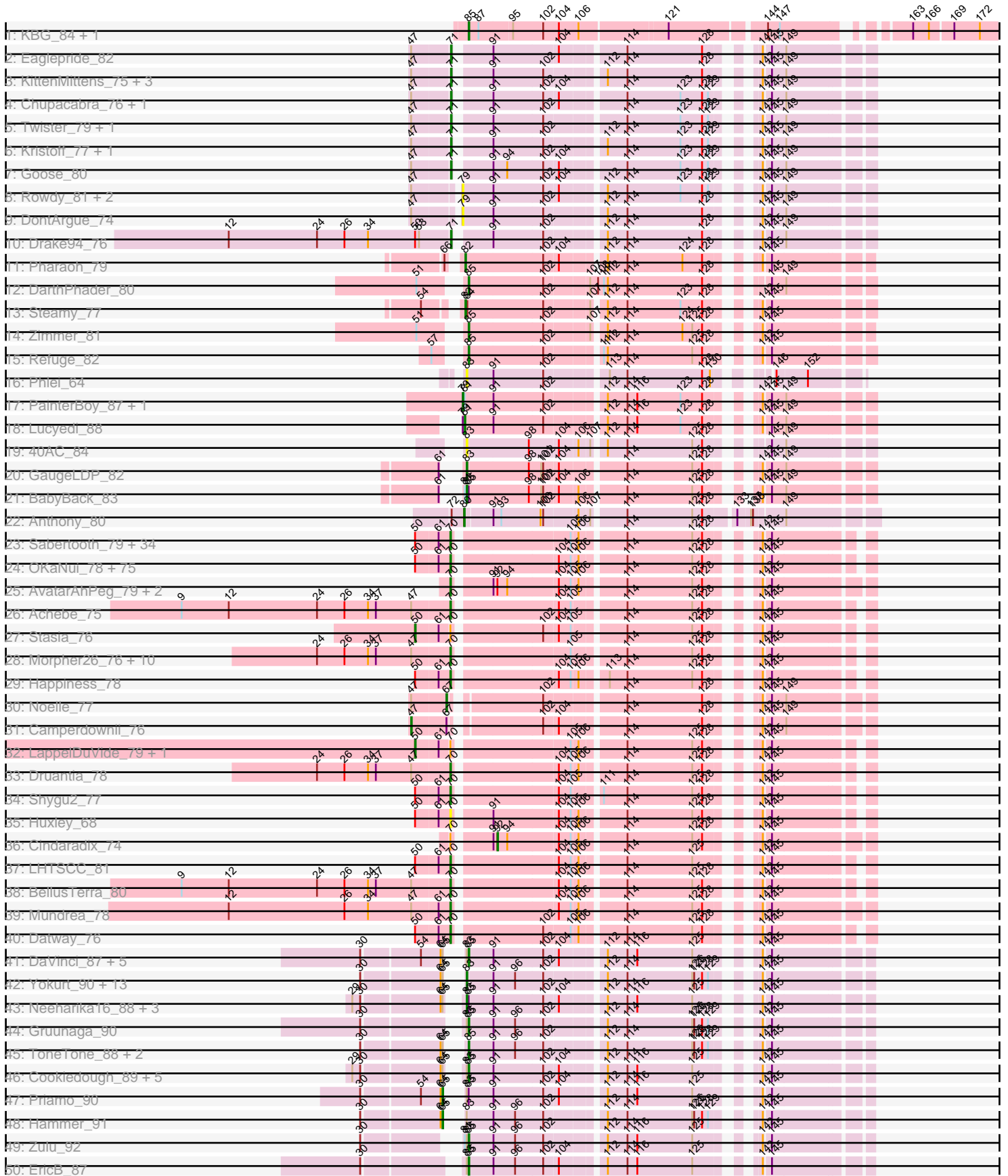
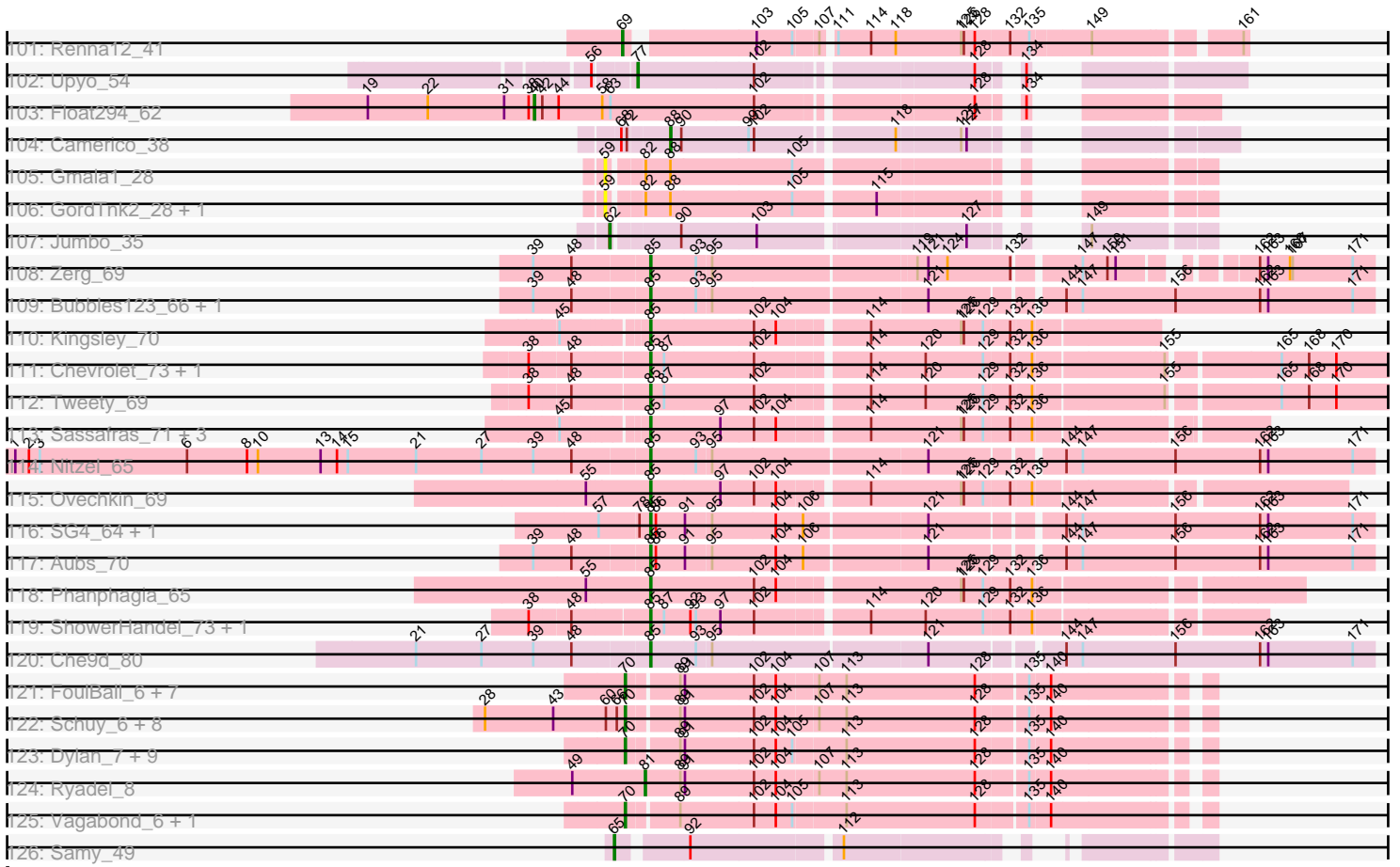


Pham 202594



Pham 202594



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 202594 Report

This analysis was run 01/18/25 on database version 583.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 202594 has 363 members, 44 are drafts.

Phages represented in each track:

- Track 1 : KBG_84, Rhynn_83
- Track 2 : Eaglepride_82
- Track 3 : KittenMittens_75, Poompha_76, Severus_77, PeaceMeal1_76
- Track 4 : Chupacabra_76, OKCentral2016_78
- Track 5 : Twister_79, WalterMcMickey_78
- Track 6 : Kristoff_77, Rebeuca_80
- Track 7 : Goose_80
- Track 8 : Rowdy_81, Shapes_81, DustyMartin_81
- Track 9 : DontArgue_74
- Track 10 : Drake94_76
- Track 11 : Pharaoh_79
- Track 12 : DARTHPhader_80
- Track 13 : Steamy_77
- Track 14 : Zimmer_81
- Track 15 : Refuge_82
- Track 16 : Phlei_64
- Track 17 : PainterBoy_87, EagleEye_89
- Track 18 : Lucyedi_88
- Track 19 : 40AC_84
- Track 20 : GaugeLDP_82
- Track 21 : BabyBack_83
- Track 22 : Anthony_80
- Track 23 : Sabertooth_79, Millski_78, Cintron_79, Bartimeaus_79, Pumbaa_79, Lorenzo_79, YoSam321_79, TinaFeyge_77, Albee_79, TiroTheta9_78, Jaykayelowell_76, Polymorphads_80, Abdiel_78, Broseidon_79, Thanksgivukkah_78, Baby16_79, Holli_78, Flux_80, Sparxx_80, Roosevelt_77, Nyxis_78, Florean_79, Pipcraft_75, Xena_75, Eros_79, MeeZee_78, Blackmoor_78, Deano_76, Connomayer_79, HamSlice_75, Citius_79, Morrow_81, Lunsford_79, Medusa_78, Annyong_78
- Track 24 : OKaNui_78, Eurydice_80, Clarenza_78, JoongJeon_78, Mazhar510_79, Burger_77, Iracema64_79, LochMonster_80, Houdini22_78, Avle17_79, Melvin_81, Bruiser_78, Wander_79, Relief_78, Ruin_79, Nemo27_78, Bombshell_79, Eris_78, Phelipe_80, Kamyph_78, Obama12_80, Kingmustik0402_79, Romney_78,

Cocoaberry_79, PeterPeter_79, Nebs_80, SheldonCooper_79, Alberto7_80, Cerulean_81, CentreCat_79, Kyee_79, Scamp_79, Lemur_79, Tinybot_78, LittleB_79, Chaph_79, Ulysses_78, Kratak_78, DirtyDunning_78, Caelakin_77, Skipitt_78, Iceman_77, Phacado_79, ChampagnePapi_82, Spino_78, SenorClean_74, Dhanush_79, Taquarus_78, Commander_77, JetBlade_80, Rosa24_75, Kremtemulon_76, Ohfah_80, Maverick_78, Eagle_78, Koan_74, Maxo_81, NorthStar_76, Eapen_79, Shaka_77, Peaches_77, KFPoly_78, Palestino_78, BangNhom_76, ICleared_78, Wilbur_79, TroyPia_80, Arturo_76, TygerBlood_79, LittleGuy_79, Phighter1804_79, Koreni_78, Gadost_79, NotAPhaseMom_78, Phontbonne_79, Funston_78

- Track 25 : AvatarAhPeg_79, Stink_79, Miramae_79
- Track 26 : Achebe_75
- Track 27 : Stasia_76
- Track 28 : Morpher26_76, Wile_75, Katalie136_76, AbbysRanger_76, Perplexer_76, Backyardigan_74, Badger_75, Wizard007_76, Bumblebee11_75, Cici_76, PetiteSangsue_76
- Track 29 : Happiness_78
- Track 30 : Noelle_77
- Track 31 : Camperdownii_76
- Track 32 : LappelDuVide_79, BubbleTrouble_78
- Track 33 : Druantia_78
- Track 34 : Shygu2_77
- Track 35 : Huxley_68
- Track 36 : Cindaradix_74
- Track 37 : LHTSCC_81
- Track 38 : BellusTerra_80
- Track 39 : Mundrea_78
- Track 40 : Datway_76
- Track 41 : DaVinci_87, McFly_89, Kazan_90, Isiphiwo_85, VohminGhazi_89, SmellyB_89
- Track 42 : Yokurt_90, Indra_94, Rifter_91, Wiks_90, Koko_92, Artemis2UCLA_90, Temprado_92, Helmet_92, CloudWang3_91, Hexamo_90, Jeffabunny_79, Roksolana_91, Zaka_91, Garak_92
- Track 43 : Neeharika16_88, Pmask_88, Jordennis_87, Dorothea_89
- Track 44 : Gruunaga_90
- Track 45 : ToneTone_88, BlessJoy_90, Tucker_91
- Track 46 : Cookiedough_89, SuperAwesome_89, GreedyLawyer_82, Newrala_88, Kipper29_89, JewelBug_81
- Track 47 : Priamo_90
- Track 48 : Hammer_91
- Track 49 : Zulu_92
- Track 50 : EricB_87
- Track 51 : Blue7_92
- Track 52 : Chartreuse_87, SuperCallie99_85
- Track 53 : Candra_87
- Track 54 : Gladiator_87
- Track 55 : Hoot_84
- Track 56 : BABullseye_82
- Track 57 : Scherzo_83, Fayely_83, Tubs_85, Sachima_81, Pioneer_85, Phaeder_85, Aliter_78, Phonnegut_85, Beemo_85, Myxus_85, HortumSL17_86, Onglai_83, Catalina_87, Jiawan_82
- Track 58 : Qobbit_83, Spouty_83, ExplosioNervosa_83, Conquerage_83, Priya_83
- Track 59 : Keziacharles14_82

- Track 60 : Vanisoa_80
- Track 61 : RyeScarlet_86, Holecx_83, Lilleskat_82, Hanray_83, EdogawaKiddo_83
- Track 62 : Alma_83, Eidsmoe_83, EmyBug_82
- Track 63 : Darrell_83
- Track 64 : Charm_80
- Track 65 : Arissanae_80
- Track 66 : SheaKeira_80
- Track 67 : LoneWolf_85
- Track 68 : DreamTeam1_80
- Track 69 : Yecey3_86
- Track 70 : Maminiaina_84
- Track 71 : BogosyJay_84
- Track 72 : Rahalelujah_84
- Track 73 : Toaka_83
- Track 74 : Elephanton_85
- Track 75 : Kabreeze_80, Tophat_81, Conboy_78, JaNo_79, Scavito_81, Linus_80, Chipper1996_810, HumptyDumpty_80, Chocolat_80, Chubster_81
- Track 76 : Mordred_80
- Track 77 : KBurrousTX_79
- Track 78 : DrYang_77
- Track 79 : MoyaNatalis_79
- Track 80 : JayCookie_80
- Track 81 : ArV1_067a
- Track 82 : PrincessTrina_81
- Track 83 : Lymara_76
- Track 84 : Colucci_82
- Track 85 : RosiePosie_80, EdgarPoe_79
- Track 86 : Jamun_39
- Track 87 : Gravel_49, Pelletreau_49, Westrich_48
- Track 88 : Orcanus_40
- Track 89 : KendraB23_50, Toad24_42
- Track 90 : Eesa_39
- Track 91 : Chickaboom_41
- Track 92 : TaylorSipht_40
- Track 93 : Abidatro_40
- Track 94 : Zhuangyuan_46
- Track 95 : Camara_42, Glotell_44, KHumphrey_42
- Track 96 : Andrew_43
- Track 97 : RedFox_42, PhluffyCoco_42, Rattail_42
- Track 98 : Leona_41
- Track 99 : StuartMinion_37
- Track 100 : HamCheese_41, AmiCi24_41, Juno112_41, Atlantica_42
- Track 101 : Renna12_41
- Track 102 : Upyo_54
- Track 103 : Float294_62
- Track 104 : Camerico_38
- Track 105 : Gmala1_28
- Track 106 : GordTnk2_28, GordDuk1_28
- Track 107 : Jumbo_35
- Track 108 : Zerg_69
- Track 109 : Bubbles123_66, Spikelee_77
- Track 110 : Kingsley_70
- Track 111 : Chevrolet_73, ArcusAngelus_70

- Track 112 : Tweety_69
- Track 113 : Sassafras_71, Inventum_68, Dorothy_71, RedBird_71
- Track 114 : Nitzel_65
- Track 115 : Ovechkin_69
- Track 116 : SG4_64, ShroomBoi_71
- Track 117 : Aubs_70
- Track 118 : Phanphagia_65
- Track 119 : ShowerHandel_73, ByChance_63
- Track 120 : Che9d_80
- Track 121 : FoulBall_6, Idergollasper_6, Familton_7, SchoolBus_6, Zebo_6, JangDynasty_6, Blessica_6, Catdawg_6
- Track 122 : Schuy_6, Vorrps_6, Mori_6, Krili_6, Alkhayr_6, Murai_6, Shida_6, MadKillah_6, NiebruSaylor_6
- Track 123 : Dylan_7, Smooch_7, Zakhe101_7, Corndog_7, Ashwin_7, TelAviv_6, Wildflower_6, Bora_6, YungJamal_7, Firecracker_6
- Track 124 : Ryadel_8
- Track 125 : Vagabond_6, Winget_6
- Track 126 : Samy_49

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

The start number called the most often in the published annotations is 70, it was called in 157 of the 319 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_76, Abdiel_78, Achebe_75, Albee_79, Alberto7_80, Alkhayr_6, Annyong_78, Arturo_76, Ashwin_7, AvatarAhPeg_79, Avle17_79, Baby16_79, Backyardigan_74, Badger_75, BangNhom_76, Bartimeaus_79, BellusTerra_80, Blackmoor_78, Blessica_6, Bombshell_79, Bora_6, Broseidon_79, Bruiser_78, Bumblebee11_75, Burger_77, Caelakin_77, Catdawg_6, CentreCat_79, Cerulean_81, ChampagnePapi_82, Chaph_79, Cici_76, Cintron_79, Citius_79, Clarenza_78, Cocoaberry_79, Commander_77, Connomayer_79, Corndog_7, Datway_76, Deano_76, Dhanush_79, DirtyDunning_78, Druantia_78, Dylan_7, Eagle_78, Eapen_79, Eris_78, Eros_79, Eurydice_80, Familton_7, Firecracker_6, Floean_79, Flux_80, FoulBall_6, Funston_78, Gadost_79, HamSlice_75, Happiness_78, Holli_78, Houdini22_78, Huxley_68, ICleared_78, Iceman_77, Idergollasper_6, Iracema64_79, JangDynasty_6, Jaykayelowell_76, JetBlade_80, JoongJeon_78, KFPoly_78, Kampy_78, Katalie136_76, Kingmustik0402_79, Koan_74, Koreni_78, Kratark_78, Kremtemulon_76, Krili_6, Kyee_79, LHTSCC_81, Lemur_79, LittleB_79, LittleGuy_79, LochMonster_80, Lorenzo_79, Lunsford_79, MadKillah_6, Maverick_78, Maxo_81, Mazhar510_79, Medusa_78, MeeZee_78, Melvin_81, Millski_78, Miramae_79, Mori_6, Morpher26_76, Morrow_81, Mundrea_78, Murai_6, Nebs_80, Nemo27_78, NiebruSaylor_6, NorthStar_76, NotAPhaseMom_78, Nyxis_78, OKaNui_78, Obama12_80, Ohfah_80, Palestino_78, Peaches_77, Perplexer_76, PeterPeter_79, PetiteSangsue_76, Phacado_79, Phelipe_80, Phighter1804_79, Phontbonne_79, Pipcraft_75, Polymorphads_80, Pumbaa_79, Relief_78, Romney_78, Roosevelt_77, Rosa24_75, Ruin_79, Sabertooth_79, Scamp_79, SchoolBus_6, Schuy_6, SeniorClean_74, Shaka_77, SheldonCooper_79, Shida_6, Shygu2_77, Skipitt_78, Smooch_7, Sparxx_80, Spino_78, Stink_79, Taquarus_78, TelAviv_6, Thanksgivukkah_78, TinaFeyge_77,

Tinybot_78, TiroTheta9_78, TroyPia_80, TygerBlood_79, Ulysses_78, Vagabond_6, Vorrrps_6, Wander_79, Wilbur_79, Wildflower_6, Wile_75, Winget_6, Wizard007_76, Xena_75, YoSam321_79, YungJamal_7, Zakhe101_7, Zebo_6,

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

- BubbleTrouble_78, Cindaradix_74, LappelDuVide_79, Stasia_76,

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

- 40AC_84, Abidatro_40, Aliter_78, Alma_83, AmiCi24_41, Andrew_43, Anthony_80, ArV1_067a, ArcusAngelus_70, Arissanee_80, Artemis2UCLA_90, Atlantica_42, Aubs_70, BABullseye_82, BabyBack_83, Beemo_85, BlessJoy_90, Blue7_92, BogosyJay_84, Bubbles123_66, ByChance_63, Camara_42, Camerico_38, Camperdownii_76, Candra_87, Catalina_87, Charm_80, Chartreuse_87, Che9d_80, Chevrolet_73, Chickaboom_41, Chipper1996_810, Chocolat_80, Chubster_81, Chupacabra_76, CloudWang3_91, Colucci_82, Conboy_78, Conquerage_83, Cookiedough_89, DaVinci_87, Darrell_83, DarthPhader_80, DontArgue_74, Dorothea_89, Dorothy_71, DrYang_77, Drake94_76, DreamTeam1_80, DustyMartin_81, EagleEye_89, Eaglepride_82, EdgarPoe_79, EdogawaKiddo_83, Eesa_39, Eidsmoe_83, Elephantoon_85, EmyBug_82, EricB_87, ExplosioNervosa_83, Fayely_83, Float294_62, Garak_92, GaugeLDP_82, Gladiator_87, Glotell_44, Gmala1_28, Goose_80, GordDuk1_28, GordTnk2_28, Gravel_49, GreedyLawyer_82, Gruunaga_90, HamCheese_41, Hammer_91, Hanray_83, Helmet_92, Hexamo_90, Horex_83, Hoot_84, HortumSL17_86, HumptyDumpty_80, Indra_94, Inventum_68, Isiphiwo_85, JaNo_79, Jamun_39, JayCookie_80, Jeffabunny_79, JewelBug_81, Jiawan_82, Jordennis_87, Jumbo_35, Juno112_41, KBG_84, KBurrousTX_79, KHumphrey_42, Kabreeze_80, Kazan_90, KendraB23_50, Keziacharles14_82, Kingsley_70, Kipper29_89, KittenMittens_75, Koko_92, Kristoff_77, Leona_41, Lilleskat_82, Linus_80, LoneWolf_85, Lucyedi_88, Lymara_76, Maminiaiina_84, McFly_89, Mordred_80, MoyaNatalis_79, Myxus_85, Neeharika16_88, Newrala_88, Nitzel_65, Noelle_77, OKCentral2016_78, Onglai_83, Orcanus_40, Ovechkin_69, PainterBoy_87, PeaceMeal1_76, Pelletreau_49, Phaeder_85, Phanphagia_65, Pharaoh_79, Phlei_64, PhluffyCoco_42, Phonnegut_85, Pioneer_85, Pmask_88, Poompha_76, Priamo_90, PrincessTrina_81, Priya_83, Qobbit_83, Rahalelujah_84, Rattail_42, Rebeuca_80, RedBird_71, RedFox_42, Refuge_82, Renna12_41, Rhynn_83, Rifter_91, Roksolana_91, RosiePosie_80, Rowdy_81, Ryadel_8, RyeScarlet_86, SG4_64, Sachima_81, Samy_49, Sassafras_71, Scavito_81, Scherzo_83, Severus_77, Shapes_81, SheaKeira_80, ShowerHandel_73, ShroomBoi_71, SmellyB_89, Spikelee_77, Spouty_83, Steamy_77, StuartMinion_37, SuperAwesome_89, SuperCallie99_85, TaylorSipht_40, Temprado_92, Toad24_42, Toaka_83, ToneTone_88, Tophat_81, Tubs_85, Tucker_91, Tweety_69, Twister_79, Upyo_54, Vanisoa_80, VohminGhazi_89, WalterMcMickey_78, Westrich_48, Wiks_90, Yecy3_86, Yokurt_90, Zaka_91, Zerg_69, Zhuangyuan_46, Zimmer_81, Zulu_92,

Summary by start number:

Start 33:

- Found in 16 of 363 (4.4%) of genes in pham
- Manual Annotations of this start: 14 of 319
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Chipper1996_810 (AR), Chocolat_80 (AR), Chubster_81 (AR), Conboy_78 (AR), EdgarPoe_79 (AR), HumptyDumpty_80 (AR), JaNo_79 (AR), JayCookie_80 (AR), Kabreeze_80 (AR), Linus_80 (AR),

PrincessTrina_81 (AR), RosiePosie_80 (AR), Scavito_81 (AR), Tophat_81 (AR),

Start 40:

- Found in 1 of 363 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Float294_62 (CR3),

Start 46:

- Found in 21 of 363 (5.8%) of genes in pham
- Manual Annotations of this start: 5 of 319
- Called 33.3% of time when present
- Phage (with cluster) where this start called: ArV1_067a (AR), Colucci_82 (AR), DrYang_77 (AR), KBurrousTX_79 (AR), Lymara_76 (AR), Mordred_80 (AR), MoyaNatalis_79 (AR),

Start 47:

- Found in 33 of 363 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Camperdownii_76 (A4),

Start 50:

- Found in 120 of 363 (33.1%) of genes in pham
- Manual Annotations of this start: 3 of 319
- Called 2.5% of time when present
- Phage (with cluster) where this start called: BubbleTrouble_78 (A4), LappelDuVide_79 (A4), Stasia_76 (A4),

Start 59:

- Found in 3 of 363 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gmala1_28 (DF1), GordDuk1_28 (DF1), GordTnk2_28 (DF1),

Start 62:

- Found in 1 of 363 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jumbo_35 (DF3),

Start 65:

- Found in 43 of 363 (11.8%) of genes in pham
- Manual Annotations of this start: 3 of 319
- Called 9.3% of time when present
- Phage (with cluster) where this start called: Candra_87 (A6), Hammer_91 (A6), Priamo_90 (A6), Samy_49 (singleton),

Start 67:

- Found in 22 of 363 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 319
- Called 9.1% of time when present

- Phage (with cluster) where this start called: BogosyJay_84 (A9), Noelle_77 (A4),

Start 69:

- Found in 26 of 363 (7.2%) of genes in pham
- Manual Annotations of this start: 13 of 319
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_40 (AS1), AmiCi24_41 (AS3), Andrew_43 (AS3), Atlantica_42 (AS3), Camara_42 (AS3), Chickaboom_41 (AS1), Eesa_39 (AS1), Glotell_44 (AS3), Gravel_49 (AS1), HamCheese_41 (AS3), Jamun_39 (AS1), Juno112_41 (AS3), KHumphrey_42 (AS3), KendraB23_50 (AS1), Leona_41 (AS3), Orcanus_40 (AS1), Pelletreau_49 (AS1), PhluffyCoco_42 (AS3), Rattail_42 (AS3), RedFox_42 (AS3), Renna12_41 (AS3), StuartMinion_37 (AS3), TaylorSipt_40 (AS1), Toad24_42 (AS1), Westrich_48 (AS1), Zhuangyuan_46 (AS2),

Start 70:

- Found in 167 of 363 (46.0%) of genes in pham
- Manual Annotations of this start: 157 of 319
- Called 97.6% of time when present
- Phage (with cluster) where this start called: AbbysRanger_76 (A4), Abdiel_78 (A4), Achebe_75 (A4), Albee_79 (A4), Alberto7_80 (A4), Alkhayr_6 (O), Annyong_78 (A4), Arturo_76 (A4), Ashwin_7 (O), AvatarAhPeg_79 (A4), Avle17_79 (A4), Baby16_79 (A4), Backyardigan_74 (A4), Badger_75 (A4), BangNhom_76 (A4), Bartimeaus_79 (A4), BellusTerra_80 (A4), Blackmoor_78 (A4), Blessica_6 (O), Bombshell_79 (A4), Bora_6 (O), Broseidon_79 (A4), Bruiser_78 (A4), Bumblebee11_75 (A4), Burger_77 (A4), Caelakin_77 (A4), Catdawg_6 (O), CentreCat_79 (A4), Cerulean_81 (A4), ChampagnePapi_82 (A4), Chaph_79 (A4), Cici_76 (A4), Cintron_79 (A4), Citius_79 (A4), Clarenza_78 (A4), Cocoaberry_79 (A4), Commander_77 (A4), Connomayer_79 (A4), Corndog_7 (O), Datway_76 (A4), Deano_76 (A4), Dhanush_79 (A4), DirtyDunning_78 (A4), Druantia_78 (A4), Dylan_7 (O), Eagle_78 (A4), Eapen_79 (A4), Eris_78 (A4), Eros_79 (A4), Eurydice_80 (A4), Familton_7 (O), Firecracker_6 (O), Florean_79 (A4), Flux_80 (A4), FoulBall_6 (O), Funston_78 (A4), Gadost_79 (A4), HamSlice_75 (A4), Happiness_78 (A4), Holli_78 (A4), Houdini22_78 (A4), Huxley_68 (A4), ICleared_78 (A4), Iceman_77 (A4), Idergollasper_6 (O), Iracema64_79 (A4), JangDynasty_6 (O), Jaykayelowell_76 (A4), JetBlade_80 (A4), JoongJeon_78 (A4), KFPoly_78 (A4), Kamy_78 (A4), Katalie136_76 (A4), Kingmustik0402_79 (A4), Koan_74 (A4), Koreni_78 (A4), Kratar_78 (A4), Kremtemulon_76 (A4), Krili_6 (O), Kyee_79 (A4), LHTSCC_81 (A4), Lemur_79 (A4), LittleB_79 (A4), LittleGuy_79 (A4), LochMonster_80 (A4), Lorenzo_79 (A4), Lunsford_79 (A4), MadKillah_6 (O), Maverick_78 (A4), Maxo_81 (A4), Mazhar510_79 (A4), Medusa_78 (A4), MeeZee_78 (A4), Melvin_81 (A4), Millski_78 (A4), Miramae_79 (A4), Mori_6 (O), Morpher26_76 (A4), Morrow_81 (A4), Mundrea_78 (A4), Murai_6 (O), Nebs_80 (A4), Nemo27_78 (A4), NiebruSaylor_6 (O), NorthStar_76 (A4), NotAPhaseMom_78 (A4), Nyxis_78 (A4), OKaNui_78 (A4), Obama12_80 (A4), Ohfah_80 (A4), Palestino_78 (A4), Peaches_77 (A4), Perplexer_76 (A4), PeterPeter_79 (A4), PetiteSangsue_76 (A4), Phacado_79 (A4), Felipe_80 (A4), Phighter1804_79 (A4), Phontbonne_79 (A4), Pipcraft_75 (A4), Polymorphads_80 (A4), Pumbaa_79 (A4), Relief_78 (A4), Romney_78 (A4), Roosevelt_77 (A4), Rosa24_75 (A4), Ruin_79 (A4), Sabertooth_79 (A4), Scamp_79 (A4), SchoolBus_6 (O), Schuy_6 (O), SenorClean_74 (A4), Shaka_77 (A4), SheldonCooper_79 (A4), Shida_6 (O), Shygu2_77 (A4), Skipitt_78 (A4), Smooch_7 (O), Sparxx_80 (A4), Spino_78 (A4), Stink_79 (A4), Taquarus_78 (A4), TelAviv_6 (O), Thanksgivukkah_78 (A4), TinaFeyge_77 (A4), Tinybot_78 (A4), TiroTheta9_78 (A4), TroyPia_80 (A4), TygerBlood_79 (A4), Ulysses_78 (A4), Vagabond_6 (O), Vorrps_6

(O), Wander_79 (A4), Wilbur_79 (A4), Wildflower_6 (O), Wile_75 (A4), Winget_6 (O), Wizard007_76 (A4), Xena_75 (A4), YoSam321_79 (A4), YungJamal_7 (O), Zakhe101_7 (O), Zebo_6 (O),

Start 71:

- Found in 37 of 363 (10.2%) of genes in pham
- Manual Annotations of this start: 18 of 319
- Called 48.6% of time when present
- Phage (with cluster) where this start called: Alma_83 (A9), Chupacabra_76 (A10), Drake94_76 (A10), Eaglepride_82 (A10), Eidsmoe_83 (A9), EmyBug_82 (A9), Goose_80 (A10), Keziacharles14_82 (A9), KittenMittens_75 (A10), Kristoff_77 (A10), OKCentral2016_78 (A10), PeaceMeal1_76 (A10), Poompha_76 (A10), Rebeuca_80 (A10), Severus_77 (A10), Twister_79 (A10), WalterMcMickey_78 (A10), Yecey3_86 (A9),

Start 74:

- Found in 11 of 363 (3.0%) of genes in pham
- Manual Annotations of this start: 8 of 319
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Arissanee_80 (A9), Charm_80 (A9), Darrell_83 (A9), DreamTeam1_80 (A9), Elephantoon_85 (A9), LoneWolf_85 (A9), Maminiaina_84 (A9), Vanisoa_80 (A9),

Start 75:

- Found in 32 of 363 (8.8%) of genes in pham
- Manual Annotations of this start: 19 of 319
- Called 84.4% of time when present
- Phage (with cluster) where this start called: Aliter_78 (A9), Beemo_85 (A9), Catalina_87 (A9), Conquerage_83 (A9), EdogawaKiddo_83 (A9), ExplosioNervosa_83 (A9), Fayely_83 (A9), Hanray_83 (A9), Horex_83 (A9), HortumSL17_86 (A9), Jiawan_82 (A9), Lilleskat_82 (A9), Myxus_85 (A9), Onglai_83 (A9), Phaeder_85 (A9), Phonnegut_85 (A9), Pioneer_85 (A9), Priya_83 (A9), Qobbit_83 (A9), Rahalelujah_84 (A9), RyeScarlet_86 (A9), Sachima_81 (A9), Scherzo_83 (A9), SheaKeira_80 (A9), Spouty_83 (A9), Toaka_83 (A9), Tubs_85 (A9),

Start 77:

- Found in 1 of 363 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo_54 (CD),

Start 79:

- Found in 7 of 363 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 319
- Called 85.7% of time when present
- Phage (with cluster) where this start called: DontArgue_74 (A10), DustyMartin_81 (A10), EagleEye_89 (A16), PainterBoy_87 (A16), Rowdy_81 (A10), Shapes_81 (A10),

Start 80:

- Found in 1 of 363 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 319

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony_80 (A20),

Start 81:

- Found in 6 of 363 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 319
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Lucyedi_88 (A16), Ryadel_8 (O),

Start 82:

- Found in 5 of 363 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 319
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_79 (A12), Steamy_77 (A12),

Start 83:

- Found in 46 of 363 (12.7%) of genes in pham
- Manual Annotations of this start: 20 of 319
- Called 56.5% of time when present
- Phage (with cluster) where this start called: 40AC_84 (A17), Artemis2UCLA_90 (A6), BABullseye_82 (A6), BabyBack_83 (A2), Chartreuse_87 (A6), CloudWang3_91 (A6), Dorothea_89 (A6), Garak_92 (A6), GaugeLDP_82 (A2), Gladiator_87 (A6), Helmet_92 (A6), Hexamo_90 (A6), Indra_94 (A6), Jeffabunny_79 (A6), Jordennis_87 (A6), Koko_92 (A6), Neeharika16_88 (A6), Phlei_64 (A13), Pmask_88 (A6), Rifter_91 (A6), Roksolana_91 (A6), SuperCallie99_85 (A6), Temprado_92 (A6), Wiks_90 (A6), Yokurt_90 (A6), Zaka_91 (A6),

Start 85:

- Found in 56 of 363 (15.4%) of genes in pham
- Manual Annotations of this start: 44 of 319
- Called 80.4% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_70 (F1), Aubs_70 (F1), BlessJoy_90 (A6), Blue7_92 (A6), Bubbles123_66 (F1), ByChance_63 (F1), Che9d_80 (F2), Chevrolet_73 (F1), Cookiedough_89 (A6), DaVinci_87 (A6), DarthPhader_80 (A12), Dorothy_71 (F1), EricB_87 (A6), GreedyLawyer_82 (A6), Gruunaga_90 (A6), Hoot_84 (A6), Inventum_68 (F1), Isiphiwo_85 (A6), JewelBug_81 (A6), KBG_84 (A1), Kazan_90 (A6), Kingsley_70 (F1), Kipper29_89 (A6), McFly_89 (A6), Newrala_88 (A6), Nitzel_65 (F1), Ovechkin_69 (F1), Phanphagia_65 (F1), RedBird_71 (F1), Refuge_82 (A12), Rhynn_83 (A1), SG4_64 (F1), Sassafras_71 (F1), ShowerHandel_73 (F1), ShroomBoi_71 (F1), SmellyB_89 (A6), Spikelee_77 (F1), SuperAwesome_89 (A6), ToneTone_88 (A6), Tucker_91 (A6), Tweety_69 (F1), VohminGhazi_89 (A6), Zerg_69 (F1), Zimmer_81 (A12), Zulu_92 (A6),

Start 88:

- Found in 4 of 363 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Camerico_38 (DF),

Start 92:

- Found in 7 of 363 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 319
- Called 14.3% of time when present

- Phage (with cluster) where this start called: Cindaradix_74 (A4),

Summary by clusters:

There are 24 clusters represented in this pham: singleton, DF, A17, A16, A10, A13, A12, DF1, DF3, A1, A2, A4, A6, A9, AS3, AS2, AS1, CR3, O, CD, AR, A20, F1, F2,

Info for manual annotations of cluster A1:

- Start number 85 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 71 was manually annotated 13 times for cluster A10.

Info for manual annotations of cluster A12:

- Start number 82 was manually annotated 2 times for cluster A12.
- Start number 85 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A16:

- Start number 79 was manually annotated 2 times for cluster A16.
- Start number 81 was manually annotated 1 time for cluster A16.

Info for manual annotations of cluster A2:

- Start number 83 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 80 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A4:

- Start number 47 was manually annotated 1 time for cluster A4.
- Start number 50 was manually annotated 3 times for cluster A4.
- Start number 67 was manually annotated 1 time for cluster A4.
- Start number 70 was manually annotated 130 times for cluster A4.
- Start number 92 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A6:

- Start number 65 was manually annotated 2 times for cluster A6.
- Start number 83 was manually annotated 18 times for cluster A6.
- Start number 85 was manually annotated 19 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 67 was manually annotated 1 time for cluster A9.
- Start number 71 was manually annotated 5 times for cluster A9.
- Start number 74 was manually annotated 8 times for cluster A9.
- Start number 75 was manually annotated 19 times for cluster A9.

Info for manual annotations of cluster AR:

- Start number 33 was manually annotated 14 times for cluster AR.
- Start number 46 was manually annotated 5 times for cluster AR.

Info for manual annotations of cluster AS1:

- Start number 69 was manually annotated 6 times for cluster AS1.

Info for manual annotations of cluster AS3:

- Start number 69 was manually annotated 7 times for cluster AS3.

Info for manual annotations of cluster CD:

- Start number 77 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CR3:

- Start number 40 was manually annotated 1 time for cluster CR3.

Info for manual annotations of cluster DF:

- Start number 88 was manually annotated 1 time for cluster DF.

Info for manual annotations of cluster DF3:

- Start number 62 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster F1:

- Start number 85 was manually annotated 19 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 85 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster O:

- Start number 70 was manually annotated 27 times for cluster O.
- Start number 81 was manually annotated 1 time for cluster O.

Gene Information:

Gene: 40AC_84 Start: 49609, Stop: 49076, Start Num: 83

Candidate Starts for 40AC_84:

(Start: 83 @49609 has 20 MA's), (98, 49516), (104, 49474), (106, 49447), (107, 49432), (112, 49417), (114, 49387), (125, 49288), (128, 49273), (145, 49216), (149, 49195),

Gene: AbbysRanger_76 Start: 47071, Stop: 46538, Start Num: 70

Candidate Starts for AbbysRanger_76:

(24, 47266), (26, 47224), (34, 47188), (37, 47176), (Start: 47 @47122 has 1 MA's), (Start: 70 @47071 has 157 MA's), (105, 46909), (114, 46840), (125, 46741), (128, 46726), (142, 46678), (145, 46669),

Gene: Abdiel_78 Start: 47271, Stop: 46738, Start Num: 70

Candidate Starts for Abdiel_78:

(Start: 50 @47316 has 3 MA's), (61, 47283), (Start: 70 @47271 has 157 MA's), (105, 47109), (106, 47100), (114, 47040), (125, 46941), (128, 46926), (142, 46878), (145, 46869),

Gene: Abidatro_40 Start: 27123, Stop: 27719, Start Num: 69

Candidate Starts for Abidatro_40:

(7, 26661), (11, 26739), (25, 26958), (Start: 69 @27123 has 13 MA's), (94, 27192), (103, 27249), (105, 27288), (107, 27312), (114, 27357), (118, 27384), (125, 27456), (128, 27471), (132, 27507), (135, 27528), (143, 27558), (153, 27639), (158, 27708),

Gene: Achebe_75 Start: 47050, Stop: 46517, Start Num: 70

Candidate Starts for Achebe_75:

(9, 47452), (12, 47380), (24, 47245), (26, 47203), (34, 47167), (37, 47155), (Start: 47 @47101 has 1 MA's), (Start: 70 @47050 has 157 MA's), (104, 46906), (105, 46888), (114, 46819), (125, 46720), (128, 46705), (142, 46657), (145, 46648),

Gene: Albee_79 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Albee_79:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Alberto7_80 Start: 47596, Stop: 47063, Start Num: 70

Candidate Starts for Alberto7_80:

(Start: 50 @47641 has 3 MA's), (61, 47608), (Start: 70 @47596 has 157 MA's), (104, 47452), (105, 47434), (106, 47425), (114, 47365), (125, 47266), (128, 47251), (142, 47203), (145, 47194),

Gene: Aliter_78 Start: 44452, Stop: 43904, Start Num: 75

Candidate Starts for Aliter_78:

(Start: 75 @44452 has 19 MA's), (102, 44323), (107, 44260), (111, 44251), (114, 44215), (123, 44134), (128, 44101), (142, 44053), (145, 44044),

Gene: Alkhayr_6 Start: 2237, Stop: 1647, Start Num: 70

Candidate Starts for Alkhayr_6:

(28, 2390), (43, 2315), (60, 2258), (66, 2246), (Start: 70 @2237 has 157 MA's), (89, 2186), (91, 2183), (102, 2108), (104, 2084), (107, 2042), (113, 2012), (128, 1871), (135, 1820), (140, 1799),

Gene: Alma_83 Start: 47302, Stop: 46748, Start Num: 71

Candidate Starts for Alma_83:

(66, 47308), (Start: 67 @47305 has 2 MA's), (Start: 71 @47302 has 18 MA's), (Start: 75 @47296 has 19 MA's), (102, 47167), (107, 47104), (111, 47095), (114, 47059), (123, 46978), (128, 46945), (142, 46897), (145, 46888),

Gene: AmiCi24_41 Start: 26807, Stop: 27406, Start Num: 69

Candidate Starts for AmiCi24_41:

(Start: 69 @26807 has 13 MA's), (103, 26930), (105, 26969), (111, 27002), (114, 27038), (118, 27065), (125, 27137), (128, 27152), (132, 27188), (135, 27209), (153, 27320), (160, 27401),

Gene: Andrew_43 Start: 26701, Stop: 27291, Start Num: 69

Candidate Starts for Andrew_43:

(Start: 69 @26701 has 13 MA's), (94, 26758), (103, 26815), (105, 26854), (111, 26887), (114, 26923), (118, 26950), (125, 27022), (128, 27037), (132, 27073), (135, 27094), (143, 27124), (149, 27154), (157, 27238),

Gene: Annyong_78 Start: 47304, Stop: 46771, Start Num: 70

Candidate Starts for Annyong_78:

(Start: 50 @47349 has 3 MA's), (61, 47316), (Start: 70 @47304 has 157 MA's), (105, 47142), (106, 47133), (114, 47073), (125, 46974), (128, 46959), (142, 46911), (145, 46902),

Gene: Anthony_80 Start: 47872, Stop: 47306, Start Num: 80

Candidate Starts for Anthony_80:

(72, 47875), (Start: 80 @47872 has 1 MA's), (91, 47833), (93, 47821), (100, 47761), (102, 47758), (106, 47710), (107, 47695), (114, 47650), (125, 47551), (128, 47536), (133, 47494), (137, 47476), (138, 47473), (149, 47431),

Gene: ArV1_067a Start: 51241, Stop: 52050, Start Num: 46

Candidate Starts for ArV1_067a:

(Start: 46 @51241 has 5 MA's), (52, 51256), (91, 51349), (105, 51466), (109, 51508), (113, 51523), (114, 51550), (122, 51628), (125, 51649), (131, 51691), (132, 51700), (148, 51781), (154, 51850), (156, 51871), (159, 51928), (164, 51979),

Gene: ArcusAngelus_70 Start: 43403, Stop: 44188, Start Num: 85

Candidate Starts for ArcusAngelus_70:

(38, 43280), (48, 43322), (Start: 85 @43403 has 44 MA's), (87, 43418), (102, 43514), (114, 43625), (120, 43685), (129, 43748), (132, 43775), (136, 43796), (155, 43931), (165, 44042), (168, 44072), (170, 44102),

Gene: Arissanae_80 Start: 47191, Stop: 46640, Start Num: 74

Candidate Starts for Arissanae_80:

(30, 47317), (66, 47200), (Start: 67 @47197 has 2 MA's), (Start: 71 @47194 has 18 MA's), (Start: 74 @47191 has 8 MA's), (107, 46996), (112, 46981), (114, 46951), (123, 46870), (128, 46837), (142, 46789), (145, 46780),

Gene: Artemis2UCLA_90 Start: 47554, Stop: 47027, Start Num: 83

Candidate Starts for Artemis2UCLA_90:

(30, 47671), (64, 47560), (Start: 65 @47557 has 3 MA's), (Start: 83 @47554 has 20 MA's), (91, 47518), (96, 47485), (102, 47443), (112, 47365), (114, 47335), (125, 47236), (126, 47233), (128, 47221), (129, 47212), (142, 47173), (145, 47164),

Gene: Arturo_76 Start: 47387, Stop: 46854, Start Num: 70

Candidate Starts for Arturo_76:

(Start: 50 @47432 has 3 MA's), (61, 47399), (Start: 70 @47387 has 157 MA's), (104, 47243), (105, 47225), (106, 47216), (114, 47156), (125, 47057), (128, 47042), (142, 46994), (145, 46985),

Gene: Ashwin_7 Start: 2541, Stop: 1951, Start Num: 70

Candidate Starts for Ashwin_7:

(Start: 70 @2541 has 157 MA's), (89, 2490), (91, 2487), (102, 2412), (104, 2388), (105, 2370), (113, 2316), (128, 2175), (135, 2124), (140, 2103),

Gene: Atlantica_42 Start: 26809, Stop: 27408, Start Num: 69

Candidate Starts for Atlantica_42:

(Start: 69 @26809 has 13 MA's), (103, 26932), (105, 26971), (111, 27004), (114, 27040), (118, 27067), (125, 27139), (128, 27154), (132, 27190), (135, 27211), (153, 27322), (160, 27403),

Gene: Aubs_70 Start: 45656, Stop: 46414, Start Num: 85

Candidate Starts for Aubs_70:

(39, 45533), (48, 45575), (Start: 85 @45656 has 44 MA's), (86, 45662), (91, 45692), (95, 45719), (104, 45788), (106, 45818), (121, 45947), (144, 46076), (147, 46094), (156, 46196), (162, 46289), (163, 46298), (171, 46391),

Gene: AvatarAhPeg_79 Start: 47420, Stop: 46878, Start Num: 70

Candidate Starts for AvatarAhPeg_79:

(Start: 70 @47420 has 157 MA's), (91, 47372), (Start: 92 @47366 has 1 MA's), (94, 47351), (104, 47276), (105, 47258), (106, 47249), (114, 47189), (125, 47090), (128, 47075), (142, 47027), (145, 47018),

Gene: Avle17_79 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for Avle17_79:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: BABullseye_82 Start: 45889, Stop: 45359, Start Num: 83

Candidate Starts for BABullseye_82:

(30, 46006), (54, 45925), (64, 45895), (Start: 83 @45889 has 20 MA's), (Start: 85 @45886 has 44 MA's), (91, 45850), (102, 45775), (104, 45754), (112, 45697), (114, 45667), (116, 45652), (125, 45568), (126, 45565), (128, 45553), (129, 45544), (142, 45505), (145, 45496),

Gene: Baby16_79 Start: 47270, Stop: 46737, Start Num: 70

Candidate Starts for Baby16_79:

(Start: 50 @47315 has 3 MA's), (61, 47282), (Start: 70 @47270 has 157 MA's), (105, 47108), (106, 47099), (114, 47039), (125, 46940), (128, 46925), (142, 46877), (145, 46868),

Gene: BabyBack_83 Start: 49524, Stop: 48991, Start Num: 83

Candidate Starts for BabyBack_83:

(61, 49530), (Start: 81 @49527 has 2 MA's), (Start: 83 @49524 has 20 MA's), (Start: 85 @49521 has 44 MA's), (98, 49431), (101, 49413), (102, 49410), (104, 49389), (106, 49362), (114, 49302), (125, 49203), (128, 49188), (142, 49140), (145, 49131), (149, 49110),

Gene: Backyardigan_74 Start: 47087, Stop: 46554, Start Num: 70

Candidate Starts for Backyardigan_74:

(24, 47282), (26, 47240), (34, 47204), (37, 47192), (Start: 47 @47138 has 1 MA's), (Start: 70 @47087 has 157 MA's), (105, 46925), (114, 46856), (125, 46757), (128, 46742), (142, 46694), (145, 46685),

Gene: Badger_75 Start: 47053, Stop: 46520, Start Num: 70

Candidate Starts for Badger_75:

(24, 47248), (26, 47206), (34, 47170), (37, 47158), (Start: 47 @47104 has 1 MA's), (Start: 70 @47053 has 157 MA's), (105, 46891), (114, 46822), (125, 46723), (128, 46708), (142, 46660), (145, 46651),

Gene: BangNhom_76 Start: 47696, Stop: 47163, Start Num: 70

Candidate Starts for BangNhom_76:

(Start: 50 @47741 has 3 MA's), (61, 47708), (Start: 70 @47696 has 157 MA's), (104, 47552), (105, 47534), (106, 47525), (114, 47465), (125, 47366), (128, 47351), (142, 47303), (145, 47294),

Gene: Bartimeaus_79 Start: 47261, Stop: 46728, Start Num: 70

Candidate Starts for Bartimeaus_79:

(Start: 50 @47306 has 3 MA's), (61, 47273), (Start: 70 @47261 has 157 MA's), (105, 47099), (106, 47090), (114, 47030), (125, 46931), (128, 46916), (142, 46868), (145, 46859),

Gene: Beemo_85 Start: 47289, Stop: 46741, Start Num: 75

Candidate Starts for Beemo_85:

(Start: 75 @47289 has 19 MA's), (102, 47160), (107, 47097), (111, 47088), (114, 47052), (123, 46971), (128, 46938), (142, 46890), (145, 46881),

Gene: BellusTerra_80 Start: 47300, Stop: 46767, Start Num: 70

Candidate Starts for BellusTerra_80:

(9, 47702), (12, 47630), (24, 47495), (26, 47453), (34, 47417), (37, 47405), (Start: 47 @47351 has 1 MA's), (Start: 70 @47300 has 157 MA's), (104, 47156), (105, 47138), (106, 47129), (114, 47069), (125, 46970), (128, 46955), (142, 46907), (145, 46898),

Gene: Blackmoor_78 Start: 47261, Stop: 46728, Start Num: 70

Candidate Starts for Blackmoor_78:

(Start: 50 @47306 has 3 MA's), (61, 47273), (Start: 70 @47261 has 157 MA's), (105, 47099), (106, 47090), (114, 47030), (125, 46931), (128, 46916), (142, 46868), (145, 46859),

Gene: BlessJoy_90 Start: 48075, Stop: 47548, Start Num: 85

Candidate Starts for BlessJoy_90:

(30, 48195), (64, 48084), (Start: 65 @48081 has 3 MA's), (Start: 85 @48075 has 44 MA's), (91, 48039), (96, 48006), (102, 47964), (112, 47886), (114, 47856), (125, 47757), (126, 47754), (128, 47742), (129, 47733), (142, 47694), (145, 47685),

Gene: Blessica_6 Start: 2096, Stop: 1506, Start Num: 70

Candidate Starts for Blessica_6:

(Start: 70 @2096 has 157 MA's), (89, 2045), (91, 2042), (102, 1967), (104, 1943), (107, 1901), (113, 1871), (128, 1730), (135, 1679), (140, 1658),

Gene: Blue7_92 Start: 47785, Stop: 47258, Start Num: 85

Candidate Starts for Blue7_92:

(30, 47905), (64, 47794), (Start: 65 @47791 has 3 MA's), (Start: 83 @47788 has 20 MA's), (Start: 85 @47785 has 44 MA's), (91, 47749), (96, 47716), (102, 47674), (112, 47596), (114, 47566), (125, 47467), (126, 47464), (128, 47452), (129, 47443), (142, 47404), (145, 47395),

Gene: BogosyJay_84 Start: 47353, Stop: 46796, Start Num: 67

Candidate Starts for BogosyJay_84:

(66, 47356), (Start: 67 @47353 has 2 MA's), (Start: 71 @47350 has 18 MA's), (Start: 74 @47347 has 8 MA's), (93, 47278), (104, 47194), (107, 47152), (112, 47137), (124, 47023), (128, 46993), (142, 46945), (145, 46936),

Gene: Bombshell_79 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Bombshell_79:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Bora_6 Start: 2231, Stop: 1641, Start Num: 70

Candidate Starts for Bora_6:

(Start: 70 @2231 has 157 MA's), (89, 2180), (91, 2177), (102, 2102), (104, 2078), (105, 2060), (113, 2006), (128, 1865), (135, 1814), (140, 1793),

Gene: Broseidon_79 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Broseidon_79:

(Start: 50 @47307 has 3 MA's), (61, 47274), (Start: 70 @47262 has 157 MA's), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: Bruiser_78 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Bruiser_78:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: BubbleTrouble_78 Start: 47331, Stop: 46753, Start Num: 50

Candidate Starts for BubbleTrouble_78:

(Start: 50 @47331 has 3 MA's), (61, 47298), (Start: 70 @47286 has 157 MA's), (105, 47124), (106, 47115), (114, 47055), (125, 46956), (128, 46941), (142, 46893), (145, 46884),

Gene: Bubbles123_66 Start: 44845, Stop: 45603, Start Num: 85

Candidate Starts for Bubbles123_66:

(39, 44722), (48, 44764), (Start: 85 @44845 has 44 MA's), (93, 44893), (95, 44908), (121, 45136), (144, 45265), (147, 45283), (156, 45385), (162, 45478), (163, 45487), (171, 45580),

Gene: Bumblebee11_75 Start: 47053, Stop: 46520, Start Num: 70

Candidate Starts for Bumblebee11_75:

(24, 47248), (26, 47206), (34, 47170), (37, 47158), (Start: 47 @47104 has 1 MA's), (Start: 70 @47053 has 157 MA's), (105, 46891), (114, 46822), (125, 46723), (128, 46708), (142, 46660), (145, 46651),

Gene: Burger_77 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Burger_77:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: ByChance_63 Start: 41432, Stop: 42055, Start Num: 85

Candidate Starts for ByChance_63:

(38, 41309), (48, 41351), (Start: 85 @41432 has 44 MA's), (87, 41447), (Start: 92 @41474 has 1 MA's), (93, 41480), (97, 41507), (102, 41543), (114, 41654), (120, 41714), (129, 41777), (132, 41804), (136, 41825),

Gene: Caelakin_77 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Caelakin_77:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Camara_42 Start: 26811, Stop: 27419, Start Num: 69

Candidate Starts for Camara_42:

(Start: 69 @26811 has 13 MA's), (103, 26934), (105, 26973), (107, 26997), (111, 27006), (114, 27042), (118, 27069), (125, 27141), (126, 27144), (128, 27156), (132, 27192), (135, 27213), (149, 27273), (161, 27414),

Gene: Camerico_38 Start: 42408, Stop: 42908, Start Num: 88

Candidate Starts for Camerico_38:

(68, 42360), (72, 42366), (Start: 88 @42408 has 1 MA's), (90, 42420), (99, 42492), (102, 42498), (118, 42636), (125, 42702), (127, 42708),

Gene: Camperdownii_76 Start: 46729, Stop: 46142, Start Num: 47

Candidate Starts for Camperdownii_76:

(Start: 47 @46729 has 1 MA's), (Start: 67 @46678 has 2 MA's), (102, 46561), (104, 46540), (114, 46453), (128, 46339), (142, 46291), (145, 46282), (149, 46261),

Gene: Candra_87 Start: 47596, Stop: 47063, Start Num: 65

Candidate Starts for Candra_87:

(30, 47710), (54, 47629), (64, 47599), (Start: 65 @47596 has 3 MA's), (Start: 83 @47593 has 20 MA's), (Start: 85 @47590 has 44 MA's), (91, 47554), (102, 47479), (104, 47458), (112, 47401), (114, 47371), (116, 47356), (125, 47272), (142, 47209), (145, 47200),

Gene: Catalina_87 Start: 47399, Stop: 46851, Start Num: 75

Candidate Starts for Catalina_87:

(Start: 75 @47399 has 19 MA's), (102, 47270), (107, 47207), (111, 47198), (114, 47162), (123, 47081), (128, 47048), (142, 47000), (145, 46991),

Gene: Catdawg_6 Start: 2146, Stop: 1556, Start Num: 70

Candidate Starts for Catdawg_6:

(Start: 70 @2146 has 157 MA's), (89, 2095), (91, 2092), (102, 2017), (104, 1993), (107, 1951), (113, 1921), (128, 1780), (135, 1729), (140, 1708),

Gene: CentreCat_79 Start: 47299, Stop: 46766, Start Num: 70

Candidate Starts for CentreCat_79:

(Start: 50 @47344 has 3 MA's), (61, 47311), (Start: 70 @47299 has 157 MA's), (104, 47155), (105, 47137), (106, 47128), (114, 47068), (125, 46969), (128, 46954), (142, 46906), (145, 46897),

Gene: Cerulean_81 Start: 47697, Stop: 47164, Start Num: 70

Candidate Starts for Cerulean_81:

(Start: 50 @47742 has 3 MA's), (61, 47709), (Start: 70 @47697 has 157 MA's), (104, 47553), (105, 47535), (106, 47526), (114, 47466), (125, 47367), (128, 47352), (142, 47304), (145, 47295),

Gene: ChampagnePapi_82 Start: 47699, Stop: 47166, Start Num: 70

Candidate Starts for ChampagnePapi_82:

(Start: 50 @47744 has 3 MA's), (61, 47711), (Start: 70 @47699 has 157 MA's), (104, 47555), (105, 47537), (106, 47528), (114, 47468), (125, 47369), (128, 47354), (142, 47306), (145, 47297),

Gene: Chaph_79 Start: 47270, Stop: 46737, Start Num: 70

Candidate Starts for Chaph_79:

(Start: 50 @47315 has 3 MA's), (61, 47282), (Start: 70 @47270 has 157 MA's), (104, 47126), (105, 47108), (106, 47099), (114, 47039), (125, 46940), (128, 46925), (142, 46877), (145, 46868),

Gene: Charm_80 Start: 46735, Stop: 46187, Start Num: 74

Candidate Starts for Charm_80:

(17, 47011), (23, 46930), (Start: 71 @46738 has 18 MA's), (Start: 74 @46735 has 8 MA's), (93, 46669), (102, 46606), (104, 46585), (107, 46543), (110, 46537), (112, 46528), (114, 46498), (123, 46417), (128, 46384), (142, 46336), (145, 46327),

Gene: Chartreuse_87 Start: 46894, Stop: 46364, Start Num: 83

Candidate Starts for Chartreuse_87:

(30, 47011), (54, 46930), (64, 46900), (Start: 65 @46897 has 3 MA's), (Start: 83 @46894 has 20 MA's), (Start: 85 @46891 has 44 MA's), (91, 46855), (102, 46780), (104, 46759), (112, 46702), (114, 46672), (116, 46657), (125, 46573), (142, 46510), (145, 46501),

Gene: Che9d_80 Start: 45002, Stop: 45760, Start Num: 85

Candidate Starts for Che9d_80:

(21, 44750), (27, 44822), (39, 44879), (48, 44921), (Start: 85 @45002 has 44 MA's), (93, 45050), (95, 45065), (121, 45293), (144, 45422), (147, 45440), (156, 45542), (162, 45635), (163, 45644), (171, 45737),

Gene: Chevrolet_73 Start: 43404, Stop: 44189, Start Num: 85

Candidate Starts for Chevrolet_73:

(38, 43281), (48, 43323), (Start: 85 @43404 has 44 MA's), (87, 43419), (102, 43515), (114, 43626), (120, 43686), (129, 43749), (132, 43776), (136, 43797), (155, 43932), (165, 44043), (168, 44073), (170, 44103),

Gene: Chickaboom_41 Start: 27140, Stop: 27736, Start Num: 69

Candidate Starts for Chickaboom_41:

(Start: 69 @27140 has 13 MA's), (103, 27266), (105, 27305), (107, 27329), (118, 27401), (125, 27473), (126, 27476), (128, 27488), (132, 27524), (135, 27545), (143, 27575), (149, 27605), (153, 27656), (158, 27725),

Gene: Chipper1996_810 Start: 52032, Stop: 52889, Start Num: 33

Candidate Starts for Chipper1996_810:

(Start: 33 @52032 has 14 MA's), (35, 52035), (Start: 46 @52089 has 5 MA's), (104, 52299), (107, 52341), (113, 52359), (132, 52536), (135, 52557), (148, 52617), (156, 52707), (159, 52764), (164, 52815),

Gene: Chocolat_80 Start: 51739, Stop: 52596, Start Num: 33

Candidate Starts for Chocolat_80:

(Start: 33 @51739 has 14 MA's), (35, 51742), (Start: 46 @51796 has 5 MA's), (104, 52006), (107, 52048), (113, 52066), (132, 52243), (135, 52264), (148, 52324), (156, 52414), (159, 52471), (164, 52522),

Gene: Chubster_81 Start: 52433, Stop: 53287, Start Num: 33

Candidate Starts for Chubster_81:

(Start: 33 @52433 has 14 MA's), (35, 52436), (Start: 46 @52490 has 5 MA's), (104, 52700), (107, 52742), (113, 52760), (132, 52937), (135, 52958), (148, 53018), (156, 53108), (159, 53165), (164, 53216),

Gene: Chupacabra_76 Start: 47045, Stop: 46506, Start Num: 71

Candidate Starts for Chupacabra_76:

(Start: 47 @47099 has 1 MA's), (Start: 71 @47045 has 18 MA's), (91, 47000), (102, 46925), (104, 46904), (114, 46817), (123, 46736), (128, 46703), (129, 46694), (142, 46655), (145, 46646), (149, 46625),

Gene: Cici_76 Start: 47066, Stop: 46533, Start Num: 70

Candidate Starts for Cici_76:

(24, 47261), (26, 47219), (34, 47183), (37, 47171), (Start: 47 @47117 has 1 MA's), (Start: 70 @47066 has 157 MA's), (105, 46904), (114, 46835), (125, 46736), (128, 46721), (142, 46673), (145, 46664),

Gene: Cindaradix_74 Start: 47332, Stop: 46844, Start Num: 92

Candidate Starts for Cindaradix_74:

(Start: 70 @47386 has 157 MA's), (91, 47338), (Start: 92 @47332 has 1 MA's), (94, 47317), (104, 47242), (105, 47224), (106, 47215), (114, 47155), (125, 47056), (128, 47041), (142, 46993), (145, 46984),

Gene: Cintron_79 Start: 47375, Stop: 46842, Start Num: 70

Candidate Starts for Cintron_79:

(Start: 50 @47420 has 3 MA's), (61, 47387), (Start: 70 @47375 has 157 MA's), (105, 47213), (106, 47204), (114, 47144), (125, 47045), (128, 47030), (142, 46982), (145, 46973),

Gene: Citius_79 Start: 47280, Stop: 46747, Start Num: 70

Candidate Starts for Citius_79:

(Start: 50 @47325 has 3 MA's), (61, 47292), (Start: 70 @47280 has 157 MA's), (105, 47118), (106, 47109), (114, 47049), (125, 46950), (128, 46935), (142, 46887), (145, 46878),

Gene: Clarenza_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Clarenza_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: CloudWang3_91 Start: 48083, Stop: 47556, Start Num: 83

Candidate Starts for CloudWang3_91:

(30, 48200), (64, 48089), (Start: 65 @48086 has 3 MA's), (Start: 83 @48083 has 20 MA's), (91, 48047), (96, 48014), (102, 47972), (112, 47894), (114, 47864), (125, 47765), (126, 47762), (128, 47750), (129, 47741), (142, 47702), (145, 47693),

Gene: Cocoaberry_79 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for Cocoaberry_79:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (104, 47116), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: Colucci_82 Start: 52514, Stop: 53323, Start Num: 46

Candidate Starts for Colucci_82:

(36, 52460), (Start: 46 @52514 has 5 MA's), (52, 52529), (97, 52661), (105, 52739), (109, 52781), (113, 52796), (114, 52823), (122, 52901), (125, 52922), (132, 52973), (135, 52994), (148, 53054), (156, 53144), (159, 53201), (164, 53252),

Gene: Commander_77 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Commander_77:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (104, 47113), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: Conboy_78 Start: 51521, Stop: 52378, Start Num: 33

Candidate Starts for Conboy_78:

(Start: 33 @51521 has 14 MA's), (35, 51524), (Start: 46 @51578 has 5 MA's), (104, 51788), (107, 51830), (113, 51848), (132, 52025), (135, 52046), (148, 52106), (156, 52196), (159, 52253), (164, 52304),

Gene: Connomayer_79 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Connomayer_79:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Conquerage_83 Start: 47065, Stop: 46517, Start Num: 75

Candidate Starts for Conquerage_83:

(66, 47077), (Start: 67 @47074 has 2 MA's), (Start: 71 @47071 has 18 MA's), (Start: 75 @47065 has 19 MA's), (102, 46936), (107, 46873), (111, 46864), (114, 46828), (123, 46747), (128, 46714), (142, 46666), (145, 46657),

Gene: Cookiedough_89 Start: 48199, Stop: 47672, Start Num: 85

Candidate Starts for Cookiedough_89:

(29, 48337), (30, 48325), (64, 48214), (Start: 65 @48211 has 3 MA's), (Start: 83 @48202 has 20 MA's), (Start: 85 @48199 has 44 MA's), (91, 48163), (102, 48088), (104, 48067), (112, 48010), (114, 47980), (116, 47965), (125, 47881), (142, 47818), (145, 47809),

Gene: Corndog_7 Start: 2523, Stop: 1933, Start Num: 70

Candidate Starts for Corndog_7:

(Start: 70 @2523 has 157 MA's), (89, 2472), (91, 2469), (102, 2394), (104, 2370), (105, 2352), (113, 2298), (128, 2157), (135, 2106), (140, 2085),

Gene: DaVinci_87 Start: 46945, Stop: 46418, Start Num: 85

Candidate Starts for DaVinci_87:

(30, 47065), (54, 46984), (64, 46954), (Start: 65 @46951 has 3 MA's), (Start: 83 @46948 has 20 MA's), (Start: 85 @46945 has 44 MA's), (91, 46909), (102, 46834), (104, 46813), (112, 46756), (114, 46726), (116, 46711), (125, 46627), (142, 46564), (145, 46555),

Gene: Darrell_83 Start: 46502, Stop: 45951, Start Num: 74

Candidate Starts for Darrell_83:

(30, 46628), (66, 46511), (Start: 67 @46508 has 2 MA's), (Start: 71 @46505 has 18 MA's), (Start: 74 @46502 has 8 MA's), (76, 46496), (107, 46307), (112, 46292), (114, 46262), (123, 46181), (124, 46178), (128, 46148), (142, 46100), (145, 46091),

Gene: DarthPhader_80 Start: 48059, Stop: 47520, Start Num: 85

Candidate Starts for DarthPhader_80:

(51, 48107), (Start: 85 @48059 has 44 MA's), (102, 47948), (107, 47885), (108, 47873), (111, 47867), (112, 47861), (114, 47831), (128, 47717), (145, 47660), (149, 47639),

Gene: Datway_76 Start: 47070, Stop: 46537, Start Num: 70

Candidate Starts for Datway_76:

(Start: 50 @47115 has 3 MA's), (61, 47082), (Start: 70 @47070 has 157 MA's), (102, 46947), (105, 46908), (106, 46899), (114, 46839), (125, 46740), (128, 46725), (142, 46677), (145, 46668),

Gene: Deano_76 Start: 47267, Stop: 46734, Start Num: 70

Candidate Starts for Deano_76:

(Start: 50 @47312 has 3 MA's), (61, 47279), (Start: 70 @47267 has 157 MA's), (105, 47105), (106, 47096), (114, 47036), (125, 46937), (128, 46922), (142, 46874), (145, 46865),

Gene: Dhanush_79 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Dhanush_79:

(Start: 50 @47307 has 3 MA's), (61, 47274), (Start: 70 @47262 has 157 MA's), (104, 47118), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: DirtyDunning_78 Start: 47271, Stop: 46738, Start Num: 70

Candidate Starts for DirtyDunning_78:

(Start: 50 @47316 has 3 MA's), (61, 47283), (Start: 70 @47271 has 157 MA's), (104, 47127), (105, 47109), (106, 47100), (114, 47040), (125, 46941), (128, 46926), (142, 46878), (145, 46869),

Gene: DontArgue_74 Start: 45905, Stop: 45366, Start Num: 79

Candidate Starts for DontArgue_74:

(Start: 47 @45965 has 1 MA's), (Start: 79 @45905 has 2 MA's), (91, 45860), (102, 45785), (112, 45707), (114, 45677), (128, 45563), (142, 45515), (145, 45506), (149, 45485),

Gene: Dorothea_89 Start: 48194, Stop: 47664, Start Num: 83

Candidate Starts for Dorothea_89:

(29, 48329), (30, 48317), (64, 48206), (Start: 65 @48203 has 3 MA's), (Start: 83 @48194 has 20 MA's), (Start: 85 @48191 has 44 MA's), (91, 48155), (102, 48080), (104, 48059), (112, 48002), (114, 47972), (116, 47957), (125, 47873), (142, 47810), (145, 47801),

Gene: Dorothy_71 Start: 44271, Stop: 44831, Start Num: 85

Candidate Starts for Dorothy_71:

(45, 44190), (Start: 85 @44271 has 44 MA's), (97, 44346), (102, 44382), (104, 44406), (114, 44493), (125, 44592), (126, 44595), (129, 44616), (132, 44643), (136, 44664),

Gene: DrYang_77 Start: 52275, Stop: 53081, Start Num: 46

Candidate Starts for DrYang_77:

(29, 52197), (Start: 46 @52275 has 5 MA's), (52, 52290), (105, 52500), (107, 52524), (113, 52542), (122, 52647), (132, 52719), (139, 52761), (148, 52800), (156, 52890), (159, 52947), (164, 52998),

Gene: Drake94_76 Start: 46202, Stop: 45663, Start Num: 71

Candidate Starts for Drake94_76:

(12, 46538), (24, 46403), (26, 46361), (34, 46325), (Start: 50 @46253 has 3 MA's), (53, 46247), (Start: 71 @46202 has 18 MA's), (91, 46157), (102, 46082), (112, 46004), (114, 45974), (128, 45860), (142, 45812), (145, 45803), (149, 45782),

Gene: DreamTeam1_80 Start: 46583, Stop: 46035, Start Num: 74

Candidate Starts for DreamTeam1_80:

(17, 46859), (23, 46778), (Start: 71 @46586 has 18 MA's), (Start: 74 @46583 has 8 MA's), (93, 46517), (102, 46454), (107, 46391), (110, 46385), (112, 46376), (114, 46346), (123, 46265), (128, 46232), (142, 46184), (145, 46175),

Gene: Druantia_78 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Druantia_78:

(24, 47457), (26, 47415), (34, 47379), (37, 47367), (Start: 47 @47313 has 1 MA's), (Start: 70 @47262 has 157 MA's), (104, 47118), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: DustyMartin_81 Start: 47188, Stop: 46649, Start Num: 79

Candidate Starts for DustyMartin_81:

(Start: 47 @47248 has 1 MA's), (Start: 79 @47188 has 2 MA's), (91, 47143), (102, 47068), (104, 47047), (112, 46990), (114, 46960), (123, 46879), (128, 46846), (129, 46837), (142, 46798), (145, 46789), (149, 46768),

Gene: Dylan_7 Start: 2545, Stop: 1955, Start Num: 70

Candidate Starts for Dylan_7:

(Start: 70 @2545 has 157 MA's), (89, 2494), (91, 2491), (102, 2416), (104, 2392), (105, 2374), (113, 2320), (128, 2179), (135, 2128), (140, 2107),

Gene: Eagle_78 Start: 47321, Stop: 46788, Start Num: 70

Candidate Starts for Eagle_78:

(Start: 50 @47366 has 3 MA's), (61, 47333), (Start: 70 @47321 has 157 MA's), (104, 47177), (105, 47159), (106, 47150), (114, 47090), (125, 46991), (128, 46976), (142, 46928), (145, 46919),

Gene: EagleEye_89 Start: 49182, Stop: 48643, Start Num: 79

Candidate Starts for EagleEye_89:

(Start: 79 @49182 has 2 MA's), (Start: 81 @49179 has 2 MA's), (91, 49137), (102, 49062), (112, 48984), (114, 48954), (116, 48939), (123, 48873), (128, 48840), (142, 48792), (145, 48783), (149, 48762),

Gene: Eaglepride_82 Start: 47125, Stop: 46586, Start Num: 71

Candidate Starts for Eaglepride_82:

(Start: 47 @47179 has 1 MA's), (Start: 71 @47125 has 18 MA's), (91, 47080), (104, 46984), (114, 46897), (128, 46783), (142, 46735), (145, 46726), (149, 46705),

Gene: Eapen_79 Start: 47254, Stop: 46721, Start Num: 70

Candidate Starts for Eapen_79:

(Start: 50 @47299 has 3 MA's), (61, 47266), (Start: 70 @47254 has 157 MA's), (104, 47110), (105, 47092), (106, 47083), (114, 47023), (125, 46924), (128, 46909), (142, 46861), (145, 46852),

Gene: EdgarPoe_79 Start: 51896, Stop: 52753, Start Num: 33

Candidate Starts for EdgarPoe_79:

(Start: 33 @51896 has 14 MA's), (35, 51899), (Start: 46 @51953 has 5 MA's), (104, 52163), (107, 52205), (113, 52223), (117, 52271), (118, 52277), (132, 52400), (135, 52421), (148, 52481), (156, 52571), (159, 52628), (164, 52679),

Gene: EdogawaKiddo_83 Start: 47367, Stop: 46819, Start Num: 75

Candidate Starts for EdogawaKiddo_83:

(66, 47379), (Start: 67 @47376 has 2 MA's), (Start: 71 @47373 has 18 MA's), (Start: 75 @47367 has 19 MA's), (102, 47238), (107, 47175), (111, 47166), (114, 47130), (123, 47049), (128, 47016), (142, 46968), (145, 46959),

Gene: Eesa_39 Start: 28022, Stop: 28654, Start Num: 69

Candidate Starts for Eesa_39:

(Start: 69 @28022 has 13 MA's), (103, 28151), (105, 28190), (107, 28214), (118, 28286), (125, 28358), (128, 28373), (132, 28409), (135, 28430), (143, 28460), (153, 28541),

Gene: Eidsmoe_83 Start: 47063, Stop: 46509, Start Num: 71

Candidate Starts for Eidsmoe_83:

(66, 47069), (Start: 67 @47066 has 2 MA's), (Start: 71 @47063 has 18 MA's), (Start: 75 @47057 has 19 MA's), (102, 46928), (107, 46865), (111, 46856), (114, 46820), (123, 46739), (128, 46706), (142, 46658), (145, 46649),

Gene: Elephantoon_85 Start: 47218, Stop: 46667, Start Num: 74

Candidate Starts for Elephantoon_85:

(16, 47509), (30, 47347), (66, 47230), (Start: 67 @47227 has 2 MA's), (Start: 71 @47224 has 18 MA's), (73, 47221), (Start: 74 @47218 has 8 MA's), (107, 47023), (112, 47008), (114, 46978), (123, 46897), (128, 46864), (142, 46816), (145, 46807),

Gene: EmyBug_82 Start: 47065, Stop: 46511, Start Num: 71

Candidate Starts for EmyBug_82:

(66, 47071), (Start: 67 @47068 has 2 MA's), (Start: 71 @47065 has 18 MA's), (Start: 75 @47059 has 19 MA's), (102, 46930), (107, 46867), (111, 46858), (114, 46822), (123, 46741), (128, 46708), (142, 46660), (145, 46651),

Gene: EricB_87 Start: 47088, Stop: 46561, Start Num: 85

Candidate Starts for EricB_87:

(30, 47214), (Start: 83 @47091 has 20 MA's), (Start: 85 @47088 has 44 MA's), (91, 47052), (96, 47019), (102, 46977), (104, 46956), (112, 46899), (114, 46869), (116, 46854), (125, 46770), (142, 46707), (145, 46698),

Gene: Eris_78 Start: 47271, Stop: 46738, Start Num: 70

Candidate Starts for Eris_78:

(Start: 50 @47316 has 3 MA's), (61, 47283), (Start: 70 @47271 has 157 MA's), (104, 47127), (105, 47109), (106, 47100), (114, 47040), (125, 46941), (128, 46926), (142, 46878), (145, 46869),

Gene: Eros_79 Start: 47261, Stop: 46728, Start Num: 70

Candidate Starts for Eros_79:

(Start: 50 @47306 has 3 MA's), (61, 47273), (Start: 70 @47261 has 157 MA's), (105, 47099), (106, 47090), (114, 47030), (125, 46931), (128, 46916), (142, 46868), (145, 46859),

Gene: Eurydice_80 Start: 47296, Stop: 46763, Start Num: 70

Candidate Starts for Eurydice_80:

(Start: 50 @47341 has 3 MA's), (61, 47308), (Start: 70 @47296 has 157 MA's), (104, 47152), (105, 47134), (106, 47125), (114, 47065), (125, 46966), (128, 46951), (142, 46903), (145, 46894),

Gene: ExplosioNervosa_83 Start: 47125, Stop: 46577, Start Num: 75

Candidate Starts for ExplosioNervosa_83:

(66, 47137), (Start: 67 @47134 has 2 MA's), (Start: 71 @47131 has 18 MA's), (Start: 75 @47125 has 19 MA's), (102, 46996), (107, 46933), (111, 46924), (114, 46888), (123, 46807), (128, 46774), (142, 46726), (145, 46717),

Gene: Familton_7 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for Familton_7:

(Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: Fayely_83 Start: 47032, Stop: 46484, Start Num: 75

Candidate Starts for Fayely_83:

(Start: 75 @47032 has 19 MA's), (102, 46903), (107, 46840), (111, 46831), (114, 46795), (123, 46714), (128, 46681), (142, 46633), (145, 46624),

Gene: Firecracker_6 Start: 2232, Stop: 1642, Start Num: 70

Candidate Starts for Firecracker_6:

(Start: 70 @2232 has 157 MA's), (89, 2181), (91, 2178), (102, 2103), (104, 2079), (105, 2061), (113, 2007), (128, 1866), (135, 1815), (140, 1794),

Gene: Float294_62 Start: 50332, Stop: 49703, Start Num: 40

Candidate Starts for Float294_62:

(19, 50515), (22, 50449), (31, 50365), (38, 50338), (Start: 40 @50332 has 1 MA's), (42, 50323), (44, 50305), (58, 50257), (63, 50248), (102, 50092), (128, 49876), (134, 49846),

Gene: Florean_79 Start: 47258, Stop: 46725, Start Num: 70

Candidate Starts for Florean_79:

(Start: 50 @47303 has 3 MA's), (61, 47270), (Start: 70 @47258 has 157 MA's), (105, 47096), (106, 47087), (114, 47027), (125, 46928), (128, 46913), (142, 46865), (145, 46856),

Gene: Flux_80 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Flux_80:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: FoulBall_6 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for FoulBall_6:

(Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: Funston_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Funston_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Gadost_79 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for Gadost_79:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (104, 47116), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: Garak_92 Start: 48028, Stop: 47501, Start Num: 83

Candidate Starts for Garak_92:

(30, 48145), (64, 48034), (Start: 65 @48031 has 3 MA's), (Start: 83 @48028 has 20 MA's), (91, 47992), (96, 47959), (102, 47917), (112, 47839), (114, 47809), (125, 47710), (126, 47707), (128, 47695), (129, 47686), (142, 47647), (145, 47638),

Gene: GaugeLDP_82 Start: 49074, Stop: 48544, Start Num: 83

Candidate Starts for GaugeLDP_82:

(61, 49080), (Start: 83 @49074 has 20 MA's), (98, 48984), (101, 48966), (102, 48963), (104, 48942), (114, 48855), (125, 48756), (128, 48741), (142, 48693), (145, 48684), (149, 48663),

Gene: Gladiator_87 Start: 47742, Stop: 47212, Start Num: 83

Candidate Starts for Gladiator_87:

(30, 47865), (Start: 83 @47742 has 20 MA's), (Start: 85 @47739 has 44 MA's), (91, 47703), (96, 47670), (102, 47628), (112, 47550), (114, 47520), (125, 47421), (126, 47418), (128, 47406), (129, 47397), (142, 47358), (145, 47349),

Gene: Glotell_44 Start: 26967, Stop: 27575, Start Num: 69

Candidate Starts for Glotell_44:

(Start: 69 @26967 has 13 MA's), (103, 27090), (105, 27129), (107, 27153), (111, 27162), (114, 27198), (118, 27225), (125, 27297), (126, 27300), (128, 27312), (132, 27348), (135, 27369), (149, 27429), (161, 27570),

Gene: Gmala1_28 Start: 35092, Stop: 35631, Start Num: 59

Candidate Starts for Gmala1_28:

(59, 35092), (Start: 82 @35122 has 2 MA's), (Start: 88 @35149 has 1 MA's), (105, 35281),

Gene: Goose_80 Start: 46856, Stop: 46317, Start Num: 71

Candidate Starts for Goose_80:

(Start: 47 @46910 has 1 MA's), (Start: 71 @46856 has 18 MA's), (91, 46811), (94, 46790), (102, 46736), (104, 46715), (114, 46628), (123, 46547), (128, 46514), (129, 46505), (142, 46466), (145, 46457), (149, 46436),

Gene: GordDuk1_28 Start: 35030, Stop: 35569, Start Num: 59

Candidate Starts for GordDuk1_28:

(59, 35030), (Start: 82 @35060 has 2 MA's), (Start: 88 @35087 has 1 MA's), (105, 35219), (115, 35300),

Gene: GordTnk2_28 Start: 34999, Stop: 35538, Start Num: 59

Candidate Starts for GordTnk2_28:

(59, 34999), (Start: 82 @35029 has 2 MA's), (Start: 88 @35056 has 1 MA's), (105, 35188), (115, 35269),

Gene: Gravel_49 Start: 27995, Stop: 28594, Start Num: 69

Candidate Starts for Gravel_49:

(Start: 69 @27995 has 13 MA's), (94, 28067), (103, 28124), (105, 28163), (107, 28187), (118, 28259), (125, 28331), (128, 28346), (132, 28382), (135, 28403), (143, 28433), (153, 28514), (158, 28583),

Gene: GreedyLawyer_82 Start: 47521, Stop: 46994, Start Num: 85

Candidate Starts for GreedyLawyer_82:

(29, 47659), (30, 47647), (64, 47536), (Start: 65 @47533 has 3 MA's), (Start: 83 @47524 has 20 MA's), (Start: 85 @47521 has 44 MA's), (91, 47485), (102, 47410), (104, 47389), (112, 47332), (114, 47302), (116, 47287), (125, 47203), (142, 47140), (145, 47131),

Gene: Gruunaga_90 Start: 47694, Stop: 47167, Start Num: 85

Candidate Starts for Gruunaga_90:

(30, 47820), (Start: 83 @47697 has 20 MA's), (Start: 85 @47694 has 44 MA's), (91, 47658), (96, 47625), (102, 47583), (112, 47505), (114, 47475), (125, 47376), (126, 47373), (128, 47361), (129, 47352), (142, 47313), (145, 47304),

Gene: HamCheese_41 Start: 26795, Stop: 27394, Start Num: 69

Candidate Starts for HamCheese_41:

(Start: 69 @26795 has 13 MA's), (103, 26918), (105, 26957), (111, 26990), (114, 27026), (118, 27053), (125, 27125), (128, 27140), (132, 27176), (135, 27197), (153, 27308), (160, 27389),

Gene: HamSlice_75 Start: 47258, Stop: 46725, Start Num: 70

Candidate Starts for HamSlice_75:

(Start: 50 @47303 has 3 MA's), (61, 47270), (Start: 70 @47258 has 157 MA's), (105, 47096), (106, 47087), (114, 47027), (125, 46928), (128, 46913), (142, 46865), (145, 46856),

Gene: Hammer_91 Start: 47404, Stop: 46874, Start Num: 65

Candidate Starts for Hammer_91:

(30, 47518), (64, 47407), (Start: 65 @47404 has 3 MA's), (Start: 83 @47401 has 20 MA's), (91, 47365), (96, 47332), (102, 47290), (112, 47212), (114, 47182), (125, 47083), (126, 47080), (128, 47068), (129, 47059), (142, 47020), (145, 47011),

Gene: Hanray_83 Start: 47343, Stop: 46795, Start Num: 75

Candidate Starts for Hanray_83:

(66, 47355), (Start: 67 @47352 has 2 MA's), (Start: 71 @47349 has 18 MA's), (Start: 75 @47343 has 19 MA's), (102, 47214), (107, 47151), (111, 47142), (114, 47106), (123, 47025), (128, 46992), (142, 46944), (145, 46935),

Gene: Happiness_78 Start: 47282, Stop: 46749, Start Num: 70

Candidate Starts for Happiness_78:

(Start: 50 @47327 has 3 MA's), (61, 47294), (Start: 70 @47282 has 157 MA's), (104, 47138), (105, 47120), (106, 47111), (113, 47078), (114, 47051), (125, 46952), (128, 46937), (142, 46889), (145, 46880),

Gene: Helmet_92 Start: 48028, Stop: 47501, Start Num: 83

Candidate Starts for Helmet_92:

(30, 48145), (64, 48034), (Start: 65 @48031 has 3 MA's), (Start: 83 @48028 has 20 MA's), (91, 47992), (96, 47959), (102, 47917), (112, 47839), (114, 47809), (125, 47710), (126, 47707), (128, 47695), (129, 47686), (142, 47647), (145, 47638),

Gene: Hexamo_90 Start: 47569, Stop: 47042, Start Num: 83

Candidate Starts for Hexamo_90:

(30, 47686), (64, 47575), (Start: 65 @47572 has 3 MA's), (Start: 83 @47569 has 20 MA's), (91, 47533), (96, 47500), (102, 47458), (112, 47380), (114, 47350), (125, 47251), (126, 47248), (128, 47236), (129, 47227), (142, 47188), (145, 47179),

Gene: Horex_83 Start: 47359, Stop: 46811, Start Num: 75

Candidate Starts for Horex_83:

(66, 47371), (Start: 67 @47368 has 2 MA's), (Start: 71 @47365 has 18 MA's), (Start: 75 @47359 has 19 MA's), (102, 47230), (107, 47167), (111, 47158), (114, 47122), (123, 47041), (128, 47008), (142, 46960), (145, 46951),

Gene: Holli_78 Start: 47049, Stop: 46516, Start Num: 70

Candidate Starts for Holli_78:

(Start: 50 @47094 has 3 MA's), (61, 47061), (Start: 70 @47049 has 157 MA's), (105, 46887), (106, 46878), (114, 46818), (125, 46719), (128, 46704), (142, 46656), (145, 46647),

Gene: Hoot_84 Start: 45405, Stop: 44878, Start Num: 85

Candidate Starts for Hoot_84:

(29, 45543), (30, 45531), (64, 45420), (Start: 65 @45417 has 3 MA's), (Start: 83 @45408 has 20 MA's), (Start: 85 @45405 has 44 MA's), (91, 45369), (96, 45336), (102, 45294), (112, 45216), (114, 45186), (125, 45087), (126, 45084), (142, 45024), (145, 45015),

Gene: HortumSL17_86 Start: 47397, Stop: 46849, Start Num: 75

Candidate Starts for HortumSL17_86:

(Start: 75 @47397 has 19 MA's), (102, 47268), (107, 47205), (111, 47196), (114, 47160), (123, 47079), (128, 47046), (142, 46998), (145, 46989),

Gene: Houdini22_78 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for Houdini22_78:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (104, 47116), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: HumptyDumpty_80 Start: 51699, Stop: 52556, Start Num: 33

Candidate Starts for HumptyDumpty_80:

(Start: 33 @51699 has 14 MA's), (35, 51702), (Start: 46 @51756 has 5 MA's), (104, 51966), (107, 52008), (113, 52026), (132, 52203), (135, 52224), (148, 52284), (156, 52374), (159, 52431), (164, 52482),

Gene: Huxley_68 Start: 45152, Stop: 44619, Start Num: 70

Candidate Starts for Huxley_68:

(Start: 50 @45197 has 3 MA's), (61, 45164), (Start: 70 @45152 has 157 MA's), (91, 45104), (104, 45008), (105, 44990), (106, 44981), (114, 44921), (125, 44822), (128, 44807), (142, 44759), (145, 44750),

Gene: ICleared_78 Start: 47327, Stop: 46794, Start Num: 70

Candidate Starts for ICleared_78:

(Start: 50 @47372 has 3 MA's), (61, 47339), (Start: 70 @47327 has 157 MA's), (104, 47183), (105, 47165), (106, 47156), (114, 47096), (125, 46997), (128, 46982), (142, 46934), (145, 46925),

Gene: Iceman_77 Start: 47549, Stop: 47016, Start Num: 70

Candidate Starts for Iceman_77:

(Start: 50 @47594 has 3 MA's), (61, 47561), (Start: 70 @47549 has 157 MA's), (104, 47405), (105, 47387), (106, 47378), (114, 47318), (125, 47219), (128, 47204), (142, 47156), (145, 47147),

Gene: Idergollasper_6 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for Idergollasper_6:

(Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: Indra_94 Start: 48029, Stop: 47502, Start Num: 83

Candidate Starts for Indra_94:

(30, 48146), (64, 48035), (Start: 65 @48032 has 3 MA's), (Start: 83 @48029 has 20 MA's), (91, 47993), (96, 47960), (102, 47918), (112, 47840), (114, 47810), (125, 47711), (126, 47708), (128, 47696), (129, 47687), (142, 47648), (145, 47639),

Gene: Inventum_68 Start: 44469, Stop: 45092, Start Num: 85

Candidate Starts for Inventum_68:

(45, 44388), (Start: 85 @44469 has 44 MA's), (97, 44544), (102, 44580), (104, 44604), (114, 44691), (125, 44790), (126, 44793), (129, 44814), (132, 44841), (136, 44862),

Gene: Iracema64_79 Start: 47523, Stop: 46990, Start Num: 70

Candidate Starts for Iracema64_79:

(Start: 50 @47568 has 3 MA's), (61, 47535), (Start: 70 @47523 has 157 MA's), (104, 47379), (105, 47361), (106, 47352), (114, 47292), (125, 47193), (128, 47178), (142, 47130), (145, 47121),

Gene: Isiphiwo_85 Start: 47116, Stop: 46589, Start Num: 85

Candidate Starts for Isiphiwo_85:

(30, 47236), (54, 47155), (64, 47125), (Start: 65 @47122 has 3 MA's), (Start: 83 @47119 has 20 MA's), (Start: 85 @47116 has 44 MA's), (91, 47080), (102, 47005), (104, 46984), (112, 46927), (114, 46897), (116, 46882), (125, 46798), (142, 46735), (145, 46726),

Gene: JaNo_79 Start: 51670, Stop: 52527, Start Num: 33

Candidate Starts for JaNo_79:

(Start: 33 @51670 has 14 MA's), (35, 51673), (Start: 46 @51727 has 5 MA's), (104, 51937), (107, 51979), (113, 51997), (132, 52174), (135, 52195), (148, 52255), (156, 52345), (159, 52402), (164, 52453),

Gene: Jamun_39 Start: 27180, Stop: 27779, Start Num: 69

Candidate Starts for Jamun_39:

(Start: 69 @27180 has 13 MA's), (103, 27309), (105, 27348), (107, 27372), (114, 27417), (118, 27444), (125, 27516), (128, 27531), (132, 27567), (135, 27588), (143, 27618), (153, 27699), (158, 27768),

Gene: JangDynasty_6 Start: 2236, Stop: 1646, Start Num: 70

Candidate Starts for JangDynasty_6:

(Start: 70 @2236 has 157 MA's), (89, 2185), (91, 2182), (102, 2107), (104, 2083), (107, 2041), (113, 2011), (128, 1870), (135, 1819), (140, 1798),

Gene: JayCookie_80 Start: 52232, Stop: 53089, Start Num: 33

Candidate Starts for JayCookie_80:

(Start: 33 @52232 has 14 MA's), (35, 52235), (Start: 46 @52289 has 5 MA's), (104, 52499), (107, 52541), (113, 52559), (132, 52736), (141, 52784), (156, 52907), (159, 52964), (164, 53015),

Gene: Jaykayelowell_76 Start: 47252, Stop: 46719, Start Num: 70

Candidate Starts for Jaykayelowell_76:

(Start: 50 @47297 has 3 MA's), (61, 47264), (Start: 70 @47252 has 157 MA's), (105, 47090), (106, 47081), (114, 47021), (125, 46922), (128, 46907), (142, 46859), (145, 46850),

Gene: Jeffabunny_79 Start: 44172, Stop: 43645, Start Num: 83

Candidate Starts for Jeffabunny_79:

(30, 44289), (64, 44178), (Start: 65 @44175 has 3 MA's), (Start: 83 @44172 has 20 MA's), (91, 44136), (96, 44103), (102, 44061), (112, 43983), (114, 43953), (125, 43854), (126, 43851), (128, 43839), (129, 43830), (142, 43791), (145, 43782),

Gene: JetBlade_80 Start: 47287, Stop: 46754, Start Num: 70

Candidate Starts for JetBlade_80:

(Start: 50 @47332 has 3 MA's), (61, 47299), (Start: 70 @47287 has 157 MA's), (104, 47143), (105, 47125), (106, 47116), (114, 47056), (125, 46957), (128, 46942), (142, 46894), (145, 46885),

Gene: JewelBug_81 Start: 45884, Stop: 45357, Start Num: 85

Candidate Starts for JewelBug_81:

(29, 46022), (30, 46010), (64, 45899), (Start: 65 @45896 has 3 MA's), (Start: 83 @45887 has 20 MA's), (Start: 85 @45884 has 44 MA's), (91, 45848), (102, 45773), (104, 45752), (112, 45695), (114, 45665), (116, 45650), (125, 45566), (142, 45503), (145, 45494),

Gene: Jiawan_82 Start: 47375, Stop: 46827, Start Num: 75

Candidate Starts for Jiawan_82:

(Start: 75 @47375 has 19 MA's), (102, 47246), (107, 47183), (111, 47174), (114, 47138), (123, 47057), (128, 47024), (142, 46976), (145, 46967),

Gene: JoongJeon_78 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for JoongJeon_78:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: Jordennis_87 Start: 47791, Stop: 47261, Start Num: 83

Candidate Starts for Jordennis_87:

(29, 47926), (30, 47914), (64, 47803), (Start: 65 @47800 has 3 MA's), (Start: 83 @47791 has 20 MA's), (Start: 85 @47788 has 44 MA's), (91, 47752), (102, 47677), (104, 47656), (112, 47599), (114, 47569), (116, 47554), (125, 47470), (142, 47407), (145, 47398),

Gene: Jumbo_35 Start: 41371, Stop: 41904, Start Num: 62

Candidate Starts for Jumbo_35:

(Start: 62 @41371 has 1 MA's), (90, 41437), (103, 41518), (127, 41728), (149, 41782),

Gene: Juno112_41 Start: 26811, Stop: 27410, Start Num: 69

Candidate Starts for Juno112_41:

(Start: 69 @26811 has 13 MA's), (103, 26934), (105, 26973), (111, 27006), (114, 27042), (118, 27069), (125, 27141), (128, 27156), (132, 27192), (135, 27213), (153, 27324), (160, 27405),

Gene: KBG_84 Start: 51007, Stop: 50294, Start Num: 85

Candidate Starts for KBG_84:

(Start: 85 @51007 has 44 MA's), (87, 50992), (95, 50944), (102, 50899), (104, 50875), (106, 50845), (121, 50719), (144, 50584), (147, 50566), (163, 50416), (166, 50392), (169, 50359), (172, 50320),

Gene: KBurrousTX_79 Start: 53874, Stop: 54680, Start Num: 46

Candidate Starts for KBurrousTX_79:

(Start: 46 @53874 has 5 MA's), (107, 54123), (113, 54141), (114, 54168), (118, 54195), (122, 54246), (125, 54267), (131, 54309), (132, 54318), (148, 54399), (156, 54489), (159, 54546), (164, 54597),

Gene: KFPoly_78 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for KFPoly_78:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: KHumphrey_42 Start: 26810, Stop: 27418, Start Num: 69

Candidate Starts for KHumphrey_42:

(Start: 69 @26810 has 13 MA's), (103, 26933), (105, 26972), (107, 26996), (111, 27005), (114, 27041), (118, 27068), (125, 27140), (126, 27143), (128, 27155), (132, 27191), (135, 27212), (149, 27272), (161, 27413),

Gene: Kabreeze_80 Start: 51756, Stop: 52613, Start Num: 33

Candidate Starts for Kabreeze_80:

(Start: 33 @51756 has 14 MA's), (35, 51759), (Start: 46 @51813 has 5 MA's), (104, 52023), (107, 52065), (113, 52083), (132, 52260), (135, 52281), (148, 52341), (156, 52431), (159, 52488), (164, 52539),

Gene: Kamy_78 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Kamy_78:

(Start: 50 @47307 has 3 MA's), (61, 47274), (Start: 70 @47262 has 157 MA's), (104, 47118), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: Katalie136_76 Start: 47053, Stop: 46520, Start Num: 70

Candidate Starts for Katalie136_76:

(24, 47248), (26, 47206), (34, 47170), (37, 47158), (Start: 47 @47104 has 1 MA's), (Start: 70 @47053 has 157 MA's), (105, 46891), (114, 46822), (125, 46723), (128, 46708), (142, 46660), (145, 46651),

Gene: Kazan_90 Start: 47560, Stop: 47033, Start Num: 85

Candidate Starts for Kazan_90:

(30, 47680), (54, 47599), (64, 47569), (Start: 65 @47566 has 3 MA's), (Start: 83 @47563 has 20 MA's), (Start: 85 @47560 has 44 MA's), (91, 47524), (102, 47449), (104, 47428), (112, 47371), (114, 47341), (116, 47326), (125, 47242), (142, 47179), (145, 47170),

Gene: KendraB23_50 Start: 28188, Stop: 28781, Start Num: 69

Candidate Starts for KendraB23_50:

(Start: 69 @28188 has 13 MA's), (94, 28254), (103, 28311), (105, 28350), (107, 28374), (118, 28446), (125, 28518), (128, 28533), (132, 28569), (135, 28590), (143, 28620), (153, 28701), (158, 28770),

Gene: Keziacharles14_82 Start: 47898, Stop: 47347, Start Num: 71

Candidate Starts for Keziacharles14_82:

(Start: 71 @47898 has 18 MA's), (Start: 75 @47895 has 19 MA's), (104, 47745), (107, 47703), (112, 47688), (114, 47658), (123, 47577), (124, 47574), (128, 47544), (142, 47496), (145, 47487),

Gene: Kingmustik0402_79 Start: 47248, Stop: 46715, Start Num: 70

Candidate Starts for Kingmustik0402_79:

(Start: 50 @47293 has 3 MA's), (61, 47260), (Start: 70 @47248 has 157 MA's), (104, 47104), (105, 47086), (106, 47077), (114, 47017), (125, 46918), (128, 46903), (142, 46855), (145, 46846),

Gene: Kingsley_70 Start: 46174, Stop: 46698, Start Num: 85

Candidate Starts for Kingsley_70:

(45, 46093), (Start: 85 @46174 has 44 MA's), (102, 46285), (104, 46309), (114, 46396), (125, 46495), (126, 46498), (129, 46519), (132, 46546), (136, 46567),

Gene: Kipper29_89 Start: 47563, Stop: 47036, Start Num: 85

Candidate Starts for Kipper29_89:

(29, 47701), (30, 47689), (64, 47578), (Start: 65 @47575 has 3 MA's), (Start: 83 @47566 has 20 MA's), (Start: 85 @47563 has 44 MA's), (91, 47527), (102, 47452), (104, 47431), (112, 47374), (114, 47344), (116, 47329), (125, 47245), (142, 47182), (145, 47173),

Gene: KittenMittens_75 Start: 46212, Stop: 45673, Start Num: 71

Candidate Starts for KittenMittens_75:

(Start: 47 @46266 has 1 MA's), (Start: 71 @46212 has 18 MA's), (91, 46167), (102, 46092), (112, 46014), (114, 45984), (128, 45870), (142, 45822), (145, 45813), (149, 45792),

Gene: Koan_74 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Koan_74:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Koko_92 Start: 48418, Stop: 47891, Start Num: 83

Candidate Starts for Koko_92:

(30, 48535), (64, 48424), (Start: 65 @48421 has 3 MA's), (Start: 83 @48418 has 20 MA's), (91, 48382), (96, 48349), (102, 48307), (112, 48229), (114, 48199), (125, 48100), (126, 48097), (128, 48085), (129, 48076), (142, 48037), (145, 48028),

Gene: Koreni_78 Start: 46940, Stop: 46407, Start Num: 70

Candidate Starts for Koreni_78:

(Start: 50 @46985 has 3 MA's), (61, 46952), (Start: 70 @46940 has 157 MA's), (104, 46796), (105, 46778), (106, 46769), (114, 46709), (125, 46610), (128, 46595), (142, 46547), (145, 46538),

Gene: Kratark_78 Start: 47293, Stop: 46760, Start Num: 70

Candidate Starts for Kratark_78:

(Start: 50 @47338 has 3 MA's), (61, 47305), (Start: 70 @47293 has 157 MA's), (104, 47149), (105, 47131), (106, 47122), (114, 47062), (125, 46963), (128, 46948), (142, 46900), (145, 46891),

Gene: Kremtemulon_76 Start: 47139, Stop: 46606, Start Num: 70

Candidate Starts for Kremtemulon_76:

(Start: 50 @47184 has 3 MA's), (61, 47151), (Start: 70 @47139 has 157 MA's), (104, 46995), (105, 46977), (106, 46968), (114, 46908), (125, 46809), (128, 46794), (142, 46746), (145, 46737),

Gene: Krili_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for Krili_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: Kristoff_77 Start: 47480, Stop: 46941, Start Num: 71

Candidate Starts for Kristoff_77:

(Start: 47 @47534 has 1 MA's), (Start: 71 @47480 has 18 MA's), (91, 47435), (102, 47360), (112, 47282), (114, 47252), (123, 47171), (128, 47138), (129, 47129), (142, 47090), (145, 47081), (149, 47060),

Gene: Kyee_79 Start: 47254, Stop: 46721, Start Num: 70

Candidate Starts for Kyee_79:

(Start: 50 @47299 has 3 MA's), (61, 47266), (Start: 70 @47254 has 157 MA's), (104, 47110), (105, 47092), (106, 47083), (114, 47023), (125, 46924), (128, 46909), (142, 46861), (145, 46852),

Gene: LHTSCC_81 Start: 47699, Stop: 47166, Start Num: 70

Candidate Starts for LHTSCC_81:

(Start: 50 @47744 has 3 MA's), (61, 47711), (Start: 70 @47699 has 157 MA's), (104, 47555), (105, 47537), (106, 47528), (114, 47468), (125, 47369), (142, 47306), (145, 47297),

Gene: LappelDuVide_79 Start: 47304, Stop: 46726, Start Num: 50

Candidate Starts for LappelDuVide_79:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Lemur_79 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Lemur_79:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Leona_41 Start: 26885, Stop: 27487, Start Num: 69

Candidate Starts for Leona_41:

(Start: 69 @26885 has 13 MA's), (94, 26942), (103, 26999), (105, 27038), (111, 27071), (114, 27107), (118, 27134), (125, 27206), (128, 27221), (132, 27257), (135, 27278), (153, 27389),

Gene: Lilleskat_82 Start: 47356, Stop: 46808, Start Num: 75

Candidate Starts for Lilleskat_82:

(66, 47368), (Start: 67 @47365 has 2 MA's), (Start: 71 @47362 has 18 MA's), (Start: 75 @47356 has 19 MA's), (102, 47227), (107, 47164), (111, 47155), (114, 47119), (123, 47038), (128, 47005), (142, 46957), (145, 46948),

Gene: Linus_80 Start: 52204, Stop: 53061, Start Num: 33

Candidate Starts for Linus_80:

(Start: 33 @52204 has 14 MA's), (35, 52207), (Start: 46 @52261 has 5 MA's), (104, 52471), (107, 52513), (113, 52531), (132, 52708), (135, 52729), (148, 52789), (156, 52879), (159, 52936), (164, 52987),

Gene: LittleB_79 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for LittleB_79:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (104, 47116), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: LittleGuy_79 Start: 47144, Stop: 46611, Start Num: 70

Candidate Starts for LittleGuy_79:

(Start: 50 @47189 has 3 MA's), (61, 47156), (Start: 70 @47144 has 157 MA's), (104, 47000), (105, 46982), (106, 46973), (114, 46913), (125, 46814), (128, 46799), (142, 46751), (145, 46742),

Gene: LochMonster_80 Start: 47496, Stop: 46963, Start Num: 70

Candidate Starts for LochMonster_80:

(Start: 50 @47541 has 3 MA's), (61, 47508), (Start: 70 @47496 has 157 MA's), (104, 47352), (105, 47334), (106, 47325), (114, 47265), (125, 47166), (128, 47151), (142, 47103), (145, 47094),

Gene: LoneWolf_85 Start: 47414, Stop: 46863, Start Num: 74

Candidate Starts for LoneWolf_85:

(Start: 65 @47426 has 3 MA's), (66, 47423), (Start: 67 @47420 has 2 MA's), (Start: 71 @47417 has 18 MA's), (Start: 74 @47414 has 8 MA's), (107, 47219), (112, 47204), (114, 47174), (123, 47093), (128, 47060), (142, 47012), (145, 47003),

Gene: Lorenzo_79 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Lorenzo_79:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: Lucyedi_88 Start: 49378, Stop: 48842, Start Num: 81

Candidate Starts for Lucyedi_88:

(Start: 79 @49381 has 2 MA's), (Start: 81 @49378 has 2 MA's), (91, 49336), (102, 49261), (112, 49183), (114, 49153), (116, 49138), (123, 49072), (128, 49039), (142, 48991), (145, 48982), (149, 48961),

Gene: Lunsford_79 Start: 47252, Stop: 46719, Start Num: 70

Candidate Starts for Lunsford_79:

(Start: 50 @47297 has 3 MA's), (61, 47264), (Start: 70 @47252 has 157 MA's), (105, 47090), (106, 47081), (114, 47021), (125, 46922), (128, 46907), (142, 46859), (145, 46850),

Gene: Lymara_76 Start: 50618, Stop: 51418, Start Num: 46

Candidate Starts for Lymara_76:

(Start: 46 @50618 has 5 MA's), (48, 50627), (104, 50828), (107, 50870), (113, 50888), (118, 50942), (122, 50993), (132, 51065), (148, 51146), (156, 51236), (159, 51293), (164, 51344),

Gene: MadKillah_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for MadKillah_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: Maminiaina_84 Start: 47329, Stop: 46778, Start Num: 74

Candidate Starts for Maminiaina_84:

(66, 47338), (Start: 67 @47335 has 2 MA's), (Start: 71 @47332 has 18 MA's), (Start: 74 @47329 has 8 MA's), (93, 47260), (104, 47176), (107, 47134), (112, 47119), (124, 47005), (128, 46975), (142, 46927), (145, 46918),

Gene: Maverick_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Maverick_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Maxo_81 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Maxo_81:

(Start: 50 @47307 has 3 MA's), (61, 47274), (Start: 70 @47262 has 157 MA's), (104, 47118), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: Mazhar510_79 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Mazhar510_79:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (104, 47113), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: McFly_89 Start: 47899, Stop: 47372, Start Num: 85

Candidate Starts for McFly_89:

(30, 48019), (54, 47938), (64, 47908), (Start: 65 @47905 has 3 MA's), (Start: 83 @47902 has 20 MA's), (Start: 85 @47899 has 44 MA's), (91, 47863), (102, 47788), (104, 47767), (112, 47710), (114, 47680), (116, 47665), (125, 47581), (142, 47518), (145, 47509),

Gene: Medusa_78 Start: 47272, Stop: 46739, Start Num: 70

Candidate Starts for Medusa_78:

(Start: 50 @47317 has 3 MA's), (61, 47284), (Start: 70 @47272 has 157 MA's), (105, 47110), (106, 47101), (114, 47041), (125, 46942), (128, 46927), (142, 46879), (145, 46870),

Gene: MeeZee_78 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for MeeZee_78:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: Melvin_81 Start: 47254, Stop: 46721, Start Num: 70

Candidate Starts for Melvin_81:

(Start: 50 @47299 has 3 MA's), (61, 47266), (Start: 70 @47254 has 157 MA's), (104, 47110), (105, 47092), (106, 47083), (114, 47023), (125, 46924), (128, 46909), (142, 46861), (145, 46852),

Gene: Millski_78 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for Millski_78:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: Miramae_79 Start: 47083, Stop: 46541, Start Num: 70

Candidate Starts for Miramae_79:

(Start: 70 @47083 has 157 MA's), (91, 47035), (Start: 92 @47029 has 1 MA's), (94, 47014), (104, 46939), (105, 46921), (106, 46912), (114, 46852), (125, 46753), (128, 46738), (142, 46690), (145, 46681),

Gene: Mordred_80 Start: 51852, Stop: 52652, Start Num: 46

Candidate Starts for Mordred_80:

(Start: 33 @51795 has 14 MA's), (35, 51798), (Start: 46 @51852 has 5 MA's), (104, 52062), (107, 52104), (113, 52122), (132, 52299), (135, 52320), (148, 52380), (156, 52470), (159, 52527), (164, 52578),

Gene: Mori_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for Mori_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: Morpher26_76 Start: 47074, Stop: 46541, Start Num: 70

Candidate Starts for Morpher26_76:

(24, 47269), (26, 47227), (34, 47191), (37, 47179), (Start: 47 @47125 has 1 MA's), (Start: 70 @47074 has 157 MA's), (105, 46912), (114, 46843), (125, 46744), (128, 46729), (142, 46681), (145, 46672),

Gene: Morrow_81 Start: 47299, Stop: 46766, Start Num: 70

Candidate Starts for Morrow_81:

(Start: 50 @47344 has 3 MA's), (61, 47311), (Start: 70 @47299 has 157 MA's), (105, 47137), (106, 47128), (114, 47068), (125, 46969), (128, 46954), (142, 46906), (145, 46897),

Gene: MoyaNatalis_79 Start: 51735, Stop: 52535, Start Num: 46

Candidate Starts for MoyaNatalis_79:

(Start: 33 @51678 has 14 MA's), (35, 51681), (Start: 46 @51735 has 5 MA's), (48, 51744), (104, 51945), (107, 51987), (113, 52005), (132, 52182), (135, 52203), (148, 52263), (156, 52353), (159, 52410), (164, 52461),

Gene: Mundrea_78 Start: 47310, Stop: 46768, Start Num: 70

Candidate Starts for Mundrea_78:

(12, 47640), (26, 47463), (34, 47427), (Start: 47 @47361 has 1 MA's), (61, 47322), (Start: 70 @47310 has 157 MA's), (104, 47166), (105, 47148), (106, 47139), (114, 47079), (125, 46980), (128, 46965), (142, 46917), (145, 46908),

Gene: Murai_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for Murai_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: Myxus_85 Start: 47397, Stop: 46849, Start Num: 75

Candidate Starts for Myxus_85:

(Start: 75 @47397 has 19 MA's), (102, 47268), (107, 47205), (111, 47196), (114, 47160), (123, 47079), (128, 47046), (142, 46998), (145, 46989),

Gene: Nebs_80 Start: 47299, Stop: 46766, Start Num: 70

Candidate Starts for Nebs_80:

(Start: 50 @47344 has 3 MA's), (61, 47311), (Start: 70 @47299 has 157 MA's), (104, 47155), (105, 47137), (106, 47128), (114, 47068), (125, 46969), (128, 46954), (142, 46906), (145, 46897),

Gene: Neeharika16_88 Start: 47653, Stop: 47123, Start Num: 83

Candidate Starts for Neeharika16_88:

(29, 47788), (30, 47776), (64, 47665), (Start: 65 @47662 has 3 MA's), (Start: 83 @47653 has 20 MA's), (Start: 85 @47650 has 44 MA's), (91, 47614), (102, 47539), (104, 47518), (112, 47461), (114, 47431), (116, 47416), (125, 47332), (142, 47269), (145, 47260),

Gene: Nemo27_78 Start: 47255, Stop: 46722, Start Num: 70

Candidate Starts for Nemo27_78:

(Start: 50 @47300 has 3 MA's), (61, 47267), (Start: 70 @47255 has 157 MA's), (104, 47111), (105, 47093), (106, 47084), (114, 47024), (125, 46925), (128, 46910), (142, 46862), (145, 46853),

Gene: Newrala_88 Start: 47996, Stop: 47469, Start Num: 85

Candidate Starts for Newrala_88:

(29, 48134), (30, 48122), (64, 48011), (Start: 65 @48008 has 3 MA's), (Start: 83 @47999 has 20 MA's), (Start: 85 @47996 has 44 MA's), (91, 47960), (102, 47885), (104, 47864), (112, 47807), (114, 47777), (116, 47762), (125, 47678), (142, 47615), (145, 47606),

Gene: NiebruSaylor_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for NiebruSaylor_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: Nitzel_65 Start: 42237, Stop: 42995, Start Num: 85

Candidate Starts for Nitzel_65:

(1, 41544), (2, 41559), (3, 41571), (6, 41733), (8, 41799), (10, 41811), (13, 41880), (14, 41898), (15, 41910), (21, 41985), (27, 42057), (39, 42114), (48, 42156), (Start: 85 @42237 has 44 MA's), (93, 42285), (95, 42300), (121, 42528), (144, 42657), (147, 42675), (156, 42777), (162, 42870), (163, 42879), (171, 42972),

Gene: Noelle_77 Start: 47280, Stop: 46744, Start Num: 67

Candidate Starts for Noelle_77:

(Start: 47 @47331 has 1 MA's), (Start: 67 @47280 has 2 MA's), (102, 47163), (114, 47055), (128, 46941), (142, 46893), (145, 46884), (149, 46863),

Gene: NorthStar_76 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for NorthStar_76:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: NotAPhaseMom_78 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for NotAPhaseMom_78:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (104, 47116), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: Nyxis_78 Start: 47138, Stop: 46605, Start Num: 70

Candidate Starts for Nyxis_78:

(Start: 50 @47183 has 3 MA's), (61, 47150), (Start: 70 @47138 has 157 MA's), (105, 46976), (106, 46967), (114, 46907), (125, 46808), (128, 46793), (142, 46745), (145, 46736),

Gene: OKCentral2016_78 Start: 46283, Stop: 45744, Start Num: 71

Candidate Starts for OKCentral2016_78:

(Start: 47 @46337 has 1 MA's), (Start: 71 @46283 has 18 MA's), (91, 46238), (102, 46163), (104, 46142), (114, 46055), (123, 45974), (128, 45941), (129, 45932), (142, 45893), (145, 45884), (149, 45863),

Gene: OKaNui_78 Start: 47310, Stop: 46777, Start Num: 70

Candidate Starts for OKaNui_78:

(Start: 50 @47355 has 3 MA's), (61, 47322), (Start: 70 @47310 has 157 MA's), (104, 47166), (105, 47148), (106, 47139), (114, 47079), (125, 46980), (128, 46965), (142, 46917), (145, 46908),

Gene: Obama12_80 Start: 47683, Stop: 47150, Start Num: 70

Candidate Starts for Obama12_80:

(Start: 50 @47728 has 3 MA's), (61, 47695), (Start: 70 @47683 has 157 MA's), (104, 47539), (105, 47521), (106, 47512), (114, 47452), (125, 47353), (128, 47338), (142, 47290), (145, 47281),

Gene: Ohfah_80 Start: 47299, Stop: 46766, Start Num: 70

Candidate Starts for Ohfah_80:

(Start: 50 @47344 has 3 MA's), (61, 47311), (Start: 70 @47299 has 157 MA's), (104, 47155), (105, 47137), (106, 47128), (114, 47068), (125, 46969), (128, 46954), (142, 46906), (145, 46897),

Gene: Onglai_83 Start: 45547, Stop: 44999, Start Num: 75

Candidate Starts for Onglai_83:

(Start: 75 @45547 has 19 MA's), (102, 45418), (107, 45355), (111, 45346), (114, 45310), (123, 45229), (128, 45196), (142, 45148), (145, 45139),

Gene: Orcanus_40 Start: 27545, Stop: 28138, Start Num: 69

Candidate Starts for Orcanus_40:

(Start: 69 @27545 has 13 MA's), (103, 27668), (105, 27707), (107, 27731), (118, 27803), (125, 27875), (128, 27890), (132, 27926), (135, 27947), (143, 27977), (153, 28058), (158, 28127),

Gene: Ovechkin_69 Start: 43705, Stop: 44415, Start Num: 85

Candidate Starts for Ovechkin_69:

(55, 43639), (Start: 85 @43705 has 44 MA's), (97, 43780), (102, 43816), (104, 43840), (114, 43927), (125, 44026), (126, 44029), (129, 44050), (132, 44077), (136, 44098),

Gene: PainterBoy_87 Start: 49092, Stop: 48553, Start Num: 79

Candidate Starts for PainterBoy_87:

(Start: 79 @49092 has 2 MA's), (Start: 81 @49089 has 2 MA's), (91, 49047), (102, 48972), (112, 48894), (114, 48864), (116, 48849), (123, 48783), (128, 48750), (142, 48702), (145, 48693), (149, 48672),

Gene: Palestino_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Palestino_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: PeaceMeal1_76 Start: 46213, Stop: 45674, Start Num: 71

Candidate Starts for PeaceMeal1_76:

(Start: 47 @46267 has 1 MA's), (Start: 71 @46213 has 18 MA's), (91, 46168), (102, 46093), (112, 46015), (114, 45985), (128, 45871), (142, 45823), (145, 45814), (149, 45793),

Gene: Peaches_77 Start: 47258, Stop: 46725, Start Num: 70

Candidate Starts for Peaches_77:

(Start: 50 @47303 has 3 MA's), (61, 47270), (Start: 70 @47258 has 157 MA's), (104, 47114), (105, 47096), (106, 47087), (114, 47027), (125, 46928), (128, 46913), (142, 46865), (145, 46856),

Gene: Pelletreau_49 Start: 27995, Stop: 28594, Start Num: 69

Candidate Starts for Pelletreau_49:

(Start: 69 @27995 has 13 MA's), (94, 28067), (103, 28124), (105, 28163), (107, 28187), (118, 28259), (125, 28331), (128, 28346), (132, 28382), (135, 28403), (143, 28433), (153, 28514), (158, 28583),

Gene: Perplexer_76 Start: 47054, Stop: 46521, Start Num: 70

Candidate Starts for Perplexer_76:

(24, 47249), (26, 47207), (34, 47171), (37, 47159), (Start: 47 @47105 has 1 MA's), (Start: 70 @47054 has 157 MA's), (105, 46892), (114, 46823), (125, 46724), (128, 46709), (142, 46661), (145, 46652),

Gene: PeterPeter_79 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for PeterPeter_79:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: PetiteSangsue_76 Start: 47057, Stop: 46524, Start Num: 70

Candidate Starts for PetiteSangsue_76:

(24, 47252), (26, 47210), (34, 47174), (37, 47162), (Start: 47 @47108 has 1 MA's), (Start: 70 @47057 has 157 MA's), (105, 46895), (114, 46826), (125, 46727), (128, 46712), (142, 46664), (145, 46655),

Gene: Phacado_79 Start: 47255, Stop: 46722, Start Num: 70

Candidate Starts for Phacado_79:

(Start: 50 @47300 has 3 MA's), (61, 47267), (Start: 70 @47255 has 157 MA's), (104, 47111), (105, 47093), (106, 47084), (114, 47024), (125, 46925), (128, 46910), (142, 46862), (145, 46853),

Gene: Phaeder_85 Start: 47272, Stop: 46724, Start Num: 75

Candidate Starts for Phaeder_85:

(Start: 75 @47272 has 19 MA's), (102, 47143), (107, 47080), (111, 47071), (114, 47035), (123, 46954), (128, 46921), (142, 46873), (145, 46864),

Gene: Phanphagia_65 Start: 43251, Stop: 43910, Start Num: 85

Candidate Starts for Phanphagia_65:

(55, 43185), (Start: 85 @43251 has 44 MA's), (102, 43362), (104, 43386), (125, 43572), (126, 43575), (129, 43596), (132, 43623), (136, 43644),

Gene: Pharaoh_79 Start: 48294, Stop: 47764, Start Num: 82

Candidate Starts for Pharaoh_79:

(66, 48306), (Start: 82 @48294 has 2 MA's), (102, 48180), (104, 48159), (112, 48102), (114, 48072), (124, 47988), (128, 47958), (142, 47910), (145, 47901),

Gene: Phelipe_80 Start: 47299, Stop: 46766, Start Num: 70

Candidate Starts for Phelipe_80:

(Start: 50 @47344 has 3 MA's), (61, 47311), (Start: 70 @47299 has 157 MA's), (104, 47155), (105, 47137), (106, 47128), (114, 47068), (125, 46969), (128, 46954), (142, 46906), (145, 46897),

Gene: Phighter1804_79 Start: 47320, Stop: 46787, Start Num: 70

Candidate Starts for Phighter1804_79:

(Start: 50 @47365 has 3 MA's), (61, 47332), (Start: 70 @47320 has 157 MA's), (104, 47176), (105, 47158), (106, 47149), (114, 47089), (125, 46990), (128, 46975), (142, 46927), (145, 46918),

Gene: Phlei_64 Start: 44228, Stop: 43716, Start Num: 83

Candidate Starts for Phlei_64:

(Start: 83 @44228 has 20 MA's), (91, 44189), (102, 44114), (113, 44033), (114, 44006), (128, 43892), (130, 43880), (146, 43832), (152, 43787),

Gene: PhluffyCoco_42 Start: 26807, Stop: 27400, Start Num: 69

Candidate Starts for PhluffyCoco_42:

(Start: 69 @26807 has 13 MA's), (103, 26930), (105, 26969), (111, 27002), (118, 27065), (125, 27137), (128, 27152), (132, 27188), (135, 27209), (153, 27320), (158, 27389),

Gene: Phonnegut_85 Start: 47288, Stop: 46740, Start Num: 75

Candidate Starts for Phonnegut_85:

(Start: 75 @47288 has 19 MA's), (102, 47159), (107, 47096), (111, 47087), (114, 47051), (123, 46970), (128, 46937), (142, 46889), (145, 46880),

Gene: Phontbonne_79 Start: 47154, Stop: 46621, Start Num: 70

Candidate Starts for Phontbonne_79:

(Start: 50 @47199 has 3 MA's), (61, 47166), (Start: 70 @47154 has 157 MA's), (104, 47010), (105, 46992), (106, 46983), (114, 46923), (125, 46824), (128, 46809), (142, 46761), (145, 46752),

Gene: Pioneer_85 Start: 47288, Stop: 46740, Start Num: 75

Candidate Starts for Pioneer_85:

(Start: 75 @47288 has 19 MA's), (102, 47159), (107, 47096), (111, 47087), (114, 47051), (123, 46970), (128, 46937), (142, 46889), (145, 46880),

Gene: Pipcraft_75 Start: 47260, Stop: 46727, Start Num: 70

Candidate Starts for Pipcraft_75:

(Start: 50 @47305 has 3 MA's), (61, 47272), (Start: 70 @47260 has 157 MA's), (105, 47098), (106, 47089), (114, 47029), (125, 46930), (128, 46915), (142, 46867), (145, 46858),

Gene: Pmask_88 Start: 48200, Stop: 47670, Start Num: 83

Candidate Starts for Pmask_88:

(29, 48335), (30, 48323), (64, 48212), (Start: 65 @48209 has 3 MA's), (Start: 83 @48200 has 20 MA's), (Start: 85 @48197 has 44 MA's), (91, 48161), (102, 48086), (104, 48065), (112, 48008), (114, 47978), (116, 47963), (125, 47879), (142, 47816), (145, 47807),

Gene: Polymorphads_80 Start: 47280, Stop: 46747, Start Num: 70

Candidate Starts for Polymorphads_80:

(Start: 50 @47325 has 3 MA's), (61, 47292), (Start: 70 @47280 has 157 MA's), (105, 47118), (106, 47109), (114, 47049), (125, 46950), (128, 46935), (142, 46887), (145, 46878),

Gene: Poompha_76 Start: 46211, Stop: 45672, Start Num: 71

Candidate Starts for Poompha_76:

(Start: 47 @46265 has 1 MA's), (Start: 71 @46211 has 18 MA's), (91, 46166), (102, 46091), (112, 46013), (114, 45983), (128, 45869), (142, 45821), (145, 45812), (149, 45791),

Gene: Priamo_90 Start: 47446, Stop: 46913, Start Num: 65

Candidate Starts for Priamo_90:

(30, 47560), (54, 47479), (64, 47449), (Start: 65 @47446 has 3 MA's), (Start: 83 @47443 has 20 MA's), (Start: 85 @47440 has 44 MA's), (91, 47404), (102, 47329), (104, 47308), (112, 47251), (114, 47221), (116, 47206), (125, 47122), (142, 47059), (145, 47050),

Gene: PrincessTrina_81 Start: 52100, Stop: 52957, Start Num: 33

Candidate Starts for PrincessTrina_81:

(Start: 33 @52100 has 14 MA's), (35, 52103), (Start: 46 @52157 has 5 MA's), (104, 52367), (107, 52409), (113, 52427), (117, 52475), (118, 52481), (141, 52652), (148, 52685), (156, 52775), (159, 52832), (164, 52883),

Gene: Priya_83 Start: 47060, Stop: 46512, Start Num: 75

Candidate Starts for Priya_83:

(66, 47072), (Start: 67 @47069 has 2 MA's), (Start: 71 @47066 has 18 MA's), (Start: 75 @47060 has 19 MA's), (102, 46931), (107, 46868), (111, 46859), (114, 46823), (123, 46742), (128, 46709), (142, 46661), (145, 46652),

Gene: Pumbaa_79 Start: 47204, Stop: 46671, Start Num: 70

Candidate Starts for Pumbaa_79:

(Start: 50 @47249 has 3 MA's), (61, 47216), (Start: 70 @47204 has 157 MA's), (105, 47042), (106, 47033), (114, 46973), (125, 46874), (128, 46859), (142, 46811), (145, 46802),

Gene: Qobbit_83 Start: 47022, Stop: 46474, Start Num: 75

Candidate Starts for Qobbit_83:

(66, 47034), (Start: 67 @47031 has 2 MA's), (Start: 71 @47028 has 18 MA's), (Start: 75 @47022 has 19 MA's), (102, 46893), (107, 46830), (111, 46821), (114, 46785), (123, 46704), (128, 46671), (142, 46623), (145, 46614),

Gene: Rahalelujah_84 Start: 46823, Stop: 46275, Start Num: 75

Candidate Starts for Rahalelujah_84:

(4, 47405), (30, 46946), (66, 46835), (Start: 67 @46832 has 2 MA's), (Start: 74 @46826 has 8 MA's), (Start: 75 @46823 has 19 MA's), (104, 46673), (107, 46631), (112, 46616), (114, 46586), (123, 46505), (128, 46472), (142, 46424), (145, 46415),

Gene: Rattail_42 Start: 26893, Stop: 27486, Start Num: 69

Candidate Starts for Rattail_42:

(Start: 69 @26893 has 13 MA's), (103, 27016), (105, 27055), (111, 27088), (118, 27151), (125, 27223), (128, 27238), (132, 27274), (135, 27295), (153, 27406), (158, 27475),

Gene: Rebeuca_80 Start: 47481, Stop: 46942, Start Num: 71

Candidate Starts for Rebeuca_80:

(Start: 47 @47535 has 1 MA's), (Start: 71 @47481 has 18 MA's), (91, 47436), (102, 47361), (112, 47283), (114, 47253), (123, 47172), (128, 47139), (129, 47130), (142, 47091), (145, 47082), (149, 47061),

Gene: RedBird_71 Start: 44150, Stop: 44698, Start Num: 85

Candidate Starts for RedBird_71:

(45, 44069), (Start: 85 @44150 has 44 MA's), (97, 44225), (102, 44261), (104, 44285), (114, 44372), (125, 44471), (126, 44474), (129, 44495), (132, 44522), (136, 44543),

Gene: RedFox_42 Start: 26806, Stop: 27399, Start Num: 69

Candidate Starts for RedFox_42:

(Start: 69 @26806 has 13 MA's), (103, 26929), (105, 26968), (111, 27001), (118, 27064), (125, 27136), (128, 27151), (132, 27187), (135, 27208), (153, 27319), (158, 27388),

Gene: Refuge_82 Start: 48905, Stop: 48375, Start Num: 85

Candidate Starts for Refuge_82:

(57, 48929), (Start: 85 @48905 has 44 MA's), (102, 48794), (111, 48722), (112, 48716), (114, 48686), (125, 48587), (128, 48572), (142, 48524), (145, 48515),

Gene: Relief_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Relief_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Renna12_41 Start: 26867, Stop: 27475, Start Num: 69

Candidate Starts for Renna12_41:

(Start: 69 @26867 has 13 MA's), (103, 26990), (105, 27029), (107, 27053), (111, 27062), (114, 27098), (118, 27125), (125, 27197), (126, 27200), (128, 27212), (132, 27248), (135, 27269), (149, 27329), (161, 27470),

Gene: Rhynn_83 Start: 50333, Stop: 49620, Start Num: 85

Candidate Starts for Rhynn_83:

(Start: 85 @50333 has 44 MA's), (87, 50318), (95, 50270), (102, 50225), (104, 50201), (106, 50171), (121, 50045), (144, 49910), (147, 49892), (163, 49742), (166, 49718), (169, 49685), (172, 49646),

Gene: Rifter_91 Start: 47196, Stop: 46669, Start Num: 83

Candidate Starts for Rifter_91:

(30, 47313), (64, 47202), (Start: 65 @47199 has 3 MA's), (Start: 83 @47196 has 20 MA's), (91, 47160), (96, 47127), (102, 47085), (112, 47007), (114, 46977), (125, 46878), (126, 46875), (128, 46863), (129, 46854), (142, 46815), (145, 46806),

Gene: Roksolana_91 Start: 47912, Stop: 47385, Start Num: 83

Candidate Starts for Roksolana_91:

(30, 48029), (64, 47918), (Start: 65 @47915 has 3 MA's), (Start: 83 @47912 has 20 MA's), (91, 47876), (96, 47843), (102, 47801), (112, 47723), (114, 47693), (125, 47594), (126, 47591), (128, 47579), (129, 47570), (142, 47531), (145, 47522),

Gene: Romney_78 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Romney_78:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Roosevelt_77 Start: 47261, Stop: 46728, Start Num: 70

Candidate Starts for Roosevelt_77:

(Start: 50 @47306 has 3 MA's), (61, 47273), (Start: 70 @47261 has 157 MA's), (105, 47099), (106, 47090), (114, 47030), (125, 46931), (128, 46916), (142, 46868), (145, 46859),

Gene: Rosa24_75 Start: 47287, Stop: 46754, Start Num: 70

Candidate Starts for Rosa24_75:

(Start: 50 @47332 has 3 MA's), (61, 47299), (Start: 70 @47287 has 157 MA's), (104, 47143), (105, 47125), (106, 47116), (114, 47056), (125, 46957), (128, 46942), (142, 46894), (145, 46885),

Gene: RosiePosie_80 Start: 51884, Stop: 52741, Start Num: 33

Candidate Starts for RosiePosie_80:

(Start: 33 @51884 has 14 MA's), (35, 51887), (Start: 46 @51941 has 5 MA's), (104, 52151), (107, 52193), (113, 52211), (117, 52259), (118, 52265), (132, 52388), (135, 52409), (148, 52469), (156, 52559), (159, 52616), (164, 52667),

Gene: Rowdy_81 Start: 47188, Stop: 46649, Start Num: 79

Candidate Starts for Rowdy_81:

(Start: 47 @47248 has 1 MA's), (Start: 79 @47188 has 2 MA's), (91, 47143), (102, 47068), (104, 47047), (112, 46990), (114, 46960), (123, 46879), (128, 46846), (129, 46837), (142, 46798), (145, 46789), (149, 46768),

Gene: Ruin_79 Start: 47252, Stop: 46719, Start Num: 70

Candidate Starts for Ruin_79:

(Start: 50 @47297 has 3 MA's), (61, 47264), (Start: 70 @47252 has 157 MA's), (104, 47108), (105, 47090), (106, 47081), (114, 47021), (125, 46922), (128, 46907), (142, 46859), (145, 46850),

Gene: Ryadel_8 Start: 2666, Stop: 2088, Start Num: 81

Candidate Starts for Ryadel_8:

(49, 2744), (Start: 81 @2666 has 2 MA's), (89, 2627), (91, 2624), (102, 2549), (104, 2525), (107, 2483), (113, 2453), (128, 2312), (135, 2261), (140, 2240),

Gene: RyeScarlet_86 Start: 47263, Stop: 46715, Start Num: 75

Candidate Starts for RyeScarlet_86:

(66, 47275), (Start: 67 @47272 has 2 MA's), (Start: 71 @47269 has 18 MA's), (Start: 75 @47263 has 19 MA's), (102, 47134), (107, 47071), (111, 47062), (114, 47026), (123, 46945), (128, 46912), (142, 46864), (145, 46855),

Gene: SG4_64 Start: 41908, Stop: 42666, Start Num: 85

Candidate Starts for SG4_64:

(57, 41854), (78, 41896), (Start: 85 @41908 has 44 MA's), (86, 41914), (91, 41944), (95, 41971), (104, 42040), (106, 42070), (121, 42199), (144, 42328), (147, 42346), (156, 42448), (162, 42541), (163, 42550), (171, 42643),

Gene: Sabertooth_79 Start: 47264, Stop: 46731, Start Num: 70

Candidate Starts for Sabertooth_79:

(Start: 50 @47309 has 3 MA's), (61, 47276), (Start: 70 @47264 has 157 MA's), (105, 47102), (106, 47093), (114, 47033), (125, 46934), (128, 46919), (142, 46871), (145, 46862),

Gene: Sachima_81 Start: 47300, Stop: 46752, Start Num: 75

Candidate Starts for Sachima_81:

(Start: 75 @47300 has 19 MA's), (102, 47171), (107, 47108), (111, 47099), (114, 47063), (123, 46982), (128, 46949), (142, 46901), (145, 46892),

Gene: Samy_49 Start: 33023, Stop: 33553, Start Num: 65

Candidate Starts for Samy_49:

(Start: 65 @33023 has 3 MA's), (Start: 92 @33089 has 1 MA's), (112, 33242),

Gene: Sassafras_71 Start: 44468, Stop: 45091, Start Num: 85

Candidate Starts for Sassafras_71:

(45, 44387), (Start: 85 @44468 has 44 MA's), (97, 44543), (102, 44579), (104, 44603), (114, 44690), (125, 44789), (126, 44792), (129, 44813), (132, 44840), (136, 44861),

Gene: Scamp_79 Start: 47261, Stop: 46728, Start Num: 70

Candidate Starts for Scamp_79:

(Start: 50 @47306 has 3 MA's), (61, 47273), (Start: 70 @47261 has 157 MA's), (104, 47117), (105, 47099), (106, 47090), (114, 47030), (125, 46931), (128, 46916), (142, 46868), (145, 46859),

Gene: Scavito_81 Start: 51844, Stop: 52701, Start Num: 33

Candidate Starts for Scavito_81:

(Start: 33 @51844 has 14 MA's), (35, 51847), (Start: 46 @51901 has 5 MA's), (104, 52111), (107, 52153), (113, 52171), (132, 52348), (135, 52369), (148, 52429), (156, 52519), (159, 52576), (164, 52627),

Gene: Scherzo_83 Start: 47320, Stop: 46772, Start Num: 75

Candidate Starts for Scherzo_83:

(Start: 75 @47320 has 19 MA's), (102, 47191), (107, 47128), (111, 47119), (114, 47083), (123, 47002), (128, 46969), (142, 46921), (145, 46912),

Gene: SchoolBus_6 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for SchoolBus_6:

(Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: Schuy_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for Schuy_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: SenorClean_74 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for SenorClean_74:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Severus_77 Start: 46211, Stop: 45672, Start Num: 71

Candidate Starts for Severus_77:

(Start: 47 @46265 has 1 MA's), (Start: 71 @46211 has 18 MA's), (91, 46166), (102, 46091), (112, 46013), (114, 45983), (128, 45869), (142, 45821), (145, 45812), (149, 45791),

Gene: Shaka_77 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Shaka_77:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (104, 47113), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: Shapes_81 Start: 47188, Stop: 46649, Start Num: 79

Candidate Starts for Shapes_81:

(Start: 47 @47248 has 1 MA's), (Start: 79 @47188 has 2 MA's), (91, 47143), (102, 47068), (104, 47047), (112, 46990), (114, 46960), (123, 46879), (128, 46846), (129, 46837), (142, 46798), (145, 46789), (149, 46768),

Gene: SheaKeira_80 Start: 46608, Stop: 46063, Start Num: 75

Candidate Starts for SheaKeira_80:

(23, 46806), (Start: 71 @46614 has 18 MA's), (Start: 75 @46608 has 19 MA's), (93, 46545), (102, 46482), (107, 46419), (110, 46413), (112, 46404), (114, 46374), (123, 46293), (128, 46260), (142, 46212), (145, 46203),

Gene: SheldonCooper_79 Start: 47697, Stop: 47164, Start Num: 70

Candidate Starts for SheldonCooper_79:

(Start: 50 @47742 has 3 MA's), (61, 47709), (Start: 70 @47697 has 157 MA's), (104, 47553), (105, 47535), (106, 47526), (114, 47466), (125, 47367), (128, 47352), (142, 47304), (145, 47295),

Gene: Shida_6 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for Shida_6:

(28, 2300), (43, 2225), (60, 2168), (66, 2156), (Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: ShowerHandel_73 Start: 45372, Stop: 45995, Start Num: 85

Candidate Starts for ShowerHandel_73:

(38, 45249), (48, 45291), (Start: 85 @45372 has 44 MA's), (87, 45387), (Start: 92 @45414 has 1 MA's), (93, 45420), (97, 45447), (102, 45483), (114, 45594), (120, 45654), (129, 45717), (132, 45744), (136, 45765),

Gene: ShroomBoi_71 Start: 45417, Stop: 46175, Start Num: 85

Candidate Starts for ShroomBoi_71:

(57, 45363), (78, 45405), (Start: 85 @45417 has 44 MA's), (86, 45423), (91, 45453), (95, 45480), (104, 45549), (106, 45579), (121, 45708), (144, 45837), (147, 45855), (156, 45957), (162, 46050), (163, 46059), (171, 46152),

Gene: Shygu2_77 Start: 47203, Stop: 46670, Start Num: 70

Candidate Starts for Shygu2_77:

(Start: 50 @47248 has 3 MA's), (61, 47215), (Start: 70 @47203 has 157 MA's), (104, 47059), (105, 47041), (111, 47008), (114, 46972), (125, 46873), (128, 46858), (142, 46810), (145, 46801),

Gene: Skipitt_78 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for Skipitt_78:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: SmellyB_89 Start: 47554, Stop: 47027, Start Num: 85

Candidate Starts for SmellyB_89:

(30, 47674), (54, 47593), (64, 47563), (Start: 65 @47560 has 3 MA's), (Start: 83 @47557 has 20 MA's), (Start: 85 @47554 has 44 MA's), (91, 47518), (102, 47443), (104, 47422), (112, 47365), (114, 47335), (116, 47320), (125, 47236), (142, 47173), (145, 47164),

Gene: Smooch_7 Start: 2521, Stop: 1931, Start Num: 70

Candidate Starts for Smooch_7:

(Start: 70 @2521 has 157 MA's), (89, 2470), (91, 2467), (102, 2392), (104, 2368), (105, 2350), (113, 2296), (128, 2155), (135, 2104), (140, 2083),

Gene: Sparxx_80 Start: 47255, Stop: 46722, Start Num: 70

Candidate Starts for Sparxx_80:

(Start: 50 @47300 has 3 MA's), (61, 47267), (Start: 70 @47255 has 157 MA's), (105, 47093), (106, 47084), (114, 47024), (125, 46925), (128, 46910), (142, 46862), (145, 46853),

Gene: Spikelee_77 Start: 47075, Stop: 47833, Start Num: 85

Candidate Starts for Spikelee_77:

(39, 46952), (48, 46994), (Start: 85 @47075 has 44 MA's), (93, 47123), (95, 47138), (121, 47366), (144, 47495), (147, 47513), (156, 47615), (162, 47708), (163, 47717), (171, 47810),

Gene: Spino_78 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for Spino_78:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Spouty_83 Start: 47059, Stop: 46511, Start Num: 75

Candidate Starts for Spouty_83:

(66, 47071), (Start: 67 @47068 has 2 MA's), (Start: 71 @47065 has 18 MA's), (Start: 75 @47059 has 19 MA's), (102, 46930), (107, 46867), (111, 46858), (114, 46822), (123, 46741), (128, 46708), (142, 46660), (145, 46651),

Gene: Stasia_76 Start: 47261, Stop: 46683, Start Num: 50

Candidate Starts for Stasia_76:

(Start: 50 @47261 has 3 MA's), (61, 47228), (Start: 70 @47216 has 157 MA's), (102, 47093), (104, 47072), (105, 47054), (114, 46985), (125, 46886), (128, 46871), (142, 46823), (145, 46814),

Gene: Steamy_77 Start: 47389, Stop: 46856, Start Num: 82

Candidate Starts for Steamy_77:

(54, 47431), (Start: 82 @47389 has 2 MA's), (84, 47386), (102, 47275), (107, 47212), (112, 47197), (114, 47167), (123, 47086), (128, 47053), (142, 47005), (145, 46996),

Gene: Stink_79 Start: 47391, Stop: 46849, Start Num: 70

Candidate Starts for Stink_79:

(Start: 70 @47391 has 157 MA's), (91, 47343), (Start: 92 @47337 has 1 MA's), (94, 47322), (104, 47247), (105, 47229), (106, 47220), (114, 47160), (125, 47061), (128, 47046), (142, 46998), (145, 46989),

Gene: StuartMinion_37 Start: 23874, Stop: 24473, Start Num: 69

Candidate Starts for StuartMinion_37:

(Start: 69 @23874 has 13 MA's), (93, 23931), (103, 23997), (105, 24036), (111, 24069), (114, 24105), (125, 24204), (128, 24219), (132, 24255), (135, 24276),

Gene: SuperAwesome_89 Start: 48236, Stop: 47709, Start Num: 85

Candidate Starts for SuperAwesome_89:

(29, 48374), (30, 48362), (64, 48251), (Start: 65 @48248 has 3 MA's), (Start: 83 @48239 has 20 MA's), (Start: 85 @48236 has 44 MA's), (91, 48200), (102, 48125), (104, 48104), (112, 48047), (114, 48017), (116, 48002), (125, 47918), (142, 47855), (145, 47846),

Gene: SuperCallie99_85 Start: 47620, Stop: 47090, Start Num: 83

Candidate Starts for SuperCallie99_85:

(30, 47737), (54, 47656), (64, 47626), (Start: 65 @47623 has 3 MA's), (Start: 83 @47620 has 20 MA's), (Start: 85 @47617 has 44 MA's), (91, 47581), (102, 47506), (104, 47485), (112, 47428), (114, 47398), (116, 47383), (125, 47299), (142, 47236), (145, 47227),

Gene: Taquarus_78 Start: 47262, Stop: 46729, Start Num: 70

Candidate Starts for Taquarus_78:

(Start: 50 @47307 has 3 MA's), (61, 47274), (Start: 70 @47262 has 157 MA's), (104, 47118), (105, 47100), (106, 47091), (114, 47031), (125, 46932), (128, 46917), (142, 46869), (145, 46860),

Gene: TaylorSipht_40 Start: 26950, Stop: 27543, Start Num: 69

Candidate Starts for TaylorSipht_40:

(25, 26785), (Start: 69 @26950 has 13 MA's), (94, 27016), (103, 27073), (104, 27094), (105, 27112), (107, 27136), (114, 27181), (118, 27208), (125, 27280), (128, 27295), (132, 27331), (135, 27352), (153, 27463),

Gene: TelAviv_6 Start: 2144, Stop: 1554, Start Num: 70

Candidate Starts for TelAviv_6:

(Start: 70 @2144 has 157 MA's), (89, 2093), (91, 2090), (102, 2015), (104, 1991), (105, 1973), (113, 1919), (128, 1778), (135, 1727), (140, 1706),

Gene: Temprado_92 Start: 48028, Stop: 47501, Start Num: 83

Candidate Starts for Temprado_92:

(30, 48145), (64, 48034), (Start: 65 @48031 has 3 MA's), (Start: 83 @48028 has 20 MA's), (91, 47992), (96, 47959), (102, 47917), (112, 47839), (114, 47809), (125, 47710), (126, 47707), (128, 47695), (129, 47686), (142, 47647), (145, 47638),

Gene: Thanksgivukkah_78 Start: 47257, Stop: 46724, Start Num: 70

Candidate Starts for Thanksgivukkah_78:

(Start: 50 @47302 has 3 MA's), (61, 47269), (Start: 70 @47257 has 157 MA's), (105, 47095), (106, 47086), (114, 47026), (125, 46927), (128, 46912), (142, 46864), (145, 46855),

Gene: TinaFeyge_77 Start: 47254, Stop: 46721, Start Num: 70

Candidate Starts for TinaFeyge_77:

(Start: 50 @47299 has 3 MA's), (61, 47266), (Start: 70 @47254 has 157 MA's), (105, 47092), (106, 47083), (114, 47023), (125, 46924), (128, 46909), (142, 46861), (145, 46852),

Gene: Tinybot_78 Start: 47286, Stop: 46753, Start Num: 70

Candidate Starts for Tinybot_78:

(Start: 50 @47331 has 3 MA's), (61, 47298), (Start: 70 @47286 has 157 MA's), (104, 47142), (105, 47124), (106, 47115), (114, 47055), (125, 46956), (128, 46941), (142, 46893), (145, 46884),

Gene: TiroTheta9_78 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for TiroTheta9_78:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: Toad24_42 Start: 28241, Stop: 28834, Start Num: 69

Candidate Starts for Toad24_42:

(Start: 69 @28241 has 13 MA's), (94, 28307), (103, 28364), (105, 28403), (107, 28427), (118, 28499), (125, 28571), (128, 28586), (132, 28622), (135, 28643), (143, 28673), (153, 28754), (158, 28823),

Gene: Toaka_83 Start: 47180, Stop: 46632, Start Num: 75

Candidate Starts for Toaka_83:

(38, 47282), (Start: 75 @47180 has 19 MA's), (107, 46988), (111, 46979), (114, 46943), (123, 46862), (128, 46829), (129, 46820), (142, 46781), (145, 46772),

Gene: ToneTone_88 Start: 47576, Stop: 47049, Start Num: 85

Candidate Starts for ToneTone_88:

(30, 47696), (64, 47585), (Start: 65 @47582 has 3 MA's), (Start: 85 @47576 has 44 MA's), (91, 47540), (96, 47507), (102, 47465), (112, 47387), (114, 47357), (125, 47258), (126, 47255), (128, 47243), (129, 47234), (142, 47195), (145, 47186),

Gene: Tophat_81 Start: 52033, Stop: 52890, Start Num: 33

Candidate Starts for Tophat_81:

(Start: 33 @52033 has 14 MA's), (35, 52036), (Start: 46 @52090 has 5 MA's), (104, 52300), (107, 52342), (113, 52360), (132, 52537), (135, 52558), (148, 52618), (156, 52708), (159, 52765), (164, 52816),

Gene: TroyPia_80 Start: 47294, Stop: 46761, Start Num: 70

Candidate Starts for TroyPia_80:

(Start: 50 @47339 has 3 MA's), (61, 47306), (Start: 70 @47294 has 157 MA's), (104, 47150), (105, 47132), (106, 47123), (114, 47063), (125, 46964), (128, 46949), (142, 46901), (145, 46892),

Gene: Tubs_85 Start: 47272, Stop: 46724, Start Num: 75

Candidate Starts for Tubs_85:

(Start: 75 @47272 has 19 MA's), (102, 47143), (107, 47080), (111, 47071), (114, 47035), (123, 46954), (128, 46921), (142, 46873), (145, 46864),

Gene: Tucker_91 Start: 47779, Stop: 47252, Start Num: 85

Candidate Starts for Tucker_91:

(30, 47899), (64, 47788), (Start: 65 @47785 has 3 MA's), (Start: 85 @47779 has 44 MA's), (91, 47743), (96, 47710), (102, 47668), (112, 47590), (114, 47560), (125, 47461), (126, 47458), (128, 47446), (129, 47437), (142, 47398), (145, 47389),

Gene: Tweety_69 Start: 44484, Stop: 45269, Start Num: 85

Candidate Starts for Tweety_69:

(38, 44361), (48, 44403), (Start: 85 @44484 has 44 MA's), (87, 44499), (102, 44595), (114, 44706), (120, 44766), (129, 44829), (132, 44856), (136, 44877), (155, 45012), (165, 45123), (168, 45153), (170, 45183),

Gene: Twister_79 Start: 47039, Stop: 46500, Start Num: 71

Candidate Starts for Twister_79:

(Start: 47 @47093 has 1 MA's), (Start: 71 @47039 has 18 MA's), (91, 46994), (102, 46919), (114, 46811), (123, 46730), (128, 46697), (129, 46688), (142, 46649), (145, 46640), (149, 46619),

Gene: TygerBlood_79 Start: 47259, Stop: 46726, Start Num: 70

Candidate Starts for TygerBlood_79:

(Start: 50 @47304 has 3 MA's), (61, 47271), (Start: 70 @47259 has 157 MA's), (104, 47115), (105, 47097), (106, 47088), (114, 47028), (125, 46929), (128, 46914), (142, 46866), (145, 46857),

Gene: Ulysses_78 Start: 46942, Stop: 46409, Start Num: 70

Candidate Starts for Ulysses_78:

(Start: 50 @46987 has 3 MA's), (61, 46954), (Start: 70 @46942 has 157 MA's), (104, 46798), (105, 46780), (106, 46771), (114, 46711), (125, 46612), (128, 46597), (142, 46549), (145, 46540),

Gene: Upyo_54 Start: 39880, Stop: 39335, Start Num: 77

Candidate Starts for Upyo_54:

(56, 39916), (Start: 77 @39880 has 1 MA's), (102, 39754), (128, 39538), (134, 39508),

Gene: Vagabond_6 Start: 2233, Stop: 1643, Start Num: 70

Candidate Starts for Vagabond_6:

(Start: 70 @2233 has 157 MA's), (89, 2182), (102, 2104), (104, 2080), (105, 2062), (113, 2008), (128, 1867), (135, 1816), (140, 1795),

Gene: Vanisoa_80 Start: 47513, Stop: 46962, Start Num: 74

Candidate Starts for Vanisoa_80:

(5, 47984), (30, 47636), (Start: 65 @47525 has 3 MA's), (Start: 74 @47513 has 8 MA's), (107, 47318), (112, 47303), (114, 47273), (123, 47192), (128, 47159), (129, 47150), (142, 47111), (145, 47102),

Gene: VohminGhazi_89 Start: 47555, Stop: 47028, Start Num: 85

Candidate Starts for VohminGhazi_89:

(30, 47675), (54, 47594), (64, 47564), (Start: 65 @47561 has 3 MA's), (Start: 83 @47558 has 20 MA's), (Start: 85 @47555 has 44 MA's), (91, 47519), (102, 47444), (104, 47423), (112, 47366), (114, 47336), (116, 47321), (125, 47237), (142, 47174), (145, 47165),

Gene: Vorrps_6 Start: 2098, Stop: 1508, Start Num: 70

Candidate Starts for Vorrps_6:

(28, 2251), (43, 2176), (60, 2119), (66, 2107), (Start: 70 @2098 has 157 MA's), (89, 2047), (91, 2044), (102, 1969), (104, 1945), (107, 1903), (113, 1873), (128, 1732), (135, 1681), (140, 1660),

Gene: WalterMcMickey_78 Start: 47039, Stop: 46500, Start Num: 71

Candidate Starts for WalterMcMickey_78:

(Start: 47 @47093 has 1 MA's), (Start: 71 @47039 has 18 MA's), (91, 46994), (102, 46919), (114, 46811), (123, 46730), (128, 46697), (129, 46688), (142, 46649), (145, 46640), (149, 46619),

Gene: Wander_79 Start: 47253, Stop: 46720, Start Num: 70

Candidate Starts for Wander_79:

(Start: 50 @47298 has 3 MA's), (61, 47265), (Start: 70 @47253 has 157 MA's), (104, 47109), (105, 47091), (106, 47082), (114, 47022), (125, 46923), (128, 46908), (142, 46860), (145, 46851),

Gene: Westrich_48 Start: 27919, Stop: 28518, Start Num: 69

Candidate Starts for Westrich_48:

(Start: 69 @27919 has 13 MA's), (94, 27991), (103, 28048), (105, 28087), (107, 28111), (118, 28183), (125, 28255), (128, 28270), (132, 28306), (135, 28327), (143, 28357), (153, 28438), (158, 28507),

Gene: Wiks_90 Start: 47659, Stop: 47132, Start Num: 83

Candidate Starts for Wiks_90:

(30, 47776), (64, 47665), (Start: 65 @47662 has 3 MA's), (Start: 83 @47659 has 20 MA's), (91, 47623), (96, 47590), (102, 47548), (112, 47470), (114, 47440), (125, 47341), (126, 47338), (128, 47326), (129, 47317), (142, 47278), (145, 47269),

Gene: Wilbur_79 Start: 47256, Stop: 46723, Start Num: 70

Candidate Starts for Wilbur_79:

(Start: 50 @47301 has 3 MA's), (61, 47268), (Start: 70 @47256 has 157 MA's), (104, 47112), (105, 47094), (106, 47085), (114, 47025), (125, 46926), (128, 46911), (142, 46863), (145, 46854),

Gene: Wildflower_6 Start: 2193, Stop: 1603, Start Num: 70

Candidate Starts for Wildflower_6:

(Start: 70 @2193 has 157 MA's), (89, 2142), (91, 2139), (102, 2064), (104, 2040), (105, 2022), (113, 1968), (128, 1827), (135, 1776), (140, 1755),

Gene: Wile_75 Start: 47083, Stop: 46550, Start Num: 70

Candidate Starts for Wile_75:

(24, 47278), (26, 47236), (34, 47200), (37, 47188), (Start: 47 @47134 has 1 MA's), (Start: 70 @47083 has 157 MA's), (105, 46921), (114, 46852), (125, 46753), (128, 46738), (142, 46690), (145, 46681),

Gene: Winget_6 Start: 2232, Stop: 1642, Start Num: 70

Candidate Starts for Winget_6:

(Start: 70 @2232 has 157 MA's), (89, 2181), (102, 2103), (104, 2079), (105, 2061), (113, 2007), (128, 1866), (135, 1815), (140, 1794),

Gene: Wizard007_76 Start: 46809, Stop: 46276, Start Num: 70

Candidate Starts for Wizard007_76:

(24, 47004), (26, 46962), (34, 46926), (37, 46914), (Start: 47 @46860 has 1 MA's), (Start: 70 @46809 has 157 MA's), (105, 46647), (114, 46578), (125, 46479), (128, 46464), (142, 46416), (145, 46407),

Gene: Xena_75 Start: 47078, Stop: 46545, Start Num: 70

Candidate Starts for Xena_75:

(Start: 50 @47123 has 3 MA's), (61, 47090), (Start: 70 @47078 has 157 MA's), (105, 46916), (106, 46907), (114, 46847), (125, 46748), (128, 46733), (142, 46685), (145, 46676),

Gene: Yecey3_86 Start: 47082, Stop: 46528, Start Num: 71

Candidate Starts for Yecey3_86:

(18, 47352), (20, 47337), (32, 47196), (41, 47157), (Start: 71 @47082 has 18 MA's), (Start: 74 @47079 has 8 MA's), (Start: 75 @47076 has 19 MA's), (93, 47010), (104, 46926), (107, 46884), (112, 46869), (114, 46839), (123, 46758), (128, 46725), (129, 46716), (142, 46677), (145, 46668),

Gene: YoSam321_79 Start: 47254, Stop: 46721, Start Num: 70

Candidate Starts for YoSam321_79:

(Start: 50 @47299 has 3 MA's), (61, 47266), (Start: 70 @47254 has 157 MA's), (105, 47092), (106, 47083), (114, 47023), (125, 46924), (128, 46909), (142, 46861), (145, 46852),

Gene: Yokurt_90 Start: 47659, Stop: 47132, Start Num: 83

Candidate Starts for Yokurt_90:

(30, 47776), (64, 47665), (Start: 65 @47662 has 3 MA's), (Start: 83 @47659 has 20 MA's), (91, 47623), (96, 47590), (102, 47548), (112, 47470), (114, 47440), (125, 47341), (126, 47338), (128, 47326), (129, 47317), (142, 47278), (145, 47269),

Gene: YungJamal_7 Start: 2521, Stop: 1931, Start Num: 70

Candidate Starts for YungJamal_7:

(Start: 70 @2521 has 157 MA's), (89, 2470), (91, 2467), (102, 2392), (104, 2368), (105, 2350), (113, 2296), (128, 2155), (135, 2104), (140, 2083),

Gene: Zaka_91 Start: 47659, Stop: 47132, Start Num: 83

Candidate Starts for Zaka_91:

(30, 47776), (64, 47665), (Start: 65 @47662 has 3 MA's), (Start: 83 @47659 has 20 MA's), (91, 47623), (96, 47590), (102, 47548), (112, 47470), (114, 47440), (125, 47341), (126, 47338), (128, 47326), (129, 47317), (142, 47278), (145, 47269),

Gene: Zakhe101_7 Start: 2545, Stop: 1955, Start Num: 70

Candidate Starts for Zakhe101_7:

(Start: 70 @2545 has 157 MA's), (89, 2494), (91, 2491), (102, 2416), (104, 2392), (105, 2374), (113, 2320), (128, 2179), (135, 2128), (140, 2107),

Gene: Zebo_6 Start: 2147, Stop: 1557, Start Num: 70

Candidate Starts for Zebo_6:

(Start: 70 @2147 has 157 MA's), (89, 2096), (91, 2093), (102, 2018), (104, 1994), (107, 1952), (113, 1922), (128, 1781), (135, 1730), (140, 1709),

Gene: Zerg_69 Start: 44914, Stop: 45627, Start Num: 85

Candidate Starts for Zerg_69:

(39, 44791), (48, 44833), (Start: 85 @44914 has 44 MA's), (93, 44962), (95, 44977), (119, 45190), (121, 45202), (124, 45223), (132, 45292), (147, 45355), (150, 45382), (151, 45391), (162, 45502), (163, 45511), (166, 45535), (167, 45538), (171, 45604),

Gene: Zhuangyuan_46 Start: 27617, Stop: 28213, Start Num: 69

Candidate Starts for Zhuangyuan_46:

(Start: 69 @27617 has 13 MA's), (103, 27740), (105, 27779), (111, 27812), (114, 27848), (118, 27875), (125, 27947), (128, 27962), (132, 27998), (135, 28019), (149, 28079),

Gene: Zimmer_81 Start: 48142, Stop: 47615, Start Num: 85

Candidate Starts for Zimmer_81:

(51, 48190), (Start: 85 @48142 has 44 MA's), (102, 48031), (107, 47968), (112, 47953), (114, 47923), (124, 47839), (125, 47824), (128, 47809), (142, 47761), (145, 47752),

Gene: Zulu_92 Start: 48036, Stop: 47509, Start Num: 85

Candidate Starts for Zulu_92:

(30, 48153), (Start: 81 @48042 has 2 MA's), (Start: 83 @48039 has 20 MA's), (Start: 85 @48036 has 44 MA's), (91, 48000), (96, 47967), (102, 47925), (112, 47847), (114, 47817), (116, 47802), (125, 47718), (142, 47655), (145, 47646),