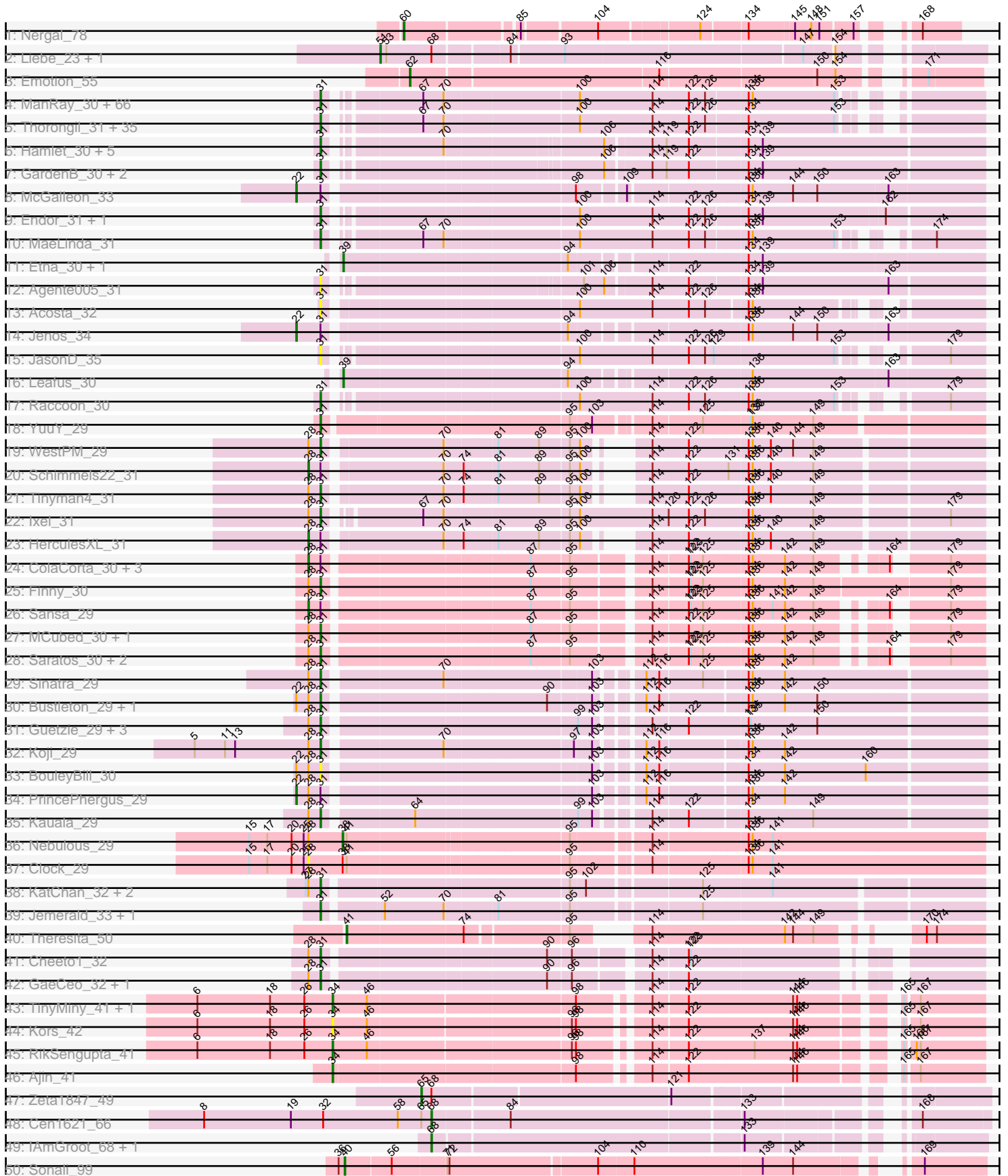
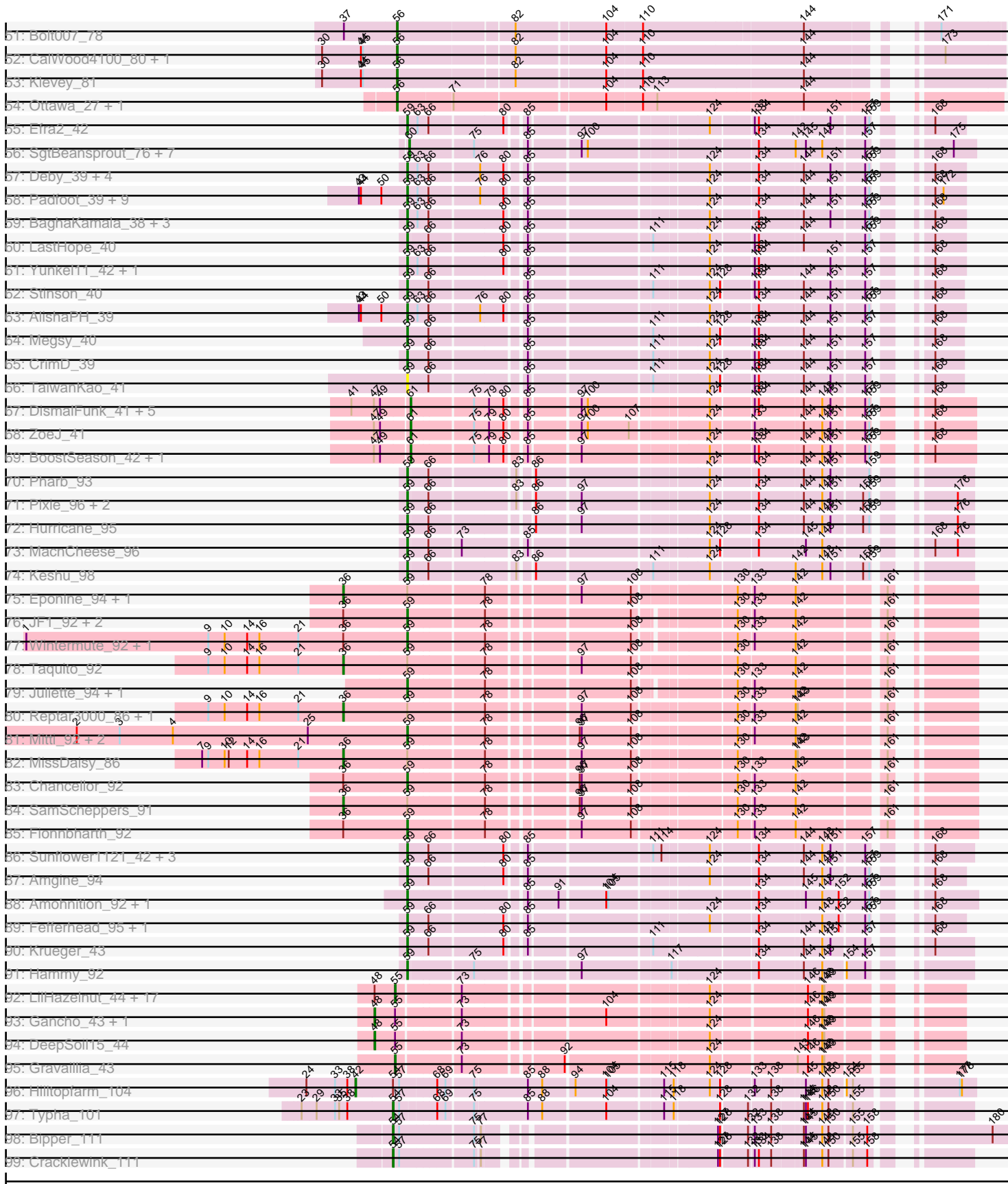


Pham 171155



Pham 171155



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 171155 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171155 has 291 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Nergal_78
- Track 2 : Liebe_23, Maureen_23
- Track 3 : Emotion_55
- Track 4 : ManRay_30, SonOfLevi_30, Gargoyle_31, Asta_30, Nattles_30, TeddyBear_30, Clancy_30, Etta_30, BeautPeep30_31, BonesMcCoy_31, Phiderman_31, Christoph_30, Erla_30, MrWorldwide_31, Duocatuli_30, Phireproof_31, Dothraki_31, Convict_31, Espinosa_30, BigRedClifford_31, MillyPhilly_31, HankSprout_31, StirfryIV_31, Kurt1_31, Jerbirus_31, Chako_30, Robinson_31, AranulaLuti_30, Byron23_31, Garey24_30, TinSulphur_31, Janus167_30, Gershwin_30, Strathdee_31, ParleG_31, Aubergine_30, Pherferi_31, Bonino_30, Rog141_30, HanSolo_30, Shee_31, Blage_31, Calix_30, Winzigespinne_30, Stanktossa_31, Tenda_30, NickSell_32, Baines_30, Figueroism_31, TatarkaPM_31, Rapheph_31, Chamuel_30, Martin_32, Raptor_31, Kale_30, Inventa_31, Pocket_30, Gelo_30, Klimt_30, Ioannes_31, PhredFlintston_31, Thompsone_31, Knox_31, Oats_30, Gubbabump_30, JasperRussell_30, KannH_30
- Track 5 : Thorongil_31, Ludgate_31, Velene_31, Oxtober96_31, Alyxandracam_31, Ilzat_30, Antoinette_31, Bandik_31, Dave_31, Benjalauren_31, JeriBeth_31, AxiPup_31, Phriends_31, Teagan_31, Superfresh_31, Nagem_31, ShaiHulud_31, PuppyEggo_31, Vispistious_31, AlexAdler_31, Peep_31, Papafritta_30, OldNelly_31, Den3_31, Riyhil_31, Sedgewig_30, HungryHenry_30, SJay_31, WildNOut_31, StingRay_30, Lovelyunicorn_31, Greys_31, Delphidian_32, Zada_31, SoilGremlin_31, Renzie_31
- Track 6 : Hamlet_30, Peppino_30, Redfield_30, Balsa_30, BeeBee8_31, Schnapsidee_30
- Track 7 : GardenB_30, KingJulien_30, Stormbreaker8_30
- Track 8 : McGalleon_33
- Track 9 : Endor_31, MonChoix_29
- Track 10 : MaeLinda_31
- Track 11 : Etna_30, FarmerDoug_30
- Track 12 : Agente005_31
- Track 13 : Acosta_32
- Track 14 : Jenos_34
- Track 15 : JasonD_35
- Track 16 : Leafus_30
- Track 17 : Raccoon_30
- Track 18 : YuuY_29
- Track 19 : WestPM_29

- Track 20 : Schimmels22_31
- Track 21 : Tinyman4_31
- Track 22 : Ixel_31
- Track 23 : HerculesXL_31
- Track 24 : ColaCorta_30, Eleri_30, Glamour_29, Andromedas_30
- Track 25 : Finny_30
- Track 26 : Sansa_29
- Track 27 : MCubed_30, ChikPic_30
- Track 28 : Saratos_30, Zenitsu_30, Shamu_30
- Track 29 : Sinatra_29
- Track 30 : Bustleton_29, Pherbot_29
- Track 31 : Guetzie_29, Lucky3_29, SirVictor_29, Golden_29
- Track 32 : Koji_29
- Track 33 : BouleyBill_30
- Track 34 : PrincePhergus_29
- Track 35 : Kauala_29
- Track 36 : Nebulous_29
- Track 37 : Clock_29
- Track 38 : KatChan_32, Luna18_32, Chepli_32
- Track 39 : Jemerald_33, Juicer_33
- Track 40 : Theresita_50
- Track 41 : Cheeto1_32
- Track 42 : GaeCeo_32, ChickenKing_31
- Track 43 : TinyMiny_41, Sparcetus_41
- Track 44 : Kors_42
- Track 45 : RikSengupta_41
- Track 46 : Ajin_41
- Track 47 : Zeta1847_49
- Track 48 : Cen1621_66
- Track 49 : IAmGroot_68, GardenState_69
- Track 50 : Sonali_99
- Track 51 : Bolt007_78
- Track 52 : CalWood4100_80, Lilmac1015_80
- Track 53 : Klevey_81
- Track 54 : Ottawa_27, Kharcho_27
- Track 55 : Efra2_42
- Track 56 : SgtBeansprout_76, Nikao_78, LilPharaoh_76, Nutello_75, Enkosi_77, Mdavu_76, Amelie_75, Binglebops_75
- Track 57 : Deby_39, Sulley_39, Angelica_39, Ganymede_40, QuincyRose_38
- Track 58 : Padfoot_39, Piatt_39, BEEST_39, Asayake_39, Durfee_39, ShiaSurprise_40, CaseJules_40, Blizzard_39, Boiiii_39, Hyperbowlee_39
- Track 59 : BaghaKamala_38, CheetoDust_38, Adonis_39, Tiri_40
- Track 60 : LastHope_40
- Track 61 : Yunkel11_42, Guanica15_42
- Track 62 : Stinson_40
- Track 63 : AlishaPH_39
- Track 64 : Megsy_40
- Track 65 : CrimD_39
- Track 66 : TaiwanKao_41
- Track 67 : DismalFunk_41, Findley_41, Strobilo_41, DismalStressor_41, Milly_41, Marcoliusprime_41
- Track 68 : ZoeJ_41
- Track 69 : BoostSeason_42, Mufasa_42

- Track 70 : Pharb_93
- Track 71 : Pixie_96, ShedlockHolmes_97, TBond007_93
- Track 72 : Hurricane_95
- Track 73 : MacnCheese_96
- Track 74 : Keshu_98
- Track 75 : Eponine_94, OmniCritical_92
- Track 76 : JF1_92, Y2_88, Y10_88
- Track 77 : Wintermute_92, Malthus_93
- Track 78 : Taquito_92
- Track 79 : Juliette_94, Ruthiejr_94
- Track 80 : Reptar3000_86, Patt_85
- Track 81 : Mitti_92, Slarp_90, Cheetobro_90
- Track 82 : MissDaisy_86
- Track 83 : Chancellor_92
- Track 84 : SamScheppers_91
- Track 85 : Fionnbharth_92
- Track 86 : Sunflower1121_42, Syra333_43, Ximenita_44, Shadow1_42
- Track 87 : Amgine_94
- Track 88 : Amohnition_92, DARTH_P_92
- Track 89 : Fefferhead_95, Ellie_93
- Track 90 : Krueger_43
- Track 91 : Hammy_92
- Track 92 : LilHazelNut_44, Giles_42, Ein37_44, Luke_44, Hail_42, Hadrien_44, Wishmaker_42, Luna22_42, OBUpride_44, Forge_42, Kinbote_44, Ubuntu_44, Evanesce_43, Dewey_42, HH92_43, Amochick_44, Amymech_44, Webster2_44
- Track 93 : Gancho_43, Daegal_46
- Track 94 : DeepSoil15_44
- Track 95 : Gravaillia_43
- Track 96 : Hilltopfarm_104
- Track 97 : Typha_101
- Track 98 : Bipper_111
- Track 99 : Cracklewink_111

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

The start number called the most often in the published annotations is 31, it was called in 133 of the 273 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_32, Agente005_31, AlexAdler_31, Alyxandracam_31, Antoinette_31, AranulaLuti_30, Asta_30, Aubergine_30, AxiPup_31, Baines_30, Balsa_30, Bandik_31, BeautPeep30_31, BeeBee8_31, Benjalauren_31, BigRedClifford_31, Blage_31, BonesMcCoy_31, Bonino_30, BouleyBill_30, Bustleton_29, Byron23_31, Calix_30, Chako_30, Chamuel_30, Cheeto1_32, Chepli_32, ChickenKing_31, ChikPic_30, Christoph_30, Clancy_30, Convict_31, Dave_31, Delphidian_32, Den3_31, Dothraki_31, Duocatuli_30, Endor_31, Erla_30, Espinosa_30, Etta_30, Figueroism_31, Finny_30, GaeCeo_32, GardenB_30, Garey24_30, Gargoyle_31, Gelo_30, Gershwin_30, Golden_29, Greys_31, Gubbabump_30, Guetzie_29, Hamlet_30, HanSolo_30, HankSprout_31, HungryHenry_30, Ilzat_30, Inventa_31, Ioannes_31, Ixel_31, Janus167_30, JasonD_35, JasperRussell_30, Jemerald_33,

Jerbirus_31, JeriBeth_31, Juicer_33, Kale_30, KannH_30, KatChan_32, Kauala_29, KingJulien_30, Klimt_30, Knox_31, Koji_29, Kurt1_31, Lovelyunicorn_31, Lucky3_29, Ludgate_31, Luna18_32, MCubed_30, MaeLinda_31, ManRay_30, Martin_32, MillyPhilly_31, MonChoix_29, MrWorldwide_31, Nagem_31, Nattles_30, NickSell_32, Oats_30, OldNelly_31, Oxtober96_31, Papafritta_30, ParleG_31, Peep_31, Peppino_30, Pherbot_29, Pherferi_31, Phiderman_31, Phireproof_31, PhredFlintston_31, Phriends_31, Pocket_30, PuppyEggo_31, Raccoon_30, Rappheph_31, Raptor_31, Redfield_30, Renzie_31, Riyhil_31, Robinson_31, Rog141_30, SJay_31, Saratos_30, Schnapsidee_30, Sedgewig_30, ShaiHulud_31, Shamu_30, Shee_31, Sinatra_29, SirVictor_29, SoilGremlin_31, SonOfLevi_30, Stanktossa_31, StingRay_30, StirfryIV_31, Stormbreaker8_30, Strathdee_31, Superfresh_31, TatarkaPM_31, Teagan_31, TeddyBear_30, Tenda_30, Thompsone_31, Thorongil_31, TinSulphur_31, Tinyman4_31, Velene_31, Vispistious_31, WestPM_29, WildNOut_31, Winzigespinne_30, YuuY_29, Zada_31, Zenitsu_30,

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

- Andromedas_30, ColaCorta_30, Eleri_30, Glamour_29, HerculesXL_31, Jenos_34, McGalleon_33, PrincePhergus_29, Sansa_29, Schimmels22_31,

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

- Adonis_39, Ajin_41, AlishaPH_39, Amelie_75, Amgine_94, Amochick_44, Amohntion_92, Amymech_44, Angelica_39, Asayake_39, BEEST_39, BaghaKamala_38, Binglebops_75, Bipper_111, Blizzard_39, Boiiii_39, Bolt007_78, BoostSeason_42, CalWood4100_80, CaseJules_40, Cen1621_66, Chancellor_92, CheetoDust_38, Cheetobro_90, Clock_29, Cracklewink_111, CrimD_39, Daegal_46, DarthP_92, Deby_39, DeepSoil15_44, Dewey_42, DismalFunk_41, DismalStressor_41, Durfee_39, Efra2_42, Ein37_44, Ellie_93, Emotion_55, Enkosi_77, Eponine_94, Etna_30, Evanesce_43, FarmerDoug_30, Fefferhead_95, Findley_41, Fionnbharth_92, Forge_42, Gancho_43, Ganymede_40, GardenState_69, Giles_42, Gravallia_43, Guanica15_42, HH92_43, Hadrien_44, Hail_42, Hammy_92, Hilltopfarm_104, Hurricane_95, Hyperbowlee_39, IAmGroot_68, JF1_92, Juliette_94, Keshu_98, Kharcho_27, Kinbote_44, Klevey_81, Kors_42, Krueger_43, LastHope_40, Leafus_30, Liebe_23, LilHazelNut_44, LilPharaoh_76, Lilmac1015_80, Luke_44, Luna22_42, MacnCheese_96, Malthus_93, Marcoliusprime_41, Maureen_23, Mdavu_76, Megsy_40, Milly_41, MissDaisy_86, Mitti_92, Mufasa_42, Nebulous_29, Nergal_78, Nikao_78, Nutello_75, OBUpride_44, OmniCritical_92, Ottawa_27, Padfoot_39, Patt_85, Pharb_93, Piatt_39, Pixie_96, QuincyRose_38, Reptar3000_86, RikSengupta_41, Ruthiejr_94, SamScheppers_91, SgtBeansprout_76, Shadow1_42, ShedlockHolmes_97, ShiaSurprise_40, Slarp_90, Sonali_99, Sparcetus_41, Stinson_40, Strobilo_41, Sulley_39, Sunflower1121_42, Syra333_43, TBond007_93, TaiwanKao_41, Taquito_92, Theresita_50, TinyMiny_41, Tiri_40, Typha_101, Ubuntu_44, Webster2_44, Wintermute_92, Wishmaker_42, Ximenita_44, Y10_88, Y2_88, Yunkel11_42, Zeta1847_49, ZoeJ_41,

Summary by start number:

Start 22:

- Found in 6 of 291 (2.1%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jenos_34 (EA1), McGalleon_33 (EA1), PrincePhergus_29 (EA4),

Start 28:

- Found in 35 of 291 (12.0%) of genes in pham
- Manual Annotations of this start: 7 of 273
- Called 22.9% of time when present
- Phage (with cluster) where this start called: Andromedas_30 (EA2), Clock_29 (EA5), ColaCorta_30 (EA2), Eleri_30 (EA2), Glamour_29 (EA2), HerculesXL_31 (EA11), Sansa_29 (EA2), Schimmels22_31 (EA11),

Start 31:

- Found in 157 of 291 (54.0%) of genes in pham
- Manual Annotations of this start: 133 of 273
- Called 93.6% of time when present
- Phage (with cluster) where this start called: Acosta_32 (EA1), Agente005_31 (EA1), AlexAdler_31 (EA1), Alyxandracam_31 (EA1), Antoinette_31 (EA1), AranulaLuti_30 (EA1), Asta_30 (EA1), Aubergine_30 (EA1), AxiPup_31 (EA1), Baines_30 (EA1), Balsa_30 (EA1), Bandik_31 (EA1), BeautPeep30_31 (EA1), BeeBee8_31 (EA1), Benjalauen_31 (EA1), BigRedClifford_31 (EA1), Blage_31 (EA1), BonesMcCoy_31 (EA1), Bonino_30 (EA1), BouleyBill_30 (EA4), Bustleton_29 (EA4), Byron23_31 (EA1), Calix_30 (EA1), Chako_30 (EA1), Chamuel_30 (EA1), Cheeto1_32 (EA9), Chepli_32 (EA6), ChickenKing_31 (EA9), ChikPic_30 (EA2), Christoph_30 (EA1), Clancy_30 (EA1), Convict_31 (EA1), Dave_31 (EA1), Delphidian_32 (EA1), Den3_31 (EA1), Dothraki_31 (EA1), Duocatuli_30 (EA1), Endor_31 (EA1), Erla_30 (EA1), Espinosa_30 (EA1), Etta_30 (EA1), Figueroism_31 (EA1), Finny_30 (EA2), GaeCeo_32 (EA9), GardenB_30 (EA1), Garey24_30 (EA1), Gargoyle_31 (EA1), Gelo_30 (EA1), Gershwin_30 (EA1), Golden_29 (EA4), Greys_31 (EA1), Gubbabump_30 (EA1), Guetzie_29 (EA4), Hamlet_30 (EA1), HanSolo_30 (EA1), HankSprout_31 (EA1), HungryHenry_30 (EA1), Ilzat_30 (EA1), Inventa_31 (EA1), Ioannes_31 (EA1), Ixel_31 (EA11), Janus167_30 (EA1), JasonD_35 (EA1), JasperRussell_30 (EA1), Jemerald_33 (EA6), Jerbirus_31 (EA1), JeriBeth_31 (EA1), Juicer_33 (EA6), Kale_30 (EA1), KannH_30 (EA1), KatChan_32 (EA6), Kauala_29 (EA4), KingJulien_30 (EA1), Klimt_30 (EA1), Knox_31 (EA1), Koji_29 (EA4), Kurt1_31 (EA1), Lovelyunicorn_31 (EA1), Lucky3_29 (EA4), Ludgate_31 (EA1), Luna18_32 (EA6), MCubed_30 (EA2), MaeLinda_31 (EA1), ManRay_30 (EA1), Martin_32 (EA1), MillyPhilly_31 (EA1), MonChoix_29 (EA1), MrWorldwide_31 (EA1), Nagem_31 (EA1), Nattles_30 (EA1), NickSell_32 (EA1), Oats_30 (EA1), OldNelly_31 (EA1), Oxtober96_31 (EA1), Papafritta_30 (EA1), ParleG_31 (EA1), Peep_31 (EA1), Peppino_30 (EA1), Pherbot_29 (EA4), Pherferi_31 (EA1), Phiderman_31 (EA1), Phireproof_31 (EA1), PhredFlintston_31 (EA1), Phriends_31 (EA1), Pocket_30 (EA1), PuppyEggo_31 (EA1), Raccoon_30 (EA1), Rappheph_31 (EA1), Raptor_31 (EA1), Redfield_30 (EA1), Renzie_31 (EA1), Riyhil_31 (EA1), Robinson_31 (EA1), Rog141_30 (EA1), SJay_31 (EA1), Saratos_30 (EA2), Schnapsidee_30 (EA1), Sedgewig_30 (EA1), ShaiHulud_31 (EA1), Shamu_30 (EA2), Shee_31 (EA1), Sinatra_29 (EA4), SirVictor_29 (EA4), SoilGremlin_31 (EA1), SonOfLevi_30 (EA1), Stanktossa_31 (EA1), StingRay_30 (EA1), StirfryIV_31 (EA1), Stormbreaker8_30 (EA1), Strathdee_31 (EA1), Superfresh_31 (EA1), TatarkaPM_31 (EA1), Teagan_31 (EA1), TeddyBear_30 (EA1), Tenda_30 (EA1), Thompsone_31 (EA1), Thorongil_31 (EA1), TinSulphur_31 (EA1), Tinyman4_31 (EA11), Velene_31 (EA1), Vispistious_31 (EA1), WestPM_29 (EA11), WildNOut_31 (EA1), Winzigespinne_30 (EA1), YuuY_29 (EA10), Zada_31 (EA1), Zenitsu_30 (EA2),

Start 34:

- Found in 5 of 291 (1.7%) of genes in pham

- Manual Annotations of this start: 4 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ajin_41 (EF), Kors_42 (EF), RikSengupta_41 (EF), Sparcetus_41 (EF), TinyMiny_41 (EF),

Start 36:

- Found in 15 of 291 (5.2%) of genes in pham
- Manual Annotations of this start: 7 of 273
- Called 46.7% of time when present
- Phage (with cluster) where this start called: Eponine_94 (K4), MissDaisy_86 (K4), OmniCritical_92 (K4), Patt_85 (K4), Reptar3000_86 (K4), SamScheppers_91 (K4), Taquito_92 (K4),

Start 38:

- Found in 4 of 291 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Nebulous_29 (EA5),

Start 39:

- Found in 3 of 291 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Etna_30 (EA1), FarmerDoug_30 (EA1), Leafus_30 (EA1),

Start 40:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sonali_99 (FG),

Start 41:

- Found in 9 of 291 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Theresita_50 (EA7),

Start 42:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hilltopfarm_104 (Y),

Start 48:

- Found in 21 of 291 (7.2%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Daegal_46 (Q), DeepSoil15_44 (Q), Gancho_43 (Q),

Start 51:

- Found in 2 of 291 (0.7%) of genes in pham

- Manual Annotations of this start: 2 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Liebe_23 (AZ2), Maureen_23 (AZ2),

Start 54:

- Found in 4 of 291 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Bipper_111 (Y), Cracklewink_111 (Y), Typha_101 (Y),

Start 55:

- Found in 22 of 291 (7.6%) of genes in pham
- Manual Annotations of this start: 19 of 273
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Amochick_44 (Q), Amymech_44 (Q), Dewey_42 (Q), Ein37_44 (Q), Evanesce_43 (Q), Forge_42 (Q), Giles_42 (Q), Gravaiilia_43 (Q), HH92_43 (Q), Hadrien_44 (Q), Hail_42 (Q), Kinbote_44 (Q), LilHazelNut_44 (Q), Luke_44 (Q), Luna22_42 (Q), OBUpride_44 (Q), Ubuntu_44 (Q), Webster2_44 (Q), Wishmaker_42 (Q),

Start 56:

- Found in 7 of 291 (2.4%) of genes in pham
- Manual Annotations of this start: 5 of 273
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Bolt007_78 (FH), CalWood4100_80 (FH), Kharcho_27 (FM), Klevey_81 (FH), Lilmac1015_80 (FH), Ottawa_27 (FM),

Start 59:

- Found in 65 of 291 (22.3%) of genes in pham
- Manual Annotations of this start: 57 of 273
- Called 89.2% of time when present
- Phage (with cluster) where this start called: Adonis_39 (K1), AlishaPH_39 (K1), Amgine_94 (K6), Amohnition_92 (K6), Angelica_39 (K1), Asayake_39 (K1), BEEST_39 (K1), BaghaKamala_38 (K1), Blizzard_39 (K1), Boiiii_39 (K1), CaseJules_40 (K1), Chancellor_92 (K4), CheetoDust_38 (K1), Cheetobro_90 (K4), CrimD_39 (K1), DARTH_92 (K6), Deby_39 (K1), Durfee_39 (K1), Efra2_42 (K1), Ellie_93 (K6), Fefferhead_95 (K6), Fionnbharth_92 (K4), Ganymede_40 (K1), Guanica15_42 (K1), Hammy_92 (K6), Hurricane_95 (K3), Hyperbowlee_39 (K1), JF1_92 (K4), Juliette_94 (K4), Keshu_98 (K3), Krueger_43 (K6), LastHope_40 (K1), MacnCheese_96 (K3), Malthus_93 (K4), Megsy_40 (K1), Mitti_92 (K4), Padfoot_39 (K1), Pharb_93 (K3), Piatt_39 (K1), Pixie_96 (K3), QuincyRose_38 (K1), Ruthiejr_94 (K4), Shadow1_42 (K6), ShedlockHolmes_97 (K3), ShiaSurprise_40 (K1), Slarp_90 (K4), Stinson_40 (K1), Sulley_39 (K1), Sunflower121_42 (K6), Syra333_43 (K6), TBond007_93 (K3), TaiwanKao_41 (K1), Tiri_40 (K1), Wintermute_92 (K4), Ximenita_44 (K6), Y10_88 (K4), Y2_88 (K4), Yunkel11_42 (K1),

Start 60:

- Found in 9 of 291 (3.1%) of genes in pham
- Manual Annotations of this start: 9 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelie_75 (K1), Biglebops_75 (K1), Enkosi_77 (K1), LilPharaoh_76 (K1), Mdavu_76 (K1), Nergal_78 (AG), Nikao_78

(K1), Nutello_75 (K1), SgtBeansprout_76 (K1),

Start 61:

- Found in 9 of 291 (3.1%) of genes in pham
- Manual Annotations of this start: 9 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BoostSeason_42 (K2), DismalFunk_41 (K2), DismalStressor_41 (K2), Findley_41 (K2), Marcoliusprime_41 (K2), Milly_41 (K2), Mufasa_42 (K2), Strobilo_41 (K2), ZoeJ_41 (K2),

Start 62:

- Found in 1 of 291 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion_55 (AZ4),

Start 65:

- Found in 2 of 291 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Zeta1847_49 (EH),

Start 68:

- Found in 8 of 291 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Cen1621_66 (EH), GardenState_69 (EH), IAmGroot_68 (EH),

Summary by clusters:

There are 24 clusters represented in this pham: K4, K3, K2, K1, EA1, K6, FG, FH, FM, EH, AG, EF, EA9, Y, EA2, EA5, EA4, EA7, EA6, Q, EA11, EA10, AZ2, AZ4,

Info for manual annotations of cluster AG:

- Start number 60 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AZ2:

- Start number 51 was manually annotated 2 times for cluster AZ2.

Info for manual annotations of cluster AZ4:

- Start number 62 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster EA1:

- Start number 22 was manually annotated 2 times for cluster EA1.
- Start number 31 was manually annotated 106 times for cluster EA1.
- Start number 39 was manually annotated 3 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 31 was manually annotated 1 time for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 28 was manually annotated 2 times for cluster EA11.

- Start number 31 was manually annotated 3 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 28 was manually annotated 5 times for cluster EA2.
- Start number 31 was manually annotated 6 times for cluster EA2.

Info for manual annotations of cluster EA4:

- Start number 22 was manually annotated 1 time for cluster EA4.
- Start number 31 was manually annotated 9 times for cluster EA4.

Info for manual annotations of cluster EA5:

- Start number 38 was manually annotated 1 time for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 31 was manually annotated 5 times for cluster EA6.

Info for manual annotations of cluster EA7:

- Start number 41 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA9:

- Start number 31 was manually annotated 3 times for cluster EA9.

Info for manual annotations of cluster EF:

- Start number 34 was manually annotated 4 times for cluster EF.

Info for manual annotations of cluster EH:

- Start number 65 was manually annotated 1 time for cluster EH.
- Start number 68 was manually annotated 3 times for cluster EH.

Info for manual annotations of cluster FG:

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

Info for manual annotations of cluster FH:

- Start number 56 was manually annotated 3 times for cluster FH.

Info for manual annotations of cluster FM:

- Start number 56 was manually annotated 2 times for cluster FM.

Info for manual annotations of cluster K1:

- Start number 59 was manually annotated 27 times for cluster K1.
- Start number 60 was manually annotated 8 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 61 was manually annotated 9 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 59 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 36 was manually annotated 7 times for cluster K4.
- Start number 59 was manually annotated 12 times for cluster K4.

Info for manual annotations of cluster K6:

- Start number 59 was manually annotated 11 times for cluster K6.

Info for manual annotations of cluster Q:

- Start number 48 was manually annotated 3 times for cluster Q.
- Start number 55 was manually annotated 19 times for cluster Q.

Info for manual annotations of cluster Y:

- Start number 42 was manually annotated 1 time for cluster Y.
- Start number 54 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: Acosta_32 Start: 22079, Stop: 21225, Start Num: 31

Candidate Starts for Acosta_32:

(Start: 31 @22079 has 133 MA's), (100, 21731), (114, 21623), (122, 21572), (126, 21548), (134, 21494), (136, 21488),

Gene: Adonis_39 Start: 31362, Stop: 32051, Start Num: 59

Candidate Starts for Adonis_39:

(Start: 59 @31362 has 57 MA's), (63, 31377), (66, 31392), (80, 31494), (85, 31515), (124, 31752), (134, 31815), (144, 31875), (151, 31914), (157, 31959), (159, 31965), (168, 32007),

Gene: Agente005_31 Start: 22035, Stop: 21148, Start Num: 31

Candidate Starts for Agente005_31:

(Start: 31 @22035 has 133 MA's), (101, 21705), (106, 21678), (114, 21618), (122, 21564), (134, 21486), (139, 21465), (163, 21279),

Gene: Ajin_41 Start: 25676, Stop: 26536, Start Num: 34

Candidate Starts for Ajin_41:

(Start: 34 @25676 has 4 MA's), (98, 26015), (114, 26102), (122, 26150), (144, 26303), (146, 26309), (165, 26423), (167, 26441),

Gene: AlexAdler_31 Start: 21787, Stop: 20945, Start Num: 31

Candidate Starts for AlexAdler_31:

(Start: 31 @21787 has 133 MA's), (67, 21673), (70, 21643), (100, 21454), (114, 21346), (122, 21295), (126, 21271), (134, 21217), (153, 21094),

Gene: AlishaPH_39 Start: 31339, Stop: 32028, Start Num: 59

Candidate Starts for AlishaPH_39:

(43, 31270), (44, 31273), (50, 31303), (Start: 59 @31339 has 57 MA's), (63, 31354), (66, 31369), (76, 31438), (80, 31471), (85, 31492), (124, 31729), (134, 31792), (144, 31852), (151, 31891), (157, 31936), (159, 31942), (168, 31984),

Gene: Alyxandracam_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Alyxandracam_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Amelie_75 Start: 54769, Stop: 55470, Start Num: 60

Candidate Starts for Amelie_75:

(Start: 60 @54769 has 9 MA's), (75, 54856), (85, 54919), (97, 54985), (100, 54994), (134, 55219), (142, 55270), (145, 55282), (148, 55306), (157, 55363), (175, 55438),

Gene: Amgine_94 Start: 60238, Stop: 60927, Start Num: 59

Candidate Starts for Amgine_94:

(Start: 59 @60238 has 57 MA's), (66, 60268), (80, 60370), (85, 60391), (124, 60628), (134, 60691), (144, 60751), (148, 60778), (151, 60790), (157, 60835), (159, 60841), (168, 60883),

Gene: Amochick_44 Start: 34132, Stop: 33431, Start Num: 55

Candidate Starts for Amochick_44:

(Start: 48 @34162 has 3 MA's), (Start: 55 @34132 has 19 MA's), (73, 34048), (124, 33730), (146, 33601), (148, 33580), (149, 33577),

Gene: Amohnition_92 Start: 59731, Stop: 60438, Start Num: 59

Candidate Starts for Amohnition_92:

(Start: 59 @59731 has 57 MA's), (85, 59884), (91, 59923), (104, 59986), (105, 59989), (134, 60184), (145, 60247), (148, 60271), (152, 60295), (157, 60328), (159, 60334), (168, 60376),

Gene: Amymech_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Amymech_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Andromedas_30 Start: 21852, Stop: 20983, Start Num: 28

Candidate Starts for Andromedas_30:

(Start: 28 @21852 has 7 MA's), (Start: 31 @21834 has 133 MA's), (87, 21549), (95, 21495), (114, 21396), (122, 21348), (123, 21345), (125, 21327), (134, 21264), (136, 21258), (142, 21210), (149, 21168), (164, 21093), (179, 21030),

Gene: Angelica_39 Start: 31296, Stop: 31985, Start Num: 59

Candidate Starts for Angelica_39:

(Start: 59 @31296 has 57 MA's), (63, 31311), (66, 31326), (76, 31395), (80, 31428), (85, 31449), (124, 31686), (134, 31749), (144, 31809), (151, 31848), (157, 31893), (159, 31899), (168, 31941),

Gene: Antoinette_31 Start: 21784, Stop: 20942, Start Num: 31

Candidate Starts for Antoinette_31:

(Start: 31 @21784 has 133 MA's), (67, 21670), (70, 21640), (100, 21451), (114, 21343), (122, 21292), (126, 21268), (134, 21214), (153, 21091),

Gene: AranulaLuti_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for AranulaLuti_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Asayake_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for Asayake_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Asta_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for Asta_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: Aubergine_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for Aubergine_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: AxiPup_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for AxiPup_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: BEEST_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for BEEST_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: BaghaKamala_38 Start: 30505, Stop: 31194, Start Num: 59

Candidate Starts for BaghaKamala_38:

(Start: 59 @30505 has 57 MA's), (63, 30520), (66, 30535), (80, 30637), (85, 30658), (124, 30895), (134, 30958), (144, 31018), (151, 31057), (157, 31102), (159, 31108), (168, 31150),

Gene: Baines_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Baines_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Balsa_30 Start: 21873, Stop: 20986, Start Num: 31

Candidate Starts for Balsa_30:

(Start: 31 @21873 has 133 MA's), (70, 21729), (106, 21516), (114, 21456), (119, 21435), (122, 21402), (134, 21324), (139, 21303),

Gene: Bandik_31 Start: 21792, Stop: 20950, Start Num: 31

Candidate Starts for Bandik_31:

(Start: 31 @21792 has 133 MA's), (67, 21678), (70, 21648), (100, 21459), (114, 21351), (122, 21300), (126, 21276), (134, 21222), (153, 21099),

Gene: BeautPeep30_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for BeautPeep30_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: BeeBee8_31 Start: 22040, Stop: 21153, Start Num: 31

Candidate Starts for BeeBee8_31:

(Start: 31 @22040 has 133 MA's), (70, 21896), (106, 21683), (114, 21623), (119, 21602), (122, 21569), (134, 21491), (139, 21470),

Gene: Benjalauren_31 Start: 21608, Stop: 20766, Start Num: 31

Candidate Starts for Benjalauren_31:

(Start: 31 @21608 has 133 MA's), (67, 21494), (70, 21464), (100, 21275), (114, 21167), (122, 21116), (126, 21092), (134, 21038), (153, 20915),

Gene: BigRedClifford_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for BigRedClifford_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Biglebops_75 Start: 54784, Stop: 55485, Start Num: 60

Candidate Starts for Biglebops_75:

(Start: 60 @54784 has 9 MA's), (75, 54871), (85, 54934), (97, 55000), (100, 55009), (134, 55234), (142, 55285), (145, 55297), (148, 55321), (157, 55378), (175, 55453),

Gene: Bipper_111 Start: 66961, Stop: 67743, Start Num: 54

Candidate Starts for Bipper_111:

(Start: 54 @66961 has 3 MA's), (57, 66970), (75, 67069), (77, 67075), (127, 67363), (128, 67366), (132, 67402), (133, 67408), (138, 67432), (144, 67471), (145, 67474), (148, 67498), (150, 67507), (155, 67537), (158, 67558), (180, 67690),

Gene: Blage_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Blage_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Blizzard_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for Blizzard_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Boiiii_39 Start: 31382, Stop: 32071, Start Num: 59

Candidate Starts for Boiiii_39:

(43, 31313), (44, 31316), (50, 31346), (Start: 59 @31382 has 57 MA's), (63, 31397), (66, 31412), (76, 31481), (80, 31514), (85, 31535), (124, 31772), (134, 31835), (144, 31895), (151, 31934), (157, 31979), (159, 31985), (168, 32027), (172, 32039),

Gene: Bolt007_78 Start: 49680, Stop: 48901, Start Num: 56

Candidate Starts for Bolt007_78:

(37, 49755), (Start: 56 @49680 has 5 MA's), (82, 49521), (104, 49398), (110, 49347), (144, 49119), (171, 48990),

Gene: BonesMcCoy_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for BonesMcCoy_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Bonino_30 Start: 21587, Stop: 20745, Start Num: 31

Candidate Starts for Bonino_30:

(Start: 31 @21587 has 133 MA's), (67, 21473), (70, 21443), (100, 21254), (114, 21146), (122, 21095), (126, 21071), (134, 21017), (136, 21011), (153, 20894),

Gene: BoostSeason_42 Start: 32103, Stop: 32801, Start Num: 61

Candidate Starts for BoostSeason_42:

(47, 32055), (49, 32064), (Start: 61 @32103 has 9 MA's), (75, 32187), (79, 32208), (80, 32229), (85, 32250), (97, 32316), (124, 32487), (133, 32544), (134, 32550), (144, 32610), (148, 32637), (151,

32649), (157, 32694), (159, 32700), (168, 32742),

Gene: BouleyBill_30 Start: 21683, Stop: 20790, Start Num: 31

Candidate Starts for BouleyBill_30:

(Start: 22 @21719 has 3 MA's), (Start: 28 @21701 has 7 MA's), (Start: 31 @21683 has 133 MA's), (103, 21317), (112, 21266), (116, 21248), (134, 21131), (142, 21077), (160, 20957),

Gene: Bustleton_29 Start: 21683, Stop: 20790, Start Num: 31

Candidate Starts for Bustleton_29:

(Start: 22 @21719 has 3 MA's), (Start: 28 @21701 has 7 MA's), (Start: 31 @21683 has 133 MA's), (90, 21377), (103, 21317), (112, 21266), (116, 21248), (134, 21131), (136, 21125), (142, 21077), (150, 21029),

Gene: Byron23_31 Start: 21801, Stop: 20959, Start Num: 31

Candidate Starts for Byron23_31:

(Start: 31 @21801 has 133 MA's), (67, 21687), (70, 21657), (100, 21468), (114, 21360), (122, 21309), (126, 21285), (134, 21231), (136, 21225), (153, 21108),

Gene: CalWood4100_80 Start: 49859, Stop: 49071, Start Num: 56

Candidate Starts for CalWood4100_80:

(30, 49967), (44, 49910), (45, 49907), (Start: 56 @49859 has 5 MA's), (82, 49700), (104, 49577), (110, 49526), (144, 49295), (173, 49157),

Gene: Calix_30 Start: 21591, Stop: 20749, Start Num: 31

Candidate Starts for Calix_30:

(Start: 31 @21591 has 133 MA's), (67, 21477), (70, 21447), (100, 21258), (114, 21150), (122, 21099), (126, 21075), (134, 21021), (136, 21015), (153, 20898),

Gene: CaseJules_40 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for CaseJules_40:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Cen1621_66 Start: 44317, Stop: 45051, Start Num: 68

Candidate Starts for Cen1621_66:

(8, 43984), (19, 44113), (32, 44161), (58, 44272), (Start: 65 @44302 has 1 MA's), (Start: 68 @44317 has 3 MA's), (84, 44425), (133, 44752), (168, 44953),

Gene: Chako_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Chako_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Chamuel_30 Start: 21593, Stop: 20751, Start Num: 31

Candidate Starts for Chamuel_30:

(Start: 31 @21593 has 133 MA's), (67, 21479), (70, 21449), (100, 21260), (114, 21152), (122, 21101), (126, 21077), (134, 21023), (136, 21017), (153, 20900),

Gene: Chancellor_92 Start: 55691, Stop: 56398, Start Num: 59

Candidate Starts for Chancellor_92:

(Start: 36 @55601 has 7 MA's), (Start: 59 @55691 has 57 MA's), (78, 55796), (96, 55907), (97, 55910), (108, 55982), (130, 56117), (133, 56138), (142, 56195), (161, 56306),

Gene: Cheeto1_32 Start: 22256, Stop: 21414, Start Num: 31

Candidate Starts for Cheeto1_32:

(Start: 28 @22274 has 7 MA's), (Start: 31 @22256 has 133 MA's), (90, 21947), (96, 21914), (114, 21818), (122, 21770), (123, 21767),

Gene: CheetoDust_38 Start: 30553, Stop: 31242, Start Num: 59

Candidate Starts for CheetoDust_38:

(Start: 59 @30553 has 57 MA's), (63, 30568), (66, 30583), (80, 30685), (85, 30706), (124, 30943), (134, 31006), (144, 31066), (151, 31105), (157, 31150), (159, 31156), (168, 31198),

Gene: Cheetobro_90 Start: 55247, Stop: 55954, Start Num: 59

Candidate Starts for Cheetobro_90:

(2, 54764), (3, 54827), (4, 54905), (25, 55103), (Start: 59 @55247 has 57 MA's), (78, 55352), (96, 55463), (97, 55466), (108, 55538), (130, 55673), (133, 55694), (142, 55751), (161, 55862),

Gene: Chepli_32 Start: 21461, Stop: 20565, Start Num: 31

Candidate Starts for Chepli_32:

(27, 21482), (Start: 28 @21479 has 7 MA's), (Start: 31 @21461 has 133 MA's), (95, 21125), (102, 21104), (125, 20954), (141, 20855),

Gene: ChickenKing_31 Start: 22169, Stop: 21327, Start Num: 31

Candidate Starts for ChickenKing_31:

(Start: 28 @22187 has 7 MA's), (Start: 31 @22169 has 133 MA's), (90, 21860), (96, 21827), (114, 21731), (122, 21683),

Gene: ChikPic_30 Start: 21850, Stop: 20999, Start Num: 31

Candidate Starts for ChikPic_30:

(Start: 28 @21868 has 7 MA's), (Start: 31 @21850 has 133 MA's), (87, 21565), (95, 21511), (114, 21412), (122, 21364), (125, 21343), (134, 21280), (136, 21274), (142, 21226), (149, 21184), (179, 21046),

Gene: Christoph_30 Start: 21609, Stop: 20767, Start Num: 31

Candidate Starts for Christoph_30:

(Start: 31 @21609 has 133 MA's), (67, 21495), (70, 21465), (100, 21276), (114, 21168), (122, 21117), (126, 21093), (134, 21039), (136, 21033), (153, 20916),

Gene: Clancy_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Clancy_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Clock_29 Start: 22374, Stop: 21424, Start Num: 28

Candidate Starts for Clock_29:

(15, 22461), (17, 22434), (20, 22398), (25, 22380), (Start: 28 @22374 has 7 MA's), (Start: 38 @22323 has 1 MA's), (Start: 41 @22317 has 1 MA's), (95, 22005), (114, 21903), (134, 21771), (136, 21765), (141, 21735),

Gene: ColaCorta_30 Start: 21852, Stop: 20983, Start Num: 28

Candidate Starts for ColaCorta_30:

(Start: 28 @21852 has 7 MA's), (Start: 31 @21834 has 133 MA's), (87, 21549), (95, 21495), (114, 21396), (122, 21348), (123, 21345), (125, 21327), (134, 21264), (136, 21258), (142, 21210), (149, 21168), (164, 21093), (179, 21030),

Gene: Convict_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Convict_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Cracklewink_111 Start: 66196, Stop: 66897, Start Num: 54

Candidate Starts for Cracklewink_111:

(Start: 54 @66196 has 3 MA's), (57, 66205), (75, 66304), (77, 66310), (127, 66598), (128, 66601), (132, 66637), (133, 66643), (134, 66649), (138, 66667), (144, 66706), (145, 66709), (148, 66733), (150, 66742), (155, 66772), (158, 66793),

Gene: CrimD_39 Start: 31313, Stop: 31999, Start Num: 59

Candidate Starts for CrimD_39:

(Start: 59 @31313 has 57 MA's), (66, 31343), (85, 31466), (111, 31628), (124, 31703), (133, 31760), (134, 31766), (144, 31826), (151, 31865), (157, 31910), (168, 31958),

Gene: Daegal_46 Start: 34740, Stop: 34009, Start Num: 48

Candidate Starts for Daegal_46:

(Start: 48 @34740 has 3 MA's), (Start: 55 @34710 has 19 MA's), (73, 34626), (104, 34443), (124, 34308), (146, 34179), (148, 34158), (149, 34155),

Gene: DARTH_P_92 Start: 59564, Stop: 60271, Start Num: 59

Candidate Starts for DARTH_P_92:

(Start: 59 @59564 has 57 MA's), (85, 59717), (91, 59756), (104, 59819), (105, 59822), (134, 60017), (145, 60080), (148, 60104), (152, 60128), (157, 60161), (159, 60167), (168, 60209),

Gene: Dave_31 Start: 21784, Stop: 20942, Start Num: 31

Candidate Starts for Dave_31:

(Start: 31 @21784 has 133 MA's), (67, 21670), (70, 21640), (100, 21451), (114, 21343), (122, 21292), (126, 21268), (134, 21214), (153, 21091),

Gene: Deby_39 Start: 31314, Stop: 32003, Start Num: 59

Candidate Starts for Deby_39:

(Start: 59 @31314 has 57 MA's), (63, 31329), (66, 31344), (76, 31413), (80, 31446), (85, 31467), (124, 31704), (134, 31767), (144, 31827), (151, 31866), (157, 31911), (159, 31917), (168, 31959),

Gene: DeepSoil15_44 Start: 34156, Stop: 33425, Start Num: 48

Candidate Starts for DeepSoil15_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Delphidian_32 Start: 21795, Stop: 20953, Start Num: 31

Candidate Starts for Delphidian_32:

(Start: 31 @21795 has 133 MA's), (67, 21681), (70, 21651), (100, 21462), (114, 21354), (122, 21303), (126, 21279), (134, 21225), (153, 21102),

Gene: Den3_31 Start: 21800, Stop: 20958, Start Num: 31

Candidate Starts for Den3_31:

(Start: 31 @21800 has 133 MA's), (67, 21686), (70, 21656), (100, 21467), (114, 21359), (122, 21308), (126, 21284), (134, 21230), (153, 21107),

Gene: Dewey_42 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Dewey_42:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: DismalFunk_41 Start: 32195, Stop: 32893, Start Num: 61

Candidate Starts for DismalFunk_41:

(Start: 41 @32114 has 1 MA's), (47, 32147), (49, 32156), (Start: 61 @32195 has 9 MA's), (75, 32279), (79, 32300), (80, 32321), (85, 32342), (97, 32408), (100, 32417), (124, 32579), (133, 32636), (134, 32642), (144, 32702), (148, 32729), (151, 32741), (157, 32786), (159, 32792), (168, 32834),

Gene: DismalStressor_41 Start: 32195, Stop: 32893, Start Num: 61

Candidate Starts for DismalStressor_41:

(Start: 41 @32114 has 1 MA's), (47, 32147), (49, 32156), (Start: 61 @32195 has 9 MA's), (75, 32279), (79, 32300), (80, 32321), (85, 32342), (97, 32408), (100, 32417), (124, 32579), (133, 32636), (134, 32642), (144, 32702), (148, 32729), (151, 32741), (157, 32786), (159, 32792), (168, 32834),

Gene: Dothraki_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Dothraki_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Duocatuli_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Duocatuli_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Durfee_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for Durfee_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Efra2_42 Start: 31156, Stop: 31845, Start Num: 59

Candidate Starts for Efra2_42:

(Start: 59 @31156 has 57 MA's), (63, 31171), (66, 31186), (80, 31288), (85, 31309), (124, 31546), (133, 31603), (134, 31609), (151, 31708), (157, 31753), (159, 31759), (168, 31801),

Gene: Ein37_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Ein37_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Eleri_30 Start: 21865, Stop: 20996, Start Num: 28

Candidate Starts for Eleri_30:

(Start: 28 @21865 has 7 MA's), (Start: 31 @21847 has 133 MA's), (87, 21562), (95, 21508), (114, 21409), (122, 21361), (123, 21358), (125, 21340), (134, 21277), (136, 21271), (142, 21223), (149, 21181), (164, 21106), (179, 21043),

Gene: Ellie_93 Start: 59948, Stop: 60637, Start Num: 59

Candidate Starts for Ellie_93:

(Start: 59 @59948 has 57 MA's), (66, 59978), (80, 60080), (85, 60101), (124, 60338), (134, 60401), (148, 60488), (152, 60512), (157, 60545), (159, 60551), (168, 60593),

Gene: Emotion_55 Start: 37527, Stop: 38288, Start Num: 62
Candidate Starts for Emotion_55:
(Start: 62 @37527 has 1 MA's), (116, 37878), (150, 38100), (154, 38127), (171, 38211),

Gene: Endor_31 Start: 22097, Stop: 21195, Start Num: 31
Candidate Starts for Endor_31:
(Start: 31 @22097 has 133 MA's), (100, 21764), (114, 21656), (122, 21605), (126, 21581), (134, 21527), (139, 21506), (162, 21329),

Gene: Enkosi_77 Start: 57382, Stop: 58083, Start Num: 60
Candidate Starts for Enkosi_77:
(Start: 60 @57382 has 9 MA's), (75, 57469), (85, 57532), (97, 57598), (100, 57607), (134, 57832), (142, 57883), (145, 57895), (148, 57919), (157, 57976), (175, 58051),

Gene: Eponine_94 Start: 56581, Stop: 57378, Start Num: 36
Candidate Starts for Eponine_94:
(Start: 36 @56581 has 7 MA's), (Start: 59 @56671 has 57 MA's), (78, 56776), (97, 56890), (108, 56962), (130, 57097), (133, 57118), (142, 57175), (161, 57286),

Gene: Erla_30 Start: 21591, Stop: 20749, Start Num: 31
Candidate Starts for Erla_30:
(Start: 31 @21591 has 133 MA's), (67, 21477), (70, 21447), (100, 21258), (114, 21150), (122, 21099), (126, 21075), (134, 21021), (136, 21015), (153, 20898),

Gene: Espinosa_30 Start: 21609, Stop: 20767, Start Num: 31
Candidate Starts for Espinosa_30:
(Start: 31 @21609 has 133 MA's), (67, 21495), (70, 21465), (100, 21276), (114, 21168), (122, 21117), (126, 21093), (134, 21039), (136, 21033), (153, 20916),

Gene: Etna_30 Start: 21878, Stop: 20988, Start Num: 39
Candidate Starts for Etna_30:
(Start: 39 @21878 has 3 MA's), (94, 21563), (134, 21329), (139, 21308),

Gene: Etta_30 Start: 21595, Stop: 20753, Start Num: 31
Candidate Starts for Etta_30:
(Start: 31 @21595 has 133 MA's), (67, 21481), (70, 21451), (100, 21262), (114, 21154), (122, 21103), (126, 21079), (134, 21025), (136, 21019), (153, 20902),

Gene: Evanesce_43 Start: 34126, Stop: 33425, Start Num: 55
Candidate Starts for Evanesce_43:
(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: FarmerDoug_30 Start: 21737, Stop: 20847, Start Num: 39
Candidate Starts for FarmerDoug_30:
(Start: 39 @21737 has 3 MA's), (94, 21422), (134, 21188), (139, 21167),

Gene: Fefferhead_95 Start: 59369, Stop: 60058, Start Num: 59
Candidate Starts for Fefferhead_95:
(Start: 59 @59369 has 57 MA's), (66, 59399), (80, 59501), (85, 59522), (124, 59759), (134, 59822), (148, 59909), (152, 59933), (157, 59966), (159, 59972), (168, 60014),

Gene: Figueroism_31 Start: 21783, Stop: 20941, Start Num: 31

Candidate Starts for Figueroism_31:

(Start: 31 @21783 has 133 MA's), (67, 21669), (70, 21639), (100, 21450), (114, 21342), (122, 21291), (126, 21267), (134, 21213), (136, 21207), (153, 21090),

Gene: Findley_41 Start: 32188, Stop: 32886, Start Num: 61

Candidate Starts for Findley_41:

(Start: 41 @32107 has 1 MA's), (47, 32140), (49, 32149), (Start: 61 @32188 has 9 MA's), (75, 32272), (79, 32293), (80, 32314), (85, 32335), (97, 32401), (100, 32410), (124, 32572), (133, 32629), (134, 32635), (144, 32695), (148, 32722), (151, 32734), (157, 32779), (159, 32785), (168, 32827),

Gene: Finny_30 Start: 21887, Stop: 20979, Start Num: 31

Candidate Starts for Finny_30:

(Start: 28 @21905 has 7 MA's), (Start: 31 @21887 has 133 MA's), (87, 21602), (95, 21548), (114, 21449), (122, 21401), (123, 21398), (125, 21380), (134, 21317), (136, 21311), (142, 21263), (149, 21221), (179, 21026),

Gene: Fionnbharth_92 Start: 56069, Stop: 56776, Start Num: 59

Candidate Starts for Fionnbharth_92:

(Start: 36 @55979 has 7 MA's), (Start: 59 @56069 has 57 MA's), (78, 56174), (97, 56288), (108, 56360), (130, 56495), (133, 56516), (142, 56573), (161, 56684),

Gene: Forge_42 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Forge_42:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: GaeCeo_32 Start: 22405, Stop: 21563, Start Num: 31

Candidate Starts for GaeCeo_32:

(Start: 28 @22423 has 7 MA's), (Start: 31 @22405 has 133 MA's), (90, 22096), (96, 22063), (114, 21967), (122, 21919),

Gene: Gancho_43 Start: 33879, Stop: 33148, Start Num: 48

Candidate Starts for Gancho_43:

(Start: 48 @33879 has 3 MA's), (Start: 55 @33849 has 19 MA's), (73, 33765), (104, 33582), (124, 33447), (146, 33318), (148, 33297), (149, 33294),

Gene: Ganymede_40 Start: 31369, Stop: 32058, Start Num: 59

Candidate Starts for Ganymede_40:

(Start: 59 @31369 has 57 MA's), (63, 31384), (66, 31399), (76, 31468), (80, 31501), (85, 31522), (124, 31759), (134, 31822), (144, 31882), (151, 31921), (157, 31966), (159, 31972), (168, 32014),

Gene: GardenB_30 Start: 21876, Stop: 20989, Start Num: 31

Candidate Starts for GardenB_30:

(Start: 31 @21876 has 133 MA's), (106, 21519), (114, 21459), (119, 21438), (122, 21405), (134, 21327), (139, 21306),

Gene: GardenState_69 Start: 42002, Stop: 42718, Start Num: 68

Candidate Starts for GardenState_69:

(Start: 68 @42002 has 3 MA's), (133, 42431),

Gene: Garey24_30 Start: 21574, Stop: 20732, Start Num: 31

Candidate Starts for Garey24_30:

(Start: 31 @21574 has 133 MA's), (67, 21460), (70, 21430), (100, 21241), (114, 21133), (122, 21082), (126, 21058), (134, 21004), (136, 20998), (153, 20881),

Gene: Gargoyle_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Gargoyle_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Gelo_30 Start: 21595, Stop: 20753, Start Num: 31

Candidate Starts for Gelo_30:

(Start: 31 @21595 has 133 MA's), (67, 21481), (70, 21451), (100, 21262), (114, 21154), (122, 21103), (126, 21079), (134, 21025), (136, 21019), (153, 20902),

Gene: Gershwin_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for Gershwin_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: Giles_42 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Giles_42:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Glamour_29 Start: 21853, Stop: 20984, Start Num: 28

Candidate Starts for Glamour_29:

(Start: 28 @21853 has 7 MA's), (Start: 31 @21835 has 133 MA's), (87, 21550), (95, 21496), (114, 21397), (122, 21349), (123, 21346), (125, 21328), (134, 21265), (136, 21259), (142, 21211), (149, 21169), (164, 21094), (179, 21031),

Gene: Golden_29 Start: 21794, Stop: 20895, Start Num: 31

Candidate Starts for Golden_29:

(Start: 28 @21812 has 7 MA's), (Start: 31 @21794 has 133 MA's), (99, 21449), (103, 21428), (114, 21368), (122, 21320), (134, 21236), (135, 21233), (150, 21134),

Gene: Gravaillia_43 Start: 34169, Stop: 33468, Start Num: 55

Candidate Starts for Gravaillia_43:

(Start: 55 @34169 has 19 MA's), (73, 34085), (92, 33956), (124, 33767), (143, 33653), (146, 33638), (148, 33617), (149, 33614),

Gene: Greys_31 Start: 21793, Stop: 20951, Start Num: 31

Candidate Starts for Greys_31:

(Start: 31 @21793 has 133 MA's), (67, 21679), (70, 21649), (100, 21460), (114, 21352), (122, 21301), (126, 21277), (134, 21223), (153, 21100),

Gene: Guanica15_42 Start: 31112, Stop: 31801, Start Num: 59

Candidate Starts for Guanica15_42:

(Start: 59 @31112 has 57 MA's), (63, 31127), (66, 31142), (80, 31244), (85, 31265), (124, 31502), (133, 31559), (134, 31565), (151, 31664), (157, 31709), (168, 31757),

Gene: Gubbabump_30 Start: 21600, Stop: 20758, Start Num: 31

Candidate Starts for Gubbabump_30:

(Start: 31 @21600 has 133 MA's), (67, 21486), (70, 21456), (100, 21267), (114, 21159), (122, 21108), (126, 21084), (134, 21030), (136, 21024), (153, 20907),

Gene: Guetzie_29 Start: 21782, Stop: 20883, Start Num: 31

Candidate Starts for Guetzie_29:

(Start: 28 @21800 has 7 MA's), (Start: 31 @21782 has 133 MA's), (99, 21437), (103, 21416), (114, 21356), (122, 21308), (134, 21224), (135, 21221), (150, 21122),

Gene: HH92_43 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for HH92_43:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Hadrien_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Hadrien_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Hail_42 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Hail_42:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Hamlet_30 Start: 21873, Stop: 20986, Start Num: 31

Candidate Starts for Hamlet_30:

(Start: 31 @21873 has 133 MA's), (70, 21729), (106, 21516), (114, 21456), (119, 21435), (122, 21402), (134, 21324), (139, 21303),

Gene: Hammy_92 Start: 59794, Stop: 60492, Start Num: 59

Candidate Starts for Hammy_92:

(Start: 59 @59794 has 57 MA's), (75, 59881), (97, 60010), (117, 60130), (134, 60244), (144, 60304), (148, 60331), (154, 60361), (157, 60388),

Gene: HanSolo_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for HanSolo_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: HankSprout_31 Start: 21478, Stop: 20636, Start Num: 31

Candidate Starts for HankSprout_31:

(Start: 31 @21478 has 133 MA's), (67, 21364), (70, 21334), (100, 21145), (114, 21037), (122, 20986), (126, 20962), (134, 20908), (136, 20902), (153, 20785),

Gene: HerculesXL_31 Start: 20731, Stop: 19856, Start Num: 28

Candidate Starts for HerculesXL_31:

(Start: 28 @20731 has 7 MA's), (Start: 31 @20713 has 133 MA's), (70, 20551), (74, 20527), (81, 20479), (89, 20419), (95, 20377), (100, 20362), (114, 20317), (122, 20266), (134, 20182), (136, 20176), (140, 20149), (149, 20086),

Gene: Hilltopfarm_104 Start: 63963, Stop: 64757, Start Num: 42

Candidate Starts for Hilltopfarm_104:

(24, 63891), (33, 63933), (Start: 38 @63951 has 1 MA's), (Start: 42 @63963 has 1 MA's), (Start: 54 @64017 has 3 MA's), (57, 64026), (Start: 68 @64077 has 3 MA's), (69, 64089), (75, 64125), (85, 64200), (88, 64221), (94, 64263), (104, 64308), (105, 64311), (115, 64383), (118, 64395), (124, 64443), (128, 64458), (133, 64500), (138, 64524), (145, 64566), (148, 64590), (150, 64599), (154,

64620), (155, 64629), (177, 64734), (178, 64737),

Gene: HungryHenry_30 Start: 21609, Stop: 20767, Start Num: 31

Candidate Starts for HungryHenry_30:

(Start: 31 @21609 has 133 MA's), (67, 21495), (70, 21465), (100, 21276), (114, 21168), (122, 21117), (126, 21093), (134, 21039), (153, 20916),

Gene: Hurricane_95 Start: 59141, Stop: 59839, Start Num: 59

Candidate Starts for Hurricane_95:

(Start: 59 @59141 has 57 MA's), (66, 59168), (86, 59297), (97, 59357), (124, 59528), (134, 59591), (144, 59651), (148, 59678), (151, 59690), (156, 59732), (159, 59741), (176, 59816),

Gene: Hyperbowlee_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for Hyperbowlee_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: IAmGroot_68 Start: 42211, Stop: 42927, Start Num: 68

Candidate Starts for IAmGroot_68:

(Start: 68 @42211 has 3 MA's), (133, 42640),

Gene: Ilzat_30 Start: 21608, Stop: 20766, Start Num: 31

Candidate Starts for Ilzat_30:

(Start: 31 @21608 has 133 MA's), (67, 21494), (70, 21464), (100, 21275), (114, 21167), (122, 21116), (126, 21092), (134, 21038), (153, 20915),

Gene: Inventa_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Inventa_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: loannes_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for loannes_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Ixel_31 Start: 20664, Stop: 19759, Start Num: 31

Candidate Starts for Ixel_31:

(Start: 28 @20682 has 7 MA's), (Start: 31 @20664 has 133 MA's), (67, 20547), (70, 20517), (95, 20343), (100, 20328), (114, 20220), (120, 20199), (122, 20169), (126, 20145), (134, 20085), (136, 20079), (149, 19989), (179, 19806),

Gene: JF1_92 Start: 55993, Stop: 56691, Start Num: 59

Candidate Starts for JF1_92:

(Start: 36 @55903 has 7 MA's), (Start: 59 @55993 has 57 MA's), (78, 56098), (108, 56284), (130, 56410), (133, 56431), (142, 56488), (161, 56599),

Gene: Janus167_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Janus167_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: JasonD_35 Start: 22235, Stop: 21387, Start Num: 31
Candidate Starts for JasonD_35:
(Start: 31 @22235 has 133 MA's), (100, 21902), (114, 21794), (122, 21743), (126, 21719), (129, 21707), (153, 21536), (179, 21434),

Gene: JasperRussell_30 Start: 21598, Stop: 20756, Start Num: 31
Candidate Starts for JasperRussell_30:
(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Jemerald_33 Start: 22738, Stop: 21842, Start Num: 31
Candidate Starts for Jemerald_33:
(Start: 31 @22738 has 133 MA's), (52, 22663), (70, 22576), (81, 22504), (95, 22402), (125, 22231),

Gene: Jenos_34 Start: 22908, Stop: 21967, Start Num: 22
Candidate Starts for Jenos_34:
(Start: 22 @22908 has 3 MA's), (Start: 31 @22872 has 133 MA's), (94, 22542), (134, 22308), (136, 22302), (144, 22242), (150, 22206), (163, 22104),

Gene: Jerbirus_31 Start: 21598, Stop: 20756, Start Num: 31
Candidate Starts for Jerbirus_31:
(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: JeriBeth_31 Start: 21455, Stop: 20613, Start Num: 31
Candidate Starts for JeriBeth_31:
(Start: 31 @21455 has 133 MA's), (67, 21341), (70, 21311), (100, 21122), (114, 21014), (122, 20963), (126, 20939), (134, 20885), (153, 20762),

Gene: Juicer_33 Start: 22738, Stop: 21842, Start Num: 31
Candidate Starts for Juicer_33:
(Start: 31 @22738 has 133 MA's), (52, 22663), (70, 22576), (81, 22504), (95, 22402), (125, 22231),

Gene: Juliette_94 Start: 56074, Stop: 56772, Start Num: 59
Candidate Starts for Juliette_94:
(Start: 59 @56074 has 57 MA's), (78, 56179), (108, 56365), (130, 56491), (133, 56512), (142, 56569), (161, 56680),

Gene: Kale_30 Start: 21613, Stop: 20771, Start Num: 31
Candidate Starts for Kale_30:
(Start: 31 @21613 has 133 MA's), (67, 21499), (70, 21469), (100, 21280), (114, 21172), (122, 21121), (126, 21097), (134, 21043), (136, 21037), (153, 20920),

Gene: KannH_30 Start: 21598, Stop: 20756, Start Num: 31
Candidate Starts for KannH_30:
(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: KatChan_32 Start: 21467, Stop: 20571, Start Num: 31
Candidate Starts for KatChan_32:
(27, 21488), (Start: 28 @21485 has 7 MA's), (Start: 31 @21467 has 133 MA's), (95, 21131), (102, 21110), (125, 20960), (141, 20861),

Gene: Kauala_29 Start: 21686, Stop: 20793, Start Num: 31

Candidate Starts for Kauala_29:

(Start: 28 @21704 has 7 MA's), (Start: 31 @21686 has 133 MA's), (64, 21566), (99, 21341), (103, 21320), (114, 21260), (122, 21212), (134, 21134), (149, 21038),

Gene: Keshu_98 Start: 59072, Stop: 59770, Start Num: 59

Candidate Starts for Keshu_98:

(Start: 59 @59072 has 57 MA's), (66, 59099), (83, 59213), (86, 59228), (111, 59384), (124, 59459), (142, 59573), (148, 59609), (151, 59621), (156, 59663), (159, 59672),

Gene: Kharcho_27 Start: 10163, Stop: 10948, Start Num: 56

Candidate Starts for Kharcho_27:

(Start: 56 @10163 has 5 MA's), (71, 10238), (104, 10445), (110, 10496), (113, 10517), (144, 10727),

Gene: Kinbote_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Kinbote_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: KingJulien_30 Start: 21869, Stop: 20982, Start Num: 31

Candidate Starts for KingJulien_30:

(Start: 31 @21869 has 133 MA's), (106, 21512), (114, 21452), (119, 21431), (122, 21398), (134, 21320), (139, 21299),

Gene: Klevey_81 Start: 49956, Stop: 49168, Start Num: 56

Candidate Starts for Klevey_81:

(30, 50064), (44, 50007), (45, 50004), (Start: 56 @49956 has 5 MA's), (82, 49797), (104, 49674), (110, 49623), (144, 49392),

Gene: Klimt_30 Start: 21593, Stop: 20751, Start Num: 31

Candidate Starts for Klimt_30:

(Start: 31 @21593 has 133 MA's), (67, 21479), (70, 21449), (100, 21260), (114, 21152), (122, 21101), (126, 21077), (134, 21023), (136, 21017), (153, 20900),

Gene: Knox_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Knox_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Koji_29 Start: 21812, Stop: 20919, Start Num: 31

Candidate Starts for Koji_29:

(5, 21998), (11, 21953), (13, 21938), (Start: 28 @21830 has 7 MA's), (Start: 31 @21812 has 133 MA's), (70, 21650), (97, 21470), (103, 21446), (112, 21395), (116, 21377), (134, 21260), (136, 21254), (142, 21206),

Gene: Kors_42 Start: 25717, Stop: 26583, Start Num: 34

Candidate Starts for Kors_42:

(6, 25516), (18, 25624), (26, 25675), (Start: 34 @25717 has 4 MA's), (46, 25768), (96, 26056), (98, 26062), (114, 26149), (122, 26197), (144, 26350), (146, 26356), (165, 26470), (167, 26488),

Gene: Krueger_43 Start: 31392, Stop: 32093, Start Num: 59

Candidate Starts for Krueger_43:

(Start: 59 @31392 has 57 MA's), (66, 31422), (80, 31524), (85, 31545), (111, 31707), (134, 31845), (144, 31905), (148, 31932), (151, 31944), (157, 31989), (168, 32037),

Gene: Kurt1_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Kurt1_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: LastHope_40 Start: 30142, Stop: 30828, Start Num: 59

Candidate Starts for LastHope_40:

(Start: 59 @30142 has 57 MA's), (66, 30169), (80, 30271), (85, 30292), (111, 30454), (124, 30529), (133, 30586), (134, 30592), (144, 30652), (157, 30736), (159, 30742), (168, 30784),

Gene: Leafus_30 Start: 22011, Stop: 21124, Start Num: 39

Candidate Starts for Leafus_30:

(Start: 39 @22011 has 3 MA's), (94, 21696), (136, 21459), (163, 21261),

Gene: Liebe_23 Start: 19676, Stop: 20467, Start Num: 51

Candidate Starts for Liebe_23:

(Start: 51 @19676 has 2 MA's), (53, 19685), (Start: 68 @19748 has 3 MA's), (84, 19850), (93, 19925), (147, 20258), (154, 20297),

Gene: LilHazelnut_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for LilHazelnut_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: LilPharaoh_76 Start: 54497, Stop: 55198, Start Num: 60

Candidate Starts for LilPharaoh_76:

(Start: 60 @54497 has 9 MA's), (75, 54584), (85, 54647), (97, 54713), (100, 54722), (134, 54947), (142, 54998), (145, 55010), (148, 55034), (157, 55091), (175, 55166),

Gene: Lilmac1015_80 Start: 49859, Stop: 49071, Start Num: 56

Candidate Starts for Lilmac1015_80:

(30, 49967), (44, 49910), (45, 49907), (Start: 56 @49859 has 5 MA's), (82, 49700), (104, 49577), (110, 49526), (144, 49295), (173, 49157),

Gene: Lovelyunicorn_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Lovelyunicorn_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Lucky3_29 Start: 21794, Stop: 20895, Start Num: 31

Candidate Starts for Lucky3_29:

(Start: 28 @21812 has 7 MA's), (Start: 31 @21794 has 133 MA's), (99, 21449), (103, 21428), (114, 21368), (122, 21320), (134, 21236), (135, 21233), (150, 21134),

Gene: Ludgate_31 Start: 21792, Stop: 20950, Start Num: 31

Candidate Starts for Ludgate_31:

(Start: 31 @21792 has 133 MA's), (67, 21678), (70, 21648), (100, 21459), (114, 21351), (122, 21300), (126, 21276), (134, 21222), (153, 21099),

Gene: Luke_44 Start: 34081, Stop: 33380, Start Num: 55

Candidate Starts for Luke_44:

(Start: 48 @34111 has 3 MA's), (Start: 55 @34081 has 19 MA's), (73, 33997), (124, 33679), (146, 33550), (148, 33529), (149, 33526),

Gene: Luna18_32 Start: 21467, Stop: 20571, Start Num: 31

Candidate Starts for Luna18_32:

(27, 21488), (Start: 28 @21485 has 7 MA's), (Start: 31 @21467 has 133 MA's), (95, 21131), (102, 21110), (125, 20960), (141, 20861),

Gene: Luna22_42 Start: 34110, Stop: 33463, Start Num: 55

Candidate Starts for Luna22_42:

(Start: 48 @34140 has 3 MA's), (Start: 55 @34110 has 19 MA's), (73, 34026), (124, 33708), (146, 33579), (148, 33558), (149, 33555),

Gene: MCubed_30 Start: 21857, Stop: 21006, Start Num: 31

Candidate Starts for MCubed_30:

(Start: 28 @21875 has 7 MA's), (Start: 31 @21857 has 133 MA's), (87, 21572), (95, 21518), (114, 21419), (122, 21371), (125, 21350), (134, 21287), (136, 21281), (142, 21233), (149, 21191), (179, 21053),

Gene: MacnCheese_96 Start: 59356, Stop: 60054, Start Num: 59

Candidate Starts for MacnCheese_96:

(Start: 59 @59356 has 57 MA's), (66, 59383), (73, 59425), (85, 59506), (124, 59743), (128, 59758), (134, 59806), (145, 59869), (148, 59893), (168, 59998), (176, 60031),

Gene: MaeLinda_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for MaeLinda_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105), (174, 21024),

Gene: Malthus_93 Start: 55794, Stop: 56501, Start Num: 59

Candidate Starts for Malthus_93:

(1, 55239), (9, 55506), (10, 55530), (14, 55563), (16, 55581), (21, 55638), (Start: 36 @55704 has 7 MA's), (Start: 59 @55794 has 57 MA's), (78, 55899), (108, 56085), (130, 56220), (133, 56241), (142, 56298), (161, 56409),

Gene: ManRay_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for ManRay_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: Marcoliusprime_41 Start: 32195, Stop: 32893, Start Num: 61

Candidate Starts for Marcoliusprime_41:

(Start: 41 @32114 has 1 MA's), (47, 32147), (49, 32156), (Start: 61 @32195 has 9 MA's), (75, 32279), (79, 32300), (80, 32321), (85, 32342), (97, 32408), (100, 32417), (124, 32579), (133, 32636), (134, 32642), (144, 32702), (148, 32729), (151, 32741), (157, 32786), (159, 32792), (168, 32834),

Gene: Martin_32 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Martin_32:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Maureen_23 Start: 19676, Stop: 20467, Start Num: 51

Candidate Starts for Maureen_23:

(Start: 51 @19676 has 2 MA's), (53, 19685), (Start: 68 @19748 has 3 MA's), (84, 19850), (93, 19925), (147, 20258), (154, 20297),

Gene: McGalleon_33 Start: 23130, Stop: 22183, Start Num: 22

Candidate Starts for McGalleon_33:

(Start: 22 @23130 has 3 MA's), (Start: 31 @23094 has 133 MA's), (98, 22749), (109, 22686), (134, 22524), (136, 22518), (144, 22458), (150, 22422), (163, 22320),

Gene: Mdavu_76 Start: 54773, Stop: 55474, Start Num: 60

Candidate Starts for Mdavu_76:

(Start: 60 @54773 has 9 MA's), (75, 54860), (85, 54923), (97, 54989), (100, 54998), (134, 55223), (142, 55274), (145, 55286), (148, 55310), (157, 55367), (175, 55442),

Gene: Megsy_40 Start: 31313, Stop: 31999, Start Num: 59

Candidate Starts for Megsy_40:

(Start: 59 @31313 has 57 MA's), (66, 31343), (85, 31466), (111, 31628), (124, 31703), (128, 31718), (133, 31760), (134, 31766), (144, 31826), (151, 31865), (157, 31910), (168, 31958),

Gene: Milly_41 Start: 32168, Stop: 32866, Start Num: 61

Candidate Starts for Milly_41:

(Start: 41 @32087 has 1 MA's), (47, 32120), (49, 32129), (Start: 61 @32168 has 9 MA's), (75, 32252), (79, 32273), (80, 32294), (85, 32315), (97, 32381), (100, 32390), (124, 32552), (133, 32609), (134, 32615), (144, 32675), (148, 32702), (151, 32714), (157, 32759), (159, 32765), (168, 32807),

Gene: MillyPhilly_31 Start: 21795, Stop: 20953, Start Num: 31

Candidate Starts for MillyPhilly_31:

(Start: 31 @21795 has 133 MA's), (67, 21681), (70, 21651), (100, 21462), (114, 21354), (122, 21303), (126, 21279), (134, 21225), (136, 21219), (153, 21102),

Gene: MissDaisy_86 Start: 52298, Stop: 53095, Start Num: 36

Candidate Starts for MissDaisy_86:

(7, 52091), (9, 52100), (10, 52124), (12, 52130), (14, 52157), (16, 52175), (21, 52232), (Start: 36 @52298 has 7 MA's), (Start: 59 @52388 has 57 MA's), (78, 52493), (97, 52607), (108, 52679), (130, 52814), (142, 52892), (143, 52895), (161, 53003),

Gene: Mitti_92 Start: 55889, Stop: 56596, Start Num: 59

Candidate Starts for Mitti_92:

(2, 55406), (3, 55469), (4, 55547), (25, 55745), (Start: 59 @55889 has 57 MA's), (78, 55994), (96, 56105), (97, 56108), (108, 56180), (130, 56315), (133, 56336), (142, 56393), (161, 56504),

Gene: MonChoix_29 Start: 21781, Stop: 20879, Start Num: 31

Candidate Starts for MonChoix_29:

(Start: 31 @21781 has 133 MA's), (100, 21448), (114, 21340), (122, 21289), (126, 21265), (134, 21211), (139, 21190), (162, 21013),

Gene: MrWorldwide_31 Start: 21799, Stop: 20957, Start Num: 31

Candidate Starts for MrWorldwide_31:

(Start: 31 @21799 has 133 MA's), (67, 21685), (70, 21655), (100, 21466), (114, 21358), (122, 21307), (126, 21283), (134, 21229), (136, 21223), (153, 21106),

Gene: Mufasa_42 Start: 32093, Stop: 32791, Start Num: 61

Candidate Starts for Mufasa_42:

(47, 32045), (49, 32054), (Start: 61 @32093 has 9 MA's), (75, 32177), (79, 32198), (80, 32219), (85, 32240), (97, 32306), (124, 32477), (133, 32534), (134, 32540), (144, 32600), (148, 32627), (151, 32639), (157, 32684), (159, 32690), (168, 32732),

Gene: Nagem_31 Start: 21792, Stop: 20950, Start Num: 31

Candidate Starts for Nagem_31:

(Start: 31 @21792 has 133 MA's), (67, 21678), (70, 21648), (100, 21459), (114, 21351), (122, 21300), (126, 21276), (134, 21222), (153, 21099),

Gene: Nattles_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Nattles_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Nebulous_29 Start: 22504, Stop: 21605, Start Num: 38

Candidate Starts for Nebulous_29:

(15, 22642), (17, 22615), (20, 22579), (25, 22561), (Start: 28 @22555 has 7 MA's), (Start: 38 @22504 has 1 MA's), (Start: 41 @22498 has 1 MA's), (95, 22186), (114, 22084), (134, 21952), (136, 21946), (141, 21916),

Gene: Nergal_78 Start: 52735, Stop: 53433, Start Num: 60

Candidate Starts for Nergal_78:

(Start: 60 @52735 has 9 MA's), (85, 52885), (104, 52987), (124, 53122), (134, 53185), (145, 53248), (148, 53272), (151, 53284), (157, 53329), (168, 53377),

Gene: NickSell_32 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for NickSell_32:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Nikao_78 Start: 57382, Stop: 58083, Start Num: 60

Candidate Starts for Nikao_78:

(Start: 60 @57382 has 9 MA's), (75, 57469), (85, 57532), (97, 57598), (100, 57607), (134, 57832), (142, 57883), (145, 57895), (148, 57919), (157, 57976), (175, 58051),

Gene: Nutello_75 Start: 54769, Stop: 55470, Start Num: 60

Candidate Starts for Nutello_75:

(Start: 60 @54769 has 9 MA's), (75, 54856), (85, 54919), (97, 54985), (100, 54994), (134, 55219), (142, 55270), (145, 55282), (148, 55306), (157, 55363), (175, 55438),

Gene: OBUpride_44 Start: 34120, Stop: 33419, Start Num: 55

Candidate Starts for OBUpride_44:

(Start: 48 @34150 has 3 MA's), (Start: 55 @34120 has 19 MA's), (73, 34036), (124, 33718), (146, 33589), (148, 33568), (149, 33565),

Gene: Oats_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for Oats_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: OldNelly_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for OldNelly_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (153, 21105),

Gene: OmniCritical_92 Start: 55877, Stop: 56674, Start Num: 36
Candidate Starts for OmniCritical_92:

(Start: 36 @55877 has 7 MA's), (Start: 59 @55967 has 57 MA's), (78, 56072), (97, 56186), (108, 56258), (130, 56393), (133, 56414), (142, 56471), (161, 56582),

Gene: Ottawa_27 Start: 10163, Stop: 10948, Start Num: 56
Candidate Starts for Ottawa_27:

(Start: 56 @10163 has 5 MA's), (71, 10238), (104, 10445), (110, 10496), (113, 10517), (144, 10727),

Gene: Oxtober96_31 Start: 21796, Stop: 20954, Start Num: 31
Candidate Starts for Oxtober96_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Padfoot_39 Start: 31380, Stop: 32069, Start Num: 59
Candidate Starts for Padfoot_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Papafritta_30 Start: 21607, Stop: 20765, Start Num: 31
Candidate Starts for Papafritta_30:

(Start: 31 @21607 has 133 MA's), (67, 21493), (70, 21463), (100, 21274), (114, 21166), (122, 21115), (126, 21091), (134, 21037), (153, 20914),

Gene: ParleG_31 Start: 21799, Stop: 20957, Start Num: 31
Candidate Starts for ParleG_31:

(Start: 31 @21799 has 133 MA's), (67, 21685), (70, 21655), (100, 21466), (114, 21358), (122, 21307), (126, 21283), (134, 21229), (136, 21223), (153, 21106),

Gene: Patt_85 Start: 52445, Stop: 53242, Start Num: 36
Candidate Starts for Patt_85:

(9, 52247), (10, 52271), (14, 52304), (16, 52322), (21, 52379), (Start: 36 @52445 has 7 MA's), (Start: 59 @52535 has 57 MA's), (78, 52640), (97, 52754), (108, 52826), (130, 52961), (133, 52982), (142, 53039), (143, 53042), (161, 53150),

Gene: Peep_31 Start: 21784, Stop: 20942, Start Num: 31
Candidate Starts for Peep_31:

(Start: 31 @21784 has 133 MA's), (67, 21670), (70, 21640), (100, 21451), (114, 21343), (122, 21292), (126, 21268), (134, 21214), (153, 21091),

Gene: Peppino_30 Start: 21865, Stop: 20978, Start Num: 31
Candidate Starts for Peppino_30:

(Start: 31 @21865 has 133 MA's), (70, 21721), (106, 21508), (114, 21448), (119, 21427), (122, 21394), (134, 21316), (139, 21295),

Gene: Pharb_93 Start: 58357, Stop: 59055, Start Num: 59
Candidate Starts for Pharb_93:

(Start: 59 @58357 has 57 MA's), (66, 58384), (83, 58498), (86, 58513), (124, 58744), (134, 58807), (144, 58867), (148, 58894), (151, 58906), (159, 58957),

Gene: Pherbot_29 Start: 21682, Stop: 20789, Start Num: 31

Candidate Starts for Pherbot_29:

(Start: 22 @21718 has 3 MA's), (Start: 28 @21700 has 7 MA's), (Start: 31 @21682 has 133 MA's), (90, 21376), (103, 21316), (112, 21265), (116, 21247), (134, 21130), (136, 21124), (142, 21076), (150, 21028),

Gene: Pherferi_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Pherferi_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Phiderman_31 Start: 21795, Stop: 20953, Start Num: 31

Candidate Starts for Phiderman_31:

(Start: 31 @21795 has 133 MA's), (67, 21681), (70, 21651), (100, 21462), (114, 21354), (122, 21303), (126, 21279), (134, 21225), (136, 21219), (153, 21102),

Gene: Phireproof_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Phireproof_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: PhredFlintston_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for PhredFlintston_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Phriends_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Phriends_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (153, 21105),

Gene: Piatt_39 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for Piatt_39:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Pixie_96 Start: 58971, Stop: 59669, Start Num: 59

Candidate Starts for Pixie_96:

(Start: 59 @58971 has 57 MA's), (66, 58998), (83, 59112), (86, 59127), (97, 59187), (124, 59358), (134, 59421), (144, 59481), (148, 59508), (151, 59520), (156, 59562), (159, 59571), (176, 59646),

Gene: Pocket_30 Start: 21596, Stop: 20754, Start Num: 31

Candidate Starts for Pocket_30:

(Start: 31 @21596 has 133 MA's), (67, 21482), (70, 21452), (100, 21263), (114, 21155), (122, 21104), (126, 21080), (134, 21026), (136, 21020), (153, 20903),

Gene: PrincePhergus_29 Start: 21721, Stop: 20792, Start Num: 22

Candidate Starts for PrincePhergus_29:

(Start: 22 @21721 has 3 MA's), (Start: 28 @21703 has 7 MA's), (Start: 31 @21685 has 133 MA's), (103, 21319), (112, 21268), (116, 21250), (134, 21133), (136, 21127), (142, 21079),

Gene: PuppyEggo_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for PuppyEggo_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: QuincyRose_38 Start: 31369, Stop: 32058, Start Num: 59

Candidate Starts for QuincyRose_38:

(Start: 59 @31369 has 57 MA's), (63, 31384), (66, 31399), (76, 31468), (80, 31501), (85, 31522), (124, 31759), (134, 31822), (144, 31882), (151, 31921), (157, 31966), (159, 31972), (168, 32014),

Gene: Raccoon_30 Start: 21834, Stop: 20986, Start Num: 31

Candidate Starts for Raccoon_30:

(Start: 31 @21834 has 133 MA's), (100, 21501), (114, 21393), (122, 21342), (126, 21318), (134, 21258), (136, 21252), (153, 21135), (179, 21033),

Gene: Rapheph_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Rapheph_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Raptor_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Raptor_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Redfield_30 Start: 21872, Stop: 20985, Start Num: 31

Candidate Starts for Redfield_30:

(Start: 31 @21872 has 133 MA's), (70, 21728), (106, 21515), (114, 21455), (119, 21434), (122, 21401), (134, 21323), (139, 21302),

Gene: Renzie_31 Start: 21784, Stop: 20942, Start Num: 31

Candidate Starts for Renzie_31:

(Start: 31 @21784 has 133 MA's), (67, 21670), (70, 21640), (100, 21451), (114, 21343), (122, 21292), (126, 21268), (134, 21214), (153, 21091),

Gene: Reptar3000_86 Start: 52435, Stop: 53232, Start Num: 36

Candidate Starts for Reptar3000_86:

(9, 52237), (10, 52261), (14, 52294), (16, 52312), (21, 52369), (Start: 36 @52435 has 7 MA's), (Start: 59 @52525 has 57 MA's), (78, 52630), (97, 52744), (108, 52816), (130, 52951), (133, 52972), (142, 53029), (143, 53032), (161, 53140),

Gene: RikSengupta_41 Start: 25754, Stop: 26620, Start Num: 34

Candidate Starts for RikSengupta_41:

(6, 25553), (18, 25661), (26, 25712), (Start: 34 @25754 has 4 MA's), (46, 25805), (96, 26093), (98, 26099), (114, 26186), (122, 26234), (137, 26330), (144, 26387), (146, 26393), (165, 26507), (166, 26519), (167, 26525),

Gene: Riyhil_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Riyhil_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (153, 21105),

Gene: Robinson_31 Start: 21790, Stop: 20948, Start Num: 31

Candidate Starts for Robinson_31:

(Start: 31 @21790 has 133 MA's), (67, 21676), (70, 21646), (100, 21457), (114, 21349), (122, 21298), (126, 21274), (134, 21220), (136, 21214), (153, 21097),

Gene: Rog141_30 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for Rog141_30:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Ruthiejr_94 Start: 55861, Stop: 56559, Start Num: 59

Candidate Starts for Ruthiejr_94:

(Start: 59 @55861 has 57 MA's), (78, 55966), (108, 56152), (130, 56278), (133, 56299), (142, 56356), (161, 56467),

Gene: SJay_31 Start: 21793, Stop: 20951, Start Num: 31

Candidate Starts for SJay_31:

(Start: 31 @21793 has 133 MA's), (67, 21679), (70, 21649), (100, 21460), (114, 21352), (122, 21301), (126, 21277), (134, 21223), (153, 21100),

Gene: SamScheppers_91 Start: 56255, Stop: 57052, Start Num: 36

Candidate Starts for SamScheppers_91:

(Start: 36 @56255 has 7 MA's), (Start: 59 @56345 has 57 MA's), (78, 56450), (96, 56561), (97, 56564), (108, 56636), (130, 56771), (133, 56792), (142, 56849), (161, 56960),

Gene: Sansa_29 Start: 21875, Stop: 21006, Start Num: 28

Candidate Starts for Sansa_29:

(Start: 28 @21875 has 7 MA's), (Start: 31 @21857 has 133 MA's), (87, 21572), (95, 21518), (114, 21419), (122, 21371), (123, 21368), (125, 21350), (134, 21287), (136, 21281), (141, 21251), (142, 21233), (149, 21191), (164, 21116), (179, 21053),

Gene: Saratos_30 Start: 21832, Stop: 20981, Start Num: 31

Candidate Starts for Saratos_30:

(Start: 28 @21850 has 7 MA's), (Start: 31 @21832 has 133 MA's), (87, 21547), (95, 21493), (114, 21394), (122, 21346), (123, 21343), (125, 21325), (134, 21262), (136, 21256), (142, 21208), (149, 21166), (164, 21091), (179, 21028),

Gene: Schimmels22_31 Start: 21105, Stop: 20230, Start Num: 28

Candidate Starts for Schimmels22_31:

(Start: 28 @21105 has 7 MA's), (Start: 31 @21087 has 133 MA's), (70, 20925), (74, 20901), (81, 20853), (89, 20793), (95, 20751), (100, 20736), (114, 20691), (122, 20640), (131, 20583), (134, 20556), (136, 20550), (140, 20523), (149, 20460),

Gene: Schnapsidee_30 Start: 21866, Stop: 20979, Start Num: 31

Candidate Starts for Schnapsidee_30:

(Start: 31 @21866 has 133 MA's), (70, 21722), (106, 21509), (114, 21449), (119, 21428), (122, 21395), (134, 21317), (139, 21296),

Gene: Sedgewig_30 Start: 21590, Stop: 20748, Start Num: 31

Candidate Starts for Sedgewig_30:

(Start: 31 @21590 has 133 MA's), (67, 21476), (70, 21446), (100, 21257), (114, 21149), (122, 21098), (126, 21074), (134, 21020), (153, 20897),

Gene: SgtBeansprout_76 Start: 54769, Stop: 55470, Start Num: 60

Candidate Starts for SgtBeansprout_76:

(Start: 60 @54769 has 9 MA's), (75, 54856), (85, 54919), (97, 54985), (100, 54994), (134, 55219), (142, 55270), (145, 55282), (148, 55306), (157, 55363), (175, 55438),

Gene: Shadow1_42 Start: 31293, Stop: 31994, Start Num: 59

Candidate Starts for Shadow1_42:

(Start: 59 @31293 has 57 MA's), (66, 31323), (80, 31425), (85, 31446), (111, 31608), (114, 31620), (124, 31683), (134, 31746), (144, 31806), (148, 31833), (151, 31845), (157, 31890), (168, 31938),

Gene: ShaiHulud_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for ShaiHulud_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Shamu_30 Start: 21847, Stop: 20996, Start Num: 31

Candidate Starts for Shamu_30:

(Start: 28 @21865 has 7 MA's), (Start: 31 @21847 has 133 MA's), (87, 21562), (95, 21508), (114, 21409), (122, 21361), (123, 21358), (125, 21340), (134, 21277), (136, 21271), (142, 21223), (149, 21181), (164, 21106), (179, 21043),

Gene: ShedlockHolmes_97 Start: 58904, Stop: 59602, Start Num: 59

Candidate Starts for ShedlockHolmes_97:

(Start: 59 @58904 has 57 MA's), (66, 58931), (83, 59045), (86, 59060), (97, 59120), (124, 59291), (134, 59354), (144, 59414), (148, 59441), (151, 59453), (156, 59495), (159, 59504), (176, 59579),

Gene: Shee_31 Start: 21795, Stop: 20953, Start Num: 31

Candidate Starts for Shee_31:

(Start: 31 @21795 has 133 MA's), (67, 21681), (70, 21651), (100, 21462), (114, 21354), (122, 21303), (126, 21279), (134, 21225), (136, 21219), (153, 21102),

Gene: ShiaSurprise_40 Start: 31380, Stop: 32069, Start Num: 59

Candidate Starts for ShiaSurprise_40:

(43, 31311), (44, 31314), (50, 31344), (Start: 59 @31380 has 57 MA's), (63, 31395), (66, 31410), (76, 31479), (80, 31512), (85, 31533), (124, 31770), (134, 31833), (144, 31893), (151, 31932), (157, 31977), (159, 31983), (168, 32025), (172, 32037),

Gene: Sinatra_29 Start: 21682, Stop: 20789, Start Num: 31

Candidate Starts for Sinatra_29:

(Start: 28 @21700 has 7 MA's), (Start: 31 @21682 has 133 MA's), (70, 21520), (103, 21316), (112, 21265), (116, 21247), (125, 21187), (134, 21130), (136, 21124), (142, 21076),

Gene: SirVictor_29 Start: 21782, Stop: 20883, Start Num: 31

Candidate Starts for SirVictor_29:

(Start: 28 @21800 has 7 MA's), (Start: 31 @21782 has 133 MA's), (99, 21437), (103, 21416), (114, 21356), (122, 21308), (134, 21224), (135, 21221), (150, 21122),

Gene: Slarp_90 Start: 55250, Stop: 55957, Start Num: 59

Candidate Starts for Slarp_90:

(2, 54767), (3, 54830), (4, 54908), (25, 55106), (Start: 59 @55250 has 57 MA's), (78, 55355), (96, 55466), (97, 55469), (108, 55541), (130, 55676), (133, 55697), (142, 55754), (161, 55865),

Gene: SoilGremlin_31 Start: 21795, Stop: 20953, Start Num: 31

Candidate Starts for SoilGremlin_31:

(Start: 31 @21795 has 133 MA's), (67, 21681), (70, 21651), (100, 21462), (114, 21354), (122, 21303), (126, 21279), (134, 21225), (153, 21102),

Gene: SonOfLevi_30 Start: 21593, Stop: 20751, Start Num: 31

Candidate Starts for SonOfLevi_30:

(Start: 31 @21593 has 133 MA's), (67, 21479), (70, 21449), (100, 21260), (114, 21152), (122, 21101), (126, 21077), (134, 21023), (136, 21017), (153, 20900),

Gene: Sonali_99 Start: 61044, Stop: 60199, Start Num: 40

Candidate Starts for Sonali_99:

(Start: 36 @61053 has 7 MA's), (Start: 40 @61044 has 1 MA's), (Start: 56 @60981 has 5 MA's), (71, 60906), (72, 60903), (104, 60696), (110, 60645), (139, 60459), (144, 60414), (169, 60288),

Gene: Sparcetus_41 Start: 25633, Stop: 26499, Start Num: 34

Candidate Starts for Sparcetus_41:

(6, 25432), (18, 25540), (26, 25591), (Start: 34 @25633 has 4 MA's), (46, 25684), (98, 25978), (114, 26065), (122, 26113), (144, 26266), (146, 26272), (165, 26386), (167, 26404),

Gene: Stanktossa_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for Stanktossa_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: StingRay_30 Start: 21608, Stop: 20766, Start Num: 31

Candidate Starts for StingRay_30:

(Start: 31 @21608 has 133 MA's), (67, 21494), (70, 21464), (100, 21275), (114, 21167), (122, 21116), (126, 21092), (134, 21038), (153, 20915),

Gene: Stinson_40 Start: 31579, Stop: 32265, Start Num: 59

Candidate Starts for Stinson_40:

(Start: 59 @31579 has 57 MA's), (66, 31609), (85, 31732), (111, 31894), (124, 31969), (128, 31984), (133, 32026), (134, 32032), (144, 32092), (151, 32131), (157, 32176), (168, 32224),

Gene: StirfryIV_31 Start: 21598, Stop: 20756, Start Num: 31

Candidate Starts for StirfryIV_31:

(Start: 31 @21598 has 133 MA's), (67, 21484), (70, 21454), (100, 21265), (114, 21157), (122, 21106), (126, 21082), (134, 21028), (136, 21022), (153, 20905),

Gene: Stormbreaker8_30 Start: 21869, Stop: 20982, Start Num: 31

Candidate Starts for Stormbreaker8_30:

(Start: 31 @21869 has 133 MA's), (106, 21512), (114, 21452), (119, 21431), (122, 21398), (134, 21320), (139, 21299),

Gene: Strathdee_31 Start: 21797, Stop: 20955, Start Num: 31

Candidate Starts for Strathdee_31:

(Start: 31 @21797 has 133 MA's), (67, 21683), (70, 21653), (100, 21464), (114, 21356), (122, 21305), (126, 21281), (134, 21227), (136, 21221), (153, 21104),

Gene: Strobilo_41 Start: 32169, Stop: 32867, Start Num: 61

Candidate Starts for Strobilo_41:

(Start: 41 @32088 has 1 MA's), (47, 32121), (49, 32130), (Start: 61 @32169 has 9 MA's), (75, 32253), (79, 32274), (80, 32295), (85, 32316), (97, 32382), (100, 32391), (124, 32553), (133, 32610), (134, 32616), (144, 32676), (148, 32703), (151, 32715), (157, 32760), (159, 32766), (168, 32808),

Gene: Sulley_39 Start: 31313, Stop: 32002, Start Num: 59

Candidate Starts for Sulley_39:

(Start: 59 @31313 has 57 MA's), (63, 31328), (66, 31343), (76, 31412), (80, 31445), (85, 31466), (124, 31703), (134, 31766), (144, 31826), (151, 31865), (157, 31910), (159, 31916), (168, 31958),

Gene: Sunflower1121_42 Start: 31388, Stop: 32089, Start Num: 59

Candidate Starts for Sunflower1121_42:

(Start: 59 @31388 has 57 MA's), (66, 31418), (80, 31520), (85, 31541), (111, 31703), (114, 31715), (124, 31778), (134, 31841), (144, 31901), (148, 31928), (151, 31940), (157, 31985), (168, 32033),

Gene: Superfresh_31 Start: 21784, Stop: 20942, Start Num: 31

Candidate Starts for Superfresh_31:

(Start: 31 @21784 has 133 MA's), (67, 21670), (70, 21640), (100, 21451), (114, 21343), (122, 21292), (126, 21268), (134, 21214), (153, 21091),

Gene: Syra333_43 Start: 31311, Stop: 32012, Start Num: 59

Candidate Starts for Syra333_43:

(Start: 59 @31311 has 57 MA's), (66, 31341), (80, 31443), (85, 31464), (111, 31626), (114, 31638), (124, 31701), (134, 31764), (144, 31824), (148, 31851), (151, 31863), (157, 31908), (168, 31956),

Gene: TBond007_93 Start: 58969, Stop: 59667, Start Num: 59

Candidate Starts for TBond007_93:

(Start: 59 @58969 has 57 MA's), (66, 58996), (83, 59110), (86, 59125), (97, 59185), (124, 59356), (134, 59419), (144, 59479), (148, 59506), (151, 59518), (156, 59560), (159, 59569), (176, 59644),

Gene: TaiwanKao_41 Start: 31310, Stop: 31996, Start Num: 59

Candidate Starts for TaiwanKao_41:

(Start: 59 @31310 has 57 MA's), (66, 31340), (85, 31463), (111, 31625), (124, 31700), (128, 31715), (133, 31757), (134, 31763), (144, 31823), (151, 31862), (157, 31907), (168, 31955),

Gene: Taquito_92 Start: 56224, Stop: 57021, Start Num: 36

Candidate Starts for Taquito_92:

(9, 56026), (10, 56050), (14, 56083), (16, 56101), (21, 56158), (Start: 36 @56224 has 7 MA's), (Start: 59 @56314 has 57 MA's), (78, 56419), (97, 56533), (108, 56605), (130, 56740), (142, 56818), (161, 56929),

Gene: TatarkaPM_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for TatarkaPM_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: Teagan_31 Start: 21792, Stop: 20950, Start Num: 31

Candidate Starts for Teagan_31:

(Start: 31 @21792 has 133 MA's), (67, 21678), (70, 21648), (100, 21459), (114, 21351), (122, 21300), (126, 21276), (134, 21222), (153, 21099),

Gene: TeddyBear_30 Start: 21611, Stop: 20769, Start Num: 31

Candidate Starts for TeddyBear_30:

(Start: 31 @21611 has 133 MA's), (67, 21497), (70, 21467), (100, 21278), (114, 21170), (122, 21119), (126, 21095), (134, 21041), (136, 21035), (153, 20918),

Gene: Tenda_30 Start: 21609, Stop: 20767, Start Num: 31

Candidate Starts for Tenda_30:

(Start: 31 @21609 has 133 MA's), (67, 21495), (70, 21465), (100, 21276), (114, 21168), (122, 21117), (126, 21093), (134, 21039), (136, 21033), (153, 20916),

Gene: Theresita_50 Start: 33880, Stop: 33122, Start Num: 41

Candidate Starts for Theresita_50:

(Start: 41 @33880 has 1 MA's), (74, 33712), (95, 33574), (114, 33514), (142, 33319), (144, 33307), (149, 33277), (170, 33208), (174, 33193),

Gene: Thompsone_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Thompsone_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (136, 21220), (153, 21103),

Gene: Thorongil_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Thorongil_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: TinSulphur_31 Start: 21798, Stop: 20956, Start Num: 31

Candidate Starts for TinSulphur_31:

(Start: 31 @21798 has 133 MA's), (67, 21684), (70, 21654), (100, 21465), (114, 21357), (122, 21306), (126, 21282), (134, 21228), (136, 21222), (153, 21105),

Gene: TinyMiny_41 Start: 25652, Stop: 26518, Start Num: 34

Candidate Starts for TinyMiny_41:

(6, 25451), (18, 25559), (26, 25610), (Start: 34 @25652 has 4 MA's), (46, 25703), (98, 25997), (114, 26084), (122, 26132), (144, 26285), (146, 26291), (165, 26405), (167, 26423),

Gene: Tinyman4_31 Start: 20713, Stop: 19856, Start Num: 31

Candidate Starts for Tinyman4_31:

(Start: 28 @20731 has 7 MA's), (Start: 31 @20713 has 133 MA's), (70, 20551), (74, 20527), (81, 20479), (89, 20419), (95, 20377), (100, 20362), (114, 20317), (122, 20266), (134, 20182), (136, 20176), (140, 20149), (149, 20086),

Gene: Tiri_40 Start: 31359, Stop: 32048, Start Num: 59

Candidate Starts for Tiri_40:

(Start: 59 @31359 has 57 MA's), (63, 31374), (66, 31389), (80, 31491), (85, 31512), (124, 31749), (134, 31812), (144, 31872), (151, 31911), (157, 31956), (159, 31962), (168, 32004),

Gene: Typha_101 Start: 63240, Stop: 63974, Start Num: 54

Candidate Starts for Typha_101:

(23, 63108), (29, 63129), (33, 63156), (35, 63162), (Start: 38 @63174 has 1 MA's), (Start: 54 @63240 has 3 MA's), (57, 63249), (Start: 68 @63297 has 3 MA's), (69, 63309), (75, 63345), (85, 63420), (88, 63441), (104, 63528), (115, 63603), (118, 63615), (128, 63678), (132, 63714), (138, 63744), (144, 63783), (145, 63786), (146, 63789), (148, 63810), (150, 63819), (155, 63849),

Gene: Ubuntu_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Ubuntu_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Velene_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Velene_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Vispistious_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for Vispistious_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Webster2_44 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Webster2_44:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: WestPM_29 Start: 20570, Stop: 19713, Start Num: 31

Candidate Starts for WestPM_29:

(Start: 28 @20588 has 7 MA's), (Start: 31 @20570 has 133 MA's), (70, 20408), (81, 20336), (89, 20276), (95, 20234), (100, 20219), (114, 20174), (122, 20123), (134, 20039), (136, 20033), (140, 20006), (144, 19973), (149, 19943),

Gene: WildNOut_31 Start: 21796, Stop: 20954, Start Num: 31

Candidate Starts for WildNOut_31:

(Start: 31 @21796 has 133 MA's), (67, 21682), (70, 21652), (100, 21463), (114, 21355), (122, 21304), (126, 21280), (134, 21226), (153, 21103),

Gene: Wintermute_92 Start: 56049, Stop: 56747, Start Num: 59

Candidate Starts for Wintermute_92:

(1, 55494), (9, 55761), (10, 55785), (14, 55818), (16, 55836), (21, 55893), (Start: 36 @55959 has 7 MA's), (Start: 59 @56049 has 57 MA's), (78, 56154), (108, 56340), (130, 56466), (133, 56487), (142, 56544), (161, 56655),

Gene: Winzigespinne_30 Start: 21597, Stop: 20755, Start Num: 31

Candidate Starts for Winzigespinne_30:

(Start: 31 @21597 has 133 MA's), (67, 21483), (70, 21453), (100, 21264), (114, 21156), (122, 21105), (126, 21081), (134, 21027), (136, 21021), (153, 20904),

Gene: Wishmaker_42 Start: 34126, Stop: 33425, Start Num: 55

Candidate Starts for Wishmaker_42:

(Start: 48 @34156 has 3 MA's), (Start: 55 @34126 has 19 MA's), (73, 34042), (124, 33724), (146, 33595), (148, 33574), (149, 33571),

Gene: Ximenita_44 Start: 31496, Stop: 32197, Start Num: 59

Candidate Starts for Ximenita_44:

(Start: 59 @31496 has 57 MA's), (66, 31526), (80, 31628), (85, 31649), (111, 31811), (114, 31823), (124, 31886), (134, 31949), (144, 32009), (148, 32036), (151, 32048), (157, 32093), (168, 32141),

Gene: Y10_88 Start: 55993, Stop: 56691, Start Num: 59

Candidate Starts for Y10_88:

(Start: 36 @55903 has 7 MA's), (Start: 59 @55993 has 57 MA's), (78, 56098), (108, 56284), (130, 56410), (133, 56431), (142, 56488), (161, 56599),

Gene: Y2_88 Start: 55993, Stop: 56691, Start Num: 59

Candidate Starts for Y2_88:

(Start: 36 @55903 has 7 MA's), (Start: 59 @55993 has 57 MA's), (78, 56098), (108, 56284), (130, 56410), (133, 56431), (142, 56488), (161, 56599),

Gene: Yunkel11_42 Start: 31111, Stop: 31800, Start Num: 59

Candidate Starts for Yunkel11_42:

(Start: 59 @31111 has 57 MA's), (63, 31126), (66, 31141), (80, 31243), (85, 31264), (124, 31501), (133, 31558), (134, 31564), (151, 31663), (157, 31708), (168, 31756),

Gene: YuuY_29 Start: 21987, Stop: 21088, Start Num: 31

Candidate Starts for YuuY_29:

(Start: 31 @21987 has 133 MA's), (95, 21648), (103, 21618), (114, 21546), (125, 21477), (135, 21411), (136, 21408), (149, 21318),

Gene: Zada_31 Start: 21777, Stop: 20935, Start Num: 31

Candidate Starts for Zada_31:

(Start: 31 @21777 has 133 MA's), (67, 21663), (70, 21633), (100, 21444), (114, 21336), (122, 21285), (126, 21261), (134, 21207), (153, 21084),

Gene: Zenitsu_30 Start: 21862, Stop: 21011, Start Num: 31

Candidate Starts for Zenitsu_30:

(Start: 28 @21880 has 7 MA's), (Start: 31 @21862 has 133 MA's), (87, 21577), (95, 21523), (114, 21424), (122, 21376), (123, 21373), (125, 21355), (134, 21292), (136, 21286), (142, 21238), (149, 21196), (164, 21121), (179, 21058),

Gene: Zeta1847_49 Start: 35401, Stop: 36153, Start Num: 65

Candidate Starts for Zeta1847_49:

(Start: 65 @35401 has 1 MA's), (Start: 68 @35416 has 3 MA's), (121, 35752),

Gene: ZoeJ_41 Start: 31857, Stop: 32555, Start Num: 61

Candidate Starts for ZoeJ_41:

(47, 31809), (49, 31818), (Start: 61 @31857 has 9 MA's), (75, 31941), (79, 31962), (80, 31983), (85, 32004), (97, 32070), (100, 32079), (107, 32139), (124, 32241), (133, 32298), (144, 32364), (148, 32391), (151, 32403), (157, 32448), (159, 32454), (168, 32496),