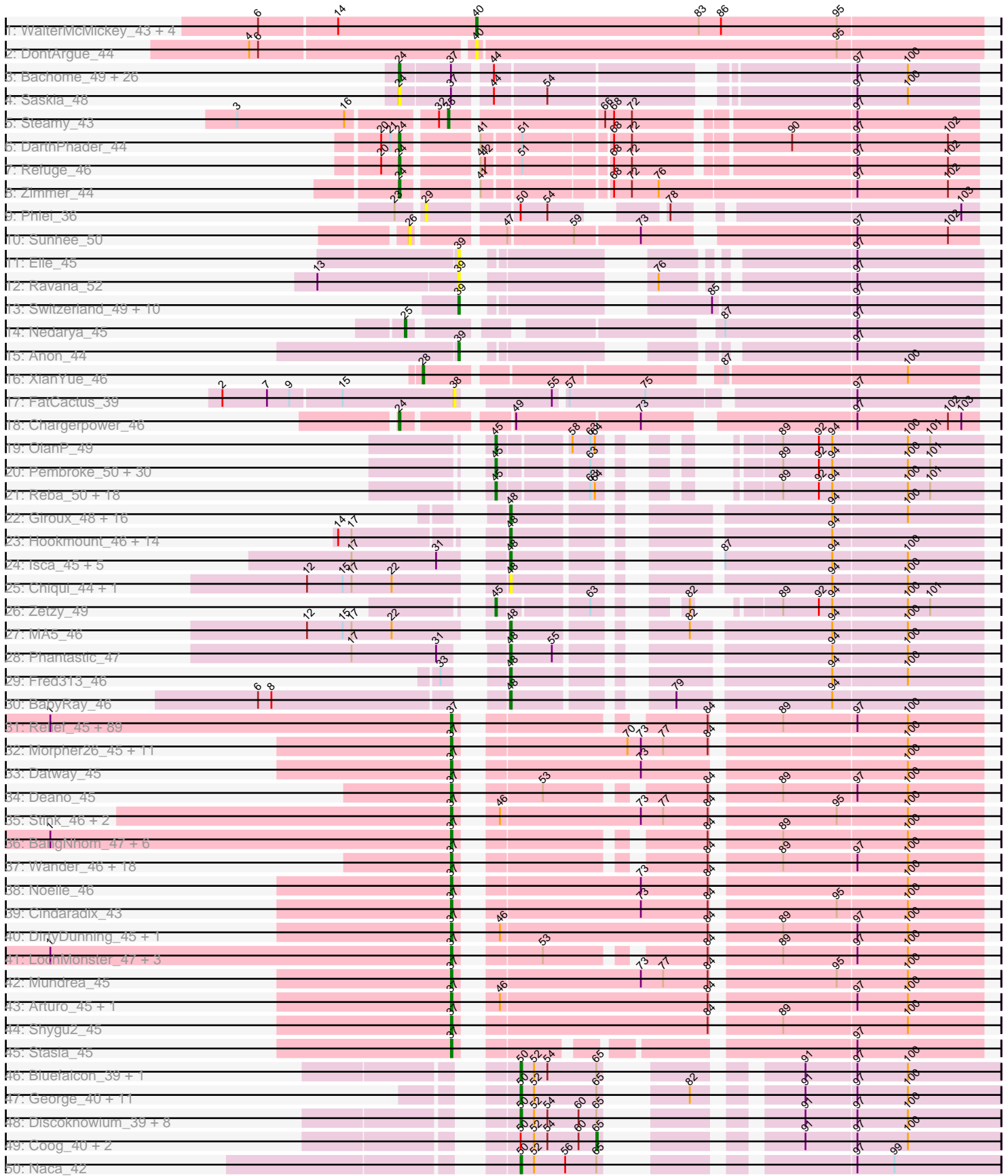


Pham 294331



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 294331 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294331 has 445 members, 50 are drafts.

Phages represented in each track:

- Track 1 : WalterMcMickey_43, Rebeuca_45, Topanga_43, Kristoff_45, Twister_43
- Track 2 : DontArgue_44
- Track 3 : Bachome_49, Sham4_47, Wolpertinger_46, Orange_47, Insomnia_48, Snape_47, Mabel_47, TinyTimmy_47, Munch_48, Et2Brutus_46, Fibonacci_47, Bud_47, Lucivia_48, Bowtie_48, Mulciber_47, MaCh_48, Petersenfast_46, Gilberta_48, Salz_46, Timothy_47, Aneem_48, Kimba_47, Flaverint_48, Hutc2_47, Ebony_47, Jabith_48, Joselito_48
- Track 4 : Saskia_48
- Track 5 : Steamy_43
- Track 6 : DarthPhader_44
- Track 7 : Refuge_46
- Track 8 : Zimmer_44
- Track 9 : Phlei_36
- Track 10 : Sunhee_50
- Track 11 : Elle_45
- Track 12 : Ravana_52
- Track 13 : Switzerland_49, Warrior24_50, Epsocamisio_48, Remus_49, Battleship_50, Strosahl_49, Oofda_49, Rosalind_48, Waits_49, MinecraftSteve_50, JSwag_48
- Track 14 : Nedarya_45
- Track 15 : Anon_44
- Track 16 : XianYue_46
- Track 17 : FatCactus_39
- Track 18 : Chargerpower_46
- Track 19 : OlanP_49
- Track 20 : Pembroke_50, Aglet_51, DaHudson_50, MadMarie_50, Methuselah_47, BuzzBuzz_48, Soshari_52, Misomonster_51, Daishi_49, Farber_50, Lowa_50, Microwolf_50, MuchMore_53, TinyPebbles_49, LarryKay_50, Ollie_50, AgronaGT15_49, Rummer_49, KADY_50, GingkoMaracino_50, HashRod_51, Louie6_49, Malinsilva_52, Phoxy_50, Spike509_50, Lilith_51, AugsMagnumOpus_53, Grub_50, Watson_50, Bxz2_46, PGHhamlin_52
- Track 21 : Reba_50, Calvinny_50, Marius_51, HaveUMetTed_51, Groupthink_51, ClownCar_50, PurpleHaze_50, Kalb97_51, JeppNRM_51, Pawn_50, Heliosoles_49, Phranny_51, Manu_50, PhishRPhriends_48, SoilDragon_50, Kalnoky_51, Jobu08_49, ACFishhook_49, Gemma_49
- Track 22 : Giroux_48, Zarafa_46, Heathen_46, Kachowdy_46, Idleandcovert_47, SaturnRing_47, DropBear_46, Pistachio_48, Puppy_48, Scout_46, BlueBird_48,

Roimos_46, Bugatti_47, Marchesa_46, Clammy_47, TNguyen7_47, HelDan_46

- Track 23 : Hookmount_46, EtoileNova_47, Pocahontas_46, Popcicle_46, Noella_46, ResDef_46, Margo_46, QuinnKiro_45, Norbert_45, Panamaxus_44, Lambert1_46, Caviar_46, Veracruz_45, Todacoro_46, Texage_45
- Track 24 : Isca_45, JF4_46, JF2_46, MK4_46, Rockstar_46, B1_43
- Track 25 : Chiqui_44, BabyJohn_44
- Track 26 : Zetzy_49
- Track 27 : MA5_46
- Track 28 : Phantastic_47
- Track 29 : Fred313_46
- Track 30 : BabyRay_46
- Track 31 : Relief_45, KekoraPapaka_46, Sultana_46, Melvin_48, HamSlice_45, JetBlade_46, Eapen_46, RockieBear_45, Jaykayelowell_44, Phelipe_47, Shaka_46, Clarenza_45, Ohfah_47, Annyong_46, Thanksgivukkah_45, Baby16_46, LappelDuVide_46, Tinybot_45, Abdiel_46, Broseidon_46, Bartimeaus_46, Polymorphads_47, Nebs_47, CentreCat_46, Nyxis_46, Lemur_46, Morrow_47, SteMason_45, Iracema64_47, Koreni_45, Iceman_46, Sparxx_47, Pumbaa_46, BubbleTrouble_45, Kingmustik0402_46, TinaFeyge_46, LeoAvram_46, Florean_46, MeeZee_46, PeterPeter_46, Spino_45, Dhanush_46, Bombshell_46, Pipcraft_44, NorthStar_45, Ruin_46, Blackmoor_46, Cintron_45, Alberto7_47, Connomayer_46, KFPoly_45, Koan_44, Peaches_46, Eros_46, LittleGuy_46, Scamp_46, Holli_45, Citius_46, Palestino_45, Phontbonne_46, Kampy_46, OKaNui_46, ICleared_46, TygerBlood_46, Ulysses_45, Chaph_46, TroyPia_47, Millski_45, Caelakin_46, LittleB_46, Medusa_46, Sabertooth_46, Wizard007_46, Skipitt_45, Lunsford_47, Druantia_46, Eurydice_47, Burger_44, Happiness_45, Roosevelt_45, Albee_46, Maxo_47, Flux_46, Eris_45, Eagle_46, Commander_46, TiroTheta9_46, Lorenzo_46, YoSam321_46, Taquarus_46
- Track 32 : Morpher26_45, Cici_45, Xena_44, Perplexer_45, Achebe_44, Badger_44, Bumblebee11_44, Backyardigan_44, PetiteSangsue_45, AbbysRanger_45, Wile_45, Katalie136_45
- Track 33 : Datway_45
- Track 34 : Deano_45
- Track 35 : Stink_46, AvatarAhPeg_45, Miramae_45
- Track 36 : BangNhom_47, SheldonCooper_48, Kremtemulon_46, LHTSCC_48, Obama12_47, ChampagnePapi_48, Cerulean_47
- Track 37 : Wander_46, Huxley_46, Cocoaberry_46, Gadost_46, Avle17_46, NotAPhaseMom_46, Bruiser_45, Houdini22_46, BellusTerra_47, Mazhar510_46, Camperdownii_44, Kyee_46, Funston_45, SenorClean_46, JoongJeon_45, Mayonnaise_45, Phacado_46, Nemo27_46, Maverick_46
- Track 38 : Noelle_46
- Track 39 : Cindaradix_43
- Track 40 : DirtyDunning_45, Phighter1804_46
- Track 41 : LochMonster_47, Rosa24_45, Romney_46, Wilbur_46
- Track 42 : Mundrea_45
- Track 43 : Arturo_45, Kratak_46
- Track 44 : Shygu2_45
- Track 45 : Stasia_45
- Track 46 : Bluefalcon_39, MarysWell_39
- Track 47 : George_40, Florence4_40, Prin Ashe11_41, Florence1_39, Micasa_42, HuhtaEnerson15_41, Milcery_41, LittleCherry_41, Tarynearal_39, Bonamassa_41, Dublin_39, Swirley_43
- Track 48 : Discoknowium_39, Lev2_40, Aragog_39, AgentM_39, Archetta_40, Phlorence_39, ForGetIt_40, Jovo_40, PickleBack_40

- Track 49 : Coog_40, Midas2_40, Twigg_41
- Track 50 : Naca_42
- Track 51 : EITiger69_42, Scorpia_44, Chadwick_44
- Track 52 : SydNat_42, Ghoulboy_42, Zolita_41
- Track 53 : Airmid_41
- Track 54 : Conspiracy_40, Tiger_39, Theia_38
- Track 55 : Cuco_40
- Track 56 : PetterN_44
- Track 57 : Jabiru_41
- Track 58 : UnionJack_41
- Track 59 : Benedict_43
- Track 60 : Dorothea_49, SmellyB_49, BennyP_50, Kipper29_49, Candra_49, VohminGhazi_49, Kazan_50, EricB_49, Neeharika16_48
- Track 61 : DroogsArmy_43, Timshel_45
- Track 62 : HINdeR_43
- Track 63 : Groundhog_43, Saintus_39, Astro_44, NearlyHeadless_44
- Track 64 : Phillis_46
- Track 65 : Stephig9_45
- Track 66 : Roary_45, Smeadley_45, Dixon_44, Expelliarmus_44, Danforth_44, Caitlin_43
- Track 67 : RyeScarlet_48, EmyBug_46, PackMan_46, Ugenie5_44, Scherzo_47, Fayely_47, Sachima_44, Eidsmoe_47, Holes_46, Myxus_47, Conquerage_47, Phonnegut_47, Qobbit_47, Pioneer_47, Phaeder_47, ExplosioNervosa_47, Ayanochan_48, HortumSL17_47, Tubs_47, Jiawan_45, Spouty_47, Lilleskat_45, Priya_47, Beemo_47, Hanray_45, Onglai_45, EdogawaKiddo_45, Aliter_47, Alma_47, Catalina_48
- Track 68 : Celestialunch_46, MegTheThird_46
- Track 69 : Klodlith_47, SheaKeira_46
- Track 70 : Charm_46
- Track 71 : BogosyJay_46, Maminiaina_46
- Track 72 : Yecey3_48
- Track 73 : Keziacharles14_47
- Track 74 : Elephantoon_46
- Track 75 : DreamTeam1_46
- Track 76 : RER2_30, BobbyDazzler_37, PhailMary_36, Lillie_37, Shuman_37, Bryce_37, Natosaleda_37, Erik_37, Nancinator_37, Yogi_37, Jester_37, RexFury_37, Harlequin_37, Rhodalysa_37, Rasputin_37, Espica_37, Phrankenstein_37, Belenaria_37, UhSalsa_37, Gollum_37, Swann_37, CosmicSans_37, TWAMP_37, Alpacados_36, Takoda_37, Yoncess_37, AngryOrchard_35, Bonanza_37
- Track 77 : Bradshaw_37, StCroix_37, Naiad_37, Alatin_37
- Track 78 : Partridge_37
- Track 79 : AppleCloud_35, Krishelle_37, Dinger_37
- Track 80 : RGL3_32
- Track 81 : Hiro_37

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

The start number called the most often in the published annotations is 37, it was called in 141 of the 395 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_45, Abdiel_46, Achebe_44, Albee_46, Alberto7_47, Annyong_46, Arturo_45, AvatarAhPeg_45, Avle17_46, Baby16_46, Backyardigan_44, Badger_44, BangNhom_47, Bartimeaus_46, BellusTerra_47, Blackmoor_46, Bombshell_46, Broseidon_46, Bruiser_45, BubbleTrouble_45, Bumblebee11_44, Burger_44, Caelakin_46, Camperdownii_44, CentreCat_46, Cerulean_47, ChampagnePapi_48, Chaph_46, Cici_45, Cindaradix_43, Cintron_45, Citius_46, Clarenza_45, Cocoaberry_46, Commander_46, Connomayer_46, Datway_45, Deano_45, Dhanush_46, DirtyDunning_45, Druantia_46, Eagle_46, Eapen_46, Eris_45, Eros_46, Eurydice_47, Florean_46, Flux_46, Funston_45, Gadost_46, HamSlice_45, Happiness_45, Holli_45, Houdini22_46, Huxley_46, ICleared_46, Iceman_46, Iracema64_47, Jaykayelowell_44, JetBlade_46, JoongJeon_45, KFPoly_45, Kamy_46, Katalie136_45, KekoraPapaka_46, Kingmustik0402_46, Koan_44, Koreni_45, Kratak_46, Kremtemulon_46, Kyee_46, LHTSCC_48, LappelDuVide_46, Lemur_46, LeoAvram_46, LittleB_46, LittleGuy_46, LochMonster_47, Lorenzo_46, Lunsford_47, Maverick_46, Maxo_47, Mayonnaise_45, Mazhar510_46, Medusa_46, MeeZee_46, Melvin_48, Millski_45, Miramae_45, Morpher26_45, Morrow_47, Mundrea_45, Nebs_47, Nemo27_46, Noelle_46, NorthStar_45, NotAPhaseMom_46, Nyxis_46, OKaNui_46, Obama12_47, Ohfah_47, Palestino_45, Peaches_46, Perplexer_45, PeterPeter_46, PetiteSangsue_45, Phacado_46, Felipe_47, Phighter1804_46, Phontbonne_46, Pipcraft_44, Polymorphads_47, Pumbaa_46, Relief_45, RockieBear_45, Romney_46, Roosevelt_45, Rosa24_45, Ruin_46, Sabertooth_46, Scamp_46, SeniorClean_46, Shaka_46, SheldonCooper_48, Shygu2_45, Skipitt_45, Sparxx_47, Spino_45, Stasia_45, SteMason_45, Stink_46, Sultana_46, Taquarus_46, Thanksgivukkah_45, TinaFeyge_46, Tinybot_45, TiroTheta9_46, TroyPia_47, TygerBlood_46, Ulysses_45, Wander_46, Wilbur_46, Wile_45, Wizard007_46, Xena_44, YoSam321_46,

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

- Aneem_48, Bachome_49, Bowtie_48, Bud_47, Ebony_47, Et2Brutus_46, Fibonacci_47, Flaverint_48, Gilberta_48, Hutc2_47, Insomnia_48, Jabith_48, Joselito_48, Kimba_47, Lucivia_48, MaCh_48, Mabel_47, Mulciber_47, Munch_48, Orange_47, Petersenfast_46, Salz_46, Saskia_48, Sham4_47, Snape_47, Timothy_47, TinyTimmy_47, Wolpertinger_46,

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

- ACFishhook_49, AgentM_39, Aglet_51, AgronaGT15_49, Airmid_41, Alatin_37, Aliter_47, Alma_47, Alpacados_36, AngryOrchard_35, Anon_44, AppleCloud_35, Aragog_39, Archetta_40, Astro_44, AugsMagnumOpus_53, Ayanochan_48, B1_43, BabyJohn_44, BabyRay_46, Battleship_50, Beemo_47, Belenaria_37, Benedict_43, BennyP_50, BlueBird_48, Bluefalcon_39, BobbyDazzler_37, BogosyJay_46, Bonamassa_41, Bonanza_37, Bradshaw_37, Bryce_37, Bugatti_47, BuzzBuzz_48, Bxz2_46, Caitlin_43, Calvinny_50, Candra_49, Catalina_48, Caviar_46, Celestiallunch_46, Chadwick_44, Chargerpower_46, Charm_46, Chiqui_44, Clammy_47, ClownCar_50, Conquerage_47, Conspiracy_40, Coog_40, CosmicSans_37, Cuco_40, DaHudson_50, Daishi_49, Danforth_44, DARTHPhader_44, Dinger_37, Discoknowium_39, Dixon_44, DontArgue_44, Dorothea_49, DreamTeam1_46, DroogsArmy_43, DropBear_46, Dublin_39, EdogawaKiddo_45, Eidsmoe_47, EITiger69_42, Elephantoon_46, Elle_45, EmyBug_46, Epsocamisio_48, EricB_49, Erik_37, Espica_37, EtoileNova_47, Expelliarmus_44, ExplosioNervosa_47, Farber_50, FatCactus_39, Fayely_47, Florence1_39, Florence4_40, ForGetIt_40, Fred313_46, Gemma_49, George_40, Ghoulyboy_42, GingkoMaracino_50, Giroux_48, Gollum_37, Groundhog_43, Grouphink_51,

Grub_50, HINdeR_43, Hanray_45, Harlequin_37, HashRod_51, HaveUMetTed_51, Heathen_46, HelDan_46, Heliosoles_49, Hiro_37, Horex_46, Hookmount_46, HortumSL17_47, HuhtaEnerson15_41, Idleandcovert_47, Isca_45, JF2_46, JF4_46, JSwag_48, Jabiru_41, JeppNRM_51, Jester_37, Jiawan_45, Jobu08_49, Jovo_40, KADY_50, Kachowdy_46, Kalb97_51, Kalnoky_51, Kazan_50, Keziacharles14_47, Kipper29_49, Klodlith_47, Krishelle_37, Kristoff_45, Lambert1_46, LarryKay_50, Lev2_40, Lilith_51, Lilleskat_45, Lillie_37, LittleCherry_41, Louie6_49, Iowa_50, MA5_46, MK4_46, MadMarie_50, Malinsilva_52, Maminaiaina_46, Manu_50, Marchesa_46, Margo_46, Marius_51, MarysWell_39, MegTheThird_46, Methuselah_47, Micasa_42, Microwolf_50, Midas2_40, Milcery_41, MinecraftSteve_50, Misomonster_51, MuchMore_53, Myxus_47, Naca_42, Naiad_37, Nancinator_37, Natosaleda_37, NearlyHeadless_44, Nedarya_45, Neeharika16_48, Noella_46, Norbert_45, OlanP_49, Ollie_50, Onglai_45, Oofda_49, PGHhamlin_52, PackMan_46, Panamaxus_44, Partridge_37, Pawn_50, Pembroke_50, PetterN_44, Phaeder_47, PhailMary_36, Phantastic_47, Phillis_46, PhishRPhriends_48, Phlei_36, Phlorence_39, Phonnegut_47, Phoxy_50, Phrankenstein_37, Phranny_51, PickleBack_40, Pioneer_47, Pistachio_48, Pocahontas_46, Popcicle_46, Prinash11_41, Priya_47, Puppy_48, PurpleHaze_50, Qobbit_47, QuinnKiro_45, RER2_30, RGL3_32, Rasputin_37, Ravana_52, Reba_50, Rebeuca_45, Refuge_46, Remus_49, ResDef_46, RexFury_37, Rhodalysa_37, Roary_45, Rockstar_46, Roimos_46, Rosalind_48, Rummer_49, RyeScarlet_48, Sachima_44, Saintus_39, SaturnRing_47, Scherzo_47, Scorpia_44, Scout_46, SheaKeira_46, Shuman_37, Smeadley_45, SmellyB_49, SoilDragon_50, Soshari_52, Spike509_50, Spouty_47, StCroix_37, Steamy_43, Stephig9_45, Strosahl_49, Sunhee_50, Swann_37, Swirley_43, Switzerland_49, SydNat_42, TNguyen7_47, TWAMP_37, Takoda_37, Tarynearal_39, Texage_45, Theia_38, Tiger_39, Timshel_45, TinyPebbles_49, Todacoro_46, Topanga_43, Tubs_47, Twigg_41, Twister_43, Ugenie5_44, UhSalsa_37, UnionJack_41, Veracruz_45, VohminGhazi_49, Waits_49, WalterMcMickey_43, Warrior24_50, Watson_50, XianYue_46, Yecy3_48, Yogi_37, Yoncess_37, Zarafa_46, Zetzy_49, Zimmer_44, Zolita_41,

Summary by start number:

Start 10:

- Found in 9 of 445 (2.0%) of genes in pham
- Manual Annotations of this start: 7 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BennyP_50 (A6), Candra_49 (A6), Dorothea_49 (A6), EricB_49 (A6), Kazan_50 (A6), Kipper29_49 (A6), Neeharika16_48 (A6), SmellyB_49 (A6), VohminGhazi_49 (A6),

Start 24:

- Found in 69 of 445 (15.5%) of genes in pham
- Manual Annotations of this start: 54 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aliter_47 (A9), Alma_47 (A9), Aneem_48 (A11), Ayanochan_48 (A9), Bachome_49 (A11), Beemo_47 (A9), BogosyJay_46 (A9), Bowtie_48 (A11), Bud_47 (A11), Catalina_48 (A9), Celestiallunch_46 (A9), Chargerpower_46 (A22), Conquerage_47 (A9), DarthPhader_44 (A12), Ebony_47 (A11), EdogawaKiddo_45 (A9), Eidsmoe_47 (A9), Elephantoon_46 (A9), EmyBug_46 (A9), Et2Brutus_46 (A11), ExplosioNervosa_47 (A9), Fayely_47 (A9), Fibonacci_47 (A11), Flaverint_48 (A11), Gilberta_48 (A11), Hanray_45 (A9), Horex_46 (A9), HortumSL17_47 (A9), Hutc2_47 (A11), Insomnia_48 (A11), Jabith_48 (A11),

Jiawan_45 (A9), Joselito_48 (A11), Keziacharles14_47 (A9), Kimba_47 (A11), Lilleskat_45 (A9), Lucivia_48 (A11), MaCh_48 (A11), Mabel_47 (A11), Maminiaina_46 (A9), MegTheThird_46 (A9), Mulciber_47 (A11), Munch_48 (A11), Myxus_47 (A9), Onglai_45 (A9), Orange_47 (A11), PackMan_46 (A9), Petersenfast_46 (A11), Phaeder_47 (A9), Phonnegut_47 (A9), Pioneer_47 (A9), Priya_47 (A9), Qobbit_47 (A9), Refuge_46 (A12), RyeScarlet_48 (A9), Sachima_44 (A9), Salz_46 (A11), Saskia_48 (A11), Scherzo_47 (A9), Sham4_47 (A11), Snape_47 (A11), Spouty_47 (A9), Timothy_47 (A11), TinyTimmy_47 (A11), Tubs_47 (A9), Ugenie5_44 (A9), Wolpertinger_46 (A11), Yecy3_48 (A9), Zimmer_44 (A12),

Start 25:

- Found in 5 of 445 (1.1%) of genes in pham
- Manual Annotations of this start: 4 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Charm_46 (A9), DreamTeam1_46 (A9), Klodlith_47 (A9), Nedarya_45 (A15), SheaKeira_46 (A9),

Start 26:

- Found in 1 of 445 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sunhee_50 (A14),

Start 28:

- Found in 1 of 445 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: XianYue_46 (A2),

Start 29:

- Found in 1 of 445 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phlei_36 (A13),

Start 35:

- Found in 1 of 445 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Steamy_43 (A12),

Start 36:

- Found in 4 of 445 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 395
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Partridge_37 (CA),

Start 37:

- Found in 174 of 445 (39.1%) of genes in pham
- Manual Annotations of this start: 141 of 395
- Called 83.9% of time when present
- Phage (with cluster) where this start called: AbbysRanger_45 (A4), Abdiel_46 (A4), Achebe_44 (A4), Albee_46 (A4), Alberto7_47 (A4), Annyong_46 (A4), Arturo_45 (A4),

AvatarAhPeg_45 (A4), Avle17_46 (A4), Baby16_46 (A4), Backyardigan_44 (A4), Badger_44 (A4), BangNhom_47 (A4), Bartimeaus_46 (A4), BellusTerra_47 (A4), Blackmoor_46 (A4), Bombshell_46 (A4), Broseidon_46 (A4), Bruiser_45 (A4), BubbleTrouble_45 (A4), Bumblebee11_44 (A4), Burger_44 (A4), Caelakin_46 (A4), Camperdownii_44 (A4), CentreCat_46 (A4), Cerulean_47 (A4), ChampagnePapi_48 (A4), Chaph_46 (A4), Cici_45 (A4), Cindaradix_43 (A4), Cintron_45 (A4), Citius_46 (A4), Clarenza_45 (A4), Cocoaberry_46 (A4), Commander_46 (A4), Connomayer_46 (A4), Datway_45 (A4), Deano_45 (A4), Dhanush_46 (A4), DirtyDunning_45 (A4), Druantia_46 (A4), Eagle_46 (A4), Eapen_46 (A4), Eris_45 (A4), Eros_46 (A4), Eurydice_47 (A4), Florean_46 (A4), Flux_46 (A4), Funston_45 (A4), Gadost_46 (A4), HamSlice_45 (A4), Happiness_45 (A4), Holli_45 (A4), Houdini22_46 (A4), Huxley_46 (A4), ICleared_46 (A4), Iceman_46 (A4), Iracema64_47 (A4), Jaykayelowell_44 (A4), JetBlade_46 (A4), JoongJeon_45 (A4), KFPoly_45 (A4), Kampy_46 (A4), Katalie136_45 (A4), KekoraPapaka_46 (A4), Kingmustik0402_46 (A4), Koan_44 (A4), Koreni_45 (A4), Kratak_46 (A4), Kremtemulon_46 (A4), Kyee_46 (A4), LHTSCC_48 (A4), LappelDuVide_46 (A4), Lemur_46 (A4), LeoAvram_46 (A4), LittleB_46 (A4), LittleGuy_46 (A4), LochMonster_47 (A4), Lorenzo_46 (A4), Lunsford_47 (A4), Maverick_46 (A4), Maxo_47 (A4), Mayonnaise_45 (A4), Mazhar510_46 (A4), Medusa_46 (A4), MeeZee_46 (A4), Melvin_48 (A4), Millski_45 (A4), Miramae_45 (A4), Morpher26_45 (A4), Morrow_47 (A4), Mundrea_45 (A4), Nebs_47 (A4), Nemo27_46 (A4), Noelle_46 (A4), NorthStar_45 (A4), NotAPhaseMom_46 (A4), Nyxis_46 (A4), OKaNui_46 (A4), Obama12_47 (A4), Ohfah_47 (A4), Palestino_45 (A4), Peaches_46 (A4), Perplexer_45 (A4), PeterPeter_46 (A4), PetiteSangsue_45 (A4), Phacado_46 (A4), Phelipe_47 (A4), Phighter1804_46 (A4), Phontbonne_46 (A4), Pipcraft_44 (A4), Polymorphads_47 (A4), Pumbaa_46 (A4), Relief_45 (A4), RockieBear_45 (A4), Romney_46 (A4), Roosevelt_45 (A4), Rosa24_45 (A4), Ruin_46 (A4), Sabertooth_46 (A4), Scamp_46 (A4), SeniorClean_46 (A4), Shaka_46 (A4), SheldonCooper_48 (A4), Shygu2_45 (A4), Skipitt_45 (A4), Sparxx_47 (A4), Spino_45 (A4), Stasia_45 (A4), SteMason_45 (A4), Stink_46 (A4), Sultana_46 (A4), Taquarus_46 (A4), Thanksgivukkah_45 (A4), TinaFeyge_46 (A4), Tinybot_45 (A4), TiroTheta9_46 (A4), TroyPia_47 (A4), TygerBlood_46 (A4), Ulysses_45 (A4), Wander_46 (A4), Wilbur_46 (A4), Wile_45 (A4), Wizard007_46 (A4), Xena_44 (A4), YoSam321_46 (A4),

Start 38:

- Found in 1 of 445 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FatCactus_39 (A20),

Start 39:

- Found in 17 of 445 (3.8%) of genes in pham
- Manual Annotations of this start: 15 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_44 (A15), Battleship_50 (A15), DroogsArmy_43 (A7), Elle_45 (A15), Epsocamisio_48 (A15), HINdeR_43 (A7), JSwag_48 (A15), MinecraftSteve_50 (A15), Oofda_49 (A15), Ravana_52 (A15), Remus_49 (A15), Rosalind_48 (A15), Strosahl_49 (A15), Switzerland_49 (A15), Timshel_45 (A7), Waits_49 (A15), Warrior24_50 (A15),

Start 40:

- Found in 6 of 445 (1.3%) of genes in pham
- Manual Annotations of this start: 5 of 395

- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue_44 (A10), Kristoff_45 (A10), Rebeuca_45 (A10), Topanga_43 (A10), Twister_43 (A10), WalterMcMickey_43 (A10),

Start 45:

- Found in 52 of 445 (11.7%) of genes in pham
- Manual Annotations of this start: 49 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ACFishhook_49 (A3), Aglet_51 (A3), AgronaGT15_49 (A3), AugsMagnumOpus_53 (A3), BuzzBuzz_48 (A3), Bxz2_46 (A3), Calvinny_50 (A3), ClownCar_50 (A3), DaHudson_50 (A3), Daishi_49 (A3), Farber_50 (A3), Gemma_49 (A3), GingkoMaracino_50 (A3), Groupthink_51 (A3), Grub_50 (A3), HashRod_51 (A3), HaveUMetTed_51 (A3), Heliosoles_49 (A3), JeppNRM_51 (A3), Jobu08_49 (A3), KADY_50 (A3), Kalb97_51 (A3), Kalnoky_51 (A3), LarryKay_50 (A3), Lilith_51 (A3), Louie6_49 (A3), Iowa_50 (A3), MadMarie_50 (A3), Malinsilva_52 (A3), Manu_50 (A3), Marius_51 (A3), Methuselah_47 (A3), Microwolf_50 (A3), Misomonster_51 (A3), MuchMore_53 (A3), OlanP_49 (A3), Ollie_50 (A3), PGHhamlin_52 (A3), Pawn_50 (A3), Pembroke_50 (A3), PhishRPhriends_48 (A3), Phoxy_50 (A3), Phranny_51 (A3), PurpleHaze_50 (A3), Reba_50 (A3), Rummer_49 (A3), SoilDragon_50 (A3), Soshari_52 (A3), Spike509_50 (A3), TinyPebbles_49 (A3), Watson_50 (A3), Zetzy_49 (A3),

Start 47:

- Found in 47 of 445 (10.6%) of genes in pham
- Manual Annotations of this start: 35 of 395
- Called 76.6% of time when present
- Phage (with cluster) where this start called: Alatin_37 (CA), Alpacados_36 (CA), AngryOrchard_35 (CA), AppleCloud_35 (CA), Belenaria_37 (CA), BobbyDazzler_37 (CA), Bonanza_37 (CA), Bradshaw_37 (CA), Bryce_37 (CA), CosmicSans_37 (CA), Dinger_37 (CA), Erik_37 (CA), Espica_37 (CA), Gollum_37 (CA), Harlequin_37 (CA), Hiro_37 (CA), Jester_37 (CA), Krishelle_37 (CA), Lillie_37 (CA), Naiad_37 (CA), Nancinator_37 (CA), Natosaleda_37 (CA), PhailMary_36 (CA), Phrankenstien_37 (CA), RER2_30 (CA), Rasputin_37 (CA), RexFury_37 (CA), Rhodalysa_37 (CA), Shuman_37 (CA), StCroix_37 (CA), Swann_37 (CA), TWAMP_37 (CA), Takoda_37 (CA), UhSalsa_37 (CA), Yogi_37 (CA), Yoncess_37 (CA),

Start 48:

- Found in 44 of 445 (9.9%) of genes in pham
- Manual Annotations of this start: 33 of 395
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B1_43 (A3), BabyJohn_44 (A3), BabyRay_46 (A3), BlueBird_48 (A3), Bugatti_47 (A3), Caviar_46 (A3), Chiqui_44 (A3), Clammy_47 (A3), DropBear_46 (A3), EtoileNova_47 (A3), Fred313_46 (A3), Giroux_48 (A3), Heathen_46 (A3), HelDan_46 (A3), Hookmount_46 (A3), Idleandcovert_47 (A3), Isca_45 (A3), JF2_46 (A3), JF4_46 (A3), Kachowdy_46 (A3), Lambert1_46 (A3), MA5_46 (A3), MK4_46 (A3), Marchesa_46 (A3), Margo_46 (A3), Noella_46 (A3), Norbert_45 (A3), Panamaxus_44 (A3), Phantastic_47 (A3), Pistachio_48 (A3), Pocahontas_46 (A3), Popcicle_46 (A3), Puppy_48 (A3), QuinnKiro_45 (A3), ResDef_46 (A3), Rockstar_46 (A3), Roimos_46 (A3), SaturnRing_47 (A3), Scout_46 (A3), TNguyen7_47 (A3), Texage_45 (A3), Todacoro_46 (A3), Veracruz_45 (A3), Zarafa_46 (A3),

Start 50:

- Found in 57 of 445 (12.8%) of genes in pham
- Manual Annotations of this start: 44 of 395
- Called 86.0% of time when present
- Phage (with cluster) where this start called: AgentM_39 (A5), Airmid_41 (A5), Aragog_39 (A5), Archetta_40 (A5), Astro_44 (A8), Benedict_43 (A5), Bluefalcon_39 (A5), Bonamassa_41 (A5), Caitlin_43 (A8), Chadwick_44 (A5), Cuco_40 (A5), Danforth_44 (A8), Discoknowium_39 (A5), Dixon_44 (A8), Dublin_39 (A5), EITiger69_42 (A5), Expelliarmus_44 (A8), Florence1_39 (A5), Florence4_40 (A5), ForGetIt_40 (A5), George_40 (A5), Ghoulboy_42 (A5), Groundhog_43 (A8), HuhtaEnerson15_41 (A5), Jabiru_41 (A5), Jovo_40 (A5), Lev2_40 (A5), LittleCherry_41 (A5), MarysWell_39 (A5), Micasa_42 (A5), Milcery_41 (A5), Naca_42 (A5), NearlyHeadless_44 (A8), PetterN_44 (A5), Phillis_46 (A8), Phlorence_39 (A5), PickleBack_40 (A5), Prinashe11_41 (A5), RGL3_32 (CA), Roary_45 (A8), Saintus_39 (A8), Scorpia_44 (A5), Smeadley_45 (A8), Stephig9_45 (A8), Swirley_43 (A5), SydNat_42 (A5), Tarynearal_39 (A5), UnionJack_41 (A5), Zolita_41 (A5),

Start 52:

- Found in 48 of 445 (10.8%) of genes in pham
- Manual Annotations of this start: 3 of 395
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Conspiracy_40 (A5), Theia_38 (A5), Tiger_39 (A5),

Start 65:

- Found in 42 of 445 (9.4%) of genes in pham
- Manual Annotations of this start: 2 of 395
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Coog_40 (A5), Midas2_40 (A5), Twigg_41 (A5),

Summary by clusters:

There are 17 clusters represented in this pham: A15, A14, A22, A11, A10, A13, A12, CA, A20, A3, A2, A5, A4, A7, A6, A9, A8,

Info for manual annotations of cluster A10:

- Start number 40 was manually annotated 5 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 24 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 24 was manually annotated 3 times for cluster A12.
- Start number 35 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:

- Start number 25 was manually annotated 1 time for cluster A15.
- Start number 39 was manually annotated 12 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 28 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:

- Start number 24 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A3:

- Start number 45 was manually annotated 49 times for cluster A3.
- Start number 48 was manually annotated 33 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 37 was manually annotated 141 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 50 was manually annotated 33 times for cluster A5.
- Start number 52 was manually annotated 3 times for cluster A5.
- Start number 65 was manually annotated 2 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 7 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 39 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 50 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 24 was manually annotated 26 times for cluster A9.
- Start number 25 was manually annotated 3 times for cluster A9.

Info for manual annotations of cluster CA:

- Start number 36 was manually annotated 1 time for cluster CA.
- Start number 47 was manually annotated 35 times for cluster CA.

Gene Information:

Gene: ACFishhook_49 Start: 32280, Stop: 32032, Start Num: 45

Candidate Starts for ACFishhook_49:

(Start: 45 @32280 has 49 MA's), (63, 32226), (64, 32223), (89, 32163), (92, 32139), (94, 32130), (100, 32082), (101, 32067),

Gene: AbbysRanger_45 Start: 31867, Stop: 31544, Start Num: 37

Candidate Starts for AbbysRanger_45:

(Start: 37 @31867 has 141 MA's), (70, 31768), (73, 31759), (77, 31744), (84, 31714), (100, 31594),

Gene: Abdiel_46 Start: 31881, Stop: 31579, Start Num: 37

Candidate Starts for Abdiel_46:

(1, 32151), (Start: 37 @31881 has 141 MA's), (84, 31749), (89, 31710), (97, 31662), (100, 31629),

Gene: Achebe_44 Start: 31850, Stop: 31527, Start Num: 37

Candidate Starts for Achebe_44:

(Start: 37 @31850 has 141 MA's), (70, 31751), (73, 31742), (77, 31727), (84, 31697), (100, 31577),

Gene: AgentM_39 Start: 30764, Stop: 30501, Start Num: 50

Candidate Starts for AgentM_39:

(Start: 50 @30764 has 44 MA's), (Start: 52 @30755 has 3 MA's), (54, 30746), (60, 30725), (Start: 65 @30713 has 2 MA's), (91, 30629), (97, 30596), (100, 30563),

Gene: Aglet_51 Start: 32309, Stop: 32061, Start Num: 45

Candidate Starts for Aglet_51:

(Start: 45 @32309 has 49 MA's), (63, 32255), (89, 32192), (92, 32168), (94, 32159), (100, 32111), (101, 32096),

Gene: AgronaGT15_49 Start: 32160, Stop: 31912, Start Num: 45

Candidate Starts for AgronaGT15_49:

(Start: 45 @32160 has 49 MA's), (63, 32106), (89, 32043), (92, 32019), (94, 32010), (100, 31962), (101, 31947),

Gene: Airmid_41 Start: 30823, Stop: 30572, Start Num: 50

Candidate Starts for Airmid_41:

(18, 30901), (Start: 50 @30823 has 44 MA's), (Start: 52 @30814 has 3 MA's), (54, 30805), (Start: 65 @30772 has 2 MA's), (82, 30742), (88, 30727), (91, 30688), (97, 30655), (100, 30622),

Gene: Alatin_37 Start: 28461, Stop: 28189, Start Num: 47

Candidate Starts for Alatin_37:

(Start: 47 @28461 has 35 MA's), (99, 28245), (102, 28209),

Gene: Albee_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Albee_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Alberto7_47 Start: 32217, Stop: 31915, Start Num: 37

Candidate Starts for Alberto7_47:

(1, 32487), (Start: 37 @32217 has 141 MA's), (84, 32085), (89, 32046), (97, 31998), (100, 31965),

Gene: Aliter_47 Start: 32037, Stop: 31711, Start Num: 24

Candidate Starts for Aliter_47:

(Start: 24 @32037 has 54 MA's), (32, 32013), (49, 31971), (102, 31731),

Gene: Alma_47 Start: 32160, Stop: 31834, Start Num: 24

Candidate Starts for Alma_47:

(Start: 24 @32160 has 54 MA's), (32, 32136), (49, 32094), (102, 31854),

Gene: Alpacados_36 Start: 28366, Stop: 28094, Start Num: 47

Candidate Starts for Alpacados_36:

(Start: 47 @28366 has 35 MA's), (70, 28300), (99, 28150), (102, 28114),

Gene: Aneem_48 Start: 31705, Stop: 31358, Start Num: 24

Candidate Starts for Aneem_48:

(Start: 24 @31705 has 54 MA's), (Start: 37 @31672 has 141 MA's), (44, 31651), (97, 31438), (100, 31405),

Gene: AngryOrchard_35 Start: 28325, Stop: 28053, Start Num: 47

Candidate Starts for AngryOrchard_35:

(Start: 47 @28325 has 35 MA's), (70, 28259), (99, 28109), (102, 28073),

Gene: Annyong_46 Start: 31925, Stop: 31623, Start Num: 37

Candidate Starts for Annyong_46:

(1, 32195), (Start: 37 @31925 has 141 MA's), (84, 31793), (89, 31754), (97, 31706), (100, 31673),

Gene: Anon_44 Start: 29643, Stop: 29365, Start Num: 39

Candidate Starts for Anon_44:

(Start: 39 @29643 has 15 MA's), (97, 29448),

Gene: AppleCloud_35 Start: 28336, Stop: 28064, Start Num: 47

Candidate Starts for AppleCloud_35:

(Start: 36 @28369 has 1 MA's), (Start: 47 @28336 has 35 MA's), (76, 28249), (99, 28120), (102, 28084),

Gene: Aragog_39 Start: 30794, Stop: 30531, Start Num: 50

Candidate Starts for Aragog_39:

(Start: 50 @30794 has 44 MA's), (Start: 52 @30785 has 3 MA's), (54, 30776), (60, 30755), (Start: 65 @30743 has 2 MA's), (91, 30659), (97, 30626), (100, 30593),

Gene: Archetta_40 Start: 31324, Stop: 31061, Start Num: 50

Candidate Starts for Archetta_40:

(Start: 50 @31324 has 44 MA's), (Start: 52 @31315 has 3 MA's), (54, 31306), (60, 31285), (Start: 65 @31273 has 2 MA's), (91, 31189), (97, 31156), (100, 31123),

Gene: Arturo_45 Start: 32157, Stop: 31834, Start Num: 37

Candidate Starts for Arturo_45:

(Start: 37 @32157 has 141 MA's), (46, 32142), (84, 32004), (97, 31917), (100, 31884),

Gene: Astro_44 Start: 31145, Stop: 30849, Start Num: 50

Candidate Starts for Astro_44:

(Start: 50 @31145 has 44 MA's), (Start: 52 @31136 has 3 MA's), (69, 31094), (100, 30908),

Gene: AugsMagnumOpus_53 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for AugsMagnumOpus_53:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: AvatarAhPeg_45 Start: 32379, Stop: 32056, Start Num: 37

Candidate Starts for AvatarAhPeg_45:

(Start: 37 @32379 has 141 MA's), (46, 32364), (73, 32271), (77, 32256), (84, 32226), (95, 32151), (100, 32106),

Gene: Avle17_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Avle17_46:

(Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Ayanochan_48 Start: 32164, Stop: 31838, Start Num: 24

Candidate Starts for Ayanochan_48:

(Start: 24 @32164 has 54 MA's), (32, 32140), (49, 32098), (102, 31858),

Gene: B1_43 Start: 31013, Stop: 30738, Start Num: 48

Candidate Starts for B1_43:

(17, 31100), (31, 31043), (Start: 48 @31013 has 33 MA's), (87, 30908), (94, 30836), (100, 30788),

Gene: Baby16_46 Start: 31891, Stop: 31589, Start Num: 37

Candidate Starts for Baby16_46:

(1, 32161), (Start: 37 @31891 has 141 MA's), (84, 31759), (89, 31720), (97, 31672), (100, 31639),

Gene: BabyJohn_44 Start: 31805, Stop: 31530, Start Num: 48

Candidate Starts for BabyJohn_44:

(12, 31922), (15, 31898), (17, 31892), (22, 31865), (Start: 48 @31805 has 33 MA's), (94, 31628), (100, 31580),

Gene: BabyRay_46 Start: 31749, Stop: 31474, Start Num: 48

Candidate Starts for BabyRay_46:

(6, 31890), (8, 31881), (Start: 48 @31749 has 33 MA's), (79, 31668), (94, 31572),

Gene: Bachome_49 Start: 31693, Stop: 31346, Start Num: 24

Candidate Starts for Bachome_49:

(Start: 24 @31693 has 54 MA's), (Start: 37 @31660 has 141 MA's), (44, 31639), (97, 31426), (100, 31393),

Gene: Backyardigan_44 Start: 31883, Stop: 31560, Start Num: 37

Candidate Starts for Backyardigan_44:

(Start: 37 @31883 has 141 MA's), (70, 31784), (73, 31775), (77, 31760), (84, 31730), (100, 31610),

Gene: Badger_44 Start: 31851, Stop: 31528, Start Num: 37

Candidate Starts for Badger_44:

(Start: 37 @31851 has 141 MA's), (70, 31752), (73, 31743), (77, 31728), (84, 31698), (100, 31578),

Gene: BangNhom_47 Start: 32302, Stop: 32000, Start Num: 37

Candidate Starts for BangNhom_47:

(1, 32572), (Start: 37 @32302 has 141 MA's), (84, 32170), (89, 32131), (100, 32050),

Gene: Bartimeaus_46 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Bartimeaus_46:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Battleship_50 Start: 30586, Stop: 30293, Start Num: 39

Candidate Starts for Battleship_50:

(Start: 39 @30586 has 15 MA's), (85, 30469), (97, 30376),

Gene: Beemo_47 Start: 32159, Stop: 31833, Start Num: 24

Candidate Starts for Beemo_47:

(Start: 24 @32159 has 54 MA's), (32, 32135), (49, 32093), (102, 31853),

Gene: Belenaria_37 Start: 28395, Stop: 28123, Start Num: 47

Candidate Starts for Belenaria_37:

(Start: 47 @28395 has 35 MA's), (70, 28329), (99, 28179), (102, 28143),

Gene: BellusTerra_47 Start: 31881, Stop: 31579, Start Num: 37

Candidate Starts for BellusTerra_47:

(Start: 37 @31881 has 141 MA's), (84, 31749), (89, 31710), (97, 31662), (100, 31629),

Gene: Benedict_43 Start: 30995, Stop: 30732, Start Num: 50

Candidate Starts for Benedict_43:

(Start: 50 @30995 has 44 MA's), (Start: 52 @30986 has 3 MA's), (Start: 65 @30944 has 2 MA's), (97, 30827), (99, 30803),

Gene: BennyP_50 Start: 31282, Stop: 30854, Start Num: 10

Candidate Starts for BennyP_50:

(5, 31309), (Start: 10 @31282 has 7 MA's), (34, 31186), (Start: 47 @31150 has 35 MA's), (74, 31060), (80, 31033), (81, 31030), (102, 30874),

Gene: Blackmoor_46 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Blackmoor_46:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: BlueBird_48 Start: 31838, Stop: 31563, Start Num: 48

Candidate Starts for BlueBird_48:

(Start: 48 @31838 has 33 MA's), (94, 31661), (100, 31613),

Gene: Bluefalcon_39 Start: 31282, Stop: 31019, Start Num: 50

Candidate Starts for Bluefalcon_39:

(Start: 50 @31282 has 44 MA's), (Start: 52 @31273 has 3 MA's), (54, 31264), (Start: 65 @31231 has 2 MA's), (91, 31147), (97, 31114), (100, 31081),

Gene: BobbyDazzler_37 Start: 28440, Stop: 28168, Start Num: 47

Candidate Starts for BobbyDazzler_37:

(Start: 47 @28440 has 35 MA's), (70, 28374), (99, 28224), (102, 28188),

Gene: BogosyJay_46 Start: 31869, Stop: 31543, Start Num: 24

Candidate Starts for BogosyJay_46:

(Start: 24 @31869 has 54 MA's), (32, 31845), (49, 31803), (60, 31761), (102, 31563),

Gene: Bombshell_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Bombshell_46:

(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Bonamassa_41 Start: 31313, Stop: 31050, Start Num: 50

Candidate Starts for Bonamassa_41:

(Start: 50 @31313 has 44 MA's), (Start: 52 @31304 has 3 MA's), (Start: 65 @31262 has 2 MA's), (82, 31232), (91, 31178), (97, 31145), (100, 31112),

Gene: Bonanza_37 Start: 28368, Stop: 28096, Start Num: 47

Candidate Starts for Bonanza_37:

(Start: 47 @28368 has 35 MA's), (70, 28302), (99, 28152), (102, 28116),

Gene: Bowtie_48 Start: 31712, Stop: 31365, Start Num: 24

Candidate Starts for Bowtie_48:

(Start: 24 @31712 has 54 MA's), (Start: 37 @31679 has 141 MA's), (44, 31658), (97, 31445), (100, 31412),

Gene: Bradshaw_37 Start: 28394, Stop: 28122, Start Num: 47

Candidate Starts for Bradshaw_37:

(Start: 47 @28394 has 35 MA's), (99, 28178), (102, 28142),

Gene: Broseidon_46 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Broseidon_46:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Bruiser_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Bruiser_45:

(Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Bryce_37 Start: 28369, Stop: 28097, Start Num: 47

Candidate Starts for Bryce_37:

(Start: 47 @28369 has 35 MA's), (70, 28303), (99, 28153), (102, 28117),

Gene: BubbleTrouble_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for BubbleTrouble_45:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Bud_47 Start: 31267, Stop: 30920, Start Num: 24

Candidate Starts for Bud_47:

(Start: 24 @31267 has 54 MA's), (Start: 37 @31234 has 141 MA's), (44, 31213), (97, 31000), (100, 30967),

Gene: Bugatti_47 Start: 31838, Stop: 31563, Start Num: 48

Candidate Starts for Bugatti_47:

(Start: 48 @31838 has 33 MA's), (94, 31661), (100, 31613),

Gene: Bumblebee11_44 Start: 31853, Stop: 31530, Start Num: 37

Candidate Starts for Bumblebee11_44:

(Start: 37 @31853 has 141 MA's), (70, 31754), (73, 31745), (77, 31730), (84, 31700), (100, 31580),

Gene: Burger_44 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Burger_44:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: BuzzBuzz_48 Start: 32339, Stop: 32091, Start Num: 45

Candidate Starts for BuzzBuzz_48:

(Start: 45 @32339 has 49 MA's), (63, 32285), (89, 32222), (92, 32198), (94, 32189), (100, 32141), (101, 32126),

Gene: Bxz2_46 Start: 32346, Stop: 32098, Start Num: 45

Candidate Starts for Bxz2_46:

(Start: 45 @32346 has 49 MA's), (63, 32292), (89, 32229), (92, 32205), (94, 32196), (100, 32148), (101, 32133),

Gene: Caelakin_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Caelakin_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Caitlin_43 Start: 31138, Stop: 30842, Start Num: 50

Candidate Starts for Caitlin_43:

(27, 31204), (Start: 50 @31138 has 44 MA's), (69, 31087), (100, 30901),

Gene: Calvinny_50 Start: 32208, Stop: 31960, Start Num: 45

Candidate Starts for Calvinny_50:

(Start: 45 @32208 has 49 MA's), (63, 32154), (64, 32151), (89, 32091), (92, 32067), (94, 32058), (100, 32010), (101, 31995),

Gene: Camperdownii_44 Start: 31553, Stop: 31251, Start Num: 37

Candidate Starts for Camperdownii_44:

(Start: 37 @31553 has 141 MA's), (84, 31421), (89, 31382), (97, 31334), (100, 31301),

Gene: Candra_49 Start: 31173, Stop: 30745, Start Num: 10

Candidate Starts for Candra_49:

(5, 31200), (Start: 10 @31173 has 7 MA's), (34, 31077), (Start: 47 @31041 has 35 MA's), (74, 30951), (80, 30924), (81, 30921), (102, 30765),

Gene: Catalina_48 Start: 32110, Stop: 31784, Start Num: 24

Candidate Starts for Catalina_48:

(Start: 24 @32110 has 54 MA's), (32, 32086), (49, 32044), (102, 31804),

Gene: Caviar_46 Start: 32081, Stop: 31806, Start Num: 48

Candidate Starts for Caviar_46:

(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: Celestiallunch_46 Start: 31680, Stop: 31330, Start Num: 24

Candidate Starts for Celestiallunch_46:

(11, 31743), (19, 31704), (Start: 24 @31680 has 54 MA's), (30, 31659), (32, 31653), (67, 31551), (102, 31350), (103, 31341),

Gene: CentreCat_46 Start: 31883, Stop: 31581, Start Num: 37

Candidate Starts for CentreCat_46:

(1, 32153), (Start: 37 @31883 has 141 MA's), (84, 31751), (89, 31712), (97, 31664), (100, 31631),

Gene: Cerulean_47 Start: 32303, Stop: 32001, Start Num: 37

Candidate Starts for Cerulean_47:

(1, 32573), (Start: 37 @32303 has 141 MA's), (84, 32171), (89, 32132), (100, 32051),

Gene: Chadwick_44 Start: 30975, Stop: 30712, Start Num: 50

Candidate Starts for Chadwick_44:

(18, 31053), (Start: 50 @30975 has 44 MA's), (Start: 52 @30966 has 3 MA's), (56, 30945), (Start: 65 @30924 has 2 MA's), (97, 30807), (99, 30783),

Gene: ChampagnePapi_48 Start: 32302, Stop: 32000, Start Num: 37

Candidate Starts for ChampagnePapi_48:

(1, 32572), (Start: 37 @32302 has 141 MA's), (84, 32170), (89, 32131), (100, 32050),

Gene: Chaph_46 Start: 31891, Stop: 31589, Start Num: 37

Candidate Starts for Chaph_46:

(1, 32161), (Start: 37 @31891 has 141 MA's), (84, 31759), (89, 31720), (97, 31672), (100, 31639),

Gene: Chargerpower_46 Start: 31054, Stop: 30704, Start Num: 24

Candidate Starts for Chargerpower_46:

(Start: 24 @31054 has 54 MA's), (49, 30991), (73, 30910), (97, 30784), (102, 30724), (103, 30715),

Gene: Charm_46 Start: 31899, Stop: 31555, Start Num: 25

Candidate Starts for Charm_46:

(Start: 25 @31899 has 4 MA's), (30, 31884), (32, 31878), (49, 31836), (60, 31794), (72, 31761), (102, 31575), (103, 31566),

Gene: Chiqui_44 Start: 31814, Stop: 31539, Start Num: 48

Candidate Starts for Chiqui_44:

(12, 31931), (15, 31907), (17, 31901), (22, 31874), (Start: 48 @31814 has 33 MA's), (94, 31637), (100, 31589),

Gene: Cici_45 Start: 31868, Stop: 31545, Start Num: 37

Candidate Starts for Cici_45:

(Start: 37 @31868 has 141 MA's), (70, 31769), (73, 31760), (77, 31745), (84, 31715), (100, 31595),

Gene: Cindaradix_43 Start: 31493, Stop: 31170, Start Num: 37

Candidate Starts for Cindaradix_43:

(Start: 37 @31493 has 141 MA's), (73, 31385), (84, 31340), (95, 31265), (100, 31220),

Gene: Cintron_45 Start: 31860, Stop: 31558, Start Num: 37

Candidate Starts for Cintron_45:

(1, 32130), (Start: 37 @31860 has 141 MA's), (84, 31728), (89, 31689), (97, 31641), (100, 31608),

Gene: Citius_46 Start: 31901, Stop: 31599, Start Num: 37

Candidate Starts for Citius_46:

(1, 32171), (Start: 37 @31901 has 141 MA's), (84, 31769), (89, 31730), (97, 31682), (100, 31649),

Gene: Clammy_47 Start: 31838, Stop: 31563, Start Num: 48

Candidate Starts for Clammy_47:

(Start: 48 @31838 has 33 MA's), (94, 31661), (100, 31613),

Gene: Clarenza_45 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Clarenza_45:

(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: ClownCar_50 Start: 32201, Stop: 31953, Start Num: 45

Candidate Starts for ClownCar_50:

(Start: 45 @32201 has 49 MA's), (63, 32147), (64, 32144), (89, 32084), (92, 32060), (94, 32051), (100, 32003), (101, 31988),

Gene: Cocoaberry_46 Start: 31884, Stop: 31582, Start Num: 37

Candidate Starts for Cocoaberry_46:

(Start: 37 @31884 has 141 MA's), (84, 31752), (89, 31713), (97, 31665), (100, 31632),

Gene: Commander_46 Start: 31879, Stop: 31577, Start Num: 37

Candidate Starts for Commander_46:

(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: Connomayer_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Connomayer_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Conquerage_47 Start: 32133, Stop: 31807, Start Num: 24

Candidate Starts for Conquerage_47:

(Start: 24 @32133 has 54 MA's), (32, 32109), (49, 32067), (102, 31827),

Gene: Conspiracy_40 Start: 30997, Stop: 30743, Start Num: 52

Candidate Starts for Conspiracy_40:

(Start: 50 @31006 has 44 MA's), (Start: 52 @30997 has 3 MA's), (54, 30988), (60, 30967), (Start: 65 @30955 has 2 MA's), (91, 30871), (97, 30838), (100, 30805),

Gene: Coog_40 Start: 31053, Stop: 30841, Start Num: 65

Candidate Starts for Coog_40:

(Start: 50 @31104 has 44 MA's), (Start: 52 @31095 has 3 MA's), (54, 31086), (60, 31065), (Start: 65 @31053 has 2 MA's), (91, 30969), (97, 30936), (100, 30903),

Gene: CosmicSans_37 Start: 28394, Stop: 28122, Start Num: 47

Candidate Starts for CosmicSans_37:

(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: Cuco_40 Start: 31061, Stop: 30810, Start Num: 50

Candidate Starts for Cuco_40:

(Start: 50 @31061 has 44 MA's), (Start: 52 @31052 has 3 MA's), (Start: 65 @31010 has 2 MA's), (91, 30926), (97, 30893), (100, 30860),

Gene: DaHudson_50 Start: 32301, Stop: 32053, Start Num: 45

Candidate Starts for DaHudson_50:

(Start: 45 @32301 has 49 MA's), (63, 32247), (89, 32184), (92, 32160), (94, 32151), (100, 32103), (101, 32088),

Gene: Daishi_49 Start: 31180, Stop: 30932, Start Num: 45

Candidate Starts for Daishi_49:

(Start: 45 @31180 has 49 MA's), (63, 31126), (89, 31063), (92, 31039), (94, 31030), (100, 30982), (101, 30967),

Gene: Danforth_44 Start: 31174, Stop: 30878, Start Num: 50

Candidate Starts for Danforth_44:

(27, 31240), (Start: 50 @31174 has 44 MA's), (69, 31123), (100, 30937),

Gene: DarthPhader_44 Start: 32954, Stop: 32610, Start Num: 24

Candidate Starts for DarthPhader_44:

(20, 32966), (21, 32960), (Start: 24 @32954 has 54 MA's), (41, 32912), (51, 32891), (68, 32837), (72, 32825), (90, 32732), (97, 32690), (102, 32630),

Gene: Datway_45 Start: 31839, Stop: 31516, Start Num: 37

Candidate Starts for Datway_45:

(Start: 37 @31839 has 141 MA's), (73, 31731), (100, 31566),

Gene: Deano_45 Start: 31888, Stop: 31586, Start Num: 37

Candidate Starts for Deano_45:

(Start: 37 @31888 has 141 MA's), (53, 31846), (84, 31756), (89, 31717), (97, 31669), (100, 31636),

Gene: Dhanush_46 Start: 31883, Stop: 31581, Start Num: 37

Candidate Starts for Dhanush_46:

(1, 32153), (Start: 37 @31883 has 141 MA's), (84, 31751), (89, 31712), (97, 31664), (100, 31631),

Gene: Dinger_37 Start: 28378, Stop: 28106, Start Num: 47

Candidate Starts for Dinger_37:

(Start: 36 @28411 has 1 MA's), (Start: 47 @28378 has 35 MA's), (76, 28291), (99, 28162), (102, 28126),

Gene: DirtyDunning_45 Start: 31898, Stop: 31575, Start Num: 37

Candidate Starts for DirtyDunning_45:

(Start: 37 @31898 has 141 MA's), (46, 31883), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Discoknowium_39 Start: 30803, Stop: 30540, Start Num: 50

Candidate Starts for Discoknowium_39:

(Start: 50 @30803 has 44 MA's), (Start: 52 @30794 has 3 MA's), (54, 30785), (60, 30764), (Start: 65 @30752 has 2 MA's), (91, 30668), (97, 30635), (100, 30602),

Gene: Dixon_44 Start: 31047, Stop: 30760, Start Num: 50

Candidate Starts for Dixon_44:

(27, 31113), (Start: 50 @31047 has 44 MA's), (69, 30996), (100, 30810),

Gene: DontArgue_44 Start: 30703, Stop: 30368, Start Num: 40

Candidate Starts for DontArgue_44:

(4, 30847), (6, 30841), (Start: 40 @30703 has 5 MA's), (95, 30463),

Gene: Dorothea_49 Start: 31156, Stop: 30728, Start Num: 10

Candidate Starts for Dorothea_49:

(5, 31183), (Start: 10 @31156 has 7 MA's), (34, 31060), (Start: 47 @31024 has 35 MA's), (74, 30934), (80, 30907), (81, 30904), (102, 30748),

Gene: DreamTeam1_46 Start: 31773, Stop: 31429, Start Num: 25

Candidate Starts for DreamTeam1_46:

(Start: 25 @31773 has 4 MA's), (30, 31758), (32, 31752), (49, 31710), (Start: 50 @31707 has 44 MA's), (60, 31668), (72, 31635), (102, 31449), (103, 31440),

Gene: DroogsArmy_43 Start: 33565, Stop: 33284, Start Num: 39

Candidate Starts for DroogsArmy_43:

(6, 33700), (Start: 39 @33565 has 15 MA's), (62, 33502), (82, 33445), (89, 33415), (102, 33307),

Gene: DropBear_46 Start: 31726, Stop: 31451, Start Num: 48

Candidate Starts for DropBear_46:

(Start: 48 @31726 has 33 MA's), (94, 31549), (100, 31501),

Gene: Druantia_46 Start: 31883, Stop: 31581, Start Num: 37

Candidate Starts for Druantia_46:

(1, 32153), (Start: 37 @31883 has 141 MA's), (84, 31751), (89, 31712), (97, 31664), (100, 31631),

Gene: Dublin_39 Start: 30825, Stop: 30562, Start Num: 50

Candidate Starts for Dublin_39:

(Start: 50 @30825 has 44 MA's), (Start: 52 @30816 has 3 MA's), (Start: 65 @30774 has 2 MA's), (82, 30744), (91, 30690), (97, 30657), (100, 30624),

Gene: Eagle_46 Start: 31905, Stop: 31603, Start Num: 37

Candidate Starts for Eagle_46:

(1, 32175), (Start: 37 @31905 has 141 MA's), (84, 31773), (89, 31734), (97, 31686), (100, 31653),

Gene: Eapen_46 Start: 31875, Stop: 31573, Start Num: 37

Candidate Starts for Eapen_46:

(1, 32145), (Start: 37 @31875 has 141 MA's), (84, 31743), (89, 31704), (97, 31656), (100, 31623),

Gene: Ebony_47 Start: 31284, Stop: 30937, Start Num: 24

Candidate Starts for Ebony_47:

(Start: 24 @31284 has 54 MA's), (Start: 37 @31251 has 141 MA's), (44, 31230), (97, 31017), (100, 30984),

Gene: EdogawaKiddo_45 Start: 32110, Stop: 31784, Start Num: 24

Candidate Starts for EdogawaKiddo_45:

(Start: 24 @32110 has 54 MA's), (32, 32086), (49, 32044), (102, 31804),

Gene: Eidsmoe_47 Start: 32173, Stop: 31847, Start Num: 24

Candidate Starts for Eidsmoe_47:

(Start: 24 @32173 has 54 MA's), (32, 32149), (49, 32107), (102, 31867),

Gene: EITiger69_42 Start: 30992, Stop: 30729, Start Num: 50

Candidate Starts for EITiger69_42:

(18, 31070), (Start: 50 @30992 has 44 MA's), (Start: 52 @30983 has 3 MA's), (56, 30962), (Start: 65 @30941 has 2 MA's), (97, 30824), (99, 30800),

Gene: Elephantoon_46 Start: 31477, Stop: 31130, Start Num: 24

Candidate Starts for Elephantoon_46:

(Start: 24 @31477 has 54 MA's), (32, 31453), (49, 31411), (72, 31336), (76, 31318), (102, 31150),

Gene: Elle_45 Start: 29059, Stop: 28784, Start Num: 39

Candidate Starts for Elle_45:

(Start: 39 @29059 has 15 MA's), (97, 28867),

Gene: EmyBug_46 Start: 32175, Stop: 31849, Start Num: 24

Candidate Starts for EmyBug_46:

(Start: 24 @32175 has 54 MA's), (32, 32151), (49, 32109), (102, 31869),

Gene: Epsocamisio_48 Start: 30391, Stop: 30098, Start Num: 39

Candidate Starts for Epsocamisio_48:

(Start: 39 @30391 has 15 MA's), (85, 30274), (97, 30181),

Gene: EricB_49 Start: 31130, Stop: 30702, Start Num: 10

Candidate Starts for EricB_49:

(5, 31157), (Start: 10 @31130 has 7 MA's), (34, 31034), (Start: 47 @30998 has 35 MA's), (74, 30908), (80, 30881), (81, 30878), (102, 30722),

Gene: Erik_37 Start: 28392, Stop: 28120, Start Num: 47

Candidate Starts for Erik_37:

(Start: 47 @28392 has 35 MA's), (70, 28326), (99, 28176), (102, 28140),

Gene: Eris_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Eris_45:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Eros_46 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Eros_46:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Espica_37 Start: 28395, Stop: 28123, Start Num: 47
Candidate Starts for Espica_37:
(Start: 47 @28395 has 35 MA's), (70, 28329), (99, 28179), (102, 28143),

Gene: Et2Brutus_46 Start: 31244, Stop: 30897, Start Num: 24
Candidate Starts for Et2Brutus_46:
(Start: 24 @31244 has 54 MA's), (Start: 37 @31211 has 141 MA's), (44, 31190), (97, 30977), (100, 30944),

Gene: EtoileNova_47 Start: 32085, Stop: 31810, Start Num: 48
Candidate Starts for EtoileNova_47:
(14, 32175), (17, 32166), (Start: 48 @32085 has 33 MA's), (94, 31908),

Gene: Eurydice_47 Start: 31877, Stop: 31575, Start Num: 37
Candidate Starts for Eurydice_47:
(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Expelliarmus_44 Start: 31203, Stop: 30907, Start Num: 50
Candidate Starts for Expelliarmus_44:
(27, 31269), (Start: 50 @31203 has 44 MA's), (69, 31152), (100, 30966),

Gene: ExplosioNervosa_47 Start: 32193, Stop: 31867, Start Num: 24
Candidate Starts for ExplosioNervosa_47:
(Start: 24 @32193 has 54 MA's), (32, 32169), (49, 32127), (102, 31887),

Gene: Farber_50 Start: 32301, Stop: 32053, Start Num: 45
Candidate Starts for Farber_50:
(Start: 45 @32301 has 49 MA's), (63, 32247), (89, 32184), (92, 32160), (94, 32151), (100, 32103), (101, 32088),

Gene: FatCactus_39 Start: 29455, Stop: 29141, Start Num: 38
Candidate Starts for FatCactus_39:
(2, 29608), (7, 29578), (9, 29563), (15, 29530), (38, 29455), (55, 29407), (57, 29401), (75, 29350), (97, 29221),

Gene: Fayely_47 Start: 32142, Stop: 31816, Start Num: 24
Candidate Starts for Fayely_47:
(Start: 24 @32142 has 54 MA's), (32, 32118), (49, 32076), (102, 31836),

Gene: Fibonacci_47 Start: 31259, Stop: 30912, Start Num: 24
Candidate Starts for Fibonacci_47:
(Start: 24 @31259 has 54 MA's), (Start: 37 @31226 has 141 MA's), (44, 31205), (97, 30992), (100, 30959),

Gene: Flaverint_48 Start: 31706, Stop: 31359, Start Num: 24
Candidate Starts for Flaverint_48:
(Start: 24 @31706 has 54 MA's), (Start: 37 @31673 has 141 MA's), (44, 31652), (97, 31439), (100, 31406),

Gene: Florean_46 Start: 31879, Stop: 31577, Start Num: 37
Candidate Starts for Florean_46:
(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: Florence1_39 Start: 30678, Stop: 30415, Start Num: 50

Candidate Starts for Florence1_39:

(Start: 50 @30678 has 44 MA's), (Start: 52 @30669 has 3 MA's), (Start: 65 @30627 has 2 MA's), (82, 30597), (91, 30543), (97, 30510), (100, 30477),

Gene: Florence4_40 Start: 30678, Stop: 30415, Start Num: 50

Candidate Starts for Florence4_40:

(Start: 50 @30678 has 44 MA's), (Start: 52 @30669 has 3 MA's), (Start: 65 @30627 has 2 MA's), (82, 30597), (91, 30543), (97, 30510), (100, 30477),

Gene: Flux_46 Start: 31879, Stop: 31577, Start Num: 37

Candidate Starts for Flux_46:

(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: ForGetIt_40 Start: 31031, Stop: 30768, Start Num: 50

Candidate Starts for ForGetIt_40:

(Start: 50 @31031 has 44 MA's), (Start: 52 @31022 has 3 MA's), (54, 31013), (60, 30992), (Start: 65 @30980 has 2 MA's), (91, 30896), (97, 30863), (100, 30830),

Gene: Fred313_46 Start: 31411, Stop: 31136, Start Num: 48

Candidate Starts for Fred313_46:

(33, 31432), (Start: 48 @31411 has 33 MA's), (94, 31234), (100, 31186),

Gene: Funston_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Funston_45:

(Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Gadost_46 Start: 31884, Stop: 31582, Start Num: 37

Candidate Starts for Gadost_46:

(Start: 37 @31884 has 141 MA's), (84, 31752), (89, 31713), (97, 31665), (100, 31632),

Gene: Gemma_49 Start: 32204, Stop: 31956, Start Num: 45

Candidate Starts for Gemma_49:

(Start: 45 @32204 has 49 MA's), (63, 32150), (64, 32147), (89, 32087), (92, 32063), (94, 32054), (100, 32006), (101, 31991),

Gene: George_40 Start: 31255, Stop: 30992, Start Num: 50

Candidate Starts for George_40:

(Start: 50 @31255 has 44 MA's), (Start: 52 @31246 has 3 MA's), (Start: 65 @31204 has 2 MA's), (82, 31174), (91, 31120), (97, 31087), (100, 31054),

Gene: Ghouboy_42 Start: 31768, Stop: 31505, Start Num: 50

Candidate Starts for Ghouboy_42:

(Start: 50 @31768 has 44 MA's), (Start: 52 @31759 has 3 MA's), (Start: 65 @31717 has 2 MA's), (82, 31687), (91, 31633), (97, 31600), (100, 31567),

Gene: Gilberta_48 Start: 31696, Stop: 31349, Start Num: 24

Candidate Starts for Gilberta_48:

(Start: 24 @31696 has 54 MA's), (Start: 37 @31663 has 141 MA's), (44, 31642), (97, 31429), (100, 31396),

Gene: GingkoMaracino_50 Start: 32194, Stop: 31946, Start Num: 45

Candidate Starts for GingkoMaracino_50:

(Start: 45 @32194 has 49 MA's), (63, 32140), (89, 32077), (92, 32053), (94, 32044), (100, 31996), (101, 31981),

Gene: Giroux_48 Start: 31837, Stop: 31562, Start Num: 48

Candidate Starts for Giroux_48:

(Start: 48 @31837 has 33 MA's), (94, 31660), (100, 31612),

Gene: Gollum_37 Start: 28394, Stop: 28122, Start Num: 47

Candidate Starts for Gollum_37:

(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: Groundhog_43 Start: 31110, Stop: 30814, Start Num: 50

Candidate Starts for Groundhog_43:

(Start: 50 @31110 has 44 MA's), (Start: 52 @31101 has 3 MA's), (69, 31059), (100, 30873),

Gene: Groupthink_51 Start: 32208, Stop: 31960, Start Num: 45

Candidate Starts for Groupthink_51:

(Start: 45 @32208 has 49 MA's), (63, 32154), (64, 32151), (89, 32091), (92, 32067), (94, 32058), (100, 32010), (101, 31995),

Gene: Grub_50 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for Grub_50:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: HINdeR_43 Start: 33388, Stop: 33113, Start Num: 39

Candidate Starts for HINdeR_43:

(Start: 39 @33388 has 15 MA's), (43, 33382), (60, 33331), (62, 33325), (71, 33307), (102, 33136),

Gene: HamSlice_45 Start: 31878, Stop: 31576, Start Num: 37

Candidate Starts for HamSlice_45:

(1, 32148), (Start: 37 @31878 has 141 MA's), (84, 31746), (89, 31707), (97, 31659), (100, 31626),

Gene: Hanray_45 Start: 32114, Stop: 31788, Start Num: 24

Candidate Starts for Hanray_45:

(Start: 24 @32114 has 54 MA's), (32, 32090), (49, 32048), (102, 31808),

Gene: Happiness_45 Start: 31885, Stop: 31583, Start Num: 37

Candidate Starts for Happiness_45:

(1, 32155), (Start: 37 @31885 has 141 MA's), (84, 31753), (89, 31714), (97, 31666), (100, 31633),

Gene: Harlequin_37 Start: 28399, Stop: 28127, Start Num: 47

Candidate Starts for Harlequin_37:

(Start: 47 @28399 has 35 MA's), (70, 28333), (99, 28183), (102, 28147),

Gene: HashRod_51 Start: 32339, Stop: 32091, Start Num: 45

Candidate Starts for HashRod_51:

(Start: 45 @32339 has 49 MA's), (63, 32285), (89, 32222), (92, 32198), (94, 32189), (100, 32141), (101, 32126),

Gene: HaveUMetTed_51 Start: 32190, Stop: 31942, Start Num: 45

Candidate Starts for HaveUMetTed_51:

(Start: 45 @32190 has 49 MA's), (63, 32136), (64, 32133), (89, 32073), (92, 32049), (94, 32040), (100, 31992), (101, 31977),

Gene: Heathen_46 Start: 31467, Stop: 31192, Start Num: 48
Candidate Starts for Heathen_46:
(Start: 48 @31467 has 33 MA's), (94, 31290), (100, 31242),

Gene: HelDan_46 Start: 31719, Stop: 31444, Start Num: 48
Candidate Starts for HelDan_46:
(Start: 48 @31719 has 33 MA's), (94, 31542), (100, 31494),

Gene: Heliosoles_49 Start: 32211, Stop: 31963, Start Num: 45
Candidate Starts for Heliosoles_49:
(Start: 45 @32211 has 49 MA's), (63, 32157), (64, 32154), (89, 32094), (92, 32070), (94, 32061), (100, 32013), (101, 31998),

Gene: Hiro_37 Start: 28654, Stop: 28382, Start Num: 47
Candidate Starts for Hiro_37:
(Start: 47 @28654 has 35 MA's), (70, 28588), (93, 28483), (99, 28438), (102, 28402),

Gene: Horex_46 Start: 32133, Stop: 31807, Start Num: 24
Candidate Starts for Horex_46:
(Start: 24 @32133 has 54 MA's), (32, 32109), (49, 32067), (102, 31827),

Gene: Holli_45 Start: 31670, Stop: 31368, Start Num: 37
Candidate Starts for Holli_45:
(1, 31940), (Start: 37 @31670 has 141 MA's), (84, 31538), (89, 31499), (97, 31451), (100, 31418),

Gene: Hookmount_46 Start: 32082, Stop: 31807, Start Num: 48
Candidate Starts for Hookmount_46:
(14, 32172), (17, 32163), (Start: 48 @32082 has 33 MA's), (94, 31905),

Gene: HortumSL17_47 Start: 32109, Stop: 31783, Start Num: 24
Candidate Starts for HortumSL17_47:
(Start: 24 @32109 has 54 MA's), (32, 32085), (49, 32043), (102, 31803),

Gene: Houdini22_46 Start: 31884, Stop: 31582, Start Num: 37
Candidate Starts for Houdini22_46:
(Start: 37 @31884 has 141 MA's), (84, 31752), (89, 31713), (97, 31665), (100, 31632),

Gene: HuhtaEnerson15_41 Start: 31246, Stop: 30983, Start Num: 50
Candidate Starts for HuhtaEnerson15_41:
(Start: 50 @31246 has 44 MA's), (Start: 52 @31237 has 3 MA's), (Start: 65 @31195 has 2 MA's), (82, 31165), (91, 31111), (97, 31078), (100, 31045),

Gene: Hutc2_47 Start: 31259, Stop: 30912, Start Num: 24
Candidate Starts for Hutc2_47:
(Start: 24 @31259 has 54 MA's), (Start: 37 @31226 has 141 MA's), (44, 31205), (97, 30992), (100, 30959),

Gene: Huxley_46 Start: 31941, Stop: 31639, Start Num: 37
Candidate Starts for Huxley_46:
(Start: 37 @31941 has 141 MA's), (84, 31809), (89, 31770), (97, 31722), (100, 31689),

Gene: ICleared_46 Start: 31909, Stop: 31607, Start Num: 37
Candidate Starts for ICleared_46:
(1, 32179), (Start: 37 @31909 has 141 MA's), (84, 31777), (89, 31738), (97, 31690), (100, 31657),

Gene: Iceman_46 Start: 32166, Stop: 31864, Start Num: 37
Candidate Starts for Iceman_46:
(1, 32436), (Start: 37 @32166 has 141 MA's), (84, 32034), (89, 31995), (97, 31947), (100, 31914),

Gene: Idleandcovert_47 Start: 31838, Stop: 31563, Start Num: 48
Candidate Starts for Idleandcovert_47:
(Start: 48 @31838 has 33 MA's), (94, 31661), (100, 31613),

Gene: Insomnia_48 Start: 31764, Stop: 31417, Start Num: 24
Candidate Starts for Insomnia_48:
(Start: 24 @31764 has 54 MA's), (Start: 37 @31731 has 141 MA's), (44, 31710), (97, 31497), (100, 31464),

Gene: Iracema64_47 Start: 32144, Stop: 31842, Start Num: 37
Candidate Starts for Iracema64_47:
(1, 32414), (Start: 37 @32144 has 141 MA's), (84, 32012), (89, 31973), (97, 31925), (100, 31892),

Gene: Isca_45 Start: 31262, Stop: 30987, Start Num: 48
Candidate Starts for Isca_45:
(17, 31349), (31, 31292), (Start: 48 @31262 has 33 MA's), (87, 31157), (94, 31085), (100, 31037),

Gene: JF2_46 Start: 31013, Stop: 30738, Start Num: 48
Candidate Starts for JF2_46:
(17, 31100), (31, 31043), (Start: 48 @31013 has 33 MA's), (87, 30908), (94, 30836), (100, 30788),

Gene: JF4_46 Start: 31013, Stop: 30738, Start Num: 48
Candidate Starts for JF4_46:
(17, 31100), (31, 31043), (Start: 48 @31013 has 33 MA's), (87, 30908), (94, 30836), (100, 30788),

Gene: JSwag_48 Start: 30329, Stop: 30036, Start Num: 39
Candidate Starts for JSwag_48:
(Start: 39 @30329 has 15 MA's), (85, 30212), (97, 30119),

Gene: Jabiru_41 Start: 30865, Stop: 30614, Start Num: 50
Candidate Starts for Jabiru_41:
(15, 30955), (18, 30943), (Start: 50 @30865 has 44 MA's), (Start: 52 @30856 has 3 MA's), (Start: 65 @30814 has 2 MA's), (82, 30784), (91, 30730), (97, 30697), (100, 30664),

Gene: Jabith_48 Start: 31765, Stop: 31418, Start Num: 24
Candidate Starts for Jabith_48:
(Start: 24 @31765 has 54 MA's), (Start: 37 @31732 has 141 MA's), (44, 31711), (97, 31498), (100, 31465),

Gene: Jaykayelowell_44 Start: 31873, Stop: 31571, Start Num: 37
Candidate Starts for Jaykayelowell_44:
(1, 32143), (Start: 37 @31873 has 141 MA's), (84, 31741), (89, 31702), (97, 31654), (100, 31621),

Gene: JeppNRM_51 Start: 32209, Stop: 31961, Start Num: 45

Candidate Starts for JeppNRM_51:

(Start: 45 @32209 has 49 MA's), (63, 32155), (64, 32152), (89, 32092), (92, 32068), (94, 32059), (100, 32011), (101, 31996),

Gene: Jester_37 Start: 28330, Stop: 28058, Start Num: 47

Candidate Starts for Jester_37:

(Start: 47 @28330 has 35 MA's), (70, 28264), (99, 28114), (102, 28078),

Gene: JetBlade_46 Start: 31874, Stop: 31572, Start Num: 37

Candidate Starts for JetBlade_46:

(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: Jiawan_45 Start: 32146, Stop: 31820, Start Num: 24

Candidate Starts for Jiawan_45:

(Start: 24 @32146 has 54 MA's), (32, 32122), (49, 32080), (102, 31840),

Gene: Jobu08_49 Start: 32140, Stop: 31892, Start Num: 45

Candidate Starts for Jobu08_49:

(Start: 45 @32140 has 49 MA's), (63, 32086), (64, 32083), (89, 32023), (92, 31999), (94, 31990), (100, 31942), (101, 31927),

Gene: JoongJeon_45 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for JoongJeon_45:

(Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Joselito_48 Start: 31705, Stop: 31358, Start Num: 24

Candidate Starts for Joselito_48:

(Start: 24 @31705 has 54 MA's), (Start: 37 @31672 has 141 MA's), (44, 31651), (97, 31438), (100, 31405),

Gene: Jovo_40 Start: 31287, Stop: 31024, Start Num: 50

Candidate Starts for Jovo_40:

(Start: 50 @31287 has 44 MA's), (Start: 52 @31278 has 3 MA's), (54, 31269), (60, 31248), (Start: 65 @31236 has 2 MA's), (91, 31152), (97, 31119), (100, 31086),

Gene: KADY_50 Start: 32339, Stop: 32091, Start Num: 45

Candidate Starts for KADY_50:

(Start: 45 @32339 has 49 MA's), (63, 32285), (89, 32222), (92, 32198), (94, 32189), (100, 32141), (101, 32126),

Gene: KFPoly_45 Start: 31874, Stop: 31572, Start Num: 37

Candidate Starts for KFPoly_45:

(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: Kachowdy_46 Start: 31719, Stop: 31444, Start Num: 48

Candidate Starts for Kachowdy_46:

(Start: 48 @31719 has 33 MA's), (94, 31542), (100, 31494),

Gene: Kalb97_51 Start: 32207, Stop: 31959, Start Num: 45

Candidate Starts for Kalb97_51:

(Start: 45 @32207 has 49 MA's), (63, 32153), (64, 32150), (89, 32090), (92, 32066), (94, 32057), (100, 32009), (101, 31994),

Gene: Kalnoky_51 Start: 32205, Stop: 31957, Start Num: 45

Candidate Starts for Kalnoky_51:

(Start: 45 @32205 has 49 MA's), (63, 32151), (64, 32148), (89, 32088), (92, 32064), (94, 32055), (100, 32007), (101, 31992),

Gene: Kamy_46 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Kamy_46:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Katalie136_45 Start: 31853, Stop: 31530, Start Num: 37

Candidate Starts for Katalie136_45:

(Start: 37 @31853 has 141 MA's), (70, 31754), (73, 31745), (77, 31730), (84, 31700), (100, 31580),

Gene: Kazan_50 Start: 31143, Stop: 30715, Start Num: 10

Candidate Starts for Kazan_50:

(5, 31170), (Start: 10 @31143 has 7 MA's), (34, 31047), (Start: 47 @31011 has 35 MA's), (74, 30921), (80, 30894), (81, 30891), (102, 30735),

Gene: KekoraPapaka_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for KekoraPapaka_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Keziacharles14_47 Start: 33144, Stop: 32797, Start Num: 24

Candidate Starts for Keziacharles14_47:

(Start: 24 @33144 has 54 MA's), (32, 33120), (49, 33078), (68, 33015), (72, 33003), (102, 32817), (103, 32808),

Gene: Kimba_47 Start: 31285, Stop: 30938, Start Num: 24

Candidate Starts for Kimba_47:

(Start: 24 @31285 has 54 MA's), (Start: 37 @31252 has 141 MA's), (44, 31231), (97, 31018), (100, 30985),

Gene: Kingmustik0402_46 Start: 31869, Stop: 31567, Start Num: 37

Candidate Starts for Kingmustik0402_46:

(1, 32139), (Start: 37 @31869 has 141 MA's), (84, 31737), (89, 31698), (97, 31650), (100, 31617),

Gene: Kipper29_49 Start: 31156, Stop: 30728, Start Num: 10

Candidate Starts for Kipper29_49:

(5, 31183), (Start: 10 @31156 has 7 MA's), (34, 31060), (Start: 47 @31024 has 35 MA's), (74, 30934), (80, 30907), (81, 30904), (102, 30748),

Gene: Klodlith_47 Start: 31790, Stop: 31446, Start Num: 25

Candidate Starts for Klodlith_47:

(Start: 25 @31790 has 4 MA's), (30, 31775), (32, 31769), (49, 31727), (60, 31685), (72, 31652), (102, 31466), (103, 31457),

Gene: Koan_44 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Koan_44:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Koreni_45 Start: 31561, Stop: 31259, Start Num: 37

Candidate Starts for Koreni_45:

(1, 31831), (Start: 37 @31561 has 141 MA's), (84, 31429), (89, 31390), (97, 31342), (100, 31309),

Gene: Kratark_46 Start: 32040, Stop: 31717, Start Num: 37

Candidate Starts for Kratark_46:

(Start: 37 @32040 has 141 MA's), (46, 32025), (84, 31887), (97, 31800), (100, 31767),

Gene: Kremtemulon_46 Start: 31831, Stop: 31529, Start Num: 37

Candidate Starts for Kremtemulon_46:

(1, 32101), (Start: 37 @31831 has 141 MA's), (84, 31699), (89, 31660), (100, 31579),

Gene: Krishelle_37 Start: 28678, Stop: 28406, Start Num: 47

Candidate Starts for Krishelle_37:

(Start: 36 @28711 has 1 MA's), (Start: 47 @28678 has 35 MA's), (76, 28591), (99, 28462), (102, 28426),

Gene: Kristoff_45 Start: 31839, Stop: 31501, Start Num: 40

Candidate Starts for Kristoff_45:

(6, 31983), (14, 31932), (Start: 40 @31839 has 5 MA's), (83, 31689), (86, 31674), (95, 31596),

Gene: Kyee_46 Start: 31878, Stop: 31576, Start Num: 37

Candidate Starts for Kyee_46:

(Start: 37 @31878 has 141 MA's), (84, 31746), (89, 31707), (97, 31659), (100, 31626),

Gene: LHTSCC_48 Start: 32302, Stop: 32000, Start Num: 37

Candidate Starts for LHTSCC_48:

(1, 32572), (Start: 37 @32302 has 141 MA's), (84, 32170), (89, 32131), (100, 32050),

Gene: Lambert1_46 Start: 32081, Stop: 31806, Start Num: 48

Candidate Starts for Lambert1_46:

(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: LappelDuVide_46 Start: 31879, Stop: 31577, Start Num: 37

Candidate Starts for LappelDuVide_46:

(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: LarryKay_50 Start: 32341, Stop: 32093, Start Num: 45

Candidate Starts for LarryKay_50:

(Start: 45 @32341 has 49 MA's), (63, 32287), (89, 32224), (92, 32200), (94, 32191), (100, 32143), (101, 32128),

Gene: Lemur_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Lemur_46:

(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: LeoAvram_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for LeoAvram_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Lev2_40 Start: 30919, Stop: 30656, Start Num: 50

Candidate Starts for Lev2_40:

(Start: 50 @30919 has 44 MA's), (Start: 52 @30910 has 3 MA's), (54, 30901), (60, 30880), (Start: 65 @30868 has 2 MA's), (91, 30784), (97, 30751), (100, 30718),

Gene: Lilith_51 Start: 32301, Stop: 32053, Start Num: 45

Candidate Starts for Lillith_51:

(Start: 45 @32301 has 49 MA's), (63, 32247), (89, 32184), (92, 32160), (94, 32151), (100, 32103), (101, 32088),

Gene: Lilleskat_45 Start: 32063, Stop: 31737, Start Num: 24

Candidate Starts for Lilleskat_45:

(Start: 24 @32063 has 54 MA's), (32, 32039), (49, 31997), (102, 31757),

Gene: Lillie_37 Start: 28394, Stop: 28122, Start Num: 47

Candidate Starts for Lillie_37:

(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: LittleB_46 Start: 31881, Stop: 31579, Start Num: 37

Candidate Starts for LittleB_46:

(1, 32151), (Start: 37 @31881 has 141 MA's), (84, 31749), (89, 31710), (97, 31662), (100, 31629),

Gene: LittleCherry_41 Start: 31256, Stop: 30993, Start Num: 50

Candidate Starts for LittleCherry_41:

(Start: 50 @31256 has 44 MA's), (Start: 52 @31247 has 3 MA's), (Start: 65 @31205 has 2 MA's), (82, 31175), (91, 31121), (97, 31088), (100, 31055),

Gene: LittleGuy_46 Start: 31776, Stop: 31474, Start Num: 37

Candidate Starts for LittleGuy_46:

(1, 32046), (Start: 37 @31776 has 141 MA's), (84, 31644), (89, 31605), (97, 31557), (100, 31524),

Gene: LochMonster_47 Start: 32116, Stop: 31814, Start Num: 37

Candidate Starts for LochMonster_47:

(1, 32386), (Start: 37 @32116 has 141 MA's), (53, 32074), (84, 31984), (89, 31945), (97, 31897), (100, 31864),

Gene: Lorenzo_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Lorenzo_46:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Louie6_49 Start: 32340, Stop: 32092, Start Num: 45

Candidate Starts for Louie6_49:

(Start: 45 @32340 has 49 MA's), (63, 32286), (89, 32223), (92, 32199), (94, 32190), (100, 32142), (101, 32127),

Gene: Lowa_50 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for Lowa_50:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: Lucivia_48 Start: 31754, Stop: 31407, Start Num: 24

Candidate Starts for Lucivia_48:

(Start: 24 @31754 has 54 MA's), (Start: 37 @31721 has 141 MA's), (44, 31700), (97, 31487), (100, 31454),

Gene: Lunsford_47 Start: 31874, Stop: 31572, Start Num: 37

Candidate Starts for Lunsford_47:

(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: MA5_46 Start: 31164, Stop: 30889, Start Num: 48

Candidate Starts for MA5_46:

(12, 31281), (15, 31257), (17, 31251), (22, 31224), (Start: 48 @31164 has 33 MA's), (82, 31074), (94, 30987), (100, 30939),

Gene: MK4_46 Start: 31247, Stop: 30972, Start Num: 48

Candidate Starts for MK4_46:

(17, 31334), (31, 31277), (Start: 48 @31247 has 33 MA's), (87, 31142), (94, 31070), (100, 31022),

Gene: MaCh_48 Start: 31692, Stop: 31345, Start Num: 24

Candidate Starts for MaCh_48:

(Start: 24 @31692 has 54 MA's), (Start: 37 @31659 has 141 MA's), (44, 31638), (97, 31425), (100, 31392),

Gene: Mabel_47 Start: 31294, Stop: 30947, Start Num: 24

Candidate Starts for Mabel_47:

(Start: 24 @31294 has 54 MA's), (Start: 37 @31261 has 141 MA's), (44, 31240), (97, 31027), (100, 30994),

Gene: MadMarie_50 Start: 32310, Stop: 32062, Start Num: 45

Candidate Starts for MadMarie_50:

(Start: 45 @32310 has 49 MA's), (63, 32256), (89, 32193), (92, 32169), (94, 32160), (100, 32112), (101, 32097),

Gene: Malinsilva_52 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for Malinsilva_52:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: Maminiaina_46 Start: 31851, Stop: 31525, Start Num: 24

Candidate Starts for Maminiaina_46:

(Start: 24 @31851 has 54 MA's), (32, 31827), (49, 31785), (60, 31743), (102, 31545),

Gene: Manu_50 Start: 32208, Stop: 31960, Start Num: 45

Candidate Starts for Manu_50:

(Start: 45 @32208 has 49 MA's), (63, 32154), (64, 32151), (89, 32091), (92, 32067), (94, 32058), (100, 32010), (101, 31995),

Gene: Marchesa_46 Start: 31717, Stop: 31442, Start Num: 48

Candidate Starts for Marchesa_46:

(Start: 48 @31717 has 33 MA's), (94, 31540), (100, 31492),

Gene: Margo_46 Start: 32107, Stop: 31832, Start Num: 48

Candidate Starts for Margo_46:

(14, 32197), (17, 32188), (Start: 48 @32107 has 33 MA's), (94, 31930),

Gene: Marius_51 Start: 32205, Stop: 31957, Start Num: 45

Candidate Starts for Marius_51:

(Start: 45 @32205 has 49 MA's), (63, 32151), (64, 32148), (89, 32088), (92, 32064), (94, 32055), (100, 32007), (101, 31992),

Gene: MarysWell_39 Start: 31119, Stop: 30856, Start Num: 50

Candidate Starts for MarysWell_39:

(Start: 50 @31119 has 44 MA's), (Start: 52 @31110 has 3 MA's), (54, 31101), (Start: 65 @31068 has 2 MA's), (91, 30984), (97, 30951), (100, 30918),

Gene: Maverick_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Maverick_46:

(Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Maxo_47 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Maxo_47:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Mayonnaise_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Mayonnaise_45:

(Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Mazhar510_46 Start: 31881, Stop: 31579, Start Num: 37

Candidate Starts for Mazhar510_46:

(Start: 37 @31881 has 141 MA's), (84, 31749), (89, 31710), (97, 31662), (100, 31629),

Gene: Medusa_46 Start: 31879, Stop: 31577, Start Num: 37

Candidate Starts for Medusa_46:

(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: MeeZee_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for MeeZee_46:

(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: MegTheThird_46 Start: 31679, Stop: 31329, Start Num: 24

Candidate Starts for MegTheThird_46:

(11, 31742), (19, 31703), (Start: 24 @31679 has 54 MA's), (30, 31658), (32, 31652), (67, 31550), (102, 31349), (103, 31340),

Gene: Melvin_48 Start: 31875, Stop: 31573, Start Num: 37

Candidate Starts for Melvin_48:

(1, 32145), (Start: 37 @31875 has 141 MA's), (84, 31743), (89, 31704), (97, 31656), (100, 31623),

Gene: Methuselah_47 Start: 32335, Stop: 32087, Start Num: 45

Candidate Starts for Methuselah_47:

(Start: 45 @32335 has 49 MA's), (63, 32281), (89, 32218), (92, 32194), (94, 32185), (100, 32137), (101, 32122),

Gene: Micasa_42 Start: 31386, Stop: 31123, Start Num: 50

Candidate Starts for Micasa_42:

(Start: 50 @31386 has 44 MA's), (Start: 52 @31377 has 3 MA's), (Start: 65 @31335 has 2 MA's), (82, 31305), (91, 31251), (97, 31218), (100, 31185),

Gene: Microwolf_50 Start: 32309, Stop: 32061, Start Num: 45

Candidate Starts for Microwolf_50:

(Start: 45 @32309 has 49 MA's), (63, 32255), (89, 32192), (92, 32168), (94, 32159), (100, 32111), (101, 32096),

Gene: Midas2_40 Start: 31053, Stop: 30841, Start Num: 65

Candidate Starts for Midas2_40:

(Start: 50 @31104 has 44 MA's), (Start: 52 @31095 has 3 MA's), (54, 31086), (60, 31065), (Start: 65 @31053 has 2 MA's), (91, 30969), (97, 30936), (100, 30903),

Gene: Milcery_41 Start: 31223, Stop: 30960, Start Num: 50

Candidate Starts for Milcery_41:

(Start: 50 @31223 has 44 MA's), (Start: 52 @31214 has 3 MA's), (Start: 65 @31172 has 2 MA's), (82, 31142), (91, 31088), (97, 31055), (100, 31022),

Gene: Millski_45 Start: 31881, Stop: 31579, Start Num: 37

Candidate Starts for Millski_45:

(1, 32151), (Start: 37 @31881 has 141 MA's), (84, 31749), (89, 31710), (97, 31662), (100, 31629),

Gene: MinecraftSteve_50 Start: 30593, Stop: 30300, Start Num: 39

Candidate Starts for MinecraftSteve_50:

(Start: 39 @30593 has 15 MA's), (85, 30476), (97, 30383),

Gene: Miramae_45 Start: 32041, Stop: 31718, Start Num: 37

Candidate Starts for Miramae_45:

(Start: 37 @32041 has 141 MA's), (46, 32026), (73, 31933), (77, 31918), (84, 31888), (95, 31813), (100, 31768),

Gene: Misomonster_51 Start: 32338, Stop: 32090, Start Num: 45

Candidate Starts for Misomonster_51:

(Start: 45 @32338 has 49 MA's), (63, 32284), (89, 32221), (92, 32197), (94, 32188), (100, 32140), (101, 32125),

Gene: Morpher26_45 Start: 31874, Stop: 31551, Start Num: 37

Candidate Starts for Morpher26_45:

(Start: 37 @31874 has 141 MA's), (70, 31775), (73, 31766), (77, 31751), (84, 31721), (100, 31601),

Gene: Morrow_47 Start: 31886, Stop: 31584, Start Num: 37

Candidate Starts for Morrow_47:

(1, 32156), (Start: 37 @31886 has 141 MA's), (84, 31754), (89, 31715), (97, 31667), (100, 31634),

Gene: MuchMore_53 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for MuchMore_53:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: Mulciber_47 Start: 31256, Stop: 30909, Start Num: 24

Candidate Starts for Mulciber_47:

(Start: 24 @31256 has 54 MA's), (Start: 37 @31223 has 141 MA's), (44, 31202), (97, 30989), (100, 30956),

Gene: Munch_48 Start: 31705, Stop: 31358, Start Num: 24

Candidate Starts for Munch_48:

(Start: 24 @31705 has 54 MA's), (Start: 37 @31672 has 141 MA's), (44, 31651), (97, 31438), (100, 31405),

Gene: Mundrea_45 Start: 31861, Stop: 31538, Start Num: 37

Candidate Starts for Mundrea_45:

(Start: 37 @31861 has 141 MA's), (73, 31753), (77, 31738), (84, 31708), (95, 31633), (100, 31588),

Gene: Myxus_47 Start: 32109, Stop: 31783, Start Num: 24
Candidate Starts for Myxus_47:
(Start: 24 @32109 has 54 MA's), (32, 32085), (49, 32043), (102, 31803),

Gene: Naca_42 Start: 31534, Stop: 31271, Start Num: 50
Candidate Starts for Naca_42:
(Start: 50 @31534 has 44 MA's), (Start: 52 @31525 has 3 MA's), (56, 31504), (Start: 65 @31483 has 2 MA's), (97, 31366), (99, 31342),

Gene: Naiad_37 Start: 28407, Stop: 28135, Start Num: 47
Candidate Starts for Naiad_37:
(Start: 47 @28407 has 35 MA's), (99, 28191), (102, 28155),

Gene: Nancinator_37 Start: 28395, Stop: 28123, Start Num: 47
Candidate Starts for Nancinator_37:
(Start: 47 @28395 has 35 MA's), (70, 28329), (99, 28179), (102, 28143),

Gene: Natosaleda_37 Start: 28394, Stop: 28122, Start Num: 47
Candidate Starts for Natosaleda_37:
(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: NearlyHeadless_44 Start: 30949, Stop: 30662, Start Num: 50
Candidate Starts for NearlyHeadless_44:
(Start: 50 @30949 has 44 MA's), (Start: 52 @30940 has 3 MA's), (69, 30898), (100, 30712),

Gene: Nebs_47 Start: 31880, Stop: 31578, Start Num: 37
Candidate Starts for Nebs_47:
(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Nedarya_45 Start: 30054, Stop: 29713, Start Num: 25
Candidate Starts for Nedarya_45:
(Start: 25 @30054 has 4 MA's), (87, 29883), (97, 29796),

Gene: Neeharika16_48 Start: 30597, Stop: 30169, Start Num: 10
Candidate Starts for Neeharika16_48:
(5, 30624), (Start: 10 @30597 has 7 MA's), (34, 30501), (Start: 47 @30465 has 35 MA's), (74, 30375), (80, 30348), (81, 30345), (102, 30189),

Gene: Nemo27_46 Start: 31879, Stop: 31577, Start Num: 37
Candidate Starts for Nemo27_46:
(Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: Noella_46 Start: 32082, Stop: 31807, Start Num: 48
Candidate Starts for Noella_46:
(14, 32172), (17, 32163), (Start: 48 @32082 has 33 MA's), (94, 31905),

Gene: Noelle_46 Start: 32163, Stop: 31840, Start Num: 37
Candidate Starts for Noelle_46:
(Start: 37 @32163 has 141 MA's), (73, 32055), (84, 32010), (100, 31890),

Gene: Norbert_45 Start: 32081, Stop: 31806, Start Num: 48
Candidate Starts for Norbert_45:
(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: NorthStar_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for NorthStar_45:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: NotAPhaseMom_46 Start: 31884, Stop: 31582, Start Num: 37

Candidate Starts for NotAPhaseMom_46:

(Start: 37 @31884 has 141 MA's), (84, 31752), (89, 31713), (97, 31665), (100, 31632),

Gene: Nyxis_46 Start: 31770, Stop: 31468, Start Num: 37

Candidate Starts for Nyxis_46:

(1, 32040), (Start: 37 @31770 has 141 MA's), (84, 31638), (89, 31599), (97, 31551), (100, 31518),

Gene: OKaNui_46 Start: 31930, Stop: 31628, Start Num: 37

Candidate Starts for OKaNui_46:

(1, 32200), (Start: 37 @31930 has 141 MA's), (84, 31798), (89, 31759), (97, 31711), (100, 31678),

Gene: Obama12_47 Start: 32304, Stop: 32002, Start Num: 37

Candidate Starts for Obama12_47:

(1, 32574), (Start: 37 @32304 has 141 MA's), (84, 32172), (89, 32133), (100, 32052),

Gene: Ohfah_47 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Ohfah_47:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: OlanP_49 Start: 32378, Stop: 32130, Start Num: 45

Candidate Starts for OlanP_49:

(Start: 45 @32378 has 49 MA's), (58, 32336), (63, 32324), (64, 32321), (89, 32261), (92, 32237), (94, 32228), (100, 32180), (101, 32165),

Gene: Ollie_50 Start: 32179, Stop: 31931, Start Num: 45

Candidate Starts for Ollie_50:

(Start: 45 @32179 has 49 MA's), (63, 32125), (89, 32062), (92, 32038), (94, 32029), (100, 31981), (101, 31966),

Gene: Onglai_45 Start: 30450, Stop: 30124, Start Num: 24

Candidate Starts for Onglai_45:

(Start: 24 @30450 has 54 MA's), (32, 30426), (49, 30384), (102, 30144),

Gene: Oofda_49 Start: 30484, Stop: 30191, Start Num: 39

Candidate Starts for Oofda_49:

(Start: 39 @30484 has 15 MA's), (85, 30367), (97, 30274),

Gene: Orange_47 Start: 31254, Stop: 30907, Start Num: 24

Candidate Starts for Orange_47:

(Start: 24 @31254 has 54 MA's), (Start: 37 @31221 has 141 MA's), (44, 31200), (97, 30987), (100, 30954),

Gene: PGHhamlin_52 Start: 32300, Stop: 32052, Start Num: 45

Candidate Starts for PGHhamlin_52:

(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102), (101, 32087),

Gene: PackMan_46 Start: 32109, Stop: 31783, Start Num: 24
Candidate Starts for PackMan_46:
(Start: 24 @32109 has 54 MA's), (32, 32085), (49, 32043), (102, 31803),

Gene: Palestino_45 Start: 31880, Stop: 31578, Start Num: 37
Candidate Starts for Palestino_45:
(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Panamaxus_44 Start: 32081, Stop: 31806, Start Num: 48
Candidate Starts for Panamaxus_44:
(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: Partridge_37 Start: 28510, Stop: 28205, Start Num: 36
Candidate Starts for Partridge_37:
(Start: 36 @28510 has 1 MA's), (Start: 47 @28477 has 35 MA's), (76, 28390), (99, 28261), (102, 28225),

Gene: Pawn_50 Start: 32212, Stop: 31964, Start Num: 45
Candidate Starts for Pawn_50:
(Start: 45 @32212 has 49 MA's), (63, 32158), (64, 32155), (89, 32095), (92, 32071), (94, 32062), (100, 32014), (101, 31999),

Gene: Peaches_46 Start: 31879, Stop: 31577, Start Num: 37
Candidate Starts for Peaches_46:
(1, 32149), (Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: Pembroke_50 Start: 32309, Stop: 32061, Start Num: 45
Candidate Starts for Pembroke_50:
(Start: 45 @32309 has 49 MA's), (63, 32255), (89, 32192), (92, 32168), (94, 32159), (100, 32111), (101, 32096),

Gene: Perplexer_45 Start: 31850, Stop: 31527, Start Num: 37
Candidate Starts for Perplexer_45:
(Start: 37 @31850 has 141 MA's), (70, 31751), (73, 31742), (77, 31727), (84, 31697), (100, 31577),

Gene: PeterPeter_46 Start: 31877, Stop: 31575, Start Num: 37
Candidate Starts for PeterPeter_46:
(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Petersenfast_46 Start: 31261, Stop: 30914, Start Num: 24
Candidate Starts for Petersenfast_46:
(Start: 24 @31261 has 54 MA's), (Start: 37 @31228 has 141 MA's), (44, 31207), (97, 30994), (100, 30961),

Gene: PetiteSangsue_45 Start: 31853, Stop: 31530, Start Num: 37
Candidate Starts for PetiteSangsue_45:
(Start: 37 @31853 has 141 MA's), (70, 31754), (73, 31745), (77, 31730), (84, 31700), (100, 31580),

Gene: PetterN_44 Start: 30975, Stop: 30712, Start Num: 50
Candidate Starts for PetterN_44:
(18, 31053), (Start: 50 @30975 has 44 MA's), (Start: 52 @30966 has 3 MA's), (56, 30945), (Start: 65 @30924 has 2 MA's), (97, 30807), (99, 30783),

Gene: Phacado_46 Start: 31879, Stop: 31577, Start Num: 37
Candidate Starts for Phacado_46:
(Start: 37 @31879 has 141 MA's), (84, 31747), (89, 31708), (97, 31660), (100, 31627),

Gene: Phaeder_47 Start: 32109, Stop: 31783, Start Num: 24
Candidate Starts for Phaeder_47:
(Start: 24 @32109 has 54 MA's), (32, 32085), (49, 32043), (102, 31803),

Gene: PhailMary_36 Start: 28716, Stop: 28444, Start Num: 47
Candidate Starts for PhailMary_36:
(Start: 47 @28716 has 35 MA's), (70, 28650), (99, 28500), (102, 28464),

Gene: Phantastic_47 Start: 31457, Stop: 31182, Start Num: 48
Candidate Starts for Phantastic_47:
(17, 31538), (31, 31481), (Start: 48 @31457 has 33 MA's), (55, 31430), (94, 31280), (100, 31232),

Gene: Phelipe_47 Start: 31880, Stop: 31578, Start Num: 37
Candidate Starts for Phelipe_47:
(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Phighter1804_46 Start: 31943, Stop: 31620, Start Num: 37
Candidate Starts for Phighter1804_46:
(Start: 37 @31943 has 141 MA's), (46, 31928), (84, 31790), (89, 31751), (97, 31703), (100, 31670),

Gene: Phillis_46 Start: 31492, Stop: 31232, Start Num: 50
Candidate Starts for Phillis_46:
(Start: 50 @31492 has 44 MA's), (Start: 52 @31483 has 3 MA's), (96, 31330), (100, 31291),

Gene: PhishRPhriends_48 Start: 31386, Stop: 31138, Start Num: 45
Candidate Starts for PhishRPhriends_48:
(Start: 45 @31386 has 49 MA's), (63, 31332), (64, 31329), (89, 31269), (92, 31245), (94, 31236), (100, 31188), (101, 31173),

Gene: Phlei_36 Start: 31613, Stop: 31308, Start Num: 29
Candidate Starts for Phlei_36:
(23, 31628), (29, 31613), (Start: 50 @31559 has 44 MA's), (54, 31541), (78, 31487), (103, 31319),

Gene: Phlorence_39 Start: 30794, Stop: 30531, Start Num: 50
Candidate Starts for Phlorence_39:
(Start: 50 @30794 has 44 MA's), (Start: 52 @30785 has 3 MA's), (54, 30776), (60, 30755), (Start: 65 @30743 has 2 MA's), (91, 30659), (97, 30626), (100, 30593),

Gene: Phonnegut_47 Start: 32158, Stop: 31832, Start Num: 24
Candidate Starts for Phonnegut_47:
(Start: 24 @32158 has 54 MA's), (32, 32134), (49, 32092), (102, 31852),

Gene: Phontbonne_46 Start: 31771, Stop: 31469, Start Num: 37
Candidate Starts for Phontbonne_46:
(1, 32041), (Start: 37 @31771 has 141 MA's), (84, 31639), (89, 31600), (97, 31552), (100, 31519),

Gene: Phoxy_50 Start: 32336, Stop: 32088, Start Num: 45
Candidate Starts for Phoxy_50:

(Start: 45 @32336 has 49 MA's), (63, 32282), (89, 32219), (92, 32195), (94, 32186), (100, 32138), (101, 32123),

Gene: Phrankenstein_37 Start: 28340, Stop: 28068, Start Num: 47

Candidate Starts for Phrankenstein_37:

(Start: 47 @28340 has 35 MA's), (70, 28274), (99, 28124), (102, 28088),

Gene: Phranny_51 Start: 32194, Stop: 31946, Start Num: 45

Candidate Starts for Phranny_51:

(Start: 45 @32194 has 49 MA's), (63, 32140), (64, 32137), (89, 32077), (92, 32053), (94, 32044), (100, 31996), (101, 31981),

Gene: PickleBack_40 Start: 30920, Stop: 30657, Start Num: 50

Candidate Starts for PickleBack_40:

(Start: 50 @30920 has 44 MA's), (Start: 52 @30911 has 3 MA's), (54, 30902), (60, 30881), (Start: 65 @30869 has 2 MA's), (91, 30785), (97, 30752), (100, 30719),

Gene: Pioneer_47 Start: 32158, Stop: 31832, Start Num: 24

Candidate Starts for Pioneer_47:

(Start: 24 @32158 has 54 MA's), (32, 32134), (49, 32092), (102, 31852),

Gene: Pipcraft_44 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Pipcraft_44:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Pistachio_48 Start: 31385, Stop: 31110, Start Num: 48

Candidate Starts for Pistachio_48:

(Start: 48 @31385 has 33 MA's), (94, 31208), (100, 31160),

Gene: Pocahontas_46 Start: 32078, Stop: 31803, Start Num: 48

Candidate Starts for Pocahontas_46:

(14, 32168), (17, 32159), (Start: 48 @32078 has 33 MA's), (94, 31901),

Gene: Polymorphads_47 Start: 31873, Stop: 31571, Start Num: 37

Candidate Starts for Polymorphads_47:

(1, 32143), (Start: 37 @31873 has 141 MA's), (84, 31741), (89, 31702), (97, 31654), (100, 31621),

Gene: Popcicle_46 Start: 32078, Stop: 31803, Start Num: 48

Candidate Starts for Popcicle_46:

(14, 32168), (17, 32159), (Start: 48 @32078 has 33 MA's), (94, 31901),

Gene: Prinash11_41 Start: 31086, Stop: 30823, Start Num: 50

Candidate Starts for Prinash11_41:

(Start: 50 @31086 has 44 MA's), (Start: 52 @31077 has 3 MA's), (Start: 65 @31035 has 2 MA's), (82, 31005), (91, 30951), (97, 30918), (100, 30885),

Gene: Priya_47 Start: 32176, Stop: 31850, Start Num: 24

Candidate Starts for Priya_47:

(Start: 24 @32176 has 54 MA's), (32, 32152), (49, 32110), (102, 31870),

Gene: Pumbaa_46 Start: 31825, Stop: 31523, Start Num: 37

Candidate Starts for Pumbaa_46:

(1, 32095), (Start: 37 @31825 has 141 MA's), (84, 31693), (89, 31654), (97, 31606), (100, 31573),

Gene: Puppy_48 Start: 31458, Stop: 31183, Start Num: 48
Candidate Starts for Puppy_48:
(Start: 48 @31458 has 33 MA's), (94, 31281), (100, 31233),

Gene: PurpleHaze_50 Start: 32207, Stop: 31959, Start Num: 45
Candidate Starts for PurpleHaze_50:
(Start: 45 @32207 has 49 MA's), (63, 32153), (64, 32150), (89, 32090), (92, 32066), (94, 32057), (100, 32009), (101, 31994),

Gene: Qobbit_47 Start: 32138, Stop: 31812, Start Num: 24
Candidate Starts for Qobbit_47:
(Start: 24 @32138 has 54 MA's), (32, 32114), (49, 32072), (102, 31832),

Gene: QuinnKiro_45 Start: 32081, Stop: 31806, Start Num: 48
Candidate Starts for QuinnKiro_45:
(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: RER2_30 Start: 25266, Stop: 24994, Start Num: 47
Candidate Starts for RER2_30:
(Start: 47 @25266 has 35 MA's), (70, 25200), (99, 25050), (102, 25014),

Gene: RGL3_32 Start: 26225, Stop: 25980, Start Num: 50
Candidate Starts for RGL3_32:
(Start: 50 @26225 has 44 MA's), (61, 26183), (99, 26036), (102, 26000), (103, 25991),

Gene: Rasputin_37 Start: 28364, Stop: 28092, Start Num: 47
Candidate Starts for Rasputin_37:
(Start: 47 @28364 has 35 MA's), (70, 28298), (99, 28148), (102, 28112),

Gene: Ravana_52 Start: 31221, Stop: 30943, Start Num: 39
Candidate Starts for Ravana_52:
(13, 31314), (Start: 39 @31221 has 15 MA's), (76, 31137), (97, 31026),

Gene: Reba_50 Start: 31867, Stop: 31619, Start Num: 45
Candidate Starts for Reba_50:
(Start: 45 @31867 has 49 MA's), (63, 31813), (64, 31810), (89, 31750), (92, 31726), (94, 31717), (100, 31669), (101, 31654),

Gene: Rebeuca_45 Start: 31840, Stop: 31502, Start Num: 40
Candidate Starts for Rebeuca_45:
(6, 31984), (14, 31933), (Start: 40 @31840 has 5 MA's), (83, 31690), (86, 31675), (95, 31597),

Gene: Refuge_46 Start: 33330, Stop: 32986, Start Num: 24
Candidate Starts for Refuge_46:
(20, 33342), (Start: 24 @33330 has 54 MA's), (41, 33288), (42, 33285), (51, 33267), (68, 33213), (72, 33201), (97, 33066), (102, 33006),

Gene: Relief_45 Start: 31877, Stop: 31575, Start Num: 37
Candidate Starts for Relief_45:
(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Remus_49 Start: 30309, Stop: 30016, Start Num: 39

Candidate Starts for Remus_49:

(Start: 39 @30309 has 15 MA's), (85, 30192), (97, 30099),

Gene: ResDef_46 Start: 32081, Stop: 31806, Start Num: 48

Candidate Starts for ResDef_46:

(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: RexFury_37 Start: 28425, Stop: 28153, Start Num: 47

Candidate Starts for RexFury_37:

(Start: 47 @28425 has 35 MA's), (70, 28359), (99, 28209), (102, 28173),

Gene: Rhodalysa_37 Start: 28394, Stop: 28122, Start Num: 47

Candidate Starts for Rhodalysa_37:

(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: Roary_45 Start: 31159, Stop: 30863, Start Num: 50

Candidate Starts for Roary_45:

(27, 31225), (Start: 50 @31159 has 44 MA's), (69, 31108), (100, 30922),

Gene: RockieBear_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for RockieBear_45:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Rockstar_46 Start: 31256, Stop: 30981, Start Num: 48

Candidate Starts for Rockstar_46:

(17, 31343), (31, 31286), (Start: 48 @31256 has 33 MA's), (87, 31151), (94, 31079), (100, 31031),

Gene: Roimos_46 Start: 31635, Stop: 31360, Start Num: 48

Candidate Starts for Roimos_46:

(Start: 48 @31635 has 33 MA's), (94, 31458), (100, 31410),

Gene: Romney_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Romney_46:

(1, 32147), (Start: 37 @31877 has 141 MA's), (53, 31835), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Roosevelt_45 Start: 31882, Stop: 31580, Start Num: 37

Candidate Starts for Roosevelt_45:

(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Rosa24_45 Start: 31911, Stop: 31609, Start Num: 37

Candidate Starts for Rosa24_45:

(1, 32181), (Start: 37 @31911 has 141 MA's), (53, 31869), (84, 31779), (89, 31740), (97, 31692), (100, 31659),

Gene: Rosalind_48 Start: 30512, Stop: 30219, Start Num: 39

Candidate Starts for Rosalind_48:

(Start: 39 @30512 has 15 MA's), (85, 30395), (97, 30302),

Gene: Ruin_46 Start: 31873, Stop: 31571, Start Num: 37

Candidate Starts for Ruin_46:

(1, 32143), (Start: 37 @31873 has 141 MA's), (84, 31741), (89, 31702), (97, 31654), (100, 31621),

Gene: Rummer_49 Start: 32339, Stop: 32091, Start Num: 45
Candidate Starts for Rummer_49:
(Start: 45 @32339 has 49 MA's), (63, 32285), (89, 32222), (92, 32198), (94, 32189), (100, 32141),
(101, 32126),

Gene: RyeScarlet_48 Start: 32133, Stop: 31807, Start Num: 24
Candidate Starts for RyeScarlet_48:
(Start: 24 @32133 has 54 MA's), (32, 32109), (49, 32067), (102, 31827),

Gene: Sabertooth_46 Start: 31882, Stop: 31580, Start Num: 37
Candidate Starts for Sabertooth_46:
(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Sachima_44 Start: 32043, Stop: 31717, Start Num: 24
Candidate Starts for Sachima_44:
(Start: 24 @32043 has 54 MA's), (32, 32019), (49, 31977), (102, 31737),

Gene: Saintus_39 Start: 27880, Stop: 27593, Start Num: 50
Candidate Starts for Saintus_39:
(Start: 50 @27880 has 44 MA's), (Start: 52 @27871 has 3 MA's), (69, 27829), (100, 27643),

Gene: Salz_46 Start: 31232, Stop: 30885, Start Num: 24
Candidate Starts for Salz_46:
(Start: 24 @31232 has 54 MA's), (Start: 37 @31199 has 141 MA's), (44, 31178), (97, 30965), (100,
30932),

Gene: Saskia_48 Start: 31226, Stop: 30879, Start Num: 24
Candidate Starts for Saskia_48:
(Start: 24 @31226 has 54 MA's), (Start: 37 @31193 has 141 MA's), (44, 31172), (54, 31139), (97,
30959), (100, 30926),

Gene: SaturnRing_47 Start: 31838, Stop: 31563, Start Num: 48
Candidate Starts for SaturnRing_47:
(Start: 48 @31838 has 33 MA's), (94, 31661), (100, 31613),

Gene: Scamp_46 Start: 31882, Stop: 31580, Start Num: 37
Candidate Starts for Scamp_46:
(1, 32152), (Start: 37 @31882 has 141 MA's), (84, 31750), (89, 31711), (97, 31663), (100, 31630),

Gene: Scherzo_47 Start: 32347, Stop: 32021, Start Num: 24
Candidate Starts for Scherzo_47:
(Start: 24 @32347 has 54 MA's), (32, 32323), (49, 32281), (102, 32041),

Gene: Scorpia_44 Start: 31052, Stop: 30789, Start Num: 50
Candidate Starts for Scorpia_44:
(18, 31130), (Start: 50 @31052 has 44 MA's), (Start: 52 @31043 has 3 MA's), (56, 31022), (Start: 65
@31001 has 2 MA's), (97, 30884), (99, 30860),

Gene: Scout_46 Start: 30966, Stop: 30691, Start Num: 48
Candidate Starts for Scout_46:
(Start: 48 @30966 has 33 MA's), (94, 30789), (100, 30741),

Gene: SeniorClean_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for SenorClean_46:
(Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Shaka_46 Start: 31877, Stop: 31575, Start Num: 37
Candidate Starts for Shaka_46:
(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Sham4_47 Start: 31260, Stop: 30913, Start Num: 24
Candidate Starts for Sham4_47:
(Start: 24 @31260 has 54 MA's), (Start: 37 @31227 has 141 MA's), (44, 31206), (97, 30993), (100, 30960),

Gene: SheaKeira_46 Start: 31684, Stop: 31340, Start Num: 25
Candidate Starts for SheaKeira_46:
(Start: 25 @31684 has 4 MA's), (30, 31669), (32, 31663), (49, 31621), (60, 31579), (72, 31546), (102, 31360), (103, 31351),

Gene: SheldonCooper_48 Start: 32303, Stop: 32001, Start Num: 37
Candidate Starts for SheldonCooper_48:
(1, 32573), (Start: 37 @32303 has 141 MA's), (84, 32171), (89, 32132), (100, 32051),

Gene: Shuman_37 Start: 28407, Stop: 28135, Start Num: 47
Candidate Starts for Shuman_37:
(Start: 47 @28407 has 35 MA's), (70, 28341), (99, 28191), (102, 28155),

Gene: Shygu2_45 Start: 31853, Stop: 31530, Start Num: 37
Candidate Starts for Shygu2_45:
(Start: 37 @31853 has 141 MA's), (84, 31700), (89, 31661), (100, 31580),

Gene: Skipitt_45 Start: 31874, Stop: 31572, Start Num: 37
Candidate Starts for Skipitt_45:
(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: Smeadley_45 Start: 31325, Stop: 31029, Start Num: 50
Candidate Starts for Smeadley_45:
(27, 31391), (Start: 50 @31325 has 44 MA's), (69, 31274), (100, 31088),

Gene: SmellyB_49 Start: 31137, Stop: 30709, Start Num: 10
Candidate Starts for SmellyB_49:
(5, 31164), (Start: 10 @31137 has 7 MA's), (34, 31041), (Start: 47 @31005 has 35 MA's), (74, 30915), (80, 30888), (81, 30885), (102, 30729),

Gene: Snape_47 Start: 31258, Stop: 30911, Start Num: 24
Candidate Starts for Snape_47:
(Start: 24 @31258 has 54 MA's), (Start: 37 @31225 has 141 MA's), (44, 31204), (97, 30991), (100, 30958),

Gene: SoilDragon_50 Start: 31756, Stop: 31508, Start Num: 45
Candidate Starts for SoilDragon_50:
(Start: 45 @31756 has 49 MA's), (63, 31702), (64, 31699), (89, 31639), (92, 31615), (94, 31606), (100, 31558), (101, 31543),

Gene: Soshari_52 Start: 32335, Stop: 32087, Start Num: 45

Candidate Starts for Soshari_52:

(Start: 45 @32335 has 49 MA's), (63, 32281), (89, 32218), (92, 32194), (94, 32185), (100, 32137), (101, 32122),

Gene: Sparxx_47 Start: 31875, Stop: 31573, Start Num: 37

Candidate Starts for Sparxx_47:

(1, 32145), (Start: 37 @31875 has 141 MA's), (84, 31743), (89, 31704), (97, 31656), (100, 31623),

Gene: Spike509_50 Start: 32336, Stop: 32088, Start Num: 45

Candidate Starts for Spike509_50:

(Start: 45 @32336 has 49 MA's), (63, 32282), (89, 32219), (92, 32195), (94, 32186), (100, 32138), (101, 32123),

Gene: Spino_45 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Spino_45:

(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Spouty_47 Start: 32175, Stop: 31849, Start Num: 24

Candidate Starts for Spouty_47:

(Start: 24 @32175 has 54 MA's), (32, 32151), (49, 32109), (102, 31869),

Gene: StCroix_37 Start: 28407, Stop: 28135, Start Num: 47

Candidate Starts for StCroix_37:

(Start: 47 @28407 has 35 MA's), (99, 28191), (102, 28155),

Gene: Stasia_45 Start: 31752, Stop: 31450, Start Num: 37

Candidate Starts for Stasia_45:

(Start: 37 @31752 has 141 MA's), (97, 31533),

Gene: SteMason_45 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for SteMason_45:

(1, 32147), (Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Steamy_43 Start: 31608, Stop: 31282, Start Num: 35

Candidate Starts for Steamy_43:

(3, 31740), (16, 31668), (32, 31614), (Start: 35 @31608 has 1 MA's), (66, 31515), (68, 31509), (72, 31497), (97, 31362),

Gene: Stephig9_45 Start: 31163, Stop: 30888, Start Num: 50

Candidate Starts for Stephig9_45:

(27, 31229), (Start: 50 @31163 has 44 MA's), (Start: 52 @31154 has 3 MA's), (62, 31118), (96, 30986), (98, 30965),

Gene: Stink_46 Start: 32321, Stop: 31998, Start Num: 37

Candidate Starts for Stink_46:

(Start: 37 @32321 has 141 MA's), (46, 32306), (73, 32213), (77, 32198), (84, 32168), (95, 32093), (100, 32048),

Gene: Strosahl_49 Start: 30309, Stop: 30016, Start Num: 39

Candidate Starts for Strosahl_49:

(Start: 39 @30309 has 15 MA's), (85, 30192), (97, 30099),

Gene: Sultana_46 Start: 31880, Stop: 31578, Start Num: 37

Candidate Starts for Sultana_46:
(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Sunhee_50 Start: 32074, Stop: 31730, Start Num: 26
Candidate Starts for Sunhee_50:
(26, 32074), (Start: 47 @32020 has 35 MA's), (59, 31978), (73, 31936), (97, 31810), (102, 31750),

Gene: Swann_37 Start: 28394, Stop: 28122, Start Num: 47
Candidate Starts for Swann_37:
(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: Swirley_43 Start: 31587, Stop: 31324, Start Num: 50
Candidate Starts for Swirley_43:
(Start: 50 @31587 has 44 MA's), (Start: 52 @31578 has 3 MA's), (Start: 65 @31536 has 2 MA's), (82, 31506), (91, 31452), (97, 31419), (100, 31386),

Gene: Switzerland_49 Start: 30692, Stop: 30399, Start Num: 39
Candidate Starts for Switzerland_49:
(Start: 39 @30692 has 15 MA's), (85, 30575), (97, 30482),

Gene: SydNat_42 Start: 31777, Stop: 31514, Start Num: 50
Candidate Starts for SydNat_42:
(Start: 50 @31777 has 44 MA's), (Start: 52 @31768 has 3 MA's), (Start: 65 @31726 has 2 MA's), (82, 31696), (91, 31642), (97, 31609), (100, 31576),

Gene: TNguyen7_47 Start: 31805, Stop: 31530, Start Num: 48
Candidate Starts for TNguyen7_47:
(Start: 48 @31805 has 33 MA's), (94, 31628), (100, 31580),

Gene: TWAMP_37 Start: 28394, Stop: 28122, Start Num: 47
Candidate Starts for TWAMP_37:
(Start: 47 @28394 has 35 MA's), (70, 28328), (99, 28178), (102, 28142),

Gene: Takoda_37 Start: 28367, Stop: 28095, Start Num: 47
Candidate Starts for Takoda_37:
(Start: 47 @28367 has 35 MA's), (70, 28301), (99, 28151), (102, 28115),

Gene: Taquarus_46 Start: 31883, Stop: 31581, Start Num: 37
Candidate Starts for Taquarus_46:
(1, 32153), (Start: 37 @31883 has 141 MA's), (84, 31751), (89, 31712), (97, 31664), (100, 31631),

Gene: Tarynearal_39 Start: 31029, Stop: 30766, Start Num: 50
Candidate Starts for Tarynearal_39:
(Start: 50 @31029 has 44 MA's), (Start: 52 @31020 has 3 MA's), (Start: 65 @30978 has 2 MA's), (82, 30948), (91, 30894), (97, 30861), (100, 30828),

Gene: Texage_45 Start: 32082, Stop: 31807, Start Num: 48
Candidate Starts for Texage_45:
(14, 32172), (17, 32163), (Start: 48 @32082 has 33 MA's), (94, 31905),

Gene: Thanksgivukkah_45 Start: 31878, Stop: 31576, Start Num: 37
Candidate Starts for Thanksgivukkah_45:
(1, 32148), (Start: 37 @31878 has 141 MA's), (84, 31746), (89, 31707), (97, 31659), (100, 31626),

Gene: Theia_38 Start: 31043, Stop: 30789, Start Num: 52

Candidate Starts for Theia_38:

(Start: 50 @31052 has 44 MA's), (Start: 52 @31043 has 3 MA's), (54, 31034), (60, 31013), (Start: 65 @31001 has 2 MA's), (91, 30917), (97, 30884), (100, 30851),

Gene: Tiger_39 Start: 30576, Stop: 30322, Start Num: 52

Candidate Starts for Tiger_39:

(Start: 50 @30585 has 44 MA's), (Start: 52 @30576 has 3 MA's), (54, 30567), (60, 30546), (Start: 65 @30534 has 2 MA's), (91, 30450), (97, 30417), (100, 30384),

Gene: Timothy_47 Start: 31235, Stop: 30888, Start Num: 24

Candidate Starts for Timothy_47:

(Start: 24 @31235 has 54 MA's), (Start: 37 @31202 has 141 MA's), (44, 31181), (97, 30968), (100, 30935),

Gene: Timshel_45 Start: 33822, Stop: 33541, Start Num: 39

Candidate Starts for Timshel_45:

(6, 33957), (Start: 39 @33822 has 15 MA's), (62, 33759), (82, 33702), (89, 33672), (102, 33564),

Gene: TinaFeyge_46 Start: 31875, Stop: 31573, Start Num: 37

Candidate Starts for TinaFeyge_46:

(1, 32145), (Start: 37 @31875 has 141 MA's), (84, 31743), (89, 31704), (97, 31656), (100, 31623),

Gene: TinyPebbles_49 Start: 32341, Stop: 32093, Start Num: 45

Candidate Starts for TinyPebbles_49:

(Start: 45 @32341 has 49 MA's), (63, 32287), (89, 32224), (92, 32200), (94, 32191), (100, 32143), (101, 32128),

Gene: TinyTimmy_47 Start: 31278, Stop: 30931, Start Num: 24

Candidate Starts for TinyTimmy_47:

(Start: 24 @31278 has 54 MA's), (Start: 37 @31245 has 141 MA's), (44, 31224), (97, 31011), (100, 30978),

Gene: Tinybot_45 Start: 31907, Stop: 31605, Start Num: 37

Candidate Starts for Tinybot_45:

(1, 32177), (Start: 37 @31907 has 141 MA's), (84, 31775), (89, 31736), (97, 31688), (100, 31655),

Gene: TiroTheta9_46 Start: 31874, Stop: 31572, Start Num: 37

Candidate Starts for TiroTheta9_46:

(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: Todacoro_46 Start: 32081, Stop: 31806, Start Num: 48

Candidate Starts for Todacoro_46:

(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: Topanga_43 Start: 31489, Stop: 31151, Start Num: 40

Candidate Starts for Topanga_43:

(6, 31633), (14, 31582), (Start: 40 @31489 has 5 MA's), (83, 31339), (86, 31324), (95, 31246),

Gene: TroyPia_47 Start: 31878, Stop: 31576, Start Num: 37

Candidate Starts for TroyPia_47:

(1, 32148), (Start: 37 @31878 has 141 MA's), (84, 31746), (89, 31707), (97, 31659), (100, 31626),

Gene: Tubs_47 Start: 32109, Stop: 31783, Start Num: 24
Candidate Starts for Tubs_47:
(Start: 24 @32109 has 54 MA's), (32, 32085), (49, 32043), (102, 31803),

Gene: Twigg_41 Start: 31175, Stop: 30963, Start Num: 65
Candidate Starts for Twigg_41:
(Start: 50 @31226 has 44 MA's), (Start: 52 @31217 has 3 MA's), (54, 31208), (60, 31187), (Start: 65 @31175 has 2 MA's), (91, 31091), (97, 31058), (100, 31025),

Gene: Twister_43 Start: 31400, Stop: 31062, Start Num: 40
Candidate Starts for Twister_43:
(6, 31544), (14, 31493), (Start: 40 @31400 has 5 MA's), (83, 31250), (86, 31235), (95, 31157),

Gene: TygerBlood_46 Start: 31880, Stop: 31578, Start Num: 37
Candidate Starts for TygerBlood_46:
(1, 32150), (Start: 37 @31880 has 141 MA's), (84, 31748), (89, 31709), (97, 31661), (100, 31628),

Gene: Ugenie5_44 Start: 32346, Stop: 32020, Start Num: 24
Candidate Starts for Ugenie5_44:
(Start: 24 @32346 has 54 MA's), (32, 32322), (49, 32280), (102, 32040),

Gene: UhSalsa_37 Start: 28395, Stop: 28123, Start Num: 47
Candidate Starts for UhSalsa_37:
(Start: 47 @28395 has 35 MA's), (70, 28329), (99, 28179), (102, 28143),

Gene: Ulysses_45 Start: 31557, Stop: 31255, Start Num: 37
Candidate Starts for Ulysses_45:
(1, 31827), (Start: 37 @31557 has 141 MA's), (84, 31425), (89, 31386), (97, 31338), (100, 31305),

Gene: UnionJack_41 Start: 30553, Stop: 30302, Start Num: 50
Candidate Starts for UnionJack_41:
(15, 30643), (18, 30631), (Start: 50 @30553 has 44 MA's), (Start: 52 @30544 has 3 MA's), (Start: 65 @30502 has 2 MA's), (82, 30472), (91, 30418), (97, 30385), (100, 30352),

Gene: Veracruz_45 Start: 32081, Stop: 31806, Start Num: 48
Candidate Starts for Veracruz_45:
(14, 32171), (17, 32162), (Start: 48 @32081 has 33 MA's), (94, 31904),

Gene: VohminGhazi_49 Start: 31138, Stop: 30710, Start Num: 10
Candidate Starts for VohminGhazi_49:
(5, 31165), (Start: 10 @31138 has 7 MA's), (34, 31042), (Start: 47 @31006 has 35 MA's), (74, 30916), (80, 30889), (81, 30886), (102, 30730),

Gene: Waits_49 Start: 30481, Stop: 30188, Start Num: 39
Candidate Starts for Waits_49:
(Start: 39 @30481 has 15 MA's), (85, 30364), (97, 30271),

Gene: WalterMcMickey_43 Start: 31400, Stop: 31062, Start Num: 40
Candidate Starts for WalterMcMickey_43:
(6, 31544), (14, 31493), (Start: 40 @31400 has 5 MA's), (83, 31250), (86, 31235), (95, 31157),

Gene: Wander_46 Start: 31877, Stop: 31575, Start Num: 37

Candidate Starts for Wander_46:
(Start: 37 @31877 has 141 MA's), (84, 31745), (89, 31706), (97, 31658), (100, 31625),

Gene: Warrior24_50 Start: 30688, Stop: 30395, Start Num: 39
Candidate Starts for Warrior24_50:
(Start: 39 @30688 has 15 MA's), (85, 30571), (97, 30478),

Gene: Watson_50 Start: 32300, Stop: 32052, Start Num: 45
Candidate Starts for Watson_50:
(Start: 45 @32300 has 49 MA's), (63, 32246), (89, 32183), (92, 32159), (94, 32150), (100, 32102),
(101, 32087),

Gene: Wilbur_46 Start: 31877, Stop: 31575, Start Num: 37
Candidate Starts for Wilbur_46:
(1, 32147), (Start: 37 @31877 has 141 MA's), (53, 31835), (84, 31745), (89, 31706), (97, 31658), (100,
31625),

Gene: Wile_45 Start: 31884, Stop: 31561, Start Num: 37
Candidate Starts for Wile_45:
(Start: 37 @31884 has 141 MA's), (70, 31785), (73, 31776), (77, 31761), (84, 31731), (100, 31611),

Gene: Wizard007_46 Start: 31885, Stop: 31583, Start Num: 37
Candidate Starts for Wizard007_46:
(1, 32155), (Start: 37 @31885 has 141 MA's), (84, 31753), (89, 31714), (97, 31666), (100, 31633),

Gene: Wolpertinger_46 Start: 31261, Stop: 30914, Start Num: 24
Candidate Starts for Wolpertinger_46:
(Start: 24 @31261 has 54 MA's), (Start: 37 @31228 has 141 MA's), (44, 31207), (97, 30994), (100,
30961),

Gene: Xena_44 Start: 31850, Stop: 31527, Start Num: 37
Candidate Starts for Xena_44:
(Start: 37 @31850 has 141 MA's), (70, 31751), (73, 31742), (77, 31727), (84, 31697), (100, 31577),

Gene: XianYue_46 Start: 31886, Stop: 31548, Start Num: 28
Candidate Starts for XianYue_46:
(Start: 28 @31886 has 1 MA's), (87, 31712), (100, 31595),

Gene: Yecey3_48 Start: 31582, Stop: 31238, Start Num: 24
Candidate Starts for Yecey3_48:
(Start: 24 @31582 has 54 MA's), (32, 31561), (49, 31519), (60, 31477), (72, 31444), (102, 31258),

Gene: YoSam321_46 Start: 31874, Stop: 31572, Start Num: 37
Candidate Starts for YoSam321_46:
(1, 32144), (Start: 37 @31874 has 141 MA's), (84, 31742), (89, 31703), (97, 31655), (100, 31622),

Gene: Yogi_37 Start: 28368, Stop: 28096, Start Num: 47
Candidate Starts for Yogi_37:
(Start: 47 @28368 has 35 MA's), (70, 28302), (99, 28152), (102, 28116),

Gene: Yoncess_37 Start: 28369, Stop: 28097, Start Num: 47
Candidate Starts for Yoncess_37:
(Start: 47 @28369 has 35 MA's), (70, 28303), (99, 28153), (102, 28117),

Gene: Zarafa_46 Start: 31728, Stop: 31453, Start Num: 48
Candidate Starts for Zarafa_46:
(Start: 48 @31728 has 33 MA's), (94, 31551), (100, 31503),

Gene: Zetzy_49 Start: 31871, Stop: 31623, Start Num: 45
Candidate Starts for Zetzy_49:
(Start: 45 @31871 has 49 MA's), (63, 31817), (82, 31784), (89, 31754), (92, 31730), (94, 31721), (100, 31673), (101, 31658),

Gene: Zimmer_44 Start: 32823, Stop: 32467, Start Num: 24
Candidate Starts for Zimmer_44:
(Start: 24 @32823 has 54 MA's), (41, 32781), (68, 32706), (72, 32694), (76, 32676), (97, 32547), (102, 32487),

Gene: Zolita_41 Start: 31781, Stop: 31518, Start Num: 50
Candidate Starts for Zolita_41:
(Start: 50 @31781 has 44 MA's), (Start: 52 @31772 has 3 MA's), (Start: 65 @31730 has 2 MA's), (82, 31700), (91, 31646), (97, 31613), (100, 31580),