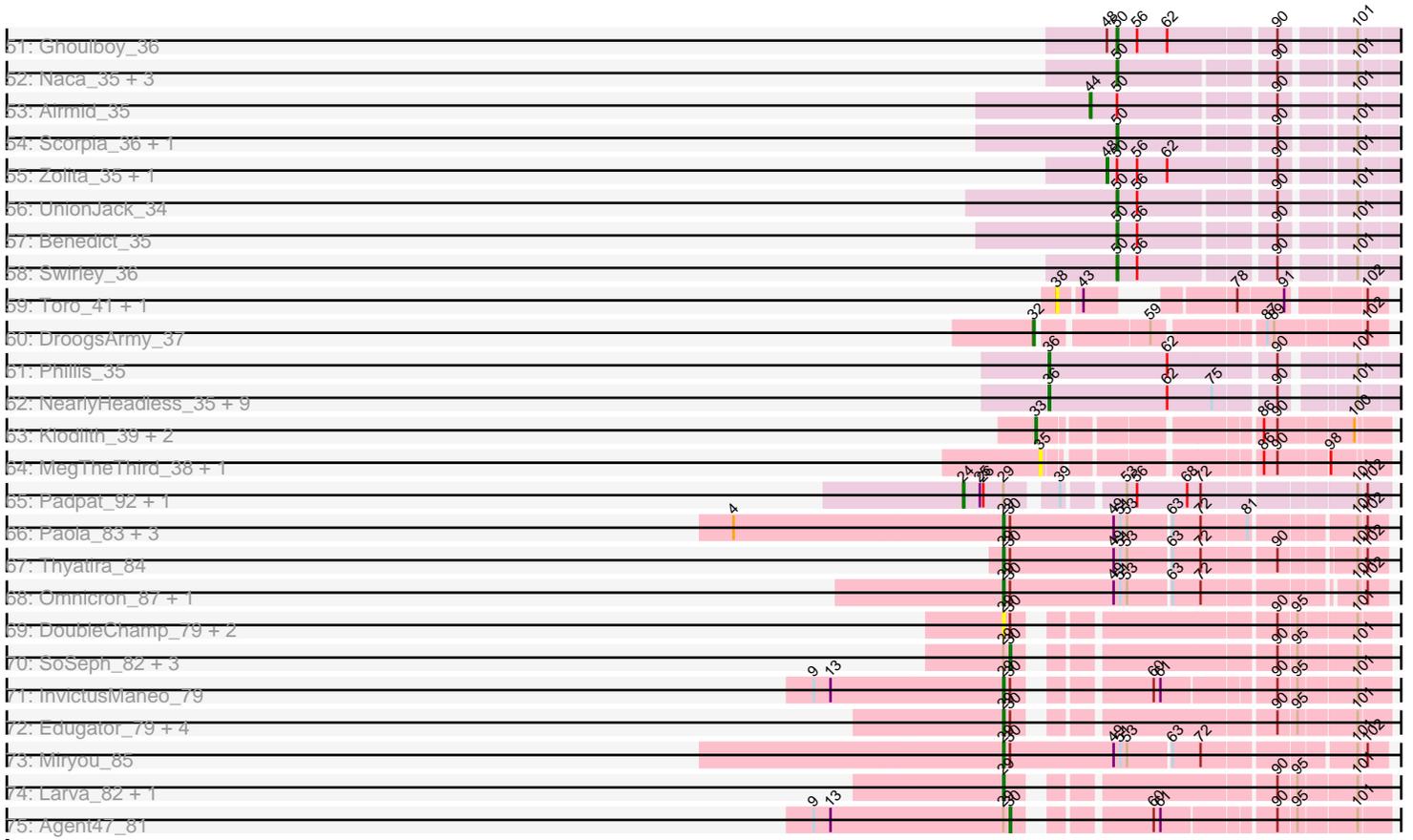# Pham 290739

Pham 290739

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 290739 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290739 has 371 members, 41 are drafts.

Phages represented in each track:
• Track 1 : LilBib_43
• Track 2 : Marco3_44
• Track 3 : Jasper_44, Dreamboat_44
• Track 4 : Sagefire_45
• Track 5 : Paraselene_41, Rutherferd_45
• Track 6 : MilleFeuille_39
• Track 7 : DustyMartin_43, Shapes_43, RhynO_40, Rowdy_43
• Track 8 : DontArgue_38
• Track 9 : Anon_38
• Track 10 : MyraDee_36
• Track 11 : LadyBird_41
• Track 12 : XianYue_38
• Track 13 : BabyBack_39
• Track 14 : Adzzy_40
• Track 15 : GaugeLDP_39
• Track 16 : CRB1_40
• Track 17 : NothingSpecial_39
• Track 18 : Idleandcovert_40, Pistachio_41, MA5_40, Clammy_40, JF2_40, SaturnRing_40, BlueBird_41, Giroux_41, MK4_40, Isca_39, Rockstar_40, Bugatti_40, JF4_40, Phantastic_40, B1_37
• Track 19 : Pembroke_43, MarQuardt_43, SoYo_43, DaHudson_43, StepMih_43, MadMarie_43, BreSam8_43, Marie_43, Tiffany_43, Farber_43, Lowa_43, JHC117_43, Bigflo_43, Hercules11_43, Microwolf_43, Montavir_42, Taurus_44, Fernando_43, Colbster_43, Grif_43, Jobu08_42, JenCasNa_44, Grum1_43, PotatoSplit_45, AugsMagnumOpus_46, MuchMore_46, LBerry_44, P28Green_44, GtownJaz_43, Vix_43, Stagni_43, MoneyMay_43, Mainiac_43, Cullens_43, Malinsilva_45, Sabinator_42, Wooldri_45, SoilDragon_43, Croquant_44, Sabia_43, Lilith_44, Watson_43, Snickers_43, Phoebe_44, Grub_43, Dieselweasel_44, Beauxregard13_43, Gwennie_42, LugYA_46, Zetzy_42, PGHhamlin_45, Penny1_44, EpicPhail_44
• Track 20 : Reba_43, Calvinny_43, Marius_44, Groupthink_44, PurpleHaze_43, Kalb97_44, JeppNRM_44, Pawn_43, Phranny_44, Heliosoles_42, Manu_43, PhishRPhriends_41, Kalnoky_44, Gemma_42
• Track 21 : Heathen_40, Roimos_40, Zarafa_40, DropBear_40, Kachowdy_40, HelDan_40, Marchesa_40
• Track 22 : Aglet_44, GingkoMaracino_43, Ollie_43, Anubis_46

• Track 23 : Todacoro_39, Hookmount_39, EtoileNova_40, Caviar_39, Margo_39, QuinnKiro_38, Lambert1_39, Noella_39, ResDef_39, Norbert_38, Popcicle_39, Panamaxus_37, Texage_38, Pocahontas_39, Veracruz_38
• Track 24 : BabyJohn_38, Chiqui_38
• Track 25 : HaveUMetTed_44, OlanP_42
• Track 26 : BuzzBuzz_41, Soshari_45, Daishi_42, Misomonster_44, LarryKay_43, Rummer_42, KADY_43, HashRod_44, Methuselah_41, Louie6_42, Phoxy_43, Bxz2_39, Spike509_43, TinyPebbles_42, AgronaGT15_42
• Track 27 : ClownCar_43, ACFishhook_42
• Track 28 : BabyRay_40
• Track 29 : Fred313_40
• Track 30 : TNguyen7_40, Puppy_41
• Track 31 : Scout_40
• Track 32 : HamSlice_37, Pumbaa_38, Melvin_40, Wilbur_38, Bruiser_37, Koreni_37, Albee_38, TygerBlood_38, SteMason_38, RockieBear_38, Flux_38, Phontbonne_38, Mazhar510_38, Bombshell_38, TiroTheta9_38, Sparxx_39, Sabertooth_38, KekoraPapaka_39, Druantia_38, OKaNui_39, JoongJeon_38, Bartimeaus_38, Millski_37, PeterPeter_38, Broseidon_38, Phelipe_39, Lorenzo_38, Avle17_38, Alberto7_39, Tinybot_37, Relief_37, TinaFeyge_39, CentreCat_38, Deano_38, Thanksgivukkah_38, Nemo27_38, Lemur_38, Eris_37, LittleB_38, Caelakin_38, Wander_38, Holli_37, Skipitt_37, Kingmustik0402_38, Romney_38, Jaykayelowell_37, BubbleTrouble_38, Huxley_39, Spino_38, Roosevelt_37, Cocoaberry_38, TroyPia_39, Taquarus_38, Kyee_38, Baby16_38, Scamp_38, Commander_38, Chaph_38, Nyxis_38, Ulysses_37, ICleared_38, Maverick_38, Iceman_39, Phacado_38, Koan_37, Peaches_38, Eapen_38, Shaka_38, Mayonnaise_38, JetBlade_38, Connomayer_38, KFPoly_38, Florean_38, Dhanush_38, Gadost_38, Funston_38, LittleGuy_38, Wizard007_38, Lunsford_39, NotAPhaseMom_38, Sultana_38, MeeZee_38, Blackmoor_38, Houdini22_38, Happiness_37, Eros_38, Burger_36, Clarenza_38, YoSam321_38, LappelDuVide_38
• Track 33 : Morpher26_37, Datway_37, PetiteSangsue_37, Katalie136_37, Wile_37, AbbysRanger_37, Achebe_36, Perplexer_37, Backyardigan_36, Badger_36, Bumblebee11_36, Xena_36, Cici_37
• Track 34 : Arturo_36
• Track 35 : Ruin_38
• Track 36 : Nebs_39, Abdiel_38, Mundrea_36, Kampy_38, Rosa24_38, BellusTerra_39, Eurydice_39, Eagle_38, NorthStar_37, Ohfah_39, LeoAvram_38, Polymorphads_39, Citius_38, Medusa_38, Morrow_39, Iracema64_39, Maxo_39
• Track 37 : LochMonster_38
• Track 38 : Cintron_38, Shygu2_37
• Track 39 : AvatarAhPeg_37, Stink_38, Miramae_37
• Track 40 : SheldonCooper_40, LHTSCC_40, Obama12_39, ChampagnePapi_40, BangNhom_39, Cerulean_39
• Track 41 : Phighter1804_38
• Track 42 : Camperdownii_37
• Track 43 : DirtyDunning_37
• Track 44 : Kratark_38, Kremtemulon_38
• Track 45 : Noelle_38
• Track 46 : SenorClean_38
• Track 47 : Palestino_37
• Track 48 : HuhtaEnerson15_34, LittleCherry_34, Prinashe11_35, Coog_34, Bonamassa_34, Micasa_36, Archetta_34, Cuco_34, Milcery_34, Twigg_34, Tarynearal_33, Midas2_34, Theia_32
• Track 49 : George_33

• Track 50 : MarysWell_33
• Track 51 : Ghoulboy_36
• Track 52 : Naca_35, ElTiger69_35, PetterN_36, Jabiru_35
• Track 53 : Airmid_35
• Track 54 : Scorpia_36, Chadwick_36
• Track 55 : Zolita_35, SydNat_36
• Track 56 : UnionJack_34
• Track 57 : Benedict_35
• Track 58 : Swirley_36
• Track 59 : Toro_41, FlyCatcher_43
• Track 60 : DroogsArmy_37
• Track 61 : Phillis_35
• Track 62 : NearlyHeadless_35, Stephig9_35, Groundhog_34, Roary_35, Danforth_34, Astro_35, Dixon_35, Smeadley_35, Caitlin_34, Expelliarmus_34
• Track 63 : Klodlith_39, Charm_38, DreamTeam1_38
• Track 64 : MegTheThird_38, Celestialunch_38
• Track 65 : Padpat_92, Emerson_91
• Track 66 : Paola_83, Waterfoul_83, Guillsminger_84, Leston_83
• Track 67 : Thyatira_84
• Track 68 : Omnicron_87, Rando14_84
• Track 69 : DoubleChamp_79, LilDirt_79, BananenDer11_79
• Track 70 : SoSeph_82, Heftyboy_82, Collard_80, ViviJ_88
• Track 71 : InvictusManeo_79
• Track 72 : Edugator_79, AlleyCat_83, Kratio_83, Psycho_81, Dadosky_83
• Track 73 : Miryou_85
• Track 74 : Larva_82, Neighly_83
• Track 75 : Agent47_81

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

The start number called the most often in the published annotations is 38, it was called in 116 of the 330 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ACFishhook_42, Aglet_44, AgronaGT15_42, Anubis_46, AugsMagnumOpus_46, B1_37, BabyJohn_38, BabyRay_40, Beauxregard13_43, Bigflo_43, BlueBird_41, BreSam8_43, Bugatti_40, BuzzBuzz_41, Bxz2_39, Calvinny_43, Caviar_39, Chiqui_38, Clammy_40, ClownCar_43, Colbster_43, Croquant_44, Cullens_43, DaHudson_43, Daishi_42, Dieselweasel_44, DropBear_40, EpicPhail_44, EtoileNova_40, Farber_43, Fernando_43, FlyCatcher_43, Fred313_40, Gemma_42, GingkoMaracino_43, Giroux_41, Grif_43, Groupthink_44, Grub_43, Grum1_43, GtownJaz_43, Gwennie_42, HashRod_44, HaveUMetTed_44, Heathen_40, HelDan_40, Heliosoles_42, Hercules11_43, Hookmount_39, Idleandcovert_40, Isca_39, JF2_40, JF4_40, JHC117_43, JenCasNa_44, JeppNRM_44, Jobu08_42, KADY_43, Kachowdy_40, Kalb97_44, Kalnoky_44, LBerry_44, Lambert1_39, LarryKay_43, Lilith_44, Louie6_42, Lowa_43, LugYA_46, MA5_40, MK4_40, MadMarie_43, Mainiac_43, Malinsilva_45, Manu_43, MarQuardt_43, Marchesa_40, Margo_39, Marie_43, Marius_44, Methuselah_41, Microwolf_43, Misomonster_44, MoneyMay_43, Montavir_42, MuchMore_46, Noella_39, Norbert_38, OlanP_42, Ollie_43, P28Green_44, PGHhamlin_45, Panamaxus_37, Pawn_43, Pembroke_43,

Penny1_44, Phantastic_40, PhishRPhriends_41, Phoebe_44, Phoxy_43, Phranny_44, Pistachio_41, Pocahontas_39, Popcicle_39, PotatoSplit_45, Puppy_41, PurpleHaze_43, QuinnKiro_38, Reba_43, ResDef_39, Rockstar_40, Roimos_40, Rummer_42, Sabia_43, Sabinator_42, SaturnRing_40, Scout_40, Snickers_43, SoYo_43, SoilDragon_43, Soshari_45, Spike509_43, Stagni_43, StepMih_43, TNguyen7_40, Taurus_44, Texage_38, Tiffany_43, TinyPebbles_42, Todacoro_39, Toro_41, Veracruz_38, Vix_43, Watson_43, Wooldri_45, Zarafa_40, Zetzy_42,

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

Genes that do not have the "Most Annotated" start:
• AbbysRanger_37, Abdiel_38, Achebe_36, Adzzy_40, Agent47_81, Airmid_35, Albee_38, Alberto7_39, AlleyCat_83, Anon_38, Archetta_34, Arturo_36, Astro_35, AvatarAhPeg_37, Avle17_38, Baby16_38, BabyBack_39, Backyardigan_36, Badger_36, BananenDer11_79, BangNhom_39, Bartimeaus_38, BellusTerra_39, Benedict_35, Blackmoor_38, Bombshell_38, Bonamassa_34, Broseidon_38, Bruiser_37, BubbleTrouble_38, Bumblebee11_36, Burger_36, CRB1_40, Caelakin_38, Caitlin_34, Camperdownii_37, Celestialunch_38, CentreCat_38, Cerulean_39, Chadwick_36, ChampagnePapi_40, Chaph_38, Charm_38, Cici_37, Cintron_38, Citius_38, Clarenza_38, Cocoaberry_38, Collard_80, Commander_38, Connomayer_38, Coog_34, Cuco_34, Dadosky_83, Danforth_34, Datway_37, Deano_38, Dhanush_38, DirtyDunning_37, Dixon_35, DontArgue_38, DoubleChamp_79, DreamTeam1_38, Dreamboat_44, DroogsArmy_37, Druantia_38, DustyMartin_43, Eagle_38, Eapen_38, Educator_79, ElTiger69_35, Emerson_91, Eris_37, Eros_38, Eurydice_39, Expelliarmus_34, Florean_38, Flux_38, Funston_38, Gadost_38, GaugeLDP_39, George_33, Ghoulboy_36, Groundhog_34, Guillsminger_84, HamSlice_37, Happiness_37, Heftyboy_82, Holli_37, Houdini22_38, HuhtaEnerson15_34, Huxley_39, ICleared_38, Iceman_39, InvictusManeo_79, Iracema64_39, Jabiru_35, Jasper_44, Jaykayelowell_37, JetBlade_38, JoongJeon_38, KFPoly_38, Kampy_38, Katalie136_37, KekoraPapaka_39, Kingmustik0402_38, Klodlith_39, Koan_37, Koreni_37, Kratark_38, Kratio_83, Kremtemulon_38, Kyee_38, LHTSCC_40, LadyBird_41, LappelDuVide_38, Larva_82, Lemur_38, LeoAvram_38, Leston_83, LilBib_43, LilDirt_79, LittleB_38, LittleCherry_34, LittleGuy_38, LochMonster_38, Lorenzo_38, Lunsford_39, Marco3_44, MarysWell_33, Maverick_38, Maxo_39, Mayonnaise_38, Mazhar510_38, Medusa_38, MeeZee_38, MegTheThird_38, Melvin_40, Micasa_36, Midas2_34, Milcery_34, MilleFeuille_39, Millski_37, Miramae_37, Miryou_85, Morpher26_37, Morrow_39, Mundrea_36, MyraDee_36, Naca_35, NearlyHeadless_35, Nebs_39, Neighly_83, Nemo27_38, Noelle_38, NorthStar_37, NotAPhaseMom_38, NothingSpecial_39, Nyxis_38, OKaNui_39, Obama12_39, Ohfah_39, Omnicron_87, Padpat_92, Palestino_37, Paola_83, Paraselene_41, Peaches_38, Perplexer_37, PeterPeter_38, PetiteSangsue_37, PetterN_36, Phacado_38, Phelipe_39, Phighter1804_38, Phillis_35, Phontbonne_38, Polymorphads_39, Prinashe11_35, Psycho_81, Pumbaa_38, Rando14_84, Relief_37, RhynO_40, Roary_35, RockieBear_38, Romney_38, Roosevelt_37, Rosa24_38, Rowdy_43, Ruin_38, Rutherferd_45, Sabertooth_38, Sagefire_45, Scamp_38, Scorpia_36, SenorClean_38, Shaka_38, Shapes_43, SheldonCooper_40, Shygu2_37, Skipitt_37, Smeadley_35, SoSeph_82, Sparxx_39, Spino_38, SteMason_38, Stephig9_35, Stink_38, Sultana_38, Swirley_36, SydNat_36, Taquarus_38, Tarynearal_33, Thanksgivukkah_38, Theia_32, Thyatira_84, TinaFeyge_39, Tinybot_37, TiroTheta9_38, TroyPia_39, Twigg_34, TygerBlood_38, Ulysses_37, UnionJack_34, ViviJ_88, Wander_38, Waterfoul_83, Wilbur_38, Wile_37, Wizard007_38, Xena_36,

XianYue_38, YoSam321_38, Zolita_35,

Summary by start number:

Start 24:
• Found in 2 of 371 (0.5%) of genes in pham
• Manual Annotations of this start: 2 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Emerson_91 (K1), Padpat_92 (K1),

Start 27:
• Found in 25 of 371 (6.7%) of genes in pham
• Manual Annotations of this start: 25 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbysRanger_37 (A4), Achebe_36 (A4), AvatarAhPeg_37 (A4), Backyardigan_36 (A4), Badger_36 (A4), BangNhom_39 (A4), Bumblebee11_36 (A4), Cerulean_39 (A4), ChampagnePapi_40 (A4), Cici_37 (A4), Cintron_38 (A4), Datway_37 (A4), DirtyDunning_37 (A4), Katalie136_37 (A4), LHTSCC_40 (A4), Miramae_37 (A4), Morpher26_37 (A4), Obama12_39 (A4), Perplexer_37 (A4), PetiteSangsue_37 (A4), SheldonCooper_40 (A4), Shygu2_37 (A4), Stink_38 (A4), Wile_37 (A4), Xena_36 (A4),

Start 29:
• Found in 26 of 371 (7.0%) of genes in pham
• Manual Annotations of this start: 15 of 330
• Called 73.1% of time when present
• Phage (with cluster) where this start called: AlleyCat_83 (K5), BananenDer11_79 (K5), Dadosky_83 (K5), DoubleChamp_79 (K5), Edugator_79 (K5), Guillsminger_84 (K5), InvictusManeo_79 (K5), Kratio_83 (K5), Larva_82 (K5), Leston_83 (K5), LilDirt_79 (K5), Miryou_85 (K5), Neighly_83 (K3), Omnicron_87 (K5), Paola_83 (K5), Psycho_81 (K5), Rando14_84 (K5), Thyatira_84 (K5), Waterfoul_83 (K5),

Start 30:
• Found in 22 of 371 (5.9%) of genes in pham
• Manual Annotations of this start: 5 of 330
• Called 22.7% of time when present
• Phage (with cluster) where this start called: Agent47_81 (K5), Collard_80 (K5), Heftyboy_82 (K5), SoSeph_82 (K5), ViviJ_88 (K5),

Start 31:
• Found in 117 of 371 (31.5%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 0.9% of time when present
• Phage (with cluster) where this start called: Camperdownii_37 (A4),

Start 32:
• Found in 1 of 371 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DroogsArmy_37 (A7),

Start 33:
• Found in 3 of 371 (0.8%) of genes in pham

• Manual Annotations of this start: 2 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Charm_38 (A9), DreamTeam1_38 (A9), Klodlith_39 (A9),

Start 35:
• Found in 2 of 371 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Celestialunch_38 (A9), MegTheThird_38 (A9),

Start 36:
• Found in 11 of 371 (3.0%) of genes in pham
• Manual Annotations of this start: 10 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astro_35 (A8), Caitlin_34 (A8), Danforth_34 (A8), Dixon_35 (A8), Expelliarmus_34 (A8), Groundhog_34 (A8), NearlyHeadless_35 (A8), Phillis_35 (A8), Roary_35 (A8), Smeadley_35 (A8), Stephig9_35 (A8),

Start 38:
• Found in 136 of 371 (36.7%) of genes in pham
• Manual Annotations of this start: 116 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ACFishhook_42 (A3), Aglet_44 (A3), AgronaGT15_42 (A3), Anubis_46 (A3), AugsMagnumOpus_46 (A3), B1_37 (A3), BabyJohn_38 (A3), BabyRay_40 (A3), Beauxregard13_43 (A3), Bigflo_43 (A3), BlueBird_41 (A3), BreSam8_43 (A3), Bugatti_40 (A3), BuzzBuzz_41 (A3), Bxz2_39 (A3), Calvinny_43 (A3), Caviar_39 (A3), Chiqui_38 (A3), Clammy_40 (A3), ClownCar_43 (A3), Colbster_43 (A3), Croquant_44 (A3), Cullens_43 (A3), DaHudson_43 (A3), Daishi_42 (A3), Dieselweasel_44 (A3), DropBear_40 (A3), EpicPhail_44 (A3), EtoileNova_40 (A3), Farber_43 (A3), Fernando_43 (A3), FlyCatcher_43 (A7), Fred313_40 (A3), Gemma_42 (A3), GingkoMaracino_43 (A3), Giroux_41 (A3), Grif_43 (A3), Groupthink_44 (A3), Grub_43 (A3), Grum1_43 (A3), GtownJaz_43 (A3), Gwennie_42 (A3), HashRod_44 (A3), HaveUMetTed_44 (A3), Heathen_40 (A3), HelDan_40 (A3), Heliosoles_42 (A3), Hercules11_43 (A3), Hookmount_39 (A3), Idleandcovert_40 (A3), Isca_39 (A3), JF2_40 (A3), JF4_40 (A3), JHC117_43 (A3), JenCasNa_44 (A3), JeppNRM_44 (A3), Jobu08_42 (A3), KADY_43 (A3), Kachowdy_40 (A3), Kalb97_44 (A3), Kalnoky_44 (A3), LBerry_44 (A3), Lambert1_39 (A3), LarryKay_43 (A3), Lilith_44 (A3), Louie6_42 (A3), Lowa_43 (A3), LugYA_46 (A3), MA5_40 (A3), MK4_40 (A3), MadMarie_43 (A3), Mainiac_43 (A3), Malinsilva_45 (A3), Manu_43 (A3), MarQuardt_43 (A3), Marchesa_40 (A3), Margo_39 (A3), Marie_43 (A3), Marius_44 (A3), Methuselah_41 (A3), Microwolf_43 (A3), Misomonster_44 (A3), MoneyMay_43 (A3), Montavir_42 (A3), MuchMore_46 (A3), Noella_39 (A3), Norbert_38 (A3), OlanP_42 (A3), Ollie_43 (A3), P28Green_44 (A3), PGHhamlin_45 (A3), Panamaxus_37 (A3), Pawn_43 (A3), Pembroke_43 (A3), Penny1_44 (A3), Phantastic_40 (A3), PhishRPhriends_41 (A3), Phoebe_44 (A3), Phoxy_43 (A3), Phranny_44 (A3), Pistachio_41 (A3), Pocahontas_39 (A3), Popcicle_39 (A3), PotatoSplit_45 (A3), Puppy_41 (A3), PurpleHaze_43 (A3), QuinnKiro_38 (A3), Reba_43 (A3), ResDef_39 (A3), Rockstar_40 (A3), Roimos_40 (A3), Rummer_42 (A3), Sabia_43 (A3), Sabinator_42 (A3), SaturnRing_40 (A3), Scout_40 (A3), Snickers_43 (A3), SoYo_43 (A3), SoilDragon_43 (A3), Soshari_45

(A3), Spike509_43 (A3), Stagni_43 (A3), StepMih_43 (A3), TNguyen7_40 (A3), Taurus_44 (A3), Texage_38 (A3), Tiffany_43 (A3), TinyPebbles_42 (A3), Todacoro_39 (A3), Toro_41 (A7), Veracruz_38 (A3), Vix_43 (A3), Watson_43 (A3), Wooldri_45 (A3), Zarafa_40 (A3), Zetzy_42 (A3),

Start 40:
• Found in 1 of 371 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MyraDee_36 (A18),

Start 41:
• Found in 8 of 371 (2.2%) of genes in pham
• Manual Annotations of this start: 7 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dreamboat_44 (A1), Jasper_44 (A1), LilBib_43 (A1), Marco3_44 (A1), MilleFeuille_39 (A1), Paraselene_41 (A1), Rutherferd_45 (A1), Sagefire_45 (A1),

Start 43:
• Found in 126 of 371 (34.0%) of genes in pham
• Manual Annotations of this start: 111 of 330
• Called 95.2% of time when present
• Phage (with cluster) where this start called: Abdiel_38 (A4), Albee_38 (A4), Alberto7_39 (A4), Arturo_36 (A4), Avle17_38 (A4), Baby16_38 (A4), Bartimeaus_38 (A4), BellusTerra_39 (A4), Blackmoor_38 (A4), Bombshell_38 (A4), Broseidon_38 (A4), Bruiser_37 (A4), BubbleTrouble_38 (A4), Burger_36 (A4), Caelakin_38 (A4), CentreCat_38 (A4), Chaph_38 (A4), Citius_38 (A4), Clarenza_38 (A4), Cocoaberry_38 (A4), Commander_38 (A4), Connomayer_38 (A4), Deano_38 (A4), Dhanush_38 (A4), DontArgue_38 (A10), Druantia_38 (A4), DustyMartin_43 (A10), Eagle_38 (A4), Eapen_38 (A4), Eris_37 (A4), Eros_38 (A4), Eurydice_39 (A4), Florean_38 (A4), Flux_38 (A4), Funston_38 (A4), Gadost_38 (A4), HamSlice_37 (A4), Happiness_37 (A4), Holli_37 (A4), Houdini22_38 (A4), Huxley_39 (A4), ICleared_38 (A4), Iceman_39 (A4), Iracema64_39 (A4), Jaykayelowell_37 (A4), JetBlade_38 (A4), JoongJeon_38 (A4), KFPoly_38 (A4), Kampy_38 (A4), KekoraPapaka_39 (A4), Kingmustik0402_38 (A4), Koan_37 (A4), Koreni_37 (A4), Kratark_38 (A4), Kremtemulon_38 (A4), Kyee_38 (A4), LappelDuVide_38 (A4), Lemur_38 (A4), LeoAvram_38 (A4), LittleB_38 (A4), LittleGuy_38 (A4), LochMonster_38 (A4), Lorenzo_38 (A4), Lunsford_39 (A4), Maverick_38 (A4), Maxo_39 (A4), Mayonnaise_38 (A4), Mazhar510_38 (A4), Medusa_38 (A4), MeeZee_38 (A4), Melvin_40 (A4), Millski_37 (A4), Morrow_39 (A4), Mundrea_36 (A4), Nebs_39 (A4), Nemo27_38 (A4), Noelle_38 (A4), NorthStar_37 (A4), NotAPhaseMom_38 (A4), Nyxis_38 (A4), OKaNui_39 (A4), Ohfah_39 (A4), Peaches_38 (A4), PeterPeter_38 (A4), Phacado_38 (A4), Phelipe_39 (A4), Phighter1804_38 (A4), Phontbonne_38 (A4), Polymorphads_39 (A4), Pumbaa_38 (A4), Relief_37 (A4), RhynO_40 (A10), RockieBear_38 (A4), Romney_38 (A4), Roosevelt_37 (A4), Rosa24_38 (A4), Rowdy_43 (A10), Ruin_38 (A4), Sabertooth_38 (A4), Scamp_38 (A4), SenorClean_38 (A4), Shaka_38 (A4), Shapes_43 (A10), Skipitt_37 (A4), Sparxx_39 (A4), Spino_38 (A4), SteMason_38 (A4), Sultana_38 (A4), Taquarus_38 (A4), Thanksgivukkah_38 (A4), TinaFeyge_39 (A4), Tinybot_37 (A4), TiroTheta9_38 (A4), TroyPia_39 (A4), TygerBlood_38 (A4), Ulysses_37 (A4), Wander_38 (A4), Wilbur_38 (A4), Wizard007_38 (A4), YoSam321_38 (A4),

Start 44:
• Found in 1 of 371 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Airmid_35 (A5),

Start 45:
• Found in 1 of 371 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anon_38 (A15),

Start 46:
• Found in 2 of 371 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CRB1_40 (A2), LadyBird_41 (A2),

Start 47:
• Found in 5 of 371 (1.3%) of genes in pham
• Manual Annotations of this start: 5 of 330
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adzzy_40 (A2), BabyBack_39 (A2), GaugeLDP_39 (A2), NothingSpecial_39 (A2), XianYue_38 (A2),

Start 48:
• Found in 3 of 371 (0.8%) of genes in pham
• Manual Annotations of this start: 2 of 330
• Called 66.7% of time when present
• Phage (with cluster) where this start called: SydNat_36 (A5), Zolita_35 (A5),

Start 50:
• Found in 46 of 371 (12.4%) of genes in pham
• Manual Annotations of this start: 22 of 330
• Called 52.2% of time when present
• Phage (with cluster) where this start called: Archetta_34 (A5), Benedict_35 (A5), Bonamassa_34 (A5), Chadwick_36 (A5), Coog_34 (A5), Cuco_34 (A5), ElTiger69_35 (A5), Ghoulboy_36 (A5), HuhtaEnerson15_34 (A5), Jabiru_35 (A5), LittleCherry_34 (A5), MarysWell_33 (A5), Micasa_36 (A5), Midas2_34 (A5), Milcery_34 (A5), Naca_35 (A5), PetterN_36 (A5), Prinashe11_35 (A5), Scorpia_36 (A5), Swirley_36 (A5), Tarynearal_33 (A5), Theia_32 (A5), Twigg_34 (A5), UnionJack_34 (A5),

Start 51:
• Found in 159 of 371 (42.9%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 0.6% of time when present
• Phage (with cluster) where this start called: Palestino_37 (A4),

Start 56:
• Found in 22 of 371 (5.9%) of genes in pham
• Manual Annotations of this start: 1 of 330
• Called 4.5% of time when present
• Phage (with cluster) where this start called: George_33 (A5),

Summary by clusters:

There are 14 clusters represented in this pham: A15, K3, A10, A3, A18, A1, K1, A2, A5, A4, K5, A7, A9, A8,

Info for manual annotations of cluster A1:
•Start number 41 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster A10:
•Start number 43 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A15:
•Start number 45 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:
•Start number 40 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:
•Start number 46 was manually annotated 1 time for cluster A2.
•Start number 47 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A3:
•Start number 38 was manually annotated 116 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 27 was manually annotated 25 times for cluster A4.
•Start number 31 was manually annotated 1 time for cluster A4.
•Start number 43 was manually annotated 110 times for cluster A4.
•Start number 51 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A5:
•Start number 44 was manually annotated 1 time for cluster A5.
•Start number 48 was manually annotated 2 times for cluster A5.
•Start number 50 was manually annotated 22 times for cluster A5.
•Start number 56 was manually annotated 1 time for cluster A5.

Info for manual annotations of cluster A7:
•Start number 32 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:
•Start number 36 was manually annotated 10 times for cluster A8.

Info for manual annotations of cluster A9:
•Start number 33 was manually annotated 2 times for cluster A9.

Info for manual annotations of cluster K1:
•Start number 24 was manually annotated 2 times for cluster K1.

Info for manual annotations of cluster K5:
•Start number 29 was manually annotated 15 times for cluster K5.
•Start number 30 was manually annotated 5 times for cluster K5.

Gene Information:

Gene: ACFishhook_42 Start: 29061, Stop: 28756, Start Num: 38
Candidate Starts for ACFishhook_42:
(5, 29307), (7, 29289), (11, 29268), (21, 29157), (23, 29145), (Start: 38 @29061 has 116 MA's), (Start: 50 @29007 has 22 MA's), (61, 28968), (68, 28944), (91, 28857), (101, 28794),

Gene: AbbysRanger_37 Start: 28220, Stop: 27960, Start Num: 27
Candidate Starts for AbbysRanger_37:
(Start: 27 @28220 has 25 MA's), (Start: 51 @28193 has 1 MA's), (59, 28166), (76, 28106), (93, 28043), (101, 27986),

Gene: Abdiel_38 Start: 28375, Stop: 28109, Start Num: 43
Candidate Starts for Abdiel_38:
(15, 28537), (Start: 31 @28423 has 1 MA's), (Start: 43 @28375 has 111 MA's), (Start: 51 @28345 has 1 MA's), (59, 28318), (76, 28258), (78, 28243), (101, 28141),

Gene: Achebe_36 Start: 28203, Stop: 27943, Start Num: 27
Candidate Starts for Achebe_36:
(Start: 27 @28203 has 25 MA's), (Start: 51 @28176 has 1 MA's), (59, 28149), (76, 28089), (93, 28026), (101, 27969),

Gene: Adzzy_40 Start: 26940, Stop: 26704, Start Num: 47
Candidate Starts for Adzzy_40:
(Start: 47 @26940 has 5 MA's), (72, 26856), (82, 26826), (84, 26823), (100, 26742), (101, 26739),

Gene: Agent47_81 Start: 53059, Stop: 53331, Start Num: 30
Candidate Starts for Agent47_81:
(9, 52885), (13, 52900), (Start: 29 @53053 has 15 MA's), (Start: 30 @53059 has 5 MA's), (60, 53152), (61, 53158), (90, 53242), (95, 53257), (101, 53305),

Gene: Aglet_44 Start: 29103, Stop: 28864, Start Num: 38
Candidate Starts for Aglet_44:
(Start: 38 @29103 has 116 MA's), (73, 29022), (78, 28995), (91, 28956), (101, 28902),

Gene: AgronaGT15_42 Start: 28921, Stop: 28682, Start Num: 38
Candidate Starts for AgronaGT15_42:
(17, 29053), (Start: 38 @28921 has 116 MA's), (78, 28813), (91, 28774), (101, 28720),

Gene: Airmid_35 Start: 27047, Stop: 26814, Start Num: 44
Candidate Starts for Airmid_35:
(Start: 44 @27047 has 1 MA's), (Start: 50 @27023 has 22 MA's), (90, 26897), (101, 26843),

Gene: Albee_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Albee_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Alberto7_39 Start: 28714, Stop: 28448, Start Num: 43
Candidate Starts for Alberto7_39:

(15, 28876), (Start: 31 @28762 has 1 MA's), (Start: 43 @28714 has 111 MA's), (Start: 51 @28684 has 1 MA's), (59, 28657), (76, 28597), (101, 28480),

Gene: AlleyCat_83 Start: 54184, Stop: 54471, Start Num: 29
Candidate Starts for AlleyCat_83:
(Start: 29 @54184 has 15 MA's), (Start: 30 @54190 has 5 MA's), (90, 54382), (95, 54397), (101, 54445),

Gene: Anon_38 Start: 26419, Stop: 26123, Start Num: 45
Candidate Starts for Anon_38:
(8, 26665), (18, 26569), (Start: 45 @26419 has 1 MA's), (57, 26374), (66, 26341), (67, 26338), (79, 26287), (83, 26275), (96, 26236), (99, 26203), (101, 26194),

Gene: Anubis_46 Start: 28988, Stop: 28749, Start Num: 38
Candidate Starts for Anubis_46:
(Start: 38 @28988 has 116 MA's), (73, 28907), (78, 28880), (91, 28841), (101, 28787),

Gene: Archetta_34 Start: 27563, Stop: 27351, Start Num: 50
Candidate Starts for Archetta_34:
(Start: 50 @27563 has 22 MA's), (Start: 56 @27545 has 1 MA's), (62, 27518), (90, 27437), (101, 27383),

Gene: Arturo_36 Start: 28433, Stop: 28167, Start Num: 43
Candidate Starts for Arturo_36:
(Start: 31 @28481 has 1 MA's), (Start: 43 @28433 has 111 MA's), (Start: 51 @28403 has 1 MA's), (59, 28376), (76, 28316), (78, 28301), (101, 28199),

Gene: Astro_35 Start: 26960, Stop: 26682, Start Num: 36
Candidate Starts for Astro_35:
(Start: 36 @26960 has 10 MA's), (62, 26855), (75, 26816), (90, 26768), (101, 26714),

Gene: AugsMagnumOpus_46 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for AugsMagnumOpus_46:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: AvatarAhPeg_37 Start: 28735, Stop: 28475, Start Num: 27
Candidate Starts for AvatarAhPeg_37:
(Start: 27 @28735 has 25 MA's), (Start: 51 @28705 has 1 MA's), (59, 28678), (76, 28618), (78, 28603), (101, 28501),

Gene: Avle17_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Avle17_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: B1_37 Start: 27979, Stop: 27740, Start Num: 38
Candidate Starts for B1_37:
(Start: 38 @27979 has 116 MA's), (78, 27871), (91, 27832), (101, 27778),

Gene: Baby16_38 Start: 28385, Stop: 28119, Start Num: 43
Candidate Starts for Baby16_38:
(15, 28547), (Start: 31 @28433 has 1 MA's), (Start: 43 @28385 has 111 MA's), (Start: 51 @28355 has 1 MA's), (59, 28328), (76, 28268), (101, 28151),

Gene: BabyBack_39 Start: 29153, Stop: 28929, Start Num: 47
Candidate Starts for BabyBack_39:
(22, 29267), (Start: 47 @29153 has 5 MA's), (72, 29069), (74, 29063), (85, 29027), (90, 29012), (101, 28955),

Gene: BabyJohn_38 Start: 28749, Stop: 28510, Start Num: 38
Candidate Starts for BabyJohn_38:
(Start: 38 @28749 has 116 MA's), (72, 28671), (78, 28641), (91, 28602), (101, 28548),

Gene: BabyRay_40 Start: 28714, Stop: 28439, Start Num: 38
Candidate Starts for BabyRay_40:
(16, 28852), (28, 28771), (Start: 38 @28714 has 116 MA's), (65, 28621), (101, 28477),

Gene: Backyardigan_36 Start: 28236, Stop: 27976, Start Num: 27
Candidate Starts for Backyardigan_36:
(Start: 27 @28236 has 25 MA's), (Start: 51 @28209 has 1 MA's), (59, 28182), (76, 28122), (93, 28059), (101, 28002),

Gene: Badger_36 Start: 28204, Stop: 27944, Start Num: 27
Candidate Starts for Badger_36:
(Start: 27 @28204 has 25 MA's), (Start: 51 @28177 has 1 MA's), (59, 28150), (76, 28090), (93, 28027), (101, 27970),

Gene: BananenDer11_79 Start: 53294, Stop: 53581, Start Num: 29
Candidate Starts for BananenDer11_79:
(Start: 29 @53294 has 15 MA's), (Start: 30 @53300 has 5 MA's), (90, 53492), (95, 53507), (101, 53555),

Gene: BangNhom_39 Start: 28676, Stop: 28410, Start Num: 27
Candidate Starts for BangNhom_39:
(1, 29540), (2, 29273), (3, 28958), (6, 28850), (10, 28826), (Start: 27 @28676 has 25 MA's), (Start: 51 @28646 has 1 MA's), (59, 28619), (76, 28559), (78, 28544), (101, 28442),

Gene: Bartimeaus_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Bartimeaus_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: Beauxregard13_43 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for Beauxregard13_43:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: BellusTerra_39 Start: 28375, Stop: 28109, Start Num: 43
Candidate Starts for BellusTerra_39:
(15, 28537), (Start: 31 @28423 has 1 MA's), (Start: 43 @28375 has 111 MA's), (Start: 51 @28345 has 1 MA's), (59, 28318), (76, 28258), (78, 28243), (101, 28141),

Gene: Benedict_35 Start: 27023, Stop: 26814, Start Num: 50
Candidate Starts for Benedict_35:
(Start: 50 @27023 has 22 MA's), (Start: 56 @27005 has 1 MA's), (90, 26897), (101, 26843),

Gene: Bigflo_43 Start: 29101, Stop: 28862, Start Num: 38

Candidate Starts for Bigflo_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Blackmoor_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Blackmoor_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: BlueBird_41 Start: 28604, Stop: 28365, Start Num: 38
Candidate Starts for BlueBird_41:
(Start: 38 @28604 has 116 MA's), (78, 28496), (91, 28457), (101, 28403),

Gene: Bombshell_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Bombshell_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Bonamassa_34 Start: 27357, Stop: 27145, Start Num: 50
Candidate Starts for Bonamassa_34:
(Start: 50 @27357 has 22 MA's), (Start: 56 @27339 has 1 MA's), (62, 27312), (90, 27231), (101, 27177),

Gene: BreSam8_43 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for BreSam8_43:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: Broseidon_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Broseidon_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: Bruiser_37 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Bruiser_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: BubbleTrouble_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for BubbleTrouble_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Bugatti_40 Start: 28604, Stop: 28365, Start Num: 38
Candidate Starts for Bugatti_40:
(Start: 38 @28604 has 116 MA's), (78, 28496), (91, 28457), (101, 28403),

Gene: Bumblebee11_36 Start: 28206, Stop: 27946, Start Num: 27
Candidate Starts for Bumblebee11_36:
(Start: 27 @28206 has 25 MA's), (Start: 51 @28179 has 1 MA's), (59, 28152), (76, 28092), (93, 28029), (101, 27972),

Gene: Burger_36 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Burger_36:

(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: BuzzBuzz_41 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for BuzzBuzz_41:
(17, 29232), (Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: Bxz2_39 Start: 29107, Stop: 28868, Start Num: 38
Candidate Starts for Bxz2_39:
(17, 29239), (Start: 38 @29107 has 116 MA's), (78, 28999), (91, 28960), (101, 28906),

Gene: CRB1_40 Start: 28593, Stop: 28357, Start Num: 46
Candidate Starts for CRB1_40:
(20, 28716), (22, 28704), (Start: 46 @28593 has 1 MA's), (101, 28389),

Gene: Caelakin_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Caelakin_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Caitlin_34 Start: 26953, Stop: 26675, Start Num: 36
Candidate Starts for Caitlin_34:
(Start: 36 @26953 has 10 MA's), (62, 26848), (75, 26809), (90, 26761), (101, 26707),

Gene: Calvinny_43 Start: 28989, Stop: 28684, Start Num: 38
Candidate Starts for Calvinny_43:
(5, 29235), (7, 29217), (11, 29196), (12, 29193), (21, 29085), (23, 29073), (Start: 38 @28989 has 116 MA's), (Start: 50 @28935 has 22 MA's), (61, 28896), (68, 28872), (91, 28785), (101, 28722),

Gene: Camperdownii_37 Start: 28095, Stop: 27802, Start Num: 31
Candidate Starts for Camperdownii_37:
(Start: 31 @28095 has 1 MA's), (Start: 43 @28047 has 111 MA's), (61, 27987), (88, 27903), (92, 27891), (94, 27882), (101, 27834),

Gene: Caviar_39 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Caviar_39:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: Celestialunch_38 Start: 28004, Stop: 27747, Start Num: 35
Candidate Starts for Celestialunch_38:
(35, 28004), (86, 27848), (90, 27836), (98, 27794),

Gene: CentreCat_38 Start: 28377, Stop: 28111, Start Num: 43
Candidate Starts for CentreCat_38:
(15, 28539), (Start: 31 @28425 has 1 MA's), (Start: 43 @28377 has 111 MA's), (Start: 51 @28347 has 1 MA's), (59, 28320), (76, 28260), (101, 28143),

Gene: Cerulean_39 Start: 28677, Stop: 28411, Start Num: 27
Candidate Starts for Cerulean_39:
(1, 29541), (2, 29274), (3, 28959), (6, 28851), (10, 28827), (Start: 27 @28677 has 25 MA's), (Start: 51 @28647 has 1 MA's), (59, 28620), (76, 28560), (78, 28545), (101, 28443),

Gene: Chadwick_36 Start: 26926, Stop: 26717, Start Num: 50

Candidate Starts for Chadwick_36:
(Start: 50 @26926 has 22 MA's), (90, 26800), (101, 26746),

Gene: ChampagnePapi_40 Start: 28676, Stop: 28410, Start Num: 27
Candidate Starts for ChampagnePapi_40:
(1, 29540), (2, 29273), (3, 28958), (6, 28850), (10, 28826), (Start: 27 @28676 has 25 MA's), (Start: 51 @28646 has 1 MA's), (59, 28619), (76, 28559), (78, 28544), (101, 28442),

Gene: Chaph_38 Start: 28385, Stop: 28119, Start Num: 43
Candidate Starts for Chaph_38:
(15, 28547), (Start: 31 @28433 has 1 MA's), (Start: 43 @28385 has 111 MA's), (Start: 51 @28355 has 1 MA's), (59, 28328), (76, 28268), (101, 28151),

Gene: Charm_38 Start: 28141, Stop: 27875, Start Num: 33
Candidate Starts for Charm_38:
(Start: 33 @28141 has 2 MA's), (86, 27976), (90, 27964), (100, 27901),

Gene: Chiqui_38 Start: 28758, Stop: 28519, Start Num: 38
Candidate Starts for Chiqui_38:
(Start: 38 @28758 has 116 MA's), (72, 28680), (78, 28650), (91, 28611), (101, 28557),

Gene: Cici_37 Start: 28221, Stop: 27961, Start Num: 27
Candidate Starts for Cici_37:
(Start: 27 @28221 has 25 MA's), (Start: 51 @28194 has 1 MA's), (59, 28167), (76, 28107), (93, 28044), (101, 27987),

Gene: Cintron_38 Start: 28440, Stop: 28174, Start Num: 27
Candidate Starts for Cintron_38:
(Start: 27 @28440 has 25 MA's), (Start: 51 @28410 has 1 MA's), (59, 28383), (76, 28323), (101, 28206),

Gene: Citius_38 Start: 28395, Stop: 28129, Start Num: 43
Candidate Starts for Citius_38:
(15, 28557), (Start: 31 @28443 has 1 MA's), (Start: 43 @28395 has 111 MA's), (Start: 51 @28365 has 1 MA's), (59, 28338), (76, 28278), (78, 28263), (101, 28161),

Gene: Clammy_40 Start: 28604, Stop: 28365, Start Num: 38
Candidate Starts for Clammy_40:
(Start: 38 @28604 has 116 MA's), (78, 28496), (91, 28457), (101, 28403),

Gene: Clarenza_38 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for Clarenza_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: ClownCar_43 Start: 28982, Stop: 28677, Start Num: 38
Candidate Starts for ClownCar_43:
(5, 29228), (7, 29210), (11, 29189), (21, 29078), (23, 29066), (Start: 38 @28982 has 116 MA's), (Start: 50 @28928 has 22 MA's), (61, 28889), (68, 28865), (91, 28778), (101, 28715),

Gene: Cocoaberry_38 Start: 28378, Stop: 28112, Start Num: 43
Candidate Starts for Cocoaberry_38:

(15, 28540), (Start: 31 @28426 has 1 MA's), (Start: 43 @28378 has 111 MA's), (Start: 51 @28348 has 1 MA's), (59, 28321), (76, 28261), (101, 28144),

Gene: Colbster_43 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for Colbster_43:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: Collard_80 Start: 53300, Stop: 53581, Start Num: 30
Candidate Starts for Collard_80:
(Start: 29 @53294 has 15 MA's), (Start: 30 @53300 has 5 MA's), (90, 53492), (95, 53507), (101, 53555),

Gene: Commander_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Commander_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Connomayer_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Connomayer_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Coog_34 Start: 27403, Stop: 27185, Start Num: 50
Candidate Starts for Coog_34:
(Start: 50 @27403 has 22 MA's), (Start: 56 @27385 has 1 MA's), (62, 27358), (90, 27271), (101, 27217),

Gene: Croquant_44 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for Croquant_44:
(Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: Cuco_34 Start: 27356, Stop: 27144, Start Num: 50
Candidate Starts for Cuco_34:
(Start: 50 @27356 has 22 MA's), (Start: 56 @27338 has 1 MA's), (62, 27311), (90, 27230), (101, 27176),

Gene: Cullens_43 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for Cullens_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: DaHudson_43 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for DaHudson_43:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Dadosky_83 Start: 54185, Stop: 54472, Start Num: 29
Candidate Starts for Dadosky_83:
(Start: 29 @54185 has 15 MA's), (Start: 30 @54191 has 5 MA's), (90, 54383), (95, 54398), (101, 54446),

Gene: Daishi_42 Start: 27941, Stop: 27702, Start Num: 38
Candidate Starts for Daishi_42:
(17, 28073), (Start: 38 @27941 has 116 MA's), (78, 27833), (91, 27794), (101, 27740),

Gene: Danforth_34 Start: 26845, Stop: 26567, Start Num: 36
Candidate Starts for Danforth_34:
(Start: 36 @26845 has 10 MA's), (62, 26740), (75, 26701), (90, 26653), (101, 26599),

Gene: Datway_37 Start: 28192, Stop: 27932, Start Num: 27
Candidate Starts for Datway_37:
(Start: 27 @28192 has 25 MA's), (Start: 51 @28165 has 1 MA's), (59, 28138), (76, 28078), (93, 28015), (101, 27958),

Gene: Deano_38 Start: 28382, Stop: 28116, Start Num: 43
Candidate Starts for Deano_38:
(15, 28544), (Start: 31 @28430 has 1 MA's), (Start: 43 @28382 has 111 MA's), (Start: 51 @28352 has 1 MA's), (59, 28325), (76, 28265), (101, 28148),

Gene: Dhanush_38 Start: 28377, Stop: 28111, Start Num: 43
Candidate Starts for Dhanush_38:
(15, 28539), (Start: 31 @28425 has 1 MA's), (Start: 43 @28377 has 111 MA's), (Start: 51 @28347 has 1 MA's), (59, 28320), (76, 28260), (101, 28143),

Gene: Dieselweasel_44 Start: 29104, Stop: 28865, Start Num: 38
Candidate Starts for Dieselweasel_44:
(Start: 38 @29104 has 116 MA's), (78, 28996), (91, 28957), (101, 28903),

Gene: DirtyDunning_37 Start: 28251, Stop: 27991, Start Num: 27
Candidate Starts for DirtyDunning_37:
(Start: 27 @28251 has 25 MA's), (Start: 51 @28221 has 1 MA's), (59, 28194), (76, 28134), (101, 28017),

Gene: Dixon_35 Start: 26954, Stop: 26676, Start Num: 36
Candidate Starts for Dixon_35:
(Start: 36 @26954 has 10 MA's), (62, 26849), (75, 26810), (90, 26762), (101, 26708),

Gene: DontArgue_38 Start: 27488, Stop: 27219, Start Num: 43
Candidate Starts for DontArgue_38:
(Start: 43 @27488 has 111 MA's), (Start: 51 @27458 has 1 MA's), (66, 27404), (67, 27401), (100, 27257), (101, 27254),

Gene: DoubleChamp_79 Start: 53294, Stop: 53581, Start Num: 29
Candidate Starts for DoubleChamp_79:
(Start: 29 @53294 has 15 MA's), (Start: 30 @53300 has 5 MA's), (90, 53492), (95, 53507), (101, 53555),

Gene: DreamTeam1_38 Start: 28024, Stop: 27758, Start Num: 33
Candidate Starts for DreamTeam1_38:
(Start: 33 @28024 has 2 MA's), (86, 27859), (90, 27847), (100, 27784),

Gene: Dreamboat_44 Start: 32205, Stop: 31960, Start Num: 41
Candidate Starts for Dreamboat_44:
(14, 32394), (Start: 41 @32205 has 7 MA's), (85, 32055), (90, 32040), (96, 32025), (97, 32013), (101, 31983),

Gene: DroogsArmy_37 Start: 30255, Stop: 29989, Start Num: 32
Candidate Starts for DroogsArmy_37:

(Start: 32 @30255 has 1 MA's), (59, 30168), (87, 30084), (89, 30078), (102, 30006),

Gene: DropBear_40 Start: 28671, Stop: 28432, Start Num: 38
Candidate Starts for DropBear_40:
(21, 28767), (Start: 38 @28671 has 116 MA's), (78, 28563), (91, 28524), (101, 28470),

Gene: Druantia_38 Start: 28377, Stop: 28111, Start Num: 43
Candidate Starts for Druantia_38:
(15, 28539), (Start: 31 @28425 has 1 MA's), (Start: 43 @28377 has 111 MA's), (Start: 51 @28347 has 1 MA's), (59, 28320), (76, 28260), (101, 28143),

Gene: DustyMartin_43 Start: 28322, Stop: 28053, Start Num: 43
Candidate Starts for DustyMartin_43:
(28, 28382), (Start: 43 @28322 has 111 MA's), (Start: 51 @28292 has 1 MA's), (58, 28268), (66, 28238), (101, 28088),

Gene: Eagle_38 Start: 28399, Stop: 28133, Start Num: 43
Candidate Starts for Eagle_38:
(15, 28561), (Start: 31 @28447 has 1 MA's), (Start: 43 @28399 has 111 MA's), (Start: 51 @28369 has 1 MA's), (59, 28342), (76, 28282), (78, 28267), (101, 28165),

Gene: Eapen_38 Start: 28372, Stop: 28106, Start Num: 43
Candidate Starts for Eapen_38:
(15, 28534), (Start: 31 @28420 has 1 MA's), (Start: 43 @28372 has 111 MA's), (Start: 51 @28342 has 1 MA's), (59, 28315), (76, 28255), (101, 28138),

Gene: Edugator_79 Start: 55356, Stop: 55643, Start Num: 29
Candidate Starts for Edugator_79:
(Start: 29 @55356 has 15 MA's), (Start: 30 @55362 has 5 MA's), (90, 55554), (95, 55569), (101, 55617),

Gene: ElTiger69_35 Start: 27021, Stop: 26812, Start Num: 50
Candidate Starts for ElTiger69_35:
(Start: 50 @27021 has 22 MA's), (90, 26895), (101, 26841),

Gene: Emerson_91 Start: 56890, Stop: 57219, Start Num: 24
Candidate Starts for Emerson_91:
(Start: 24 @56890 has 2 MA's), (25, 56905), (26, 56908), (Start: 29 @56926 has 15 MA's), (39, 56962), (53, 57007), (Start: 56 @57016 has 1 MA's), (68, 57061), (72, 57070), (101, 57193), (102, 57199),

Gene: EpicPhail_44 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for EpicPhail_44:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: Eris_37 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Eris_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Eros_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Eros_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: EtoileNova_40 Start: 28763, Stop: 28524, Start Num: 38
Candidate Starts for EtoileNova_40:
(Start: 38 @28763 has 116 MA's), (78, 28655), (91, 28616),

Gene: Eurydice_39 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Eurydice_39:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (78, 28242), (101, 28140),

Gene: Expelliarmus_34 Start: 26831, Stop: 26553, Start Num: 36
Candidate Starts for Expelliarmus_34:
(Start: 36 @26831 has 10 MA's), (62, 26726), (75, 26687), (90, 26639), (101, 26585),

Gene: Farber_43 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for Farber_43:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: Fernando_43 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for Fernando_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Florean_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Florean_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Flux_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Flux_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: FlyCatcher_43 Start: 30738, Stop: 30514, Start Num: 38
Candidate Starts for FlyCatcher_43:
(Start: 38 @30738 has 116 MA's), (Start: 43 @30720 has 111 MA's), (78, 30630), (91, 30591), (102, 30531),

Gene: Fred313_40 Start: 28356, Stop: 28117, Start Num: 38
Candidate Starts for Fred313_40:
(21, 28452), (Start: 38 @28356 has 116 MA's), (42, 28341), (78, 28248), (91, 28209), (101, 28155),

Gene: Funston_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Funston_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Gadost_38 Start: 28378, Stop: 28112, Start Num: 43
Candidate Starts for Gadost_38:
(15, 28540), (Start: 31 @28426 has 1 MA's), (Start: 43 @28378 has 111 MA's), (Start: 51 @28348 has 1 MA's), (59, 28321), (76, 28261), (101, 28144),

Gene: GaugeLDP_39 Start: 29059, Stop: 28823, Start Num: 47
Candidate Starts for GaugeLDP_39:

(22, 29173), (Start: 43 @29074 has 111 MA's), (Start: 47 @29059 has 5 MA's), (52, 29041), (71, 28978), (101, 28867),

Gene: Gemma_42 Start: 28985, Stop: 28680, Start Num: 38
Candidate Starts for Gemma_42:
(5, 29231), (7, 29213), (11, 29192), (12, 29189), (21, 29081), (23, 29069), (Start: 38 @28985 has 116 MA's), (Start: 50 @28931 has 22 MA's), (61, 28892), (68, 28868), (91, 28781), (101, 28718),

Gene: George_33 Start: 27339, Stop: 27145, Start Num: 56
Candidate Starts for George_33:
(Start: 50 @27357 has 22 MA's), (Start: 56 @27339 has 1 MA's), (62, 27312), (90, 27231), (101, 27177),

Gene: Ghoulboy_36 Start: 27962, Stop: 27744, Start Num: 50
Candidate Starts for Ghoulboy_36:
(Start: 48 @27971 has 2 MA's), (Start: 50 @27962 has 22 MA's), (Start: 56 @27944 has 1 MA's), (62, 27917), (90, 27830), (101, 27776),

Gene: GingkoMaracino_43 Start: 28988, Stop: 28749, Start Num: 38
Candidate Starts for GingkoMaracino_43:
(Start: 38 @28988 has 116 MA's), (73, 28907), (78, 28880), (91, 28841), (101, 28787),

Gene: Giroux_41 Start: 28603, Stop: 28364, Start Num: 38
Candidate Starts for Giroux_41:
(Start: 38 @28603 has 116 MA's), (78, 28495), (91, 28456), (101, 28402),

Gene: Grif_43 Start: 29176, Stop: 28937, Start Num: 38
Candidate Starts for Grif_43:
(Start: 38 @29176 has 116 MA's), (78, 29068), (91, 29029), (101, 28975),

Gene: Groundhog_34 Start: 26925, Stop: 26647, Start Num: 36
Candidate Starts for Groundhog_34:
(Start: 36 @26925 has 10 MA's), (62, 26820), (75, 26781), (90, 26733), (101, 26679),

Gene: Groupthink_44 Start: 28989, Stop: 28684, Start Num: 38
Candidate Starts for Groupthink_44:
(5, 29235), (7, 29217), (11, 29196), (12, 29193), (21, 29085), (23, 29073), (Start: 38 @28989 has 116 MA's), (Start: 50 @28935 has 22 MA's), (61, 28896), (68, 28872), (91, 28785), (101, 28722),

Gene: Grub_43 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for Grub_43:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Grum1_43 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for Grum1_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: GtownJaz_43 Start: 29103, Stop: 28864, Start Num: 38
Candidate Starts for GtownJaz_43:
(Start: 38 @29103 has 116 MA's), (78, 28995), (91, 28956), (101, 28902),

Gene: Guillsminger_84 Start: 55380, Stop: 55694, Start Num: 29
Candidate Starts for Guillsminger_84:

(4, 55140), (Start: 29 @55380 has 15 MA's), (Start: 30 @55386 has 5 MA's), (49, 55479), (Start: 51 @55485 has 1 MA's), (53, 55491), (63, 55527), (72, 55551), (81, 55590), (101, 55671), (102, 55677),

Gene: Gwennie_42 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for Gwennie_42:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: HamSlice_37 Start: 28372, Stop: 28106, Start Num: 43
Candidate Starts for HamSlice_37:
(15, 28534), (Start: 31 @28420 has 1 MA's), (Start: 43 @28372 has 111 MA's), (Start: 51 @28342 has 1 MA's), (59, 28315), (76, 28255), (101, 28138),

Gene: Happiness_37 Start: 28379, Stop: 28113, Start Num: 43
Candidate Starts for Happiness_37:
(15, 28541), (Start: 31 @28427 has 1 MA's), (Start: 43 @28379 has 111 MA's), (Start: 51 @28349 has 1 MA's), (59, 28322), (76, 28262), (101, 28145),

Gene: HashRod_44 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for HashRod_44:
(17, 29232), (Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: HaveUMetTed_44 Start: 28983, Stop: 28678, Start Num: 38
Candidate Starts for HaveUMetTed_44:
(21, 29079), (23, 29067), (Start: 38 @28983 has 116 MA's), (Start: 50 @28929 has 22 MA's), (61, 28890), (68, 28866), (91, 28779), (101, 28716),

Gene: Heathen_40 Start: 28412, Stop: 28173, Start Num: 38
Candidate Starts for Heathen_40:
(21, 28508), (Start: 38 @28412 has 116 MA's), (78, 28304), (91, 28265), (101, 28211),

Gene: Heftyboy_82 Start: 55027, Stop: 55308, Start Num: 30
Candidate Starts for Heftyboy_82:
(Start: 29 @55021 has 15 MA's), (Start: 30 @55027 has 5 MA's), (90, 55219), (95, 55234), (101, 55282),

Gene: HelDan_40 Start: 28664, Stop: 28425, Start Num: 38
Candidate Starts for HelDan_40:
(21, 28760), (Start: 38 @28664 has 116 MA's), (78, 28556), (91, 28517), (101, 28463),

Gene: Heliosoles_42 Start: 28992, Stop: 28687, Start Num: 38
Candidate Starts for Heliosoles_42:
(5, 29238), (7, 29220), (11, 29199), (12, 29196), (21, 29088), (23, 29076), (Start: 38 @28992 has 116 MA's), (Start: 50 @28938 has 22 MA's), (61, 28899), (68, 28875), (91, 28788), (101, 28725),

Gene: Hercules11_43 Start: 29110, Stop: 28871, Start Num: 38
Candidate Starts for Hercules11_43:
(Start: 38 @29110 has 116 MA's), (78, 29002), (91, 28963), (101, 28909),

Gene: Holli_37 Start: 28164, Stop: 27898, Start Num: 43
Candidate Starts for Holli_37:
(15, 28326), (Start: 31 @28212 has 1 MA's), (Start: 43 @28164 has 111 MA's), (Start: 51 @28134 has 1 MA's), (59, 28107), (76, 28047), (101, 27930),

Gene: Hookmount_39 Start: 28760, Stop: 28521, Start Num: 38
Candidate Starts for Hookmount_39:
(Start: 38 @28760 has 116 MA's), (78, 28652), (91, 28613),

Gene: Houdini22_38 Start: 28378, Stop: 28112, Start Num: 43
Candidate Starts for Houdini22_38:
(15, 28540), (Start: 31 @28426 has 1 MA's), (Start: 43 @28378 has 111 MA's), (Start: 51 @28348 has 1 MA's), (59, 28321), (76, 28261), (101, 28144),

Gene: HuhtaEnerson15_34 Start: 27348, Stop: 27136, Start Num: 50
Candidate Starts for HuhtaEnerson15_34:
(Start: 50 @27348 has 22 MA's), (Start: 56 @27330 has 1 MA's), (62, 27303), (90, 27222), (101, 27168),

Gene: Huxley_39 Start: 28435, Stop: 28169, Start Num: 43
Candidate Starts for Huxley_39:
(15, 28597), (Start: 31 @28483 has 1 MA's), (Start: 43 @28435 has 111 MA's), (Start: 51 @28405 has 1 MA's), (59, 28378), (76, 28318), (101, 28201),

Gene: ICleared_38 Start: 28406, Stop: 28140, Start Num: 43
Candidate Starts for ICleared_38:
(15, 28568), (Start: 31 @28454 has 1 MA's), (Start: 43 @28406 has 111 MA's), (Start: 51 @28376 has 1 MA's), (59, 28349), (76, 28289), (101, 28172),

Gene: Iceman_39 Start: 28663, Stop: 28397, Start Num: 43
Candidate Starts for Iceman_39:
(15, 28825), (Start: 31 @28711 has 1 MA's), (Start: 43 @28663 has 111 MA's), (Start: 51 @28633 has 1 MA's), (59, 28606), (76, 28546), (101, 28429),

Gene: Idleandcovert_40 Start: 28604, Stop: 28365, Start Num: 38
Candidate Starts for Idleandcovert_40:
(Start: 38 @28604 has 116 MA's), (78, 28496), (91, 28457), (101, 28403),

Gene: InvictusManeo_79 Start: 53057, Stop: 53335, Start Num: 29
Candidate Starts for InvictusManeo_79:
(9, 52889), (13, 52904), (Start: 29 @53057 has 15 MA's), (Start: 30 @53063 has 5 MA's), (60, 53156), (61, 53162), (90, 53246), (95, 53261), (101, 53309),

Gene: Iracema64_39 Start: 28638, Stop: 28372, Start Num: 43
Candidate Starts for Iracema64_39:
(15, 28800), (Start: 31 @28686 has 1 MA's), (Start: 43 @28638 has 111 MA's), (Start: 51 @28608 has 1 MA's), (59, 28581), (76, 28521), (78, 28506), (101, 28404),

Gene: Isca_39 Start: 28228, Stop: 27989, Start Num: 38
Candidate Starts for Isca_39:
(Start: 38 @28228 has 116 MA's), (78, 28120), (91, 28081), (101, 28027),

Gene: JF2_40 Start: 27979, Stop: 27740, Start Num: 38
Candidate Starts for JF2_40:
(Start: 38 @27979 has 116 MA's), (78, 27871), (91, 27832), (101, 27778),

Gene: JF4_40 Start: 27979, Stop: 27740, Start Num: 38
Candidate Starts for JF4_40:

(Start: 38 @27979 has 116 MA's), (78, 27871), (91, 27832), (101, 27778),

Gene: JHC117_43 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for JHC117_43:
(Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: Jabiru_35 Start: 27070, Stop: 26861, Start Num: 50
Candidate Starts for Jabiru_35:
(Start: 50 @27070 has 22 MA's), (90, 26944), (101, 26890),

Gene: Jasper_44 Start: 32091, Stop: 31846, Start Num: 41
Candidate Starts for Jasper_44:
(14, 32280), (Start: 41 @32091 has 7 MA's), (85, 31941), (90, 31926), (96, 31911), (97, 31899), (101, 31869),

Gene: Jaykayelowell_37 Start: 28370, Stop: 28104, Start Num: 43
Candidate Starts for Jaykayelowell_37:
(15, 28532), (Start: 31 @28418 has 1 MA's), (Start: 43 @28370 has 111 MA's), (Start: 51 @28340 has 1 MA's), (59, 28313), (76, 28253), (101, 28136),

Gene: JenCasNa_44 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for JenCasNa_44:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: JeppNRM_44 Start: 28990, Stop: 28685, Start Num: 38
Candidate Starts for JeppNRM_44:
(5, 29236), (7, 29218), (11, 29197), (12, 29194), (21, 29086), (23, 29074), (Start: 38 @28990 has 116 MA's), (Start: 50 @28936 has 22 MA's), (61, 28897), (68, 28873), (91, 28786), (101, 28723),

Gene: JetBlade_38 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for JetBlade_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: Jobu08_42 Start: 28934, Stop: 28692, Start Num: 38
Candidate Starts for Jobu08_42:
(Start: 38 @28934 has 116 MA's), (78, 28826), (91, 28787), (101, 28730),

Gene: JoongJeon_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for JoongJeon_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: KADY_43 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for KADY_43:
(17, 29232), (Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: KFPoly_38 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for KFPoly_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: Kachowdy_40 Start: 28664, Stop: 28425, Start Num: 38

Candidate Starts for Kachowdy_40:
(21, 28760), (Start: 38 @28664 has 116 MA's), (78, 28556), (91, 28517), (101, 28463),

Gene: Kalb97_44 Start: 28988, Stop: 28683, Start Num: 38
Candidate Starts for Kalb97_44:
(5, 29234), (7, 29216), (11, 29195), (12, 29192), (21, 29084), (23, 29072), (Start: 38 @28988 has 116 MA's), (Start: 50 @28934 has 22 MA's), (61, 28895), (68, 28871), (91, 28784), (101, 28721),

Gene: Kalnoky_44 Start: 28986, Stop: 28681, Start Num: 38
Candidate Starts for Kalnoky_44:
(5, 29232), (7, 29214), (11, 29193), (12, 29190), (21, 29082), (23, 29070), (Start: 38 @28986 has 116 MA's), (Start: 50 @28932 has 22 MA's), (61, 28893), (68, 28869), (91, 28782), (101, 28719),

Gene: Kampy_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Kampy_38:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (78, 28244), (101, 28142),

Gene: Katalie136_37 Start: 28206, Stop: 27946, Start Num: 27
Candidate Starts for Katalie136_37:
(Start: 27 @28206 has 25 MA's), (Start: 51 @28179 has 1 MA's), (59, 28152), (76, 28092), (93, 28029), (101, 27972),

Gene: KekoraPapaka_39 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for KekoraPapaka_39:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Kingmustik0402_38 Start: 28366, Stop: 28100, Start Num: 43
Candidate Starts for Kingmustik0402_38:
(15, 28528), (Start: 31 @28414 has 1 MA's), (Start: 43 @28366 has 111 MA's), (Start: 51 @28336 has 1 MA's), (59, 28309), (76, 28249), (101, 28132),

Gene: Klodlith_39 Start: 28041, Stop: 27775, Start Num: 33
Candidate Starts for Klodlith_39:
(Start: 33 @28041 has 2 MA's), (86, 27876), (90, 27864), (100, 27801),

Gene: Koan_37 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Koan_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Koreni_37 Start: 28055, Stop: 27789, Start Num: 43
Candidate Starts for Koreni_37:
(15, 28217), (Start: 31 @28103 has 1 MA's), (Start: 43 @28055 has 111 MA's), (Start: 51 @28025 has 1 MA's), (59, 27998), (76, 27938), (101, 27821),

Gene: Kratark_38 Start: 28316, Stop: 28050, Start Num: 43
Candidate Starts for Kratark_38:
(Start: 31 @28364 has 1 MA's), (Start: 43 @28316 has 111 MA's), (Start: 51 @28286 has 1 MA's), (59, 28259), (66, 28232), (67, 28229), (76, 28199), (101, 28082),

Gene: Kratio_83 Start: 54079, Stop: 54366, Start Num: 29

Candidate Starts for Kratio_83:
(Start: 29 @54079 has 15 MA's), (Start: 30 @54085 has 5 MA's), (90, 54277), (95, 54292), (101, 54340),

Gene: Kremtemulon_38 Start: 28328, Stop: 28062, Start Num: 43
Candidate Starts for Kremtemulon_38:
(Start: 31 @28376 has 1 MA's), (Start: 43 @28328 has 111 MA's), (Start: 51 @28298 has 1 MA's), (59, 28271), (66, 28244), (67, 28241), (76, 28211), (101, 28094),

Gene: Kyee_38 Start: 28372, Stop: 28106, Start Num: 43
Candidate Starts for Kyee_38:
(15, 28534), (Start: 31 @28420 has 1 MA's), (Start: 43 @28372 has 111 MA's), (Start: 51 @28342 has 1 MA's), (59, 28315), (76, 28255), (101, 28138),

Gene: LBerry_44 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for LBerry_44:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: LHTSCC_40 Start: 28676, Stop: 28410, Start Num: 27
Candidate Starts for LHTSCC_40:
(1, 29540), (2, 29273), (3, 28958), (6, 28850), (10, 28826), (Start: 27 @28676 has 25 MA's), (Start: 51 @28646 has 1 MA's), (59, 28619), (76, 28559), (78, 28544), (101, 28442),

Gene: LadyBird_41 Start: 28555, Stop: 28316, Start Num: 46
Candidate Starts for LadyBird_41:
(20, 28678), (22, 28666), (Start: 46 @28555 has 1 MA's), (73, 28468), (80, 28441), (95, 28396), (101, 28351),

Gene: Lambert1_39 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Lambert1_39:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: LappelDuVide_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for LappelDuVide_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: LarryKay_43 Start: 29102, Stop: 28863, Start Num: 38
Candidate Starts for LarryKay_43:
(17, 29234), (Start: 38 @29102 has 116 MA's), (78, 28994), (91, 28955), (101, 28901),

Gene: Larva_82 Start: 55057, Stop: 55344, Start Num: 29
Candidate Starts for Larva_82:
(Start: 29 @55057 has 15 MA's), (90, 55255), (95, 55270), (101, 55318),

Gene: Lemur_38 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for Lemur_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: LeoAvram_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for LeoAvram_38:

(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (78, 28242), (101, 28140),

Gene: Leston_83 Start: 55497, Stop: 55811, Start Num: 29
Candidate Starts for Leston_83:
(4, 55257), (Start: 29 @55497 has 15 MA's), (Start: 30 @55503 has 5 MA's), (49, 55596), (Start: 51 @55602 has 1 MA's), (53, 55608), (63, 55644), (72, 55668), (81, 55707), (101, 55788), (102, 55794),

Gene: LilBib_43 Start: 33080, Stop: 32835, Start Num: 41
Candidate Starts for LilBib_43:
(Start: 41 @33080 has 7 MA's), (85, 32930), (90, 32915), (96, 32900), (97, 32888), (101, 32858),

Gene: LilDirt_79 Start: 53095, Stop: 53382, Start Num: 29
Candidate Starts for LilDirt_79:
(Start: 29 @53095 has 15 MA's), (Start: 30 @53101 has 5 MA's), (90, 53293), (95, 53308), (101, 53356),

Gene: Lilith_44 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for Lilith_44:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: LittleB_38 Start: 28375, Stop: 28109, Start Num: 43
Candidate Starts for LittleB_38:
(15, 28537), (Start: 31 @28423 has 1 MA's), (Start: 43 @28375 has 111 MA's), (Start: 51 @28345 has 1 MA's), (59, 28318), (76, 28258), (101, 28141),

Gene: LittleCherry_34 Start: 27358, Stop: 27146, Start Num: 50
Candidate Starts for LittleCherry_34:
(Start: 50 @27358 has 22 MA's), (Start: 56 @27340 has 1 MA's), (62, 27313), (90, 27232), (101, 27178),

Gene: LittleGuy_38 Start: 28273, Stop: 28007, Start Num: 43
Candidate Starts for LittleGuy_38:
(15, 28435), (Start: 31 @28321 has 1 MA's), (Start: 43 @28273 has 111 MA's), (Start: 51 @28243 has 1 MA's), (59, 28216), (76, 28156), (101, 28039),

Gene: LochMonster_38 Start: 28413, Stop: 28147, Start Num: 43
Candidate Starts for LochMonster_38:
(15, 28575), (Start: 31 @28461 has 1 MA's), (Start: 43 @28413 has 111 MA's), (Start: 51 @28383 has 1 MA's), (59, 28356), (66, 28329), (67, 28326), (76, 28296), (101, 28179),

Gene: Lorenzo_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Lorenzo_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Louie6_42 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for Louie6_42:
(17, 29233), (Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Lowa_43 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for Lowa_43:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: LugYA_46 Start: 29102, Stop: 28863, Start Num: 38
Candidate Starts for LugYA_46:
(Start: 38 @29102 has 116 MA's), (78, 28994), (91, 28955), (101, 28901),

Gene: Lunsford_39 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for Lunsford_39:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: MA5_40 Start: 28108, Stop: 27869, Start Num: 38
Candidate Starts for MA5_40:
(Start: 38 @28108 has 116 MA's), (78, 28000), (91, 27961), (101, 27907),

Gene: MK4_40 Start: 28213, Stop: 27974, Start Num: 38
Candidate Starts for MK4_40:
(Start: 38 @28213 has 116 MA's), (78, 28105), (91, 28066), (101, 28012),

Gene: MadMarie_43 Start: 29104, Stop: 28865, Start Num: 38
Candidate Starts for MadMarie_43:
(Start: 38 @29104 has 116 MA's), (78, 28996), (91, 28957), (101, 28903),

Gene: Mainiac_43 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for Mainiac_43:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: Malinsilva_45 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for Malinsilva_45:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Manu_43 Start: 28989, Stop: 28684, Start Num: 38
Candidate Starts for Manu_43:
(5, 29235), (7, 29217), (11, 29196), (12, 29193), (21, 29085), (23, 29073), (Start: 38 @28989 has 116 MA's), (Start: 50 @28935 has 22 MA's), (61, 28896), (68, 28872), (91, 28785), (101, 28722),

Gene: MarQuardt_43 Start: 29103, Stop: 28864, Start Num: 38
Candidate Starts for MarQuardt_43:
(Start: 38 @29103 has 116 MA's), (78, 28995), (91, 28956), (101, 28902),

Gene: Marchesa_40 Start: 28662, Stop: 28423, Start Num: 38
Candidate Starts for Marchesa_40:
(21, 28758), (Start: 38 @28662 has 116 MA's), (78, 28554), (91, 28515), (101, 28461),

Gene: Marco3_44 Start: 32839, Stop: 32594, Start Num: 41
Candidate Starts for Marco3_44:
(Start: 41 @32839 has 7 MA's), (Start: 51 @32809 has 1 MA's), (85, 32689), (90, 32674), (96, 32659), (97, 32647), (101, 32617),

Gene: Margo_39 Start: 28785, Stop: 28546, Start Num: 38
Candidate Starts for Margo_39:
(Start: 38 @28785 has 116 MA's), (78, 28677), (91, 28638),

Gene: Marie_43 Start: 29101, Stop: 28862, Start Num: 38

Candidate Starts for Marie_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Marius_44 Start: 28986, Stop: 28681, Start Num: 38
Candidate Starts for Marius_44:
(5, 29232), (7, 29214), (11, 29193), (12, 29190), (21, 29082), (23, 29070), (Start: 38 @28986 has 116 MA's), (Start: 50 @28932 has 22 MA's), (61, 28893), (68, 28869), (91, 28782), (101, 28719),

Gene: MarysWell_33 Start: 27412, Stop: 27194, Start Num: 50
Candidate Starts for MarysWell_33:
(Start: 50 @27412 has 22 MA's), (62, 27367), (90, 27280), (101, 27226),

Gene: Maverick_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Maverick_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Maxo_39 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Maxo_39:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (78, 28244), (101, 28142),

Gene: Mayonnaise_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Mayonnaise_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Mazhar510_38 Start: 28375, Stop: 28109, Start Num: 43
Candidate Starts for Mazhar510_38:
(15, 28537), (Start: 31 @28423 has 1 MA's), (Start: 43 @28375 has 111 MA's), (Start: 51 @28345 has 1 MA's), (59, 28318), (76, 28258), (101, 28141),

Gene: Medusa_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Medusa_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (78, 28241), (101, 28139),

Gene: MeeZee_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for MeeZee_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: MegTheThird_38 Start: 28003, Stop: 27746, Start Num: 35
Candidate Starts for MegTheThird_38:
(35, 28003), (86, 27847), (90, 27835), (98, 27793),

Gene: Melvin_40 Start: 28372, Stop: 28106, Start Num: 43
Candidate Starts for Melvin_40:
(15, 28534), (Start: 31 @28420 has 1 MA's), (Start: 43 @28372 has 111 MA's), (Start: 51 @28342 has 1 MA's), (59, 28315), (76, 28255), (101, 28138),

Gene: Methuselah_41 Start: 29096, Stop: 28857, Start Num: 38
Candidate Starts for Methuselah_41:

(17, 29228), (Start: 38 @29096 has 116 MA's), (78, 28988), (91, 28949), (101, 28895),

Gene: Micasa_36 Start: 27685, Stop: 27467, Start Num: 50
Candidate Starts for Micasa_36:
(Start: 50 @27685 has 22 MA's), (Start: 56 @27667 has 1 MA's), (62, 27640), (90, 27553), (101, 27499),

Gene: Microwolf_43 Start: 29103, Stop: 28864, Start Num: 38
Candidate Starts for Microwolf_43:
(Start: 38 @29103 has 116 MA's), (78, 28995), (91, 28956), (101, 28902),

Gene: Midas2_34 Start: 27403, Stop: 27185, Start Num: 50
Candidate Starts for Midas2_34:
(Start: 50 @27403 has 22 MA's), (Start: 56 @27385 has 1 MA's), (62, 27358), (90, 27271), (101, 27217),

Gene: Milcery_34 Start: 27362, Stop: 27150, Start Num: 50
Candidate Starts for Milcery_34:
(Start: 50 @27362 has 22 MA's), (Start: 56 @27344 has 1 MA's), (62, 27317), (90, 27236), (101, 27182),

Gene: MilleFeuille_39 Start: 32461, Stop: 32216, Start Num: 41
Candidate Starts for MilleFeuille_39:
(18, 32602), (Start: 41 @32461 has 7 MA's), (Start: 51 @32431 has 1 MA's), (85, 32311), (90, 32296), (96, 32281), (97, 32269), (101, 32239),

Gene: Millski_37 Start: 28378, Stop: 28112, Start Num: 43
Candidate Starts for Millski_37:
(15, 28540), (Start: 31 @28426 has 1 MA's), (Start: 43 @28378 has 111 MA's), (Start: 51 @28348 has 1 MA's), (59, 28321), (76, 28261), (101, 28144),

Gene: Miramae_37 Start: 28397, Stop: 28137, Start Num: 27
Candidate Starts for Miramae_37:
(Start: 27 @28397 has 25 MA's), (Start: 51 @28367 has 1 MA's), (59, 28340), (76, 28280), (78, 28265), (101, 28163),

Gene: Miryou_85 Start: 57355, Stop: 57669, Start Num: 29
Candidate Starts for Miryou_85:
(Start: 29 @57355 has 15 MA's), (Start: 30 @57361 has 5 MA's), (49, 57454), (Start: 51 @57460 has 1 MA's), (53, 57466), (63, 57502), (72, 57526), (101, 57646), (102, 57652),

Gene: Misomonster_44 Start: 29099, Stop: 28860, Start Num: 38
Candidate Starts for Misomonster_44:
(17, 29231), (Start: 38 @29099 has 116 MA's), (78, 28991), (91, 28952), (101, 28898),

Gene: MoneyMay_43 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for MoneyMay_43:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Montavir_42 Start: 29102, Stop: 28863, Start Num: 38
Candidate Starts for Montavir_42:
(Start: 38 @29102 has 116 MA's), (78, 28994), (91, 28955), (101, 28901),

Gene: Morpher26_37 Start: 28227, Stop: 27967, Start Num: 27
Candidate Starts for Morpher26_37:
(Start: 27 @28227 has 25 MA's), (Start: 51 @28200 has 1 MA's), (59, 28173), (76, 28113), (93, 28050), (101, 27993),

Gene: Morrow_39 Start: 28380, Stop: 28114, Start Num: 43
Candidate Starts for Morrow_39:
(15, 28542), (Start: 31 @28428 has 1 MA's), (Start: 43 @28380 has 111 MA's), (Start: 51 @28350 has 1 MA's), (59, 28323), (76, 28263), (78, 28248), (101, 28146),

Gene: MuchMore_46 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for MuchMore_46:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Mundrea_36 Start: 28134, Stop: 27874, Start Num: 43
Candidate Starts for Mundrea_36:
(15, 28296), (Start: 31 @28182 has 1 MA's), (Start: 43 @28134 has 111 MA's), (Start: 51 @28104 has 1 MA's), (59, 28077), (76, 28017), (78, 28002), (101, 27900),

Gene: MyraDee_36 Start: 26293, Stop: 26057, Start Num: 40
Candidate Starts for MyraDee_36:
(Start: 40 @26293 has 1 MA's), (54, 26248), (69, 26200), (84, 26152), (90, 26134),

Gene: Naca_35 Start: 27563, Stop: 27354, Start Num: 50
Candidate Starts for Naca_35:
(Start: 50 @27563 has 22 MA's), (90, 27437), (101, 27383),

Gene: NearlyHeadless_35 Start: 26884, Stop: 26606, Start Num: 36
Candidate Starts for NearlyHeadless_35:
(Start: 36 @26884 has 10 MA's), (62, 26779), (75, 26740), (90, 26692), (101, 26638),

Gene: Nebs_39 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Nebs_39:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (78, 28242), (101, 28140),

Gene: Neighly_83 Start: 55056, Stop: 55343, Start Num: 29
Candidate Starts for Neighly_83:
(Start: 29 @55056 has 15 MA's), (90, 55254), (95, 55269), (101, 55317),

Gene: Nemo27_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Nemo27_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Noella_39 Start: 28760, Stop: 28521, Start Num: 38
Candidate Starts for Noella_39:
(Start: 38 @28760 has 116 MA's), (78, 28652), (91, 28613),

Gene: Noelle_38 Start: 28436, Stop: 28167, Start Num: 43
Candidate Starts for Noelle_38:
(15, 28595), (Start: 31 @28481 has 1 MA's), (Start: 43 @28436 has 111 MA's), (Start: 51 @28406 has 1 MA's), (59, 28379), (66, 28352), (93, 28256), (101, 28199),

Gene: Norbert_38 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Norbert_38:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: NorthStar_37 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for NorthStar_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (78, 28242), (101, 28140),

Gene: NotAPhaseMom_38 Start: 28378, Stop: 28112, Start Num: 43
Candidate Starts for NotAPhaseMom_38:
(15, 28540), (Start: 31 @28426 has 1 MA's), (Start: 43 @28378 has 111 MA's), (Start: 51 @28348 has 1 MA's), (59, 28321), (76, 28261), (101, 28144),

Gene: NothingSpecial_39 Start: 29386, Stop: 29153, Start Num: 47
Candidate Starts for NothingSpecial_39:
(20, 29512), (37, 29419), (Start: 43 @29401 has 111 MA's), (Start: 47 @29386 has 5 MA's), (64, 29326), (72, 29302), (77, 29281), (101, 29188),

Gene: Nyxis_38 Start: 28267, Stop: 28001, Start Num: 43
Candidate Starts for Nyxis_38:
(15, 28429), (Start: 31 @28315 has 1 MA's), (Start: 43 @28267 has 111 MA's), (Start: 51 @28237 has 1 MA's), (59, 28210), (76, 28150), (101, 28033),

Gene: OKaNui_39 Start: 28427, Stop: 28161, Start Num: 43
Candidate Starts for OKaNui_39:
(15, 28589), (Start: 31 @28475 has 1 MA's), (Start: 43 @28427 has 111 MA's), (Start: 51 @28397 has 1 MA's), (59, 28370), (76, 28310), (101, 28193),

Gene: Obama12_39 Start: 28678, Stop: 28412, Start Num: 27
Candidate Starts for Obama12_39:
(1, 29542), (2, 29275), (3, 28960), (6, 28852), (10, 28828), (Start: 27 @28678 has 25 MA's), (Start: 51 @28648 has 1 MA's), (59, 28621), (76, 28561), (78, 28546), (101, 28444),

Gene: Ohfah_39 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Ohfah_39:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (78, 28242), (101, 28140),

Gene: OlanP_42 Start: 29171, Stop: 28866, Start Num: 38
Candidate Starts for OlanP_42:
(21, 29267), (23, 29255), (Start: 38 @29171 has 116 MA's), (Start: 50 @29117 has 22 MA's), (61, 29078), (68, 29054), (91, 28967), (101, 28904),

Gene: Ollie_43 Start: 28973, Stop: 28734, Start Num: 38
Candidate Starts for Ollie_43:
(Start: 38 @28973 has 116 MA's), (73, 28892), (78, 28865), (91, 28826), (101, 28772),

Gene: Omnicron_87 Start: 57578, Stop: 57886, Start Num: 29
Candidate Starts for Omnicron_87:
(Start: 29 @57578 has 15 MA's), (Start: 30 @57584 has 5 MA's), (49, 57677), (Start: 51 @57683 has 1 MA's), (53, 57689), (63, 57725), (72, 57749), (101, 57863), (102, 57869),

Gene: P28Green_44 Start: 29104, Stop: 28865, Start Num: 38
Candidate Starts for P28Green_44:
(Start: 38 @29104 has 116 MA's), (78, 28996), (91, 28957), (101, 28903),

Gene: PGHhamlin_45 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for PGHhamlin_45:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Padpat_92 Start: 56890, Stop: 57219, Start Num: 24
Candidate Starts for Padpat_92:
(Start: 24 @56890 has 2 MA's), (25, 56905), (26, 56908), (Start: 29 @56926 has 15 MA's), (39, 56962), (53, 57007), (Start: 56 @57016 has 1 MA's), (68, 57061), (72, 57070), (101, 57193), (102, 57199),

Gene: Palestino_37 Start: 28344, Stop: 28108, Start Num: 51
Candidate Starts for Palestino_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Panamaxus_37 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Panamaxus_37:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: Paola_83 Start: 55380, Stop: 55694, Start Num: 29
Candidate Starts for Paola_83:
(4, 55140), (Start: 29 @55380 has 15 MA's), (Start: 30 @55386 has 5 MA's), (49, 55479), (Start: 51 @55485 has 1 MA's), (53, 55491), (63, 55527), (72, 55551), (81, 55590), (101, 55671), (102, 55677),

Gene: Paraselene_41 Start: 32492, Stop: 32247, Start Num: 41
Candidate Starts for Paraselene_41:
(Start: 41 @32492 has 7 MA's), (Start: 51 @32462 has 1 MA's), (85, 32342), (90, 32327), (96, 32312), (97, 32300), (101, 32270),

Gene: Pawn_43 Start: 28993, Stop: 28688, Start Num: 38
Candidate Starts for Pawn_43:
(5, 29239), (7, 29221), (11, 29200), (12, 29197), (21, 29089), (23, 29077), (Start: 38 @28993 has 116 MA's), (Start: 50 @28939 has 22 MA's), (61, 28900), (68, 28876), (91, 28789), (101, 28726),

Gene: Peaches_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Peaches_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Pembroke_43 Start: 29103, Stop: 28864, Start Num: 38
Candidate Starts for Pembroke_43:
(Start: 38 @29103 has 116 MA's), (78, 28995), (91, 28956), (101, 28902),

Gene: Penny1_44 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for Penny1_44:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: Perplexer_37 Start: 28203, Stop: 27943, Start Num: 27
Candidate Starts for Perplexer_37:

(Start: 27 @28203 has 25 MA's), (Start: 51 @28176 has 1 MA's), (59, 28149), (76, 28089), (93, 28026), (101, 27969),

Gene: PeterPeter_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for PeterPeter_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: PetiteSangsue_37 Start: 28206, Stop: 27946, Start Num: 27
Candidate Starts for PetiteSangsue_37:
(Start: 27 @28206 has 25 MA's), (Start: 51 @28179 has 1 MA's), (59, 28152), (76, 28092), (93, 28029), (101, 27972),

Gene: PetterN_36 Start: 26926, Stop: 26717, Start Num: 50
Candidate Starts for PetterN_36:
(Start: 50 @26926 has 22 MA's), (90, 26800), (101, 26746),

Gene: Phacado_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Phacado_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Phantastic_40 Start: 28244, Stop: 28005, Start Num: 38
Candidate Starts for Phantastic_40:
(Start: 38 @28244 has 116 MA's), (78, 28136), (91, 28097), (101, 28043),

Gene: Phelipe_39 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Phelipe_39:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Phighter1804_38 Start: 28416, Stop: 28150, Start Num: 43
Candidate Starts for Phighter1804_38:
(15, 28578), (Start: 31 @28464 has 1 MA's), (Start: 43 @28416 has 111 MA's), (Start: 51 @28386 has 1 MA's), (55, 28374), (59, 28359), (76, 28299), (101, 28182),

Gene: Phillis_35 Start: 26910, Stop: 26632, Start Num: 36
Candidate Starts for Phillis_35:
(Start: 36 @26910 has 10 MA's), (62, 26805), (90, 26718), (101, 26664),

Gene: PhishRPhriends_41 Start: 28167, Stop: 27862, Start Num: 38
Candidate Starts for PhishRPhriends_41:
(5, 28413), (7, 28395), (11, 28374), (12, 28371), (21, 28263), (23, 28251), (Start: 38 @28167 has 116 MA's), (Start: 50 @28113 has 22 MA's), (61, 28074), (68, 28050), (91, 27963), (101, 27900),

Gene: Phoebe_44 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for Phoebe_44:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Phontbonne_38 Start: 28268, Stop: 28002, Start Num: 43
Candidate Starts for Phontbonne_38:
(15, 28430), (Start: 31 @28316 has 1 MA's), (Start: 43 @28268 has 111 MA's), (Start: 51 @28238 has 1 MA's), (59, 28211), (76, 28151), (101, 28034),

Gene: Phoxy_43 Start: 29097, Stop: 28858, Start Num: 38
Candidate Starts for Phoxy_43:
(17, 29229), (Start: 38 @29097 has 116 MA's), (78, 28989), (91, 28950), (101, 28896),

Gene: Phranny_44 Start: 28975, Stop: 28670, Start Num: 38
Candidate Starts for Phranny_44:
(5, 29221), (7, 29203), (11, 29182), (12, 29179), (21, 29071), (23, 29059), (Start: 38 @28975 has 116 MA's), (Start: 50 @28921 has 22 MA's), (61, 28882), (68, 28858), (91, 28771), (101, 28708),

Gene: Pistachio_41 Start: 28151, Stop: 27912, Start Num: 38
Candidate Starts for Pistachio_41:
(Start: 38 @28151 has 116 MA's), (78, 28043), (91, 28004), (101, 27950),

Gene: Pocahontas_39 Start: 28756, Stop: 28517, Start Num: 38
Candidate Starts for Pocahontas_39:
(Start: 38 @28756 has 116 MA's), (78, 28648), (91, 28609),

Gene: Polymorphads_39 Start: 28367, Stop: 28101, Start Num: 43
Candidate Starts for Polymorphads_39:
(15, 28529), (Start: 31 @28415 has 1 MA's), (Start: 43 @28367 has 111 MA's), (Start: 51 @28337 has 1 MA's), (59, 28310), (76, 28250), (78, 28235), (101, 28133),

Gene: Popcicle_39 Start: 28756, Stop: 28517, Start Num: 38
Candidate Starts for Popcicle_39:
(Start: 38 @28756 has 116 MA's), (78, 28648), (91, 28609),

Gene: PotatoSplit_45 Start: 29105, Stop: 28866, Start Num: 38
Candidate Starts for PotatoSplit_45:
(Start: 38 @29105 has 116 MA's), (78, 28997), (91, 28958), (101, 28904),

Gene: Prinashe11_35 Start: 27325, Stop: 27113, Start Num: 50
Candidate Starts for Prinashe11_35:
(Start: 50 @27325 has 22 MA's), (Start: 56 @27307 has 1 MA's), (62, 27280), (90, 27199), (101, 27145),

Gene: Psycho_81 Start: 54182, Stop: 54469, Start Num: 29
Candidate Starts for Psycho_81:
(Start: 29 @54182 has 15 MA's), (Start: 30 @54188 has 5 MA's), (90, 54380), (95, 54395), (101, 54443),

Gene: Pumbaa_38 Start: 28319, Stop: 28053, Start Num: 43
Candidate Starts for Pumbaa_38:
(15, 28481), (Start: 31 @28367 has 1 MA's), (Start: 43 @28319 has 111 MA's), (Start: 51 @28289 has 1 MA's), (59, 28262), (76, 28202), (101, 28085),

Gene: Puppy_41 Start: 28224, Stop: 27985, Start Num: 38
Candidate Starts for Puppy_41:
(Start: 38 @28224 has 116 MA's), (91, 28077), (101, 28023),

Gene: PurpleHaze_43 Start: 28988, Stop: 28683, Start Num: 38
Candidate Starts for PurpleHaze_43:

(5, 29234), (7, 29216), (11, 29195), (12, 29192), (21, 29084), (23, 29072), (Start: 38 @28988 has 116 MA's), (Start: 50 @28934 has 22 MA's), (61, 28895), (68, 28871), (91, 28784), (101, 28721),

Gene: QuinnKiro_38 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for QuinnKiro_38:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: Rando14_84 Start: 55989, Stop: 56297, Start Num: 29
Candidate Starts for Rando14_84:
(Start: 29 @55989 has 15 MA's), (Start: 30 @55995 has 5 MA's), (49, 56088), (Start: 51 @56094 has 1 MA's), (53, 56100), (63, 56136), (72, 56160), (101, 56274), (102, 56280),

Gene: Reba_43 Start: 28648, Stop: 28343, Start Num: 38
Candidate Starts for Reba_43:
(5, 28894), (7, 28876), (11, 28855), (12, 28852), (21, 28744), (23, 28732), (Start: 38 @28648 has 116 MA's), (Start: 50 @28594 has 22 MA's), (61, 28555), (68, 28531), (91, 28444), (101, 28381),

Gene: Relief_37 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Relief_37:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: ResDef_39 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for ResDef_39:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: RhynO_40 Start: 28414, Stop: 28145, Start Num: 43
Candidate Starts for RhynO_40:
(28, 28474), (Start: 43 @28414 has 111 MA's), (Start: 51 @28384 has 1 MA's), (58, 28360), (66, 28330), (101, 28180),

Gene: Roary_35 Start: 26830, Stop: 26552, Start Num: 36
Candidate Starts for Roary_35:
(Start: 36 @26830 has 10 MA's), (62, 26725), (75, 26686), (90, 26638), (101, 26584),

Gene: RockieBear_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for RockieBear_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Rockstar_40 Start: 28220, Stop: 27981, Start Num: 38
Candidate Starts for Rockstar_40:
(Start: 38 @28220 has 116 MA's), (78, 28112), (91, 28073), (101, 28019),

Gene: Roimos_40 Start: 28580, Stop: 28341, Start Num: 38
Candidate Starts for Roimos_40:
(21, 28676), (Start: 38 @28580 has 116 MA's), (78, 28472), (91, 28433), (101, 28379),

Gene: Romney_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Romney_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Roosevelt_37 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Roosevelt_37:
(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: Rosa24_38 Start: 28408, Stop: 28142, Start Num: 43
Candidate Starts for Rosa24_38:
(15, 28570), (Start: 31 @28456 has 1 MA's), (Start: 43 @28408 has 111 MA's), (Start: 51 @28378 has 1 MA's), (59, 28351), (76, 28291), (78, 28276), (101, 28174),

Gene: Rowdy_43 Start: 28322, Stop: 28053, Start Num: 43
Candidate Starts for Rowdy_43:
(28, 28382), (Start: 43 @28322 has 111 MA's), (Start: 51 @28292 has 1 MA's), (58, 28268), (66, 28238), (101, 28088),

Gene: Ruin_38 Start: 28370, Stop: 28104, Start Num: 43
Candidate Starts for Ruin_38:
(15, 28532), (Start: 31 @28418 has 1 MA's), (Start: 43 @28370 has 111 MA's), (Start: 51 @28340 has 1 MA's), (59, 28313), (101, 28136),

Gene: Rummer_42 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for Rummer_42:
(17, 29232), (Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: Rutherferd_45 Start: 33535, Stop: 33290, Start Num: 41
Candidate Starts for Rutherferd_45:
(Start: 41 @33535 has 7 MA's), (Start: 51 @33505 has 1 MA's), (85, 33385), (90, 33370), (96, 33355), (97, 33343), (101, 33313),

Gene: Sabertooth_38 Start: 28373, Stop: 28107, Start Num: 43
Candidate Starts for Sabertooth_38:
(15, 28535), (Start: 31 @28421 has 1 MA's), (Start: 43 @28373 has 111 MA's), (Start: 51 @28343 has 1 MA's), (59, 28316), (76, 28256), (101, 28139),

Gene: Sabia_43 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for Sabia_43:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: Sabinator_42 Start: 29100, Stop: 28861, Start Num: 38
Candidate Starts for Sabinator_42:
(Start: 38 @29100 has 116 MA's), (78, 28992), (91, 28953), (101, 28899),

Gene: Sagefire_45 Start: 33468, Stop: 33223, Start Num: 41
Candidate Starts for Sagefire_45:
(Start: 41 @33468 has 7 MA's), (Start: 51 @33438 has 1 MA's), (85, 33318), (90, 33303), (96, 33288), (97, 33276), (101, 33246),

Gene: SaturnRing_40 Start: 28604, Stop: 28365, Start Num: 38
Candidate Starts for SaturnRing_40:
(Start: 38 @28604 has 116 MA's), (78, 28496), (91, 28457), (101, 28403),

Gene: Scamp_38 Start: 28376, Stop: 28110, Start Num: 43
Candidate Starts for Scamp_38:

(15, 28538), (Start: 31 @28424 has 1 MA's), (Start: 43 @28376 has 111 MA's), (Start: 51 @28346 has 1 MA's), (59, 28319), (76, 28259), (101, 28142),

Gene: Scorpia_36 Start: 27003, Stop: 26794, Start Num: 50
Candidate Starts for Scorpia_36:
(Start: 50 @27003 has 22 MA's), (90, 26877), (101, 26823),

Gene: Scout_40 Start: 27911, Stop: 27672, Start Num: 38
Candidate Starts for Scout_40:
(21, 28007), (34, 27926), (Start: 38 @27911 has 116 MA's), (78, 27803), (91, 27764), (101, 27710),

Gene: SenorClean_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for SenorClean_38:
(15, 28536), (19, 28506), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Shaka_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Shaka_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Shapes_43 Start: 28322, Stop: 28053, Start Num: 43
Candidate Starts for Shapes_43:
(28, 28382), (Start: 43 @28322 has 111 MA's), (Start: 51 @28292 has 1 MA's), (58, 28268), (66, 28238), (101, 28088),

Gene: SheldonCooper_40 Start: 28677, Stop: 28411, Start Num: 27
Candidate Starts for SheldonCooper_40:
(1, 29541), (2, 29274), (3, 28959), (6, 28851), (10, 28827), (Start: 27 @28677 has 25 MA's), (Start: 51 @28647 has 1 MA's), (59, 28620), (76, 28560), (78, 28545), (101, 28443),

Gene: Shygu2_37 Start: 28206, Stop: 27946, Start Num: 27
Candidate Starts for Shygu2_37:
(Start: 27 @28206 has 25 MA's), (Start: 51 @28176 has 1 MA's), (59, 28149), (76, 28089), (101, 27972),

Gene: Skipitt_37 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for Skipitt_37:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: Smeadley_35 Start: 26953, Stop: 26675, Start Num: 36
Candidate Starts for Smeadley_35:
(Start: 36 @26953 has 10 MA's), (62, 26848), (75, 26809), (90, 26761), (101, 26707),

Gene: Snickers_43 Start: 29075, Stop: 28836, Start Num: 38
Candidate Starts for Snickers_43:
(Start: 38 @29075 has 116 MA's), (78, 28967), (91, 28928), (101, 28874),

Gene: SoSeph_82 Start: 55027, Stop: 55308, Start Num: 30
Candidate Starts for SoSeph_82:
(Start: 29 @55021 has 15 MA's), (Start: 30 @55027 has 5 MA's), (90, 55219), (95, 55234), (101, 55282),

Gene: SoYo_43 Start: 29013, Stop: 28774, Start Num: 38
Candidate Starts for SoYo_43:
(Start: 38 @29013 has 116 MA's), (78, 28905), (91, 28866), (101, 28812),

Gene: SoilDragon_43 Start: 28550, Stop: 28308, Start Num: 38
Candidate Starts for SoilDragon_43:
(Start: 38 @28550 has 116 MA's), (78, 28442), (91, 28403), (101, 28346),

Gene: Soshari_45 Start: 29096, Stop: 28857, Start Num: 38
Candidate Starts for Soshari_45:
(17, 29228), (Start: 38 @29096 has 116 MA's), (78, 28988), (91, 28949), (101, 28895),

Gene: Sparxx_39 Start: 28369, Stop: 28103, Start Num: 43
Candidate Starts for Sparxx_39:
(15, 28531), (Start: 31 @28417 has 1 MA's), (Start: 43 @28369 has 111 MA's), (Start: 51 @28339 has 1 MA's), (59, 28312), (76, 28252), (101, 28135),

Gene: Spike509_43 Start: 29097, Stop: 28858, Start Num: 38
Candidate Starts for Spike509_43:
(17, 29229), (Start: 38 @29097 has 116 MA's), (78, 28989), (91, 28950), (101, 28896),

Gene: Spino_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Spino_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Stagni_43 Start: 29104, Stop: 28865, Start Num: 38
Candidate Starts for Stagni_43:
(Start: 38 @29104 has 116 MA's), (78, 28996), (91, 28957), (101, 28903),

Gene: SteMason_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for SteMason_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: StepMih_43 Start: 29095, Stop: 28856, Start Num: 38
Candidate Starts for StepMih_43:
(Start: 38 @29095 has 116 MA's), (78, 28987), (91, 28948), (101, 28894),

Gene: Stephig9_35 Start: 26858, Stop: 26580, Start Num: 36
Candidate Starts for Stephig9_35:
(Start: 36 @26858 has 10 MA's), (62, 26753), (75, 26714), (90, 26666), (101, 26612),

Gene: Stink_38 Start: 28677, Stop: 28417, Start Num: 27
Candidate Starts for Stink_38:
(Start: 27 @28677 has 25 MA's), (Start: 51 @28647 has 1 MA's), (59, 28620), (76, 28560), (78, 28545), (101, 28443),

Gene: Sultana_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Sultana_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Swirley_36 Start: 27689, Stop: 27477, Start Num: 50
Candidate Starts for Swirley_36:
(Start: 50 @27689 has 22 MA's), (Start: 56 @27671 has 1 MA's), (90, 27563), (101, 27509),

Gene: SydNat_36 Start: 27980, Stop: 27753, Start Num: 48
Candidate Starts for SydNat_36:
(Start: 48 @27980 has 2 MA's), (Start: 50 @27971 has 22 MA's), (Start: 56 @27953 has 1 MA's), (62, 27926), (90, 27839), (101, 27785),

Gene: TNguyen7_40 Start: 28571, Stop: 28332, Start Num: 38
Candidate Starts for TNguyen7_40:
(Start: 38 @28571 has 116 MA's), (91, 28424), (101, 28370),

Gene: Taquarus_38 Start: 28377, Stop: 28111, Start Num: 43
Candidate Starts for Taquarus_38:
(15, 28539), (Start: 31 @28425 has 1 MA's), (Start: 43 @28377 has 111 MA's), (Start: 51 @28347 has 1 MA's), (59, 28320), (76, 28260), (101, 28143),

Gene: Tarynearal_33 Start: 27355, Stop: 27143, Start Num: 50
Candidate Starts for Tarynearal_33:
(Start: 50 @27355 has 22 MA's), (Start: 56 @27337 has 1 MA's), (62, 27310), (90, 27229), (101, 27175),

Gene: Taurus_44 Start: 29101, Stop: 28862, Start Num: 38
Candidate Starts for Taurus_44:
(Start: 38 @29101 has 116 MA's), (78, 28993), (91, 28954), (101, 28900),

Gene: Texage_38 Start: 28760, Stop: 28521, Start Num: 38
Candidate Starts for Texage_38:
(Start: 38 @28760 has 116 MA's), (78, 28652), (91, 28613),

Gene: Thanksgivukkah_38 Start: 28375, Stop: 28109, Start Num: 43
Candidate Starts for Thanksgivukkah_38:
(15, 28537), (Start: 31 @28423 has 1 MA's), (Start: 43 @28375 has 111 MA's), (Start: 51 @28345 has 1 MA's), (59, 28318), (76, 28258), (101, 28141),

Gene: Theia_32 Start: 27379, Stop: 27167, Start Num: 50
Candidate Starts for Theia_32:
(Start: 50 @27379 has 22 MA's), (Start: 56 @27361 has 1 MA's), (62, 27334), (90, 27253), (101, 27199),

Gene: Thyatira_84 Start: 57092, Stop: 57403, Start Num: 29
Candidate Starts for Thyatira_84:
(Start: 29 @57092 has 15 MA's), (Start: 30 @57098 has 5 MA's), (49, 57191), (Start: 51 @57197 has 1 MA's), (53, 57203), (63, 57239), (72, 57263), (90, 57323), (101, 57380), (102, 57386),

Gene: Tiffany_43 Start: 28987, Stop: 28748, Start Num: 38
Candidate Starts for Tiffany_43:
(Start: 38 @28987 has 116 MA's), (78, 28879), (91, 28840), (101, 28786),

Gene: TinaFeyge_39 Start: 28369, Stop: 28103, Start Num: 43
Candidate Starts for TinaFeyge_39:

(15, 28531), (Start: 31 @28417 has 1 MA's), (Start: 43 @28369 has 111 MA's), (Start: 51 @28339 has 1 MA's), (59, 28312), (76, 28252), (101, 28135),

Gene: TinyPebbles_42 Start: 29102, Stop: 28863, Start Num: 38
Candidate Starts for TinyPebbles_42:
(17, 29234), (Start: 38 @29102 has 116 MA's), (78, 28994), (91, 28955), (101, 28901),

Gene: Tinybot_37 Start: 28404, Stop: 28138, Start Num: 43
Candidate Starts for Tinybot_37:
(15, 28566), (Start: 31 @28452 has 1 MA's), (Start: 43 @28404 has 111 MA's), (Start: 51 @28374 has 1 MA's), (59, 28347), (76, 28287), (101, 28170),

Gene: TiroTheta9_38 Start: 28371, Stop: 28105, Start Num: 43
Candidate Starts for TiroTheta9_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: Todacoro_39 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Todacoro_39:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: Toro_41 Start: 30738, Stop: 30514, Start Num: 38
Candidate Starts for Toro_41:
(Start: 38 @30738 has 116 MA's), (Start: 43 @30720 has 111 MA's), (78, 30630), (91, 30591), (102, 30531),

Gene: TroyPia_39 Start: 28372, Stop: 28106, Start Num: 43
Candidate Starts for TroyPia_39:
(15, 28534), (Start: 31 @28420 has 1 MA's), (Start: 43 @28372 has 111 MA's), (Start: 51 @28342 has 1 MA's), (59, 28315), (76, 28255), (101, 28138),

Gene: Twigg_34 Start: 27328, Stop: 27116, Start Num: 50
Candidate Starts for Twigg_34:
(Start: 50 @27328 has 22 MA's), (Start: 56 @27310 has 1 MA's), (62, 27283), (90, 27202), (101, 27148),

Gene: TygerBlood_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for TygerBlood_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Ulysses_37 Start: 28054, Stop: 27788, Start Num: 43
Candidate Starts for Ulysses_37:
(15, 28216), (Start: 31 @28102 has 1 MA's), (Start: 43 @28054 has 111 MA's), (Start: 51 @28024 has 1 MA's), (59, 27997), (76, 27937), (101, 27820),

Gene: UnionJack_34 Start: 26537, Stop: 26325, Start Num: 50
Candidate Starts for UnionJack_34:
(Start: 50 @26537 has 22 MA's), (Start: 56 @26519 has 1 MA's), (90, 26411), (101, 26357),

Gene: Veracruz_38 Start: 28759, Stop: 28520, Start Num: 38
Candidate Starts for Veracruz_38:
(Start: 38 @28759 has 116 MA's), (78, 28651), (91, 28612),

Gene: ViviJ_88 Start: 55389, Stop: 55670, Start Num: 30
Candidate Starts for ViviJ_88:
(Start: 29 @55383 has 15 MA's), (Start: 30 @55389 has 5 MA's), (90, 55581), (95, 55596), (101, 55644),

Gene: Vix_43 Start: 29184, Stop: 28945, Start Num: 38
Candidate Starts for Vix_43:
(Start: 38 @29184 has 116 MA's), (78, 29076), (91, 29037), (101, 28983),

Gene: Wander_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Wander_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Waterfoul_83 Start: 55162, Stop: 55473, Start Num: 29
Candidate Starts for Waterfoul_83:
(4, 54922), (Start: 29 @55162 has 15 MA's), (Start: 30 @55168 has 5 MA's), (49, 55261), (Start: 51 @55267 has 1 MA's), (53, 55273), (63, 55309), (72, 55333), (81, 55372), (101, 55450), (102, 55456),

Gene: Watson_43 Start: 29094, Stop: 28855, Start Num: 38
Candidate Starts for Watson_43:
(Start: 38 @29094 has 116 MA's), (78, 28986), (91, 28947), (101, 28893),

Gene: Wilbur_38 Start: 28374, Stop: 28108, Start Num: 43
Candidate Starts for Wilbur_38:
(15, 28536), (Start: 31 @28422 has 1 MA's), (Start: 43 @28374 has 111 MA's), (Start: 51 @28344 has 1 MA's), (59, 28317), (76, 28257), (101, 28140),

Gene: Wile_37 Start: 28237, Stop: 27977, Start Num: 27
Candidate Starts for Wile_37:
(Start: 27 @28237 has 25 MA's), (Start: 51 @28210 has 1 MA's), (59, 28183), (76, 28123), (93, 28060), (101, 28003),

Gene: Wizard007_38 Start: 28379, Stop: 28113, Start Num: 43
Candidate Starts for Wizard007_38:
(15, 28541), (Start: 31 @28427 has 1 MA's), (Start: 43 @28379 has 111 MA's), (Start: 51 @28349 has 1 MA's), (59, 28322), (76, 28262), (101, 28145),

Gene: Wooldri_45 Start: 29013, Stop: 28774, Start Num: 38
Candidate Starts for Wooldri_45:
(Start: 38 @29013 has 116 MA's), (78, 28905), (91, 28866), (101, 28812),

Gene: Xena_36 Start: 28203, Stop: 27943, Start Num: 27
Candidate Starts for Xena_36:
(Start: 27 @28203 has 25 MA's), (Start: 51 @28176 has 1 MA's), (59, 28149), (76, 28089), (93, 28026), (101, 27969),

Gene: XianYue_38 Start: 28104, Stop: 27877, Start Num: 47
Candidate Starts for XianYue_38:
(20, 28230), (22, 28218), (Start: 47 @28104 has 5 MA's), (70, 28026), (72, 28020), (101, 27906),

Gene: YoSam321_38 Start: 28371, Stop: 28105, Start Num: 43

Candidate Starts for YoSam321_38:
(15, 28533), (Start: 31 @28419 has 1 MA's), (Start: 43 @28371 has 111 MA's), (Start: 51 @28341 has 1 MA's), (59, 28314), (76, 28254), (101, 28137),

Gene: Zarafa_40 Start: 28673, Stop: 28434, Start Num: 38
Candidate Starts for Zarafa_40:
(21, 28769), (Start: 38 @28673 has 116 MA's), (78, 28565), (91, 28526), (101, 28472),

Gene: Zetzy_42 Start: 28665, Stop: 28426, Start Num: 38
Candidate Starts for Zetzy_42:
(Start: 38 @28665 has 116 MA's), (78, 28557), (91, 28518), (101, 28464),

Gene: Zolita_35 Start: 27984, Stop: 27757, Start Num: 48
Candidate Starts for Zolita_35:
(Start: 48 @27984 has 2 MA's), (Start: 50 @27975 has 22 MA's), (Start: 56 @27957 has 1 MA's), (62, 27930), (90, 27843), (101, 27789),