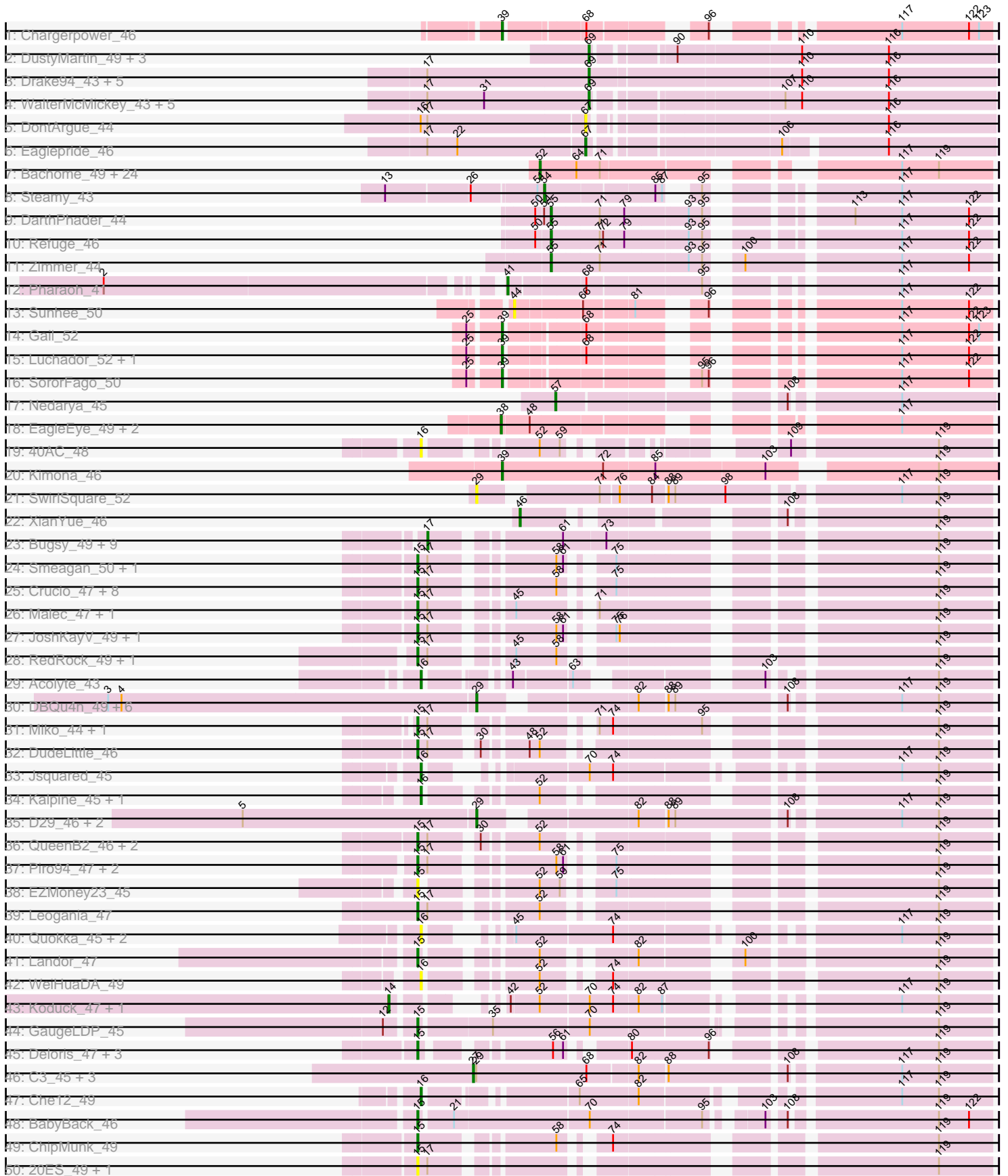
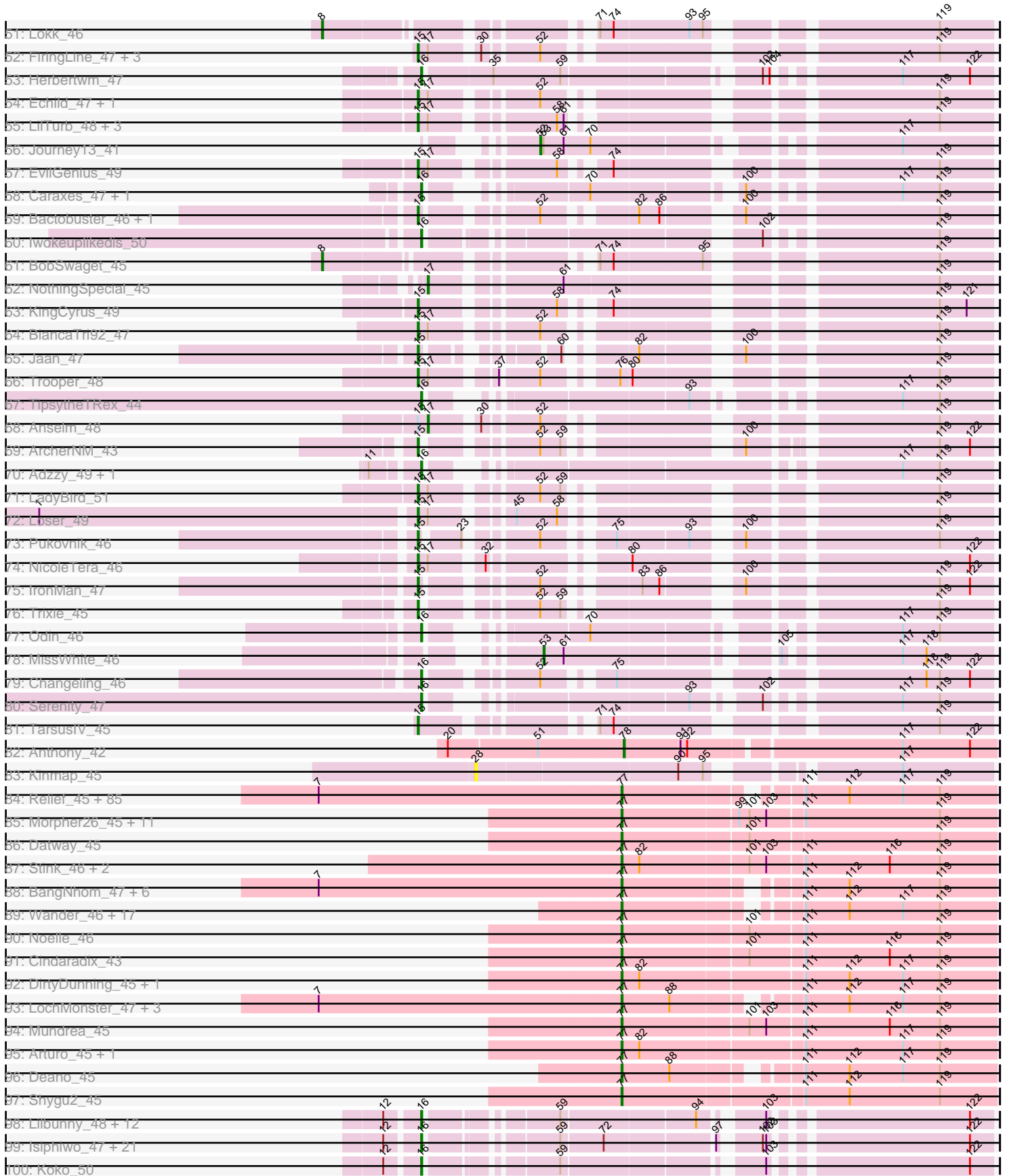


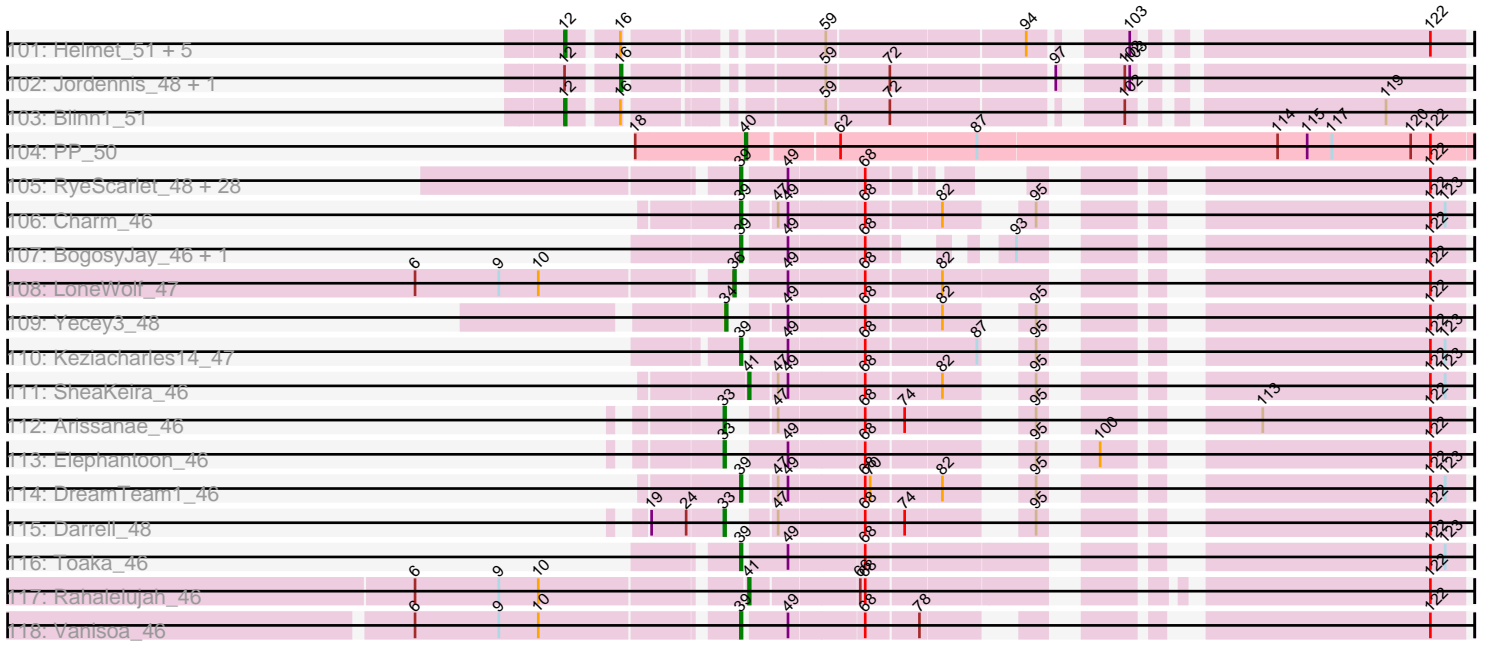
Pham 202584



Pham 202584



Pham 202584



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 202584 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202584 has 407 members, 40 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_46
- Track 2 : DustyMartin_49, Shapes_49, Rowdy_49, RhynO_46
- Track 3 : Drake94_43, Trike_43, Poompha_44, Severus_43, PeaceMeal1_43, KittenMittens_42
- Track 4 : WalterMcMickey_43, Rebeuca_45, Topanga_43, Kristoff_45, Edison31_44, Twister_43
- Track 5 : DontArgue_44
- Track 6 : Eaglepride_46
- Track 7 : Bachome_49, Sham4_47, Orange_47, Insomnia_48, Snape_47, Mabel_47, TinyTimmy_47, Munch_48, Et2Brutus_46, Fibonacci_47, Bud_47, Lucivia_48, Bowtie_48, Mulciber_47, MaCh_48, Petersenfast_46, Gilberta_48, Timothy_47, Aneem_48, Hutc2_47, Ebony_47, Jabith_48, Flaverint_48, Salz_46, Joselito_48
- Track 8 : Steamy_43
- Track 9 : DarthPhader_44
- Track 10 : Refuge_46
- Track 11 : Zimmer_44
- Track 12 : Pharaoh_41
- Track 13 : Sunhee_50
- Track 14 : Gail_52
- Track 15 : Luchador_52, Jeeves_52
- Track 16 : SororFago_50
- Track 17 : Nedarya_45
- Track 18 : EagleEye_49, Lucyedi_48, PainterBoy_48
- Track 19 : 40AC_48
- Track 20 : Kimona_46
- Track 21 : SwirlSquare_52
- Track 22 : XianYue_46
- Track 23 : Bugsy_49, Baehexic_46, Updawg_48, WideWale_48, Centaur_48, NaSiaTalie_47, Flare16_47, MiculUcigas_47, Sknot_49, Equemioh13_48
- Track 24 : Smeagan_50, Leviathan_49
- Track 25 : Crucio_47, Dignity_49, SweetiePie_47, Turbido_48, SemperFi_48, Retro23_48, Georgie2_48, Dalmatian_48, Jerm_49
- Track 26 : Malec_47, Larenn_46
- Track 27 : JoshKayV_49, CRB1_50
- Track 28 : RedRock_49, AnnaL29_49
- Track 29 : Acolyte_43

- Track 30 : DBQu4n_49, Pomar16_49, Travvers_49, Tomathan_49, Kerberos_49, Duplo_49, StarStuff_49
- Track 31 : Miko_44, Rachaly_46
- Track 32 : DudeLittle_46
- Track 33 : Jsquared_45
- Track 34 : Kalpine_45, Colin_47
- Track 35 : D29_46, Naji_49, D32_49
- Track 36 : QueenB2_46, Fameo_47, Heffalump_46
- Track 37 : Piro94_47, HarryHoudini_48, Drake55_49
- Track 38 : EZMoney23_45
- Track 39 : Leogania_47
- Track 40 : Quokka_45, Bradman_46, MajorMajor_46
- Track 41 : Landor_47
- Track 42 : WeiHuaDA_49
- Track 43 : Koduck_47, L5_46
- Track 44 : GaugeLDP_45
- Track 45 : Deloris_47, BengiVuitton_48, VA6_47, AN3_49
- Track 46 : C3_45, AN9_50, VC3_50, ANI8_50
- Track 47 : Che12_49
- Track 48 : BabyBack_46
- Track 49 : ChipMunk_49
- Track 50 : 20ES_49, First_0048
- Track 51 : Lokk_46
- Track 52 : FiringLine_47, Power_46, QueenBeesly_47, SnapTap_47
- Track 53 : Herbertwm_47
- Track 54 : Echild_47, Benvolio_44
- Track 55 : LilTurb_48, Whabigail7_48, Agape74_49, AbbyPaige_49
- Track 56 : Journey13_41
- Track 57 : EvilGenius_49
- Track 58 : Caraxes_47, Superchunk_46
- Track 59 : Bactobuster_46, Phaded_48
- Track 60 : Iwokeuplikedis_50
- Track 61 : BobSwaget_45
- Track 62 : NothingSpecial_45
- Track 63 : KingCyrus_49
- Track 64 : BiancaTri92_47
- Track 65 : Jaan_47
- Track 66 : Trooper_48
- Track 67 : TipsytheTRex_44
- Track 68 : Anselm_48
- Track 69 : ArcherNM_43
- Track 70 : Adzzy_49, Ph8s_49
- Track 71 : LadyBird_51
- Track 72 : Loser_49
- Track 73 : Pukovnik_46
- Track 74 : NicoleTera_46
- Track 75 : IronMan_47
- Track 76 : Trixie_45
- Track 77 : Odin_46
- Track 78 : MissWhite_46
- Track 79 : Changeling_46
- Track 80 : Serenity_47
- Track 81 : TarsusIV_45

- Track 82 : Anthony_42
- Track 83 : Kinmap_45
- Track 84 : Relief_45, Melvin_48, Citius_46, HamSlice_45, Jaykayelowell_44, Phelipe_47, Blackmoor_46, Shaka_46, Clarenza_45, Ohfah_47, Annyong_46, Thanksgivukkah_45, Baby16_46, LappelDuVide_46, Tinybot_45, Abdiel_46, Broseidon_46, Bartimeaus_46, Koreni_45, Nebs_47, CentreCat_46, Nyxis_46, Lemur_46, Morrow_47, JetBlade_46, Iracema64_47, Polymorphads_47, Iceman_46, Sparxx_47, Pumbaa_46, BubbleTrouble_45, Kingmustik0402_46, TinaFeyge_46, LeoAvram_46, Florean_46, Roosevelt_45, PeterPeter_46, Spino_45, Dhanush_46, Bombshell_46, Pipcraft_44, NorthStar_45, Ruin_46, Cintron_45, Alberto7_47, Connomayer_46, KFPoly_45, Peaches_46, Eros_46, LittleGuy_46, Scamp_46, Holli_45, Eapen_46, Palestino_45, Phontbonne_46, Kampy_46, OKaNui_46, ICleared_46, Ulysses_45, Chaph_46, TygerBlood_46, TroyPia_47, Millski_45, Caelakin_46, LittleB_46, Medusa_46, Koan_44, Sabertooth_46, Wizard007_46, Skipitt_45, Lunsford_47, Druantia_46, Eurydice_47, Burger_44, Happiness_45, MeeZee_46, Albee_46, Maxo_47, Flux_46, Eris_45, Eagle_46, Commander_46, TiroTheta9_46, Lorenzo_46, YoSam321_46, Taquarus_46
- Track 85 : Morpher26_45, Cici_45, Xena_44, Perplexer_45, Achebe_44, Badger_44, Bumblebee11_44, AbbysRanger_45, Backyardigan_44, PetiteSangsue_45, Wile_45, Katalie136_45
- Track 86 : Datway_45
- Track 87 : Stink_46, AvatarAhPeg_45, Miramae_45
- Track 88 : BangNhom_47, SheldonCooper_48, Kremtemulon_46, LHTSCC_48, Obama12_47, ChampagnePapi_48, Cerulean_47
- Track 89 : Wander_46, Huxley_46, Cocoaberry_46, Gadost_46, Avle17_46, NotAPhaseMom_46, Bruiser_45, Houdini22_46, Nemo27_46, BellusTerra_47, Mazhar510_46, Camperdownii_44, Kyee_46, Funston_45, SenorClean_44, JoongJeon_45, Phacado_46, Maverick_46
- Track 90 : Noelle_46
- Track 91 : Cindaradix_43
- Track 92 : DirtyDunning_45, Phighter1804_46
- Track 93 : LochMonster_47, Rosa24_45, Romney_46, Wilbur_46
- Track 94 : Mundrea_45
- Track 95 : Arturo_45, Kratak_46
- Track 96 : Deano_45
- Track 97 : Shygu2_45
- Track 98 : Lilbunny_48, Wiks_48, Blue7_51, Zaka_49, Gruunaga_49, ToneTone_46, Indra_52, Zulu_49, Tucker_49, Jeffabunny_49, WunderPhul_49, Hammer_50, Rifter_50
- Track 99 : Isiphiwo_47, Gladiator_47, Newrala_49, Dorothea_49, Chartreuse_48, DaVinci_48, SmellyB_49, SuperCallie99_48, McFly_49, Roksolana_50, Artemis2UCLA_49, GreedyLawyer_49, Kipper29_49, Cookiedough_49, CloudWang3_49, SuperAwesome_49, Candra_49, VohminGhazi_49, Kazan_50, EricB_49, Pmask_49, Neeharika16_48
- Track 100 : Koko_50
- Track 101 : Helmet_51, Yokurt_49, BlessJoy_50, Temprado_51, Garak_51, Hexamo_49
- Track 102 : Jordennis_48, Priamo_50
- Track 103 : Blinn1_51
- Track 104 : PP_50
- Track 105 : RyeScarlet_48, EmyBug_46, PackMan_46, Scherzo_47, Fayely_47, Sachima_44, Eidsmoe_47, Holecx_46, Myxus_47, Ugenie5_44, Conquerage_47, Phonnegut_47, Pioneer_47, Phaeder_47, ExplosioNervosa_47, HortumSL17_47,

Jiawan_45, Tubs_47, Spouty_47, Qobbit_47, Lilleskat_45, Priya_47, Beemo_47, Hanray_45, Onglai_45, EdogawaKiddo_45, Aliter_47, Alma_47, Catalina_48

- Track 106 : Charm_46
- Track 107 : BogosyJay_46, Maminiaina_46
- Track 108 : LoneWolf_47
- Track 109 : Yecey3_48
- Track 110 : Keziacharles14_47
- Track 111 : SheaKeira_46
- Track 112 : Arissanae_46
- Track 113 : Elephantoon_46
- Track 114 : DreamTeam1_46
- Track 115 : Darrell_48
- Track 116 : Toaka_46
- Track 117 : Rahalelujah_46
- Track 118 : Vanisoa_46

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

The start number called the most often in the published annotations is 77, it was called in 136 of the 367 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_45, Abdiel_46, Achebe_44, Albee_46, Alberto7_47, Annyong_46, Arturo_45, AvatarAhPeg_45, Avle17_46, Baby16_46, Backyardigan_44, Badger_44, BangNhom_47, Bartimeaus_46, BellusTerra_47, Blackmoor_46, Bombshell_46, Broseidon_46, Bruiser_45, BubbleTrouble_45, Bumblebee11_44, Burger_44, Caelakin_46, Camperdownii_44, CentreCat_46, Cerulean_47, ChampagnePapi_48, Chaph_46, Cici_45, Cindaradix_43, Cintron_45, Citius_46, Clarenza_45, Cocoaberry_46, Commander_46, Connomayer_46, Datway_45, Deano_45, Dhanush_46, DirtyDunning_45, Druantia_46, Eagle_46, Eapen_46, Eris_45, Eros_46, Eurydice_47, Floean_46, Flux_46, Funston_45, Gadost_46, HamSlice_45, Happiness_45, Holli_45, Houdini22_46, Huxley_46, ICleared_46, Iceman_46, Iracema64_47, Jaykayelowell_44, JetBlade_46, JoongJeon_45, KFPoly_45, Kampy_46, Katalie136_45, Kingmustik0402_46, Koan_44, Koreni_45, Kratak_46, Kremtemulon_46, Kyee_46, LHTSCC_48, LappelDuVide_46, Lemur_46, LeoAvram_46, LittleB_46, LittleGuy_46, LochMonster_47, Lorenzo_46, Lunsford_47, Maverick_46, Maxo_47, Mazhar510_46, Medusa_46, MeeZee_46, Melvin_48, Millski_45, Miramae_45, Morpher26_45, Morrow_47, Mundrea_45, Nebs_47, Nemo27_46, Noelle_46, NorthStar_45, NotAPhaseMom_46, Nyxis_46, OKaNui_46, Obama12_47, Ohfah_47, Palestino_45, Peaches_46, Perplexer_45, PeterPeter_46, PetiteSangsue_45, Phacado_46, Phelipe_47, Phighter1804_46, Phontbonne_46, Pipcraft_44, Polymorphads_47, Pumbaa_46, Relief_45, Romney_46, Roosevelt_45, Rosa24_45, Ruin_46, Sabertooth_46, Scamp_46, SenorClean_44, Shaka_46, SheldonCooper_48, Shygu2_45, Skipitt_45, Sparxx_47, Spino_45, Stink_46, Taquarus_46, Thanksgivukkah_45, TinaFeyge_46, Tinybot_45, TiroTheta9_46, TroyPia_47, TygerBlood_46, Ulysses_45, Wander_46, Wilbur_46, Wile_45, Wizard007_46, Xena_44, YoSam321_46,

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

-

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

- 20ES_49, 40AC_48, AN3_49, AN9_50, ANI8_50, AbbyPaige_49, Acolyte_43, Adzzy_49, Agape74_49, Aliter_47, Alma_47, Aneem_48, AnnaL29_49, Anselm_48, Anthony_42, ArcherNM_43, Arissanae_46, Artemis2UCLA_49, BabyBack_46, Bachome_49, Bactobuster_46, Baehexic_46, Beemo_47, BengiVuitton_48, Benvolio_44, BiancaTri92_47, BlessJoy_50, Blinn1_51, Blue7_51, BobSwaget_45, BogosyJay_46, Bowtie_48, Bradman_46, Bud_47, Bugsy_49, C3_45, CRB1_50, Candra_49, Caraxes_47, Catalina_48, Centaur_48, Changeling_46, Chargerpower_46, Charm_46, Chartreuse_48, Che12_49, ChipMunk_49, CloudWang3_49, Colin_47, Conquerage_47, Cookiedough_49, Crucio_47, D29_46, D32_49, DBQu4n_49, DaVinci_48, Dalmatian_48, Darrell_48, DarthPhader_44, Deloris_47, Dignity_49, DontArgue_44, Dorothea_49, Drake55_49, Drake94_43, DreamTeam1_46, DudeLittle_46, Duplo_49, DustyMartin_49, EZMoney23_45, EagleEye_49, Eaglepride_46, Ebony_47, Echild_47, Edison31_44, EdogawaKiddo_45, Eidsmoe_47, Elephantoon_46, EmyBug_46, Equemioh13_48, EricB_49, Et2Brutus_46, EvilGenius_49, ExplosioNervosa_47, Fameo_47, Fayely_47, Fibonacci_47, FiringLine_47, First_0048, Flare16_47, Flaverint_48, Gail_52, Garak_51, GaugeLDP_45, Georgie2_48, Gilberta_48, Gladiator_47, GreedyLawyer_49, Gruunaga_49, Hammer_50, Hanray_45, HarryHoudini_48, Heffalump_46, Helmet_51, Herbertwm_47, Hexamo_49, Horex_46, HortumSL17_47, Hutc2_47, Indra_52, Insomnia_48, IronMan_47, Isiphiwo_47, Iwokeuplikedis_50, Jaan_47, Jabith_48, Jeeves_52, Jeffabunny_49, Jerm_49, Jiawan_45, Jordennis_48, Joselito_48, JoshKayV_49, Journey13_41, Jsquared_45, Kalpine_45, Kazan_50, Kerberos_49, Keziacharles14_47, Kimona_46, KingCyrus_49, Kinmap_45, Kipper29_49, KittenMittens_42, Koduck_47, Koko_50, Kristoff_45, L5_46, LadyBird_51, Landor_47, Larenn_46, Leogania_47, Leviathan_49, LilTurb_48, Lilbunny_48, Lilleskat_45, Lökk_46, LoneWolf_47, Loser_49, Luchador_52, Lucivia_48, Lucyedi_48, MaCh_48, Mabel_47, MajorMajor_46, Malec_47, Maminiaina_46, McFly_49, MiculUcigas_47, Miko_44, MissWhite_46, Mulciber_47, Munch_48, Myxus_47, NaSiaTalie_47, Naji_49, Nedarya_45, Neeharika16_48, Newrala_49, NicoleTera_46, NothingSpecial_45, Odin_46, Onglai_45, Orange_47, PP_50, PackMan_46, PainterBoy_48, PeaceMeal1_43, Petersenfast_46, Ph8s_49, Phaded_48, Phaeder_47, Pharaoh_41, Phonnegut_47, Pioneer_47, Piro94_47, Pmask_49, Pomar16_49, Poompha_44, Power_46, Priamo_50, Priya_47, Pukovnik_46, Qobbit_47, QueenB2_46, QueenBeesly_47, Quokka_45, Rachaly_46, Rahalelujah_46, Rebeuca_45, RedRock_49, Refuge_46, Retro23_48, RhynO_46, Rifter_50, Roksolana_50, Rowdy_49, RyeScarlet_48, Sachima_44, Salz_46, Scherzo_47, SemperFi_48, Serenity_47, Severus_43, Sham4_47, Shapes_49, SheaKeira_46, Sknot_49, Smeagan_50, SmellyB_49, SnapTap_47, Snape_47, SororFago_50, Spouty_47, StarStuff_49, Steamy_43, Sunhee_50, SuperAwesome_49, SuperCallie99_48, Superchunk_46, SweetiePie_47, SwirlSquare_52, TarsusIV_45, Temprado_51, Timothy_47, TinyTimmy_47, TipsytheTRex_44, Toaka_46, Tomathan_49, ToneTone_46, Topanga_43, Travvers_49, Trike_43, Trixie_45, Trooper_48, Tubs_47, Tucker_49, Turbido_48, Twister_43, Ugenie5_44, Updawg_48, VA6_47, VC3_50, Vanisoa_46, VohminGhazi_49, WalterMcMickey_43, WeiHuaDA_49, Whabigail7_48, WideWale_48, Wiks_48, WunderPhul_49, XianYue_46, Yecey3_48, Yokurt_49, Zaka_49, Zimmer_44, Zulu_49,

Summary by start number:

Start 8:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobSwaget_45 (A2), Lokk_46 (A2),

Start 12:

- Found in 46 of 407 (11.3%) of genes in pham
- Manual Annotations of this start: 3 of 367
- Called 15.2% of time when present
- Phage (with cluster) where this start called: BlessJoy_50 (A6), Blinn1_51 (A6), Garak_51 (A6), Helmet_51 (A6), Hexamo_49 (A6), Temprado_51 (A6), Yokurt_49 (A6),

Start 14:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Koduck_47 (A2), L5_46 (A2),

Start 15:

- Found in 64 of 407 (15.7%) of genes in pham
- Manual Annotations of this start: 59 of 367
- Called 98.4% of time when present
- Phage (with cluster) where this start called: 20ES_49 (A2), AN3_49 (A2), AbbyPaige_49 (A2), Agape74_49 (A2), AnnaL29_49 (A2), ArcherNM_43 (A2), BabyBack_46 (A2), Bactobuster_46 (A2), BengiVuitton_48 (A2), Benvolio_44 (A2), BiancaTri92_47 (A2), CRB1_50 (A2), ChipMunk_49 (A2), Crucio_47 (A2), Dalmatian_48 (A2), Deloris_47 (A2), Dignity_49 (A2), Drake55_49 (A2), DudeLittle_46 (A2), EZMoney23_45 (A2), Echid_47 (A2), EvilGenius_49 (A2), Fameo_47 (A2), FiringLine_47 (A2), First_0048 (A2), GaugeLDP_45 (A2), Georgie2_48 (A2), HarryHoudini_48 (A2), Heffalump_46 (A2), IronMan_47 (A2), Jaan_47 (A2), Jerm_49 (A2), JoshKayV_49 (A2), KingCyrus_49 (A2), LadyBird_51 (A2), Landor_47 (A2), Larenn_46 (A2), Leogania_47 (A2), Leviathan_49 (A2), LilTurb_48 (A2), Loser_49 (A2), Malec_47 (A2), Miko_44 (A2), NicoleTera_46 (A2), Phaded_48 (A2), Piro94_47 (A2), Power_46 (A2), Pukovnik_46 (A2), QueenB2_46 (A2), QueenBeesly_47 (A2), Rachaly_46 (A2), RedRock_49 (A2), Retro23_48 (A2), SemperFi_48 (A2), Smeagan_50 (A2), SnapTap_47 (A2), SweetiePie_47 (A2), TarsusIV_45 (A2), Trixie_45 (A2), Trooper_48 (A2), Turbido_48 (A2), VA6_47 (A2), Whabigail7_48 (A2),

Start 16:

- Found in 66 of 407 (16.2%) of genes in pham
- Manual Annotations of this start: 49 of 367
- Called 87.9% of time when present
- Phage (with cluster) where this start called: 40AC_48 (A17), Acolyte_43 (A2), Adzzy_49 (A2), Artemis2UCLA_49 (A6), Blue7_51 (A6), Bradman_46 (A2), Candra_49 (A6), Caraxes_47 (A2), Changeling_46 (A2), Chartreuse_48 (A6), Che12_49 (A2), CloudWang3_49 (A6), Colin_47 (A2), Cookiedough_49 (A6), DaVinci_48 (A6), Dorothea_49 (A6), EricB_49 (A6), Gladiator_47 (A6), GreedyLawyer_49 (A6), Gruunaga_49 (A6), Hammer_50 (A6), Herbertwm_47 (A2), Indra_52 (A6), Isiphiwo_47 (A6), Iwokeuplieddis_50 (A2), Jeffabunny_49 (A6), Jordennis_48 (A6), Jsquared_45 (A2), Kalpine_45 (A2), Kazan_50 (A6), Kipper29_49 (A6), Koko_50 (A6), Lilbunny_48 (A6), MajorMajor_46 (A2), McFly_49 (A6),

Neeharika16_48 (A6), Newrala_49 (A6), Odin_46 (A2), Ph8s_49 (A2), Pmask_49 (A6), Priamo_50 (A6), Quokka_45 (A2), Rifter_50 (A6), Roksolana_50 (A6), Serenity_47 (A2), SmellyB_49 (A6), SuperAwesome_49 (A6), SuperCallie99_48 (A6), Superchunk_46 (A2), TipsytheTRex_44 (A2), ToneTone_46 (A6), Tucker_49 (A6), VohminGhazi_49 (A6), WeiHuaDA_49 (A2), Wiks_48 (A6), WunderPhul_49 (A6), Zaka_49 (A6), Zulu_49 (A6),

Start 17:

- Found in 71 of 407 (17.4%) of genes in pham
- Manual Annotations of this start: 11 of 367
- Called 16.9% of time when present
- Phage (with cluster) where this start called: Anselm_48 (A2), Baehexic_46 (A2), Buggy_49 (A2), Centaur_48 (A2), Equemioh13_48 (A2), Flare16_47 (A2), MiculUcigas_47 (A2), NaSiaTalie_47 (A2), NothingSpecial_45 (A2), Sknot_49 (A2), Updawg_48 (A2), WideWale_48 (A2),

Start 27:

- Found in 4 of 407 (1.0%) of genes in pham
- Manual Annotations of this start: 4 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9_50 (A2), ANI8_50 (A2), C3_45 (A2), VC3_50 (A2),

Start 28:

- Found in 1 of 407 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_45 (A21),

Start 29:

- Found in 15 of 407 (3.7%) of genes in pham
- Manual Annotations of this start: 9 of 367
- Called 73.3% of time when present
- Phage (with cluster) where this start called: D29_46 (A2), D32_49 (A2), DBQu4n_49 (A2), Duplo_49 (A2), Kerberos_49 (A2), Naji_49 (A2), Pomar16_49 (A2), StarStuff_49 (A2), SwirlSquare_52 (A2), Tomathan_49 (A2), Travvers_49 (A2),

Start 33:

- Found in 3 of 407 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arissanee_46 (A9), Darrell_48 (A9), Elephantoon_46 (A9),

Start 34:

- Found in 1 of 407 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yecey3_48 (A9),

Start 36:

- Found in 1 of 407 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 367

- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_47 (A9),

Start 38:

- Found in 3 of 407 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_49 (A16), Lucyedi_48 (A16), PainterBoy_48 (A16),

Start 39:

- Found in 42 of 407 (10.3%) of genes in pham
- Manual Annotations of this start: 34 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aliter_47 (A9), Alma_47 (A9), Beemo_47 (A9), BogosyJay_46 (A9), Catalina_48 (A9), Chargerpower_46 (A), Charm_46 (A9), Conquerage_47 (A9), DreamTeam1_46 (A9), EdogawaKiddo_45 (A9), Eidsmoe_47 (A9), EmyBug_46 (A9), ExplosioNervosa_47 (A9), Fayely_47 (A9), Gail_52 (A14), Hanray_45 (A9), Halex_46 (A9), HortumSL17_47 (A9), Jeeves_52 (A14), Jiawan_45 (A9), Keziacharles14_47 (A9), Kimona_46 (A19), Lilleskat_45 (A9), Luchador_52 (A14), Maminiaina_46 (A9), Myxus_47 (A9), Onglai_45 (A9), PackMan_46 (A9), Phaeder_47 (A9), Phonnegut_47 (A9), Pioneer_47 (A9), Priya_47 (A9), Qobbit_47 (A9), RyeScarlet_48 (A9), Sachima_44 (A9), Scherzo_47 (A9), SororFago_50 (A14), Spouty_47 (A9), Toaka_46 (A9), Tubs_47 (A9), Ugenie5_44 (A9), Vanisoa_46 (A9),

Start 40:

- Found in 1 of 407 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_50 (A7),

Start 41:

- Found in 3 of 407 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_41 (A12), Rahalelujah_46 (A9), SheaKeira_46 (A9),

Start 44:

- Found in 1 of 407 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sunhee_50 (A14),

Start 46:

- Found in 1 of 407 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: XianYue_46 (A2),

Start 52:

- Found in 56 of 407 (13.8%) of genes in pham
- Manual Annotations of this start: 25 of 367

- Called 46.4% of time when present
- Phage (with cluster) where this start called: Aneem_48 (A11), Bachome_49 (A11), Bowtie_48 (A11), Bud_47 (A11), Ebony_47 (A11), Et2Brutus_46 (A11), Fibonacci_47 (A11), Flaverint_48 (A11), Gilberta_48 (A11), Hutc2_47 (A11), Insomnia_48 (A11), Jabith_48 (A11), Joselito_48 (A11), Journey13_41 (A2), Lucivia_48 (A11), MaCh_48 (A11), Mabel_47 (A11), Mulciber_47 (A11), Munch_48 (A11), Orange_47 (A11), Petersenfast_46 (A11), Salz_46 (A11), Sham4_47 (A11), Snape_47 (A11), Timothy_47 (A11), TinyTimmy_47 (A11),

Start 53:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MissWhite_46 (A2),

Start 54:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Steamy_43 (A12),

Start 55:

- Found in 3 of 407 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DARTHPhader_44 (A12), Refuge_46 (A12), Zimmer_44 (A12),

Start 57:

- Found in 1 of 407 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nedarya_45 (A15),

Start 67:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue_44 (A10), Eaglepride_46 (A10),

Start 69:

- Found in 16 of 407 (3.9%) of genes in pham
- Manual Annotations of this start: 13 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Drake94_43 (A10), DustyMartin_49 (A10), Edison31_44 (A10), KittenMittens_42 (A10), Kristoff_45 (A10), PeaceMeal1_43 (A10), Poompha_44 (A10), Rebeuca_45 (A10), RhynO_46 (A10), Rowdy_49 (A10), Severus_43 (A10), Shapes_49 (A10), Topanga_43 (A10), Trike_43 (A10), Twister_43 (A10), WalterMcMickey_43 (A10),

Start 77:

- Found in 140 of 407 (34.4%) of genes in pham

- Manual Annotations of this start: 136 of 367
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger_45 (A4), Abdiel_46 (A4), Achebe_44 (A4), Albee_46 (A4), Alberto7_47 (A4), Annyong_46 (A4), Arturo_45 (A4), AvatarAhPeg_45 (A4), Avle17_46 (A4), Baby16_46 (A4), Backyardigan_44 (A4), Badger_44 (A4), BangNhom_47 (A4), Bartimeaus_46 (A4), BellusTerra_47 (A4), Blackmoor_46 (A4), Bombshell_46 (A4), Broseidon_46 (A4), Bruiser_45 (A4), BubbleTrouble_45 (A4), Bumblebee11_44 (A4), Burger_44 (A4), Caelakin_46 (A4), Camperdownii_44 (A4), CentreCat_46 (A4), Cerulean_47 (A4), ChampagnePapi_48 (A4), Chaph_46 (A4), Cici_45 (A4), Cindaradix_43 (A4), Cintron_45 (A4), Citius_46 (A4), Clarenza_45 (A4), Cocoaberry_46 (A4), Commander_46 (A4), Connomayer_46 (A4), Datway_45 (A4), Deano_45 (A4), Dhanush_46 (A4), DirtyDunning_45 (A4), Druantia_46 (A4), Eagle_46 (A4), Eapen_46 (A4), Eris_45 (A4), Eros_46 (A4), Eurydice_47 (A4), Florean_46 (A4), Flux_46 (A4), Funston_45 (A4), Gadost_46 (A4), HamSlice_45 (A4), Happiness_45 (A4), Holli_45 (A4), Houdini22_46 (A4), Huxley_46 (A4), ICleared_46 (A4), Iceman_46 (A4), Iracema64_47 (A4), Jaykayelowell_44 (A4), JetBlade_46 (A4), JoongJeon_45 (A4), KFPoly_45 (A4), Kampy_46 (A4), Katalie136_45 (A4), Kingmustik0402_46 (A4), Koan_44 (A4), Koreni_45 (A4), Kratark_46 (A4), Kremtemulon_46 (A4), Kyeel_46 (A4), LHTSCC_48 (A4), LappelDuVide_46 (A4), Lemur_46 (A4), LeoAvram_46 (A4), LittleB_46 (A4), LittleGuy_46 (A4), LochMonster_47 (A4), Lorenzo_46 (A4), Lunsford_47 (A4), Maverick_46 (A4), Maxo_47 (A4), Mazhar510_46 (A4), Medusa_46 (A4), MeeZee_46 (A4), Melvin_48 (A4), Millski_45 (A4), Miramae_45 (A4), Morpher26_45 (A4), Morrow_47 (A4), Mundrea_45 (A4), Nebs_47 (A4), Nemo27_46 (A4), Noelle_46 (A4), NorthStar_45 (A4), NotAPhaseMom_46 (A4), Nyxis_46 (A4), OKaNui_46 (A4), Obama12_47 (A4), Ohfah_47 (A4), Palestino_45 (A4), Peaches_46 (A4), Perplexer_45 (A4), PeterPeter_46 (A4), PetiteSangsue_45 (A4), Phacado_46 (A4), Philippe_47 (A4), Phighter1804_46 (A4), Phontbonne_46 (A4), Pipcraft_44 (A4), Polymorphads_47 (A4), Pumbaa_46 (A4), Relief_45 (A4), Romney_46 (A4), Roosevelt_45 (A4), Rosa24_45 (A4), Ruin_46 (A4), Sabertooth_46 (A4), Scamp_46 (A4), SeniorClean_44 (A4), Shaka_46 (A4), SheldonCooper_48 (A4), Shygu2_45 (A4), Skipitt_45 (A4), Sparxx_47 (A4), Spino_45 (A4), Stink_46 (A4), Taquarus_46 (A4), Thanksgivukkah_45 (A4), TinaFeyge_46 (A4), Tinybot_45 (A4), TiroTheta9_46 (A4), TroyPia_47 (A4), TygerBlood_46 (A4), Ulysses_45 (A4), Wander_46 (A4), Wilbur_46 (A4), Wile_45 (A4), Wizard007_46 (A4), Xena_44 (A4), YoSam321_46 (A4),

Start 78:

- Found in 2 of 407 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 367
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Anthony_42 (A20),

Summary by clusters:

There are 16 clusters represented in this pham: A15, A14, A17, A16, A11, A10, A12, A19, A21, A20, A2, A, A4, A7, A6, A9,

Info for manual annotations of cluster A:

- Start number 39 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A10:

- Start number 67 was manually annotated 1 time for cluster A10.

- Start number 69 was manually annotated 13 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 52 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 41 was manually annotated 1 time for cluster A12.
- Start number 54 was manually annotated 1 time for cluster A12.
- Start number 55 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 39 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 57 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A16:

- Start number 38 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A19:

- Start number 39 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 8 was manually annotated 2 times for cluster A2.
- Start number 14 was manually annotated 1 time for cluster A2.
- Start number 15 was manually annotated 59 times for cluster A2.
- Start number 16 was manually annotated 13 times for cluster A2.
- Start number 17 was manually annotated 11 times for cluster A2.
- Start number 27 was manually annotated 4 times for cluster A2.
- Start number 29 was manually annotated 9 times for cluster A2.
- Start number 46 was manually annotated 1 time for cluster A2.
- Start number 52 was manually annotated 1 time for cluster A2.
- Start number 53 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 78 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A4:

- Start number 77 was manually annotated 136 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 12 was manually annotated 3 times for cluster A6.
- Start number 16 was manually annotated 36 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 40 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:

- Start number 33 was manually annotated 3 times for cluster A9.
- Start number 34 was manually annotated 1 time for cluster A9.
- Start number 36 was manually annotated 1 time for cluster A9.

- Start number 39 was manually annotated 28 times for cluster A9.
- Start number 41 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: 20ES_49 Start: 32435, Stop: 32013, Start Num: 15

Candidate Starts for 20ES_49:

(Start: 15 @32435 has 59 MA's), (Start: 17 @32426 has 11 MA's), (119, 32060),

Gene: 40AC_48 Start: 33450, Stop: 33055, Start Num: 16

Candidate Starts for 40AC_48:

(Start: 16 @33450 has 49 MA's), (Start: 52 @33372 has 25 MA's), (59, 33354), (109, 33225), (119, 33102),

Gene: AN3_49 Start: 32806, Stop: 32393, Start Num: 15

Candidate Starts for AN3_49:

(Start: 15 @32806 has 59 MA's), (56, 32716), (61, 32707), (80, 32671), (96, 32605), (119, 32440),

Gene: AN9_50 Start: 32346, Stop: 31912, Start Num: 27

Candidate Starts for AN9_50:

(Start: 27 @32346 has 4 MA's), (Start: 29 @32343 has 9 MA's), (68, 32244), (82, 32202), (88, 32178), (108, 32079), (117, 31992), (119, 31959),

Gene: ANI8_50 Start: 32346, Stop: 31912, Start Num: 27

Candidate Starts for ANI8_50:

(Start: 27 @32346 has 4 MA's), (Start: 29 @32343 has 9 MA's), (68, 32244), (82, 32202), (88, 32178), (108, 32079), (117, 31992), (119, 31959),

Gene: AbbyPaige_49 Start: 32616, Stop: 32194, Start Num: 15

Candidate Starts for AbbyPaige_49:

(Start: 15 @32616 has 59 MA's), (Start: 17 @32607 has 11 MA's), (58, 32514), (61, 32508), (119, 32241),

Gene: AbbysRanger_45 Start: 31867, Stop: 31544, Start Num: 77

Candidate Starts for AbbysRanger_45:

(Start: 77 @31867 has 136 MA's), (99, 31768), (101, 31759), (103, 31744), (111, 31714), (119, 31594),

Gene: Abdiel_46 Start: 31881, Stop: 31579, Start Num: 77

Candidate Starts for Abdiel_46:

(7, 32151), (Start: 77 @31881 has 136 MA's), (111, 31749), (112, 31710), (117, 31662), (119, 31629),

Gene: Achebe_44 Start: 31850, Stop: 31527, Start Num: 77

Candidate Starts for Achebe_44:

(Start: 77 @31850 has 136 MA's), (99, 31751), (101, 31742), (103, 31727), (111, 31697), (119, 31577),

Gene: Acolyte_43 Start: 31589, Stop: 31182, Start Num: 16

Candidate Starts for Acolyte_43:

(Start: 16 @31589 has 49 MA's), (43, 31532), (63, 31484), (103, 31358), (119, 31229),

Gene: Adzzy_49 Start: 31071, Stop: 30643, Start Num: 16

Candidate Starts for Adzzy_49:

(11, 31107), (Start: 16 @31071 has 49 MA's), (117, 30723), (119, 30690),

Gene: Agape74_49 Start: 32601, Stop: 32179, Start Num: 15

Candidate Starts for Agape74_49:

(Start: 15 @32601 has 59 MA's), (Start: 17 @32592 has 11 MA's), (58, 32499), (61, 32493), (119, 32226),

Gene: Albee_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Albee_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Alberto7_47 Start: 32217, Stop: 31915, Start Num: 77

Candidate Starts for Alberto7_47:

(7, 32487), (Start: 77 @32217 has 136 MA's), (111, 32085), (112, 32046), (117, 31998), (119, 31965),

Gene: Aliter_47 Start: 32037, Stop: 31711, Start Num: 39

Candidate Starts for Aliter_47:

(Start: 39 @32037 has 34 MA's), (49, 32013), (68, 31971), (122, 31731),

Gene: Alma_47 Start: 32160, Stop: 31834, Start Num: 39

Candidate Starts for Alma_47:

(Start: 39 @32160 has 34 MA's), (49, 32136), (68, 32094), (122, 31854),

Gene: Aneem_48 Start: 31705, Stop: 31358, Start Num: 52

Candidate Starts for Aneem_48:

(Start: 52 @31705 has 25 MA's), (64, 31672), (71, 31651), (117, 31438), (119, 31405),

Gene: AnnaL29_49 Start: 33146, Stop: 32724, Start Num: 15

Candidate Starts for AnnaL29_49:

(Start: 15 @33146 has 59 MA's), (Start: 17 @33137 has 11 MA's), (45, 33080), (58, 33044), (119, 32771),

Gene: Annyong_46 Start: 31925, Stop: 31623, Start Num: 77

Candidate Starts for Annyong_46:

(7, 32195), (Start: 77 @31925 has 136 MA's), (111, 31793), (112, 31754), (117, 31706), (119, 31673),

Gene: Anselm_48 Start: 32523, Stop: 32110, Start Num: 17

Candidate Starts for Anselm_48:

(Start: 15 @32532 has 59 MA's), (Start: 17 @32523 has 11 MA's), (30, 32487), (Start: 52 @32445 has 25 MA's), (119, 32157),

Gene: Anthony_42 Start: 29795, Stop: 29478, Start Num: 78

Candidate Starts for Anthony_42:

(20, 29948), (51, 29870), (Start: 78 @29795 has 1 MA's), (91, 29747), (92, 29741), (117, 29561), (122, 29501),

Gene: ArcherNM_43 Start: 32185, Stop: 31778, Start Num: 15

Candidate Starts for ArcherNM_43:

(Start: 15 @32185 has 59 MA's), (Start: 52 @32107 has 25 MA's), (59, 32089), (100, 31972), (119, 31825), (122, 31798),

Gene: Arissanae_46 Start: 32694, Stop: 32350, Start Num: 33

Candidate Starts for Arissanae_46:

(Start: 33 @32694 has 3 MA's), (47, 32679), (68, 32631), (74, 32610), (95, 32556), (113, 32472), (122, 32370),

Gene: Artemis2UCLA_49 Start: 30834, Stop: 30406, Start Num: 16

Candidate Starts for Artemis2UCLA_49:

(Start: 12 @30861 has 3 MA's), (Start: 16 @30834 has 49 MA's), (59, 30738), (72, 30702), (97, 30612), (102, 30585), (103, 30582), (122, 30426),

Gene: Arturo_45 Start: 32157, Stop: 31834, Start Num: 77

Candidate Starts for Arturo_45:

(Start: 77 @32157 has 136 MA's), (82, 32142), (111, 32004), (117, 31917), (119, 31884),

Gene: AvatarAhPeg_45 Start: 32379, Stop: 32056, Start Num: 77

Candidate Starts for AvatarAhPeg_45:

(Start: 77 @32379 has 136 MA's), (82, 32364), (101, 32271), (103, 32256), (111, 32226), (116, 32151), (119, 32106),

Gene: Avle17_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Avle17_46:

(Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Baby16_46 Start: 31891, Stop: 31589, Start Num: 77

Candidate Starts for Baby16_46:

(7, 32161), (Start: 77 @31891 has 136 MA's), (111, 31759), (112, 31720), (117, 31672), (119, 31639),

Gene: BabyBack_46 Start: 32865, Stop: 32410, Start Num: 15

Candidate Starts for BabyBack_46:

(Start: 15 @32865 has 59 MA's), (21, 32838), (70, 32721), (95, 32625), (103, 32589), (108, 32577), (119, 32457), (122, 32430),

Gene: Bachome_49 Start: 31693, Stop: 31346, Start Num: 52

Candidate Starts for Bachome_49:

(Start: 52 @31693 has 25 MA's), (64, 31660), (71, 31639), (117, 31426), (119, 31393),

Gene: Backyardigan_44 Start: 31883, Stop: 31560, Start Num: 77

Candidate Starts for Backyardigan_44:

(Start: 77 @31883 has 136 MA's), (99, 31784), (101, 31775), (103, 31760), (111, 31730), (119, 31610),

Gene: Bactobuster_46 Start: 33096, Stop: 32677, Start Num: 15

Candidate Starts for Bactobuster_46:

(Start: 15 @33096 has 59 MA's), (Start: 52 @33015 has 25 MA's), (82, 32952), (86, 32934), (100, 32880), (119, 32724),

Gene: Badger_44 Start: 31851, Stop: 31528, Start Num: 77

Candidate Starts for Badger_44:

(Start: 77 @31851 has 136 MA's), (99, 31752), (101, 31743), (103, 31728), (111, 31698), (119, 31578),

Gene: Baehexic_46 Start: 32303, Stop: 31869, Start Num: 17

Candidate Starts for Baehexic_46:

(Start: 17 @32303 has 11 MA's), (61, 32204), (73, 32168), (119, 31916),

Gene: BangNhom_47 Start: 32302, Stop: 32000, Start Num: 77

Candidate Starts for BangNhom_47:

(7, 32572), (Start: 77 @32302 has 136 MA's), (111, 32170), (112, 32131), (119, 32050),

Gene: Bartimeaus_46 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Bartimeaus_46:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Beemo_47 Start: 32159, Stop: 31833, Start Num: 39

Candidate Starts for Beemo_47:

(Start: 39 @32159 has 34 MA's), (49, 32135), (68, 32093), (122, 31853),

Gene: BellusTerra_47 Start: 31881, Stop: 31579, Start Num: 77

Candidate Starts for BellusTerra_47:

(Start: 77 @31881 has 136 MA's), (111, 31749), (112, 31710), (117, 31662), (119, 31629),

Gene: BengiVuitton_48 Start: 32388, Stop: 31975, Start Num: 15

Candidate Starts for BengiVuitton_48:

(Start: 15 @32388 has 59 MA's), (56, 32298), (61, 32289), (80, 32253), (96, 32187), (119, 32022),

Gene: Benvolio_44 Start: 31563, Stop: 31141, Start Num: 15

Candidate Starts for Benvolio_44:

(Start: 15 @31563 has 59 MA's), (Start: 17 @31554 has 11 MA's), (Start: 52 @31476 has 25 MA's), (119, 31188),

Gene: BiancaTri92_47 Start: 32931, Stop: 32509, Start Num: 15

Candidate Starts for BiancaTri92_47:

(Start: 15 @32931 has 59 MA's), (Start: 17 @32922 has 11 MA's), (Start: 52 @32844 has 25 MA's), (119, 32556),

Gene: Blackmoor_46 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Blackmoor_46:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: BlessJoy_50 Start: 31322, Stop: 30867, Start Num: 12

Candidate Starts for BlessJoy_50:

(Start: 12 @31322 has 3 MA's), (Start: 16 @31295 has 49 MA's), (59, 31199), (94, 31085), (103, 31043), (122, 30887),

Gene: Blinn1_51 Start: 31121, Stop: 30666, Start Num: 12

Candidate Starts for Blinn1_51:

(Start: 12 @31121 has 3 MA's), (Start: 16 @31094 has 49 MA's), (59, 30998), (72, 30962), (102, 30845), (119, 30713),

Gene: Blue7_51 Start: 30930, Stop: 30502, Start Num: 16

Candidate Starts for Blue7_51:

(Start: 12 @30957 has 3 MA's), (Start: 16 @30930 has 49 MA's), (59, 30834), (94, 30720), (103, 30678), (122, 30522),

Gene: BobSwaget_45 Start: 31896, Stop: 31399, Start Num: 8

Candidate Starts for BobSwaget_45:

(Start: 8 @31896 has 2 MA's), (71, 31704), (74, 31692), (95, 31617), (119, 31446),

Gene: BogosyJay_46 Start: 31869, Stop: 31543, Start Num: 39

Candidate Starts for BogosyJay_46:

(Start: 39 @31869 has 34 MA's), (49, 31845), (68, 31803), (93, 31761), (122, 31563),

Gene: Bombshell_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Bombshell_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Bowtie_48 Start: 31712, Stop: 31365, Start Num: 52

Candidate Starts for Bowtie_48:

(Start: 52 @31712 has 25 MA's), (64, 31679), (71, 31658), (117, 31445), (119, 31412),

Gene: Bradman_46 Start: 31085, Stop: 30678, Start Num: 16

Candidate Starts for Bradman_46:

(Start: 16 @31085 has 49 MA's), (45, 31049), (74, 30965), (117, 30758), (119, 30725),

Gene: Broseidon_46 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Broseidon_46:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Bruiser_45 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Bruiser_45:

(Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: BubbleTrouble_45 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for BubbleTrouble_45:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Bud_47 Start: 31267, Stop: 30920, Start Num: 52

Candidate Starts for Bud_47:

(Start: 52 @31267 has 25 MA's), (64, 31234), (71, 31213), (117, 31000), (119, 30967),

Gene: Buggy_49 Start: 32673, Stop: 32239, Start Num: 17

Candidate Starts for Buggy_49:

(Start: 17 @32673 has 11 MA's), (61, 32574), (73, 32538), (119, 32286),

Gene: Bumblebee11_44 Start: 31853, Stop: 31530, Start Num: 77

Candidate Starts for Bumblebee11_44:

(Start: 77 @31853 has 136 MA's), (99, 31754), (101, 31745), (103, 31730), (111, 31700), (119, 31580),

Gene: Burger_44 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Burger_44:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: C3_45 Start: 32346, Stop: 31912, Start Num: 27

Candidate Starts for C3_45:

(Start: 27 @32346 has 4 MA's), (Start: 29 @32343 has 9 MA's), (68, 32244), (82, 32202), (88, 32178), (108, 32079), (117, 31992), (119, 31959),

Gene: CRB1_50 Start: 32781, Stop: 32359, Start Num: 15

Candidate Starts for CRB1_50:

(Start: 15 @32781 has 59 MA's), (Start: 17 @32772 has 11 MA's), (58, 32679), (61, 32673), (75, 32649), (76, 32646), (119, 32406),

Gene: Caelakin_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Caelakin_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Camperdownii_44 Start: 31553, Stop: 31251, Start Num: 77

Candidate Starts for Camperdownii_44:

(Start: 77 @31553 has 136 MA's), (111, 31421), (112, 31382), (117, 31334), (119, 31301),

Gene: Candra_49 Start: 31173, Stop: 30745, Start Num: 16

Candidate Starts for Candra_49:

(Start: 12 @31200 has 3 MA's), (Start: 16 @31173 has 49 MA's), (59, 31077), (72, 31041), (97, 30951), (102, 30924), (103, 30921), (122, 30765),

Gene: Caraxes_47 Start: 30723, Stop: 30316, Start Num: 16

Candidate Starts for Caraxes_47:

(Start: 16 @30723 has 49 MA's), (70, 30624), (100, 30510), (117, 30396), (119, 30363),

Gene: Catalina_48 Start: 32110, Stop: 31784, Start Num: 39

Candidate Starts for Catalina_48:

(Start: 39 @32110 has 34 MA's), (49, 32086), (68, 32044), (122, 31804),

Gene: Centaur_48 Start: 32520, Stop: 32086, Start Num: 17

Candidate Starts for Centaur_48:

(Start: 17 @32520 has 11 MA's), (61, 32421), (73, 32385), (119, 32133),

Gene: CentreCat_46 Start: 31883, Stop: 31581, Start Num: 77

Candidate Starts for CentreCat_46:

(7, 32153), (Start: 77 @31883 has 136 MA's), (111, 31751), (112, 31712), (117, 31664), (119, 31631),

Gene: Cerulean_47 Start: 32303, Stop: 32001, Start Num: 77

Candidate Starts for Cerulean_47:

(7, 32573), (Start: 77 @32303 has 136 MA's), (111, 32171), (112, 32132), (119, 32051),

Gene: ChampagnePapi_48 Start: 32302, Stop: 32000, Start Num: 77

Candidate Starts for ChampagnePapi_48:

(7, 32572), (Start: 77 @32302 has 136 MA's), (111, 32170), (112, 32131), (119, 32050),

Gene: Changeling_46 Start: 32725, Stop: 32312, Start Num: 16

Candidate Starts for Changeling_46:

(Start: 16 @32725 has 49 MA's), (Start: 52 @32647 has 25 MA's), (75, 32602), (118, 32371), (119, 32359), (122, 32332),

Gene: Chaph_46 Start: 31891, Stop: 31589, Start Num: 77

Candidate Starts for Chaph_46:

(7, 32161), (Start: 77 @31891 has 136 MA's), (111, 31759), (112, 31720), (117, 31672), (119, 31639),

Gene: Chargerpower_46 Start: 31054, Stop: 30704, Start Num: 39

Candidate Starts for Chargerpower_46:

(Start: 39 @31054 has 34 MA's), (68, 30991), (96, 30910), (117, 30784), (122, 30724), (123, 30715),

Gene: Charm_46 Start: 31899, Stop: 31555, Start Num: 39

Candidate Starts for Charm_46:

(Start: 39 @31899 has 34 MA's), (47, 31884), (49, 31878), (68, 31836), (82, 31794), (95, 31761), (122, 31575), (123, 31566),

Gene: Chartreuse_48 Start: 30533, Stop: 30105, Start Num: 16
Candidate Starts for Chartreuse_48:
(Start: 12 @30560 has 3 MA's), (Start: 16 @30533 has 49 MA's), (59, 30437), (72, 30401), (97, 30311),
(102, 30284), (103, 30281), (122, 30125),

Gene: Che12_49 Start: 31155, Stop: 30727, Start Num: 16
Candidate Starts for Che12_49:
(Start: 16 @31155 has 49 MA's), (65, 31044), (82, 30993), (117, 30807), (119, 30774),

Gene: ChipMunk_49 Start: 33873, Stop: 33451, Start Num: 15
Candidate Starts for ChipMunk_49:
(Start: 15 @33873 has 59 MA's), (58, 33771), (74, 33744), (119, 33498),

Gene: Cici_45 Start: 31868, Stop: 31545, Start Num: 77
Candidate Starts for Cici_45:
(Start: 77 @31868 has 136 MA's), (99, 31769), (101, 31760), (103, 31745), (111, 31715), (119, 31595),

Gene: Cindaradix_43 Start: 31493, Stop: 31170, Start Num: 77
Candidate Starts for Cindaradix_43:
(Start: 77 @31493 has 136 MA's), (101, 31385), (111, 31340), (116, 31265), (119, 31220),

Gene: Cintron_45 Start: 31860, Stop: 31558, Start Num: 77
Candidate Starts for Cintron_45:
(7, 32130), (Start: 77 @31860 has 136 MA's), (111, 31728), (112, 31689), (117, 31641), (119, 31608),

Gene: Citius_46 Start: 31901, Stop: 31599, Start Num: 77
Candidate Starts for Citius_46:
(7, 32171), (Start: 77 @31901 has 136 MA's), (111, 31769), (112, 31730), (117, 31682), (119, 31649),

Gene: Clarenza_45 Start: 31877, Stop: 31575, Start Num: 77
Candidate Starts for Clarenza_45:
(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: CloudWang3_49 Start: 30934, Stop: 30506, Start Num: 16
Candidate Starts for CloudWang3_49:
(Start: 12 @30961 has 3 MA's), (Start: 16 @30934 has 49 MA's), (59, 30838), (72, 30802), (97, 30712),
(102, 30685), (103, 30682), (122, 30526),

Gene: Cocoaberry_46 Start: 31884, Stop: 31582, Start Num: 77
Candidate Starts for Cocoaberry_46:
(Start: 77 @31884 has 136 MA's), (111, 31752), (112, 31713), (117, 31665), (119, 31632),

Gene: Colin_47 Start: 32497, Stop: 32084, Start Num: 16
Candidate Starts for Colin_47:
(Start: 16 @32497 has 49 MA's), (Start: 52 @32419 has 25 MA's), (119, 32131),

Gene: Commander_46 Start: 31879, Stop: 31577, Start Num: 77
Candidate Starts for Commander_46:
(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Connomayer_46 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Connomayer_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Conquerage_47 Start: 32133, Stop: 31807, Start Num: 39

Candidate Starts for Conquerage_47:

(Start: 39 @32133 has 34 MA's), (49, 32109), (68, 32067), (122, 31827),

Gene: Cookiedough_49 Start: 31149, Stop: 30721, Start Num: 16

Candidate Starts for Cookiedough_49:

(Start: 12 @31176 has 3 MA's), (Start: 16 @31149 has 49 MA's), (59, 31053), (72, 31017), (97, 30927), (102, 30900), (103, 30897), (122, 30741),

Gene: Crucio_47 Start: 32116, Stop: 31694, Start Num: 15

Candidate Starts for Crucio_47:

(Start: 15 @32116 has 59 MA's), (Start: 17 @32107 has 11 MA's), (58, 32014), (75, 31984), (119, 31741),

Gene: D29_46 Start: 31906, Stop: 31496, Start Num: 29

Candidate Starts for D29_46:

(5, 32113), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: D32_49 Start: 31906, Stop: 31496, Start Num: 29

Candidate Starts for D32_49:

(5, 32113), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: DBQu4n_49 Start: 31906, Stop: 31496, Start Num: 29

Candidate Starts for DBQu4n_49:

(3, 32233), (4, 32221), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: DaVinci_48 Start: 30587, Stop: 30159, Start Num: 16

Candidate Starts for DaVinci_48:

(Start: 12 @30614 has 3 MA's), (Start: 16 @30587 has 49 MA's), (59, 30491), (72, 30455), (97, 30365), (102, 30338), (103, 30335), (122, 30179),

Gene: Dalmatian_48 Start: 32508, Stop: 32086, Start Num: 15

Candidate Starts for Dalmatian_48:

(Start: 15 @32508 has 59 MA's), (Start: 17 @32499 has 11 MA's), (58, 32406), (75, 32376), (119, 32133),

Gene: Darrell_48 Start: 32497, Stop: 32153, Start Num: 33

Candidate Starts for Darrell_48:

(19, 32539), (24, 32518), (Start: 33 @32497 has 3 MA's), (47, 32482), (68, 32434), (74, 32413), (95, 32359), (122, 32173),

Gene: DarthPhader_44 Start: 32954, Stop: 32610, Start Num: 55

Candidate Starts for DarthPhader_44:

(50, 32966), (Start: 54 @32960 has 1 MA's), (Start: 55 @32954 has 3 MA's), (71, 32912), (79, 32891), (93, 32837), (95, 32825), (113, 32732), (117, 32690), (122, 32630),

Gene: Datway_45 Start: 31839, Stop: 31516, Start Num: 77

Candidate Starts for Datway_45:

(Start: 77 @31839 has 136 MA's), (101, 31731), (119, 31566),

Gene: Deano_45 Start: 31888, Stop: 31586, Start Num: 77

Candidate Starts for Deano_45:

(Start: 77 @31888 has 136 MA's), (88, 31846), (111, 31756), (112, 31717), (117, 31669), (119, 31636),

Gene: Deloris_47 Start: 32057, Stop: 31644, Start Num: 15

Candidate Starts for Deloris_47:

(Start: 15 @32057 has 59 MA's), (56, 31967), (61, 31958), (80, 31922), (96, 31856), (119, 31691),

Gene: Dhanush_46 Start: 31883, Stop: 31581, Start Num: 77

Candidate Starts for Dhanush_46:

(7, 32153), (Start: 77 @31883 has 136 MA's), (111, 31751), (112, 31712), (117, 31664), (119, 31631),

Gene: Dignity_49 Start: 32681, Stop: 32259, Start Num: 15

Candidate Starts for Dignity_49:

(Start: 15 @32681 has 59 MA's), (Start: 17 @32672 has 11 MA's), (58, 32579), (75, 32549), (119, 32306),

Gene: DirtyDunning_45 Start: 31898, Stop: 31575, Start Num: 77

Candidate Starts for DirtyDunning_45:

(Start: 77 @31898 has 136 MA's), (82, 31883), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: DontArgue_44 Start: 30703, Stop: 30368, Start Num: 67

Candidate Starts for DontArgue_44:

(Start: 16 @30847 has 49 MA's), (Start: 17 @30841 has 11 MA's), (Start: 67 @30703 has 1 MA's), (116, 30463),

Gene: Dorothea_49 Start: 31156, Stop: 30728, Start Num: 16

Candidate Starts for Dorothea_49:

(Start: 12 @31183 has 3 MA's), (Start: 16 @31156 has 49 MA's), (59, 31060), (72, 31024), (97, 30934), (102, 30907), (103, 30904), (122, 30748),

Gene: Drake55_49 Start: 32605, Stop: 32183, Start Num: 15

Candidate Starts for Drake55_49:

(Start: 15 @32605 has 59 MA's), (Start: 17 @32596 has 11 MA's), (58, 32503), (61, 32497), (75, 32473), (119, 32230),

Gene: Drake94_43 Start: 30743, Stop: 30387, Start Num: 69

Candidate Starts for Drake94_43:

(Start: 17 @30887 has 11 MA's), (Start: 69 @30743 has 13 MA's), (110, 30560), (116, 30482),

Gene: DreamTeam1_46 Start: 31773, Stop: 31429, Start Num: 39

Candidate Starts for DreamTeam1_46:

(Start: 39 @31773 has 34 MA's), (47, 31758), (49, 31752), (68, 31710), (70, 31707), (82, 31668), (95, 31635), (122, 31449), (123, 31440),

Gene: Druantia_46 Start: 31883, Stop: 31581, Start Num: 77

Candidate Starts for Druantia_46:

(7, 32153), (Start: 77 @31883 has 136 MA's), (111, 31751), (112, 31712), (117, 31664), (119, 31631),

Gene: DudeLittle_46 Start: 32250, Stop: 31828, Start Num: 15

Candidate Starts for DudeLittle_46:

(Start: 15 @32250 has 59 MA's), (Start: 17 @32241 has 11 MA's), (30, 32205), (48, 32172), (Start: 52 @32163 has 25 MA's), (119, 31875),

Gene: Duplo_49 Start: 31944, Stop: 31534, Start Num: 29

Candidate Starts for Duplo_49:

(3, 32271), (4, 32259), (Start: 29 @31944 has 9 MA's), (82, 31824), (88, 31800), (89, 31794), (108, 31701), (117, 31614), (119, 31581),

Gene: DustyMartin_49 Start: 31547, Stop: 31209, Start Num: 69

Candidate Starts for DustyMartin_49:

(Start: 69 @31547 has 13 MA's), (90, 31487), (110, 31382), (116, 31304),

Gene: EZMoney23_45 Start: 32055, Stop: 31642, Start Num: 15

Candidate Starts for EZMoney23_45:

(Start: 15 @32055 has 59 MA's), (Start: 52 @31977 has 25 MA's), (59, 31959), (75, 31932), (119, 31689),

Gene: Eagle_46 Start: 31905, Stop: 31603, Start Num: 77

Candidate Starts for Eagle_46:

(7, 32175), (Start: 77 @31905 has 136 MA's), (111, 31773), (112, 31734), (117, 31686), (119, 31653),

Gene: EagleEye_49 Start: 31670, Stop: 31308, Start Num: 38

Candidate Starts for EagleEye_49:

(Start: 38 @31670 has 3 MA's), (48, 31646), (117, 31388),

Gene: Eaglepride_46 Start: 31543, Stop: 31214, Start Num: 67

Candidate Starts for Eaglepride_46:

(Start: 17 @31681 has 11 MA's), (22, 31654), (Start: 67 @31543 has 1 MA's), (106, 31393), (116, 31309),

Gene: Eapen_46 Start: 31875, Stop: 31573, Start Num: 77

Candidate Starts for Eapen_46:

(7, 32145), (Start: 77 @31875 has 136 MA's), (111, 31743), (112, 31704), (117, 31656), (119, 31623),

Gene: Ebony_47 Start: 31284, Stop: 30937, Start Num: 52

Candidate Starts for Ebony_47:

(Start: 52 @31284 has 25 MA's), (64, 31251), (71, 31230), (117, 31017), (119, 30984),

Gene: Echild_47 Start: 31587, Stop: 31165, Start Num: 15

Candidate Starts for Echild_47:

(Start: 15 @31587 has 59 MA's), (Start: 17 @31578 has 11 MA's), (Start: 52 @31500 has 25 MA's), (119, 31212),

Gene: Edison31_44 Start: 31487, Stop: 31149, Start Num: 69

Candidate Starts for Edison31_44:

(Start: 17 @31631 has 11 MA's), (31, 31580), (Start: 69 @31487 has 13 MA's), (107, 31337), (110, 31322), (116, 31244),

Gene: EdogawaKiddo_45 Start: 32110, Stop: 31784, Start Num: 39

Candidate Starts for EdogawaKiddo_45:

(Start: 39 @32110 has 34 MA's), (49, 32086), (68, 32044), (122, 31804),

Gene: Eidsmoe_47 Start: 32173, Stop: 31847, Start Num: 39

Candidate Starts for Eidsmoe_47:

(Start: 39 @32173 has 34 MA's), (49, 32149), (68, 32107), (122, 31867),

Gene: Elephantoon_46 Start: 31477, Stop: 31130, Start Num: 33

Candidate Starts for Elephantoon_46:

(Start: 33 @31477 has 3 MA's), (49, 31453), (68, 31411), (95, 31336), (100, 31318), (122, 31150),

Gene: EmyBug_46 Start: 32175, Stop: 31849, Start Num: 39

Candidate Starts for EmyBug_46:

(Start: 39 @32175 has 34 MA's), (49, 32151), (68, 32109), (122, 31869),

Gene: Equemioh13_48 Start: 32422, Stop: 31988, Start Num: 17

Candidate Starts for Equemioh13_48:

(Start: 17 @32422 has 11 MA's), (61, 32323), (73, 32287), (119, 32035),

Gene: EricB_49 Start: 31130, Stop: 30702, Start Num: 16

Candidate Starts for EricB_49:

(Start: 12 @31157 has 3 MA's), (Start: 16 @31130 has 49 MA's), (59, 31034), (72, 30998), (97, 30908), (102, 30881), (103, 30878), (122, 30722),

Gene: Eris_45 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Eris_45:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Eros_46 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Eros_46:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Et2Brutus_46 Start: 31244, Stop: 30897, Start Num: 52

Candidate Starts for Et2Brutus_46:

(Start: 52 @31244 has 25 MA's), (64, 31211), (71, 31190), (117, 30977), (119, 30944),

Gene: Eurydice_47 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Eurydice_47:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: EvilGenius_49 Start: 33877, Stop: 33455, Start Num: 15

Candidate Starts for EvilGenius_49:

(Start: 15 @33877 has 59 MA's), (Start: 17 @33868 has 11 MA's), (58, 33775), (74, 33748), (119, 33502),

Gene: ExplosioNervosa_47 Start: 32193, Stop: 31867, Start Num: 39

Candidate Starts for ExplosioNervosa_47:

(Start: 39 @32193 has 34 MA's), (49, 32169), (68, 32127), (122, 31887),

Gene: Fameo_47 Start: 32426, Stop: 32004, Start Num: 15

Candidate Starts for Fameo_47:

(Start: 15 @32426 has 59 MA's), (Start: 17 @32417 has 11 MA's), (30, 32381), (Start: 52 @32339 has 25 MA's), (119, 32051),

Gene: Fayely_47 Start: 32142, Stop: 31816, Start Num: 39

Candidate Starts for Fayely_47:

(Start: 39 @32142 has 34 MA's), (49, 32118), (68, 32076), (122, 31836),

Gene: Fibonacci_47 Start: 31259, Stop: 30912, Start Num: 52

Candidate Starts for Fibonacci_47:

(Start: 52 @31259 has 25 MA's), (64, 31226), (71, 31205), (117, 30992), (119, 30959),

Gene: FiringLine_47 Start: 32097, Stop: 31675, Start Num: 15

Candidate Starts for FiringLine_47:

(Start: 15 @32097 has 59 MA's), (Start: 17 @32088 has 11 MA's), (30, 32052), (Start: 52 @32010 has 25 MA's), (119, 31722),

Gene: First_0048 Start: 32311, Stop: 31889, Start Num: 15

Candidate Starts for First_0048:

(Start: 15 @32311 has 59 MA's), (Start: 17 @32302 has 11 MA's), (119, 31936),

Gene: Flare16_47 Start: 32181, Stop: 31747, Start Num: 17

Candidate Starts for Flare16_47:

(Start: 17 @32181 has 11 MA's), (61, 32082), (73, 32046), (119, 31794),

Gene: Flaverint_48 Start: 31706, Stop: 31359, Start Num: 52

Candidate Starts for Flaverint_48:

(Start: 52 @31706 has 25 MA's), (64, 31673), (71, 31652), (117, 31439), (119, 31406),

Gene: Florean_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for Florean_46:

(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Flux_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for Flux_46:

(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Funston_45 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Funston_45:

(Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Gadost_46 Start: 31884, Stop: 31582, Start Num: 77

Candidate Starts for Gadost_46:

(Start: 77 @31884 has 136 MA's), (111, 31752), (112, 31713), (117, 31665), (119, 31632),

Gene: Gail_52 Start: 33875, Stop: 33528, Start Num: 39

Candidate Starts for Gail_52:

(25, 33899), (Start: 39 @33875 has 34 MA's), (68, 33815), (117, 33608), (122, 33548), (123, 33539),

Gene: Garak_51 Start: 31328, Stop: 30873, Start Num: 12

Candidate Starts for Garak_51:

(Start: 12 @31328 has 3 MA's), (Start: 16 @31301 has 49 MA's), (59, 31205), (94, 31091), (103, 31049), (122, 30893),

Gene: GaugeLDP_45 Start: 32488, Stop: 32036, Start Num: 15

Candidate Starts for GaugeLDP_45:

(Start: 12 @32512 has 3 MA's), (Start: 15 @32488 has 59 MA's), (35, 32428), (70, 32344), (119, 32083),

Gene: Georgie2_48 Start: 32142, Stop: 31720, Start Num: 15

Candidate Starts for Georgie2_48:

(Start: 15 @32142 has 59 MA's), (Start: 17 @32133 has 11 MA's), (58, 32040), (75, 32010), (119, 31767),

Gene: Gilberta_48 Start: 31696, Stop: 31349, Start Num: 52

Candidate Starts for Gilberta_48:

(Start: 52 @31696 has 25 MA's), (64, 31663), (71, 31642), (117, 31429), (119, 31396),

Gene: Gladiator_47 Start: 30461, Stop: 30033, Start Num: 16

Candidate Starts for Gladiator_47:

(Start: 12 @30488 has 3 MA's), (Start: 16 @30461 has 49 MA's), (59, 30365), (72, 30329), (97, 30239), (102, 30212), (103, 30209), (122, 30053),

Gene: GreedyLawyer_49 Start: 31137, Stop: 30709, Start Num: 16

Candidate Starts for GreedyLawyer_49:

(Start: 12 @31164 has 3 MA's), (Start: 16 @31137 has 49 MA's), (59, 31041), (72, 31005), (97, 30915), (102, 30888), (103, 30885), (122, 30729),

Gene: Gruunaga_49 Start: 31137, Stop: 30709, Start Num: 16

Candidate Starts for Gruunaga_49:

(Start: 12 @31164 has 3 MA's), (Start: 16 @31137 has 49 MA's), (59, 31041), (94, 30927), (103, 30885), (122, 30729),

Gene: HamSlice_45 Start: 31878, Stop: 31576, Start Num: 77

Candidate Starts for HamSlice_45:

(7, 32148), (Start: 77 @31878 has 136 MA's), (111, 31746), (112, 31707), (117, 31659), (119, 31626),

Gene: Hammer_50 Start: 30740, Stop: 30312, Start Num: 16

Candidate Starts for Hammer_50:

(Start: 12 @30767 has 3 MA's), (Start: 16 @30740 has 49 MA's), (59, 30644), (94, 30530), (103, 30488), (122, 30332),

Gene: Hanray_45 Start: 32114, Stop: 31788, Start Num: 39

Candidate Starts for Hanray_45:

(Start: 39 @32114 has 34 MA's), (49, 32090), (68, 32048), (122, 31808),

Gene: Happiness_45 Start: 31885, Stop: 31583, Start Num: 77

Candidate Starts for Happiness_45:

(7, 32155), (Start: 77 @31885 has 136 MA's), (111, 31753), (112, 31714), (117, 31666), (119, 31633),

Gene: HarryHoudini_48 Start: 32614, Stop: 32192, Start Num: 15

Candidate Starts for HarryHoudini_48:

(Start: 15 @32614 has 59 MA's), (Start: 17 @32605 has 11 MA's), (58, 32512), (61, 32506), (75, 32482), (119, 32239),

Gene: Heffalump_46 Start: 32894, Stop: 32472, Start Num: 15

Candidate Starts for Heffalump_46:

(Start: 15 @32894 has 59 MA's), (Start: 17 @32885 has 11 MA's), (30, 32849), (Start: 52 @32807 has 25 MA's), (119, 32519),

Gene: Helmet_51 Start: 31328, Stop: 30873, Start Num: 12

Candidate Starts for Helmet_51:

(Start: 12 @31328 has 3 MA's), (Start: 16 @31301 has 49 MA's), (59, 31205), (94, 31091), (103, 31049), (122, 30893),

Gene: Herbertwm_47 Start: 31973, Stop: 31524, Start Num: 16

Candidate Starts for Herbertwm_47:

(Start: 16 @31973 has 49 MA's), (35, 31916), (59, 31856), (102, 31703), (104, 31697), (117, 31604), (122, 31544),

Gene: Hexamo_49 Start: 30949, Stop: 30494, Start Num: 12

Candidate Starts for Hexamo_49:

(Start: 12 @30949 has 3 MA's), (Start: 16 @30922 has 49 MA's), (59, 30826), (94, 30712), (103, 30670), (122, 30514),

Gene: Holec_46 Start: 32133, Stop: 31807, Start Num: 39

Candidate Starts for Holec_46:

(Start: 39 @32133 has 34 MA's), (49, 32109), (68, 32067), (122, 31827),

Gene: Holli_45 Start: 31670, Stop: 31368, Start Num: 77

Candidate Starts for Holli_45:

(7, 31940), (Start: 77 @31670 has 136 MA's), (111, 31538), (112, 31499), (117, 31451), (119, 31418),

Gene: HortumSL17_47 Start: 32109, Stop: 31783, Start Num: 39

Candidate Starts for HortumSL17_47:

(Start: 39 @32109 has 34 MA's), (49, 32085), (68, 32043), (122, 31803),

Gene: Houdini22_46 Start: 31884, Stop: 31582, Start Num: 77

Candidate Starts for Houdini22_46:

(Start: 77 @31884 has 136 MA's), (111, 31752), (112, 31713), (117, 31665), (119, 31632),

Gene: Hutc2_47 Start: 31259, Stop: 30912, Start Num: 52

Candidate Starts for Hutc2_47:

(Start: 52 @31259 has 25 MA's), (64, 31226), (71, 31205), (117, 30992), (119, 30959),

Gene: Huxley_46 Start: 31941, Stop: 31639, Start Num: 77

Candidate Starts for Huxley_46:

(Start: 77 @31941 has 136 MA's), (111, 31809), (112, 31770), (117, 31722), (119, 31689),

Gene: ICleared_46 Start: 31909, Stop: 31607, Start Num: 77

Candidate Starts for ICleared_46:

(7, 32179), (Start: 77 @31909 has 136 MA's), (111, 31777), (112, 31738), (117, 31690), (119, 31657),

Gene: Iceman_46 Start: 32166, Stop: 31864, Start Num: 77

Candidate Starts for Iceman_46:

(7, 32436), (Start: 77 @32166 has 136 MA's), (111, 32034), (112, 31995), (117, 31947), (119, 31914),

Gene: Indra_52 Start: 31302, Stop: 30874, Start Num: 16

Candidate Starts for Indra_52:

(Start: 12 @31329 has 3 MA's), (Start: 16 @31302 has 49 MA's), (59, 31206), (94, 31092), (103, 31050), (122, 30894),

Gene: Insomnia_48 Start: 31764, Stop: 31417, Start Num: 52

Candidate Starts for Insomnia_48:

(Start: 52 @31764 has 25 MA's), (64, 31731), (71, 31710), (117, 31497), (119, 31464),

Gene: Iracema64_47 Start: 32144, Stop: 31842, Start Num: 77

Candidate Starts for Iracema64_47:

(7, 32414), (Start: 77 @32144 has 136 MA's), (111, 32012), (112, 31973), (117, 31925), (119, 31892),

Gene: IronMan_47 Start: 33279, Stop: 32860, Start Num: 15

Candidate Starts for IronMan_47:

(Start: 15 @33279 has 59 MA's), (Start: 52 @33198 has 25 MA's), (83, 33132), (86, 33117), (100, 33063), (119, 32907), (122, 32880),

Gene: Isiphiwo_47 Start: 30674, Stop: 30246, Start Num: 16

Candidate Starts for Isiphiwo_47:

(Start: 12 @30701 has 3 MA's), (Start: 16 @30674 has 49 MA's), (59, 30578), (72, 30542), (97, 30452), (102, 30425), (103, 30422), (122, 30266),

Gene: Iwokeuplikedis_50 Start: 32216, Stop: 31788, Start Num: 16

Candidate Starts for Iwokeuplikedis_50:

(Start: 16 @32216 has 49 MA's), (102, 31967), (119, 31835),

Gene: Jaan_47 Start: 33445, Stop: 33047, Start Num: 15

Candidate Starts for Jaan_47:

(Start: 15 @33445 has 59 MA's), (60, 33364), (82, 33322), (100, 33250), (119, 33094),

Gene: Jabith_48 Start: 31765, Stop: 31418, Start Num: 52

Candidate Starts for Jabith_48:

(Start: 52 @31765 has 25 MA's), (64, 31732), (71, 31711), (117, 31498), (119, 31465),

Gene: Jaykayelowell_44 Start: 31873, Stop: 31571, Start Num: 77

Candidate Starts for Jaykayelowell_44:

(7, 32143), (Start: 77 @31873 has 136 MA's), (111, 31741), (112, 31702), (117, 31654), (119, 31621),

Gene: Jeeves_52 Start: 32647, Stop: 32300, Start Num: 39

Candidate Starts for Jeeves_52:

(25, 32671), (Start: 39 @32647 has 34 MA's), (68, 32587), (117, 32380), (122, 32320),

Gene: Jeffabunny_49 Start: 30958, Stop: 30530, Start Num: 16

Candidate Starts for Jeffabunny_49:

(Start: 12 @30985 has 3 MA's), (Start: 16 @30958 has 49 MA's), (59, 30862), (94, 30748), (103, 30706), (122, 30550),

Gene: Jerm_49 Start: 32674, Stop: 32252, Start Num: 15

Candidate Starts for Jerm_49:

(Start: 15 @32674 has 59 MA's), (Start: 17 @32665 has 11 MA's), (58, 32572), (75, 32542), (119, 32299),

Gene: JetBlade_46 Start: 31874, Stop: 31572, Start Num: 77

Candidate Starts for JetBlade_46:

(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: Jiawan_45 Start: 32146, Stop: 31820, Start Num: 39

Candidate Starts for Jiawan_45:

(Start: 39 @32146 has 34 MA's), (49, 32122), (68, 32080), (122, 31840),

Gene: JoongJeon_45 Start: 31877, Stop: 31575, Start Num: 77
Candidate Starts for JoongJeon_45:
(Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Jordennis_48 Start: 30594, Stop: 30166, Start Num: 16
Candidate Starts for Jordennis_48:
(Start: 12 @30621 has 3 MA's), (Start: 16 @30594 has 49 MA's), (59, 30498), (72, 30462), (97, 30372),
(102, 30345), (103, 30342),

Gene: Joselito_48 Start: 31705, Stop: 31358, Start Num: 52
Candidate Starts for Joselito_48:
(Start: 52 @31705 has 25 MA's), (64, 31672), (71, 31651), (117, 31438), (119, 31405),

Gene: JoshKayV_49 Start: 32755, Stop: 32333, Start Num: 15
Candidate Starts for JoshKayV_49:
(Start: 15 @32755 has 59 MA's), (Start: 17 @32746 has 11 MA's), (58, 32653), (61, 32647), (75,
32623), (76, 32620), (119, 32380),

Gene: Journey13_41 Start: 30529, Stop: 30176, Start Num: 52
Candidate Starts for Journey13_41:
(Start: 52 @30529 has 25 MA's), (Start: 53 @30526 has 1 MA's), (61, 30508), (70, 30484), (117,
30256),

Gene: Jsquared_45 Start: 31025, Stop: 30618, Start Num: 16
Candidate Starts for Jsquared_45:
(Start: 16 @31025 has 49 MA's), (70, 30926), (74, 30905), (117, 30698), (119, 30665),

Gene: KFPoly_45 Start: 31874, Stop: 31572, Start Num: 77
Candidate Starts for KFPoly_45:
(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: Kalpine_45 Start: 32395, Stop: 31982, Start Num: 16
Candidate Starts for Kalpine_45:
(Start: 16 @32395 has 49 MA's), (Start: 52 @32317 has 25 MA's), (119, 32029),

Gene: Kamy_46 Start: 31882, Stop: 31580, Start Num: 77
Candidate Starts for Kamy_46:
(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Katalie136_45 Start: 31853, Stop: 31530, Start Num: 77
Candidate Starts for Katalie136_45:
(Start: 77 @31853 has 136 MA's), (99, 31754), (101, 31745), (103, 31730), (111, 31700), (119, 31580),

Gene: Kazan_50 Start: 31143, Stop: 30715, Start Num: 16
Candidate Starts for Kazan_50:
(Start: 12 @31170 has 3 MA's), (Start: 16 @31143 has 49 MA's), (59, 31047), (72, 31011), (97, 30921),
(102, 30894), (103, 30891), (122, 30735),

Gene: Kerberos_49 Start: 31906, Stop: 31496, Start Num: 29
Candidate Starts for Kerberos_49:
(3, 32233), (4, 32221), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108,
31663), (117, 31576), (119, 31543),

Gene: Keziacharles14_47 Start: 33144, Stop: 32797, Start Num: 39
Candidate Starts for Keziacharles14_47:
(Start: 39 @33144 has 34 MA's), (49, 33120), (68, 33078), (87, 33015), (95, 33003), (122, 32817),
(123, 32808),

Gene: Kimona_46 Start: 30459, Stop: 30046, Start Num: 39
Candidate Starts for Kimona_46:
(Start: 39 @30459 has 34 MA's), (72, 30369), (85, 30324), (103, 30228), (119, 30099),

Gene: KingCyrus_49 Start: 33872, Stop: 33450, Start Num: 15
Candidate Starts for KingCyrus_49:
(Start: 15 @33872 has 59 MA's), (58, 33770), (74, 33743), (119, 33497), (121, 33473),

Gene: Kingmustik0402_46 Start: 31869, Stop: 31567, Start Num: 77
Candidate Starts for Kingmustik0402_46:
(7, 32139), (Start: 77 @31869 has 136 MA's), (111, 31737), (112, 31698), (117, 31650), (119, 31617),

Gene: Kinmap_45 Start: 31426, Stop: 31016, Start Num: 28
Candidate Starts for Kinmap_45:
(28, 31426), (90, 31252), (95, 31231), (117, 31096),

Gene: Kipper29_49 Start: 31156, Stop: 30728, Start Num: 16
Candidate Starts for Kipper29_49:
(Start: 12 @31183 has 3 MA's), (Start: 16 @31156 has 49 MA's), (59, 31060), (72, 31024), (97, 30934),
(102, 30907), (103, 30904), (122, 30748),

Gene: KittenMittens_42 Start: 30751, Stop: 30395, Start Num: 69
Candidate Starts for KittenMittens_42:
(Start: 17 @30895 has 11 MA's), (Start: 69 @30751 has 13 MA's), (110, 30568), (116, 30490),

Gene: Koan_44 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Koan_44:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Koduck_47 Start: 31317, Stop: 30889, Start Num: 14
Candidate Starts for Koduck_47:
(Start: 14 @31317 has 1 MA's), (42, 31263), (Start: 52 @31239 has 25 MA's), (70, 31197), (74, 31176),
(82, 31155), (87, 31134), (117, 30969), (119, 30936),

Gene: Koko_50 Start: 31279, Stop: 30851, Start Num: 16
Candidate Starts for Koko_50:
(Start: 12 @31306 has 3 MA's), (Start: 16 @31279 has 49 MA's), (59, 31183), (103, 31027), (122,
30871),

Gene: Koreni_45 Start: 31561, Stop: 31259, Start Num: 77
Candidate Starts for Koreni_45:
(7, 31831), (Start: 77 @31561 has 136 MA's), (111, 31429), (112, 31390), (117, 31342), (119, 31309),

Gene: Kratark_46 Start: 32040, Stop: 31717, Start Num: 77
Candidate Starts for Kratark_46:
(Start: 77 @32040 has 136 MA's), (82, 32025), (111, 31887), (117, 31800), (119, 31767),

Gene: Kremtemulon_46 Start: 31831, Stop: 31529, Start Num: 77

Candidate Starts for Kremtemulon_46:

(7, 32101), (Start: 77 @31831 has 136 MA's), (111, 31699), (112, 31660), (119, 31579),

Gene: Kristoff_45 Start: 31839, Stop: 31501, Start Num: 69

Candidate Starts for Kristoff_45:

(Start: 17 @31983 has 11 MA's), (31, 31932), (Start: 69 @31839 has 13 MA's), (107, 31689), (110, 31674), (116, 31596),

Gene: Kyee_46 Start: 31878, Stop: 31576, Start Num: 77

Candidate Starts for Kyee_46:

(Start: 77 @31878 has 136 MA's), (111, 31746), (112, 31707), (117, 31659), (119, 31626),

Gene: L5_46 Start: 31389, Stop: 30961, Start Num: 14

Candidate Starts for L5_46:

(Start: 14 @31389 has 1 MA's), (42, 31335), (Start: 52 @31311 has 25 MA's), (70, 31269), (74, 31248), (82, 31227), (87, 31206), (117, 31041), (119, 31008),

Gene: LHTSCC_48 Start: 32302, Stop: 32000, Start Num: 77

Candidate Starts for LHTSCC_48:

(7, 32572), (Start: 77 @32302 has 136 MA's), (111, 32170), (112, 32131), (119, 32050),

Gene: LadyBird_51 Start: 32746, Stop: 32324, Start Num: 15

Candidate Starts for LadyBird_51:

(Start: 15 @32746 has 59 MA's), (Start: 17 @32737 has 11 MA's), (Start: 52 @32659 has 25 MA's), (59, 32641), (119, 32371),

Gene: Landor_47 Start: 33357, Stop: 32938, Start Num: 15

Candidate Starts for Landor_47:

(Start: 15 @33357 has 59 MA's), (Start: 52 @33276 has 25 MA's), (82, 33213), (100, 33141), (119, 32985),

Gene: LappelDuVide_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for LappelDuVide_46:

(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Larenn_46 Start: 32287, Stop: 31865, Start Num: 15

Candidate Starts for Larenn_46:

(Start: 15 @32287 has 59 MA's), (Start: 17 @32278 has 11 MA's), (45, 32221), (71, 32170), (119, 31912),

Gene: Lemur_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Lemur_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: LeoAvram_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for LeoAvram_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Leogania_47 Start: 33298, Stop: 32876, Start Num: 15

Candidate Starts for Leogania_47:

(Start: 15 @33298 has 59 MA's), (Start: 17 @33289 has 11 MA's), (Start: 52 @33211 has 25 MA's), (119, 32923),

Gene: Leviathan_49 Start: 32730, Stop: 32308, Start Num: 15

Candidate Starts for Leviathan_49:

(Start: 15 @32730 has 59 MA's), (Start: 17 @32721 has 11 MA's), (58, 32628), (61, 32622), (75, 32598), (119, 32355),

Gene: LilTurb_48 Start: 32563, Stop: 32141, Start Num: 15

Candidate Starts for LilTurb_48:

(Start: 15 @32563 has 59 MA's), (Start: 17 @32554 has 11 MA's), (58, 32461), (61, 32455), (119, 32188),

Gene: Lilbunny_48 Start: 30932, Stop: 30504, Start Num: 16

Candidate Starts for Lilbunny_48:

(Start: 12 @30959 has 3 MA's), (Start: 16 @30932 has 49 MA's), (59, 30836), (94, 30722), (103, 30680), (122, 30524),

Gene: Lilleskat_45 Start: 32063, Stop: 31737, Start Num: 39

Candidate Starts for Lilleskat_45:

(Start: 39 @32063 has 34 MA's), (49, 32039), (68, 31997), (122, 31757),

Gene: LittleB_46 Start: 31881, Stop: 31579, Start Num: 77

Candidate Starts for LittleB_46:

(7, 32151), (Start: 77 @31881 has 136 MA's), (111, 31749), (112, 31710), (117, 31662), (119, 31629),

Gene: LittleGuy_46 Start: 31776, Stop: 31474, Start Num: 77

Candidate Starts for LittleGuy_46:

(7, 32046), (Start: 77 @31776 has 136 MA's), (111, 31644), (112, 31605), (117, 31557), (119, 31524),

Gene: LochMonster_47 Start: 32116, Stop: 31814, Start Num: 77

Candidate Starts for LochMonster_47:

(7, 32386), (Start: 77 @32116 has 136 MA's), (88, 32074), (111, 31984), (112, 31945), (117, 31897), (119, 31864),

Gene: Lokk_46 Start: 32421, Stop: 31924, Start Num: 8

Candidate Starts for Lokk_46:

(Start: 8 @32421 has 2 MA's), (71, 32229), (74, 32217), (93, 32154), (95, 32142), (119, 31971),

Gene: LoneWolf_47 Start: 31870, Stop: 31502, Start Num: 36

Candidate Starts for LoneWolf_47:

(6, 32050), (9, 31999), (10, 31975), (Start: 36 @31870 has 1 MA's), (49, 31846), (68, 31804), (82, 31762), (122, 31522),

Gene: Lorenzo_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Lorenzo_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Loser_49 Start: 33095, Stop: 32673, Start Num: 15

Candidate Starts for Loser_49:

(1, 33422), (Start: 15 @33095 has 59 MA's), (Start: 17 @33086 has 11 MA's), (45, 33029), (58, 32993), (119, 32720),

Gene: Luchador_52 Start: 34435, Stop: 34088, Start Num: 39

Candidate Starts for Luchador_52:

(25, 34459), (Start: 39 @34435 has 34 MA's), (68, 34375), (117, 34168), (122, 34108),

Gene: Lucivia_48 Start: 31754, Stop: 31407, Start Num: 52

Candidate Starts for Lucivia_48:

(Start: 52 @31754 has 25 MA's), (64, 31721), (71, 31700), (117, 31487), (119, 31454),

Gene: Lucyedi_48 Start: 31865, Stop: 31503, Start Num: 38

Candidate Starts for Lucyedi_48:

(Start: 38 @31865 has 3 MA's), (48, 31841), (117, 31583),

Gene: Lunsford_47 Start: 31874, Stop: 31572, Start Num: 77

Candidate Starts for Lunsford_47:

(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: MaCh_48 Start: 31692, Stop: 31345, Start Num: 52

Candidate Starts for MaCh_48:

(Start: 52 @31692 has 25 MA's), (64, 31659), (71, 31638), (117, 31425), (119, 31392),

Gene: Mabel_47 Start: 31294, Stop: 30947, Start Num: 52

Candidate Starts for Mabel_47:

(Start: 52 @31294 has 25 MA's), (64, 31261), (71, 31240), (117, 31027), (119, 30994),

Gene: MajorMajor_46 Start: 31085, Stop: 30678, Start Num: 16

Candidate Starts for MajorMajor_46:

(Start: 16 @31085 has 49 MA's), (45, 31049), (74, 30965), (117, 30758), (119, 30725),

Gene: Malec_47 Start: 32851, Stop: 32429, Start Num: 15

Candidate Starts for Malec_47:

(Start: 15 @32851 has 59 MA's), (Start: 17 @32842 has 11 MA's), (45, 32785), (71, 32734), (119, 32476),

Gene: Maminiaina_46 Start: 31851, Stop: 31525, Start Num: 39

Candidate Starts for Maminiaina_46:

(Start: 39 @31851 has 34 MA's), (49, 31827), (68, 31785), (93, 31743), (122, 31545),

Gene: Maverick_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Maverick_46:

(Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Maxo_47 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Maxo_47:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Mazhar510_46 Start: 31881, Stop: 31579, Start Num: 77

Candidate Starts for Mazhar510_46:

(Start: 77 @31881 has 136 MA's), (111, 31749), (112, 31710), (117, 31662), (119, 31629),

Gene: McFly_49 Start: 31137, Stop: 30709, Start Num: 16

Candidate Starts for McFly_49:

(Start: 12 @31164 has 3 MA's), (Start: 16 @31137 has 49 MA's), (59, 31041), (72, 31005), (97, 30915), (102, 30888), (103, 30885), (122, 30729),

Gene: Medusa_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for Medusa_46:

(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: MeeZee_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for MeeZee_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Melvin_48 Start: 31875, Stop: 31573, Start Num: 77

Candidate Starts for Melvin_48:

(7, 32145), (Start: 77 @31875 has 136 MA's), (111, 31743), (112, 31704), (117, 31656), (119, 31623),

Gene: MiculUcigas_47 Start: 32081, Stop: 31647, Start Num: 17

Candidate Starts for MiculUcigas_47:

(Start: 17 @32081 has 11 MA's), (61, 31982), (73, 31946), (119, 31694),

Gene: Miko_44 Start: 32243, Stop: 31821, Start Num: 15

Candidate Starts for Miko_44:

(Start: 15 @32243 has 59 MA's), (Start: 17 @32234 has 11 MA's), (71, 32126), (74, 32114), (95, 32039), (119, 31868),

Gene: Millski_45 Start: 31881, Stop: 31579, Start Num: 77

Candidate Starts for Millski_45:

(7, 32151), (Start: 77 @31881 has 136 MA's), (111, 31749), (112, 31710), (117, 31662), (119, 31629),

Gene: Miramae_45 Start: 32041, Stop: 31718, Start Num: 77

Candidate Starts for Miramae_45:

(Start: 77 @32041 has 136 MA's), (82, 32026), (101, 31933), (103, 31918), (111, 31888), (116, 31813), (119, 31768),

Gene: MissWhite_46 Start: 30606, Stop: 30256, Start Num: 53

Candidate Starts for MissWhite_46:

(Start: 53 @30606 has 1 MA's), (61, 30588), (105, 30426), (117, 30336), (118, 30315),

Gene: Morpher26_45 Start: 31874, Stop: 31551, Start Num: 77

Candidate Starts for Morpher26_45:

(Start: 77 @31874 has 136 MA's), (99, 31775), (101, 31766), (103, 31751), (111, 31721), (119, 31601),

Gene: Morrow_47 Start: 31886, Stop: 31584, Start Num: 77

Candidate Starts for Morrow_47:

(7, 32156), (Start: 77 @31886 has 136 MA's), (111, 31754), (112, 31715), (117, 31667), (119, 31634),

Gene: Mulciber_47 Start: 31256, Stop: 30909, Start Num: 52

Candidate Starts for Mulciber_47:

(Start: 52 @31256 has 25 MA's), (64, 31223), (71, 31202), (117, 30989), (119, 30956),

Gene: Munch_48 Start: 31705, Stop: 31358, Start Num: 52

Candidate Starts for Munch_48:

(Start: 52 @31705 has 25 MA's), (64, 31672), (71, 31651), (117, 31438), (119, 31405),

Gene: Mundrea_45 Start: 31861, Stop: 31538, Start Num: 77

Candidate Starts for Mundrea_45:

(Start: 77 @31861 has 136 MA's), (101, 31753), (103, 31738), (111, 31708), (116, 31633), (119, 31588),

Gene: Myxus_47 Start: 32109, Stop: 31783, Start Num: 39
Candidate Starts for Myxus_47:
(Start: 39 @32109 has 34 MA's), (49, 32085), (68, 32043), (122, 31803),

Gene: NaSiaTalie_47 Start: 32178, Stop: 31744, Start Num: 17
Candidate Starts for NaSiaTalie_47:
(Start: 17 @32178 has 11 MA's), (61, 32079), (73, 32043), (119, 31791),

Gene: Naji_49 Start: 31906, Stop: 31496, Start Num: 29
Candidate Starts for Naji_49:
(5, 32113), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: Nebs_47 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Nebs_47:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Nedarya_45 Start: 30054, Stop: 29713, Start Num: 57
Candidate Starts for Nedarya_45:
(Start: 57 @30054 has 1 MA's), (108, 29883), (117, 29796),

Gene: Neeharika16_48 Start: 30597, Stop: 30169, Start Num: 16
Candidate Starts for Neeharika16_48:
(Start: 12 @30624 has 3 MA's), (Start: 16 @30597 has 49 MA's), (59, 30501), (72, 30465), (97, 30375), (102, 30348), (103, 30345), (122, 30189),

Gene: Nemo27_46 Start: 31879, Stop: 31577, Start Num: 77
Candidate Starts for Nemo27_46:
(Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Newrala_49 Start: 31148, Stop: 30720, Start Num: 16
Candidate Starts for Newrala_49:
(Start: 12 @31175 has 3 MA's), (Start: 16 @31148 has 49 MA's), (59, 31052), (72, 31016), (97, 30926), (102, 30899), (103, 30896), (122, 30740),

Gene: NicoleTera_46 Start: 32449, Stop: 32027, Start Num: 15
Candidate Starts for NicoleTera_46:
(Start: 15 @32449 has 59 MA's), (Start: 17 @32440 has 11 MA's), (32, 32401), (80, 32305), (122, 32047),

Gene: Noelle_46 Start: 32163, Stop: 31840, Start Num: 77
Candidate Starts for Noelle_46:
(Start: 77 @32163 has 136 MA's), (101, 32055), (111, 32010), (119, 31890),

Gene: NorthStar_45 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for NorthStar_45:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: NotAPhaseMom_46 Start: 31884, Stop: 31582, Start Num: 77
Candidate Starts for NotAPhaseMom_46:
(Start: 77 @31884 has 136 MA's), (111, 31752), (112, 31713), (117, 31665), (119, 31632),

Gene: NothingSpecial_45 Start: 32705, Stop: 32271, Start Num: 17

Candidate Starts for NothingSpecial_45:
(Start: 17 @32705 has 11 MA's), (61, 32606), (119, 32318),

Gene: Nyxis_46 Start: 31770, Stop: 31468, Start Num: 77
Candidate Starts for Nyxis_46:
(7, 32040), (Start: 77 @31770 has 136 MA's), (111, 31638), (112, 31599), (117, 31551), (119, 31518),

Gene: OKaNui_46 Start: 31930, Stop: 31628, Start Num: 77
Candidate Starts for OKaNui_46:
(7, 32200), (Start: 77 @31930 has 136 MA's), (111, 31798), (112, 31759), (117, 31711), (119, 31678),

Gene: Obama12_47 Start: 32304, Stop: 32002, Start Num: 77
Candidate Starts for Obama12_47:
(7, 32574), (Start: 77 @32304 has 136 MA's), (111, 32172), (112, 32133), (119, 32052),

Gene: Odin_46 Start: 30872, Stop: 30465, Start Num: 16
Candidate Starts for Odin_46:
(Start: 16 @30872 has 49 MA's), (70, 30773), (117, 30545), (119, 30512),

Gene: Ohfah_47 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Ohfah_47:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Onglai_45 Start: 30450, Stop: 30124, Start Num: 39
Candidate Starts for Onglai_45:
(Start: 39 @30450 has 34 MA's), (49, 30426), (68, 30384), (122, 30144),

Gene: Orange_47 Start: 31254, Stop: 30907, Start Num: 52
Candidate Starts for Orange_47:
(Start: 52 @31254 has 25 MA's), (64, 31221), (71, 31200), (117, 30987), (119, 30954),

Gene: PP_50 Start: 36311, Stop: 35883, Start Num: 40
Candidate Starts for PP_50:
(18, 36377), (Start: 40 @36311 has 1 MA's), (62, 36260), (87, 36179), (114, 35999), (115, 35981),
(117, 35966), (120, 35918), (122, 35906),

Gene: PackMan_46 Start: 32109, Stop: 31783, Start Num: 39
Candidate Starts for PackMan_46:
(Start: 39 @32109 has 34 MA's), (49, 32085), (68, 32043), (122, 31803),

Gene: PainterBoy_48 Start: 31801, Stop: 31439, Start Num: 38
Candidate Starts for PainterBoy_48:
(Start: 38 @31801 has 3 MA's), (48, 31777), (117, 31519),

Gene: Palestino_45 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Palestino_45:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: PeaceMeal1_43 Start: 30752, Stop: 30396, Start Num: 69
Candidate Starts for PeaceMeal1_43:
(Start: 17 @30896 has 11 MA's), (Start: 69 @30752 has 13 MA's), (110, 30569), (116, 30491),

Gene: Peaches_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for Peaches_46:

(7, 32149), (Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Perplexer_45 Start: 31850, Stop: 31527, Start Num: 77

Candidate Starts for Perplexer_45:

(Start: 77 @31850 has 136 MA's), (99, 31751), (101, 31742), (103, 31727), (111, 31697), (119, 31577),

Gene: PeterPeter_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for PeterPeter_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Petersenfast_46 Start: 31261, Stop: 30914, Start Num: 52

Candidate Starts for Petersenfast_46:

(Start: 52 @31261 has 25 MA's), (64, 31228), (71, 31207), (117, 30994), (119, 30961),

Gene: PetiteSangsue_45 Start: 31853, Stop: 31530, Start Num: 77

Candidate Starts for PetiteSangsue_45:

(Start: 77 @31853 has 136 MA's), (99, 31754), (101, 31745), (103, 31730), (111, 31700), (119, 31580),

Gene: Ph8s_49 Start: 31506, Stop: 31078, Start Num: 16

Candidate Starts for Ph8s_49:

(11, 31542), (Start: 16 @31506 has 49 MA's), (117, 31158), (119, 31125),

Gene: Phacado_46 Start: 31879, Stop: 31577, Start Num: 77

Candidate Starts for Phacado_46:

(Start: 77 @31879 has 136 MA's), (111, 31747), (112, 31708), (117, 31660), (119, 31627),

Gene: Phaded_48 Start: 33339, Stop: 32920, Start Num: 15

Candidate Starts for Phaded_48:

(Start: 15 @33339 has 59 MA's), (Start: 52 @33258 has 25 MA's), (82, 33195), (86, 33177), (100, 33123), (119, 32967),

Gene: Phaeder_47 Start: 32109, Stop: 31783, Start Num: 39

Candidate Starts for Phaeder_47:

(Start: 39 @32109 has 34 MA's), (49, 32085), (68, 32043), (122, 31803),

Gene: Pharaoh_41 Start: 31682, Stop: 31311, Start Num: 41

Candidate Starts for Pharaoh_41:

(2, 32006), (Start: 41 @31682 has 3 MA's), (68, 31619), (95, 31523), (117, 31391),

Gene: Phelipe_47 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Phelipe_47:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Phighter1804_46 Start: 31943, Stop: 31620, Start Num: 77

Candidate Starts for Phighter1804_46:

(Start: 77 @31943 has 136 MA's), (82, 31928), (111, 31790), (112, 31751), (117, 31703), (119, 31670),

Gene: Phonnegut_47 Start: 32158, Stop: 31832, Start Num: 39

Candidate Starts for Phonnegut_47:

(Start: 39 @32158 has 34 MA's), (49, 32134), (68, 32092), (122, 31852),

Gene: Phontbonne_46 Start: 31771, Stop: 31469, Start Num: 77

Candidate Starts for Phontbonne_46:
(7, 32041), (Start: 77 @31771 has 136 MA's), (111, 31639), (112, 31600), (117, 31552), (119, 31519),

Gene: Pioneer_47 Start: 32158, Stop: 31832, Start Num: 39
Candidate Starts for Pioneer_47:
(Start: 39 @32158 has 34 MA's), (49, 32134), (68, 32092), (122, 31852),

Gene: Pipcraft_44 Start: 31880, Stop: 31578, Start Num: 77
Candidate Starts for Pipcraft_44:
(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Piro94_47 Start: 32531, Stop: 32109, Start Num: 15
Candidate Starts for Piro94_47:
(Start: 15 @32531 has 59 MA's), (Start: 17 @32522 has 11 MA's), (58, 32429), (61, 32423), (75, 32399), (119, 32156),

Gene: Pmask_49 Start: 31149, Stop: 30721, Start Num: 16
Candidate Starts for Pmask_49:
(Start: 12 @31176 has 3 MA's), (Start: 16 @31149 has 49 MA's), (59, 31053), (72, 31017), (97, 30927), (102, 30900), (103, 30897), (122, 30741),

Gene: Polymorphads_47 Start: 31873, Stop: 31571, Start Num: 77
Candidate Starts for Polymorphads_47:
(7, 32143), (Start: 77 @31873 has 136 MA's), (111, 31741), (112, 31702), (117, 31654), (119, 31621),

Gene: Pomar16_49 Start: 31947, Stop: 31537, Start Num: 29
Candidate Starts for Pomar16_49:
(3, 32274), (4, 32262), (Start: 29 @31947 has 9 MA's), (82, 31827), (88, 31803), (89, 31797), (108, 31704), (117, 31617), (119, 31584),

Gene: Poompha_44 Start: 30750, Stop: 30394, Start Num: 69
Candidate Starts for Poompha_44:
(Start: 17 @30894 has 11 MA's), (Start: 69 @30750 has 13 MA's), (110, 30567), (116, 30489),

Gene: Power_46 Start: 32150, Stop: 31728, Start Num: 15
Candidate Starts for Power_46:
(Start: 15 @32150 has 59 MA's), (Start: 17 @32141 has 11 MA's), (30, 32105), (Start: 52 @32063 has 25 MA's), (119, 31775),

Gene: Priamo_50 Start: 30766, Stop: 30338, Start Num: 16
Candidate Starts for Priamo_50:
(Start: 12 @30793 has 3 MA's), (Start: 16 @30766 has 49 MA's), (59, 30670), (72, 30634), (97, 30544), (102, 30517), (103, 30514),

Gene: Priya_47 Start: 32176, Stop: 31850, Start Num: 39
Candidate Starts for Priya_47:
(Start: 39 @32176 has 34 MA's), (49, 32152), (68, 32110), (122, 31870),

Gene: Pukovnik_46 Start: 32944, Stop: 32528, Start Num: 15
Candidate Starts for Pukovnik_46:
(Start: 15 @32944 has 59 MA's), (23, 32914), (Start: 52 @32866 has 25 MA's), (75, 32821), (93, 32761), (100, 32731), (119, 32575),

Gene: Pumbaa_46 Start: 31825, Stop: 31523, Start Num: 77
Candidate Starts for Pumbaa_46:
(7, 32095), (Start: 77 @31825 has 136 MA's), (111, 31693), (112, 31654), (117, 31606), (119, 31573),

Gene: Qobbit_47 Start: 32138, Stop: 31812, Start Num: 39
Candidate Starts for Qobbit_47:
(Start: 39 @32138 has 34 MA's), (49, 32114), (68, 32072), (122, 31832),

Gene: QueenB2_46 Start: 32110, Stop: 31688, Start Num: 15
Candidate Starts for QueenB2_46:
(Start: 15 @32110 has 59 MA's), (Start: 17 @32101 has 11 MA's), (30, 32065), (Start: 52 @32023 has 25 MA's), (119, 31735),

Gene: QueenBeesly_47 Start: 32097, Stop: 31675, Start Num: 15
Candidate Starts for QueenBeesly_47:
(Start: 15 @32097 has 59 MA's), (Start: 17 @32088 has 11 MA's), (30, 32052), (Start: 52 @32010 has 25 MA's), (119, 31722),

Gene: Quokka_45 Start: 31085, Stop: 30678, Start Num: 16
Candidate Starts for Quokka_45:
(Start: 16 @31085 has 49 MA's), (45, 31049), (74, 30965), (117, 30758), (119, 30725),

Gene: Rachaly_46 Start: 32420, Stop: 31998, Start Num: 15
Candidate Starts for Rachaly_46:
(Start: 15 @32420 has 59 MA's), (Start: 17 @32411 has 11 MA's), (71, 32303), (74, 32291), (95, 32216), (119, 32045),

Gene: Rahalelujah_46 Start: 31411, Stop: 31040, Start Num: 41
Candidate Starts for Rahalelujah_46:
(6, 31597), (9, 31546), (10, 31522), (Start: 41 @31411 has 3 MA's), (66, 31351), (68, 31348), (122, 31060),

Gene: Rebeuca_45 Start: 31840, Stop: 31502, Start Num: 69
Candidate Starts for Rebeuca_45:
(Start: 17 @31984 has 11 MA's), (31, 31933), (Start: 69 @31840 has 13 MA's), (107, 31690), (110, 31675), (116, 31597),

Gene: RedRock_49 Start: 33308, Stop: 32886, Start Num: 15
Candidate Starts for RedRock_49:
(Start: 15 @33308 has 59 MA's), (Start: 17 @33299 has 11 MA's), (45, 33242), (58, 33206), (119, 32933),

Gene: Refuge_46 Start: 33330, Stop: 32986, Start Num: 55
Candidate Starts for Refuge_46:
(50, 33342), (Start: 55 @33330 has 3 MA's), (71, 33288), (72, 33285), (79, 33267), (93, 33213), (95, 33201), (117, 33066), (122, 33006),

Gene: Relief_45 Start: 31877, Stop: 31575, Start Num: 77
Candidate Starts for Relief_45:
(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Retro23_48 Start: 32504, Stop: 32082, Start Num: 15
Candidate Starts for Retro23_48:

(Start: 15 @32504 has 59 MA's), (Start: 17 @32495 has 11 MA's), (58, 32402), (75, 32372), (119, 32129),

Gene: RhynO_46 Start: 31639, Stop: 31301, Start Num: 69
Candidate Starts for RhynO_46:
(Start: 69 @31639 has 13 MA's), (90, 31579), (110, 31474), (116, 31396),

Gene: Rifter_50 Start: 30703, Stop: 30275, Start Num: 16
Candidate Starts for Rifter_50:
(Start: 12 @30730 has 3 MA's), (Start: 16 @30703 has 49 MA's), (59, 30607), (94, 30493), (103, 30451), (122, 30295),

Gene: Roksolana_50 Start: 31185, Stop: 30757, Start Num: 16
Candidate Starts for Roksolana_50:
(Start: 12 @31212 has 3 MA's), (Start: 16 @31185 has 49 MA's), (59, 31089), (72, 31053), (97, 30963), (102, 30936), (103, 30933), (122, 30777),

Gene: Romney_46 Start: 31877, Stop: 31575, Start Num: 77
Candidate Starts for Romney_46:
(7, 32147), (Start: 77 @31877 has 136 MA's), (88, 31835), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Roosevelt_45 Start: 31882, Stop: 31580, Start Num: 77
Candidate Starts for Roosevelt_45:
(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Rosa24_45 Start: 31911, Stop: 31609, Start Num: 77
Candidate Starts for Rosa24_45:
(7, 32181), (Start: 77 @31911 has 136 MA's), (88, 31869), (111, 31779), (112, 31740), (117, 31692), (119, 31659),

Gene: Rowdy_49 Start: 31547, Stop: 31209, Start Num: 69
Candidate Starts for Rowdy_49:
(Start: 69 @31547 has 13 MA's), (90, 31487), (110, 31382), (116, 31304),

Gene: Ruin_46 Start: 31873, Stop: 31571, Start Num: 77
Candidate Starts for Ruin_46:
(7, 32143), (Start: 77 @31873 has 136 MA's), (111, 31741), (112, 31702), (117, 31654), (119, 31621),

Gene: RyeScarlet_48 Start: 32133, Stop: 31807, Start Num: 39
Candidate Starts for RyeScarlet_48:
(Start: 39 @32133 has 34 MA's), (49, 32109), (68, 32067), (122, 31827),

Gene: Sabertooth_46 Start: 31882, Stop: 31580, Start Num: 77
Candidate Starts for Sabertooth_46:
(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Sachima_44 Start: 32043, Stop: 31717, Start Num: 39
Candidate Starts for Sachima_44:
(Start: 39 @32043 has 34 MA's), (49, 32019), (68, 31977), (122, 31737),

Gene: Salz_46 Start: 31232, Stop: 30885, Start Num: 52
Candidate Starts for Salz_46:

(Start: 52 @31232 has 25 MA's), (64, 31199), (71, 31178), (117, 30965), (119, 30932),

Gene: Scamp_46 Start: 31882, Stop: 31580, Start Num: 77

Candidate Starts for Scamp_46:

(7, 32152), (Start: 77 @31882 has 136 MA's), (111, 31750), (112, 31711), (117, 31663), (119, 31630),

Gene: Scherzo_47 Start: 32347, Stop: 32021, Start Num: 39

Candidate Starts for Scherzo_47:

(Start: 39 @32347 has 34 MA's), (49, 32323), (68, 32281), (122, 32041),

Gene: SemperFi_48 Start: 32365, Stop: 31943, Start Num: 15

Candidate Starts for SemperFi_48:

(Start: 15 @32365 has 59 MA's), (Start: 17 @32356 has 11 MA's), (58, 32263), (75, 32233), (119, 31990),

Gene: SenorClean_44 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for SenorClean_44:

(Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Serenity_47 Start: 31249, Stop: 30842, Start Num: 16

Candidate Starts for Serenity_47:

(Start: 16 @31249 has 49 MA's), (93, 31066), (102, 31021), (117, 30922), (119, 30889),

Gene: Severus_43 Start: 30750, Stop: 30394, Start Num: 69

Candidate Starts for Severus_43:

(Start: 17 @30894 has 11 MA's), (Start: 69 @30750 has 13 MA's), (110, 30567), (116, 30489),

Gene: Shaka_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Shaka_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Sham4_47 Start: 31260, Stop: 30913, Start Num: 52

Candidate Starts for Sham4_47:

(Start: 52 @31260 has 25 MA's), (64, 31227), (71, 31206), (117, 30993), (119, 30960),

Gene: Shapes_49 Start: 31547, Stop: 31209, Start Num: 69

Candidate Starts for Shapes_49:

(Start: 69 @31547 has 13 MA's), (90, 31487), (110, 31382), (116, 31304),

Gene: SheaKeira_46 Start: 31684, Stop: 31340, Start Num: 41

Candidate Starts for SheaKeira_46:

(Start: 41 @31684 has 3 MA's), (47, 31669), (49, 31663), (68, 31621), (82, 31579), (95, 31546), (122, 31360), (123, 31351),

Gene: SheldonCooper_48 Start: 32303, Stop: 32001, Start Num: 77

Candidate Starts for SheldonCooper_48:

(7, 32573), (Start: 77 @32303 has 136 MA's), (111, 32171), (112, 32132), (119, 32051),

Gene: Shygu2_45 Start: 31853, Stop: 31530, Start Num: 77

Candidate Starts for Shygu2_45:

(Start: 77 @31853 has 136 MA's), (111, 31700), (112, 31661), (119, 31580),

Gene: Skipitt_45 Start: 31874, Stop: 31572, Start Num: 77

Candidate Starts for Skipitt_45:

(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: Sknot_49 Start: 32181, Stop: 31747, Start Num: 17

Candidate Starts for Sknot_49:

(Start: 17 @32181 has 11 MA's), (61, 32082), (73, 32046), (119, 31794),

Gene: Smeagan_50 Start: 32817, Stop: 32395, Start Num: 15

Candidate Starts for Smeagan_50:

(Start: 15 @32817 has 59 MA's), (Start: 17 @32808 has 11 MA's), (58, 32715), (61, 32709), (75, 32685), (119, 32442),

Gene: SmellyB_49 Start: 31137, Stop: 30709, Start Num: 16

Candidate Starts for SmellyB_49:

(Start: 12 @31164 has 3 MA's), (Start: 16 @31137 has 49 MA's), (59, 31041), (72, 31005), (97, 30915), (102, 30888), (103, 30885), (122, 30729),

Gene: SnapTap_47 Start: 32176, Stop: 31754, Start Num: 15

Candidate Starts for SnapTap_47:

(Start: 15 @32176 has 59 MA's), (Start: 17 @32167 has 11 MA's), (30, 32131), (Start: 52 @32089 has 25 MA's), (119, 31801),

Gene: Snape_47 Start: 31258, Stop: 30911, Start Num: 52

Candidate Starts for Snape_47:

(Start: 52 @31258 has 25 MA's), (64, 31225), (71, 31204), (117, 30991), (119, 30958),

Gene: SororFago_50 Start: 33759, Stop: 33412, Start Num: 39

Candidate Starts for SororFago_50:

(25, 33783), (Start: 39 @33759 has 34 MA's), (95, 33624), (96, 33618), (117, 33492), (122, 33432),

Gene: Sparxx_47 Start: 31875, Stop: 31573, Start Num: 77

Candidate Starts for Sparxx_47:

(7, 32145), (Start: 77 @31875 has 136 MA's), (111, 31743), (112, 31704), (117, 31656), (119, 31623),

Gene: Spino_45 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for Spino_45:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Spouty_47 Start: 32175, Stop: 31849, Start Num: 39

Candidate Starts for Spouty_47:

(Start: 39 @32175 has 34 MA's), (49, 32151), (68, 32109), (122, 31869),

Gene: StarStuff_49 Start: 31909, Stop: 31499, Start Num: 29

Candidate Starts for StarStuff_49:

(3, 32236), (4, 32224), (Start: 29 @31909 has 9 MA's), (82, 31789), (88, 31765), (89, 31759), (108, 31666), (117, 31579), (119, 31546),

Gene: Steamy_43 Start: 31608, Stop: 31282, Start Num: 54

Candidate Starts for Steamy_43:

(13, 31740), (26, 31668), (51, 31614), (Start: 54 @31608 has 1 MA's), (85, 31515), (87, 31509), (95, 31497), (117, 31362),

Gene: Stink_46 Start: 32321, Stop: 31998, Start Num: 77

Candidate Starts for Stink_46:

(Start: 77 @32321 has 136 MA's), (82, 32306), (101, 32213), (103, 32198), (111, 32168), (116, 32093), (119, 32048),

Gene: Sunhee_50 Start: 32074, Stop: 31730, Start Num: 44

Candidate Starts for Sunhee_50:

(44, 32074), (66, 32020), (81, 31978), (96, 31936), (117, 31810), (122, 31750),

Gene: SuperAwesome_49 Start: 31148, Stop: 30720, Start Num: 16

Candidate Starts for SuperAwesome_49:

(Start: 12 @31175 has 3 MA's), (Start: 16 @31148 has 49 MA's), (59, 31052), (72, 31016), (97, 30926), (102, 30899), (103, 30896), (122, 30740),

Gene: SuperCallie99_48 Start: 31021, Stop: 30593, Start Num: 16

Candidate Starts for SuperCallie99_48:

(Start: 12 @31048 has 3 MA's), (Start: 16 @31021 has 49 MA's), (59, 30925), (72, 30889), (97, 30799), (102, 30772), (103, 30769), (122, 30613),

Gene: Superchunk_46 Start: 30723, Stop: 30316, Start Num: 16

Candidate Starts for Superchunk_46:

(Start: 16 @30723 has 49 MA's), (70, 30624), (100, 30510), (117, 30396), (119, 30363),

Gene: SweetiePie_47 Start: 32305, Stop: 31883, Start Num: 15

Candidate Starts for SweetiePie_47:

(Start: 15 @32305 has 59 MA's), (Start: 17 @32296 has 11 MA's), (58, 32203), (75, 32173), (119, 31930),

Gene: SwirlSquare_52 Start: 31390, Stop: 30980, Start Num: 29

Candidate Starts for SwirlSquare_52:

(Start: 29 @31390 has 9 MA's), (71, 31300), (76, 31285), (84, 31258), (88, 31246), (89, 31240), (98, 31195), (117, 31060), (119, 31027),

Gene: Taquarus_46 Start: 31883, Stop: 31581, Start Num: 77

Candidate Starts for Taquarus_46:

(7, 32153), (Start: 77 @31883 has 136 MA's), (111, 31751), (112, 31712), (117, 31664), (119, 31631),

Gene: TarsusIV_45 Start: 31964, Stop: 31542, Start Num: 15

Candidate Starts for TarsusIV_45:

(Start: 15 @31964 has 59 MA's), (71, 31847), (74, 31835), (119, 31589),

Gene: Temprado_51 Start: 31328, Stop: 30873, Start Num: 12

Candidate Starts for Temprado_51:

(Start: 12 @31328 has 3 MA's), (Start: 16 @31301 has 49 MA's), (59, 31205), (94, 31091), (103, 31049), (122, 30893),

Gene: Thanksgivukkah_45 Start: 31878, Stop: 31576, Start Num: 77

Candidate Starts for Thanksgivukkah_45:

(7, 32148), (Start: 77 @31878 has 136 MA's), (111, 31746), (112, 31707), (117, 31659), (119, 31626),

Gene: Timothy_47 Start: 31235, Stop: 30888, Start Num: 52

Candidate Starts for Timothy_47:

(Start: 52 @31235 has 25 MA's), (64, 31202), (71, 31181), (117, 30968), (119, 30935),

Gene: TinaFeyge_46 Start: 31875, Stop: 31573, Start Num: 77
Candidate Starts for TinaFeyge_46:
(7, 32145), (Start: 77 @31875 has 136 MA's), (111, 31743), (112, 31704), (117, 31656), (119, 31623),

Gene: TinyTimmy_47 Start: 31278, Stop: 30931, Start Num: 52
Candidate Starts for TinyTimmy_47:
(Start: 52 @31278 has 25 MA's), (64, 31245), (71, 31224), (117, 31011), (119, 30978),

Gene: Tinybot_45 Start: 31907, Stop: 31605, Start Num: 77
Candidate Starts for Tinybot_45:
(7, 32177), (Start: 77 @31907 has 136 MA's), (111, 31775), (112, 31736), (117, 31688), (119, 31655),

Gene: TipsytheTRex_44 Start: 31322, Stop: 30915, Start Num: 16
Candidate Starts for TipsytheTRex_44:
(Start: 16 @31322 has 49 MA's), (93, 31139), (117, 30995), (119, 30962),

Gene: TiroTheta9_46 Start: 31874, Stop: 31572, Start Num: 77
Candidate Starts for TiroTheta9_46:
(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: Toaka_46 Start: 31676, Stop: 31308, Start Num: 39
Candidate Starts for Toaka_46:
(Start: 39 @31676 has 34 MA's), (49, 31652), (68, 31610), (122, 31328), (123, 31319),

Gene: Tomathan_49 Start: 31906, Stop: 31496, Start Num: 29
Candidate Starts for Tomathan_49:
(3, 32233), (4, 32221), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: ToneTone_46 Start: 30864, Stop: 30436, Start Num: 16
Candidate Starts for ToneTone_46:
(Start: 12 @30891 has 3 MA's), (Start: 16 @30864 has 49 MA's), (59, 30768), (94, 30654), (103, 30612), (122, 30456),

Gene: Topanga_43 Start: 31489, Stop: 31151, Start Num: 69
Candidate Starts for Topanga_43:
(Start: 17 @31633 has 11 MA's), (31, 31582), (Start: 69 @31489 has 13 MA's), (107, 31339), (110, 31324), (116, 31246),

Gene: Travvers_49 Start: 31906, Stop: 31496, Start Num: 29
Candidate Starts for Travvers_49:
(3, 32233), (4, 32221), (Start: 29 @31906 has 9 MA's), (82, 31786), (88, 31762), (89, 31756), (108, 31663), (117, 31576), (119, 31543),

Gene: Trike_43 Start: 30758, Stop: 30402, Start Num: 69
Candidate Starts for Trike_43:
(Start: 17 @30902 has 11 MA's), (Start: 69 @30758 has 13 MA's), (110, 30575), (116, 30497),

Gene: Trixie_45 Start: 32233, Stop: 31820, Start Num: 15
Candidate Starts for Trixie_45:
(Start: 15 @32233 has 59 MA's), (Start: 52 @32155 has 25 MA's), (59, 32137), (119, 31867),

Gene: Trooper_48 Start: 32526, Stop: 32104, Start Num: 15

Candidate Starts for Trooper_48:

(Start: 15 @32526 has 59 MA's), (Start: 17 @32517 has 11 MA's), (37, 32469), (Start: 52 @32439 has 25 MA's), (76, 32391), (80, 32382), (119, 32151),

Gene: TroyPia_47 Start: 31878, Stop: 31576, Start Num: 77

Candidate Starts for TroyPia_47:

(7, 32148), (Start: 77 @31878 has 136 MA's), (111, 31746), (112, 31707), (117, 31659), (119, 31626),

Gene: Tubs_47 Start: 32109, Stop: 31783, Start Num: 39

Candidate Starts for Tubs_47:

(Start: 39 @32109 has 34 MA's), (49, 32085), (68, 32043), (122, 31803),

Gene: Tucker_49 Start: 30751, Stop: 30323, Start Num: 16

Candidate Starts for Tucker_49:

(Start: 12 @30778 has 3 MA's), (Start: 16 @30751 has 49 MA's), (59, 30655), (94, 30541), (103, 30499), (122, 30343),

Gene: Turbido_48 Start: 32560, Stop: 32138, Start Num: 15

Candidate Starts for Turbido_48:

(Start: 15 @32560 has 59 MA's), (Start: 17 @32551 has 11 MA's), (58, 32458), (75, 32428), (119, 32185),

Gene: Twister_43 Start: 31400, Stop: 31062, Start Num: 69

Candidate Starts for Twister_43:

(Start: 17 @31544 has 11 MA's), (31, 31493), (Start: 69 @31400 has 13 MA's), (107, 31250), (110, 31235), (116, 31157),

Gene: TygerBlood_46 Start: 31880, Stop: 31578, Start Num: 77

Candidate Starts for TygerBlood_46:

(7, 32150), (Start: 77 @31880 has 136 MA's), (111, 31748), (112, 31709), (117, 31661), (119, 31628),

Gene: Ugenie5_44 Start: 32346, Stop: 32020, Start Num: 39

Candidate Starts for Ugenie5_44:

(Start: 39 @32346 has 34 MA's), (49, 32322), (68, 32280), (122, 32040),

Gene: Ulysses_45 Start: 31557, Stop: 31255, Start Num: 77

Candidate Starts for Ulysses_45:

(7, 31827), (Start: 77 @31557 has 136 MA's), (111, 31425), (112, 31386), (117, 31338), (119, 31305),

Gene: Updawg_48 Start: 32422, Stop: 31988, Start Num: 17

Candidate Starts for Updawg_48:

(Start: 17 @32422 has 11 MA's), (61, 32323), (73, 32287), (119, 32035),

Gene: VA6_47 Start: 32280, Stop: 31867, Start Num: 15

Candidate Starts for VA6_47:

(Start: 15 @32280 has 59 MA's), (56, 32190), (61, 32181), (80, 32145), (96, 32079), (119, 31914),

Gene: VC3_50 Start: 32346, Stop: 31912, Start Num: 27

Candidate Starts for VC3_50:

(Start: 27 @32346 has 4 MA's), (Start: 29 @32343 has 9 MA's), (68, 32244), (82, 32202), (88, 32178), (108, 32079), (117, 31992), (119, 31959),

Gene: Vanisoa_46 Start: 32705, Stop: 32358, Start Num: 39

Candidate Starts for Vanisoa_46:

(6, 32888), (9, 32837), (10, 32813), (Start: 39 @32705 has 34 MA's), (49, 32681), (68, 32639), (Start: 78 @32609 has 1 MA's), (122, 32378),

Gene: VohminGhazi_49 Start: 31138, Stop: 30710, Start Num: 16

Candidate Starts for VohminGhazi_49:

(Start: 12 @31165 has 3 MA's), (Start: 16 @31138 has 49 MA's), (59, 31042), (72, 31006), (97, 30916), (102, 30889), (103, 30886), (122, 30730),

Gene: WalterMcMickey_43 Start: 31400, Stop: 31062, Start Num: 69

Candidate Starts for WalterMcMickey_43:

(Start: 17 @31544 has 11 MA's), (31, 31493), (Start: 69 @31400 has 13 MA's), (107, 31250), (110, 31235), (116, 31157),

Gene: Wander_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Wander_46:

(Start: 77 @31877 has 136 MA's), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: WeiHuaDA_49 Start: 33119, Stop: 32706, Start Num: 16

Candidate Starts for WeiHuaDA_49:

(Start: 16 @33119 has 49 MA's), (Start: 52 @33041 has 25 MA's), (74, 32999), (119, 32753),

Gene: Whabigail7_48 Start: 32545, Stop: 32123, Start Num: 15

Candidate Starts for Whabigail7_48:

(Start: 15 @32545 has 59 MA's), (Start: 17 @32536 has 11 MA's), (58, 32443), (61, 32437), (119, 32170),

Gene: WideWale_48 Start: 32422, Stop: 31988, Start Num: 17

Candidate Starts for WideWale_48:

(Start: 17 @32422 has 11 MA's), (61, 32323), (73, 32287), (119, 32035),

Gene: Wiks_48 Start: 30932, Stop: 30504, Start Num: 16

Candidate Starts for Wiks_48:

(Start: 12 @30959 has 3 MA's), (Start: 16 @30932 has 49 MA's), (59, 30836), (94, 30722), (103, 30680), (122, 30524),

Gene: Wilbur_46 Start: 31877, Stop: 31575, Start Num: 77

Candidate Starts for Wilbur_46:

(7, 32147), (Start: 77 @31877 has 136 MA's), (88, 31835), (111, 31745), (112, 31706), (117, 31658), (119, 31625),

Gene: Wile_45 Start: 31884, Stop: 31561, Start Num: 77

Candidate Starts for Wile_45:

(Start: 77 @31884 has 136 MA's), (99, 31785), (101, 31776), (103, 31761), (111, 31731), (119, 31611),

Gene: Wizard007_46 Start: 31885, Stop: 31583, Start Num: 77

Candidate Starts for Wizard007_46:

(7, 32155), (Start: 77 @31885 has 136 MA's), (111, 31753), (112, 31714), (117, 31666), (119, 31633),

Gene: WunderPhul_49 Start: 30930, Stop: 30502, Start Num: 16

Candidate Starts for WunderPhul_49:

(Start: 12 @30957 has 3 MA's), (Start: 16 @30930 has 49 MA's), (59, 30834), (94, 30720), (103, 30678), (122, 30522),

Gene: Xena_44 Start: 31850, Stop: 31527, Start Num: 77

Candidate Starts for Xena_44:

(Start: 77 @31850 has 136 MA's), (99, 31751), (101, 31742), (103, 31727), (111, 31697), (119, 31577),

Gene: XianYue_46 Start: 31886, Stop: 31548, Start Num: 46

Candidate Starts for XianYue_46:

(Start: 46 @31886 has 1 MA's), (108, 31712), (119, 31595),

Gene: Yecey3_48 Start: 31582, Stop: 31238, Start Num: 34

Candidate Starts for Yecey3_48:

(Start: 34 @31582 has 1 MA's), (49, 31561), (68, 31519), (82, 31477), (95, 31444), (122, 31258),

Gene: YoSam321_46 Start: 31874, Stop: 31572, Start Num: 77

Candidate Starts for YoSam321_46:

(7, 32144), (Start: 77 @31874 has 136 MA's), (111, 31742), (112, 31703), (117, 31655), (119, 31622),

Gene: Yokurt_49 Start: 30959, Stop: 30504, Start Num: 12

Candidate Starts for Yokurt_49:

(Start: 12 @30959 has 3 MA's), (Start: 16 @30932 has 49 MA's), (59, 30836), (94, 30722), (103, 30680), (122, 30524),

Gene: Zaka_49 Start: 30932, Stop: 30504, Start Num: 16

Candidate Starts for Zaka_49:

(Start: 12 @30959 has 3 MA's), (Start: 16 @30932 has 49 MA's), (59, 30836), (94, 30722), (103, 30680), (122, 30524),

Gene: Zimmer_44 Start: 32823, Stop: 32467, Start Num: 55

Candidate Starts for Zimmer_44:

(Start: 55 @32823 has 3 MA's), (71, 32781), (93, 32706), (95, 32694), (100, 32676), (117, 32547), (122, 32487),

Gene: Zulu_49 Start: 30732, Stop: 30304, Start Num: 16

Candidate Starts for Zulu_49:

(Start: 12 @30759 has 3 MA's), (Start: 16 @30732 has 49 MA's), (59, 30636), (94, 30522), (103, 30480), (122, 30324),