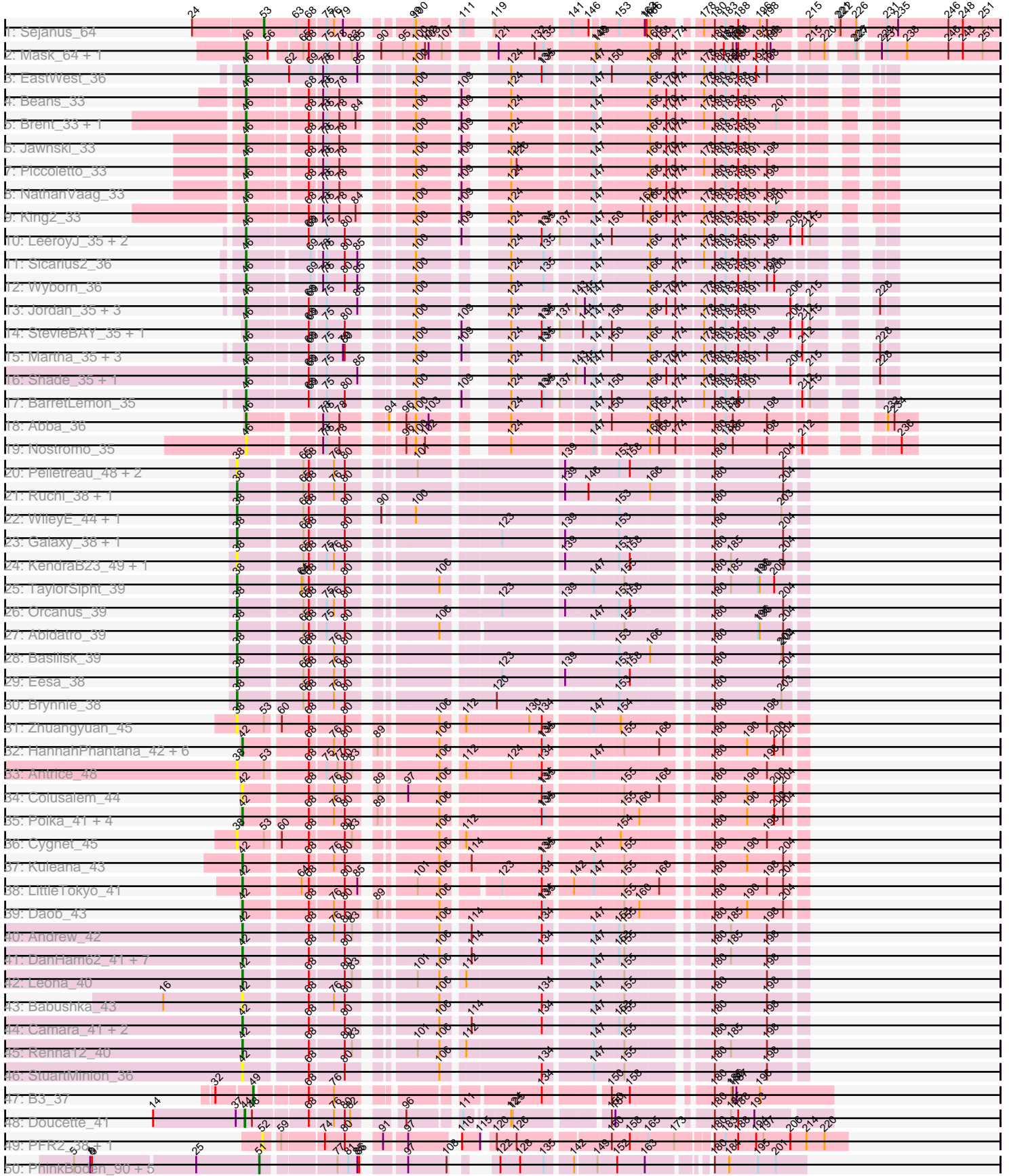
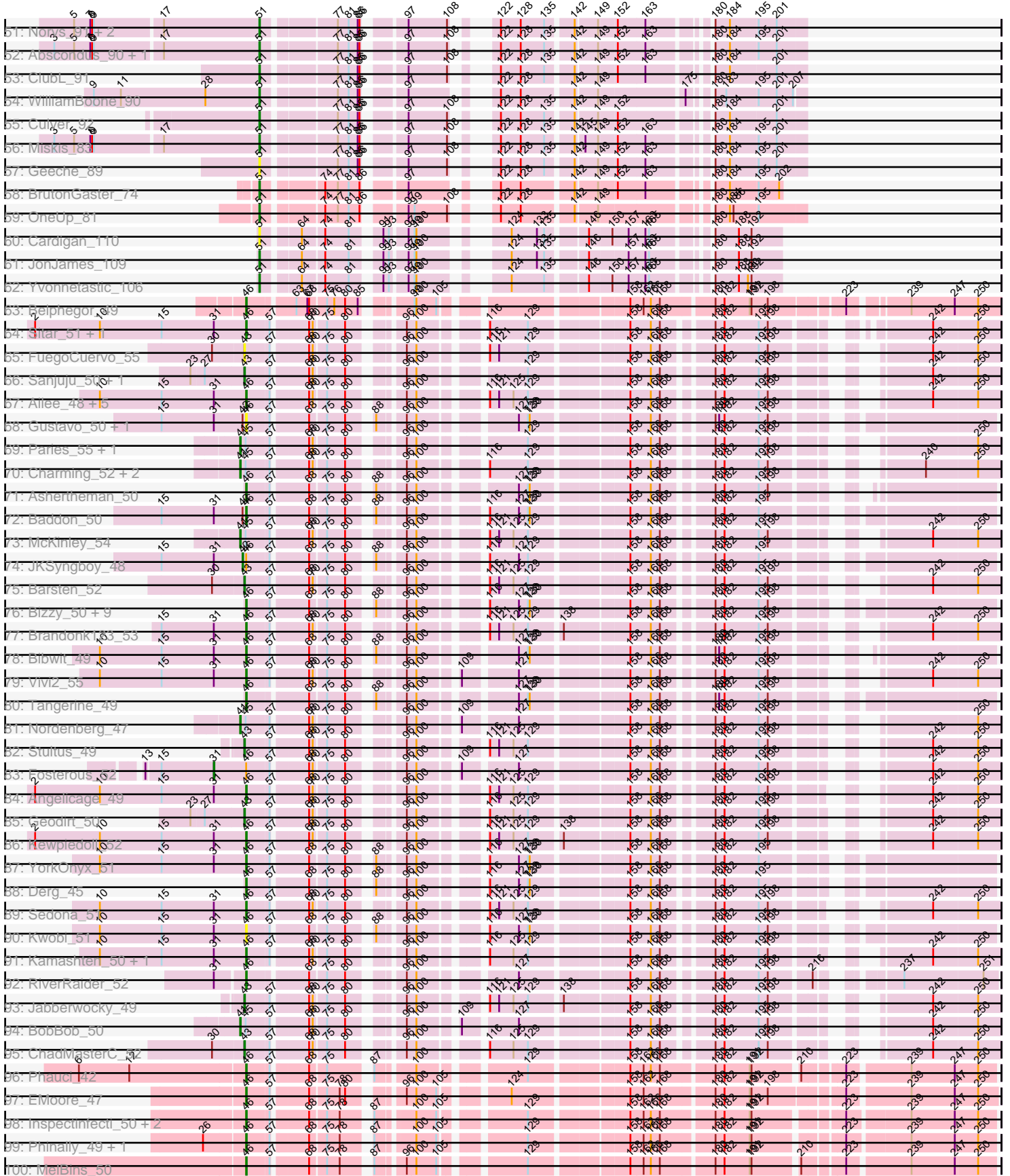


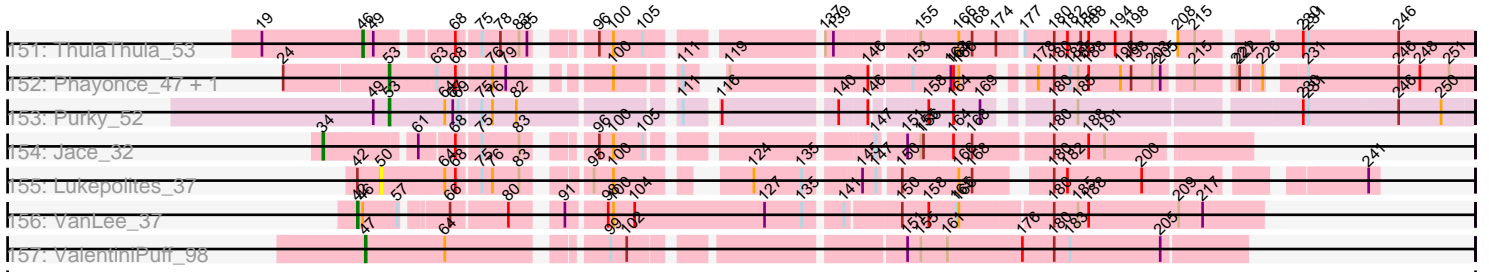
Pham 219326



Pham 219326



Pham 219326



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 219326 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219326 has 322 members, 56 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_64
- Track 2 : Mask_64, Dori_64
- Track 3 : EastWest_36
- Track 4 : Beans_33
- Track 5 : Brent_33, Franzy_33
- Track 6 : Jawnski_33
- Track 7 : Piccoletto_33
- Track 8 : NathanVaag_33
- Track 9 : King2_33
- Track 10 : LeeroyJ_35, BigDome_35, Timinator_35
- Track 11 : Sicarius2_36
- Track 12 : Wyborn_36
- Track 13 : Jordan_35, Zartrosa_35, JKerns_35, Pippa_35
- Track 14 : StevieBAY_35, GravityBall_35
- Track 15 : Martha_35, BossLady_35, Grekaycon_35, TaeYoung_35
- Track 16 : Shade_35, Sonny_35
- Track 17 : BarretLemon_35
- Track 18 : Abba_36
- Track 19 : Nostromo_35
- Track 20 : Pelletreau_48, Westrich_47, Gravel_48
- Track 21 : Ruchi_38, Vulpecula_38
- Track 22 : WileyE_44, Chickaboom_40
- Track 23 : Galaxy_38, Jamun_38
- Track 24 : KendraB23_49, Toad24_41
- Track 25 : TaylorSipht_39
- Track 26 : Orcanus_39
- Track 27 : Abidatro_39
- Track 28 : Basilisk_39
- Track 29 : Eesa_38
- Track 30 : Brynnie_38
- Track 31 : Zhuangyuan_45
- Track 32 : HannahPhantana_42, Coral_41, Bedetta_46, Cote_43, Jerole_51, Amelia_41, Bibble12_45
- Track 33 : Antrice_48
- Track 34 : Colusalem_44
- Track 35 : Polka_41, OtsoOtso_49, Kepler_43, Melons_43, Lunar_43
- Track 36 : Cygnet_45

- Track 37 : Kuleana_43
- Track 38 : LittleTokyo_41
- Track 39 : Daob_43
- Track 40 : Andrew_42
- Track 41 : DanHam62_41, AmiCi24_40, RedFox_41, Juno112_40, Atlantica_41, Rattail_41, PhluffyCoco_41, HamCheese_40
- Track 42 : Leona_40
- Track 43 : Babushka_43
- Track 44 : Camara_41, KHumphrey_41, Glotell_43
- Track 45 : Renna12_40
- Track 46 : StuartMinion_36
- Track 47 : B3_37
- Track 48 : Doucette_41
- Track 49 : PFR2_38, PFR1_36
- Track 50 : PhinkBoden_90, Cucurbita_92, Lozinak_91, Bachita_93, Engineer_92, Smoothie_92
- Track 51 : Norvs_91, Toniann_91, Aphelion_90
- Track 52 : Abscondus_90, Dusty_87
- Track 53 : ClubL_91
- Track 54 : WilliamBoone_90
- Track 55 : Culver_92
- Track 56 : Miskis_83
- Track 57 : Geeche_89
- Track 58 : BrutonGaster_74
- Track 59 : OneUp_81
- Track 60 : Cardigan_110
- Track 61 : JonJames_109
- Track 62 : Yvonnetastic_106
- Track 63 : Belphegor_49
- Track 64 : Sitar_51, Lennon_51
- Track 65 : FuegoCuervo_55
- Track 66 : Sanjuju_50, Fitzgerald_50
- Track 67 : Ailee_48, MoontowerMania_51, Affeca_49, Keitabear_51, Shivanishola_51, Love_56
- Track 68 : Gustavo_50, Saronaya_50
- Track 69 : Paries_55, Galadriel_52
- Track 70 : Charming_52, Tangent_52, Rofo_51
- Track 71 : Ashertheman_50
- Track 72 : Baddon_50
- Track 73 : McKinley_54
- Track 74 : JKSyngboy_48
- Track 75 : Barsten_52
- Track 76 : Bizzy_50, Baumdotcom_48, Ribeye_50, Flatwoods_50, Tycho_49, StorminNorm_49, SchottB_48, Gaea_49, LilHam_47, Kroos_50
- Track 77 : Brandonk123_53
- Track 78 : Bibwit_49
- Track 79 : Vivi2_55
- Track 80 : Tangerine_49
- Track 81 : Nordenberg_47
- Track 82 : Stultus_49
- Track 83 : Fosterous_52
- Track 84 : Angelicage_49
- Track 85 : Geodirt_50

- Track 86 : Kewpiedoll_52
- Track 87 : YorkOnyx_51
- Track 88 : Derg_45
- Track 89 : Sedona_51
- Track 90 : Kwobi_51
- Track 91 : Kamashten_50, Thing3_50
- Track 92 : RiverRaider_52
- Track 93 : Jabberwocky_49
- Track 94 : BobBob_50
- Track 95 : ChadMasterC_52
- Track 96 : Phauci_42
- Track 97 : EMoore_47
- Track 98 : Inspectinfecti_50, Ali17_47, Hans_51
- Track 99 : Phinally_49, Leonard_49
- Track 100 : MelBins_50
- Track 101 : Dexdert_48
- Track 102 : Chickadee_47, Kwekel_47, Tiamoceli_48, Twonlo_45
- Track 103 : EdmundFerry_46, GTE6_47, RoadKill_45
- Track 104 : APunk_52, Sampson_51, Scioto_52, Natkenzie_51, Abblin_51
- Track 105 : Zitch_54
- Track 106 : Zipp_52, Delrey21_51, DoctorFroggo_51, Verity_51
- Track 107 : ViaConlectus_51
- Track 108 : Tardus_53
- Track 109 : Lilbeanie_53
- Track 110 : DatBoi_90
- Track 111 : Mollymur_94
- Track 112 : Daredevil_84
- Track 113 : Bantam_94
- Track 114 : SpeedDemon_950
- Track 115 : Towmatter_86
- Track 116 : ObLaDi_40
- Track 117 : Aleemily_39, ModicumRichard_40, Cafasso_40
- Track 118 : Morgana_40
- Track 119 : Altadena_37
- Track 120 : Circuit_35
- Track 121 : Bumble_35
- Track 122 : Lilmac1015_40, CalWood4100_40, Prairie_37
- Track 123 : Klevey_38
- Track 124 : Bolt007_38
- Track 125 : TripleJ_55
- Track 126 : HC_46
- Track 127 : Brujita_49, Island3_49
- Track 128 : QueenHazel_44, Xula_43
- Track 129 : Babsiella_48
- Track 130 : Sbash_58
- Track 131 : Stuck_62
- Track 132 : Che9c_61
- Track 133 : Rebel_44, ShrimpFriedEgg_52, Nenae_52, Jamie19_46, Purgamenstris_52, Raymond7_46, BabeRuth_53, Andies_45, Phrann_49, Redi_52, Hanako_52, PhancyPhin_52, SpongeBob_46, Snekmaggedon_46, Panchino_45
- Track 134 : Kevin1_50, Rubeelu_51, Butters_51
- Track 135 : EGunicorn_49

- Track 136 : Schnauzer_49, Duplicity_48, Fulbright_47, Melville_51, Carcharodon_48, Phloss_46, Gex_48, Magsby_48, Silvafighter_49, Tapioca_50, Tortoise12_48, Parmesanjohn_48, Xerxes_48, Chewbacca_50, Pipsqueaks_48, Smurph_48
- Track 137 : Bosection6_46
- Track 138 : Philonius_48
- Track 139 : Scitech_45
- Track 140 : Shweta_46
- Track 141 : MichelleMyBell_48
- Track 142 : SkinnyPete_45
- Track 143 : Silvy_46, Aggie_46
- Track 144 : Camster_47, Bogie_50, GreaseLightnin_47, Phineas_48, Shipwreck_50, HUHilltop_48, Sonah_47
- Track 145 : CactusJack_46, Willsammy_45, Xeno_48, Atcoo_46, Glaske_46, StevieRay_46, Brusacoram_46, Gavriela_46, Phalm_46, Bunnies_47, Ksquared_46, Megiddo_46, StressBall_46, KilKor_46, Thespis_46, Juniormint_47, Bhagsy_47
- Track 146 : Techage_46, Malithi_47, Phegasus_47, Arib1_47, Zilizebeth_47, Charlie_48, Bartholomew_46, Journey_47, Vidya_46, Dynamo_47, Etoile_46, Kari_46, Jebeks_48, Necropolis_46, Fishburne_46, Langerak_47, Jung_45, Mangethe_47, Majeke_47, Polkaroo_47, Venti_47, Donovan_47
- Track 147 : FirstPlacePfu_47
- Track 148 : Pygmy_50
- Track 149 : Xavia_54
- Track 150 : Nazo_49, BigNuz_48
- Track 151 : ThulaThula_53
- Track 152 : Phayonce_47, Mao1_65
- Track 153 : Purky_52
- Track 154 : Jace_32
- Track 155 : Lukepolites_37
- Track 156 : VanLee_37
- Track 157 : ValentiniPuff_98

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

The start number called the most often in the published annotations is 46, it was called in 121 of the 266 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- APunk_52, Abba_36, Abblin_51, Affeca_49, Ailee_48, Ali17_47, Andies_45, Angelicage_49, Ashertheman_50, BabeRuth_53, Baddon_50, BarretLemon_35, Baumdotcom_48, Beans_33, Belphegor_49, Bibwit_49, BigDome_35, Bizzy_50, Bosection6_46, BossLady_35, Brandonk123_53, Brent_33, Brujita_49, Butters_51, Carcharodon_48, Chewbacca_50, Chickadee_47, Delrey21_51, Derg_45, Dextert_48, DoctorFroggo_51, Dori_64, Duplicity_48, EGUnicorn_49, EMoore_47, EastWest_36, EdmundFerry_46, Flatwoods_50, Franzy_33, Fulbright_47, GTE6_47, Gaea_49, Gex_48, GravityBall_35, Grekaycon_35, Gustavo_50, Hanako_52, Hans_51, Inspectinfecti_50, Island3_49, JKerns_35, Jamie19_46, Jawnski_33, Jordan_35, Kamashten_50, Keitabear_51, Kevin1_50, Kewpiedoll_52, King2_33, Kroos_50, Kwekel_47, Kwobi_51, LeeroyJ_35, Lennon_51, Leonard_49, LilHam_47, Lilbeanie_53, Love_56, Magsby_48, Martha_35, Mask_64, MelBins_50, Melville_51,

MoontowerMania_51, NathanVaag_33, Natkenzie_51, Nенаe_52, Nostromo_35, Panchino_45, Parmesanjohn_48, PhancyPhin_52, Phauci_42, Phinally_49, Phloss_46, Phrann_49, Piccoletto_33, Pippa_35, Pipsqueaks_48, Purgamenstris_52, Raymond7_46, Rebel_44, Redi_52, Ribeye_50, RiverRaider_52, RoadKill_45, Rubeelu_51, Sampson_51, Saronaya_50, Schnauzer_49, SchottB_48, Scioto_52, Scitech_45, Sedona_51, Shade_35, Shivanishola_51, ShrimpFriedEgg_52, Shweta_46, Sicarius2_36, Silvafighter_49, Sitar_51, Smurph_48, Snekmaggon_46, Sonny_35, SpongeBob_46, StevieBAY_35, StorminNorm_49, Stuck_62, TaeYoung_35, Tangerine_49, Tapioca_50, Tardus_53, Thing3_50, ThulaThula_53, Tiamoceli_48, Timinator_35, Tortoise12_48, TripleJ_55, Twonlo_45, Tycho_49, Verity_51, ViaConlectus_51, Vivi2_55, Wyborn_36, Xerxes_48, YorkOnyx_51, Zartrosa_35, Zipp_52, Zitch_54,

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

- Fosterous_52, JKSyngboy_48, VanLee_37,

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

- Abidatro_39, Abscondus_90, Aggie_46, Aleemily_39, Altadena_37, Amelia_41, AmiCi24_40, Andrew_42, Antrice_48, Aphelion_90, Arib1_47, Atcoo_46, Atlantica_41, B3_37, Babsiella_48, Babushka_43, Bachita_93, Bantam_94, Barsten_52, Bartholomew_46, Basilisk_39, Bedetta_46, Bhagsy_47, Bibble12_45, BigNuz_48, BobBob_50, Bogie_50, Bolt007_38, Brusacoram_46, BrutonGaster_74, Brynnie_38, Bumble_35, Bunnies_47, CactusJack_46, Cafasso_40, CalWood4100_40, Camara_41, Camster_47, Cardigan_110, ChadMasterC_52, Charlie_48, Charming_52, Che9c_61, Chickaboom_40, Circuit_35, ClubL_91, Colusalem_44, Coral_41, Cote_43, Cucurbita_92, Culver_92, Cygnet_45, DanHam62_41, Daob_43, Daredevil_84, DatBoi_90, Donovan_47, Doucette_41, Dusty_87, Dynamo_47, Eesa_38, Engineer_92, Etoile_46, FirstPlacePfu_47, Fishburne_46, Fitzgerald_50, FuegoCuervo_55, Galadriel_52, Galaxy_38, Gavriela_46, Geeche_89, Geodirt_50, Glaske_46, Glotell_43, Gravel_48, GreaseLightnin_47, HC_46, HUHilltop_48, HamCheese_40, HannahPhantana_42, Jabberwocky_49, Jace_32, Jamun_38, Jebeks_48, Jerole_51, JonJames_109, Journey_47, Jung_45, Juniormint_47, Juno112_40, KHumphrey_41, Kari_46, KendraB23_49, Kepler_43, KilKor_46, Klevey_38, Ksquared_46, Kuleana_43, Langerak_47, Leona_40, Lilmac1015_40, LittleTokyo_41, Lozinak_91, Lukepolites_37, Lunar_43, Majeke_47, Malithi_47, Mangethe_47, Mao1_65, McKinley_54, Megiddo_46, Melons_43, MichelleMyBell_48, Miskis_83, ModicumRichard_40, Mollymur_94, Morgana_40, Nazo_49, Necropolis_46, Nordenberg_47, Norvs_91, ObLaDi_40, OneUp_81, Orcanus_39, OtsoOtso_49, PFR1_36, PFR2_38, Paries_55, Pelletreau_48, Phalm_46, Phayonce_47, Phegasus_47, Philonius_48, Phineas_48, PhinkBoden_90, PhluffyCoco_41, Polka_41, Polkaroo_47, Prairie_37, Purky_52, Pygmy_50, QueenHazel_44, Rattail_41, RedFox_41, Renna12_40, Rofo_51, Ruchi_38, Sanjuju_50, Sbash_58, Sejanus_64, Shipwreck_50, Silvy_46, SkinnyPete_45, Smoothie_92, Sonah_47, SpeedDemon_950, StevieRay_46, StressBall_46, StuartMinion_36, Stultus_49, Tangent_52, TaylorSipht_39, Techage_46, Thespis_46, Toad24_41, Toniann_91, Towmatter_86, ValentiniPuff_98, Venti_47, Vidya_46, Vulpecula_38, Westrich_47, WileyE_44, WilliamBoone_90, Willsammy_45, Xavia_54, Xeno_48, Xula_43, Yvonnestic_106, Zhuangyuan_45, Zilizebeth_47,

Summary by start number:

Start 31:

- Found in 24 of 322 (7.5%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Fosterous_52 (DE1),

Start 34:

- Found in 1 of 322 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_32 (singleton),

Start 38:

- Found in 20 of 322 (6.2%) of genes in pham
- Manual Annotations of this start: 11 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_39 (AS1), Antrice_48 (AS2), Basilisk_39 (AS1), Brynnie_38 (AS1), Chickaboom_40 (AS1), Cygnet_45 (AS2), Eesa_38 (AS1), Galaxy_38 (AS1), Gravel_48 (AS1), Jamun_38 (AS1), KendraB23_49 (AS1), Orcanus_39 (AS1), Pelletreau_48 (AS1), Ruchi_38 (AS1), TaylorSipt_39 (AS1), Toad24_41 (AS1), Vulpecula_38 (AS1), Westrich_47 (AS1), WileyE_44 (AS1), Zhuangyuan_45 (AS2),

Start 40:

- Found in 6 of 322 (1.9%) of genes in pham
- Manual Annotations of this start: 5 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_94 (DL), Daredevil_84 (DL), DatBoi_90 (DL), Mollymur_94 (DL), SpeedDemon_950 (DL), Towmatter_86 (DL),

Start 41:

- Found in 8 of 322 (2.5%) of genes in pham
- Manual Annotations of this start: 8 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobBob_50 (DE1), Charming_52 (DE1), Galadriel_52 (DE1), McKinley_54 (DE1), Nordenberg_47 (DE1), Paries_55 (DE1), Rofo_51 (DE1), Tangent_52 (DE1),

Start 42:

- Found in 51 of 322 (15.8%) of genes in pham
- Manual Annotations of this start: 30 of 266
- Called 92.2% of time when present
- Phage (with cluster) where this start called: Aleemily_39 (DZ), Altadena_37 (FH), Amelia_41 (AS2), AmiCi24_40 (AS3), Andrew_42 (AS3), Atlantica_41 (AS3), Babushka_43 (AS3), Bedetta_46 (AS2), Bibble12_45 (AS2), Bolt007_38 (FH), Bumble_35 (FH), Cafasso_40 (DZ), CalWood4100_40 (FH), Camara_41 (AS3), Circuit_35 (FH), Colusalem_44 (AS2), Coral_41 (AS2), Cote_43 (AS2), DanHam62_41 (AS3), Daob_43 (AS2), Glotell_43 (AS3), HamCheese_40 (AS3), HannahPhantana_42 (AS2), JKSyngboy_48 (DE1), Jerole_51 (AS2), Juno112_40 (AS3), KHumphrey_41 (AS3), Kepler_43 (AS2), Klevey_38 (FH), Kuleana_43 (AS2), Leona_40 (AS3), Lilmac1015_40 (FH), LittleTokyo_41 (AS2), Lunar_43 (AS2), Melons_43 (AS2), ModicumRichard_40 (DZ), Morgana_40 (DZ), ObLaDi_40 (DZ), OtsoOtso_49 (AS2), PhluffyCoco_41 (AS3), Polka_41 (AS2), Prairie_37 (FH), Rattail_41 (AS3), RedFox_41 (AS3), Renna12_40 (AS3), StuartMinion_36 (AS3),

VanLee_37 (singleton),

Start 43:

- Found in 8 of 322 (2.5%) of genes in pham
- Manual Annotations of this start: 7 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barsten_52 (DE1), ChadMasterC_52 (DE1), Fitzgerald_50 (DE1), FuegoCuervo_55 (DE1), Geodirt_50 (DE1), Jabberwocky_49 (DE1), Sanjuju_50 (DE1), Stultus_49 (DE1),

Start 44:

- Found in 1 of 322 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Doucette_41 (BW),

Start 46:

- Found in 141 of 322 (43.8%) of genes in pham
- Manual Annotations of this start: 121 of 266
- Called 97.9% of time when present
- Phage (with cluster) where this start called: APunk_52 (DE4), Abba_36 (AO3), Abblin_51 (DE4), Affeca_49 (DE1), Ailee_48 (DE1), Ali17_47 (DE2), Andies_45 (N), Angelicage_49 (DE1), Ashertheman_50 (DE1), BabeRuth_53 (N), Baddon_50 (DE1), BarretLemon_35 (AO2), Baumdotcom_48 (DE1), Beans_33 (AO1), Belphegor_49 (DE), Bibwit_49 (DE1), BigDome_35 (AO2), Bizzy_50 (DE1), Bosection6_46 (N), BossLady_35 (AO2), Brandonk123_53 (DE1), Brent_33 (AO1), Brujita_49 (I1), Butters_51 (N), Carcharodon_48 (N), Chewbacca_50 (N), Chickadee_47 (DE3), Delrey21_51 (DE4), Derg_45 (DE1), Dextert_48 (DE3), DoctorFroggo_51 (DE4), Dori_64 (AD), Duplicity_48 (N), EGUnicorn_49 (N), EMOore_47 (DE2), EastWest_36 (AO), EdmundFerry_46 (DE3), Flatwoods_50 (DE1), Franzy_33 (AO1), Fulbright_47 (N), GTE6_47 (DE3), Gaea_49 (DE1), Gex_48 (N), GravityBall_35 (AO2), Grekaycon_35 (AO2), Gustavo_50 (DE1), Hanako_52 (N), Hans_51 (DE2), Inspectinfecti_50 (DE2), Island3_49 (I1), JKerns_35 (AO2), Jamie19_46 (N), Jawnski_33 (AO1), Jordan_35 (AO2), Kamashten_50 (DE1), Keitabear_51 (DE1), Kevin1_50 (N), Kewpiedoll_52 (DE1), King2_33 (AO1), Kroos_50 (DE1), Kwekel_47 (DE3), Kwobi_51 (DE1), LeeroyJ_35 (AO2), Lennon_51 (DE1), Leonard_49 (DE2), LilHam_47 (DE1), Lilbeanie_53 (DE5), Love_56 (DE1), Magsby_48 (N), Martha_35 (AO2), Mask_64 (AD), MelBins_50 (DE2), Melville_51 (N), MoontowerMania_51 (DE1), NathanVaag_33 (AO1), Natkenzie_51 (DE4), Nенаe_52 (N), Nostromo_35 (AO3), Panchino_45 (N), Parmesanjohn_48 (N), PhancyPhin_52 (N), Phauci_42 (DE2), Phinally_49 (DE2), Phloss_46 (N), Phrann_49 (N), Piccoletto_33 (AO1), Pippa_35 (AO2), Pipsqueaks_48 (N), Purgamenstris_52 (N), Raymond7_46 (N), Rebel_44 (N), Redi_52 (N), Ribeye_50 (DE1), RiverRaider_52 (DE1), RoadKill_45 (DE3), Rubeelu_51 (N), Sampson_51 (DE4), Saronaya_50 (DE1), Schnauzer_49 (N), SchottB_48 (DE1), Scioto_52 (DE4), Scitech_45 (N), Sedona_51 (DE1), Shade_35 (AO2), Shivanishola_51 (DE1), ShrimpFriedEgg_52 (N), Shweta_46 (N), Sicarius2_36 (AO2), Silvafighter_49 (N), Sitar_51 (DE1), Smurph_48 (N), Snekmaggedon_46 (N), Sonny_35 (AO2), SpongeBob_46 (N), StevieBAY_35 (AO2), StorminNorm_49 (DE1), Stuck_62 (I2), TaeYoung_35 (AO2), Tangerine_49 (DE1), Tapioca_50 (N), Tardus_53 (DE4), Thing3_50 (DE1), ThulaThula_53 (P5), Tiamoceli_48 (DE3), Timinator_35 (AO2), Tortoise12_48 (N), TripleJ_55 (FJ), Twonlo_45 (DE3), Tycho_49 (DE1), Verity_51 (DE4), ViaConlectus_51 (DE4), Vivi2_55 (DE1), Wyborn_36 (AO2), Xerxes_48 (N), YorkOnyx_51 (DE1), Zartrosa_35

(AO2), Zipp_52 (DE4), Zitch_54 (DE4),

Start 47:

- Found in 1 of 322 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ValentiniPuff_98 (singleton),

Start 49:

- Found in 47 of 322 (14.6%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 2.1% of time when present
- Phage (with cluster) where this start called: B3_37 (BV),

Start 50:

- Found in 1 of 322 (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: Lukepolites_37 (singleton),

Start 51:

- Found in 21 of 322 (6.5%) of genes in pham
- Manual Annotations of this start: 18 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_90 (CQ1), Aphelion_90 (CQ1), Bachita_93 (CQ1), BrutonGaster_74 (CQ2), Cardigan_110 (DD), ClubL_91 (CQ1), Cucurbita_92 (CQ1), Culver_92 (CQ1), Dusty_87 (CQ1), Engineer_92 (CQ1), Geeche_89 (CQ1), JonJames_109 (DD), Lozinak_91 (CQ1), Miskis_83 (CQ1), Norvs_91 (CQ1), OneUp_81 (CQ2), PhinkBoden_90 (CQ1), Smoothie_92 (CQ1), Toniann_91 (CQ1), WilliamBoone_90 (CQ1), Yvonnetastic_106 (DD),

Start 52:

- Found in 2 of 322 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1_36 (BX), PFR2_38 (BX),

Start 53:

- Found in 67 of 322 (20.8%) of genes in pham
- Manual Annotations of this start: 58 of 266
- Called 94.0% of time when present
- Phage (with cluster) where this start called: Aggie_46 (N), Arib1_47 (P1), Atcoo_46 (P1), Babsiella_48 (I1), Bartholomew_46 (P1), Bhagsy_47 (P1), BigNuz_48 (P4), Bogie_50 (P1), Brusacoram_46 (P1), Bunnies_47 (P1), CactusJack_46 (P1), Camster_47 (P1), Charlie_48 (N), Che9c_61 (I2), Donovan_47 (P1), Dynamo_47 (P1), Etoile_46 (P1), FirstPlacePfu_47 (P1), Fishburne_46 (P1), Gavriela_46 (P1), Glaske_46 (P1), GreaseLightnin_47 (P1), HC_46 (I1), HUHilltop_48 (P1), Jebeks_48 (P1), Journey_47 (N), Jung_45 (P1), Juniormint_47 (P1), Kari_46 (P1), KilKor_46 (P1), Ksquared_46 (P1), Langerak_47 (P1), Majeke_47 (P1), Malithi_47 (P1), Mangethe_47 (P1), Mao1_65 (AD), Megiddo_46 (P1), Nazo_49 (P4), Necropolis_46 (P1), Phalm_46 (P1), Phayonce_47 (P5), Phegasus_47 (P1), Philonius_48 (N), Phineas_48 (P1), Polkaroo_47 (P1), Purky_52 (P6), QueenHazel_44 (I1), Sbash_58 (I2), Sejanus_64 (AD), Shipwreck_50 (P1), Silvy_46 (N), SkinnyPete_45 (N),

Sonah_47 (P1), StevieRay_46 (P1), StressBall_46 (P1), Techage_46 (P1), Thespis_46 (P1), Venti_47 (P1), Vidya_46 (P1), Willsammy_45 (P1), Xeno_48 (N), Xula_43 (I1), Zilizebeth_47 (P1),

Start 54:

- Found in 1 of 322 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MichelleMyBell_48 (N),

Start 55:

- Found in 1 of 322 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Xavia_54 (P3),

Start 58:

- Found in 56 of 322 (17.4%) of genes in pham
- Manual Annotations of this start: 1 of 266
- Called 1.8% of time when present
- Phage (with cluster) where this start called: Pygmy_50 (P1),

Summary by clusters:

There are 33 clusters represented in this pham: singleton, AS2, DD, DE, DL, BV, BW, DZ, FH, FJ, BX, I1, I2, CQ2, CQ1, AS3, P3, AS1, P1, P6, AD, P4, P5, AO, N, AO3, AO2, AO1, DE1, DE2, DE3, DE4, DE5,

Info for manual annotations of cluster AD:

- Start number 46 was manually annotated 2 times for cluster AD.
- Start number 53 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster AO:

- Start number 46 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 46 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 46 was manually annotated 17 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 46 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AS1:

- Start number 38 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 42 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 42 was manually annotated 7 times for cluster AS3.

Info for manual annotations of cluster BV:

- Start number 49 was manually annotated 1 time for cluster BV.

Info for manual annotations of cluster BW:

- Start number 44 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CQ1:

- Start number 51 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 51 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 51 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DE:

- Start number 46 was manually annotated 1 time for cluster DE.

Info for manual annotations of cluster DE1:

- Start number 31 was manually annotated 1 time for cluster DE1.
- Start number 41 was manually annotated 8 times for cluster DE1.
- Start number 42 was manually annotated 1 time for cluster DE1.
- Start number 43 was manually annotated 7 times for cluster DE1.
- Start number 46 was manually annotated 28 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 46 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 46 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 46 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 46 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DL:

- Start number 40 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DZ:

- Start number 42 was manually annotated 4 times for cluster DZ.

Info for manual annotations of cluster FH:

- Start number 42 was manually annotated 6 times for cluster FH.

Info for manual annotations of cluster FJ:

- Start number 46 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster I1:

- Start number 46 was manually annotated 2 times for cluster I1.
- Start number 53 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 53 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:

- Start number 46 was manually annotated 35 times for cluster N.
- Start number 53 was manually annotated 7 times for cluster N.
- Start number 54 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P1:

- Start number 53 was manually annotated 39 times for cluster P1.
- Start number 58 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P3:

- Start number 55 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 53 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 46 was manually annotated 1 time for cluster P5.
- Start number 53 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 53 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: APunk_52 Start: 43066, Stop: 44106, Start Num: 46

Candidate Starts for APunk_52:

(Start: 46 @43066 has 121 MA's), (68, 43156), (75, 43180), (76, 43192), (80, 43210), (100, 43288), (105, 43321), (145, 43495), (158, 43561), (168, 43609), (180, 43681), (182, 43696), (187, 43717), (191, 43738), (192, 43741), (220, 43846), (223, 43879), (224, 43891), (247, 44038), (250, 44074),

Gene: Abba_36 Start: 28749, Stop: 29633, Start Num: 46

Candidate Starts for Abba_36:

(Start: 46 @28749 has 121 MA's), (73, 28854), (75, 28860), (78, 28881), (94, 28938), (96, 28953), (100, 28968), (103, 28989), (124, 29073), (147, 29190), (150, 29211), (166, 29271), (168, 29286), (174, 29313), (180, 29370), (183, 29388), (186, 29400), (198, 29457), (232, 29586), (234, 29595),

Gene: Abblin_51 Start: 43588, Stop: 44628, Start Num: 46

Candidate Starts for Abblin_51:

(Start: 46 @43588 has 121 MA's), (68, 43678), (75, 43702), (76, 43714), (80, 43732), (100, 43810), (105, 43843), (145, 44017), (158, 44083), (168, 44131), (180, 44203), (182, 44218), (187, 44239), (191, 44260), (192, 44263), (220, 44368), (223, 44401), (224, 44413), (247, 44560), (250, 44596),

Gene: Abidatro_39 Start: 26326, Stop: 27126, Start Num: 38

Candidate Starts for Abidatro_39:

(Start: 38 @26326 has 11 MA's), (65, 26422), (68, 26431), (75, 26455), (80, 26485), (106, 26602), (147, 26815), (155, 26860), (180, 26980), (195, 27052), (196, 27055), (204, 27094),

Gene: Abscondus_90 Start: 55792, Stop: 56517, Start Num: 51

Candidate Starts for Abscondus_90:

(3, 55459), (5, 55492), (7, 55519), (8, 55522), (9, 55525), (17, 55633), (Start: 51 @55792 has 18 MA's), (77, 55900), (81, 55918), (85, 55933), (86, 55936), (97, 55987), (108, 56050), (122, 56077), (128, 56110), (135, 56149), (142, 56188), (149, 56218), (152, 56245), (163, 56290), (180, 56371), (184, 56395), (195, 56440), (201, 56470),

Gene: Affeca_49 Start: 42918, Stop: 43916, Start Num: 46

Candidate Starts for Affeca_49:

(10, 42675), (15, 42777), (Start: 31 @42864 has 1 MA's), (Start: 46 @42918 has 121 MA's), (57, 42954), (68, 43005), (70, 43011), (75, 43029), (80, 43059), (96, 43122), (100, 43137), (116, 43218), (121, 43233), (125, 43257), (129, 43281), (158, 43428), (166, 43461), (168, 43476), (180, 43545), (182, 43560), (195, 43617), (198, 43632), (242, 43809), (250, 43881),

Gene: Aggie_46 Start: 32126, Stop: 33115, Start Num: 53

Candidate Starts for Aggie_46:

(4, 31805), (18, 31973), (29, 32036), (Start: 53 @32126 has 58 MA's), (Start: 58 @32141 has 1 MA's), (68, 32189), (79, 32240), (102, 32336), (111, 32375), (141, 32510), (164, 32621), (166, 32624), (172, 32663), (178, 32687), (180, 32705), (189, 32750), (196, 32780), (198, 32792), (231, 32936), (246, 33035), (250, 33083),

Gene: Ailee_48 Start: 42523, Stop: 43524, Start Num: 46

Candidate Starts for Ailee_48:

(10, 42280), (15, 42382), (Start: 31 @42469 has 1 MA's), (Start: 46 @42523 has 121 MA's), (57, 42559), (68, 42610), (70, 42616), (75, 42634), (80, 42664), (96, 42727), (100, 42742), (116, 42823), (121, 42838), (125, 42862), (129, 42886), (158, 43033), (166, 43066), (168, 43081), (180, 43150), (182, 43165), (195, 43222), (198, 43237), (242, 43417), (250, 43489),

Gene: Aleemily_39 Start: 32837, Stop: 33721, Start Num: 42

Candidate Starts for Aleemily_39:

(Start: 42 @32837 has 30 MA's), (63, 32909), (67, 32927), (71, 32939), (76, 32966), (80, 32984), (100, 33071), (127, 33236), (151, 33368), (158, 33392), (164, 33419), (166, 33425), (179, 33506), (180, 33512), (188, 33551), (210, 33653),

Gene: Ali17_47 Start: 41267, Stop: 42328, Start Num: 46

Candidate Starts for Ali17_47:

(Start: 46 @41267 has 121 MA's), (57, 41303), (68, 41354), (75, 41378), (78, 41399), (87, 41435), (100, 41486), (105, 41519), (129, 41630), (158, 41777), (162, 41798), (166, 41810), (168, 41825), (180, 41906), (182, 41921), (191, 41963), (192, 41966), (223, 42095), (239, 42191), (247, 42263), (250, 42299),

Gene: Altadena_37 Start: 28014, Stop: 28847, Start Num: 42

Candidate Starts for Altadena_37:

(Start: 42 @28014 has 30 MA's), (68, 28104), (75, 28128), (100, 28236), (124, 28341), (147, 28461), (155, 28500), (180, 28638), (188, 28677),

Gene: Amelia_41 Start: 26090, Stop: 26884, Start Num: 42

Candidate Starts for Amelia_41:

(Start: 42 @26090 has 30 MA's), (68, 26183), (76, 26219), (80, 26237), (89, 26270), (106, 26354), (134, 26501), (135, 26504), (155, 26618), (168, 26672), (180, 26738), (190, 26792), (200, 26837), (204, 26852),

Gene: AmiCi24_40 Start: 26013, Stop: 26810, Start Num: 42

Candidate Starts for AmiCi24_40:

(Start: 42 @26013 has 30 MA's), (68, 26109), (80, 26163), (106, 26280), (114, 26316), (134, 26427), (147, 26499), (153, 26535), (155, 26544), (180, 26664), (185, 26691), (198, 26751),

Gene: Andies_45 Start: 32643, Stop: 33707, Start Num: 46

Candidate Starts for Andies_45:

(19, 32529), (Start: 46 @32643 has 121 MA's), (Start: 49 @32655 has 1 MA's), (65, 32721), (66, 32724), (68, 32730), (75, 32754), (78, 32775), (79, 32781), (82, 32793), (83, 32796), (85, 32805), (96, 32847), (100, 32862), (137, 33054), (152, 33135), (155, 33147), (158, 33156), (166, 33189), (168, 33204), (174, 33231), (180, 33285), (182, 33300), (186, 33315), (188, 33324), (194, 33354), (198, 33372), (199, 33378), (215, 33429), (225, 33486), (229, 33522), (231, 33528), (245, 33618), (246, 33627), (250, 33675), (251, 33684),

Gene: Andrew_42 Start: 25907, Stop: 26704, Start Num: 42

Candidate Starts for Andrew_42:

(Start: 42 @25907 has 30 MA's), (68, 26003), (76, 26039), (80, 26057), (83, 26069), (106, 26174), (114, 26210), (134, 26321), (147, 26393), (153, 26429), (155, 26438), (180, 26558), (185, 26585), (198, 26645),

Gene: Angelicage_49 Start: 43336, Stop: 44331, Start Num: 46

Candidate Starts for Angelicage_49:

(2, 42985), (10, 43093), (15, 43195), (Start: 31 @43282 has 1 MA's), (Start: 46 @43336 has 121 MA's), (57, 43372), (68, 43423), (70, 43429), (75, 43447), (80, 43477), (96, 43540), (100, 43555), (116, 43636), (121, 43651), (125, 43675), (129, 43699), (158, 43846), (166, 43879), (168, 43894), (180, 43963), (182, 43978), (195, 44035), (198, 44050), (242, 44224), (250, 44296),

Gene: Antrice_48 Start: 27283, Stop: 28095, Start Num: 38

Candidate Starts for Antrice_48:

(Start: 38 @27283 has 11 MA's), (Start: 53 @27328 has 58 MA's), (68, 27391), (75, 27415), (77, 27433), (80, 27445), (83, 27457), (106, 27562), (112, 27592), (124, 27664), (134, 27712), (147, 27784), (180, 27949), (198, 28036),

Gene: Aphelion_90 Start: 56388, Stop: 57113, Start Num: 51

Candidate Starts for Aphelion_90:

(5, 56088), (7, 56115), (8, 56118), (9, 56121), (17, 56229), (Start: 51 @56388 has 18 MA's), (77, 56496), (81, 56514), (85, 56529), (86, 56532), (97, 56583), (108, 56646), (122, 56673), (128, 56706), (135, 56745), (142, 56784), (149, 56814), (152, 56841), (163, 56886), (180, 56967), (184, 56991), (195, 57036), (201, 57066),

Gene: Arib1_47 Start: 32549, Stop: 33544, Start Num: 53

Candidate Starts for Arib1_47:

(4, 32228), (18, 32396), (29, 32459), (Start: 53 @32549 has 58 MA's), (Start: 58 @32564 has 1 MA's), (68, 32612), (79, 32663), (102, 32759), (111, 32798), (141, 32933), (164, 33044), (166, 33047), (172, 33086), (178, 33110), (180, 33128), (189, 33173), (196, 33203), (198, 33215), (231, 33362), (246, 33461), (250, 33509), (252, 33533),

Gene: Ashertheman_50 Start: 42632, Stop: 43633, Start Num: 46

Candidate Starts for Ashertheman_50:

(Start: 46 @42632 has 121 MA's), (57, 42668), (68, 42722), (75, 42746), (80, 42776), (88, 42806), (96, 42839), (100, 42854), (127, 42983), (129, 42998), (130, 43001), (158, 43145), (166, 43178), (168, 43193), (180, 43262), (182, 43277), (195, 43334), (198, 43349),

Gene: Atcoo_46 Start: 33030, Stop: 34004, Start Num: 53

Candidate Starts for Atcoo_46:

(Start: 53 @33030 has 58 MA's), (Start: 58 @33048 has 1 MA's), (68, 33096), (79, 33147), (83, 33162), (85, 33171), (111, 33282), (141, 33417), (164, 33528), (166, 33531), (172, 33570), (178, 33594), (180, 33612), (189, 33657), (196, 33687), (198, 33699), (215, 33756), (231, 33825), (246, 33924), (250, 33972),

Gene: Atlantica_41 Start: 26015, Stop: 26812, Start Num: 42

Candidate Starts for Atlantica_41:

(Start: 42 @26015 has 30 MA's), (68, 26111), (80, 26165), (106, 26282), (114, 26318), (134, 26429), (147, 26501), (153, 26537), (155, 26546), (180, 26666), (185, 26693), (198, 26753),

Gene: B3_37 Start: 26812, Stop: 27609, Start Num: 49

Candidate Starts for B3_37:

(32, 26755), (Start: 49 @26812 has 1 MA's), (68, 26887), (76, 26923), (134, 27193), (150, 27280), (158, 27307), (180, 27412), (185, 27439), (186, 27442), (187, 27448), (196, 27487),

Gene: BabeRuth_53 Start: 34364, Stop: 35428, Start Num: 46

Candidate Starts for BabeRuth_53:

(19, 34250), (Start: 46 @34364 has 121 MA's), (Start: 49 @34376 has 1 MA's), (65, 34442), (66, 34445), (68, 34451), (75, 34475), (78, 34496), (79, 34502), (82, 34514), (83, 34517), (85, 34526), (96, 34568), (100, 34583), (137, 34775), (152, 34856), (155, 34868), (158, 34877), (166, 34910), (168, 34925), (174, 34952), (180, 35006), (182, 35021), (186, 35036), (188, 35045), (194, 35075), (198, 35093), (199, 35099), (215, 35150), (225, 35207), (229, 35243), (231, 35249), (245, 35339), (246, 35348), (250, 35396), (251, 35405),

Gene: Babsiella_48 Start: 33402, Stop: 34397, Start Num: 53

Candidate Starts for Babsiella_48:

(21, 33267), (Start: 53 @33402 has 58 MA's), (Start: 58 @33417 has 1 MA's), (68, 33465), (79, 33516), (85, 33540), (111, 33651), (141, 33786), (164, 33897), (166, 33900), (172, 33939), (178, 33963), (180, 33981), (189, 34026), (196, 34056), (198, 34068), (215, 34125), (231, 34215), (246, 34314), (250, 34362), (252, 34386),

Gene: Babushka_43 Start: 25948, Stop: 26745, Start Num: 42

Candidate Starts for Babushka_43:

(16, 25816), (Start: 42 @25948 has 30 MA's), (68, 26044), (76, 26080), (80, 26098), (106, 26215), (134, 26362), (147, 26434), (155, 26479), (180, 26599), (198, 26686),

Gene: Bachita_93 Start: 56837, Stop: 57562, Start Num: 51

Candidate Starts for Bachita_93:

(5, 56537), (7, 56564), (8, 56567), (9, 56570), (25, 56732), (Start: 51 @56837 has 18 MA's), (77, 56945), (81, 56963), (85, 56978), (86, 56981), (97, 57032), (108, 57095), (122, 57122), (128, 57155), (135, 57194), (142, 57233), (149, 57263), (152, 57290), (163, 57335), (180, 57416), (184, 57440), (195, 57485), (201, 57515),

Gene: Baddon_50 Start: 43605, Stop: 44627, Start Num: 46

Candidate Starts for Baddon_50:

(15, 43464), (Start: 31 @43551 has 1 MA's), (Start: 42 @43599 has 30 MA's), (Start: 46 @43605 has 121 MA's), (57, 43641), (68, 43695), (75, 43719), (80, 43749), (88, 43779), (96, 43812), (100, 43827), (116, 43908), (127, 43956), (129, 43971), (130, 43974), (158, 44118), (166, 44151), (168, 44166), (180, 44235), (182, 44250), (195, 44307),

Gene: Bantam_94 Start: 63033, Stop: 62203, Start Num: 40

Candidate Starts for Bantam_94:

(Start: 40 @63033 has 5 MA's), (75, 62910), (81, 62874), (97, 62805), (124, 62697), (152, 62532), (157, 62514), (180, 62406), (213, 62262),

Gene: BarretLemon_35 Start: 29827, Stop: 30672, Start Num: 46

Candidate Starts for BarretLemon_35:

(Start: 46 @29827 has 121 MA's), (68, 29920), (69, 29923), (75, 29944), (80, 29974), (100, 30052), (109, 30109), (124, 30157), (134, 30208), (135, 30211), (137, 30226), (147, 30274), (150, 30292), (166, 30352), (174, 30394), (178, 30433), (180, 30451), (183, 30469), (188, 30490), (191, 30508), (212, 30589), (215, 30595),

Gene: Barsten_52 Start: 43289, Stop: 44287, Start Num: 43

Candidate Starts for Barsten_52:

(30, 43238), (Start: 43 @43289 has 7 MA's), (57, 43325), (68, 43376), (70, 43382), (75, 43400), (80, 43430), (96, 43493), (100, 43508), (116, 43589), (121, 43604), (125, 43628), (129, 43652), (158, 43799), (166, 43832), (168, 43847), (180, 43916), (182, 43931), (195, 43988), (198, 44003), (242, 44180), (250, 44252),

Gene: Bartholomew_46 Start: 32543, Stop: 33535, Start Num: 53

Candidate Starts for Bartholomew_46:

(4, 32222), (18, 32390), (29, 32453), (Start: 53 @32543 has 58 MA's), (Start: 58 @32558 has 1 MA's), (68, 32606), (79, 32657), (102, 32753), (111, 32792), (141, 32927), (164, 33038), (166, 33041), (172, 33080), (178, 33104), (180, 33122), (189, 33167), (196, 33197), (198, 33209), (231, 33353), (246, 33452), (250, 33500), (252, 33524),

Gene: Basilisk_39 Start: 26840, Stop: 27646, Start Num: 38

Candidate Starts for Basilisk_39:

(Start: 38 @26840 has 11 MA's), (65, 26936), (68, 26945), (76, 26981), (80, 26999), (153, 27374), (166, 27419), (180, 27500), (203, 27611), (204, 27614),

Gene: Baumdotcom_48 Start: 42032, Stop: 43054, Start Num: 46

Candidate Starts for Baumdotcom_48:

(Start: 46 @42032 has 121 MA's), (57, 42068), (68, 42122), (75, 42146), (80, 42176), (88, 42206), (96, 42239), (100, 42254), (116, 42335), (127, 42383), (129, 42398), (130, 42401), (158, 42545), (166, 42578), (168, 42593), (180, 42662), (182, 42677), (195, 42734), (198, 42749),

Gene: Beans_33 Start: 29523, Stop: 30368, Start Num: 46

Candidate Starts for Beans_33:

(Start: 46 @29523 has 121 MA's), (68, 29610), (73, 29628), (75, 29634), (78, 29655), (100, 29742), (109, 29799), (124, 29847), (147, 29964), (166, 30042), (170, 30069), (174, 30084), (178, 30123), (180, 30141), (183, 30159), (188, 30180), (191, 30198),

Gene: Bedetta_46 Start: 26237, Stop: 27031, Start Num: 42

Candidate Starts for Bedetta_46:

(Start: 42 @26237 has 30 MA's), (68, 26330), (76, 26366), (80, 26384), (89, 26417), (106, 26501), (134, 26648), (135, 26651), (155, 26765), (168, 26819), (180, 26885), (190, 26939), (200, 26984), (204, 26999),

Gene: Belphegor_49 Start: 43122, Stop: 44186, Start Num: 46

Candidate Starts for Belphegor_49:

(Start: 46 @43122 has 121 MA's), (63, 43188), (67, 43206), (68, 43209), (75, 43233), (76, 43245), (80, 43263), (85, 43284), (99, 43338), (100, 43341), (105, 43374), (158, 43632), (162, 43653), (166, 43665), (168, 43680), (180, 43761), (182, 43776), (191, 43818), (192, 43821), (198, 43848), (223, 43959), (239, 44040), (247, 44112), (250, 44148),

Gene: Bhagsy_47 Start: 32535, Stop: 33509, Start Num: 53

Candidate Starts for Bhagsy_47:

(Start: 53 @32535 has 58 MA's), (Start: 58 @32553 has 1 MA's), (68, 32601), (79, 32652), (83, 32667), (85, 32676), (111, 32787), (141, 32922), (164, 33033), (166, 33036), (172, 33075), (178, 33099), (180, 33117), (189, 33162), (196, 33192), (198, 33204), (215, 33261), (231, 33330), (246, 33429), (250, 33477),

Gene: Bible12_45 Start: 26085, Stop: 26879, Start Num: 42

Candidate Starts for Bible12_45:

(Start: 42 @26085 has 30 MA's), (68, 26178), (76, 26214), (80, 26232), (89, 26265), (106, 26349), (134, 26496), (135, 26499), (155, 26613), (168, 26667), (180, 26733), (190, 26787), (200, 26832), (204, 26847),

Gene: Bibwit_49 Start: 42164, Stop: 43165, Start Num: 46

Candidate Starts for Bibwit_49:

(10, 41921), (15, 42023), (Start: 31 @42110 has 1 MA's), (Start: 46 @42164 has 121 MA's), (57, 42200), (68, 42254), (75, 42278), (80, 42308), (88, 42338), (96, 42371), (100, 42386), (127, 42515), (129, 42530), (130, 42533), (158, 42677), (166, 42710), (168, 42725), (180, 42794), (181, 42800), (182, 42809), (195, 42866), (198, 42881),

Gene: BigDome_35 Start: 29819, Stop: 30664, Start Num: 46

Candidate Starts for BigDome_35:

(Start: 46 @29819 has 121 MA's), (68, 29912), (69, 29915), (75, 29936), (80, 29966), (100, 30044), (109, 30101), (124, 30149), (134, 30200), (135, 30203), (137, 30218), (147, 30266), (150, 30284), (166, 30344), (174, 30386), (178, 30425), (180, 30443), (183, 30461), (188, 30482), (191, 30500), (198, 30530), (206, 30569), (212, 30581), (215, 30587),

Gene: BigNuz_48 Start: 34451, Stop: 35503, Start Num: 53

Candidate Starts for BigNuz_48:

(Start: 49 @34433 has 1 MA's), (Start: 53 @34451 has 58 MA's), (62, 34490), (69, 34526), (75, 34547), (76, 34559), (82, 34586), (111, 34739), (116, 34766), (125, 34805), (140, 34886), (141, 34892), (158, 34967), (164, 34994), (180, 35075), (185, 35102), (230, 35318), (231, 35324), (246, 35423), (250, 35471),

Gene: Bizzy_50 Start: 42320, Stop: 43342, Start Num: 46

Candidate Starts for Bizzy_50:

(Start: 46 @42320 has 121 MA's), (57, 42356), (68, 42410), (75, 42434), (80, 42464), (88, 42494), (96, 42527), (100, 42542), (116, 42623), (127, 42671), (129, 42686), (130, 42689), (158, 42833), (166, 42866), (168, 42881), (180, 42950), (182, 42965), (195, 43022), (198, 43037),

Gene: BobBob_50 Start: 42507, Stop: 43514, Start Num: 41

Candidate Starts for BobBob_50:

(Start: 41 @42507 has 8 MA's), (45, 42516), (57, 42552), (68, 42603), (70, 42609), (75, 42627), (80, 42657), (96, 42720), (100, 42735), (109, 42786), (127, 42864), (158, 43026), (166, 43059), (168, 43074), (180, 43143), (182, 43158), (195, 43215), (198, 43230), (242, 43407), (250, 43479),

Gene: Bogie_50 Start: 34801, Stop: 35775, Start Num: 53

Candidate Starts for Bogie_50:

(Start: 53 @34801 has 58 MA's), (Start: 58 @34819 has 1 MA's), (68, 34867), (79, 34918), (85, 34942), (111, 35053), (141, 35188), (164, 35299), (166, 35302), (172, 35341), (178, 35365), (180, 35383), (189, 35428), (196, 35458), (198, 35470), (215, 35527), (231, 35596), (246, 35695), (250, 35743),

Gene: Bolt007_38 Start: 30497, Stop: 31360, Start Num: 42

Candidate Starts for Bolt007_38:

(Start: 42 @30497 has 30 MA's), (68, 30587), (75, 30611), (100, 30719), (124, 30824), (147, 30944), (180, 31121), (188, 31160), (190, 31175), (199, 31214), (218, 31277),

Gene: Bosection6_46 Start: 32109, Stop: 33173, Start Num: 46

Candidate Starts for Bosection6_46:

(1, 31737), (19, 31995), (Start: 46 @32109 has 121 MA's), (Start: 49 @32121 has 1 MA's), (65, 32187), (66, 32190), (68, 32196), (75, 32220), (78, 32241), (79, 32247), (82, 32259), (83, 32262), (85, 32271), (96, 32313), (100, 32328), (137, 32520), (152, 32601), (155, 32613), (158, 32622), (166, 32655), (168, 32670), (174, 32697), (180, 32751), (182, 32766), (186, 32781), (188, 32790), (194, 32820), (198, 32838), (199, 32844), (215, 32895), (225, 32952), (229, 32988), (231, 32994), (245, 33084), (246, 33093), (250, 33141), (251, 33150),

Gene: BossLady_35 Start: 29796, Stop: 30644, Start Num: 46

Candidate Starts for BossLady_35:

(Start: 46 @29796 has 121 MA's), (68, 29886), (69, 29889), (75, 29910), (79, 29937), (80, 29940), (100, 30018), (109, 30075), (124, 30123), (134, 30174), (135, 30177), (147, 30240), (150, 30258), (166, 30318), (174, 30360), (178, 30399), (180, 30417), (183, 30435), (188, 30456), (191, 30474), (198, 30504), (212, 30555), (228, 30621),

Gene: Brandonk123_53 Start: 43467, Stop: 44465, Start Num: 46

Candidate Starts for Brandonk123_53:

(15, 43326), (Start: 31 @43413 has 1 MA's), (Start: 46 @43467 has 121 MA's), (57, 43503), (68, 43554), (70, 43560), (75, 43578), (80, 43608), (96, 43671), (100, 43686), (116, 43767), (121, 43782), (125, 43806), (129, 43830), (138, 43878), (158, 43977), (166, 44010), (168, 44025), (180, 44094), (182, 44109), (195, 44166), (198, 44181), (242, 44358), (250, 44430),

Gene: Brent_33 Start: 29486, Stop: 30331, Start Num: 46

Candidate Starts for Brent_33:

(Start: 46 @29486 has 121 MA's), (68, 29576), (73, 29594), (75, 29600), (78, 29621), (84, 29648), (100, 29708), (109, 29765), (124, 29813), (147, 29930), (166, 30008), (170, 30035), (174, 30050), (178, 30089), (180, 30107), (183, 30125), (188, 30146), (191, 30164), (201, 30209),

Gene: Brujita_49 Start: 34787, Stop: 35854, Start Num: 46

Candidate Starts for Brujita_49:

(Start: 46 @34787 has 121 MA's), (Start: 49 @34799 has 1 MA's), (65, 34865), (68, 34874), (75, 34898), (78, 34919), (79, 34925), (83, 34940), (85, 34949), (96, 34991), (100, 35006), (116, 35093), (155, 35291), (166, 35333), (168, 35348), (174, 35375), (177, 35396), (180, 35429), (182, 35444), (186, 35459), (188, 35468), (194, 35498), (198, 35516), (199, 35522), (208, 35555), (215, 35573), (230, 35666), (231, 35672), (246, 35771), (250, 35819), (252, 35843),

Gene: Brusacoram_46 Start: 32536, Stop: 33510, Start Num: 53

Candidate Starts for Brusacoram_46:

(Start: 53 @32536 has 58 MA's), (Start: 58 @32554 has 1 MA's), (68, 32602), (79, 32653), (83, 32668), (85, 32677), (111, 32788), (141, 32923), (164, 33034), (166, 33037), (172, 33076), (178, 33100), (180, 33118), (189, 33163), (196, 33193), (198, 33205), (215, 33262), (231, 33331), (246, 33430), (250, 33478),

Gene: BrutonGaster_74 Start: 51893, Stop: 52576, Start Num: 51

Candidate Starts for BrutonGaster_74:

(Start: 51 @51893 has 18 MA's), (74, 51980), (77, 52001), (81, 52019), (86, 52037), (97, 52088), (122, 52178), (128, 52211), (142, 52289), (149, 52319), (152, 52346), (163, 52391), (180, 52472), (184,

52496), (195, 52541), (202, 52571),

Gene: Brynnie_38 Start: 26718, Stop: 27524, Start Num: 38

Candidate Starts for Brynnie_38:

(Start: 38 @26718 has 11 MA's), (65, 26814), (68, 26823), (76, 26859), (80, 26877), (120, 27069), (153, 27252), (180, 27378), (203, 27489),

Gene: Bumble_35 Start: 28079, Stop: 28930, Start Num: 42

Candidate Starts for Bumble_35:

(Start: 42 @28079 has 30 MA's), (68, 28169), (75, 28193), (100, 28301), (124, 28406), (155, 28565), (166, 28604), (180, 28685), (188, 28724), (233, 28919),

Gene: Bunnies_47 Start: 32550, Stop: 33524, Start Num: 53

Candidate Starts for Bunnies_47:

(Start: 53 @32550 has 58 MA's), (Start: 58 @32568 has 1 MA's), (68, 32616), (79, 32667), (83, 32682), (85, 32691), (111, 32802), (141, 32937), (164, 33048), (166, 33051), (172, 33090), (178, 33114), (180, 33132), (189, 33177), (196, 33207), (198, 33219), (215, 33276), (231, 33345), (246, 33444), (250, 33492),

Gene: Butters_51 Start: 34063, Stop: 35127, Start Num: 46

Candidate Starts for Butters_51:

(Start: 46 @34063 has 121 MA's), (Start: 49 @34075 has 1 MA's), (65, 34141), (68, 34150), (75, 34174), (78, 34195), (79, 34201), (83, 34216), (85, 34225), (96, 34267), (100, 34282), (116, 34369), (155, 34567), (166, 34609), (168, 34624), (174, 34651), (177, 34672), (180, 34705), (182, 34720), (186, 34735), (188, 34744), (194, 34774), (198, 34792), (199, 34798), (208, 34831), (215, 34849), (230, 34942), (231, 34948), (245, 35038), (246, 35047), (250, 35095), (251, 35104),

Gene: CactusJack_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for CactusJack_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250, 33742),

Gene: Cafasso_40 Start: 33411, Stop: 34295, Start Num: 42

Candidate Starts for Cafasso_40:

(Start: 42 @33411 has 30 MA's), (63, 33483), (67, 33501), (71, 33513), (76, 33540), (80, 33558), (100, 33645), (127, 33810), (151, 33942), (158, 33966), (164, 33993), (166, 33999), (179, 34080), (180, 34086), (188, 34125), (210, 34227),

Gene: CalWood4100_40 Start: 29991, Stop: 30845, Start Num: 42

Candidate Starts for CalWood4100_40:

(Start: 42 @29991 has 30 MA's), (68, 30081), (75, 30105), (100, 30213), (124, 30318), (147, 30438), (180, 30615), (188, 30654), (218, 30771),

Gene: Camara_41 Start: 26017, Stop: 26814, Start Num: 42

Candidate Starts for Camara_41:

(Start: 42 @26017 has 30 MA's), (68, 26113), (80, 26167), (106, 26284), (114, 26320), (134, 26431), (147, 26503), (153, 26539), (155, 26548), (180, 26668), (198, 26755),

Gene: Camster_47 Start: 32557, Stop: 33531, Start Num: 53

Candidate Starts for Camster_47:

(Start: 53 @32557 has 58 MA's), (Start: 58 @32575 has 1 MA's), (68, 32623), (79, 32674), (85, 32698), (111, 32809), (141, 32944), (164, 33055), (166, 33058), (172, 33097), (178, 33121), (180, 33139), (189, 33184), (196, 33214), (198, 33226), (215, 33283), (231, 33352), (246, 33451), (250, 33499),

Gene: Carcharodon_48 Start: 33458, Stop: 34519, Start Num: 46

Candidate Starts for Carcharodon_48:

(Start: 46 @33458 has 121 MA's), (Start: 49 @33470 has 1 MA's), (65, 33536), (66, 33539), (68, 33545), (75, 33569), (78, 33590), (79, 33596), (82, 33608), (83, 33611), (85, 33620), (96, 33662), (100, 33677), (116, 33764), (137, 33869), (139, 33878), (147, 33923), (152, 33950), (155, 33962), (162, 33992), (166, 34004), (168, 34019), (174, 34046), (177, 34067), (180, 34100), (182, 34115), (183, 34118), (186, 34130), (188, 34139), (198, 34187), (199, 34193), (215, 34244), (220, 34268), (225, 34301), (227, 34304), (229, 34334), (231, 34340), (242, 34412), (245, 34430), (246, 34439), (250, 34487), (251, 34496),

Gene: Cardigan_110 Start: 63451, Stop: 64143, Start Num: 51

Candidate Starts for Cardigan_110:

(Start: 51 @63451 has 18 MA's), (64, 63505), (74, 63538), (81, 63577), (91, 63613), (93, 63622), (97, 63646), (99, 63655), (100, 63658), (124, 63754), (133, 63796), (135, 63808), (146, 63865), (150, 63901), (157, 63925), (163, 63952), (165, 63958), (180, 64033), (188, 64072), (192, 64093),

Gene: ChadMasterC_52 Start: 44688, Stop: 45686, Start Num: 43

Candidate Starts for ChadMasterC_52:

(30, 44637), (Start: 43 @44688 has 7 MA's), (57, 44724), (68, 44775), (70, 44781), (75, 44799), (80, 44829), (96, 44892), (100, 44907), (116, 44988), (125, 45027), (129, 45051), (158, 45198), (166, 45231), (168, 45246), (180, 45315), (182, 45330), (195, 45387), (198, 45402), (242, 45579), (250, 45651),

Gene: Charlie_48 Start: 31920, Stop: 32912, Start Num: 53

Candidate Starts for Charlie_48:

(4, 31599), (18, 31767), (29, 31830), (Start: 53 @31920 has 58 MA's), (Start: 58 @31935 has 1 MA's), (68, 31983), (79, 32034), (102, 32130), (111, 32169), (141, 32304), (164, 32415), (166, 32418), (172, 32457), (178, 32481), (180, 32499), (189, 32544), (196, 32574), (198, 32586), (231, 32730), (246, 32829), (250, 32877), (252, 32901),

Gene: Charming_52 Start: 42946, Stop: 43956, Start Num: 41

Candidate Starts for Charming_52:

(Start: 41 @42946 has 8 MA's), (45, 42955), (57, 42991), (68, 43045), (70, 43051), (75, 43069), (80, 43099), (96, 43162), (100, 43177), (116, 43258), (129, 43321), (158, 43468), (166, 43501), (168, 43516), (180, 43585), (182, 43600), (195, 43657), (198, 43672), (240, 43837), (250, 43921),

Gene: Che9c_61 Start: 43643, Stop: 44704, Start Num: 53

Candidate Starts for Che9c_61:

(Start: 49 @43625 has 1 MA's), (Start: 53 @43643 has 58 MA's), (64, 43703), (67, 43712), (69, 43718), (75, 43739), (76, 43751), (82, 43778), (111, 43931), (116, 43958), (140, 44078), (146, 44105), (158, 44159), (164, 44186), (169, 44213), (180, 44267), (185, 44294), (230, 44519), (231, 44525), (251, 44681),

Gene: Chewbacca_50 Start: 33458, Stop: 34519, Start Num: 46

Candidate Starts for Chewbacca_50:

(Start: 46 @33458 has 121 MA's), (Start: 49 @33470 has 1 MA's), (65, 33536), (66, 33539), (68, 33545), (75, 33569), (78, 33590), (79, 33596), (82, 33608), (83, 33611), (85, 33620), (96, 33662), (100, 33677), (116, 33764), (137, 33869), (139, 33878), (147, 33923), (152, 33950), (155, 33962), (162, 33992), (166, 34004), (168, 34019), (174, 34046), (177, 34067), (180, 34100), (182, 34115), (183,

34118), (186, 34130), (188, 34139), (198, 34187), (199, 34193), (215, 34244), (220, 34268), (225, 34301), (227, 34304), (229, 34334), (231, 34340), (242, 34412), (245, 34430), (246, 34439), (250, 34487), (251, 34496),

Gene: Chickaboom_40 Start: 26337, Stop: 27143, Start Num: 38

Candidate Starts for Chickaboom_40:

(Start: 38 @26337 has 11 MA's), (65, 26433), (68, 26442), (80, 26496), (90, 26535), (100, 26574), (153, 26871), (180, 26997), (203, 27108),

Gene: Chickadee_47 Start: 39366, Stop: 40424, Start Num: 46

Candidate Starts for Chickadee_47:

(35, 39336), (Start: 46 @39366 has 121 MA's), (68, 39453), (75, 39477), (80, 39507), (96, 39570), (100, 39585), (105, 39618), (129, 39729), (135, 39756), (145, 39810), (158, 39876), (162, 39897), (166, 39909), (168, 39924), (180, 40008), (183, 40026), (187, 40044), (191, 40065), (198, 40095), (223, 40206), (240, 40311), (243, 40332), (249, 40389), (250, 40395),

Gene: Circuit_35 Start: 29044, Stop: 29892, Start Num: 42

Candidate Starts for Circuit_35:

(Start: 42 @29044 has 30 MA's), (68, 29134), (75, 29158), (100, 29266), (124, 29371), (155, 29530), (166, 29569), (180, 29650), (188, 29689),

Gene: ClubL_91 Start: 55523, Stop: 56248, Start Num: 51

Candidate Starts for ClubL_91:

(Start: 51 @55523 has 18 MA's), (77, 55631), (81, 55649), (85, 55664), (86, 55667), (97, 55718), (108, 55781), (122, 55808), (128, 55841), (135, 55880), (142, 55919), (149, 55949), (152, 55976), (163, 56021), (180, 56102), (184, 56126), (201, 56201),

Gene: Colusalem_44 Start: 26067, Stop: 26861, Start Num: 42

Candidate Starts for Colusalem_44:

(Start: 42 @26067 has 30 MA's), (68, 26160), (76, 26196), (80, 26214), (89, 26247), (97, 26280), (106, 26331), (134, 26478), (135, 26481), (155, 26595), (168, 26649), (180, 26715), (190, 26769), (200, 26814), (204, 26829),

Gene: Coral_41 Start: 25938, Stop: 26732, Start Num: 42

Candidate Starts for Coral_41:

(Start: 42 @25938 has 30 MA's), (68, 26031), (76, 26067), (80, 26085), (89, 26118), (106, 26202), (134, 26349), (135, 26352), (155, 26466), (168, 26520), (180, 26586), (190, 26640), (200, 26685), (204, 26700),

Gene: Cote_43 Start: 26415, Stop: 27209, Start Num: 42

Candidate Starts for Cote_43:

(Start: 42 @26415 has 30 MA's), (68, 26508), (76, 26544), (80, 26562), (89, 26595), (106, 26679), (134, 26826), (135, 26829), (155, 26943), (168, 26997), (180, 27063), (190, 27117), (200, 27162), (204, 27177),

Gene: Cucurbita_92 Start: 57344, Stop: 58069, Start Num: 51

Candidate Starts for Cucurbita_92:

(5, 57044), (7, 57071), (8, 57074), (9, 57077), (25, 57239), (Start: 51 @57344 has 18 MA's), (77, 57452), (81, 57470), (85, 57485), (86, 57488), (97, 57539), (108, 57602), (122, 57629), (128, 57662), (135, 57701), (142, 57740), (149, 57770), (152, 57797), (163, 57842), (180, 57923), (184, 57947), (195, 57992), (201, 58022),

Gene: Culver_92 Start: 55420, Stop: 56145, Start Num: 51

Candidate Starts for Culver_92:

(Start: 51 @55420 has 18 MA's), (77, 55528), (81, 55546), (85, 55561), (86, 55564), (97, 55615), (108, 55678), (122, 55705), (128, 55738), (135, 55777), (142, 55816), (149, 55846), (152, 55873), (180, 55999), (184, 56023), (201, 56098),

Gene: Cygnet_45 Start: 26877, Stop: 27689, Start Num: 38

Candidate Starts for Cygnet_45:

(Start: 38 @26877 has 11 MA's), (Start: 53 @26922 has 58 MA's), (60, 26940), (68, 26985), (80, 27039), (83, 27051), (106, 27156), (112, 27186), (154, 27417), (180, 27543), (198, 27630),

Gene: DanHam62_41 Start: 26014, Stop: 26811, Start Num: 42

Candidate Starts for DanHam62_41:

(Start: 42 @26014 has 30 MA's), (68, 26110), (80, 26164), (106, 26281), (114, 26317), (134, 26428), (147, 26500), (153, 26536), (155, 26545), (180, 26665), (185, 26692), (198, 26752),

Gene: Daob_43 Start: 26423, Stop: 27217, Start Num: 42

Candidate Starts for Daob_43:

(Start: 42 @26423 has 30 MA's), (68, 26516), (76, 26552), (80, 26570), (89, 26603), (106, 26687), (134, 26834), (135, 26837), (155, 26951), (160, 26975), (180, 27071), (190, 27125), (204, 27185),

Gene: Daredevil_84 Start: 58699, Stop: 57869, Start Num: 40

Candidate Starts for Daredevil_84:

(Start: 40 @58699 has 5 MA's), (64, 58609), (81, 58537), (97, 58468), (110, 58402), (124, 58360), (152, 58195), (157, 58177), (180, 58069), (184, 58045), (213, 57931), (221, 57877),

Gene: DatBoi_90 Start: 62181, Stop: 61351, Start Num: 40

Candidate Starts for DatBoi_90:

(Start: 40 @62181 has 5 MA's), (75, 62058), (81, 62022), (97, 61953), (124, 61845), (152, 61680), (157, 61662), (171, 61593), (180, 61554),

Gene: Delrey21_51 Start: 44353, Stop: 45396, Start Num: 46

Candidate Starts for Delrey21_51:

(Start: 46 @44353 has 121 MA's), (68, 44443), (75, 44467), (76, 44479), (100, 44575), (145, 44782), (158, 44848), (168, 44896), (180, 44968), (182, 44983), (187, 45004), (191, 45025), (192, 45028), (198, 45055), (220, 45133), (223, 45166), (224, 45178), (243, 45301), (247, 45328), (250, 45364),

Gene: Derg_45 Start: 41912, Stop: 42934, Start Num: 46

Candidate Starts for Derg_45:

(Start: 46 @41912 has 121 MA's), (57, 41948), (68, 42002), (75, 42026), (80, 42056), (88, 42086), (96, 42119), (100, 42134), (116, 42215), (127, 42263), (129, 42278), (130, 42281), (158, 42425), (166, 42458), (168, 42473), (180, 42542), (182, 42557), (195, 42614),

Gene: Dxdert_48 Start: 39661, Stop: 40713, Start Num: 46

Candidate Starts for Dxdert_48:

(Start: 46 @39661 has 121 MA's), (68, 39748), (75, 39772), (80, 39802), (96, 39865), (100, 39880), (105, 39913), (129, 40024), (135, 40051), (145, 40105), (158, 40171), (162, 40192), (166, 40204), (168, 40219), (180, 40303), (183, 40321), (187, 40339), (198, 40390), (223, 40492), (240, 40600), (243, 40621), (250, 40684),

Gene: DoctorFroggo_51 Start: 44353, Stop: 45396, Start Num: 46

Candidate Starts for DoctorFroggo_51:

(Start: 46 @44353 has 121 MA's), (68, 44443), (75, 44467), (76, 44479), (100, 44575), (145, 44782), (158, 44848), (168, 44896), (180, 44968), (182, 44983), (187, 45004), (191, 45025), (192, 45028),

(198, 45055), (220, 45133), (223, 45166), (224, 45178), (243, 45301), (247, 45328), (250, 45364),

Gene: Donovan_47 Start: 32566, Stop: 33558, Start Num: 53

Candidate Starts for Donovan_47:

(4, 32245), (18, 32413), (29, 32476), (Start: 53 @32566 has 58 MA's), (Start: 58 @32581 has 1 MA's), (68, 32629), (79, 32680), (102, 32776), (111, 32815), (141, 32950), (164, 33061), (166, 33064), (172, 33103), (178, 33127), (180, 33145), (189, 33190), (196, 33220), (198, 33232), (231, 33376), (246, 33475), (250, 33523), (252, 33547),

Gene: Dori_64 Start: 50133, Stop: 51218, Start Num: 46

Candidate Starts for Dori_64:

(Start: 46 @50133 has 121 MA's), (56, 50169), (65, 50208), (68, 50217), (75, 50241), (78, 50262), (83, 50283), (85, 50292), (90, 50310), (95, 50343), (100, 50364), (102, 50379), (103, 50385), (107, 50406), (121, 50466), (132, 50526), (135, 50541), (148, 50613), (149, 50616), (166, 50700), (168, 50715), (174, 50742), (180, 50799), (182, 50814), (183, 50817), (186, 50829), (187, 50835), (188, 50838), (194, 50868), (198, 50886), (199, 50892), (215, 50943), (220, 50967), (225, 51000), (227, 51003), (229, 51033), (231, 51039), (238, 51072), (246, 51138), (248, 51162), (251, 51195),

Gene: Doucette_41 Start: 28699, Stop: 29496, Start Num: 44

Candidate Starts for Doucette_41:

(14, 28546), (37, 28684), (Start: 44 @28699 has 1 MA's), (48, 28711), (68, 28795), (76, 28831), (80, 28849), (82, 28858), (96, 28912), (111, 28981), (124, 29038), (125, 29041), (150, 29176), (151, 29179), (180, 29311), (185, 29338), (188, 29350), (193, 29377),

Gene: Duplicity_48 Start: 33467, Stop: 34528, Start Num: 46

Candidate Starts for Duplicity_48:

(Start: 46 @33467 has 121 MA's), (Start: 49 @33479 has 1 MA's), (65, 33545), (66, 33548), (68, 33554), (75, 33578), (78, 33599), (79, 33605), (82, 33617), (83, 33620), (85, 33629), (96, 33671), (100, 33686), (116, 33773), (137, 33878), (139, 33887), (147, 33932), (152, 33959), (155, 33971), (162, 34001), (166, 34013), (168, 34028), (174, 34055), (177, 34076), (180, 34109), (182, 34124), (183, 34127), (186, 34139), (188, 34148), (198, 34196), (199, 34202), (215, 34253), (220, 34277), (225, 34310), (227, 34313), (229, 34343), (231, 34349), (242, 34421), (245, 34439), (246, 34448), (250, 34496), (251, 34505),

Gene: Dusty_87 Start: 55039, Stop: 55764, Start Num: 51

Candidate Starts for Dusty_87:

(3, 54706), (5, 54739), (7, 54766), (8, 54769), (9, 54772), (17, 54880), (Start: 51 @55039 has 18 MA's), (77, 55147), (81, 55165), (85, 55180), (86, 55183), (97, 55234), (108, 55297), (122, 55324), (128, 55357), (135, 55396), (142, 55435), (149, 55465), (152, 55492), (163, 55537), (180, 55618), (184, 55642), (195, 55687), (201, 55717),

Gene: Dynamo_47 Start: 33026, Stop: 34018, Start Num: 53

Candidate Starts for Dynamo_47:

(4, 32705), (18, 32873), (29, 32936), (Start: 53 @33026 has 58 MA's), (Start: 58 @33041 has 1 MA's), (68, 33089), (79, 33140), (102, 33236), (111, 33275), (141, 33410), (164, 33521), (166, 33524), (172, 33563), (178, 33587), (180, 33605), (189, 33650), (196, 33680), (198, 33692), (231, 33836), (246, 33935), (250, 33983), (252, 34007),

Gene: EGUunicorn_49 Start: 32155, Stop: 33219, Start Num: 46

Candidate Starts for EGUunicorn_49:

(19, 32041), (Start: 46 @32155 has 121 MA's), (Start: 49 @32167 has 1 MA's), (65, 32233), (66, 32236), (68, 32242), (75, 32266), (78, 32287), (79, 32293), (82, 32305), (83, 32308), (85, 32317), (96, 32359), (100, 32374), (137, 32566), (152, 32647), (155, 32659), (158, 32668), (166, 32701), (168,

32716), (174, 32743), (180, 32797), (182, 32812), (186, 32827), (188, 32836), (194, 32866), (198, 32884), (199, 32890), (215, 32941), (225, 32998), (229, 33034), (231, 33040), (242, 33112), (245, 33130), (246, 33139), (250, 33187), (251, 33196),

Gene: EMoore_47 Start: 42468, Stop: 43541, Start Num: 46

Candidate Starts for EMoore_47:

(Start: 46 @42468 has 121 MA's), (57, 42504), (68, 42555), (75, 42579), (78, 42600), (80, 42609), (96, 42672), (100, 42687), (105, 42720), (124, 42804), (158, 42978), (162, 42999), (168, 43026), (180, 43107), (182, 43122), (191, 43164), (192, 43167), (198, 43194), (223, 43305), (239, 43401), (247, 43473), (250, 43509),

Gene: EastWest_36 Start: 29042, Stop: 29902, Start Num: 46

Candidate Starts for EastWest_36:

(Start: 46 @29042 has 121 MA's), (62, 29114), (69, 29150), (73, 29165), (75, 29171), (85, 29222), (100, 29279), (124, 29384), (134, 29435), (135, 29438), (147, 29501), (150, 29519), (166, 29579), (174, 29621), (178, 29660), (180, 29678), (183, 29696), (185, 29705), (188, 29717), (194, 29747), (198, 29765),

Gene: EdmundFerry_46 Start: 39437, Stop: 40492, Start Num: 46

Candidate Starts for EdmundFerry_46:

(35, 39407), (Start: 46 @39437 has 121 MA's), (68, 39524), (75, 39548), (80, 39578), (96, 39641), (100, 39656), (105, 39689), (129, 39800), (135, 39827), (145, 39881), (158, 39947), (162, 39968), (166, 39980), (168, 39995), (180, 40079), (183, 40097), (187, 40115), (191, 40136), (198, 40166), (223, 40274), (240, 40379), (243, 40400), (249, 40457), (250, 40463),

Gene: Eesa_38 Start: 27219, Stop: 28025, Start Num: 38

Candidate Starts for Eesa_38:

(Start: 38 @27219 has 11 MA's), (65, 27315), (68, 27324), (76, 27360), (80, 27378), (123, 27579), (139, 27672), (153, 27753), (158, 27771), (180, 27879), (204, 27993),

Gene: Engineer_92 Start: 56810, Stop: 57535, Start Num: 51

Candidate Starts for Engineer_92:

(5, 56510), (7, 56537), (8, 56540), (9, 56543), (25, 56705), (Start: 51 @56810 has 18 MA's), (77, 56918), (81, 56936), (85, 56951), (86, 56954), (97, 57005), (108, 57068), (122, 57095), (128, 57128), (135, 57167), (142, 57206), (149, 57236), (152, 57263), (163, 57308), (180, 57389), (184, 57413), (195, 57458), (201, 57488),

Gene: Etoile_46 Start: 32543, Stop: 33535, Start Num: 53

Candidate Starts for Etoile_46:

(4, 32222), (18, 32390), (29, 32453), (Start: 53 @32543 has 58 MA's), (Start: 58 @32558 has 1 MA's), (68, 32606), (79, 32657), (102, 32753), (111, 32792), (141, 32927), (164, 33038), (166, 33041), (172, 33080), (178, 33104), (180, 33122), (189, 33167), (196, 33197), (198, 33209), (231, 33353), (246, 33452), (250, 33500), (252, 33524),

Gene: FirstPlacePfu_47 Start: 32575, Stop: 33567, Start Num: 53

Candidate Starts for FirstPlacePfu_47:

(18, 32422), (29, 32485), (Start: 53 @32575 has 58 MA's), (Start: 58 @32590 has 1 MA's), (68, 32638), (79, 32689), (102, 32785), (111, 32824), (141, 32959), (164, 33070), (166, 33073), (172, 33112), (178, 33136), (180, 33154), (189, 33199), (196, 33229), (198, 33241), (231, 33385), (246, 33484), (250, 33532), (252, 33556),

Gene: Fishburne_46 Start: 32543, Stop: 33535, Start Num: 53

Candidate Starts for Fishburne_46:

(4, 32222), (18, 32390), (29, 32453), (Start: 53 @32543 has 58 MA's), (Start: 58 @32558 has 1 MA's), (68, 32606), (79, 32657), (102, 32753), (111, 32792), (141, 32927), (164, 33038), (166, 33041), (172, 33080), (178, 33104), (180, 33122), (189, 33167), (196, 33197), (198, 33209), (231, 33353), (246, 33452), (250, 33500), (252, 33524),

Gene: Fitzgerald_50 Start: 43949, Stop: 44947, Start Num: 43

Candidate Starts for Fitzgerald_50:

(23, 43865), (27, 43886), (Start: 43 @43949 has 7 MA's), (57, 43985), (68, 44036), (70, 44042), (75, 44060), (80, 44090), (96, 44153), (100, 44168), (129, 44312), (158, 44459), (166, 44492), (168, 44507), (180, 44576), (182, 44591), (195, 44648), (198, 44663), (242, 44840), (250, 44912),

Gene: Flatwoods_50 Start: 42261, Stop: 43283, Start Num: 46

Candidate Starts for Flatwoods_50:

(Start: 46 @42261 has 121 MA's), (57, 42297), (68, 42351), (75, 42375), (80, 42405), (88, 42435), (96, 42468), (100, 42483), (116, 42564), (127, 42612), (129, 42627), (130, 42630), (158, 42774), (166, 42807), (168, 42822), (180, 42891), (182, 42906), (195, 42963), (198, 42978),

Gene: Fosterous_52 Start: 43368, Stop: 44420, Start Num: 31

Candidate Starts for Fosterous_52:

(13, 43260), (15, 43281), (Start: 31 @43368 has 1 MA's), (Start: 46 @43422 has 121 MA's), (57, 43458), (68, 43509), (70, 43515), (75, 43533), (80, 43563), (96, 43626), (100, 43641), (109, 43692), (127, 43770), (158, 43932), (166, 43965), (168, 43980), (180, 44049), (182, 44064), (195, 44121), (198, 44136), (242, 44313), (250, 44385),

Gene: Franzy_33 Start: 29485, Stop: 30330, Start Num: 46

Candidate Starts for Franzy_33:

(Start: 46 @29485 has 121 MA's), (68, 29575), (73, 29593), (75, 29599), (78, 29620), (84, 29647), (100, 29707), (109, 29764), (124, 29812), (147, 29929), (166, 30007), (170, 30034), (174, 30049), (178, 30088), (180, 30106), (183, 30124), (188, 30145), (191, 30163), (201, 30208),

Gene: FuegoCuervo_55 Start: 42559, Stop: 43557, Start Num: 43

Candidate Starts for FuegoCuervo_55:

(30, 42508), (Start: 43 @42559 has 7 MA's), (57, 42595), (68, 42646), (70, 42652), (75, 42670), (80, 42700), (96, 42763), (100, 42778), (116, 42859), (121, 42874), (129, 42922), (158, 43069), (166, 43102), (168, 43117), (180, 43186), (182, 43201), (195, 43258), (198, 43273), (242, 43450), (250, 43522),

Gene: Fulbright_47 Start: 32547, Stop: 33608, Start Num: 46

Candidate Starts for Fulbright_47:

(Start: 46 @32547 has 121 MA's), (Start: 49 @32559 has 1 MA's), (65, 32625), (66, 32628), (68, 32634), (75, 32658), (78, 32679), (79, 32685), (82, 32697), (83, 32700), (85, 32709), (96, 32751), (100, 32766), (116, 32853), (137, 32958), (139, 32967), (147, 33012), (152, 33039), (155, 33051), (162, 33081), (166, 33093), (168, 33108), (174, 33135), (177, 33156), (180, 33189), (182, 33204), (183, 33207), (186, 33219), (188, 33228), (198, 33276), (199, 33282), (215, 33333), (220, 33357), (225, 33390), (227, 33393), (229, 33423), (231, 33429), (242, 33501), (245, 33519), (246, 33528), (250, 33576), (251, 33585),

Gene: GTE6_47 Start: 39899, Stop: 40960, Start Num: 46

Candidate Starts for GTE6_47:

(35, 39869), (Start: 46 @39899 has 121 MA's), (68, 39986), (75, 40010), (80, 40040), (96, 40103), (100, 40118), (105, 40151), (129, 40262), (135, 40289), (145, 40343), (158, 40409), (162, 40430), (166, 40442), (168, 40457), (180, 40541), (183, 40559), (187, 40577), (191, 40598), (198, 40628), (223, 40739), (240, 40847), (243, 40868), (249, 40925), (250, 40931),

Gene: Gaea_49 Start: 41917, Stop: 42939, Start Num: 46

Candidate Starts for Gaea_49:

(Start: 46 @41917 has 121 MA's), (57, 41953), (68, 42007), (75, 42031), (80, 42061), (88, 42091), (96, 42124), (100, 42139), (116, 42220), (127, 42268), (129, 42283), (130, 42286), (158, 42430), (166, 42463), (168, 42478), (180, 42547), (182, 42562), (195, 42619), (198, 42634),

Gene: Galadriel_52 Start: 43406, Stop: 44413, Start Num: 41

Candidate Starts for Galadriel_52:

(Start: 41 @43406 has 8 MA's), (45, 43415), (57, 43451), (68, 43502), (70, 43508), (75, 43526), (80, 43556), (96, 43619), (100, 43634), (129, 43778), (158, 43925), (166, 43958), (168, 43973), (180, 44042), (182, 44057), (195, 44114), (198, 44129), (250, 44378),

Gene: Galaxy_38 Start: 26092, Stop: 26898, Start Num: 38

Candidate Starts for Galaxy_38:

(Start: 38 @26092 has 11 MA's), (65, 26188), (68, 26197), (80, 26251), (123, 26452), (139, 26545), (153, 26626), (180, 26752), (204, 26866),

Gene: Gavriela_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for Gavriela_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250, 33742),

Gene: Geeche_89 Start: 55875, Stop: 56600, Start Num: 51

Candidate Starts for Geeche_89:

(Start: 51 @55875 has 18 MA's), (77, 55983), (81, 56001), (85, 56016), (86, 56019), (97, 56070), (108, 56133), (122, 56160), (128, 56193), (135, 56232), (142, 56271), (149, 56301), (152, 56328), (163, 56373), (180, 56454), (184, 56478), (195, 56523), (201, 56553),

Gene: Geodirt_50 Start: 44037, Stop: 45035, Start Num: 43

Candidate Starts for Geodirt_50:

(23, 43953), (27, 43974), (Start: 43 @44037 has 7 MA's), (57, 44073), (68, 44124), (70, 44130), (75, 44148), (80, 44178), (96, 44241), (100, 44256), (116, 44337), (125, 44376), (129, 44400), (158, 44547), (166, 44580), (168, 44595), (180, 44664), (182, 44679), (195, 44736), (198, 44751), (242, 44928), (250, 45000),

Gene: Gex_48 Start: 33474, Stop: 34535, Start Num: 46

Candidate Starts for Gex_48:

(Start: 46 @33474 has 121 MA's), (Start: 49 @33486 has 1 MA's), (65, 33552), (66, 33555), (68, 33561), (75, 33585), (78, 33606), (79, 33612), (82, 33624), (83, 33627), (85, 33636), (96, 33678), (100, 33693), (116, 33780), (137, 33885), (139, 33894), (147, 33939), (152, 33966), (155, 33978), (162, 34008), (166, 34020), (168, 34035), (174, 34062), (177, 34083), (180, 34116), (182, 34131), (183, 34134), (186, 34146), (188, 34155), (198, 34203), (199, 34209), (215, 34260), (220, 34284), (225, 34317), (227, 34320), (229, 34350), (231, 34356), (242, 34428), (245, 34446), (246, 34455), (250, 34503), (251, 34512),

Gene: Glaske_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for Glaske_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250,

33742),

Gene: Glotell_43 Start: 26173, Stop: 26970, Start Num: 42

Candidate Starts for Glotell_43:

(Start: 42 @26173 has 30 MA's), (68, 26269), (80, 26323), (106, 26440), (114, 26476), (134, 26587), (147, 26659), (153, 26695), (155, 26704), (180, 26824), (198, 26911),

Gene: Gravel_48 Start: 27192, Stop: 27998, Start Num: 38

Candidate Starts for Gravel_48:

(Start: 38 @27192 has 11 MA's), (65, 27288), (68, 27297), (76, 27333), (80, 27351), (101, 27432), (139, 27645), (153, 27726), (158, 27744), (180, 27852), (204, 27966),

Gene: GravityBall_35 Start: 29827, Stop: 30672, Start Num: 46

Candidate Starts for GravityBall_35:

(Start: 46 @29827 has 121 MA's), (68, 29920), (69, 29923), (75, 29944), (80, 29974), (100, 30052), (109, 30109), (124, 30157), (134, 30208), (135, 30211), (137, 30226), (144, 30256), (147, 30274), (150, 30292), (166, 30352), (174, 30394), (178, 30433), (180, 30451), (183, 30469), (188, 30490), (191, 30508), (206, 30577), (212, 30589), (215, 30595),

Gene: GreaseLightnin_47 Start: 32779, Stop: 33753, Start Num: 53

Candidate Starts for GreaseLightnin_47:

(Start: 53 @32779 has 58 MA's), (Start: 58 @32797 has 1 MA's), (68, 32845), (79, 32896), (85, 32920), (111, 33031), (141, 33166), (164, 33277), (166, 33280), (172, 33319), (178, 33343), (180, 33361), (189, 33406), (196, 33436), (198, 33448), (215, 33505), (231, 33574), (246, 33673), (250, 33721),

Gene: Grekaycon_35 Start: 29742, Stop: 30590, Start Num: 46

Candidate Starts for Grekaycon_35:

(Start: 46 @29742 has 121 MA's), (68, 29832), (69, 29835), (75, 29856), (79, 29883), (80, 29886), (100, 29964), (109, 30021), (124, 30069), (134, 30120), (135, 30123), (147, 30186), (150, 30204), (166, 30264), (174, 30306), (178, 30345), (180, 30363), (183, 30381), (188, 30402), (191, 30420), (198, 30450), (212, 30501), (228, 30567),

Gene: Gustavo_50 Start: 42537, Stop: 43559, Start Num: 46

Candidate Starts for Gustavo_50:

(15, 42396), (Start: 31 @42483 has 1 MA's), (Start: 42 @42531 has 30 MA's), (Start: 46 @42537 has 121 MA's), (57, 42573), (68, 42627), (75, 42651), (80, 42681), (88, 42711), (96, 42744), (100, 42759), (127, 42888), (129, 42903), (130, 42906), (158, 43050), (166, 43083), (168, 43098), (180, 43167), (181, 43173), (182, 43182), (195, 43239), (198, 43254),

Gene: HC_46 Start: 32186, Stop: 33181, Start Num: 53

Candidate Starts for HC_46:

(21, 32051), (Start: 53 @32186 has 58 MA's), (Start: 58 @32201 has 1 MA's), (68, 32249), (79, 32300), (85, 32324), (111, 32435), (141, 32570), (164, 32681), (166, 32684), (172, 32723), (178, 32747), (180, 32765), (189, 32810), (196, 32840), (198, 32852), (219, 32930), (231, 32999), (246, 33098), (250, 33146), (252, 33170),

Gene: HUHilltop_48 Start: 33058, Stop: 34032, Start Num: 53

Candidate Starts for HUHilltop_48:

(Start: 53 @33058 has 58 MA's), (Start: 58 @33076 has 1 MA's), (68, 33124), (79, 33175), (85, 33199), (111, 33310), (141, 33445), (164, 33556), (166, 33559), (172, 33598), (178, 33622), (180, 33640), (189, 33685), (196, 33715), (198, 33727), (215, 33784), (231, 33853), (246, 33952), (250, 34000),

Gene: HamCheese_40 Start: 26001, Stop: 26798, Start Num: 42

Candidate Starts for HamCheese_40:

(Start: 42 @26001 has 30 MA's), (68, 26097), (80, 26151), (106, 26268), (114, 26304), (134, 26415), (147, 26487), (153, 26523), (155, 26532), (180, 26652), (185, 26679), (198, 26739),

Gene: Hanako_52 Start: 34364, Stop: 35428, Start Num: 46

Candidate Starts for Hanako_52:

(19, 34250), (Start: 46 @34364 has 121 MA's), (Start: 49 @34376 has 1 MA's), (65, 34442), (66, 34445), (68, 34451), (75, 34475), (78, 34496), (79, 34502), (82, 34514), (83, 34517), (85, 34526), (96, 34568), (100, 34583), (137, 34775), (152, 34856), (155, 34868), (158, 34877), (166, 34910), (168, 34925), (174, 34952), (180, 35006), (182, 35021), (186, 35036), (188, 35045), (194, 35075), (198, 35093), (199, 35099), (215, 35150), (225, 35207), (229, 35243), (231, 35249), (245, 35339), (246, 35348), (250, 35396), (251, 35405),

Gene: HannahPhantana_42 Start: 26085, Stop: 26879, Start Num: 42

Candidate Starts for HannahPhantana_42:

(Start: 42 @26085 has 30 MA's), (68, 26178), (76, 26214), (80, 26232), (89, 26265), (106, 26349), (134, 26496), (135, 26499), (155, 26613), (168, 26667), (180, 26733), (190, 26787), (200, 26832), (204, 26847),

Gene: Hans_51 Start: 41907, Stop: 42968, Start Num: 46

Candidate Starts for Hans_51:

(Start: 46 @41907 has 121 MA's), (57, 41943), (68, 41994), (75, 42018), (78, 42039), (87, 42075), (100, 42126), (105, 42159), (129, 42270), (158, 42417), (162, 42438), (166, 42450), (168, 42465), (180, 42546), (182, 42561), (191, 42603), (192, 42606), (223, 42735), (239, 42831), (247, 42903), (250, 42939),

Gene: Inspectinfecti_50 Start: 42353, Stop: 43414, Start Num: 46

Candidate Starts for Inspectinfecti_50:

(Start: 46 @42353 has 121 MA's), (57, 42389), (68, 42440), (75, 42464), (78, 42485), (87, 42521), (100, 42572), (105, 42605), (129, 42716), (158, 42863), (162, 42884), (166, 42896), (168, 42911), (180, 42992), (182, 43007), (191, 43049), (192, 43052), (223, 43181), (239, 43277), (247, 43349), (250, 43385),

Gene: Island3_49 Start: 34787, Stop: 35854, Start Num: 46

Candidate Starts for Island3_49:

(Start: 46 @34787 has 121 MA's), (Start: 49 @34799 has 1 MA's), (65, 34865), (68, 34874), (75, 34898), (78, 34919), (79, 34925), (83, 34940), (85, 34949), (96, 34991), (100, 35006), (116, 35093), (155, 35291), (166, 35333), (168, 35348), (174, 35375), (177, 35396), (180, 35429), (182, 35444), (186, 35459), (188, 35468), (194, 35498), (198, 35516), (199, 35522), (208, 35555), (215, 35573), (230, 35666), (231, 35672), (246, 35771), (250, 35819), (252, 35843),

Gene: JKSyngboy_48 Start: 43130, Stop: 44158, Start Num: 42

Candidate Starts for JKSyngboy_48:

(15, 42995), (Start: 31 @43082 has 1 MA's), (Start: 42 @43130 has 30 MA's), (Start: 46 @43136 has 121 MA's), (57, 43172), (68, 43226), (75, 43250), (80, 43280), (88, 43310), (96, 43343), (100, 43358), (116, 43439), (127, 43487), (129, 43502), (158, 43649), (166, 43682), (168, 43697), (180, 43766), (182, 43781), (195, 43838),

Gene: JKerns_35 Start: 29691, Stop: 30554, Start Num: 46

Candidate Starts for JKerns_35:

(Start: 46 @29691 has 121 MA's), (68, 29781), (69, 29784), (75, 29805), (85, 29856), (100, 29913), (124, 30018), (143, 30108), (145, 30120), (147, 30135), (166, 30213), (170, 30240), (174, 30255), (178, 30297), (180, 30315), (183, 30333), (188, 30354), (191, 30372), (206, 30441), (215, 30459),

(228, 30531),

Gene: Jabberwocky_49 Start: 44097, Stop: 45095, Start Num: 43

Candidate Starts for Jabberwocky_49:

(Start: 43 @44097 has 7 MA's), (57, 44133), (68, 44184), (70, 44190), (75, 44208), (80, 44238), (96, 44301), (100, 44316), (116, 44397), (121, 44412), (125, 44436), (129, 44460), (138, 44508), (158, 44607), (166, 44640), (168, 44655), (180, 44724), (182, 44739), (195, 44796), (198, 44811), (242, 44988), (250, 45060),

Gene: Jace_32 Start: 26355, Stop: 27233, Start Num: 34

Candidate Starts for Jace_32:

(Start: 34 @26355 has 1 MA's), (61, 26445), (68, 26478), (75, 26502), (83, 26544), (96, 26595), (100, 26610), (105, 26643), (147, 26847), (151, 26871), (155, 26886), (156, 26889), (164, 26922), (168, 26940), (180, 27024), (188, 27063), (191, 27081),

Gene: Jamie19_46 Start: 32655, Stop: 33719, Start Num: 46

Candidate Starts for Jamie19_46:

(19, 32541), (Start: 46 @32655 has 121 MA's), (Start: 49 @32667 has 1 MA's), (65, 32733), (66, 32736), (68, 32742), (75, 32766), (78, 32787), (79, 32793), (82, 32805), (83, 32808), (85, 32817), (96, 32859), (100, 32874), (137, 33066), (152, 33147), (155, 33159), (158, 33168), (166, 33201), (168, 33216), (174, 33243), (180, 33297), (182, 33312), (186, 33327), (188, 33336), (194, 33366), (198, 33384), (199, 33390), (215, 33441), (225, 33498), (229, 33534), (231, 33540), (245, 33630), (246, 33639), (250, 33687), (251, 33696),

Gene: Jamun_38 Start: 26377, Stop: 27183, Start Num: 38

Candidate Starts for Jamun_38:

(Start: 38 @26377 has 11 MA's), (65, 26473), (68, 26482), (80, 26536), (123, 26737), (139, 26830), (153, 26911), (180, 27037), (204, 27151),

Gene: Jawnski_33 Start: 29492, Stop: 30337, Start Num: 46

Candidate Starts for Jawnski_33:

(Start: 46 @29492 has 121 MA's), (68, 29579), (73, 29597), (75, 29603), (78, 29624), (100, 29711), (109, 29768), (124, 29816), (147, 29933), (166, 30011), (170, 30038), (174, 30053), (180, 30110), (183, 30128), (188, 30149), (191, 30167),

Gene: Jebeks_48 Start: 32603, Stop: 33595, Start Num: 53

Candidate Starts for Jebeks_48:

(4, 32282), (18, 32450), (29, 32513), (Start: 53 @32603 has 58 MA's), (Start: 58 @32618 has 1 MA's), (68, 32666), (79, 32717), (102, 32813), (111, 32852), (141, 32987), (164, 33098), (166, 33101), (172, 33140), (178, 33164), (180, 33182), (189, 33227), (196, 33257), (198, 33269), (231, 33413), (246, 33512), (250, 33560), (252, 33584),

Gene: Jerole_51 Start: 26209, Stop: 27003, Start Num: 42

Candidate Starts for Jerole_51:

(Start: 42 @26209 has 30 MA's), (68, 26302), (76, 26338), (80, 26356), (89, 26389), (106, 26473), (134, 26620), (135, 26623), (155, 26737), (168, 26791), (180, 26857), (190, 26911), (200, 26956), (204, 26971),

Gene: JonJames_109 Start: 63983, Stop: 64675, Start Num: 51

Candidate Starts for JonJames_109:

(Start: 51 @63983 has 18 MA's), (64, 64037), (74, 64070), (81, 64109), (91, 64145), (93, 64154), (97, 64178), (99, 64187), (100, 64190), (124, 64286), (133, 64328), (135, 64340), (146, 64397), (157, 64457), (163, 64484), (165, 64490), (180, 64565), (188, 64604), (192, 64625),

Gene: Jordan_35 Start: 29741, Stop: 30604, Start Num: 46

Candidate Starts for Jordan_35:

(Start: 46 @29741 has 121 MA's), (68, 29831), (69, 29834), (75, 29855), (85, 29906), (100, 29963), (124, 30068), (143, 30158), (145, 30170), (147, 30185), (166, 30263), (170, 30290), (174, 30305), (178, 30347), (180, 30365), (183, 30383), (188, 30404), (191, 30422), (206, 30491), (215, 30509), (228, 30581),

Gene: Journey_47 Start: 31920, Stop: 32912, Start Num: 53

Candidate Starts for Journey_47:

(4, 31599), (18, 31767), (29, 31830), (Start: 53 @31920 has 58 MA's), (Start: 58 @31935 has 1 MA's), (68, 31983), (79, 32034), (102, 32130), (111, 32169), (141, 32304), (164, 32415), (166, 32418), (172, 32457), (178, 32481), (180, 32499), (189, 32544), (196, 32574), (198, 32586), (231, 32730), (246, 32829), (250, 32877), (252, 32901),

Gene: Jung_45 Start: 32501, Stop: 33496, Start Num: 53

Candidate Starts for Jung_45:

(4, 32180), (18, 32348), (29, 32411), (Start: 53 @32501 has 58 MA's), (Start: 58 @32516 has 1 MA's), (68, 32564), (79, 32615), (102, 32711), (111, 32750), (141, 32885), (164, 32996), (166, 32999), (172, 33038), (178, 33062), (180, 33080), (189, 33125), (196, 33155), (198, 33167), (231, 33314), (246, 33413), (250, 33461), (252, 33485),

Gene: Juniormint_47 Start: 32572, Stop: 33546, Start Num: 53

Candidate Starts for Juniormint_47:

(Start: 53 @32572 has 58 MA's), (Start: 58 @32590 has 1 MA's), (68, 32638), (79, 32689), (83, 32704), (85, 32713), (111, 32824), (141, 32959), (164, 33070), (166, 33073), (172, 33112), (178, 33136), (180, 33154), (189, 33199), (196, 33229), (198, 33241), (215, 33298), (231, 33367), (246, 33466), (250, 33514),

Gene: Juno112_40 Start: 26017, Stop: 26814, Start Num: 42

Candidate Starts for Juno112_40:

(Start: 42 @26017 has 30 MA's), (68, 26113), (80, 26167), (106, 26284), (114, 26320), (134, 26431), (147, 26503), (153, 26539), (155, 26548), (180, 26668), (185, 26695), (198, 26755),

Gene: KHumphrey_41 Start: 26016, Stop: 26813, Start Num: 42

Candidate Starts for KHumphrey_41:

(Start: 42 @26016 has 30 MA's), (68, 26112), (80, 26166), (106, 26283), (114, 26319), (134, 26430), (147, 26502), (153, 26538), (155, 26547), (180, 26667), (198, 26754),

Gene: Kamashten_50 Start: 42629, Stop: 43627, Start Num: 46

Candidate Starts for Kamashten_50:

(10, 42386), (15, 42488), (Start: 31 @42575 has 1 MA's), (Start: 46 @42629 has 121 MA's), (57, 42665), (68, 42716), (70, 42722), (75, 42740), (80, 42770), (96, 42833), (100, 42848), (116, 42929), (125, 42968), (129, 42992), (158, 43139), (166, 43172), (168, 43187), (180, 43256), (182, 43271), (195, 43328), (198, 43343), (242, 43520), (250, 43592),

Gene: Kari_46 Start: 32540, Stop: 33532, Start Num: 53

Candidate Starts for Kari_46:

(4, 32219), (18, 32387), (29, 32450), (Start: 53 @32540 has 58 MA's), (Start: 58 @32555 has 1 MA's), (68, 32603), (79, 32654), (102, 32750), (111, 32789), (141, 32924), (164, 33035), (166, 33038), (172, 33077), (178, 33101), (180, 33119), (189, 33164), (196, 33194), (198, 33206), (231, 33350), (246, 33449), (250, 33497), (252, 33521),

Gene: Keitabear_51 Start: 44151, Stop: 45146, Start Num: 46

Candidate Starts for Keitabear_51:

(10, 43908), (15, 44010), (Start: 31 @44097 has 1 MA's), (Start: 46 @44151 has 121 MA's), (57, 44187), (68, 44238), (70, 44244), (75, 44262), (80, 44292), (96, 44355), (100, 44370), (116, 44451), (121, 44466), (125, 44490), (129, 44514), (158, 44661), (166, 44694), (168, 44709), (180, 44778), (182, 44793), (195, 44850), (198, 44865), (242, 45039), (250, 45111),

Gene: KendraB23_49 Start: 27385, Stop: 28191, Start Num: 38

Candidate Starts for KendraB23_49:

(Start: 38 @27385 has 11 MA's), (65, 27481), (68, 27490), (75, 27514), (76, 27526), (80, 27544), (139, 27838), (153, 27919), (158, 27937), (180, 28045), (185, 28072), (204, 28159),

Gene: Kepler_43 Start: 26833, Stop: 27627, Start Num: 42

Candidate Starts for Kepler_43:

(Start: 42 @26833 has 30 MA's), (68, 26926), (76, 26962), (80, 26980), (89, 27013), (106, 27097), (134, 27244), (135, 27247), (155, 27361), (160, 27385), (180, 27481), (190, 27535), (200, 27580), (204, 27595),

Gene: Kevin1_50 Start: 33499, Stop: 34563, Start Num: 46

Candidate Starts for Kevin1_50:

(Start: 46 @33499 has 121 MA's), (Start: 49 @33511 has 1 MA's), (65, 33577), (68, 33586), (75, 33610), (78, 33631), (79, 33637), (83, 33652), (85, 33661), (96, 33703), (100, 33718), (116, 33805), (155, 34003), (166, 34045), (168, 34060), (174, 34087), (177, 34108), (180, 34141), (182, 34156), (186, 34171), (188, 34180), (194, 34210), (198, 34228), (199, 34234), (208, 34267), (215, 34285), (230, 34378), (231, 34384), (245, 34474), (246, 34483), (250, 34531), (251, 34540),

Gene: Kewpiedoll_52 Start: 43580, Stop: 44578, Start Num: 46

Candidate Starts for Kewpiedoll_52:

(2, 43229), (10, 43337), (15, 43439), (Start: 31 @43526 has 1 MA's), (Start: 46 @43580 has 121 MA's), (57, 43616), (68, 43667), (70, 43673), (75, 43691), (80, 43721), (96, 43784), (100, 43799), (116, 43880), (121, 43895), (125, 43919), (129, 43943), (138, 43991), (158, 44090), (166, 44123), (168, 44138), (180, 44207), (182, 44222), (195, 44279), (198, 44294), (242, 44471), (250, 44543),

Gene: KilKor_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for KilKor_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250, 33742),

Gene: King2_33 Start: 29481, Stop: 30326, Start Num: 46

Candidate Starts for King2_33:

(Start: 46 @29481 has 121 MA's), (68, 29571), (73, 29589), (75, 29595), (78, 29616), (84, 29643), (100, 29703), (109, 29760), (124, 29808), (147, 29925), (162, 29991), (166, 30003), (170, 30030), (174, 30045), (178, 30084), (180, 30102), (183, 30120), (188, 30141), (191, 30159), (198, 30189), (201, 30204),

Gene: Klevey_38 Start: 29418, Stop: 30272, Start Num: 42

Candidate Starts for Klevey_38:

(Start: 42 @29418 has 30 MA's), (68, 29508), (75, 29532), (100, 29640), (124, 29745), (147, 29865), (180, 30042), (185, 30069), (188, 30081), (218, 30198),

Gene: Kroos_50 Start: 42820, Stop: 43842, Start Num: 46

Candidate Starts for Kroos_50:

(Start: 46 @42820 has 121 MA's), (57, 42856), (68, 42910), (75, 42934), (80, 42964), (88, 42994), (96, 43027), (100, 43042), (116, 43123), (127, 43171), (129, 43186), (130, 43189), (158, 43333), (166, 43366), (168, 43381), (180, 43450), (182, 43465), (195, 43522), (198, 43537),

Gene: Ksquared_46 Start: 32550, Stop: 33524, Start Num: 53

Candidate Starts for Ksquared_46:

(Start: 53 @32550 has 58 MA's), (Start: 58 @32568 has 1 MA's), (68, 32616), (79, 32667), (83, 32682), (85, 32691), (111, 32802), (141, 32937), (164, 33048), (166, 33051), (172, 33090), (178, 33114), (180, 33132), (189, 33177), (196, 33207), (198, 33219), (215, 33276), (231, 33345), (246, 33444), (250, 33492),

Gene: Kuleana_43 Start: 26408, Stop: 27208, Start Num: 42

Candidate Starts for Kuleana_43:

(Start: 42 @26408 has 30 MA's), (68, 26504), (76, 26540), (80, 26558), (106, 26675), (114, 26711), (134, 26825), (135, 26828), (147, 26897), (155, 26942), (180, 27062), (190, 27116), (204, 27176),

Gene: Kwekel_47 Start: 39327, Stop: 40385, Start Num: 46

Candidate Starts for Kwekel_47:

(35, 39297), (Start: 46 @39327 has 121 MA's), (68, 39414), (75, 39438), (80, 39468), (96, 39531), (100, 39546), (105, 39579), (129, 39690), (135, 39717), (145, 39771), (158, 39837), (162, 39858), (166, 39870), (168, 39885), (180, 39969), (183, 39987), (187, 40005), (191, 40026), (198, 40056), (223, 40167), (240, 40272), (243, 40293), (249, 40350), (250, 40356),

Gene: Kwobi_51 Start: 43246, Stop: 44268, Start Num: 46

Candidate Starts for Kwobi_51:

(10, 43003), (15, 43105), (Start: 31 @43192 has 1 MA's), (Start: 46 @43246 has 121 MA's), (57, 43282), (68, 43336), (75, 43360), (80, 43390), (88, 43420), (96, 43453), (100, 43468), (116, 43549), (127, 43597), (129, 43612), (130, 43615), (158, 43759), (166, 43792), (168, 43807), (180, 43876), (182, 43891), (195, 43948), (198, 43963),

Gene: Langerak_47 Start: 32559, Stop: 33551, Start Num: 53

Candidate Starts for Langerak_47:

(4, 32238), (18, 32406), (29, 32469), (Start: 53 @32559 has 58 MA's), (Start: 58 @32574 has 1 MA's), (68, 32622), (79, 32673), (102, 32769), (111, 32808), (141, 32943), (164, 33054), (166, 33057), (172, 33096), (178, 33120), (180, 33138), (189, 33183), (196, 33213), (198, 33225), (231, 33369), (246, 33468), (250, 33516), (252, 33540),

Gene: LeeroyJ_35 Start: 29826, Stop: 30671, Start Num: 46

Candidate Starts for LeeroyJ_35:

(Start: 46 @29826 has 121 MA's), (68, 29919), (69, 29922), (75, 29943), (80, 29973), (100, 30051), (109, 30108), (124, 30156), (134, 30207), (135, 30210), (137, 30225), (147, 30273), (150, 30291), (166, 30351), (174, 30393), (178, 30432), (180, 30450), (183, 30468), (188, 30489), (191, 30507), (198, 30537), (206, 30576), (212, 30588), (215, 30594),

Gene: Lennon_51 Start: 44231, Stop: 45241, Start Num: 46

Candidate Starts for Lennon_51:

(2, 43880), (10, 43988), (15, 44090), (Start: 31 @44177 has 1 MA's), (Start: 46 @44231 has 121 MA's), (57, 44267), (68, 44318), (70, 44324), (75, 44342), (80, 44372), (96, 44435), (100, 44450), (116, 44531), (129, 44594), (158, 44741), (166, 44774), (168, 44789), (180, 44858), (182, 44873), (195, 44930), (198, 44945), (242, 45134), (250, 45206),

Gene: Leona_40 Start: 26088, Stop: 26888, Start Num: 42

Candidate Starts for Leona_40:

(Start: 42 @26088 has 30 MA's), (68, 26184), (80, 26238), (83, 26250), (101, 26319), (106, 26355), (112, 26385), (147, 26577), (155, 26622), (180, 26742), (198, 26829),

Gene: Leonard_49 Start: 42000, Stop: 43061, Start Num: 46

Candidate Starts for Leonard_49:

(26, 41934), (Start: 46 @42000 has 121 MA's), (57, 42036), (68, 42087), (75, 42111), (78, 42132), (87, 42168), (100, 42219), (105, 42252), (129, 42363), (158, 42510), (162, 42531), (166, 42543), (168, 42558), (180, 42639), (182, 42654), (191, 42696), (192, 42699), (223, 42828), (239, 42924), (247, 42996), (250, 43032),

Gene: LilHam_47 Start: 41425, Stop: 42447, Start Num: 46

Candidate Starts for LilHam_47:

(Start: 46 @41425 has 121 MA's), (57, 41461), (68, 41515), (75, 41539), (80, 41569), (88, 41599), (96, 41632), (100, 41647), (116, 41728), (127, 41776), (129, 41791), (130, 41794), (158, 41938), (166, 41971), (168, 41986), (180, 42055), (182, 42070), (195, 42127), (198, 42142),

Gene: Lilbeanie_53 Start: 38965, Stop: 40047, Start Num: 46

Candidate Starts for Lilbeanie_53:

(Start: 46 @38965 has 121 MA's), (68, 39055), (75, 39079), (76, 39091), (78, 39100), (87, 39136), (100, 39187), (113, 39247), (117, 39271), (131, 39340), (145, 39412), (151, 39451), (166, 39508), (168, 39523), (174, 39550), (180, 39604), (240, 39937), (242, 39949), (244, 39961), (250, 40018),

Gene: Lilmac1015_40 Start: 29991, Stop: 30845, Start Num: 42

Candidate Starts for Lilmac1015_40:

(Start: 42 @29991 has 30 MA's), (68, 30081), (75, 30105), (100, 30213), (124, 30318), (147, 30438), (180, 30615), (188, 30654), (218, 30771),

Gene: LittleTokyo_41 Start: 25961, Stop: 26755, Start Num: 42

Candidate Starts for LittleTokyo_41:

(Start: 42 @25961 has 30 MA's), (64, 26048), (68, 26060), (80, 26114), (85, 26135), (101, 26195), (106, 26231), (123, 26309), (134, 26372), (142, 26414), (147, 26444), (155, 26489), (168, 26543), (180, 26609), (198, 26696), (204, 26723),

Gene: Love_56 Start: 44855, Stop: 45853, Start Num: 46

Candidate Starts for Love_56:

(10, 44612), (15, 44714), (Start: 31 @44801 has 1 MA's), (Start: 46 @44855 has 121 MA's), (57, 44891), (68, 44942), (70, 44948), (75, 44966), (80, 44996), (96, 45059), (100, 45074), (116, 45155), (121, 45170), (125, 45194), (129, 45218), (158, 45365), (166, 45398), (168, 45413), (180, 45482), (182, 45497), (195, 45554), (198, 45569), (242, 45746), (250, 45818),

Gene: Lozinak_91 Start: 56648, Stop: 57373, Start Num: 51

Candidate Starts for Lozinak_91:

(5, 56348), (7, 56375), (8, 56378), (9, 56381), (25, 56543), (Start: 51 @56648 has 18 MA's), (77, 56756), (81, 56774), (85, 56789), (86, 56792), (97, 56843), (108, 56906), (122, 56933), (128, 56966), (135, 57005), (142, 57044), (149, 57074), (152, 57101), (163, 57146), (180, 57227), (184, 57251), (195, 57296), (201, 57326),

Gene: Lukepolites_37 Start: 29627, Stop: 30544, Start Num: 50

Candidate Starts for Lukepolites_37:

(Start: 42 @29600 has 30 MA's), (50, 29627), (64, 29696), (68, 29708), (75, 29732), (76, 29744), (83, 29774), (95, 29825), (100, 29846), (124, 29951), (135, 30005), (145, 30056), (147, 30071), (150, 30092), (166, 30149), (168, 30164), (180, 30230), (182, 30245), (200, 30329), (241, 30533),

Gene: Lunar_43 Start: 26749, Stop: 27543, Start Num: 42

Candidate Starts for Lunar_43:

(Start: 42 @26749 has 30 MA's), (68, 26842), (76, 26878), (80, 26896), (89, 26929), (106, 27013), (134, 27160), (135, 27163), (155, 27277), (160, 27301), (180, 27397), (190, 27451), (200, 27496), (204, 27511),

Gene: Magsby_48 Start: 33475, Stop: 34536, Start Num: 46

Candidate Starts for Magsby_48:

(Start: 46 @33475 has 121 MA's), (Start: 49 @33487 has 1 MA's), (65, 33553), (66, 33556), (68, 33562), (75, 33586), (78, 33607), (79, 33613), (82, 33625), (83, 33628), (85, 33637), (96, 33679), (100, 33694), (116, 33781), (137, 33886), (139, 33895), (147, 33940), (152, 33967), (155, 33979), (162, 34009), (166, 34021), (168, 34036), (174, 34063), (177, 34084), (180, 34117), (182, 34132), (183, 34135), (186, 34147), (188, 34156), (198, 34204), (199, 34210), (215, 34261), (220, 34285), (225, 34318), (227, 34321), (229, 34351), (231, 34357), (242, 34429), (245, 34447), (246, 34456), (250, 34504), (251, 34513),

Gene: Majeke_47 Start: 32584, Stop: 33576, Start Num: 53

Candidate Starts for Majeke_47:

(4, 32263), (18, 32431), (29, 32494), (Start: 53 @32584 has 58 MA's), (Start: 58 @32599 has 1 MA's), (68, 32647), (79, 32698), (102, 32794), (111, 32833), (141, 32968), (164, 33079), (166, 33082), (172, 33121), (178, 33145), (180, 33163), (189, 33208), (196, 33238), (198, 33250), (231, 33394), (246, 33493), (250, 33541), (252, 33565),

Gene: Malithi_47 Start: 32459, Stop: 33451, Start Num: 53

Candidate Starts for Malithi_47:

(4, 32138), (18, 32306), (29, 32369), (Start: 53 @32459 has 58 MA's), (Start: 58 @32474 has 1 MA's), (68, 32522), (79, 32573), (102, 32669), (111, 32708), (141, 32843), (164, 32954), (166, 32957), (172, 32996), (178, 33020), (180, 33038), (189, 33083), (196, 33113), (198, 33125), (231, 33269), (246, 33368), (250, 33416), (252, 33440),

Gene: Mangethe_47 Start: 32584, Stop: 33576, Start Num: 53

Candidate Starts for Mangethe_47:

(4, 32263), (18, 32431), (29, 32494), (Start: 53 @32584 has 58 MA's), (Start: 58 @32599 has 1 MA's), (68, 32647), (79, 32698), (102, 32794), (111, 32833), (141, 32968), (164, 33079), (166, 33082), (172, 33121), (178, 33145), (180, 33163), (189, 33208), (196, 33238), (198, 33250), (231, 33394), (246, 33493), (250, 33541), (252, 33565),

Gene: Mao1_65 Start: 48471, Stop: 49460, Start Num: 53

Candidate Starts for Mao1_65:

(24, 48357), (Start: 53 @48471 has 58 MA's), (63, 48516), (68, 48537), (76, 48573), (79, 48588), (100, 48669), (111, 48723), (119, 48741), (146, 48879), (153, 48915), (163, 48957), (164, 48960), (166, 48963), (178, 49026), (180, 49044), (183, 49062), (185, 49071), (188, 49083), (196, 49119), (198, 49131), (203, 49155), (205, 49164), (215, 49191), (221, 49227), (222, 49230), (226, 49251), (231, 49281), (246, 49380), (248, 49404), (251, 49437),

Gene: Martha_35 Start: 29743, Stop: 30591, Start Num: 46

Candidate Starts for Martha_35:

(Start: 46 @29743 has 121 MA's), (68, 29833), (69, 29836), (75, 29857), (79, 29884), (80, 29887), (100, 29965), (109, 30022), (124, 30070), (134, 30121), (135, 30124), (147, 30187), (150, 30205), (166, 30265), (174, 30307), (178, 30346), (180, 30364), (183, 30382), (188, 30403), (191, 30421), (198, 30451), (212, 30502), (228, 30568),

Gene: Mask_64 Start: 50876, Stop: 51961, Start Num: 46

Candidate Starts for Mask_64:

(Start: 46 @50876 has 121 MA's), (56, 50912), (65, 50951), (68, 50960), (75, 50984), (78, 51005), (83, 51026), (85, 51035), (90, 51053), (95, 51086), (100, 51107), (102, 51122), (103, 51128), (107, 51149), (121, 51209), (132, 51269), (135, 51284), (148, 51356), (149, 51359), (166, 51443), (168, 51458), (174, 51485), (180, 51542), (182, 51557), (183, 51560), (186, 51572), (187, 51578), (188, 51581), (194, 51611), (198, 51629), (199, 51635), (215, 51686), (220, 51710), (225, 51743), (227, 51746), (229, 51776), (231, 51782), (238, 51815), (246, 51881), (248, 51905), (251, 51938),

Gene: McKinley_54 Start: 43977, Stop: 44984, Start Num: 41

Candidate Starts for McKinley_54:

(Start: 41 @43977 has 8 MA's), (45, 43986), (57, 44022), (68, 44073), (70, 44079), (75, 44097), (80, 44127), (96, 44190), (100, 44205), (116, 44286), (121, 44301), (125, 44325), (129, 44349), (158, 44496), (166, 44529), (168, 44544), (180, 44613), (182, 44628), (195, 44685), (198, 44700), (242, 44877), (250, 44949),

Gene: Megiddo_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for Megiddo_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250, 33742),

Gene: MelBins_50 Start: 42252, Stop: 43313, Start Num: 46

Candidate Starts for MelBins_50:

(Start: 46 @42252 has 121 MA's), (57, 42288), (68, 42339), (75, 42363), (78, 42384), (87, 42420), (96, 42456), (100, 42471), (105, 42504), (129, 42615), (158, 42762), (162, 42783), (166, 42795), (168, 42810), (180, 42891), (182, 42906), (191, 42948), (192, 42951), (210, 43020), (223, 43080), (239, 43176), (247, 43248), (250, 43284),

Gene: Melons_43 Start: 26563, Stop: 27357, Start Num: 42

Candidate Starts for Melons_43:

(Start: 42 @26563 has 30 MA's), (68, 26656), (76, 26692), (80, 26710), (89, 26743), (106, 26827), (134, 26974), (135, 26977), (155, 27091), (160, 27115), (180, 27211), (190, 27265), (200, 27310), (204, 27325),

Gene: Melville_51 Start: 33459, Stop: 34520, Start Num: 46

Candidate Starts for Melville_51:

(Start: 46 @33459 has 121 MA's), (Start: 49 @33471 has 1 MA's), (65, 33537), (66, 33540), (68, 33546), (75, 33570), (78, 33591), (79, 33597), (82, 33609), (83, 33612), (85, 33621), (96, 33663), (100, 33678), (116, 33765), (137, 33870), (139, 33879), (147, 33924), (152, 33951), (155, 33963), (162, 33993), (166, 34005), (168, 34020), (174, 34047), (177, 34068), (180, 34101), (182, 34116), (183, 34119), (186, 34131), (188, 34140), (198, 34188), (199, 34194), (215, 34245), (220, 34269), (225, 34302), (227, 34305), (229, 34335), (231, 34341), (242, 34413), (245, 34431), (246, 34440), (250, 34488), (251, 34497),

Gene: MichelleMyBell_48 Start: 32199, Stop: 33182, Start Num: 54

Candidate Starts for MichelleMyBell_48:

(Start: 54 @32199 has 1 MA's), (75, 32286), (76, 32298), (79, 32313), (83, 32328), (84, 32334), (100, 32394), (111, 32448), (119, 32466), (122, 32475), (130, 32523), (135, 32547), (146, 32604), (153, 32640), (163, 32682), (164, 32685), (166, 32688), (167, 32694), (168, 32703), (178, 32751), (180, 32769), (183, 32787), (188, 32808), (196, 32844), (198, 32856), (205, 32889), (222, 32949), (226, 32973), (231, 33003), (235, 33021), (246, 33102), (248, 33126), (251, 33159),

Gene: Miskis_83 Start: 54557, Stop: 55282, Start Num: 51

Candidate Starts for Miskis_83:

(3, 54224), (5, 54257), (7, 54284), (8, 54287), (9, 54290), (17, 54398), (Start: 51 @54557 has 18 MA's), (77, 54665), (81, 54683), (85, 54698), (86, 54701), (97, 54752), (108, 54815), (122, 54842), (128, 54875), (135, 54914), (142, 54953), (145, 54965), (149, 54983), (152, 55010), (163, 55055), (180, 55136), (184, 55160), (195, 55205), (201, 55235),

Gene: ModicumRichard_40 Start: 33410, Stop: 34294, Start Num: 42

Candidate Starts for ModicumRichard_40:

(Start: 42 @33410 has 30 MA's), (63, 33482), (67, 33500), (71, 33512), (76, 33539), (80, 33557), (100, 33644), (127, 33809), (151, 33941), (158, 33965), (164, 33992), (166, 33998), (179, 34079), (180, 34085), (188, 34124), (210, 34226),

Gene: Mollymur_94 Start: 63842, Stop: 63024, Start Num: 40

Candidate Starts for Mollymur_94:

(Start: 40 @63842 has 5 MA's), (64, 63752), (75, 63716), (81, 63680), (97, 63611), (124, 63503), (152, 63332), (157, 63314), (171, 63245), (180, 63206), (183, 63188), (184, 63182), (192, 63146), (198, 63125), (211, 63071),

Gene: MoontowerMania_51 Start: 43863, Stop: 44861, Start Num: 46

Candidate Starts for MoontowerMania_51:

(10, 43620), (15, 43722), (Start: 31 @43809 has 1 MA's), (Start: 46 @43863 has 121 MA's), (57, 43899), (68, 43950), (70, 43956), (75, 43974), (80, 44004), (96, 44067), (100, 44082), (116, 44163), (121, 44178), (125, 44202), (129, 44226), (158, 44373), (166, 44406), (168, 44421), (180, 44490), (182, 44505), (195, 44562), (198, 44577), (242, 44754), (250, 44826),

Gene: Morgana_40 Start: 33361, Stop: 34245, Start Num: 42

Candidate Starts for Morgana_40:

(39, 33355), (Start: 42 @33361 has 30 MA's), (63, 33433), (67, 33451), (71, 33463), (76, 33490), (80, 33508), (100, 33595), (127, 33760), (141, 33838), (151, 33892), (158, 33916), (164, 33943), (166, 33949), (179, 34030), (180, 34036), (188, 34075), (210, 34177),

Gene: NathanVaag_33 Start: 29495, Stop: 30340, Start Num: 46

Candidate Starts for NathanVaag_33:

(Start: 46 @29495 has 121 MA's), (68, 29582), (73, 29600), (75, 29606), (78, 29627), (100, 29714), (109, 29771), (124, 29819), (147, 29936), (166, 30014), (170, 30041), (174, 30056), (180, 30113), (183, 30131), (188, 30152), (191, 30170), (198, 30200),

Gene: Natkenzie_51 Start: 43588, Stop: 44628, Start Num: 46

Candidate Starts for Natkenzie_51:

(Start: 46 @43588 has 121 MA's), (68, 43678), (75, 43702), (76, 43714), (80, 43732), (100, 43810), (105, 43843), (145, 44017), (158, 44083), (168, 44131), (180, 44203), (182, 44218), (187, 44239), (191, 44260), (192, 44263), (220, 44368), (223, 44401), (224, 44413), (247, 44560), (250, 44596),

Gene: Nazo_49 Start: 34648, Stop: 35700, Start Num: 53

Candidate Starts for Nazo_49:

(Start: 49 @34630 has 1 MA's), (Start: 53 @34648 has 58 MA's), (62, 34687), (69, 34723), (75, 34744), (76, 34756), (82, 34783), (111, 34936), (116, 34963), (125, 35002), (140, 35083), (141, 35089), (158, 35164), (164, 35191), (180, 35272), (185, 35299), (230, 35515), (231, 35521), (246, 35620), (250, 35668),

Gene: Necropolis_46 Start: 32615, Stop: 33607, Start Num: 53

Candidate Starts for Necropolis_46:

(4, 32294), (18, 32462), (29, 32525), (Start: 53 @32615 has 58 MA's), (Start: 58 @32630 has 1 MA's), (68, 32678), (79, 32729), (102, 32825), (111, 32864), (141, 32999), (164, 33110), (166, 33113), (172, 33152), (178, 33176), (180, 33194), (189, 33239), (196, 33269), (198, 33281), (231, 33425), (246, 33524), (250, 33572), (252, 33596),

Gene: Nenae_52 Start: 34366, Stop: 35430, Start Num: 46

Candidate Starts for Nenae_52:

(19, 34252), (Start: 46 @34366 has 121 MA's), (Start: 49 @34378 has 1 MA's), (65, 34444), (66, 34447), (68, 34453), (75, 34477), (78, 34498), (79, 34504), (82, 34516), (83, 34519), (85, 34528), (96, 34570), (100, 34585), (137, 34777), (152, 34858), (155, 34870), (158, 34879), (166, 34912), (168, 34927), (174, 34954), (180, 35008), (182, 35023), (186, 35038), (188, 35047), (194, 35077), (198, 35095), (199, 35101), (215, 35152), (225, 35209), (229, 35245), (231, 35251), (245, 35341), (246, 35350), (250, 35398), (251, 35407),

Gene: Nordenberg_47 Start: 42762, Stop: 43769, Start Num: 41

Candidate Starts for Nordenberg_47:

(Start: 41 @42762 has 8 MA's), (45, 42771), (57, 42807), (68, 42858), (70, 42864), (75, 42882), (80, 42912), (96, 42975), (100, 42990), (109, 43041), (127, 43119), (158, 43281), (166, 43314), (168, 43329), (180, 43398), (182, 43413), (195, 43470), (198, 43485), (250, 43734),

Gene: Norvs_91 Start: 56033, Stop: 56758, Start Num: 51

Candidate Starts for Norvs_91:

(5, 55733), (7, 55760), (8, 55763), (9, 55766), (17, 55874), (Start: 51 @56033 has 18 MA's), (77, 56141), (81, 56159), (85, 56174), (86, 56177), (97, 56228), (108, 56291), (122, 56318), (128, 56351), (135, 56390), (142, 56429), (149, 56459), (152, 56486), (163, 56531), (180, 56612), (184, 56636), (195, 56681), (201, 56711),

Gene: Nostromo_35 Start: 28820, Stop: 29710, Start Num: 46

Candidate Starts for Nostromo_35:

(Start: 46 @28820 has 121 MA's), (73, 28925), (75, 28931), (78, 28952), (96, 29024), (100, 29039), (102, 29054), (124, 29144), (147, 29261), (166, 29342), (168, 29357), (174, 29384), (180, 29441), (183, 29459), (186, 29471), (198, 29528), (212, 29579), (236, 29684),

Gene: ObLaDi_40 Start: 33395, Stop: 34282, Start Num: 42

Candidate Starts for ObLaDi_40:

(39, 33389), (Start: 42 @33395 has 30 MA's), (63, 33467), (67, 33485), (71, 33497), (76, 33524), (80, 33542), (100, 33629), (127, 33794), (151, 33929), (158, 33953), (164, 33980), (166, 33986), (179, 34067), (180, 34073), (188, 34112),

Gene: OneUp_81 Start: 54043, Stop: 54768, Start Num: 51

Candidate Starts for OneUp_81:

(Start: 51 @54043 has 18 MA's), (74, 54130), (77, 54151), (81, 54169), (86, 54187), (97, 54238), (99, 54247), (108, 54301), (122, 54328), (128, 54361), (142, 54439), (149, 54469), (180, 54622), (184, 54646), (186, 54652), (195, 54691),

Gene: Orcanus_39 Start: 26742, Stop: 27548, Start Num: 38

Candidate Starts for Orcanus_39:

(Start: 38 @26742 has 11 MA's), (65, 26838), (68, 26847), (75, 26871), (76, 26883), (80, 26901), (123, 27102), (139, 27195), (153, 27276), (158, 27294), (180, 27402), (204, 27516),

Gene: OtsoOtso_49 Start: 25939, Stop: 26733, Start Num: 42

Candidate Starts for OtsoOtso_49:

(Start: 42 @25939 has 30 MA's), (68, 26032), (76, 26068), (80, 26086), (89, 26119), (106, 26203), (134, 26350), (135, 26353), (155, 26467), (160, 26491), (180, 26587), (190, 26641), (200, 26686), (204, 26701),

Gene: PFR1_36 Start: 27536, Stop: 28372, Start Num: 52

Candidate Starts for PFR1_36:

(52, 27536), (59, 27557), (74, 27620), (80, 27653), (91, 27695), (97, 27728), (110, 27794), (115, 27824), (120, 27836), (126, 27869), (150, 28004), (158, 28031), (165, 28061), (173, 28103), (180, 28151), (183, 28169), (188, 28190), (194, 28220), (197, 28232), (206, 28277), (214, 28304), (220, 28334),

Gene: PFR2_38 Start: 29105, Stop: 29941, Start Num: 52

Candidate Starts for PFR2_38:

(52, 29105), (59, 29126), (74, 29189), (80, 29222), (91, 29264), (97, 29297), (110, 29363), (115, 29393), (120, 29405), (126, 29438), (150, 29573), (158, 29600), (165, 29630), (173, 29672), (180, 29720), (183, 29738), (188, 29759), (194, 29789), (197, 29801), (206, 29846), (214, 29873), (220, 29903),

Gene: Panchino_45 Start: 34001, Stop: 35065, Start Num: 46

Candidate Starts for Panchino_45:

(19, 33887), (Start: 46 @34001 has 121 MA's), (Start: 49 @34013 has 1 MA's), (65, 34079), (66, 34082), (68, 34088), (75, 34112), (78, 34133), (79, 34139), (82, 34151), (83, 34154), (85, 34163), (96, 34205), (100, 34220), (137, 34412), (152, 34493), (155, 34505), (158, 34514), (166, 34547), (168, 34562), (174, 34589), (180, 34643), (182, 34658), (186, 34673), (188, 34682), (194, 34712), (198, 34730), (199, 34736), (215, 34787), (225, 34844), (229, 34880), (231, 34886), (245, 34976), (246, 34985), (250, 35033), (251, 35042),

Gene: Paries_55 Start: 44233, Stop: 45240, Start Num: 41

Candidate Starts for Paries_55:

(Start: 41 @44233 has 8 MA's), (45, 44242), (57, 44278), (68, 44329), (70, 44335), (75, 44353), (80, 44383), (96, 44446), (100, 44461), (129, 44605), (158, 44752), (166, 44785), (168, 44800), (180, 44869), (182, 44884), (195, 44941), (198, 44956), (250, 45205),

Gene: Parmesanjohn_48 Start: 33478, Stop: 34539, Start Num: 46

Candidate Starts for Parmesanjohn_48:

(Start: 46 @33478 has 121 MA's), (Start: 49 @33490 has 1 MA's), (65, 33556), (66, 33559), (68, 33565), (75, 33589), (78, 33610), (79, 33616), (82, 33628), (83, 33631), (85, 33640), (96, 33682), (100, 33697), (116, 33784), (137, 33889), (139, 33898), (147, 33943), (152, 33970), (155, 33982), (162, 34012), (166, 34024), (168, 34039), (174, 34066), (177, 34087), (180, 34120), (182, 34135), (183, 34138), (186, 34150), (188, 34159), (198, 34207), (199, 34213), (215, 34264), (220, 34288), (225, 34321), (227, 34324), (229, 34354), (231, 34360), (242, 34432), (245, 34450), (246, 34459), (250, 34507), (251, 34516),

Gene: Pelletreau_48 Start: 27192, Stop: 27998, Start Num: 38

Candidate Starts for Pelletreau_48:

(Start: 38 @27192 has 11 MA's), (65, 27288), (68, 27297), (76, 27333), (80, 27351), (101, 27432), (139, 27645), (153, 27726), (158, 27744), (180, 27852), (204, 27966),

Gene: Phalm_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for Phalm_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250,

33742),

Gene: PhancyPhin_52 Start: 34360, Stop: 35424, Start Num: 46

Candidate Starts for PhancyPhin_52:

(19, 34246), (Start: 46 @34360 has 121 MA's), (Start: 49 @34372 has 1 MA's), (65, 34438), (66, 34441), (68, 34447), (75, 34471), (78, 34492), (79, 34498), (82, 34510), (83, 34513), (85, 34522), (96, 34564), (100, 34579), (137, 34771), (152, 34852), (155, 34864), (158, 34873), (166, 34906), (168, 34921), (174, 34948), (180, 35002), (182, 35017), (186, 35032), (188, 35041), (194, 35071), (198, 35089), (199, 35095), (215, 35146), (225, 35203), (229, 35239), (231, 35245), (245, 35335), (246, 35344), (250, 35392), (251, 35401),

Gene: Phauci_42 Start: 38921, Stop: 39982, Start Num: 46

Candidate Starts for Phauci_42:

(6, 38648), (12, 38732), (Start: 46 @38921 has 121 MA's), (57, 38957), (68, 39008), (75, 39032), (87, 39089), (100, 39140), (129, 39284), (158, 39431), (162, 39452), (166, 39464), (168, 39479), (180, 39560), (182, 39575), (191, 39617), (192, 39620), (210, 39689), (223, 39749), (239, 39845), (247, 39917), (250, 39953),

Gene: Phayonce_47 Start: 34633, Stop: 35622, Start Num: 53

Candidate Starts for Phayonce_47:

(24, 34519), (Start: 53 @34633 has 58 MA's), (63, 34678), (68, 34699), (76, 34735), (79, 34750), (100, 34831), (111, 34885), (119, 34903), (146, 35041), (153, 35077), (163, 35119), (164, 35122), (166, 35125), (178, 35188), (180, 35206), (183, 35224), (185, 35233), (188, 35245), (196, 35281), (198, 35293), (203, 35317), (205, 35326), (215, 35353), (221, 35389), (222, 35392), (226, 35413), (231, 35443), (246, 35542), (248, 35566), (251, 35599),

Gene: Phegasus_47 Start: 32551, Stop: 33543, Start Num: 53

Candidate Starts for Phegasus_47:

(4, 32230), (18, 32398), (29, 32461), (Start: 53 @32551 has 58 MA's), (Start: 58 @32566 has 1 MA's), (68, 32614), (79, 32665), (102, 32761), (111, 32800), (141, 32935), (164, 33046), (166, 33049), (172, 33088), (178, 33112), (180, 33130), (189, 33175), (196, 33205), (198, 33217), (231, 33361), (246, 33460), (250, 33508), (252, 33532),

Gene: Philonius_48 Start: 31652, Stop: 32644, Start Num: 53

Candidate Starts for Philonius_48:

(Start: 53 @31652 has 58 MA's), (Start: 58 @31670 has 1 MA's), (68, 31718), (79, 31769), (83, 31784), (85, 31793), (111, 31904), (141, 32039), (164, 32150), (166, 32153), (172, 32192), (178, 32216), (180, 32234), (189, 32279), (196, 32309), (198, 32321), (231, 32465), (246, 32564), (250, 32612),

Gene: Phinally_49 Start: 41997, Stop: 43058, Start Num: 46

Candidate Starts for Phinally_49:

(26, 41931), (Start: 46 @41997 has 121 MA's), (57, 42033), (68, 42084), (75, 42108), (78, 42129), (87, 42165), (100, 42216), (105, 42249), (129, 42360), (158, 42507), (162, 42528), (166, 42540), (168, 42555), (180, 42636), (182, 42651), (191, 42693), (192, 42696), (223, 42825), (239, 42921), (247, 42993), (250, 43029),

Gene: Phineas_48 Start: 33393, Stop: 34367, Start Num: 53

Candidate Starts for Phineas_48:

(Start: 53 @33393 has 58 MA's), (Start: 58 @33411 has 1 MA's), (68, 33459), (79, 33510), (85, 33534), (111, 33645), (141, 33780), (164, 33891), (166, 33894), (172, 33933), (178, 33957), (180, 33975), (189, 34020), (196, 34050), (198, 34062), (215, 34119), (231, 34188), (246, 34287), (250, 34335),

Gene: PhinkBoden_90 Start: 56438, Stop: 57163, Start Num: 51

Candidate Starts for PhinkBoden_90:

(5, 56138), (7, 56165), (8, 56168), (9, 56171), (25, 56333), (Start: 51 @56438 has 18 MA's), (77, 56546), (81, 56564), (85, 56579), (86, 56582), (97, 56633), (108, 56696), (122, 56723), (128, 56756), (135, 56795), (142, 56834), (149, 56864), (152, 56891), (163, 56936), (180, 57017), (184, 57041), (195, 57086), (201, 57116),

Gene: Phloss_46 Start: 32885, Stop: 33946, Start Num: 46

Candidate Starts for Phloss_46:

(Start: 46 @32885 has 121 MA's), (Start: 49 @32897 has 1 MA's), (65, 32963), (66, 32966), (68, 32972), (75, 32996), (78, 33017), (79, 33023), (82, 33035), (83, 33038), (85, 33047), (96, 33089), (100, 33104), (116, 33191), (137, 33296), (139, 33305), (147, 33350), (152, 33377), (155, 33389), (162, 33419), (166, 33431), (168, 33446), (174, 33473), (177, 33494), (180, 33527), (182, 33542), (183, 33545), (186, 33557), (188, 33566), (198, 33614), (199, 33620), (215, 33671), (220, 33695), (225, 33728), (227, 33731), (229, 33761), (231, 33767), (242, 33839), (245, 33857), (246, 33866), (250, 33914), (251, 33923),

Gene: PhluffyCoco_41 Start: 26013, Stop: 26810, Start Num: 42

Candidate Starts for PhluffyCoco_41:

(Start: 42 @26013 has 30 MA's), (68, 26109), (80, 26163), (106, 26280), (114, 26316), (134, 26427), (147, 26499), (153, 26535), (155, 26544), (180, 26664), (185, 26691), (198, 26751),

Gene: Phrann_49 Start: 34643, Stop: 35707, Start Num: 46

Candidate Starts for Phrann_49:

(19, 34529), (Start: 46 @34643 has 121 MA's), (Start: 49 @34655 has 1 MA's), (65, 34721), (66, 34724), (68, 34730), (75, 34754), (78, 34775), (79, 34781), (82, 34793), (83, 34796), (85, 34805), (96, 34847), (100, 34862), (137, 35054), (152, 35135), (155, 35147), (158, 35156), (166, 35189), (168, 35204), (174, 35231), (180, 35285), (182, 35300), (186, 35315), (188, 35324), (194, 35354), (198, 35372), (199, 35378), (215, 35429), (225, 35486), (229, 35522), (231, 35528), (245, 35618), (246, 35627), (250, 35675), (251, 35684),

Gene: Piccoletto_33 Start: 29496, Stop: 30341, Start Num: 46

Candidate Starts for Piccoletto_33:

(Start: 46 @29496 has 121 MA's), (68, 29583), (73, 29601), (75, 29607), (78, 29628), (100, 29715), (109, 29772), (124, 29820), (126, 29829), (147, 29937), (166, 30015), (170, 30042), (174, 30057), (178, 30096), (180, 30114), (183, 30132), (188, 30153), (191, 30171), (198, 30201),

Gene: Pippa_35 Start: 29870, Stop: 30733, Start Num: 46

Candidate Starts for Pippa_35:

(Start: 46 @29870 has 121 MA's), (68, 29960), (69, 29963), (75, 29984), (85, 30035), (100, 30092), (124, 30197), (143, 30287), (145, 30299), (147, 30314), (166, 30392), (170, 30419), (174, 30434), (178, 30476), (180, 30494), (183, 30512), (188, 30533), (191, 30551), (206, 30620), (215, 30638), (228, 30710),

Gene: Pipsqueaks_48 Start: 33455, Stop: 34516, Start Num: 46

Candidate Starts for Pipsqueaks_48:

(Start: 46 @33455 has 121 MA's), (Start: 49 @33467 has 1 MA's), (65, 33533), (66, 33536), (68, 33542), (75, 33566), (78, 33587), (79, 33593), (82, 33605), (83, 33608), (85, 33617), (96, 33659), (100, 33674), (116, 33761), (137, 33866), (139, 33875), (147, 33920), (152, 33947), (155, 33959), (162, 33989), (166, 34001), (168, 34016), (174, 34043), (177, 34064), (180, 34097), (182, 34112), (183, 34115), (186, 34127), (188, 34136), (198, 34184), (199, 34190), (215, 34241), (220, 34265), (225, 34298), (227, 34301), (229, 34331), (231, 34337), (242, 34409), (245, 34427), (246, 34436), (250, 34484), (251, 34493),

Gene: Polka_41 Start: 25939, Stop: 26733, Start Num: 42

Candidate Starts for Polka_41:

(Start: 42 @25939 has 30 MA's), (68, 26032), (76, 26068), (80, 26086), (89, 26119), (106, 26203), (134, 26350), (135, 26353), (155, 26467), (160, 26491), (180, 26587), (190, 26641), (200, 26686), (204, 26701),

Gene: Polkaroo_47 Start: 32547, Stop: 33539, Start Num: 53

Candidate Starts for Polkaroo_47:

(4, 32226), (18, 32394), (29, 32457), (Start: 53 @32547 has 58 MA's), (Start: 58 @32562 has 1 MA's), (68, 32610), (79, 32661), (102, 32757), (111, 32796), (141, 32931), (164, 33042), (166, 33045), (172, 33084), (178, 33108), (180, 33126), (189, 33171), (196, 33201), (198, 33213), (231, 33357), (246, 33456), (250, 33504), (252, 33528),

Gene: Prairie_37 Start: 29334, Stop: 30188, Start Num: 42

Candidate Starts for Prairie_37:

(Start: 42 @29334 has 30 MA's), (68, 29424), (75, 29448), (100, 29556), (124, 29661), (147, 29781), (180, 29958), (188, 29997), (218, 30114),

Gene: Purgamenstris_52 Start: 34364, Stop: 35428, Start Num: 46

Candidate Starts for Purgamenstris_52:

(19, 34250), (Start: 46 @34364 has 121 MA's), (Start: 49 @34376 has 1 MA's), (65, 34442), (66, 34445), (68, 34451), (75, 34475), (78, 34496), (79, 34502), (82, 34514), (83, 34517), (85, 34526), (96, 34568), (100, 34583), (137, 34775), (152, 34856), (155, 34868), (158, 34877), (166, 34910), (168, 34925), (174, 34952), (180, 35006), (182, 35021), (186, 35036), (188, 35045), (194, 35075), (198, 35093), (199, 35099), (215, 35150), (225, 35207), (229, 35243), (231, 35249), (245, 35339), (246, 35348), (250, 35396), (251, 35405),

Gene: Purky_52 Start: 35044, Stop: 36114, Start Num: 53

Candidate Starts for Purky_52:

(Start: 49 @35026 has 1 MA's), (Start: 53 @35044 has 58 MA's), (64, 35104), (67, 35113), (69, 35119), (75, 35140), (76, 35152), (82, 35179), (111, 35332), (116, 35359), (140, 35479), (146, 35506), (158, 35560), (164, 35587), (169, 35614), (180, 35668), (185, 35695), (230, 35929), (231, 35935), (246, 36034), (250, 36082),

Gene: Pygmy_50 Start: 34875, Stop: 35831, Start Num: 58

Candidate Starts for Pygmy_50:

(Start: 53 @34857 has 58 MA's), (Start: 58 @34875 has 1 MA's), (68, 34923), (79, 34974), (85, 34998), (111, 35109), (141, 35244), (164, 35355), (166, 35358), (172, 35397), (178, 35421), (180, 35439), (189, 35484), (196, 35514), (198, 35526), (215, 35583), (231, 35652), (246, 35751), (250, 35799),

Gene: QueenHazel_44 Start: 32701, Stop: 33696, Start Num: 53

Candidate Starts for QueenHazel_44:

(21, 32566), (Start: 53 @32701 has 58 MA's), (Start: 58 @32716 has 1 MA's), (68, 32764), (79, 32815), (85, 32839), (111, 32950), (141, 33085), (164, 33196), (166, 33199), (172, 33238), (178, 33262), (180, 33280), (189, 33325), (196, 33355), (198, 33367), (215, 33424), (231, 33514), (246, 33613), (250, 33661), (252, 33685),

Gene: Rattail_41 Start: 26099, Stop: 26896, Start Num: 42

Candidate Starts for Rattail_41:

(Start: 42 @26099 has 30 MA's), (68, 26195), (80, 26249), (106, 26366), (114, 26402), (134, 26513), (147, 26585), (153, 26621), (155, 26630), (180, 26750), (185, 26777), (198, 26837),

Gene: Raymond7_46 Start: 34152, Stop: 35216, Start Num: 46

Candidate Starts for Raymond7_46:

(19, 34038), (Start: 46 @34152 has 121 MA's), (Start: 49 @34164 has 1 MA's), (65, 34230), (66, 34233), (68, 34239), (75, 34263), (78, 34284), (79, 34290), (82, 34302), (83, 34305), (85, 34314), (96, 34356), (100, 34371), (137, 34563), (152, 34644), (155, 34656), (158, 34665), (166, 34698), (168, 34713), (174, 34740), (180, 34794), (182, 34809), (186, 34824), (188, 34833), (194, 34863), (198, 34881), (199, 34887), (215, 34938), (225, 34995), (229, 35031), (231, 35037), (245, 35127), (246, 35136), (250, 35184), (251, 35193),

Gene: Rebel_44 Start: 30494, Stop: 31558, Start Num: 46

Candidate Starts for Rebel_44:

(19, 30380), (Start: 46 @30494 has 121 MA's), (Start: 49 @30506 has 1 MA's), (65, 30572), (66, 30575), (68, 30581), (75, 30605), (78, 30626), (79, 30632), (82, 30644), (83, 30647), (85, 30656), (96, 30698), (100, 30713), (137, 30905), (152, 30986), (155, 30998), (158, 31007), (166, 31040), (168, 31055), (174, 31082), (180, 31136), (182, 31151), (186, 31166), (188, 31175), (194, 31205), (198, 31223), (199, 31229), (215, 31280), (225, 31337), (229, 31373), (231, 31379), (245, 31469), (246, 31478), (250, 31526), (251, 31535),

Gene: RedFox_41 Start: 26012, Stop: 26809, Start Num: 42

Candidate Starts for RedFox_41:

(Start: 42 @26012 has 30 MA's), (68, 26108), (80, 26162), (106, 26279), (114, 26315), (134, 26426), (147, 26498), (153, 26534), (155, 26543), (180, 26663), (185, 26690), (198, 26750),

Gene: Redi_52 Start: 34363, Stop: 35427, Start Num: 46

Candidate Starts for Redi_52:

(19, 34249), (Start: 46 @34363 has 121 MA's), (Start: 49 @34375 has 1 MA's), (65, 34441), (66, 34444), (68, 34450), (75, 34474), (78, 34495), (79, 34501), (82, 34513), (83, 34516), (85, 34525), (96, 34567), (100, 34582), (137, 34774), (152, 34855), (155, 34867), (158, 34876), (166, 34909), (168, 34924), (174, 34951), (180, 35005), (182, 35020), (186, 35035), (188, 35044), (194, 35074), (198, 35092), (199, 35098), (215, 35149), (225, 35206), (229, 35242), (231, 35248), (245, 35338), (246, 35347), (250, 35395), (251, 35404),

Gene: Renna12_40 Start: 26070, Stop: 26870, Start Num: 42

Candidate Starts for Renna12_40:

(Start: 42 @26070 has 30 MA's), (68, 26166), (80, 26220), (83, 26232), (101, 26301), (106, 26337), (112, 26367), (147, 26559), (155, 26604), (180, 26724), (185, 26751), (198, 26811),

Gene: Ribeye_50 Start: 43238, Stop: 44260, Start Num: 46

Candidate Starts for Ribeye_50:

(Start: 46 @43238 has 121 MA's), (57, 43274), (68, 43328), (75, 43352), (80, 43382), (88, 43412), (96, 43445), (100, 43460), (116, 43541), (127, 43589), (129, 43604), (130, 43607), (158, 43751), (166, 43784), (168, 43799), (180, 43868), (182, 43883), (195, 43940), (198, 43955),

Gene: RiverRaider_52 Start: 41929, Stop: 42948, Start Num: 46

Candidate Starts for RiverRaider_52:

(Start: 31 @41884 has 1 MA's), (Start: 46 @41929 has 121 MA's), (68, 42016), (75, 42040), (80, 42070), (96, 42133), (100, 42148), (127, 42277), (158, 42439), (166, 42472), (168, 42487), (180, 42556), (182, 42571), (195, 42628), (198, 42643), (216, 42706), (237, 42796), (251, 42925),

Gene: RoadKill_45 Start: 38932, Stop: 39990, Start Num: 46

Candidate Starts for RoadKill_45:

(35, 38902), (Start: 46 @38932 has 121 MA's), (68, 39019), (75, 39043), (80, 39073), (96, 39136), (100, 39151), (105, 39184), (129, 39295), (135, 39322), (145, 39376), (158, 39442), (162, 39463), (166, 39475), (168, 39490), (180, 39574), (183, 39592), (187, 39610), (191, 39631), (198, 39661),

(223, 39772), (240, 39877), (243, 39898), (249, 39955), (250, 39961),

Gene: Rofo_51 Start: 43335, Stop: 44345, Start Num: 41

Candidate Starts for Rofo_51:

(Start: 41 @43335 has 8 MA's), (45, 43344), (57, 43380), (68, 43434), (70, 43440), (75, 43458), (80, 43488), (96, 43551), (100, 43566), (116, 43647), (129, 43710), (158, 43857), (166, 43890), (168, 43905), (180, 43974), (182, 43989), (195, 44046), (198, 44061), (240, 44226), (250, 44310),

Gene: Rubeelu_51 Start: 34063, Stop: 35127, Start Num: 46

Candidate Starts for Rubeelu_51:

(Start: 46 @34063 has 121 MA's), (Start: 49 @34075 has 1 MA's), (65, 34141), (68, 34150), (75, 34174), (78, 34195), (79, 34201), (83, 34216), (85, 34225), (96, 34267), (100, 34282), (116, 34369), (155, 34567), (166, 34609), (168, 34624), (174, 34651), (177, 34672), (180, 34705), (182, 34720), (186, 34735), (188, 34744), (194, 34774), (198, 34792), (199, 34798), (208, 34831), (215, 34849), (230, 34942), (231, 34948), (245, 35038), (246, 35047), (250, 35095), (251, 35104),

Gene: Ruchi_38 Start: 26786, Stop: 27592, Start Num: 38

Candidate Starts for Ruchi_38:

(Start: 38 @26786 has 11 MA's), (65, 26882), (68, 26891), (76, 26927), (80, 26945), (139, 27239), (146, 27275), (166, 27365), (180, 27446), (204, 27560),

Gene: Sampson_51 Start: 43533, Stop: 44573, Start Num: 46

Candidate Starts for Sampson_51:

(Start: 46 @43533 has 121 MA's), (68, 43623), (75, 43647), (76, 43659), (80, 43677), (100, 43755), (105, 43788), (145, 43962), (158, 44028), (168, 44076), (180, 44148), (182, 44163), (187, 44184), (191, 44205), (192, 44208), (220, 44313), (223, 44346), (224, 44358), (247, 44505), (250, 44541),

Gene: Sanjuju_50 Start: 44082, Stop: 45080, Start Num: 43

Candidate Starts for Sanjuju_50:

(23, 43998), (27, 44019), (Start: 43 @44082 has 7 MA's), (57, 44118), (68, 44169), (70, 44175), (75, 44193), (80, 44223), (96, 44286), (100, 44301), (129, 44445), (158, 44592), (166, 44625), (168, 44640), (180, 44709), (182, 44724), (195, 44781), (198, 44796), (242, 44973), (250, 45045),

Gene: Saronaya_50 Start: 42537, Stop: 43559, Start Num: 46

Candidate Starts for Saronaya_50:

(15, 42396), (Start: 31 @42483 has 1 MA's), (Start: 42 @42531 has 30 MA's), (Start: 46 @42537 has 121 MA's), (57, 42573), (68, 42627), (75, 42651), (80, 42681), (88, 42711), (96, 42744), (100, 42759), (127, 42888), (129, 42903), (130, 42906), (158, 43050), (166, 43083), (168, 43098), (180, 43167), (181, 43173), (182, 43182), (195, 43239), (198, 43254),

Gene: Sbash_58 Start: 41406, Stop: 42380, Start Num: 53

Candidate Starts for Sbash_58:

(Start: 53 @41406 has 58 MA's), (Start: 58 @41421 has 1 MA's), (68, 41469), (72, 41481), (79, 41520), (84, 41541), (85, 41544), (92, 41562), (126, 41709), (137, 41769), (139, 41778), (153, 41850), (155, 41859), (166, 41898), (172, 41937), (178, 41961), (180, 41979), (183, 41997), (188, 42018), (189, 42024), (196, 42054), (230, 42195), (231, 42201), (250, 42348),

Gene: Schnauzer_49 Start: 33478, Stop: 34539, Start Num: 46

Candidate Starts for Schnauzer_49:

(Start: 46 @33478 has 121 MA's), (Start: 49 @33490 has 1 MA's), (65, 33556), (66, 33559), (68, 33565), (75, 33589), (78, 33610), (79, 33616), (82, 33628), (83, 33631), (85, 33640), (96, 33682), (100, 33697), (116, 33784), (137, 33889), (139, 33898), (147, 33943), (152, 33970), (155, 33982), (162, 34012), (166, 34024), (168, 34039), (174, 34066), (177, 34087), (180, 34120), (182, 34135), (183,

34138), (186, 34150), (188, 34159), (198, 34207), (199, 34213), (215, 34264), (220, 34288), (225, 34321), (227, 34324), (229, 34354), (231, 34360), (242, 34432), (245, 34450), (246, 34459), (250, 34507), (251, 34516),

Gene: SchottB_48 Start: 43080, Stop: 44102, Start Num: 46

Candidate Starts for SchottB_48:

(Start: 46 @43080 has 121 MA's), (57, 43116), (68, 43170), (75, 43194), (80, 43224), (88, 43254), (96, 43287), (100, 43302), (116, 43383), (127, 43431), (129, 43446), (130, 43449), (158, 43593), (166, 43626), (168, 43641), (180, 43710), (182, 43725), (195, 43782), (198, 43797),

Gene: Scioto_52 Start: 43589, Stop: 44629, Start Num: 46

Candidate Starts for Scioto_52:

(Start: 46 @43589 has 121 MA's), (68, 43679), (75, 43703), (76, 43715), (80, 43733), (100, 43811), (105, 43844), (145, 44018), (158, 44084), (168, 44132), (180, 44204), (182, 44219), (187, 44240), (191, 44261), (192, 44264), (220, 44369), (223, 44402), (224, 44414), (247, 44561), (250, 44597),

Gene: Scitech_45 Start: 31494, Stop: 32558, Start Num: 46

Candidate Starts for Scitech_45:

(Start: 46 @31494 has 121 MA's), (Start: 49 @31506 has 1 MA's), (65, 31572), (66, 31575), (68, 31581), (75, 31605), (78, 31626), (79, 31632), (82, 31644), (83, 31647), (85, 31656), (96, 31698), (100, 31713), (116, 31800), (137, 31905), (139, 31914), (147, 31959), (152, 31986), (155, 31998), (162, 32028), (166, 32040), (168, 32055), (174, 32082), (177, 32103), (180, 32136), (182, 32151), (183, 32154), (186, 32166), (188, 32175), (198, 32223), (199, 32229), (215, 32280), (220, 32304), (225, 32337), (227, 32340), (229, 32370), (231, 32376), (245, 32469), (246, 32478), (248, 32502), (251, 32535),

Gene: Sedona_51 Start: 43831, Stop: 44826, Start Num: 46

Candidate Starts for Sedona_51:

(10, 43588), (15, 43690), (Start: 31 @43777 has 1 MA's), (Start: 46 @43831 has 121 MA's), (57, 43867), (68, 43918), (70, 43924), (75, 43942), (80, 43972), (96, 44035), (100, 44050), (116, 44131), (121, 44146), (125, 44170), (129, 44194), (158, 44341), (166, 44374), (168, 44389), (180, 44458), (182, 44473), (195, 44530), (198, 44545), (242, 44719), (250, 44791),

Gene: Sejanus_64 Start: 49582, Stop: 50574, Start Num: 53

Candidate Starts for Sejanus_64:

(24, 49468), (Start: 53 @49582 has 58 MA's), (63, 49627), (68, 49648), (75, 49672), (76, 49684), (79, 49699), (99, 49777), (100, 49780), (111, 49834), (119, 49852), (141, 49969), (146, 49990), (153, 50026), (163, 50068), (164, 50071), (166, 50074), (178, 50137), (180, 50155), (183, 50173), (188, 50194), (196, 50230), (198, 50242), (215, 50302), (221, 50338), (222, 50341), (226, 50365), (231, 50395), (235, 50413), (246, 50494), (248, 50518), (251, 50551),

Gene: Shade_35 Start: 29715, Stop: 30578, Start Num: 46

Candidate Starts for Shade_35:

(Start: 46 @29715 has 121 MA's), (68, 29805), (69, 29808), (75, 29829), (85, 29880), (100, 29937), (124, 30042), (143, 30132), (145, 30144), (147, 30159), (166, 30237), (170, 30264), (174, 30279), (178, 30321), (180, 30339), (183, 30357), (188, 30378), (191, 30396), (206, 30465), (215, 30483), (228, 30555),

Gene: Shipwreck_50 Start: 34832, Stop: 35806, Start Num: 53

Candidate Starts for Shipwreck_50:

(Start: 53 @34832 has 58 MA's), (Start: 58 @34850 has 1 MA's), (68, 34898), (79, 34949), (85, 34973), (111, 35084), (141, 35219), (164, 35330), (166, 35333), (172, 35372), (178, 35396), (180, 35414), (189, 35459), (196, 35489), (198, 35501), (215, 35558), (231, 35627), (246, 35726), (250, 35774),

Gene: Shivanishola_51 Start: 42552, Stop: 43547, Start Num: 46

Candidate Starts for Shivanishola_51:

(10, 42309), (15, 42411), (Start: 31 @42498 has 1 MA's), (Start: 46 @42552 has 121 MA's), (57, 42588), (68, 42639), (70, 42645), (75, 42663), (80, 42693), (96, 42756), (100, 42771), (116, 42852), (121, 42867), (125, 42891), (129, 42915), (158, 43062), (166, 43095), (168, 43110), (180, 43179), (182, 43194), (195, 43251), (198, 43266), (242, 43440), (250, 43512),

Gene: ShrimpFriedEgg_52 Start: 34363, Stop: 35427, Start Num: 46

Candidate Starts for ShrimpFriedEgg_52:

(19, 34249), (Start: 46 @34363 has 121 MA's), (Start: 49 @34375 has 1 MA's), (65, 34441), (66, 34444), (68, 34450), (75, 34474), (78, 34495), (79, 34501), (82, 34513), (83, 34516), (85, 34525), (96, 34567), (100, 34582), (137, 34774), (152, 34855), (155, 34867), (158, 34876), (166, 34909), (168, 34924), (174, 34951), (180, 35005), (182, 35020), (186, 35035), (188, 35044), (194, 35074), (198, 35092), (199, 35098), (215, 35149), (225, 35206), (229, 35242), (231, 35248), (245, 35338), (246, 35347), (250, 35395), (251, 35404),

Gene: Shweta_46 Start: 32422, Stop: 33489, Start Num: 46

Candidate Starts for Shweta_46:

(19, 32308), (Start: 46 @32422 has 121 MA's), (Start: 49 @32434 has 1 MA's), (65, 32500), (66, 32503), (68, 32509), (75, 32533), (78, 32554), (79, 32560), (82, 32572), (83, 32575), (85, 32584), (96, 32626), (100, 32641), (137, 32833), (152, 32914), (155, 32926), (158, 32935), (166, 32968), (168, 32983), (174, 33010), (180, 33064), (182, 33079), (186, 33094), (188, 33103), (194, 33133), (198, 33151), (199, 33157), (215, 33208), (225, 33265), (231, 33307), (246, 33406), (250, 33454), (252, 33478),

Gene: Sicarius2_36 Start: 29347, Stop: 30198, Start Num: 46

Candidate Starts for Sicarius2_36:

(Start: 46 @29347 has 121 MA's), (69, 29440), (73, 29455), (75, 29461), (80, 29491), (85, 29512), (100, 29569), (124, 29674), (135, 29728), (147, 29791), (166, 29869), (174, 29911), (178, 29950), (180, 29968), (183, 29986), (188, 30007), (191, 30025), (198, 30055),

Gene: Silvafighter_49 Start: 33451, Stop: 34512, Start Num: 46

Candidate Starts for Silvafighter_49:

(Start: 46 @33451 has 121 MA's), (Start: 49 @33463 has 1 MA's), (65, 33529), (66, 33532), (68, 33538), (75, 33562), (78, 33583), (79, 33589), (82, 33601), (83, 33604), (85, 33613), (96, 33655), (100, 33670), (116, 33757), (137, 33862), (139, 33871), (147, 33916), (152, 33943), (155, 33955), (162, 33985), (166, 33997), (168, 34012), (174, 34039), (177, 34060), (180, 34093), (182, 34108), (183, 34111), (186, 34123), (188, 34132), (198, 34180), (199, 34186), (215, 34237), (220, 34261), (225, 34294), (227, 34297), (229, 34327), (231, 34333), (242, 34405), (245, 34423), (246, 34432), (250, 34480), (251, 34489),

Gene: Silvy_46 Start: 32126, Stop: 33115, Start Num: 53

Candidate Starts for Silvy_46:

(4, 31805), (18, 31973), (29, 32036), (Start: 53 @32126 has 58 MA's), (Start: 58 @32141 has 1 MA's), (68, 32189), (79, 32240), (102, 32336), (111, 32375), (141, 32510), (164, 32621), (166, 32624), (172, 32663), (178, 32687), (180, 32705), (189, 32750), (196, 32780), (198, 32792), (231, 32936), (246, 33035), (250, 33083),

Gene: Sitar_51 Start: 44231, Stop: 45241, Start Num: 46

Candidate Starts for Sitar_51:

(2, 43880), (10, 43988), (15, 44090), (Start: 31 @44177 has 1 MA's), (Start: 46 @44231 has 121 MA's), (57, 44267), (68, 44318), (70, 44324), (75, 44342), (80, 44372), (96, 44435), (100, 44450), (116,

44531), (129, 44594), (158, 44741), (166, 44774), (168, 44789), (180, 44858), (182, 44873), (195, 44930), (198, 44945), (242, 45134), (250, 45206),

Gene: SkinnyPete_45 Start: 31602, Stop: 32585, Start Num: 53

Candidate Starts for SkinnyPete_45:

(Start: 53 @31602 has 58 MA's), (68, 31668), (72, 31680), (79, 31719), (92, 31761), (111, 31854), (141, 31989), (163, 32097), (164, 32100), (166, 32103), (172, 32142), (178, 32166), (180, 32184), (185, 32211), (188, 32223), (196, 32259), (198, 32271), (215, 32328), (231, 32403), (246, 32505), (250, 32553),

Gene: Smoothie_92 Start: 56648, Stop: 57373, Start Num: 51

Candidate Starts for Smoothie_92:

(5, 56348), (7, 56375), (8, 56378), (9, 56381), (25, 56543), (Start: 51 @56648 has 18 MA's), (77, 56756), (81, 56774), (85, 56789), (86, 56792), (97, 56843), (108, 56906), (122, 56933), (128, 56966), (135, 57005), (142, 57044), (149, 57074), (152, 57101), (163, 57146), (180, 57227), (184, 57251), (195, 57296), (201, 57326),

Gene: Smurph_48 Start: 33478, Stop: 34539, Start Num: 46

Candidate Starts for Smurph_48:

(Start: 46 @33478 has 121 MA's), (Start: 49 @33490 has 1 MA's), (65, 33556), (66, 33559), (68, 33565), (75, 33589), (78, 33610), (79, 33616), (82, 33628), (83, 33631), (85, 33640), (96, 33682), (100, 33697), (116, 33784), (137, 33889), (139, 33898), (147, 33943), (152, 33970), (155, 33982), (162, 34012), (166, 34024), (168, 34039), (174, 34066), (177, 34087), (180, 34120), (182, 34135), (183, 34138), (186, 34150), (188, 34159), (198, 34207), (199, 34213), (215, 34264), (220, 34288), (225, 34321), (227, 34324), (229, 34354), (231, 34360), (242, 34432), (245, 34450), (246, 34459), (250, 34507), (251, 34516),

Gene: Snekmaggedon_46 Start: 32655, Stop: 33719, Start Num: 46

Candidate Starts for Snekmaggedon_46:

(19, 32541), (Start: 46 @32655 has 121 MA's), (Start: 49 @32667 has 1 MA's), (65, 32733), (66, 32736), (68, 32742), (75, 32766), (78, 32787), (79, 32793), (82, 32805), (83, 32808), (85, 32817), (96, 32859), (100, 32874), (137, 33066), (152, 33147), (155, 33159), (158, 33168), (166, 33201), (168, 33216), (174, 33243), (180, 33297), (182, 33312), (186, 33327), (188, 33336), (194, 33366), (198, 33384), (199, 33390), (215, 33441), (225, 33498), (229, 33534), (231, 33540), (245, 33630), (246, 33639), (250, 33687), (251, 33696),

Gene: Sonah_47 Start: 32529, Stop: 33503, Start Num: 53

Candidate Starts for Sonah_47:

(Start: 53 @32529 has 58 MA's), (Start: 58 @32547 has 1 MA's), (68, 32595), (79, 32646), (85, 32670), (111, 32781), (141, 32916), (164, 33027), (166, 33030), (172, 33069), (178, 33093), (180, 33111), (189, 33156), (196, 33186), (198, 33198), (215, 33255), (231, 33324), (246, 33423), (250, 33471),

Gene: Sonny_35 Start: 29745, Stop: 30608, Start Num: 46

Candidate Starts for Sonny_35:

(Start: 46 @29745 has 121 MA's), (68, 29835), (69, 29838), (75, 29859), (85, 29910), (100, 29967), (124, 30072), (143, 30162), (145, 30174), (147, 30189), (166, 30267), (170, 30294), (174, 30309), (178, 30351), (180, 30369), (183, 30387), (188, 30408), (191, 30426), (206, 30495), (215, 30513), (228, 30585),

Gene: SpeedDemon_950 Start: 64954, Stop: 64124, Start Num: 40

Candidate Starts for SpeedDemon_950:

(Start: 40 @64954 has 5 MA's), (75, 64831), (81, 64795), (97, 64726), (124, 64618), (152, 64453), (157, 64435), (180, 64327), (192, 64267), (213, 64183),

Gene: SpongeBob_46 Start: 32655, Stop: 33719, Start Num: 46

Candidate Starts for SpongeBob_46:

(19, 32541), (Start: 46 @32655 has 121 MA's), (Start: 49 @32667 has 1 MA's), (65, 32733), (66, 32736), (68, 32742), (75, 32766), (78, 32787), (79, 32793), (82, 32805), (83, 32808), (85, 32817), (96, 32859), (100, 32874), (137, 33066), (152, 33147), (155, 33159), (158, 33168), (166, 33201), (168, 33216), (174, 33243), (180, 33297), (182, 33312), (186, 33327), (188, 33336), (194, 33366), (198, 33384), (199, 33390), (215, 33441), (225, 33498), (229, 33534), (231, 33540), (245, 33630), (246, 33639), (250, 33687), (251, 33696),

Gene: StevieBAY_35 Start: 29827, Stop: 30672, Start Num: 46

Candidate Starts for StevieBAY_35:

(Start: 46 @29827 has 121 MA's), (68, 29920), (69, 29923), (75, 29944), (80, 29974), (100, 30052), (109, 30109), (124, 30157), (134, 30208), (135, 30211), (137, 30226), (144, 30256), (147, 30274), (150, 30292), (166, 30352), (174, 30394), (178, 30433), (180, 30451), (183, 30469), (188, 30490), (191, 30508), (206, 30577), (212, 30589), (215, 30595),

Gene: StevieRay_46 Start: 32502, Stop: 33476, Start Num: 53

Candidate Starts for StevieRay_46:

(Start: 53 @32502 has 58 MA's), (Start: 58 @32520 has 1 MA's), (68, 32568), (79, 32619), (83, 32634), (85, 32643), (111, 32754), (141, 32889), (164, 33000), (166, 33003), (172, 33042), (178, 33066), (180, 33084), (189, 33129), (196, 33159), (198, 33171), (215, 33228), (231, 33297), (246, 33396), (250, 33444),

Gene: StorminNorm_49 Start: 42171, Stop: 43193, Start Num: 46

Candidate Starts for StorminNorm_49:

(Start: 46 @42171 has 121 MA's), (57, 42207), (68, 42261), (75, 42285), (80, 42315), (88, 42345), (96, 42378), (100, 42393), (116, 42474), (127, 42522), (129, 42537), (130, 42540), (158, 42684), (166, 42717), (168, 42732), (180, 42801), (182, 42816), (195, 42873), (198, 42888),

Gene: StressBall_46 Start: 32800, Stop: 33774, Start Num: 53

Candidate Starts for StressBall_46:

(Start: 53 @32800 has 58 MA's), (Start: 58 @32818 has 1 MA's), (68, 32866), (79, 32917), (83, 32932), (85, 32941), (111, 33052), (141, 33187), (164, 33298), (166, 33301), (172, 33340), (178, 33364), (180, 33382), (189, 33427), (196, 33457), (198, 33469), (215, 33526), (231, 33595), (246, 33694), (250, 33742),

Gene: StuartMinion_36 Start: 23080, Stop: 23877, Start Num: 42

Candidate Starts for StuartMinion_36:

(Start: 42 @23080 has 30 MA's), (68, 23176), (80, 23230), (106, 23347), (134, 23494), (147, 23566), (155, 23611), (180, 23731), (198, 23818),

Gene: Stuck_62 Start: 42896, Stop: 43942, Start Num: 46

Candidate Starts for Stuck_62:

(Start: 46 @42896 has 121 MA's), (Start: 49 @42908 has 1 MA's), (65, 42974), (68, 42983), (75, 43007), (78, 43028), (82, 43046), (83, 43049), (85, 43058), (96, 43100), (100, 43115), (166, 43442), (168, 43457), (174, 43484), (180, 43538), (182, 43553), (186, 43568), (188, 43577), (200, 43637), (208, 43664), (215, 43682), (227, 43736), (229, 43757), (231, 43763), (250, 43910),

Gene: Stultus_49 Start: 42729, Stop: 43727, Start Num: 43

Candidate Starts for Stultus_49:

(Start: 43 @42729 has 7 MA's), (57, 42765), (68, 42816), (70, 42822), (75, 42840), (80, 42870), (96, 42933), (100, 42948), (116, 43029), (121, 43044), (125, 43068), (129, 43092), (158, 43239), (166,

43272), (168, 43287), (180, 43356), (182, 43371), (195, 43428), (198, 43443), (242, 43620), (250, 43692),

Gene: TaeYoung_35 Start: 29743, Stop: 30591, Start Num: 46

Candidate Starts for TaeYoung_35:

(Start: 46 @29743 has 121 MA's), (68, 29833), (69, 29836), (75, 29857), (79, 29884), (80, 29887), (100, 29965), (109, 30022), (124, 30070), (134, 30121), (135, 30124), (147, 30187), (150, 30205), (166, 30265), (174, 30307), (178, 30346), (180, 30364), (183, 30382), (188, 30403), (191, 30421), (198, 30451), (212, 30502), (228, 30568),

Gene: Tangent_52 Start: 42958, Stop: 43968, Start Num: 41

Candidate Starts for Tangent_52:

(Start: 41 @42958 has 8 MA's), (45, 42967), (57, 43003), (68, 43057), (70, 43063), (75, 43081), (80, 43111), (96, 43174), (100, 43189), (116, 43270), (129, 43333), (158, 43480), (166, 43513), (168, 43528), (180, 43597), (182, 43612), (195, 43669), (198, 43684), (240, 43849), (250, 43933),

Gene: Tangerine_49 Start: 41949, Stop: 42971, Start Num: 46

Candidate Starts for Tangerine_49:

(Start: 46 @41949 has 121 MA's), (68, 42039), (75, 42063), (80, 42093), (88, 42123), (96, 42156), (100, 42171), (127, 42300), (129, 42315), (130, 42318), (158, 42462), (166, 42495), (168, 42510), (180, 42579), (181, 42585), (182, 42594), (195, 42651), (198, 42666),

Gene: Tapioca_50 Start: 33444, Stop: 34505, Start Num: 46

Candidate Starts for Tapioca_50:

(Start: 46 @33444 has 121 MA's), (Start: 49 @33456 has 1 MA's), (65, 33522), (66, 33525), (68, 33531), (75, 33555), (78, 33576), (79, 33582), (82, 33594), (83, 33597), (85, 33606), (96, 33648), (100, 33663), (116, 33750), (137, 33855), (139, 33864), (147, 33909), (152, 33936), (155, 33948), (162, 33978), (166, 33990), (168, 34005), (174, 34032), (177, 34053), (180, 34086), (182, 34101), (183, 34104), (186, 34116), (188, 34125), (198, 34173), (199, 34179), (215, 34230), (220, 34254), (225, 34287), (227, 34290), (229, 34320), (231, 34326), (242, 34398), (245, 34416), (246, 34425), (250, 34473), (251, 34482),

Gene: Tardus_53 Start: 43285, Stop: 44328, Start Num: 46

Candidate Starts for Tardus_53:

(Start: 46 @43285 has 121 MA's), (68, 43375), (75, 43399), (76, 43411), (80, 43429), (100, 43507), (125, 43609), (145, 43714), (158, 43780), (168, 43828), (180, 43900), (182, 43915), (187, 43936), (191, 43957), (192, 43960), (220, 44065), (223, 44098), (224, 44110), (247, 44260), (250, 44296),

Gene: TaylorSipht_39 Start: 26156, Stop: 26953, Start Num: 38

Candidate Starts for TaylorSipht_39:

(Start: 38 @26156 has 11 MA's), (64, 26246), (65, 26249), (68, 26258), (80, 26312), (106, 26429), (147, 26642), (155, 26687), (180, 26807), (185, 26834), (195, 26879), (196, 26882), (200, 26906),

Gene: Techage_46 Start: 32569, Stop: 33561, Start Num: 53

Candidate Starts for Techage_46:

(4, 32248), (18, 32416), (29, 32479), (Start: 53 @32569 has 58 MA's), (Start: 58 @32584 has 1 MA's), (68, 32632), (79, 32683), (102, 32779), (111, 32818), (141, 32953), (164, 33064), (166, 33067), (172, 33106), (178, 33130), (180, 33148), (189, 33193), (196, 33223), (198, 33235), (231, 33379), (246, 33478), (250, 33526), (252, 33550),

Gene: Thespis_46 Start: 32536, Stop: 33510, Start Num: 53

Candidate Starts for Thespis_46:

(Start: 53 @32536 has 58 MA's), (Start: 58 @32554 has 1 MA's), (68, 32602), (79, 32653), (83, 32668), (85, 32677), (111, 32788), (141, 32923), (164, 33034), (166, 33037), (172, 33076), (178, 33100), (180, 33118), (189, 33163), (196, 33193), (198, 33205), (215, 33262), (231, 33331), (246, 33430), (250, 33478),

Gene: Thing3_50 Start: 42629, Stop: 43627, Start Num: 46

Candidate Starts for Thing3_50:

(10, 42386), (15, 42488), (Start: 31 @42575 has 1 MA's), (Start: 46 @42629 has 121 MA's), (57, 42665), (68, 42716), (70, 42722), (75, 42740), (80, 42770), (96, 42833), (100, 42848), (116, 42929), (125, 42968), (129, 42992), (158, 43139), (166, 43172), (168, 43187), (180, 43256), (182, 43271), (195, 43328), (198, 43343), (242, 43520), (250, 43592),

Gene: ThulaThula_53 Start: 37120, Stop: 38187, Start Num: 46

Candidate Starts for ThulaThula_53:

(19, 37006), (Start: 46 @37120 has 121 MA's), (Start: 49 @37132 has 1 MA's), (68, 37207), (75, 37231), (78, 37252), (83, 37273), (85, 37282), (96, 37324), (100, 37339), (105, 37372), (137, 37531), (139, 37540), (155, 37624), (166, 37666), (168, 37681), (174, 37708), (177, 37729), (180, 37762), (182, 37777), (186, 37792), (188, 37801), (194, 37831), (198, 37849), (208, 37888), (215, 37906), (230, 38002), (231, 38008), (246, 38107),

Gene: Tiamoceli_48 Start: 40223, Stop: 41281, Start Num: 46

Candidate Starts for Tiamoceli_48:

(35, 40193), (Start: 46 @40223 has 121 MA's), (68, 40310), (75, 40334), (80, 40364), (96, 40427), (100, 40442), (105, 40475), (129, 40586), (135, 40613), (145, 40667), (158, 40733), (162, 40754), (166, 40766), (168, 40781), (180, 40865), (183, 40883), (187, 40901), (191, 40922), (198, 40952), (223, 41063), (240, 41168), (243, 41189), (249, 41246), (250, 41252),

Gene: Timinator_35 Start: 29826, Stop: 30671, Start Num: 46

Candidate Starts for Timinator_35:

(Start: 46 @29826 has 121 MA's), (68, 29919), (69, 29922), (75, 29943), (80, 29973), (100, 30051), (109, 30108), (124, 30156), (134, 30207), (135, 30210), (137, 30225), (147, 30273), (150, 30291), (166, 30351), (174, 30393), (178, 30432), (180, 30450), (183, 30468), (188, 30489), (191, 30507), (198, 30537), (206, 30576), (212, 30588), (215, 30594),

Gene: Toad24_41 Start: 27438, Stop: 28244, Start Num: 38

Candidate Starts for Toad24_41:

(Start: 38 @27438 has 11 MA's), (65, 27534), (68, 27543), (75, 27567), (76, 27579), (80, 27597), (139, 27891), (153, 27972), (158, 27990), (180, 28098), (185, 28125), (204, 28212),

Gene: Toniann_91 Start: 55976, Stop: 56701, Start Num: 51

Candidate Starts for Toniann_91:

(5, 55676), (7, 55703), (8, 55706), (9, 55709), (17, 55817), (Start: 51 @55976 has 18 MA's), (77, 56084), (81, 56102), (85, 56117), (86, 56120), (97, 56171), (108, 56234), (122, 56261), (128, 56294), (135, 56333), (142, 56372), (149, 56402), (152, 56429), (163, 56474), (180, 56555), (184, 56579), (195, 56624), (201, 56654),

Gene: Tortoise12_48 Start: 32161, Stop: 33222, Start Num: 46

Candidate Starts for Tortoise12_48:

(Start: 46 @32161 has 121 MA's), (Start: 49 @32173 has 1 MA's), (65, 32239), (66, 32242), (68, 32248), (75, 32272), (78, 32293), (79, 32299), (82, 32311), (83, 32314), (85, 32323), (96, 32365), (100, 32380), (116, 32467), (137, 32572), (139, 32581), (147, 32626), (152, 32653), (155, 32665), (162, 32695), (166, 32707), (168, 32722), (174, 32749), (177, 32770), (180, 32803), (182, 32818), (183, 32821), (186, 32833), (188, 32842), (198, 32890), (199, 32896), (215, 32947), (220, 32971), (225,

33004), (227, 33007), (229, 33037), (231, 33043), (242, 33115), (245, 33133), (246, 33142), (250, 33190), (251, 33199),

Gene: Towmatter_86 Start: 58781, Stop: 57948, Start Num: 40

Candidate Starts for Towmatter_86:

(Start: 40 @58781 has 5 MA's), (64, 58691), (81, 58619), (97, 58550), (124, 58442), (136, 58385), (152, 58277), (157, 58259), (180, 58151), (213, 58010), (221, 57956),

Gene: TripleJ_55 Start: 33927, Stop: 34802, Start Num: 46

Candidate Starts for TripleJ_55:

(Start: 46 @33927 has 121 MA's), (68, 34017), (76, 34053), (84, 34089), (95, 34128), (100, 34149), (111, 34203), (130, 34278), (149, 34368), (153, 34395), (155, 34404), (156, 34407), (159, 34416), (166, 34443), (167, 34449), (178, 34506), (180, 34524), (187, 34560), (188, 34563), (204, 34632), (224, 34716),

Gene: Twonlo_45 Start: 38853, Stop: 39911, Start Num: 46

Candidate Starts for Twonlo_45:

(35, 38823), (Start: 46 @38853 has 121 MA's), (68, 38940), (75, 38964), (80, 38994), (96, 39057), (100, 39072), (105, 39105), (129, 39216), (135, 39243), (145, 39297), (158, 39363), (162, 39384), (166, 39396), (168, 39411), (180, 39495), (183, 39513), (187, 39531), (191, 39552), (198, 39582), (223, 39693), (240, 39798), (243, 39819), (249, 39876), (250, 39882),

Gene: Tycho_49 Start: 42039, Stop: 43061, Start Num: 46

Candidate Starts for Tycho_49:

(Start: 46 @42039 has 121 MA's), (57, 42075), (68, 42129), (75, 42153), (80, 42183), (88, 42213), (96, 42246), (100, 42261), (116, 42342), (127, 42390), (129, 42405), (130, 42408), (158, 42552), (166, 42585), (168, 42600), (180, 42669), (182, 42684), (195, 42741), (198, 42756),

Gene: ValentiniPuff_98 Start: 56073, Stop: 56969, Start Num: 47

Candidate Starts for ValentiniPuff_98:

(Start: 47 @56073 has 1 MA's), (64, 56163), (99, 56310), (102, 56328), (151, 56592), (155, 56607), (161, 56637), (176, 56721), (180, 56757), (183, 56775), (205, 56877),

Gene: VanLee_37 Start: 30355, Stop: 31278, Start Num: 42

Candidate Starts for VanLee_37:

(Start: 42 @30355 has 30 MA's), (Start: 46 @30361 has 121 MA's), (57, 30400), (66, 30439), (80, 30499), (91, 30541), (98, 30580), (100, 30586), (104, 30610), (127, 30757), (135, 30799), (141, 30835), (150, 30889), (158, 30916), (165, 30946), (166, 30949), (180, 31048), (185, 31075), (188, 31087), (209, 31186), (217, 31210),

Gene: Venti_47 Start: 32543, Stop: 33535, Start Num: 53

Candidate Starts for Venti_47:

(4, 32222), (18, 32390), (29, 32453), (Start: 53 @32543 has 58 MA's), (Start: 58 @32558 has 1 MA's), (68, 32606), (79, 32657), (102, 32753), (111, 32792), (141, 32927), (164, 33038), (166, 33041), (172, 33080), (178, 33104), (180, 33122), (189, 33167), (196, 33197), (198, 33209), (231, 33353), (246, 33452), (250, 33500), (252, 33524),

Gene: Verity_51 Start: 44353, Stop: 45396, Start Num: 46

Candidate Starts for Verity_51:

(Start: 46 @44353 has 121 MA's), (68, 44443), (75, 44467), (76, 44479), (100, 44575), (145, 44782), (158, 44848), (168, 44896), (180, 44968), (182, 44983), (187, 45004), (191, 45025), (192, 45028), (198, 45055), (220, 45133), (223, 45166), (224, 45178), (243, 45301), (247, 45328), (250, 45364),

Gene: ViaConlectus_51 Start: 42237, Stop: 43280, Start Num: 46

Candidate Starts for ViaConlectus_51:

(Start: 46 @42237 has 121 MA's), (68, 42330), (75, 42354), (76, 42366), (80, 42384), (100, 42462), (105, 42495), (145, 42669), (158, 42735), (168, 42783), (180, 42855), (182, 42870), (187, 42891), (191, 42912), (192, 42915), (220, 43020), (223, 43053), (224, 43065), (247, 43212), (250, 43248),

Gene: Vidya_46 Start: 32576, Stop: 33568, Start Num: 53

Candidate Starts for Vidya_46:

(4, 32255), (18, 32423), (29, 32486), (Start: 53 @32576 has 58 MA's), (Start: 58 @32591 has 1 MA's), (68, 32639), (79, 32690), (102, 32786), (111, 32825), (141, 32960), (164, 33071), (166, 33074), (172, 33113), (178, 33137), (180, 33155), (189, 33200), (196, 33230), (198, 33242), (231, 33386), (246, 33485), (250, 33533), (252, 33557),

Gene: Vivi2_55 Start: 44459, Stop: 45457, Start Num: 46

Candidate Starts for Vivi2_55:

(10, 44216), (15, 44318), (Start: 31 @44405 has 1 MA's), (Start: 46 @44459 has 121 MA's), (57, 44495), (68, 44546), (70, 44552), (75, 44570), (80, 44600), (96, 44663), (100, 44678), (109, 44729), (127, 44807), (158, 44969), (166, 45002), (168, 45017), (180, 45086), (182, 45101), (195, 45158), (198, 45173), (242, 45350), (250, 45422),

Gene: Vulpecula_38 Start: 26463, Stop: 27269, Start Num: 38

Candidate Starts for Vulpecula_38:

(Start: 38 @26463 has 11 MA's), (65, 26559), (68, 26568), (76, 26604), (80, 26622), (139, 26916), (146, 26952), (166, 27042), (180, 27123), (204, 27237),

Gene: Westrich_47 Start: 27116, Stop: 27922, Start Num: 38

Candidate Starts for Westrich_47:

(Start: 38 @27116 has 11 MA's), (65, 27212), (68, 27221), (76, 27257), (80, 27275), (101, 27356), (139, 27569), (153, 27650), (158, 27668), (180, 27776), (204, 27890),

Gene: WileyE_44 Start: 26337, Stop: 27143, Start Num: 38

Candidate Starts for WileyE_44:

(Start: 38 @26337 has 11 MA's), (65, 26433), (68, 26442), (80, 26496), (90, 26535), (100, 26574), (153, 26871), (180, 26997), (203, 27108),

Gene: WilliamBoone_90 Start: 54745, Stop: 55467, Start Num: 51

Candidate Starts for WilliamBoone_90:

(9, 54469), (11, 54514), (28, 54655), (Start: 51 @54745 has 18 MA's), (77, 54853), (81, 54871), (85, 54886), (86, 54889), (97, 54940), (122, 55030), (128, 55063), (142, 55141), (149, 55171), (175, 55300), (180, 55324), (183, 55342), (195, 55393), (201, 55423), (207, 55450),

Gene: Willsammy_45 Start: 32283, Stop: 33257, Start Num: 53

Candidate Starts for Willsammy_45:

(Start: 53 @32283 has 58 MA's), (Start: 58 @32301 has 1 MA's), (68, 32349), (79, 32400), (83, 32415), (85, 32424), (111, 32535), (141, 32670), (164, 32781), (166, 32784), (172, 32823), (178, 32847), (180, 32865), (189, 32910), (196, 32940), (198, 32952), (215, 33009), (231, 33078), (246, 33177), (250, 33225),

Gene: Wyborn_36 Start: 29985, Stop: 30836, Start Num: 46

Candidate Starts for Wyborn_36:

(Start: 46 @29985 has 121 MA's), (69, 30078), (73, 30093), (75, 30099), (80, 30129), (85, 30150), (100, 30207), (124, 30312), (135, 30366), (147, 30429), (166, 30507), (174, 30549), (180, 30606), (183, 30624), (188, 30645), (191, 30663), (198, 30693), (200, 30705),

Gene: Xavia_54 Start: 39834, Stop: 40823, Start Num: 55

Candidate Starts for Xavia_54:

(20, 39696), (22, 39705), (33, 39759), (36, 39768), (Start: 55 @39834 has 1 MA's), (63, 39873), (68, 39894), (74, 39915), (76, 39930), (79, 39945), (84, 39966), (92, 39987), (97, 40014), (100, 40026), (103, 40047), (107, 40062), (111, 40083), (118, 40098), (130, 40158), (141, 40218), (153, 40284), (164, 40329), (166, 40332), (167, 40338), (168, 40347), (180, 40413), (194, 40482), (198, 40500), (205, 40530), (212, 40545), (222, 40590), (226, 40614), (231, 40644), (235, 40662), (246, 40743), (251, 40800),

Gene: Xeno_48 Start: 31878, Stop: 32852, Start Num: 53

Candidate Starts for Xeno_48:

(Start: 53 @31878 has 58 MA's), (Start: 58 @31896 has 1 MA's), (68, 31944), (79, 31995), (83, 32010), (85, 32019), (111, 32130), (141, 32265), (164, 32376), (166, 32379), (172, 32418), (178, 32442), (180, 32460), (189, 32505), (196, 32535), (198, 32547), (215, 32604), (231, 32673), (246, 32772), (250, 32820),

Gene: Xerxes_48 Start: 33475, Stop: 34536, Start Num: 46

Candidate Starts for Xerxes_48:

(Start: 46 @33475 has 121 MA's), (Start: 49 @33487 has 1 MA's), (65, 33553), (66, 33556), (68, 33562), (75, 33586), (78, 33607), (79, 33613), (82, 33625), (83, 33628), (85, 33637), (96, 33679), (100, 33694), (116, 33781), (137, 33886), (139, 33895), (147, 33940), (152, 33967), (155, 33979), (162, 34009), (166, 34021), (168, 34036), (174, 34063), (177, 34084), (180, 34117), (182, 34132), (183, 34135), (186, 34147), (188, 34156), (198, 34204), (199, 34210), (215, 34261), (220, 34285), (225, 34318), (227, 34321), (229, 34351), (231, 34357), (242, 34429), (245, 34447), (246, 34456), (250, 34504), (251, 34513),

Gene: Xula_43 Start: 32303, Stop: 33298, Start Num: 53

Candidate Starts for Xula_43:

(21, 32168), (Start: 53 @32303 has 58 MA's), (Start: 58 @32318 has 1 MA's), (68, 32366), (79, 32417), (85, 32441), (111, 32552), (141, 32687), (164, 32798), (166, 32801), (172, 32840), (178, 32864), (180, 32882), (189, 32927), (196, 32957), (198, 32969), (215, 33026), (231, 33116), (246, 33215), (250, 33263), (252, 33287),

Gene: YorkOnyx_51 Start: 42735, Stop: 43757, Start Num: 46

Candidate Starts for YorkOnyx_51:

(10, 42492), (15, 42594), (Start: 31 @42681 has 1 MA's), (Start: 46 @42735 has 121 MA's), (57, 42771), (68, 42825), (75, 42849), (80, 42879), (88, 42909), (96, 42942), (100, 42957), (116, 43038), (127, 43086), (129, 43101), (130, 43104), (158, 43248), (166, 43281), (168, 43296), (180, 43365), (182, 43380), (195, 43437),

Gene: Yvonnetastic_106 Start: 61147, Stop: 61839, Start Num: 51

Candidate Starts for Yvonnetastic_106:

(Start: 51 @61147 has 18 MA's), (64, 61201), (74, 61234), (81, 61273), (91, 61309), (93, 61318), (97, 61342), (99, 61351), (100, 61354), (124, 61450), (135, 61504), (146, 61561), (150, 61597), (157, 61621), (163, 61648), (165, 61654), (180, 61729), (188, 61768), (190, 61783), (192, 61789),

Gene: Zartrosa_35 Start: 29654, Stop: 30517, Start Num: 46

Candidate Starts for Zartrosa_35:

(Start: 46 @29654 has 121 MA's), (68, 29744), (69, 29747), (75, 29768), (85, 29819), (100, 29876), (124, 29981), (143, 30071), (145, 30083), (147, 30098), (166, 30176), (170, 30203), (174, 30218), (178, 30260), (180, 30278), (183, 30296), (188, 30317), (191, 30335), (206, 30404), (215, 30422), (228, 30494),

Gene: Zhuangyuan_45 Start: 26808, Stop: 27620, Start Num: 38

Candidate Starts for Zhuangyuan_45:

(Start: 38 @26808 has 11 MA's), (Start: 53 @26853 has 58 MA's), (60, 26871), (68, 26916), (80, 26970), (106, 27087), (112, 27117), (130, 27216), (134, 27237), (147, 27309), (154, 27348), (180, 27474), (198, 27561),

Gene: Zilizebeth_47 Start: 32575, Stop: 33567, Start Num: 53

Candidate Starts for Zilizebeth_47:

(4, 32254), (18, 32422), (29, 32485), (Start: 53 @32575 has 58 MA's), (Start: 58 @32590 has 1 MA's), (68, 32638), (79, 32689), (102, 32785), (111, 32824), (141, 32959), (164, 33070), (166, 33073), (172, 33112), (178, 33136), (180, 33154), (189, 33199), (196, 33229), (198, 33241), (231, 33385), (246, 33484), (250, 33532), (252, 33556),

Gene: Zipp_52 Start: 44268, Stop: 45311, Start Num: 46

Candidate Starts for Zipp_52:

(Start: 46 @44268 has 121 MA's), (68, 44358), (75, 44382), (76, 44394), (100, 44490), (145, 44697), (158, 44763), (168, 44811), (180, 44883), (182, 44898), (187, 44919), (191, 44940), (192, 44943), (198, 44970), (220, 45048), (223, 45081), (224, 45093), (243, 45216), (247, 45243), (250, 45279),

Gene: Zitch_54 Start: 42394, Stop: 43437, Start Num: 46

Candidate Starts for Zitch_54:

(Start: 46 @42394 has 121 MA's), (68, 42484), (75, 42508), (76, 42520), (80, 42538), (100, 42616), (105, 42649), (145, 42823), (158, 42889), (168, 42937), (180, 43009), (182, 43024), (187, 43045), (191, 43066), (192, 43069), (220, 43174), (223, 43207), (224, 43219), (247, 43369),