139, 37607), (158, 37730), (176, 37844), (180, 37862), (238, 38192),

Gene: MichelleMyBell_47 Start: 31300, Stop: 32202, Start Num: 131

Candidate Starts for MichelleMyBell_47:

(51, 31054), (54, 31066), (81, 31132), (96, 31177), (Start: 131 @31300 has 63 MA's), (Start: 134 @31306 has 23 MA's), (137, 31324), (143, 31378), (157, 31462), (161, 31495), (162, 31498), (167, 31537), (173, 31591), (186, 31672), (204, 31774), (220, 31888), (226, 31924), (232, 31957), (233, 31960), (236, 31984), (237, 31987), (238, 31993), (256, 32110), (262, 32137), (275, 32182),

Gene: MidnightRain_71 Start: 37076, Stop: 37903, Start Num: 134

Candidate Starts for MidnightRain_71:

(124, 37055), (Start: 134 @37076 has 23 MA's), (146, 37163), (163, 37280), (181, 37379), (186, 37397), (190, 37412), (239, 37709), (272, 37892),

Gene: Misha28_64 Start: 40131, Stop: 40985, Start Num: 127

Candidate Starts for Misha28_64:

(Start: 127 @40131 has 9 MA's), (155, 40293), (159, 40326), (161, 40338), (163, 40362), (176, 40437), (180, 40455), (186, 40476), (204, 40578), (210, 40629), (213, 40641), (215, 40656), (231, 40773), (240, 40824), (241, 40830), (246, 40860), (258, 40944),

Gene: Mocha12_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Mocha12_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Mowgli_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Mowgli_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Mutzi_53 Start: 42017, Stop: 42850, Start Num: 136

Candidate Starts for Mutzi_53:

(Start: 136 @42017 has 9 MA's), (143, 42086), (144, 42101), (150, 42143), (161, 42203), (186, 42341), (198, 42404), (199, 42410), (220, 42569), (237, 42668),

Gene: Nairb_43 Start: 32597, Stop: 33427, Start Num: 134

Candidate Starts for Nairb_43:

(Start: 134 @32597 has 23 MA's), (161, 32786), (164, 32813), (184, 32924), (198, 32987), (227, 33191), (230, 33206),

Gene: Nazo_48 Start: 33708, Stop: 34655, Start Num: 131

Candidate Starts for Nazo_48:

(96, 33588), (Start: 131 @33708 has 63 MA's), (137, 33735), (143, 33789), (157, 33873), (161, 33906), (167, 33948), (176, 34044), (186, 34083), (204, 34185), (220, 34299), (221, 34317), (222, 34323), (224, 34329), (233, 34371), (236, 34395), (237, 34398), (250, 34482), (255, 34518), (256, 34521),

Gene: Necropolis_45 Start: 31689, Stop: 32618, Start Num: 131

Candidate Starts for Necropolis_45:

(96, 31569), (Start: 131 @31689 has 63 MA's), (137, 31719), (143, 31773), (161, 31890), (164, 31917), (167, 31932), (173, 31986), (186, 32067), (204, 32169), (220, 32283), (233, 32355), (236, 32379), (237, 32382), (250, 32466), (256, 32505), (276, 32607),

Gene: Neobush_56 Start: 38834, Stop: 39709, Start Num: 110

Candidate Starts for Neobush_56:

(80, 38753), (85, 38771), (90, 38780), (Start: 110 @38834 has 90 MA's), (159, 39029), (186, 39179), (207, 39302), (210, 39329), (223, 39437), (238, 39515),

Gene: Neoh_42 Start: 31899, Stop: 32984, Start Num: 69

Candidate Starts for Neoh_42:

(Start: 69 @31899 has 68 MA's), (109, 32013), (117, 32037), (122, 32067), (160, 32286), (161, 32289), (164, 32316), (173, 32385), (181, 32448), (186, 32466), (189, 32478), (206, 32568), (237, 32784), (238, 32790), (250, 32868), (258, 32916), (261, 32931),

Gene: Nette_45 Start: 32158, Stop: 32988, Start Num: 134

Candidate Starts for Nette_45:

(15, 31696), (28, 31783), (49, 31903), (96, 32032), (104, 32053), (Start: 134 @32158 has 23 MA's), (161, 32347), (164, 32374), (184, 32485), (206, 32587), (248, 32878),

Gene: Nettuno_49 Start: 33560, Stop: 34423, Start Num: 110

Candidate Starts for Nettuno_49:

(90, 33506), (Start: 110 @33560 has 90 MA's), (142, 33632), (159, 33743), (176, 33854), (186, 33893), (206, 33995), (207, 34016), (210, 34043), (223, 34151), (238, 34229),

Gene: NewKitty_71 Start: 36386, Stop: 37213, Start Num: 134

Candidate Starts for NewKitty_71:

(Start: 134 @36386 has 23 MA's), (137, 36404), (163, 36590), (175, 36653), (184, 36695), (186, 36707), (190, 36722), (191, 36734), (199, 36776), (203, 36800), (212, 36842), (214, 36860), (228, 36962), (232, 36980), (245, 37058), (253, 37121), (259, 37148),

Gene: Nubi_54 Start: 41034, Stop: 41882, Start Num: 97

Candidate Starts for Nubi_54:

(86, 41007), (Start: 97 @41034 has 22 MA's),

Gene: Nyilah_70 Start: 35008, Stop: 35847, Start Num: 134

Candidate Starts for Nyilah_70:

(92, 34870), (107, 34918), (Start: 134 @35008 has 23 MA's), (165, 35218), (186, 35329), (190, 35344), (203, 35422), (212, 35464), (237, 35632), (238, 35638), (239, 35641),

Gene: OctaviousRex_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for OctaviousRex_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Ohgeesy_56 Start: 39515, Stop: 40390, Start Num: 110

Candidate Starts for Ohgeesy_56:

(24, 39200), (34, 39284), (37, 39302), (43, 39320), (52, 39362), (57, 39380), (60, 39386), (80, 39434), (85, 39452), (90, 39461), (Start: 110 @39515 has 90 MA's), (159, 39710), (177, 39827), (186, 39860), (198, 39923), (207, 39983), (210, 40010), (223, 40118), (238, 40196),

Gene: Olga_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Olga_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: OnionKnight_39 Start: 28260, Stop: 29147, Start Num: 118

Candidate Starts for OnionKnight_39:

(94, 28182), (Start: 118 @28260 has 1 MA's), (120, 28272), (138, 28338), (157, 28461), (161, 28494), (185, 28623), (186, 28632), (205, 28737), (236, 28965), (240, 28983), (256, 29091), (263, 29133),

Gene: Oregano_57 Start: 37319, Stop: 38158, Start Num: 110

Candidate Starts for Oregano_57:

(83, 37256), (Start: 110 @37319 has 90 MA's), (139, 37367), (158, 37490), (176, 37604), (180, 37622), (238, 37952),

Gene: Pace1224_42 Start: 33012, Stop: 34091, Start Num: 65

Candidate Starts for Pace1224_42:

(Start: 65 @33012 has 1 MA's), (119, 33159), (156, 33360), (160, 33399), (161, 33402), (164, 33429), (181, 33561), (186, 33579), (189, 33591), (206, 33681), (219, 33783), (232, 33870), (237, 33900), (242, 33927), (258, 34032),

Gene: PaintedDog_52 Start: 34435, Stop: 35376, Start Num: 131

Candidate Starts for PaintedDog_52:

(70, 34246), (71, 34249), (96, 34315), (Start: 131 @34435 has 63 MA's), (Start: 134 @34444 has 23 MA's), (137, 34462), (143, 34516), (161, 34648), (164, 34675), (167, 34690), (176, 34786), (186,

34825), (189, 34837), (198, 34894), (199, 34900), (204, 34927), (216, 35008), (220, 35041), (233, 35113), (236, 35137), (237, 35140), (250, 35224), (256, 35263), (276, 35365),

Gene: Paito_43 Start: 32145, Stop: 33233, Start Num: 69

Candidate Starts for Paito_43:

(26, 31989), (Start: 69 @32145 has 68 MA's), (109, 32259), (117, 32283), (140, 32406), (141, 32409), (142, 32415), (152, 32481), (160, 32532), (161, 32535), (164, 32562), (173, 32631), (181, 32694), (186, 32712), (189, 32724), (196, 32754), (206, 32814), (217, 32907), (223, 32964), (237, 33033), (248, 33102), (250, 33117), (258, 33165),

Gene: PantheRoc_59 Start: 40114, Stop: 40977, Start Num: 110

Candidate Starts for PantheRoc_59:

(51, 39958), (58, 39982), (87, 40054), (89, 40057), (90, 40060), (Start: 110 @40114 has 90 MA's), (159, 40297), (176, 40408), (177, 40414), (186, 40447), (198, 40510), (207, 40570), (210, 40597), (223, 40705), (238, 40783),

Gene: PeanutPie_46 Start: 31612, Stop: 32538, Start Num: 131

Candidate Starts for PeanutPie_46:

(Start: 131 @31612 has 63 MA's), (137, 31639), (143, 31693), (161, 31810), (164, 31837), (167, 31852), (186, 31987), (189, 31999), (198, 32056), (206, 32095), (220, 32203), (224, 32233), (233, 32275), (236, 32299), (237, 32302), (250, 32386), (256, 32425), (276, 32527),

Gene: Peeb_42 Start: 31892, Stop: 32977, Start Num: 69

Candidate Starts for Peeb_42:

(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282), (164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777), (238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: Periodt_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for Periodt_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (232, 32753), (237, 32783), (250, 32867), (258, 32915), (261, 32930),

Gene: Persistence_62 Start: 34633, Stop: 35460, Start Num: 134

Candidate Starts for Persistence_62:

(66, 34423), (95, 34501), (98, 34507), (126, 34609), (Start: 134 @34633 has 23 MA's), (177, 34921), (181, 34936), (186, 34954), (190, 34969), (203, 35047), (239, 35266), (272, 35449),

Gene: Phalm_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for Phalm_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (224, 32498), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: Phayonce_46 Start: 33725, Stop: 34636, Start Num: 131

Candidate Starts for Phayonce_46:

(Start: 131 @33725 has 63 MA's), (Start: 134 @33734 has 23 MA's), (137, 33752), (143, 33806), (161, 33923), (164, 33950), (167, 33965), (176, 34061), (186, 34100), (189, 34112), (197, 34160), (204, 34202), (206, 34208), (216, 34289), (220, 34322), (221, 34340), (224, 34352), (226, 34358), (232, 34391), (233, 34394), (236, 34418), (237, 34421), (238, 34427), (256, 34544), (262, 34571), (275, 34616),

Gene: Pegasus_46 Start: 31625, Stop: 32554, Start Num: 131

Candidate Starts for Pegasus_46:

(96, 31505), (Start: 131 @31625 has 63 MA's), (137, 31655), (143, 31709), (161, 31826), (164, 31853), (167, 31868), (173, 31922), (186, 32003), (204, 32105), (220, 32219), (233, 32291), (236, 32315), (237, 32318), (250, 32402), (256, 32441), (276, 32543),

Gene: Philonius_47 Start: 30729, Stop: 31655, Start Num: 131

Candidate Starts for Philonius_47:

(Start: 131 @30729 has 63 MA's), (137, 30756), (143, 30810), (161, 30927), (164, 30954), (167, 30969), (186, 31104), (189, 31116), (198, 31173), (206, 31212), (220, 31320), (224, 31350), (233, 31392), (236, 31416), (237, 31419), (250, 31503), (256, 31542), (276, 31644),

Gene: Phineas_47 Start: 32470, Stop: 33396, Start Num: 131

Candidate Starts for Phineas_47:

(Start: 131 @32470 has 63 MA's), (137, 32497), (143, 32551), (161, 32668), (164, 32695), (167, 32710), (173, 32764), (186, 32845), (189, 32857), (198, 32914), (206, 32953), (220, 33061), (233, 33133), (236, 33157), (237, 33160), (250, 33244), (256, 33283), (276, 33385),

Gene: Phish_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Phish_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Phloodle_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Phloodle_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (232, 32762), (237, 32792), (250, 32876), (258, 32924), (261, 32939),

Gene: Phlop_53 Start: 41109, Stop: 41957, Start Num: 97

Candidate Starts for Phlop_53:

(Start: 97 @41109 has 22 MA's), (103, 41124), (271, 41937),

Gene: Phreak_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Phreak_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: PhriskyACE_54 Start: 37457, Stop: 38290, Start Num: 110

Candidate Starts for PhriskyACE_54:

(85, 37394), (90, 37403), (Start: 110 @37457 has 90 MA's), (142, 37529), (155, 37598), (165, 37670), (204, 37877), (207, 37904), (211, 37919),

Gene: Pickett_49 Start: 33137, Stop: 34012, Start Num: 110

Candidate Starts for Pickett_49:

(80, 33056), (85, 33074), (90, 33083), (Start: 110 @33137 has 90 MA's), (159, 33332), (186, 33482), (207, 33605), (210, 33632), (223, 33740), (238, 33818),

Gene: PinkCoffee_56 Start: 41212, Stop: 42060, Start Num: 97

Candidate Starts for PinkCoffee_56:

(Start: 97 @41212 has 22 MA's), (103, 41227), (271, 42040),

Gene: PinkYoshi_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for PinkYoshi_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (206, 32567), (237, 32783), (238, 32789), (250, 32867), (258, 32915), (261, 32930),

Gene: Pinnie_42 Start: 33163, Stop: 34254, Start Num: 69

Candidate Starts for Pinnie_42:

(19, 32929), (Start: 69 @33163 has 68 MA's), (76, 33178), (119, 33310), (138, 33397), (156, 33511), (160, 33550), (161, 33553), (177, 33697), (181, 33712), (186, 33730), (189, 33742), (219, 33934), (237, 34051), (258, 34183),

Gene: Piper2020_67 Start: 41026, Stop: 41880, Start Num: 127

Candidate Starts for Piper2020_67:

(Start: 127 @41026 has 9 MA's), (155, 41188), (159, 41221), (161, 41233), (163, 41257), (176, 41332), (180, 41350), (186, 41371), (204, 41473), (210, 41524), (213, 41536), (215, 41551), (231, 41668), (240, 41719), (241, 41725), (246, 41755), (258, 41839),

Gene: Plagueis_42 Start: 31727, Stop: 32812, Start Num: 69

Candidate Starts for Plagueis_42:

(Start: 69 @31727 has 68 MA's), (109, 31841), (117, 31865), (122, 31895), (160, 32114), (161, 32117), (164, 32144), (173, 32213), (181, 32276), (186, 32294), (189, 32306), (206, 32396), (237, 32612), (238, 32618), (250, 32696), (258, 32744), (261, 32759),

Gene: Polkaroo_46 Start: 31651, Stop: 32550, Start Num: 137

Candidate Starts for Polkaroo_46:

(Start: 131 @31624 has 63 MA's), (137, 31651), (143, 31705), (161, 31822), (164, 31849), (167, 31864), (186, 31999), (206, 32107), (220, 32215), (224, 32245), (233, 32287), (236, 32311), (237, 32314), (250, 32398), (256, 32437), (276, 32539),

Gene: Pollux_59 Start: 41384, Stop: 42259, Start Num: 110

Candidate Starts for Pollux_59:

(8, 40919), (11, 40985), (25, 41078), (43, 41189), (52, 41231), (57, 41249), (60, 41255), (85, 41321), (90, 41330), (Start: 110 @41384 has 90 MA's), (155, 41546), (159, 41579), (176, 41690), (186, 41729), (210, 41879), (223, 41987), (238, 42065),

Gene: Polly_53 Start: 38283, Stop: 39158, Start Num: 110

Candidate Starts for Polly_53:

(80, 38202), (85, 38220), (90, 38229), (Start: 110 @38283 has 90 MA's), (159, 38478), (186, 38628), (207, 38751), (210, 38778), (223, 38886), (238, 38964),

Gene: Portcullis_55 Start: 40701, Stop: 41534, Start Num: 136

Candidate Starts for Portcullis_55:

(Start: 136 @40701 has 9 MA's), (143, 40770), (144, 40785), (150, 40827), (161, 40887), (186, 41025), (198, 41088), (199, 41094), (220, 41253), (237, 41352),

Gene: Posh_59 Start: 41292, Stop: 42122, Start Num: 110

Candidate Starts for Posh_59:

(Start: 110 @41292 has 90 MA's), (197, 41670), (204, 41712), (206, 41718), (207, 41739), (211, 41754),

Gene: Powerball_55 Start: 37583, Stop: 38416, Start Num: 110

Candidate Starts for Powerball_55:

(85, 37520), (90, 37529), (Start: 110 @37583 has 90 MA's), (142, 37655), (155, 37724), (165, 37796), (204, 38003), (207, 38030), (211, 38045),

Gene: PullumCavea_53 Start: 41109, Stop: 41957, Start Num: 97

Candidate Starts for PullumCavea_53:

(Start: 97 @41109 has 22 MA's), (271, 41937),

Gene: Purky_51 Start: 34107, Stop: 35051, Start Num: 131

Candidate Starts for Purky_51:

(Start: 68 @33915 has 2 MA's), (96, 33987), (Start: 131 @34107 has 63 MA's), (Start: 134 @34113 has 23 MA's), (137, 34131), (146, 34206), (150, 34242), (161, 34302), (167, 34344), (173, 34398), (176, 34440), (186, 34479), (189, 34491), (220, 34695), (237, 34794), (250, 34878), (255, 34914),

Gene: Pygmy_49 Start: 33934, Stop: 34860, Start Num: 131

Candidate Starts for Pygmy_49:

(Start: 131 @33934 has 63 MA's), (137, 33961), (143, 34015), (161, 34132), (164, 34159), (167, 34174), (173, 34228), (186, 34309), (189, 34321), (198, 34378), (206, 34417), (220, 34525), (233, 34597), (236, 34621), (237, 34624), (250, 34708), (256, 34747), (276, 34849),

Gene: Pytheas_59 Start: 42317, Stop: 43192, Start Num: 110

Candidate Starts for Pytheas_59:

(Start: 110 @42317 has 90 MA's), (159, 42512), (186, 42662), (206, 42764), (207, 42785), (210, 42812), (223, 42920), (238, 42998),

Gene: QueenHazel_43 Start: 31778, Stop: 32704, Start Num: 131

Candidate Starts for QueenHazel_43:

(36, 31481), (44, 31505), (62, 31574), (96, 31658), (Start: 131 @31778 has 63 MA's), (Start: 134 @31787 has 23 MA's), (137, 31805), (143, 31859), (161, 31976), (164, 32003), (167, 32018), (173, 32072), (176, 32114), (186, 32153), (198, 32222), (199, 32228), (204, 32255), (216, 32336), (220, 32369), (233, 32441), (236, 32465), (237, 32468), (250, 32552), (256, 32591), (276, 32693),

Gene: Rabbs_43 Start: 32095, Stop: 33180, Start Num: 69

Candidate Starts for Rabbs_43:

(10, 31795), (Start: 69 @32095 has 68 MA's), (117, 32233), (140, 32356), (160, 32482), (164, 32512), (173, 32581), (181, 32644), (186, 32662), (189, 32674), (206, 32764), (223, 32911), (237, 32980), (250, 33064), (258, 33112),

Gene: RadFad_73 Start: 37290, Stop: 38117, Start Num: 134

Candidate Starts for RadFad_73:

(124, 37269), (Start: 134 @37290 has 23 MA's), (146, 37377), (163, 37494), (181, 37593), (186, 37611), (190, 37626), (239, 37923), (272, 38106),

Gene: Rattrick_42 Start: 31898, Stop: 32983, Start Num: 69

Candidate Starts for Rattrick_42:

(Start: 69 @31898 has 68 MA's), (109, 32012), (117, 32036), (122, 32066), (160, 32285), (161, 32288), (164, 32315), (173, 32384), (181, 32447), (186, 32465), (189, 32477), (232, 32753), (237, 32783), (250, 32867), (258, 32915), (261, 32930),

Gene: RavenCo17_53 Start: 38730, Stop: 39557, Start Num: 111

Candidate Starts for RavenCo17_53:

(Start: 111 @38730 has 2 MA's), (155, 38868), (178, 39021), (204, 39147), (206, 39153), (207, 39174), (211, 39189), (213, 39198),

Gene: Remy19_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Remy19_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Renaissance_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Renaissance_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Richarlison_42 Start: 31892, Stop: 32977, Start Num: 69

Candidate Starts for Richarlison_42:

(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282), (164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777), (238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: RogerDodger_57 Start: 41231, Stop: 42079, Start Num: 97

Candidate Starts for RogerDodger_57:

(86, 41204), (Start: 97 @41231 has 22 MA's), (271, 42059),

Gene: RonRayGun_44 Start: 33043, Stop: 33873, Start Num: 134

Candidate Starts for RonRayGun_44:

(Start: 134 @33043 has 23 MA's), (161, 33232), (164, 33259), (184, 33370), (198, 33433), (227, 33637), (230, 33652),

Gene: Rooter_55 Start: 30069, Stop: 30872, Start Num: 134

Candidate Starts for Rooter_55:

(36, 29769), (53, 29832), (75, 29892), (Start: 114 @30006 has 1 MA's), (Start: 134 @30069 has 23 MA's), (154, 30204), (166, 30282), (186, 30390), (190, 30405), (212, 30525), (237, 30693),

Gene: Ruriko_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Ruriko_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Ruthy_54 Start: 39658, Stop: 40491, Start Num: 110

Candidate Starts for Ruthy_54:

(85, 39595), (89, 39601), (Start: 110 @39658 has 90 MA's), (155, 39802), (197, 40039), (204, 40081), (206, 40087), (207, 40108), (210, 40120),

Gene: Sahara_52 Start: 34798, Stop: 35661, Start Num: 110

Candidate Starts for Sahara_52:

(90, 34744), (Start: 110 @34798 has 90 MA's), (142, 34870), (159, 34981), (176, 35092), (186, 35131), (206, 35233), (207, 35254), (210, 35281), (223, 35389), (238, 35467),

Gene: Salvador_53 Start: 40927, Stop: 41775, Start Num: 97

Candidate Starts for Salvador_53:

(86, 40900), (Start: 97 @40927 has 22 MA's), (103, 40942),

Gene: Samman98_54 Start: 36185, Stop: 37024, Start Num: 110
Candidate Starts for Samman98_54:
(83, 36122), (Start: 110 @36185 has 90 MA's), (139, 36233), (158, 36356), (176, 36470), (180, 36488),
(238, 36818),

Gene: Satrap_68 Start: 36073, Stop: 36912, Start Num: 134
Candidate Starts for Satrap_68:
(Start: 134 @36073 has 23 MA's), (165, 36283), (177, 36361), (186, 36394), (190, 36409), (212,
36529), (237, 36697), (238, 36703), (255, 36814),

Gene: Savage_53 Start: 35051, Stop: 35914, Start Num: 110
Candidate Starts for Savage_53:
(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384),
(206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Savbucketdawg_53 Start: 40688, Stop: 41521, Start Num: 136
Candidate Starts for Savbucketdawg_53:
(Start: 136 @40688 has 9 MA's), (143, 40757), (144, 40772), (150, 40814), (161, 40874), (186, 41012),
(198, 41075), (199, 41081), (220, 41240), (237, 41339),

Gene: Sbash_57 Start: 40492, Stop: 41409, Start Num: 131
Candidate Starts for Sbash_57:
(Start: 131 @40492 has 63 MA's), (137, 40519), (143, 40573), (164, 40717), (167, 40732), (173,
40786), (176, 40828), (186, 40867), (189, 40879), (204, 40969), (220, 41083), (225, 41116), (233,
41155), (236, 41179), (237, 41182), (250, 41266), (256, 41305), (260, 41329), (276, 41398),

Gene: Schiebel_42 Start: 31892, Stop: 32977, Start Num: 69
Candidate Starts for Schiebel_42:
(Start: 69 @31892 has 68 MA's), (109, 32006), (117, 32030), (122, 32060), (160, 32279), (161, 32282),
(164, 32309), (173, 32378), (181, 32441), (186, 32459), (189, 32471), (206, 32561), (237, 32777),
(238, 32783), (250, 32861), (258, 32909), (261, 32924),

Gene: Seahorse_72 Start: 37934, Stop: 38800, Start Num: 123
Candidate Starts for Seahorse_72:
(50, 37712), (Start: 123 @37934 has 1 MA's), (125, 37937), (Start: 134 @37961 has 23 MA's), (138,
37991), (165, 38171), (177, 38249), (186, 38282), (190, 38297), (212, 38417), (237, 38585), (238,
38591), (255, 38702),

Gene: Sejanus_63 Start: 48683, Stop: 49585, Start Num: 131
Candidate Starts for Sejanus_63:
(Start: 131 @48683 has 63 MA's), (143, 48761), (161, 48878), (164, 48905), (167, 48920), (171,
48965), (176, 49016), (186, 49055), (189, 49067), (204, 49151), (220, 49271), (226, 49307), (232,
49340), (233, 49343), (236, 49367), (237, 49370), (238, 49376), (256, 49493), (262, 49520), (275,
49565),

Gene: Sekhmet_55 Start: 37219, Stop: 38082, Start Num: 110
Candidate Starts for Sekhmet_55:
(85, 37156), (Start: 110 @37219 has 90 MA's), (176, 37513), (186, 37552), (190, 37567), (207, 37675),
(210, 37702), (212, 37708), (219, 37762), (223, 37810), (233, 37855), (234, 37858), (238, 37888),

Gene: ShaboiShabazz_42 Start: 31907, Stop: 32992, Start Num: 69
Candidate Starts for ShaboiShabazz_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Shinji_53 Start: 40451, Stop: 41284, Start Num: 136

Candidate Starts for Shinji_53:

(Start: 136 @40451 has 9 MA's), (143, 40520), (144, 40535), (150, 40577), (161, 40637), (186, 40775), (198, 40838), (199, 40844), (220, 41003), (237, 41102),

Gene: Shipwreck_49 Start: 33909, Stop: 34835, Start Num: 131

Candidate Starts for Shipwreck_49:

(Start: 131 @33909 has 63 MA's), (137, 33936), (143, 33990), (161, 34107), (164, 34134), (167, 34149), (173, 34203), (186, 34284), (189, 34296), (198, 34353), (206, 34392), (220, 34500), (233, 34572), (236, 34596), (237, 34599), (250, 34683), (256, 34722), (276, 34824),

Gene: Shlim410_55 Start: 40640, Stop: 41503, Start Num: 110

Candidate Starts for Shlim410_55:

(85, 40577), (Start: 110 @40640 has 90 MA's), (155, 40790), (159, 40823), (186, 40973), (191, 41000), (207, 41096), (210, 41123), (212, 41129), (238, 41309), (268, 41483),

Gene: Sidious_56 Start: 39609, Stop: 40484, Start Num: 110

Candidate Starts for Sidious_56:

(16, 39249), (34, 39378), (43, 39414), (52, 39456), (57, 39474), (60, 39480), (85, 39546), (90, 39555), (Start: 110 @39609 has 90 MA's), (155, 39771), (159, 39804), (176, 39915), (186, 39954), (207, 40077), (210, 40104), (223, 40212), (238, 40290), (248, 40353),

Gene: Silvy_45 Start: 31200, Stop: 32129, Start Num: 131

Candidate Starts for Silvy_45:

(78, 31029), (79, 31032), (Start: 91 @31065 has 1 MA's), (96, 31080), (Start: 131 @31200 has 63 MA's), (137, 31230), (143, 31284), (161, 31401), (164, 31428), (167, 31443), (173, 31497), (176, 31539), (186, 31578), (204, 31680), (220, 31794), (233, 31866), (236, 31890), (237, 31893), (250, 31977), (256, 32016), (276, 32118),

Gene: Sizemore_42 Start: 31893, Stop: 32978, Start Num: 69

Candidate Starts for Sizemore_42:

(Start: 69 @31893 has 68 MA's), (109, 32007), (117, 32031), (122, 32061), (160, 32280), (161, 32283), (164, 32310), (173, 32379), (181, 32442), (186, 32460), (189, 32472), (206, 32562), (237, 32778), (238, 32784), (250, 32862), (258, 32910), (261, 32925),

Gene: SkinnyPete_44 Start: 30665, Stop: 31612, Start Num: 131

Candidate Starts for SkinnyPete_44:

(Start: 131 @30665 has 63 MA's), (Start: 134 @30674 has 23 MA's), (137, 30692), (143, 30746), (161, 30863), (168, 30914), (176, 31001), (186, 31040), (189, 31052), (204, 31142), (212, 31199), (214, 31217), (217, 31241), (222, 31295), (224, 31301), (232, 31340), (233, 31343), (237, 31370), (238, 31376), (256, 31493), (276, 31595),

Gene: SmokingBunny_54 Start: 41020, Stop: 41868, Start Num: 97

Candidate Starts for SmokingBunny_54:

(86, 40993), (Start: 97 @41020 has 22 MA's),

Gene: Sneeze_43 Start: 32094, Stop: 33179, Start Num: 69

Candidate Starts for Sneeze_43:

(10, 31794), (Start: 69 @32094 has 68 MA's), (117, 32232), (140, 32355), (160, 32481), (164, 32511), (173, 32580), (181, 32643), (186, 32661), (189, 32673), (206, 32763), (223, 32910), (237, 32979), (250, 33063), (258, 33111),

Gene: SoilAssassin_51 Start: 35972, Stop: 36847, Start Num: 110

Candidate Starts for SoilAssassin_51:

(80, 35891), (85, 35909), (90, 35918), (Start: 110 @35972 has 90 MA's), (159, 36167), (176, 36278), (177, 36284), (186, 36317), (189, 36329), (195, 36356), (207, 36440), (210, 36467), (223, 36575), (233, 36620), (238, 36653),

Gene: Sonah_46 Start: 31603, Stop: 32532, Start Num: 131

Candidate Starts for Sonah_46:

(96, 31483), (Start: 131 @31603 has 63 MA's), (137, 31633), (143, 31687), (161, 31804), (164, 31831), (167, 31846), (173, 31900), (186, 31981), (189, 31993), (198, 32050), (206, 32089), (220, 32197), (233, 32269), (236, 32293), (237, 32296), (250, 32380), (256, 32419), (276, 32521),

Gene: Sparky_56 Start: 39597, Stop: 40523, Start Num: 115

Candidate Starts for Sparky_56:

(72, 39477), (Start: 91 @39522 has 1 MA's), (96, 39537), (Start: 115 @39597 has 1 MA's), (116, 39603), (163, 39864), (164, 39867), (167, 39882), (173, 39936), (176, 39978), (186, 40017), (189, 40029),

Gene: Sporco_71 Start: 36853, Stop: 37680, Start Num: 134

Candidate Starts for Sporco_71:

(Start: 134 @36853 has 23 MA's), (163, 37057), (175, 37120), (184, 37162), (186, 37174), (190, 37189), (191, 37201), (199, 37243), (203, 37267), (212, 37309), (214, 37327), (232, 37447), (245, 37525), (253, 37588), (259, 37615),

Gene: Sprinklemunch_63 Start: 42753, Stop: 43580, Start Num: 110

Candidate Starts for Sprinklemunch_63:

(85, 42690), (Start: 110 @42753 has 90 MA's), (155, 42891), (176, 43035), (194, 43110), (199, 43143), (204, 43170), (206, 43176), (207, 43197), (210, 43209),

Gene: Sproutie_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Sproutie_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Stargaze_43 Start: 33184, Stop: 34263, Start Num: 68

Candidate Starts for Stargaze_43:

(23, 32989), (32, 33064), (Start: 68 @33184 has 2 MA's), (138, 33418), (156, 33532), (160, 33571), (170, 33652), (177, 33718), (181, 33733), (186, 33751), (189, 33763), (237, 34072), (238, 34078), (258, 34204),

Gene: StevieRay_45 Start: 31579, Stop: 32505, Start Num: 131

Candidate Starts for StevieRay_45:

(Start: 131 @31579 has 63 MA's), (137, 31606), (143, 31660), (161, 31777), (164, 31804), (167, 31819), (186, 31954), (189, 31966), (198, 32023), (206, 32062), (220, 32170), (224, 32200), (233, 32242), (236, 32266), (237, 32269), (250, 32353), (256, 32392), (276, 32494),

Gene: StressBall_45 Start: 31877, Stop: 32803, Start Num: 131

Candidate Starts for StressBall_45:

(Start: 131 @31877 has 63 MA's), (137, 31904), (143, 31958), (161, 32075), (164, 32102), (167, 32117), (186, 32252), (189, 32264), (198, 32321), (206, 32360), (220, 32468), (233, 32540), (236, 32564), (237, 32567), (250, 32651), (256, 32690), (276, 32792),

Gene: Suerte_50 Start: 36159, Stop: 36998, Start Num: 110

Candidate Starts for Suerte_50:

(85, 36096), (90, 36105), (Start: 110 @36159 has 90 MA's), (139, 36207), (158, 36330), (176, 36444), (180, 36462), (238, 36792),

Gene: Susceptit_56 Start: 38841, Stop: 39716, Start Num: 110

Candidate Starts for Susceptit_56:

(80, 38760), (85, 38778), (90, 38787), (Start: 110 @38841 has 90 MA's), (159, 39036), (186, 39186), (207, 39309), (210, 39336), (223, 39444), (238, 39522),

Gene: Sweets_42 Start: 31902, Stop: 32987, Start Num: 69

Candidate Starts for Sweets_42:

(Start: 69 @31902 has 68 MA's), (109, 32016), (117, 32040), (122, 32070), (160, 32289), (161, 32292), (164, 32319), (173, 32388), (181, 32451), (186, 32469), (189, 32481), (206, 32571), (237, 32787), (238, 32793), (250, 32871), (258, 32919), (261, 32934),

Gene: Taheera_41 Start: 31598, Stop: 32683, Start Num: 69

Candidate Starts for Taheera_41:

(10, 31322), (Start: 69 @31598 has 68 MA's), (117, 31736), (140, 31859), (160, 31985), (164, 32015), (173, 32084), (181, 32147), (186, 32165), (189, 32177), (206, 32267), (223, 32414), (237, 32483), (250, 32567), (258, 32615), (266, 32657),

Gene: Tayonia_56 Start: 38840, Stop: 39715, Start Num: 110

Candidate Starts for Tayonia_56:

(80, 38759), (85, 38777), (90, 38786), (Start: 110 @38840 has 90 MA's), (159, 39035), (186, 39185), (207, 39308), (210, 39335), (223, 39443), (238, 39521),

Gene: Techage_45 Start: 31643, Stop: 32572, Start Num: 131

Candidate Starts for Techage_45:

(96, 31523), (Start: 131 @31643 has 63 MA's), (137, 31673), (143, 31727), (161, 31844), (164, 31871), (167, 31886), (173, 31940), (186, 32021), (204, 32123), (220, 32237), (233, 32309), (236, 32333), (237, 32336), (250, 32420), (256, 32459), (276, 32561),

Gene: Terror_41 Start: 31598, Stop: 32683, Start Num: 69

Candidate Starts for Terror_41:

(10, 31322), (Start: 69 @31598 has 68 MA's), (117, 31736), (140, 31859), (160, 31985), (164, 32015), (173, 32084), (181, 32147), (186, 32165), (189, 32177), (206, 32267), (223, 32414), (237, 32483), (250, 32567), (258, 32615), (266, 32657),

Gene: ThankyouJordi_59 Start: 41692, Stop: 42531, Start Num: 110

Candidate Starts for ThankyouJordi_59:

(87, 41632), (90, 41638), (Start: 110 @41692 has 90 MA's), (158, 41863), (176, 41977), (180, 41995), (197, 42070), (238, 42325),

Gene: Thespis_45 Start: 31613, Stop: 32539, Start Num: 131

Candidate Starts for Thespis_45:

(Start: 131 @31613 has 63 MA's), (137, 31640), (143, 31694), (161, 31811), (164, 31838), (167, 31853), (186, 31988), (189, 32000), (198, 32057), (206, 32096), (220, 32204), (233, 32276), (236, 32300), (237, 32303), (250, 32387), (256, 32426), (276, 32528),

Gene: Thimann_56 Start: 37603, Stop: 38442, Start Num: 110

Candidate Starts for Thimann_56:

(85, 37540), (90, 37549), (Start: 110 @37603 has 90 MA's), (139, 37651), (158, 37774), (176, 37888), (180, 37906), (238, 38236),

Gene: TillyBobJoe_56 Start: 42531, Stop: 43376, Start Num: 97

Candidate Starts for TillyBobJoe_56:

(86, 42504), (Start: 97 @42531 has 22 MA's), (183, 42849), (194, 42900), (237, 43167), (243, 43197),

Gene: TinaBug_42 Start: 31902, Stop: 32987, Start Num: 69

Candidate Starts for TinaBug_42:

(Start: 69 @31902 has 68 MA's), (109, 32016), (117, 32040), (122, 32070), (160, 32289), (161, 32292), (164, 32319), (173, 32388), (181, 32451), (186, 32469), (189, 32481), (206, 32571), (237, 32787), (238, 32793), (250, 32871), (258, 32919), (261, 32934),

Gene: Togo_53 Start: 41020, Stop: 41868, Start Num: 97

Candidate Starts for Togo_53:

(86, 40993), (Start: 97 @41020 has 22 MA's),

Gene: TomBrady_42 Start: 31908, Stop: 32993, Start Num: 69

Candidate Starts for TomBrady_42:

(Start: 69 @31908 has 68 MA's), (109, 32022), (117, 32046), (122, 32076), (160, 32295), (161, 32298), (164, 32325), (173, 32394), (181, 32457), (186, 32475), (189, 32487), (206, 32577), (237, 32793), (238, 32799), (250, 32877), (258, 32925), (261, 32940),

Gene: TootsiePop_64 Start: 40131, Stop: 40985, Start Num: 127

Candidate Starts for TootsiePop_64:

(Start: 127 @40131 has 9 MA's), (155, 40293), (159, 40326), (161, 40338), (163, 40362), (176, 40437), (180, 40455), (186, 40476), (204, 40578), (210, 40629), (213, 40641), (215, 40656), (231, 40773), (240, 40824), (241, 40830), (246, 40860), (258, 40944),

Gene: Tortellini_55 Start: 39104, Stop: 39952, Start Num: 127

Candidate Starts for Tortellini_55:

(Start: 127 @39104 has 9 MA's), (155, 39260), (159, 39293), (161, 39305), (163, 39329), (164, 39332), (176, 39404), (180, 39422), (186, 39443), (204, 39545), (210, 39596), (213, 39608), (215, 39623), (231, 39740), (240, 39791), (241, 39797), (246, 39827), (258, 39911),

Gene: Trumpet_56 Start: 38841, Stop: 39716, Start Num: 110

Candidate Starts for Trumpet_56:

(80, 38760), (85, 38778), (90, 38787), (Start: 110 @38841 has 90 MA's), (159, 39036), (186, 39186), (207, 39309), (210, 39336), (223, 39444), (238, 39522),

Gene: TuertoX_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for TuertoX_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Tuti_57 Start: 38067, Stop: 38906, Start Num: 110

Candidate Starts for Tuti_57:

(83, 38004), (Start: 110 @38067 has 90 MA's), (139, 38115), (158, 38238), (176, 38352), (180, 38370), (238, 38700),

Gene: Twinkle_56 Start: 41699, Stop: 42562, Start Num: 110

Candidate Starts for Twinkle_56:

(85, 41636), (Start: 110 @41699 has 90 MA's), (155, 41849), (159, 41882), (186, 42032), (191, 42059), (207, 42155), (210, 42182), (212, 42188), (238, 42368), (268, 42542),

Gene: Twister6_56 Start: 40801, Stop: 41634, Start Num: 136

Candidate Starts for Twister6_56:

(Start: 136 @40801 has 9 MA's), (143, 40870), (144, 40885), (150, 40927), (161, 40987), (186, 41125), (198, 41188), (199, 41194), (220, 41353), (237, 41452),

Gene: Valary_56 Start: 41836, Stop: 42684, Start Num: 97

Candidate Starts for Valary_56:

(86, 41809), (Start: 97 @41836 has 22 MA's), (271, 42664),

Gene: VanDeWege_57 Start: 41128, Stop: 41976, Start Num: 97

Candidate Starts for VanDeWege_57:

(86, 41101), (Start: 97 @41128 has 22 MA's), (271, 41956),

Gene: Venti_46 Start: 31617, Stop: 32546, Start Num: 131

Candidate Starts for Venti_46:

(96, 31497), (Start: 131 @31617 has 63 MA's), (137, 31647), (143, 31701), (161, 31818), (164, 31845), (167, 31860), (173, 31914), (186, 31995), (204, 32097), (220, 32211), (233, 32283), (236, 32307), (237, 32310), (250, 32394), (256, 32433), (276, 32535),

Gene: Vidya_45 Start: 31650, Stop: 32579, Start Num: 131

Candidate Starts for Vidya_45:

(96, 31530), (Start: 131 @31650 has 63 MA's), (137, 31680), (143, 31734), (161, 31851), (164, 31878), (167, 31893), (173, 31947), (186, 32028), (204, 32130), (220, 32244), (233, 32316), (236, 32340), (237, 32343), (250, 32427), (256, 32466), (276, 32568),

Gene: Vopal_70 Start: 38758, Stop: 39585, Start Num: 134

Candidate Starts for Vopal_70:

(124, 38737), (Start: 134 @38758 has 23 MA's), (146, 38845), (163, 38962), (181, 39061), (186, 39079), (190, 39094), (239, 39391), (272, 39574),

Gene: WelcomeAyanna_59 Start: 41839, Stop: 42678, Start Num: 110

Candidate Starts for WelcomeAyanna_59:

(87, 41779), (90, 41785), (Start: 110 @41839 has 90 MA's), (158, 42010), (176, 42124), (180, 42142), (197, 42217), (238, 42472),

Gene: Wendigo_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Wendigo_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Whack_53 Start: 36342, Stop: 37211, Start Num: 132

Candidate Starts for Whack_53:

(49, 36096), (67, 36150), (73, 36165), (108, 36261), (Start: 132 @36342 has 1 MA's), (146, 36441), (157, 36504), (167, 36579), (169, 36600), (185, 36684), (186, 36693), (188, 36702), (192, 36726), (205, 36792), (212, 36849), (233, 36993), (249, 37095), (269, 37200), (270, 37203),

Gene: Whiteclaw_53 Start: 35051, Stop: 35914, Start Num: 110

Candidate Starts for Whiteclaw_53:

(90, 34997), (Start: 110 @35051 has 90 MA's), (142, 35123), (159, 35234), (176, 35345), (186, 35384), (206, 35486), (207, 35507), (210, 35534), (223, 35642), (238, 35720),

Gene: Whitty_43 Start: 32598, Stop: 33428, Start Num: 134

Candidate Starts for Whitty_43:

(Start: 134 @32598 has 23 MA's), (161, 32787), (164, 32814), (184, 32925), (198, 32988), (227, 33192), (230, 33207),

Gene: Willsammy_44 Start: 31360, Stop: 32286, Start Num: 131

Candidate Starts for Willsammy_44:

(Start: 131 @31360 has 63 MA's), (137, 31387), (143, 31441), (161, 31558), (164, 31585), (167, 31600), (186, 31735), (189, 31747), (198, 31804), (206, 31843), (220, 31951), (224, 31981), (233, 32023), (236, 32047), (237, 32050), (250, 32134), (256, 32173), (276, 32275),

Gene: WinkNick_56 Start: 36743, Stop: 37606, Start Num: 110

Candidate Starts for WinkNick_56:

(85, 36680), (Start: 110 @36743 has 90 MA's), (176, 37037), (186, 37076), (190, 37091), (207, 37199), (210, 37226), (212, 37232), (219, 37286), (223, 37334), (233, 37379), (234, 37382), (238, 37412),

Gene: Wizard_53 Start: 41034, Stop: 41882, Start Num: 97

Candidate Starts for Wizard_53:

(86, 41007), (Start: 97 @41034 has 22 MA's), (271, 41862),

Gene: Wrigley_61 Start: 40875, Stop: 41705, Start Num: 110

Candidate Starts for Wrigley_61:

(Start: 110 @40875 has 90 MA's), (197, 41253), (204, 41295), (206, 41301), (207, 41322), (211, 41337),

Gene: Xavia_52 Start: 38393, Stop: 39310, Start Num: 131

Candidate Starts for Xavia_52:

(Start: 131 @38393 has 63 MA's), (137, 38420), (143, 38474), (161, 38591), (176, 38729), (179, 38741), (186, 38768), (189, 38780), (197, 38828), (204, 38870), (212, 38927), (214, 38945), (217, 38969), (222, 39023), (224, 39029), (232, 39068), (233, 39071), (237, 39098), (238, 39104), (245, 39146), (256, 39221), (258, 39233), (267, 39260), (274, 39281),

Gene: Xeno_47 Start: 30955, Stop: 31881, Start Num: 131

Candidate Starts for Xeno_47:

(Start: 131 @30955 has 63 MA's), (137, 30982), (143, 31036), (161, 31153), (164, 31180), (167, 31195), (186, 31330), (189, 31342), (198, 31399), (206, 31438), (220, 31546), (233, 31618), (236, 31642), (237, 31645), (250, 31729), (256, 31768), (276, 31870),

Gene: Xula_42 Start: 31380, Stop: 32306, Start Num: 131

Candidate Starts for Xula_42:

(36, 31083), (44, 31107), (62, 31176), (96, 31260), (Start: 131 @31380 has 63 MA's), (Start: 134 @31389 has 23 MA's), (137, 31407), (143, 31461), (161, 31578), (164, 31605), (167, 31620), (173, 31674), (176, 31716), (186, 31755), (198, 31824), (199, 31830), (204, 31857), (216, 31938), (220, 31971), (233, 32043), (236, 32067), (237, 32070), (250, 32154), (256, 32193), (276, 32295),

Gene: YangYin_43 Start: 33210, Stop: 34289, Start Num: 68

Candidate Starts for YangYin_43:

(23, 33015), (32, 33090), (Start: 68 @33210 has 2 MA's), (138, 33444), (156, 33558), (160, 33597), (170, 33678), (177, 33744), (181, 33759), (186, 33777), (189, 33789), (237, 34098), (238, 34104),

(258, 34230),

Gene: Yeet412_51 Start: 35973, Stop: 36848, Start Num: 110

Candidate Starts for Yeet412_51:

(80, 35892), (85, 35910), (90, 35919), (Start: 110 @35973 has 90 MA's), (159, 36168), (186, 36318), (207, 36441), (210, 36468), (223, 36576), (238, 36654),

Gene: Yeezy_56 Start: 38295, Stop: 39125, Start Num: 110

Candidate Starts for Yeezy_56:

(Start: 110 @38295 has 90 MA's), (155, 38436), (197, 38673), (204, 38715), (206, 38721), (207, 38742), (210, 38754), (213, 38766),

Gene: YungMoney_56 Start: 44559, Stop: 45392, Start Num: 136

Candidate Starts for YungMoney_56:

(Start: 136 @44559 has 9 MA's), (143, 44628), (144, 44643), (150, 44685), (161, 44745), (186, 44883), (198, 44946), (199, 44952), (220, 45111), (237, 45210),

Gene: Zameen_56 Start: 38840, Stop: 39715, Start Num: 110

Candidate Starts for Zameen_56:

(80, 38759), (85, 38777), (90, 38786), (Start: 110 @38840 has 90 MA's), (159, 39035), (186, 39185), (207, 39308), (210, 39335), (223, 39443), (238, 39521),

Gene: ZenTime222_43 Start: 32597, Stop: 33427, Start Num: 134

Candidate Starts for ZenTime222_43:

(Start: 134 @32597 has 23 MA's), (161, 32786), (164, 32813), (184, 32924), (198, 32987), (227, 33191), (230, 33206),

Gene: Zilizebeth_46 Start: 31649, Stop: 32578, Start Num: 131

Candidate Starts for Zilizebeth_46:

(96, 31529), (Start: 131 @31649 has 63 MA's), (137, 31679), (143, 31733), (161, 31850), (164, 31877), (167, 31892), (173, 31946), (186, 32027), (204, 32129), (220, 32243), (233, 32315), (236, 32339), (237, 32342), (250, 32426), (256, 32465), (276, 32567),

Gene: Zirinka_53 Start: 39460, Stop: 40335, Start Num: 110

Candidate Starts for Zirinka_53:

(80, 39379), (85, 39397), (90, 39406), (Start: 110 @39460 has 90 MA's), (159, 39655), (186, 39805), (207, 39928), (210, 39955), (223, 40063), (238, 40141),

Gene: ZoMa_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for ZoMa_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792), (238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Zodiariah_55 Start: 41477, Stop: 42310, Start Num: 110

Candidate Starts for Zodiariah_55:

(42, 41279), (60, 41348), (63, 41357), (85, 41414), (Start: 110 @41477 has 90 MA's), (155, 41618), (165, 41690), (204, 41897), (207, 41924), (211, 41939),

Gene: Zombie_42 Start: 31907, Stop: 32992, Start Num: 69

Candidate Starts for Zombie_42:

(Start: 69 @31907 has 68 MA's), (109, 32021), (117, 32045), (122, 32075), (160, 32294), (161, 32297), (164, 32324), (173, 32393), (181, 32456), (186, 32474), (189, 32486), (206, 32576), (237, 32792),

(238, 32798), (250, 32876), (258, 32924), (261, 32939),

Gene: Zucker_64 Start: 36175, Stop: 37002, Start Num: 134

Candidate Starts for Zucker_64:

(125, 36151), (Start: 134 @36175 has 23 MA's), (163, 36379), (175, 36442), (184, 36484), (186, 36496), (190, 36511), (191, 36523), (199, 36565), (203, 36589), (212, 36631), (214, 36649), (228, 36751), (232, 36769), (245, 36847), (253, 36910), (259, 36937),