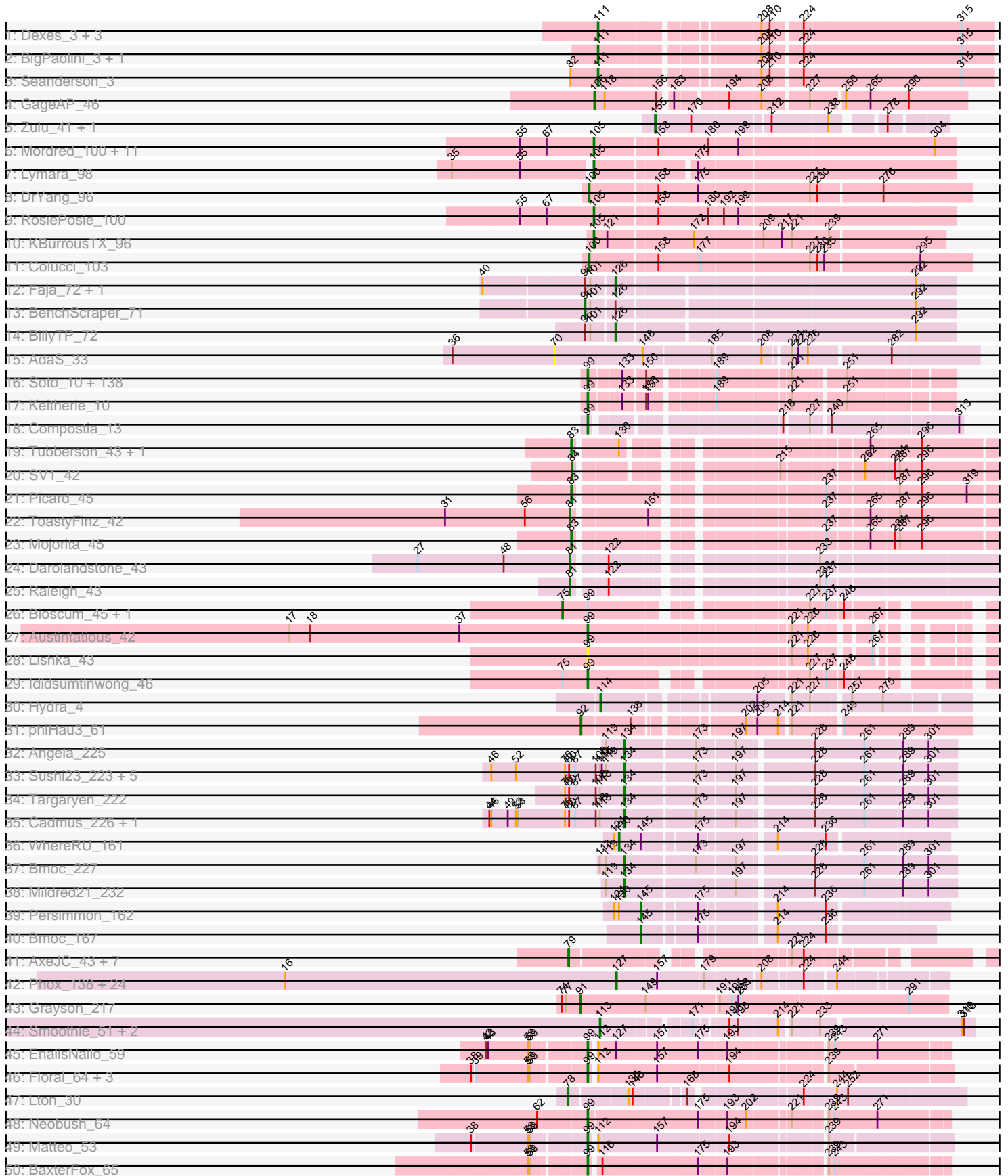
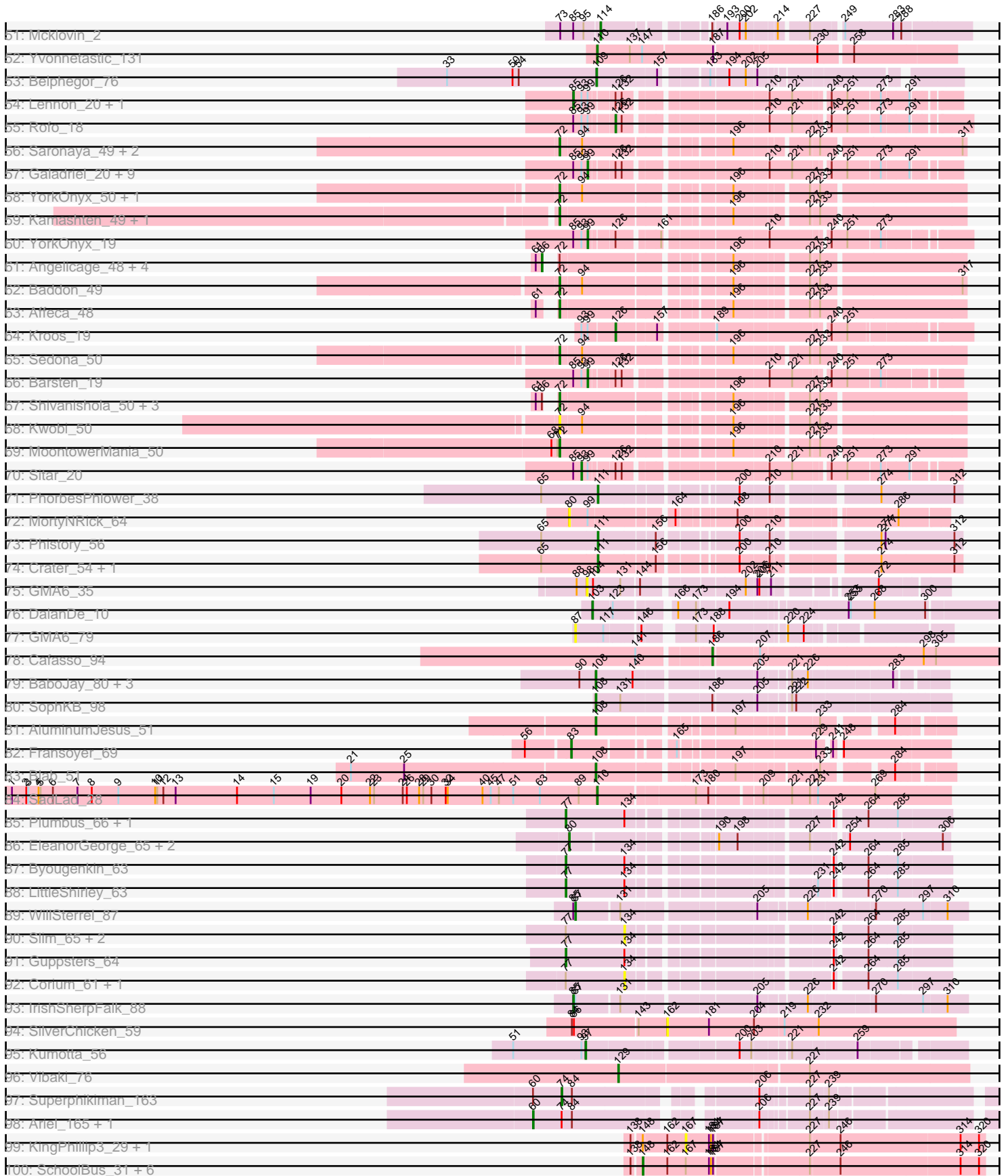


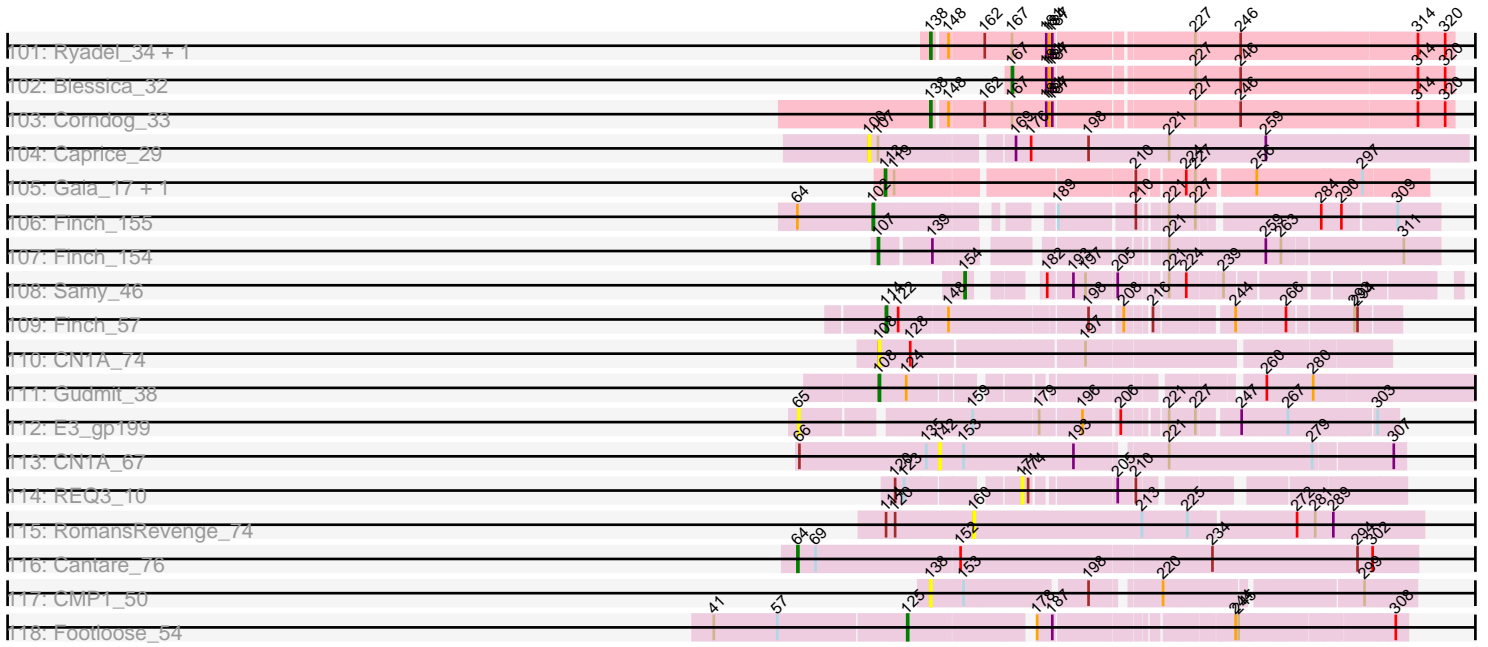
Pham 224187



Pham 224187



Pham 224187



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 224187 Report

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

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 224187 has 358 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Dexes_3, Smeagol_2, Smairt_2, Gyzlar_3
- Track 2 : BigPaolini_3, Licorice_4
- Track 3 : Seanderson_3
- Track 4 : GageAP_46
- Track 5 : Zulu_41, Tucker_41
- Track 6 : Mordred_100, Tophat_101, HumptyDumpty_100, Chubster_100, PrincessTrina_101, JaNo_99, Linus_100, Chocolat_100, Kabreeze_100, EdgarPoe_100, Chipper1996_1010, Scavito_101
- Track 7 : Lymara_98
- Track 8 : DrYang_96
- Track 9 : RosiePosie_100
- Track 10 : KBurrousTX_96
- Track 11 : Colucci_103
- Track 12 : Faja_72, Hestia_63
- Track 13 : BenchScraper_71
- Track 14 : BillyTP_72
- Track 15 : AdaS_33
- Track 16 : Soto_10, HSavage_10, Puhltonio_10, Zaider_11, Gyarad_0010, Fringe_10, Numberten_10, JacAttac_10, Phamished_10, OliverWalter_10, Andre_10, OSmaximus_10, Gwilliam_10, Yoshand_10, Etaye_10, Vivaldi_10, Plmatters_10, Melc17_10, Newman_10, Nacho_0010, CheetO_10, Hartsy_10, Spartan300_10, CamL_10, Morty_10, Roscoe_11, Weher20_10, Serpentine_0010, ABU_10, KlimbOn_10, BlueHusk_10, Hamish_10, Suffolk_10, Mikota_10, Vista_10, ThreeOh3D2_10, PhatLouie_10, Megatron_10, Serendipity_10, Inchworm_10, Olive_10, Swish_10, Haimas_10, DirtJuice_10, Pherdinand_10, Surely_10, Hetaeria_10, Slatt_10, KLucky39_10, Kikipoo_10, Valjean_10, Virapocalypse_10, Pipsqueak_10, MiniBoss_10, Prickles_10, Iridoclysis_10, FluffyNinja_10, Gophee_10, Kailash_10, Horchata_10, Magic8_10, Zonia_10, Boehler_10, JangoPhett_10, DoesntMatter_10, BlackStallion_10, SDcharge11_10, Durga_10, Sigman_10, Riggan_10, UAch1_10, Mesh1_10, Fang_10, TomBombadil_10, Quisquillae_10, Phipps_10, Craff_10, Waterdiva_10, PhrodoBaggins_105, Podrick_10, FriarPreacher_10, Scoot17C_10, Lasso_10, Sheila_10, Samaymay_10, Tooj_10, ProfessorX_10, AltPhacts_10, Orion_10, Lulwa_10, Emiris_10, Charles1_10,

PG1_10, Cobra_10, QueenBeane_10, Omniscient_10, LeeLot_10, Murdoc_10, IsaacEli_10, Pops_10, Chunky_10, Lego3393_10, CampRoach_10, Dingo_10, Oosterbaan_10, Anderson_10, Roliet_10, Harvey_10, Tomlarah_10, Matalotodo_10, GeneCoco_10, Chah_10, Cannibal_10, Inverness_10, Hertubise_10, Zelda_10, EmpTee_10, Badfish_10, Adriana_10, Thora_10, LasagnaCat_10, Frankicide_10, Eremos_10, Basato_11, Katniss_10, Daka_10, Buckeye_10, Colbert_10, Trypo_10, Skippy_10, Usavi_10, Phunky_10, Nicole21_10, YouGoGlencoco_10, PhatCats2014_10, Eugenia_10, ShiVal_10, KingVeVeVe_10, Kloppinator_10

- Track 17 : Keitherie_10
- Track 18 : Compostia_13
- Track 19 : Tubberson_43, SoJo_43
- Track 20 : SV1_42
- Track 21 : Picard_45
- Track 22 : ToastyFinz_42
- Track 23 : Mojorita_45
- Track 24 : Darolandstone_43
- Track 25 : Raleigh_43
- Track 26 : Bioscum_45, PapayaSalad_44
- Track 27 : Austintatious_42
- Track 28 : Lishka_43
- Track 29 : Ididsumtinwong_46
- Track 30 : Hydra_4
- Track 31 : phiHau3_61
- Track 32 : Angela_225
- Track 33 : Sushi23_223, Cursive_225, Larnav_222, PacManQ_219, Lululemon_219, Shuckle_225
- Track 34 : Targaryen_222
- Track 35 : Cadmus_226, Daubenski_216
- Track 36 : WhereRU_161
- Track 37 : Bmoc_227
- Track 38 : Mildred21_232
- Track 39 : Persimmon_162
- Track 40 : Bmoc_167
- Track 41 : AxeJC_43, Eklok_44, Ignacio_44, Cumberbatch_45, Eastland_44, Piccadilly_44, HFrancette_45, Vondra_43
- Track 42 : Phox_138, LRRHood_134, Jessibeth14_140, MikeLiesIn_142, Teardrop_140, LolaVinca_141, HyRo_132, ChickenPhender_137, Pio_145, CharlieB_138, SVoro_139, Shaqnato_134, Cane17_133, Lukilu_131, Fludd_142, Breeniome_140, Mangeria_141, Bxz1_138, Rabinovish_140, Shelob_143, Burrough_141, DeejaClivia_128, Cali_136, Koguma_138, Shifa_130
- Track 43 : Grayson_217
- Track 44 : Smoothie_51, Lozinak_50, Engineer_51
- Track 45 : EnalisNailo_59
- Track 46 : Floral_64, EMsquaredA_63, Pollux_66, Marteena_62
- Track 47 : Lton_30
- Track 48 : Neobush_64
- Track 49 : Matteo_53
- Track 50 : BaxterFox_65
- Track 51 : Mcklovin_2
- Track 52 : Yvonnetastic_131
- Track 53 : Belphegor_76
- Track 54 : Lennon_20, Vivi2_18
- Track 55 : Rofo_18

- Track 56 : Saronaya_49, JKSyngboy_47, Gustavo_49
- Track 57 : Galadriel_20, Bibwit_19, Tangent_16, Charming_16, Fosterous_16, Love_20, Paries_19, BobBob_16, Keitabear_20, Nordenberg_13
- Track 58 : YorkOnyx_50, Bibwit_48
- Track 59 : Kamashten_49, Thing3_49
- Track 60 : YorkOnyx_19
- Track 61 : Angelicage_48, Sitar_50, Vivi2_54, Keitabear_50, Lennon_50
- Track 62 : Baddon_49
- Track 63 : Affeca_48
- Track 64 : Kroos_19
- Track 65 : Sedona_50
- Track 66 : Barsten_19
- Track 67 : Shivanishola_50, Kewpiedoll_51, Love_55, Ailee_47
- Track 68 : Kwobi_50
- Track 69 : MoontowerMania_50
- Track 70 : Sitar_20
- Track 71 : PhorbesPhlower_38
- Track 72 : MortyNRick_64
- Track 73 : Phistory_56
- Track 74 : Crater_54, Apricot_54
- Track 75 : GMA6_35
- Track 76 : DalanDe_10
- Track 77 : GMA6_79
- Track 78 : Cafasso_94
- Track 79 : BaboJay_80, Goku_81, Eureka_81, Manda_84
- Track 80 : SophKB_98
- Track 81 : AluminumJesus_51
- Track 82 : Fransoyer_69
- Track 83 : Blab_51
- Track 84 : SadLad_28
- Track 85 : Plumbus_66, Totinger_63
- Track 86 : EleanorGeorge_65, Firehouse51_66, Mutaforma13_69
- Track 87 : Byougenkin_63
- Track 88 : LittleShirley_63
- Track 89 : WillSterrel_87
- Track 90 : Slim_65, Ms6_60, Emmaloid_65
- Track 91 : Guppsters_64
- Track 92 : Corium_61, KingJulian_61
- Track 93 : IrishSherpFalk_88
- Track 94 : SilverChicken_59
- Track 95 : Kumotta_56
- Track 96 : Vibaki_76
- Track 97 : Superphikiman_163
- Track 98 : Ariel_165, Courthouse_162
- Track 99 : KingPhillip3_29, Zebo_30
- Track 100 : SchoolBus_31, Catdawg_31, FoulBall_31, YungJamal_34, Idergollasper_31, Familton_32, JangDynasty_31
- Track 101 : Ryadel_34, Winget_32
- Track 102 : Blessica_32
- Track 103 : Corndog_33
- Track 104 : Caprice_29
- Track 105 : Gaia_17, Nebkiss_18
- Track 106 : Finch_155

- Track 107 : Finch_154
- Track 108 : Samy_46
- Track 109 : Finch_57
- Track 110 : CN1A_74
- Track 111 : Gudmit_38
- Track 112 : E3_gp199
- Track 113 : CN1A_67
- Track 114 : REQ3_10
- Track 115 : RomansRevenge_74
- Track 116 : Cantare_76
- Track 117 : CMP1_50
- Track 118 : 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 163 of the 330 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_10, Adriana_10, AltPhacts_10, Anderson_10, Andre_10, Austintatious_42, 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, Gwilliam_10, Gyarad_0010, HSavage_10, Haimas_10, Hamish_10, Hartsy_10, Harvey_10, Hertubise_10, Hetaeria_10, Horchata_10, Ididsumtinwong_46, 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, Lishka_43, Love_20, Lulwa_10, Magic8_10, Marteena_62, Matalotodo_10, 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, Quisquiliae_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:

- Bioscum_45, Kroos_19, Lennon_20, MortyNRick_64, PapayaSalad_44, Rofo_18, Sitar_20, Vivi2_18,

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

- AdaS_33, Affeca_48, Ailee_47, AluminumJesus_51, Angela_225, Angelicage_48, Apricot_54, Ariel_165, AxeJC_43, BaboJay_80, Baddon_49, Belphegor_76, BenchScraper_71, Bibwit_48, BigPaolini_3, BillyTP_72, Blab_51, Blessica_32, Bmoc_167, Bmoc_227, Breeniome_140, Burrough_141, Bxz1_138, Byougenkin_63, CMP1_50, CN1A_67, CN1A_74, Cadmus_226, Cafasso_94, Cali_136, Cane17_133, Cantare_76, Caprice_29, Catdawg_31, CharlieB_138, ChickenPhender_137, Chipper1996_1010, Chocolat_100, Chubster_100, Colucci_103, Corium_61, Corndog_33, Courthouse_162, Crater_54, Cumberbatch_45, Cursive_225, DalanDe_10, Darolandstone_43, Daubenski_216, DeejaClivia_128, Dexes_3, DrYang_96, E3_gp199, Eastland_44, EdgarPoe_100, Eklok_44, EleanorGeorge_65, Emmaloid_65, Engineer_51, Eureka_81, Faja_72, Familton_32, Finch_154, Finch_155, Finch_57, Firehouse51_66, Fludd_142, Footloose_54, FoulBall_31, Fransoyer_69, GMA6_35, GMA6_79, GageAP_46, Gaia_17, Goku_81, Grayson_217, Gudmit_38, Guppsters_64, Gustavo_49, Gyzzlar_3, HFrancette_45, Hestia_63, HumptyDumpty_100, HyRo_132, Hydra_4, Idergollasper_31, Ignacio_44, IrishSherpFalk_88, JKSyngboy_47, JaNo_99, JangDynasty_31, Jessibeth14_140, KBurrousTX_96, Kabreeze_100, Kamashten_49, Keitabear_50, Kewpiedoll_51, KingJulian_61, KingPhillip3_29, Koguma_138, Kumotta_56, Kwobi_50, LRRHood_134, Larnav_222, Lennon_50, Licorice_4, Linus_100, LittleShirley_63, LolaVinca_141, Love_55, Lozinak_50, Lton_30, Lukilu_131, Lululemon_219, Lymara_98, Manda_84, Mangeria_141, Mcklovin_2, MikeLiesIn_142, Mildred21_232, Mojorita_45, MoontowerMania_50, Mordred_100, Ms6_60, Mutaforma13_69, Nebkiss_18, PacManQ_219, Persimmon_162, Phistory_56, PhorbesPhlower_38, Phox_138, Picard_45, Piccadilly_44, Pio_145, Plumbus_66, PrincessTrina_101, REQ3_10, Rabinovish_140, Raleigh_43, RomansRevenge_74, RosiePosie_100, Ryadel_34, SV1_42, SVoro_139, SadLad_28, Samy_46, Saronaya_49, Scavito_101, SchoolBus_31, Seanderson_3, Sedona_50, Shaqnato_134, Shelob_143, Shifa_130, Shivanishola_50, Shuckle_225, SilverChicken_59, Sitar_50, Slim_65, Smairt_2, Smeagol_2, Smoothie_51, SoJo_43, SophKB_98, Superphikiman_163, Sushi23_223, Targaryen_222, Teardrop_140, Thing3_49, ToastyFinz_42, Tophat_101, Totinger_63, Tubberson_43, Tucker_41, Vibaki_76, Vivi2_54, Vondra_43, WhereRU_161, WillSterrel_87, Winget_32, YorkOnyx_50, YungJamal_34, Yvonnestic_131, Zebo_30, Zulu_41, phiHau3_61,

Summary by start number:

Start 60:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Ariel_165 (J), Courthouse_162 (J),

Start 64:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cantare_76 (singleton),

Start 65:

- Found in 5 of 358 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: E3_gp199 (singleton),

Start 66:

- Found in 10 of 358 (2.8%) of genes in pham
- Manual Annotations of this start: 5 of 330
- Called 50.0% 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 70:

- Found in 1 of 358 (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: AdaS_33 (AY),

Start 72:

- Found in 21 of 358 (5.9%) of genes in pham
- Manual Annotations of this start: 12 of 330
- 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 74:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Superphikiman_163 (J),

Start 75:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bioscum_45 (BC3), PapayaSalad_44 (BC3),

Start 77:

- Found in 11 of 358 (3.1%) of genes in pham
- Manual Annotations of this start: 5 of 330
- Called 45.5% of time when present
- Phage (with cluster) where this start called: Byougenkin_63 (F1), Guppsters_64 (F1), LittleShirley_63 (F1), Plumbus_66 (F1), Totinger_63 (F1),

Start 78:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lton_30 (CZ),

Start 79:

- Found in 8 of 358 (2.2%) of genes in pham
- Manual Annotations of this start: 8 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC_43 (BP), Cumberbatch_45 (BP), Eastland_44 (BP), Eklok_44 (BP), HFrancette_45 (BP), Ignacio_44 (BP), Piccadilly_44 (BP), Vondra_43 (BP),

Start 80:

- Found in 13 of 358 (3.6%) of genes in pham
- Manual Annotations of this start: 3 of 330
- Called 30.8% of time when present
- Phage (with cluster) where this start called: EleanorGeorge_65 (F1), Firehouse51_66 (F1), MortyNRick_64 (DN), Mutaforma13_69 (F1),

Start 81:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 3 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darolandstone_43 (BC2), Raleigh_43 (BC2), ToastyFinz_42 (BC1),

Start 83:

- Found in 5 of 358 (1.4%) of genes in pham
- Manual Annotations of this start: 5 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fransoyer_69 (EG), Mojorita_45 (BC1), Picard_45 (BC1), SoJo_43 (BC1), Tubberson_43 (BC1),

Start 84:

- Found in 5 of 358 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 20.0% of time when present
- Phage (with cluster) where this start called: SV1_42 (BC1),

Start 85:

- Found in 19 of 358 (5.3%) of genes in pham
- Manual Annotations of this start: 3 of 330
- Called 15.8% of time when present
- Phage (with cluster) where this start called: IrishSherpFalk_88 (F1), Lennon_20 (DE1), Vivi2_18 (DE1),

Start 87:

- Found in 12 of 358 (3.4%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 16.7% of time when present
- Phage (with cluster) where this start called: GMA6_79 (DQ), WillSterrel_87 (F1),

Start 91:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Grayson_217 (CB),

Start 92:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiHau3_61 (BD4),

Start 93:

- Found in 18 of 358 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Sitar_20 (DE1),

Start 96:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BenchScraper_71 (AY),

Start 97:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_56 (FB),

Start 98:

- Found in 1 of 358 (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_35 (DQ),

Start 99:

- Found in 172 of 358 (48.0%) of genes in pham
- Manual Annotations of this start: 163 of 330
- Called 95.3% of time when present
- Phage (with cluster) where this start called: ABU_10 (B1), Adriana_10 (B1), AltPhacts_10 (B1), Anderson_10 (B1), Andre_10 (B1), Austintatious_42 (BC3), 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), Gwilliam_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), Ididsumtinwong_46 (BC3), 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), Lishka_43 (BC3), Love_20 (DE1), Lulwa_10 (B1), Magic8_10 (B1), Marteena_62 (CY1), Matalotodo_10 (B1), 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), Zaider_11 (B1), Zelda_10 (B1), Zonia_10 (B1),

Start 100:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caprice_29 (S), Colucci_103 (AR), DrYang_96 (AR),

Start 102:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_155 (singleton),

Start 103:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe_10 (DQ),

Start 105:

- Found in 15 of 358 (4.2%) of genes in pham
- Manual Annotations of this start: 15 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996_1010 (AR), Chocolat_100 (AR), Chubster_100 (AR), EdgarPoe_100 (AR), HumptyDumpty_100 (AR), JaNo_99 (AR), KBurrousTX_96 (AR), Kabreeze_100 (AR), Linus_100 (AR), Lymara_98 (AR), Mordred_100 (AR), PrincessTrina_101 (AR), RosiePosie_100 (AR), Scavito_101 (AR), Tophat_101 (AR),

Start 106:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GageAP_46 (A1),

Start 107:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Finch_154 (singleton),

Start 108:

- Found in 18 of 358 (5.0%) of genes in pham
- Manual Annotations of this start: 8 of 330
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AluminumJesus_51 (EG), BaboJay_80 (E), Blab_51 (EG), CN1A_74 (singleton), Eureka_81 (E), Goku_81 (E), Gudmit_38 (singleton), Manda_84 (E), SophKB_98 (E),

Start 109:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor_76 (DE),

Start 110:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SadLad_28 (EG), Yvonnetastic_131 (DD),

Start 111:

- Found in 11 of 358 (3.1%) of genes in pham
- Manual Annotations of this start: 11 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_54 (DN3), BigPaolini_3 (A1), Crater_54 (DN3), Dexes_3 (A1), Gyzlar_3 (A1), Licorice_4 (A1), Phistory_56 (DN1), PhorbesPhlower_38 (DH), Seanderson_3 (A1), Smairt_2 (A1), Smeagol_2 (A1),

Start 113:

- Found in 15 of 358 (4.2%) of genes in pham
- Manual Annotations of this start: 5 of 330
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Engineer_51 (CQ1), Gaia_17 (X), Lozinak_50 (CQ1), Nebkiss_18 (X), Smoothie_51 (CQ1),

Start 114:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 330
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Finch_57 (singleton), Hydra_4 (BD1), Mcklovin_2 (CZ4),

Start 125:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Footloose_54 (singleton),

Start 126:

- Found in 21 of 358 (5.9%) of genes in pham
- Manual Annotations of this start: 5 of 330
- Called 23.8% of time when present
- Phage (with cluster) where this start called: BillyTP_72 (AY), Faja_72 (AY), Hestia_63 (AY), Kroos_19 (DE1), Rofo_18 (DE1),

Start 127:

- Found in 26 of 358 (7.3%) of genes in pham
- Manual Annotations of this start: 23 of 330
- Called 96.2% 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), DeejaClivia_128 (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), SVoro_139 (C1), Shaqnato_134 (C1), Shelob_143 (C1), Shifa_130 (C1), Teardrop_140 (C1),

Start 129:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vibaki_76 (FL),

Start 130:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 25.0% of time when present
- Phage (with cluster) where this start called: WhereRU_161 (BE1),

Start 134:

- Found in 22 of 358 (6.1%) of genes in pham
- Manual Annotations of this start: 10 of 330
- Called 77.3% of time when present
- Phage (with cluster) where this start called: Angela_225 (BE1), Bmoc_227 (BE1), Cadmus_226 (BE1), Corium_61 (F1), Cursive_225 (BE1), Daubenski_216 (BE1), Emmaloid_65 (F1), KingJulian_61 (F1), Larnav_222 (BE1), Lululemon_219 (BE1), Mildred21_232 (BE1), Ms6_60 (F1), PacManQ_219 (BE1), Shuckle_225 (BE1), Slim_65 (F1), Sushi23_223 (BE1), Targaryen_222 (BE1),

Start 138:

- Found in 14 of 358 (3.9%) of genes in pham
- Manual Annotations of this start: 3 of 330
- Called 28.6% of time when present

- Phage (with cluster) where this start called: CMP1_50 (singleton), Corndog_33 (O), Ryadel_34 (O), Winget_32 (O),

Start 142:

- Found in 1 of 358 (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 145:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bmoc_167 (BE1), Persimmon_162 (BE1),

Start 148:

- Found in 14 of 358 (3.9%) of genes in pham
- Manual Annotations of this start: 7 of 330
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Catdawg_31 (O), Familton_32 (O), FoulBall_31 (O), Idergollasper_31 (O), JangDynasty_31 (O), SchoolBus_31 (O), YungJamal_34 (O),

Start 154:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Samy_46 (singleton),

Start 155:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 330
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tucker_41 (A6), Zulu_41 (A6),

Start 160:

- Found in 1 of 358 (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: RomansRevenge_74 (singleton),

Start 162:

- Found in 13 of 358 (3.6%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: SilverChicken_59 (F2),

Start 167:

- Found in 13 of 358 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 23.1% of time when present

- Phage (with cluster) where this start called: Blessica_32 (O), KingPhillip3_29 (O), Zebo_30 (O),

Start 171:

- Found in 4 of 358 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: REQ3_10 (singleton),

Start 186:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 330
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Cafasso_94 (DZ),

Summary by clusters:

There are 42 clusters represented in this pham: DN, singleton, DH, CZ2, CZ3, DD, CZ1, CZ4, FB, BP, FL, DQ, A1, BD4, DN1, DN3, A6, BD1, C1, CY1, DE, E, CB, EG, J, O, CZ, S, AR, AY, X, CQ1, F1, F2, DE1, B1, B3, DZ, BE1, BC1, BC2, BC3,

Info for manual annotations of cluster A1:

- Start number 106 was manually annotated 1 time for cluster A1.
- Start number 111 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster A6:

- Start number 155 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster AR:

- Start number 100 was manually annotated 2 times for cluster AR.
- Start number 105 was manually annotated 15 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 96 was manually annotated 1 time for cluster AY.
- Start number 126 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster B1:

- Start number 99 was manually annotated 140 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 81 was manually annotated 1 time for cluster BC1.
- Start number 83 was manually annotated 4 times for cluster BC1.
- Start number 84 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 81 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 75 was manually annotated 2 times for cluster BC3.
- Start number 99 was manually annotated 2 times for cluster BC3.

Info for manual annotations of cluster BD1:

- Start number 114 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD4:

- Start number 92 was manually annotated 1 time for cluster BD4.

Info for manual annotations of cluster BE1:

- Start number 130 was manually annotated 1 time for cluster BE1.
- Start number 134 was manually annotated 10 times for cluster BE1.
- Start number 145 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BP:

- Start number 79 was manually annotated 8 times for cluster BP.

Info for manual annotations of cluster C1:

- Start number 127 was manually annotated 23 times for cluster C1.

Info for manual annotations of cluster CB:

- Start number 91 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CQ1:

- Start number 113 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 78 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 114 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DD:

- Start number 110 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE:

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

Info for manual annotations of cluster DE1:

- Start number 66 was manually annotated 5 times for cluster DE1.
- Start number 72 was manually annotated 12 times for cluster DE1.
- Start number 85 was manually annotated 2 times for cluster DE1.
- Start number 93 was manually annotated 1 time for cluster DE1.

- Start number 99 was manually annotated 12 times for cluster DE1.
- Start number 126 was manually annotated 2 times for cluster DE1.

Info for manual annotations of cluster DH:

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

Info for manual annotations of cluster DN1:

- Start number 111 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 111 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DQ:

- Start number 103 was manually annotated 1 time for cluster DQ.

Info for manual annotations of cluster DZ:

- Start number 186 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster E:

- Start number 108 was manually annotated 5 times for cluster E.

Info for manual annotations of cluster EG:

- Start number 83 was manually annotated 1 time for cluster EG.
- Start number 108 was manually annotated 2 times for cluster EG.
- Start number 110 was manually annotated 1 time for cluster EG.

Info for manual annotations of cluster F1:

- Start number 77 was manually annotated 5 times for cluster F1.
- Start number 80 was manually annotated 3 times for cluster F1.
- Start number 85 was manually annotated 1 time for cluster F1.
- Start number 87 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster FB:

- Start number 97 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FL:

- Start number 129 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster J:

- Start number 60 was manually annotated 2 times for cluster J.
- Start number 74 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster O:

- Start number 138 was manually annotated 3 times for cluster O.
- Start number 148 was manually annotated 7 times for cluster O.
- Start number 167 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster X:

- Start number 113 was manually annotated 2 times for cluster X.

Gene Information:

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

Candidate Starts for ABU_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: AdaS_33 Start: 23341, Stop: 23913, Start Num: 70

Candidate Starts for AdaS_33:

(36, 23191), (70, 23341), (Start: 148 @23467 has 7 MA's), (185, 23563), (208, 23626), (221, 23656), (223, 23665), (226, 23677), (282, 23788),

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

Candidate Starts for Adriana_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Affeca_48 Start: 42397, Stop: 42915, Start Num: 72

Candidate Starts for Affeca_48:

(61, 42385), (Start: 72 @42397 has 12 MA's), (196, 42613), (227, 42703), (233, 42715),

Gene: Ailee_47 Start: 42002, Stop: 42520, Start Num: 72

Candidate Starts for Ailee_47:

(61, 41990), (Start: 66 @41999 has 5 MA's), (Start: 72 @42002 has 12 MA's), (196, 42218), (227, 42308), (233, 42320),

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

Candidate Starts for AltPhacts_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: AluminumJesus_51 Start: 40979, Stop: 40554, Start Num: 108

Candidate Starts for AluminumJesus_51:

(Start: 108 @40979 has 8 MA's), (197, 40811), (233, 40709), (284, 40625),

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

Candidate Starts for Anderson_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Andre_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Andre_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Angela_225 Start: 112366, Stop: 112806, Start Num: 134

Candidate Starts for Angela_225:

(119, 112339), (Start: 134 @112366 has 10 MA's), (173, 112462), (197, 112513), (228, 112606), (261, 112678), (289, 112732), (301, 112765),

Gene: Angelicage_48 Start: 42812, Stop: 43333, Start Num: 66

Candidate Starts for Angelicage_48:

(61, 42803), (Start: 66 @42812 has 5 MA's), (Start: 72 @42815 has 12 MA's), (196, 43031), (227, 43121), (233, 43133),

Gene: Apricot_54 Start: 35119, Stop: 35568, Start Num: 111

Candidate Starts for Apricot_54:

(65, 35038), (Start: 111 @35119 has 11 MA's), (156, 35191), (200, 35287), (210, 35323), (274, 35452), (312, 35557),

Gene: Ariel_165 Start: 84168, Stop: 84737, Start Num: 60

Candidate Starts for Ariel_165:

(Start: 60 @84168 has 2 MA's), (Start: 74 @84210 has 1 MA's), (Start: 84 @84225 has 1 MA's), (206, 84447), (227, 84504), (239, 84525),

Gene: Austintatious_42 Start: 27716, Stop: 28177, Start Num: 99

Candidate Starts for Austintatious_42:

(17, 27290), (18, 27320), (37, 27539), (Start: 99 @27716 has 163 MA's), (221, 27980), (226, 28001), (267, 28064),

Gene: AxeJC_43 Start: 29903, Stop: 30394, Start Num: 79

Candidate Starts for AxeJC_43:

(Start: 79 @29903 has 8 MA's), (221, 30155), (224, 30170),

Gene: BaboJay_80 Start: 51126, Stop: 51572, Start Num: 108

Candidate Starts for BaboJay_80:

(90, 51102), (Start: 108 @51126 has 8 MA's), (140, 51180), (205, 51339), (221, 51378), (226, 51399), (283, 51510),

Gene: Baddon_49 Start: 43084, Stop: 43602, Start Num: 72

Candidate Starts for Baddon_49:

(Start: 72 @43084 has 12 MA's), (94, 43114), (196, 43300), (227, 43390), (233, 43402), (317, 43597),

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

Candidate Starts for Badfish_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Barsten_19:

(Start: 85 @14591 has 3 MA's), (Start: 93 @14603 has 1 MA's), (Start: 99 @14612 has 163 MA's), (Start: 126 @14642 has 5 MA's), (132, 14651), (210, 14822), (221, 14855), (240, 14897), (251, 14918), (273, 14963),

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

Candidate Starts for Basato_11:

(Start: 99 @9177 has 163 MA's), (133, 9216), (150, 9240), (189, 9321), (221, 9411), (251, 9474),

Gene: BaxterFox_65 Start: 44276, Stop: 44731, Start Num: 99

Candidate Starts for BaxterFox_65:

(58, 44204), (59, 44207), (Start: 99 @44276 has 163 MA's), (116, 44288), (175, 44417), (193, 44453), (239, 44570), (243, 44579),

Gene: Belphegor_76 Start: 56290, Stop: 56739, Start Num: 109

Candidate Starts for Belphegor_76:

(33, 56071), (50, 56167), (54, 56176), (Start: 109 @56290 has 1 MA's), (157, 56374), (183, 56431), (194, 56455), (202, 56479), (205, 56491),

Gene: BenchScraper_71 Start: 37047, Stop: 37535, Start Num: 96

Candidate Starts for BenchScraper_71:

(Start: 96 @37047 has 1 MA's), (101, 37053), (Start: 126 @37083 has 5 MA's), (292, 37479),

Gene: Bibwit_19 Start: 14856, Stop: 15302, Start Num: 99

Candidate Starts for Bibwit_19:

(Start: 85 @14835 has 3 MA's), (Start: 93 @14847 has 1 MA's), (Start: 99 @14856 has 163 MA's),
(Start: 126 @14886 has 5 MA's), (132, 14895), (210, 15066), (221, 15099), (240, 15141), (251, 15162),
(273, 15207), (291, 15243),

Gene: Bibwit_48 Start: 41643, Stop: 42161, Start Num: 72

Candidate Starts for Bibwit_48:

(Start: 72 @41643 has 12 MA's), (94, 41673), (196, 41859), (227, 41949), (233, 41961),

Gene: BigPaolini_3 Start: 1128, Stop: 1637, Start Num: 111

Candidate Starts for BigPaolini_3:

(Start: 111 @1128 has 11 MA's), (208, 1323), (210, 1332), (224, 1368), (315, 1590),

Gene: BillyTP_72 Start: 38938, Stop: 39390, Start Num: 126

Candidate Starts for BillyTP_72:

(Start: 96 @38902 has 1 MA's), (101, 38908), (Start: 126 @38938 has 5 MA's), (292, 39334),

Gene: Bioscum_45 Start: 29978, Stop: 30484, Start Num: 75

Candidate Starts for Bioscum_45:

(Start: 75 @29978 has 2 MA's), (Start: 99 @30014 has 163 MA's), (227, 30272), (237, 30290), (248,
30311),

Gene: Blab_51 Start: 40826, Stop: 40401, Start Num: 108

Candidate Starts for Blab_51:

(21, 41177), (25, 41099), (Start: 108 @40826 has 8 MA's), (197, 40658), (233, 40556), (284, 40472),

Gene: BlackStallion_10 Start: 8941, Stop: 9375, Start Num: 99

Candidate Starts for BlackStallion_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Blessica_32 Start: 14991, Stop: 15401, Start Num: 167

Candidate Starts for Blessica_32:

(Start: 167 @14991 has 1 MA's), (181, 15024), (184, 15027), (187, 15030), (227, 15153), (246, 15195),
(314, 15366), (320, 15393),

Gene: BlueHusk_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for BlueHusk_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Bmoc_227 Start: 112807, Stop: 113247, Start Num: 134

Candidate Starts for Bmoc_227:

(Start: 113 @112771 has 5 MA's), (119, 112780), (Start: 134 @112807 has 10 MA's), (173, 112903),
(197, 112954), (228, 113047), (261, 113119), (289, 113173), (301, 113206),

Gene: Bmoc_167 Start: 91666, Stop: 92031, Start Num: 145

Candidate Starts for Bmoc_167:

(Start: 145 @91666 has 2 MA's), (175, 91735), (214, 91822), (236, 91888),

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

Candidate Starts for BobBob_16:

(Start: 85 @13445 has 3 MA's), (Start: 93 @13457 has 1 MA's), (Start: 99 @13466 has 163 MA's),
(Start: 126 @13496 has 5 MA's), (132, 13505), (210, 13676), (221, 13709), (240, 13751), (251, 13772),
(273, 13817), (291, 13853),

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

Candidate Starts for Boehler_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Breeniome_140 Start: 81159, Stop: 81575, Start Num: 127

Candidate Starts for Breeniome_140:

(16, 80682), (Start: 127 @81159 has 23 MA's), (157, 81216), (179, 81279), (208, 81348), (224, 81393),
(244, 81432),

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

Candidate Starts for Buckeye_10:

(Start: 99 @8945 has 163 MA's), (133, 8984), (150, 9008), (189, 9089), (221, 9179), (251, 9242),

Gene: Burrough_141 Start: 83310, Stop: 83726, Start Num: 127

Candidate Starts for Burrough_141:

(16, 82833), (Start: 127 @83310 has 23 MA's), (157, 83367), (179, 83430), (208, 83499), (224, 83544),
(244, 83583),

Gene: Bxz1_138 Start: 84513, Stop: 84929, Start Num: 127

Candidate Starts for Bxz1_138:

(16, 84036), (Start: 127 @84513 has 23 MA's), (157, 84570), (179, 84633), (208, 84702), (224, 84747),
(244, 84786),

Gene: Byougenkin_63 Start: 41134, Stop: 41616, Start Num: 77

Candidate Starts for Byougenkin_63:

(Start: 77 @41134 has 5 MA's), (Start: 134 @41218 has 10 MA's), (242, 41461), (264, 41500), (285,
41542),

Gene: CMP1_50 Start: 47245, Stop: 46814, Start Num: 138

Candidate Starts for CMP1_50:

(Start: 138 @47245 has 3 MA's), (153, 47212), (198, 47098), (220, 47044), (299, 46864),

Gene: CN1A_74 Start: 54320, Stop: 53856, Start Num: 108

Candidate Starts for CN1A_74:

(Start: 108 @54320 has 8 MA's), (128, 54290), (197, 54131),

Gene: CN1A_67 Start: 52198, Stop: 51770, Start Num: 142

Candidate Starts for CN1A_67:

(Start: 66 @52336 has 5 MA's), (135, 52210), (142, 52198), (153, 52174), (193, 52066), (221, 51991),
(279, 51853), (307, 51781),

Gene: Cadmus_226 Start: 113488, Stop: 113928, Start Num: 134

Candidate Starts for Cadmus_226:

(44, 113290), (46, 113293), (49, 113317), (52, 113329), (53, 113332), (76, 113401), (Start: 80
@113407 has 3 MA's), (Start: 87 @113416 has 1 MA's), (Start: 108 @113446 has 8 MA's), (Start: 113
@113452 has 5 MA's), (Start: 134 @113488 has 10 MA's), (173, 113584), (197, 113635), (228,
113728), (261, 113800), (289, 113854), (301, 113887),

Gene: Cafasso_94 Start: 55360, Stop: 55818, Start Num: 186

Candidate Starts for Cafasso_94:

(141, 55264), (Start: 186 @55360 has 1 MA's), (207, 55423), (298, 55645), (305, 55663),

Gene: Cali_136 Start: 83312, Stop: 83728, Start Num: 127

Candidate Starts for Cali_136:

(16, 82835), (Start: 127 @83312 has 23 MA's), (157, 83369), (179, 83432), (208, 83501), (224, 83546), (244, 83585),

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

Candidate Starts for CamL_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for CampRoach_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Cane17_133 Start: 84174, Stop: 84590, Start Num: 127

Candidate Starts for Cane17_133:

(16, 83697), (Start: 127 @84174 has 23 MA's), (157, 84231), (179, 84294), (208, 84363), (224, 84408), (244, 84447),

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

Candidate Starts for Cannibal_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Cantare_76 Start: 62423, Stop: 63022, Start Num: 64

Candidate Starts for Cantare_76:

(Start: 64 @62423 has 1 MA's), (69, 62441), (152, 62582), (234, 62819), (294, 62963), (302, 62978),

Gene: Caprice_29 Start: 9273, Stop: 9845, Start Num: 100

Candidate Starts for Caprice_29:

(Start: 100 @9273 has 2 MA's), (Start: 107 @9282 has 1 MA's), (169, 9402), (176, 9417), (198, 9474), (221, 9552), (259, 9645),

Gene: Catdawg_31 Start: 14620, Stop: 15090, Start Num: 148

Candidate Starts for Catdawg_31:

(Start: 138 @14608 has 3 MA's), (Start: 148 @14620 has 7 MA's), (162, 14653), (Start: 167 @14680 has 1 MA's), (181, 14713), (184, 14716), (187, 14719), (227, 14842), (246, 14884), (314, 15055), (320, 15082),

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

Candidate Starts for Chah_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for Charles1_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: CharlieB_138 Start: 82195, Stop: 82611, Start Num: 127

Candidate Starts for CharlieB_138:

(16, 81718), (Start: 127 @82195 has 23 MA's), (157, 82252), (179, 82315), (208, 82384), (224, 82429), (244, 82468),

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

Candidate Starts for Charming_16:

(Start: 85 @13447 has 3 MA's), (Start: 93 @13459 has 1 MA's), (Start: 99 @13468 has 163 MA's),
(Start: 126 @13498 has 5 MA's), (132, 13507), (210, 13678), (221, 13711), (240, 13753), (251, 13774),
(273, 13819), (291, 13855),

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

Candidate Starts for CheetO_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: ChickenPhender_137 Start: 81501, Stop: 81917, Start Num: 127

Candidate Starts for ChickenPhender_137:

(16, 81024), (Start: 127 @81501 has 23 MA's), (157, 81558), (179, 81621), (208, 81690), (224, 81735),
(244, 81774),

Gene: Chipper1996_1010 Start: 63867, Stop: 64361, Start Num: 105

Candidate Starts for Chipper1996_1010:

(55, 63759), (67, 63798), (Start: 105 @63867 has 15 MA's), (158, 63951), (180, 64023), (199, 64062),
(304, 64332),

Gene: Chocolat_100 Start: 63574, Stop: 64068, Start Num: 105

Candidate Starts for Chocolat_100:

(55, 63466), (67, 63505), (Start: 105 @63574 has 15 MA's), (158, 63658), (180, 63730), (199, 63769),
(304, 64039),

Gene: Chubster_100 Start: 63814, Stop: 64308, Start Num: 105

Candidate Starts for Chubster_100:

(55, 63706), (67, 63745), (Start: 105 @63814 has 15 MA's), (158, 63898), (180, 63970), (199, 64009),
(304, 64279),

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

Candidate Starts for Chunky_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Cobra_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Colbert_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Colucci_103 Start: 64172, Stop: 64684, Start Num: 100

Candidate Starts for Colucci_103:

(Start: 100 @64172 has 2 MA's), (158, 64262), (177, 64316), (227, 64463), (230, 64472), (235, 64481),
(295, 64610),

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

Candidate Starts for Compostia_13:

(Start: 99 @10667 has 163 MA's), (218, 10889), (227, 10919), (240, 10937), (313, 11102),

Gene: Corium_61 Start: 40510, Stop: 40908, Start Num: 134

Candidate Starts for Corium_61:

(Start: 77 @40426 has 5 MA's), (Start: 134 @40510 has 10 MA's), (242, 40753), (264, 40792), (285, 40834),

Gene: Corndog_33 Start: 15066, Stop: 15548, Start Num: 138

Candidate Starts for Corndog_33:

(Start: 138 @15066 has 3 MA's), (Start: 148 @15078 has 7 MA's), (162, 15111), (Start: 167 @15138 has 1 MA's), (181, 15171), (184, 15174), (187, 15177), (227, 15300), (246, 15342), (314, 15513), (320, 15540),

Gene: Courthouse_162 Start: 84612, Stop: 85181, Start Num: 60

Candidate Starts for Courthouse_162:

(Start: 60 @84612 has 2 MA's), (Start: 74 @84654 has 1 MA's), (Start: 84 @84669 has 1 MA's), (206, 84891), (227, 84948), (239, 84969),

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

Candidate Starts for Craff_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Crater_54 Start: 35514, Stop: 35963, Start Num: 111

Candidate Starts for Crater_54:

(65, 35433), (Start: 111 @35514 has 11 MA's), (156, 35586), (200, 35682), (210, 35718), (274, 35847), (312, 35952),

Gene: Cumberbatch_45 Start: 30201, Stop: 30692, Start Num: 79

Candidate Starts for Cumberbatch_45:

(Start: 79 @30201 has 8 MA's), (221, 30453), (224, 30468),

Gene: Cursive_225 Start: 113007, Stop: 113447, Start Num: 134

Candidate Starts for Cursive_225:

(46, 112812), (52, 112848), (76, 112920), (Start: 80 @112926 has 3 MA's), (Start: 87 @112935 has 1 MA's), (Start: 108 @112965 has 8 MA's), (Start: 113 @112971 has 5 MA's), (115, 112974), (119, 112980), (Start: 134 @113007 has 10 MA's), (173, 113103), (197, 113154), (228, 113247), (261, 113319), (289, 113373), (301, 113406),

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

Candidate Starts for Daka_10:

(Start: 99 @8946 has 163 MA's), (133, 8985), (150, 9009), (189, 9090), (221, 9180), (251, 9243),

Gene: DalanDe_10 Start: 6059, Stop: 6628, Start Num: 103

Candidate Starts for DalanDe_10:

(Start: 103 @6059 has 1 MA's), (123, 6083), (166, 6149), (173, 6173), (194, 6212), (253, 6356), (255, 6359), (268, 6392), (300, 6461),

Gene: Darolandstone_43 Start: 33080, Stop: 33595, Start Num: 81

Candidate Starts for Darolandstone_43:

(27, 32861), (48, 32987), (Start: 81 @33080 has 3 MA's), (122, 33119), (233, 33359),

Gene: Daubenski_216 Start: 113389, Stop: 113829, Start Num: 134

Candidate Starts for Daubenski_216:

(44, 113191), (46, 113194), (49, 113218), (52, 113230), (53, 113233), (76, 113302), (Start: 80 @113308 has 3 MA's), (Start: 87 @113317 has 1 MA's), (Start: 108 @113347 has 8 MA's), (Start: 113 @113353 has 5 MA's), (Start: 134 @113389 has 10 MA's), (173, 113485), (197, 113536), (228, 113629), (261, 113701), (289, 113755), (301, 113788),

Gene: DeejaClivia_128 Start: 80469, Stop: 80885, Start Num: 127
Candidate Starts for DeejaClivia_128:
(16, 79992), (Start: 127 @80469 has 23 MA's), (157, 80526), (179, 80589), (208, 80658), (224, 80703),
(244, 80742),

Gene: Dexes_3 Start: 1113, Stop: 1622, Start Num: 111
Candidate Starts for Dexes_3:
(Start: 111 @1113 has 11 MA's), (208, 1308), (210, 1317), (224, 1353), (315, 1575),

Gene: Dingo_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Dingo_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: DirtJuice_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for DirtJuice_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: DoesntMatter_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for DoesntMatter_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: DrYang_96 Start: 63051, Stop: 63563, Start Num: 100
Candidate Starts for DrYang_96:
(Start: 100 @63051 has 2 MA's), (158, 63141), (175, 63192), (227, 63342), (230, 63351), (276, 63438),

Gene: Durga_10 Start: 8957, Stop: 9391, Start Num: 99
Candidate Starts for Durga_10:
(Start: 99 @8957 has 163 MA's), (133, 8996), (150, 9020), (189, 9101), (221, 9191), (251, 9254),

Gene: E3_gp199 Start: 129947, Stop: 130468, Start Num: 65
Candidate Starts for E3_gp199:
(65, 129947), (159, 130100), (179, 130163), (196, 130202), (206, 130232), (221, 130265), (227,
130289), (247, 130325), (267, 130367), (303, 130448),

Gene: EMSquaredA_63 Start: 42816, Stop: 43277, Start Num: 99
Candidate Starts for EMSquaredA_63:
(38, 42666), (39, 42669), (58, 42744), (59, 42747), (Start: 99 @42816 has 163 MA's), (112, 42822),
(157, 42903), (194, 42999), (239, 43116),

Gene: Eastland_44 Start: 30161, Stop: 30652, Start Num: 79
Candidate Starts for Eastland_44:
(Start: 79 @30161 has 8 MA's), (221, 30413), (224, 30428),

Gene: EdgarPoe_100 Start: 63731, Stop: 64225, Start Num: 105
Candidate Starts for EdgarPoe_100:
(55, 63623), (67, 63662), (Start: 105 @63731 has 15 MA's), (158, 63815), (180, 63887), (199, 63926),
(304, 64196),

Gene: Eklok_44 Start: 29960, Stop: 30451, Start Num: 79
Candidate Starts for Eklok_44:
(Start: 79 @29960 has 8 MA's), (221, 30212), (224, 30227),

Gene: EleanorGeorge_65 Start: 42284, Stop: 42745, Start Num: 80
Candidate Starts for EleanorGeorge_65:
(Start: 80 @42284 has 3 MA's), (190, 42458), (198, 42485), (227, 42569), (254, 42608), (306, 42737),

Gene: Emiris_10 Start: 8944, Stop: 9378, Start Num: 99
Candidate Starts for Emiris_10:
(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Emmaloid_65 Start: 42092, Stop: 42490, Start Num: 134
Candidate Starts for Emmaloid_65:
(Start: 77 @42008 has 5 MA's), (Start: 134 @42092 has 10 MA's), (242, 42335), (264, 42374), (285, 42416),

Gene: EmpTee_10 Start: 8944, Stop: 9378, Start Num: 99
Candidate Starts for EmpTee_10:
(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: EnalisNailo_59 Start: 42622, Stop: 43077, Start Num: 99
Candidate Starts for EnalisNailo_59:
(42, 42490), (43, 42493), (58, 42550), (59, 42553), (Start: 99 @42622 has 163 MA's), (112, 42628),
(Start: 127 @42649 has 23 MA's), (157, 42706), (175, 42763), (193, 42799), (239, 42916), (243, 42925), (271, 42985),

Gene: Engineer_51 Start: 31923, Stop: 32384, Start Num: 113
Candidate Starts for Engineer_51:
(Start: 113 @31923 has 5 MA's), (171, 32031), (194, 32070), (198, 32082), (214, 32130), (221, 32142),
(233, 32178), (316, 32367), (318, 32370),

Gene: Eremos_10 Start: 8937, Stop: 9371, Start Num: 99
Candidate Starts for Eremos_10:
(Start: 99 @8937 has 163 MA's), (133, 8976), (150, 9000), (189, 9081), (221, 9171), (251, 9234),

Gene: Etaye_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Etaye_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Eugenia_10 Start: 8944, Stop: 9378, Start Num: 99
Candidate Starts for Eugenia_10:
(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Eureka_81 Start: 51417, Stop: 51863, Start Num: 108
Candidate Starts for Eureka_81:
(90, 51393), (Start: 108 @51417 has 8 MA's), (140, 51471), (205, 51630), (221, 51669), (226, 51690),
(283, 51801),

Gene: Faja_72 Start: 38688, Stop: 39140, Start Num: 126
Candidate Starts for Faja_72:
(40, 38511), (Start: 96 @38652 has 1 MA's), (101, 38658), (Start: 126 @38688 has 5 MA's), (292, 39084),

Gene: Familton_32 Start: 14624, Stop: 15094, Start Num: 148
Candidate Starts for Familton_32:

(Start: 138 @14612 has 3 MA's), (Start: 148 @14624 has 7 MA's), (162, 14657), (Start: 167 @14684 has 1 MA's), (181, 14717), (184, 14720), (187, 14723), (227, 14846), (246, 14888), (314, 15059), (320, 15086),

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

Candidate Starts for Fang_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Finch_155 Start: 99620, Stop: 100087, Start Num: 102

Candidate Starts for Finch_155:

(Start: 64 @99545 has 1 MA's), (Start: 102 @99620 has 1 MA's), (189, 99755), (210, 99824), (221, 99845), (227, 99869), (284, 99977), (290, 99995), (309, 100046),

Gene: Finch_154 Start: 99144, Stop: 99620, Start Num: 107

Candidate Starts for Finch_154:

(Start: 107 @99144 has 1 MA's), (139, 99192), (221, 99372), (259, 99462), (263, 99477), (311, 99588),

Gene: Finch_57 Start: 47485, Stop: 47922, Start Num: 114

Candidate Starts for Finch_57:

(Start: 114 @47485 has 3 MA's), (122, 47497), (Start: 148 @47542 has 7 MA's), (198, 47668), (208, 47695), (216, 47713), (244, 47779), (266, 47824), (293, 47881), (294, 47884),

Gene: Firehouse51_66 Start: 45330, Stop: 45791, Start Num: 80

Candidate Starts for Firehouse51_66:

(Start: 80 @45330 has 3 MA's), (190, 45504), (198, 45531), (227, 45615), (254, 45654), (306, 45783),

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

Candidate Starts for Floral_64:

(38, 44551), (39, 44554), (58, 44629), (59, 44632), (Start: 99 @44701 has 163 MA's), (112, 44707), (157, 44788), (194, 44884), (239, 45001),

Gene: Fludd_142 Start: 82309, Stop: 82725, Start Num: 127

Candidate Starts for Fludd_142:

(16, 81832), (Start: 127 @82309 has 23 MA's), (157, 82366), (179, 82429), (208, 82498), (224, 82543), (244, 82582),

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

Candidate Starts for FluffyNinja_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Footloose_54 Start: 31404, Stop: 31829, Start Num: 125

Candidate Starts for Footloose_54:

(41, 31218), (57, 31281), (Start: 125 @31404 has 1 MA's), (178, 31515), (187, 31530), (244, 31677), (245, 31680), (308, 31818),

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

Candidate Starts for Fosterous_16:

(Start: 85 @14336 has 3 MA's), (Start: 93 @14348 has 1 MA's), (Start: 99 @14357 has 163 MA's), (Start: 126 @14387 has 5 MA's), (132, 14396), (210, 14567), (221, 14600), (240, 14642), (251, 14663), (273, 14708), (291, 14744),

Gene: FoulBall_31 Start: 14618, Stop: 15088, Start Num: 148

Candidate Starts for FoulBall_31:

(Start: 138 @14606 has 3 MA's), (Start: 148 @14618 has 7 MA's), (162, 14651), (Start: 167 @14678 has 1 MA's), (181, 14711), (184, 14714), (187, 14717), (227, 14840), (246, 14882), (314, 15053), (320, 15080),

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

Candidate Starts for Frankicide_10:

(Start: 99 @8945 has 163 MA's), (133, 8984), (150, 9008), (189, 9089), (221, 9179), (251, 9242),

Gene: Fransoyer_69 Start: 49557, Stop: 49093, Start Num: 83

Candidate Starts for Fransoyer_69:

(56, 49611), (Start: 83 @49557 has 5 MA's), (165, 49434), (229, 49263), (241, 49248), (248, 49242),

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

Candidate Starts for FriarPreacher_10:

(Start: 99 @8946 has 163 MA's), (133, 8985), (150, 9009), (189, 9090), (221, 9180), (251, 9243),

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

Candidate Starts for Fringe_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: GMA6_35 Start: 29073, Stop: 29516, Start Num: 98

Candidate Starts for GMA6_35:

(88, 29058), (98, 29073), (104, 29082), (131, 29121), (144, 29145), (202, 29274), (205, 29286), (206, 29289), (211, 29301), (272, 29424),

Gene: GMA6_79 Start: 60811, Stop: 61245, Start Num: 87

Candidate Starts for GMA6_79:

(Start: 87 @60811 has 1 MA's), (117, 60850), (146, 60892), (173, 60946), (188, 60967), (220, 61051), (224, 61072),

Gene: GageAP_46 Start: 34874, Stop: 34401, Start Num: 106

Candidate Starts for GageAP_46:

(Start: 106 @34874 has 1 MA's), (118, 34859), (156, 34787), (163, 34772), (194, 34709), (208, 34670), (227, 34616), (250, 34574), (265, 34538), (290, 34484),

Gene: Gaia_17 Start: 16945, Stop: 17430, Start Num: 113

Candidate Starts for Gaia_17:

(Start: 113 @16945 has 5 MA's), (119, 16954), (210, 17170), (224, 17209), (227, 17218), (256, 17269), (297, 17368),

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

Candidate Starts for Galadriel_20:

(Start: 85 @14195 has 3 MA's), (Start: 93 @14207 has 1 MA's), (Start: 99 @14216 has 163 MA's), (Start: 126 @14246 has 5 MA's), (132, 14255), (210, 14426), (221, 14459), (240, 14501), (251, 14522), (273, 14567), (291, 14603),

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

Candidate Starts for GeneCoco_10:

(Start: 99 @8949 has 163 MA's), (133, 8988), (150, 9012), (189, 9093), (221, 9183), (251, 9246),

Gene: Goku_81 Start: 51146, Stop: 51592, Start Num: 108

Candidate Starts for Goku_81:

(90, 51122), (Start: 108 @51146 has 8 MA's), (140, 51200), (205, 51359), (221, 51398), (226, 51419), (283, 51530),

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

Candidate Starts for Gophee_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Grayson_217 Start: 108140, Stop: 108661, Start Num: 91

Candidate Starts for Grayson_217:

(Start: 74 @108113 has 1 MA's), (Start: 77 @108119 has 5 MA's), (Start: 91 @108140 has 1 MA's), (149, 108236), (191, 108338), (195, 108356), (199, 108365), (201, 108368), (291, 108605),

Gene: Gudmit_38 Start: 27363, Stop: 27896, Start Num: 108

Candidate Starts for Gudmit_38:

(Start: 108 @27363 has 8 MA's), (124, 27390), (260, 27666), (280, 27711),

Gene: Guppsters_64 Start: 40923, Stop: 41405, Start Num: 77

Candidate Starts for Guppsters_64:

(Start: 77 @40923 has 5 MA's), (Start: 134 @41007 has 10 MA's), (242, 41250), (264, 41289), (285, 41331),

Gene: Gustavo_49 Start: 42016, Stop: 42534, Start Num: 72

Candidate Starts for Gustavo_49:

(Start: 72 @42016 has 12 MA's), (94, 42046), (196, 42232), (227, 42322), (233, 42334), (317, 42529),

Gene: Gwilliam_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Gwilliam_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Gyarad_0010:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Gyzlar_3 Start: 1073, Stop: 1582, Start Num: 111

Candidate Starts for Gyzlar_3:

(Start: 111 @1073 has 11 MA's), (208, 1268), (210, 1277), (224, 1313), (315, 1535),

Gene: HFrancette_45 Start: 30939, Stop: 31430, Start Num: 79

Candidate Starts for HFrancette_45:

(Start: 79 @30939 has 8 MA's), (221, 31191), (224, 31206),

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

Candidate Starts for HSavage_10:

(Start: 99 @8945 has 163 MA's), (133, 8984), (150, 9008), (189, 9089), (221, 9179), (251, 9242),

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

Candidate Starts for Haimas_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Hamish_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Hartsy_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Hartsy_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Harvey_10 Start: 8944, Stop: 9378, Start Num: 99
Candidate Starts for Harvey_10:
(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Hertubise_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Hertubise_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Hestia_63 Start: 34911, Stop: 35363, Start Num: 126
Candidate Starts for Hestia_63:
(40, 34734), (Start: 96 @34875 has 1 MA's), (101, 34881), (Start: 126 @34911 has 5 MA's), (292, 35307),

Gene: Hetaeria_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Hetaeria_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Horchata_10 Start: 8942, Stop: 9376, Start Num: 99
Candidate Starts for Horchata_10:
(Start: 99 @8942 has 163 MA's), (133, 8981), (150, 9005), (189, 9086), (221, 9176), (251, 9239),

Gene: HumptyDumpty_100 Start: 63534, Stop: 64028, Start Num: 105
Candidate Starts for HumptyDumpty_100:
(55, 63426), (67, 63465), (Start: 105 @63534 has 15 MA's), (158, 63618), (180, 63690), (199, 63729), (304, 63999),

Gene: HyRo_132 Start: 82234, Stop: 82650, Start Num: 127
Candidate Starts for HyRo_132:
(16, 81757), (Start: 127 @82234 has 23 MA's), (157, 82291), (179, 82354), (208, 82423), (224, 82468), (244, 82507),

Gene: Hydra_4 Start: 1342, Stop: 1785, Start Num: 114
Candidate Starts for Hydra_4:
(Start: 114 @1342 has 3 MA's), (205, 1525), (221, 1561), (227, 1585), (257, 1630), (275, 1672),

Gene: Idergollasper_31 Start: 14618, Stop: 15088, Start Num: 148
Candidate Starts for Idergollasper_31:
(Start: 138 @14606 has 3 MA's), (Start: 148 @14618 has 7 MA's), (162, 14651), (Start: 167 @14678 has 1 MA's), (181, 14711), (184, 14714), (187, 14717), (227, 14840), (246, 14882), (314, 15053), (320, 15080),

Gene: Ididsumtinwong_46 Start: 30014, Stop: 30484, Start Num: 99
Candidate Starts for Ididsumtinwong_46:
(Start: 75 @29978 has 2 MA's), (Start: 99 @30014 has 163 MA's), (227, 30272), (237, 30290), (248, 30311),

Gene: Ignacio_44 Start: 30842, Stop: 31333, Start Num: 79
Candidate Starts for Ignacio_44:
(Start: 79 @30842 has 8 MA's), (221, 31094), (224, 31109),

Gene: Inchworm_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Inchworm_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Inverness_10 Start: 8945, Stop: 9379, Start Num: 99
Candidate Starts for Inverness_10:
(Start: 99 @8945 has 163 MA's), (133, 8984), (150, 9008), (189, 9089), (221, 9179), (251, 9242),

Gene: Iridoclysis_10 Start: 8947, Stop: 9381, Start Num: 99
Candidate Starts for Iridoclysis_10:
(Start: 99 @8947 has 163 MA's), (133, 8986), (150, 9010), (189, 9091), (221, 9181), (251, 9244),

Gene: IrishSherpFalk_88 Start: 51234, Stop: 51749, Start Num: 85
Candidate Starts for IrishSherpFalk_88:
(Start: 85 @51234 has 3 MA's), (Start: 87 @51237 has 1 MA's), (131, 51297), (205, 51474), (226, 51534), (270, 51621), (297, 51687), (310, 51720),

Gene: IsaacEli_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for IsaacEli_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: JKSyngboy_47 Start: 42615, Stop: 43133, Start Num: 72
Candidate Starts for JKSyngboy_47:
(Start: 72 @42615 has 12 MA's), (94, 42645), (196, 42831), (227, 42921), (233, 42933), (317, 43128),

Gene: JaNo_99 Start: 63505, Stop: 63999, Start Num: 105
Candidate Starts for JaNo_99:
(55, 63397), (67, 63436), (Start: 105 @63505 has 15 MA's), (158, 63589), (180, 63661), (199, 63700), (304, 63970),

Gene: JacAttac_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for JacAttac_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: JangDynasty_31 Start: 14713, Stop: 15183, Start Num: 148
Candidate Starts for JangDynasty_31:
(Start: 138 @14701 has 3 MA's), (Start: 148 @14713 has 7 MA's), (162, 14746), (Start: 167 @14773 has 1 MA's), (181, 14806), (184, 14809), (187, 14812), (227, 14935), (246, 14977), (314, 15148), (320, 15175),

Gene: JangoPhett_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for JangoPhett_10:
(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Jessibeth14_140 Start: 83080, Stop: 83496, Start Num: 127
Candidate Starts for Jessibeth14_140:
(16, 82603), (Start: 127 @83080 has 23 MA's), (157, 83137), (179, 83200), (208, 83269), (224, 83314), (244, 83353),

Gene: KBurrousTX_96 Start: 64281, Stop: 64742, Start Num: 105
Candidate Starts for KBurrousTX_96:

(Start: 105 @64281 has 15 MA's), (121, 64299), (172, 64410), (209, 64503), (217, 64521), (221, 64536), (239, 64584),

Gene: KLucky39_10 Start: 8943, Stop: 9377, Start Num: 99

Candidate Starts for KLucky39_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Kabreeze_100 Start: 63591, Stop: 64085, Start Num: 105

Candidate Starts for Kabreeze_100:

(55, 63483), (67, 63522), (Start: 105 @63591 has 15 MA's), (158, 63675), (180, 63747), (199, 63786), (304, 64056),

Gene: Kailash_10 Start: 8952, Stop: 9386, Start Num: 99

Candidate Starts for Kailash_10:

(Start: 99 @8952 has 163 MA's), (133, 8991), (150, 9015), (189, 9096), (221, 9186), (251, 9249),

Gene: Kamashten_49 Start: 42108, Stop: 42626, Start Num: 72

Candidate Starts for Kamashten_49:

(Start: 72 @42108 has 12 MA's), (196, 42324), (227, 42414), (233, 42426),

Gene: Katniss_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Katniss_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Keitabear_50 Start: 43627, Stop: 44148, Start Num: 66

Candidate Starts for Keitabear_50:

(61, 43618), (Start: 66 @43627 has 5 MA's), (Start: 72 @43630 has 12 MA's), (196, 43846), (227, 43936), (233, 43948),

Gene: Keitabear_20 Start: 16560, Stop: 17006, Start Num: 99

Candidate Starts for Keitabear_20:

(Start: 85 @16539 has 3 MA's), (Start: 93 @16551 has 1 MA's), (Start: 99 @16560 has 163 MA's), (Start: 126 @16590 has 5 MA's), (132, 16599), (210, 16770), (221, 16803), (240, 16845), (251, 16866), (273, 16911), (291, 16947),

Gene: Keitherie_10 Start: 8957, Stop: 9391, Start Num: 99

Candidate Starts for Keitherie_10:

(Start: 99 @8957 has 163 MA's), (133, 8996), (150, 9020), (151, 9023), (189, 9101), (221, 9191), (251, 9254),

Gene: Kewpiedoll_51 Start: 43059, Stop: 43577, Start Num: 72

Candidate Starts for Kewpiedoll_51:

(61, 43047), (Start: 66 @43056 has 5 MA's), (Start: 72 @43059 has 12 MA's), (196, 43275), (227, 43365), (233, 43377),

Gene: Kikipoo_10 Start: 8940, Stop: 9374, Start Num: 99

Candidate Starts for Kikipoo_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: KingJulian_61 Start: 40510, Stop: 40908, Start Num: 134

Candidate Starts for KingJulian_61:

(Start: 77 @40426 has 5 MA's), (Start: 134 @40510 has 10 MA's), (242, 40753), (264, 40792), (285, 40834),

Gene: KingPhillip3_29 Start: 14678, Stop: 15088, Start Num: 167

Candidate Starts for KingPhillip3_29:

(Start: 138 @14606 has 3 MA's), (Start: 148 @14618 has 7 MA's), (162, 14651), (Start: 167 @14678 has 1 MA's), (181, 14711), (184, 14714), (187, 14717), (227, 14840), (246, 14882), (314, 15053), (320, 15080),

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

Candidate Starts for KingVeVeVe_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for KlimbOn_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Kloppinator_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Koguma_138 Start: 80718, Stop: 81134, Start Num: 127

Candidate Starts for Koguma_138:

(16, 80241), (Start: 127 @80718 has 23 MA's), (157, 80775), (179, 80838), (208, 80907), (224, 80952), (244, 80991),

Gene: Kroos_19 Start: 14665, Stop: 15102, Start Num: 126

Candidate Starts for Kroos_19:

(Start: 93 @14620 has 1 MA's), (Start: 99 @14629 has 163 MA's), (Start: 126 @14665 has 5 MA's), (157, 14716), (189, 14782), (240, 14926), (251, 14947),

Gene: Kumotta_56 Start: 32485, Stop: 32964, Start Num: 97

Candidate Starts for Kumotta_56:

(51, 32380), (Start: 93 @32479 has 1 MA's), (Start: 97 @32485 has 1 MA's), (200, 32686), (203, 32701), (221, 32743), (259, 32827),

Gene: Kwobi_50 Start: 42725, Stop: 43243, Start Num: 72

Candidate Starts for Kwobi_50:

(Start: 72 @42725 has 12 MA's), (94, 42755), (196, 42941), (227, 43031), (233, 43043),

Gene: LRRHood_134 Start: 82526, Stop: 82942, Start Num: 127

Candidate Starts for LRRHood_134:

(16, 82049), (Start: 127 @82526 has 23 MA's), (157, 82583), (179, 82646), (208, 82715), (224, 82760), (244, 82799),

Gene: Larnav_222 Start: 113173, Stop: 113613, Start Num: 134

Candidate Starts for Larnav_222:

(46, 112978), (52, 113014), (76, 113086), (Start: 80 @113092 has 3 MA's), (Start: 87 @113101 has 1 MA's), (Start: 108 @113131 has 8 MA's), (Start: 113 @113137 has 5 MA's), (115, 113140), (119, 113146), (Start: 134 @113173 has 10 MA's), (173, 113269), (197, 113320), (228, 113413), (261, 113485), (289, 113539), (301, 113572),

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

Candidate Starts for LasagnaCat_10:

(Start: 99 @8952 has 163 MA's), (133, 8991), (150, 9015), (189, 9096), (221, 9186), (251, 9249),

Gene: Lasso_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Lasso_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: LeeLot_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for LeeLot_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Lego3393_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for Lego3393_10:
(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Lennon_20 Start: 15643, Stop: 16110, Start Num: 85
Candidate Starts for Lennon_20:
(Start: 85 @15643 has 3 MA's), (Start: 93 @15655 has 1 MA's), (Start: 99 @15664 has 163 MA's),
(Start: 126 @15694 has 5 MA's), (132, 15703), (210, 15874), (221, 15907), (240, 15949), (251, 15970),
(273, 16015), (291, 16051),

Gene: Lennon_50 Start: 43707, Stop: 44228, Start Num: 66
Candidate Starts for Lennon_50:
(61, 43698), (Start: 66 @43707 has 5 MA's), (Start: 72 @43710 has 12 MA's), (196, 43926), (227,
44016), (233, 44028),

Gene: Licorice_4 Start: 1283, Stop: 1792, Start Num: 111
Candidate Starts for Licorice_4:
(Start: 111 @1283 has 11 MA's), (208, 1478), (210, 1487), (224, 1523), (315, 1745),

Gene: Linus_100 Start: 64039, Stop: 64533, Start Num: 105
Candidate Starts for Linus_100:
(55, 63931), (67, 63970), (Start: 105 @64039 has 15 MA's), (158, 64123), (180, 64195), (199, 64234),
(304, 64504),

Gene: Lishka_43 Start: 27718, Stop: 28179, Start Num: 99
Candidate Starts for Lishka_43:
(Start: 99 @27718 has 163 MA's), (221, 27982), (226, 28003), (267, 28066),

Gene: LittleShirley_63 Start: 41739, Stop: 42221, Start Num: 77
Candidate Starts for LittleShirley_63:
(Start: 77 @41739 has 5 MA's), (Start: 134 @41823 has 10 MA's), (231, 42048), (242, 42066), (264,
42105), (285, 42147),

Gene: LolaVinca_141 Start: 83494, Stop: 83910, Start Num: 127
Candidate Starts for LolaVinca_141:
(16, 83017), (Start: 127 @83494 has 23 MA's), (157, 83551), (179, 83614), (208, 83683), (224, 83728),
(244, 83767),

Gene: Love_20 Start: 14527, Stop: 14973, Start Num: 99
Candidate Starts for Love_20:
(Start: 85 @14506 has 3 MA's), (Start: 93 @14518 has 1 MA's), (Start: 99 @14527 has 163 MA's),
(Start: 126 @14557 has 5 MA's), (132, 14566), (210, 14737), (221, 14770), (240, 14812), (251, 14833),
(273, 14878), (291, 14914),

Gene: Love_55 Start: 44334, Stop: 44852, Start Num: 72

Candidate Starts for Love_55:

(61, 44322), (Start: 66 @44331 has 5 MA's), (Start: 72 @44334 has 12 MA's), (196, 44550), (227, 44640), (233, 44652),

Gene: Lozinak_50 Start: 31978, Stop: 32439, Start Num: 113

Candidate Starts for Lozinak_50:

(Start: 113 @31978 has 5 MA's), (171, 32086), (194, 32125), (198, 32137), (214, 32185), (221, 32197), (233, 32233), (316, 32422), (318, 32425),

Gene: Lton_30 Start: 23640, Stop: 24134, Start Num: 78

Candidate Starts for Lton_30:

(Start: 78 @23640 has 1 MA's), (136, 23715), (140, 23721), (168, 23784), (224, 23916), (244, 23958), (252, 23973),

Gene: Lukilu_131 Start: 83536, Stop: 83952, Start Num: 127

Candidate Starts for Lukilu_131:

(16, 83059), (Start: 127 @83536 has 23 MA's), (157, 83593), (179, 83656), (208, 83725), (224, 83770), (244, 83809),

Gene: Lululemon_219 Start: 112060, Stop: 112500, Start Num: 134

Candidate Starts for Lululemon_219:

(46, 111865), (52, 111901), (76, 111973), (Start: 80 @111979 has 3 MA's), (Start: 87 @111988 has 1 MA's), (Start: 108 @112018 has 8 MA's), (Start: 113 @112024 has 5 MA's), (115, 112027), (119, 112033), (Start: 134 @112060 has 10 MA's), (173, 112156), (197, 112207), (228, 112300), (261, 112372), (289, 112426), (301, 112459),

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

Candidate Starts for Lulwa_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Lymara_98 Start: 62394, Stop: 62876, Start Num: 105

Candidate Starts for Lymara_98:

(35, 62202), (55, 62298), (Start: 105 @62394 has 15 MA's), (175, 62526),

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

Candidate Starts for Magic8_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Manda_84 Start: 52535, Stop: 52981, Start Num: 108

Candidate Starts for Manda_84:

(90, 52511), (Start: 108 @52535 has 8 MA's), (140, 52589), (205, 52748), (221, 52787), (226, 52808), (283, 52919),

Gene: Mangeria_141 Start: 83337, Stop: 83753, Start Num: 127

Candidate Starts for Mangeria_141:

(16, 82860), (Start: 127 @83337 has 23 MA's), (157, 83394), (179, 83457), (208, 83526), (224, 83571), (244, 83610),

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

Candidate Starts for Marteena_62:

(38, 42666), (39, 42669), (58, 42744), (59, 42747), (Start: 99 @42816 has 163 MA's), (112, 42822), (157, 42903), (194, 42999), (239, 43116),

Gene: Matalotodo_10 Start: 8944, Stop: 9378, Start Num: 99

Candidate Starts for Matalotodo_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for Matteo_53:

(38, 35702), (58, 35780), (59, 35783), (Start: 99 @35852 has 163 MA's), (112, 35858), (157, 35939), (194, 36035), (239, 36152),

Gene: Mcklovin_2 Start: 532, Stop: 981, Start Num: 114

Candidate Starts for Mcklovin_2:

(73, 484), (Start: 85 @499 has 3 MA's), (95, 514), (Start: 114 @532 has 3 MA's), (Start: 186 @658 has 1 MA's), (193, 676), (200, 694), (202, 703), (214, 739), (227, 775), (249, 811), (283, 874), (288, 886),

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

Candidate Starts for Megatron_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Melc17_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Mesh1_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: MikeLiesIn_142 Start: 83297, Stop: 83713, Start Num: 127

Candidate Starts for MikeLiesIn_142:

(16, 82820), (Start: 127 @83297 has 23 MA's), (157, 83354), (179, 83417), (208, 83486), (224, 83531), (244, 83570),

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

Candidate Starts for Mikota_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Mildred21_232 Start: 111445, Stop: 111885, Start Num: 134

Candidate Starts for Mildred21_232:

(119, 111418), (Start: 134 @111445 has 10 MA's), (197, 111592), (228, 111685), (261, 111757), (289, 111811), (301, 111844),

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

Candidate Starts for MiniBoss_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Mojorita_45 Start: 30760, Stop: 31281, Start Num: 83

Candidate Starts for Mojorita_45:

(Start: 83 @30760 has 5 MA's), (237, 31048), (265, 31099), (284, 31132), (287, 31138), (296, 31168),

Gene: MoontowerMania_50 Start: 43336, Stop: 43860, Start Num: 72

Candidate Starts for MoontowerMania_50:

(68, 43324), (71, 43333), (Start: 72 @43336 has 12 MA's), (196, 43558), (227, 43648), (233, 43660),

Gene: Mordred_100 Start: 63630, Stop: 64124, Start Num: 105
Candidate Starts for Mordred_100:
(55, 63522), (67, 63561), (Start: 105 @63630 has 15 MA's), (158, 63714), (180, 63786), (199, 63825),
(304, 64095),

Gene: Morty_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Morty_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: MortyNRick_64 Start: 42082, Stop: 42537, Start Num: 80
Candidate Starts for MortyNRick_64:
(Start: 80 @42082 has 3 MA's), (Start: 99 @42106 has 163 MA's), (164, 42211), (198, 42283), (286,
42475),

Gene: Ms6_60 Start: 36767, Stop: 37165, Start Num: 134
Candidate Starts for Ms6_60:
(Start: 77 @36683 has 5 MA's), (Start: 134 @36767 has 10 MA's), (242, 37010), (264, 37049), (285,
37091),

Gene: Murdoc_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Murdoc_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Mutaforma13_69 Start: 44640, Stop: 45101, Start Num: 80
Candidate Starts for Mutaforma13_69:
(Start: 80 @44640 has 3 MA's), (190, 44814), (198, 44841), (227, 44925), (254, 44964), (306, 45093),

Gene: Nacho_0010 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Nacho_0010:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Nebkiss_18 Start: 16946, Stop: 17431, Start Num: 113
Candidate Starts for Nebkiss_18:
(Start: 113 @16946 has 5 MA's), (119, 16955), (210, 17171), (224, 17210), (227, 17219), (256, 17270),
(297, 17369),

Gene: Neobush_64 Start: 42273, Stop: 42734, Start Num: 99
Candidate Starts for Neobush_64:
(62, 42207), (Start: 99 @42273 has 163 MA's), (175, 42420), (193, 42456), (202, 42483), (221, 42531),
(239, 42573), (243, 42582), (271, 42642),

Gene: Newman_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Newman_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Nicole21_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for Nicole21_10:
(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Nordenberg_13 Start: 12847, Stop: 13293, Start Num: 99
Candidate Starts for Nordenberg_13:
(Start: 85 @12826 has 3 MA's), (Start: 93 @12838 has 1 MA's), (Start: 99 @12847 has 163 MA's),
(Start: 126 @12877 has 5 MA's), (132, 12886), (210, 13057), (221, 13090), (240, 13132), (251, 13153),

(273, 13198), (291, 13234),

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

Candidate Starts for Numberten_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for OSmaximus_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for Olive_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for OliverWalter_10:

(Start: 99 @8939 has 163 MA's), (133, 8978), (150, 9002), (189, 9083), (221, 9173), (251, 9236),

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

Candidate Starts for Omniscient_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Oosterbaan_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for Orion_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for PG1_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: PacManQ_219 Start: 112060, Stop: 112500, Start Num: 134

Candidate Starts for PacManQ_219:

(46, 111865), (52, 111901), (76, 111973), (Start: 80 @111979 has 3 MA's), (Start: 87 @111988 has 1 MA's), (Start: 108 @112018 has 8 MA's), (Start: 113 @112024 has 5 MA's), (115, 112027), (119, 112033), (Start: 134 @112060 has 10 MA's), (173, 112156), (197, 112207), (228, 112300), (261, 112372), (289, 112426), (301, 112459),

Gene: PapayaSalad_44 Start: 30268, Stop: 30774, Start Num: 75

Candidate Starts for PapayaSalad_44:

(Start: 75 @30268 has 2 MA's), (Start: 99 @30304 has 163 MA's), (227, 30562), (237, 30580), (248, 30601),

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

Candidate Starts for Paries_19:

(Start: 85 @14194 has 3 MA's), (Start: 93 @14206 has 1 MA's), (Start: 99 @14215 has 163 MA's), (Start: 126 @14245 has 5 MA's), (132, 14254), (210, 14425), (221, 14458), (240, 14500), (251, 14521), (273, 14566), (291, 14602),

Gene: Persimmon_162 Start: 90873, Stop: 91259, Start Num: 145

Candidate Starts for Persimmon_162:

(124, 90837), (Start: 130 @90843 has 1 MA's), (Start: 145 @90873 has 2 MA's), (175, 90942), (214, 91029), (236, 91095),

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

Candidate Starts for Phamished_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for PhatCats2014_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for PhatLouie_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Pherdinand_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for Phipps_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Phistory_56 Start: 36066, Stop: 36515, Start Num: 111

Candidate Starts for Phistory_56:

(65, 35985), (Start: 111 @36066 has 11 MA's), (156, 36138), (200, 36234), (210, 36270), (274, 36399), (277, 36405), (312, 36504),

Gene: PhorbesPhlower_38 Start: 28562, Stop: 29011, Start Num: 111

Candidate Starts for PhorbesPhlower_38:

(65, 28481), (Start: 111 @28562 has 11 MA's), (200, 28730), (210, 28766), (274, 28895), (312, 29000),

Gene: Phox_138 Start: 83560, Stop: 83976, Start Num: 127

Candidate Starts for Phox_138:

(16, 83083), (Start: 127 @83560 has 23 MA's), (157, 83617), (179, 83680), (208, 83749), (224, 83794), (244, 83833),

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

Candidate Starts for PhrodoBaggins_105:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Phunky_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Picard_45 Start: 30958, Stop: 31479, Start Num: 83

Candidate Starts for Picard_45:

(Start: 83 @30958 has 5 MA's), (237, 31246), (287, 31336), (296, 31366), (319, 31432),

Gene: Piccadilly_44 Start: 30160, Stop: 30651, Start Num: 79

Candidate Starts for Piccadilly_44:

(Start: 79 @30160 has 8 MA's), (221, 30412), (224, 30427),

Gene: Pio_145 Start: 85169, Stop: 85585, Start Num: 127

Candidate Starts for Pio_145:

(16, 84692), (Start: 127 @85169 has 23 MA's), (157, 85226), (179, 85289), (208, 85358), (224, 85403), (244, 85442),

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

Candidate Starts for Pipsqueak_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Plmatters_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Plumbus_66 Start: 41519, Stop: 42001, Start Num: 77

Candidate Starts for Plumbus_66:

(Start: 77 @41519 has 5 MA's), (Start: 134 @41603 has 10 MA's), (242, 41846), (264, 41885), (285, 41927),

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

Candidate Starts for Podrick_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Pollux_66:

(38, 44551), (39, 44554), (58, 44629), (59, 44632), (Start: 99 @44701 has 163 MA's), (112, 44707), (157, 44788), (194, 44884), (239, 45001),

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

Candidate Starts for Pops_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Prickles_10:

(Start: 99 @8949 has 163 MA's), (133, 8988), (150, 9012), (189, 9093), (221, 9183), (251, 9246),

Gene: PrincessTrina_101 Start: 63821, Stop: 64315, Start Num: 105

Candidate Starts for PrincessTrina_101:

(55, 63713), (67, 63752), (Start: 105 @63821 has 15 MA's), (158, 63905), (180, 63977), (199, 64016), (304, 64286),

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

Candidate Starts for ProfessorX_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for Puhltonio_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for QueenBeane_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Quisquilliae_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: REQ3_10 Start: 4829, Stop: 5143, Start Num: 171

Candidate Starts for REQ3_10:

(120, 4724), (123, 4733), (171, 4829), (174, 4835), (205, 4904), (210, 4919),

Gene: Rabinovish_140 Start: 83892, Stop: 84308, Start Num: 127

Candidate Starts for Rabinovish_140:

(16, 83415), (Start: 127 @83892 has 23 MA's), (157, 83949), (179, 84012), (208, 84081), (224, 84126), (244, 84165),

Gene: Raleigh_43 Start: 33449, Stop: 33964, Start Num: 81

Candidate Starts for Raleigh_43:

(Start: 81 @33449 has 3 MA's), (122, 33488), (233, 33728), (237, 33734),

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

Candidate Starts for Riggan_10:

(Start: 99 @8947 has 163 MA's), (133, 8986), (150, 9010), (189, 9091), (221, 9181), (251, 9244),

Gene: Rofo_18 Start: 14497, Stop: 14928, Start Num: 126

Candidate Starts for Rofo_18:

(Start: 85 @14446 has 3 MA's), (Start: 93 @14458 has 1 MA's), (Start: 99 @14467 has 163 MA's), (Start: 126 @14497 has 5 MA's), (132, 14506), (210, 14677), (221, 14710), (240, 14752), (251, 14773), (273, 14818), (291, 14854),

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

Candidate Starts for Roliet_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: RomansRevenge_74 Start: 50908, Stop: 50471, Start Num: 160

Candidate Starts for RomansRevenge_74:

(Start: 114 @50992 has 3 MA's), (120, 50983), (160, 50908), (213, 50743), (225, 50698), (272, 50596), (281, 50578), (289, 50560),

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

Candidate Starts for Roscoe_11:

(Start: 99 @9178 has 163 MA's), (133, 9217), (150, 9241), (189, 9322), (221, 9412), (251, 9475),

Gene: RosiePosie_100 Start: 63686, Stop: 64180, Start Num: 105

Candidate Starts for RosiePosie_100:

(55, 63578), (67, 63617), (Start: 105 @63686 has 15 MA's), (158, 63770), (180, 63842), (192, 63860), (199, 63881),

Gene: Ryadel_34 Start: 15422, Stop: 15904, Start Num: 138

Candidate Starts for Ryadel_34:

(Start: 138 @15422 has 3 MA's), (Start: 148 @15434 has 7 MA's), (162, 15467), (Start: 167 @15494 has 1 MA's), (181, 15527), (184, 15530), (187, 15533), (227, 15656), (246, 15698), (314, 15869), (320, 15896),

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

Candidate Starts for SDcharge11_10:

(Start: 99 @8936 has 163 MA's), (133, 8975), (150, 8999), (189, 9080), (221, 9170), (251, 9233),

Gene: SV1_42 Start: 29657, Stop: 30169, Start Num: 84

Candidate Starts for SV1_42:

(Start: 84 @29657 has 1 MA's), (215, 29882), (262, 29981), (284, 30020), (287, 30026), (296, 30056),

Gene: SVoro_139 Start: 83654, Stop: 84070, Start Num: 127

Candidate Starts for SVoro_139:

(16, 83177), (Start: 127 @83654 has 23 MA's), (157, 83711), (179, 83774), (208, 83843), (224, 83888), (244, 83927),

Gene: SadLad_28 Start: 14537, Stop: 14064, Start Num: 110

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), (15, 15011), (19, 14957), (20, 14912), (22, 14870), (23, 14864), (24, 14822), (26, 14816), (28, 14798), (29, 14792), (30, 14780), (32, 14759), (34, 14756), (40, 14705), (45, 14693), (47, 14681), (51, 14660), (63, 14621), (89, 14564), (Start: 110 @14537 has 2 MA's), (173, 14405), (180, 14387), (209, 14321), (221, 14282), (227, 14258), (231, 14249), (269, 14168),

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

Candidate Starts for Samaymay_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Samy_46 Start: 31456, Stop: 31815, Start Num: 154

Candidate Starts for Samy_46:

(Start: 154 @31456 has 1 MA's), (182, 31495), (193, 31516), (197, 31528), (205, 31555), (221, 31591), (224, 31606), (239, 31636),

Gene: Saronaya_49 Start: 42016, Stop: 42534, Start Num: 72

Candidate Starts for Saronaya_49:

(Start: 72 @42016 has 12 MA's), (94, 42046), (196, 42232), (227, 42322), (233, 42334), (317, 42529),

Gene: Scavito_101 Start: 63679, Stop: 64173, Start Num: 105

Candidate Starts for Scavito_101:

(55, 63571), (67, 63610), (Start: 105 @63679 has 15 MA's), (158, 63763), (180, 63835), (199, 63874), (304, 64144),

Gene: SchoolBus_31 Start: 14621, Stop: 15091, Start Num: 148

Candidate Starts for SchoolBus_31:

(Start: 138 @14609 has 3 MA's), (Start: 148 @14621 has 7 MA's), (162, 14654), (Start: 167 @14681 has 1 MA's), (181, 14714), (184, 14717), (187, 14720), (227, 14843), (246, 14885), (314, 15056), (320, 15083),

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

Candidate Starts for Scoot17C_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

Gene: Seanderson_3 Start: 1096, Stop: 1605, Start Num: 111

Candidate Starts for Seanderson_3:

(82, 1057), (Start: 111 @1096 has 11 MA's), (208, 1291), (210, 1300), (224, 1336), (315, 1558),

Gene: Sedona_50 Start: 43310, Stop: 43828, Start Num: 72

Candidate Starts for Sedona_50:

(Start: 72 @43310 has 12 MA's), (94, 43340), (196, 43526), (227, 43616), (233, 43628),

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

Candidate Starts for Serendipity_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Serpentine_0010:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Shaqnato_134 Start: 81274, Stop: 81690, Start Num: 127

Candidate Starts for Shaqnato_134:

(16, 80797), (Start: 127 @81274 has 23 MA's), (157, 81331), (179, 81394), (208, 81463), (224, 81508), (244, 81547),

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

Candidate Starts for Sheila_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Shelob_143 Start: 84076, Stop: 84492, Start Num: 127

Candidate Starts for Shelob_143:

(16, 83599), (Start: 127 @84076 has 23 MA's), (157, 84133), (179, 84196), (208, 84265), (224, 84310), (244, 84349),

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

Candidate Starts for ShiVal_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Shifa_130 Start: 81500, Stop: 81916, Start Num: 127

Candidate Starts for Shifa_130:

(16, 81023), (Start: 127 @81500 has 23 MA's), (157, 81557), (179, 81620), (208, 81689), (224, 81734), (244, 81773),

Gene: Shivanishola_50 Start: 42031, Stop: 42549, Start Num: 72

Candidate Starts for Shivanishola_50:

(61, 42019), (Start: 66 @42028 has 5 MA's), (Start: 72 @42031 has 12 MA's), (196, 42247), (227, 42337), (233, 42349),

Gene: Shuckle_225 Start: 113504, Stop: 113944, Start Num: 134

Candidate Starts for Shuckle_225:

(46, 113309), (52, 113345), (76, 113417), (Start: 80 @113423 has 3 MA's), (Start: 87 @113432 has 1 MA's), (Start: 108 @113462 has 8 MA's), (Start: 113 @113468 has 5 MA's), (115, 113471), (119, 113477), (Start: 134 @113504 has 10 MA's), (173, 113600), (197, 113651), (228, 113744), (261, 113816), (289, 113870), (301, 113903),

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

Candidate Starts for Sigman_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: SilverChicken_59 Start: 36550, Stop: 36966, Start Num: 162

Candidate Starts for SilverChicken_59:

(Start: 84 @36415 has 1 MA's), (86, 36418), (143, 36508), (162, 36550), (181, 36610), (204, 36676), (219, 36718), (232, 36766),

Gene: Sitar_50 Start: 43707, Stop: 44228, Start Num: 66

Candidate Starts for Sitar_50:

(61, 43698), (Start: 66 @43707 has 5 MA's), (Start: 72 @43710 has 12 MA's), (196, 43926), (227, 44016), (233, 44028),

Gene: Sitar_20 Start: 15655, Stop: 16110, Start Num: 93

Candidate Starts for Sitar_20:

(Start: 85 @15643 has 3 MA's), (Start: 93 @15655 has 1 MA's), (Start: 99 @15664 has 163 MA's), (Start: 126 @15694 has 5 MA's), (132, 15703), (210, 15874), (221, 15907), (240, 15949), (251, 15970), (273, 16015), (291, 16051),

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

Candidate Starts for Skippy_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Slatt_10:

(Start: 99 @8945 has 163 MA's), (133, 8984), (150, 9008), (189, 9089), (221, 9179), (251, 9242),

Gene: Slim_65 Start: 42083, Stop: 42481, Start Num: 134

Candidate Starts for Slim_65:

(Start: 77 @41999 has 5 MA's), (Start: 134 @42083 has 10 MA's), (242, 42326), (264, 42365), (285, 42407),

Gene: Smairt_2 Start: 926, Stop: 1435, Start Num: 111

Candidate Starts for Smairt_2:

(Start: 111 @926 has 11 MA's), (208, 1121), (210, 1130), (224, 1166), (315, 1388),

Gene: Smeagol_2 Start: 927, Stop: 1436, Start Num: 111

Candidate Starts for Smeagol_2:

(Start: 111 @927 has 11 MA's), (208, 1122), (210, 1131), (224, 1167), (315, 1389),

Gene: Smoothie_51 Start: 31978, Stop: 32439, Start Num: 113

Candidate Starts for Smoothie_51:

(Start: 113 @31978 has 5 MA's), (171, 32086), (194, 32125), (198, 32137), (214, 32185), (221, 32197), (233, 32233), (316, 32422), (318, 32425),

Gene: SoJo_43 Start: 31466, Stop: 31978, Start Num: 83

Candidate Starts for SoJo_43:

(Start: 83 @31466 has 5 MA's), (Start: 130 @31523 has 1 MA's), (265, 31799), (296, 31868),

Gene: SophKB_98 Start: 59438, Stop: 59899, Start Num: 108

Candidate Starts for SophKB_98:

(Start: 108 @59438 has 8 MA's), (131, 59474), (Start: 186 @59594 has 1 MA's), (205, 59651), (221, 59690), (222, 59696),

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

Candidate Starts for Soto_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Spartan300_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

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

Candidate Starts for Suffolk_10:

(Start: 99 @8942 has 163 MA's), (133, 8981), (150, 9005), (189, 9086), (221, 9176), (251, 9239),

Gene: Superphikiman_163 Start: 84350, Stop: 84877, Start Num: 74

Candidate Starts for Superphikiman_163:

(Start: 60 @84308 has 2 MA's), (Start: 74 @84350 has 1 MA's), (Start: 84 @84365 has 1 MA's), (206, 84587), (227, 84644), (239, 84665),

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

Candidate Starts for Surely_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Sushi23_223 Start: 114010, Stop: 114450, Start Num: 134

Candidate Starts for Sushi23_223:

(46, 113815), (52, 113851), (76, 113923), (Start: 80 @113929 has 3 MA's), (Start: 87 @113938 has 1 MA's), (Start: 108 @113968 has 8 MA's), (Start: 113 @113974 has 5 MA's), (115, 113977), (119, 113983), (Start: 134 @114010 has 10 MA's), (173, 114106), (197, 114157), (228, 114250), (261, 114322), (289, 114376), (301, 114409),

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

Candidate Starts for Swish_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for Tangent_16:

(Start: 85 @13447 has 3 MA's), (Start: 93 @13459 has 1 MA's), (Start: 99 @13468 has 163 MA's), (Start: 126 @13498 has 5 MA's), (132, 13507), (210, 13678), (221, 13711), (240, 13753), (251, 13774), (273, 13819), (291, 13855),

Gene: Targaryen_222 Start: 114182, Stop: 114622, Start Num: 134

Candidate Starts for Targaryen_222:

(76, 114095), (Start: 80 @114101 has 3 MA's), (Start: 87 @114110 has 1 MA's), (Start: 108 @114140 has 8 MA's), (Start: 113 @114146 has 5 MA's), (Start: 134 @114182 has 10 MA's), (173, 114278), (197, 114329), (228, 114422), (261, 114494), (289, 114548), (301, 114581),

Gene: Teardrop_140 Start: 81782, Stop: 82198, Start Num: 127

Candidate Starts for Teardrop_140:

(16, 81305), (Start: 127 @81782 has 23 MA's), (157, 81839), (179, 81902), (208, 81971), (224, 82016), (244, 82055),

Gene: Thing3_49 Start: 42108, Stop: 42626, Start Num: 72

Candidate Starts for Thing3_49:

(Start: 72 @42108 has 12 MA's), (196, 42324), (227, 42414), (233, 42426),

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

Candidate Starts for Thora_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: ThreeOh3D2_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for ThreeOh3D2_10:
(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: ToastyFinz_42 Start: 32290, Stop: 32811, Start Num: 81
Candidate Starts for ToastyFinz_42:
(31, 32113), (56, 32227), (Start: 81 @32290 has 3 MA's), (151, 32383), (237, 32578), (265, 32629),
(287, 32668), (296, 32698),

Gene: TomBombadil_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for TomBombadil_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Tomlarah_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Tomlarah_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Tooj_10 Start: 8941, Stop: 9375, Start Num: 99
Candidate Starts for Tooj_10:
(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Tophat_101 Start: 63868, Stop: 64362, Start Num: 105
Candidate Starts for Tophat_101:
(55, 63760), (67, 63799), (Start: 105 @63868 has 15 MA's), (158, 63952), (180, 64024), (199, 64063),
(304, 64333),

Gene: Totinger_63 Start: 40465, Stop: 40947, Start Num: 77
Candidate Starts for Totinger_63:
(Start: 77 @40465 has 5 MA's), (Start: 134 @40549 has 10 MA's), (242, 40792), (264, 40831), (285,
40873),

Gene: Trypo_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Trypo_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Tubberson_43 Start: 31467, Stop: 31979, Start Num: 83
Candidate Starts for Tubberson_43:
(Start: 83 @31467 has 5 MA's), (Start: 130 @31524 has 1 MA's), (265, 31800), (296, 31869),

Gene: Tucker_41 Start: 26756, Stop: 26394, Start Num: 155
Candidate Starts for Tucker_41:
(Start: 155 @26756 has 2 MA's), (170, 26708), (212, 26609), (238, 26531), (278, 26471),

Gene: UAch1_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for UAch1_10:
(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Usavi_10 Start: 8940, Stop: 9374, Start Num: 99
Candidate Starts for Usavi_10:
(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: Valjean_10 Start: 8943, Stop: 9377, Start Num: 99
Candidate Starts for Valjean_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

Gene: Vibaki_76 Start: 46752, Stop: 47243, Start Num: 129

Candidate Starts for Vibaki_76:

(Start: 129 @46752 has 1 MA's), (227, 47013),

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

Candidate Starts for Virapocalypse_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for Vista_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Vivaldi_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

Gene: Vivi2_18 Start: 14618, Stop: 15085, Start Num: 85

Candidate Starts for Vivi2_18:

(Start: 85 @14618 has 3 MA's), (Start: 93 @14630 has 1 MA's), (Start: 99 @14639 has 163 MA's),
(Start: 126 @14669 has 5 MA's), (132, 14678), (210, 14849), (221, 14882), (240, 14924), (251, 14945),
(273, 14990), (291, 15026),

Gene: Vivi2_54 Start: 43935, Stop: 44456, Start Num: 66

Candidate Starts for Vivi2_54:

(61, 43926), (Start: 66 @43935 has 5 MA's), (Start: 72 @43938 has 12 MA's), (196, 44154), (227,
44244), (233, 44256),

Gene: Vondra_43 Start: 30012, Stop: 30503, Start Num: 79

Candidate Starts for Vondra_43:

(Start: 79 @30012 has 8 MA's), (221, 30264), (224, 30279),

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

Candidate Starts for Waterdiva_10:

(Start: 99 @8944 has 163 MA's), (133, 8983), (150, 9007), (189, 9088), (221, 9178), (251, 9241),

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

Candidate Starts for Weher20_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: WhereRU_161 Start: 91595, Stop: 92011, Start Num: 130

Candidate Starts for WhereRU_161:

(124, 91589), (Start: 130 @91595 has 1 MA's), (Start: 145 @91625 has 2 MA's), (175, 91694), (214,
91781), (236, 91847),

Gene: WillSterrel_87 Start: 51270, Stop: 51782, Start Num: 87

Candidate Starts for WillSterrel_87:

(Start: 85 @51267 has 3 MA's), (Start: 87 @51270 has 1 MA's), (131, 51330), (205, 51507), (226,
51567), (270, 51654), (297, 51720), (310, 51753),

Gene: Winget_32 Start: 14875, Stop: 15357, Start Num: 138

Candidate Starts for Winget_32:

(Start: 138 @14875 has 3 MA's), (Start: 148 @14887 has 7 MA's), (162, 14920), (Start: 167 @14947 has 1 MA's), (181, 14980), (184, 14983), (187, 14986), (227, 15109), (246, 15151), (314, 15322), (320, 15349),

Gene: YorkOnyx_50 Start: 42214, Stop: 42732, Start Num: 72

Candidate Starts for YorkOnyx_50:

(Start: 72 @42214 has 12 MA's), (94, 42244), (196, 42430), (227, 42520), (233, 42532),

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

Candidate Starts for YorkOnyx_19:

(Start: 85 @14140 has 3 MA's), (Start: 93 @14152 has 1 MA's), (Start: 99 @14161 has 163 MA's), (Start: 126 @14191 has 5 MA's), (161, 14242), (210, 14371), (240, 14446), (251, 14467), (273, 14512),

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

Candidate Starts for Yoshand_10:

(Start: 99 @8941 has 163 MA's), (133, 8980), (150, 9004), (189, 9085), (221, 9175), (251, 9238),

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

Candidate Starts for YouGoGlencoco_10:

(Start: 99 @8940 has 163 MA's), (133, 8979), (150, 9003), (189, 9084), (221, 9174), (251, 9237),

Gene: YungJamal_34 Start: 14950, Stop: 15420, Start Num: 148

Candidate Starts for YungJamal_34:

(Start: 138 @14938 has 3 MA's), (Start: 148 @14950 has 7 MA's), (162, 14983), (Start: 167 @15010 has 1 MA's), (181, 15043), (184, 15046), (187, 15049), (227, 15172), (246, 15214), (314, 15385), (320, 15412),

Gene: Yvonnetastic_131 Start: 74014, Stop: 74502, Start Num: 110

Candidate Starts for Yvonnetastic_131:

(Start: 110 @74014 has 2 MA's), (137, 74062), (147, 74080), (187, 74179), (230, 74311), (258, 74356),

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

Candidate Starts for Zaider_11:

(Start: 99 @9173 has 163 MA's), (133, 9212), (150, 9236), (189, 9317), (221, 9407), (251, 9470),

Gene: Zebo_30 Start: 14681, Stop: 15091, Start Num: 167

Candidate Starts for Zebo_30:

(Start: 138 @14609 has 3 MA's), (Start: 148 @14621 has 7 MA's), (162, 14654), (Start: 167 @14681 has 1 MA's), (181, 14714), (184, 14717), (187, 14720), (227, 14843), (246, 14885), (314, 15056), (320, 15083),

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

Candidate Starts for Zelda_10:

(Start: 99 @8943 has 163 MA's), (133, 8982), (150, 9006), (189, 9087), (221, 9177), (251, 9240),

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

Candidate Starts for Zonia_10:

(Start: 99 @8957 has 163 MA's), (133, 8996), (150, 9020), (189, 9101), (221, 9191), (251, 9254),

Gene: Zulu_41 Start: 26737, Stop: 26375, Start Num: 155

Candidate Starts for Zulu_41:

(Start: 155 @26737 has 2 MA's), (170, 26689), (212, 26590), (238, 26512), (278, 26452),

Gene: phiHau3_61 Start: 41644, Stop: 41168, Start Num: 92

Candidate Starts for phiHau3_61:

(Start: 92 @41644 has 1 MA's), (Start: 138 @41575 has 3 MA's), (202, 41452), (205, 41440), (214, 41416), (221, 41404), (249, 41344),