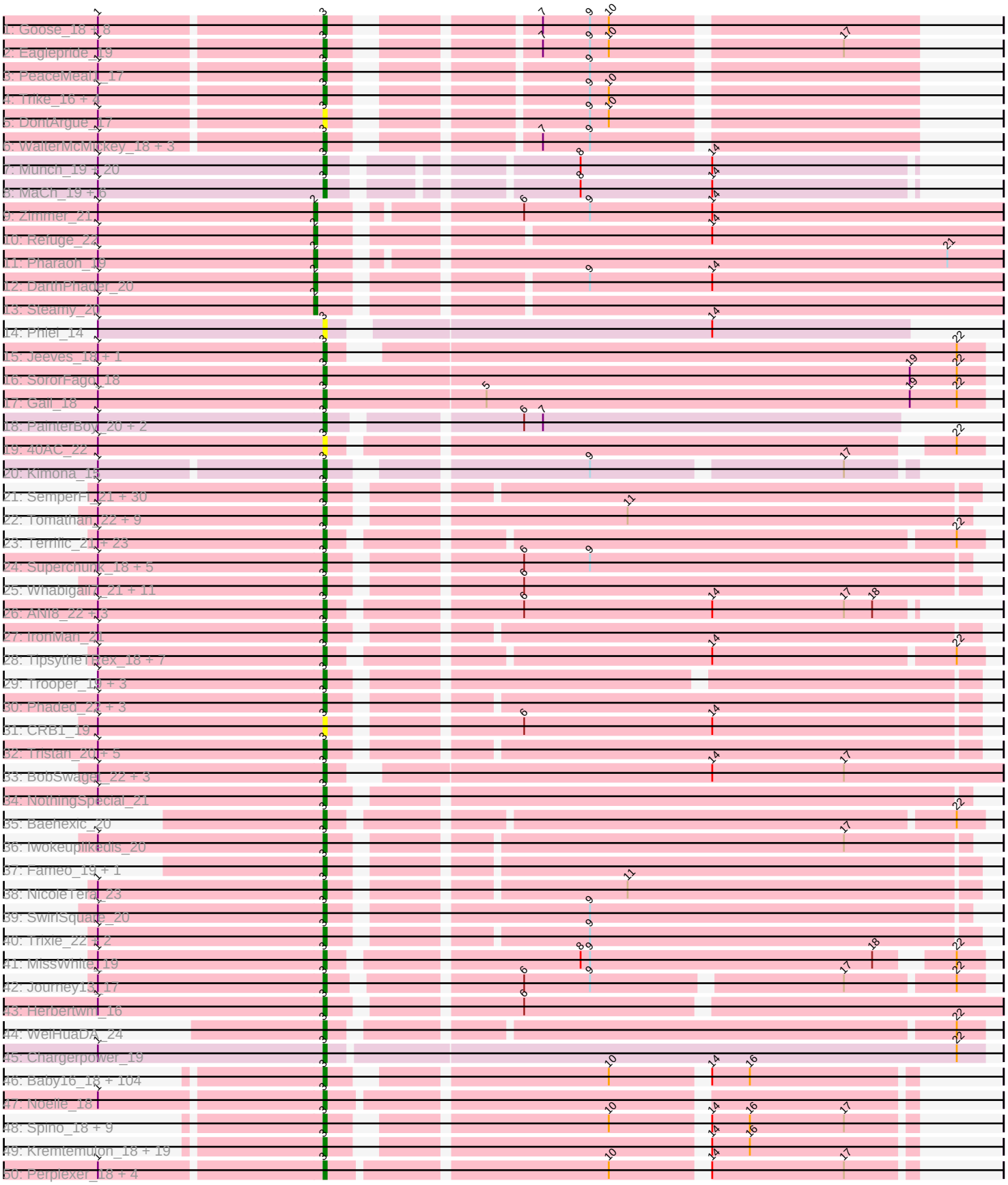
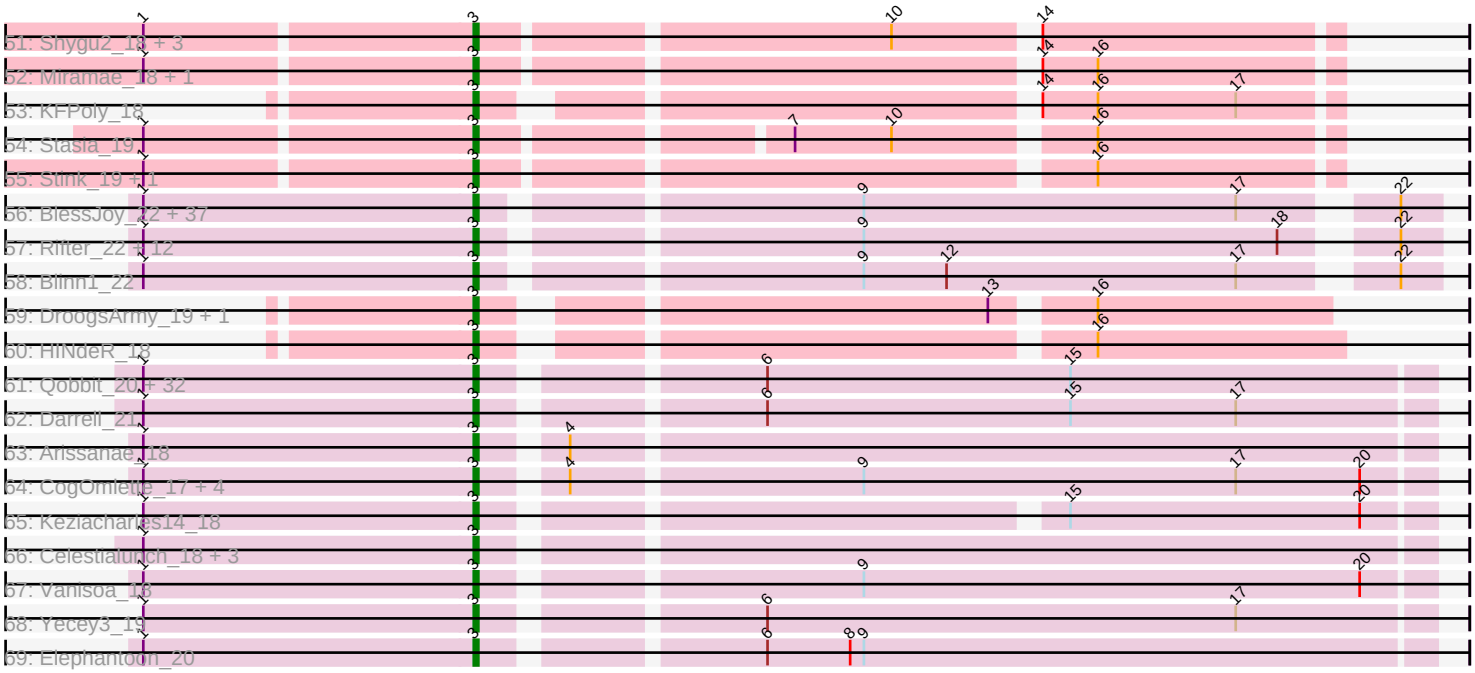
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1: Goose_18 + 8
2: Eaglepride_19
3: PeaceMeal_17
4: Trike_16 + 2
5: DontArgue_17
6: WalterMcMickey_18 + 3
7: Munch_19 + 20
8: MaCh_19 + 6
9: Zimmer_21
10: Refuge_22
11: Pharaoh_19
12: DarthPhader_20
13: Steamy_20
14: Phiel_14
15: Jeeves_18 + 1
16: SororFago_18
17: Gail_18
18: PalmerBoy_20 + 2
19: 40AC_22
20: Kimona_15
21: SemperFi_21 + 30
22: Tomathan_22 + 9
23: Terrific_21 + 23
24: Superchunk_18 + 5
25: Whabigail_21 + 11
26: ANI8_22 + 3
27: IronMan_21
28: TipsytheTrex_18 + 7
29: Trooper_19 + 3
30: Phaded_22 + 3
31: CRB1_19
32: Tristan_20 + 5
33: BobSwaget_22 + 3
34: NothingSpecial_21
35: Baehexic_20
36: Iwokeuplikedis_20
37: Fameo_19 + 1
38: NicoleTera_23
39: SwimSquare_20
40: Trixie_22 + 2
41: MissWhite_19
42: Journey18_17
43: Herbertwm_16
44: WeiHuaDA_24
45: Chargerpower_19
46: Baby16_18 + 104
47: Noelle_18
48: Spino_18 + 9
49: Kremlemulon_18 + 19
50: Perplexer_18 + 4

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51: Shygu2_18 + 3
52: Miramae_18 + 1
53: KPPoly_18
54: Stasia_19
55: Stink_19 + 1
56: BlessJoy_22 + 37
57: Ritter_22 + 12
58: Blinn1_22
59: DroogsArmy_19 + 1
60: HiNdeR_18
61: Qobbit_20 + 32
62: Darrell_21
63: Arissanae_18
64: CogOmlette_17 + 4
65: Keziacharles14_18
66: Celestialunch_18 + 3
67: Vanisoa_18
68: Yecey3_19
69: Elephantoon_20

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 345244 Report

This analysis was run 11/14/26 on database version 672.

Pham number 345244 has 448 members, 27 are drafts.

Phages represented in each track:
• Track 1 : Goose_18, RhynO_19, Rebeuca_19, OKCentral2016_18, Shapes_21, Rowdy_21, DustyMartin_21, Chupacabra_18, Kristoff_19
• Track 2 : Eaglepride_19
• Track 3 : PeaceMeal1_17
• Track 4 : Trike_16, Severus_17, Drake94_17, KittenMittens_17, Poompha_17
• Track 5 : DontArgue_17
• Track 6 : WalterMcMickey_18, Edison31_18, Twister_18, Topanga_18
• Track 7 : Munch_19, Salz_19, Orange_19, Insomnia_19, Jabith_19, Et2Brutus_18, Flaverint_19, Bowtie_19, Sham4_19, Petersenfast_19, Timothy_19, Joselito_19, Aneem_19, Kimba_19, Mulciber_19, Bud_19, Lucivia_19, Wolpertinger_18, Saskia_19, Hutc2_19, Snape_19
• Track 8 : MaCh_19, TinyTimmy_19, Fibonacci_19, Bachome_19, Ebony_19, Gilberta_19, Mabel_19
• Track 9 : Zimmer_21
• Track 10 : Refuge_22
• Track 11 : Pharaoh_19
• Track 12 : DarthPhader_20
• Track 13 : Steamy_20
• Track 14 : Phlei_14
• Track 15 : Jeeves_18, Luchador_20
• Track 16 : SororFago_18
• Track 17 : Gail_18
• Track 18 : PainterBoy_20, Lucyedi_20, EagleEye_21
• Track 19 : 40AC_22
• Track 20 : Kimona_15
• Track 21 : SemperFi_21, QueenBeesly_19, Anselm_19, AN3_19, Colin_22, Georgie2_20, SweetiePie_19, Power_19, VA6_19, Pukovnik_21, KingCyrus_21, Deloris_20, LionsBait_20, Dalmatian_19, HippoHollow_20, 20ES_19, DudeLittle_19, Prudy_22, BengiVuitton_20, SnapTap_19, First_0019, LadyBird_19, Benvolio_19, EvilGenius_21, DeerParkTS_20, Echild_19, Crucio_19, Heffalump_21, FiringLine_19, ChipMunk_21, ArcherNM_21
• Track 22 : Tomathan_22, D29_19.1, StarStuff_22, Travvers_22, DBQu4n_22, Duplo_22, Kerberos_22, Pomar16_22, Naji_22, D32_22
• Track 23 : Terrific_21, Equemioh13_21, Malec_20, NaSiaTalie_19, AnnaL29_22, Gratitude_21, Loser_22, Flare16_19, ForesterFrank_21, MiculUcigas_19, EZMoney23_23, HarryHoudini_21, Updawg_21, Sknot_19, Drake55_21, RedRock_22, Larenn_20, BabyBack_21, GaugeLDP_21, Kalpine_22, Centaur_21,

Changeling_22, WideWale_21, Piro94_20
• Track 24 : Superchunk_18, Caraxes_18, Che12_21, Odin_18, Ph8s_20, Adzzy_20
• Track 25 : Whabigail7_21, Dignity_21, Jerm_21, Agape74_21, AbbyPaige_21, Bugsy_21, TarsusIV_19, Leviathan_21, LilTurb_21, Smeagan_21, Turbido_21, SheaKeira_19
• Track 26 : ANI8_22, C3_17, AN9_22, VC3_22
• Track 27 : IronMan_21
• Track 28 : TipsytheTRex_18, Bradman_18, L5_19.1, Quokka_17, Koduck_20, Serenity_18, MajorMajor_18, Jsquared_18
• Track 29 : Trooper_19, Retro23_19, Maminiaina_20, BogosyJay_20
• Track 30 : Phaded_22, Landor_20, Bactobuster_20, Jaan_22
• Track 31 : CRB1_19
• Track 32 : Tristan_20, Sunhee_18, Kinmap_18, Leogania_21, Toaka_18, BiancaTri92_21
• Track 33 : BobSwaget_22, Miko_22, Rachaly_22, Lokk_22
• Track 34 : NothingSpecial_21
• Track 35 : Baehexic_20
• Track 36 : Iwokeuplikedis_20
• Track 37 : Fameo_19, QueenB2_19
• Track 38 : NicoleTera_23
• Track 39 : SwirlSquare_20
• Track 40 : Trixie_22, JoshKayV_21, XianYue_19
• Track 41 : MissWhite_19
• Track 42 : Journey13_17
• Track 43 : Herbertwm_16
• Track 44 : WeiHuaDA_24
• Track 45 : Chargerpower_19
• Track 46 : Baby16_18, BubbleTrouble_18, Eurydice_18, Backyardigan_18, Roosevelt_18, Scamp_18, Albee_18, Nyxis_18, Taquarus_18, Pipcraft_18, NorthStar_18, JetBlade_18, Cocoaberry_18, Maverick_18, Eagle_17, Commander_18, Buckaroo_17, Rosa24_17, Northrop_18, BellusTerra_18, Chaph_18, SenorClean_18, Connomayer_18, LHTSCC_19, BangNhom_18, Iceman_19, Phacado_18, Peaches_18, Citius_18, Wizard007_18, Badger_18, LittleGuy_18, Deano_18, Ohfah_18, Annyong_18, LeoAvram_18, Florean_18, ICleared_18, Rocksand_18, Jaykayelowell_18, Polymorphads_18, Cerulean_19, Obama12_19, Dhanush_18, Gadost_18, Lunsford_19, NotAPhaseMom_18, Nebs_18, Sultana_18, Xena_18, Medusa_18, Datway_18, HamSlice_17, Bartimeaus_18, Morrow_18, Blackmoor_18, Bruiser_18, Arturo_17, Eros_18, Burger_17, Wile_18, SteMason_18, Iracema64_19, Clarenza_18, Houdini22_18, Flux_18, Palestino_18, Phontbonne_18, TiroTheta9_18, Sparxx_18, OKaNui_19, KekoraPapaka_17, JoongJeon_18, Melvin_18, TygerBlood_18, PeterPeter_18, RockieBear_18, Bombshell_18, Avle17_18, Mazhar510_18, Phelipe_18, Sabertooth_18, ChampagnePapi_19, Tinybot_17, Alberto7_19, Camperdownii_17, Abdiel_18, Maxo_18, TroyPia_18, Ruin_18, Achebe_18, Broseidon_18, Druantia_18, Lorenzo_18, Holli_18, SheldonCooper_19, Kingmustik0402_18, Relief_18, Kampy_18, CentreCat_18, Nemo27_18, Lemur_18, LittleB_18, Wander_18, Caelakin_18
• Track 47 : Noelle_18
• Track 48 : Spino_18, Romney_18, Mayonnaise_18, MeeZee_18, YoSam321_18, Junimo_17, Wilbur_18, Eapen_18, TinaFeyge_18, Skipitt_18
• Track 49 : Kremtemulon_18, Ulysses_17, Millski_18, Koan_18, Funston_18, Happiness_18, Pumbaa_18, Skadoosh_18, Shaka_18, LochMonster_18, Koreni_17, Kyee_18, Thanksgivukkah_18, LappelDuVide_18, Huxley_18, Cintron_18, Eris_18,

Kratark_18, Phighter1804_18, DirtyDunning_18
• Track 50 : Perplexer_18, Bumblebee11_18, PetiteSangsue_18, Katalie136_18, Morpher26_18
• Track 51 : Shygu2_18, Cici_18, AbbysRanger_18, Mundrea_18
• Track 52 : Miramae_18, AvatarAhPeg_19
• Track 53 : KFPoly_18
• Track 54 : Stasia_19
• Track 55 : Stink_19, Cindaradix_17
• Track 56 : BlessJoy_22, DelvinSonDorr_21, Garak_23, Cookiedough_22, Isiphiwo_22, Wiks_22, SuperCallie99_22, JewelBug_22, VohminGhazi_22, Pmask_22, Chartreuse_22, Jordennis_22, SmellyB_22, Neeharika16_22, Newrala_22, Dorothea_22, Imbriano_22, DaVinci_22, Yokurt_22, Helmet_22, Candra_22, BABullseye_22, ToneTone_20, Priamo_22, WunderPhul_22, Temprado_22, EricB_22, Kazan_22, Zulu_22, Lilbunny_22, Hoot_22, McFly_22, Polyphemus_22, BennyP_22, SuperAwesome_22, GreedyLawyer_22, Zaka_22, Kipper29_22
• Track 57 : Rifter_22, Koko_22, Tucker_22, Hammer_22, CloudWang3_22, Roksolana_22, Gladiator_22, Blue7_22, Artemis2UCLA_22, Indra_22, Hexamo_22, Gruunaga_22, Jeffabunny_22
• Track 58 : Blinn1_22
• Track 59 : DroogsArmy_19, Timshel_19
• Track 60 : HINdeR_18
• Track 61 : Qobbit_20, Ugenie5_17, Tubs_20, Phaeder_20, Jiawan_20, RyeScarlet_20, DreamTeam1_19, Priya_20, ExplosioNervosa_20, Aliter_20, Scherzo_20, Fayely_20, Phonnegut_20, Pioneer_20, EmyBug_20, Klodlith_19, Sachima_20, Eidsmoe_20, Lilleskat_20, Myxus_20, Hanray_20, EdogawaKiddo_20, Onglai_19, Holex_20, Ayanochan_20, HortumSL17_20, Alma_20, Conquerage_20, Catalina_20, Spouty_20, Beemo_20, PackMan_20, Charm_19
• Track 62 : Darrell_21
• Track 63 : Arissanae_18
• Track 64 : CogOmlette_17, Rahalelujah_18, Minispark_17, Bellris_18, WorldCup_17
• Track 65 : Keziacharles14_18
• Track 66 : Celestialunch_18, LoneWolf_20, MegTheThird_18, Acolyte_19
• Track 67 : Vanisoa_18
• Track 68 : Yecey3_19
• Track 69 : Elephantoon_20

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

The start number called the most often in the published annotations is 3, it was called in 416 of the 421 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_19, 40AC_22, AN3_19, AN9_22, ANI8_22, AbbyPaige_21, AbbysRanger_18, Abdiel_18, Achebe_18, Acolyte_19, Adzzy_20, Agape74_21, Albee_18, Alberto7_19, Aliter_20, Alma_20, Aneem_19, AnnaL29_22, Annyong_18, Anselm_19, ArcherNM_21, Arissanae_18, Artemis2UCLA_22, Arturo_17, AvatarAhPeg_19, Avle17_18, Ayanochan_20, BABullseye_22, Baby16_18, BabyBack_21, Bachome_19, Backyardigan_18, Bactobuster_20, Badger_18, Baehexic_20, BangNhom_18, Bartimeaus_18, Beemo_20, Bellris_18, BellusTerra_18,

BengiVuitton_20, BennyP_22, Benvolio_19, BiancaTri92_21, Blackmoor_18, BlessJoy_22, Blinn1_22, Blue7_22, BobSwaget_22, BogosyJay_20, Bombshell_18, Bowtie_19, Bradman_18, Broseidon_18, Bruiser_18, BubbleTrouble_18, Buckaroo_17, Bud_19, Bugsy_21, Bumblebee11_18, Burger_17, C3_17, CRB1_19, Caelakin_18, Camperdownii_17, Candra_22, Caraxes_18, Catalina_20, Celestialunch_18, Centaur_21, CentreCat_18, Cerulean_19, ChampagnePapi_19, Changeling_22, Chaph_18, Chargerpower_19, Charm_19, Chartreuse_22, Che12_21, ChipMunk_21, Chupacabra_18, Cici_18, Cindaradix_17, Cintron_18, Citius_18, Clarenza_18, CloudWang3_22, Cocoaberry_18, CogOmlette_17, Colin_22, Commander_18, Connomayer_18, Conquerage_20, Cookiedough_22, Crucio_19, D29_19.1, D32_22, DBQu4n_22, DaVinci_22, Dalmatian_19, Darrell_21, Datway_18, Deano_18, DeerParkTS_20, Deloris_20, DelvinSonDorr_21, Dhanush_18, Dignity_21, DirtyDunning_18, DontArgue_17, Dorothea_22, Drake55_21, Drake94_17, DreamTeam1_19, DroogsArmy_19, Druantia_18, DudeLittle_19, Duplo_22, DustyMartin_21, EZMoney23_23, EagleEye_21, Eagle_17, Eaglepride_19, Eapen_18, Ebony_19, Echild_19, Edison31_18, EdogawaKiddo_20, Eidsmoe_20, Elephantoon_20, EmyBug_20, Equemioh13_21, EricB_22, Eris_18, Eros_18, Et2Brutus_18, Eurydice_18, EvilGenius_21, ExplosioNervosa_20, Fameo_19, Fayely_20, Fibonacci_19, FiringLine_19, First_0019, Flare16_19, Flaverint_19, Florean_18, Flux_18, ForesterFrank_21, Funston_18, Gadost_18, Gail_18, Garak_23, GaugeLDP_21, Georgie2_20, Gilberta_19, Gladiator_22, Goose_18, Gratitude_21, GreedyLawyer_22, Gruunaga_22, HINdeR_18, HamSlice_17, Hammer_22, Hanray_20, Happiness_18, HarryHoudini_21, Heffalump_21, Helmet_22, Herbertwm_16, Hexamo_22, HippoHollow_20, Holex_20, Holli_18, Hoot_22, HortumSL17_20, Houdini22_18, Hutc2_19, Huxley_18, ICleared_18, Iceman_19, Imbriano_22, Indra_22, Insomnia_19, Iracema64_19, IronMan_21, Isiphiwo_22, Iwokeuplikedis_20, Jaan_22, Jabith_19, Jaykayelowell_18, Jeeves_18, Jeffabunny_22, Jerm_21, JetBlade_18, JewelBug_22, Jiawan_20, JoongJeon_18, Jordennis_22, Joselito_19, JoshKayV_21, Journey13_17, Jsquared_18, Junimo_17, KFPoly_18, Kalpine_22, Kampy_18, Katalie136_18, Kazan_22, KekoraPapaka_17, Kerberos_22, Keziacharles14_18, Kimba_19, Kimona_15, KingCyrus_21, Kingmustik0402_18, Kinmap_18, Kipper29_22, KittenMittens_17, Klodlith_19, Koan_18, Koduck_20, Koko_22, Koreni_17, Kratark_18, Kremtemulon_18, Kristoff_19, Kyee_18, L5_19.1, LHTSCC_19, LadyBird_19, Landor_20, LappelDuVide_18, Larenn_20, Lemur_18, LeoAvram_18, Leogania_21, Leviathan_21, LilTurb_21, Lilbunny_22, Lilleskat_20, LionsBait_20, LittleB_18, LittleGuy_18, LochMonster_18, Lokk_22, LoneWolf_20, Lorenzo_18, Loser_22, Luchador_20, Lucivia_19, Lucyedi_20, Lunsford_19, MaCh_19, Mabel_19, MajorMajor_18, Malec_20, Maminiaina_20, Maverick_18, Maxo_18, Mayonnaise_18, Mazhar510_18, McFly_22, Medusa_18, MeeZee_18, MegTheThird_18, Melvin_18, MiculUcigas_19, Miko_22, Millski_18, Minispark_17, Miramae_18, MissWhite_19, Morpher26_18, Morrow_18, Mulciber_19, Munch_19, Mundrea_18, Myxus_20, NaSiaTalie_19, Naji_22, Nebs_18, Neeharika16_22, Nemo27_18, Newrala_22, NicoleTera_23, Noelle_18, NorthStar_18, Northrop_18, NotAPhaseMom_18, NothingSpecial_21, Nyxis_18, OKCentral2016_18, OKaNui_19, Obama12_19, Odin_18, Ohfah_18, Onglai_19, Orange_19, PackMan_20, PainterBoy_20, Palestino_18, PeaceMeal1_17, Peaches_18, Perplexer_18, PeterPeter_18, Petersenfast_19, PetiteSangsue_18, Ph8s_20, Phacado_18, Phaded_22, Phaeder_20, Phelipe_18, Phighter1804_18, Phlei_14, Phonnegut_20, Phontbonne_18, Pioneer_20, Pipcraft_18, Piro94_20, Pmask_22, Polymorphads_18, Polyphemus_22, Pomar16_22, Poompha_17, Power_19, Priamo_22, Priya_20, Prudy_22, Pukovnik_21, Pumbaa_18, Qobbit_20, QueenB2_19, QueenBeesly_19, Quokka_17, Rachaly_22, Rahalelujah_18, Rebeuca_19, RedRock_22, Relief_18,

Retro23_19, RhynO_19, Rifter_22, RockieBear_18, Rocksand_18, Roksolana_22, Romney_18, Roosevelt_18, Rosa24_17, Rowdy_21, Ruin_18, RyeScarlet_20, Sabertooth_18, Sachima_20, Salz_19, Saskia_19, Scamp_18, Scherzo_20, SemperFi_21, SenorClean_18, Serenity_18, Severus_17, Shaka_18, Sham4_19, Shapes_21, SheaKeira_19, SheldonCooper_19, Shygu2_18, Skadoosh_18, Skipitt_18, Sknot_19, Smeagan_21, SmellyB_22, SnapTap_19, Snape_19, SororFago_18, Sparxx_18, Spino_18, Spouty_20, StarStuff_22, Stasia_19, SteMason_18, Stink_19, Sultana_18, Sunhee_18, SuperAwesome_22, SuperCallie99_22, Superchunk_18, SweetiePie_19, SwirlSquare_20, Taquarus_18, TarsusIV_19, Temprado_22, Terrific_21, Thanksgivukkah_18, Timothy_19, Timshel_19, TinaFeyge_18, TinyTimmy_19, Tinybot_17, TipsytheTRex_18, TiroTheta9_18, Toaka_18, Tomathan_22, ToneTone_20, Topanga_18, Travvers_22, Trike_16, Tristan_20, Trixie_22, Trooper_19, TroyPia_18, Tubs_20, Tucker_22, Turbido_21, Twister_18, TygerBlood_18, Ugenie5_17, Ulysses_17, Updawg_21, VA6_19, VC3_22, Vanisoa_18, VohminGhazi_22, WalterMcMickey_18, Wander_18, WeiHuaDA_24, Whabigail7_21, WideWale_21, Wiks_22, Wilbur_18, Wile_18, Wizard007_18, Wolpertinger_18, WorldCup_17, WunderPhul_22, Xena_18, XianYue_19, Yecey3_19, YoSam321_18, Yokurt_22, Zaka_22, Zulu_22,

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

Genes that do not have the "Most Annotated" start:
• DarthPhader_20, Pharaoh_19, Refuge_22, Steamy_20, Zimmer_21,

Summary by start number:

Start 2:
• Found in 5 of 448 (1.1%) of genes in pham
• Manual Annotations of this start: 5 of 421
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DarthPhader_20 (A12), Pharaoh_19 (A12), Refuge_22 (A12), Steamy_20 (A12), Zimmer_21 (A12),

Start 3:
• Found in 443 of 448 (98.9%) of genes in pham
• Manual Annotations of this start: 416 of 421
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 20ES_19 (A2), 40AC_22 (A17), AN3_19 (A2), AN9_22 (A2), ANI8_22 (A2), AbbyPaige_21 (A2), AbbysRanger_18 (A4), Abdiel_18 (A4), Achebe_18 (A4), Acolyte_19 (A2), Adzzy_20 (A2), Agape74_21 (A2), Albee_18 (A4), Alberto7_19 (A4), Aliter_20 (A9), Alma_20 (A9), Aneem_19 (A11), AnnaL29_22 (A2), Annyong_18 (A4), Anselm_19 (A2), ArcherNM_21 (A2), Arissanae_18 (A9), Artemis2UCLA_22 (A6), Arturo_17 (A4), AvatarAhPeg_19 (A4), Avle17_18 (A4), Ayanochan_20 (A9), BABullseye_22 (A6), Baby16_18 (A4), BabyBack_21 (A2), Bachome_19 (A11), Backyardigan_18 (A4), Bactobuster_20 (A2), Badger_18 (A4), Baehexic_20 (A2), BangNhom_18 (A4), Bartimeaus_18 (A4), Beemo_20 (A9), Bellris_18 (A9), BellusTerra_18 (A4), BengiVuitton_20 (A2), BennyP_22 (A6), Benvolio_19 (A2), BiancaTri92_21 (A2), Blackmoor_18 (A4), BlessJoy_22 (A6), Blinn1_22 (A6), Blue7_22 (A6), BobSwaget_22 (A2), BogosyJay_20 (A9), Bombshell_18 (A4), Bowtie_19 (A11), Bradman_18 (A2), Broseidon_18 (A4), Bruiser_18 (A4), BubbleTrouble_18 (A4), Buckaroo_17 (A4), Bud_19 (A11), Bugsy_21 (A2), Bumblebee11_18 (A4), Burger_17 (A4), C3_17 (A2),

CRB1_19 (A2), Caelakin_18 (A4), Camperdownii_17 (A4), Candra_22 (A6), Caraxes_18 (A2), Catalina_20 (A9), Celestialunch_18 (A9), Centaur_21 (A2), CentreCat_18 (A4), Cerulean_19 (A4), ChampagnePapi_19 (A4), Changeling_22 (A2), Chaph_18 (A4), Chargerpower_19 (A22), Charm_19 (A9), Chartreuse_22 (A6), Che12_21 (A2), ChipMunk_21 (A2), Chupacabra_18 (A10), Cici_18 (A4), Cindaradix_17 (A4), Cintron_18 (A4), Citius_18 (A4), Clarenza_18 (A4), CloudWang3_22 (A6), Cocoaberry_18 (A4), CogOmlette_17 (A9), Colin_22 (A2), Commander_18 (A4), Connomayer_18 (A4), Conquerage_20 (A9), Cookiedough_22 (A6), Crucio_19 (A2), D29_19.1 (A2), D32_22 (A2), DBQu4n_22 (A2), DaVinci_22 (A6), Dalmatian_19 (A2), Darrell_21 (A9), Datway_18 (A4), Deano_18 (A4), DeerParkTS_20 (A2), Deloris_20 (A2), DelvinSonDorr_21 (A6), Dhanush_18 (A4), Dignity_21 (A2), DirtyDunning_18 (A4), DontArgue_17 (A10), Dorothea_22 (A6), Drake55_21 (A2), Drake94_17 (A10), DreamTeam1_19 (A9), DroogsArmy_19 (A7), Druantia_18 (A4), DudeLittle_19 (A2), Duplo_22 (A2), DustyMartin_21 (A10), EZMoney23_23 (A2), EagleEye_21 (A16), Eagle_17 (A4), Eaglepride_19 (A10), Eapen_18 (A4), Ebony_19 (A11), Echild_19 (A2), Edison31_18 (A10), EdogawaKiddo_20 (A9), Eidsmoe_20 (A9), Elephantoon_20 (A9), EmyBug_20 (A9), Equemioh13_21 (A2), EricB_22 (A6), Eris_18 (A4), Eros_18 (A4), Et2Brutus_18 (A11), Eurydice_18 (A4), EvilGenius_21 (A2), ExplosioNervosa_20 (A9), Fameo_19 (A2), Fayely_20 (A9), Fibonacci_19 (A11), FiringLine_19 (A2), First_0019 (A2), Flare16_19 (A2), Flaverint_19 (A11), Florean_18 (A4), Flux_18 (A4), ForesterFrank_21 (A2), Funston_18 (A4), Gadost_18 (A4), Gail_18 (A14), Garak_23 (A6), GaugeLDP_21 (A2), Georgie2_20 (A2), Gilberta_19 (A11), Gladiator_22 (A6), Goose_18 (A10), Gratitude_21 (A2), GreedyLawyer_22 (A6), Gruunaga_22 (A6), HINdeR_18 (A7), HamSlice_17 (A4), Hammer_22 (A6), Hanray_20 (A9), Happiness_18 (A4), HarryHoudini_21 (A2), Heffalump_21 (A2), Helmet_22 (A6), Herbertwm_16 (A2), Hexamo_22 (A6), HippoHollow_20 (A2), Holex_20 (A9), Holli_18 (A4), Hoot_22 (A6), HortumSL17_20 (A9), Houdini22_18 (A4), Hutc2_19 (A11), Huxley_18 (A4), ICleared_18 (A4), Iceman_19 (A4), Imbriano_22 (A6), Indra_22 (A6), Insomnia_19 (A11), Iracema64_19 (A4), IronMan_21 (A2), Isiphiwo_22 (A6), Iwokeuplikedis_20 (A2), Jaan_22 (A2), Jabith_19 (A11), Jaykayelowell_18 (A4), Jeeves_18 (A14), Jeffabunny_22 (A6), Jerm_21 (A2), JetBlade_18 (A4), JewelBug_22 (A6), Jiawan_20 (A9), JoongJeon_18 (A4), Jordennis_22 (A6), Joselito_19 (A11), JoshKayV_21 (A2), Journey13_17 (A2), Jsquared_18 (A2), Junimo_17 (A4), KFPoly_18 (A4), Kalpine_22 (A2), Kampy_18 (A4), Katalie136_18 (A4), Kazan_22 (A6), KekoraPapaka_17 (A4), Kerberos_22 (A2), Keziacharles14_18 (A9), Kimba_19 (A11), Kimona_15 (A19), KingCyrus_21 (A2), Kingmustik0402_18 (A4), Kinmap_18 (A21), Kipper29_22 (A6), KittenMittens_17 (A10), Klodlith_19 (A9), Koan_18 (A4), Koduck_20 (A2), Koko_22 (A6), Koreni_17 (A4), Kratark_18 (A4), Kremtemulon_18 (A4), Kristoff_19 (A10), Kyee_18 (A4), L5_19.1 (A2), LHTSCC_19 (A4), LadyBird_19 (A2), Landor_20 (A2), LappelDuVide_18 (A4), Larenn_20 (A2), Lemur_18 (A4), LeoAvram_18 (A4), Leogania_21 (A2), Leviathan_21 (A2), LilTurb_21 (A2), Lilbunny_22 (A6), Lilleskat_20 (A9), LionsBait_20 (A2), LittleB_18 (A4), LittleGuy_18 (A4), LochMonster_18 (A4), Lokk_22 (A2), LoneWolf_20 (A9), Lorenzo_18 (A4), Loser_22 (A2), Luchador_20 (A14), Lucivia_19 (A11), Lucyedi_20 (A16), Lunsford_19 (A4), MaCh_19 (A11), Mabel_19 (A11), MajorMajor_18 (A2), Malec_20 (A2), Maminiaina_20 (A9), Maverick_18 (A4), Maxo_18 (A4), Mayonnaise_18 (A4), Mazhar510_18 (A4), McFly_22 (A6), Medusa_18 (A4), MeeZee_18 (A4), MegTheThird_18 (A9), Melvin_18 (A4), MiculUcigas_19 (A2), Miko_22 (A2), Millski_18 (A4), Minispark_17 (A9), Miramae_18 (A4), MissWhite_19 (A2), Morpher26_18 (A4), Morrow_18 (A4), Mulciber_19 (A11), Munch_19 (A11), Mundrea_18 (A4), Myxus_20 (A9), NaSiaTalie_19 (A2), Naji_22 (A2), Nebs_18 (A4), Neeharika16_22 (A6), Nemo27_18 (A4), Newrala_22 (A6), NicoleTera_23 (A2),

Noelle_18 (A4), NorthStar_18 (A4), Northrop_18 (A4), NotAPhaseMom_18 (A4), NothingSpecial_21 (A2), Nyxis_18 (A4), OKCentral2016_18 (A10), OKaNui_19 (A4), Obama12_19 (A4), Odin_18 (A2), Ohfah_18 (A4), Onglai_19 (A9), Orange_19 (A11), PackMan_20 (A9), PainterBoy_20 (A16), Palestino_18 (A4), PeaceMeal1_17 (A10), Peaches_18 (A4), Perplexer_18 (A4), PeterPeter_18 (A4), Petersenfast_19 (A11), PetiteSangsue_18 (A4), Ph8s_20 (A2), Phacado_18 (A4), Phaded_22 (A2), Phaeder_20 (A9), Phelipe_18 (A4), Phighter1804_18 (A4), Phlei_14 (A13), Phonnegut_20 (A9), Phontbonne_18 (A4), Pioneer_20 (A9), Pipcraft_18 (A4), Piro94_20 (A2), Pmask_22 (A6), Polymorphads_18 (A4), Polyphemus_22 (A6), Pomar16_22 (A2), Poompha_17 (A10), Power_19 (A2), Priamo_22 (A6), Priya_20 (A9), Prudy_22 (A2), Pukovnik_21 (A2), Pumbaa_18 (A4), Qobbit_20 (A9), QueenB2_19 (A2), QueenBeesly_19 (A2), Quokka_17 (A2), Rachaly_22 (A2), Rahalelujah_18 (A9), Rebeuca_19 (A10), RedRock_22 (A2), Relief_18 (A4), Retro23_19 (A2), RhynO_19 (A10), Rifter_22 (A6), RockieBear_18 (A4), Rocksand_18 (A4), Roksolana_22 (A6), Romney_18 (A4), Roosevelt_18 (A4), Rosa24_17 (A4), Rowdy_21 (A10), Ruin_18 (A4), RyeScarlet_20 (A9), Sabertooth_18 (A4), Sachima_20 (A9), Salz_19 (A11), Saskia_19 (A11), Scamp_18 (A4), Scherzo_20 (A9), SemperFi_21 (A2), SenorClean_18 (A4), Serenity_18 (A2), Severus_17 (A10), Shaka_18 (A4), Sham4_19 (A11), Shapes_21 (A10), SheaKeira_19 (A9), SheldonCooper_19 (A4), Shygu2_18 (A4), Skadoosh_18 (A4), Skipitt_18 (A4), Sknot_19 (A2), Smeagan_21 (A2), SmellyB_22 (A6), SnapTap_19 (A2), Snape_19 (A11), SororFago_18 (A14), Sparxx_18 (A4), Spino_18 (A4), Spouty_20 (A9), StarStuff_22 (A2), Stasia_19 (A4), SteMason_18 (A4), Stink_19 (A4), Sultana_18 (A4), Sunhee_18 (A14), SuperAwesome_22 (A6), SuperCallie99_22 (A6), Superchunk_18 (A2), SweetiePie_19 (A2), SwirlSquare_20 (A2), Taquarus_18 (A4), TarsusIV_19 (A2), Temprado_22 (A6), Terrific_21 (A2), Thanksgivukkah_18 (A4), Timothy_19 (A11), Timshel_19 (A7), TinaFeyge_18 (A4), TinyTimmy_19 (A11), Tinybot_17 (A4), TipsytheTRex_18 (A2), TiroTheta9_18 (A4), Toaka_18 (A9), Tomathan_22 (A2), ToneTone_20 (A6), Topanga_18 (A10), Travvers_22 (A2), Trike_16 (A10), Tristan_20 (A2), Trixie_22 (A2), Trooper_19 (A2), TroyPia_18 (A4), Tubs_20 (A9), Tucker_22 (A6), Turbido_21 (A2), Twister_18 (A10), TygerBlood_18 (A4), Ugenie5_17 (A9), Ulysses_17 (A4), Updawg_21 (A2), VA6_19 (A2), VC3_22 (A2), Vanisoa_18 (A9), VohminGhazi_22 (A6), WalterMcMickey_18 (A10), Wander_18 (A4), WeiHuaDA_24 (A2), Whabigail7_21 (A2), WideWale_21 (A2), Wiks_22 (A6), Wilbur_18 (A4), Wile_18 (A4), Wizard007_18 (A4), Wolpertinger_18 (A11), WorldCup_17 (A9), WunderPhul_22 (A6), Xena_18 (A4), XianYue_19 (A2), Yecey3_19 (A9), YoSam321_18 (A4), Yokurt_22 (A6), Zaka_22 (A6), Zulu_22 (A6),

Summary by clusters:

There are 15 clusters represented in this pham: A14, A17, A16, A11, A10, A13, A12, A19, A22, A21, A2, A4, A7, A6, A9,

Info for manual annotations of cluster A10:
•Start number 3 was manually annotated 17 times for cluster A10.

Info for manual annotations of cluster A11:
•Start number 3 was manually annotated 28 times for cluster A11.

Info for manual annotations of cluster A12:
•Start number 2 was manually annotated 5 times for cluster A12.

Info for manual annotations of cluster A14:
•Start number 3 was manually annotated 5 times for cluster A14.

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

Info for manual annotations of cluster A19:
•Start number 3 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:
•Start number 3 was manually annotated 117 times for cluster A2.

Info for manual annotations of cluster A21:
•Start number 3 was manually annotated 1 time for cluster A21.

Info for manual annotations of cluster A22:
•Start number 3 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A4:
•Start number 3 was manually annotated 144 times for cluster A4.

Info for manual annotations of cluster A6:
•Start number 3 was manually annotated 50 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 3 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster A9:
•Start number 3 was manually annotated 46 times for cluster A9.

Gene Information:

Gene: 20ES_19 Start: 13760, Stop: 13954, Start Num: 3
Candidate Starts for 20ES_19:
(1, 13691), (Start: 3 @13760 has 416 MA's),

Gene: 40AC_22 Start: 15786, Stop: 15977, Start Num: 3
Candidate Starts for 40AC_22:
(1, 15717), (Start: 3 @15786 has 416 MA's), (22, 15969),

Gene: AN3_19 Start: 13750, Stop: 13944, Start Num: 3
Candidate Starts for AN3_19:
(1, 13681), (Start: 3 @13750 has 416 MA's),

Gene: AN9_22 Start: 13755, Stop: 13931, Start Num: 3
Candidate Starts for AN9_22:
(1, 13686), (Start: 3 @13755 has 416 MA's), (6, 13809), (14, 13869), (17, 13911), (18, 13920),

Gene: ANI8_22 Start: 13755, Stop: 13931, Start Num: 3
Candidate Starts for ANI8_22:

(1, 13686), (Start: 3 @13755 has 416 MA's), (6, 13809), (14, 13869), (17, 13911), (18, 13920),

Gene: AbbyPaige_21 Start: 14210, Stop: 14407, Start Num: 3
Candidate Starts for AbbyPaige_21:
(1, 14141), (Start: 3 @14210 has 416 MA's), (6, 14264),

Gene: AbbysRanger_18 Start: 13061, Stop: 13234, Start Num: 3
Candidate Starts for AbbysRanger_18:
(1, 12995), (Start: 3 @13061 has 416 MA's), (10, 13145), (14, 13172),

Gene: Abdiel_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Abdiel_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Achebe_18 Start: 13040, Stop: 13213, Start Num: 3
Candidate Starts for Achebe_18:
(Start: 3 @13040 has 416 MA's), (10, 13124), (14, 13151), (16, 13163),

Gene: Acolyte_19 Start: 13878, Stop: 14072, Start Num: 3
Candidate Starts for Acolyte_19:
(1, 13809), (Start: 3 @13878 has 416 MA's),

Gene: Adzzy_20 Start: 12493, Stop: 12687, Start Num: 3
Candidate Starts for Adzzy_20:
(1, 12424), (Start: 3 @12493 has 416 MA's), (6, 12547), (9, 12568),

Gene: Agape74_21 Start: 14210, Stop: 14407, Start Num: 3
Candidate Starts for Agape74_21:
(1, 14141), (Start: 3 @14210 has 416 MA's), (6, 14264),

Gene: Albee_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Albee_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Alberto7_19 Start: 13343, Stop: 13510, Start Num: 3
Candidate Starts for Alberto7_19:
(Start: 3 @13343 has 416 MA's), (10, 13421), (14, 13448), (16, 13460),

Gene: Aliter_20 Start: 14442, Stop: 14639, Start Num: 3
Candidate Starts for Aliter_20:
(1, 14373), (Start: 3 @14442 has 416 MA's), (6, 14496), (15, 14562),

Gene: Alma_20 Start: 14521, Stop: 14718, Start Num: 3
Candidate Starts for Alma_20:
(1, 14452), (Start: 3 @14521 has 416 MA's), (6, 14575), (15, 14641),

Gene: Aneem_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Aneem_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: AnnaL29_22 Start: 15599, Stop: 15799, Start Num: 3
Candidate Starts for AnnaL29_22:
(1, 15530), (Start: 3 @15599 has 416 MA's), (22, 15791),

Gene: Annyong_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Annyong_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: Anselm_19 Start: 13857, Stop: 14051, Start Num: 3
Candidate Starts for Anselm_19:
(1, 13788), (Start: 3 @13857 has 416 MA's),

Gene: ArcherNM_21 Start: 15551, Stop: 15745, Start Num: 3
Candidate Starts for ArcherNM_21:
(1, 15482), (Start: 3 @15551 has 416 MA's),

Gene: Arissanae_18 Start: 12614, Stop: 12811, Start Num: 3
Candidate Starts for Arissanae_18:
(1, 12545), (Start: 3 @12614 has 416 MA's), (4, 12629),

Gene: Artemis2UCLA_22 Start: 13736, Stop: 13927, Start Num: 3
Candidate Starts for Artemis2UCLA_22:
(1, 13667), (Start: 3 @13736 has 416 MA's), (9, 13811), (18, 13901), (22, 13919),

Gene: Arturo_17 Start: 13152, Stop: 13319, Start Num: 3
Candidate Starts for Arturo_17:
(Start: 3 @13152 has 416 MA's), (10, 13230), (14, 13257), (16, 13269),

Gene: AvatarAhPeg_19 Start: 13325, Stop: 13498, Start Num: 3
Candidate Starts for AvatarAhPeg_19:
(1, 13259), (Start: 3 @13325 has 416 MA's), (14, 13436), (16, 13448),

Gene: Avle17_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Avle17_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Ayanochan_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Ayanochan_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: BABullseye_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for BABullseye_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Baby16_18 Start: 13050, Stop: 13217, Start Num: 3
Candidate Starts for Baby16_18:
(Start: 3 @13050 has 416 MA's), (10, 13128), (14, 13155), (16, 13167),

Gene: BabyBack_21 Start: 15390, Stop: 15581, Start Num: 3
Candidate Starts for BabyBack_21:
(1, 15321), (Start: 3 @15390 has 416 MA's), (22, 15573),

Gene: Bachome_19 Start: 14299, Stop: 14469, Start Num: 3
Candidate Starts for Bachome_19:
(1, 14230), (Start: 3 @14299 has 416 MA's), (8, 14365), (14, 14407),

Gene: Backyardigan_18 Start: 13052, Stop: 13225, Start Num: 3
Candidate Starts for Backyardigan_18:
(Start: 3 @13052 has 416 MA's), (10, 13136), (14, 13163), (16, 13175),

Gene: Bactobuster_20 Start: 15482, Stop: 15676, Start Num: 3
Candidate Starts for Bactobuster_20:
(1, 15413), (Start: 3 @15482 has 416 MA's),

Gene: Badger_18 Start: 13041, Stop: 13214, Start Num: 3
Candidate Starts for Badger_18:
(Start: 3 @13041 has 416 MA's), (10, 13125), (14, 13152), (16, 13164),

Gene: Baehexic_20 Start: 14257, Stop: 14451, Start Num: 3
Candidate Starts for Baehexic_20:
(Start: 3 @14257 has 416 MA's), (22, 14443),

Gene: BangNhom_18 Start: 13353, Stop: 13520, Start Num: 3
Candidate Starts for BangNhom_18:
(Start: 3 @13353 has 416 MA's), (10, 13431), (14, 13458), (16, 13470),

Gene: Bartimeaus_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Bartimeaus_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Beemo_20 Start: 14548, Stop: 14745, Start Num: 3
Candidate Starts for Beemo_20:
(1, 14479), (Start: 3 @14548 has 416 MA's), (6, 14602), (15, 14668),

Gene: Bellris_18 Start: 12584, Stop: 12781, Start Num: 3
Candidate Starts for Bellris_18:
(1, 12515), (Start: 3 @12584 has 416 MA's), (4, 12599), (9, 12659), (17, 12740), (20, 12767),

Gene: BellusTerra_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for BellusTerra_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: BengiVuitton_20 Start: 14173, Stop: 14367, Start Num: 3
Candidate Starts for BengiVuitton_20:
(1, 14104), (Start: 3 @14173 has 416 MA's),

Gene: BennyP_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for BennyP_22:
(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: Benvolio_19 Start: 13847, Stop: 14041, Start Num: 3
Candidate Starts for Benvolio_19:
(1, 13778), (Start: 3 @13847 has 416 MA's),

Gene: BiancaTri92_21 Start: 15535, Stop: 15729, Start Num: 3
Candidate Starts for BiancaTri92_21:
(1, 15466), (Start: 3 @15535 has 416 MA's),

Gene: Blackmoor_18 Start: 13041, Stop: 13208, Start Num: 3

Candidate Starts for Blackmoor_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: BlessJoy_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for BlessJoy_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Blinn1_22 Start: 13891, Stop: 14082, Start Num: 3
Candidate Starts for Blinn1_22:
(1, 13822), (Start: 3 @13891 has 416 MA's), (9, 13966), (12, 13984), (17, 14047), (22, 14074),

Gene: Blue7_22 Start: 13826, Stop: 14017, Start Num: 3
Candidate Starts for Blue7_22:
(1, 13757), (Start: 3 @13826 has 416 MA's), (9, 13901), (18, 13991), (22, 14009),

Gene: BobSwaget_22 Start: 15401, Stop: 15604, Start Num: 3
Candidate Starts for BobSwaget_22:
(1, 15332), (Start: 3 @15401 has 416 MA's), (14, 15512), (17, 15554),

Gene: BogosyJay_20 Start: 14268, Stop: 14465, Start Num: 3
Candidate Starts for BogosyJay_20:
(1, 14199), (Start: 3 @14268 has 416 MA's),

Gene: Bombshell_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Bombshell_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Bowtie_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Bowtie_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Bradman_18 Start: 12667, Stop: 12861, Start Num: 3
Candidate Starts for Bradman_18:
(1, 12598), (Start: 3 @12667 has 416 MA's), (14, 12778), (22, 12853),

Gene: Broseidon_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Broseidon_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Bruiser_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Bruiser_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: BubbleTrouble_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for BubbleTrouble_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Buckaroo_17 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for Buckaroo_17:
(Start: 3 @13045 has 416 MA's), (10, 13123), (14, 13150), (16, 13162),

Gene: Bud_19 Start: 14308, Stop: 14478, Start Num: 3
Candidate Starts for Bud_19:

(1, 14239), (Start: 3 @14308 has 416 MA's), (8, 14374), (14, 14416),

Gene: Bugsy_21 Start: 14209, Stop: 14406, Start Num: 3
Candidate Starts for Bugsy_21:
(1, 14140), (Start: 3 @14209 has 416 MA's), (6, 14263),

Gene: Bumblebee11_18 Start: 13043, Stop: 13216, Start Num: 3
Candidate Starts for Bumblebee11_18:
(1, 12977), (Start: 3 @13043 has 416 MA's), (10, 13127), (14, 13154), (17, 13196),

Gene: Burger_17 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Burger_17:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: C3_17 Start: 13755, Stop: 13931, Start Num: 3
Candidate Starts for C3_17:
(1, 13686), (Start: 3 @13755 has 416 MA's), (6, 13809), (14, 13869), (17, 13911), (18, 13920),

Gene: CRB1_19 Start: 13729, Stop: 13926, Start Num: 3
Candidate Starts for CRB1_19:
(1, 13660), (Start: 3 @13729 has 416 MA's), (6, 13783), (14, 13843),

Gene: Caelakin_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Caelakin_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Camperdownii_17 Start: 12660, Stop: 12827, Start Num: 3
Candidate Starts for Camperdownii_17:
(Start: 3 @12660 has 416 MA's), (10, 12738), (14, 12765), (16, 12777),

Gene: Candra_22 Start: 13892, Stop: 14083, Start Num: 3
Candidate Starts for Candra_22:
(1, 13823), (Start: 3 @13892 has 416 MA's), (9, 13967), (17, 14048), (22, 14075),

Gene: Caraxes_18 Start: 12393, Stop: 12587, Start Num: 3
Candidate Starts for Caraxes_18:
(1, 12324), (Start: 3 @12393 has 416 MA's), (6, 12447), (9, 12468),

Gene: Catalina_20 Start: 14515, Stop: 14712, Start Num: 3
Candidate Starts for Catalina_20:
(1, 14446), (Start: 3 @14515 has 416 MA's), (6, 14569), (15, 14635),

Gene: Celestialunch_18 Start: 12684, Stop: 12881, Start Num: 3
Candidate Starts for Celestialunch_18:
(1, 12615), (Start: 3 @12684 has 416 MA's),

Gene: Centaur_21 Start: 14235, Stop: 14429, Start Num: 3
Candidate Starts for Centaur_21:
(1, 14166), (Start: 3 @14235 has 416 MA's), (22, 14421),

Gene: CentreCat_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for CentreCat_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: Cerulean_19 Start: 13354, Stop: 13521, Start Num: 3
Candidate Starts for Cerulean_19:
(Start: 3 @13354 has 416 MA's), (10, 13432), (14, 13459), (16, 13471),

Gene: ChampagnePapi_19 Start: 13353, Stop: 13520, Start Num: 3
Candidate Starts for ChampagnePapi_19:
(Start: 3 @13353 has 416 MA's), (10, 13431), (14, 13458), (16, 13470),

Gene: Changeling_22 Start: 15600, Stop: 15794, Start Num: 3
Candidate Starts for Changeling_22:
(1, 15531), (Start: 3 @15600 has 416 MA's), (22, 15786),

Gene: Chaph_18 Start: 13050, Stop: 13217, Start Num: 3
Candidate Starts for Chaph_18:
(Start: 3 @13050 has 416 MA's), (10, 13128), (14, 13155), (16, 13167),

Gene: Chargerpower_19 Start: 12965, Stop: 13171, Start Num: 3
Candidate Starts for Chargerpower_19:
(1, 12896), (Start: 3 @12965 has 416 MA's), (22, 13163),

Gene: Charm_19 Start: 12696, Stop: 12893, Start Num: 3
Candidate Starts for Charm_19:
(1, 12627), (Start: 3 @12696 has 416 MA's), (6, 12750), (15, 12816),

Gene: Chartreuse_22 Start: 13805, Stop: 13996, Start Num: 3
Candidate Starts for Chartreuse_22:
(1, 13736), (Start: 3 @13805 has 416 MA's), (9, 13880), (17, 13961), (22, 13988),

Gene: Che12_21 Start: 12659, Stop: 12853, Start Num: 3
Candidate Starts for Che12_21:
(1, 12590), (Start: 3 @12659 has 416 MA's), (6, 12713), (9, 12734),

Gene: ChipMunk_21 Start: 14145, Stop: 14339, Start Num: 3
Candidate Starts for ChipMunk_21:
(1, 14076), (Start: 3 @14145 has 416 MA's),

Gene: Chupacabra_18 Start: 12820, Stop: 12987, Start Num: 3
Candidate Starts for Chupacabra_18:
(1, 12754), (Start: 3 @12820 has 416 MA's), (7, 12874), (9, 12889), (10, 12895),

Gene: Cici_18 Start: 13034, Stop: 13207, Start Num: 3
Candidate Starts for Cici_18:
(1, 12968), (Start: 3 @13034 has 416 MA's), (10, 13118), (14, 13145),

Gene: Cindaradix_17 Start: 12768, Stop: 12941, Start Num: 3
Candidate Starts for Cindaradix_17:
(1, 12702), (Start: 3 @12768 has 416 MA's), (16, 12891),

Gene: Cintron_18 Start: 13089, Stop: 13256, Start Num: 3
Candidate Starts for Cintron_18:
(Start: 3 @13089 has 416 MA's), (14, 13194), (16, 13206),

Gene: Citius_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Citius_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Clarenza_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Clarenza_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: CloudWang3_22 Start: 13836, Stop: 14027, Start Num: 3
Candidate Starts for CloudWang3_22:
(1, 13767), (Start: 3 @13836 has 416 MA's), (9, 13911), (18, 14001), (22, 14019),

Gene: Cocoaberry_18 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for Cocoaberry_18:
(Start: 3 @13045 has 416 MA's), (10, 13123), (14, 13150), (16, 13162),

Gene: CogOmlette_17 Start: 12584, Stop: 12781, Start Num: 3
Candidate Starts for CogOmlette_17:
(1, 12515), (Start: 3 @12584 has 416 MA's), (4, 12599), (9, 12659), (17, 12740), (20, 12767),

Gene: Colin_22 Start: 15439, Stop: 15633, Start Num: 3
Candidate Starts for Colin_22:
(1, 15370), (Start: 3 @15439 has 416 MA's),

Gene: Commander_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Commander_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Connomayer_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Connomayer_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Conquerage_20 Start: 14544, Stop: 14741, Start Num: 3
Candidate Starts for Conquerage_20:
(1, 14475), (Start: 3 @14544 has 416 MA's), (6, 14598), (15, 14664),

Gene: Cookiedough_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for Cookiedough_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Crucio_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for Crucio_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: D29_19.1 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for D29_19.1:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: D32_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for D32_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: DBQu4n_22 Start: 13643, Stop: 13837, Start Num: 3

Candidate Starts for DBQu4n_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: DaVinci_22 Start: 13859, Stop: 14050, Start Num: 3
Candidate Starts for DaVinci_22:
(1, 13790), (Start: 3 @13859 has 416 MA's), (9, 13934), (17, 14015), (22, 14042),

Gene: Dalmatian_19 Start: 13842, Stop: 14036, Start Num: 3
Candidate Starts for Dalmatian_19:
(1, 13773), (Start: 3 @13842 has 416 MA's),

Gene: Darrell_21 Start: 14706, Stop: 14903, Start Num: 3
Candidate Starts for Darrell_21:
(1, 14637), (Start: 3 @14706 has 416 MA's), (6, 14760), (15, 14826), (17, 14862),

Gene: DarthPhader_20 Start: 14681, Stop: 14887, Start Num: 2
Candidate Starts for DarthPhader_20:
(1, 14612), (Start: 2 @14681 has 5 MA's), (9, 14756), (14, 14795),

Gene: Datway_18 Start: 13052, Stop: 13225, Start Num: 3
Candidate Starts for Datway_18:
(Start: 3 @13052 has 416 MA's), (10, 13136), (14, 13163), (16, 13175),

Gene: Deano_18 Start: 13049, Stop: 13216, Start Num: 3
Candidate Starts for Deano_18:
(Start: 3 @13049 has 416 MA's), (10, 13127), (14, 13154), (16, 13166),

Gene: DeerParkTS_20 Start: 13806, Stop: 14000, Start Num: 3
Candidate Starts for DeerParkTS_20:
(1, 13737), (Start: 3 @13806 has 416 MA's),

Gene: Deloris_20 Start: 14173, Stop: 14367, Start Num: 3
Candidate Starts for Deloris_20:
(1, 14104), (Start: 3 @14173 has 416 MA's),

Gene: DelvinSonDorr_21 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for DelvinSonDorr_21:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Dhanush_18 Start: 13044, Stop: 13211, Start Num: 3
Candidate Starts for Dhanush_18:
(Start: 3 @13044 has 416 MA's), (10, 13122), (14, 13149), (16, 13161),

Gene: Dignity_21 Start: 14154, Stop: 14351, Start Num: 3
Candidate Starts for Dignity_21:
(1, 14085), (Start: 3 @14154 has 416 MA's), (6, 14208),

Gene: DirtyDunning_18 Start: 13037, Stop: 13204, Start Num: 3
Candidate Starts for DirtyDunning_18:
(Start: 3 @13037 has 416 MA's), (14, 13142), (16, 13154),

Gene: DontArgue_17 Start: 11078, Stop: 11245, Start Num: 3
Candidate Starts for DontArgue_17:

(1, 11012), (Start: 3 @11078 has 416 MA's), (9, 11147), (10, 11153),

Gene: Dorothea_22 Start: 13860, Stop: 14051, Start Num: 3
Candidate Starts for Dorothea_22:
(1, 13791), (Start: 3 @13860 has 416 MA's), (9, 13935), (17, 14016), (22, 14043),

Gene: Drake55_21 Start: 14253, Stop: 14447, Start Num: 3
Candidate Starts for Drake55_21:
(1, 14184), (Start: 3 @14253 has 416 MA's), (22, 14439),

Gene: Drake94_17 Start: 10911, Stop: 11078, Start Num: 3
Candidate Starts for Drake94_17:
(1, 10845), (Start: 3 @10911 has 416 MA's), (9, 10980), (10, 10986),

Gene: DreamTeam1_19 Start: 12696, Stop: 12893, Start Num: 3
Candidate Starts for DreamTeam1_19:
(1, 12627), (Start: 3 @12696 has 416 MA's), (6, 12750), (15, 12816),

Gene: DroogsArmy_19 Start: 14408, Stop: 14575, Start Num: 3
Candidate Starts for DroogsArmy_19:
(Start: 3 @14408 has 416 MA's), (13, 14507), (16, 14525),

Gene: Druantia_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Druantia_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: DudeLittle_19 Start: 13844, Stop: 14038, Start Num: 3
Candidate Starts for DudeLittle_19:
(1, 13775), (Start: 3 @13844 has 416 MA's),

Gene: Duplo_22 Start: 13684, Stop: 13878, Start Num: 3
Candidate Starts for Duplo_22:
(1, 13615), (Start: 3 @13684 has 416 MA's), (11, 13771),

Gene: DustyMartin_21 Start: 12890, Stop: 13057, Start Num: 3
Candidate Starts for DustyMartin_21:
(1, 12824), (Start: 3 @12890 has 416 MA's), (7, 12944), (9, 12959), (10, 12965),

Gene: EZMoney23_23 Start: 15728, Stop: 15922, Start Num: 3
Candidate Starts for EZMoney23_23:
(1, 15659), (Start: 3 @15728 has 416 MA's), (22, 15914),

Gene: Eagle_17 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Eagle_17:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: EagleEye_21 Start: 13990, Stop: 14163, Start Num: 3
Candidate Starts for EagleEye_21:
(1, 13921), (Start: 3 @13990 has 416 MA's), (6, 14044), (7, 14050),

Gene: Eaglepride_19 Start: 12830, Stop: 12997, Start Num: 3
Candidate Starts for Eaglepride_19:
(1, 12764), (Start: 3 @12830 has 416 MA's), (7, 12884), (9, 12899), (10, 12905), (17, 12974),

Gene: Eapen_18 Start: 13040, Stop: 13207, Start Num: 3
Candidate Starts for Eapen_18:
(Start: 3 @13040 has 416 MA's), (10, 13118), (14, 13145), (16, 13157), (17, 13187),

Gene: Ebony_19 Start: 14351, Stop: 14521, Start Num: 3
Candidate Starts for Ebony_19:
(1, 14282), (Start: 3 @14351 has 416 MA's), (8, 14417), (14, 14459),

Gene: Echild_19 Start: 13847, Stop: 14041, Start Num: 3
Candidate Starts for Echild_19:
(1, 13778), (Start: 3 @13847 has 416 MA's),

Gene: Edison31_18 Start: 12854, Stop: 13021, Start Num: 3
Candidate Starts for Edison31_18:
(1, 12788), (Start: 3 @12854 has 416 MA's), (7, 12908), (9, 12923),

Gene: EdogawaKiddo_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for EdogawaKiddo_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: Eidsmoe_20 Start: 14544, Stop: 14741, Start Num: 3
Candidate Starts for Eidsmoe_20:
(1, 14475), (Start: 3 @14544 has 416 MA's), (6, 14598), (15, 14664),

Gene: Elephantoon_20 Start: 14135, Stop: 14332, Start Num: 3
Candidate Starts for Elephantoon_20:
(1, 14066), (Start: 3 @14135 has 416 MA's), (6, 14189), (8, 14207), (9, 14210),

Gene: EmyBug_20 Start: 14544, Stop: 14741, Start Num: 3
Candidate Starts for EmyBug_20:
(1, 14475), (Start: 3 @14544 has 416 MA's), (6, 14598), (15, 14664),

Gene: Equemioh13_21 Start: 14238, Stop: 14432, Start Num: 3
Candidate Starts for Equemioh13_21:
(1, 14169), (Start: 3 @14238 has 416 MA's), (22, 14424),

Gene: EricB_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for EricB_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Eris_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Eris_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158),

Gene: Eros_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Eros_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Et2Brutus_18 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Et2Brutus_18:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: Eurydice_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Eurydice_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: EvilGenius_21 Start: 14155, Stop: 14349, Start Num: 3
Candidate Starts for EvilGenius_21:
(1, 14086), (Start: 3 @14155 has 416 MA's),

Gene: ExplosioNervosa_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for ExplosioNervosa_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: Fameo_19 Start: 13770, Stop: 13964, Start Num: 3
Candidate Starts for Fameo_19:
(Start: 3 @13770 has 416 MA's),

Gene: Fayely_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Fayely_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: Fibonacci_19 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Fibonacci_19:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: FiringLine_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for FiringLine_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: First_0019 Start: 13760, Stop: 13954, Start Num: 3
Candidate Starts for First_0019:
(1, 13691), (Start: 3 @13760 has 416 MA's),

Gene: Flare16_19 Start: 13796, Stop: 13990, Start Num: 3
Candidate Starts for Flare16_19:
(1, 13727), (Start: 3 @13796 has 416 MA's), (22, 13982),

Gene: Flaverint_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Flaverint_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Florean_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Florean_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Flux_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Flux_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: ForesterFrank_21 Start: 15267, Stop: 15461, Start Num: 3
Candidate Starts for ForesterFrank_21:
(1, 15198), (Start: 3 @15267 has 416 MA's), (22, 15453),

Gene: Funston_18 Start: 13041, Stop: 13208, Start Num: 3

Candidate Starts for Funston_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158),

Gene: Gadost_18 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for Gadost_18:
(Start: 3 @13045 has 416 MA's), (10, 13123), (14, 13150), (16, 13162),

Gene: Gail_18 Start: 12857, Stop: 13066, Start Num: 3
Candidate Starts for Gail_18:
(1, 12788), (Start: 3 @12857 has 416 MA's), (5, 12908), (19, 13043), (22, 13058),

Gene: Garak_23 Start: 13854, Stop: 14045, Start Num: 3
Candidate Starts for Garak_23:
(1, 13785), (Start: 3 @13854 has 416 MA's), (9, 13929), (17, 14010), (22, 14037),

Gene: GaugeLDP_21 Start: 15063, Stop: 15254, Start Num: 3
Candidate Starts for GaugeLDP_21:
(1, 14994), (Start: 3 @15063 has 416 MA's), (22, 15246),

Gene: Georgie2_20 Start: 13693, Stop: 13887, Start Num: 3
Candidate Starts for Georgie2_20:
(1, 13624), (Start: 3 @13693 has 416 MA's),

Gene: Gilberta_19 Start: 14299, Stop: 14469, Start Num: 3
Candidate Starts for Gilberta_19:
(1, 14230), (Start: 3 @14299 has 416 MA's), (8, 14365), (14, 14407),

Gene: Gladiator_22 Start: 13826, Stop: 14017, Start Num: 3
Candidate Starts for Gladiator_22:
(1, 13757), (Start: 3 @13826 has 416 MA's), (9, 13901), (18, 13991), (22, 14009),

Gene: Goose_18 Start: 12821, Stop: 12988, Start Num: 3
Candidate Starts for Goose_18:
(1, 12755), (Start: 3 @12821 has 416 MA's), (7, 12875), (9, 12890), (10, 12896),

Gene: Gratitude_21 Start: 14238, Stop: 14432, Start Num: 3
Candidate Starts for Gratitude_21:
(1, 14169), (Start: 3 @14238 has 416 MA's), (22, 14424),

Gene: GreedyLawyer_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for GreedyLawyer_22:
(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: Gruunaga_22 Start: 13826, Stop: 14017, Start Num: 3
Candidate Starts for Gruunaga_22:
(1, 13757), (Start: 3 @13826 has 416 MA's), (9, 13901), (18, 13991), (22, 14009),

Gene: HINdeR_18 Start: 14513, Stop: 14683, Start Num: 3
Candidate Starts for HINdeR_18:
(Start: 3 @14513 has 416 MA's), (16, 14630),

Gene: HamSlice_17 Start: 13039, Stop: 13206, Start Num: 3
Candidate Starts for HamSlice_17:

(Start: 3 @13039 has 416 MA's), (10, 13117), (14, 13144), (16, 13156),

Gene: Hammer_22 Start: 13841, Stop: 14032, Start Num: 3
Candidate Starts for Hammer_22:
(1, 13772), (Start: 3 @13841 has 416 MA's), (9, 13916), (18, 14006), (22, 14024),

Gene: Hanray_20 Start: 14518, Stop: 14715, Start Num: 3
Candidate Starts for Hanray_20:
(1, 14449), (Start: 3 @14518 has 416 MA's), (6, 14572), (15, 14638),

Gene: Happiness_18 Start: 13047, Stop: 13214, Start Num: 3
Candidate Starts for Happiness_18:
(Start: 3 @13047 has 416 MA's), (14, 13152), (16, 13164),

Gene: HarryHoudini_21 Start: 14253, Stop: 14447, Start Num: 3
Candidate Starts for HarryHoudini_21:
(1, 14184), (Start: 3 @14253 has 416 MA's), (22, 14439),

Gene: Heffalump_21 Start: 15572, Stop: 15766, Start Num: 3
Candidate Starts for Heffalump_21:
(1, 15503), (Start: 3 @15572 has 416 MA's),

Gene: Helmet_22 Start: 13854, Stop: 14045, Start Num: 3
Candidate Starts for Helmet_22:
(1, 13785), (Start: 3 @13854 has 416 MA's), (9, 13929), (17, 14010), (22, 14037),

Gene: Herbertwm_16 Start: 12450, Stop: 12650, Start Num: 3
Candidate Starts for Herbertwm_16:
(1, 12381), (Start: 3 @12450 has 416 MA's), (6, 12504),

Gene: Hexamo_22 Start: 13808, Stop: 13999, Start Num: 3
Candidate Starts for Hexamo_22:
(1, 13739), (Start: 3 @13808 has 416 MA's), (9, 13883), (18, 13973), (22, 13991),

Gene: HippoHollow_20 Start: 15512, Stop: 15706, Start Num: 3
Candidate Starts for HippoHollow_20:
(1, 15443), (Start: 3 @15512 has 416 MA's),

Gene: Holex_20 Start: 14518, Stop: 14715, Start Num: 3
Candidate Starts for Holex_20:
(1, 14449), (Start: 3 @14518 has 416 MA's), (6, 14572), (15, 14638),

Gene: Holli_18 Start: 12831, Stop: 12998, Start Num: 3
Candidate Starts for Holli_18:
(Start: 3 @12831 has 416 MA's), (10, 12909), (14, 12936), (16, 12948),

Gene: Hoot_22 Start: 13837, Stop: 14028, Start Num: 3
Candidate Starts for Hoot_22:
(1, 13768), (Start: 3 @13837 has 416 MA's), (9, 13912), (17, 13993), (22, 14020),

Gene: HortumSL17_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for HortumSL17_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: Houdini22_18 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for Houdini22_18:
(Start: 3 @13045 has 416 MA's), (10, 13123), (14, 13150), (16, 13162),

Gene: Hutc2_19 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Hutc2_19:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: Huxley_18 Start: 13105, Stop: 13272, Start Num: 3
Candidate Starts for Huxley_18:
(Start: 3 @13105 has 416 MA's), (14, 13210), (16, 13222),

Gene: ICleared_18 Start: 13039, Stop: 13206, Start Num: 3
Candidate Starts for ICleared_18:
(Start: 3 @13039 has 416 MA's), (10, 13117), (14, 13144), (16, 13156),

Gene: Iceman_19 Start: 13330, Stop: 13497, Start Num: 3
Candidate Starts for Iceman_19:
(Start: 3 @13330 has 416 MA's), (10, 13408), (14, 13435), (16, 13447),

Gene: Imbriano_22 Start: 13859, Stop: 14050, Start Num: 3
Candidate Starts for Imbriano_22:
(1, 13790), (Start: 3 @13859 has 416 MA's), (9, 13934), (17, 14015), (22, 14042),

Gene: Indra_22 Start: 13853, Stop: 14044, Start Num: 3
Candidate Starts for Indra_22:
(1, 13784), (Start: 3 @13853 has 416 MA's), (9, 13928), (18, 14018), (22, 14036),

Gene: Insomnia_19 Start: 14354, Stop: 14524, Start Num: 3
Candidate Starts for Insomnia_19:
(1, 14285), (Start: 3 @14354 has 416 MA's), (8, 14420), (14, 14462),

Gene: Iracema64_19 Start: 13353, Stop: 13520, Start Num: 3
Candidate Starts for Iracema64_19:
(Start: 3 @13353 has 416 MA's), (10, 13431), (14, 13458), (16, 13470),

Gene: IronMan_21 Start: 15438, Stop: 15632, Start Num: 3
Candidate Starts for IronMan_21:
(1, 15369), (Start: 3 @15438 has 416 MA's),

Gene: Isiphiwo_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for Isiphiwo_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Iwokeuplikedis_20 Start: 13723, Stop: 13914, Start Num: 3
Candidate Starts for Iwokeuplikedis_20:
(1, 13654), (Start: 3 @13723 has 416 MA's), (17, 13876),

Gene: Jaan_22 Start: 15836, Stop: 16030, Start Num: 3
Candidate Starts for Jaan_22:
(1, 15767), (Start: 3 @15836 has 416 MA's),

Gene: Jabith_19 Start: 14354, Stop: 14524, Start Num: 3
Candidate Starts for Jabith_19:
(1, 14285), (Start: 3 @14354 has 416 MA's), (8, 14420), (14, 14462),

Gene: Jaykayelowell_18 Start: 13037, Stop: 13204, Start Num: 3
Candidate Starts for Jaykayelowell_18:
(Start: 3 @13037 has 416 MA's), (10, 13115), (14, 13142), (16, 13154),

Gene: Jeeves_18 Start: 12900, Stop: 13097, Start Num: 3
Candidate Starts for Jeeves_18:
(1, 12831), (Start: 3 @12900 has 416 MA's), (22, 13089),

Gene: Jeffabunny_22 Start: 13860, Stop: 14051, Start Num: 3
Candidate Starts for Jeffabunny_22:
(1, 13791), (Start: 3 @13860 has 416 MA's), (9, 13935), (18, 14025), (22, 14043),

Gene: Jerm_21 Start: 14170, Stop: 14367, Start Num: 3
Candidate Starts for Jerm_21:
(1, 14101), (Start: 3 @14170 has 416 MA's), (6, 14224),

Gene: JetBlade_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for JetBlade_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: JewelBug_22 Start: 13861, Stop: 14052, Start Num: 3
Candidate Starts for JewelBug_22:
(1, 13792), (Start: 3 @13861 has 416 MA's), (9, 13936), (17, 14017), (22, 14044),

Gene: Jiawan_20 Start: 14550, Stop: 14747, Start Num: 3
Candidate Starts for Jiawan_20:
(1, 14481), (Start: 3 @14550 has 416 MA's), (6, 14604), (15, 14670),

Gene: JoongJeon_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for JoongJeon_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Jordennis_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for Jordennis_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Joselito_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Joselito_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: JoshKayV_21 Start: 14174, Stop: 14365, Start Num: 3
Candidate Starts for JoshKayV_21:
(1, 14105), (Start: 3 @14174 has 416 MA's), (9, 14249),

Gene: Journey13_17 Start: 12883, Stop: 13074, Start Num: 3
Candidate Starts for Journey13_17:
(1, 12814), (Start: 3 @12883 has 416 MA's), (6, 12937), (9, 12958), (17, 13033), (22, 13066),

Gene: Jsquared_18 Start: 12584, Stop: 12778, Start Num: 3

Candidate Starts for Jsquared_18:
(1, 12515), (Start: 3 @12584 has 416 MA's), (14, 12695), (22, 12770),

Gene: Junimo_17 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Junimo_17:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: KFPoly_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for KFPoly_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158), (17, 13188),

Gene: Kalpine_22 Start: 15533, Stop: 15727, Start Num: 3
Candidate Starts for Kalpine_22:
(1, 15464), (Start: 3 @15533 has 416 MA's), (22, 15719),

Gene: Kampy_18 Start: 13039, Stop: 13206, Start Num: 3
Candidate Starts for Kampy_18:
(Start: 3 @13039 has 416 MA's), (10, 13117), (14, 13144), (16, 13156),

Gene: Katalie136_18 Start: 13043, Stop: 13216, Start Num: 3
Candidate Starts for Katalie136_18:
(1, 12977), (Start: 3 @13043 has 416 MA's), (10, 13127), (14, 13154), (17, 13196),

Gene: Kazan_22 Start: 13864, Stop: 14055, Start Num: 3
Candidate Starts for Kazan_22:
(1, 13795), (Start: 3 @13864 has 416 MA's), (9, 13939), (17, 14020), (22, 14047),

Gene: KekoraPapaka_17 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for KekoraPapaka_17:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Kerberos_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for Kerberos_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: Keziacharles14_18 Start: 12652, Stop: 12843, Start Num: 3
Candidate Starts for Keziacharles14_18:
(1, 12583), (Start: 3 @12652 has 416 MA's), (15, 12766), (20, 12829),

Gene: Kimba_19 Start: 14354, Stop: 14524, Start Num: 3
Candidate Starts for Kimba_19:
(1, 14285), (Start: 3 @14354 has 416 MA's), (8, 14420), (14, 14462),

Gene: Kimona_15 Start: 10526, Stop: 10693, Start Num: 3
Candidate Starts for Kimona_15:
(1, 10460), (Start: 3 @10526 has 416 MA's), (9, 10598), (17, 10673),

Gene: KingCyrus_21 Start: 14145, Stop: 14339, Start Num: 3
Candidate Starts for KingCyrus_21:
(1, 14076), (Start: 3 @14145 has 416 MA's),

Gene: Kingmustik0402_18 Start: 13033, Stop: 13200, Start Num: 3
Candidate Starts for Kingmustik0402_18:

(Start: 3 @13033 has 416 MA's), (10, 13111), (14, 13138), (16, 13150),

Gene: Kinmap_18 Start: 13590, Stop: 13769, Start Num: 3
Candidate Starts for Kinmap_18:
(1, 13521), (Start: 3 @13590 has 416 MA's),

Gene: Kipper29_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for Kipper29_22:
(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: KittenMittens_17 Start: 10919, Stop: 11086, Start Num: 3
Candidate Starts for KittenMittens_17:
(1, 10853), (Start: 3 @10919 has 416 MA's), (9, 10988), (10, 10994),

Gene: Klodlith_19 Start: 12696, Stop: 12893, Start Num: 3
Candidate Starts for Klodlith_19:
(1, 12627), (Start: 3 @12696 has 416 MA's), (6, 12750), (15, 12816),

Gene: Koan_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Koan_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158),

Gene: Koduck_20 Start: 12925, Stop: 13116, Start Num: 3
Candidate Starts for Koduck_20:
(1, 12856), (Start: 3 @12925 has 416 MA's), (14, 13033), (22, 13108),

Gene: Koko_22 Start: 13852, Stop: 14043, Start Num: 3
Candidate Starts for Koko_22:
(1, 13783), (Start: 3 @13852 has 416 MA's), (9, 13927), (18, 14017), (22, 14035),

Gene: Koreni_17 Start: 12687, Stop: 12854, Start Num: 3
Candidate Starts for Koreni_17:
(Start: 3 @12687 has 416 MA's), (14, 12792), (16, 12804),

Gene: Kratark_18 Start: 13036, Stop: 13203, Start Num: 3
Candidate Starts for Kratark_18:
(Start: 3 @13036 has 416 MA's), (14, 13141), (16, 13153),

Gene: Kremtemulon_18 Start: 13089, Stop: 13256, Start Num: 3
Candidate Starts for Kremtemulon_18:
(Start: 3 @13089 has 416 MA's), (14, 13194), (16, 13206),

Gene: Kristoff_19 Start: 13002, Stop: 13169, Start Num: 3
Candidate Starts for Kristoff_19:
(1, 12936), (Start: 3 @13002 has 416 MA's), (7, 13056), (9, 13071), (10, 13077),

Gene: Kyee_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Kyee_18:
(Start: 3 @13042 has 416 MA's), (14, 13147), (16, 13159),

Gene: L5_19.1 Start: 12933, Stop: 13127, Start Num: 3
Candidate Starts for L5_19.1:
(1, 12864), (Start: 3 @12933 has 416 MA's), (14, 13044), (22, 13119),

Gene: LHTSCC_19 Start: 13353, Stop: 13520, Start Num: 3
Candidate Starts for LHTSCC_19:
(Start: 3 @13353 has 416 MA's), (10, 13431), (14, 13458), (16, 13470),

Gene: LadyBird_19 Start: 13715, Stop: 13909, Start Num: 3
Candidate Starts for LadyBird_19:
(1, 13646), (Start: 3 @13715 has 416 MA's),

Gene: Landor_20 Start: 15488, Stop: 15682, Start Num: 3
Candidate Starts for Landor_20:
(1, 15419), (Start: 3 @15488 has 416 MA's),

Gene: LappelDuVide_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for LappelDuVide_18:
(Start: 3 @13038 has 416 MA's), (14, 13143), (16, 13155),

Gene: Larenn_20 Start: 14027, Stop: 14215, Start Num: 3
Candidate Starts for Larenn_20:
(1, 13958), (Start: 3 @14027 has 416 MA's), (22, 14207),

Gene: Lemur_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Lemur_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: LeoAvram_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for LeoAvram_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Leogania_21 Start: 15892, Stop: 16086, Start Num: 3
Candidate Starts for Leogania_21:
(1, 15823), (Start: 3 @15892 has 416 MA's),

Gene: Leviathan_21 Start: 14202, Stop: 14399, Start Num: 3
Candidate Starts for Leviathan_21:
(1, 14133), (Start: 3 @14202 has 416 MA's), (6, 14256),

Gene: LilTurb_21 Start: 14229, Stop: 14426, Start Num: 3
Candidate Starts for LilTurb_21:
(1, 14160), (Start: 3 @14229 has 416 MA's), (6, 14283),

Gene: Lilbunny_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for Lilbunny_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Lilleskat_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for Lilleskat_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: LionsBait_20 Start: 15506, Stop: 15700, Start Num: 3
Candidate Starts for LionsBait_20:
(1, 15437), (Start: 3 @15506 has 416 MA's),

Gene: LittleB_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for LittleB_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: LittleGuy_18 Start: 12984, Stop: 13151, Start Num: 3
Candidate Starts for LittleGuy_18:
(Start: 3 @12984 has 416 MA's), (10, 13062), (14, 13089), (16, 13101),

Gene: LochMonster_18 Start: 13016, Stop: 13183, Start Num: 3
Candidate Starts for LochMonster_18:
(Start: 3 @13016 has 416 MA's), (14, 13121), (16, 13133),

Gene: Lokk_22 Start: 15421, Stop: 15624, Start Num: 3
Candidate Starts for Lokk_22:
(1, 15352), (Start: 3 @15421 has 416 MA's), (14, 15532), (17, 15574),

Gene: LoneWolf_20 Start: 14323, Stop: 14520, Start Num: 3
Candidate Starts for LoneWolf_20:
(1, 14254), (Start: 3 @14323 has 416 MA's),

Gene: Lorenzo_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Lorenzo_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Loser_22 Start: 15523, Stop: 15723, Start Num: 3
Candidate Starts for Loser_22:
(1, 15454), (Start: 3 @15523 has 416 MA's), (22, 15715),

Gene: Luchador_20 Start: 14084, Stop: 14293, Start Num: 3
Candidate Starts for Luchador_20:
(1, 14015), (Start: 3 @14084 has 416 MA's), (22, 14285),

Gene: Lucivia_19 Start: 14351, Stop: 14521, Start Num: 3
Candidate Starts for Lucivia_19:
(1, 14282), (Start: 3 @14351 has 416 MA's), (8, 14417), (14, 14459),

Gene: Lucyedi_20 Start: 13927, Stop: 14100, Start Num: 3
Candidate Starts for Lucyedi_20:
(1, 13858), (Start: 3 @13927 has 416 MA's), (6, 13981), (7, 13987),

Gene: Lunsford_19 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Lunsford_19:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: MaCh_19 Start: 14299, Stop: 14469, Start Num: 3
Candidate Starts for MaCh_19:
(1, 14230), (Start: 3 @14299 has 416 MA's), (8, 14365), (14, 14407),

Gene: Mabel_19 Start: 14366, Stop: 14536, Start Num: 3
Candidate Starts for Mabel_19:
(1, 14297), (Start: 3 @14366 has 416 MA's), (8, 14432), (14, 14474),

Gene: MajorMajor_18 Start: 12667, Stop: 12861, Start Num: 3

Candidate Starts for MajorMajor_18:
(1, 12598), (Start: 3 @12667 has 416 MA's), (14, 12778), (22, 12853),

Gene: Malec_20 Start: 14032, Stop: 14220, Start Num: 3
Candidate Starts for Malec_20:
(1, 13963), (Start: 3 @14032 has 416 MA's), (22, 14212),

Gene: Maminiaina_20 Start: 14247, Stop: 14444, Start Num: 3
Candidate Starts for Maminiaina_20:
(1, 14178), (Start: 3 @14247 has 416 MA's),

Gene: Maverick_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Maverick_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Maxo_18 Start: 13039, Stop: 13206, Start Num: 3
Candidate Starts for Maxo_18:
(Start: 3 @13039 has 416 MA's), (10, 13117), (14, 13144), (16, 13156),

Gene: Mayonnaise_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Mayonnaise_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: Mazhar510_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Mazhar510_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: McFly_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for McFly_22:
(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: Medusa_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Medusa_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: MeeZee_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for MeeZee_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: MegTheThird_18 Start: 12684, Stop: 12881, Start Num: 3
Candidate Starts for MegTheThird_18:
(1, 12615), (Start: 3 @12684 has 416 MA's),

Gene: Melvin_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Melvin_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: MiculUcigas_19 Start: 13796, Stop: 13990, Start Num: 3
Candidate Starts for MiculUcigas_19:
(1, 13727), (Start: 3 @13796 has 416 MA's), (22, 13982),

Gene: Miko_22 Start: 15390, Stop: 15593, Start Num: 3
Candidate Starts for Miko_22:

(1, 15321), (Start: 3 @15390 has 416 MA's), (14, 15501), (17, 15543),

Gene: Millski_18 Start: 13044, Stop: 13211, Start Num: 3
Candidate Starts for Millski_18:
(Start: 3 @13044 has 416 MA's), (14, 13149), (16, 13161),

Gene: Minispark_17 Start: 12584, Stop: 12781, Start Num: 3
Candidate Starts for Minispark_17:
(1, 12515), (Start: 3 @12584 has 416 MA's), (4, 12599), (9, 12659), (17, 12740), (20, 12767),

Gene: Miramae_18 Start: 12989, Stop: 13162, Start Num: 3
Candidate Starts for Miramae_18:
(1, 12923), (Start: 3 @12989 has 416 MA's), (14, 13100), (16, 13112),

Gene: MissWhite_19 Start: 12831, Stop: 13022, Start Num: 3
Candidate Starts for MissWhite_19:
(1, 12762), (Start: 3 @12831 has 416 MA's), (8, 12903), (9, 12906), (18, 12996), (22, 13014),

Gene: Morpher26_18 Start: 13043, Stop: 13216, Start Num: 3
Candidate Starts for Morpher26_18:
(1, 12977), (Start: 3 @13043 has 416 MA's), (10, 13127), (14, 13154), (17, 13196),

Gene: Morrow_18 Start: 13044, Stop: 13211, Start Num: 3
Candidate Starts for Morrow_18:
(Start: 3 @13044 has 416 MA's), (10, 13122), (14, 13149), (16, 13161),

Gene: Mulciber_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Mulciber_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Munch_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Munch_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Mundrea_18 Start: 13009, Stop: 13182, Start Num: 3
Candidate Starts for Mundrea_18:
(1, 12943), (Start: 3 @13009 has 416 MA's), (10, 13093), (14, 13120),

Gene: Myxus_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for Myxus_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: NaSiaTalie_19 Start: 13793, Stop: 13987, Start Num: 3
Candidate Starts for NaSiaTalie_19:
(1, 13724), (Start: 3 @13793 has 416 MA's), (22, 13979),

Gene: Naji_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for Naji_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: Nebs_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Nebs_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Neeharika16_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for Neeharika16_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: Nemo27_18 Start: 13040, Stop: 13207, Start Num: 3
Candidate Starts for Nemo27_18:
(Start: 3 @13040 has 416 MA's), (10, 13118), (14, 13145), (16, 13157),

Gene: Newrala_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for Newrala_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: NicoleTera_23 Start: 15507, Stop: 15701, Start Num: 3
Candidate Starts for NicoleTera_23:
(1, 15438), (Start: 3 @15507 has 416 MA's), (11, 15591),

Gene: Noelle_18 Start: 13095, Stop: 13268, Start Num: 3
Candidate Starts for Noelle_18:
(1, 13029), (Start: 3 @13095 has 416 MA's),

Gene: NorthStar_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for NorthStar_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Northrop_18 Start: 13037, Stop: 13204, Start Num: 3
Candidate Starts for Northrop_18:
(Start: 3 @13037 has 416 MA's), (10, 13115), (14, 13142), (16, 13154),

Gene: NotAPhaseMom_18 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for NotAPhaseMom_18:
(Start: 3 @13045 has 416 MA's), (10, 13123), (14, 13150), (16, 13162),

Gene: NothingSpecial_21 Start: 15763, Stop: 15957, Start Num: 3
Candidate Starts for NothingSpecial_21:
(1, 15691), (Start: 3 @15763 has 416 MA's),

Gene: Nyxis_18 Start: 12984, Stop: 13151, Start Num: 3
Candidate Starts for Nyxis_18:
(Start: 3 @12984 has 416 MA's), (10, 13062), (14, 13089), (16, 13101),

Gene: OKCentral2016_18 Start: 12521, Stop: 12688, Start Num: 3
Candidate Starts for OKCentral2016_18:
(1, 12455), (Start: 3 @12521 has 416 MA's), (7, 12575), (9, 12590), (10, 12596),

Gene: OKaNui_19 Start: 13094, Stop: 13261, Start Num: 3
Candidate Starts for OKaNui_19:
(Start: 3 @13094 has 416 MA's), (10, 13172), (14, 13199), (16, 13211),

Gene: Obama12_19 Start: 13355, Stop: 13522, Start Num: 3
Candidate Starts for Obama12_19:
(Start: 3 @13355 has 416 MA's), (10, 13433), (14, 13460), (16, 13472),

Gene: Odin_18 Start: 12535, Stop: 12729, Start Num: 3
Candidate Starts for Odin_18:
(1, 12466), (Start: 3 @12535 has 416 MA's), (6, 12589), (9, 12610),

Gene: Ohfah_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Ohfah_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Onglai_19 Start: 12848, Stop: 13045, Start Num: 3
Candidate Starts for Onglai_19:
(1, 12779), (Start: 3 @12848 has 416 MA's), (6, 12902), (15, 12968),

Gene: Orange_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Orange_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: PackMan_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for PackMan_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: PainterBoy_20 Start: 13927, Stop: 14100, Start Num: 3
Candidate Starts for PainterBoy_20:
(1, 13858), (Start: 3 @13927 has 416 MA's), (6, 13981), (7, 13987),

Gene: Palestino_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Palestino_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: PeaceMeal1_17 Start: 10920, Stop: 11087, Start Num: 3
Candidate Starts for PeaceMeal1_17:
(1, 10854), (Start: 3 @10920 has 416 MA's), (9, 10989),

Gene: Peaches_18 Start: 13040, Stop: 13207, Start Num: 3
Candidate Starts for Peaches_18:
(Start: 3 @13040 has 416 MA's), (10, 13118), (14, 13145), (16, 13157),

Gene: Perplexer_18 Start: 13037, Stop: 13210, Start Num: 3
Candidate Starts for Perplexer_18:
(1, 12971), (Start: 3 @13037 has 416 MA's), (10, 13121), (14, 13148), (17, 13190),

Gene: PeterPeter_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for PeterPeter_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Petersenfast_19 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Petersenfast_19:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: PetiteSangsue_18 Start: 13043, Stop: 13216, Start Num: 3
Candidate Starts for PetiteSangsue_18:
(1, 12977), (Start: 3 @13043 has 416 MA's), (10, 13127), (14, 13154), (17, 13196),

Gene: Ph8s_20 Start: 12494, Stop: 12688, Start Num: 3

Candidate Starts for Ph8s_20:
(1, 12425), (Start: 3 @12494 has 416 MA's), (6, 12548), (9, 12569),

Gene: Phacado_18 Start: 13040, Stop: 13207, Start Num: 3
Candidate Starts for Phacado_18:
(Start: 3 @13040 has 416 MA's), (10, 13118), (14, 13145), (16, 13157),

Gene: Phaded_22 Start: 15835, Stop: 16029, Start Num: 3
Candidate Starts for Phaded_22:
(1, 15766), (Start: 3 @15835 has 416 MA's),

Gene: Phaeder_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for Phaeder_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: Pharaoh_19 Start: 14261, Stop: 14467, Start Num: 2
Candidate Starts for Pharaoh_19:
(1, 14192), (Start: 2 @14261 has 5 MA's), (21, 14450),

Gene: Phelipe_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Phelipe_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Phighter1804_18 Start: 13019, Stop: 13186, Start Num: 3
Candidate Starts for Phighter1804_18:
(Start: 3 @13019 has 416 MA's), (14, 13124), (16, 13136),

Gene: Phlei_14 Start: 14366, Stop: 14542, Start Num: 3
Candidate Starts for Phlei_14:
(1, 14297), (Start: 3 @14366 has 416 MA's), (14, 14480),

Gene: Phonnegut_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Phonnegut_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: Phontbonne_18 Start: 12985, Stop: 13152, Start Num: 3
Candidate Starts for Phontbonne_18:
(Start: 3 @12985 has 416 MA's), (10, 13063), (14, 13090), (16, 13102),

Gene: Pioneer_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Pioneer_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: Pipcraft_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Pipcraft_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Piro94_20 Start: 14254, Stop: 14448, Start Num: 3
Candidate Starts for Piro94_20:
(1, 14185), (Start: 3 @14254 has 416 MA's), (22, 14440),

Gene: Pmask_22 Start: 13850, Stop: 14041, Start Num: 3
Candidate Starts for Pmask_22:

(1, 13781), (Start: 3 @13850 has 416 MA's), (9, 13925), (17, 14006), (22, 14033),

Gene: Polymorphads_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Polymorphads_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Polyphemus_22 Start: 13851, Stop: 14042, Start Num: 3
Candidate Starts for Polyphemus_22:
(1, 13782), (Start: 3 @13851 has 416 MA's), (9, 13926), (17, 14007), (22, 14034),

Gene: Pomar16_22 Start: 13684, Stop: 13878, Start Num: 3
Candidate Starts for Pomar16_22:
(1, 13615), (Start: 3 @13684 has 416 MA's), (11, 13771),

Gene: Poompha_17 Start: 10918, Stop: 11085, Start Num: 3
Candidate Starts for Poompha_17:
(1, 10852), (Start: 3 @10918 has 416 MA's), (9, 10987), (10, 10993),

Gene: Power_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for Power_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: Priamo_22 Start: 13877, Stop: 14068, Start Num: 3
Candidate Starts for Priamo_22:
(1, 13808), (Start: 3 @13877 has 416 MA's), (9, 13952), (17, 14033), (22, 14060),

Gene: Priya_20 Start: 14545, Stop: 14742, Start Num: 3
Candidate Starts for Priya_20:
(1, 14476), (Start: 3 @14545 has 416 MA's), (6, 14599), (15, 14665),

Gene: Prudy_22 Start: 15557, Stop: 15751, Start Num: 3
Candidate Starts for Prudy_22:
(1, 15488), (Start: 3 @15557 has 416 MA's),

Gene: Pukovnik_21 Start: 15388, Stop: 15582, Start Num: 3
Candidate Starts for Pukovnik_21:
(1, 15319), (Start: 3 @15388 has 416 MA's),

Gene: Pumbaa_18 Start: 13016, Stop: 13183, Start Num: 3
Candidate Starts for Pumbaa_18:
(Start: 3 @13016 has 416 MA's), (14, 13121), (16, 13133),

Gene: Qobbit_20 Start: 14544, Stop: 14741, Start Num: 3
Candidate Starts for Qobbit_20:
(1, 14475), (Start: 3 @14544 has 416 MA's), (6, 14598), (15, 14664),

Gene: QueenB2_19 Start: 13770, Stop: 13964, Start Num: 3
Candidate Starts for QueenB2_19:
(Start: 3 @13770 has 416 MA's),

Gene: QueenBeesly_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for QueenBeesly_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: Quokka_17 Start: 12667, Stop: 12861, Start Num: 3
Candidate Starts for Quokka_17:
(1, 12598), (Start: 3 @12667 has 416 MA's), (14, 12778), (22, 12853),

Gene: Rachaly_22 Start: 15418, Stop: 15621, Start Num: 3
Candidate Starts for Rachaly_22:
(1, 15349), (Start: 3 @15418 has 416 MA's), (14, 15529), (17, 15571),

Gene: Rahalelujah_18 Start: 12584, Stop: 12781, Start Num: 3
Candidate Starts for Rahalelujah_18:
(1, 12515), (Start: 3 @12584 has 416 MA's), (4, 12599), (9, 12659), (17, 12740), (20, 12767),

Gene: Rebeuca_19 Start: 13003, Stop: 13170, Start Num: 3
Candidate Starts for Rebeuca_19:
(1, 12937), (Start: 3 @13003 has 416 MA's), (7, 13057), (9, 13072), (10, 13078),

Gene: RedRock_22 Start: 15680, Stop: 15880, Start Num: 3
Candidate Starts for RedRock_22:
(1, 15611), (Start: 3 @15680 has 416 MA's), (22, 15872),

Gene: Refuge_22 Start: 16063, Stop: 16269, Start Num: 2
Candidate Starts for Refuge_22:
(1, 15994), (Start: 2 @16063 has 5 MA's), (14, 16177),

Gene: Relief_18 Start: 13039, Stop: 13206, Start Num: 3
Candidate Starts for Relief_18:
(Start: 3 @13039 has 416 MA's), (10, 13117), (14, 13144), (16, 13156),

Gene: Retro23_19 Start: 13843, Stop: 14037, Start Num: 3
Candidate Starts for Retro23_19:
(1, 13774), (Start: 3 @13843 has 416 MA's),

Gene: RhynO_19 Start: 12979, Stop: 13146, Start Num: 3
Candidate Starts for RhynO_19:
(1, 12913), (Start: 3 @12979 has 416 MA's), (7, 13033), (9, 13048), (10, 13054),

Gene: Rifter_22 Start: 13825, Stop: 14016, Start Num: 3
Candidate Starts for Rifter_22:
(1, 13756), (Start: 3 @13825 has 416 MA's), (9, 13900), (18, 13990), (22, 14008),

Gene: RockieBear_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for RockieBear_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Rocksand_18 Start: 13037, Stop: 13204, Start Num: 3
Candidate Starts for Rocksand_18:
(Start: 3 @13037 has 416 MA's), (10, 13115), (14, 13142), (16, 13154),

Gene: Roksolana_22 Start: 13853, Stop: 14044, Start Num: 3
Candidate Starts for Roksolana_22:
(1, 13784), (Start: 3 @13853 has 416 MA's), (9, 13928), (18, 14018), (22, 14036),

Gene: Romney_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Romney_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: Roosevelt_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Roosevelt_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Rosa24_17 Start: 13014, Stop: 13181, Start Num: 3
Candidate Starts for Rosa24_17:
(Start: 3 @13014 has 416 MA's), (10, 13092), (14, 13119), (16, 13131),

Gene: Rowdy_21 Start: 12890, Stop: 13057, Start Num: 3
Candidate Starts for Rowdy_21:
(1, 12824), (Start: 3 @12890 has 416 MA's), (7, 12944), (9, 12959), (10, 12965),

Gene: Ruin_18 Start: 13037, Stop: 13204, Start Num: 3
Candidate Starts for Ruin_18:
(Start: 3 @13037 has 416 MA's), (10, 13115), (14, 13142), (16, 13154),

Gene: RyeScarlet_20 Start: 14518, Stop: 14715, Start Num: 3
Candidate Starts for RyeScarlet_20:
(1, 14449), (Start: 3 @14518 has 416 MA's), (6, 14572), (15, 14638),

Gene: Sabertooth_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Sabertooth_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Sachima_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for Sachima_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: Salz_19 Start: 14299, Stop: 14469, Start Num: 3
Candidate Starts for Salz_19:
(1, 14230), (Start: 3 @14299 has 416 MA's), (8, 14365), (14, 14407),

Gene: Saskia_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Saskia_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Scamp_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Scamp_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Scherzo_20 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Scherzo_20:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: SemperFi_21 Start: 14120, Stop: 14314, Start Num: 3
Candidate Starts for SemperFi_21:
(1, 14051), (Start: 3 @14120 has 416 MA's),

Gene: SenorClean_18 Start: 13041, Stop: 13208, Start Num: 3

Candidate Starts for SenorClean_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Serenity_18 Start: 12667, Stop: 12861, Start Num: 3
Candidate Starts for Serenity_18:
(1, 12598), (Start: 3 @12667 has 416 MA's), (14, 12778), (22, 12853),

Gene: Severus_17 Start: 10918, Stop: 11085, Start Num: 3
Candidate Starts for Severus_17:
(1, 10852), (Start: 3 @10918 has 416 MA's), (9, 10987), (10, 10993),

Gene: Shaka_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Shaka_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158),

Gene: Sham4_19 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Sham4_19:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: Shapes_21 Start: 12890, Stop: 13057, Start Num: 3
Candidate Starts for Shapes_21:
(1, 12824), (Start: 3 @12890 has 416 MA's), (7, 12944), (9, 12959), (10, 12965),

Gene: SheaKeira_19 Start: 12723, Stop: 12920, Start Num: 3
Candidate Starts for SheaKeira_19:
(1, 12654), (Start: 3 @12723 has 416 MA's), (6, 12777),

Gene: SheldonCooper_19 Start: 13354, Stop: 13521, Start Num: 3
Candidate Starts for SheldonCooper_19:
(Start: 3 @13354 has 416 MA's), (10, 13432), (14, 13459), (16, 13471),

Gene: Shygu2_18 Start: 13038, Stop: 13211, Start Num: 3
Candidate Starts for Shygu2_18:
(1, 12972), (Start: 3 @13038 has 416 MA's), (10, 13122), (14, 13149),

Gene: Skadoosh_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Skadoosh_18:
(Start: 3 @13041 has 416 MA's), (14, 13146), (16, 13158),

Gene: Skipitt_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Skipitt_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155), (17, 13185),

Gene: Sknot_19 Start: 13796, Stop: 13990, Start Num: 3
Candidate Starts for Sknot_19:
(1, 13727), (Start: 3 @13796 has 416 MA's), (22, 13982),

Gene: Smeagan_21 Start: 14205, Stop: 14402, Start Num: 3
Candidate Starts for Smeagan_21:
(1, 14136), (Start: 3 @14205 has 416 MA's), (6, 14259),

Gene: SmellyB_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for SmellyB_22:

(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: SnapTap_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for SnapTap_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: Snape_19 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Snape_19:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: SororFago_18 Start: 12878, Stop: 13087, Start Num: 3
Candidate Starts for SororFago_18:
(1, 12809), (Start: 3 @12878 has 416 MA's), (19, 13064), (22, 13079),

Gene: Sparxx_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for Sparxx_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Spino_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Spino_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: Spouty_20 Start: 14544, Stop: 14741, Start Num: 3
Candidate Starts for Spouty_20:
(1, 14475), (Start: 3 @14544 has 416 MA's), (6, 14598), (15, 14664),

Gene: StarStuff_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for StarStuff_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: Stasia_19 Start: 13477, Stop: 13647, Start Num: 3
Candidate Starts for Stasia_19:
(1, 13411), (Start: 3 @13477 has 416 MA's), (7, 13537), (10, 13558), (16, 13597),

Gene: SteMason_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for SteMason_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Steamy_20 Start: 14293, Stop: 14499, Start Num: 2
Candidate Starts for Steamy_20:
(1, 14224), (Start: 2 @14293 has 5 MA's),

Gene: Stink_19 Start: 13326, Stop: 13499, Start Num: 3
Candidate Starts for Stink_19:
(1, 13260), (Start: 3 @13326 has 416 MA's), (16, 13449),

Gene: Sultana_18 Start: 13042, Stop: 13209, Start Num: 3
Candidate Starts for Sultana_18:
(Start: 3 @13042 has 416 MA's), (10, 13120), (14, 13147), (16, 13159),

Gene: Sunhee_18 Start: 12912, Stop: 13121, Start Num: 3
Candidate Starts for Sunhee_18:
(1, 12843), (Start: 3 @12912 has 416 MA's),

Gene: SuperAwesome_22 Start: 13849, Stop: 14040, Start Num: 3
Candidate Starts for SuperAwesome_22:
(1, 13780), (Start: 3 @13849 has 416 MA's), (9, 13924), (17, 14005), (22, 14032),

Gene: SuperCallie99_22 Start: 13848, Stop: 14039, Start Num: 3
Candidate Starts for SuperCallie99_22:
(1, 13779), (Start: 3 @13848 has 416 MA's), (9, 13923), (17, 14004), (22, 14031),

Gene: Superchunk_18 Start: 12393, Stop: 12587, Start Num: 3
Candidate Starts for Superchunk_18:
(1, 12324), (Start: 3 @12393 has 416 MA's), (6, 12447), (9, 12468),

Gene: SweetiePie_19 Start: 13692, Stop: 13886, Start Num: 3
Candidate Starts for SweetiePie_19:
(1, 13623), (Start: 3 @13692 has 416 MA's),

Gene: SwirlSquare_20 Start: 12572, Stop: 12766, Start Num: 3
Candidate Starts for SwirlSquare_20:
(1, 12503), (Start: 3 @12572 has 416 MA's), (9, 12647),

Gene: Taquarus_18 Start: 13044, Stop: 13211, Start Num: 3
Candidate Starts for Taquarus_18:
(Start: 3 @13044 has 416 MA's), (10, 13122), (14, 13149), (16, 13161),

Gene: TarsusIV_19 Start: 13792, Stop: 13989, Start Num: 3
Candidate Starts for TarsusIV_19:
(1, 13723), (Start: 3 @13792 has 416 MA's), (6, 13846),

Gene: Temprado_22 Start: 13854, Stop: 14045, Start Num: 3
Candidate Starts for Temprado_22:
(1, 13785), (Start: 3 @13854 has 416 MA's), (9, 13929), (17, 14010), (22, 14037),

Gene: Terrific_21 Start: 14250, Stop: 14444, Start Num: 3
Candidate Starts for Terrific_21:
(1, 14181), (Start: 3 @14250 has 416 MA's), (22, 14436),

Gene: Thanksgivukkah_18 Start: 13045, Stop: 13212, Start Num: 3
Candidate Starts for Thanksgivukkah_18:
(Start: 3 @13045 has 416 MA's), (14, 13150), (16, 13162),

Gene: Timothy_19 Start: 14302, Stop: 14472, Start Num: 3
Candidate Starts for Timothy_19:
(1, 14233), (Start: 3 @14302 has 416 MA's), (8, 14368), (14, 14410),

Gene: Timshel_19 Start: 14647, Stop: 14814, Start Num: 3
Candidate Starts for Timshel_19:
(Start: 3 @14647 has 416 MA's), (13, 14746), (16, 14764),

Gene: TinaFeyge_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for TinaFeyge_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155), (17, 13185),

Gene: TinyTimmy_19 Start: 14345, Stop: 14515, Start Num: 3
Candidate Starts for TinyTimmy_19:
(1, 14276), (Start: 3 @14345 has 416 MA's), (8, 14411), (14, 14453),

Gene: Tinybot_17 Start: 13019, Stop: 13186, Start Num: 3
Candidate Starts for Tinybot_17:
(Start: 3 @13019 has 416 MA's), (10, 13097), (14, 13124), (16, 13136),

Gene: TipsytheTRex_18 Start: 12802, Stop: 12996, Start Num: 3
Candidate Starts for TipsytheTRex_18:
(1, 12733), (Start: 3 @12802 has 416 MA's), (14, 12913), (22, 12988),

Gene: TiroTheta9_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for TiroTheta9_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155),

Gene: Toaka_18 Start: 12876, Stop: 13067, Start Num: 3
Candidate Starts for Toaka_18:
(1, 12807), (Start: 3 @12876 has 416 MA's),

Gene: Tomathan_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for Tomathan_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: ToneTone_20 Start: 13766, Stop: 13957, Start Num: 3
Candidate Starts for ToneTone_20:
(1, 13697), (Start: 3 @13766 has 416 MA's), (9, 13841), (17, 13922), (22, 13949),

Gene: Topanga_18 Start: 12956, Stop: 13123, Start Num: 3
Candidate Starts for Topanga_18:
(1, 12890), (Start: 3 @12956 has 416 MA's), (7, 13010), (9, 13025),

Gene: Travvers_22 Start: 13643, Stop: 13837, Start Num: 3
Candidate Starts for Travvers_22:
(1, 13574), (Start: 3 @13643 has 416 MA's), (11, 13730),

Gene: Trike_16 Start: 10926, Stop: 11093, Start Num: 3
Candidate Starts for Trike_16:
(1, 10860), (Start: 3 @10926 has 416 MA's), (9, 10995), (10, 11001),

Gene: Tristan_20 Start: 15507, Stop: 15701, Start Num: 3
Candidate Starts for Tristan_20:
(1, 15438), (Start: 3 @15507 has 416 MA's),

Gene: Trixie_22 Start: 15405, Stop: 15599, Start Num: 3
Candidate Starts for Trixie_22:
(1, 15336), (Start: 3 @15405 has 416 MA's), (9, 15477),

Gene: Trooper_19 Start: 13583, Stop: 13774, Start Num: 3
Candidate Starts for Trooper_19:
(1, 13514), (Start: 3 @13583 has 416 MA's),

Gene: TroyPia_18 Start: 13041, Stop: 13208, Start Num: 3

Candidate Starts for TroyPia_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: Tubs_20 Start: 14514, Stop: 14711, Start Num: 3
Candidate Starts for Tubs_20:
(1, 14445), (Start: 3 @14514 has 416 MA's), (6, 14568), (15, 14634),

Gene: Tucker_22 Start: 13852, Stop: 14043, Start Num: 3
Candidate Starts for Tucker_22:
(1, 13783), (Start: 3 @13852 has 416 MA's), (9, 13927), (18, 14017), (22, 14035),

Gene: Turbido_21 Start: 14232, Stop: 14429, Start Num: 3
Candidate Starts for Turbido_21:
(1, 14163), (Start: 3 @14232 has 416 MA's), (6, 14286),

Gene: Twister_18 Start: 12855, Stop: 13022, Start Num: 3
Candidate Starts for Twister_18:
(1, 12789), (Start: 3 @12855 has 416 MA's), (7, 12909), (9, 12924),

Gene: TygerBlood_18 Start: 13040, Stop: 13207, Start Num: 3
Candidate Starts for TygerBlood_18:
(Start: 3 @13040 has 416 MA's), (10, 13118), (14, 13145), (16, 13157),

Gene: Ugenie5_17 Start: 14547, Stop: 14744, Start Num: 3
Candidate Starts for Ugenie5_17:
(1, 14478), (Start: 3 @14547 has 416 MA's), (6, 14601), (15, 14667),

Gene: Ulysses_17 Start: 12762, Stop: 12929, Start Num: 3
Candidate Starts for Ulysses_17:
(Start: 3 @12762 has 416 MA's), (14, 12867), (16, 12879),

Gene: Updawg_21 Start: 14238, Stop: 14432, Start Num: 3
Candidate Starts for Updawg_21:
(1, 14169), (Start: 3 @14238 has 416 MA's), (22, 14424),

Gene: VA6_19 Start: 13750, Stop: 13944, Start Num: 3
Candidate Starts for VA6_19:
(1, 13681), (Start: 3 @13750 has 416 MA's),

Gene: VC3_22 Start: 13755, Stop: 13931, Start Num: 3
Candidate Starts for VC3_22:
(1, 13686), (Start: 3 @13755 has 416 MA's), (6, 13809), (14, 13869), (17, 13911), (18, 13920),

Gene: Vanisoa_18 Start: 12602, Stop: 12799, Start Num: 3
Candidate Starts for Vanisoa_18:
(1, 12533), (Start: 3 @12602 has 416 MA's), (9, 12677), (20, 12785),

Gene: VohminGhazi_22 Start: 13858, Stop: 14049, Start Num: 3
Candidate Starts for VohminGhazi_22:
(1, 13789), (Start: 3 @13858 has 416 MA's), (9, 13933), (17, 14014), (22, 14041),

Gene: WalterMcMickey_18 Start: 12855, Stop: 13022, Start Num: 3
Candidate Starts for WalterMcMickey_18:

(1, 12789), (Start: 3 @12855 has 416 MA's), (7, 12909), (9, 12924),

Gene: Wander_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Wander_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158),

Gene: WeiHuaDA_24 Start: 16007, Stop: 16201, Start Num: 3
Candidate Starts for WeiHuaDA_24:
(Start: 3 @16007 has 416 MA's), (22, 16193),

Gene: Whabigail7_21 Start: 14220, Stop: 14417, Start Num: 3
Candidate Starts for Whabigail7_21:
(1, 14151), (Start: 3 @14220 has 416 MA's), (6, 14274),

Gene: WideWale_21 Start: 14238, Stop: 14432, Start Num: 3
Candidate Starts for WideWale_21:
(1, 14169), (Start: 3 @14238 has 416 MA's), (22, 14424),

Gene: Wiks_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for Wiks_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Wilbur_18 Start: 13041, Stop: 13208, Start Num: 3
Candidate Starts for Wilbur_18:
(Start: 3 @13041 has 416 MA's), (10, 13119), (14, 13146), (16, 13158), (17, 13188),

Gene: Wile_18 Start: 13053, Stop: 13226, Start Num: 3
Candidate Starts for Wile_18:
(Start: 3 @13053 has 416 MA's), (10, 13137), (14, 13164), (16, 13176),

Gene: Wizard007_18 Start: 13043, Stop: 13210, Start Num: 3
Candidate Starts for Wizard007_18:
(Start: 3 @13043 has 416 MA's), (10, 13121), (14, 13148), (16, 13160),

Gene: Wolpertinger_18 Start: 14305, Stop: 14475, Start Num: 3
Candidate Starts for Wolpertinger_18:
(1, 14236), (Start: 3 @14305 has 416 MA's), (8, 14371), (14, 14413),

Gene: WorldCup_17 Start: 12584, Stop: 12781, Start Num: 3
Candidate Starts for WorldCup_17:
(1, 12515), (Start: 3 @12584 has 416 MA's), (4, 12599), (9, 12659), (17, 12740), (20, 12767),

Gene: WunderPhul_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for WunderPhul_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Xena_18 Start: 13040, Stop: 13213, Start Num: 3
Candidate Starts for Xena_18:
(Start: 3 @13040 has 416 MA's), (10, 13124), (14, 13151), (16, 13163),

Gene: XianYue_19 Start: 13711, Stop: 13908, Start Num: 3
Candidate Starts for XianYue_19:
(1, 13642), (Start: 3 @13711 has 416 MA's), (9, 13786),

Gene: Yecey3_19 Start: 12638, Stop: 12835, Start Num: 3
Candidate Starts for Yecey3_19:
(1, 12569), (Start: 3 @12638 has 416 MA's), (6, 12692), (17, 12794),

Gene: YoSam321_18 Start: 13038, Stop: 13205, Start Num: 3
Candidate Starts for YoSam321_18:
(Start: 3 @13038 has 416 MA's), (10, 13116), (14, 13143), (16, 13155), (17, 13185),

Gene: Yokurt_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for Yokurt_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Zaka_22 Start: 13834, Stop: 14025, Start Num: 3
Candidate Starts for Zaka_22:
(1, 13765), (Start: 3 @13834 has 416 MA's), (9, 13909), (17, 13990), (22, 14017),

Gene: Zimmer_21 Start: 15319, Stop: 15525, Start Num: 2
Candidate Starts for Zimmer_21:
(1, 15250), (Start: 2 @15319 has 5 MA's), (6, 15373), (9, 15394), (14, 15433),

Gene: Zulu_22 Start: 13833, Stop: 14024, Start Num: 3
Candidate Starts for Zulu_22:
(1, 13764), (Start: 3 @13833 has 416 MA's), (9, 13908), (17, 13989), (22, 14016),