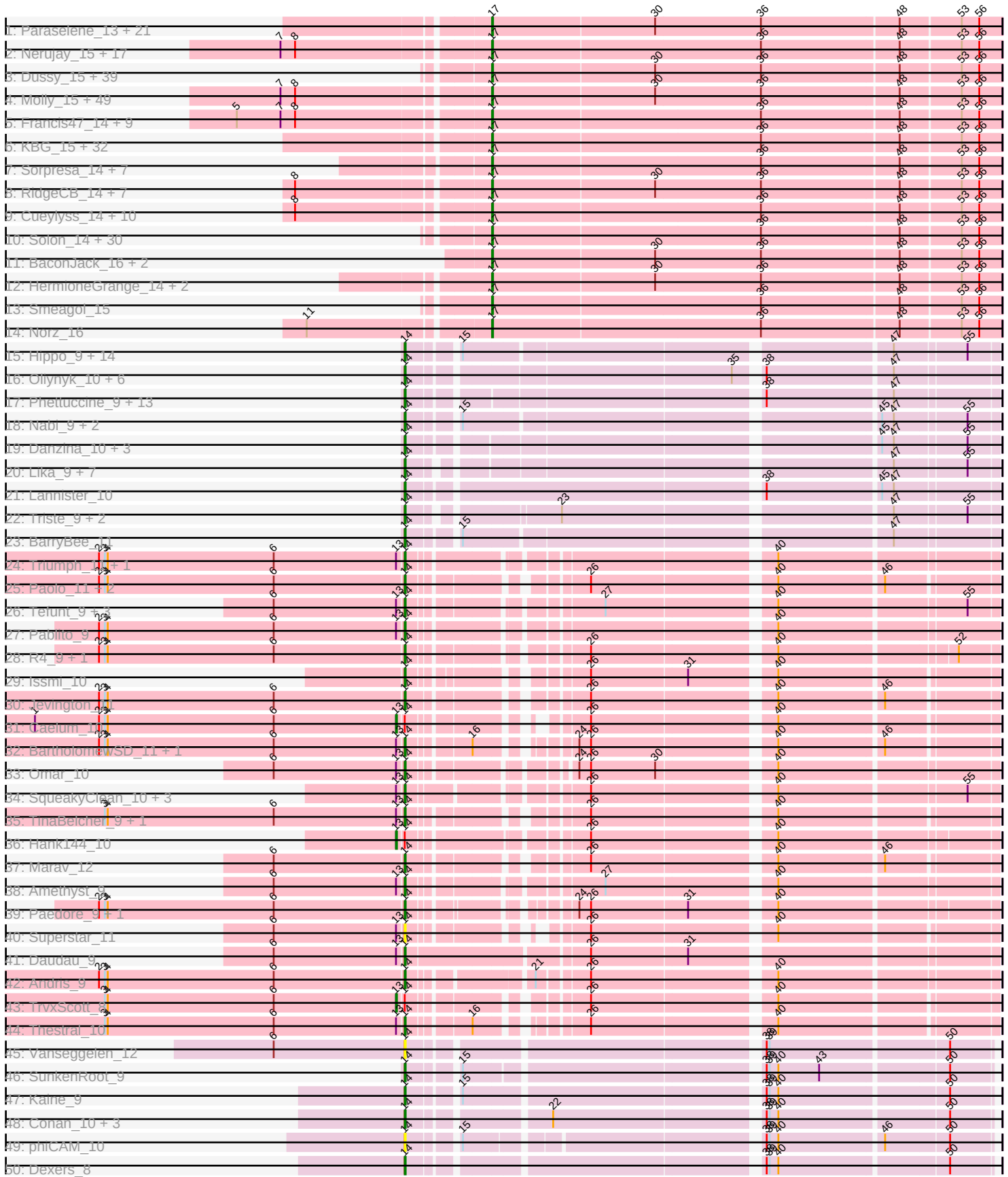
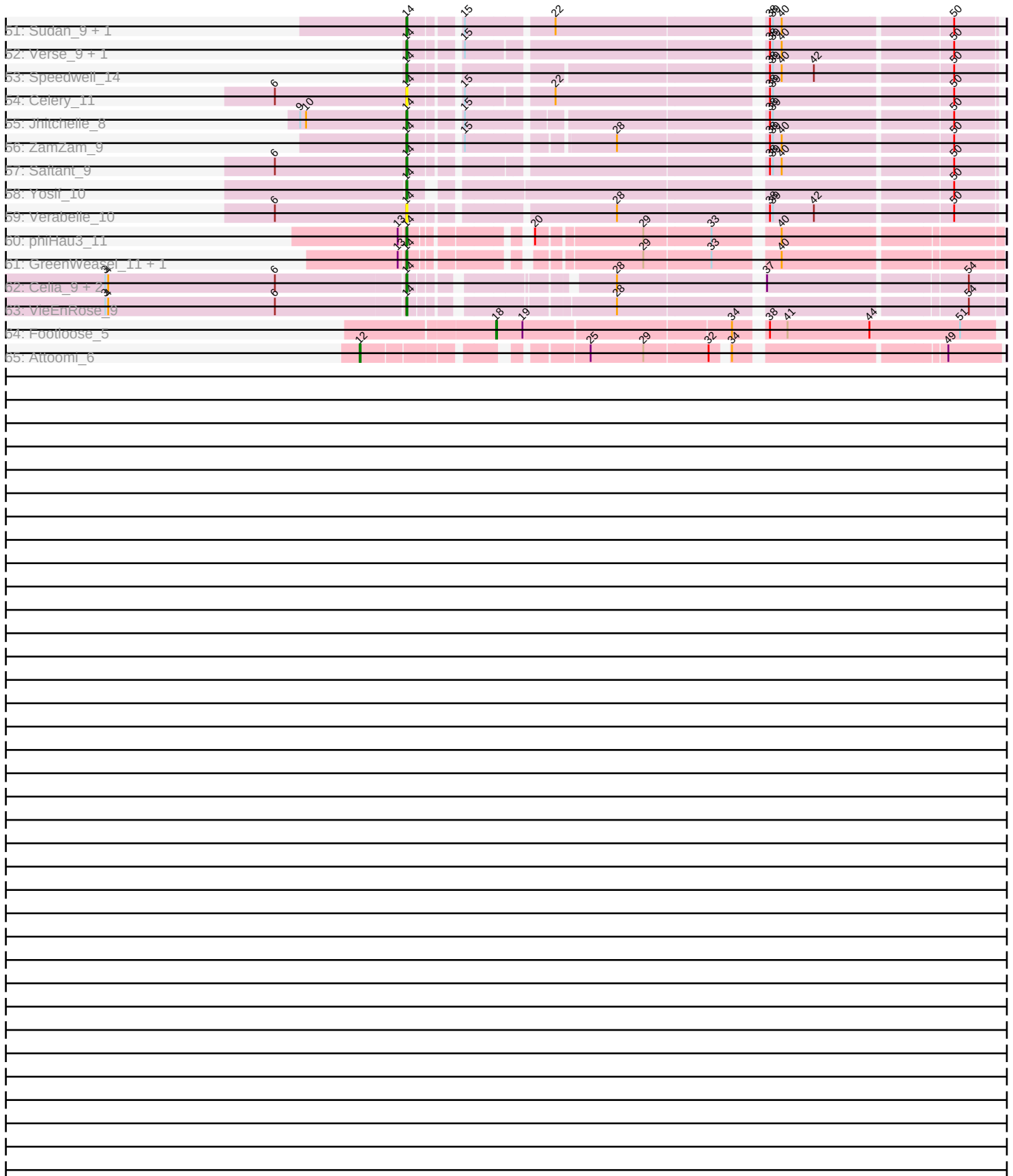




Pham 330366



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 330366 Report

This analysis was run 09/05/26 on database version 662.

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 330366 has 358 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Paraselene_13, Bruns_13, Briton15_16, Jasper_15, Seanderson_15, Bethlehem_14, ProMouse_13, Scowl_15, Arcanine_15, DrFeelGood_13, Rajelicia_14, Abrogate_15, Sagefire_15, Dreamboat_15, Doom_14, Raid_14, Mryolo_13, Rhynn_14, Arlo_13, Bob3_13, TwoPeat_15, Rubeus_15
- Track 2 : Nerujay_15, Pepe_15, Pita2_16, Agaliana_14, PSullivan_16, Blue_14, Graduation_16, LilBib_15, SkiPole_16, Ringer_14, Maroc7_13, EnzoK_15, Rutherford_16, IgnatiusPatJac_13, Dulcie_13, Fascinus_13, BluSpix_14, Dexes_15
- Track 3 : Dussy_15, Anglerfish_15, Kenmech_17, PowerRanger_14, A6_12, Squee_15, Euphoria_14, Parliament_13, StewieG_13, Corvo_14, Switzer_15, Bigchung_14, Abbysshoes_15, Barriga_14, Makemake_14, Froghopper_15, Aldrich_15, Marsha_14, Hermia_16, Magnar_14, Lesedi_13, Michley_14, Petruccio_14, TheloniousMonk_16, Zephyr_14, CatBus_15, ShortQueendom_14, Inyanga_13, DirtDevil_15, DreamCatcher_17, BK1_12, GroundGoblin_15, Pari_15, Noxious_16, Tripl3t_15, U2_14, Espresso_14, Iqorha_13, Blackflame_14, KikiBouba_16
- Track 4 : Molly_15, CartmannCramer_14, Altman_15, Bircsak_14, Lopton_15, Petp2012_16, Papez_16, Gompeii16_14, Thor_14, Acme_16, Rohr_15, PattyP_16, Alvin_15, Magnito_13, Burton_15, GMonster_13, MPlant7149_13, Tote_16, Marge_15, Monet_16, Museum_16, BPBiebs31_15, Pippin_16, ChristmasHams_14, Ciao_14, HarryOW_15, JC27_16, Ichabod_15, Gyzzar_16, Swole_16, GrecoEtereo_15, JackSparrow_15, Rufus_15, BigMau_16, Zeeculate_13, Pinto_16, KSSJEB_14, STLscum_15, Sibs6_16, Slagathor_15, QTRlifeCrisis_14, Jerm2_15, Homines_14, ConceptII_14, SarFire_14, Wheeler_14, Nhonho_14, JuliaChild_16, LunarLander_14, Marcell_14
- Track 5 : Francis47_14, Topgun_14, Levia_14, Gachnar_14, Violet_13, Eyeball_14, PhineBark_13, Ajay_14, Wilkins_14, BarrowTuph_13
- Track 6 : KBG_15, BeesKnees_15, MetalQZJ_14, StrongArm_13, MaryBeth_14, Hami1_16, Snazzy_12, Payneful_14, Dynamix_15, PherrisBueLLer_15, NEHalo_14, Marco3_14, McSinger_15, Carlyle_16, Alsfro_18, HanShotFirst_14, DD5_15, Teodoridan_12, Pelly_15, Zeuska_15, Marchy_13, GageAP_16, Lockley_14, Big3_14, Bexan_13, McGuire_15, Lamina13_14, MrGordo_14, Trouble_14, Jorgensen_14, Seabiscuit_16, CactusRose_13, SpikeBT_16

- Track 7 : Sorpresa_14, Ruotula_13, BigPaolini_15, PascalRango_13, Sandaddy_13, Sanya_14, Gwendoluna_16, Peterson_17
- Track 8 : RidgeCB_14, Traft412_16, Naira_15, Fushigi_15, Hope4ever_14, Mkhusele_15, Smairt_15, Fenn_15
- Track 9 : Cueyliss_14, ILeeKay_16, Edtherson_15, Watermelon_16, Bigfoot_13, Treddle_16, KyMonks1A_16, Blessers_14, Applejack_14, Sunshine924_13, AFIS_14
- Track 10 : Solon_14, Niza_16, Bones_14, Beatrix_13, Sumter_13, Gandalf20_15, Aeneas_16, Chanagan_13, Puppet_14, MilleFeuille_13, Mule_14, Moose_13, PacerPaul_14, Adahisdi_15, PhrostyMug_14, Tasp14_15, Fajezeel_16, Paphu_13, Perseus_15, Oogway_13, Ashballer_13, Kanely_15, Turj99_13, Killigrew_12, Atkinbua_15, Greg_16, SwissCheese_14, Forsytheast_13, Manatee_15, PinkPlastic_13, Philipppers_13
- Track 11 : BaconJack_16, Licorice_16, Buttons_15
- Track 12 : HermioneGrange_14, Crispicous1_13, Ohno789_14
- Track 13 : Smeagol_15
- Track 14 : Norz_16
- Track 15 : Hippo_9, Werner_9, Katalie_10, RedBear_11, Sujidade_10, Brataylor_10, SarahRose_9, Whatever_9, Chucky_9, Snorlax_9, Nanodon_11, Emaanora_11, South40_10, Dwayne_9, TagePhighter_10
- Track 16 : Oliynyk_10, Rusticus_10, BryanRecycles_10, Jash_10, Eddasa_10, EnochSoames_10, Izzy_10
- Track 17 : Phettuccine_9, Ozzie_9, Hydra_11, BeardedLady_10, Bovely_9, Aaronocolus_9, Unstoppable_9, Legacy_9, Indigo_9, Leviticus_9, Esperer_9, Caliburn_9, Nerdos_9, SunsetPointe_9
- Track 18 : Nabi_9, Lorelei_9, Rana_9
- Track 19 : Danzina_10, Toma_9, Dattran_10, Goby_9
- Track 20 : Lika_9, TuanPN_9, Godpower_10, Maneekul_9, Ejemplo_9, Zemlya_10, Yasdnail_9, Celeste_9
- Track 21 : Lannister_10
- Track 22 : Triste_9, Asten_9, OzzyJ_10
- Track 23 : BarryBee_11
- Track 24 : Triumph_11, Axiom_10
- Track 25 : Paolo_11, Zainub_11, Puginator_11
- Track 26 : Tefunt_9, Haizum_9, Nishikigoi_9, Diane_9
- Track 27 : Pablito_9
- Track 28 : R4_9, ELB20_08
- Track 29 : Issmi_10
- Track 30 : Jevington_11
- Track 31 : Caelum_10
- Track 32 : BartholomewSD_11, Alvy_11
- Track 33 : Omar_10
- Track 34 : SqueakyClean_10, Janus_10, Animus_10, GirlDinner_9
- Track 35 : TinaBelcher_9, Bowden_10
- Track 36 : Hank144_10
- Track 37 : Marav_12
- Track 38 : Amethyst_9
- Track 39 : Paedore_9, Loofah_10
- Track 40 : Superstar_11
- Track 41 : Daudau_9
- Track 42 : Andris_9
- Track 43 : TrvxScott_8
- Track 44 : Thestral_10
- Track 45 : Vanseggelen_12

- Track 46 : SunkenRoot_9
- Track 47 : Kaine_9
- Track 48 : Conan_10, ElGato_10, Provolone_10, Pavo_10
- Track 49 : phiCAM_10
- Track 50 : Dexers_8
- Track 51 : Sudan_9, Alsaber_10
- Track 52 : Verse_9, Amela_9
- Track 53 : Speedwell_14
- Track 54 : Celery_11
- Track 55 : Jhitchelle_8
- Track 56 : ZamZam_9
- Track 57 : Saftant_9
- Track 58 : Yosif_10
- Track 59 : Verabelle_10
- Track 60 : phiHau3_11
- Track 61 : GreenWeasel_11, BroPlease_10
- Track 62 : Celia_9, Itza_9, Urza_9
- Track 63 : VieEnRose_9
- Track 64 : Footloose_5
- Track 65 : Attoomi_6

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

The start number called the most often in the published annotations is 17, it was called in 223 of the 336 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_12, AFIS_14, Abbyshoes_15, Abrogate_150, Acme_16, Adahisdi_15, Aeneas_16, Agaliana_14, Ajay_14, Aldrich_15, Alsfro_18, Altman_15, Alvin_15, Anglerfish_15, Applejack_14, Arcanine_15, Arlo_13, Ashballer_13, Atkinbua_15, BK1_12, BPBiebs31_15, BaconJack_16, Barriga_14, BarrowTuph_13, Beatrix_13, BeesKnees_15, Bethlehem_14, Bexan_13, Big3_14, BigMau_16, BigPaolini_15, Bigchungu_14, Bigfoot_13, Bircsak_14, Blackflame_14, Blessier_14, BluSpix_14, Blue_14, Bob3_13, Bones_14, Briton15_16, Bruns_13, Burton_15, Buttons_15, CactusRose_13, Carlyle_16, CartmannCramer_14, CatBus_15, Chanagan_13, ChristmasHams_14, Ciao_14, ConceptII_14, Corvo_14, Crispicous1_13, Cueyliss_14, DD5_15, Dexes_15, DirtDevil_15, Doom_14, DrFeelGood_13, DreamCatcher_17, Dreamboat_15, Dulcie_13, Dussy_15, Dynamix_15, Edtherson_15, EnzoK_15, Espresso_14, Euphoria_14, Eyeball_14, Fajezeel_16, Fascinus_13, Fenn_15, Forsytheast_13, Francis47_14, Froghopper_15, Fushigi_15, GMonster_13, Gachnar_14, GageAP_16, Gandalf20_15, Gompeii16_14, Graduation_16, GrecoEtereo_15, Greg_16, GroundGoblin_15, Gwendoluna_16, Gyzlar_16, Hami1_16, HanShotFirst_14, HarryOW_15, Hermia_16, HermioneGrange_14, Homines_14, Hope4ever_14, ILeeKay_16, Ichabod_15, IgnatiusPatJac_13, Inyanga_13, Iqorha_13, JC27_16, JackSparrow_15, Jasper_15, Jerm2_15, Jorgensen_14, JuliaChild_16, KBG_15, KSSJEB_14, Kanely_15, Kenmech_17, KikiBouba_16, Killigrew_12, KyMonks1A_16, Lamina13_14, Lesedi_13, Levia_14, Licorice_16, LilBib_15, Lockley_14, Lopton_15, LunarLander_14, MPlant7149_13, Magnar_14, Magnito_13, Makemake_14, Manatee_15, Marcell_14, Marchy_13, Marco3_14, Marge_15, Maroc7_13,

Marsha_14, MaryBeth_14, McGuire_15, McSinger_15, MetalQZJ_14, Michley_14, MilleFeuille_13, Mkhuseleli_15, Molly_15, Monet_16, Moose_13, MrGordo_14, Mryolo_13, Mule_14, Museum_16, NEHalo_14, Naira_15, Nerujay_15, Nhonho_14, Niza_16, Norz_16, Noxious_16, Ohno789_14, Oogway_13, PSullivan_16, PacerPaul_14, Papez_16, Paphu_13, Paraselene_13, Pari_15, Parliament_13, PascalRango_13, PattyP_16, Payneful_14, Pelly_15, Pepe_15, Perseus_15, Peterson_17, Petp2012_16, Petruchio_14, PherrisBueller_15, PhineBark_13, Phlippers_13, PhrostyMug_14, PinkPlastic_13, Pinto_16, Pippin_16, Pita2_16, PowerRanger_14, ProMouse_13, Puppet_14, QTRLifeCrisis_14, Raid_14, Rajelicia_14, Rhynn_14, RidgeCB_14, Ringer_14, Rohr_15, Rubeus_15, Rufus_15, Ruotula_13, Rutherford_16, STLscum_15, Sagefire_15, Sandaddy_13, Sanya_14, SarFire_14, Scowl_15, Seabiscuit_16, Seanderson_15, ShortQueendom_14, Sibs6_16, SkiPole_16, Slagathor_15, Smairt_15, Smeagol_15, Snazzy_12, Solon_14, Sorpresa_14, SpikeBT_16, Squee_15, StewieG_13, StrongArm_13, Sumter_13, Sunshine924_13, SwissCheese_14, Switzer_15, Swole_16, Tasp14_15, Teodoridan_12, TheloniousMonk_16, Thor_14, Topgun_14, Tote_16, Traft412_16, Treddle_16, Tripl3t_15, Trouble_14, Turj99_13, TwoPeat_15, U2_14, Violet_13, Watermelon_16, Wheeler_14, Wilkins_14, Zeeculate_13, Zephyr_14, Zeuska_15,

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

-

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

- Aaronocolus_9, Alsaber_10, Alvy_11, Amela_9, Amethyst_9, Andris_9, Animus_10, Asten_9, Attoomi_6, Axiom_10, BarryBee_11, BartholomewSD_11, BeardedLady_10, Bovely_9, Bowden_10, Brataylor_10, BroPlease_10, BryanRecycles_10, Caelum_10, Caliburn_9, Celery_11, Celeste_9, Celia_9, Chucky_9, Conan_10, Danzina_10, Dattran_10, Daudau_9, Dexers_8, Diane_9, Dwayne_9, ELB20_08, Eddasa_10, Ejemplo_9, ElGato_10, Emaanora_11, EnochSoames_10, Esperer_9, Footloose_5, GirlDinner_9, Goby_9, Godpower_10, GreenWeasel_11, Haizum_9, Hank144_10, Hippo_9, Hydra_11, Indigo_9, Issmi_10, Itza_9, Izzy_10, Janus_10, Jash_10, Jevington_11, Jhitchelle_8, Kaine_9, Katalie_10, Lannister_10, Legacy_9, Leviticus_9, Lika_9, Loofah_10, Lorelei_9, Maneekul_9, Marav_12, Nabi_9, Nanodon_11, Nerdos_9, Nishikigoi_9, Oliynyk_10, Omar_10, Ozzie_9, OzzyJ_10, Pablito_9, Paedore_9, Paolo_11, Pavo_10, Phettuccine_9, Provolone_10, Puginator_11, R4_9, Rana_9, RedBear_11, Rusticus_10, Saftant_9, SarahRose_9, Snorlax_9, South40_10, Speedwell_14, SqueakyClean_10, Sudan_9, Sujidade_10, SunkenRoot_9, SunsetPointe_9, Superstar_11, TagePhighter_10, Tefunt_9, Thestral_10, TinaBelcher_9, Toma_9, Triste_9, Triumph_11, TrvxScott_8, TuanPN_9, Unstoppable_9, Urza_9, Vanseggelen_12, Verabelle_10, Verse_9, VieEnRose_9, Werner_9, Whatever_9, Yasdnail_9, Yosif_10, Zainub_11, ZamZam_9, Zemlya_10, phiCAM_10, phiHau3_11,

Summary by start number:

Start 12:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 336
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attoomi_6 (singleton),

Start 13:

- Found in 26 of 358 (7.3%) of genes in pham

- Manual Annotations of this start: 3 of 336
- Called 11.5% of time when present
- Phage (with cluster) where this start called: Caelum_10 (BD2), Hank144_10 (BD2), TrvxScott_8 (BD2),

Start 14:

- Found in 117 of 358 (32.7%) of genes in pham
- Manual Annotations of this start: 108 of 336
- Called 97.4% of time when present
- Phage (with cluster) where this start called: Aaronocolus_9 (BD1), Alsaber_10 (BD3), Alvy_11 (BD2), Amela_9 (BD3), Amethyst_9 (BD2), Andris_9 (BD2), Animus_10 (BD2), Asten_9 (BD1), Axiom_10 (BD2), BarryBee_11 (BD1), BartholomewSD_11 (BD2), BeardedLady_10 (BD1), Bovely_9 (BD1), Bowden_10 (BD2), Brataylor_10 (BD1), BroPlease_10 (BD4), BryanRecycles_10 (BD1), Caliburn_9 (BD1), Celery_11 (BD3), Celeste_9 (BD1), Celia_9 (BD6), Chucky_9 (BD1), Conan_10 (BD3), Danzina_10 (BD1), Dattran_10 (BD1), Daudau_9 (BD2), Dexters_8 (BD3), Diane_9 (BD2), Dwayne_9 (BD1), ELB20_08 (BD2), Eddasa_10 (BD1), Ejemplo_9 (BD1), ElGato_10 (BD3), Emaanora_11 (BD1), EnochSoames_10 (BD1), Esperer_9 (BD1), GirlDinner_9 (BD2), Goby_9 (BD1), Godpower_10 (BD1), GreenWeasel_11 (BD4), Haizum_9 (BD2), Hippo_9 (BD1), Hydra_11 (BD1), Indigo_9 (BD1), Issmi_10 (BD2), Itza_9 (BD6), Izzy_10 (BD1), Janus_10 (BD2), Jash_10 (BD1), Jevington_11 (BD2), Jhitchelle_8 (BD3), Kaine_9 (BD3), Katalie_10 (BD1), Lannister_10 (BD1), Legacy_9 (BD1), Leviticus_9 (BD1), Lika_9 (BD1), Loofah_10 (BD2), Lorelei_9 (BD1), Maneekul_9 (BD1), Marav_12 (BD2), Nabi_9 (BD1), Nanodon_11 (BD1), Nerdos_9 (BD1), Nishikigoi_9 (BD2), Oliynyk_10 (BD1), Omar_10 (BD2), Ozzie_9 (BD1), OzzyJ_10 (BD1), Pablito_9 (BD2), Paedore_9 (BD2), Paolo_11 (BD2), Pavo_10 (BD3), Phettuccine_9 (BD1), Provolone_10 (BD3), Puginator_11 (BD2), R4_9 (BD2), Rana_9 (BD1), RedBear_11 (BD1), Rusticus_10 (BD1), Saftant_9 (BD3), SarahRose_9 (BD1), Snorlax_9 (BD1), South40_10 (BD1), Speedwell_14 (BD3), SqueakyClean_10 (BD2), Sudan_9 (BD3), Sujidade_10 (BD1), SunkenRoot_9 (BD3), SunsetPointe_9 (BD1), Superstar_11 (BD2), TagePhighter_10 (BD1), Tefunt_9 (BD2), Thestral_10 (BD2), TinaBelcher_9 (BD2), Toma_9 (BD1), Triste_9 (BD1), Triumph_11 (BD2), TuanPN_9 (BD1), Unstoppable_9 (BD1), Urza_9 (BD6), Vanseggelen_12 (BD3), Verabelle_10 (BD3), Verse_9 (BD3), VieEnRose_9 (BD6), Werner_9 (BD1), Whatever_9 (BD1), Yasdnil_9 (BD1), Yosif_10 (BD3), Zainub_11 (BD2), ZamZam_9 (BD3), Zemlya_10 (BD1), phiCAM_10 (BD3), phiHau3_11 (BD4),

Start 17:

- Found in 239 of 358 (66.8%) of genes in pham
- Manual Annotations of this start: 223 of 336
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A6_12 (A1), AFIS_14 (A1), Abbyshoes_15 (A1), Abrogate_150 (A1), Acme_16 (A1), Adahisdi_15 (A1), Aeneas_16 (A1), Agaliana_14 (A1), Ajay_14 (A1), Aldrich_15 (A1), Alsfro_18 (A1), Altman_15 (A1), Alvin_15 (A1), Anglerfish_15 (A1), Applejack_14 (A1), Arcanine_15 (A1), Arlo_13 (A1), Ashballer_13 (A1), Atkinbua_15 (A1), BK1_12 (A1), BPBiebs31_15 (A1), BaconJack_16 (A1), Barriga_14 (A1), BarrowTuph_13 (A1), Beatrix_13 (A1), BeesKnees_15 (A1), Bethlehem_14 (A1), Bexan_13 (A1), Big3_14 (A1), BigMau_16 (A1), BigPaolini_15 (A1), Bigchungi_14 (A1), Bigfoot_13 (A1), Bircsak_14 (A1), Blackflame_14 (A1), Blessers_14 (A1), BluSpix_14 (A1), Blue_14 (A1), Bob3_13 (A1), Bones_14 (A1), Briton15_16 (A1), Bruns_13 (A1), Burton_15 (A1), Buttons_15 (A1), CactusRose_13 (A1), Carlyle_16 (A1), CartmannCramer_14

(A1), CatBus_15 (A1), Chanagan_13 (A1), ChristmasHams_14 (A1), Ciao_14 (A1), ConceptII_14 (A1), Corvo_14 (A1), Crispicous1_13 (A1), Cueylyss_14 (A1), DD5_15 (A1), Dexes_15 (A1), DirtDevil_15 (A1), Doom_14 (A1), DrFeelGood_13 (A1), DreamCatcher_17 (A1), Dreamboat_15 (A1), Dulcie_13 (A1), Dussy_15 (A1), Dynamix_15 (A1), Edtherson_15 (A1), EnzoK_15 (A1), Espresso_14 (A1), Euphoria_14 (A1), Eyeball_14 (A1), Fajezeel_16 (A1), Fascinus_13 (A1), Fenn_15 (A1), Forsytheast_13 (A1), Francis47_14 (A1), Froghopper_15 (A1), Fushigi_15 (A1), GMonster_13 (A1), Gachnar_14 (A1), GageAP_16 (A1), Gandalf20_15 (A1), Gompeii16_14 (A1), Graduation_16 (A1), GrecoEtereo_15 (A1), Greg_16 (A1), GroundGoblin_15 (A1), Gwendoluna_16 (A1), Gyzlar_16 (A1), Hami1_16 (A1), HanShotFirst_14 (A1), HarryOW_15 (A1), Hermia_16 (A1), HermioneGrange_14 (A1), Homines_14 (A1), Hope4ever_14 (A1), ILeeKay_16 (A1), Ichabod_15 (A1), IgnatiusPatJac_13 (A1), Inyanga_13 (A1), Iqorha_13 (A1), JC27_16 (A1), JackSparrow_15 (A1), Jasper_15 (A1), Jerm2_15 (A1), Jorgensen_14 (A1), JuliaChild_16 (A1), KBG_15 (A1), KSSJEB_14 (A1), Kanely_15 (A1), Kenmech_17 (A1), KikiBouba_16 (A1), Killigrew_12 (A1), KyMonks1A_16 (A1), Lamina13_14 (A1), Lesedi_13 (A1), Levia_14 (A1), Licorice_16 (A1), LilBib_15 (A1), Lockley_14 (A1), Lopton_15 (A1), LunarLander_14 (A1), MPlant7149_13 (A1), Magnar_14 (A1), Magnito_13 (A1), Makemake_14 (A1), Manatee_15 (A1), Marcell_14 (A1), Marchy_13 (A1), Marco3_14 (A1), Marge_15 (A1), Maroc7_13 (A1), Marsha_14 (A1), MaryBeth_14 (A1), McGuire_15 (A1), McSinger_15 (A1), MetalQZJ_14 (A1), Michley_14 (A1), MilleFeuille_13 (A1), Mkhuse1_15 (A1), Molly_15 (A1), Monet_16 (A1), Moose_13 (A1), MrGordo_14 (A1), Mryolo_13 (A1), Mule_14 (A1), Museum_16 (A1), NEHalo_14 (A1), Naira_15 (A1), Nerujay_15 (A1), Nhonho_14 (A1), Niza_16 (A1), Norz_16 (A1), Noxious_16 (A1), Ohno789_14 (A1), Oogway_13 (A1), PSullivan_16 (A1), PacerPaul_14 (A1), Papez_16 (A1), Paphu_13 (A1), Paraselene_13 (A1), Pari_15 (A1), Parliament_13 (A1), PascalRango_13 (A1), PattyP_16 (A1), Payneful_14 (A1), Pelly_15 (A1), Pepe_15 (A1), Perseus_15 (A1), Peterson_17 (A1), Petp2012_16 (A1), Petruchio_14 (A1), PherrisBueller_15 (A1), PhineBark_13 (A1), Phlippers_13 (A1), PhrostyMug_14 (A1), PinkPlastic_13 (A1), Pinto_16 (A1), Pippin_16 (A1), Pita2_16 (A1), PowerRanger_14 (A1), ProMouse_13 (A1), Puppet_14 (A1), QTRLifeCrisis_14 (A1), Raid_14 (A1), Rajelicia_14 (A1), Rhynn_14 (A1), RidgeCB_14 (A1), Ringer_14 (A1), Rohr_15 (A1), Rubeus_15 (A1), Rufus_15 (A1), Ruotula_13 (A1), Rutherferd_16 (A1), STLscum_15 (A1), Sagefire_15 (A1), Sandaddy_13 (A1), Sanya_14 (A1), SarFire_14 (A1), Scowl_15 (A1), Seabiscuit_16 (A1), Seanderson_15 (A1), ShortQueendom_14 (A1), Sibs6_16 (A1), SkiPole_16 (A1), Slagathor_15 (A1), Smairt_15 (A1), Smeagol_15 (A1), Snazzy_12 (A1), Solon_14 (A1), Sorpresa_14 (A1), SpikeBT_16 (A1), Squee_15 (A1), StewieG_13 (A1), StrongArm_13 (A1), Sumter_13 (A1), Sunshine924_13 (A1), SwissCheese_14 (A1), Switzer_15 (A1), Swole_16 (A1), Tasp14_15 (A1), Teodoridan_12 (A1), TheloniousMonk_16 (A1), Thor_14 (A1), Topgun_14 (A1), Tote_16 (A1), Traft412_16 (A1), Treddle_16 (A1), Tripl3t_15 (A1), Trouble_14 (A1), Turj99_13 (A1), TwoPeat_15 (A1), U2_14 (A1), Violet_13 (A1), Watermelon_16 (A1), Wheeler_14 (A1), Wilkins_14 (A1), Zeeculate_13 (A1), Zephyr_14 (A1), Zeuska_15 (A1),

Start 18:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 336
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Footloose_5 (singleton),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, A1, BD4, BD6, BD1, BD3, BD2,

Info for manual annotations of cluster A1:

- Start number 17 was manually annotated 223 times for cluster A1.

Info for manual annotations of cluster BD1:

- Start number 14 was manually annotated 55 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 13 was manually annotated 3 times for cluster BD2.
- Start number 14 was manually annotated 30 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 14 was manually annotated 16 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 14 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 14 was manually annotated 4 times for cluster BD6.

Gene Information:

Gene: A6_12 Start: 10644, Stop: 11156, Start Num: 17

Candidate Starts for A6_12:

(Start: 17 @10644 has 223 MA's), (30, 10809), (36, 10917), (48, 11055), (53, 11115), (56, 11133),

Gene: AFIS_14 Start: 10982, Stop: 11494, Start Num: 17

Candidate Starts for AFIS_14:

(8, 10796), (Start: 17 @10982 has 223 MA's), (36, 11255), (48, 11393), (53, 11453), (56, 11471),

Gene: Aaronocolus_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Aaronocolus_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Abbyshoes_15 Start: 11070, Stop: 11582, Start Num: 17

Candidate Starts for Abbyshoes_15:

(Start: 17 @11070 has 223 MA's), (30, 11235), (36, 11343), (48, 11481), (53, 11541), (56, 11559),

Gene: Abrogate_150 Start: 11727, Stop: 12239, Start Num: 17

Candidate Starts for Abrogate_150:

(Start: 17 @11727 has 223 MA's), (30, 11892), (36, 12000), (48, 12138), (53, 12198), (56, 12216),

Gene: Acme_16 Start: 11418, Stop: 11930, Start Num: 17

Candidate Starts for Acme_16:

(7, 11217), (8, 11232), (Start: 17 @11418 has 223 MA's), (30, 11583), (36, 11691), (48, 11829), (53, 11889), (56, 11907),

Gene: Adahisdi_15 Start: 11309, Stop: 11821, Start Num: 17

Candidate Starts for Adahisdi_15:

(Start: 17 @11309 has 223 MA's), (36, 11582), (48, 11720), (53, 11780), (56, 11798),

Gene: Aeneas_16 Start: 11404, Stop: 11916, Start Num: 17

Candidate Starts for Aeneas_16:

(Start: 17 @11404 has 223 MA's), (36, 11677), (48, 11815), (53, 11875), (56, 11893),

Gene: Agaliana_14 Start: 11119, Stop: 11631, Start Num: 17

Candidate Starts for Agaliana_14:

(7, 10918), (8, 10933), (Start: 17 @11119 has 223 MA's), (36, 11392), (48, 11530), (53, 11590), (56, 11608),

Gene: Ajay_14 Start: 11115, Stop: 11627, Start Num: 17

Candidate Starts for Ajay_14:

(5, 10869), (7, 10914), (8, 10929), (Start: 17 @11115 has 223 MA's), (36, 11388), (48, 11526), (53, 11586), (56, 11604),

Gene: Aldrich_15 Start: 11622, Stop: 12134, Start Num: 17

Candidate Starts for Aldrich_15:

(Start: 17 @11622 has 223 MA's), (30, 11787), (36, 11895), (48, 12033), (53, 12093), (56, 12111),

Gene: Alsaber_10 Start: 6736, Stop: 7278, Start Num: 14

Candidate Starts for Alsaber_10:

(Start: 14 @6736 has 108 MA's), (15, 6778), (22, 6859), (38, 7060), (39, 7063), (40, 7072), (50, 7237),

Gene: Alsfro_18 Start: 11858, Stop: 12370, Start Num: 17

Candidate Starts for Alsfro_18:

(Start: 17 @11858 has 223 MA's), (36, 12131), (48, 12269), (53, 12329), (56, 12347),

Gene: Altman_15 Start: 11653, Stop: 12165, Start Num: 17

Candidate Starts for Altman_15:

(7, 11452), (8, 11467), (Start: 17 @11653 has 223 MA's), (30, 11818), (36, 11926), (48, 12064), (53, 12124), (56, 12142),

Gene: Alvin_15 Start: 11326, Stop: 11838, Start Num: 17

Candidate Starts for Alvin_15:

(7, 11125), (8, 11140), (Start: 17 @11326 has 223 MA's), (30, 11491), (36, 11599), (48, 11737), (53, 11797), (56, 11815),

Gene: Alvy_11 Start: 6598, Stop: 7116, Start Num: 14

Candidate Starts for Alvy_11:

(2, 6286), (3, 6292), (4, 6295), (6, 6466), (Start: 13 @6592 has 3 MA's), (Start: 14 @6598 has 108 MA's), (16, 6652), (24, 6724), (26, 6736), (40, 6910), (46, 7012),

Gene: Amela_9 Start: 6795, Stop: 7334, Start Num: 14

Candidate Starts for Amela_9:

(Start: 14 @6795 has 108 MA's), (15, 6837), (38, 7116), (39, 7119), (40, 7128), (50, 7293),

Gene: Amethyst_9 Start: 6407, Stop: 6937, Start Num: 14

Candidate Starts for Amethyst_9:

(6, 6275), (Start: 13 @6401 has 3 MA's), (Start: 14 @6407 has 108 MA's), (27, 6569), (40, 6728),

Gene: Andris_9 Start: 6465, Stop: 6998, Start Num: 14

Candidate Starts for Andris_9:

(2, 6153), (3, 6159), (4, 6162), (6, 6333), (Start: 14 @6465 has 108 MA's), (21, 6570), (26, 6615), (40, 6789),

Gene: Anglerfish_15 Start: 12039, Stop: 12551, Start Num: 17

Candidate Starts for Anglerfish_15:

(Start: 17 @12039 has 223 MA's), (30, 12204), (36, 12312), (48, 12450), (53, 12510), (56, 12528),

Gene: Animus_10 Start: 6815, Stop: 7348, Start Num: 14

Candidate Starts for Animus_10:

(Start: 13 @6809 has 3 MA's), (Start: 14 @6815 has 108 MA's), (26, 6965), (40, 7139), (55, 7319),

Gene: Applejack_14 Start: 11053, Stop: 11565, Start Num: 17

Candidate Starts for Applejack_14:

(8, 10867), (Start: 17 @11053 has 223 MA's), (36, 11326), (48, 11464), (53, 11524), (56, 11542),

Gene: Arcanine_15 Start: 10989, Stop: 11501, Start Num: 17

Candidate Starts for Arcanine_15:

(Start: 17 @10989 has 223 MA's), (30, 11154), (36, 11262), (48, 11400), (53, 11460), (56, 11478),

Gene: Arlo_13 Start: 10678, Stop: 11190, Start Num: 17

Candidate Starts for Arlo_13:

(Start: 17 @10678 has 223 MA's), (30, 10843), (36, 10951), (48, 11089), (53, 11149), (56, 11167),

Gene: Ashballer_13 Start: 11057, Stop: 11569, Start Num: 17

Candidate Starts for Ashballer_13:

(Start: 17 @11057 has 223 MA's), (36, 11330), (48, 11468), (53, 11528), (56, 11546),

Gene: Asten_9 Start: 6604, Stop: 7146, Start Num: 14

Candidate Starts for Asten_9:

(Start: 14 @6604 has 108 MA's), (23, 6733), (47, 7048), (55, 7117),

Gene: Atkinbua_15 Start: 11032, Stop: 11544, Start Num: 17

Candidate Starts for Atkinbua_15:

(Start: 17 @11032 has 223 MA's), (36, 11305), (48, 11443), (53, 11503), (56, 11521),

Gene: Attoomi_6 Start: 5006, Stop: 5563, Start Num: 12

Candidate Starts for Attoomi_6:

(Start: 12 @5006 has 1 MA's), (25, 5189), (29, 5243), (32, 5306), (34, 5318), (49, 5510),

Gene: Axiom_10 Start: 6474, Stop: 7007, Start Num: 14

Candidate Starts for Axiom_10:

(2, 6162), (3, 6168), (4, 6171), (6, 6342), (Start: 13 @6468 has 3 MA's), (Start: 14 @6474 has 108 MA's), (40, 6798),

Gene: BK1_12 Start: 10644, Stop: 11156, Start Num: 17

Candidate Starts for BK1_12:

(Start: 17 @10644 has 223 MA's), (30, 10809), (36, 10917), (48, 11055), (53, 11115), (56, 11133),

Gene: BPBiebs31_15 Start: 11317, Stop: 11829, Start Num: 17

Candidate Starts for BPBiebs31_15:

(7, 11116), (8, 11131), (Start: 17 @11317 has 223 MA's), (30, 11482), (36, 11590), (48, 11728), (53, 11788), (56, 11806),

Gene: BaconJack_16 Start: 11096, Stop: 11608, Start Num: 17

Candidate Starts for BaconJack_16:

(Start: 17 @11096 has 223 MA's), (30, 11261), (36, 11369), (48, 11507), (53, 11567), (56, 11585),

Gene: Barriga_14 Start: 10920, Stop: 11432, Start Num: 17

Candidate Starts for Barriga_14:

(Start: 17 @10920 has 223 MA's), (30, 11085), (36, 11193), (48, 11331), (53, 11391), (56, 11409),

Gene: BarrowTuph_13 Start: 10968, Stop: 11480, Start Num: 17

Candidate Starts for BarrowTuph_13:

(5, 10722), (7, 10767), (8, 10782), (Start: 17 @10968 has 223 MA's), (36, 11241), (48, 11379), (53, 11439), (56, 11457),

Gene: BarryBee_11 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for BarryBee_11:

(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051),

Gene: BartholomewSD_11 Start: 6598, Stop: 7116, Start Num: 14

Candidate Starts for BartholomewSD_11:

(2, 6286), (3, 6292), (4, 6295), (6, 6466), (Start: 13 @6592 has 3 MA's), (Start: 14 @6598 has 108 MA's), (16, 6652), (24, 6724), (26, 6736), (40, 6910), (46, 7012),

Gene: BeardedLady_10 Start: 6883, Stop: 7428, Start Num: 14

Candidate Starts for BeardedLady_10:

(Start: 14 @6883 has 108 MA's), (38, 7207), (47, 7330),

Gene: Beatrix_13 Start: 11760, Stop: 12272, Start Num: 17

Candidate Starts for Beatrix_13:

(Start: 17 @11760 has 223 MA's), (36, 12033), (48, 12171), (53, 12231), (56, 12249),

Gene: BeesKnees_15 Start: 11119, Stop: 11631, Start Num: 17

Candidate Starts for BeesKnees_15:

(Start: 17 @11119 has 223 MA's), (36, 11392), (48, 11530), (53, 11590), (56, 11608),

Gene: Bethlehem_14 Start: 12347, Stop: 12859, Start Num: 17

Candidate Starts for Bethlehem_14:

(Start: 17 @12347 has 223 MA's), (30, 12512), (36, 12620), (48, 12758), (53, 12818), (56, 12836),

Gene: Bexan_13 Start: 11761, Stop: 12273, Start Num: 17

Candidate Starts for Bexan_13:

(Start: 17 @11761 has 223 MA's), (36, 12034), (48, 12172), (53, 12232), (56, 12250),

Gene: Big3_14 Start: 11704, Stop: 12216, Start Num: 17

Candidate Starts for Big3_14:

(Start: 17 @11704 has 223 MA's), (36, 11977), (48, 12115), (53, 12175), (56, 12193),

Gene: BigMau_16 Start: 11285, Stop: 11797, Start Num: 17

Candidate Starts for BigMau_16:

(7, 11084), (8, 11099), (Start: 17 @11285 has 223 MA's), (30, 11450), (36, 11558), (48, 11696), (53, 11756), (56, 11774),

Gene: BigPaolini_15 Start: 11711, Stop: 12223, Start Num: 17

Candidate Starts for BigPaolini_15:

(Start: 17 @11711 has 223 MA's), (36, 11984), (48, 12122), (53, 12182), (56, 12200),

Gene: Bigchunggi_14 Start: 10787, Stop: 11299, Start Num: 17

Candidate Starts for Bigchunggi_14:

(Start: 17 @10787 has 223 MA's), (30, 10952), (36, 11060), (48, 11198), (53, 11258), (56, 11276),

Gene: Bigfoot_13 Start: 10809, Stop: 11321, Start Num: 17

Candidate Starts for Bigfoot_13:

(8, 10623), (Start: 17 @10809 has 223 MA's), (36, 11082), (48, 11220), (53, 11280), (56, 11298),

Gene: Bircsak_14 Start: 11270, Stop: 11782, Start Num: 17

Candidate Starts for Bircsak_14:

(7, 11069), (8, 11084), (Start: 17 @11270 has 223 MA's), (30, 11435), (36, 11543), (48, 11681), (53, 11741), (56, 11759),

Gene: Blackflame_14 Start: 10796, Stop: 11308, Start Num: 17

Candidate Starts for Blackflame_14:

(Start: 17 @10796 has 223 MA's), (30, 10961), (36, 11069), (48, 11207), (53, 11267), (56, 11285),

Gene: Blessner_14 Start: 11374, Stop: 11886, Start Num: 17

Candidate Starts for Blessner_14:

(8, 11188), (Start: 17 @11374 has 223 MA's), (36, 11647), (48, 11785), (53, 11845), (56, 11863),

Gene: BluSpix_14 Start: 11069, Stop: 11581, Start Num: 17

Candidate Starts for BluSpix_14:

(7, 10868), (8, 10883), (Start: 17 @11069 has 223 MA's), (36, 11342), (48, 11480), (53, 11540), (56, 11558),

Gene: Blue_14 Start: 11176, Stop: 11688, Start Num: 17

Candidate Starts for Blue_14:

(7, 10975), (8, 10990), (Start: 17 @11176 has 223 MA's), (36, 11449), (48, 11587), (53, 11647), (56, 11665),

Gene: Bob3_13 Start: 10625, Stop: 11137, Start Num: 17

Candidate Starts for Bob3_13:

(Start: 17 @10625 has 223 MA's), (30, 10790), (36, 10898), (48, 11036), (53, 11096), (56, 11114),

Gene: Bones_14 Start: 10819, Stop: 11331, Start Num: 17

Candidate Starts for Bones_14:

(Start: 17 @10819 has 223 MA's), (36, 11092), (48, 11230), (53, 11290), (56, 11308),

Gene: Bovely_9 Start: 6642, Stop: 7187, Start Num: 14

Candidate Starts for Bovely_9:

(Start: 14 @6642 has 108 MA's), (38, 6966), (47, 7089),

Gene: Bowden_10 Start: 6509, Stop: 7030, Start Num: 14

Candidate Starts for Bowden_10:

(3, 6203), (4, 6206), (6, 6377), (Start: 13 @6503 has 3 MA's), (Start: 14 @6509 has 108 MA's), (26, 6650), (40, 6824),

Gene: Brataylor_10 Start: 6607, Stop: 7152, Start Num: 14

Candidate Starts for Brataylor_10:

(Start: 14 @6607 has 108 MA's), (15, 6649), (47, 7054), (55, 7123),

Gene: Briton15_16 Start: 11131, Stop: 11643, Start Num: 17

Candidate Starts for Briton15_16:

(Start: 17 @11131 has 223 MA's), (30, 11296), (36, 11404), (48, 11542), (53, 11602), (56, 11620),

Gene: BroPlease_10 Start: 6713, Stop: 7237, Start Num: 14

Candidate Starts for BroPlease_10:

(Start: 13 @6707 has 3 MA's), (Start: 14 @6713 has 108 MA's), (29, 6905), (33, 6971), (40, 7028),

Gene: Bruns_13 Start: 10988, Stop: 11500, Start Num: 17

Candidate Starts for Bruns_13:

(Start: 17 @10988 has 223 MA's), (30, 11153), (36, 11261), (48, 11399), (53, 11459), (56, 11477),

Gene: BryanRecycles_10 Start: 6796, Stop: 7344, Start Num: 14

Candidate Starts for BryanRecycles_10:

(Start: 14 @6796 has 108 MA's), (35, 7102), (38, 7123), (47, 7246),

Gene: Burton_15 Start: 11188, Stop: 11700, Start Num: 17

Candidate Starts for Burton_15:

(7, 10987), (8, 11002), (Start: 17 @11188 has 223 MA's), (30, 11353), (36, 11461), (48, 11599), (53, 11659), (56, 11677),

Gene: Buttons_15 Start: 11258, Stop: 11770, Start Num: 17

Candidate Starts for Buttons_15:

(Start: 17 @11258 has 223 MA's), (30, 11423), (36, 11531), (48, 11669), (53, 11729), (56, 11747),

Gene: CactusRose_13 Start: 10808, Stop: 11320, Start Num: 17

Candidate Starts for CactusRose_13:

(Start: 17 @10808 has 223 MA's), (36, 11081), (48, 11219), (53, 11279), (56, 11297),

Gene: Caelum_10 Start: 6369, Stop: 6884, Start Num: 13

Candidate Starts for Caelum_10:

(1, 5997), (2, 6063), (3, 6069), (4, 6072), (6, 6243), (Start: 13 @6369 has 3 MA's), (Start: 14 @6375 has 108 MA's), (26, 6504), (40, 6678),

Gene: Caliburn_9 Start: 6616, Stop: 7161, Start Num: 14

Candidate Starts for Caliburn_9:

(Start: 14 @6616 has 108 MA's), (38, 6940), (47, 7063),

Gene: Carlyle_16 Start: 11656, Stop: 12168, Start Num: 17

Candidate Starts for Carlyle_16:

(Start: 17 @11656 has 223 MA's), (36, 11929), (48, 12067), (53, 12127), (56, 12145),

Gene: CartmannCramer_14 Start: 12609, Stop: 13121, Start Num: 17

Candidate Starts for CartmannCramer_14:

(7, 12408), (8, 12423), (Start: 17 @12609 has 223 MA's), (30, 12774), (36, 12882), (48, 13020), (53, 13080), (56, 13098),

Gene: CatBus_15 Start: 11814, Stop: 12326, Start Num: 17

Candidate Starts for CatBus_15:

(Start: 17 @11814 has 223 MA's), (30, 11979), (36, 12087), (48, 12225), (53, 12285), (56, 12303),

Gene: Celery_11 Start: 6699, Stop: 7238, Start Num: 14
Candidate Starts for Celery_11:
(6, 6564), (Start: 14 @6699 has 108 MA's), (15, 6741), (22, 6819), (38, 7020), (39, 7023), (50, 7197),

Gene: Celeste_9 Start: 6606, Stop: 7151, Start Num: 14
Candidate Starts for Celeste_9:
(Start: 14 @6606 has 108 MA's), (47, 7053), (55, 7122),

Gene: Celia_9 Start: 6927, Stop: 7451, Start Num: 14
Candidate Starts for Celia_9:
(3, 6624), (4, 6627), (6, 6798), (Start: 14 @6927 has 108 MA's), (28, 7092), (37, 7227), (54, 7419),

Gene: Chanagan_13 Start: 10651, Stop: 11163, Start Num: 17
Candidate Starts for Chanagan_13:
(Start: 17 @10651 has 223 MA's), (36, 10924), (48, 11062), (53, 11122), (56, 11140),

Gene: ChristmasHams_14 Start: 11119, Stop: 11631, Start Num: 17
Candidate Starts for ChristmasHams_14:
(7, 10918), (8, 10933), (Start: 17 @11119 has 223 MA's), (30, 11284), (36, 11392), (48, 11530), (53, 11590), (56, 11608),

Gene: Chucky_9 Start: 6605, Stop: 7150, Start Num: 14
Candidate Starts for Chucky_9:
(Start: 14 @6605 has 108 MA's), (15, 6647), (47, 7052), (55, 7121),

Gene: Ciao_14 Start: 11038, Stop: 11550, Start Num: 17
Candidate Starts for Ciao_14:
(7, 10837), (8, 10852), (Start: 17 @11038 has 223 MA's), (30, 11203), (36, 11311), (48, 11449), (53, 11509), (56, 11527),

Gene: Conan_10 Start: 6446, Stop: 6988, Start Num: 14
Candidate Starts for Conan_10:
(Start: 14 @6446 has 108 MA's), (22, 6569), (38, 6770), (39, 6773), (40, 6782), (50, 6947),

Gene: ConceptII_14 Start: 11289, Stop: 11801, Start Num: 17
Candidate Starts for ConceptII_14:
(7, 11088), (8, 11103), (Start: 17 @11289 has 223 MA's), (30, 11454), (36, 11562), (48, 11700), (53, 11760), (56, 11778),

Gene: Corvo_14 Start: 11232, Stop: 11744, Start Num: 17
Candidate Starts for Corvo_14:
(Start: 17 @11232 has 223 MA's), (30, 11397), (36, 11505), (48, 11643), (53, 11703), (56, 11721),

Gene: Crispicous1_13 Start: 10518, Stop: 11030, Start Num: 17
Candidate Starts for Crispicous1_13:
(Start: 17 @10518 has 223 MA's), (30, 10683), (36, 10791), (48, 10929), (53, 10989), (56, 11007),

Gene: Cueyllyss_14 Start: 11228, Stop: 11740, Start Num: 17
Candidate Starts for Cueyllyss_14:
(8, 11042), (Start: 17 @11228 has 223 MA's), (36, 11501), (48, 11639), (53, 11699), (56, 11717),

Gene: DD5_15 Start: 11768, Stop: 12280, Start Num: 17
Candidate Starts for DD5_15:

(Start: 17 @11768 has 223 MA's), (36, 12041), (48, 12179), (53, 12239), (56, 12257),

Gene: Danzina_10 Start: 6804, Stop: 7349, Start Num: 14

Candidate Starts for Danzina_10:

(Start: 14 @6804 has 108 MA's), (45, 7239), (47, 7251), (55, 7320),

Gene: Dattran_10 Start: 6605, Stop: 7150, Start Num: 14

Candidate Starts for Dattran_10:

(Start: 14 @6605 has 108 MA's), (45, 7040), (47, 7052), (55, 7121),

Gene: Daudau_9 Start: 6400, Stop: 6954, Start Num: 14

Candidate Starts for Daudau_9:

(6, 6268), (Start: 13 @6394 has 3 MA's), (Start: 14 @6400 has 108 MA's), (26, 6571), (31, 6667),

Gene: Dexers_8 Start: 6439, Stop: 6981, Start Num: 14

Candidate Starts for Dexers_8:

(Start: 14 @6439 has 108 MA's), (38, 6763), (39, 6766), (40, 6775), (50, 6940),

Gene: Dexes_15 Start: 11733, Stop: 12245, Start Num: 17

Candidate Starts for Dexes_15:

(7, 11532), (8, 11547), (Start: 17 @11733 has 223 MA's), (36, 12006), (48, 12144), (53, 12204), (56, 12222),

Gene: Diane_9 Start: 6409, Stop: 6939, Start Num: 14

Candidate Starts for Diane_9:

(6, 6277), (Start: 13 @6403 has 3 MA's), (Start: 14 @6409 has 108 MA's), (27, 6571), (40, 6730), (55, 6910),

Gene: DirtDevil_15 Start: 11622, Stop: 12134, Start Num: 17

Candidate Starts for DirtDevil_15:

(Start: 17 @11622 has 223 MA's), (30, 11787), (36, 11895), (48, 12033), (53, 12093), (56, 12111),

Gene: Doom_14 Start: 11311, Stop: 11823, Start Num: 17

Candidate Starts for Doom_14:

(Start: 17 @11311 has 223 MA's), (30, 11476), (36, 11584), (48, 11722), (53, 11782), (56, 11800),

Gene: DrFeelGood_13 Start: 10835, Stop: 11347, Start Num: 17

Candidate Starts for DrFeelGood_13:

(Start: 17 @10835 has 223 MA's), (30, 11000), (36, 11108), (48, 11246), (53, 11306), (56, 11324),

Gene: DreamCatcher_17 Start: 12264, Stop: 12776, Start Num: 17

Candidate Starts for DreamCatcher_17:

(Start: 17 @12264 has 223 MA's), (30, 12429), (36, 12537), (48, 12675), (53, 12735), (56, 12753),

Gene: Dreamboat_15 Start: 10963, Stop: 11475, Start Num: 17

Candidate Starts for Dreamboat_15:

(Start: 17 @10963 has 223 MA's), (30, 11128), (36, 11236), (48, 11374), (53, 11434), (56, 11452),

Gene: Dulcie_13 Start: 10710, Stop: 11222, Start Num: 17

Candidate Starts for Dulcie_13:

(7, 10509), (8, 10524), (Start: 17 @10710 has 223 MA's), (36, 10983), (48, 11121), (53, 11181), (56, 11199),

Gene: Dussy_15 Start: 11070, Stop: 11582, Start Num: 17
Candidate Starts for Dussy_15:
(Start: 17 @11070 has 223 MA's), (30, 11235), (36, 11343), (48, 11481), (53, 11541), (56, 11559),

Gene: Dwayne_9 Start: 6605, Stop: 7150, Start Num: 14
Candidate Starts for Dwayne_9:
(Start: 14 @6605 has 108 MA's), (15, 6647), (47, 7052), (55, 7121),

Gene: Dynamix_15 Start: 11120, Stop: 11632, Start Num: 17
Candidate Starts for Dynamix_15:
(Start: 17 @11120 has 223 MA's), (36, 11393), (48, 11531), (53, 11591), (56, 11609),

Gene: ELB20_08 Start: 6466, Stop: 6990, Start Num: 14
Candidate Starts for ELB20_08:
(2, 6154), (3, 6160), (4, 6163), (6, 6334), (Start: 14 @6466 has 108 MA's), (26, 6610), (40, 6784), (52, 6952),

Gene: Eddasa_10 Start: 6796, Stop: 7344, Start Num: 14
Candidate Starts for Eddasa_10:
(Start: 14 @6796 has 108 MA's), (35, 7102), (38, 7123), (47, 7246),

Gene: Edtherson_15 Start: 11568, Stop: 12080, Start Num: 17
Candidate Starts for Edtherson_15:
(8, 11382), (Start: 17 @11568 has 223 MA's), (36, 11841), (48, 11979), (53, 12039), (56, 12057),

Gene: Ejemplo_9 Start: 6608, Stop: 7153, Start Num: 14
Candidate Starts for Ejemplo_9:
(Start: 14 @6608 has 108 MA's), (47, 7055), (55, 7124),

Gene: ElGato_10 Start: 6449, Stop: 6991, Start Num: 14
Candidate Starts for ElGato_10:
(Start: 14 @6449 has 108 MA's), (22, 6572), (38, 6773), (39, 6776), (40, 6785), (50, 6950),

Gene: Emaanora_11 Start: 6604, Stop: 7149, Start Num: 14
Candidate Starts for Emaanora_11:
(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051), (55, 7120),

Gene: EnochSoames_10 Start: 6792, Stop: 7340, Start Num: 14
Candidate Starts for EnochSoames_10:
(Start: 14 @6792 has 108 MA's), (35, 7098), (38, 7119), (47, 7242),

Gene: EnzoK_15 Start: 11302, Stop: 11814, Start Num: 17
Candidate Starts for EnzoK_15:
(7, 11101), (8, 11116), (Start: 17 @11302 has 223 MA's), (36, 11575), (48, 11713), (53, 11773), (56, 11791),

Gene: Esperer_9 Start: 6636, Stop: 7181, Start Num: 14
Candidate Starts for Esperer_9:
(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Espresso_14 Start: 11163, Stop: 11675, Start Num: 17
Candidate Starts for Espresso_14:
(Start: 17 @11163 has 223 MA's), (30, 11328), (36, 11436), (48, 11574), (53, 11634), (56, 11652),

Gene: Euphoria_14 Start: 11059, Stop: 11571, Start Num: 17

Candidate Starts for Euphoria_14:

(Start: 17 @11059 has 223 MA's), (30, 11224), (36, 11332), (48, 11470), (53, 11530), (56, 11548),

Gene: Eyeball_14 Start: 10807, Stop: 11319, Start Num: 17

Candidate Starts for Eyeball_14:

(5, 10561), (7, 10606), (8, 10621), (Start: 17 @10807 has 223 MA's), (36, 11080), (48, 11218), (53, 11278), (56, 11296),

Gene: Fajezeel_16 Start: 11383, Stop: 11895, Start Num: 17

Candidate Starts for Fajezeel_16:

(Start: 17 @11383 has 223 MA's), (36, 11656), (48, 11794), (53, 11854), (56, 11872),

Gene: Fascinus_13 Start: 10810, Stop: 11322, Start Num: 17

Candidate Starts for Fascinus_13:

(7, 10609), (8, 10624), (Start: 17 @10810 has 223 MA's), (36, 11083), (48, 11221), (53, 11281), (56, 11299),

Gene: Fenn_15 Start: 12374, Stop: 12886, Start Num: 17

Candidate Starts for Fenn_15:

(8, 12188), (Start: 17 @12374 has 223 MA's), (30, 12539), (36, 12647), (48, 12785), (53, 12845), (56, 12863),

Gene: Footloose_5 Start: 4342, Stop: 4824, Start Num: 18

Candidate Starts for Footloose_5:

(Start: 18 @4342 has 1 MA's), (19, 4369), (34, 4570), (38, 4594), (41, 4612), (44, 4696), (51, 4789),

Gene: Forsytheast_13 Start: 11073, Stop: 11585, Start Num: 17

Candidate Starts for Forsytheast_13:

(Start: 17 @11073 has 223 MA's), (36, 11346), (48, 11484), (53, 11544), (56, 11562),

Gene: Francis47_14 Start: 11311, Stop: 11823, Start Num: 17

Candidate Starts for Francis47_14:

(5, 11065), (7, 11110), (8, 11125), (Start: 17 @11311 has 223 MA's), (36, 11584), (48, 11722), (53, 11782), (56, 11800),

Gene: Froghopper_15 Start: 10752, Stop: 11264, Start Num: 17

Candidate Starts for Froghopper_15:

(Start: 17 @10752 has 223 MA's), (30, 10917), (36, 11025), (48, 11163), (53, 11223), (56, 11241),

Gene: Fushigi_15 Start: 11475, Stop: 11987, Start Num: 17

Candidate Starts for Fushigi_15:

(8, 11289), (Start: 17 @11475 has 223 MA's), (30, 11640), (36, 11748), (48, 11886), (53, 11946), (56, 11964),

Gene: GMonster_13 Start: 10679, Stop: 11191, Start Num: 17

Candidate Starts for GMonster_13:

(7, 10478), (8, 10493), (Start: 17 @10679 has 223 MA's), (30, 10844), (36, 10952), (48, 11090), (53, 11150), (56, 11168),

Gene: Gachnar_14 Start: 11094, Stop: 11606, Start Num: 17

Candidate Starts for Gachnar_14:

(5, 10848), (7, 10893), (8, 10908), (Start: 17 @11094 has 223 MA's), (36, 11367), (48, 11505), (53, 11565), (56, 11583),

Gene: GageAP_16 Start: 11800, Stop: 12312, Start Num: 17

Candidate Starts for GageAP_16:

(Start: 17 @11800 has 223 MA's), (36, 12073), (48, 12211), (53, 12271), (56, 12289),

Gene: Gandalf20_15 Start: 11867, Stop: 12379, Start Num: 17

Candidate Starts for Gandalf20_15:

(Start: 17 @11867 has 223 MA's), (36, 12140), (48, 12278), (53, 12338), (56, 12356),

Gene: GirlDinner_9 Start: 6478, Stop: 7011, Start Num: 14

Candidate Starts for GirlDinner_9:

(Start: 13 @6472 has 3 MA's), (Start: 14 @6478 has 108 MA's), (26, 6628), (40, 6802), (55, 6982),

Gene: Goby_9 Start: 6605, Stop: 7150, Start Num: 14

Candidate Starts for Goby_9:

(Start: 14 @6605 has 108 MA's), (45, 7040), (47, 7052), (55, 7121),

Gene: Godpower_10 Start: 6608, Stop: 7147, Start Num: 14

Candidate Starts for Godpower_10:

(Start: 14 @6608 has 108 MA's), (47, 7049), (55, 7118),

Gene: Gompeii16_14 Start: 11271, Stop: 11783, Start Num: 17

Candidate Starts for Gompeii16_14:

(7, 11070), (8, 11085), (Start: 17 @11271 has 223 MA's), (30, 11436), (36, 11544), (48, 11682), (53, 11742), (56, 11760),

Gene: Graduation_16 Start: 11833, Stop: 12345, Start Num: 17

Candidate Starts for Graduation_16:

(7, 11632), (8, 11647), (Start: 17 @11833 has 223 MA's), (36, 12106), (48, 12244), (53, 12304), (56, 12322),

Gene: GrecoEtereo_15 Start: 11371, Stop: 11883, Start Num: 17

Candidate Starts for GrecoEtereo_15:

(7, 11170), (8, 11185), (Start: 17 @11371 has 223 MA's), (30, 11536), (36, 11644), (48, 11782), (53, 11842), (56, 11860),

Gene: GreenWeasel_11 Start: 6722, Stop: 7246, Start Num: 14

Candidate Starts for GreenWeasel_11:

(Start: 13 @6716 has 3 MA's), (Start: 14 @6722 has 108 MA's), (29, 6914), (33, 6980), (40, 7037),

Gene: Greg_16 Start: 11383, Stop: 11895, Start Num: 17

Candidate Starts for Greg_16:

(Start: 17 @11383 has 223 MA's), (36, 11656), (48, 11794), (53, 11854), (56, 11872),

Gene: GroundGoblin_15 Start: 11622, Stop: 12134, Start Num: 17

Candidate Starts for GroundGoblin_15:

(Start: 17 @11622 has 223 MA's), (30, 11787), (36, 11895), (48, 12033), (53, 12093), (56, 12111),

Gene: Gwendoluna_16 Start: 12253, Stop: 12765, Start Num: 17

Candidate Starts for Gwendoluna_16:

(Start: 17 @12253 has 223 MA's), (36, 12526), (48, 12664), (53, 12724), (56, 12742),

Gene: Gyzlar_16 Start: 12014, Stop: 12526, Start Num: 17

Candidate Starts for Gyzlar_16:

(7, 11813), (8, 11828), (Start: 17 @12014 has 223 MA's), (30, 12179), (36, 12287), (48, 12425), (53, 12485), (56, 12503),

Gene: Haizum_9 Start: 6438, Stop: 6968, Start Num: 14

Candidate Starts for Haizum_9:

(6, 6306), (Start: 13 @6432 has 3 MA's), (Start: 14 @6438 has 108 MA's), (27, 6600), (40, 6759), (55, 6939),

Gene: Hami1_16 Start: 11455, Stop: 11967, Start Num: 17

Candidate Starts for Hami1_16:

(Start: 17 @11455 has 223 MA's), (36, 11728), (48, 11866), (53, 11926), (56, 11944),

Gene: HanShotFirst_14 Start: 10675, Stop: 11187, Start Num: 17

Candidate Starts for HanShotFirst_14:

(Start: 17 @10675 has 223 MA's), (36, 10948), (48, 11086), (53, 11146), (56, 11164),

Gene: Hank144_10 Start: 6746, Stop: 7285, Start Num: 13

Candidate Starts for Hank144_10:

(Start: 13 @6746 has 3 MA's), (Start: 14 @6752 has 108 MA's), (26, 6905), (40, 7079),

Gene: HarryOW_15 Start: 11371, Stop: 11883, Start Num: 17

Candidate Starts for HarryOW_15:

(7, 11170), (8, 11185), (Start: 17 @11371 has 223 MA's), (30, 11536), (36, 11644), (48, 11782), (53, 11842), (56, 11860),

Gene: Hermia_16 Start: 11814, Stop: 12326, Start Num: 17

Candidate Starts for Hermia_16:

(Start: 17 @11814 has 223 MA's), (30, 11979), (36, 12087), (48, 12225), (53, 12285), (56, 12303),

Gene: HermioneGrange_14 Start: 10785, Stop: 11297, Start Num: 17

Candidate Starts for HermioneGrange_14:

(Start: 17 @10785 has 223 MA's), (30, 10950), (36, 11058), (48, 11196), (53, 11256), (56, 11274),

Gene: Hippo_9 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for Hippo_9:

(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051), (55, 7120),

Gene: Homines_14 Start: 11090, Stop: 11602, Start Num: 17

Candidate Starts for Homines_14:

(7, 10889), (8, 10904), (Start: 17 @11090 has 223 MA's), (30, 11255), (36, 11363), (48, 11501), (53, 11561), (56, 11579),

Gene: Hope4ever_14 Start: 11192, Stop: 11704, Start Num: 17

Candidate Starts for Hope4ever_14:

(8, 11006), (Start: 17 @11192 has 223 MA's), (30, 11357), (36, 11465), (48, 11603), (53, 11663), (56, 11681),

Gene: Hydra_11 Start: 7173, Stop: 7718, Start Num: 14

Candidate Starts for Hydra_11:

(Start: 14 @7173 has 108 MA's), (38, 7497), (47, 7620),

Gene: lLeeKay_16 Start: 11244, Stop: 11756, Start Num: 17

Candidate Starts for lLeeKay_16:

(8, 11058), (Start: 17 @11244 has 223 MA's), (36, 11517), (48, 11655), (53, 11715), (56, 11733),

Gene: Ichabod_15 Start: 11096, Stop: 11608, Start Num: 17

Candidate Starts for Ichabod_15:

(7, 10895), (8, 10910), (Start: 17 @11096 has 223 MA's), (30, 11261), (36, 11369), (48, 11507), (53, 11567), (56, 11585),

Gene: IgnatiusPatJac_13 Start: 11070, Stop: 11582, Start Num: 17

Candidate Starts for IgnatiusPatJac_13:

(7, 10869), (8, 10884), (Start: 17 @11070 has 223 MA's), (36, 11343), (48, 11481), (53, 11541), (56, 11559),

Gene: Indigo_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Indigo_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Inyanga_13 Start: 10858, Stop: 11370, Start Num: 17

Candidate Starts for Inyanga_13:

(Start: 17 @10858 has 223 MA's), (30, 11023), (36, 11131), (48, 11269), (53, 11329), (56, 11347),

Gene: Iqorha_13 Start: 10858, Stop: 11370, Start Num: 17

Candidate Starts for Iqorha_13:

(Start: 17 @10858 has 223 MA's), (30, 11023), (36, 11131), (48, 11269), (53, 11329), (56, 11347),

Gene: Issmi_10 Start: 6720, Stop: 7238, Start Num: 14

Candidate Starts for Issmi_10:

(Start: 14 @6720 has 108 MA's), (26, 6858), (31, 6954), (40, 7032),

Gene: Itza_9 Start: 6850, Stop: 7374, Start Num: 14

Candidate Starts for Itza_9:

(3, 6547), (4, 6550), (6, 6721), (Start: 14 @6850 has 108 MA's), (28, 7015), (37, 7150), (54, 7342),

Gene: Izzy_10 Start: 6843, Stop: 7391, Start Num: 14

Candidate Starts for Izzy_10:

(Start: 14 @6843 has 108 MA's), (35, 7149), (38, 7170), (47, 7293),

Gene: JC27_16 Start: 11696, Stop: 12208, Start Num: 17

Candidate Starts for JC27_16:

(7, 11495), (8, 11510), (Start: 17 @11696 has 223 MA's), (30, 11861), (36, 11969), (48, 12107), (53, 12167), (56, 12185),

Gene: JackSparrow_15 Start: 11412, Stop: 11924, Start Num: 17

Candidate Starts for JackSparrow_15:

(7, 11211), (8, 11226), (Start: 17 @11412 has 223 MA's), (30, 11577), (36, 11685), (48, 11823), (53, 11883), (56, 11901),

Gene: Janus_10 Start: 6815, Stop: 7348, Start Num: 14

Candidate Starts for Janus_10:

(Start: 13 @6809 has 3 MA's), (Start: 14 @6815 has 108 MA's), (26, 6965), (40, 7139), (55, 7319),

Gene: Jash_10 Start: 6796, Stop: 7344, Start Num: 14

Candidate Starts for Jash_10:

(Start: 14 @6796 has 108 MA's), (35, 7102), (38, 7123), (47, 7246),

Gene: Jasper_15 Start: 10907, Stop: 11419, Start Num: 17

Candidate Starts for Jasper_15:

(Start: 17 @10907 has 223 MA's), (30, 11072), (36, 11180), (48, 11318), (53, 11378), (56, 11396),

Gene: Jerm2_15 Start: 11285, Stop: 11797, Start Num: 17

Candidate Starts for Jerm2_15:

(7, 11084), (8, 11099), (Start: 17 @11285 has 223 MA's), (30, 11450), (36, 11558), (48, 11696), (53, 11756), (56, 11774),

Gene: Jevington_11 Start: 7004, Stop: 7528, Start Num: 14

Candidate Starts for Jevington_11:

(2, 6692), (3, 6698), (4, 6701), (6, 6872), (Start: 14 @7004 has 108 MA's), (26, 7148), (40, 7322), (46, 7424),

Gene: Jhitchelle_8 Start: 6386, Stop: 6919, Start Num: 14

Candidate Starts for Jhitchelle_8:

(9, 6278), (10, 6284), (Start: 14 @6386 has 108 MA's), (15, 6428), (38, 6701), (39, 6704), (50, 6878),

Gene: Jorgensen_14 Start: 10868, Stop: 11380, Start Num: 17

Candidate Starts for Jorgensen_14:

(Start: 17 @10868 has 223 MA's), (36, 11141), (48, 11279), (53, 11339), (56, 11357),

Gene: JuliaChild_16 Start: 11543, Stop: 12055, Start Num: 17

Candidate Starts for JuliaChild_16:

(7, 11342), (8, 11357), (Start: 17 @11543 has 223 MA's), (30, 11708), (36, 11816), (48, 11954), (53, 12014), (56, 12032),

Gene: KBG_15 Start: 11976, Stop: 12488, Start Num: 17

Candidate Starts for KBG_15:

(Start: 17 @11976 has 223 MA's), (36, 12249), (48, 12387), (53, 12447), (56, 12465),

Gene: KSSJEB_14 Start: 10881, Stop: 11393, Start Num: 17

Candidate Starts for KSSJEB_14:

(7, 10680), (8, 10695), (Start: 17 @10881 has 223 MA's), (30, 11046), (36, 11154), (48, 11292), (53, 11352), (56, 11370),

Gene: Kaine_9 Start: 6439, Stop: 6981, Start Num: 14

Candidate Starts for Kaine_9:

(Start: 14 @6439 has 108 MA's), (15, 6481), (38, 6763), (39, 6766), (40, 6775), (50, 6940),

Gene: Kanely_15 Start: 11652, Stop: 12164, Start Num: 17

Candidate Starts for Kanely_15:

(Start: 17 @11652 has 223 MA's), (36, 11925), (48, 12063), (53, 12123), (56, 12141),

Gene: Katalie_10 Start: 6876, Stop: 7421, Start Num: 14

Candidate Starts for Katalie_10:

(Start: 14 @6876 has 108 MA's), (15, 6918), (47, 7323), (55, 7392),

Gene: Kenmech_17 Start: 12156, Stop: 12668, Start Num: 17

Candidate Starts for Kenmech_17:

(Start: 17 @12156 has 223 MA's), (30, 12321), (36, 12429), (48, 12567), (53, 12627), (56, 12645),

Gene: KikiBouba_16 Start: 11623, Stop: 12135, Start Num: 17

Candidate Starts for KikiBouba_16:

(Start: 17 @11623 has 223 MA's), (30, 11788), (36, 11896), (48, 12034), (53, 12094), (56, 12112),

Gene: Killigrew_12 Start: 10517, Stop: 11029, Start Num: 17

Candidate Starts for Killigrew_12:

(Start: 17 @10517 has 223 MA's), (36, 10790), (48, 10928), (53, 10988), (56, 11006),

Gene: KyMonks1A_16 Start: 11387, Stop: 11899, Start Num: 17

Candidate Starts for KyMonks1A_16:

(8, 11201), (Start: 17 @11387 has 223 MA's), (36, 11660), (48, 11798), (53, 11858), (56, 11876),

Gene: Lamina13_14 Start: 10663, Stop: 11175, Start Num: 17

Candidate Starts for Lamina13_14:

(Start: 17 @10663 has 223 MA's), (36, 10936), (48, 11074), (53, 11134), (56, 11152),

Gene: Lannister_10 Start: 6609, Stop: 7163, Start Num: 14

Candidate Starts for Lannister_10:

(Start: 14 @6609 has 108 MA's), (38, 6942), (45, 7053), (47, 7065),

Gene: Legacy_9 Start: 6616, Stop: 7161, Start Num: 14

Candidate Starts for Legacy_9:

(Start: 14 @6616 has 108 MA's), (38, 6940), (47, 7063),

Gene: Lesedi_13 Start: 10821, Stop: 11333, Start Num: 17

Candidate Starts for Lesedi_13:

(Start: 17 @10821 has 223 MA's), (30, 10986), (36, 11094), (48, 11232), (53, 11292), (56, 11310),

Gene: Levia_14 Start: 11850, Stop: 12362, Start Num: 17

Candidate Starts for Levia_14:

(5, 11604), (7, 11649), (8, 11664), (Start: 17 @11850 has 223 MA's), (36, 12123), (48, 12261), (53, 12321), (56, 12339),

Gene: Leviticus_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Leviticus_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Licorice_16 Start: 11679, Stop: 12191, Start Num: 17

Candidate Starts for Licorice_16:

(Start: 17 @11679 has 223 MA's), (30, 11844), (36, 11952), (48, 12090), (53, 12150), (56, 12168),

Gene: Lika_9 Start: 6609, Stop: 7148, Start Num: 14

Candidate Starts for Lika_9:

(Start: 14 @6609 has 108 MA's), (47, 7050), (55, 7119),

Gene: LilBib_15 Start: 11622, Stop: 12134, Start Num: 17

Candidate Starts for LilBib_15:

(7, 11421), (8, 11436), (Start: 17 @11622 has 223 MA's), (36, 11895), (48, 12033), (53, 12093), (56, 12111),

Gene: Lockley_14 Start: 11001, Stop: 11513, Start Num: 17

Candidate Starts for Lockley_14:

(Start: 17 @11001 has 223 MA's), (36, 11274), (48, 11412), (53, 11472), (56, 11490),

Gene: Loofah_10 Start: 6516, Stop: 7034, Start Num: 14

Candidate Starts for Loofah_10:

(2, 6204), (3, 6210), (4, 6213), (6, 6384), (Start: 14 @6516 has 108 MA's), (24, 6642), (26, 6654), (31, 6750), (40, 6828),

Gene: Lopton_15 Start: 12429, Stop: 12941, Start Num: 17

Candidate Starts for Lopton_15:

(7, 12228), (8, 12243), (Start: 17 @12429 has 223 MA's), (30, 12594), (36, 12702), (48, 12840), (53, 12900), (56, 12918),

Gene: Lorelei_9 Start: 6602, Stop: 7147, Start Num: 14

Candidate Starts for Lorelei_9:

(Start: 14 @6602 has 108 MA's), (15, 6644), (45, 7037), (47, 7049), (55, 7118),

Gene: LunarLander_14 Start: 10789, Stop: 11301, Start Num: 17

Candidate Starts for LunarLander_14:

(7, 10588), (8, 10603), (Start: 17 @10789 has 223 MA's), (30, 10954), (36, 11062), (48, 11200), (53, 11260), (56, 11278),

Gene: MPlant7149_13 Start: 10639, Stop: 11151, Start Num: 17

Candidate Starts for MPlant7149_13:

(7, 10438), (8, 10453), (Start: 17 @10639 has 223 MA's), (30, 10804), (36, 10912), (48, 11050), (53, 11110), (56, 11128),

Gene: Magnar_14 Start: 10786, Stop: 11298, Start Num: 17

Candidate Starts for Magnar_14:

(Start: 17 @10786 has 223 MA's), (30, 10951), (36, 11059), (48, 11197), (53, 11257), (56, 11275),

Gene: Magnito_13 Start: 10538, Stop: 11050, Start Num: 17

Candidate Starts for Magnito_13:

(7, 10337), (8, 10352), (Start: 17 @10538 has 223 MA's), (30, 10703), (36, 10811), (48, 10949), (53, 11009), (56, 11027),

Gene: Makemake_14 Start: 12270, Stop: 12782, Start Num: 17

Candidate Starts for Makemake_14:

(Start: 17 @12270 has 223 MA's), (30, 12435), (36, 12543), (48, 12681), (53, 12741), (56, 12759),

Gene: Manatee_15 Start: 11070, Stop: 11582, Start Num: 17

Candidate Starts for Manatee_15:

(Start: 17 @11070 has 223 MA's), (36, 11343), (48, 11481), (53, 11541), (56, 11559),

Gene: Maneekul_9 Start: 6607, Stop: 7152, Start Num: 14

Candidate Starts for Maneekul_9:

(Start: 14 @6607 has 108 MA's), (47, 7054), (55, 7123),

Gene: Marav_12 Start: 7354, Stop: 7878, Start Num: 14

Candidate Starts for Marav_12:

(6, 7222), (Start: 14 @7354 has 108 MA's), (26, 7498), (40, 7672), (46, 7774),

Gene: Marcell_14 Start: 10998, Stop: 11510, Start Num: 17
Candidate Starts for Marcell_14:
(7, 10797), (8, 10812), (Start: 17 @10998 has 223 MA's), (30, 11163), (36, 11271), (48, 11409), (53, 11469), (56, 11487),

Gene: Marchy_13 Start: 10625, Stop: 11137, Start Num: 17
Candidate Starts for Marchy_13:
(Start: 17 @10625 has 223 MA's), (36, 10898), (48, 11036), (53, 11096), (56, 11114),

Gene: Marco3_14 Start: 11270, Stop: 11782, Start Num: 17
Candidate Starts for Marco3_14:
(Start: 17 @11270 has 223 MA's), (36, 11543), (48, 11681), (53, 11741), (56, 11759),

Gene: Marge_15 Start: 11521, Stop: 12033, Start Num: 17
Candidate Starts for Marge_15:
(7, 11320), (8, 11335), (Start: 17 @11521 has 223 MA's), (30, 11686), (36, 11794), (48, 11932), (53, 11992), (56, 12010),

Gene: Maroc7_13 Start: 10811, Stop: 11323, Start Num: 17
Candidate Starts for Maroc7_13:
(7, 10610), (8, 10625), (Start: 17 @10811 has 223 MA's), (36, 11084), (48, 11222), (53, 11282), (56, 11300),

Gene: Marsha_14 Start: 11254, Stop: 11766, Start Num: 17
Candidate Starts for Marsha_14:
(Start: 17 @11254 has 223 MA's), (30, 11419), (36, 11527), (48, 11665), (53, 11725), (56, 11743),

Gene: MaryBeth_14 Start: 11233, Stop: 11745, Start Num: 17
Candidate Starts for MaryBeth_14:
(Start: 17 @11233 has 223 MA's), (36, 11506), (48, 11644), (53, 11704), (56, 11722),

Gene: McGuire_15 Start: 11116, Stop: 11628, Start Num: 17
Candidate Starts for McGuire_15:
(Start: 17 @11116 has 223 MA's), (36, 11389), (48, 11527), (53, 11587), (56, 11605),

Gene: McSinger_15 Start: 11196, Stop: 11708, Start Num: 17
Candidate Starts for McSinger_15:
(Start: 17 @11196 has 223 MA's), (36, 11469), (48, 11607), (53, 11667), (56, 11685),

Gene: MetalQZJ_14 Start: 11233, Stop: 11745, Start Num: 17
Candidate Starts for MetalQZJ_14:
(Start: 17 @11233 has 223 MA's), (36, 11506), (48, 11644), (53, 11704), (56, 11722),

Gene: Michley_14 Start: 10980, Stop: 11492, Start Num: 17
Candidate Starts for Michley_14:
(Start: 17 @10980 has 223 MA's), (30, 11145), (36, 11253), (48, 11391), (53, 11451), (56, 11469),

Gene: MilleFeuille_13 Start: 10548, Stop: 11060, Start Num: 17
Candidate Starts for MilleFeuille_13:
(Start: 17 @10548 has 223 MA's), (36, 10821), (48, 10959), (53, 11019), (56, 11037),

Gene: Mkhuseli_15 Start: 11142, Stop: 11654, Start Num: 17
Candidate Starts for Mkhuseli_15:

(8, 10956), (Start: 17 @11142 has 223 MA's), (30, 11307), (36, 11415), (48, 11553), (53, 11613), (56, 11631),

Gene: Molly_15 Start: 10841, Stop: 11353, Start Num: 17

Candidate Starts for Molly_15:

(7, 10640), (8, 10655), (Start: 17 @10841 has 223 MA's), (30, 11006), (36, 11114), (48, 11252), (53, 11312), (56, 11330),

Gene: Monet_16 Start: 12038, Stop: 12550, Start Num: 17

Candidate Starts for Monet_16:

(7, 11837), (8, 11852), (Start: 17 @12038 has 223 MA's), (30, 12203), (36, 12311), (48, 12449), (53, 12509), (56, 12527),

Gene: Moose_13 Start: 11073, Stop: 11585, Start Num: 17

Candidate Starts for Moose_13:

(Start: 17 @11073 has 223 MA's), (36, 11346), (48, 11484), (53, 11544), (56, 11562),

Gene: MrGordo_14 Start: 10793, Stop: 11305, Start Num: 17

Candidate Starts for MrGordo_14:

(Start: 17 @10793 has 223 MA's), (36, 11066), (48, 11204), (53, 11264), (56, 11282),

Gene: Mryolo_13 Start: 10823, Stop: 11335, Start Num: 17

Candidate Starts for Mryolo_13:

(Start: 17 @10823 has 223 MA's), (30, 10988), (36, 11096), (48, 11234), (53, 11294), (56, 11312),

Gene: Mule_14 Start: 11108, Stop: 11620, Start Num: 17

Candidate Starts for Mule_14:

(Start: 17 @11108 has 223 MA's), (36, 11381), (48, 11519), (53, 11579), (56, 11597),

Gene: Museum_16 Start: 11127, Stop: 11639, Start Num: 17

Candidate Starts for Museum_16:

(7, 10926), (8, 10941), (Start: 17 @11127 has 223 MA's), (30, 11292), (36, 11400), (48, 11538), (53, 11598), (56, 11616),

Gene: NEHalo_14 Start: 10635, Stop: 11147, Start Num: 17

Candidate Starts for NEHalo_14:

(Start: 17 @10635 has 223 MA's), (36, 10908), (48, 11046), (53, 11106), (56, 11124),

Gene: Nabi_9 Start: 6602, Stop: 7147, Start Num: 14

Candidate Starts for Nabi_9:

(Start: 14 @6602 has 108 MA's), (15, 6644), (45, 7037), (47, 7049), (55, 7118),

Gene: Naira_15 Start: 12374, Stop: 12886, Start Num: 17

Candidate Starts for Naira_15:

(8, 12188), (Start: 17 @12374 has 223 MA's), (30, 12539), (36, 12647), (48, 12785), (53, 12845), (56, 12863),

Gene: Nanodon_11 Start: 6798, Stop: 7337, Start Num: 14

Candidate Starts for Nanodon_11:

(Start: 14 @6798 has 108 MA's), (15, 6840), (47, 7239), (55, 7308),

Gene: Nerdos_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Nerdos_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Nerujay_15 Start: 11530, Stop: 12042, Start Num: 17

Candidate Starts for Nerujay_15:

(7, 11329), (8, 11344), (Start: 17 @11530 has 223 MA's), (36, 11803), (48, 11941), (53, 12001), (56, 12019),

Gene: Nhonho_14 Start: 10979, Stop: 11491, Start Num: 17

Candidate Starts for Nhonho_14:

(7, 10778), (8, 10793), (Start: 17 @10979 has 223 MA's), (30, 11144), (36, 11252), (48, 11390), (53, 11450), (56, 11468),

Gene: Nishikigoi_9 Start: 6438, Stop: 6968, Start Num: 14

Candidate Starts for Nishikigoi_9:

(6, 6306), (Start: 13 @6432 has 3 MA's), (Start: 14 @6438 has 108 MA's), (27, 6600), (40, 6759), (55, 6939),

Gene: Niza_16 Start: 12146, Stop: 12658, Start Num: 17

Candidate Starts for Niza_16:

(Start: 17 @12146 has 223 MA's), (36, 12419), (48, 12557), (53, 12617), (56, 12635),

Gene: Norz_16 Start: 11782, Stop: 12294, Start Num: 17

Candidate Starts for Norz_16:

(11, 11608), (Start: 17 @11782 has 223 MA's), (36, 12055), (48, 12193), (53, 12253), (56, 12271),

Gene: Noxious_16 Start: 11814, Stop: 12326, Start Num: 17

Candidate Starts for Noxious_16:

(Start: 17 @11814 has 223 MA's), (30, 11979), (36, 12087), (48, 12225), (53, 12285), (56, 12303),

Gene: Ohno789_14 Start: 10925, Stop: 11437, Start Num: 17

Candidate Starts for Ohno789_14:

(Start: 17 @10925 has 223 MA's), (30, 11090), (36, 11198), (48, 11336), (53, 11396), (56, 11414),

Gene: Oliynyk_10 Start: 6796, Stop: 7344, Start Num: 14

Candidate Starts for Oliynyk_10:

(Start: 14 @6796 has 108 MA's), (35, 7102), (38, 7123), (47, 7246),

Gene: Omar_10 Start: 6663, Stop: 7190, Start Num: 14

Candidate Starts for Omar_10:

(6, 6531), (Start: 13 @6657 has 3 MA's), (Start: 14 @6663 has 108 MA's), (24, 6795), (26, 6807), (30, 6873), (40, 6981),

Gene: Oogway_13 Start: 11054, Stop: 11566, Start Num: 17

Candidate Starts for Oogway_13:

(Start: 17 @11054 has 223 MA's), (36, 11327), (48, 11465), (53, 11525), (56, 11543),

Gene: Ozzie_9 Start: 6616, Stop: 7161, Start Num: 14

Candidate Starts for Ozzie_9:

(Start: 14 @6616 has 108 MA's), (38, 6940), (47, 7063),

Gene: OzzyJ_10 Start: 6605, Stop: 7147, Start Num: 14

Candidate Starts for OzzyJ_10:

(Start: 14 @6605 has 108 MA's), (23, 6734), (47, 7049), (55, 7118),

Gene: PSullivan_16 Start: 11543, Stop: 12055, Start Num: 17

Candidate Starts for PSullivan_16:

(7, 11342), (8, 11357), (Start: 17 @11543 has 223 MA's), (36, 11816), (48, 11954), (53, 12014), (56, 12032),

Gene: Pablito_9 Start: 6493, Stop: 7029, Start Num: 14

Candidate Starts for Pablito_9:

(2, 6181), (3, 6187), (4, 6190), (6, 6361), (Start: 13 @6487 has 3 MA's), (Start: 14 @6493 has 108 MA's), (40, 6817),

Gene: PacerPaul_14 Start: 11310, Stop: 11822, Start Num: 17

Candidate Starts for PacerPaul_14:

(Start: 17 @11310 has 223 MA's), (36, 11583), (48, 11721), (53, 11781), (56, 11799),

Gene: Paedore_9 Start: 6516, Stop: 7034, Start Num: 14

Candidate Starts for Paedore_9:

(2, 6204), (3, 6210), (4, 6213), (6, 6384), (Start: 14 @6516 has 108 MA's), (24, 6642), (26, 6654), (31, 6750), (40, 6828),

Gene: Paolo_11 Start: 7046, Stop: 7567, Start Num: 14

Candidate Starts for Paolo_11:

(2, 6734), (3, 6740), (4, 6743), (6, 6914), (Start: 14 @7046 has 108 MA's), (26, 7187), (40, 7361), (46, 7463),

Gene: Papez_16 Start: 12506, Stop: 13018, Start Num: 17

Candidate Starts for Papez_16:

(7, 12305), (8, 12320), (Start: 17 @12506 has 223 MA's), (30, 12671), (36, 12779), (48, 12917), (53, 12977), (56, 12995),

Gene: Paphu_13 Start: 10499, Stop: 11011, Start Num: 17

Candidate Starts for Paphu_13:

(Start: 17 @10499 has 223 MA's), (36, 10772), (48, 10910), (53, 10970), (56, 10988),

Gene: Paraselene_13 Start: 10812, Stop: 11324, Start Num: 17

Candidate Starts for Paraselene_13:

(Start: 17 @10812 has 223 MA's), (30, 10977), (36, 11085), (48, 11223), (53, 11283), (56, 11301),

Gene: Pari_15 Start: 11278, Stop: 11790, Start Num: 17

Candidate Starts for Pari_15:

(Start: 17 @11278 has 223 MA's), (30, 11443), (36, 11551), (48, 11689), (53, 11749), (56, 11767),

Gene: Parliament_13 Start: 10881, Stop: 11393, Start Num: 17

Candidate Starts for Parliament_13:

(Start: 17 @10881 has 223 MA's), (30, 11046), (36, 11154), (48, 11292), (53, 11352), (56, 11370),

Gene: PascalRango_13 Start: 10739, Stop: 11251, Start Num: 17

Candidate Starts for PascalRango_13:

(Start: 17 @10739 has 223 MA's), (36, 11012), (48, 11150), (53, 11210), (56, 11228),

Gene: PattyP_16 Start: 11336, Stop: 11848, Start Num: 17

Candidate Starts for PattyP_16:

(7, 11135), (8, 11150), (Start: 17 @11336 has 223 MA's), (30, 11501), (36, 11609), (48, 11747), (53, 11807), (56, 11825),

Gene: Pavo_10 Start: 6719, Stop: 7261, Start Num: 14

Candidate Starts for Pavo_10:

(Start: 14 @6719 has 108 MA's), (22, 6842), (38, 7043), (39, 7046), (40, 7055), (50, 7220),

Gene: Payneful_14 Start: 10625, Stop: 11137, Start Num: 17

Candidate Starts for Payneful_14:

(Start: 17 @10625 has 223 MA's), (36, 10898), (48, 11036), (53, 11096), (56, 11114),

Gene: Pelly_15 Start: 11571, Stop: 12083, Start Num: 17

Candidate Starts for Pelly_15:

(Start: 17 @11571 has 223 MA's), (36, 11844), (48, 11982), (53, 12042), (56, 12060),

Gene: Pepe_15 Start: 11534, Stop: 12046, Start Num: 17

Candidate Starts for Pepe_15:

(7, 11333), (8, 11348), (Start: 17 @11534 has 223 MA's), (36, 11807), (48, 11945), (53, 12005), (56, 12023),

Gene: Perseus_15 Start: 11194, Stop: 11706, Start Num: 17

Candidate Starts for Perseus_15:

(Start: 17 @11194 has 223 MA's), (36, 11467), (48, 11605), (53, 11665), (56, 11683),

Gene: Peterson_17 Start: 12495, Stop: 13007, Start Num: 17

Candidate Starts for Peterson_17:

(Start: 17 @12495 has 223 MA's), (36, 12768), (48, 12906), (53, 12966), (56, 12984),

Gene: Petp2012_16 Start: 12010, Stop: 12522, Start Num: 17

Candidate Starts for Petp2012_16:

(7, 11809), (8, 11824), (Start: 17 @12010 has 223 MA's), (30, 12175), (36, 12283), (48, 12421), (53, 12481), (56, 12499),

Gene: Petruchio_14 Start: 10752, Stop: 11264, Start Num: 17

Candidate Starts for Petruchio_14:

(Start: 17 @10752 has 223 MA's), (30, 10917), (36, 11025), (48, 11163), (53, 11223), (56, 11241),

Gene: PherrisBueller_15 Start: 10963, Stop: 11475, Start Num: 17

Candidate Starts for PherrisBueller_15:

(Start: 17 @10963 has 223 MA's), (36, 11236), (48, 11374), (53, 11434), (56, 11452),

Gene: Phettuccine_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Phettuccine_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: PhineBark_13 Start: 11850, Stop: 12362, Start Num: 17

Candidate Starts for PhineBark_13:

(5, 11604), (7, 11649), (8, 11664), (Start: 17 @11850 has 223 MA's), (36, 12123), (48, 12261), (53, 12321), (56, 12339),

Gene: Phlippers_13 Start: 12034, Stop: 12546, Start Num: 17

Candidate Starts for Phlippers_13:

(Start: 17 @12034 has 223 MA's), (36, 12307), (48, 12445), (53, 12505), (56, 12523),

Gene: PhrostyMug_14 Start: 11108, Stop: 11620, Start Num: 17

Candidate Starts for PhrostyMug_14:

(Start: 17 @11108 has 223 MA's), (36, 11381), (48, 11519), (53, 11579), (56, 11597),

Gene: PinkPlastic_13 Start: 10877, Stop: 11389, Start Num: 17

Candidate Starts for PinkPlastic_13:

(Start: 17 @10877 has 223 MA's), (36, 11150), (48, 11288), (53, 11348), (56, 11366),

Gene: Pinto_16 Start: 11185, Stop: 11697, Start Num: 17

Candidate Starts for Pinto_16:

(7, 10984), (8, 10999), (Start: 17 @11185 has 223 MA's), (30, 11350), (36, 11458), (48, 11596), (53, 11656), (56, 11674),

Gene: Pippin_16 Start: 11446, Stop: 11958, Start Num: 17

Candidate Starts for Pippin_16:

(7, 11245), (8, 11260), (Start: 17 @11446 has 223 MA's), (30, 11611), (36, 11719), (48, 11857), (53, 11917), (56, 11935),

Gene: Pita2_16 Start: 11543, Stop: 12055, Start Num: 17

Candidate Starts for Pita2_16:

(7, 11342), (8, 11357), (Start: 17 @11543 has 223 MA's), (36, 11816), (48, 11954), (53, 12014), (56, 12032),

Gene: PowerRanger_14 Start: 11369, Stop: 11881, Start Num: 17

Candidate Starts for PowerRanger_14:

(Start: 17 @11369 has 223 MA's), (30, 11534), (36, 11642), (48, 11780), (53, 11840), (56, 11858),

Gene: ProMouse_13 Start: 11506, Stop: 12018, Start Num: 17

Candidate Starts for ProMouse_13:

(Start: 17 @11506 has 223 MA's), (30, 11671), (36, 11779), (48, 11917), (53, 11977), (56, 11995),

Gene: Provolone_10 Start: 6449, Stop: 6991, Start Num: 14

Candidate Starts for Provolone_10:

(Start: 14 @6449 has 108 MA's), (22, 6572), (38, 6773), (39, 6776), (40, 6785), (50, 6950),

Gene: Puginator_11 Start: 6992, Stop: 7513, Start Num: 14

Candidate Starts for Puginator_11:

(2, 6680), (3, 6686), (4, 6689), (6, 6860), (Start: 14 @6992 has 108 MA's), (26, 7133), (40, 7307), (46, 7409),

Gene: Puppet_14 Start: 11125, Stop: 11637, Start Num: 17

Candidate Starts for Puppet_14:

(Start: 17 @11125 has 223 MA's), (36, 11398), (48, 11536), (53, 11596), (56, 11614),

Gene: QTRLifeCrisis_14 Start: 11511, Stop: 12023, Start Num: 17

Candidate Starts for QTRLifeCrisis_14:

(7, 11310), (8, 11325), (Start: 17 @11511 has 223 MA's), (30, 11676), (36, 11784), (48, 11922), (53, 11982), (56, 12000),

Gene: R4_9 Start: 6477, Stop: 7001, Start Num: 14

Candidate Starts for R4_9:

(2, 6165), (3, 6171), (4, 6174), (6, 6345), (Start: 14 @6477 has 108 MA's), (26, 6621), (40, 6795), (52, 6963),

Gene: Raid_14 Start: 10802, Stop: 11314, Start Num: 17

Candidate Starts for Raid_14:

(Start: 17 @10802 has 223 MA's), (30, 10967), (36, 11075), (48, 11213), (53, 11273), (56, 11291),

Gene: Rajelicia_14 Start: 11018, Stop: 11530, Start Num: 17

Candidate Starts for Rajelicia_14:

(Start: 17 @11018 has 223 MA's), (30, 11183), (36, 11291), (48, 11429), (53, 11489), (56, 11507),

Gene: Rana_9 Start: 6602, Stop: 7147, Start Num: 14

Candidate Starts for Rana_9:

(Start: 14 @6602 has 108 MA's), (15, 6644), (45, 7037), (47, 7049), (55, 7118),

Gene: RedBear_11 Start: 6876, Stop: 7421, Start Num: 14

Candidate Starts for RedBear_11:

(Start: 14 @6876 has 108 MA's), (15, 6918), (47, 7323), (55, 7392),

Gene: Rhynn_14 Start: 11112, Stop: 11624, Start Num: 17

Candidate Starts for Rhynn_14:

(Start: 17 @11112 has 223 MA's), (30, 11277), (36, 11385), (48, 11523), (53, 11583), (56, 11601),

Gene: RidgeCB_14 Start: 10639, Stop: 11151, Start Num: 17

Candidate Starts for RidgeCB_14:

(8, 10453), (Start: 17 @10639 has 223 MA's), (30, 10804), (36, 10912), (48, 11050), (53, 11110), (56, 11128),

Gene: Ringer_14 Start: 11370, Stop: 11882, Start Num: 17

Candidate Starts for Ringer_14:

(7, 11169), (8, 11184), (Start: 17 @11370 has 223 MA's), (36, 11643), (48, 11781), (53, 11841), (56, 11859),

Gene: Rohr_15 Start: 11318, Stop: 11830, Start Num: 17

Candidate Starts for Rohr_15:

(7, 11117), (8, 11132), (Start: 17 @11318 has 223 MA's), (30, 11483), (36, 11591), (48, 11729), (53, 11789), (56, 11807),

Gene: Rubeus_15 Start: 11144, Stop: 11656, Start Num: 17

Candidate Starts for Rubeus_15:

(Start: 17 @11144 has 223 MA's), (30, 11309), (36, 11417), (48, 11555), (53, 11615), (56, 11633),

Gene: Rufus_15 Start: 11201, Stop: 11713, Start Num: 17

Candidate Starts for Rufus_15:

(7, 11000), (8, 11015), (Start: 17 @11201 has 223 MA's), (30, 11366), (36, 11474), (48, 11612), (53, 11672), (56, 11690),

Gene: Ruotula_13 Start: 11321, Stop: 11833, Start Num: 17

Candidate Starts for Ruotula_13:

(Start: 17 @11321 has 223 MA's), (36, 11594), (48, 11732), (53, 11792), (56, 11810),

Gene: Rusticus_10 Start: 6796, Stop: 7344, Start Num: 14

Candidate Starts for Rusticus_10:

(Start: 14 @6796 has 108 MA's), (35, 7102), (38, 7123), (47, 7246),

Gene: Rutherferd_16 Start: 11662, Stop: 12174, Start Num: 17

Candidate Starts for Rutherferd_16:

(7, 11461), (8, 11476), (Start: 17 @11662 has 223 MA's), (36, 11935), (48, 12073), (53, 12133), (56, 12151),

Gene: STLscum_15 Start: 11231, Stop: 11743, Start Num: 17

Candidate Starts for STLscum_15:

(7, 11030), (8, 11045), (Start: 17 @11231 has 223 MA's), (30, 11396), (36, 11504), (48, 11642), (53, 11702), (56, 11720),

Gene: Saftant_9 Start: 6729, Stop: 7268, Start Num: 14

Candidate Starts for Saftant_9:

(6, 6594), (Start: 14 @6729 has 108 MA's), (38, 7050), (39, 7053), (40, 7062), (50, 7227),

Gene: Sagefire_15 Start: 11913, Stop: 12425, Start Num: 17

Candidate Starts for Sagefire_15:

(Start: 17 @11913 has 223 MA's), (30, 12078), (36, 12186), (48, 12324), (53, 12384), (56, 12402),

Gene: Sandaddy_13 Start: 11037, Stop: 11549, Start Num: 17

Candidate Starts for Sandaddy_13:

(Start: 17 @11037 has 223 MA's), (36, 11310), (48, 11448), (53, 11508), (56, 11526),

Gene: Sanya_14 Start: 11699, Stop: 12211, Start Num: 17

Candidate Starts for Sanya_14:

(Start: 17 @11699 has 223 MA's), (36, 11972), (48, 12110), (53, 12170), (56, 12188),

Gene: SarFire_14 Start: 10897, Stop: 11409, Start Num: 17

Candidate Starts for SarFire_14:

(7, 10696), (8, 10711), (Start: 17 @10897 has 223 MA's), (30, 11062), (36, 11170), (48, 11308), (53, 11368), (56, 11386),

Gene: SarahRose_9 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for SarahRose_9:

(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051), (55, 7120),

Gene: Scowl_15 Start: 11589, Stop: 12101, Start Num: 17

Candidate Starts for Scowl_15:

(Start: 17 @11589 has 223 MA's), (30, 11754), (36, 11862), (48, 12000), (53, 12060), (56, 12078),

Gene: Seabiscuit_16 Start: 11118, Stop: 11630, Start Num: 17

Candidate Starts for Seabiscuit_16:

(Start: 17 @11118 has 223 MA's), (36, 11391), (48, 11529), (53, 11589), (56, 11607),

Gene: Seanderson_15 Start: 11562, Stop: 12074, Start Num: 17

Candidate Starts for Seanderson_15:

(Start: 17 @11562 has 223 MA's), (30, 11727), (36, 11835), (48, 11973), (53, 12033), (56, 12051),

Gene: ShortQueendom_14 Start: 10703, Stop: 11215, Start Num: 17

Candidate Starts for ShortQueendom_14:

(Start: 17 @10703 has 223 MA's), (30, 10868), (36, 10976), (48, 11114), (53, 11174), (56, 11192),

Gene: Sibs6_16 Start: 11337, Stop: 11849, Start Num: 17

Candidate Starts for Sibs6_16:

(7, 11136), (8, 11151), (Start: 17 @11337 has 223 MA's), (30, 11502), (36, 11610), (48, 11748), (53, 11808), (56, 11826),

Gene: SkiPole_16 Start: 11211, Stop: 11723, Start Num: 17

Candidate Starts for SkiPole_16:

(7, 11010), (8, 11025), (Start: 17 @11211 has 223 MA's), (36, 11484), (48, 11622), (53, 11682), (56, 11700),

Gene: Slagathor_15 Start: 10989, Stop: 11501, Start Num: 17

Candidate Starts for Slagathor_15:

(7, 10788), (8, 10803), (Start: 17 @10989 has 223 MA's), (30, 11154), (36, 11262), (48, 11400), (53, 11460), (56, 11478),

Gene: Smairt_15 Start: 11508, Stop: 12020, Start Num: 17

Candidate Starts for Smairt_15:

(8, 11322), (Start: 17 @11508 has 223 MA's), (30, 11673), (36, 11781), (48, 11919), (53, 11979), (56, 11997),

Gene: Smeagol_15 Start: 11925, Stop: 12437, Start Num: 17

Candidate Starts for Smeagol_15:

(Start: 17 @11925 has 223 MA's), (36, 12198), (48, 12336), (53, 12396), (56, 12414),

Gene: Snazzy_12 Start: 10518, Stop: 11030, Start Num: 17

Candidate Starts for Snazzy_12:

(Start: 17 @10518 has 223 MA's), (36, 10791), (48, 10929), (53, 10989), (56, 11007),

Gene: Snorlax_9 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for Snorlax_9:

(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051), (55, 7120),

Gene: Solon_14 Start: 11669, Stop: 12181, Start Num: 17

Candidate Starts for Solon_14:

(Start: 17 @11669 has 223 MA's), (36, 11942), (48, 12080), (53, 12140), (56, 12158),

Gene: Sorpresa_14 Start: 11037, Stop: 11549, Start Num: 17

Candidate Starts for Sorpresa_14:

(Start: 17 @11037 has 223 MA's), (36, 11310), (48, 11448), (53, 11508), (56, 11526),

Gene: South40_10 Start: 6876, Stop: 7421, Start Num: 14

Candidate Starts for South40_10:

(Start: 14 @6876 has 108 MA's), (15, 6918), (47, 7323), (55, 7392),

Gene: Speedwell_14 Start: 8417, Stop: 8953, Start Num: 14

Candidate Starts for Speedwell_14:

(Start: 14 @8417 has 108 MA's), (38, 8735), (39, 8738), (40, 8747), (42, 8780), (50, 8912),

Gene: SpikeBT_16 Start: 11973, Stop: 12485, Start Num: 17

Candidate Starts for SpikeBT_16:

(Start: 17 @11973 has 223 MA's), (36, 12246), (48, 12384), (53, 12444), (56, 12462),

Gene: SqueakyClean_10 Start: 6741, Stop: 7274, Start Num: 14

Candidate Starts for SqueakyClean_10:

(Start: 13 @6735 has 3 MA's), (Start: 14 @6741 has 108 MA's), (26, 6891), (40, 7065), (55, 7245),

Gene: Squee_15 Start: 11513, Stop: 12025, Start Num: 17

Candidate Starts for Squee_15:

(Start: 17 @11513 has 223 MA's), (30, 11678), (36, 11786), (48, 11924), (53, 11984), (56, 12002),

Gene: StewieG_13 Start: 10885, Stop: 11397, Start Num: 17

Candidate Starts for StewieG_13:

(Start: 17 @10885 has 223 MA's), (30, 11050), (36, 11158), (48, 11296), (53, 11356), (56, 11374),

Gene: StrongArm_13 Start: 11761, Stop: 12273, Start Num: 17

Candidate Starts for StrongArm_13:

(Start: 17 @11761 has 223 MA's), (36, 12034), (48, 12172), (53, 12232), (56, 12250),

Gene: Sudan_9 Start: 6726, Stop: 7268, Start Num: 14

Candidate Starts for Sudan_9:

(Start: 14 @6726 has 108 MA's), (15, 6768), (22, 6849), (38, 7050), (39, 7053), (40, 7062), (50, 7227),

Gene: Sujidade_10 Start: 6900, Stop: 7445, Start Num: 14

Candidate Starts for Sujidade_10:

(Start: 14 @6900 has 108 MA's), (15, 6942), (47, 7347), (55, 7416),

Gene: Sumter_13 Start: 10628, Stop: 11140, Start Num: 17

Candidate Starts for Sumter_13:

(Start: 17 @10628 has 223 MA's), (36, 10901), (48, 11039), (53, 11099), (56, 11117),

Gene: SunkenRoot_9 Start: 6788, Stop: 7327, Start Num: 14

Candidate Starts for SunkenRoot_9:

(Start: 14 @6788 has 108 MA's), (15, 6830), (38, 7109), (39, 7112), (40, 7121), (43, 7163), (50, 7286),

Gene: SunsetPointe_9 Start: 6635, Stop: 7180, Start Num: 14

Candidate Starts for SunsetPointe_9:

(Start: 14 @6635 has 108 MA's), (38, 6959), (47, 7082),

Gene: Sunshine924_13 Start: 10612, Stop: 11124, Start Num: 17

Candidate Starts for Sunshine924_13:

(8, 10426), (Start: 17 @10612 has 223 MA's), (36, 10885), (48, 11023), (53, 11083), (56, 11101),

Gene: Superstar_11 Start: 7579, Stop: 8088, Start Num: 14

Candidate Starts for Superstar_11:

(6, 7447), (Start: 13 @7573 has 3 MA's), (Start: 14 @7579 has 108 MA's), (26, 7708), (40, 7882),

Gene: SwissCheese_14 Start: 11073, Stop: 11585, Start Num: 17

Candidate Starts for SwissCheese_14:

(Start: 17 @11073 has 223 MA's), (36, 11346), (48, 11484), (53, 11544), (56, 11562),

Gene: Switzer_15 Start: 10996, Stop: 11508, Start Num: 17

Candidate Starts for Switzer_15:

(Start: 17 @10996 has 223 MA's), (30, 11161), (36, 11269), (48, 11407), (53, 11467), (56, 11485),

Gene: Swole_16 Start: 11543, Stop: 12055, Start Num: 17

Candidate Starts for Swole_16:

(7, 11342), (8, 11357), (Start: 17 @11543 has 223 MA's), (30, 11708), (36, 11816), (48, 11954), (53, 12014), (56, 12032),

Gene: TagePhighter_10 Start: 6604, Stop: 7149, Start Num: 14
Candidate Starts for TagePhighter_10:
(Start: 14 @6604 has 108 MA's), (15, 6646), (47, 7051), (55, 7120),

Gene: Tasp14_15 Start: 11313, Stop: 11825, Start Num: 17
Candidate Starts for Tasp14_15:
(Start: 17 @11313 has 223 MA's), (36, 11586), (48, 11724), (53, 11784), (56, 11802),

Gene: Tefunt_9 Start: 6438, Stop: 6968, Start Num: 14
Candidate Starts for Tefunt_9:
(6, 6306), (Start: 13 @6432 has 3 MA's), (Start: 14 @6438 has 108 MA's), (27, 6600), (40, 6759), (55, 6939),

Gene: Teodoridan_12 Start: 10445, Stop: 10957, Start Num: 17
Candidate Starts for Teodoridan_12:
(Start: 17 @10445 has 223 MA's), (36, 10718), (48, 10856), (53, 10916), (56, 10934),

Gene: TheloniousMonk_16 Start: 12056, Stop: 12568, Start Num: 17
Candidate Starts for TheloniousMonk_16:
(Start: 17 @12056 has 223 MA's), (30, 12221), (36, 12329), (48, 12467), (53, 12527), (56, 12545),

Gene: Thestral_10 Start: 6515, Stop: 7033, Start Num: 14
Candidate Starts for Thestral_10:
(3, 6209), (4, 6212), (6, 6383), (Start: 13 @6509 has 3 MA's), (Start: 14 @6515 has 108 MA's), (16, 6569), (26, 6653), (40, 6827),

Gene: Thor_14 Start: 10897, Stop: 11409, Start Num: 17
Candidate Starts for Thor_14:
(7, 10696), (8, 10711), (Start: 17 @10897 has 223 MA's), (30, 11062), (36, 11170), (48, 11308), (53, 11368), (56, 11386),

Gene: TinaBelcher_9 Start: 6460, Stop: 6981, Start Num: 14
Candidate Starts for TinaBelcher_9:
(3, 6154), (4, 6157), (6, 6328), (Start: 13 @6454 has 3 MA's), (Start: 14 @6460 has 108 MA's), (26, 6601), (40, 6775),

Gene: Toma_9 Start: 6605, Stop: 7150, Start Num: 14
Candidate Starts for Toma_9:
(Start: 14 @6605 has 108 MA's), (45, 7040), (47, 7052), (55, 7121),

Gene: Topgun_14 Start: 10802, Stop: 11314, Start Num: 17
Candidate Starts for Topgun_14:
(5, 10556), (7, 10601), (8, 10616), (Start: 17 @10802 has 223 MA's), (36, 11075), (48, 11213), (53, 11273), (56, 11291),

Gene: Tote_16 Start: 11543, Stop: 12055, Start Num: 17
Candidate Starts for Tote_16:
(7, 11342), (8, 11357), (Start: 17 @11543 has 223 MA's), (30, 11708), (36, 11816), (48, 11954), (53, 12014), (56, 12032),

Gene: Traft412_16 Start: 11724, Stop: 12236, Start Num: 17

Candidate Starts for Traft412_16:

(8, 11538), (Start: 17 @11724 has 223 MA's), (30, 11889), (36, 11997), (48, 12135), (53, 12195), (56, 12213),

Gene: Treddle_16 Start: 12039, Stop: 12551, Start Num: 17

Candidate Starts for Treddle_16:

(8, 11853), (Start: 17 @12039 has 223 MA's), (36, 12312), (48, 12450), (53, 12510), (56, 12528),

Gene: Tripl3t_15 Start: 11724, Stop: 12236, Start Num: 17

Candidate Starts for Tripl3t_15:

(Start: 17 @11724 has 223 MA's), (30, 11889), (36, 11997), (48, 12135), (53, 12195), (56, 12213),

Gene: Triste_9 Start: 6605, Stop: 7147, Start Num: 14

Candidate Starts for Triste_9:

(Start: 14 @6605 has 108 MA's), (23, 6734), (47, 7049), (55, 7118),

Gene: Triumph_11 Start: 6504, Stop: 7037, Start Num: 14

Candidate Starts for Triumph_11:

(2, 6192), (3, 6198), (4, 6201), (6, 6372), (Start: 13 @6498 has 3 MA's), (Start: 14 @6504 has 108 MA's), (40, 6828),

Gene: Trouble_14 Start: 11374, Stop: 11886, Start Num: 17

Candidate Starts for Trouble_14:

(Start: 17 @11374 has 223 MA's), (36, 11647), (48, 11785), (53, 11845), (56, 11863),

Gene: TrvxScott_8 Start: 6455, Stop: 6982, Start Num: 13

Candidate Starts for TrvxScott_8:

(3, 6155), (4, 6158), (6, 6329), (Start: 13 @6455 has 3 MA's), (Start: 14 @6461 has 108 MA's), (26, 6602), (40, 6776),

Gene: TuanPN_9 Start: 6608, Stop: 7153, Start Num: 14

Candidate Starts for TuanPN_9:

(Start: 14 @6608 has 108 MA's), (47, 7055), (55, 7124),

Gene: Turj99_13 Start: 10817, Stop: 11329, Start Num: 17

Candidate Starts for Turj99_13:

(Start: 17 @10817 has 223 MA's), (36, 11090), (48, 11228), (53, 11288), (56, 11306),

Gene: TwoPeat_15 Start: 11336, Stop: 11848, Start Num: 17

Candidate Starts for TwoPeat_15:

(Start: 17 @11336 has 223 MA's), (30, 11501), (36, 11609), (48, 11747), (53, 11807), (56, 11825),

Gene: U2_14 Start: 10998, Stop: 11510, Start Num: 17

Candidate Starts for U2_14:

(Start: 17 @10998 has 223 MA's), (30, 11163), (36, 11271), (48, 11409), (53, 11469), (56, 11487),

Gene: Unstoppable_9 Start: 6636, Stop: 7181, Start Num: 14

Candidate Starts for Unstoppable_9:

(Start: 14 @6636 has 108 MA's), (38, 6960), (47, 7083),

Gene: Urza_9 Start: 6850, Stop: 7386, Start Num: 14

Candidate Starts for Urza_9:

(3, 6547), (4, 6550), (6, 6721), (Start: 14 @6850 has 108 MA's), (28, 7027), (37, 7162), (54, 7354),

Gene: Vanseggelen_12 Start: 6357, Stop: 6899, Start Num: 14

Candidate Starts for Vanseggelen_12:

(6, 6222), (Start: 14 @6357 has 108 MA's), (38, 6681), (39, 6684), (50, 6858),

Gene: Verabelle_10 Start: 6722, Stop: 7264, Start Num: 14

Candidate Starts for Verabelle_10:

(6, 6587), (Start: 14 @6722 has 108 MA's), (28, 6908), (38, 7046), (39, 7049), (42, 7091), (50, 7223),

Gene: Verse_9 Start: 6789, Stop: 7328, Start Num: 14

Candidate Starts for Verse_9:

(Start: 14 @6789 has 108 MA's), (15, 6831), (38, 7110), (39, 7113), (40, 7122), (50, 7287),

Gene: VieEnRose_9 Start: 6924, Stop: 7457, Start Num: 14

Candidate Starts for VieEnRose_9:

(3, 6621), (4, 6624), (6, 6795), (Start: 14 @6924 has 108 MA's), (28, 7098), (54, 7425),

Gene: Violet_13 Start: 11633, Stop: 12145, Start Num: 17

Candidate Starts for Violet_13:

(5, 11387), (7, 11432), (8, 11447), (Start: 17 @11633 has 223 MA's), (36, 11906), (48, 12044), (53, 12104), (56, 12122),

Gene: Watermelon_16 Start: 11925, Stop: 12437, Start Num: 17

Candidate Starts for Watermelon_16:

(8, 11739), (Start: 17 @11925 has 223 MA's), (36, 12198), (48, 12336), (53, 12396), (56, 12414),

Gene: Werner_9 Start: 6605, Stop: 7150, Start Num: 14

Candidate Starts for Werner_9:

(Start: 14 @6605 has 108 MA's), (15, 6647), (47, 7052), (55, 7121),

Gene: Whatever_9 Start: 6605, Stop: 7150, Start Num: 14

Candidate Starts for Whatever_9:

(Start: 14 @6605 has 108 MA's), (15, 6647), (47, 7052), (55, 7121),

Gene: Wheeler_14 Start: 11091, Stop: 11603, Start Num: 17

Candidate Starts for Wheeler_14:

(7, 10890), (8, 10905), (Start: 17 @11091 has 223 MA's), (30, 11256), (36, 11364), (48, 11502), (53, 11562), (56, 11580),

Gene: Wilkins_14 Start: 10802, Stop: 11314, Start Num: 17

Candidate Starts for Wilkins_14:

(5, 10556), (7, 10601), (8, 10616), (Start: 17 @10802 has 223 MA's), (36, 11075), (48, 11213), (53, 11273), (56, 11291),

Gene: Yasdnil_9 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for Yasdnil_9:

(Start: 14 @6604 has 108 MA's), (47, 7051), (55, 7120),

Gene: Yosif_10 Start: 7092, Stop: 7634, Start Num: 14

Candidate Starts for Yosif_10:

(Start: 14 @7092 has 108 MA's), (50, 7593),

Gene: Zainub_11 Start: 6992, Stop: 7513, Start Num: 14

Candidate Starts for Zainub_11:

(2, 6680), (3, 6686), (4, 6689), (6, 6860), (Start: 14 @6992 has 108 MA's), (26, 7133), (40, 7307), (46, 7409),

Gene: ZamZam_9 Start: 6698, Stop: 7228, Start Num: 14

Candidate Starts for ZamZam_9:

(Start: 14 @6698 has 108 MA's), (15, 6740), (28, 6872), (38, 7010), (39, 7013), (40, 7022), (50, 7187),

Gene: Zeeculate_13 Start: 10786, Stop: 11298, Start Num: 17

Candidate Starts for Zeeculate_13:

(7, 10585), (8, 10600), (Start: 17 @10786 has 223 MA's), (30, 10951), (36, 11059), (48, 11197), (53, 11257), (56, 11275),

Gene: Zemlya_10 Start: 6604, Stop: 7149, Start Num: 14

Candidate Starts for Zemlya_10:

(Start: 14 @6604 has 108 MA's), (47, 7051), (55, 7120),

Gene: Zephyr_14 Start: 10926, Stop: 11438, Start Num: 17

Candidate Starts for Zephyr_14:

(Start: 17 @10926 has 223 MA's), (30, 11091), (36, 11199), (48, 11337), (53, 11397), (56, 11415),

Gene: Zeuska_15 Start: 11605, Stop: 12117, Start Num: 17

Candidate Starts for Zeuska_15:

(Start: 17 @11605 has 223 MA's), (36, 11878), (48, 12016), (53, 12076), (56, 12094),

Gene: phiCAM_10 Start: 8461, Stop: 8991, Start Num: 14

Candidate Starts for phiCAM_10:

(Start: 14 @8461 has 108 MA's), (15, 8503), (38, 8773), (39, 8776), (40, 8785), (46, 8887), (50, 8950),

Gene: phiHau3_11 Start: 6678, Stop: 7202, Start Num: 14

Candidate Starts for phiHau3_11:

(Start: 13 @6672 has 3 MA's), (Start: 14 @6678 has 108 MA's), (20, 6771), (29, 6870), (33, 6936), (40, 6993),