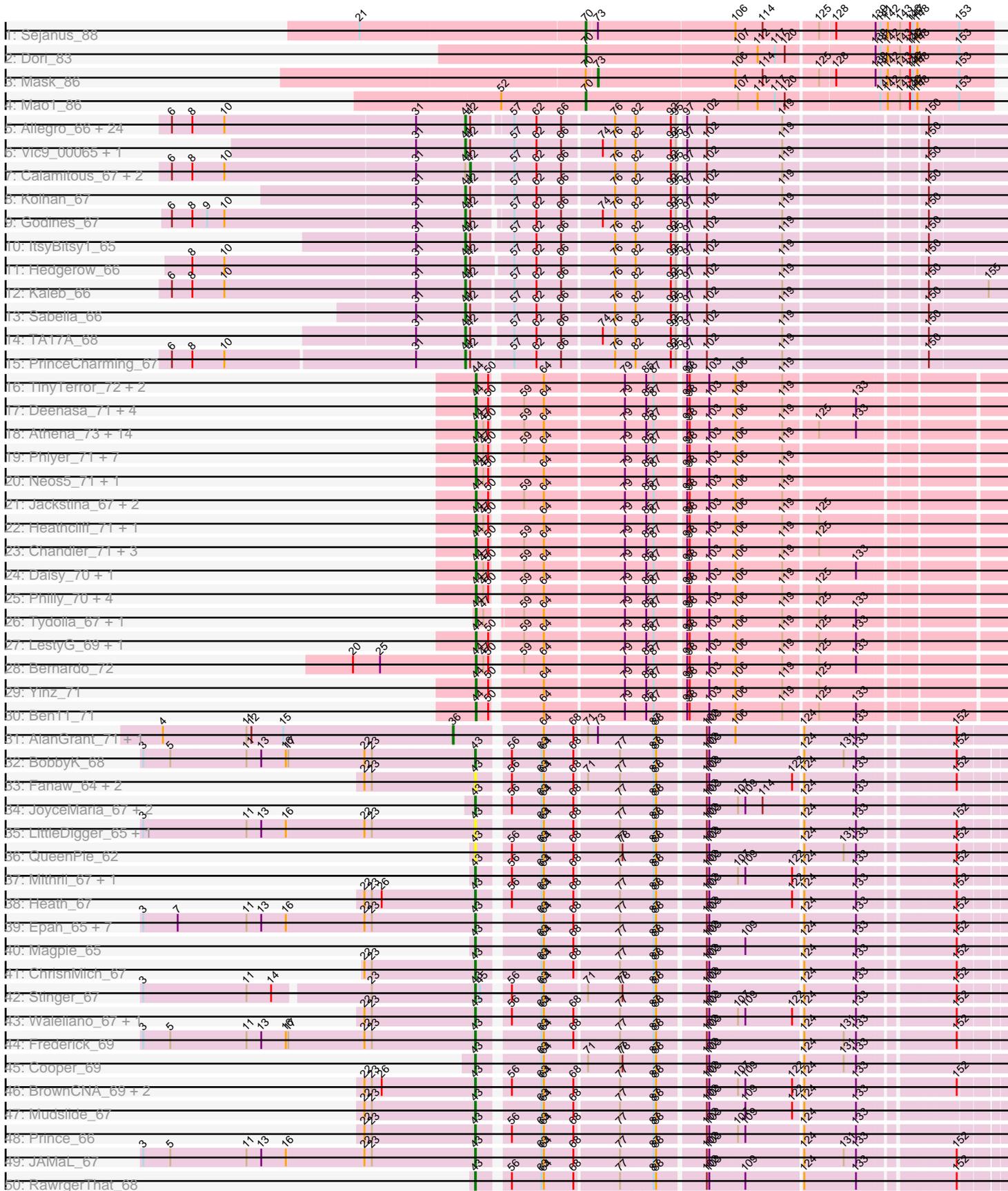
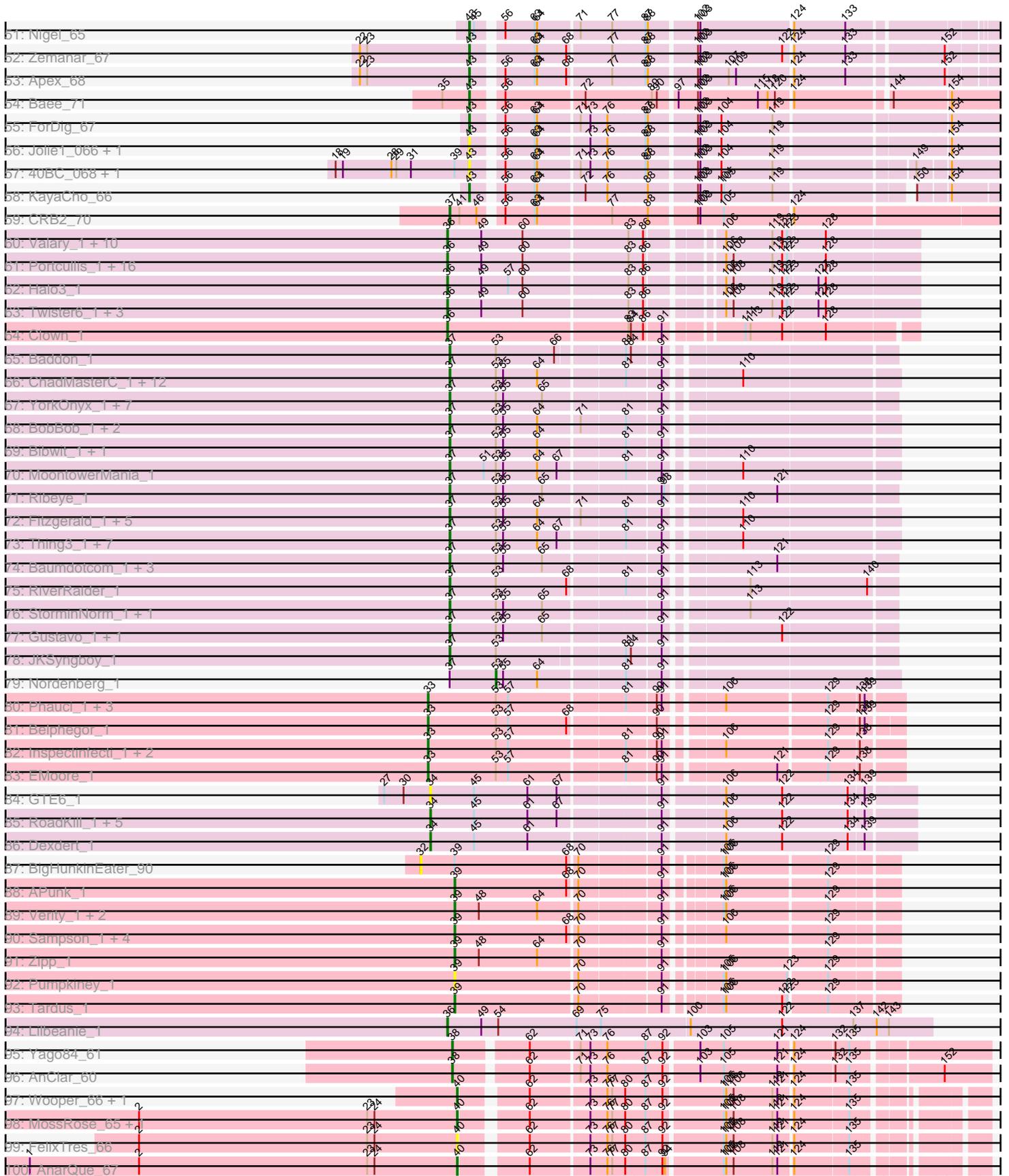


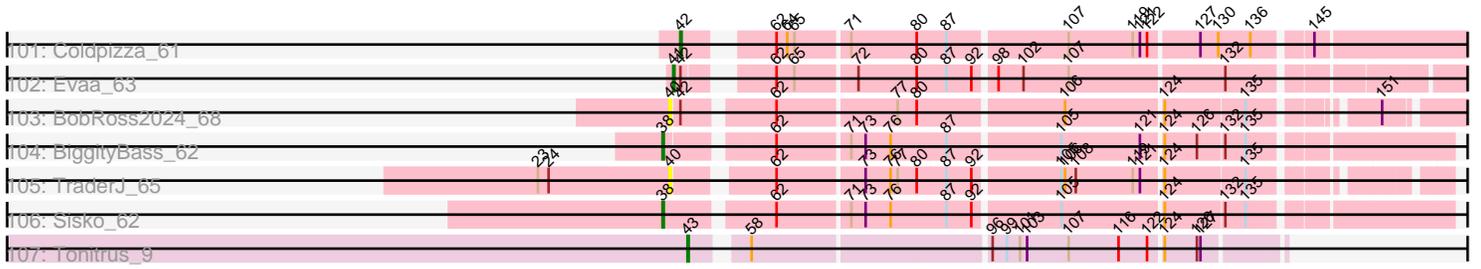
Pham 290786



Pham 290786



Pham 290786



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 290786 Report

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

Pham number 290786 has 280 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_88
- Track 2 : Dori_83
- Track 3 : Mask_86
- Track 4 : Mao1_86
- Track 5 : Allegro_66, Kheth_66, Tres_66, Ares_66, Qyrzula_60, Blocker23_66, Glass_67, LizLemon_66, Rhinoforte_66, Lars_67, MasterPo_67, Lephleur_66, West99_66, FrenchFry_67, Coffee_66, Eaglehorse_66, Brownie5_66, Arbiter_64, Rosebush_65, Opia_67, Holeinone_66, Bananafish_67, LilSmirk_66, Phantasmagoria_65, Tinciduntolum_67
- Track 6 : Vic9_00065, Laurie_66
- Track 7 : Calamitous_67, Faze9_65, Boyle_66
- Track 8 : Kolhan_67
- Track 9 : Godines_67
- Track 10 : ItsyBitsy1_65
- Track 11 : Hedgerow_66
- Track 12 : Kaleb_66
- Track 13 : Sabella_66
- Track 14 : TA17A_68
- Track 15 : PrinceCharming_67
- Track 16 : TinyTerror_72, Rita1961_72, MmasiCarm_72
- Track 17 : Deenasa_71, Abinghost_71, Nozo_71, OrangeOswald_71, Akoma_71
- Track 18 : Athena_73, Baloo_70, Marlia_72, Yahalom_69, Mulaychimus_72, Briakila_71, Corofin_71, RomaT_71, Halfpint_70, SlippinJimmy_74, SwainyDoc_72, Gervas_72, Devonte_70, Audrey_71, ChaChing_71
- Track 19 : Phlyer_71, Compostia_70, Kronus_71, GlenHope_72, Shenandoah_70, RagingRooster_70, Morty007_70, Marley1013_72
- Track 20 : Neos5_71, Chentzyk_73
- Track 21 : Jackstina_67, Phayeta_74, Mortcellus_71
- Track 22 : Heathcliff_71, Olivio_71
- Track 23 : Chandler_71, Gadjet_72, Chalmers_70, Obutu_73
- Track 24 : Daisy_70, SynergyX_71
- Track 25 : Philly_70, Casbah_71, Kamiyu_71, Phaedrus_66, Glubnar_72
- Track 26 : Tydolla_67, HarveySr_70
- Track 27 : LestyG_69, Pipefish_74
- Track 28 : Bernardo_72
- Track 29 : Yinz_71
- Track 30 : Ben11_71

- Track 31 : AlanGrant_71, Vincenzo_70
- Track 32 : BobbyK_68
- Track 33 : Fanaw_64, JaguarMi_68, Xincheng_67
- Track 34 : JoyceMaria_67, Austelle_67, VioletZ_69
- Track 35 : LittleDigger_65, Renkei_65
- Track 36 : QueenPie_62
- Track 37 : Mithril_67, Fortunato_68
- Track 38 : Heath_67
- Track 39 : Epah_65, Poster_65, Hally898_65, Antihero_65, Nanao_66, Lambano_65, Ahwei_65, GinPorsche_67
- Track 40 : Magpie_65
- Track 41 : ChrisnMich_67
- Track 42 : Stinger_67
- Track 43 : Waleliano_67, Lolalove_69
- Track 44 : Frederick_69
- Track 45 : Cooper_69
- Track 46 : BrownCNA_69, Hydro_68, Hangman_68
- Track 47 : Mudslide_67
- Track 48 : Prince_66
- Track 49 : JAMaL_67
- Track 50 : RawrgerThat_68
- Track 51 : Nigel_65
- Track 52 : Zemanar_67
- Track 53 : Apex_68
- Track 54 : Bae_71
- Track 55 : ForDig_67
- Track 56 : Jolie1_066, Hosp_064
- Track 57 : 40BC_068, 39HC_068
- Track 58 : KayaCho_66
- Track 59 : CRB2_70
- Track 60 : Valary_1, Egi03_1, Fireball_1, Arri_1, KimmyK_1, Shinji_1, Gezellig_1, CherryCola_1, Wizard_1, PullumCavea_1, Phlop_1
- Track 61 : Portcullis_1, Bakery_1, ClamChowder_1, PinkCoffee_1, SmokingBunny_1, Evamon_1, VanDeWege_1, CoveyB_1, Mutzi_1, Togo_1, Fugax_1, Nubi_1, Salvador_1, TillyBobJoe_1, Barb_1, YungMoney_1, Danyall_1
- Track 62 : Halo3_1
- Track 63 : Twister6_1, Savbucketdawg_1, RogerDodger_1, Jambalaya_1
- Track 64 : Clown_1
- Track 65 : Baddon_1
- Track 66 : ChadMasterC_1, Affeca_1, Jabberwocky_1, McKinley_1, Love_1, Sitar_1, Kewpiedoll_1, Geodirt_1, Charming_1, Fosterous_1, Vivi2_1, Lennon_1, Tangent_1
- Track 67 : YorkOnyx_1, Kroos_1, Derg_1, Tangerine_1, Bizzy_1, Kwobi_1, Ashertheman_1, Flatwoods_1
- Track 68 : BobBob_1, Angelicage_1, Brandonk123_1
- Track 69 : Bibwit_1, Stultus_1
- Track 70 : MoontowerMania_1
- Track 71 : Ribeye_1
- Track 72 : Fitzgerald_1, Ailee_1, Keitabear_1, Shivanishola_1, Sedona_1, Sanjuju_1
- Track 73 : Thing3_1, Kamashten_1, Barsten_1, FuegoCuervo_1, McCrothy_1, Rofo_1, Galadriel_1, Paries_1
- Track 74 : Baumdotcom_1, SchottB_1, Gaea_1, LilHam_1

- Track 75 : RiverRaider_1
- Track 76 : StorminNorm_1, Tycho_1
- Track 77 : Gustavo_1, Saronaya_1
- Track 78 : JKSyngboy_1
- Track 79 : Nordenberg_1
- Track 80 : Phauci_1, Hans_1, Leonard_1, Phinally_1
- Track 81 : Belphegor_1
- Track 82 : Inspectinfecti_1, Ali17_1, MelBins_1
- Track 83 : EMOore_1
- Track 84 : GTE6_1
- Track 85 : RoadKill_1, Twonlo_1, Chickadee_1, Kwekel_1, EdmundFerry_1, Tiamoceli_1
- Track 86 : Dxdert_1
- Track 87 : BigHunkinEater_90
- Track 88 : APunk_1
- Track 89 : Verity_1, DoctorFroggo_1, Delrey21_1
- Track 90 : Sampson_1, Natkenzie_1, Abblin_1, Scioto_1, ViaConlectus_1
- Track 91 : Zipp_1
- Track 92 : Pumpkiney_1
- Track 93 : Tardus_1
- Track 94 : Lilbeanie_1
- Track 95 : Yago84_61
- Track 96 : AnClar_60
- Track 97 : Wooper_66, Yeshua_65
- Track 98 : MossRose_65, MakoManhole_62
- Track 99 : FelixTres_66
- Track 100 : AnarQue_67
- Track 101 : Coldpizza_61
- Track 102 : Evaa_63
- Track 103 : BobRoss2024_68
- Track 104 : BiggityBass_62
- Track 105 : TraderJ_65
- Track 106 : Sisko_62
- Track 107 : Tonitrus_9

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

The start number called the most often in the published annotations is 37, it was called in 53 of the 243 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_1, Ailee_1, Angelicage_1, Ashertheman_1, Baddon_1, Barsten_1, Baumdotcom_1, Bibwit_1, Bizzy_1, BobBob_1, Brandonk123_1, CRB2_70, ChadMasterC_1, Charming_1, Derg_1, Fitzgerald_1, Flatwoods_1, Fosterous_1, FuegoCuervo_1, Gaea_1, Galadriel_1, Geodirt_1, Gustavo_1, JKSyngboy_1, Jabberwocky_1, Kamashten_1, Keitabear_1, Kewpiedoll_1, Kroos_1, Kwobi_1, Lennon_1, LilHam_1, Love_1, McCrothy_1, McKinley_1, MoontowerMania_1, Paries_1, Ribeye_1, RiverRaider_1, Rofo_1, Sanjuju_1, Saronaya_1, SchottB_1, Sedona_1, Shivanishola_1, Sitar_1, StorminNorm_1, Stultus_1, Tangent_1, Tangerine_1, Thing3_1, Tycho_1, Vivi2_1, YorkOnyx_1,

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

- Nordenberg_1,

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

- 39HC_068, 40BC_068, APunk_1, Abblin_1, Abingghost_71, Ahwei_65, Akoma_71, AlanGrant_71, Ali17_1, Allegro_66, AnClar_60, AnarQue_67, Antihero_65, Apex_68, Arbiter_64, Ares_66, Arri_1, Athena_73, Audrey_71, Austelle_67, Bae_71, Bakery_1, Baloo_70, Bananafish_67, Barb_1, Belphegor_1, Ben11_71, Bernardo_72, BigHunkinEater_90, BiggityBass_62, Blocker23_66, BobRoss2024_68, BobbyK_68, Boyle_66, Briakila_71, BrownCNA_69, Brownie5_66, Calamitous_67, Casbah_71, ChaChing_71, Chalmers_70, Chandler_71, Chentzyk_73, CherryCola_1, Chickadee_1, ChrisnMich_67, ClamChowder_1, Clown_1, Coffee_66, Coldpizza_61, Compostia_70, Cooper_69, Corofin_71, CoveyB_1, Daisy_70, Danyall_1, Deenasa_71, Delrey21_1, Devonte_70, Dexdert_1, DoctorFroggo_1, Dori_83, EMOore_1, Eaglehorse_66, EdmundFerry_1, Egi03_1, Epah_65, Evaa_63, Evamon_1, Fanaw_64, Faze9_65, FelixTres_66, Fireball_1, ForDig_67, Fortunato_68, Frederick_69, FrenchFry_67, Fugax_1, GTE6_1, Gadget_72, Gervas_72, Gezellig_1, GinPorsche_67, Glass_67, GlenHope_72, Glubnar_72, Godines_67, Halfpint_70, Hally898_65, Halo3_1, Hangman_68, Hans_1, HarveySr_70, Heath_67, Heathcliff_71, Hedgerow_66, Holeinone_66, Hosp_064, Hydro_68, Inspectinfecti_1, ItsyBitsy1_65, JAMaL_67, Jackstina_67, JaguarMi_68, Jambalaya_1, Jolie1_066, JoyceMaria_67, Kaleb_66, Kamiyu_71, KayaCho_66, Kheth_66, KimmyK_1, Kolhan_67, Kronus_71, Kwekel_1, Lambano_65, Lars_67, Laurie_66, Leonard_1, Lephleur_66, LestyG_69, LilSmirk_66, Lilbeanie_1, LittleDigger_65, LizLemon_66, Lolalove_69, Magpie_65, MakoManhole_62, Mao1_86, Marley1013_72, Marlia_72, Mask_86, MasterPo_67, MelBins_1, Mithril_67, MmasiCarm_72, Mortcellus_71, Morty007_70, MossRose_65, Mudslide_67, Mulaychimus_72, Mutzi_1, Nanao_66, Natkenzie_1, Neos5_71, Nigel_65, Nozo_71, Nubi_1, Obutu_73, Olivio_71, Opia_67, OrangeOswald_71, Phaedruss_66, Phantasmagoria_65, Phauci_1, Phayeta_74, Philly_70, Phinally_1, Phlop_1, Phlyer_71, PinkCoffee_1, Pipefish_74, Portcullis_1, Poster_65, PrinceCharming_67, Prince_66, PullumCavea_1, Pumpkiney_1, QueenPie_62, Qyrzula_60, RagingRooster_70, RawrgerThat_68, Renkei_65, Rhinoforte_66, Rita1961_72, RoadKill_1, RogerDodger_1, RomaT_71, Rosebush_65, Sabella_66, Salvador_1, Sampson_1, Savbucketdawg_1, Scioto_1, Sejanus_88, Shenandoah_70, Shinji_1, Sisko_62, SlippinJimmy_74, SmokingBunny_1, Stinger_67, SwainyDoc_72, SynergyX_71, TA17A_68, Tardus_1, Tiamoceli_1, TillyBobJoe_1, Tinciduntolum_67, TinyTerror_72, Togo_1, Tonitrus_9, TraderJ_65, Tres_66, Twister6_1, Twonlo_1, Tydolla_67, Valary_1, VanDeWege_1, Verity_1, ViaConlectus_1, Vic9_00065, Vincenzo_70, VioletZ_69, Waleliano_67, West99_66, Wizard_1, Wooper_66, Xincheng_67, Yago84_61, Yahalom_69, Yeshua_65, Yinz_71, YungMoney_1, Zemanar_67, Zipp_1,

Summary by start number:

Start 32:

- Found in 1 of 280 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigHunkinEater_90 (DE4),

Start 33:

- Found in 9 of 280 (3.2%) of genes in pham
- Manual Annotations of this start: 9 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17_1 (DE2), Belphegor_1 (DE2), EMOore_1 (DE2), Hans_1 (DE2), Inspectinfecti_1 (DE2), Leonard_1 (DE2), MelBins_1 (DE2), Phauci_1 (DE2), Phinally_1 (DE2),

Start 34:

- Found in 8 of 280 (2.9%) of genes in pham
- Manual Annotations of this start: 7 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chickadee_1 (DE3), Dextert_1 (DE3), EdmundFerry_1 (DE3), GTE6_1 (DE3), Kwekel_1 (DE3), RoadKill_1 (DE3), Tiamoceli_1 (DE3), Twonlo_1 (DE3),

Start 36:

- Found in 37 of 280 (13.2%) of genes in pham
- Manual Annotations of this start: 35 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_71 (B4), Arri_1 (DC1), Bakery_1 (DC1), Barb_1 (DC1), CherryCola_1 (DC1), ClamChowder_1 (DC1), Clown_1 (DC2), CoveyB_1 (DC1), Danyall_1 (DC1), Egi03_1 (DC1), Evamon_1 (DC1), Fireball_1 (DC1), Fugax_1 (DC1), Gezellig_1 (DC1), Halo3_1 (DC1), Jambalaya_1 (DC1), KimmyK_1 (DC1), Lilbeanie_1 (DE5), Mutzi_1 (DC1), Nubi_1 (DC1), Phlop_1 (DC1), PinkCoffee_1 (DC1), Portcullis_1 (DC1), PullumCavea_1 (DC1), RogerDodger_1 (DC1), Salvador_1 (DC1), Savbucketdawg_1 (DC1), Shinji_1 (DC1), SmokingBunny_1 (DC1), TillyBobJoe_1 (DC1), Togo_1 (DC1), Twister6_1 (DC1), Valary_1 (DC1), VanDeWege_1 (DC1), Vincenzo_70 (B4), Wizard_1 (DC1), YungMoney_1 (DC1),

Start 37:

- Found in 55 of 280 (19.6%) of genes in pham
- Manual Annotations of this start: 53 of 243
- Called 98.2% of time when present
- Phage (with cluster) where this start called: Affeca_1 (DE1), Ailee_1 (DE1), Angelicage_1 (DE1), Ashertheman_1 (DE1), Baddon_1 (DE1), Barsten_1 (DE1), Baumdotcom_1 (DE1), Bibwit_1 (DE1), Bizzy_1 (DE1), BobBob_1 (DE1), Brandonk123_1 (DE1), CRB2_70 (B9), ChadMasterC_1 (DE1), Charming_1 (DE1), Derg_1 (DE1), Fitzgerald_1 (DE1), Flatwoods_1 (DE1), Fosterous_1 (DE1), FuegoCuervo_1 (DE1), Gaea_1 (DE1), Galadriel_1 (DE1), Geodirt_1 (DE1), Gustavo_1 (DE1), JKSyngboy_1 (DE1), Jabberwocky_1 (DE1), Kamashten_1 (DE1), Keitabear_1 (DE1), Kewpiedoll_1 (DE1), Kroos_1 (DE1), Kwobi_1 (DE1), Lennon_1 (DE1), LilHam_1 (DE1), Love_1 (DE1), McCrothy_1 (DE1), McKinley_1 (DE1), MoontowerMania_1 (DE1), Paries_1 (DE1), Ribeye_1 (DE1), RiverRaider_1 (DE1), Rofo_1 (DE1), Sanjuju_1 (DE1), Saronaya_1 (DE1), SchottB_1 (DE1), Sedona_1 (DE1), Shivanishola_1 (DE1), Sitar_1 (DE1), StorminNorm_1 (DE1), Stultus_1 (DE1), Tangent_1 (DE1), Tangerine_1 (DE1), Thing3_1 (DE1), Tycho_1 (DE1), Vivi2_1 (DE1), YorkOnyx_1 (DE1),

Start 38:

- Found in 4 of 280 (1.4%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 100.0% of time when present

- Phage (with cluster) where this start called: AnClar_60 (DR), BiggityBass_62 (DR), Sisko_62 (DR), Yago84_61 (DR),

Start 39:

- Found in 15 of 280 (5.4%) of genes in pham
- Manual Annotations of this start: 8 of 243
- Called 80.0% of time when present
- Phage (with cluster) where this start called: APunk_1 (DE4), Abblin_1 (DE4), Delrey21_1 (DE4), DoctorFroggo_1 (DE4), Natkenzie_1 (DE4), Pumpkiney_1 (DE4), Sampson_1 (DE4), Scioto_1 (DE4), Tardus_1 (DE4), Verity_1 (DE4), ViaConlectus_1 (DE4), Zipp_1 (DE4),

Start 40:

- Found in 8 of 280 (2.9%) of genes in pham
- Manual Annotations of this start: 5 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_67 (DR), BobRoss2024_68 (DR), FelixTres_66 (DR), MakoManhole_62 (DR), MossRose_65 (DR), TraderJ_65 (DR), Wooper_66 (DR), Yeshua_65 (DR),

Start 41:

- Found in 40 of 280 (14.3%) of genes in pham
- Manual Annotations of this start: 35 of 243
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Allegro_66 (B2), Arbitrator_64 (B2), Ares_66 (B2), Bananafish_67 (B2), Blocker23_66 (B2), Brownie5_66 (B2), Coffee_66 (B2), Eaglehorse_66 (B2), Evaa_63 (DR), FrenchFry_67 (B2), Glass_67 (B2), Godines_67 (B2), Hedgerow_66 (B2), Holeinone_66 (B2), ItsyBitsy1_65 (B2), Kaleb_66 (B2), Kheth_66 (B2), Kolhan_67 (B2), Lars_67 (B2), Laurie_66 (B2), Lephleur_66 (B2), LilSmirk_66 (B2), LizLemon_66 (B2), MasterPo_67 (B2), Opia_67 (B2), Phantasmagoria_65 (B2), PrinceCharming_67 (B2), Qyrzula_60 (B2), Rhinoforte_66 (B2), Rosebush_65 (B2), Sabella_66 (B2), TA17A_68 (B2), Tinciduntolum_67 (B2), Tres_66 (B2), Vic9_00065 (B2), West99_66 (B2),

Start 42:

- Found in 41 of 280 (14.6%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 9.8% of time when present
- Phage (with cluster) where this start called: Boyle_66 (B2), Calamitous_67 (B2), Coldpizza_61 (DR), Faze9_65 (B2),

Start 43:

- Found in 46 of 280 (16.4%) of genes in pham
- Manual Annotations of this start: 28 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_068 (B6), 40BC_068 (B6), Ahwei_65 (B4), Antihero_65 (B4), Apex_68 (B4), Austelle_67 (B4), Bae_71 (B5), BobbyK_68 (B4), BrownCNA_69 (B4), ChrisnMich_67 (B4), Cooper_69 (B4), Epah_65 (B4), Fanaw_64 (B4), ForDig_67 (B6), Fortunato_68 (B4), Frederick_69 (B4), GinPorsche_67 (B4), Hally898_65 (B4), Hangman_68 (B4), Heath_67 (B4), Hosp_064 (B6), Hydro_68 (B4), JAMaL_67 (B4), JaguarMi_68 (B4), Jolie1_066 (B6), JoyceMaria_67 (B4), KayaCho_66 (B6), Lambano_65 (B4), LittleDigger_65 (B4), Lolalove_69 (B4), Magpie_65 (B4), Mithril_67 (B4), Mudslide_67 (B4), Nanao_66

(B4), Nigel_65 (B4), Poster_65 (B4), Prince_66 (B4), QueenPie_62 (B4), RawrgerThat_68 (B4), Renkei_65 (B4), Stinger_67 (B4), Tonitrus_9 (singleton), VioletZ_69 (B4), Waleliano_67 (B4), Xincheng_67 (B4), Zemanar_67 (B4),

Start 44:

- Found in 56 of 280 (20.0%) of genes in pham
- Manual Annotations of this start: 50 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abinghost_71 (B3), Akoma_71 (B3), Athena_73 (B3), Audrey_71 (B3), Baloo_70 (B3), Ben11_71 (B3), Bernardo_72 (B3), Briakila_71 (B3), Casbah_71 (B3), ChaChing_71 (B3), Chalmers_70 (B3), Chandler_71 (B3), Chentzyk_73 (B3), Compostia_70 (B3), Corofin_71 (B3), Daisy_70 (B3), Deenasa_71 (B3), Devonte_70 (B3), Gadget_72 (B3), Gervas_72 (B3), GlenHope_72 (B3), Glubnar_72 (B3), Halfpint_70 (B3), HarveySr_70 (B3), Heathcliff_71 (B3), Jackstina_67 (B3), Kamiyu_71 (B3), Kronus_71 (B3), LestyG_69 (B3), Marley1013_72 (B3), Marlia_72 (B3), MmasiCarm_72 (B3), Mortcellus_71 (B3), Morty007_70 (B3), Mulaychimus_72 (B3), Neos5_71 (B3), Nozo_71 (B3), Obutu_73 (B3), Olivio_71 (B3), OrangeOswald_71 (B3), Phaedrus_66 (B3), Phayeta_74 (B3), Philly_70 (B3), Phlyer_71 (B3), Pipefish_74 (B3), RagingRooster_70 (B3), Rita1961_72 (B3), RomaT_71 (B3), Shenandoah_70 (B3), SlippinJimmy_74 (B3), SwainyDoc_72 (B3), SynergyX_71 (B3), TinyTerror_72 (B3), Tydolla_67 (B3), Yahalom_69 (B3), Yinz_71 (B3),

Start 53:

- Found in 63 of 280 (22.5%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 1.6% of time when present
- Phage (with cluster) where this start called: Nordenberg_1 (DE1),

Start 70:

- Found in 17 of 280 (6.1%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Dori_83 (AD), Mao1_86 (AD), Sejanus_88 (AD),

Start 73:

- Found in 20 of 280 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Mask_86 (AD),

Summary by clusters:

There are 16 clusters represented in this pham: singleton, AD, DE1, DE2, DE3, DE4, DE5, B4, B5, B6, B2, B3, DC2, DR, B9, DC1,

Info for manual annotations of cluster AD:

- Start number 70 was manually annotated 3 times for cluster AD.
- Start number 73 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster B2:

- Start number 41 was manually annotated 34 times for cluster B2.

- Start number 42 was manually annotated 3 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 44 was manually annotated 50 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 36 was manually annotated 2 times for cluster B4.
- Start number 43 was manually annotated 24 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 43 was manually annotated 1 time for cluster B5.

Info for manual annotations of cluster B6:

- Start number 43 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B9:

- Start number 37 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster DC1:

- Start number 36 was manually annotated 31 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 36 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 37 was manually annotated 52 times for cluster DE1.
- Start number 53 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 33 was manually annotated 9 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 34 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 39 was manually annotated 8 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 36 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DR:

- Start number 38 was manually annotated 4 times for cluster DR.
- Start number 40 was manually annotated 5 times for cluster DR.
- Start number 41 was manually annotated 1 time for cluster DR.
- Start number 42 was manually annotated 1 time for cluster DR.

Gene Information:

Gene: 39HC_068 Start: 58083, Stop: 58772, Start Num: 43

Candidate Starts for 39HC_068:

(18, 57918), (19, 57927), (28, 57987), (29, 57993), (31, 58011), (Start: 39 @58065 has 8 MA's), (Start: 43 @58083 has 28 MA's), (56, 58113), (63, 58149), (64, 58152), (71, 58200), (Start: 73 @58212 has 1 MA's), (76, 58233), (87, 58278), (88, 58281), (102, 58335), (103, 58338), (104, 58362), (119, 58425), (149, 58581), (154, 58614),

Gene: 40BC_068 Start: 58083, Stop: 58772, Start Num: 43

Candidate Starts for 40BC_068:

(18, 57918), (19, 57927), (28, 57987), (29, 57993), (31, 58011), (Start: 39 @58065 has 8 MA's), (Start: 43 @58083 has 28 MA's), (56, 58113), (63, 58149), (64, 58152), (71, 58200), (Start: 73 @58212 has 1 MA's), (76, 58233), (87, 58278), (88, 58281), (102, 58335), (103, 58338), (104, 58362), (119, 58425), (149, 58581), (154, 58614),

Gene: APunk_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for APunk_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (129, 418),

Gene: Abblin_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Abblin_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (106, 298), (129, 418),

Gene: Abinghost_71 Start: 57879, Stop: 58478, Start Num: 44

Candidate Starts for Abinghost_71:

(Start: 44 @57879 has 50 MA's), (50, 57894), (59, 57924), (64, 57948), (79, 58041), (85, 58065), (87, 58074), (97, 58107), (98, 58110), (103, 58134), (106, 58164), (119, 58221), (133, 58305),

Gene: Affeca_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Affeca_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Ahwei_65 Start: 58476, Stop: 59063, Start Num: 43

Candidate Starts for Ahwei_65:

(3, 58071), (7, 58113), (11, 58197), (13, 58215), (16, 58245), (22, 58341), (23, 58350), (Start: 43 @58476 has 28 MA's), (63, 58542), (64, 58545), (68, 58581), (77, 58632), (87, 58671), (88, 58674), (102, 58728), (103, 58731), (124, 58839), (133, 58902), (152, 59004),

Gene: Ailee_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Ailee_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Akoma_71 Start: 57919, Stop: 58518, Start Num: 44

Candidate Starts for Akoma_71:

(Start: 44 @57919 has 50 MA's), (50, 57934), (59, 57964), (64, 57988), (79, 58081), (85, 58105), (87, 58114), (97, 58147), (98, 58150), (103, 58174), (106, 58204), (119, 58261), (133, 58345),

Gene: AlanGrant_71 Start: 60795, Stop: 61415, Start Num: 36

Candidate Starts for AlanGrant_71:

(4, 60447), (11, 60546), (12, 60552), (15, 60591), (Start: 36 @60795 has 35 MA's), (64, 60891), (68, 60927), (71, 60939), (Start: 73 @60951 has 1 MA's), (87, 61017), (88, 61020), (102, 61074), (103, 61077), (106, 61107), (124, 61185), (133, 61248), (152, 61350),

Gene: Ali17_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Ali17_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487),

Gene: Allegro_66 Start: 56167, Stop: 56817, Start Num: 41

Candidate Starts for Allegro_66:

(6, 55813), (8, 55837), (10, 55876), (31, 56107), (Start: 41 @56167 has 35 MA's), (Start: 42 @56173 has 4 MA's), (57, 56218), (62, 56245), (66, 56275), (76, 56335), (82, 56359), (92, 56401), (95, 56407), (97, 56413), (102, 56437), (119, 56527), (150, 56683),

Gene: AnClar_60 Start: 52491, Stop: 53087, Start Num: 38

Candidate Starts for AnClar_60:

(Start: 38 @52491 has 4 MA's), (62, 52569), (71, 52626), (Start: 73 @52638 has 1 MA's), (76, 52659), (87, 52704), (92, 52725), (103, 52764), (105, 52791), (121, 52857), (124, 52872), (132, 52920), (135, 52935), (152, 53031),

Gene: AnarQue_67 Start: 53185, Stop: 53751, Start Num: 40

Candidate Starts for AnarQue_67:

(1, 52657), (2, 52792), (23, 53074), (24, 53083), (Start: 40 @53185 has 5 MA's), (62, 53254), (Start: 73 @53323 has 1 MA's), (76, 53344), (77, 53350), (80, 53365), (87, 53389), (92, 53410), (94, 53413), (105, 53476), (106, 53479), (108, 53488), (119, 53536), (121, 53542), (124, 53557), (135, 53620),

Gene: Angelicage_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Angelicage_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247),

Gene: Antihero_65 Start: 58474, Stop: 59061, Start Num: 43

Candidate Starts for Antihero_65:

(3, 58069), (7, 58111), (11, 58195), (13, 58213), (16, 58243), (22, 58339), (23, 58348), (Start: 43 @58474 has 28 MA's), (63, 58540), (64, 58543), (68, 58579), (77, 58630), (87, 58669), (88, 58672), (102, 58726), (103, 58729), (124, 58837), (133, 58900), (152, 59002),

Gene: Apex_68 Start: 59579, Stop: 60166, Start Num: 43

Candidate Starts for Apex_68:

(22, 59444), (23, 59453), (Start: 43 @59579 has 28 MA's), (56, 59609), (63, 59645), (64, 59648), (68, 59684), (77, 59735), (87, 59774), (88, 59777), (102, 59831), (103, 59834), (107, 59867), (109, 59876), (124, 59942), (133, 60005), (152, 60107),

Gene: Arbiter_64 Start: 56199, Stop: 56852, Start Num: 41

Candidate Starts for Arbiter_64:

(6, 55845), (8, 55869), (10, 55908), (31, 56139), (Start: 41 @56199 has 35 MA's), (Start: 42 @56205 has 4 MA's), (57, 56253), (62, 56280), (66, 56310), (76, 56370), (82, 56394), (92, 56436), (95, 56442), (97, 56448), (102, 56472), (119, 56562), (150, 56718),

Gene: Ares_66 Start: 56170, Stop: 56823, Start Num: 41

Candidate Starts for Ares_66:

(6, 55816), (8, 55840), (10, 55879), (31, 56110), (Start: 41 @56170 has 35 MA's), (Start: 42 @56176 has 4 MA's), (57, 56224), (62, 56251), (66, 56281), (76, 56341), (82, 56365), (92, 56407), (95, 56413), (97, 56419), (102, 56443), (119, 56533), (150, 56689),

Gene: Arri_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Arri_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Ashertheman_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Ashertheman_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Athena_73 Start: 58654, Stop: 59253, Start Num: 44

Candidate Starts for Athena_73:

(Start: 44 @58654 has 50 MA's), (47, 58663), (50, 58669), (59, 58699), (64, 58723), (79, 58816), (85, 58840), (87, 58849), (97, 58882), (98, 58885), (103, 58909), (106, 58939), (119, 58996), (125, 59035), (133, 59080),

Gene: Audrey_71 Start: 57918, Stop: 58517, Start Num: 44

Candidate Starts for Audrey_71:

(Start: 44 @57918 has 50 MA's), (47, 57927), (50, 57933), (59, 57963), (64, 57987), (79, 58080), (85, 58104), (87, 58113), (97, 58146), (98, 58149), (103, 58173), (106, 58203), (119, 58260), (125, 58299), (133, 58344),

Gene: Austelle_67 Start: 60096, Stop: 60683, Start Num: 43

Candidate Starts for Austelle_67:

(Start: 43 @60096 has 28 MA's), (56, 60126), (63, 60162), (64, 60165), (68, 60201), (77, 60252), (87, 60291), (88, 60294), (102, 60348), (103, 60351), (107, 60384), (109, 60393), (114, 60414), (124, 60459), (133, 60522),

Gene: Baddon_1 Start: 1, Stop: 504, Start Num: 37

Candidate Starts for Baddon_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (66, 130), (81, 205), (84, 211), (91, 244),

Gene: Bae_71 Start: 60200, Stop: 60841, Start Num: 43

Candidate Starts for Bae_71:

(35, 60167), (Start: 43 @60200 has 28 MA's), (56, 60230), (72, 60323), (89, 60404), (90, 60410), (97, 60428), (102, 60452), (103, 60455), (115, 60524), (118, 60536), (120, 60545), (124, 60563), (144, 60671), (154, 60737),

Gene: Bakery_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Bakery_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Baloo_70 Start: 57751, Stop: 58350, Start Num: 44

Candidate Starts for Baloo_70:

(Start: 44 @57751 has 50 MA's), (47, 57760), (50, 57766), (59, 57796), (64, 57820), (79, 57913), (85, 57937), (87, 57946), (97, 57979), (98, 57982), (103, 58006), (106, 58036), (119, 58093), (125, 58132), (133, 58177),

Gene: Bananafish_67 Start: 56100, Stop: 56753, Start Num: 41

Candidate Starts for Bananafish_67:

(6, 55746), (8, 55770), (10, 55809), (31, 56040), (Start: 41 @56100 has 35 MA's), (Start: 42 @56106 has 4 MA's), (57, 56154), (62, 56181), (66, 56211), (76, 56271), (82, 56295), (92, 56337), (95, 56343), (97, 56349), (102, 56373), (119, 56463), (150, 56619),

Gene: Barb_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Barb_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Barsten_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Barsten_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Baumdotcom_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Baumdotcom_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (121, 367),

Gene: Belphegor_1 Start: 1, Stop: 534, Start Num: 33

Candidate Starts for Belphegor_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (68, 172), (90, 268), (129, 451), (138, 487), (139, 493),

Gene: Ben11_71 Start: 58136, Stop: 58735, Start Num: 44

Candidate Starts for Ben11_71:

(Start: 44 @58136 has 50 MA's), (50, 58151), (64, 58205), (79, 58298), (85, 58322), (87, 58331), (97, 58364), (98, 58367), (103, 58391), (106, 58421), (119, 58478), (125, 58517), (133, 58562),

Gene: Bernardo_72 Start: 58117, Stop: 58716, Start Num: 44

Candidate Starts for Bernardo_72:

(20, 57967), (25, 58000), (Start: 44 @58117 has 50 MA's), (47, 58126), (50, 58132), (59, 58162), (64, 58186), (79, 58279), (85, 58303), (87, 58312), (97, 58345), (98, 58348), (103, 58372), (106, 58402), (119, 58459), (125, 58498), (133, 58543),

Gene: Bibwit_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Bibwit_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247),

Gene: BigHunkinEater_90 Start: 58891, Stop: 498, Start Num: 32

Candidate Starts for BigHunkinEater_90:

(32, 58891), (Start: 39 @58933 has 8 MA's), (68, 59071), (Start: 70 @59080 has 3 MA's), (91, 59173), (105, 59227), (106, 59230), (129, 59350),

Gene: BiggityBass_62 Start: 53047, Stop: 53640, Start Num: 38

Candidate Starts for BiggityBass_62:

(Start: 38 @53047 has 4 MA's), (62, 53122), (71, 53179), (Start: 73 @53191 has 1 MA's), (76, 53212), (87, 53257), (105, 53344), (121, 53410), (124, 53425), (126, 53452), (132, 53473), (135, 53488),

Gene: Bizzy_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Bizzy_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Blocker23_66 Start: 56167, Stop: 56817, Start Num: 41

Candidate Starts for Blocker23_66:

(6, 55813), (8, 55837), (10, 55876), (31, 56107), (Start: 41 @56167 has 35 MA's), (Start: 42 @56173 has 4 MA's), (57, 56218), (62, 56245), (66, 56275), (76, 56335), (82, 56359), (92, 56401), (95, 56407), (97, 56413), (102, 56437), (119, 56527), (150, 56683),

Gene: BobBob_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for BobBob_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247),

Gene: BobRoss2024_68 Start: 52748, Stop: 53359, Start Num: 40

Candidate Starts for BobRoss2024_68:

(Start: 40 @52748 has 5 MA's), (Start: 42 @52754 has 4 MA's), (62, 52817), (77, 52913), (80, 52928), (106, 53042), (124, 53120), (135, 53183), (151, 53264),

Gene: BobbyK_68 Start: 59356, Stop: 59943, Start Num: 43

Candidate Starts for BobbyK_68:

(3, 58951), (5, 58984), (11, 59077), (13, 59095), (16, 59125), (17, 59128), (22, 59221), (23, 59230), (Start: 43 @59356 has 28 MA's), (56, 59386), (63, 59422), (64, 59425), (68, 59461), (77, 59512), (87, 59551), (88, 59554), (102, 59608), (103, 59611), (124, 59719), (131, 59767), (133, 59782), (152, 59884),

Gene: Boyle_66 Start: 56214, Stop: 56861, Start Num: 42

Candidate Starts for Boyle_66:

(6, 55854), (8, 55878), (10, 55917), (31, 56148), (Start: 41 @56208 has 35 MA's), (Start: 42 @56214 has 4 MA's), (57, 56262), (62, 56289), (66, 56319), (76, 56379), (82, 56403), (92, 56445), (95, 56451), (97, 56457), (102, 56481), (119, 56571), (150, 56727),

Gene: Brandonk123_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Brandonk123_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247),

Gene: Briakila_71 Start: 58117, Stop: 58716, Start Num: 44

Candidate Starts for Briakila_71:

(Start: 44 @58117 has 50 MA's), (47, 58126), (50, 58132), (59, 58162), (64, 58186), (79, 58279), (85, 58303), (87, 58312), (97, 58345), (98, 58348), (103, 58372), (106, 58402), (119, 58459), (125, 58498), (133, 58543),

Gene: BrownCNA_69 Start: 59733, Stop: 60320, Start Num: 43

Candidate Starts for BrownCNA_69:

(22, 59598), (23, 59607), (26, 59619), (Start: 43 @59733 has 28 MA's), (56, 59763), (63, 59799), (64, 59802), (68, 59838), (77, 59889), (87, 59928), (88, 59931), (102, 59985), (103, 59988), (107, 60021), (109, 60030), (122, 60087), (124, 60096), (133, 60159), (152, 60261),

Gene: Brownie5_66 Start: 56210, Stop: 56863, Start Num: 41

Candidate Starts for Brownie5_66:

(6, 55856), (8, 55880), (10, 55919), (31, 56150), (Start: 41 @56210 has 35 MA's), (Start: 42 @56216 has 4 MA's), (57, 56264), (62, 56291), (66, 56321), (76, 56381), (82, 56405), (92, 56447), (95, 56453), (97, 56459), (102, 56483), (119, 56573), (150, 56729),

Gene: CRB2_70 Start: 60958, Stop: 61668, Start Num: 37

Candidate Starts for CRB2_70:

(Start: 37 @60958 has 53 MA's), (Start: 41 @60970 has 35 MA's), (46, 60991), (56, 61012), (63, 61048), (64, 61051), (77, 61138), (88, 61180), (102, 61234), (103, 61237), (105, 61264), (124, 61345),

Gene: Calamitous_67 Start: 56104, Stop: 56751, Start Num: 42

Candidate Starts for Calamitous_67:

(6, 55744), (8, 55768), (10, 55807), (31, 56038), (Start: 41 @56098 has 35 MA's), (Start: 42 @56104 has 4 MA's), (57, 56152), (62, 56179), (66, 56209), (76, 56269), (82, 56293), (92, 56335), (95, 56341), (97, 56347), (102, 56371), (119, 56461), (150, 56617),

Gene: Casbah_71 Start: 58238, Stop: 58837, Start Num: 44

Candidate Starts for Casbah_71:

(Start: 44 @58238 has 50 MA's), (47, 58247), (50, 58253), (59, 58283), (64, 58307), (79, 58400), (85, 58424), (87, 58433), (97, 58466), (98, 58469), (103, 58493), (106, 58523), (119, 58580), (125, 58619),

Gene: ChaChing_71 Start: 57936, Stop: 58535, Start Num: 44

Candidate Starts for ChaChing_71:

(Start: 44 @57936 has 50 MA's), (47, 57945), (50, 57951), (59, 57981), (64, 58005), (79, 58098), (85, 58122), (87, 58131), (97, 58164), (98, 58167), (103, 58191), (106, 58221), (119, 58278), (125, 58317), (133, 58362),

Gene: ChadMasterC_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for ChadMasterC_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Chalmers_70 Start: 58369, Stop: 58968, Start Num: 44

Candidate Starts for Chalmers_70:

(Start: 44 @58369 has 50 MA's), (50, 58384), (59, 58414), (64, 58438), (79, 58531), (85, 58555), (87, 58564), (97, 58597), (98, 58600), (103, 58624), (106, 58654), (119, 58711), (125, 58750),

Gene: Chandler_71 Start: 58698, Stop: 59297, Start Num: 44

Candidate Starts for Chandler_71:

(Start: 44 @58698 has 50 MA's), (50, 58713), (59, 58743), (64, 58767), (79, 58860), (85, 58884), (87, 58893), (97, 58926), (98, 58929), (103, 58953), (106, 58983), (119, 59040), (125, 59079),

Gene: Charming_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Charming_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Chentzyk_73 Start: 58869, Stop: 59468, Start Num: 44

Candidate Starts for Chentzyk_73:

(Start: 44 @58869 has 50 MA's), (47, 58878), (50, 58884), (64, 58938), (79, 59031), (85, 59055), (87, 59064), (97, 59097), (98, 59100), (103, 59124), (106, 59154), (119, 59211),

Gene: CherryCola_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for CherryCola_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Chickadee_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for Chickadee_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: ChrisnMich_67 Start: 58458, Stop: 59045, Start Num: 43

Candidate Starts for ChrisnMich_67:

(22, 58323), (23, 58332), (Start: 43 @58458 has 28 MA's), (63, 58524), (64, 58527), (68, 58563), (77, 58614), (87, 58653), (88, 58656), (102, 58710), (103, 58713), (124, 58821), (133, 58884), (152, 58986),

Gene: ClamChowder_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for ClamChowder_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Clown_1 Start: 1, Stop: 522, Start Num: 36

Candidate Starts for Clown_1:

(Start: 36 @1 has 35 MA's), (83, 214), (84, 217), (86, 232), (91, 250), (111, 328), (113, 334), (122, 373), (128, 424),

Gene: Coffee_66 Start: 56202, Stop: 56855, Start Num: 41

Candidate Starts for Coffee_66:

(6, 55848), (8, 55872), (10, 55911), (31, 56142), (Start: 41 @56202 has 35 MA's), (Start: 42 @56208 has 4 MA's), (57, 56256), (62, 56283), (66, 56313), (76, 56373), (82, 56397), (92, 56439), (95, 56445), (97, 56451), (102, 56475), (119, 56565), (150, 56721),

Gene: Coldpizza_61 Start: 52645, Stop: 53241, Start Num: 42

Candidate Starts for Coldpizza_61:

(Start: 42 @52645 has 4 MA's), (62, 52699), (64, 52708), (65, 52714), (71, 52756), (80, 52810), (87, 52834), (107, 52927), (119, 52981), (121, 52987), (122, 52993), (127, 53032), (130, 53047), (136, 53074), (145, 53113),

Gene: Compostia_70 Start: 58319, Stop: 58918, Start Num: 44

Candidate Starts for Compostia_70:

(Start: 44 @58319 has 50 MA's), (47, 58328), (50, 58334), (59, 58364), (64, 58388), (79, 58481), (85, 58505), (87, 58514), (97, 58547), (98, 58550), (103, 58574), (106, 58604), (119, 58661),

Gene: Cooper_69 Start: 59149, Stop: 59742, Start Num: 43

Candidate Starts for Cooper_69:

(Start: 43 @59149 has 28 MA's), (63, 59215), (64, 59218), (71, 59266), (77, 59305), (78, 59308), (87, 59344), (88, 59347), (102, 59401), (103, 59404), (124, 59512), (131, 59560), (133, 59575),

Gene: Corofin_71 Start: 57949, Stop: 58548, Start Num: 44

Candidate Starts for Corofin_71:

(Start: 44 @57949 has 50 MA's), (47, 57958), (50, 57964), (59, 57994), (64, 58018), (79, 58111), (85, 58135), (87, 58144), (97, 58177), (98, 58180), (103, 58204), (106, 58234), (119, 58291), (125, 58330), (133, 58375),

Gene: CoveyB_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for CoveyB_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Daisy_70 Start: 57482, Stop: 58081, Start Num: 44

Candidate Starts for Daisy_70:

(Start: 44 @57482 has 50 MA's), (47, 57491), (50, 57497), (59, 57527), (64, 57551), (79, 57644), (85, 57668), (87, 57677), (97, 57710), (98, 57713), (103, 57737), (106, 57767), (119, 57824), (133, 57908),

Gene: Danyall_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Danyall_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Deenasa_71 Start: 58785, Stop: 59384, Start Num: 44

Candidate Starts for Deenasa_71:

(Start: 44 @58785 has 50 MA's), (50, 58800), (59, 58830), (64, 58854), (79, 58947), (85, 58971), (87, 58980), (97, 59013), (98, 59016), (103, 59040), (106, 59070), (119, 59127), (133, 59211),

Gene: Delrey21_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Delrey21_1:

(Start: 39 @1 has 8 MA's), (48, 31), (64, 103), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (129, 418),

Gene: Derg_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Derg_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Devonte_70 Start: 57561, Stop: 58160, Start Num: 44

Candidate Starts for Devonte_70:

(Start: 44 @57561 has 50 MA's), (47, 57570), (50, 57576), (59, 57606), (64, 57630), (79, 57723), (85, 57747), (87, 57756), (97, 57789), (98, 57792), (103, 57816), (106, 57846), (119, 57903), (125, 57942), (133, 57987),

Gene: Dxdert_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for Dxdert_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: DoctorFroggo_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for DoctorFroggo_1:

(Start: 39 @1 has 8 MA's), (48, 31), (64, 103), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (129, 418),

Gene: Dori_83 Start: 58816, Stop: 59301, Start Num: 70

Candidate Starts for Dori_83:

(Start: 70 @58816 has 3 MA's), (107, 58999), (112, 59023), (117, 59044), (120, 59056), (139, 59158), (141, 59164), (142, 59173), (143, 59188), (146, 59200), (147, 59203), (148, 59209), (153, 59260),

Gene: EMoore_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for EMoore_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (121, 394), (129, 451), (138, 487),

Gene: Eaglehorse_66 Start: 56088, Stop: 56741, Start Num: 41

Candidate Starts for Eaglehorse_66:

(6, 55734), (8, 55758), (10, 55797), (31, 56028), (Start: 41 @56088 has 35 MA's), (Start: 42 @56094 has 4 MA's), (57, 56142), (62, 56169), (66, 56199), (76, 56259), (82, 56283), (92, 56325), (95, 56331), (97, 56337), (102, 56361), (119, 56451), (150, 56607),

Gene: EdmundFerry_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for EdmundFerry_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: Egi03_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Egi03_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Epah_65 Start: 58474, Stop: 59061, Start Num: 43

Candidate Starts for Epah_65:

(3, 58069), (7, 58111), (11, 58195), (13, 58213), (16, 58243), (22, 58339), (23, 58348), (Start: 43 @58474 has 28 MA's), (63, 58540), (64, 58543), (68, 58579), (77, 58630), (87, 58669), (88, 58672), (102, 58726), (103, 58729), (124, 58837), (133, 58900), (152, 59002),

Gene: Evaa_63 Start: 50521, Stop: 51108, Start Num: 41

Candidate Starts for Evaa_63:

(Start: 41 @50521 has 35 MA's), (Start: 42 @50527 has 4 MA's), (62, 50578), (65, 50593), (72, 50641), (80, 50689), (87, 50713), (92, 50734), (98, 50749), (102, 50770), (107, 50806), (132, 50932),

Gene: Evamon_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Evamon_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Fanaw_64 Start: 59510, Stop: 60097, Start Num: 43

Candidate Starts for Fanaw_64:

(22, 59375), (23, 59384), (Start: 43 @59510 has 28 MA's), (56, 59540), (63, 59576), (64, 59579), (68, 59615), (71, 59627), (77, 59666), (87, 59705), (88, 59708), (102, 59762), (103, 59765), (122, 59864), (124, 59873), (133, 59936), (152, 60038),

Gene: Faze9_65 Start: 56233, Stop: 56880, Start Num: 42

Candidate Starts for Faze9_65:

(6, 55873), (8, 55897), (10, 55936), (31, 56167), (Start: 41 @56227 has 35 MA's), (Start: 42 @56233 has 4 MA's), (57, 56281), (62, 56308), (66, 56338), (76, 56398), (82, 56422), (92, 56464), (95, 56470), (97, 56476), (102, 56500), (119, 56590), (150, 56746),

Gene: FelixTres_66 Start: 52439, Stop: 53005, Start Num: 40

Candidate Starts for FelixTres_66:

(2, 52046), (23, 52328), (24, 52337), (Start: 40 @52439 has 5 MA's), (62, 52508), (Start: 73 @52577 has 1 MA's), (76, 52598), (77, 52604), (80, 52619), (87, 52643), (92, 52664), (105, 52730), (106, 52733), (108, 52742), (119, 52790), (121, 52796), (124, 52811), (135, 52874),

Gene: Fireball_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Fireball_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Fitzgerald_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Fitzgerald_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Flatwoods_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Flatwoods_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: ForDig_67 Start: 58034, Stop: 58732, Start Num: 43

Candidate Starts for ForDig_67:

(Start: 43 @58034 has 28 MA's), (56, 58064), (63, 58100), (64, 58103), (71, 58151), (Start: 73 @58163 has 1 MA's), (76, 58184), (87, 58229), (88, 58232), (102, 58286), (103, 58289), (104, 58313), (119, 58376), (154, 58574),

Gene: Fortunato_68 Start: 59509, Stop: 60096, Start Num: 43

Candidate Starts for Fortunato_68:

(Start: 43 @59509 has 28 MA's), (56, 59539), (63, 59575), (64, 59578), (68, 59614), (77, 59665), (87, 59704), (88, 59707), (102, 59761), (103, 59764), (107, 59797), (109, 59806), (122, 59863), (124, 59872), (133, 59935), (152, 60037),

Gene: Fosterous_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Fosterous_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Frederick_69 Start: 59456, Stop: 60043, Start Num: 43

Candidate Starts for Frederick_69:

(3, 59051), (5, 59084), (11, 59177), (13, 59195), (16, 59225), (17, 59228), (22, 59321), (23, 59330), (Start: 43 @59456 has 28 MA's), (63, 59522), (64, 59525), (68, 59561), (77, 59612), (87, 59651), (88, 59654), (102, 59708), (103, 59711), (124, 59819), (131, 59867), (133, 59882), (152, 59984),

Gene: FrenchFry_67 Start: 56213, Stop: 56866, Start Num: 41

Candidate Starts for FrenchFry_67:

(6, 55859), (8, 55883), (10, 55922), (31, 56153), (Start: 41 @56213 has 35 MA's), (Start: 42 @56219 has 4 MA's), (57, 56267), (62, 56294), (66, 56324), (76, 56384), (82, 56408), (92, 56450), (95, 56456), (97, 56462), (102, 56486), (119, 56576), (150, 56732),

Gene: FuegoCuervo_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for FuegoCuervo_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Fugax_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Fugax_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: GTE6_1 Start: 65, Stop: 625, Start Num: 34

Candidate Starts for GTE6_1:

(27, 8), (30, 32), (Start: 34 @65 has 7 MA's), (45, 119), (61, 185), (67, 221), (91, 335), (106, 401), (122, 470), (134, 551), (139, 569),

Gene: Gadget_72 Start: 58249, Stop: 58848, Start Num: 44

Candidate Starts for Gadget_72:

(Start: 44 @58249 has 50 MA's), (50, 58264), (59, 58294), (64, 58318), (79, 58411), (85, 58435), (87, 58444), (97, 58477), (98, 58480), (103, 58504), (106, 58534), (119, 58591), (125, 58630),

Gene: Gaea_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Gaea_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (121, 367),

Gene: Galadriel_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Galadriel_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Geodirt_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Geodirt_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Gervas_72 Start: 58343, Stop: 58942, Start Num: 44

Candidate Starts for Gervas_72:

(Start: 44 @58343 has 50 MA's), (47, 58352), (50, 58358), (59, 58388), (64, 58412), (79, 58505), (85, 58529), (87, 58538), (97, 58571), (98, 58574), (103, 58598), (106, 58628), (119, 58685), (125, 58724), (133, 58769),

Gene: Gezellig_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Gezellig_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: GinPorsche_67 Start: 58474, Stop: 59061, Start Num: 43

Candidate Starts for GinPorsche_67:

(3, 58069), (7, 58111), (11, 58195), (13, 58213), (16, 58243), (22, 58339), (23, 58348), (Start: 43 @58474 has 28 MA's), (63, 58540), (64, 58543), (68, 58579), (77, 58630), (87, 58669), (88, 58672), (102, 58726), (103, 58729), (124, 58837), (133, 58900), (152, 59002),

Gene: Glass_67 Start: 56215, Stop: 56868, Start Num: 41

Candidate Starts for Glass_67:

(6, 55861), (8, 55885), (10, 55924), (31, 56155), (Start: 41 @56215 has 35 MA's), (Start: 42 @56221 has 4 MA's), (57, 56269), (62, 56296), (66, 56326), (76, 56386), (82, 56410), (92, 56452), (95, 56458), (97, 56464), (102, 56488), (119, 56578), (150, 56734),

Gene: GlenHope_72 Start: 57909, Stop: 58508, Start Num: 44

Candidate Starts for GlenHope_72:

(Start: 44 @57909 has 50 MA's), (47, 57918), (50, 57924), (59, 57954), (64, 57978), (79, 58071), (85, 58095), (87, 58104), (97, 58137), (98, 58140), (103, 58164), (106, 58194), (119, 58251),

Gene: Glubnar_72 Start: 57815, Stop: 58414, Start Num: 44

Candidate Starts for Glubnar_72:

(Start: 44 @57815 has 50 MA's), (47, 57824), (50, 57830), (59, 57860), (64, 57884), (79, 57977), (85, 58001), (87, 58010), (97, 58043), (98, 58046), (103, 58070), (106, 58100), (119, 58157), (125, 58196),

Gene: Godines_67 Start: 56471, Stop: 57118, Start Num: 41

Candidate Starts for Godines_67:

(6, 56117), (8, 56141), (9, 56159), (10, 56180), (31, 56411), (Start: 41 @56471 has 35 MA's), (Start: 42 @56477 has 4 MA's), (57, 56519), (62, 56546), (66, 56576), (74, 56621), (76, 56636), (82, 56660), (92, 56702), (95, 56708), (97, 56714), (102, 56738), (119, 56828), (150, 56984),

Gene: Gustavo_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Gustavo_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (122, 373),

Gene: Halfpint_70 Start: 57660, Stop: 58259, Start Num: 44

Candidate Starts for Halfpint_70:

(Start: 44 @57660 has 50 MA's), (47, 57669), (50, 57675), (59, 57705), (64, 57729), (79, 57822), (85, 57846), (87, 57855), (97, 57888), (98, 57891), (103, 57915), (106, 57945), (119, 58002), (125, 58041), (133, 58086),

Gene: Hally898_65 Start: 58489, Stop: 59076, Start Num: 43

Candidate Starts for Hally898_65:

(3, 58084), (7, 58126), (11, 58210), (13, 58228), (16, 58258), (22, 58354), (23, 58363), (Start: 43 @58489 has 28 MA's), (63, 58555), (64, 58558), (68, 58594), (77, 58645), (87, 58684), (88, 58687), (102, 58741), (103, 58744), (124, 58852), (133, 58915), (152, 59017),

Gene: Halo3_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Halo3_1:

(Start: 36 @1 has 35 MA's), (49, 43), (57, 76), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (127, 415), (128, 424),

Gene: Hangman_68 Start: 59655, Stop: 60242, Start Num: 43

Candidate Starts for Hangman_68:

(22, 59520), (23, 59529), (26, 59541), (Start: 43 @59655 has 28 MA's), (56, 59685), (63, 59721), (64, 59724), (68, 59760), (77, 59811), (87, 59850), (88, 59853), (102, 59907), (103, 59910), (107, 59943), (109, 59952), (122, 60009), (124, 60018), (133, 60081), (152, 60183),

Gene: Hans_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Hans_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487), (139, 493),

Gene: HarveySr_70 Start: 57468, Stop: 58064, Start Num: 44

Candidate Starts for HarveySr_70:

(Start: 44 @57468 has 50 MA's), (47, 57477), (59, 57510), (64, 57534), (79, 57627), (85, 57651), (87, 57660), (97, 57693), (98, 57696), (103, 57720), (106, 57750), (119, 57807), (125, 57846), (133, 57891),

Gene: Heath_67 Start: 59282, Stop: 59869, Start Num: 43

Candidate Starts for Heath_67:

(22, 59147), (23, 59156), (26, 59168), (Start: 43 @59282 has 28 MA's), (56, 59312), (63, 59348), (64, 59351), (68, 59387), (77, 59438), (87, 59477), (88, 59480), (102, 59534), (103, 59537), (122, 59636), (124, 59645), (133, 59708), (152, 59810),

Gene: Heathcliff_71 Start: 57876, Stop: 58475, Start Num: 44

Candidate Starts for Heathcliff_71:

(Start: 44 @57876 has 50 MA's), (47, 57885), (50, 57891), (64, 57945), (79, 58038), (85, 58062), (87, 58071), (97, 58104), (98, 58107), (103, 58131), (106, 58161), (119, 58218), (125, 58257),

Gene: Hedgerow_66 Start: 56165, Stop: 56818, Start Num: 41

Candidate Starts for Hedgerow_66:

(8, 55835), (10, 55874), (31, 56105), (Start: 41 @56165 has 35 MA's), (Start: 42 @56171 has 4 MA's), (57, 56219), (62, 56246), (66, 56276), (76, 56336), (82, 56360), (92, 56402), (95, 56408), (97, 56414), (102, 56438), (119, 56528), (150, 56684),

Gene: Holeinone_66 Start: 56073, Stop: 56723, Start Num: 41

Candidate Starts for Holeinone_66:

(6, 55719), (8, 55743), (10, 55782), (31, 56013), (Start: 41 @56073 has 35 MA's), (Start: 42 @56079 has 4 MA's), (57, 56124), (62, 56151), (66, 56181), (76, 56241), (82, 56265), (92, 56307), (95, 56313), (97, 56319), (102, 56343), (119, 56433), (150, 56589),

Gene: Hosp_064 Start: 55830, Stop: 56528, Start Num: 43

Candidate Starts for Hosp_064:

(Start: 43 @55830 has 28 MA's), (56, 55860), (63, 55896), (64, 55899), (Start: 73 @55959 has 1 MA's), (76, 55980), (87, 56025), (88, 56028), (102, 56082), (103, 56085), (104, 56109), (119, 56172), (154, 56370),

Gene: Hydro_68 Start: 59593, Stop: 60180, Start Num: 43

Candidate Starts for Hydro_68:

(22, 59458), (23, 59467), (26, 59479), (Start: 43 @59593 has 28 MA's), (56, 59623), (63, 59659), (64, 59662), (68, 59698), (77, 59749), (87, 59788), (88, 59791), (102, 59845), (103, 59848), (107, 59881), (109, 59890), (122, 59947), (124, 59956), (133, 60019), (152, 60121),

Gene: Inspectinfecti_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Inspectinfecti_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487),

Gene: ItsyBitsy1_65 Start: 56303, Stop: 56956, Start Num: 41

Candidate Starts for ItsyBitsy1_65:

(31, 56243), (Start: 41 @56303 has 35 MA's), (Start: 42 @56309 has 4 MA's), (57, 56357), (62, 56384), (66, 56414), (76, 56474), (82, 56498), (92, 56540), (95, 56546), (97, 56552), (102, 56576), (119, 56666), (150, 56822),

Gene: JAMaL_67 Start: 59483, Stop: 60070, Start Num: 43

Candidate Starts for JAMaL_67:

(3, 59078), (5, 59111), (11, 59204), (13, 59222), (16, 59252), (22, 59348), (23, 59357), (Start: 43 @59483 has 28 MA's), (63, 59549), (64, 59552), (68, 59588), (77, 59639), (87, 59678), (88, 59681), (102, 59735), (103, 59738), (124, 59846), (131, 59894), (133, 59909), (152, 60011),

Gene: JKSyngboy_1 Start: 1, Stop: 504, Start Num: 37

Candidate Starts for JKSyngboy_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (81, 205), (84, 211), (91, 244),

Gene: Jabberwocky_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Jabberwocky_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Jackstina_67 Start: 57801, Stop: 58400, Start Num: 44

Candidate Starts for Jackstina_67:

(Start: 44 @57801 has 50 MA's), (50, 57816), (59, 57846), (64, 57870), (79, 57963), (85, 57987), (87, 57996), (97, 58029), (98, 58032), (103, 58056), (106, 58086), (119, 58143),

Gene: JaguarMi_68 Start: 60746, Stop: 61336, Start Num: 43

Candidate Starts for JaguarMi_68:

(22, 60611), (23, 60620), (Start: 43 @60746 has 28 MA's), (56, 60776), (63, 60812), (64, 60815), (68, 60851), (71, 60863), (77, 60902), (87, 60941), (88, 60944), (102, 60998), (103, 61001), (122, 61100), (124, 61109), (133, 61172), (152, 61274),

Gene: Jambalaya_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Jambalaya_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (127, 415), (128, 424),

Gene: Jolie1_066 Start: 57958, Stop: 58656, Start Num: 43

Candidate Starts for Jolie1_066:

(Start: 43 @57958 has 28 MA's), (56, 57988), (63, 58024), (64, 58027), (Start: 73 @58087 has 1 MA's), (76, 58108), (87, 58153), (88, 58156), (102, 58210), (103, 58213), (104, 58237), (119, 58300), (154, 58498),

Gene: JoyceMaria_67 Start: 59619, Stop: 60206, Start Num: 43

Candidate Starts for JoyceMaria_67:

(Start: 43 @59619 has 28 MA's), (56, 59649), (63, 59685), (64, 59688), (68, 59724), (77, 59775), (87, 59814), (88, 59817), (102, 59871), (103, 59874), (107, 59907), (109, 59916), (114, 59937), (124, 59982), (133, 60045),

Gene: Kaleb_66 Start: 56220, Stop: 56873, Start Num: 41

Candidate Starts for Kaleb_66:

(6, 55866), (8, 55890), (10, 55929), (31, 56160), (Start: 41 @56220 has 35 MA's), (Start: 42 @56226 has 4 MA's), (57, 56274), (62, 56301), (66, 56331), (76, 56391), (82, 56415), (92, 56457), (95, 56463), (97, 56469), (102, 56493), (119, 56583), (150, 56739), (155, 56808),

Gene: Kamashten_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Kamashten_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Kamiyu_71 Start: 57878, Stop: 58477, Start Num: 44

Candidate Starts for Kamiyu_71:

(Start: 44 @57878 has 50 MA's), (47, 57887), (50, 57893), (59, 57923), (64, 57947), (79, 58040), (85, 58064), (87, 58073), (97, 58106), (98, 58109), (103, 58133), (106, 58163), (119, 58220), (125, 58259),

Gene: KayaCho_66 Start: 57943, Stop: 58623, Start Num: 43

Candidate Starts for KayaCho_66:

(Start: 43 @57943 has 28 MA's), (56, 57973), (63, 58009), (64, 58012), (72, 58066), (76, 58093), (88, 58141), (102, 58195), (103, 58198), (104, 58222), (105, 58225), (119, 58285), (150, 58435), (154, 58468),

Gene: Keitabear_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Keitabear_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Kewpiedoll_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Kewpiedoll_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Kheth_66 Start: 56132, Stop: 56785, Start Num: 41

Candidate Starts for Kheth_66:

(6, 55778), (8, 55802), (10, 55841), (31, 56072), (Start: 41 @56132 has 35 MA's), (Start: 42 @56138 has 4 MA's), (57, 56186), (62, 56213), (66, 56243), (76, 56303), (82, 56327), (92, 56369), (95, 56375), (97, 56381), (102, 56405), (119, 56495), (150, 56651),

Gene: KimmyK_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for KimmyK_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Kolhan_67 Start: 56109, Stop: 56762, Start Num: 41

Candidate Starts for Kolhan_67:

(31, 56049), (Start: 41 @56109 has 35 MA's), (Start: 42 @56115 has 4 MA's), (57, 56163), (62, 56190), (66, 56220), (76, 56280), (82, 56304), (92, 56346), (95, 56352), (97, 56358), (102, 56382), (119, 56472), (150, 56628),

Gene: Kronus_71 Start: 58974, Stop: 59573, Start Num: 44

Candidate Starts for Kronus_71:

(Start: 44 @58974 has 50 MA's), (47, 58983), (50, 58989), (59, 59019), (64, 59043), (79, 59136), (85, 59160), (87, 59169), (97, 59202), (98, 59205), (103, 59229), (106, 59259), (119, 59316),

Gene: Kroos_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Kroos_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Kwekel_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for Kwekel_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: Kwobi_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Kwobi_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Lambano_65 Start: 58489, Stop: 59076, Start Num: 43

Candidate Starts for Lambano_65:

(3, 58084), (7, 58126), (11, 58210), (13, 58228), (16, 58258), (22, 58354), (23, 58363), (Start: 43 @58489 has 28 MA's), (63, 58555), (64, 58558), (68, 58594), (77, 58645), (87, 58684), (88, 58687), (102, 58741), (103, 58744), (124, 58852), (133, 58915), (152, 59017),

Gene: Lars_67 Start: 56193, Stop: 56846, Start Num: 41

Candidate Starts for Lars_67:

(6, 55839), (8, 55863), (10, 55902), (31, 56133), (Start: 41 @56193 has 35 MA's), (Start: 42 @56199 has 4 MA's), (57, 56247), (62, 56274), (66, 56304), (76, 56364), (82, 56388), (92, 56430), (95, 56436), (97, 56442), (102, 56466), (119, 56556), (150, 56712),

Gene: Laurie_66 Start: 55873, Stop: 56523, Start Num: 41

Candidate Starts for Laurie_66:

(31, 55813), (Start: 41 @55873 has 35 MA's), (Start: 42 @55879 has 4 MA's), (57, 55924), (62, 55951), (66, 55981), (74, 56026), (76, 56041), (82, 56065), (92, 56107), (95, 56113), (97, 56119), (102, 56143), (119, 56233), (150, 56389),

Gene: Lennon_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Lennon_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Leonard_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Leonard_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487), (139, 493),

Gene: Lephleur_66 Start: 56058, Stop: 56708, Start Num: 41

Candidate Starts for Lephleur_66:

(6, 55704), (8, 55728), (10, 55767), (31, 55998), (Start: 41 @56058 has 35 MA's), (Start: 42 @56064 has 4 MA's), (57, 56109), (62, 56136), (66, 56166), (76, 56226), (82, 56250), (92, 56292), (95, 56298), (97, 56304), (102, 56328), (119, 56418), (150, 56574),

Gene: LestyG_69 Start: 57404, Stop: 58003, Start Num: 44

Candidate Starts for LestyG_69:

(Start: 44 @57404 has 50 MA's), (50, 57419), (59, 57449), (64, 57473), (79, 57566), (85, 57590), (87, 57599), (97, 57632), (98, 57635), (103, 57659), (106, 57689), (119, 57746), (125, 57785), (133, 57830),

Gene: LilHam_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for LilHam_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (121, 367),

Gene: LilSmirk_66 Start: 56091, Stop: 56744, Start Num: 41

Candidate Starts for LilSmirk_66:

(6, 55737), (8, 55761), (10, 55800), (31, 56031), (Start: 41 @56091 has 35 MA's), (Start: 42 @56097 has 4 MA's), (57, 56145), (62, 56172), (66, 56202), (76, 56262), (82, 56286), (92, 56328), (95, 56334), (97, 56340), (102, 56364), (119, 56454), (150, 56610),

Gene: Lilbeanie_1 Start: 1, Stop: 591, Start Num: 36

Candidate Starts for Lilbeanie_1:

(Start: 36 @1 has 35 MA's), (49, 43), (54, 64), (69, 160), (75, 190), (100, 298), (122, 409), (137, 496), (142, 523), (143, 538),

Gene: LittleDigger_65 Start: 58412, Stop: 58999, Start Num: 43

Candidate Starts for LittleDigger_65:

(3, 58007), (11, 58133), (13, 58151), (16, 58181), (22, 58277), (23, 58286), (Start: 43 @58412 has 28 MA's), (63, 58478), (64, 58481), (68, 58517), (77, 58568), (87, 58607), (88, 58610), (102, 58664), (103, 58667), (124, 58775), (133, 58838), (152, 58940),

Gene: LizLemon_66 Start: 56220, Stop: 56873, Start Num: 41

Candidate Starts for LizLemon_66:

(6, 55866), (8, 55890), (10, 55929), (31, 56160), (Start: 41 @56220 has 35 MA's), (Start: 42 @56226 has 4 MA's), (57, 56274), (62, 56301), (66, 56331), (76, 56391), (82, 56415), (92, 56457), (95, 56463), (97, 56469), (102, 56493), (119, 56583), (150, 56739),

Gene: Lolalove_69 Start: 59664, Stop: 60251, Start Num: 43

Candidate Starts for Lolalove_69:

(22, 59529), (23, 59538), (Start: 43 @59664 has 28 MA's), (56, 59694), (63, 59730), (64, 59733), (68, 59769), (77, 59820), (87, 59859), (88, 59862), (102, 59916), (103, 59919), (107, 59952), (109, 59961), (122, 60018), (124, 60027), (133, 60090), (152, 60192),

Gene: Love_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Love_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Magpie_65 Start: 59349, Stop: 59936, Start Num: 43

Candidate Starts for Magpie_65:

(Start: 43 @59349 has 28 MA's), (63, 59415), (64, 59418), (68, 59454), (77, 59505), (87, 59544), (88, 59547), (102, 59601), (103, 59604), (109, 59646), (124, 59712), (133, 59775), (152, 59877),

Gene: MakoManhole_62 Start: 51487, Stop: 52053, Start Num: 40

Candidate Starts for MakoManhole_62:

(2, 51094), (23, 51376), (24, 51385), (Start: 40 @51487 has 5 MA's), (62, 51556), (Start: 73 @51625 has 1 MA's), (76, 51646), (77, 51652), (80, 51667), (87, 51691), (92, 51712), (105, 51778), (106, 51781), (108, 51790), (119, 51838), (121, 51844), (124, 51859), (135, 51922),

Gene: Mao1_86 Start: 57916, Stop: 58401, Start Num: 70

Candidate Starts for Mao1_86:

(52, 57814), (Start: 70 @57916 has 3 MA's), (107, 58099), (112, 58123), (117, 58144), (120, 58156), (141, 58264), (142, 58273), (143, 58288), (146, 58300), (147, 58303), (148, 58309), (153, 58360),

Gene: Marley1013_72 Start: 58826, Stop: 59425, Start Num: 44

Candidate Starts for Marley1013_72:

(Start: 44 @58826 has 50 MA's), (47, 58835), (50, 58841), (59, 58871), (64, 58895), (79, 58988), (85, 59012), (87, 59021), (97, 59054), (98, 59057), (103, 59081), (106, 59111), (119, 59168),

Gene: Marlia_72 Start: 58347, Stop: 58946, Start Num: 44

Candidate Starts for Marlia_72:

(Start: 44 @58347 has 50 MA's), (47, 58356), (50, 58362), (59, 58392), (64, 58416), (79, 58509), (85, 58533), (87, 58542), (97, 58575), (98, 58578), (103, 58602), (106, 58632), (119, 58689), (125, 58728), (133, 58773),

Gene: Mask_86 Start: 60554, Stop: 61024, Start Num: 73

Candidate Starts for Mask_86:

(Start: 70 @60542 has 3 MA's), (Start: 73 @60554 has 1 MA's), (106, 60719), (114, 60752), (125, 60815), (128, 60833), (139, 60881), (141, 60887), (142, 60896), (143, 60911), (146, 60923), (147, 60926), (148, 60932), (153, 60983),

Gene: MasterPo_67 Start: 56090, Stop: 56740, Start Num: 41

Candidate Starts for MasterPo_67:

(6, 55736), (8, 55760), (10, 55799), (31, 56030), (Start: 41 @56090 has 35 MA's), (Start: 42 @56096 has 4 MA's), (57, 56141), (62, 56168), (66, 56198), (76, 56258), (82, 56282), (92, 56324), (95, 56330), (97, 56336), (102, 56360), (119, 56450), (150, 56606),

Gene: McCrothy_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for McCrothy_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: McKinley_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for McKinley_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: MelBins_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for MelBins_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487),

Gene: Mithril_67 Start: 59663, Stop: 60250, Start Num: 43

Candidate Starts for Mithril_67:

(Start: 43 @59663 has 28 MA's), (56, 59693), (63, 59729), (64, 59732), (68, 59768), (77, 59819), (87, 59858), (88, 59861), (102, 59915), (103, 59918), (107, 59951), (109, 59960), (122, 60017), (124, 60026), (133, 60089), (152, 60191),

Gene: MmasiCarm_72 Start: 58329, Stop: 58928, Start Num: 44

Candidate Starts for MmasiCarm_72:

(Start: 44 @58329 has 50 MA's), (50, 58344), (64, 58398), (79, 58491), (85, 58515), (87, 58524), (97, 58557), (98, 58560), (103, 58584), (106, 58614), (119, 58671),

Gene: MoontowerMania_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for MoontowerMania_1:

(Start: 37 @1 has 53 MA's), (51, 43), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Mortcellus_71 Start: 58991, Stop: 59590, Start Num: 44

Candidate Starts for Mortcellus_71:

(Start: 44 @58991 has 50 MA's), (50, 59006), (59, 59036), (64, 59060), (79, 59153), (85, 59177), (87, 59186), (97, 59219), (98, 59222), (103, 59246), (106, 59276), (119, 59333),

Gene: Morty007_70 Start: 58826, Stop: 59425, Start Num: 44

Candidate Starts for Morty007_70:

(Start: 44 @58826 has 50 MA's), (47, 58835), (50, 58841), (59, 58871), (64, 58895), (79, 58988), (85, 59012), (87, 59021), (97, 59054), (98, 59057), (103, 59081), (106, 59111), (119, 59168),

Gene: MossRose_65 Start: 52447, Stop: 53013, Start Num: 40

Candidate Starts for MossRose_65:

(2, 52054), (23, 52336), (24, 52345), (Start: 40 @52447 has 5 MA's), (62, 52516), (Start: 73 @52585 has 1 MA's), (76, 52606), (77, 52612), (80, 52627), (87, 52651), (92, 52672), (105, 52738), (106, 52741), (108, 52750), (119, 52798), (121, 52804), (124, 52819), (135, 52882),

Gene: Mudslide_67 Start: 59684, Stop: 60271, Start Num: 43

Candidate Starts for Mudslide_67:

(22, 59549), (23, 59558), (Start: 43 @59684 has 28 MA's), (63, 59750), (64, 59753), (68, 59789), (77, 59840), (87, 59879), (88, 59882), (102, 59936), (103, 59939), (109, 59981), (122, 60038), (124, 60047), (133, 60110),

Gene: Mulaychimus_72 Start: 58346, Stop: 58945, Start Num: 44

Candidate Starts for Mulaychimus_72:

(Start: 44 @58346 has 50 MA's), (47, 58355), (50, 58361), (59, 58391), (64, 58415), (79, 58508), (85, 58532), (87, 58541), (97, 58574), (98, 58577), (103, 58601), (106, 58631), (119, 58688), (125, 58727), (133, 58772),

Gene: Mutzi_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Mutzi_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Nanao_66 Start: 58479, Stop: 59066, Start Num: 43

Candidate Starts for Nanao_66:

(3, 58074), (7, 58116), (11, 58200), (13, 58218), (16, 58248), (22, 58344), (23, 58353), (Start: 43 @58479 has 28 MA's), (63, 58545), (64, 58548), (68, 58584), (77, 58635), (87, 58674), (88, 58677), (102, 58731), (103, 58734), (124, 58842), (133, 58905), (152, 59007),

Gene: Natkenzie_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Natkenzie_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (106, 298), (129, 418),

Gene: Neos5_71 Start: 58288, Stop: 58887, Start Num: 44

Candidate Starts for Neos5_71:

(Start: 44 @58288 has 50 MA's), (47, 58297), (50, 58303), (64, 58357), (79, 58450), (85, 58474), (87, 58483), (97, 58516), (98, 58519), (103, 58543), (106, 58573), (119, 58630),

Gene: Nigel_65 Start: 58299, Stop: 58883, Start Num: 43

Candidate Starts for Nigel_65:

(Start: 43 @58299 has 28 MA's), (45, 58305), (56, 58329), (63, 58365), (64, 58368), (71, 58416), (77, 58455), (87, 58494), (88, 58497), (102, 58551), (103, 58554), (124, 58662), (133, 58725),

Gene: Nordenberg_1 Start: 58, Stop: 510, Start Num: 53

Candidate Starts for Nordenberg_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247),

Gene: Nozo_71 Start: 58685, Stop: 59284, Start Num: 44

Candidate Starts for Nozo_71:

(Start: 44 @58685 has 50 MA's), (50, 58700), (59, 58730), (64, 58754), (79, 58847), (85, 58871), (87, 58880), (97, 58913), (98, 58916), (103, 58940), (106, 58970), (119, 59027), (133, 59111),

Gene: Nubi_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Nubi_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Obutu_73 Start: 58508, Stop: 59107, Start Num: 44

Candidate Starts for Obutu_73:

(Start: 44 @58508 has 50 MA's), (50, 58523), (59, 58553), (64, 58577), (79, 58670), (85, 58694), (87, 58703), (97, 58736), (98, 58739), (103, 58763), (106, 58793), (119, 58850), (125, 58889),

Gene: Olivio_71 Start: 58141, Stop: 58740, Start Num: 44

Candidate Starts for Olivio_71:

(Start: 44 @58141 has 50 MA's), (47, 58150), (50, 58156), (64, 58210), (79, 58303), (85, 58327), (87, 58336), (97, 58369), (98, 58372), (103, 58396), (106, 58426), (119, 58483), (125, 58522),

Gene: Opia_67 Start: 56110, Stop: 56766, Start Num: 41

Candidate Starts for Opia_67:

(6, 55756), (8, 55780), (10, 55819), (31, 56050), (Start: 41 @56110 has 35 MA's), (Start: 42 @56116 has 4 MA's), (57, 56167), (62, 56194), (66, 56224), (76, 56284), (82, 56308), (92, 56350), (95, 56356), (97, 56362), (102, 56386), (119, 56476), (150, 56632),

Gene: OrangeOswald_71 Start: 57926, Stop: 58525, Start Num: 44

Candidate Starts for OrangeOswald_71:

(Start: 44 @57926 has 50 MA's), (50, 57941), (59, 57971), (64, 57995), (79, 58088), (85, 58112), (87, 58121), (97, 58154), (98, 58157), (103, 58181), (106, 58211), (119, 58268), (133, 58352),

Gene: Paries_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Paries_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Phaedrus_66 Start: 57351, Stop: 57950, Start Num: 44

Candidate Starts for Phaedrus_66:

(Start: 44 @57351 has 50 MA's), (47, 57360), (50, 57366), (59, 57396), (64, 57420), (79, 57513), (85, 57537), (87, 57546), (97, 57579), (98, 57582), (103, 57606), (106, 57636), (119, 57693), (125, 57732),

Gene: Phantasmagoria_65 Start: 56102, Stop: 56755, Start Num: 41

Candidate Starts for Phantasmagoria_65:

(6, 55748), (8, 55772), (10, 55811), (31, 56042), (Start: 41 @56102 has 35 MA's), (Start: 42 @56108 has 4 MA's), (57, 56156), (62, 56183), (66, 56213), (76, 56273), (82, 56297), (92, 56339), (95, 56345), (97, 56351), (102, 56375), (119, 56465), (150, 56621),

Gene: Phauci_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Phauci_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487), (139, 493),

Gene: Phayeta_74 Start: 58412, Stop: 59011, Start Num: 44

Candidate Starts for Phayeta_74:

(Start: 44 @58412 has 50 MA's), (50, 58427), (59, 58457), (64, 58481), (79, 58574), (85, 58598), (87, 58607), (97, 58640), (98, 58643), (103, 58667), (106, 58697), (119, 58754),

Gene: Philly_70 Start: 57738, Stop: 58337, Start Num: 44

Candidate Starts for Philly_70:

(Start: 44 @57738 has 50 MA's), (47, 57747), (50, 57753), (59, 57783), (64, 57807), (79, 57900), (85, 57924), (87, 57933), (97, 57966), (98, 57969), (103, 57993), (106, 58023), (119, 58080), (125, 58119),

Gene: Phinally_1 Start: 1, Stop: 537, Start Num: 33

Candidate Starts for Phinally_1:

(Start: 33 @1 has 9 MA's), (Start: 53 @85 has 1 MA's), (57, 100), (81, 235), (90, 268), (91, 274), (106, 331), (129, 451), (138, 487), (139, 493),

Gene: Phlop_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Phlop_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Phlyer_71 Start: 58634, Stop: 59233, Start Num: 44

Candidate Starts for Phlyer_71:

(Start: 44 @58634 has 50 MA's), (47, 58643), (50, 58649), (59, 58679), (64, 58703), (79, 58796), (85, 58820), (87, 58829), (97, 58862), (98, 58865), (103, 58889), (106, 58919), (119, 58976),

Gene: PinkCoffee_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for PinkCoffee_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Pipefish_74 Start: 59045, Stop: 59644, Start Num: 44

Candidate Starts for Pipefish_74:

(Start: 44 @59045 has 50 MA's), (50, 59060), (59, 59090), (64, 59114), (79, 59207), (85, 59231), (87, 59240), (97, 59273), (98, 59276), (103, 59300), (106, 59330), (119, 59387), (125, 59426), (133, 59471),

Gene: Portcullis_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Portcullis_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Poster_65 Start: 58480, Stop: 59067, Start Num: 43

Candidate Starts for Poster_65:

(3, 58075), (7, 58117), (11, 58201), (13, 58219), (16, 58249), (22, 58345), (23, 58354), (Start: 43 @58480 has 28 MA's), (63, 58546), (64, 58549), (68, 58585), (77, 58636), (87, 58675), (88, 58678), (102, 58732), (103, 58735), (124, 58843), (133, 58906), (152, 59008),

Gene: Prince_66 Start: 59594, Stop: 60181, Start Num: 43

Candidate Starts for Prince_66:

(22, 59459), (23, 59468), (Start: 43 @59594 has 28 MA's), (56, 59624), (63, 59660), (64, 59663), (68, 59699), (77, 59750), (87, 59789), (88, 59792), (102, 59846), (103, 59849), (107, 59882), (109, 59891), (124, 59957), (133, 60020),

Gene: PrinceCharming_67 Start: 56142, Stop: 56795, Start Num: 41

Candidate Starts for PrinceCharming_67:

(6, 55791), (8, 55815), (10, 55854), (31, 56082), (Start: 41 @56142 has 35 MA's), (Start: 42 @56148 has 4 MA's), (57, 56196), (62, 56223), (66, 56253), (76, 56313), (82, 56337), (92, 56379), (95, 56385), (97, 56391), (102, 56415), (119, 56505), (150, 56661),

Gene: PullumCavea_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for PullumCavea_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Pumpkiney_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Pumpkiney_1:

(Start: 39 @1 has 8 MA's), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (123, 373), (129, 418),

Gene: QueenPie_62 Start: 58582, Stop: 59169, Start Num: 43

Candidate Starts for QueenPie_62:

(Start: 43 @58582 has 28 MA's), (56, 58612), (63, 58648), (64, 58651), (68, 58687), (77, 58738), (78, 58741), (87, 58777), (88, 58780), (102, 58834), (103, 58837), (124, 58945), (131, 58993), (133, 59008), (152, 59110),

Gene: Qyrzula_60 Start: 56221, Stop: 56880, Start Num: 41

Candidate Starts for Qyrzula_60:

(6, 55867), (8, 55891), (10, 55930), (31, 56161), (Start: 41 @56221 has 35 MA's), (Start: 42 @56227 has 4 MA's), (57, 56281), (62, 56308), (66, 56338), (76, 56398), (82, 56422), (92, 56464), (95, 56470), (97, 56476), (102, 56500), (119, 56590), (150, 56746),

Gene: RagingRooster_70 Start: 57566, Stop: 58165, Start Num: 44

Candidate Starts for RagingRooster_70:

(Start: 44 @57566 has 50 MA's), (47, 57575), (50, 57581), (59, 57611), (64, 57635), (79, 57728), (85, 57752), (87, 57761), (97, 57794), (98, 57797), (103, 57821), (106, 57851), (119, 57908),

Gene: RawrgerThat_68 Start: 59487, Stop: 60074, Start Num: 43

Candidate Starts for RawrgerThat_68:

(Start: 43 @59487 has 28 MA's), (56, 59517), (63, 59553), (64, 59556), (68, 59592), (77, 59643), (87, 59682), (88, 59685), (102, 59739), (103, 59742), (109, 59784), (124, 59850), (133, 59913), (152, 60015),

Gene: Renkei_65 Start: 58406, Stop: 58993, Start Num: 43

Candidate Starts for Renkei_65:

(3, 58001), (11, 58127), (13, 58145), (16, 58175), (22, 58271), (23, 58280), (Start: 43 @58406 has 28 MA's), (63, 58472), (64, 58475), (68, 58511), (77, 58562), (87, 58601), (88, 58604), (102, 58658), (103, 58661), (124, 58769), (133, 58832), (152, 58934),

Gene: Rhinoforte_66 Start: 56143, Stop: 56793, Start Num: 41

Candidate Starts for Rhinoforte_66:

(6, 55789), (8, 55813), (10, 55852), (31, 56083), (Start: 41 @56143 has 35 MA's), (Start: 42 @56149 has 4 MA's), (57, 56194), (62, 56221), (66, 56251), (76, 56311), (82, 56335), (92, 56377), (95, 56383), (97, 56389), (102, 56413), (119, 56503), (150, 56659),

Gene: Ribeye_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Ribeye_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (93, 250), (121, 367),

Gene: Rita1961_72 Start: 58284, Stop: 58883, Start Num: 44

Candidate Starts for Rita1961_72:

(Start: 44 @58284 has 50 MA's), (50, 58299), (64, 58353), (79, 58446), (85, 58470), (87, 58479), (97, 58512), (98, 58515), (103, 58539), (106, 58569), (119, 58626),

Gene: RiverRaider_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for RiverRaider_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (68, 145), (81, 208), (91, 247), (113, 334), (140, 475),

Gene: RoadKill_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for RoadKill_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: Rofo_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Rofo_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: RogerDodger_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for RogerDodger_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (127, 415), (128, 424),

Gene: RomaT_71 Start: 58485, Stop: 59084, Start Num: 44

Candidate Starts for RomaT_71:

(Start: 44 @58485 has 50 MA's), (47, 58494), (50, 58500), (59, 58530), (64, 58554), (79, 58647), (85, 58671), (87, 58680), (97, 58713), (98, 58716), (103, 58740), (106, 58770), (119, 58827), (125, 58866), (133, 58911),

Gene: Rosebush_65 Start: 56206, Stop: 56859, Start Num: 41

Candidate Starts for Rosebush_65:

(6, 55852), (8, 55876), (10, 55915), (31, 56146), (Start: 41 @56206 has 35 MA's), (Start: 42 @56212 has 4 MA's), (57, 56260), (62, 56287), (66, 56317), (76, 56377), (82, 56401), (92, 56443), (95, 56449), (97, 56455), (102, 56479), (119, 56569), (150, 56725),

Gene: Sabella_66 Start: 56042, Stop: 56695, Start Num: 41

Candidate Starts for Sabella_66:

(31, 55982), (Start: 41 @56042 has 35 MA's), (Start: 42 @56048 has 4 MA's), (57, 56096), (62, 56123), (66, 56153), (76, 56213), (82, 56237), (92, 56279), (95, 56285), (97, 56291), (102, 56315), (119, 56405), (150, 56561),

Gene: Salvador_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Salvador_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Sampson_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Sampson_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (106, 298), (129, 418),

Gene: Sanjuju_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Sanjuju_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Saronaya_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Saronaya_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (122, 373),

Gene: Savbucketdawg_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Savbucketdawg_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (127, 415), (128, 424),

Gene: SchottB_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for SchottB_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (121, 367),

Gene: Scioto_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Scioto_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (106, 298), (129, 418),

Gene: Sedona_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Sedona_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Sejanus_88 Start: 59562, Stop: 60044, Start Num: 70

Candidate Starts for Sejanus_88:

(21, 59292), (Start: 70 @59562 has 3 MA's), (Start: 73 @59574 has 1 MA's), (106, 59739), (114, 59772), (125, 59835), (128, 59853), (139, 59901), (141, 59907), (142, 59916), (143, 59931), (146, 59943), (147, 59946), (148, 59952), (153, 60003),

Gene: Shenandoah_70 Start: 57543, Stop: 58142, Start Num: 44

Candidate Starts for Shenandoah_70:

(Start: 44 @57543 has 50 MA's), (47, 57552), (50, 57558), (59, 57588), (64, 57612), (79, 57705), (85, 57729), (87, 57738), (97, 57771), (98, 57774), (103, 57798), (106, 57828), (119, 57885),

Gene: Shinji_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Shinji_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Shivanishola_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Shivanishola_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (71, 157), (81, 208), (91, 247), (110, 325),

Gene: Sisko_62 Start: 51559, Stop: 52155, Start Num: 38

Candidate Starts for Sisko_62:

(Start: 38 @51559 has 4 MA's), (62, 51637), (71, 51694), (Start: 73 @51706 has 1 MA's), (76, 51727), (87, 51772), (92, 51793), (105, 51859), (124, 51940), (132, 51988), (135, 52003),

Gene: Sitar_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Sitar_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: SlippinJimmy_74 Start: 59309, Stop: 59908, Start Num: 44

Candidate Starts for SlippinJimmy_74:

(Start: 44 @59309 has 50 MA's), (47, 59318), (50, 59324), (59, 59354), (64, 59378), (79, 59471), (85, 59495), (87, 59504), (97, 59537), (98, 59540), (103, 59564), (106, 59594), (119, 59651), (125, 59690), (133, 59735),

Gene: SmokingBunny_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for SmokingBunny_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Stinger_67 Start: 58422, Stop: 59009, Start Num: 43

Candidate Starts for Stinger_67:

(3, 58029), (11, 58155), (14, 58185), (23, 58296), (Start: 43 @58422 has 28 MA's), (45, 58428), (56, 58452), (63, 58488), (64, 58491), (71, 58539), (77, 58578), (78, 58581), (87, 58617), (88, 58620), (102, 58674), (103, 58677), (124, 58785), (133, 58848), (152, 58950),

Gene: StorminNorm_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for StorminNorm_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (113, 334),

Gene: Stultus_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Stultus_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247),

Gene: SwainyDoc_72 Start: 58307, Stop: 58906, Start Num: 44

Candidate Starts for SwainyDoc_72:

(Start: 44 @58307 has 50 MA's), (47, 58316), (50, 58322), (59, 58352), (64, 58376), (79, 58469), (85, 58493), (87, 58502), (97, 58535), (98, 58538), (103, 58562), (106, 58592), (119, 58649), (125, 58688), (133, 58733),

Gene: SynergyX_71 Start: 57923, Stop: 58522, Start Num: 44

Candidate Starts for SynergyX_71:

(Start: 44 @57923 has 50 MA's), (47, 57932), (50, 57938), (59, 57968), (64, 57992), (79, 58085), (85, 58109), (87, 58118), (97, 58151), (98, 58154), (103, 58178), (106, 58208), (119, 58265), (133, 58349),

Gene: TA17A_68 Start: 56048, Stop: 56698, Start Num: 41

Candidate Starts for TA17A_68:

(31, 55988), (Start: 41 @56048 has 35 MA's), (Start: 42 @56054 has 4 MA's), (57, 56099), (62, 56126), (66, 56156), (74, 56201), (76, 56216), (82, 56240), (92, 56282), (95, 56288), (97, 56294), (102, 56318), (119, 56408), (150, 56564),

Gene: Tangent_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Tangent_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Tangerine_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Tangerine_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: Tardus_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Tardus_1:

(Start: 39 @1 has 8 MA's), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (122, 367), (123, 373), (129, 418),

Gene: Thing3_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Thing3_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (67, 133), (81, 208), (91, 247), (110, 325),

Gene: Tiamoceli_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for Tiamoceli_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: TillyBobJoe_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for TillyBobJoe_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Tinciduntolum_67 Start: 56209, Stop: 56862, Start Num: 41

Candidate Starts for Tinciduntsum_67:

(6, 55855), (8, 55879), (10, 55918), (31, 56149), (Start: 41 @56209 has 35 MA's), (Start: 42 @56215 has 4 MA's), (57, 56263), (62, 56290), (66, 56320), (76, 56380), (82, 56404), (92, 56446), (95, 56452), (97, 56458), (102, 56482), (119, 56572), (150, 56728),

Gene: TinyTerror_72 Start: 58345, Stop: 58944, Start Num: 44

Candidate Starts for TinyTerror_72:

(Start: 44 @58345 has 50 MA's), (50, 58360), (64, 58414), (79, 58507), (85, 58531), (87, 58540), (97, 58573), (98, 58576), (103, 58600), (106, 58630), (119, 58687),

Gene: Togo_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Togo_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Tonitrus_9 Start: 4643, Stop: 5092, Start Num: 43

Candidate Starts for Tonitrus_9:

(Start: 43 @4643 has 28 MA's), (58, 4679), (96, 4868), (99, 4880), (101, 4889), (103, 4895), (107, 4928), (116, 4970), (122, 4994), (124, 5003), (126, 5030), (127, 5033),

Gene: TraderJ_65 Start: 52573, Stop: 53139, Start Num: 40

Candidate Starts for TraderJ_65:

(23, 52462), (24, 52471), (Start: 40 @52573 has 5 MA's), (62, 52642), (Start: 73 @52711 has 1 MA's), (76, 52732), (77, 52738), (80, 52753), (87, 52777), (92, 52798), (105, 52864), (106, 52867), (108, 52876), (119, 52924), (121, 52930), (124, 52945), (135, 53008),

Gene: Tres_66 Start: 56063, Stop: 56716, Start Num: 41

Candidate Starts for Tres_66:

(6, 55709), (8, 55733), (10, 55772), (31, 56003), (Start: 41 @56063 has 35 MA's), (Start: 42 @56069 has 4 MA's), (57, 56117), (62, 56144), (66, 56174), (76, 56234), (82, 56258), (92, 56300), (95, 56306), (97, 56312), (102, 56336), (119, 56426), (150, 56582),

Gene: Twister6_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Twister6_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (127, 415), (128, 424),

Gene: Twonlo_1 Start: 1, Stop: 561, Start Num: 34

Candidate Starts for Twonlo_1:

(Start: 34 @1 has 7 MA's), (45, 55), (61, 121), (67, 157), (91, 271), (106, 337), (122, 406), (134, 487), (139, 505),

Gene: Tycho_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for Tycho_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247), (113, 334),

Gene: Tydolla_67 Start: 57917, Stop: 58513, Start Num: 44

Candidate Starts for Tydolla_67:

(Start: 44 @57917 has 50 MA's), (47, 57926), (59, 57959), (64, 57983), (79, 58076), (85, 58100), (87, 58109), (97, 58142), (98, 58145), (103, 58169), (106, 58199), (119, 58256), (125, 58295), (133, 58340),

Gene: Valary_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Valary_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: VanDeWege_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for VanDeWege_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Verity_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Verity_1:

(Start: 39 @1 has 8 MA's), (48, 31), (64, 103), (Start: 70 @148 has 3 MA's), (91, 241), (105, 295), (106, 298), (129, 418),

Gene: ViaConlectus_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for ViaConlectus_1:

(Start: 39 @1 has 8 MA's), (68, 139), (Start: 70 @148 has 3 MA's), (91, 241), (106, 298), (129, 418),

Gene: Vic9_00065 Start: 56894, Stop: 57553, Start Num: 41

Candidate Starts for Vic9_00065:

(31, 56834), (Start: 41 @56894 has 35 MA's), (Start: 42 @56900 has 4 MA's), (57, 56954), (62, 56981), (66, 57011), (74, 57056), (76, 57071), (82, 57095), (92, 57137), (95, 57143), (97, 57149), (102, 57173), (119, 57263), (150, 57419),

Gene: Vincenzo_70 Start: 60825, Stop: 61445, Start Num: 36

Candidate Starts for Vincenzo_70:

(4, 60477), (11, 60576), (12, 60582), (15, 60621), (Start: 36 @60825 has 35 MA's), (64, 60921), (68, 60957), (71, 60969), (Start: 73 @60981 has 1 MA's), (87, 61047), (88, 61050), (102, 61104), (103, 61107), (106, 61137), (124, 61215), (133, 61278), (152, 61380),

Gene: VioletZ_69 Start: 59597, Stop: 60184, Start Num: 43

Candidate Starts for VioletZ_69:

(Start: 43 @59597 has 28 MA's), (56, 59627), (63, 59663), (64, 59666), (68, 59702), (77, 59753), (87, 59792), (88, 59795), (102, 59849), (103, 59852), (107, 59885), (109, 59894), (114, 59915), (124, 59960), (133, 60023),

Gene: Vivi2_1 Start: 1, Stop: 510, Start Num: 37

Candidate Starts for Vivi2_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (64, 109), (81, 208), (91, 247), (110, 325),

Gene: Waleliano_67 Start: 59486, Stop: 60073, Start Num: 43

Candidate Starts for Waleliano_67:

(22, 59351), (23, 59360), (Start: 43 @59486 has 28 MA's), (56, 59516), (63, 59552), (64, 59555), (68, 59591), (77, 59642), (87, 59681), (88, 59684), (102, 59738), (103, 59741), (107, 59774), (109, 59783), (122, 59840), (124, 59849), (133, 59912), (152, 60014),

Gene: West99_66 Start: 56236, Stop: 56889, Start Num: 41

Candidate Starts for West99_66:

(6, 55882), (8, 55906), (10, 55945), (31, 56176), (Start: 41 @56236 has 35 MA's), (Start: 42 @56242 has 4 MA's), (57, 56290), (62, 56317), (66, 56347), (76, 56407), (82, 56431), (92, 56473), (95, 56479), (97, 56485), (102, 56509), (119, 56599), (150, 56755),

Gene: Wizard_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for Wizard_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Wooper_66 Start: 52518, Stop: 53084, Start Num: 40

Candidate Starts for Wooper_66:

(Start: 40 @52518 has 5 MA's), (62, 52587), (Start: 73 @52656 has 1 MA's), (76, 52677), (77, 52683), (80, 52698), (87, 52722), (92, 52743), (105, 52809), (106, 52812), (108, 52821), (119, 52869), (121, 52875), (124, 52890), (135, 52953),

Gene: Xincheng_67 Start: 60697, Stop: 61287, Start Num: 43

Candidate Starts for Xincheng_67:

(22, 60562), (23, 60571), (Start: 43 @60697 has 28 MA's), (56, 60727), (63, 60763), (64, 60766), (68, 60802), (71, 60814), (77, 60853), (87, 60892), (88, 60895), (102, 60949), (103, 60952), (122, 61051), (124, 61060), (133, 61123), (152, 61225),

Gene: Yago84_61 Start: 51044, Stop: 51640, Start Num: 38

Candidate Starts for Yago84_61:

(Start: 38 @51044 has 4 MA's), (62, 51122), (71, 51179), (Start: 73 @51191 has 1 MA's), (76, 51212), (87, 51257), (92, 51278), (103, 51317), (105, 51344), (121, 51410), (124, 51425), (132, 51473), (135, 51488),

Gene: Yahalom_69 Start: 57728, Stop: 58327, Start Num: 44

Candidate Starts for Yahalom_69:

(Start: 44 @57728 has 50 MA's), (47, 57737), (50, 57743), (59, 57773), (64, 57797), (79, 57890), (85, 57914), (87, 57923), (97, 57956), (98, 57959), (103, 57983), (106, 58013), (119, 58070), (125, 58109), (133, 58154),

Gene: Yeshua_65 Start: 52495, Stop: 53061, Start Num: 40

Candidate Starts for Yeshua_65:

(Start: 40 @52495 has 5 MA's), (62, 52564), (Start: 73 @52633 has 1 MA's), (76, 52654), (77, 52660), (80, 52675), (87, 52699), (92, 52720), (105, 52786), (106, 52789), (108, 52798), (119, 52846), (121, 52852), (124, 52867), (135, 52930),

Gene: Yinz_71 Start: 57793, Stop: 58392, Start Num: 44

Candidate Starts for Yinz_71:

(Start: 44 @57793 has 50 MA's), (50, 57808), (64, 57862), (79, 57955), (85, 57979), (87, 57988), (97, 58021), (98, 58024), (103, 58048), (106, 58078), (119, 58135), (125, 58174),

Gene: YorkOnyx_1 Start: 1, Stop: 507, Start Num: 37

Candidate Starts for YorkOnyx_1:

(Start: 37 @1 has 53 MA's), (Start: 53 @58 has 1 MA's), (55, 67), (65, 115), (91, 247),

Gene: YungMoney_1 Start: 1, Stop: 531, Start Num: 36

Candidate Starts for YungMoney_1:

(Start: 36 @1 has 35 MA's), (49, 43), (60, 94), (83, 214), (86, 232), (106, 304), (108, 313), (119, 361), (122, 373), (123, 379), (128, 424),

Gene: Zemanar_67 Start: 59384, Stop: 59971, Start Num: 43

Candidate Starts for Zemanar_67:

(22, 59249), (23, 59258), (Start: 43 @59384 has 28 MA's), (63, 59450), (64, 59453), (68, 59489), (77, 59540), (87, 59579), (88, 59582), (102, 59636), (103, 59639), (122, 59738), (124, 59747), (133,

59810), (152, 59912),

Gene: Zipp_1 Start: 1, Stop: 498, Start Num: 39

Candidate Starts for Zipp_1:

(Start: 39 @1 has 8 MA's), (48, 31), (64, 103), (Start: 70 @148 has 3 MA's), (91, 241), (129, 418),