Pham 288939

1: Goose_16 + 103
2: PeaceMeal_15 + 7
3: Munch_17 + 27
4: Pharaoh_17
5: Remus_19 + 24
6: 40AC_20
7: Kimona_13
8: QueenBeesly_17 + 27
9: Tomathan_20 + 53
10: IronMan_19
11: Jerm_19
12: CRB1_17
13: Bradman_16 + 2
14: NicoleTera_21 + 9
15: Miko_20 + 5
16: Fameo_17 + 1
17: L5_18
18: Landor_18 + 1
19: MissWhite_17
20: Tristan_18 + 2
21: Koduck_18
22: Serenity_16 + 2
23: Journey13_15
24: Iwokeuplikedis_18
25: Deloris_18 + 1
26: Che12_19
27: Heffalump_19
28: BabyBack_19
29: Acolyte_17
30: Jsquared_16
31: NothingSpecial_19
32: FatCactus_15
33: Kinmap_16
34: Norbert_16 + 12
35: Anubis_20 + 66
36: Veracruz_16 + 1
37: HeiDan_16 + 16
38: SoilDragon_18 + 1
39: Malinsilva_20
40: Isca_16 + 2
41: BabyRay_16
42: JF4_16 + 4
43: Phantastic_16
44: Zetzy_17
45: MA5_16
46: Noelle_16 + 59
47: BlessJoy_20 + 42
48: Ritter_20 + 8
49: Cookiedough_20 + 12
50: JewelBug_20 + 1

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51: Pmask_20
52: FlyCatcher_20 + 2
53: PP_26
54: Espica_13 + 16
55: Krishelle_13 + 8
56: AngryOrchard_12 + 5
57: RGL3_6
58: Alpacados_12
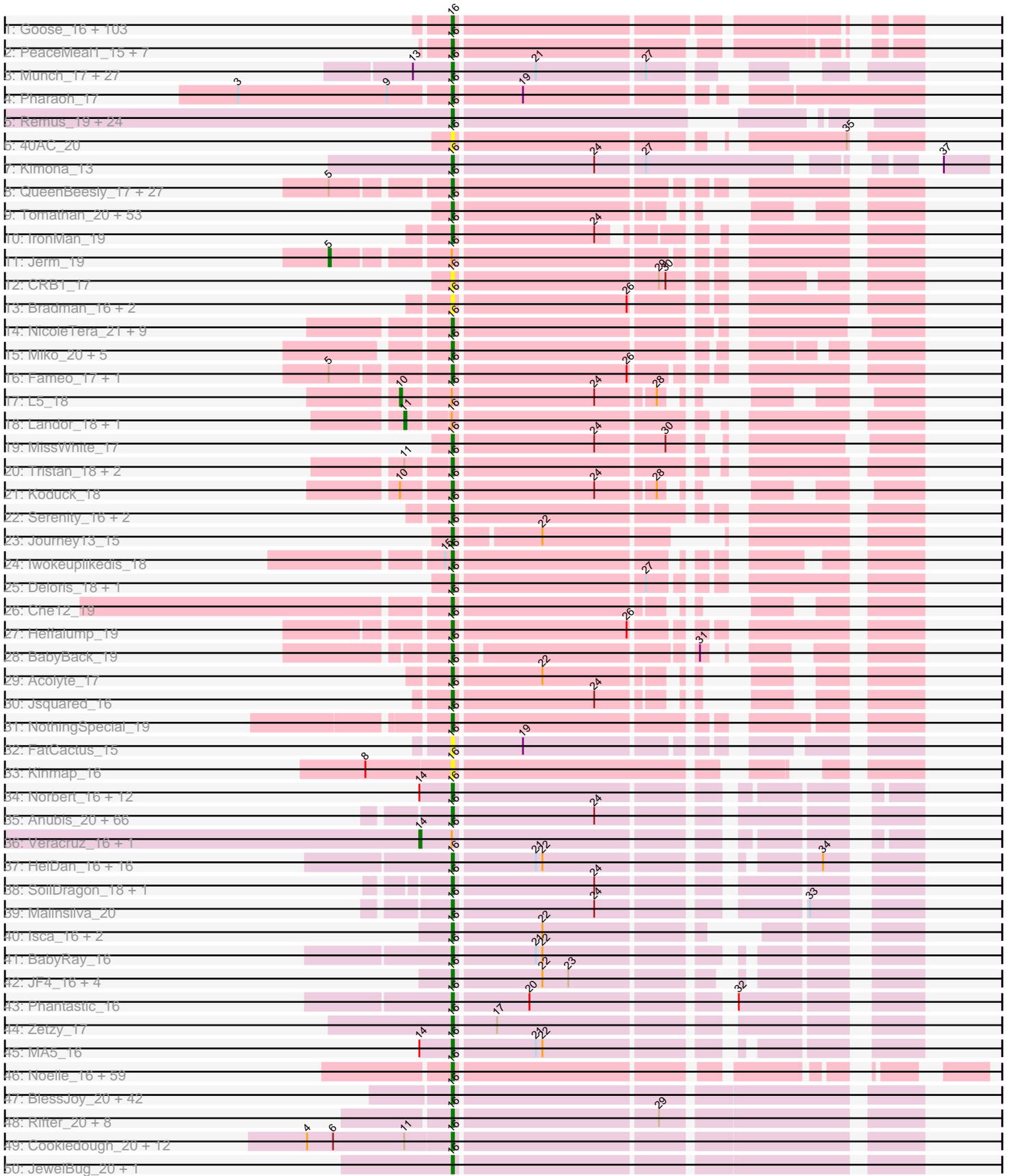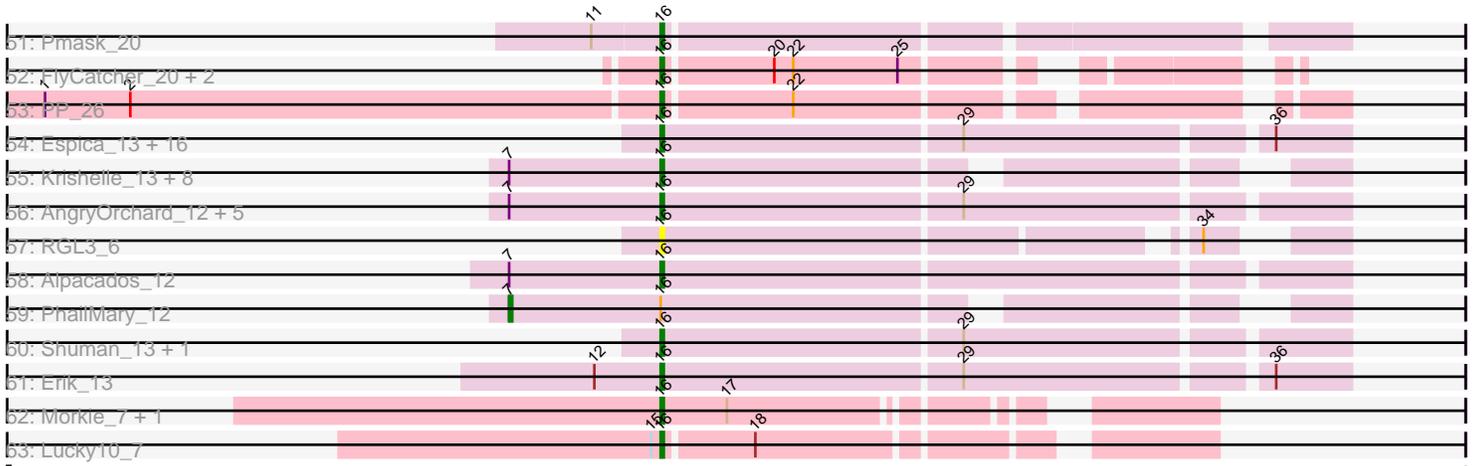59: PhaliMary_12
60: Shuman_13 + 1
61: Erik_13
62: Morkie_7 + 1
63: Lucky10_7

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 288939 Report

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

Pham number 288939 has 584 members, 63 are drafts.

Phages represented in each track:
• Track 1 : Goose_16, Eaglepride_17, Scamp_16, BubbleTrouble_16, Baby16_16, RhynO_17, Huxley_16, Spino_16, Chiqui_15, Roosevelt_16, Kremtemulon_16, Romney_16, Taquarus_16, Kyee_16, Rebeuca_17, Pipcraft_16, Maverick_16, Cocoaberry_16, Houdini22_16, NorthStar_16, Eagle_15, ChampagnePapi_16, Commander_16, Bombshell_16, Mayonnaise_16, Ulysses_15, SenorClean_16, Chaph_16, Connomayer_16, KFPoly_16, DontArgue_15, BangNhom_15, Obama12_16, Phacado_16, Koan_16, Funston_16, Chupacabra_16, OKCentral2016_16, Wizard007_16, Citius_16, Deano_16, LHTSCC_16, MeeZee_16, Cerulean_16, Gadost_16, NotAPhaseMom_16, Sultana_16, Dhanush_16, Medusa_16, DustyMartin_19, Pumbaa_16, Bartimeaus_16, Morrow_16, Blackmoor_16, Bruiser_16, Happiness_16, Shapes_19, Eros_16, Burger_15, Iracema64_16, SteMason_15, Albee_16, Flux_16, Anthony_16, Palestino_16, Annyong_16, Caelakin_16, Stasia_17, KekoraPapaka_15, Twister_16, JoongJeon_16, Melvin_16, LochMonster_16, Shaka_16, BabyJohn_15, RockieBear_15, Millski_16, Avle17_16, Phelipe_16, Mazhar510_16, Topanga_16, WalterMcMickey_16, Eris_16, Thanksgivukkah_16, Cintron_16, Broseidon_16, Druantia_16, Lorenzo_16, SheldonCooper_16, Kratark_16, Kristoff_17, Rowdy_19, Kingmustik0402_16, PeterPeter_16, CentreCat_16, Nemo27_16, LittleB_16, Edison31_16, Phighter1804_16, Wander_16, Trike_14, DirtyDunning_16, TroyPia_16, Wilbur_16
• Track 2 : PeaceMeal1_15, DroogsArmy_17, HINdeR_16, Severus_15, Drake94_15, KittenMittens_15, Poompha_15, Timshel_17
• Track 3 : Munch_17, Salz_17, Lucivia_17, Orange_17, MaCh_17, Insomnia_17, Jabith_17, TinyTimmy_17, Et2Brutus_16, Flaverint_17, Saskia_16, Wolpertinger_16, Sham4_17, Bachome_17, Petersenfast_16, Ebony_17, Fibonacci_17, Gilberta_17, Timothy_17, Joselito_17, Aneem_17, Mulciber_17, Kimba_17, Bud_17, Bowtie_17, Mabel_17, Hutc2_17, Snape_17
• Track 4 : Pharaoh_17
• Track 5 : Remus_19, Ravana_20, MinecraftSteve_20, Switzerland_19, Looper_20, LastResort_19, JSwag_19, ShayRa_20, Warrior24_19, Iceman_17, Rosalind_19, KatherineG_19, DekHockey33_19, Oofda_19, Waits_19, Nebulosus_19, ReMo_19, OKaNui_17, Anaysia_19, Battleship_20, Epsocamisio_19, Nedarya_18, Strosahl_19, Boohoo_19, Soups_19
• Track 6 : 40AC_20
• Track 7 : Kimona_13
• Track 8 : QueenBeesly_17, Anselm_17, AN3_17, SemperFi_19, Georgie2_18, Dignity_19, AbbyPaige_19, SweetiePie_17, Power_17, DudeLittle_17, Benvolio_17,

LionsBait_18, Retro23_17, Dalmatian_17, Smeagan_19, Bugsy_19, LilTurb_19, Whabigail7_19, VA6_17, HippoHollow_18, Agape74_19, JoshKayV_19, Leviathan_19, SnapTap_17, Echild_17, Crucio_17, FiringLine_17, Turbido_19
• Track 9 : Tomathan_20, First_0017, D29_18, PainterBoy_18, EvilGenius_19, Superchunk_16, Caraxes_16, Terrific_21, Anon_17, Travvers_20, Trooper_17, HarryHoudini_19, Updawg_19, BiancaTri92_19, ForesterFrank_18, DBQu4n_20, NaSiaTalie_17, Adzzy_18, Duplo_20, EZMoney23_21, Flare16_17, Equemioh13_19, AnnaL29_20, Prudy_19, SwirlSquare_18, Gratitude_18, Kerberos_20, 20ES_17, D32_20, Sknot_17, KingCyrus_19, Elle_17, Lucyedi_18, Baehexic_18, TarsusIV_17, Changeling_20, MiculUcigas_17, Pomar16_20, WideWale_19, Kalpine_20, StarStuff_20, Odin_16, Ph8s_18, Trixie_20, ChipMunk_19, Centaur_19, Drake55_19, Naji_20, LadyBird_17, Tailonex_14, WeiHuaDA_23, EagleEye_19, BobSwaget_20, Piro94_18
• Track 10 : IronMan_19
• Track 11 : Jerm_19
• Track 12 : CRB1_17
• Track 13 : Bradman_16, Quokka_15, MajorMajor_16
• Track 14 : NicoleTera_21, Mundrea_16, ArcherNM_19, Loser_20, RedRock_20, Stink_16, AvatarAhPeg_16, Miramae_16, Cindaradix_15, DeerParkTS_18
• Track 15 : Miko_20, Malec_18, Colin_21, Leogania_19, Lokk_20, Larenn_18
• Track 16 : Fameo_17, QueenB2_17
• Track 17 : L5_18
• Track 18 : Landor_18, Phaded_20
• Track 19 : MissWhite_17
• Track 20 : Tristan_18, Bactobuster_18, Jaan_20
• Track 21 : Koduck_18
• Track 22 : Serenity_16, XianYue_17, Pukovnik_19
• Track 23 : Journey13_15
• Track 24 : Iwokeuplikedis_18
• Track 25 : Deloris_18, BengiVuitton_18
• Track 26 : Che12_19
• Track 27 : Heffalump_19
• Track 28 : BabyBack_19
• Track 29 : Acolyte_17
• Track 30 : Jsquared_16
• Track 31 : NothingSpecial_19
• Track 32 : FatCactus_15
• Track 33 : Kinmap_16
• Track 34 : Norbert_16, Noella_17, ResDef_17, Caviar_17, Popcicle_17, Texage_16, Pocahontas_17, Todacoro_17, Hookmount_17, EtoileNova_17, Margo_17, Lambert1_17, QuinnKiro_16
• Track 35 : Anubis_20, LugYA_20, Misomonster_20, Taurus_18, JenCasNa_18, LarryKay_18, Louie6_18, Lowa_18, Wooldri_20, Mainiac_18, Hercules11_18, P28Green_18, Bigflo_18, Stagni_18, MadMarie_18, TinyPebbles_18, Rummer_18, Methuselah_18, KADY_19, MoneyMay_18, Marie_18, HashRod_19, SoYo_18, Sabinator_18, Bxz2_18, Beauxregard13_18, Gwennie_17, PGHhamlin_20, Croquant_19, Grub_18, Ollie_18, PotatoSplit_19, Farber_18, Microwolf_18, AgronaGT15_18, Vix_18, Dieselweasel_18, BreSam8_18, MuchMore_20, BuzzBuzz_17, Colbster_18, DaHudson_18, Fernando_18, GtownJaz_18, Spike509_18, Daishi_17, Lilith_18, Phoebe_18, Grum1_18, LBerry_18, JHC117_18, Soshari_20, Grif_18, Tiffany_18, AugsMagnumOpus_20, EpicPhail_18, Penny1_18, Montavir_17, Pembroke_18, Cullens_18, Phoxy_18, Aglet_18, MarQuardt_18, Watson_18, Sabia_18, GingkoMaracino_18, Snickers_18

- Track 36 : Veracruz_16, Panamaxus_17
- Track 37 : HelDan_16, Kachowdy_16, Giroux_17, Bugatti_16, Marchesa_16, Idleandcovert_16, Scout_16, Pistachio_17, Heathen_16, Puppy_17, Roimos_16, Zarafa_16, Clammy_16, TNguyen7_16, BlueBird_17, SaturnRing_16, DropBear_16
- Track 38 : SoilDragon_18, Jobu08_18
- Track 39 : Malinsilva_20
- Track 40 : Isca_16, TipsytheTRex_16, Rockstar_16
- Track 41 : BabyRay_16
- Track 42 : JF4_16, B1_14, MK4_16, Fred313_16, JF2_16
- Track 43 : Phantastic_16
- Track 44 : Zetzy_17
- Track 45 : MA5_16
- Track 46 : Noelle_16, Backyardigan_16, Eurydice_16, GaugeLDP_19, Rachaly_20, Perplexer_16, ANI8_20, Bumblebee11_16, Shygu2_16, Rosa24_15, BellusTerra_16, JetBlade_16, Peaches_16, Badger_16, LittleGuy_16, Ohfah_16, LeoAvram_16, Florean_16, ICleared_16, Polymorphads_16, Lunsford_17, Nebs_16, Xena_16, Datway_16, HamSlice_15, AN9_20, Arturo_15, PetiteSangsue_16, Clarenza_16, Wile_16, Katalie136_16, YoSam321_16, Phontbonne_16, Cici_16, Sparxx_16, TiroTheta9_16, Maxo_16, Morpher26_16, Ruin_16, Koreni_15, AbbysRanger_16, TygerBlood_16, Eapen_16, C3_15, Sabertooth_16, Tinybot_15, Alberto7_17, Camperdownii_15, Abdiel_16, LappelDuVide_16, Achebe_16, Holli_16, Relief_16, Kampy_16, TinaFeyge_16, Nyxis_16, Jaykayelowell_16, Lemur_16, VC3_20, Skipitt_16
- Track 47 : BlessJoy_20, DelvinSonDorr_19, Wiks_20, Heliosoles_18, Calvinny_19, CloudWang3_20, PhishRPhriends_17, VohminGhazi_20, ACFishhook_18, HaveUMetTed_19, OlanP_18, SmellyB_20, Gemma_18, Reba_19, Manu_19, Roksolana_20, Chartreuse_20, Pawn_18, DaVinci_20, Blinn1_20, Kalb97_19, Yokurt_20, Kalnoky_19, Kipper29_20, Artemis2UCLA_20, WunderPhul_20, EricB_20, Groupthink_19, Phranny_19, Kazan_20, PurpleHaze_18, Indra_20, Hexamo_20, Zulu_20, ClownCar_19, Lilbunny_20, JeppNRM_19, Hoot_20, BennyP_20, Marius_19, GreedyLawyer_20, Zaka_20, McFly_20
- Track 48 : Rifter_20, Koko_20, SuperCallie99_20, Tucker_20, Gladiator_20, Blue7_20, Hammer_20, Gruunaga_20, Jeffabunny_20
- Track 49 : Cookiedough_20, Isiphiwo_20, Jordennis_20, Neeharika16_20, Newrala_20, Helmet_20, Candra_20, Priamo_20, Temprado_20, BABullseye_20, Polyphemus_20, SuperAwesome_20, Garak_21
- Track 50 : JewelBug_20, Dorothea_20
- Track 51 : Pmask_20
- Track 52 : FlyCatcher_20, Sheen_18, Toro_19
- Track 53 : PP_26
- Track 54 : Espica_13, UhSalsa_13, Gollum_13, RER2_6, Naiad_13, Belenaria_13, Phrankenstein_13, CosmicSans_13, TWAMP_13, Swann_13, StCroix_13, Bradshaw_13, Lillie_13, Alatin_13, RexFury_13, Nancinator_13, Rhodalysa_13
- Track 55 : Krishelle_13, Hiro_13, Yoncess_13, AppleCloud_11, BobbyDazzler_13, Bonanza_13, Bryce_13, Yogi_13, Rasputin_13
- Track 56 : AngryOrchard_12, Dinger_13, Harlequin_13, Takoda_13, Partridge_13, Jester_13
- Track 57 : RGL3_6
- Track 58 : Alpacados_12
- Track 59 : PhailMary_12
- Track 60 : Shuman_13, Natosaleda_13
- Track 61 : Erik_13
- Track 62 : Morkie_7, PhorbesPhlower_7

• Track 63 : Lucky10_7

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

The start number called the most often in the published annotations is 16, it was called in 514 of the 521 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_17, 40AC_20, ACFishhook_18, AN3_17, AN9_20, ANI8_20, AbbyPaige_19, AbbysRanger_16, Abdiel_16, Achebe_16, Acolyte_17, Adzzy_18, Agape74_19, Aglet_18, AgronaGT15_18, Alatin_13, Albee_16, Alberto7_17, Alpacados_12, Anaysia_19, Aneem_17, AngryOrchard_12, AnnaL29_20, Annyong_16, Anon_17, Anselm_17, Anthony_16, Anubis_20, AppleCloud_11, ArcherNM_19, Artemis2UCLA_20, Arturo_15, AugsMagnumOpus_20, AvatarAhPeg_16, Avle17_16, B1_14, BABullseye_20, Baby16_16, BabyBack_19, BabyJohn_15, BabyRay_16, Bachome_17, Backyardigan_16, Bactobuster_18, Badger_16, Baehexic_18, BangNhom_15, Bartimeaus_16, Battleship_20, Beauxregard13_18, Belenaria_13, BellusTerra_16, BengiVuitton_18, BennyP_20, Benvolio_17, BiancaTri92_19, Bigflo_18, Blackmoor_16, BlessJoy_20, Blinn1_20, Blue7_20, BlueBird_17, BobSwaget_20, BobbyDazzler_13, Bombshell_16, Bonanza_13, Boohoo_19, Bowtie_17, Bradman_16, Bradshaw_13, BreSam8_18, Broseidon_16, Bruiser_16, Bryce_13, BubbleTrouble_16, Bud_17, Bugatti_16, Bugsy_19, Bumblebee11_16, Burger_15, BuzzBuzz_17, Bxz2_18, C3_15, CRB1_17, Caelakin_16, Calvinny_19, Camperdownii_15, Candra_20, Caraxes_16, Caviar_17, Centaur_19, CentreCat_16, Cerulean_16, ChampagnePapi_16, Changeling_20, Chaph_16, Chartreuse_20, Che12_19, ChipMunk_19, Chiqui_15, Chupacabra_16, Cici_16, Cindaradix_15, Cintron_16, Citius_16, Clammy_16, Clarenza_16, CloudWang3_20, ClownCar_19, Cocoaberry_16, Colbster_18, Colin_21, Commander_16, Connomayer_16, Cookiedough_20, CosmicSans_13, Croquant_19, Crucio_17, Cullens_18, D29_18, D32_20, DBQu4n_20, DaHudson_18, DaVinci_20, Daishi_17, Dalmatian_17, Datway_16, Deano_16, DeerParkTS_18, DekHockey33_19, Deloris_18, DelvinSonDorr_19, Dhanush_16, Dieselweasel_18, Dignity_19, Dinger_13, DirtyDunning_16, DontArgue_15, Dorothea_20, Drake55_19, Drake94_15, DroogsArmy_17, DropBear_16, Druantia_16, DudeLittle_17, Duplo_20, DustyMartin_19, EZMoney23_21, EagleEye_19, Eagle_15, Eaglepride_17, Eapen_16, Ebony_17, Echild_17, Edison31_16, Elle_17, EpicPhail_18, Epsocamisio_19, Equemioh13_19, EricB_20, Erik_13, Eris_16, Eros_16, Espica_13, Et2Brutus_16, EtoileNova_17, Eurydice_16, EvilGenius_19, Fameo_17, Farber_18, FatCactus_15, Fernando_18, Fibonacci_17, FiringLine_17, First_0017, Flare16_17, Flaverint_17, Florean_16, Flux_16, FlyCatcher_20, ForesterFrank_18, Fred313_16, Funston_16, Gadost_16, Garak_21, GaugeLDP_19, Gemma_18, Georgie2_18, Gilberta_17, GingkoMaracino_18, Giroux_17, Gladiator_20, Gollum_13, Goose_16, Gratitude_18, GreedyLawyer_20, Grif_18, Groupthink_19, Grub_18, Grum1_18, Gruunaga_20, GtownJaz_18, Gwennie_17, HINdeR_16, HamSlice_15, Hammer_20, Happiness_16, Harlequin_13, HarryHoudini_19, HashRod_19, HaveUMetTed_19, Heathen_16, Heffalump_19, HelDan_16, Heliosoles_18, Helmet_20, Hercules11_18, Hexamo_20, HippoHollow_18, Hiro_13, Holli_16, Hookmount_17, Hoot_20, Houdini22_16, Hutc2_17, Huxley_16, ICleared_16, Iceman_17, Idleandcovert_16, Indra_20, Insomnia_17, Iracema64_16, IronMan_19, Isca_16, Isiphiwo_20, Iwokeuplikedis_18, JF2_16, JF4_16, JHC117_18, JSwag_19, Jaan_20, Jabith_17,

Jaykayelowell_16, Jeffabunny_20, JenCasNa_18, JeppNRM_19, Jester_13, JetBlade_16, JewelBug_20, Jobu08_18, JoongJeon_16, Jordennis_20, Joselito_17, JoshKayV_19, Journey13_15, Jsquared_16, KADY_19, KFPoly_16, Kachowdy_16, Kalb97_19, Kalnoky_19, Kalpine_20, Kampy_16, Katalie136_16, KatherineG_19, Kazan_20, KekoraPapaka_15, Kerberos_20, Kimba_17, Kimona_13, KingCyrus_19, Kingmustik0402_16, Kinmap_16, Kipper29_20, KittenMittens_15, Koan_16, Koduck_18, Koko_20, Koreni_15, Kratark_16, Kremtemulon_16, Krishelle_13, Kristoff_17, Kyee_16, LBerry_18, LHTSCC_16, LadyBird_17, Lambert1_17, LappelDuVide_16, Larenn_18, LarryKay_18, LastResort_19, Lemur_16, LeoAvram_16, Leogania_19, Leviathan_19, LilTurb_19, Lilbunny_20, Lilith_18, Lillie_13, LionsBait_18, LittleB_16, LittleGuy_16, LochMonster_16, Lokk_20, Looper_20, Lorenzo_16, Loser_20, Louie6_18, Lowa_18, Lucivia_17, Lucky10_7, Lucyedi_18, LugYA_20, Lunsford_17, MA5_16, MK4_16, MaCh_17, Mabel_17, MadMarie_18, Mainiac_18, MajorMajor_16, Malec_18, Malinsilva_20, Manu_19, MarQuardt_18, Marchesa_16, Margo_17, Marie_18, Marius_19, Maverick_16, Maxo_16, Mayonnaise_16, Mazhar510_16, McFly_20, Medusa_16, MeeZee_16, Melvin_16, Methuselah_18, Microwolf_18, MiculUcigas_17, Miko_20, Millski_16, MinecraftSteve_20, Miramae_16, Misomonster_20, MissWhite_17, MoneyMay_18, Montavir_17, Morkie_7, Morpher26_16, Morrow_16, MuchMore_20, Mulciber_17, Munch_17, Mundrea_16, NaSiaTalie_17, Naiad_13, Naji_20, Nancinator_13, Natosaleda_13, Nebs_16, Nebulosus_19, Nedarya_18, Neeharika16_20, Nemo27_16, Newrala_20, NicoleTera_21, Noella_17, Noelle_16, Norbert_16, NorthStar_16, NotAPhaseMom_16, NothingSpecial_19, Nyxis_16, OKCentral2016_16, OKaNui_17, Obama12_16, Odin_16, Ohfah_16, OlanP_18, Ollie_18, Oofda_19, Orange_17, P28Green_18, PGHhamlin_20, PP_26, PainterBoy_18, Palestino_16, Partridge_13, Pawn_18, PeaceMeal1_15, Peaches_16, Pembroke_18, Penny1_18, Perplexer_16, PeterPeter_16, Petersenfast_16, PetiteSangsue_16, Ph8s_18, Phacado_16, Phantastic_16, Pharaoh_17, Phelipe_16, Phighter1804_16, PhishRPhriends_17, Phoebe_18, Phontbonne_16, PhorbesPhlower_7, Phoxy_18, Phrankenstein_13, Phranny_19, Pipcraft_16, Piro94_18, Pistachio_17, Pmask_20, Pocahontas_17, Polymorphads_16, Polyphemus_20, Pomar16_20, Poompha_15, Popcicle_17, PotatoSplit_19, Power_17, Priamo_20, Prudy_19, Pukovnik_19, Pumbaa_16, Puppy_17, PurpleHaze_18, QueenB2_17, QueenBeesly_17, QuinnKiro_16, Quokka_15, RER2_6, RGL3_6, Rachaly_20, Rasputin_13, Ravana_20, ReMo_19, Reba_19, Rebeuca_17, RedRock_20, Relief_16, Remus_19, ResDef_17, Retro23_17, RexFury_13, Rhodalysa_13, RhynO_17, Rifter_20, RockieBear_15, Rockstar_16, Roimos_16, Roksolana_20, Romney_16, Roosevelt_16, Rosa24_15, Rosalind_19, Rowdy_19, Ruin_16, Rummer_18, Sabertooth_16, Sabia_18, Sabinator_18, Salz_17, Saskia_16, SaturnRing_16, Scamp_16, Scout_16, SemperFi_19, SenorClean_16, Serenity_16, Severus_15, Shaka_16, Sham4_17, Shapes_19, ShayRa_20, Sheen_18, SheldonCooper_16, Shuman_13, Shygu2_16, Skipitt_16, Sknot_17, Smeagan_19, SmellyB_20, SnapTap_17, Snape_17, Snickers_18, SoYo_18, SoilDragon_18, Soshari_20, Soups_19, Sparxx_16, Spike509_18, Spino_16, StCroix_13, Stagni_18, StarStuff_20, Stasia_17, SteMason_15, Stink_16, Strosahl_19, Sultana_16, SuperAwesome_20, SuperCallie99_20, Superchunk_16, Swann_13, SweetiePie_17, SwirlSquare_18, Switzerland_19, TNguyen7_16, TWAMP_13, Tailonex_14, Takoda_13, Taquarus_16, TarsusIV_17, Taurus_18, Temprado_20, Terrific_21, Texage_16, Thanksgivukkah_16, Tiffany_18, Timothy_17, Timshel_17, TinaFeyge_16, TinyPebbles_18, TinyTimmy_17, Tinybot_15, TipsytheTRex_16, TiroTheta9_16, Todacoro_17, Tomathan_20, Topanga_16, Toro_19, Travvers_20, Trike_14, Tristan_18, Trixie_20, Trooper_17, TroyPia_16, Tucker_20, Turbido_19, Twister_16,

TygerBlood_16, UhSalsa_13, Ulysses_15, Updawg_19, VA6_17, VC3_20, Vix_18, VohminGhazi_20, Waits_19, WalterMcMickey_16, Wander_16, Warrior24_19, Watson_18, WeiHuaDA_23, Whabigail7_19, WideWale_19, Wiks_20, Wilbur_16, Wile_16, Wizard007_16, Wolpertinger_16, Wooldri_20, WunderPhul_20, Xena_16, XianYue_17, YoSam321_16, Yogi_13, Yokurt_20, Yoncess_13, Zaka_20, Zarafa_16, Zetzy_17, Zulu_20,

Genes that have the "Most Annotated" start but do not call it:
• Jerm_19, L5_18, Landor_18, Panamaxus_17, Phaded_20, PhailMary_12, Veracruz_16,

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

Summary by start number:

Start 5:
• Found in 31 of 584 (5.3%) of genes in pham
• Manual Annotations of this start: 1 of 521
• Called 3.2% of time when present
• Phage (with cluster) where this start called: Jerm_19 (A2),

Start 7:
• Found in 17 of 584 (2.9%) of genes in pham
• Manual Annotations of this start: 1 of 521
• Called 5.9% of time when present
• Phage (with cluster) where this start called: PhailMary_12 (CA),

Start 10:
• Found in 2 of 584 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 521
• Called 50.0% of time when present
• Phage (with cluster) where this start called: L5_18 (A2),

Start 11:
• Found in 19 of 584 (3.3%) of genes in pham
• Manual Annotations of this start: 2 of 521
• Called 10.5% of time when present
• Phage (with cluster) where this start called: Landor_18 (A2), Phaded_20 (A2),

Start 14:
• Found in 16 of 584 (2.7%) of genes in pham
• Manual Annotations of this start: 2 of 521
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Panamaxus_17 (A3), Veracruz_16 (A3),

Start 16:
• Found in 584 of 584 (100.0%) of genes in pham
• Manual Annotations of this start: 514 of 521
• Called 98.8% of time when present
• Phage (with cluster) where this start called: 20ES_17 (A2), 40AC_20 (A17), ACFishhook_18 (A3), AN3_17 (A2), AN9_20 (A2), ANI8_20 (A2), AbbyPaige_19 (A2), AbbysRanger_16 (A4), Abdiel_16 (A4), Achebe_16 (A4), Acolyte_17 (A2), Adzzy_18

(A2), Agape74_19 (A2), Aglet_18 (A3), AgronaGT15_18 (A3), Alatin_13 (CA), Albee_16 (A4), Alberto7_17 (A4), Alpacados_12 (CA), Anaysia_19 (A15), Aneem_17 (A11), AngryOrchard_12 (CA), AnnaL29_20 (A2), Annyong_16 (A4), Anon_17 (A15), Anselm_17 (A2), Anthony_16 (A20), Anubis_20 (A3), AppleCloud_11 (CA), ArcherNM_19 (A2), Artemis2UCLA_20 (A6), Arturo_15 (A4), AugsMagnumOpus_20 (A3), AvatarAhPeg_16 (A4), Avle17_16 (A4), B1_14 (A3), BABullseye_20 (A6), Baby16_16 (A4), BabyBack_19 (A2), BabyJohn_15 (A3), BabyRay_16 (A3), Bachome_17 (A11), Backyardigan_16 (A4), Bactobuster_18 (A2), Badger_16 (A4), Baehexic_18 (A2), BangNhom_15 (A4), Bartimeaus_16 (A4), Battleship_20 (A15), Beauxregard13_18 (A3), Belenaria_13 (CA), BellusTerra_16 (A4), BengiVuitton_18 (A2), BennyP_20 (A6), Benvolio_17 (A2), BiancaTri92_19 (A2), Bigflo_18 (A3), Blackmoor_16 (A4), BlessJoy_20 (A6), Blinn1_20 (A6), Blue7_20 (A6), BlueBird_17 (A3), BobSwaget_20 (A2), BobbyDazzler_13 (CA), Bombshell_16 (A4), Bonanza_13 (CA), Boohoo_19 (A15), Bowtie_17 (A11), Bradman_16 (A2), Bradshaw_13 (CA), BreSam8_18 (A3), Broseidon_16 (A4), Bruiser_16 (A4), Bryce_13 (CA), BubbleTrouble_16 (A4), Bud_17 (A11), Bugatti_16 (A3), Bugsy_19 (A2), Bumblebee11_16 (A4), Burger_15 (A4), BuzzBuzz_17 (A3), Bxz2_18 (A3), C3_15 (A2), CRB1_17 (A2), Caelakin_16 (A4), Calvinny_19 (A3), Camperdownii_15 (A4), Candra_20 (A6), Caraxes_16 (A2), Caviar_17 (A3), Centaur_19 (A2), CentreCat_16 (A4), Cerulean_16 (A4), ChampagnePapi_16 (A4), Changeling_20 (A2), Chaph_16 (A4), Chartreuse_20 (A6), Che12_19 (A2), ChipMunk_19 (A2), Chiqui_15 (A3), Chupacabra_16 (A10), Cici_16 (A4), Cindaradix_15 (A4), Cintron_16 (A4), Citius_16 (A4), Clammy_16 (A3), Clarenza_16 (A4), CloudWang3_20 (A6), ClownCar_19 (A3), Cocoaberry_16 (A4), Colbster_18 (A3), Colin_21 (A2), Commander_16 (A4), Connomayer_16 (A4), Cookiedough_20 (A6), CosmicSans_13 (CA), Croquant_19 (A3), Crucio_17 (A2), Cullens_18 (A3), D29_18 (A2), D32_20 (A2), DBQu4n_20 (A2), DaHudson_18 (A3), DaVinci_20 (A6), Daishi_17 (A3), Dalmatian_17 (A2), Datway_16 (A4), Deano_16 (A4), DeerParkTS_18 (A2), DekHockey33_19 (A15), Deloris_18 (A2), DelvinSonDorr_19 (A6), Dhanush_16 (A4), Dieselweasel_18 (A3), Dignity_19 (A2), Dinger_13 (CA), DirtyDunning_16 (A4), DontArgue_15 (A10), Dorothea_20 (A6), Drake55_19 (A2), Drake94_15 (A10), DroogsArmy_17 (A7), DropBear_16 (A3), Druantia_16 (A4), DudeLittle_17 (A2), Duplo_20 (A2), DustyMartin_19 (A10), EZMoney23_21 (A2), EagleEye_19 (A16), Eagle_15 (A4), Eaglepride_17 (A10), Eapen_16 (A4), Ebony_17 (A11), Echild_17 (A2), Edison31_16 (A10), Elle_17 (A15), EpicPhail_18 (A3), Epsocamisio_19 (A15), Equemioh13_19 (A2), EricB_20 (A6), Erik_13 (CA), Eris_16 (A4), Eros_16 (A4), Espica_13 (CA), Et2Brutus_16 (A11), EtoileNova_17 (A3), Eurydice_16 (A4), EvilGenius_19 (A2), Fameo_17 (A2), Farber_18 (A3), FatCactus_15 (A20), Fernando_18 (A3), Fibonacci_17 (A11), FiringLine_17 (A2), First_0017 (A2), Flare16_17 (A2), Flaverint_17 (A11), Florean_16 (A4), Flux_16 (A4), FlyCatcher_20 (A7), ForesterFrank_18 (A2), Fred313_16 (A3), Funston_16 (A4), Gadost_16 (A4), Garak_21 (A6), GaugeLDP_19 (A2), Gemma_18 (A3), Georgie2_18 (A2), Gilberta_17 (A11), GingkoMaracino_18 (A3), Giroux_17 (A3), Gladiator_20 (A6), Gollum_13 (CA), Goose_16 (A10), Gratitude_18 (A2), GreedyLawyer_20 (A6), Grif_18 (A3), Groupthink_19 (A3), Grub_18 (A3), Grum1_18 (A3), Gruunaga_20 (A6), GtownJaz_18 (A3), Gwennie_17 (A3), HINdeR_16 (A7), HamSlice_15 (A4), Hammer_20 (A6), Happiness_16 (A4), Harlequin_13 (CA), HarryHoudini_19 (A2), HashRod_19 (A3), HaveUMetTed_19 (A3), Heathen_16 (A3), Heffalump_19 (A2), HelDan_16 (A3), Heliosoles_18 (A3), Helmet_20 (A6), Hercules11_18 (A3), Hexamo_20 (A6), HippoHollow_18 (A2), Hiro_13 (CA), Holli_16 (A4), Hookmount_17 (A3), Hoot_20 (A6), Houdini22_16 (A4), Hutc2_17 (A11), Huxley_16 (A4), ICleared_16 (A4), Iceman_17 (A4), Idleandcovert_16 (A3), Indra_20 (A6), Insomnia_17 (A11), Iracema64_16 (A4), IronMan_19 (A2), Isca_16 (A3), Isiphiwo_20 (A6), Iwokeuplikedis_18 (A2), JF2_16 (A3), JF4_16 (A3), JHC117_18

(A3), JSwag_19 (A15), Jaan_20 (A2), Jabith_17 (A11), Jaykayelowell_16 (A4), Jeffabunny_20 (A6), JenCasNa_18 (A3), JeppNRM_19 (A3), Jester_13 (CA), JetBlade_16 (A4), JewelBug_20 (A6), Jobu08_18 (A3), JoongJeon_16 (A4), Jordennis_20 (A6), Joselito_17 (A11), JoshKayV_19 (A2), Journey13_15 (A2), Jsquared_16 (A2), KADY_19 (A3), KFPoly_16 (A4), Kachowdy_16 (A3), Kalb97_19 (A3), Kalnoky_19 (A3), Kalpine_20 (A2), Kampy_16 (A4), Katalie136_16 (A4), KatherineG_19 (A15), Kazan_20 (A6), KekoraPapaka_15 (A4), Kerberos_20 (A2), Kimba_17 (A11), Kimona_13 (A19), KingCyrus_19 (A2), Kingmustik0402_16 (A4), Kinmap_16 (A21), Kipper29_20 (A6), KittenMittens_15 (A10), Koan_16 (A4), Koduck_18 (A2), Koko_20 (A6), Koreni_15 (A4), Kratark_16 (A4), Kremtemulon_16 (A4), Krishelle_13 (CA), Kristoff_17 (A10), Kyee_16 (A4), LBerry_18 (A3), LHTSCC_16 (A4), LadyBird_17 (A2), Lambert1_17 (A3), LappelDuVide_16 (A4), Larenn_18 (A2), LarryKay_18 (A3), LastResort_19 (A15), Lemur_16 (A4), LeoAvram_16 (A4), Leogania_19 (A2), Leviathan_19 (A2), LilTurb_19 (A2), Lilbunny_20 (A6), Lilith_18 (A3), Lillie_13 (CA), LionsBait_18 (A2), LittleB_16 (A4), LittleGuy_16 (A4), LochMonster_16 (A4), Lokk_20 (A2), Looper_20 (A15), Lorenzo_16 (A4), Loser_20 (A2), Louie6_18 (A3), Lowa_18 (A3), Lucivia_17 (A11), Lucky10_7 (DH), Lucyedi_18 (A16), LugYA_20 (A3), Lunsford_17 (A4), MA5_16 (A3), MK4_16 (A3), MaCh_17 (A11), Mabel_17 (A11), MadMarie_18 (A3), Mainiac_18 (A3), MajorMajor_16 (A2), Malec_18 (A2), Malinsilva_20 (A3), Manu_19 (A3), MarQuardt_18 (A3), Marchesa_16 (A3), Margo_17 (A3), Marie_18 (A3), Marius_19 (A3), Maverick_16 (A4), Maxo_16 (A4), Mayonnaise_16 (A4), Mazhar510_16 (A4), McFly_20 (A6), Medusa_16 (A4), MeeZee_16 (A4), Melvin_16 (A4), Methuselah_18 (A3), Microwolf_18 (A3), MiculUcigas_17 (A2), Miko_20 (A2), Millski_16 (A4), MinecraftSteve_20 (A15), Miramae_16 (A4), Misomonster_20 (A3), MissWhite_17 (A2), MoneyMay_18 (A3), Montavir_17 (A3), Morkie_7 (DH), Morpher26_16 (A4), Morrow_16 (A4), MuchMore_20 (A3), Mulciber_17 (A11), Munch_17 (A11), Mundrea_16 (A4), NaSiaTalie_17 (A2), Naiad_13 (CA), Naji_20 (A2), Nancinator_13 (CA), Natosaleda_13 (CA), Nebs_16 (A4), Nebulosus_19 (A15), Nedarya_18 (A15), Neeharika16_20 (A6), Nemo27_16 (A4), Newrala_20 (A6), NicoleTera_21 (A2), Noella_17 (A3), Noelle_16 (A4), Norbert_16 (A3), NorthStar_16 (A4), NotAPhaseMom_16 (A4), NothingSpecial_19 (A2), Nyxis_16 (A4), OKCentral2016_16 (A10), OKaNui_17 (A4), Obama12_16 (A4), Odin_16 (A2), Ohfah_16 (A4), OlanP_18 (A3), Ollie_18 (A3), Oofda_19 (A15), Orange_17 (A11), P28Green_18 (A3), PGHhamlin_20 (A3), PP_26 (A7), PainterBoy_18 (A16), Palestino_16 (A4), Partridge_13 (CA), Pawn_18 (A3), PeaceMeal1_15 (A10), Peaches_16 (A4), Pembroke_18 (A3), Penny1_18 (A3), Perplexer_16 (A4), PeterPeter_16 (A4), Petersenfast_16 (A11), PetiteSangsue_16 (A4), Ph8s_18 (A2), Phacado_16 (A4), Phantastic_16 (A3), Pharaoh_17 (A12), Phelipe_16 (A4), Phighter1804_16 (A4), PhishRPhriends_17 (A3), Phoebe_18 (A3), Phontbonne_16 (A4), PhorbesPhlower_7 (DH), Phoxy_18 (A3), Phrankenstein_13 (CA), Phranny_19 (A3), Pipcraft_16 (A4), Piro94_18 (A2), Pistachio_17 (A3), Pmask_20 (A6), Pocahontas_17 (A3), Polymorphads_16 (A4), Polyphemus_20 (A6), Pomar16_20 (A2), Poompha_15 (A10), Popcicle_17 (A3), PotatoSplit_19 (A3), Power_17 (A2), Priamo_20 (A6), Prudy_19 (A2), Pukovnik_19 (A2), Pumbaa_16 (A4), Puppy_17 (A3), PurpleHaze_18 (A3), QueenB2_17 (A2), QueenBeesly_17 (A2), QuinnKiro_16 (A3), Quokka_15 (A2), RER2_6 (CA), RGL3_6 (CA), Rachaly_20 (A2), Rasputin_13 (CA), Ravana_20 (A15), ReMo_19 (A15), Reba_19 (A3), Rebeuca_17 (A10), RedRock_20 (A2), Relief_16 (A4), Remus_19 (A15), ResDef_17 (A3), Retro23_17 (A2), RexFury_13 (CA), Rhodalysa_13 (CA), RhynO_17 (A10), Rifter_20 (A6), RockieBear_15 (A4), Rockstar_16 (A3), Roimos_16 (A3), Roksolana_20 (A6), Romney_16 (A4), Roosevelt_16 (A4), Rosa24_15 (A4), Rosalind_19 (A15), Rowdy_19 (A10), Ruin_16 (A4), Rummer_18 (A3), Sabertooth_16 (A4), Sabia_18

(A3), Sabinator_18 (A3), Salz_17 (A11), Saskia_16 (A11), SaturnRing_16 (A3), Scamp_16 (A4), Scout_16 (A3), SemperFi_19 (A2), SenorClean_16 (A4), Serenity_16 (A2), Severus_15 (A10), Shaka_16 (A4), Sham4_17 (A11), Shapes_19 (A10), ShayRa_20 (A15), Sheen_18 (A7), SheldonCooper_16 (A4), Shuman_13 (CA), Shygu2_16 (A4), Skipitt_16 (A4), Sknot_17 (A2), Smeagan_19 (A2), SmellyB_20 (A6), SnapTap_17 (A2), Snape_17 (A11), Snickers_18 (A3), SoYo_18 (A3), SoilDragon_18 (A3), Soshari_20 (A3), Soups_19 (A15), Sparxx_16 (A4), Spike509_18 (A3), Spino_16 (A4), StCroix_13 (CA), Stagni_18 (A3), StarStuff_20 (A2), Stasia_17 (A4), SteMason_15 (A4), Stink_16 (A4), Strosahl_19 (A15), Sultana_16 (A4), SuperAwesome_20 (A6), SuperCallie99_20 (A6), Superchunk_16 (A2), Swann_13 (CA), SweetiePie_17 (A2), SwirlSquare_18 (A2), Switzerland_19 (A15), TNguyen7_16 (A3), TWAMP_13 (CA), Tailonex_14 (singleton), Takoda_13 (CA), Taquarus_16 (A4), TarsusIV_17 (A2), Taurus_18 (A3), Temprado_20 (A6), Terrific_21 (A2), Texage_16 (A3), Thanksgivukkah_16 (A4), Tiffany_18 (A3), Timothy_17 (A11), Timshel_17 (A7), TinaFeyge_16 (A4), TinyPebbles_18 (A3), TinyTimmy_17 (A11), Tinybot_15 (A4), TipsytheTRex_16 (A2), TiroTheta9_16 (A4), Todacoro_17 (A3), Tomathan_20 (A2), Topanga_16 (A10), Toro_19 (A7), Travvers_20 (A2), Trike_14 (A10), Tristan_18 (A2), Trixie_20 (A2), Trooper_17 (A2), TroyPia_16 (A4), Tucker_20 (A6), Turbido_19 (A2), Twister_16 (A10), TygerBlood_16 (A4), UhSalsa_13 (CA), Ulysses_15 (A4), Updawg_19 (A2), VA6_17 (A2), VC3_20 (A2), Vix_18 (A3), VohminGhazi_20 (A6), Waits_19 (A15), WalterMcMickey_16 (A10), Wander_16 (A4), Warrior24_19 (A15), Watson_18 (A3), WeiHuaDA_23 (A2), Whabigail7_19 (A2), WideWale_19 (A2), Wiks_20 (A6), Wilbur_16 (A4), Wile_16 (A4), Wizard007_16 (A4), Wolpertinger_16 (A11), Wooldri_20 (A3), WunderPhul_20 (A6), Xena_16 (A4), XianYue_17 (A2), YoSam321_16 (A4), Yogi_13 (CA), Yokurt_20 (A6), Yoncess_13 (CA), Zaka_20 (A6), Zarafa_16 (A3), Zetzy_17 (A3), Zulu_20 (A6),

Summary by clusters:

There are 17 clusters represented in this pham: A20, A15, A17, A16, A11, A10, DH, A21, CA, A12, A19, singleton, A3, A2, A4, A7, A6,

Info for manual annotations of cluster A10:
•Start number 16 was manually annotated 17 times for cluster A10.

Info for manual annotations of cluster A11:
•Start number 16 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:
•Start number 16 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:
•Start number 16 was manually annotated 23 times for cluster A15.

Info for manual annotations of cluster A16:
•Start number 16 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A19:
•Start number 16 was manually annotated 1 time for cluster A19.

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

•Start number 10 was manually annotated 1 time for cluster A2.
•Start number 11 was manually annotated 2 times for cluster A2.
•Start number 16 was manually annotated 101 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 16 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:
•Start number 14 was manually annotated 2 times for cluster A3.
•Start number 16 was manually annotated 113 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 16 was manually annotated 141 times for cluster A4.

Info for manual annotations of cluster A6:
•Start number 16 was manually annotated 46 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 16 was manually annotated 5 times for cluster A7.

Info for manual annotations of cluster CA:
•Start number 7 was manually annotated 1 time for cluster CA.
•Start number 16 was manually annotated 35 times for cluster CA.

Info for manual annotations of cluster DH:
•Start number 16 was manually annotated 3 times for cluster DH.

Gene Information:

Gene: 20ES_17 Start: 13206, Stop: 13382, Start Num: 16
Candidate Starts for 20ES_17:
(Start: 16 @13206 has 514 MA's),

Gene: 40AC_20 Start: 15229, Stop: 15408, Start Num: 16
Candidate Starts for 40AC_20:
(Start: 16 @15229 has 514 MA's), (35, 15382),

Gene: ACFishhook_18 Start: 12760, Stop: 12942, Start Num: 16
Candidate Starts for ACFishhook_18:
(Start: 16 @12760 has 514 MA's),

Gene: AN3_17 Start: 13196, Stop: 13372, Start Num: 16
Candidate Starts for AN3_17:
(Start: 5 @13148 has 1 MA's), (Start: 16 @13196 has 514 MA's),

Gene: AN9_20 Start: 13198, Stop: 13377, Start Num: 16
Candidate Starts for AN9_20:
(Start: 16 @13198 has 514 MA's),

Gene: ANI8_20 Start: 13198, Stop: 13377, Start Num: 16

Candidate Starts for ANI8_20:
(Start: 16 @13198 has 514 MA's),

Gene: AbbyPaige_19 Start: 13651, Stop: 13833, Start Num: 16
Candidate Starts for AbbyPaige_19:
(Start: 5 @13603 has 1 MA's), (Start: 16 @13651 has 514 MA's),

Gene: AbbysRanger_16 Start: 12505, Stop: 12702, Start Num: 16
Candidate Starts for AbbysRanger_16:
(Start: 16 @12505 has 514 MA's),

Gene: Abdiel_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Abdiel_16:
(Start: 16 @12475 has 514 MA's),

Gene: Achebe_16 Start: 12484, Stop: 12681, Start Num: 16
Candidate Starts for Achebe_16:
(Start: 16 @12484 has 514 MA's),

Gene: Acolyte_17 Start: 13345, Stop: 13500, Start Num: 16
Candidate Starts for Acolyte_17:
(Start: 16 @13345 has 514 MA's), (22, 13384),

Gene: Adzzy_18 Start: 11960, Stop: 12115, Start Num: 16
Candidate Starts for Adzzy_18:
(Start: 16 @11960 has 514 MA's),

Gene: Agape74_19 Start: 13651, Stop: 13833, Start Num: 16
Candidate Starts for Agape74_19:
(Start: 5 @13603 has 1 MA's), (Start: 16 @13651 has 514 MA's),

Gene: Aglet_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for Aglet_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: AgronaGT15_18 Start: 12510, Stop: 12695, Start Num: 16
Candidate Starts for AgronaGT15_18:
(Start: 16 @12510 has 514 MA's), (24, 12573),

Gene: Alatin_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Alatin_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Albee_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Albee_16:
(Start: 16 @12478 has 514 MA's),

Gene: Alberto7_17 Start: 12780, Stop: 12986, Start Num: 16
Candidate Starts for Alberto7_17:
(Start: 16 @12780 has 514 MA's),

Gene: Alpacados_12 Start: 8637, Stop: 8843, Start Num: 16
Candidate Starts for Alpacados_12:

(Start: 7 @8589 has 1 MA's), (Start: 16 @8637 has 514 MA's),

Gene: Anaysia_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for Anaysia_19:
(Start: 16 @12316 has 514 MA's),

Gene: Aneem_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Aneem_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: AngryOrchard_12 Start: 8620, Stop: 8826, Start Num: 16
Candidate Starts for AngryOrchard_12:
(Start: 7 @8572 has 1 MA's), (Start: 16 @8620 has 514 MA's), (29, 8713),

Gene: AnnaL29_20 Start: 15039, Stop: 15221, Start Num: 16
Candidate Starts for AnnaL29_20:
(Start: 16 @15039 has 514 MA's),

Gene: Annyong_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Annyong_16:
(Start: 16 @12479 has 514 MA's),

Gene: Anon_17 Start: 12677, Stop: 12832, Start Num: 16
Candidate Starts for Anon_17:
(Start: 16 @12677 has 514 MA's),

Gene: Anselm_17 Start: 13298, Stop: 13480, Start Num: 16
Candidate Starts for Anselm_17:
(Start: 5 @13250 has 1 MA's), (Start: 16 @13298 has 514 MA's),

Gene: Anthony_16 Start: 11421, Stop: 11594, Start Num: 16
Candidate Starts for Anthony_16:
(Start: 16 @11421 has 514 MA's),

Gene: Anubis_20 Start: 12488, Stop: 12673, Start Num: 16
Candidate Starts for Anubis_20:
(Start: 16 @12488 has 514 MA's), (24, 12551),

Gene: AppleCloud_11 Start: 8384, Stop: 8566, Start Num: 16
Candidate Starts for AppleCloud_11:
(Start: 7 @8336 has 1 MA's), (Start: 16 @8384 has 514 MA's),

Gene: ArcherNM_19 Start: 14988, Stop: 15173, Start Num: 16
Candidate Starts for ArcherNM_19:
(Start: 16 @14988 has 514 MA's),

Gene: Artemis2UCLA_20 Start: 13162, Stop: 13359, Start Num: 16
Candidate Starts for Artemis2UCLA_20:
(Start: 16 @13162 has 514 MA's),

Gene: Arturo_15 Start: 12589, Stop: 12795, Start Num: 16
Candidate Starts for Arturo_15:
(Start: 16 @12589 has 514 MA's),

Gene: AugsMagnumOpus_20 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for AugsMagnumOpus_20:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: AvatarAhPeg_16 Start: 12446, Stop: 12640, Start Num: 16
Candidate Starts for AvatarAhPeg_16:
(Start: 16 @12446 has 514 MA's),

Gene: Avle17_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Avle17_16:
(Start: 16 @12478 has 514 MA's),

Gene: B1_14 Start: 11811, Stop: 11987, Start Num: 16
Candidate Starts for B1_14:
(Start: 16 @11811 has 514 MA's), (22, 11850), (23, 11862),

Gene: BABullseye_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for BABullseye_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: Baby16_16 Start: 12487, Stop: 12693, Start Num: 16
Candidate Starts for Baby16_16:
(Start: 16 @12487 has 514 MA's),

Gene: BabyBack_19 Start: 14848, Stop: 15012, Start Num: 16
Candidate Starts for BabyBack_19:
(Start: 16 @14848 has 514 MA's), (31, 14947),

Gene: BabyJohn_15 Start: 12395, Stop: 12571, Start Num: 16
Candidate Starts for BabyJohn_15:
(Start: 16 @12395 has 514 MA's),

Gene: BabyRay_16 Start: 12381, Stop: 12560, Start Num: 16
Candidate Starts for BabyRay_16:
(Start: 16 @12381 has 514 MA's), (21, 12417), (22, 12420),

Gene: Bachome_17 Start: 13754, Stop: 13921, Start Num: 16
Candidate Starts for Bachome_17:
(13, 13736), (Start: 16 @13754 has 514 MA's), (21, 13790), (27, 13838),

Gene: Backyardigan_16 Start: 12496, Stop: 12693, Start Num: 16
Candidate Starts for Backyardigan_16:
(Start: 16 @12496 has 514 MA's),

Gene: Bactobuster_18 Start: 14922, Stop: 15104, Start Num: 16
Candidate Starts for Bactobuster_18:
(Start: 11 @14904 has 2 MA's), (Start: 16 @14922 has 514 MA's),

Gene: Badger_16 Start: 12485, Stop: 12682, Start Num: 16
Candidate Starts for Badger_16:
(Start: 16 @12485 has 514 MA's),

Gene: Baehexic_18 Start: 13700, Stop: 13879, Start Num: 16
Candidate Starts for Baehexic_18:
(Start: 16 @13700 has 514 MA's),

Gene: BangNhom_15 Start: 12456, Stop: 12668, Start Num: 16
Candidate Starts for BangNhom_15:
(Start: 16 @12456 has 514 MA's),

Gene: Bartimeaus_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Bartimeaus_16:
(Start: 16 @12478 has 514 MA's),

Gene: Battleship_20 Start: 12431, Stop: 12601, Start Num: 16
Candidate Starts for Battleship_20:
(Start: 16 @12431 has 514 MA's),

Gene: Beauxregard13_18 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for Beauxregard13_18:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Belenaria_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Belenaria_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: BellusTerra_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for BellusTerra_16:
(Start: 16 @12475 has 514 MA's),

Gene: BengiVuitton_18 Start: 13613, Stop: 13795, Start Num: 16
Candidate Starts for BengiVuitton_18:
(Start: 16 @13613 has 514 MA's), (27, 13697),

Gene: BennyP_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for BennyP_20:
(Start: 16 @13284 has 514 MA's),

Gene: Benvolio_17 Start: 13288, Stop: 13470, Start Num: 16
Candidate Starts for Benvolio_17:
(Start: 5 @13240 has 1 MA's), (Start: 16 @13288 has 514 MA's),

Gene: BiancaTri92_19 Start: 14972, Stop: 15157, Start Num: 16
Candidate Starts for BiancaTri92_19:
(Start: 16 @14972 has 514 MA's),

Gene: Bigflo_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Bigflo_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Blackmoor_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Blackmoor_16:
(Start: 16 @12478 has 514 MA's),

Gene: BlessJoy_20 Start: 13260, Stop: 13457, Start Num: 16

Candidate Starts for BlessJoy_20:
(Start: 16 @13260 has 514 MA's),

Gene: Blinn1_20 Start: 13317, Stop: 13514, Start Num: 16
Candidate Starts for Blinn1_20:
(Start: 16 @13317 has 514 MA's),

Gene: Blue7_20 Start: 13252, Stop: 13449, Start Num: 16
Candidate Starts for Blue7_20:
(Start: 16 @13252 has 514 MA's), (29, 13342),

Gene: BlueBird_17 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for BlueBird_17:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: BobSwaget_20 Start: 14847, Stop: 15023, Start Num: 16
Candidate Starts for BobSwaget_20:
(Start: 16 @14847 has 514 MA's),

Gene: BobbyDazzler_13 Start: 8746, Stop: 8952, Start Num: 16
Candidate Starts for BobbyDazzler_13:
(Start: 7 @8698 has 1 MA's), (Start: 16 @8746 has 514 MA's),

Gene: Bombshell_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Bombshell_16:
(Start: 16 @12478 has 514 MA's),

Gene: Bonanza_13 Start: 8675, Stop: 8881, Start Num: 16
Candidate Starts for Bonanza_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: Boohoo_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for Boohoo_19:
(Start: 16 @12316 has 514 MA's),

Gene: Bowtie_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Bowtie_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: Bradman_16 Start: 12104, Stop: 12289, Start Num: 16
Candidate Starts for Bradman_16:
(Start: 16 @12104 has 514 MA's), (26, 12182),

Gene: Bradshaw_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Bradshaw_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: BreSam8_18 Start: 12595, Stop: 12780, Start Num: 16
Candidate Starts for BreSam8_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: Broseidon_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Broseidon_16:

(Start: 16 @12478 has 514 MA's),

Gene: Bruiser_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Bruiser_16:
(Start: 16 @12478 has 514 MA's),

Gene: Bryce_13 Start: 8675, Stop: 8881, Start Num: 16
Candidate Starts for Bryce_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: BubbleTrouble_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for BubbleTrouble_16:
(Start: 16 @12478 has 514 MA's),

Gene: Bud_17 Start: 13763, Stop: 13930, Start Num: 16
Candidate Starts for Bud_17:
(13, 13745), (Start: 16 @13763 has 514 MA's), (21, 13799), (27, 13847),

Gene: Bugatti_16 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for Bugatti_16:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: Bugsy_19 Start: 13650, Stop: 13832, Start Num: 16
Candidate Starts for Bugsy_19:
(Start: 5 @13602 has 1 MA's), (Start: 16 @13650 has 514 MA's),

Gene: Bumblebee11_16 Start: 12487, Stop: 12684, Start Num: 16
Candidate Starts for Bumblebee11_16:
(Start: 16 @12487 has 514 MA's),

Gene: Burger_15 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Burger_15:
(Start: 16 @12478 has 514 MA's),

Gene: BuzzBuzz_17 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for BuzzBuzz_17:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: Bxz2_18 Start: 12696, Stop: 12881, Start Num: 16
Candidate Starts for Bxz2_18:
(Start: 16 @12696 has 514 MA's), (24, 12759),

Gene: C3_15 Start: 13198, Stop: 13377, Start Num: 16
Candidate Starts for C3_15:
(Start: 16 @13198 has 514 MA's),

Gene: CRB1_17 Start: 13172, Stop: 13351, Start Num: 16
Candidate Starts for CRB1_17:
(Start: 16 @13172 has 514 MA's), (29, 13262), (30, 13265),

Gene: Caelakin_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Caelakin_16:
(Start: 16 @12478 has 514 MA's),

Gene: Calvinny_19 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Calvinny_19:
(Start: 16 @12679 has 514 MA's),

Gene: Camperdownii_15 Start: 12097, Stop: 12303, Start Num: 16
Candidate Starts for Camperdownii_15:
(Start: 16 @12097 has 514 MA's),

Gene: Candra_20 Start: 13318, Stop: 13515, Start Num: 16
Candidate Starts for Candra_20:
(4, 13252), (6, 13264), (Start: 11 @13297 has 2 MA's), (Start: 16 @13318 has 514 MA's),

Gene: Caraxes_16 Start: 11860, Stop: 12015, Start Num: 16
Candidate Starts for Caraxes_16:
(Start: 16 @11860 has 514 MA's),

Gene: Caviar_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Caviar_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Centaur_19 Start: 13678, Stop: 13857, Start Num: 16
Candidate Starts for Centaur_19:
(Start: 16 @13678 has 514 MA's),

Gene: CentreCat_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for CentreCat_16:
(Start: 16 @12479 has 514 MA's),

Gene: Cerulean_16 Start: 12457, Stop: 12669, Start Num: 16
Candidate Starts for Cerulean_16:
(Start: 16 @12457 has 514 MA's),

Gene: ChampagnePapi_16 Start: 12456, Stop: 12668, Start Num: 16
Candidate Starts for ChampagnePapi_16:
(Start: 16 @12456 has 514 MA's),

Gene: Changeling_20 Start: 15040, Stop: 15222, Start Num: 16
Candidate Starts for Changeling_20:
(Start: 16 @15040 has 514 MA's),

Gene: Chaph_16 Start: 12487, Stop: 12693, Start Num: 16
Candidate Starts for Chaph_16:
(Start: 16 @12487 has 514 MA's),

Gene: Chartreuse_20 Start: 13231, Stop: 13428, Start Num: 16
Candidate Starts for Chartreuse_20:
(Start: 16 @13231 has 514 MA's),

Gene: Che12_19 Start: 12126, Stop: 12281, Start Num: 16
Candidate Starts for Che12_19:
(Start: 16 @12126 has 514 MA's),

Gene: ChipMunk_19 Start: 13586, Stop: 13768, Start Num: 16
Candidate Starts for ChipMunk_19:
(Start: 16 @13586 has 514 MA's),

Gene: Chiqui_15 Start: 12395, Stop: 12571, Start Num: 16
Candidate Starts for Chiqui_15:
(Start: 16 @12395 has 514 MA's),

Gene: Chupacabra_16 Start: 12256, Stop: 12441, Start Num: 16
Candidate Starts for Chupacabra_16:
(Start: 16 @12256 has 514 MA's),

Gene: Cici_16 Start: 12478, Stop: 12675, Start Num: 16
Candidate Starts for Cici_16:
(Start: 16 @12478 has 514 MA's),

Gene: Cindaradix_15 Start: 12200, Stop: 12409, Start Num: 16
Candidate Starts for Cindaradix_15:
(Start: 16 @12200 has 514 MA's),

Gene: Cintron_16 Start: 12526, Stop: 12732, Start Num: 16
Candidate Starts for Cintron_16:
(Start: 16 @12526 has 514 MA's),

Gene: Citius_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Citius_16:
(Start: 16 @12478 has 514 MA's),

Gene: Clammy_16 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for Clammy_16:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: Clarenza_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Clarenza_16:
(Start: 16 @12475 has 514 MA's),

Gene: CloudWang3_20 Start: 13262, Stop: 13459, Start Num: 16
Candidate Starts for CloudWang3_20:
(Start: 16 @13262 has 514 MA's),

Gene: ClownCar_19 Start: 12671, Stop: 12853, Start Num: 16
Candidate Starts for ClownCar_19:
(Start: 16 @12671 has 514 MA's),

Gene: Cocoaberry_16 Start: 12482, Stop: 12688, Start Num: 16
Candidate Starts for Cocoaberry_16:
(Start: 16 @12482 has 514 MA's),

Gene: Colbster_18 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for Colbster_18:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Colin_21 Start: 14879, Stop: 15061, Start Num: 16

Candidate Starts for Colin_21:
(Start: 16 @14879 has 514 MA's),

Gene: Commander_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Commander_16:
(Start: 16 @12478 has 514 MA's),

Gene: Connomayer_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Connomayer_16:
(Start: 16 @12478 has 514 MA's),

Gene: Cookiedough_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for Cookiedough_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: CosmicSans_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for CosmicSans_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Croquant_19 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Croquant_19:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Crucio_17 Start: 13133, Stop: 13315, Start Num: 16
Candidate Starts for Crucio_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: Cullens_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Cullens_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: D29_18 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for D29_18:
(Start: 16 @13113 has 514 MA's),

Gene: D32_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for D32_20:
(Start: 16 @13113 has 514 MA's),

Gene: DBQu4n_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for DBQu4n_20:
(Start: 16 @13113 has 514 MA's),

Gene: DaHudson_18 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for DaHudson_18:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: DaVinci_20 Start: 13285, Stop: 13482, Start Num: 16
Candidate Starts for DaVinci_20:
(Start: 16 @13285 has 514 MA's),

Gene: Daishi_17 Start: 11527, Stop: 11712, Start Num: 16
Candidate Starts for Daishi_17:

(Start: 16 @11527 has 514 MA's), (24, 11590),

Gene: Dalmatian_17 Start: 13283, Stop: 13465, Start Num: 16
Candidate Starts for Dalmatian_17:
(Start: 5 @13235 has 1 MA's), (Start: 16 @13283 has 514 MA's),

Gene: Datway_16 Start: 12496, Stop: 12693, Start Num: 16
Candidate Starts for Datway_16:
(Start: 16 @12496 has 514 MA's),

Gene: Deano_16 Start: 12486, Stop: 12692, Start Num: 16
Candidate Starts for Deano_16:
(Start: 16 @12486 has 514 MA's),

Gene: DeerParkTS_18 Start: 13243, Stop: 13428, Start Num: 16
Candidate Starts for DeerParkTS_18:
(Start: 16 @13243 has 514 MA's),

Gene: DekHockey33_19 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for DekHockey33_19:
(Start: 16 @12438 has 514 MA's),

Gene: Deloris_18 Start: 13613, Stop: 13795, Start Num: 16
Candidate Starts for Deloris_18:
(Start: 16 @13613 has 514 MA's), (27, 13697),

Gene: DelvinSonDorr_19 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for DelvinSonDorr_19:
(Start: 16 @13275 has 514 MA's),

Gene: Dhanush_16 Start: 12481, Stop: 12687, Start Num: 16
Candidate Starts for Dhanush_16:
(Start: 16 @12481 has 514 MA's),

Gene: Dieselweasel_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for Dieselweasel_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: Dignity_19 Start: 13595, Stop: 13777, Start Num: 16
Candidate Starts for Dignity_19:
(Start: 5 @13547 has 1 MA's), (Start: 16 @13595 has 514 MA's),

Gene: Dinger_13 Start: 8671, Stop: 8877, Start Num: 16
Candidate Starts for Dinger_13:
(Start: 7 @8623 has 1 MA's), (Start: 16 @8671 has 514 MA's), (29, 8764),

Gene: DirtyDunning_16 Start: 12474, Stop: 12680, Start Num: 16
Candidate Starts for DirtyDunning_16:
(Start: 16 @12474 has 514 MA's),

Gene: DontArgue_15 Start: 10509, Stop: 10697, Start Num: 16
Candidate Starts for DontArgue_15:
(Start: 16 @10509 has 514 MA's),

Gene: Dorothea_20 Start: 13286, Stop: 13483, Start Num: 16
Candidate Starts for Dorothea_20:
(Start: 16 @13286 has 514 MA's),

Gene: Drake55_19 Start: 13696, Stop: 13875, Start Num: 16
Candidate Starts for Drake55_19:
(Start: 16 @13696 has 514 MA's),

Gene: Drake94_15 Start: 10353, Stop: 10532, Start Num: 16
Candidate Starts for Drake94_15:
(Start: 16 @10353 has 514 MA's),

Gene: DroogsArmy_17 Start: 13841, Stop: 14029, Start Num: 16
Candidate Starts for DroogsArmy_17:
(Start: 16 @13841 has 514 MA's),

Gene: DropBear_16 Start: 12215, Stop: 12394, Start Num: 16
Candidate Starts for DropBear_16:
(Start: 16 @12215 has 514 MA's), (21, 12251), (22, 12254), (34, 12359),

Gene: Druantia_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Druantia_16:
(Start: 16 @12479 has 514 MA's),

Gene: DudeLittle_17 Start: 13285, Stop: 13467, Start Num: 16
Candidate Starts for DudeLittle_17:
(Start: 5 @13237 has 1 MA's), (Start: 16 @13285 has 514 MA's),

Gene: Duplo_20 Start: 13154, Stop: 13309, Start Num: 16
Candidate Starts for Duplo_20:
(Start: 16 @13154 has 514 MA's),

Gene: DustyMartin_19 Start: 12326, Stop: 12511, Start Num: 16
Candidate Starts for DustyMartin_19:
(Start: 16 @12326 has 514 MA's),

Gene: EZMoney23_21 Start: 15171, Stop: 15350, Start Num: 16
Candidate Starts for EZMoney23_21:
(Start: 16 @15171 has 514 MA's),

Gene: Eagle_15 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Eagle_15:
(Start: 16 @12478 has 514 MA's),

Gene: EagleEye_19 Start: 13431, Stop: 13613, Start Num: 16
Candidate Starts for EagleEye_19:
(Start: 16 @13431 has 514 MA's),

Gene: Eaglepride_17 Start: 12258, Stop: 12449, Start Num: 16
Candidate Starts for Eaglepride_17:
(Start: 16 @12258 has 514 MA's),

Gene: Eapen_16 Start: 12477, Stop: 12683, Start Num: 16
Candidate Starts for Eapen_16:
(Start: 16 @12477 has 514 MA's),

Gene: Ebony_17 Start: 13806, Stop: 13973, Start Num: 16
Candidate Starts for Ebony_17:
(13, 13788), (Start: 16 @13806 has 514 MA's), (21, 13842), (27, 13890),

Gene: Echild_17 Start: 13288, Stop: 13470, Start Num: 16
Candidate Starts for Echild_17:
(Start: 5 @13240 has 1 MA's), (Start: 16 @13288 has 514 MA's),

Gene: Edison31_16 Start: 12290, Stop: 12475, Start Num: 16
Candidate Starts for Edison31_16:
(Start: 16 @12290 has 514 MA's),

Gene: Elle_17 Start: 12045, Stop: 12200, Start Num: 16
Candidate Starts for Elle_17:
(Start: 16 @12045 has 514 MA's),

Gene: EpicPhail_18 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for EpicPhail_18:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Epsocamisio_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for Epsocamisio_19:
(Start: 16 @12316 has 514 MA's),

Gene: Equemioh13_19 Start: 13681, Stop: 13860, Start Num: 16
Candidate Starts for Equemioh13_19:
(Start: 16 @13681 has 514 MA's),

Gene: EricB_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for EricB_20:
(Start: 16 @13275 has 514 MA's),

Gene: Erik_13 Start: 8706, Stop: 8912, Start Num: 16
Candidate Starts for Erik_13:
(12, 8685), (Start: 16 @8706 has 514 MA's), (29, 8799), (36, 8889),

Gene: Eris_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Eris_16:
(Start: 16 @12478 has 514 MA's),

Gene: Eros_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Eros_16:
(Start: 16 @12478 has 514 MA's),

Gene: Espica_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Espica_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Et2Brutus_16 Start: 13760, Stop: 13927, Start Num: 16

Candidate Starts for Et2Brutus_16:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: EtoileNova_17 Start: 12699, Stop: 12878, Start Num: 16
Candidate Starts for EtoileNova_17:
(Start: 14 @12684 has 2 MA's), (Start: 16 @12699 has 514 MA's),

Gene: Eurydice_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Eurydice_16:
(Start: 16 @12475 has 514 MA's),

Gene: EvilGenius_19 Start: 13596, Stop: 13778, Start Num: 16
Candidate Starts for EvilGenius_19:
(Start: 16 @13596 has 514 MA's),

Gene: Fameo_17 Start: 13210, Stop: 13392, Start Num: 16
Candidate Starts for Fameo_17:
(Start: 5 @13162 has 1 MA's), (Start: 16 @13210 has 514 MA's), (26, 13288),

Gene: Farber_18 Start: 12595, Stop: 12780, Start Num: 16
Candidate Starts for Farber_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: FatCactus_15 Start: 11349, Stop: 11525, Start Num: 16
Candidate Starts for FatCactus_15:
(Start: 16 @11349 has 514 MA's), (19, 11379),

Gene: Fernando_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Fernando_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Fibonacci_17 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Fibonacci_17:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: FiringLine_17 Start: 13133, Stop: 13315, Start Num: 16
Candidate Starts for FiringLine_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: First_0017 Start: 13206, Stop: 13382, Start Num: 16
Candidate Starts for First_0017:
(Start: 16 @13206 has 514 MA's),

Gene: Flare16_17 Start: 13239, Stop: 13418, Start Num: 16
Candidate Starts for Flare16_17:
(Start: 16 @13239 has 514 MA's),

Gene: Flaverint_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Flaverint_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: Florean_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Florean_16:

(Start: 16 @12475 has 514 MA's),

Gene: Flux_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Flux_16:
(Start: 16 @12478 has 514 MA's),

Gene: FlyCatcher_20 Start: 14171, Stop: 14332, Start Num: 16
Candidate Starts for FlyCatcher_20:
(Start: 16 @14171 has 514 MA's), (20, 14204), (22, 14210), (25, 14243),

Gene: ForesterFrank_18 Start: 14707, Stop: 14889, Start Num: 16
Candidate Starts for ForesterFrank_18:
(Start: 16 @14707 has 514 MA's),

Gene: Fred313_16 Start: 11876, Stop: 12052, Start Num: 16
Candidate Starts for Fred313_16:
(Start: 16 @11876 has 514 MA's), (22, 11915), (23, 11927),

Gene: Funston_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Funston_16:
(Start: 16 @12478 has 514 MA's),

Gene: Gadost_16 Start: 12482, Stop: 12688, Start Num: 16
Candidate Starts for Gadost_16:
(Start: 16 @12482 has 514 MA's),

Gene: Garak_21 Start: 13280, Stop: 13477, Start Num: 16
Candidate Starts for Garak_21:
(4, 13214), (6, 13226), (Start: 11 @13259 has 2 MA's), (Start: 16 @13280 has 514 MA's),

Gene: GaugeLDP_19 Start: 14527, Stop: 14685, Start Num: 16
Candidate Starts for GaugeLDP_19:
(Start: 16 @14527 has 514 MA's),

Gene: Gemma_18 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Gemma_18:
(Start: 16 @12679 has 514 MA's),

Gene: Georgie2_18 Start: 13134, Stop: 13316, Start Num: 16
Candidate Starts for Georgie2_18:
(Start: 5 @13086 has 1 MA's), (Start: 16 @13134 has 514 MA's),

Gene: Gilberta_17 Start: 13754, Stop: 13921, Start Num: 16
Candidate Starts for Gilberta_17:
(13, 13736), (Start: 16 @13754 has 514 MA's), (21, 13790), (27, 13838),

Gene: GingkoMaracino_18 Start: 12488, Stop: 12673, Start Num: 16
Candidate Starts for GingkoMaracino_18:
(Start: 16 @12488 has 514 MA's), (24, 12551),

Gene: Giroux_17 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for Giroux_17:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: Gladiator_20 Start: 13252, Stop: 13449, Start Num: 16
Candidate Starts for Gladiator_20:
(Start: 16 @13252 has 514 MA's), (29, 13342),

Gene: Gollum_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Gollum_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Goose_16 Start: 12257, Stop: 12442, Start Num: 16
Candidate Starts for Goose_16:
(Start: 16 @12257 has 514 MA's),

Gene: Gratitude_18 Start: 13681, Stop: 13860, Start Num: 16
Candidate Starts for Gratitude_18:
(Start: 16 @13681 has 514 MA's),

Gene: GreedyLawyer_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for GreedyLawyer_20:
(Start: 16 @13284 has 514 MA's),

Gene: Grif_18 Start: 12685, Stop: 12870, Start Num: 16
Candidate Starts for Grif_18:
(Start: 16 @12685 has 514 MA's), (24, 12748),

Gene: Groupthink_19 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Groupthink_19:
(Start: 16 @12679 has 514 MA's),

Gene: Grub_18 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for Grub_18:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: Grum1_18 Start: 12595, Stop: 12780, Start Num: 16
Candidate Starts for Grum1_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: Gruunaga_20 Start: 13252, Stop: 13449, Start Num: 16
Candidate Starts for Gruunaga_20:
(Start: 16 @13252 has 514 MA's), (29, 13342),

Gene: GtownJaz_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for GtownJaz_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: Gwennie_17 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for Gwennie_17:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: HINdeR_16 Start: 13946, Stop: 14134, Start Num: 16
Candidate Starts for HINdeR_16:
(Start: 16 @13946 has 514 MA's),

Gene: HamSlice_15 Start: 12476, Stop: 12682, Start Num: 16
Candidate Starts for HamSlice_15:
(Start: 16 @12476 has 514 MA's),

Gene: Hammer_20 Start: 13267, Stop: 13464, Start Num: 16
Candidate Starts for Hammer_20:
(Start: 16 @13267 has 514 MA's), (29, 13357),

Gene: Happiness_16 Start: 12484, Stop: 12690, Start Num: 16
Candidate Starts for Happiness_16:
(Start: 16 @12484 has 514 MA's),

Gene: Harlequin_13 Start: 8675, Stop: 8857, Start Num: 16
Candidate Starts for Harlequin_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's), (29, 8768),

Gene: HarryHoudini_19 Start: 13696, Stop: 13875, Start Num: 16
Candidate Starts for HarryHoudini_19:
(Start: 16 @13696 has 514 MA's),

Gene: HashRod_19 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for HashRod_19:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: HaveUMetTed_19 Start: 12673, Stop: 12855, Start Num: 16
Candidate Starts for HaveUMetTed_19:
(Start: 16 @12673 has 514 MA's),

Gene: Heathen_16 Start: 11956, Stop: 12135, Start Num: 16
Candidate Starts for Heathen_16:
(Start: 16 @11956 has 514 MA's), (21, 11992), (22, 11995), (34, 12100),

Gene: Heffalump_19 Start: 15012, Stop: 15194, Start Num: 16
Candidate Starts for Heffalump_19:
(Start: 16 @15012 has 514 MA's), (26, 15090),

Gene: HelDan_16 Start: 12208, Stop: 12387, Start Num: 16
Candidate Starts for HelDan_16:
(Start: 16 @12208 has 514 MA's), (21, 12244), (22, 12247), (34, 12352),

Gene: Heliosoles_18 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Heliosoles_18:
(Start: 16 @12679 has 514 MA's),

Gene: Helmet_20 Start: 13280, Stop: 13477, Start Num: 16
Candidate Starts for Helmet_20:
(4, 13214), (6, 13226), (Start: 11 @13259 has 2 MA's), (Start: 16 @13280 has 514 MA's),

Gene: Hercules11_18 Start: 12609, Stop: 12794, Start Num: 16
Candidate Starts for Hercules11_18:
(Start: 16 @12609 has 514 MA's), (24, 12672),

Gene: Hexamo_20 Start: 13234, Stop: 13431, Start Num: 16

Candidate Starts for Hexamo_20:
(Start: 16 @13234 has 514 MA's),

Gene: HippoHollow_18 Start: 14946, Stop: 15134, Start Num: 16
Candidate Starts for HippoHollow_18:
(Start: 5 @14898 has 1 MA's), (Start: 16 @14946 has 514 MA's),

Gene: Hiro_13 Start: 8675, Stop: 8857, Start Num: 16
Candidate Starts for Hiro_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: Holli_16 Start: 12268, Stop: 12474, Start Num: 16
Candidate Starts for Holli_16:
(Start: 16 @12268 has 514 MA's),

Gene: Hookmount_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Hookmount_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Hoot_20 Start: 13263, Stop: 13460, Start Num: 16
Candidate Starts for Hoot_20:
(Start: 16 @13263 has 514 MA's),

Gene: Houdini22_16 Start: 12482, Stop: 12688, Start Num: 16
Candidate Starts for Houdini22_16:
(Start: 16 @12482 has 514 MA's),

Gene: Hutc2_17 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Hutc2_17:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: Huxley_16 Start: 12542, Stop: 12748, Start Num: 16
Candidate Starts for Huxley_16:
(Start: 16 @12542 has 514 MA's),

Gene: ICleared_16 Start: 12476, Stop: 12682, Start Num: 16
Candidate Starts for ICleared_16:
(Start: 16 @12476 has 514 MA's),

Gene: Iceman_17 Start: 12767, Stop: 12973, Start Num: 16
Candidate Starts for Iceman_17:
(Start: 16 @12767 has 514 MA's),

Gene: Idleandcovert_16 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for Idleandcovert_16:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: Indra_20 Start: 13279, Stop: 13476, Start Num: 16
Candidate Starts for Indra_20:
(Start: 16 @13279 has 514 MA's),

Gene: Insomnia_17 Start: 13809, Stop: 13976, Start Num: 16
Candidate Starts for Insomnia_17:

(13, 13791), (Start: 16 @13809 has 514 MA's), (21, 13845), (27, 13893),

Gene: Iracema64_16 Start: 12456, Stop: 12668, Start Num: 16
Candidate Starts for Iracema64_16:
(Start: 16 @12456 has 514 MA's),

Gene: IronMan_19 Start: 14887, Stop: 15060, Start Num: 16
Candidate Starts for IronMan_19:
(Start: 16 @14887 has 514 MA's), (24, 14950),

Gene: Isca_16 Start: 12055, Stop: 12222, Start Num: 16
Candidate Starts for Isca_16:
(Start: 16 @12055 has 514 MA's), (22, 12094),

Gene: Isiphiwo_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for Isiphiwo_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: Iwokeuplikedis_18 Start: 13175, Stop: 13345, Start Num: 16
Candidate Starts for Iwokeuplikedis_18:
(15, 13172), (Start: 16 @13175 has 514 MA's),

Gene: JF2_16 Start: 11811, Stop: 11987, Start Num: 16
Candidate Starts for JF2_16:
(Start: 16 @11811 has 514 MA's), (22, 11850), (23, 11862),

Gene: JF4_16 Start: 11811, Stop: 11987, Start Num: 16
Candidate Starts for JF4_16:
(Start: 16 @11811 has 514 MA's), (22, 11850), (23, 11862),

Gene: JHC117_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for JHC117_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: JSwag_19 Start: 12302, Stop: 12472, Start Num: 16
Candidate Starts for JSwag_19:
(Start: 16 @12302 has 514 MA's),

Gene: Jaan_20 Start: 15276, Stop: 15458, Start Num: 16
Candidate Starts for Jaan_20:
(Start: 11 @15258 has 2 MA's), (Start: 16 @15276 has 514 MA's),

Gene: Jabith_17 Start: 13809, Stop: 13976, Start Num: 16
Candidate Starts for Jabith_17:
(13, 13791), (Start: 16 @13809 has 514 MA's), (21, 13845), (27, 13893),

Gene: Jaykayelowell_16 Start: 12474, Stop: 12680, Start Num: 16
Candidate Starts for Jaykayelowell_16:
(Start: 16 @12474 has 514 MA's),

Gene: Jeffabunny_20 Start: 13286, Stop: 13483, Start Num: 16
Candidate Starts for Jeffabunny_20:
(Start: 16 @13286 has 514 MA's), (29, 13376),

Gene: JenCasNa_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for JenCasNa_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: JeppNRM_19 Start: 12677, Stop: 12859, Start Num: 16
Candidate Starts for JeppNRM_19:
(Start: 16 @12677 has 514 MA's),

Gene: Jerm_19 Start: 13563, Stop: 13793, Start Num: 5
Candidate Starts for Jerm_19:
(Start: 5 @13563 has 1 MA's), (Start: 16 @13611 has 514 MA's),

Gene: Jester_13 Start: 8675, Stop: 8857, Start Num: 16
Candidate Starts for Jester_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's), (29, 8768),

Gene: JetBlade_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for JetBlade_16:
(Start: 16 @12475 has 514 MA's),

Gene: JewelBug_20 Start: 13287, Stop: 13484, Start Num: 16
Candidate Starts for JewelBug_20:
(Start: 16 @13287 has 514 MA's),

Gene: Jobu08_18 Start: 12669, Stop: 12854, Start Num: 16
Candidate Starts for Jobu08_18:
(Start: 16 @12669 has 514 MA's), (24, 12732),

Gene: JoongJeon_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for JoongJeon_16:
(Start: 16 @12478 has 514 MA's),

Gene: Jordennis_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for Jordennis_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: Joselito_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Joselito_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: JoshKayV_19 Start: 13615, Stop: 13797, Start Num: 16
Candidate Starts for JoshKayV_19:
(Start: 5 @13567 has 1 MA's), (Start: 16 @13615 has 514 MA's),

Gene: Journey13_15 Start: 12341, Stop: 12505, Start Num: 16
Candidate Starts for Journey13_15:
(Start: 16 @12341 has 514 MA's), (22, 12377),

Gene: Jsquared_16 Start: 12051, Stop: 12206, Start Num: 16
Candidate Starts for Jsquared_16:
(Start: 16 @12051 has 514 MA's), (24, 12114),

Gene: KADY_19 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for KADY_19:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: KFPoly_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for KFPoly_16:
(Start: 16 @12478 has 514 MA's),

Gene: Kachowdy_16 Start: 12208, Stop: 12387, Start Num: 16
Candidate Starts for Kachowdy_16:
(Start: 16 @12208 has 514 MA's), (21, 12244), (22, 12247), (34, 12352),

Gene: Kalb97_19 Start: 12677, Stop: 12859, Start Num: 16
Candidate Starts for Kalb97_19:
(Start: 16 @12677 has 514 MA's),

Gene: Kalnoky_19 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Kalnoky_19:
(Start: 16 @12679 has 514 MA's),

Gene: Kalpine_20 Start: 14973, Stop: 15155, Start Num: 16
Candidate Starts for Kalpine_20:
(Start: 16 @14973 has 514 MA's),

Gene: Kampy_16 Start: 12476, Stop: 12682, Start Num: 16
Candidate Starts for Kampy_16:
(Start: 16 @12476 has 514 MA's),

Gene: Katalie136_16 Start: 12487, Stop: 12684, Start Num: 16
Candidate Starts for Katalie136_16:
(Start: 16 @12487 has 514 MA's),

Gene: KatherineG_19 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for KatherineG_19:
(Start: 16 @12438 has 514 MA's),

Gene: Kazan_20 Start: 13290, Stop: 13487, Start Num: 16
Candidate Starts for Kazan_20:
(Start: 16 @13290 has 514 MA's),

Gene: KekoraPapaka_15 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for KekoraPapaka_15:
(Start: 16 @12478 has 514 MA's),

Gene: Kerberos_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for Kerberos_20:
(Start: 16 @13113 has 514 MA's),

Gene: Kimba_17 Start: 13809, Stop: 13976, Start Num: 16
Candidate Starts for Kimba_17:
(13, 13791), (Start: 16 @13809 has 514 MA's), (21, 13845), (27, 13893),

Gene: Kimona_13 Start: 9941, Stop: 10147, Start Num: 16

Candidate Starts for Kimona_13:
(Start: 16 @9941 has 514 MA's), (24, 10004), (27, 10025), (37, 10127),

Gene: KingCyrus_19 Start: 13586, Stop: 13768, Start Num: 16
Candidate Starts for KingCyrus_19:
(Start: 16 @13586 has 514 MA's),

Gene: Kingmustik0402_16 Start: 12470, Stop: 12676, Start Num: 16
Candidate Starts for Kingmustik0402_16:
(Start: 16 @12470 has 514 MA's),

Gene: Kinmap_16 Start: 13042, Stop: 13212, Start Num: 16
Candidate Starts for Kinmap_16:
(8, 13003), (Start: 16 @13042 has 514 MA's),

Gene: Kipper29_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for Kipper29_20:
(Start: 16 @13284 has 514 MA's),

Gene: KittenMittens_15 Start: 10361, Stop: 10540, Start Num: 16
Candidate Starts for KittenMittens_15:
(Start: 16 @10361 has 514 MA's),

Gene: Koan_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Koan_16:
(Start: 16 @12478 has 514 MA's),

Gene: Koduck_18 Start: 12395, Stop: 12547, Start Num: 16
Candidate Starts for Koduck_18:
(Start: 10 @12374 has 1 MA's), (Start: 16 @12395 has 514 MA's), (24, 12458), (28, 12482),

Gene: Koko_20 Start: 13278, Stop: 13475, Start Num: 16
Candidate Starts for Koko_20:
(Start: 16 @13278 has 514 MA's), (29, 13368),

Gene: Koreni_15 Start: 12124, Stop: 12330, Start Num: 16
Candidate Starts for Koreni_15:
(Start: 16 @12124 has 514 MA's),

Gene: Kratark_16 Start: 12473, Stop: 12679, Start Num: 16
Candidate Starts for Kratark_16:
(Start: 16 @12473 has 514 MA's),

Gene: Kremtemulon_16 Start: 12526, Stop: 12732, Start Num: 16
Candidate Starts for Kremtemulon_16:
(Start: 16 @12526 has 514 MA's),

Gene: Krishelle_13 Start: 8690, Stop: 8872, Start Num: 16
Candidate Starts for Krishelle_13:
(Start: 7 @8642 has 1 MA's), (Start: 16 @8690 has 514 MA's),

Gene: Kristoff_17 Start: 12438, Stop: 12623, Start Num: 16
Candidate Starts for Kristoff_17:

(Start: 16 @12438 has 514 MA's),

Gene: Kyee_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Kyee_16:
(Start: 16 @12479 has 514 MA's),

Gene: L5_18 Start: 12382, Stop: 12555, Start Num: 10
Candidate Starts for L5_18:
(Start: 10 @12382 has 1 MA's), (Start: 16 @12403 has 514 MA's), (24, 12466), (28, 12490),

Gene: LBerry_18 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for LBerry_18:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: LHTSCC_16 Start: 12456, Stop: 12668, Start Num: 16
Candidate Starts for LHTSCC_16:
(Start: 16 @12456 has 514 MA's),

Gene: LadyBird_17 Start: 13155, Stop: 13337, Start Num: 16
Candidate Starts for LadyBird_17:
(Start: 16 @13155 has 514 MA's),

Gene: Lambert1_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Lambert1_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Landor_18 Start: 14910, Stop: 15110, Start Num: 11
Candidate Starts for Landor_18:
(Start: 11 @14910 has 2 MA's), (Start: 16 @14928 has 514 MA's),

Gene: LappelDuVide_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for LappelDuVide_16:
(Start: 16 @12475 has 514 MA's),

Gene: Larenn_18 Start: 13470, Stop: 13649, Start Num: 16
Candidate Starts for Larenn_18:
(Start: 16 @13470 has 514 MA's),

Gene: LarryKay_18 Start: 12688, Stop: 12873, Start Num: 16
Candidate Starts for LarryKay_18:
(Start: 16 @12688 has 514 MA's), (24, 12751),

Gene: LastResort_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for LastResort_19:
(Start: 16 @12316 has 514 MA's),

Gene: Lemur_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Lemur_16:
(Start: 16 @12475 has 514 MA's),

Gene: LeoAvram_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for LeoAvram_16:
(Start: 16 @12475 has 514 MA's),

Gene: Leogania_19 Start: 15329, Stop: 15514, Start Num: 16
Candidate Starts for Leogania_19:
(Start: 16 @15329 has 514 MA's),

Gene: Leviathan_19 Start: 13643, Stop: 13825, Start Num: 16
Candidate Starts for Leviathan_19:
(Start: 5 @13595 has 1 MA's), (Start: 16 @13643 has 514 MA's),

Gene: LilTurb_19 Start: 13670, Stop: 13852, Start Num: 16
Candidate Starts for LilTurb_19:
(Start: 5 @13622 has 1 MA's), (Start: 16 @13670 has 514 MA's),

Gene: Lilbunny_20 Start: 13260, Stop: 13457, Start Num: 16
Candidate Starts for Lilbunny_20:
(Start: 16 @13260 has 514 MA's),

Gene: Lilith_18 Start: 12595, Stop: 12780, Start Num: 16
Candidate Starts for Lilith_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: Lillie_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Lillie_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: LionsBait_18 Start: 14940, Stop: 15128, Start Num: 16
Candidate Starts for LionsBait_18:
(Start: 5 @14892 has 1 MA's), (Start: 16 @14940 has 514 MA's),

Gene: LittleB_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for LittleB_16:
(Start: 16 @12478 has 514 MA's),

Gene: LittleGuy_16 Start: 12421, Stop: 12627, Start Num: 16
Candidate Starts for LittleGuy_16:
(Start: 16 @12421 has 514 MA's),

Gene: LochMonster_16 Start: 12453, Stop: 12659, Start Num: 16
Candidate Starts for LochMonster_16:
(Start: 16 @12453 has 514 MA's),

Gene: Lokk_20 Start: 14867, Stop: 15043, Start Num: 16
Candidate Starts for Lokk_20:
(Start: 16 @14867 has 514 MA's),

Gene: Looper_20 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for Looper_20:
(Start: 16 @12316 has 514 MA's),

Gene: Lorenzo_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Lorenzo_16:
(Start: 16 @12478 has 514 MA's),

Gene: Loser_20 Start: 14963, Stop: 15145, Start Num: 16
Candidate Starts for Loser_20:
(Start: 16 @14963 has 514 MA's),

Gene: Louie6_18 Start: 12689, Stop: 12874, Start Num: 16
Candidate Starts for Louie6_18:
(Start: 16 @12689 has 514 MA's), (24, 12752),

Gene: Lowa_18 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for Lowa_18:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: Lucivia_17 Start: 13806, Stop: 13973, Start Num: 16
Candidate Starts for Lucivia_17:
(13, 13788), (Start: 16 @13806 has 514 MA's), (21, 13842), (27, 13890),

Gene: Lucky10_7 Start: 5390, Stop: 5542, Start Num: 16
Candidate Starts for Lucky10_7:
(15, 5387), (Start: 16 @5390 has 514 MA's), (18, 5417),

Gene: Lucyedi_18 Start: 13368, Stop: 13550, Start Num: 16
Candidate Starts for Lucyedi_18:
(Start: 16 @13368 has 514 MA's),

Gene: LugYA_20 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for LugYA_20:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Lunsford_17 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Lunsford_17:
(Start: 16 @12475 has 514 MA's),

Gene: MA5_16 Start: 11752, Stop: 11931, Start Num: 16
Candidate Starts for MA5_16:
(Start: 14 @11737 has 2 MA's), (Start: 16 @11752 has 514 MA's), (21, 11788), (22, 11791),

Gene: MK4_16 Start: 12045, Stop: 12221, Start Num: 16
Candidate Starts for MK4_16:
(Start: 16 @12045 has 514 MA's), (22, 12084), (23, 12096),

Gene: MaCh_17 Start: 13754, Stop: 13921, Start Num: 16
Candidate Starts for MaCh_17:
(13, 13736), (Start: 16 @13754 has 514 MA's), (21, 13790), (27, 13838),

Gene: Mabel_17 Start: 13821, Stop: 13988, Start Num: 16
Candidate Starts for Mabel_17:
(13, 13803), (Start: 16 @13821 has 514 MA's), (21, 13857), (27, 13905),

Gene: MadMarie_18 Start: 12604, Stop: 12789, Start Num: 16
Candidate Starts for MadMarie_18:
(Start: 16 @12604 has 514 MA's), (24, 12667),

Gene: Mainiac_18 Start: 12595, Stop: 12780, Start Num: 16

Candidate Starts for Mainiac_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: MajorMajor_16 Start: 12104, Stop: 12289, Start Num: 16
Candidate Starts for MajorMajor_16:
(Start: 16 @12104 has 514 MA's), (26, 12182),

Gene: Malec_18 Start: 13475, Stop: 13654, Start Num: 16
Candidate Starts for Malec_18:
(Start: 16 @13475 has 514 MA's),

Gene: Malinsilva_20 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for Malinsilva_20:
(Start: 16 @12594 has 514 MA's), (24, 12657), (33, 12738),

Gene: Manu_19 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Manu_19:
(Start: 16 @12679 has 514 MA's),

Gene: MarQuardt_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for MarQuardt_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: Marchesa_16 Start: 12206, Stop: 12385, Start Num: 16
Candidate Starts for Marchesa_16:
(Start: 16 @12206 has 514 MA's), (21, 12242), (22, 12245), (34, 12350),

Gene: Margo_17 Start: 12721, Stop: 12900, Start Num: 16
Candidate Starts for Margo_17:
(Start: 14 @12706 has 2 MA's), (Start: 16 @12721 has 514 MA's),

Gene: Marie_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Marie_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Marius_19 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Marius_19:
(Start: 16 @12679 has 514 MA's),

Gene: Maverick_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Maverick_16:
(Start: 16 @12478 has 514 MA's),

Gene: Maxo_16 Start: 12476, Stop: 12682, Start Num: 16
Candidate Starts for Maxo_16:
(Start: 16 @12476 has 514 MA's),

Gene: Mayonnaise_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Mayonnaise_16:
(Start: 16 @12478 has 514 MA's),

Gene: Mazhar510_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Mazhar510_16:

(Start: 16 @12479 has 514 MA's),

Gene: McFly_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for McFly_20:
(Start: 16 @13284 has 514 MA's),

Gene: Medusa_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Medusa_16:
(Start: 16 @12479 has 514 MA's),

Gene: MeeZee_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for MeeZee_16:
(Start: 16 @12478 has 514 MA's),

Gene: Melvin_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Melvin_16:
(Start: 16 @12478 has 514 MA's),

Gene: Methuselah_18 Start: 12685, Stop: 12870, Start Num: 16
Candidate Starts for Methuselah_18:
(Start: 16 @12685 has 514 MA's), (24, 12748),

Gene: Microwolf_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for Microwolf_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: MiculUcigas_17 Start: 13239, Stop: 13418, Start Num: 16
Candidate Starts for MiculUcigas_17:
(Start: 16 @13239 has 514 MA's),

Gene: Miko_20 Start: 14836, Stop: 15012, Start Num: 16
Candidate Starts for Miko_20:
(Start: 16 @14836 has 514 MA's),

Gene: Millski_16 Start: 12481, Stop: 12687, Start Num: 16
Candidate Starts for Millski_16:
(Start: 16 @12481 has 514 MA's),

Gene: MinecraftSteve_20 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for MinecraftSteve_20:
(Start: 16 @12438 has 514 MA's),

Gene: Miramae_16 Start: 12438, Stop: 12632, Start Num: 16
Candidate Starts for Miramae_16:
(Start: 16 @12438 has 514 MA's),

Gene: Misomonster_20 Start: 12685, Stop: 12870, Start Num: 16
Candidate Starts for Misomonster_20:
(Start: 16 @12685 has 514 MA's), (24, 12748),

Gene: MissWhite_17 Start: 12278, Stop: 12454, Start Num: 16
Candidate Starts for MissWhite_17:
(Start: 16 @12278 has 514 MA's), (24, 12341), (30, 12371),

Gene: MoneyMay_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for MoneyMay_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Montavir_17 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for Montavir_17:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Morkie_7 Start: 5358, Stop: 5504, Start Num: 16
Candidate Starts for Morkie_7:
(Start: 16 @5358 has 514 MA's), (17, 5379),

Gene: Morpher26_16 Start: 12487, Stop: 12684, Start Num: 16
Candidate Starts for Morpher26_16:
(Start: 16 @12487 has 514 MA's),

Gene: Morrow_16 Start: 12481, Stop: 12687, Start Num: 16
Candidate Starts for Morrow_16:
(Start: 16 @12481 has 514 MA's),

Gene: MuchMore_20 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for MuchMore_20:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: Mulciber_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Mulciber_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: Munch_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Munch_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: Mundrea_16 Start: 12441, Stop: 12650, Start Num: 16
Candidate Starts for Mundrea_16:
(Start: 16 @12441 has 514 MA's),

Gene: NaSiaTalie_17 Start: 13236, Stop: 13415, Start Num: 16
Candidate Starts for NaSiaTalie_17:
(Start: 16 @13236 has 514 MA's),

Gene: Naiad_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Naiad_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Naji_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for Naji_20:
(Start: 16 @13113 has 514 MA's),

Gene: Nancinator_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Nancinator_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Natosaleda_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Natosaleda_13:
(Start: 16 @8707 has 514 MA's), (29, 8800),

Gene: Nebs_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Nebs_16:
(Start: 16 @12475 has 514 MA's),

Gene: Nebulosus_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for Nebulosus_19:
(Start: 16 @12316 has 514 MA's),

Gene: Nedarya_18 Start: 12899, Stop: 13075, Start Num: 16
Candidate Starts for Nedarya_18:
(Start: 16 @12899 has 514 MA's),

Gene: Neeharika16_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for Neeharika16_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: Nemo27_16 Start: 12477, Stop: 12683, Start Num: 16
Candidate Starts for Nemo27_16:
(Start: 16 @12477 has 514 MA's),

Gene: Newrala_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for Newrala_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: NicoleTera_21 Start: 14947, Stop: 15129, Start Num: 16
Candidate Starts for NicoleTera_21:
(Start: 16 @14947 has 514 MA's),

Gene: Noella_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Noella_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Noelle_16 Start: 12541, Stop: 12738, Start Num: 16
Candidate Starts for Noelle_16:
(Start: 16 @12541 has 514 MA's),

Gene: Norbert_16 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Norbert_16:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: NorthStar_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for NorthStar_16:
(Start: 16 @12478 has 514 MA's),

Gene: NotAPhaseMom_16 Start: 12482, Stop: 12688, Start Num: 16
Candidate Starts for NotAPhaseMom_16:
(Start: 16 @12482 has 514 MA's),

Gene: NothingSpecial_19 Start: 15200, Stop: 15382, Start Num: 16

Candidate Starts for NothingSpecial_19:
(Start: 16 @15200 has 514 MA's),

Gene: Nyxis_16 Start: 12421, Stop: 12627, Start Num: 16
Candidate Starts for Nyxis_16:
(Start: 16 @12421 has 514 MA's),

Gene: OKCentral2016_16 Start: 11957, Stop: 12142, Start Num: 16
Candidate Starts for OKCentral2016_16:
(Start: 16 @11957 has 514 MA's),

Gene: OKaNui_17 Start: 12531, Stop: 12737, Start Num: 16
Candidate Starts for OKaNui_17:
(Start: 16 @12531 has 514 MA's),

Gene: Obama12_16 Start: 12458, Stop: 12670, Start Num: 16
Candidate Starts for Obama12_16:
(Start: 16 @12458 has 514 MA's),

Gene: Odin_16 Start: 12002, Stop: 12157, Start Num: 16
Candidate Starts for Odin_16:
(Start: 16 @12002 has 514 MA's),

Gene: Ohfah_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Ohfah_16:
(Start: 16 @12475 has 514 MA's),

Gene: OlanP_18 Start: 12859, Stop: 13041, Start Num: 16
Candidate Starts for OlanP_18:
(Start: 16 @12859 has 514 MA's),

Gene: Ollie_18 Start: 12473, Stop: 12658, Start Num: 16
Candidate Starts for Ollie_18:
(Start: 16 @12473 has 514 MA's), (24, 12536),

Gene: Oofda_19 Start: 12287, Stop: 12457, Start Num: 16
Candidate Starts for Oofda_19:
(Start: 16 @12287 has 514 MA's),

Gene: Orange_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Orange_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: P28Green_18 Start: 12601, Stop: 12786, Start Num: 16
Candidate Starts for P28Green_18:
(Start: 16 @12601 has 514 MA's), (24, 12664),

Gene: PGHhamlin_20 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for PGHhamlin_20:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: PP_26 Start: 18359, Stop: 18544, Start Num: 16
Candidate Starts for PP_26:

(1, 18167), (2, 18194), (Start: 16 @18359 has 514 MA's), (22, 18398),

Gene: PainterBoy_18 Start: 13368, Stop: 13550, Start Num: 16
Candidate Starts for PainterBoy_18:
(Start: 16 @13368 has 514 MA's),

Gene: Palestino_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Palestino_16:
(Start: 16 @12478 has 514 MA's),

Gene: Panamaxus_17 Start: 12681, Stop: 12875, Start Num: 14
Candidate Starts for Panamaxus_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Partridge_13 Start: 8734, Stop: 8940, Start Num: 16
Candidate Starts for Partridge_13:
(Start: 7 @8686 has 1 MA's), (Start: 16 @8734 has 514 MA's), (29, 8827),

Gene: Pawn_18 Start: 12679, Stop: 12861, Start Num: 16
Candidate Starts for Pawn_18:
(Start: 16 @12679 has 514 MA's),

Gene: PeaceMeal1_15 Start: 10362, Stop: 10541, Start Num: 16
Candidate Starts for PeaceMeal1_15:
(Start: 16 @10362 has 514 MA's),

Gene: Peaches_16 Start: 12477, Stop: 12683, Start Num: 16
Candidate Starts for Peaches_16:
(Start: 16 @12477 has 514 MA's),

Gene: Pembroke_18 Start: 12603, Stop: 12788, Start Num: 16
Candidate Starts for Pembroke_18:
(Start: 16 @12603 has 514 MA's), (24, 12666),

Gene: Penny1_18 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for Penny1_18:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Perplexer_16 Start: 12481, Stop: 12678, Start Num: 16
Candidate Starts for Perplexer_16:
(Start: 16 @12481 has 514 MA's),

Gene: PeterPeter_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for PeterPeter_16:
(Start: 16 @12478 has 514 MA's),

Gene: Petersenfast_16 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Petersenfast_16:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: PetiteSangsue_16 Start: 12487, Stop: 12684, Start Num: 16
Candidate Starts for PetiteSangsue_16:
(Start: 16 @12487 has 514 MA's),

Gene: Ph8s_18 Start: 11961, Stop: 12116, Start Num: 16
Candidate Starts for Ph8s_18:
(Start: 16 @11961 has 514 MA's),

Gene: Phacado_16 Start: 12477, Stop: 12683, Start Num: 16
Candidate Starts for Phacado_16:
(Start: 16 @12477 has 514 MA's),

Gene: Phaded_20 Start: 15257, Stop: 15457, Start Num: 11
Candidate Starts for Phaded_20:
(Start: 11 @15257 has 2 MA's), (Start: 16 @15275 has 514 MA's),

Gene: PhailMary_12 Start: 8693, Stop: 8923, Start Num: 7
Candidate Starts for PhailMary_12:
(Start: 7 @8693 has 1 MA's), (Start: 16 @8741 has 514 MA's),

Gene: Phantastic_16 Start: 12115, Stop: 12300, Start Num: 16
Candidate Starts for Phantastic_16:
(Start: 16 @12115 has 514 MA's), (20, 12148), (32, 12229),

Gene: Pharaoh_17 Start: 13693, Stop: 13884, Start Num: 16
Candidate Starts for Pharaoh_17:
(3, 13597), (9, 13666), (Start: 16 @13693 has 514 MA's), (19, 13723),

Gene: Phelipe_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Phelipe_16:
(Start: 16 @12478 has 514 MA's),

Gene: Phighter1804_16 Start: 12456, Stop: 12662, Start Num: 16
Candidate Starts for Phighter1804_16:
(Start: 16 @12456 has 514 MA's),

Gene: PhishRPhriends_17 Start: 11864, Stop: 12046, Start Num: 16
Candidate Starts for PhishRPhriends_17:
(Start: 16 @11864 has 514 MA's),

Gene: Phoebe_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Phoebe_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Phontbonne_16 Start: 12422, Stop: 12628, Start Num: 16
Candidate Starts for Phontbonne_16:
(Start: 16 @12422 has 514 MA's),

Gene: PhorbesPhlower_7 Start: 5358, Stop: 5504, Start Num: 16
Candidate Starts for PhorbesPhlower_7:
(Start: 16 @5358 has 514 MA's), (17, 5379),

Gene: Phoxy_18 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for Phoxy_18:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: Phrankenstein_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Phrankenstein_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Phranny_19 Start: 12671, Stop: 12853, Start Num: 16
Candidate Starts for Phranny_19:
(Start: 16 @12671 has 514 MA's),

Gene: Pipcraft_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Pipcraft_16:
(Start: 16 @12478 has 514 MA's),

Gene: Piro94_18 Start: 13697, Stop: 13876, Start Num: 16
Candidate Starts for Piro94_18:
(Start: 16 @13697 has 514 MA's),

Gene: Pistachio_17 Start: 11702, Stop: 11881, Start Num: 16
Candidate Starts for Pistachio_17:
(Start: 16 @11702 has 514 MA's), (21, 11738), (22, 11741), (34, 11846),

Gene: Pmask_20 Start: 13276, Stop: 13473, Start Num: 16
Candidate Starts for Pmask_20:
(Start: 11 @13255 has 2 MA's), (Start: 16 @13276 has 514 MA's),

Gene: Pocahontas_17 Start: 12693, Stop: 12872, Start Num: 16
Candidate Starts for Pocahontas_17:
(Start: 14 @12678 has 2 MA's), (Start: 16 @12693 has 514 MA's),

Gene: Polymorphads_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Polymorphads_16:
(Start: 16 @12475 has 514 MA's),

Gene: Polyphemus_20 Start: 13277, Stop: 13474, Start Num: 16
Candidate Starts for Polyphemus_20:
(4, 13211), (6, 13223), (Start: 11 @13256 has 2 MA's), (Start: 16 @13277 has 514 MA's),

Gene: Pomar16_20 Start: 13154, Stop: 13309, Start Num: 16
Candidate Starts for Pomar16_20:
(Start: 16 @13154 has 514 MA's),

Gene: Poompha_15 Start: 10360, Stop: 10539, Start Num: 16
Candidate Starts for Poompha_15:
(Start: 16 @10360 has 514 MA's),

Gene: Popcicle_17 Start: 12693, Stop: 12872, Start Num: 16
Candidate Starts for Popcicle_17:
(Start: 14 @12678 has 2 MA's), (Start: 16 @12693 has 514 MA's),

Gene: PotatoSplit_19 Start: 12602, Stop: 12787, Start Num: 16
Candidate Starts for PotatoSplit_19:
(Start: 16 @12602 has 514 MA's), (24, 12665),

Gene: Power_17 Start: 13133, Stop: 13315, Start Num: 16

Candidate Starts for Power_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: Priamo_20 Start: 13303, Stop: 13500, Start Num: 16
Candidate Starts for Priamo_20:
(4, 13237), (6, 13249), (Start: 11 @13282 has 2 MA's), (Start: 16 @13303 has 514 MA's),

Gene: Prudy_19 Start: 14994, Stop: 15179, Start Num: 16
Candidate Starts for Prudy_19:
(Start: 16 @14994 has 514 MA's),

Gene: Pukovnik_19 Start: 14843, Stop: 15010, Start Num: 16
Candidate Starts for Pukovnik_19:
(Start: 16 @14843 has 514 MA's),

Gene: Pumbaa_16 Start: 12453, Stop: 12659, Start Num: 16
Candidate Starts for Pumbaa_16:
(Start: 16 @12453 has 514 MA's),

Gene: Puppy_17 Start: 11774, Stop: 11953, Start Num: 16
Candidate Starts for Puppy_17:
(Start: 16 @11774 has 514 MA's), (21, 11810), (22, 11813), (34, 11918),

Gene: PurpleHaze_18 Start: 12678, Stop: 12860, Start Num: 16
Candidate Starts for PurpleHaze_18:
(Start: 16 @12678 has 514 MA's),

Gene: QueenB2_17 Start: 13210, Stop: 13392, Start Num: 16
Candidate Starts for QueenB2_17:
(Start: 5 @13162 has 1 MA's), (Start: 16 @13210 has 514 MA's), (26, 13288),

Gene: QueenBeesly_17 Start: 13133, Stop: 13315, Start Num: 16
Candidate Starts for QueenBeesly_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: QuinnKiro_16 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for QuinnKiro_16:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Quokka_15 Start: 12104, Stop: 12289, Start Num: 16
Candidate Starts for Quokka_15:
(Start: 16 @12104 has 514 MA's), (26, 12182),

Gene: RER2_6 Start: 5579, Stop: 5785, Start Num: 16
Candidate Starts for RER2_6:
(Start: 16 @5579 has 514 MA's), (29, 5672), (36, 5762),

Gene: RGL3_6 Start: 5567, Stop: 5749, Start Num: 16
Candidate Starts for RGL3_6:
(Start: 16 @5567 has 514 MA's), (34, 5720),

Gene: Rachaly_20 Start: 14864, Stop: 15040, Start Num: 16
Candidate Starts for Rachaly_20:

(Start: 16 @14864 has 514 MA's),

Gene: Rasputin_13 Start: 8675, Stop: 8881, Start Num: 16
Candidate Starts for Rasputin_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: Ravana_20 Start: 12277, Stop: 12447, Start Num: 16
Candidate Starts for Ravana_20:
(Start: 16 @12277 has 514 MA's),

Gene: ReMo_19 Start: 12316, Stop: 12486, Start Num: 16
Candidate Starts for ReMo_19:
(Start: 16 @12316 has 514 MA's),

Gene: Reba_19 Start: 12344, Stop: 12526, Start Num: 16
Candidate Starts for Reba_19:
(Start: 16 @12344 has 514 MA's),

Gene: Rebeuca_17 Start: 12439, Stop: 12624, Start Num: 16
Candidate Starts for Rebeuca_17:
(Start: 16 @12439 has 514 MA's),

Gene: RedRock_20 Start: 15120, Stop: 15302, Start Num: 16
Candidate Starts for RedRock_20:
(Start: 16 @15120 has 514 MA's),

Gene: Relief_16 Start: 12476, Stop: 12682, Start Num: 16
Candidate Starts for Relief_16:
(Start: 16 @12476 has 514 MA's),

Gene: Remus_19 Start: 12277, Stop: 12447, Start Num: 16
Candidate Starts for Remus_19:
(Start: 16 @12277 has 514 MA's),

Gene: ResDef_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for ResDef_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Retro23_17 Start: 13284, Stop: 13466, Start Num: 16
Candidate Starts for Retro23_17:
(Start: 5 @13236 has 1 MA's), (Start: 16 @13284 has 514 MA's),

Gene: RexFury_13 Start: 8738, Stop: 8944, Start Num: 16
Candidate Starts for RexFury_13:
(Start: 16 @8738 has 514 MA's), (29, 8831), (36, 8921),

Gene: Rhodalysa_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Rhodalysa_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: RhynO_17 Start: 12415, Stop: 12600, Start Num: 16
Candidate Starts for RhynO_17:
(Start: 16 @12415 has 514 MA's),

Gene: Rifter_20 Start: 13251, Stop: 13448, Start Num: 16
Candidate Starts for Rifter_20:
(Start: 16 @13251 has 514 MA's), (29, 13341),

Gene: RockieBear_15 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for RockieBear_15:
(Start: 16 @12478 has 514 MA's),

Gene: Rockstar_16 Start: 12051, Stop: 12227, Start Num: 16
Candidate Starts for Rockstar_16:
(Start: 16 @12051 has 514 MA's), (22, 12090),

Gene: Roimos_16 Start: 12124, Stop: 12303, Start Num: 16
Candidate Starts for Roimos_16:
(Start: 16 @12124 has 514 MA's), (21, 12160), (22, 12163), (34, 12268),

Gene: Roksolana_20 Start: 13279, Stop: 13476, Start Num: 16
Candidate Starts for Roksolana_20:
(Start: 16 @13279 has 514 MA's),

Gene: Romney_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Romney_16:
(Start: 16 @12478 has 514 MA's),

Gene: Roosevelt_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Roosevelt_16:
(Start: 16 @12478 has 514 MA's),

Gene: Rosa24_15 Start: 12451, Stop: 12657, Start Num: 16
Candidate Starts for Rosa24_15:
(Start: 16 @12451 has 514 MA's),

Gene: Rosalind_19 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for Rosalind_19:
(Start: 16 @12438 has 514 MA's),

Gene: Rowdy_19 Start: 12326, Stop: 12511, Start Num: 16
Candidate Starts for Rowdy_19:
(Start: 16 @12326 has 514 MA's),

Gene: Ruin_16 Start: 12474, Stop: 12680, Start Num: 16
Candidate Starts for Ruin_16:
(Start: 16 @12474 has 514 MA's),

Gene: Rummer_18 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for Rummer_18:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: Sabertooth_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Sabertooth_16:
(Start: 16 @12475 has 514 MA's),

Gene: Sabia_18 Start: 12595, Stop: 12780, Start Num: 16
Candidate Starts for Sabia_18:
(Start: 16 @12595 has 514 MA's), (24, 12658),

Gene: Sabinator_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Sabinator_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Salz_17 Start: 13754, Stop: 13921, Start Num: 16
Candidate Starts for Salz_17:
(13, 13736), (Start: 16 @13754 has 514 MA's), (21, 13790), (27, 13838),

Gene: Saskia_16 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Saskia_16:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: SaturnRing_16 Start: 12155, Stop: 12334, Start Num: 16
Candidate Starts for SaturnRing_16:
(Start: 16 @12155 has 514 MA's), (21, 12191), (22, 12194), (34, 12299),

Gene: Scamp_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Scamp_16:
(Start: 16 @12478 has 514 MA's),

Gene: Scout_16 Start: 11455, Stop: 11634, Start Num: 16
Candidate Starts for Scout_16:
(Start: 16 @11455 has 514 MA's), (21, 11491), (22, 11494), (34, 11599),

Gene: SemperFi_19 Start: 13561, Stop: 13743, Start Num: 16
Candidate Starts for SemperFi_19:
(Start: 5 @13513 has 1 MA's), (Start: 16 @13561 has 514 MA's),

Gene: SenorClean_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for SenorClean_16:
(Start: 16 @12478 has 514 MA's),

Gene: Serenity_16 Start: 12104, Stop: 12289, Start Num: 16
Candidate Starts for Serenity_16:
(Start: 16 @12104 has 514 MA's),

Gene: Severus_15 Start: 10360, Stop: 10539, Start Num: 16
Candidate Starts for Severus_15:
(Start: 16 @10360 has 514 MA's),

Gene: Shaka_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Shaka_16:
(Start: 16 @12478 has 514 MA's),

Gene: Sham4_17 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Sham4_17:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: Shapes_19 Start: 12326, Stop: 12511, Start Num: 16

Candidate Starts for Shapes_19:
(Start: 16 @12326 has 514 MA's),

Gene: ShayRa_20 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for ShayRa_20:
(Start: 16 @12438 has 514 MA's),

Gene: Sheen_18 Start: 14229, Stop: 14390, Start Num: 16
Candidate Starts for Sheen_18:
(Start: 16 @14229 has 514 MA's), (20, 14262), (22, 14268), (25, 14301),

Gene: SheldonCooper_16 Start: 12457, Stop: 12669, Start Num: 16
Candidate Starts for SheldonCooper_16:
(Start: 16 @12457 has 514 MA's),

Gene: Shuman_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Shuman_13:
(Start: 16 @8707 has 514 MA's), (29, 8800),

Gene: Shygu2_16 Start: 12482, Stop: 12679, Start Num: 16
Candidate Starts for Shygu2_16:
(Start: 16 @12482 has 514 MA's),

Gene: Skipitt_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Skipitt_16:
(Start: 16 @12475 has 514 MA's),

Gene: Sknot_17 Start: 13239, Stop: 13418, Start Num: 16
Candidate Starts for Sknot_17:
(Start: 16 @13239 has 514 MA's),

Gene: Smeagan_19 Start: 13646, Stop: 13828, Start Num: 16
Candidate Starts for Smeagan_19:
(Start: 5 @13598 has 1 MA's), (Start: 16 @13646 has 514 MA's),

Gene: SmellyB_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for SmellyB_20:
(Start: 16 @13284 has 514 MA's),

Gene: SnapTap_17 Start: 13133, Stop: 13315, Start Num: 16
Candidate Starts for SnapTap_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: Snape_17 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Snape_17:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: Snickers_18 Start: 12576, Stop: 12761, Start Num: 16
Candidate Starts for Snickers_18:
(Start: 16 @12576 has 514 MA's), (24, 12639),

Gene: SoYo_18 Start: 12513, Stop: 12698, Start Num: 16
Candidate Starts for SoYo_18:

(Start: 16 @12513 has 514 MA's), (24, 12576),

Gene: SoilDragon_18 Start: 12285, Stop: 12470, Start Num: 16
Candidate Starts for SoilDragon_18:
(Start: 16 @12285 has 514 MA's), (24, 12348),

Gene: Soshari_20 Start: 12685, Stop: 12870, Start Num: 16
Candidate Starts for Soshari_20:
(Start: 16 @12685 has 514 MA's), (24, 12748),

Gene: Soups_19 Start: 12438, Stop: 12608, Start Num: 16
Candidate Starts for Soups_19:
(Start: 16 @12438 has 514 MA's),

Gene: Sparxx_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for Sparxx_16:
(Start: 16 @12475 has 514 MA's),

Gene: Spike509_18 Start: 12686, Stop: 12871, Start Num: 16
Candidate Starts for Spike509_18:
(Start: 16 @12686 has 514 MA's), (24, 12749),

Gene: Spino_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Spino_16:
(Start: 16 @12478 has 514 MA's),

Gene: StCroix_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for StCroix_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Stagni_18 Start: 12604, Stop: 12789, Start Num: 16
Candidate Starts for Stagni_18:
(Start: 16 @12604 has 514 MA's), (24, 12667),

Gene: StarStuff_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for StarStuff_20:
(Start: 16 @13113 has 514 MA's),

Gene: Stasia_17 Start: 12932, Stop: 13120, Start Num: 16
Candidate Starts for Stasia_17:
(Start: 16 @12932 has 514 MA's),

Gene: SteMason_15 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for SteMason_15:
(Start: 16 @12478 has 514 MA's),

Gene: Stink_16 Start: 12447, Stop: 12641, Start Num: 16
Candidate Starts for Stink_16:
(Start: 16 @12447 has 514 MA's),

Gene: Strosahl_19 Start: 12277, Stop: 12447, Start Num: 16
Candidate Starts for Strosahl_19:
(Start: 16 @12277 has 514 MA's),

Gene: Sultana_16 Start: 12479, Stop: 12685, Start Num: 16
Candidate Starts for Sultana_16:
(Start: 16 @12479 has 514 MA's),

Gene: SuperAwesome_20 Start: 13275, Stop: 13472, Start Num: 16
Candidate Starts for SuperAwesome_20:
(4, 13209), (6, 13221), (Start: 11 @13254 has 2 MA's), (Start: 16 @13275 has 514 MA's),

Gene: SuperCallie99_20 Start: 13274, Stop: 13471, Start Num: 16
Candidate Starts for SuperCallie99_20:
(Start: 16 @13274 has 514 MA's), (29, 13364),

Gene: Superchunk_16 Start: 11860, Stop: 12015, Start Num: 16
Candidate Starts for Superchunk_16:
(Start: 16 @11860 has 514 MA's),

Gene: Swann_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for Swann_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: SweetiePie_17 Start: 13133, Stop: 13315, Start Num: 16
Candidate Starts for SweetiePie_17:
(Start: 5 @13085 has 1 MA's), (Start: 16 @13133 has 514 MA's),

Gene: SwirlSquare_18 Start: 12039, Stop: 12194, Start Num: 16
Candidate Starts for SwirlSquare_18:
(Start: 16 @12039 has 514 MA's),

Gene: Switzerland_19 Start: 12431, Stop: 12601, Start Num: 16
Candidate Starts for Switzerland_19:
(Start: 16 @12431 has 514 MA's),

Gene: TNguyen7_16 Start: 12125, Stop: 12304, Start Num: 16
Candidate Starts for TNguyen7_16:
(Start: 16 @12125 has 514 MA's), (21, 12161), (22, 12164), (34, 12269),

Gene: TWAMP_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for TWAMP_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Tailonex_14 Start: 11950, Stop: 12099, Start Num: 16
Candidate Starts for Tailonex_14:
(Start: 16 @11950 has 514 MA's),

Gene: Takoda_13 Start: 8667, Stop: 8873, Start Num: 16
Candidate Starts for Takoda_13:
(Start: 7 @8619 has 1 MA's), (Start: 16 @8667 has 514 MA's), (29, 8760),

Gene: Taquarus_16 Start: 12481, Stop: 12687, Start Num: 16
Candidate Starts for Taquarus_16:
(Start: 16 @12481 has 514 MA's),

Gene: TarsusIV_17 Start: 13232, Stop: 13414, Start Num: 16
Candidate Starts for TarsusIV_17:
(Start: 16 @13232 has 514 MA's),

Gene: Taurus_18 Start: 12600, Stop: 12785, Start Num: 16
Candidate Starts for Taurus_18:
(Start: 16 @12600 has 514 MA's), (24, 12663),

Gene: Temprado_20 Start: 13280, Stop: 13477, Start Num: 16
Candidate Starts for Temprado_20:
(4, 13214), (6, 13226), (Start: 11 @13259 has 2 MA's), (Start: 16 @13280 has 514 MA's),

Gene: Terrific_21 Start: 13693, Stop: 13872, Start Num: 16
Candidate Starts for Terrific_21:
(Start: 16 @13693 has 514 MA's),

Gene: Texage_16 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Texage_16:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Thanksgivukkah_16 Start: 12482, Stop: 12688, Start Num: 16
Candidate Starts for Thanksgivukkah_16:
(Start: 16 @12482 has 514 MA's),

Gene: Tiffany_18 Start: 12496, Stop: 12681, Start Num: 16
Candidate Starts for Tiffany_18:
(Start: 16 @12496 has 514 MA's), (24, 12559),

Gene: Timothy_17 Start: 13757, Stop: 13924, Start Num: 16
Candidate Starts for Timothy_17:
(13, 13739), (Start: 16 @13757 has 514 MA's), (21, 13793), (27, 13841),

Gene: Timshel_17 Start: 14080, Stop: 14268, Start Num: 16
Candidate Starts for Timshel_17:
(Start: 16 @14080 has 514 MA's),

Gene: TinaFeyge_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for TinaFeyge_16:
(Start: 16 @12475 has 514 MA's),

Gene: TinyPebbles_18 Start: 12685, Stop: 12870, Start Num: 16
Candidate Starts for TinyPebbles_18:
(Start: 16 @12685 has 514 MA's), (24, 12748),

Gene: TinyTimmy_17 Start: 13800, Stop: 13967, Start Num: 16
Candidate Starts for TinyTimmy_17:
(13, 13782), (Start: 16 @13800 has 514 MA's), (21, 13836), (27, 13884),

Gene: Tinybot_15 Start: 12456, Stop: 12662, Start Num: 16
Candidate Starts for Tinybot_15:
(Start: 16 @12456 has 514 MA's),

Gene: TipsytheTRex_16 Start: 12263, Stop: 12424, Start Num: 16

Candidate Starts for TipsytheTRex_16:
(Start: 16 @12263 has 514 MA's), (22, 12302),

Gene: TiroTheta9_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for TiroTheta9_16:
(Start: 16 @12475 has 514 MA's),

Gene: Todacoro_17 Start: 12696, Stop: 12875, Start Num: 16
Candidate Starts for Todacoro_17:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Tomathan_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for Tomathan_20:
(Start: 16 @13113 has 514 MA's),

Gene: Topanga_16 Start: 12392, Stop: 12577, Start Num: 16
Candidate Starts for Topanga_16:
(Start: 16 @12392 has 514 MA's),

Gene: Toro_19 Start: 14171, Stop: 14332, Start Num: 16
Candidate Starts for Toro_19:
(Start: 16 @14171 has 514 MA's), (20, 14204), (22, 14210), (25, 14243),

Gene: Travvers_20 Start: 13113, Stop: 13268, Start Num: 16
Candidate Starts for Travvers_20:
(Start: 16 @13113 has 514 MA's),

Gene: Trike_14 Start: 10362, Stop: 10547, Start Num: 16
Candidate Starts for Trike_14:
(Start: 16 @10362 has 514 MA's),

Gene: Tristan_18 Start: 14947, Stop: 15129, Start Num: 16
Candidate Starts for Tristan_18:
(Start: 11 @14929 has 2 MA's), (Start: 16 @14947 has 514 MA's),

Gene: Trixie_20 Start: 14845, Stop: 15027, Start Num: 16
Candidate Starts for Trixie_20:
(Start: 16 @14845 has 514 MA's),

Gene: Trooper_17 Start: 13023, Stop: 13205, Start Num: 16
Candidate Starts for Trooper_17:
(Start: 16 @13023 has 514 MA's),

Gene: TroyPia_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for TroyPia_16:
(Start: 16 @12478 has 514 MA's),

Gene: Tucker_20 Start: 13278, Stop: 13475, Start Num: 16
Candidate Starts for Tucker_20:
(Start: 16 @13278 has 514 MA's), (29, 13368),

Gene: Turbido_19 Start: 13673, Stop: 13855, Start Num: 16
Candidate Starts for Turbido_19:

(Start: 5 @13625 has 1 MA's), (Start: 16 @13673 has 514 MA's),

Gene: Twister_16 Start: 12291, Stop: 12476, Start Num: 16
Candidate Starts for Twister_16:
(Start: 16 @12291 has 514 MA's),

Gene: TygerBlood_16 Start: 12477, Stop: 12683, Start Num: 16
Candidate Starts for TygerBlood_16:
(Start: 16 @12477 has 514 MA's),

Gene: UhSalsa_13 Start: 8707, Stop: 8913, Start Num: 16
Candidate Starts for UhSalsa_13:
(Start: 16 @8707 has 514 MA's), (29, 8800), (36, 8890),

Gene: Ulysses_15 Start: 12199, Stop: 12405, Start Num: 16
Candidate Starts for Ulysses_15:
(Start: 16 @12199 has 514 MA's),

Gene: Updawg_19 Start: 13681, Stop: 13860, Start Num: 16
Candidate Starts for Updawg_19:
(Start: 16 @13681 has 514 MA's),

Gene: VA6_17 Start: 13196, Stop: 13372, Start Num: 16
Candidate Starts for VA6_17:
(Start: 5 @13148 has 1 MA's), (Start: 16 @13196 has 514 MA's),

Gene: VC3_20 Start: 13198, Stop: 13377, Start Num: 16
Candidate Starts for VC3_20:
(Start: 16 @13198 has 514 MA's),

Gene: Veracruz_16 Start: 12681, Stop: 12875, Start Num: 14
Candidate Starts for Veracruz_16:
(Start: 14 @12681 has 2 MA's), (Start: 16 @12696 has 514 MA's),

Gene: Vix_18 Start: 12684, Stop: 12869, Start Num: 16
Candidate Starts for Vix_18:
(Start: 16 @12684 has 514 MA's), (24, 12747),

Gene: VohminGhazi_20 Start: 13284, Stop: 13481, Start Num: 16
Candidate Starts for VohminGhazi_20:
(Start: 16 @13284 has 514 MA's),

Gene: Waits_19 Start: 12283, Stop: 12453, Start Num: 16
Candidate Starts for Waits_19:
(Start: 16 @12283 has 514 MA's),

Gene: WalterMcMickey_16 Start: 12291, Stop: 12476, Start Num: 16
Candidate Starts for WalterMcMickey_16:
(Start: 16 @12291 has 514 MA's),

Gene: Wander_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Wander_16:
(Start: 16 @12478 has 514 MA's),

Gene: Warrior24_19 Start: 12287, Stop: 12457, Start Num: 16
Candidate Starts for Warrior24_19:
(Start: 16 @12287 has 514 MA's),

Gene: Watson_18 Start: 12594, Stop: 12779, Start Num: 16
Candidate Starts for Watson_18:
(Start: 16 @12594 has 514 MA's), (24, 12657),

Gene: WeiHuaDA_23 Start: 15447, Stop: 15629, Start Num: 16
Candidate Starts for WeiHuaDA_23:
(Start: 16 @15447 has 514 MA's),

Gene: Whabigail7_19 Start: 13661, Stop: 13843, Start Num: 16
Candidate Starts for Whabigail7_19:
(Start: 5 @13613 has 1 MA's), (Start: 16 @13661 has 514 MA's),

Gene: WideWale_19 Start: 13681, Stop: 13860, Start Num: 16
Candidate Starts for WideWale_19:
(Start: 16 @13681 has 514 MA's),

Gene: Wiks_20 Start: 13260, Stop: 13457, Start Num: 16
Candidate Starts for Wiks_20:
(Start: 16 @13260 has 514 MA's),

Gene: Wilbur_16 Start: 12478, Stop: 12684, Start Num: 16
Candidate Starts for Wilbur_16:
(Start: 16 @12478 has 514 MA's),

Gene: Wile_16 Start: 12497, Stop: 12694, Start Num: 16
Candidate Starts for Wile_16:
(Start: 16 @12497 has 514 MA's),

Gene: Wizard007_16 Start: 12480, Stop: 12686, Start Num: 16
Candidate Starts for Wizard007_16:
(Start: 16 @12480 has 514 MA's),

Gene: Wolpertinger_16 Start: 13760, Stop: 13927, Start Num: 16
Candidate Starts for Wolpertinger_16:
(13, 13742), (Start: 16 @13760 has 514 MA's), (21, 13796), (27, 13844),

Gene: Wooldri_20 Start: 12513, Stop: 12698, Start Num: 16
Candidate Starts for Wooldri_20:
(Start: 16 @12513 has 514 MA's), (24, 12576),

Gene: WunderPhul_20 Start: 13260, Stop: 13457, Start Num: 16
Candidate Starts for WunderPhul_20:
(Start: 16 @13260 has 514 MA's),

Gene: Xena_16 Start: 12484, Stop: 12681, Start Num: 16
Candidate Starts for Xena_16:
(Start: 16 @12484 has 514 MA's),

Gene: XianYue_17 Start: 13149, Stop: 13334, Start Num: 16
Candidate Starts for XianYue_17:
(Start: 16 @13149 has 514 MA's),

Gene: YoSam321_16 Start: 12475, Stop: 12681, Start Num: 16
Candidate Starts for YoSam321_16:
(Start: 16 @12475 has 514 MA's),

Gene: Yogi_13 Start: 8675, Stop: 8881, Start Num: 16
Candidate Starts for Yogi_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: Yokurt_20 Start: 13260, Stop: 13457, Start Num: 16
Candidate Starts for Yokurt_20:
(Start: 16 @13260 has 514 MA's),

Gene: Yoncess_13 Start: 8675, Stop: 8881, Start Num: 16
Candidate Starts for Yoncess_13:
(Start: 7 @8627 has 1 MA's), (Start: 16 @8675 has 514 MA's),

Gene: Zaka_20 Start: 13260, Stop: 13457, Start Num: 16
Candidate Starts for Zaka_20:
(Start: 16 @13260 has 514 MA's),

Gene: Zarafa_16 Start: 12217, Stop: 12396, Start Num: 16
Candidate Starts for Zarafa_16:
(Start: 16 @12217 has 514 MA's), (21, 12253), (22, 12256), (34, 12361),

Gene: Zetzy_17 Start: 12134, Stop: 12319, Start Num: 16
Candidate Starts for Zetzy_17:
(Start: 16 @12134 has 514 MA's), (17, 12152),

Gene: Zulu_20 Start: 13259, Stop: 13456, Start Num: 16
Candidate Starts for Zulu_20:
(Start: 16 @13259 has 514 MA's),