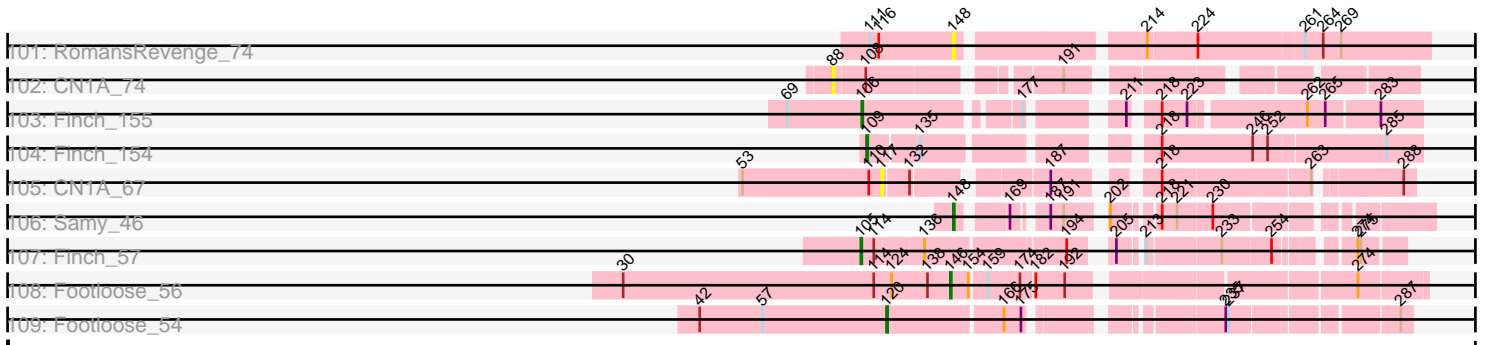


Pham 171143



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 171143 Report

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

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

Pham number 171143 has 328 members, 26 are drafts.

Phages represented in each track:

- Track 1 : GageAP_46
- Track 2 : Zulu_41, Tucker_41
- Track 3 : Scavito_101, JaNo_99, PrincessTrina_101, Chipper1996_1010, Chubster_100, Chocolat_100, HumptyDumpty_100, Tophat_101, Mordred_100, Linus_100, Kabreeze_100, EdgarPoe_100
- Track 4 : Colucci_103
- Track 5 : KBurrousTX_96
- Track 6 : DrYang_96
- Track 7 : RosiePosie_100
- Track 8 : Lymara_98
- Track 9 : Hestia_63, Faja_72
- Track 10 : BenchScraper_69
- Track 11 : BlackStallion_10, Puhltonio_10, Durga_10, Sigman_10, Chunky_10, Riggan_10, Soto_10, Inchworm_10, HSavage_10, SDcharge11_10, Haimas_10, Lego3393_10, Zaider_11, CampRoach_10, Lasso_10, Swish_10, Dingo_10, Magic8_10, Fringe_10, Gyarad_0010, TomBombadil_10, Oosterbaan_10, Numberten_10, DirtJuice_10, QueenBeane_10, Anderson_10, Roliet_10, JacAttac_10, Phipps_10, Harvey_10, Pherdinand_10, Sheila_10, Craff_10, Phamished_10, OliverWalter_10, Tomlarah_10, Omniscient_10, Waterdiva_10, OSmaximus_10, PhrodoBaggins_105, JangoPhett_10, Surely_10, Nicole21_10, Chah_10, LeeLot_10, Hetaeria_10, Inverness_10, Slatt_10, Hertubise_10, AltPhacts_10, Vivaldi_10, Boehler_10, UAch1_10, Plmatters_10, Buckeye_10, EmpTee_10, Melc17_10, Mesh1_10, Newman_10, Serendipity_10, Kikipoo_10, Badfish_10, CamL_10, Scoot17C_10, Adriana_10, Nacho_0010, Thora_10, Valjean_10, CheetO_10, Hartsy_10, Spartan300_10, LasagnaCat_10, Virapocalypse_10, ShiVal_10, Pipsqueak_10, Samaymay_10, Frankicide_10, GeneCoco_10, Eremos_10, Roscoe_11, Tooj_10, Etaye_10, Fang_10, Weher20_10, Serpentine_0010, ABU_10, KlimbOn_10, BlueHusk_10, Hamish_10, Prickles_10, Olive_10, Suffolk_10, Pops_10, Iridoclysis_10, Mikota_10, Orion_10, MiniBoss_10, FluffyNinja_10, Lulwa_10, Colbert_10, Kailash_10, Trypo_10, Vista_10, Zelda_10, Katniss_10, Gophee_10, Daka_10, Charles1_10, Horchata_10, KLucky39_10, Emiris_10, ProfessorX_10, PG1_10, Basato_11, Skippy_10, Usavi_10, PhatLouie_10, Morty_10, ThreeOh3D2_10, Podrick_10, Phunky_10, Zonia_10,

Yoshand_10, YouGoGlencoco_10, PhatCats2014_10, Eugenia_10, Quisquiliae_10, Murdoc_10, KingVeVeVe_10, IsaacEli_10, DoesntMatter_10, Kloppinator_10, Cannibal_10, Megatron_10, FriarPreacher_10, Cobra_10

- Track 12 : Keitherie_10
- Track 13 : Compostia_13
- Track 14 : SV1_42
- Track 15 : Picard_45
- Track 16 : SoJo_43
- Track 17 : Mojorita_45
- Track 18 : ToastyFinz_42
- Track 19 : Raleigh_43
- Track 20 : Darolandstone_43
- Track 21 : Bioscum_45, PapayaSalad_44
- Track 22 : Austintatious_42
- Track 23 : Ididsumtinwong_46
- Track 24 : Hydra_4
- Track 25 : Bmoc_227
- Track 26 : Sushi23_223, Cursive_225, Larnav_229, PacManQ_223
- Track 27 : Targaryen_222
- Track 28 : Angela_225
- Track 29 : Lululemon_222
- Track 30 : Mildred21_232
- Track 31 : Persimmon_162, WhereRU_166
- Track 32 : Bmoc_167
- Track 33 : Daubenski_216
- Track 34 : Eastland_44, Piccadilly_44, Ignacio_44, HFrancette_45, AxeJC_43, Vondra_43, Eklok_44, Cumberbatch_45
- Track 35 : Bxz1_138, Mangeria_141, LRRHood_134, Cane17_133, Lukilu_131, MikeLiesIn_142, Pio_145, Jessibeth14_140, Rabinovish_140, Shaqnato_134, Fludd_142, Breeniome_140, Shelob_143, Phox_138, Teardrop_140, LolaVinca_141, ChickenPhender_137, Cali_136, CharlieB_138, Koguma_138, HyRo_132, Shifa_130, Burrough_141
- Track 36 : Grayson_217
- Track 37 : Lozinak_50, Engineer_51, Smoothie_51
- Track 38 : EnalisNailo_59
- Track 39 : EMSquaredA_63, Floral_64, Pollux_66, Marteena_62
- Track 40 : Lton_30
- Track 41 : Neobush_64
- Track 42 : Matteo_53
- Track 43 : BaxterFox_65
- Track 44 : Mcklovin_2
- Track 45 : Yvonnetastic_114
- Track 46 : Yvonnetastic_131
- Track 47 : Belphegor_76
- Track 48 : Lennon_20, Vivi2_18
- Track 49 : Fosterous_16, Love_20, Bibwit_19, Paries_19, BobBob_16, Galadriel_20, Tangent_16, Keitabear_20, Charming_16, Nordenberg_13
- Track 50 : Ailee_47, Love_55, Kewpiedoll_51, Shivanishola_50
- Track 51 : Baddon_49
- Track 52 : Sitar_50, Vivi2_54, Keitabear_50, Lennon_50, Angelicage_48
- Track 53 : YorkOnyx_19
- Track 54 : MoontowerMania_50
- Track 55 : Affeca_48

- Track 56 : JKSyngboy_47, Saronaya_49, Gustavo_49
- Track 57 : Kroos_19
- Track 58 : Kwobi_50
- Track 59 : Bibwit_48, YorkOnyx_50
- Track 60 : Thing3_49, Kamashten_49
- Track 61 : Barsten_19
- Track 62 : Sedona_50
- Track 63 : Rofo_18
- Track 64 : Sitar_20
- Track 65 : PhorbessPhlower_38
- Track 66 : MortyNRick_64
- Track 67 : Phistory_56
- Track 68 : Apricot_54, Crater_54
- Track 69 : GMA6_79
- Track 70 : GMA6_81
- Track 71 : GMA6_35
- Track 72 : UBSmoodge_126
- Track 73 : Sour_34
- Track 74 : RedWattleHog_27
- Track 75 : Cafasso_94
- Track 76 : CrystalP_38
- Track 77 : Amao_38
- Track 78 : AluminumJesus_51
- Track 79 : Fransoyer_69
- Track 80 : Blab_51
- Track 81 : SadLad_28
- Track 82 : Plumbus_66, Totinger_66
- Track 83 : EleanorGeorge_65, Firehouse51_66, Mutaforma13_69
- Track 84 : Byougenkin_63
- Track 85 : Ms6_60
- Track 86 : LittleShirley_63
- Track 87 : Guppsters_64
- Track 88 : Sarge_55
- Track 89 : Vibaki_76
- Track 90 : Courthouse_162, Ariel_165
- Track 91 : Gonephishing_48
- Track 92 : Superphikiman_163
- Track 93 : Corndog_33
- Track 94 : Blessica_32
- Track 95 : Ryadel_34, Winget_32
- Track 96 : Idergollasper_31, Familton_32, Catdawg_31, SchoolBus_31, YungJamal_34, JangDynasty_31
- Track 97 : Caprice_29
- Track 98 : REQ3_10
- Track 99 : CMP1_50
- Track 100 : Gudmit_38
- Track 101 : RomansRevenge_74
- Track 102 : CN1A_74
- Track 103 : Finch_155
- Track 104 : Finch_154
- Track 105 : CN1A_67
- Track 106 : Samy_46
- Track 107 : Finch_57

- Track 108 : Footloose_56
- Track 109 : Footloose_54

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

The start number called the most often in the published annotations is 99, it was called in 158 of the 302 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_10, Adriana_10, AltPhacts_10, Anderson_10, Badfish_10, Barsten_19, Basato_11, BaxterFox_65, Bibwit_19, BlackStallion_10, BlueHusk_10, BobBob_16, Boehler_10, Buckeye_10, CamL_10, CampRoach_10, Cannibal_10, Chah_10, Charles1_10, Charming_16, CheetO_10, Chunky_10, Cobra_10, Colbert_10, Compostia_13, Craff_10, Daka_10, Dingo_10, DirtJuice_10, DoesntMatter_10, Durga_10, EMSquaredA_63, Emiris_10, EmpTee_10, EnalisNailo_59, Eremos_10, Etaye_10, Eugenia_10, Fang_10, Floral_64, FluffyNinja_10, Fosterous_16, Frankicide_10, FriarPreacher_10, Fringe_10, Galadriel_20, GeneCoco_10, Gophee_10, Gyarad_0010, HSavage_10, Haimas_10, Hamish_10, Hartsy_10, Harvey_10, Hertubise_10, Hetaeria_10, Horchata_10, Inchworm_10, Inverness_10, Iridoclysis_10, IsaacEli_10, JacAttac_10, JangoPhett_10, KLucky39_10, Kailash_10, Katniss_10, Keitabear_20, Keitherie_10, Kikipoo_10, KingVeVeVe_10, KlimbOn_10, Kloppinator_10, LasagnaCat_10, Lasso_10, LeeLot_10, Lego3393_10, Love_20, Lulwa_10, Magic8_10, Marteena_62, Matteo_53, Megatron_10, Melc17_10, Mesh1_10, Mikota_10, MiniBoss_10, Morty_10, Murdoc_10, Nacho_0010, Neobush_64, Newman_10, Nicole21_10, Nordenberg_13, Numberten_10, OSmaximus_10, Olive_10, OliverWalter_10, Omniscient_10, Oosterbaan_10, Orion_10, PG1_10, Paries_19, Phamished_10, PhatCats2014_10, PhatLouie_10, Pherdinand_10, Phipps_10, PhrodoBaggins_105, Phunky_10, Pipsqueak_10, Plmatters_10, Podrick_10, Pollux_66, Pops_10, Prickles_10, ProfessorX_10, Puhltonio_10, QueenBeane_10, Quisquilliae_10, Riggan_10, Roliet_10, Roscoe_11, SDcharge11_10, Samaymay_10, Scoot17C_10, Serendipity_10, Serpentine_0010, Sheila_10, ShiVal_10, Sigman_10, Skippy_10, Slatt_10, Soto_10, Spartan300_10, Suffolk_10, Surely_10, Swish_10, Tangent_16, Thora_10, ThreeOh3D2_10, TomBombadil_10, Tomlarah_10, Tooj_10, Trypo_10, UAch1_10, Usavi_10, Valjean_10, Virapocalypse_10, Vista_10, Vivaldi_10, Waterdiva_10, Weher20_10, YorkOnyx_19, Yoshand_10, YouGoGlencoco_10, Zaider_11, Zelda_10, Zonia_10,

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

- Kroos_19, Lennon_20, Rofo_18, Sitar_20, Vivi2_18,

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

- Affeca_48, Ailee_47, AluminumJesus_51, Amao_38, Angela_225, Angelicage_48, Apricot_54, Ariel_165, Austintatious_42, AxeJC_43, Baddon_49, Belphegor_76, BenchScraper_69, Bibwit_48, Bioscum_45, Blab_51, Blessica_32, Bmoc_167, Bmoc_227, Breeniome_140, Burrough_141, Bxz1_138, Byougenkin_63, CMP1_50, CN1A_67, CN1A_74, Cafasso_94, Cali_136, Cane17_133, Caprice_29, Catdawg_31, CharlieB_138, ChickenPhender_137, Chipper1996_1010, Chocolat_100, Chubster_100, Colucci_103, Corndog_33, Courthouse_162, Crater_54, CrystalP_38, Cumberbatch_45, Cursive_225, Darolandstone_43, Daubenski_216, DrYang_96, Eastland_44, EdgarPoe_100, Eklok_44,

EleanorGeorge_65, Engineer_51, Faja_72, Familton_32, Finch_154, Finch_155, Finch_57, Firehouse51_66, Fludd_142, Footloose_54, Footloose_56, Fransoyer_69, GMA6_35, GMA6_79, GMA6_81, GageAP_46, Gonephishing_48, Grayson_217, Gudmit_38, Guppsters_64, Gustavo_49, HFrancette_45, Hestia_63, HumptyDumpty_100, HyRo_132, Hydra_4, Idergollasper_31, Ididsumtinwong_46, Ignacio_44, JKSyngboy_47, JaNo_99, JangDynasty_31, Jessibeth14_140, KBurrousTX_96, Kabreeze_100, Kamashten_49, Keitabear_50, Kewpiedoll_51, Koguma_138, Kwobi_50, LRRHood_134, Larnav_229, Lennon_50, Linus_100, LittleShirley_63, LolaVinca_141, Love_55, Lozinak_50, Lton_30, Lukilu_131, Lululemon_222, Lymara_98, Mangeria_141, Mcklovin_2, MikeLiesIn_142, Mildred21_232, Mojorita_45, MoontowerMania_50, Mordred_100, MortyNRick_64, Ms6_60, Mutaforma13_69, PacManQ_223, PapayaSalad_44, Persimmon_162, Phistory_56, PhorbesPhlower_38, Phox_138, Picard_45, Piccadilly_44, Pio_145, Plumbus_66, PrincessTrina_101, REQ3_10, Rabinovish_140, Raleigh_43, RedWattleHog_27, RomansRevenge_74, RosiePosie_100, Ryadel_34, SV1_42, SadLad_28, Samy_46, Sarge_55, Saronaya_49, Scavito_101, SchoolBus_31, Sedona_50, Shaqnato_134, Shelob_143, Shifa_130, Shivanishola_50, Sitar_50, Smoothie_51, SoJo_43, Sour_34, Superphikiman_163, Sushi23_223, Targaryen_222, Teardrop_140, Thing3_49, ToastyFinz_42, Tophat_101, Totinger_66, Tucker_41, UBSmoodge_126, Vibaki_76, Vivi2_54, Vondra_43, WhereRU_166, Winget_32, YorkOnyx_50, YungJamal_34, Yvonnetastic_114, Yvonnetastic_131, Zulu_41,

Summary by start number:

Start 62:

- Found in 3 of 328 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Ariel_165 (J), Courthouse_162 (J),

Start 63:

- Found in 9 of 328 (2.7%) of genes in pham
- Manual Annotations of this start: 5 of 302
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Angelicage_48 (DE1), Keitabear_50 (DE1), Lennon_50 (DE1), Sitar_50 (DE1), Vivi2_54 (DE1),

Start 76:

- Found in 21 of 328 (6.4%) of genes in pham
- Manual Annotations of this start: 12 of 302
- Called 76.2% of time when present
- Phage (with cluster) where this start called: Affeca_48 (DE1), Ailee_47 (DE1), Baddon_49 (DE1), Bibwit_48 (DE1), Gustavo_49 (DE1), JKSyngboy_47 (DE1), Kamashten_49 (DE1), Kewpiedoll_51 (DE1), Kwobi_50 (DE1), Love_55 (DE1), MoontowerMania_50 (DE1), Saronaya_49 (DE1), Sedona_50 (DE1), Shivanishola_50 (DE1), Thing3_49 (DE1), YorkOnyx_50 (DE1),

Start 79:

- Found in 3 of 328 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Bioscum_45 (BC3), PapayaSalad_44 (BC3),

Start 80:

- Found in 9 of 328 (2.7%) of genes in pham
- Manual Annotations of this start: 5 of 302
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Byougenkin_63 (F1), Guppsters_64 (F1), LittleShirley_63 (F1), Plumbus_66 (F1), Superphikiman_163 (J), Totinger_66 (F1),

Start 81:

- Found in 14 of 328 (4.3%) of genes in pham
- Manual Annotations of this start: 12 of 302
- Called 92.9% of time when present
- Phage (with cluster) where this start called: AxeJC_43 (BP), Cumberbatch_45 (BP), Eastland_44 (BP), Eklok_44 (BP), EleanorGeorge_65 (F1), Firehouse51_66 (F1), Fransoyer_69 (EG), HFrancette_45 (BP), Ignacio_44 (BP), MortyNRick_64 (DN), Mutaforma13_69 (F1), Piccadilly_44 (BP), Vondra_43 (BP),

Start 82:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lton_30 (CZ),

Start 85:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnetastic_131 (DD),

Start 86:

- Found in 19 of 328 (5.8%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Lennon_20 (DE1), Vivi2_18 (DE1),

Start 88:

- Found in 4 of 328 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A_74 (singleton), Darolandstone_43 (BC2), Raleigh_43 (BC2), ToastyFinz_42 (BC1),

Start 90:

- Found in 11 of 328 (3.4%) of genes in pham
- Manual Annotations of this start: 3 of 302
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Moajorita_45 (BC1), Picard_45 (BC1), SoJo_43 (BC1),

Start 91:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SV1_42 (BC1),

Start 93:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cafasso_94 (DZ),

Start 94:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GageAP_46 (A1),

Start 95:

- Found in 27 of 328 (8.2%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 7.4% of time when present
- Phage (with cluster) where this start called: Lululemon_222 (BE1), Sitar_20 (DE1),

Start 96:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6_79 (DQ),

Start 98:

- Found in 4 of 328 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Austintatious_42 (BC3),
Ididsumtinwong_46 (BC3),

Start 99:

- Found in 163 of 328 (49.7%) of genes in pham
- Manual Annotations of this start: 158 of 302
- Called 96.9% of time when present
- Phage (with cluster) where this start called: ABU_10 (B1), Adriana_10 (B1),
AltPhacts_10 (B1), Anderson_10 (B1), Badfish_10 (B1), Barsten_19 (DE1),
Basato_11 (B1), BaxterFox_65 (CZ3), Bibwit_19 (DE1), BlackStallion_10 (B1),
BlueHusk_10 (B1), BobBob_16 (DE1), Boehler_10 (B1), Buckeye_10 (B1), CamL_10
(B1), CampRoach_10 (B1), Cannibal_10 (B1), Chah_10 (B1), Charles1_10 (B1),
Charming_16 (DE1), CheetO_10 (B1), Chunky_10 (B1), Cobra_10 (B1), Colbert_10
(B1), Compostia_13 (B3), Craff_10 (B1), Daka_10 (B1), Dingo_10 (B1), DirtJuice_10
(B1), DoesntMatter_10 (B1), Durga_10 (B1), EMSquaredA_63 (CY1), Emiris_10 (B1),
EmpTee_10 (B1), EnalisNailo_59 (CY1), Eremos_10 (B1), Etaye_10 (B1),
Eugenia_10 (B1), Fang_10 (B1), Floral_64 (CY1), FluffyNinja_10 (B1), Fosterous_16
(DE1), Frankicide_10 (B1), FriarPreacher_10 (B1), Fringe_10 (B1), Galadriel_20
(DE1), GeneCoco_10 (B1), Gophee_10 (B1), Gyarad_0010 (B1), HSavage_10 (B1),
Haimas_10 (B1), Hamish_10 (B1), Hartsy_10 (B1), Harvey_10 (B1), Hertubise_10

(B1), Hetaeria_10 (B1), Horchata_10 (B1), Inchworm_10 (B1), Inverness_10 (B1), Iridoclysis_10 (B1), IsaacEli_10 (B1), JacAttac_10 (B1), JangoPhett_10 (B1), KLucky39_10 (B1), Kailash_10 (B1), Katniss_10 (B1), Keitabear_20 (DE1), Keitherie_10 (B1), Kikipoo_10 (B1), KingVeVeVe_10 (B1), KlimbOn_10 (B1), Kloppinator_10 (B1), LasagnaCat_10 (B1), Lasso_10 (B1), LeeLot_10 (B1), Lego3393_10 (B1), Love_20 (DE1), Lulwa_10 (B1), Magic8_10 (B1), Marteena_62 (CY1), Matteo_53 (CZ2), Megatron_10 (B1), Melc17_10 (B1), Mesh1_10 (B1), Mikota_10 (B1), MiniBoss_10 (B1), Morty_10 (B1), Murdoc_10 (B1), Nacho_0010 (B1), Neobush_64 (CZ1), Newman_10 (B1), Nicole21_10 (B1), Nordenberg_13 (DE1), Numberten_10 (B1), OSmaximus_10 (B1), Olive_10 (B1), OliverWalter_10 (B1), Omniscient_10 (B1), Oosterbaan_10 (B1), Orion_10 (B1), PG1_10 (B1), Paries_19 (DE1), Phamished_10 (B1), PhatCats2014_10 (B1), PhatLouie_10 (B1), Pherdinand_10 (B1), Phipps_10 (B1), PhrodoBaggins_105 (B1), Phunky_10 (B1), Pipsqueak_10 (B1), Plmatters_10 (B1), Podrick_10 (B1), Pollux_66 (CY1), Pops_10 (B1), Prickles_10 (B1), ProfessorX_10 (B1), Puhltonio_10 (B1), QueenBeane_10 (B1), Quisquilliae_10 (B1), Riggan_10 (B1), Roliet_10 (B1), Roscoe_11 (B1), SDcharge11_10 (B1), Samaymay_10 (B1), Scoot17C_10 (B1), Serendipity_10 (B1), Serpentine_0010 (B1), Sheila_10 (B1), ShiVal_10 (B1), Sigman_10 (B1), Skippy_10 (B1), Slatt_10 (B1), Soto_10 (B1), Spartan300_10 (B1), Suffolk_10 (B1), Surely_10 (B1), Swish_10 (B1), Tangent_16 (DE1), Thora_10 (B1), ThreeOh3D2_10 (B1), TomBombadil_10 (B1), Tomlarah_10 (B1), Tooj_10 (B1), Trypo_10 (B1), UAch1_10 (B1), Usavi_10 (B1), Valjean_10 (B1), Virapocalypse_10 (B1), Vista_10 (B1), Vivaldi_10 (B1), Waterdiva_10 (B1), Weher20_10 (B1), YorkOnyx_19 (DE1), Yoshand_10 (B1), YouGoGlencoco_10 (B1), Zaidler_11 (B1), Zelda_10 (B1), Zonia_10 (B1),

Start 101:

- Found in 8 of 328 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 302
- Called 62.5% of time when present
- Phage (with cluster) where this start called: AluminumJesus_51 (EG), Blab_51 (EG), Caprice_29 (S), Hydra_4 (BD1), Mcklovin_2 (CZ4),

Start 102:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor_76 (DE),

Start 103:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_103 (AR), DrYang_96 (AR),

Start 104:

- Found in 3 of 328 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Gudmit_38 (singleton),

Start 105:

- Found in 1 of 328 (0.3%) of genes in pham

- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_57 (singleton),

Start 106:

- Found in 3 of 328 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Finch_155 (singleton),

Start 107:

- Found in 15 of 328 (4.6%) of genes in pham
- Manual Annotations of this start: 5 of 302
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Engineer_51 (CQ1), Grayson_217 (CB), KBurrousTX_96 (AR), Lozinak_50 (CQ1), Smoothie_51 (CQ1),

Start 109:

- Found in 6 of 328 (1.8%) of genes in pham
- Manual Annotations of this start: 5 of 302
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Apricot_54 (DN3), Crater_54 (DN3), Finch_154 (singleton), Phistory_56 (DN1), PhorbesPhlower_38 (DH),

Start 111:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Vibaki_76 (FL),

Start 112:

- Found in 29 of 328 (8.8%) of genes in pham
- Manual Annotations of this start: 21 of 302
- Called 82.8% of time when present
- Phage (with cluster) where this start called: Angela_225 (BE1), Bmoc_227 (BE1), Chipper1996_1010 (AR), Chocolat_100 (AR), Chubster_100 (AR), Cursive_225 (BE1), Daubenski_216 (BE1), EdgarPoe_100 (AR), HumptyDumpty_100 (AR), JaNo_99 (AR), Kabreeze_100 (AR), Larnav_229 (BE1), Linus_100 (AR), Lymara_98 (AR), Mildred21_232 (BE1), Mordred_100 (AR), PacManQ_223 (BE1), PrincessTrina_101 (AR), RosiePosie_100 (AR), SadLad_28 (EG), Scavito_101 (AR), Sushi23_223 (BE1), Targaryen_222 (BE1), Tophat_101 (AR),

Start 113:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CMP1_50 (singleton),

Start 114:

- Found in 3 of 328 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: GMA6_35 (DQ),

Start 117:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A_67 (singleton),

Start 119:

- Found in 25 of 328 (7.6%) of genes in pham
- Manual Annotations of this start: 23 of 302
- Called 92.0% of time when present
- Phage (with cluster) where this start called: Breeniome_140 (C1), Burrough_141 (C1), Bxz1_138 (C1), Cali_136 (C1), Cane17_133 (C1), CharlieB_138 (C1), ChickenPhender_137 (C1), Fludd_142 (C1), HyRo_132 (C1), Jessibeth14_140 (C1), Koguma_138 (C1), LRRHood_134 (C1), LolaVinca_141 (C1), Lukilu_131 (C1), Mangeria_141 (C1), MikeLiesIn_142 (C1), Phox_138 (C1), Pio_145 (C1), Rabinovish_140 (C1), Shaqnato_134 (C1), Shelob_143 (C1), Shifa_130 (C1), Teardrop_140 (C1),

Start 120:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Footloose_54 (singleton),

Start 123:

- Found in 17 of 328 (5.2%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Kroos_19 (DE1), Rofo_18 (DE1),

Start 127:

- Found in 141 of 328 (43.0%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 2.1% of time when present
- Phage (with cluster) where this start called: Bmoc_167 (BE1), Persimmon_162 (BE1), WhereRU_166 (BE1),

Start 128:

- Found in 10 of 328 (3.0%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 40.0% of time when present
- Phage (with cluster) where this start called: BenchScraper_69 (AY), Faja_72 (AY), Hestia_63 (AY), Ms6_60 (F1),

Start 130:

- Found in 9 of 328 (2.7%) of genes in pham
- Manual Annotations of this start: 3 of 302
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Corndog_33 (O), Ryadel_34 (O), Winget_32 (O),

Start 134:

- Found in 9 of 328 (2.7%) of genes in pham
- Manual Annotations of this start: 6 of 302
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Catdawg_31 (O), Familton_32 (O), Idergollasper_31 (O), JangDynasty_31 (O), SchoolBus_31 (O), YungJamal_34 (O),

Start 140:

- Found in 3 of 328 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 302
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Tucker_41 (A6), Zulu_41 (A6),

Start 143:

- Found in 30 of 328 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 3.3% of time when present
- Phage (with cluster) where this start called: RedWattleHog_27 (DX),

Start 146:

- Found in 10 of 328 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Footloose_56 (singleton),

Start 148:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_74 (singleton), Samy_46 (singleton),

Start 152:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnestic_114 (DD),

Start 153:

- Found in 1 of 328 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sour_34 (DR),

Start 154:

- Found in 4 of 328 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 25.0% of time when present
- Phage (with cluster) where this start called: CrystalP_38 (E),

Start 155:

- Found in 2 of 328 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 50.0% of time when present

- Phage (with cluster) where this start called: Sarge_55 (FB),

Start 158:

- Found in 10 of 328 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 302
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Blessica_32 (O),

Start 164:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ3_10 (singleton),

Start 165:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: UBSmoodge_126 (DQ),

Start 173:

- Found in 1 of 328 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gonephishing_48 (J),

Start 174:

- Found in 12 of 328 (3.7%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: GMA6_81 (DQ),

Start 191:

- Found in 8 of 328 (2.4%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Amao_38 (E),

Summary by clusters:

There are 41 clusters represented in this pham: DN, singleton, DH, CZ2, CZ3, DD, CZ1, CZ4, FB, BP, DX, DR, DQ, FL, A1, DN1, DN3, A6, BD1, CQ1, CY1, DE, E, CB, EG, J, O, CZ, S, AR, AY, C1, F1, DE1, B1, B3, DZ, BE1, BC1, BC2, BC3,

Info for manual annotations of cluster A1:

- Start number 94 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A6:

- Start number 140 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster AR:

- Start number 103 was manually annotated 2 times for cluster AR.
- Start number 107 was manually annotated 1 time for cluster AR.

- Start number 112 was manually annotated 13 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 128 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster B1:

- Start number 99 was manually annotated 137 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 99 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster BC1:

- Start number 88 was manually annotated 1 time for cluster BC1.
- Start number 90 was manually annotated 3 times for cluster BC1.
- Start number 91 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 88 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 79 was manually annotated 2 times for cluster BC3.
- Start number 98 was manually annotated 2 times for cluster BC3.

Info for manual annotations of cluster BD1:

- Start number 101 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BE1:

- Start number 112 was manually annotated 7 times for cluster BE1.
- Start number 127 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BP:

- Start number 81 was manually annotated 8 times for cluster BP.

Info for manual annotations of cluster C1:

- Start number 119 was manually annotated 23 times for cluster C1.

Info for manual annotations of cluster CB:

- Start number 107 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CQ1:

- Start number 107 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CY1:

- Start number 99 was manually annotated 5 times for cluster CY1.

Info for manual annotations of cluster CZ:

- Start number 82 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 99 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 99 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 99 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 101 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DD:

- Start number 85 was manually annotated 1 time for cluster DD.
- Start number 152 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 63 was manually annotated 5 times for cluster DE1.
- Start number 76 was manually annotated 12 times for cluster DE1.
- Start number 86 was manually annotated 2 times for cluster DE1.
- Start number 95 was manually annotated 1 time for cluster DE1.
- Start number 99 was manually annotated 12 times for cluster DE1.
- Start number 123 was manually annotated 2 times for cluster DE1.

Info for manual annotations of cluster DH:

- Start number 109 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN1:

- Start number 109 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 109 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DR:

- Start number 153 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DX:

- Start number 143 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster DZ:

- Start number 93 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster E:

- Start number 154 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster EG:

- Start number 81 was manually annotated 1 time for cluster EG.
- Start number 101 was manually annotated 2 times for cluster EG.
- Start number 112 was manually annotated 1 time for cluster EG.

Info for manual annotations of cluster F1:

- Start number 80 was manually annotated 4 times for cluster F1.
- Start number 81 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FB:

- Start number 155 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FL:

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

Info for manual annotations of cluster J:

- Start number 62 was manually annotated 2 times for cluster J.
- Start number 80 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster O:

- Start number 130 was manually annotated 3 times for cluster O.
- Start number 134 was manually annotated 6 times for cluster O.
- Start number 158 was manually annotated 1 time for cluster O.

Gene Information:

Gene: ABU_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for ABU_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Adriana_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Adriana_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Affeca_48 Start: 42397, Stop: 42915, Start Num: 76

Candidate Starts for Affeca_48:

(59, 42385), (Start: 76 @42397 has 12 MA's), (189, 42613), (223, 42703), (227, 42715),

Gene: Ailee_47 Start: 42002, Stop: 42520, Start Num: 76

Candidate Starts for Ailee_47:

(59, 41990), (Start: 63 @41999 has 5 MA's), (Start: 76 @42002 has 12 MA's), (189, 42218), (223, 42308), (227, 42320),

Gene: AltPhacts_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for AltPhacts_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: AluminumJesus_51 Start: 40979, Stop: 40554, Start Num: 101

Candidate Starts for AluminumJesus_51:

(Start: 101 @40979 has 4 MA's), (191, 40811), (227, 40709), (267, 40625),

Gene: Amao_38 Start: 33060, Stop: 32746, Start Num: 191

Candidate Starts for Amao_38:

(58, 33333), (87, 33267), (115, 33225), (Start: 154 @33138 has 1 MA's), (191, 33060), (194, 33057), (206, 33021),

Gene: Anderson_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Anderson_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Angela_225 Start: 112366, Stop: 112806, Start Num: 112

Candidate Starts for Angela_225:

(Start: 95 @112339 has 1 MA's), (Start: 112 @112366 has 21 MA's), (162, 112462), (190, 112513), (224, 112606), (253, 112678), (272, 112732), (282, 112765),

Gene: Angelicage_48 Start: 42812, Stop: 43333, Start Num: 63

Candidate Starts for Angelicage_48:

(59, 42803), (Start: 63 @42812 has 5 MA's), (Start: 76 @42815 has 12 MA's), (189, 43031), (223, 43121), (227, 43133),

Gene: Apricot_54 Start: 35119, Stop: 35568, Start Num: 109

Candidate Starts for Apricot_54:

(67, 35038), (Start: 109 @35119 has 5 MA's), (141, 35191), (196, 35287), (210, 35323), (261, 35452), (291, 35557),

Gene: Ariel_165 Start: 84168, Stop: 84737, Start Num: 62

Candidate Starts for Ariel_165:

(Start: 62 @84168 has 2 MA's), (Start: 80 @84210 has 5 MA's), (Start: 86 @84225 has 2 MA's), (203, 84447), (223, 84504), (230, 84525),

Gene: Austintatious_42 Start: 27716, Stop: 28177, Start Num: 98

Candidate Starts for Austintatious_42:

(17, 27290), (18, 27320), (37, 27539), (Start: 98 @27716 has 2 MA's), (218, 27980), (222, 28001), (255, 28064),

Gene: AxeJC_43 Start: 29903, Stop: 30394, Start Num: 81

Candidate Starts for AxeJC_43:

(Start: 81 @29903 has 12 MA's), (218, 30155), (221, 30170),

Gene: Baddon_49 Start: 43084, Stop: 43602, Start Num: 76

Candidate Starts for Baddon_49:

(Start: 76 @43084 has 12 MA's), (Start: 90 @43114 has 3 MA's), (189, 43300), (223, 43390), (227, 43402), (294, 43597),

Gene: Badfish_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Badfish_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Barsten_19 Start: 14612, Stop: 15058, Start Num: 99

Candidate Starts for Barsten_19:

(Start: 86 @14591 has 2 MA's), (Start: 95 @14603 has 1 MA's), (Start: 99 @14612 has 158 MA's), (Start: 123 @14642 has 2 MA's), (126, 14651), (210, 14822), (218, 14855), (229, 14897), (238, 14918), (259, 14963),

Gene: Basato_11 Start: 9177, Stop: 9611, Start Num: 99

Candidate Starts for Basato_11:

(Start: 99 @9177 has 158 MA's), (Start: 127 @9216 has 2 MA's), (137, 9240), (177, 9321), (218, 9411), (238, 9474),

Gene: BaxterFox_65 Start: 44276, Stop: 44731, Start Num: 99
Candidate Starts for BaxterFox_65:
(58, 44204), (60, 44207), (Start: 99 @44276 has 158 MA's), (Start: 112 @44288 has 21 MA's), (168, 44417), (187, 44453), (228, 44570), (232, 44579),

Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 102
Candidate Starts for Belphegor_76:
(32, 56071), (50, 56167), (52, 56176), (102, 56290), (144, 56374), (184, 56431), (191, 56455), (200, 56479), (207, 56491),

Gene: BenchScraper_69 Start: 37083, Stop: 37535, Start Num: 128
Candidate Starts for BenchScraper_69:
(Start: 107 @37047 has 5 MA's), (Start: 112 @37053 has 21 MA's), (Start: 128 @37083 has 2 MA's), (277, 37479),

Gene: Bibwit_19 Start: 14856, Stop: 15302, Start Num: 99
Candidate Starts for Bibwit_19:
(Start: 86 @14835 has 2 MA's), (Start: 95 @14847 has 1 MA's), (Start: 99 @14856 has 158 MA's), (Start: 123 @14886 has 2 MA's), (126, 14895), (210, 15066), (218, 15099), (229, 15141), (238, 15162), (259, 15207), (273, 15243),

Gene: Bibwit_48 Start: 41643, Stop: 42161, Start Num: 76
Candidate Starts for Bibwit_48:
(Start: 76 @41643 has 12 MA's), (Start: 90 @41673 has 3 MA's), (189, 41859), (223, 41949), (227, 41961),

Gene: Bioscum_45 Start: 29978, Stop: 30484, Start Num: 79
Candidate Starts for Bioscum_45:
(Start: 79 @29978 has 2 MA's), (Start: 98 @30014 has 2 MA's), (223, 30272), (228, 30290), (240, 30311),

Gene: Blab_51 Start: 40826, Stop: 40401, Start Num: 101
Candidate Starts for Blab_51:
(21, 41177), (24, 41099), (Start: 101 @40826 has 4 MA's), (191, 40658), (227, 40556), (267, 40472),

Gene: BlackStallion_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for BlackStallion_10:
(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Blessica_32 Start: 14991, Stop: 15401, Start Num: 158
Candidate Starts for Blessica_32:
(Start: 158 @14991 has 1 MA's), (172, 15024), (174, 15027), (177, 15030), (223, 15153), (239, 15195), (292, 15366), (297, 15393),

Gene: BlueHusk_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for BlueHusk_10:
(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Bmoc_227 Start: 112807, Stop: 113247, Start Num: 112
Candidate Starts for Bmoc_227:

(89, 112771), (Start: 95 @112780 has 1 MA's), (Start: 112 @112807 has 21 MA's), (162, 112903), (190, 112954), (224, 113047), (253, 113119), (272, 113173), (282, 113206),

Gene: Bmoc_167 Start: 91666, Stop: 92031, Start Num: 127

Candidate Starts for Bmoc_167:

(Start: 127 @91666 has 2 MA's), (163, 91735), (210, 91822), (230, 91888),

Gene: BobBob_16 Start: 13466, Stop: 13912, Start Num: 99

Candidate Starts for BobBob_16:

(Start: 86 @13445 has 2 MA's), (Start: 95 @13457 has 1 MA's), (Start: 99 @13466 has 158 MA's), (Start: 123 @13496 has 2 MA's), (126, 13505), (210, 13676), (218, 13709), (229, 13751), (238, 13772), (259, 13817), (273, 13853),

Gene: Boehler_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Boehler_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Breeniome_140 Start: 81159, Stop: 81575, Start Num: 119

Candidate Starts for Breeniome_140:

(15, 80682), (Start: 119 @81159 has 23 MA's), (Start: 143 @81216 has 1 MA's), (171, 81279), (205, 81348), (221, 81393), (233, 81432),

Gene: Buckeye_10 Start: 8945, Stop: 9379, Start Num: 99

Candidate Starts for Buckeye_10:

(Start: 99 @8945 has 158 MA's), (Start: 127 @8984 has 2 MA's), (137, 9008), (177, 9089), (218, 9179), (238, 9242),

Gene: Burrough_141 Start: 83310, Stop: 83726, Start Num: 119

Candidate Starts for Burrough_141:

(15, 82833), (Start: 119 @83310 has 23 MA's), (Start: 143 @83367 has 1 MA's), (171, 83430), (205, 83499), (221, 83544), (233, 83583),

Gene: Bxz1_138 Start: 84513, Stop: 84929, Start Num: 119

Candidate Starts for Bxz1_138:

(15, 84036), (Start: 119 @84513 has 23 MA's), (Start: 143 @84570 has 1 MA's), (171, 84633), (205, 84702), (221, 84747), (233, 84786),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 80

Candidate Starts for Byougenkin_63:

(Start: 80 @41134 has 5 MA's), (Start: 128 @41218 has 2 MA's), (243, 41461), (257, 41500), (270, 41542),

Gene: CMP1_50 Start: 47245, Stop: 46814, Start Num: 113

Candidate Starts for CMP1_50:

(113, 47245), (132, 47212), (193, 47098), (217, 47044), (278, 46864),

Gene: CN1A_74 Start: 54320, Stop: 53856, Start Num: 88

Candidate Starts for CN1A_74:

(Start: 88 @54320 has 3 MA's), (108, 54290), (191, 54131),

Gene: CN1A_67 Start: 52198, Stop: 51770, Start Num: 117

Candidate Starts for CN1A_67:

(53, 52336), (110, 52210), (117, 52198), (132, 52174), (187, 52066), (218, 51991), (263, 51853), (288, 51781),

Gene: Cafasso_94 Start: 55360, Stop: 55818, Start Num: 93

Candidate Starts for Cafasso_94:

(54, 55264), (Start: 93 @55360 has 1 MA's), (129, 55423), (223, 55645), (228, 55663),

Gene: Cali_136 Start: 83312, Stop: 83728, Start Num: 119

Candidate Starts for Cali_136:

(15, 82835), (Start: 119 @83312 has 23 MA's), (Start: 143 @83369 has 1 MA's), (171, 83432), (205, 83501), (221, 83546), (233, 83585),

Gene: CamL_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for CamL_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: CampRoach_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for CampRoach_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Cane17_133 Start: 84174, Stop: 84590, Start Num: 119

Candidate Starts for Cane17_133:

(15, 83697), (Start: 119 @84174 has 23 MA's), (Start: 143 @84231 has 1 MA's), (171, 84294), (205, 84363), (221, 84408), (233, 84447),

Gene: Cannibal_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Cannibal_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Caprice_29 Start: 9273, Stop: 9845, Start Num: 101

Candidate Starts for Caprice_29:

(Start: 101 @9273 has 4 MA's), (Start: 107 @9282 has 5 MA's), (162, 9402), (169, 9417), (194, 9474), (218, 9552), (249, 9645),

Gene: Catdawg_31 Start: 14620, Stop: 15090, Start Num: 134

Candidate Starts for Catdawg_31:

(Start: 130 @14608 has 3 MA's), (Start: 134 @14620 has 6 MA's), (Start: 146 @14653 has 1 MA's), (Start: 158 @14680 has 1 MA's), (172, 14713), (174, 14716), (177, 14719), (223, 14842), (239, 14884), (292, 15055), (297, 15082),

Gene: Chah_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Chah_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Charles1_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Charles1_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: CharlieB_138 Start: 82195, Stop: 82611, Start Num: 119

Candidate Starts for CharlieB_138:

(15, 81718), (Start: 119 @82195 has 23 MA's), (Start: 143 @82252 has 1 MA's), (171, 82315), (205, 82384), (221, 82429), (233, 82468),

Gene: Charming_16 Start: 13468, Stop: 13914, Start Num: 99

Candidate Starts for Charming_16:

(Start: 86 @13447 has 2 MA's), (Start: 95 @13459 has 1 MA's), (Start: 99 @13468 has 158 MA's), (Start: 123 @13498 has 2 MA's), (126, 13507), (210, 13678), (218, 13711), (229, 13753), (238, 13774), (259, 13819), (273, 13855),

Gene: CheetO_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for CheetO_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: ChickenPhender_137 Start: 81501, Stop: 81917, Start Num: 119

Candidate Starts for ChickenPhender_137:

(15, 81024), (Start: 119 @81501 has 23 MA's), (Start: 143 @81558 has 1 MA's), (171, 81621), (205, 81690), (221, 81735), (233, 81774),

Gene: Chipper1996_1010 Start: 63867, Stop: 64361, Start Num: 112

Candidate Starts for Chipper1996_1010:

(57, 63759), (75, 63798), (Start: 112 @63867 has 21 MA's), (149, 63951), (187, 64023), (201, 64062), (286, 64332),

Gene: Chocolat_100 Start: 63574, Stop: 64068, Start Num: 112

Candidate Starts for Chocolat_100:

(57, 63466), (75, 63505), (Start: 112 @63574 has 21 MA's), (149, 63658), (187, 63730), (201, 63769), (286, 64039),

Gene: Chubster_100 Start: 63814, Stop: 64308, Start Num: 112

Candidate Starts for Chubster_100:

(57, 63706), (75, 63745), (Start: 112 @63814 has 21 MA's), (149, 63898), (187, 63970), (201, 64009), (286, 64279),

Gene: Chunky_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Chunky_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Cobra_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Cobra_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Colbert_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Colbert_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Colucci_103 Start: 64172, Stop: 64684, Start Num: 103

Candidate Starts for Colucci_103:

(Start: 103 @64172 has 2 MA's), (149, 64262), (184, 64316), (223, 64463), (225, 64472), (228, 64481), (279, 64610),

Gene: Compostia_13 Start: 10667, Stop: 11107, Start Num: 99

Candidate Starts for Compostia_13:

(Start: 99 @10667 has 158 MA's), (215, 10889), (223, 10919), (229, 10937), (293, 11102),

Gene: Corndog_33 Start: 15066, Stop: 15548, Start Num: 130

Candidate Starts for Corndog_33:

(Start: 130 @15066 has 3 MA's), (Start: 134 @15078 has 6 MA's), (Start: 146 @15111 has 1 MA's), (Start: 158 @15138 has 1 MA's), (172, 15171), (174, 15174), (177, 15177), (223, 15300), (239, 15342), (292, 15513), (297, 15540),

Gene: Courthouse_162 Start: 84612, Stop: 85181, Start Num: 62

Candidate Starts for Courthouse_162:

(Start: 62 @84612 has 2 MA's), (Start: 80 @84654 has 5 MA's), (Start: 86 @84669 has 2 MA's), (203, 84891), (223, 84948), (230, 84969),

Gene: Craff_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Craff_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Crater_54 Start: 35514, Stop: 35963, Start Num: 109

Candidate Starts for Crater_54:

(67, 35433), (Start: 109 @35514 has 5 MA's), (141, 35586), (196, 35682), (210, 35718), (261, 35847), (291, 35952),

Gene: CrystalP_38 Start: 33934, Stop: 33542, Start Num: 154

Candidate Starts for CrystalP_38:

(58, 34129), (87, 34063), (115, 34021), (Start: 154 @33934 has 1 MA's), (191, 33856), (194, 33853), (206, 33817),

Gene: Cumberbatch_45 Start: 30201, Stop: 30692, Start Num: 81

Candidate Starts for Cumberbatch_45:

(Start: 81 @30201 has 12 MA's), (218, 30453), (221, 30468),

Gene: Cursive_225 Start: 113007, Stop: 113447, Start Num: 112

Candidate Starts for Cursive_225:

(39, 112812), (46, 112848), (66, 112920), (70, 112926), (73, 112935), (84, 112965), (89, 112971), (92, 112974), (Start: 95 @112980 has 1 MA's), (Start: 112 @113007 has 21 MA's), (162, 113103), (190, 113154), (224, 113247), (253, 113319), (272, 113373), (282, 113406),

Gene: Daka_10 Start: 8946, Stop: 9380, Start Num: 99

Candidate Starts for Daka_10:

(Start: 99 @8946 has 158 MA's), (Start: 127 @8985 has 2 MA's), (137, 9009), (177, 9090), (218, 9180), (238, 9243),

Gene: Darolandstone_43 Start: 33080, Stop: 33595, Start Num: 88

Candidate Starts for Darolandstone_43:

(27, 32861), (51, 32987), (Start: 88 @33080 has 3 MA's), (116, 33119), (227, 33359),

Gene: Daubenski_216 Start: 113389, Stop: 113829, Start Num: 112

Candidate Starts for Daubenski_216:

(38, 113191), (39, 113194), (42, 113218), (46, 113230), (47, 113233), (66, 113302), (70, 113308), (73, 113317), (84, 113347), (89, 113353), (Start: 112 @113389 has 21 MA's), (162, 113485), (190, 113536), (224, 113629), (253, 113701), (272, 113755), (282, 113788),

Gene: Dingo_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Dingo_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: DirtJuice_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for DirtJuice_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: DoesntMatter_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for DoesntMatter_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: DrYang_96 Start: 63051, Stop: 63563, Start Num: 103

Candidate Starts for DrYang_96:

(Start: 103 @63051 has 2 MA's), (149, 63141), (181, 63192), (223, 63342), (225, 63351), (263, 63438),

Gene: Durga_10 Start: 8957, Stop: 9391, Start Num: 99

Candidate Starts for Durga_10:

(Start: 99 @8957 has 158 MA's), (Start: 127 @8996 has 2 MA's), (137, 9020), (177, 9101), (218, 9191), (238, 9254),

Gene: EMSquaredA_63 Start: 42816, Stop: 43277, Start Num: 99

Candidate Starts for EMSquaredA_63:

(40, 42666), (41, 42669), (58, 42744), (60, 42747), (Start: 99 @42816 has 158 MA's), (Start: 107 @42822 has 5 MA's), (Start: 143 @42903 has 1 MA's), (188, 42999), (228, 43116),

Gene: Eastland_44 Start: 30161, Stop: 30652, Start Num: 81

Candidate Starts for Eastland_44:

(Start: 81 @30161 has 12 MA's), (218, 30413), (221, 30428),

Gene: EdgarPoe_100 Start: 63731, Stop: 64225, Start Num: 112

Candidate Starts for EdgarPoe_100:

(57, 63623), (75, 63662), (Start: 112 @63731 has 21 MA's), (149, 63815), (187, 63887), (201, 63926), (286, 64196),

Gene: Eklok_44 Start: 29960, Stop: 30451, Start Num: 81

Candidate Starts for Eklok_44:

(Start: 81 @29960 has 12 MA's), (218, 30212), (221, 30227),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 81

Candidate Starts for EleanorGeorge_65:

(Start: 81 @42284 has 12 MA's), (184, 42458), (194, 42485), (223, 42569), (248, 42608), (289, 42737),

Gene: Emiris_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Emiris_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: EmpTee_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for EmpTee_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: EnalisNailo_59 Start: 42622, Stop: 43077, Start Num: 99

Candidate Starts for EnalisNailo_59:

(43, 42490), (45, 42493), (58, 42550), (60, 42553), (Start: 99 @42622 has 158 MA's), (Start: 107 @42628 has 5 MA's), (Start: 119 @42649 has 23 MA's), (Start: 143 @42706 has 1 MA's), (168, 42763), (187, 42799), (228, 42916), (232, 42925), (256, 42985),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 107

Candidate Starts for Engineer_51:

(Start: 107 @31923 has 5 MA's), (163, 32031), (188, 32070), (194, 32082), (212, 32130), (218, 32142), (227, 32178), (295, 32367), (296, 32370),

Gene: Eremos_10 Start: 8937, Stop: 9371, Start Num: 99

Candidate Starts for Eremos_10:

(Start: 99 @8937 has 158 MA's), (Start: 127 @8976 has 2 MA's), (137, 9000), (177, 9081), (218, 9171), (238, 9234),

Gene: Etaye_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Etaye_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Eugenia_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Eugenia_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Faja_72 Start: 38688, Stop: 39140, Start Num: 128

Candidate Starts for Faja_72:

(48, 38511), (Start: 107 @38652 has 5 MA's), (Start: 112 @38658 has 21 MA's), (Start: 128 @38688 has 2 MA's), (277, 39084),

Gene: Familton_32 Start: 14624, Stop: 15094, Start Num: 134

Candidate Starts for Familton_32:

(Start: 130 @14612 has 3 MA's), (Start: 134 @14624 has 6 MA's), (Start: 146 @14657 has 1 MA's), (Start: 158 @14684 has 1 MA's), (172, 14717), (174, 14720), (177, 14723), (223, 14846), (239, 14888), (292, 15059), (297, 15086),

Gene: Fang_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Fang_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Finch_155 Start: 99620, Stop: 100087, Start Num: 106

Candidate Starts for Finch_155:

(69, 99545), (Start: 106 @99620 has 1 MA's), (177, 99755), (211, 99824), (218, 99845), (223, 99869), (262, 99977), (265, 99995), (283, 100046),

Gene: Finch_154 Start: 99144, Stop: 99620, Start Num: 109

Candidate Starts for Finch_154:

(Start: 109 @99144 has 5 MA's), (135, 99192), (218, 99372), (246, 99462), (252, 99477), (285, 99588),

Gene: Finch_57 Start: 47485, Stop: 47922, Start Num: 105

Candidate Starts for Finch_57:

(Start: 105 @47485 has 1 MA's), (114, 47497), (136, 47542), (194, 47668), (205, 47695), (213, 47713), (233, 47779), (254, 47824), (274, 47881), (275, 47884),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 81

Candidate Starts for Firehouse51_66:

(Start: 81 @45330 has 12 MA's), (184, 45504), (194, 45531), (223, 45615), (248, 45654), (289, 45783),

Gene: Floral_64 Start: 44701, Stop: 45162, Start Num: 99

Candidate Starts for Floral_64:

(40, 44551), (41, 44554), (58, 44629), (60, 44632), (Start: 99 @44701 has 158 MA's), (Start: 107 @44707 has 5 MA's), (Start: 143 @44788 has 1 MA's), (188, 44884), (228, 45001),

Gene: Fludd_142 Start: 82309, Stop: 82725, Start Num: 119

Candidate Starts for Fludd_142:

(15, 81832), (Start: 119 @82309 has 23 MA's), (Start: 143 @82366 has 1 MA's), (171, 82429), (205, 82498), (221, 82543), (233, 82582),

Gene: FluffyNinja_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for FluffyNinja_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Footloose_56 Start: 32214, Stop: 32624, Start Num: 146

Candidate Starts for Footloose_56:

(30, 31890), (114, 32139), (124, 32157), (138, 32193), (Start: 146 @32214 has 1 MA's), (Start: 154 @32232 has 1 MA's), (159, 32247), (174, 32277), (182, 32289), (192, 32316), (274, 32565),

Gene: Footloose_54 Start: 31404, Stop: 31829, Start Num: 120

Candidate Starts for Footloose_54:

(42, 31218), (57, 31281), (Start: 120 @31404 has 1 MA's), (166, 31515), (175, 31530), (235, 31677), (237, 31680), (287, 31818),

Gene: Fosterous_16 Start: 14357, Stop: 14803, Start Num: 99

Candidate Starts for Fosterous_16:

(Start: 86 @14336 has 2 MA's), (Start: 95 @14348 has 1 MA's), (Start: 99 @14357 has 158 MA's), (Start: 123 @14387 has 2 MA's), (126, 14396), (210, 14567), (218, 14600), (229, 14642), (238, 14663), (259, 14708), (273, 14744),

Gene: Frankicide_10 Start: 8945, Stop: 9379, Start Num: 99

Candidate Starts for Frankicide_10:

(Start: 99 @8945 has 158 MA's), (Start: 127 @8984 has 2 MA's), (137, 9008), (177, 9089), (218, 9179), (238, 9242),

Gene: Fransoyer_69 Start: 49557, Stop: 49093, Start Num: 81

Candidate Starts for Fransoyer_69:

(56, 49611), (Start: 81 @49557 has 12 MA's), (157, 49434), (224, 49263), (234, 49248), (242, 49242),

Gene: FriarPreacher_10 Start: 8946, Stop: 9380, Start Num: 99

Candidate Starts for FriarPreacher_10:

(Start: 99 @8946 has 158 MA's), (Start: 127 @8985 has 2 MA's), (137, 9009), (177, 9090), (218, 9180), (238, 9243),

Gene: Fringe_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Fringe_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: GMA6_79 Start: 60811, Stop: 61245, Start Num: 96

Candidate Starts for GMA6_79:

(96, 60811), (Start: 120 @60850 has 1 MA's), (139, 60892), (163, 60946), (175, 60967), (216, 61051), (221, 61072),

Gene: GMA6_81 Start: 64168, Stop: 64497, Start Num: 174

Candidate Starts for GMA6_81:

(78, 63964), (83, 63982), (137, 64081), (Start: 140 @64090 has 2 MA's), (Start: 154 @64123 has 1 MA's), (156, 64126), (170, 64162), (174, 64168), (186, 64189), (188, 64195), (191, 64204), (199, 64222), (220, 64288), (233, 64336), (284, 64474),

Gene: GMA6_35 Start: 29073, Stop: 29516, Start Num: 114

Candidate Starts for GMA6_35:

(Start: 104 @29058 has 1 MA's), (114, 29073), (118, 29082), (136, 29121), (145, 29145), (198, 29274), (202, 29286), (203, 29289), (210, 29301), (251, 29424),

Gene: GageAP_46 Start: 34874, Stop: 34401, Start Num: 94

Candidate Starts for GageAP_46:

(Start: 94 @34874 has 1 MA's), (Start: 101 @34859 has 4 MA's), (141, 34787), (151, 34772), (188, 34709), (205, 34670), (223, 34616), (238, 34574), (253, 34538), (268, 34484),

Gene: Galadriel_20 Start: 14216, Stop: 14662, Start Num: 99

Candidate Starts for Galadriel_20:

(Start: 86 @14195 has 2 MA's), (Start: 95 @14207 has 1 MA's), (Start: 99 @14216 has 158 MA's), (Start: 123 @14246 has 2 MA's), (126, 14255), (210, 14426), (218, 14459), (229, 14501), (238, 14522), (259, 14567), (273, 14603),

Gene: GeneCoco_10 Start: 8949, Stop: 9383, Start Num: 99

Candidate Starts for GeneCoco_10:

(Start: 99 @8949 has 158 MA's), (Start: 127 @8988 has 2 MA's), (137, 9012), (177, 9093), (218, 9183), (238, 9246),

Gene: Gonephishing_48 Start: 38804, Stop: 38457, Start Num: 173

Candidate Starts for Gonephishing_48:

(72, 38996), (Start: 91 @38954 has 1 MA's), (Start: 127 @38909 has 2 MA's), (173, 38804), (188, 38777), (199, 38750), (208, 38726), (245, 38615),

Gene: Gophee_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Gophee_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Grayson_217 Start: 108140, Stop: 108661, Start Num: 107

Candidate Starts for Grayson_217:

(92, 108113), (Start: 95 @108119 has 1 MA's), (Start: 107 @108140 has 5 MA's), (150, 108236), (197, 108338), (204, 108356), (209, 108365), (211, 108368), (276, 108605),

Gene: Gudmit_38 Start: 27363, Stop: 27896, Start Num: 104

Candidate Starts for Gudmit_38:

(Start: 104 @27363 has 1 MA's), (Start: 119 @27390 has 23 MA's), (253, 27666), (268, 27711),

Gene: Guppsters_64 Start: 40923, Stop: 41405, Start Num: 80

Candidate Starts for Guppsters_64:

(Start: 80 @40923 has 5 MA's), (Start: 128 @41007 has 2 MA's), (243, 41250), (257, 41289), (270, 41331),

Gene: Gustavo_49 Start: 42016, Stop: 42534, Start Num: 76

Candidate Starts for Gustavo_49:

(Start: 76 @42016 has 12 MA's), (Start: 90 @42046 has 3 MA's), (189, 42232), (223, 42322), (227, 42334), (294, 42529),

Gene: Gyarad_0010 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Gyarad_0010:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: HFrancette_45 Start: 30939, Stop: 31430, Start Num: 81

Candidate Starts for HFrancette_45:

(Start: 81 @30939 has 12 MA's), (218, 31191), (221, 31206),

Gene: HSavage_10 Start: 8945, Stop: 9379, Start Num: 99

Candidate Starts for HSavage_10:

(Start: 99 @8945 has 158 MA's), (Start: 127 @8984 has 2 MA's), (137, 9008), (177, 9089), (218, 9179), (238, 9242),

Gene: Haimas_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Haimas_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Hamish_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Hamish_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Hartsy_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Hartsy_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Harvey_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Harvey_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Hertubise_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Hertubise_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Hestia_63 Start: 34911, Stop: 35363, Start Num: 128

Candidate Starts for Hestia_63:

(48, 34734), (Start: 107 @34875 has 5 MA's), (Start: 112 @34881 has 21 MA's), (Start: 128 @34911 has 2 MA's), (277, 35307),

Gene: Hetaeria_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Hetaeria_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Horchata_10 Start: 8942, Stop: 9376, Start Num: 99

Candidate Starts for Horchata_10:

(Start: 99 @8942 has 158 MA's), (Start: 127 @8981 has 2 MA's), (137, 9005), (177, 9086), (218, 9176), (238, 9239),

Gene: HumptyDumpty_100 Start: 63534, Stop: 64028, Start Num: 112

Candidate Starts for HumptyDumpty_100:

(57, 63426), (75, 63465), (Start: 112 @63534 has 21 MA's), (149, 63618), (187, 63690), (201, 63729), (286, 63999),

Gene: HyRo_132 Start: 82234, Stop: 82650, Start Num: 119

Candidate Starts for HyRo_132:

(15, 81757), (Start: 119 @82234 has 23 MA's), (Start: 143 @82291 has 1 MA's), (171, 82354), (205, 82423), (221, 82468), (233, 82507),

Gene: Hydra_4 Start: 1342, Stop: 1785, Start Num: 101

Candidate Starts for Hydra_4:

(Start: 101 @1342 has 4 MA's), (202, 1525), (218, 1561), (223, 1585), (244, 1630), (258, 1672),

Gene: Idergollasper_31 Start: 14618, Stop: 15088, Start Num: 134

Candidate Starts for Idergollasper_31:

(Start: 130 @14606 has 3 MA's), (Start: 134 @14618 has 6 MA's), (Start: 146 @14651 has 1 MA's), (Start: 158 @14678 has 1 MA's), (172, 14711), (174, 14714), (177, 14717), (223, 14840), (239, 14882), (292, 15053), (297, 15080),

Gene: Ididsumtinwong_46 Start: 30014, Stop: 30484, Start Num: 98

Candidate Starts for Ididsumtinwong_46:

(Start: 79 @29978 has 2 MA's), (Start: 98 @30014 has 2 MA's), (223, 30272), (228, 30290), (240, 30311),

Gene: Ignacio_44 Start: 30842, Stop: 31333, Start Num: 81

Candidate Starts for Ignacio_44:

(Start: 81 @30842 has 12 MA's), (218, 31094), (221, 31109),

Gene: Inchworm_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Inchworm_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Inverness_10 Start: 8945, Stop: 9379, Start Num: 99

Candidate Starts for Inverness_10:

(Start: 99 @8945 has 158 MA's), (Start: 127 @8984 has 2 MA's), (137, 9008), (177, 9089), (218, 9179), (238, 9242),

Gene: Iridoclysis_10 Start: 8947, Stop: 9381, Start Num: 99

Candidate Starts for Iridoclysis_10:

(Start: 99 @8947 has 158 MA's), (Start: 127 @8986 has 2 MA's), (137, 9010), (177, 9091), (218, 9181), (238, 9244),

Gene: IsaacEli_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for IsaacEli_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: JKSyngboy_47 Start: 42615, Stop: 43133, Start Num: 76

Candidate Starts for JKSyngboy_47:

(Start: 76 @42615 has 12 MA's), (Start: 90 @42645 has 3 MA's), (189, 42831), (223, 42921), (227, 42933), (294, 43128),

Gene: JaNo_99 Start: 63505, Stop: 63999, Start Num: 112

Candidate Starts for JaNo_99:

(57, 63397), (75, 63436), (Start: 112 @63505 has 21 MA's), (149, 63589), (187, 63661), (201, 63700), (286, 63970),

Gene: JacAttac_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for JacAttac_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: JangDynasty_31 Start: 14713, Stop: 15183, Start Num: 134

Candidate Starts for JangDynasty_31:

(Start: 130 @14701 has 3 MA's), (Start: 134 @14713 has 6 MA's), (Start: 146 @14746 has 1 MA's), (Start: 158 @14773 has 1 MA's), (172, 14806), (174, 14809), (177, 14812), (223, 14935), (239, 14977), (292, 15148), (297, 15175),

Gene: JangoPhett_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for JangoPhett_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Jessibeth14_140 Start: 83080, Stop: 83496, Start Num: 119

Candidate Starts for Jessibeth14_140:

(15, 82603), (Start: 119 @83080 has 23 MA's), (Start: 143 @83137 has 1 MA's), (171, 83200), (205, 83269), (221, 83314), (233, 83353),

Gene: KBurrousTX_96 Start: 64281, Stop: 64742, Start Num: 107
Candidate Starts for KBurrousTX_96:
(Start: 107 @64281 has 5 MA's), (122, 64299), (179, 64410), (209, 64503), (214, 64521), (218, 64536), (231, 64584),

Gene: KLucky39_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for KLucky39_10:
(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Kabreeze_100 Start: 63591, Stop: 64085, Start Num: 112
Candidate Starts for Kabreeze_100:
(57, 63483), (75, 63522), (Start: 112 @63591 has 21 MA's), (149, 63675), (187, 63747), (201, 63786), (286, 64056),

Gene: Kailash_10 Start: 8952, Stop: 9386, Start Num: 99
Candidate Starts for Kailash_10:
(Start: 99 @8952 has 158 MA's), (Start: 127 @8991 has 2 MA's), (137, 9015), (177, 9096), (218, 9186), (238, 9249),

Gene: Kamashten_49 Start: 42108, Stop: 42626, Start Num: 76
Candidate Starts for Kamashten_49:
(Start: 76 @42108 has 12 MA's), (189, 42324), (223, 42414), (227, 42426),

Gene: Katniss_10 Start: 8944, Stop: 9378, Start Num: 99
Candidate Starts for Katniss_10:
(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Keitabear_50 Start: 43627, Stop: 44148, Start Num: 63
Candidate Starts for Keitabear_50:
(59, 43618), (Start: 63 @43627 has 5 MA's), (Start: 76 @43630 has 12 MA's), (189, 43846), (223, 43936), (227, 43948),

Gene: Keitabear_20 Start: 16560, Stop: 17006, Start Num: 99
Candidate Starts for Keitabear_20:
(Start: 86 @16539 has 2 MA's), (Start: 95 @16551 has 1 MA's), (Start: 99 @16560 has 158 MA's), (Start: 123 @16590 has 2 MA's), (126, 16599), (210, 16770), (218, 16803), (229, 16845), (238, 16866), (259, 16911), (273, 16947),

Gene: Keitherie_10 Start: 8957, Stop: 9391, Start Num: 99
Candidate Starts for Keitherie_10:
(Start: 99 @8957 has 158 MA's), (Start: 127 @8996 has 2 MA's), (137, 9020), (139, 9023), (177, 9101), (218, 9191), (238, 9254),

Gene: Kewpiedoll_51 Start: 43059, Stop: 43577, Start Num: 76
Candidate Starts for Kewpiedoll_51:
(59, 43047), (Start: 63 @43056 has 5 MA's), (Start: 76 @43059 has 12 MA's), (189, 43275), (223, 43365), (227, 43377),

Gene: Kikipoo_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Kikipoo_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: KingVeVeVe_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for KingVeVeVe_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: KlimbOn_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for KlimbOn_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Kloppinator_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Kloppinator_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Koguma_138 Start: 80718, Stop: 81134, Start Num: 119

Candidate Starts for Koguma_138:

(15, 80241), (Start: 119 @80718 has 23 MA's), (Start: 143 @80775 has 1 MA's), (171, 80838), (205, 80907), (221, 80952), (233, 80991),

Gene: Kroos_19 Start: 14665, Stop: 15102, Start Num: 123

Candidate Starts for Kroos_19:

(Start: 95 @14620 has 1 MA's), (Start: 99 @14629 has 158 MA's), (Start: 123 @14665 has 2 MA's), (142, 14716), (177, 14782), (229, 14926), (238, 14947),

Gene: Kwobi_50 Start: 42725, Stop: 43243, Start Num: 76

Candidate Starts for Kwobi_50:

(Start: 76 @42725 has 12 MA's), (Start: 90 @42755 has 3 MA's), (189, 42941), (223, 43031), (227, 43043),

Gene: LRRHood_134 Start: 82526, Stop: 82942, Start Num: 119

Candidate Starts for LRRHood_134:

(15, 82049), (Start: 119 @82526 has 23 MA's), (Start: 143 @82583 has 1 MA's), (171, 82646), (205, 82715), (221, 82760), (233, 82799),

Gene: Larnav_229 Start: 113173, Stop: 113613, Start Num: 112

Candidate Starts for Larnav_229:

(39, 112978), (46, 113014), (66, 113086), (70, 113092), (73, 113101), (84, 113131), (89, 113137), (92, 113140), (Start: 95 @113146 has 1 MA's), (Start: 112 @113173 has 21 MA's), (162, 113269), (190, 113320), (224, 113413), (253, 113485), (272, 113539), (282, 113572),

Gene: LasagnaCat_10 Start: 8952, Stop: 9386, Start Num: 99

Candidate Starts for LasagnaCat_10:

(Start: 99 @8952 has 158 MA's), (Start: 127 @8991 has 2 MA's), (137, 9015), (177, 9096), (218, 9186), (238, 9249),

Gene: Lasso_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Lasso_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: LeeLot_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for LeeLot_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Lego3393_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Lego3393_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Lennon_20 Start: 15643, Stop: 16110, Start Num: 86

Candidate Starts for Lennon_20:

(Start: 86 @15643 has 2 MA's), (Start: 95 @15655 has 1 MA's), (Start: 99 @15664 has 158 MA's), (Start: 123 @15694 has 2 MA's), (126, 15703), (210, 15874), (218, 15907), (229, 15949), (238, 15970), (259, 16015), (273, 16051),

Gene: Lennon_50 Start: 43707, Stop: 44228, Start Num: 63

Candidate Starts for Lennon_50:

(59, 43698), (Start: 63 @43707 has 5 MA's), (Start: 76 @43710 has 12 MA's), (189, 43926), (223, 44016), (227, 44028),

Gene: Linus_100 Start: 64039, Stop: 64533, Start Num: 112

Candidate Starts for Linus_100:

(57, 63931), (75, 63970), (Start: 112 @64039 has 21 MA's), (149, 64123), (187, 64195), (201, 64234), (286, 64504),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 80

Candidate Starts for LittleShirley_63:

(Start: 80 @41739 has 5 MA's), (Start: 128 @41823 has 2 MA's), (226, 42048), (243, 42066), (257, 42105), (270, 42147),

Gene: LolaVince_141 Start: 83494, Stop: 83910, Start Num: 119

Candidate Starts for LolaVince_141:

(15, 83017), (Start: 119 @83494 has 23 MA's), (Start: 143 @83551 has 1 MA's), (171, 83614), (205, 83683), (221, 83728), (233, 83767),

Gene: Love_20 Start: 14527, Stop: 14973, Start Num: 99

Candidate Starts for Love_20:

(Start: 86 @14506 has 2 MA's), (Start: 95 @14518 has 1 MA's), (Start: 99 @14527 has 158 MA's), (Start: 123 @14557 has 2 MA's), (126, 14566), (210, 14737), (218, 14770), (229, 14812), (238, 14833), (259, 14878), (273, 14914),

Gene: Love_55 Start: 44334, Stop: 44852, Start Num: 76

Candidate Starts for Love_55:

(59, 44322), (Start: 63 @44331 has 5 MA's), (Start: 76 @44334 has 12 MA's), (189, 44550), (223, 44640), (227, 44652),

Gene: Lozinak_50 Start: 31978, Stop: 32439, Start Num: 107

Candidate Starts for Lozinak_50:

(Start: 107 @31978 has 5 MA's), (163, 32086), (188, 32125), (194, 32137), (212, 32185), (218, 32197), (227, 32233), (295, 32422), (296, 32425),

Gene: Lton_30 Start: 23640, Stop: 24134, Start Num: 82

Candidate Starts for Lton_30:

(Start: 82 @23640 has 1 MA's), (131, 23715), (133, 23721), (161, 23784), (221, 23916), (235, 23958), (241, 23973),

Gene: Lukilu_131 Start: 83536, Stop: 83952, Start Num: 119

Candidate Starts for Lukilu_131:

(15, 83059), (Start: 119 @83536 has 23 MA's), (Start: 143 @83593 has 1 MA's), (171, 83656), (205, 83725), (221, 83770), (233, 83809),

Gene: Lululemon_222 Start: 112033, Stop: 112500, Start Num: 95

Candidate Starts for Lululemon_222:

(39, 111865), (46, 111901), (66, 111973), (70, 111979), (73, 111988), (84, 112018), (89, 112024), (92, 112027), (Start: 95 @112033 has 1 MA's), (Start: 112 @112060 has 21 MA's), (162, 112156), (190, 112207), (224, 112300), (253, 112372), (272, 112426), (282, 112459),

Gene: Lulwa_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Lulwa_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Lymara_98 Start: 62394, Stop: 62876, Start Num: 112

Candidate Starts for Lymara_98:

(36, 62202), (57, 62298), (Start: 112 @62394 has 21 MA's), (181, 62526),

Gene: Magic8_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Magic8_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Mangeria_141 Start: 83337, Stop: 83753, Start Num: 119

Candidate Starts for Mangeria_141:

(15, 82860), (Start: 119 @83337 has 23 MA's), (Start: 143 @83394 has 1 MA's), (171, 83457), (205, 83526), (221, 83571), (233, 83610),

Gene: Marteena_62 Start: 42816, Stop: 43277, Start Num: 99

Candidate Starts for Marteena_62:

(40, 42666), (41, 42669), (58, 42744), (60, 42747), (Start: 99 @42816 has 158 MA's), (Start: 107 @42822 has 5 MA's), (Start: 143 @42903 has 1 MA's), (188, 42999), (228, 43116),

Gene: Matteo_53 Start: 35852, Stop: 36313, Start Num: 99

Candidate Starts for Matteo_53:

(40, 35702), (58, 35780), (60, 35783), (Start: 99 @35852 has 158 MA's), (Start: 107 @35858 has 5 MA's), (Start: 143 @35939 has 1 MA's), (188, 36035), (228, 36152),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 101

Candidate Starts for Mcklovin_2:

(77, 484), (Start: 81 @499 has 12 MA's), (89, 514), (Start: 101 @532 has 4 MA's), (178, 658), (187, 676), (196, 694), (198, 703), (212, 739), (223, 775), (236, 811), (261, 874), (266, 886),

Gene: Megatron_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Megatron_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Melc17_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Melc17_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Mesh1_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Mesh1_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: MikeLiesIn_142 Start: 83297, Stop: 83713, Start Num: 119

Candidate Starts for MikeLiesIn_142:

(15, 82820), (Start: 119 @83297 has 23 MA's), (Start: 143 @83354 has 1 MA's), (171, 83417), (205, 83486), (221, 83531), (233, 83570),

Gene: Mikota_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Mikota_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Mildred21_232 Start: 111445, Stop: 111885, Start Num: 112

Candidate Starts for Mildred21_232:

(Start: 95 @111418 has 1 MA's), (Start: 112 @111445 has 21 MA's), (190, 111592), (224, 111685), (253, 111757), (272, 111811), (282, 111844),

Gene: MiniBoss_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for MiniBoss_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Mojorita_45 Start: 30760, Stop: 31281, Start Num: 90

Candidate Starts for Mojorita_45:

(Start: 90 @30760 has 3 MA's), (228, 31048), (253, 31099), (261, 31132), (263, 31138), (269, 31168),

Gene: MoontowerMania_50 Start: 43336, Stop: 43860, Start Num: 76

Candidate Starts for MoontowerMania_50:

(71, 43324), (74, 43333), (Start: 76 @43336 has 12 MA's), (189, 43558), (223, 43648), (227, 43660),

Gene: Mordred_100 Start: 63630, Stop: 64124, Start Num: 112

Candidate Starts for Mordred_100:

(57, 63522), (75, 63561), (Start: 112 @63630 has 21 MA's), (149, 63714), (187, 63786), (201, 63825), (286, 64095),

Gene: Morty_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Morty_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: MortyNRick_64 Start: 42082, Stop: 42537, Start Num: 81

Candidate Starts for MortyNRick_64:

(Start: 81 @42082 has 12 MA's), (97, 42106), (156, 42211), (194, 42283), (271, 42475),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 128

Candidate Starts for Ms6_60:

(Start: 80 @36683 has 5 MA's), (Start: 128 @36767 has 2 MA's), (243, 37010), (257, 37049), (270, 37091),

Gene: Murdoc_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Murdoc_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 81

Candidate Starts for Mutaforma13_69:

(Start: 81 @44640 has 12 MA's), (184, 44814), (194, 44841), (223, 44925), (248, 44964), (289, 45093),

Gene: Nacho_0010 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Nacho_0010:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Neobush_64 Start: 42273, Stop: 42734, Start Num: 99

Candidate Starts for Neobush_64:

(64, 42207), (Start: 99 @42273 has 158 MA's), (168, 42420), (187, 42456), (198, 42483), (218, 42531), (228, 42573), (232, 42582), (256, 42642),

Gene: Newman_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Newman_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Nicole21_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Nicole21_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Nordenberg_13 Start: 12847, Stop: 13293, Start Num: 99

Candidate Starts for Nordenberg_13:

(Start: 86 @12826 has 2 MA's), (Start: 95 @12838 has 1 MA's), (Start: 99 @12847 has 158 MA's), (Start: 123 @12877 has 2 MA's), (126, 12886), (210, 13057), (218, 13090), (229, 13132), (238, 13153), (259, 13198), (273, 13234),

Gene: Numberten_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Numberten_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: OSmaximus_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for OSmaximus_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Olive_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Olive_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: OliverWalter_10 Start: 8939, Stop: 9373, Start Num: 99

Candidate Starts for OliverWalter_10:

(Start: 99 @8939 has 158 MA's), (Start: 127 @8978 has 2 MA's), (137, 9002), (177, 9083), (218, 9173), (238, 9236),

Gene: Omniscient_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Omniscient_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Oosterbaan_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Oosterbaan_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Orion_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Orion_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: PG1_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for PG1_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: PacManQ_223 Start: 112060, Stop: 112500, Start Num: 112

Candidate Starts for PacManQ_223:

(39, 111865), (46, 111901), (66, 111973), (70, 111979), (73, 111988), (84, 112018), (89, 112024), (92, 112027), (Start: 95 @112033 has 1 MA's), (Start: 112 @112060 has 21 MA's), (162, 112156), (190, 112207), (224, 112300), (253, 112372), (272, 112426), (282, 112459),

Gene: PapayaSalad_44 Start: 30268, Stop: 30774, Start Num: 79

Candidate Starts for PapayaSalad_44:

(Start: 79 @30268 has 2 MA's), (Start: 98 @30304 has 2 MA's), (223, 30562), (228, 30580), (240, 30601),

Gene: Paries_19 Start: 14215, Stop: 14661, Start Num: 99

Candidate Starts for Paries_19:

(Start: 86 @14194 has 2 MA's), (Start: 95 @14206 has 1 MA's), (Start: 99 @14215 has 158 MA's), (Start: 123 @14245 has 2 MA's), (126, 14254), (210, 14425), (218, 14458), (229, 14500), (238, 14521), (259, 14566), (273, 14602),

Gene: Persimmon_162 Start: 90873, Stop: 91259, Start Num: 127

Candidate Starts for Persimmon_162:

(Start: 101 @90837 has 4 MA's), (Start: 106 @90843 has 1 MA's), (Start: 127 @90873 has 2 MA's), (163, 90942), (210, 91029), (230, 91095),

Gene: Phamished_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Phamished_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: PhatCats2014_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for PhatCats2014_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: PhatLouie_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for PhatLouie_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Pherdinand_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Pherdinand_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Phipps_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Phipps_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Phistory_56 Start: 36066, Stop: 36515, Start Num: 109

Candidate Starts for Phistory_56:

(67, 35985), (Start: 109 @36066 has 5 MA's), (141, 36138), (196, 36234), (210, 36270), (261, 36399), (263, 36405), (291, 36504),

Gene: PhorbesPhlower_38 Start: 28562, Stop: 29011, Start Num: 109

Candidate Starts for PhorbesPhlower_38:

(67, 28481), (Start: 109 @28562 has 5 MA's), (196, 28730), (210, 28766), (261, 28895), (291, 29000),

Gene: Phox_138 Start: 83560, Stop: 83976, Start Num: 119

Candidate Starts for Phox_138:

(15, 83083), (Start: 119 @83560 has 23 MA's), (Start: 143 @83617 has 1 MA's), (171, 83680), (205, 83749), (221, 83794), (233, 83833),

Gene: PhrodoBaggins_105 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for PhrodoBaggins_105:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Phunky_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Phunky_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Picard_45 Start: 30958, Stop: 31479, Start Num: 90

Candidate Starts for Picard_45:

(Start: 90 @30958 has 3 MA's), (228, 31246), (263, 31336), (269, 31366), (290, 31432),

Gene: Piccadilly_44 Start: 30160, Stop: 30651, Start Num: 81

Candidate Starts for Piccadilly_44:

(Start: 81 @30160 has 12 MA's), (218, 30412), (221, 30427),

Gene: Pio_145 Start: 85169, Stop: 85585, Start Num: 119

Candidate Starts for Pio_145:

(15, 84692), (Start: 119 @85169 has 23 MA's), (Start: 143 @85226 has 1 MA's), (171, 85289), (205, 85358), (221, 85403), (233, 85442),

Gene: Pipsqueak_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Pipsqueak_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Plmatters_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Plmatters_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 80

Candidate Starts for Plumbus_66:

(Start: 80 @41519 has 5 MA's), (Start: 128 @41603 has 2 MA's), (243, 41846), (257, 41885), (270, 41927),

Gene: Podrick_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Podrick_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Pollux_66 Start: 44701, Stop: 45162, Start Num: 99

Candidate Starts for Pollux_66:

(40, 44551), (41, 44554), (58, 44629), (60, 44632), (Start: 99 @44701 has 158 MA's), (Start: 107 @44707 has 5 MA's), (Start: 143 @44788 has 1 MA's), (188, 44884), (228, 45001),

Gene: Pops_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Pops_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Prickles_10 Start: 8949, Stop: 9383, Start Num: 99

Candidate Starts for Prickles_10:

(Start: 99 @8949 has 158 MA's), (Start: 127 @8988 has 2 MA's), (137, 9012), (177, 9093), (218, 9183), (238, 9246),

Gene: PrincessTrina_101 Start: 63821, Stop: 64315, Start Num: 112

Candidate Starts for PrincessTrina_101:

(57, 63713), (75, 63752), (Start: 112 @63821 has 21 MA's), (149, 63905), (187, 63977), (201, 64016), (286, 64286),

Gene: ProfessorX_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for ProfessorX_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Puhltonio_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Puhltonio_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: QueenBeane_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for QueenBeane_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Quisquilliae_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Quisquilliae_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: REQ3_10 Start: 4829, Stop: 5143, Start Num: 164

Candidate Starts for REQ3_10:

(Start: 104 @4724 has 1 MA's), (Start: 109 @4733 has 5 MA's), (164, 4829), (167, 4835), (202, 4904), (210, 4919),

Gene: Rabinovish_140 Start: 83892, Stop: 84308, Start Num: 119

Candidate Starts for Rabinovish_140:

(15, 83415), (Start: 119 @83892 has 23 MA's), (Start: 143 @83949 has 1 MA's), (171, 84012), (205, 84081), (221, 84126), (233, 84165),

Gene: Raleigh_43 Start: 33449, Stop: 33964, Start Num: 88

Candidate Starts for Raleigh_43:

(Start: 88 @33449 has 3 MA's), (116, 33488), (227, 33728), (228, 33734),

Gene: RedWattleHog_27 Start: 28545, Stop: 28156, Start Num: 143

Candidate Starts for RedWattleHog_27:

(83, 28650), (Start: 143 @28545 has 1 MA's), (196, 28443), (230, 28326), (281, 28179),

Gene: Riggan_10 Start: 8947, Stop: 9381, Start Num: 99

Candidate Starts for Riggan_10:

(Start: 99 @8947 has 158 MA's), (Start: 127 @8986 has 2 MA's), (137, 9010), (177, 9091), (218, 9181), (238, 9244),

Gene: Rofo_18 Start: 14497, Stop: 14928, Start Num: 123

Candidate Starts for Rofo_18:

(Start: 86 @14446 has 2 MA's), (Start: 95 @14458 has 1 MA's), (Start: 99 @14467 has 158 MA's), (Start: 123 @14497 has 2 MA's), (126, 14506), (210, 14677), (218, 14710), (229, 14752), (238, 14773), (259, 14818), (273, 14854),

Gene: Roliet_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Roliet_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: RomansRevenge_74 Start: 50908, Stop: 50471, Start Num: 148

Candidate Starts for RomansRevenge_74:

(Start: 111 @50992 has 1 MA's), (116, 50983), (Start: 148 @50908 has 1 MA's), (214, 50743), (224, 50698), (261, 50596), (264, 50578), (269, 50560),

Gene: Roscoe_11 Start: 9178, Stop: 9612, Start Num: 99

Candidate Starts for Roscoe_11:

(Start: 99 @9178 has 158 MA's), (Start: 127 @9217 has 2 MA's), (137, 9241), (177, 9322), (218, 9412), (238, 9475),

Gene: RosiePosie_100 Start: 63686, Stop: 64180, Start Num: 112

Candidate Starts for RosiePosie_100:

(57, 63578), (75, 63617), (Start: 112 @63686 has 21 MA's), (149, 63770), (187, 63842), (196, 63860), (201, 63881),

Gene: Ryadel_34 Start: 15422, Stop: 15904, Start Num: 130

Candidate Starts for Ryadel_34:

(Start: 130 @15422 has 3 MA's), (Start: 134 @15434 has 6 MA's), (Start: 146 @15467 has 1 MA's), (Start: 158 @15494 has 1 MA's), (172, 15527), (174, 15530), (177, 15533), (223, 15656), (239, 15698), (292, 15869), (297, 15896),

Gene: SDcharge11_10 Start: 8936, Stop: 9370, Start Num: 99

Candidate Starts for SDcharge11_10:

(Start: 99 @8936 has 158 MA's), (Start: 127 @8975 has 2 MA's), (137, 8999), (177, 9080), (218, 9170), (238, 9233),

Gene: SV1_42 Start: 29657, Stop: 30169, Start Num: 91

Candidate Starts for SV1_42:

(Start: 91 @29657 has 1 MA's), (212, 29882), (250, 29981), (261, 30020), (263, 30026), (269, 30056),

Gene: SadLad_28 Start: 14537, Stop: 14064, Start Num: 112

Candidate Starts for SadLad_28:

(1, 15395), (2, 15374), (3, 15371), (4, 15356), (5, 15353), (6, 15335), (7, 15299), (8, 15278), (9, 15239), (10, 15185), (11, 15182), (12, 15173), (13, 15155), (14, 15065), (16, 15011), (19, 14957), (20, 14912), (22, 14870), (23, 14864), (25, 14822), (26, 14816), (28, 14798), (29, 14792), (31, 14780), (33, 14759), (34, 14756), (44, 14705), (47, 14693), (49, 14681), (55, 14660), (68, 14621), (Start: 95 @14564 has 1 MA's), (Start: 112 @14537 has 21 MA's), (180, 14405), (187, 14387), (209, 14321), (218, 14282), (223, 14258), (226, 14249), (260, 14168),

Gene: Samaymay_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Samaymay_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Samy_46 Start: 31456, Stop: 31815, Start Num: 148

Candidate Starts for Samy_46:

(Start: 148 @31456 has 1 MA's), (169, 31495), (187, 31516), (191, 31528), (202, 31555), (218, 31591), (221, 31606), (230, 31636),

Gene: Sarge_55 Start: 31661, Stop: 32050, Start Num: 155

Candidate Starts for Sarge_55:

(Start: 155 @31661 has 1 MA's), (231, 31862),

Gene: Saronaya_49 Start: 42016, Stop: 42534, Start Num: 76

Candidate Starts for Saronaya_49:

(Start: 76 @42016 has 12 MA's), (Start: 90 @42046 has 3 MA's), (189, 42232), (223, 42322), (227, 42334), (294, 42529),

Gene: Scavito_101 Start: 63679, Stop: 64173, Start Num: 112

Candidate Starts for Scavito_101:

(57, 63571), (75, 63610), (Start: 112 @63679 has 21 MA's), (149, 63763), (187, 63835), (201, 63874), (286, 64144),

Gene: SchoolBus_31 Start: 14621, Stop: 15091, Start Num: 134

Candidate Starts for SchoolBus_31:

(Start: 130 @14609 has 3 MA's), (Start: 134 @14621 has 6 MA's), (Start: 146 @14654 has 1 MA's), (Start: 158 @14681 has 1 MA's), (172, 14714), (174, 14717), (177, 14720), (223, 14843), (239, 14885), (292, 15056), (297, 15083),

Gene: Scoot17C_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Scoot17C_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Sedona_50 Start: 43310, Stop: 43828, Start Num: 76

Candidate Starts for Sedona_50:

(Start: 76 @43310 has 12 MA's), (Start: 90 @43340 has 3 MA's), (189, 43526), (223, 43616), (227, 43628),

Gene: Serendipity_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Serendipity_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Serpentine_0010 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Serpentine_0010:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Shaqnato_134 Start: 81274, Stop: 81690, Start Num: 119

Candidate Starts for Shaqnato_134:

(15, 80797), (Start: 119 @81274 has 23 MA's), (Start: 143 @81331 has 1 MA's), (171, 81394), (205, 81463), (221, 81508), (233, 81547),

Gene: Sheila_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Sheila_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Shelob_143 Start: 84076, Stop: 84492, Start Num: 119

Candidate Starts for Shelob_143:

(15, 83599), (Start: 119 @84076 has 23 MA's), (Start: 143 @84133 has 1 MA's), (171, 84196), (205, 84265), (221, 84310), (233, 84349),

Gene: ShiVal_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for ShiVal_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Shifa_130 Start: 81500, Stop: 81916, Start Num: 119

Candidate Starts for Shifa_130:

(15, 81023), (Start: 119 @81500 has 23 MA's), (Start: 143 @81557 has 1 MA's), (171, 81620), (205, 81689), (221, 81734), (233, 81773),

Gene: Shivanishola_50 Start: 42031, Stop: 42549, Start Num: 76

Candidate Starts for Shivanishola_50:

(59, 42019), (Start: 63 @42028 has 5 MA's), (Start: 76 @42031 has 12 MA's), (189, 42247), (223, 42337), (227, 42349),

Gene: Sigman_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Sigman_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Sitar_50 Start: 43707, Stop: 44228, Start Num: 63

Candidate Starts for Sitar_50:

(59, 43698), (Start: 63 @43707 has 5 MA's), (Start: 76 @43710 has 12 MA's), (189, 43926), (223, 44016), (227, 44028),

Gene: Sitar_20 Start: 15655, Stop: 16110, Start Num: 95

Candidate Starts for Sitar_20:

(Start: 86 @15643 has 2 MA's), (Start: 95 @15655 has 1 MA's), (Start: 99 @15664 has 158 MA's), (Start: 123 @15694 has 2 MA's), (126, 15703), (210, 15874), (218, 15907), (229, 15949), (238, 15970), (259, 16015), (273, 16051),

Gene: Skippy_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Skippy_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Slatt_10 Start: 8945, Stop: 9379, Start Num: 99

Candidate Starts for Slatt_10:

(Start: 99 @8945 has 158 MA's), (Start: 127 @8984 has 2 MA's), (137, 9008), (177, 9089), (218, 9179), (238, 9242),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 107

Candidate Starts for Smoothie_51:

(Start: 107 @31978 has 5 MA's), (163, 32086), (188, 32125), (194, 32137), (212, 32185), (218, 32197), (227, 32233), (295, 32422), (296, 32425),

Gene: SoJo_43 Start: 31466, Stop: 31978, Start Num: 90

Candidate Starts for SoJo_43:

(Start: 90 @31466 has 3 MA's), (125, 31523), (253, 31799), (269, 31868),

Gene: Soto_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Soto_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Sour_34 Start: 32659, Stop: 32288, Start Num: 153

Candidate Starts for Sour_34:

(100, 32755), (Start: 153 @32659 has 1 MA's), (169, 32617), (183, 32599), (185, 32596), (199, 32557), (232, 32449), (280, 32329),

Gene: Spartan300_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Spartan300_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Suffolk_10 Start: 8942, Stop: 9376, Start Num: 99

Candidate Starts for Suffolk_10:

(Start: 99 @8942 has 158 MA's), (Start: 127 @8981 has 2 MA's), (137, 9005), (177, 9086), (218, 9176), (238, 9239),

Gene: Superphikiman_163 Start: 84350, Stop: 84877, Start Num: 80

Candidate Starts for Superphikiman_163:

(Start: 62 @84308 has 2 MA's), (Start: 80 @84350 has 5 MA's), (Start: 86 @84365 has 2 MA's), (203, 84587), (223, 84644), (230, 84665),

Gene: Surely_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Surely_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Sushi23_223 Start: 114010, Stop: 114450, Start Num: 112

Candidate Starts for Sushi23_223:

(39, 113815), (46, 113851), (66, 113923), (70, 113929), (73, 113938), (84, 113968), (89, 113974), (92, 113977), (Start: 95 @113983 has 1 MA's), (Start: 112 @114010 has 21 MA's), (162, 114106), (190, 114157), (224, 114250), (253, 114322), (272, 114376), (282, 114409),

Gene: Swish_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Swish_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Tangent_16 Start: 13468, Stop: 13914, Start Num: 99

Candidate Starts for Tangent_16:

(Start: 86 @13447 has 2 MA's), (Start: 95 @13459 has 1 MA's), (Start: 99 @13468 has 158 MA's), (Start: 123 @13498 has 2 MA's), (126, 13507), (210, 13678), (218, 13711), (229, 13753), (238, 13774), (259, 13819), (273, 13855),

Gene: Targaryen_222 Start: 114182, Stop: 114622, Start Num: 112

Candidate Starts for Targaryen_222:

(66, 114095), (70, 114101), (73, 114110), (84, 114140), (89, 114146), (Start: 112 @114182 has 21 MA's), (162, 114278), (190, 114329), (224, 114422), (253, 114494), (272, 114548), (282, 114581),

Gene: Teardrop_140 Start: 81782, Stop: 82198, Start Num: 119

Candidate Starts for Teardrop_140:

(15, 81305), (Start: 119 @81782 has 23 MA's), (Start: 143 @81839 has 1 MA's), (171, 81902), (205, 81971), (221, 82016), (233, 82055),

Gene: Thing3_49 Start: 42108, Stop: 42626, Start Num: 76

Candidate Starts for Thing3_49:

(Start: 76 @42108 has 12 MA's), (189, 42324), (223, 42414), (227, 42426),

Gene: Thora_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Thora_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: ThreeOh3D2_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for ThreeOh3D2_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: ToastyFinz_42 Start: 32290, Stop: 32811, Start Num: 88

Candidate Starts for ToastyFinz_42:

(35, 32113), (61, 32227), (Start: 88 @32290 has 3 MA's), (141, 32383), (228, 32578), (253, 32629), (263, 32668), (269, 32698),

Gene: TomBombadil_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for TomBombadil_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Tomlarah_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Tomlarah_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Tooj_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Tooj_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Tophat_101 Start: 63868, Stop: 64362, Start Num: 112

Candidate Starts for Tophat_101:

(57, 63760), (75, 63799), (Start: 112 @63868 has 21 MA's), (149, 63952), (187, 64024), (201, 64063), (286, 64333),

Gene: Totinger_66 Start: 40465, Stop: 40947, Start Num: 80

Candidate Starts for Totinger_66:

(Start: 80 @40465 has 5 MA's), (Start: 128 @40549 has 2 MA's), (243, 40792), (257, 40831), (270, 40873),

Gene: Trypo_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Trypo_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Tucker_41 Start: 26756, Stop: 26394, Start Num: 140

Candidate Starts for Tucker_41:

(Start: 140 @26756 has 2 MA's), (160, 26708), (205, 26609), (231, 26531), (263, 26471),

Gene: UAch1_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for UAch1_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: UBSmoodge_126 Start: 91583, Stop: 91951, Start Num: 165

Candidate Starts for UBSmoodge_126:

(65, 91385), (121, 91484), (133, 91508), (147, 91541), (159, 91571), (165, 91583), (185, 91616), (194, 91637), (196, 91640), (230, 91754), (233, 91763), (276, 91889),

Gene: Usavi_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Usavi_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: Valjean_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Valjean_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Vibaki_76 Start: 46752, Stop: 47243, Start Num: 111

Candidate Starts for Vibaki_76:

(Start: 111 @46752 has 1 MA's), (223, 47013),

Gene: Virapocalypse_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Virapocalypse_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Vista_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Vista_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Vivaldi_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Vivaldi_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: Vivi2_54 Start: 43935, Stop: 44456, Start Num: 63

Candidate Starts for Vivi2_54:

(59, 43926), (Start: 63 @43935 has 5 MA's), (Start: 76 @43938 has 12 MA's), (189, 44154), (223, 44244), (227, 44256),

Gene: Vivi2_18 Start: 14618, Stop: 15085, Start Num: 86

Candidate Starts for Vivi2_18:

(Start: 86 @14618 has 2 MA's), (Start: 95 @14630 has 1 MA's), (Start: 99 @14639 has 158 MA's), (Start: 123 @14669 has 2 MA's), (126, 14678), (210, 14849), (218, 14882), (229, 14924), (238, 14945), (259, 14990), (273, 15026),

Gene: Vondra_43 Start: 30012, Stop: 30503, Start Num: 81

Candidate Starts for Vondra_43:

(Start: 81 @30012 has 12 MA's), (218, 30264), (221, 30279),

Gene: Waterdiva_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Waterdiva_10:

(Start: 99 @8944 has 158 MA's), (Start: 127 @8983 has 2 MA's), (137, 9007), (177, 9088), (218, 9178), (238, 9241),

Gene: Weher20_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Weher20_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: WhereRU_166 Start: 91625, Stop: 92011, Start Num: 127

Candidate Starts for WhereRU_166:

(Start: 101 @91589 has 4 MA's), (Start: 106 @91595 has 1 MA's), (Start: 127 @91625 has 2 MA's), (163, 91694), (210, 91781), (230, 91847),

Gene: Winget_32 Start: 14875, Stop: 15357, Start Num: 130

Candidate Starts for Winget_32:

(Start: 130 @14875 has 3 MA's), (Start: 134 @14887 has 6 MA's), (Start: 146 @14920 has 1 MA's), (Start: 158 @14947 has 1 MA's), (172, 14980), (174, 14983), (177, 14986), (223, 15109), (239, 15151), (292, 15322), (297, 15349),

Gene: YorkOnyx_19 Start: 14161, Stop: 14622, Start Num: 99

Candidate Starts for YorkOnyx_19:

(Start: 86 @14140 has 2 MA's), (Start: 95 @14152 has 1 MA's), (Start: 99 @14161 has 158 MA's), (Start: 123 @14191 has 2 MA's), (145, 14242), (210, 14371), (229, 14446), (238, 14467), (259, 14512),

Gene: YorkOnyx_50 Start: 42214, Stop: 42732, Start Num: 76

Candidate Starts for YorkOnyx_50:

(Start: 76 @42214 has 12 MA's), (Start: 90 @42244 has 3 MA's), (189, 42430), (223, 42520), (227, 42532),

Gene: Yoshand_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for Yoshand_10:

(Start: 99 @8941 has 158 MA's), (Start: 127 @8980 has 2 MA's), (137, 9004), (177, 9085), (218, 9175), (238, 9238),

Gene: YouGoGlencoco_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for YouGoGlencoco_10:

(Start: 99 @8940 has 158 MA's), (Start: 127 @8979 has 2 MA's), (137, 9003), (177, 9084), (218, 9174), (238, 9237),

Gene: YungJamal_34 Start: 14950, Stop: 15420, Start Num: 134

Candidate Starts for YungJamal_34:

(Start: 130 @14938 has 3 MA's), (Start: 134 @14950 has 6 MA's), (Start: 146 @14983 has 1 MA's), (Start: 158 @15010 has 1 MA's), (172, 15043), (174, 15046), (177, 15049), (223, 15172), (239, 15214), (292, 15385), (297, 15412),

Gene: Yvonnetastic_114 Start: 64668, Stop: 65060, Start Num: 152

Candidate Starts for Yvonnetastic_114:

(Start: 152 @64668 has 1 MA's), (Start: 155 @64677 has 1 MA's), (195, 64749), (208, 64785), (210, 64788), (219, 64824), (231, 64869),

Gene: Yvonnetastic_131 Start: 74014, Stop: 74502, Start Num: 85

Candidate Starts for Yvonnetastic_131:

(Start: 85 @74014 has 1 MA's), (116, 74062), (Start: 128 @74080 has 2 MA's), (176, 74179), (226, 74311), (247, 74356),

Gene: Zaider_11 Start: 9173, Stop: 9607, Start Num: 99

Candidate Starts for Zaider_11:

(Start: 99 @9173 has 158 MA's), (Start: 127 @9212 has 2 MA's), (137, 9236), (177, 9317), (218, 9407), (238, 9470),

Gene: Zelda_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for Zelda_10:

(Start: 99 @8943 has 158 MA's), (Start: 127 @8982 has 2 MA's), (137, 9006), (177, 9087), (218, 9177), (238, 9240),

Gene: Zonia_10 Start: 8957, Stop: 9391, Start Num: 99

Candidate Starts for Zonia_10:

(Start: 99 @8957 has 158 MA's), (Start: 127 @8996 has 2 MA's), (137, 9020), (177, 9101), (218, 9191), (238, 9254),

Gene: Zulu_41 Start: 26737, Stop: 26375, Start Num: 140

Candidate Starts for Zulu_41:

(Start: 140 @26737 has 2 MA's), (160, 26689), (205, 26590), (231, 26512), (263, 26452),