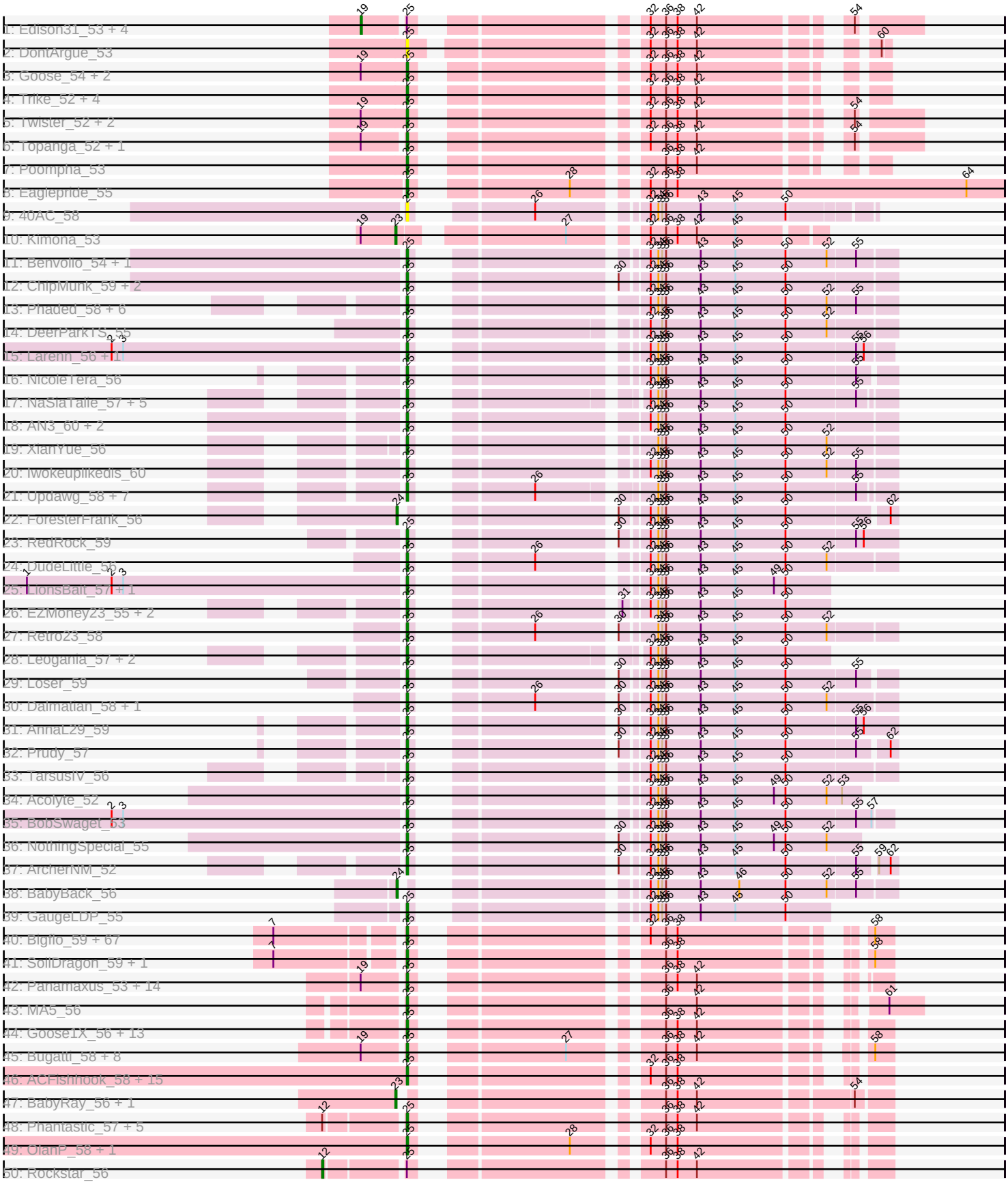
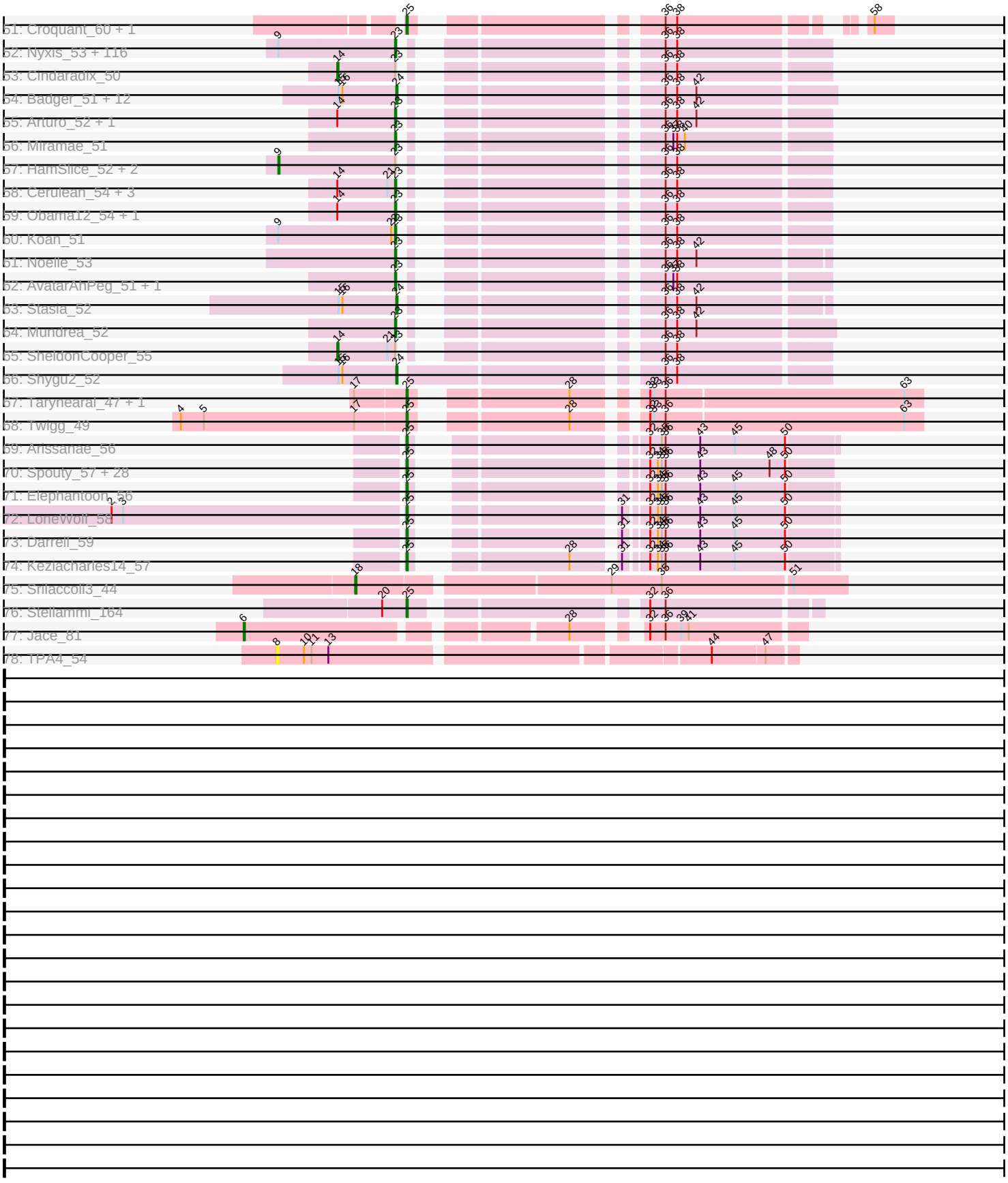
Pham 347106


1: Edison31_53 + 4
2: DontArgue_53
3: Goose_54 + 2
4: Trike_52 + 4
5: Twister_52 + 2
6: Topanga_52 + 1
7: Poompha_53
8: Eaglepride_55
9: 40AC_58
10: Kimona_53
11: Benvolio_54 + 1
12: ChipMunk_59 + 2
13: Phaded_58 + 6
14: DeerParkTS_55
15: Larenn_56 + 1
16: NicoleTera_56
17: NaSiaTalie_57 + 5
18: AN3_60 + 2
19: XianYue_56
20: Iwokeuplikedis_60
21: Updawg_58 + 7
22: ForesterFrank_56
23: RedRock_59
24: DudeLittle_58
25: LionsBait_57 + 1
26: EZMoney23_55 + 2
27: Retro23_58
28: Leogania_57 + 2
29: Loser_59
30: Dalmatian_58 + 1
31: AnnaL29_59
32: Prudy_57
33: TarsusIV_56
34: Acolyte_52
35: BobSwaget_53
36: NothingSpecial_55
37: ArcherNM_52
38: BabyBack_56
39: GaugeLDP_55
40: Bigflo_59 + 67
41: SoftDragon_59 + 1
42: Panamaxus_53 + 14
43: MA5_56
44: Goose1X_56 + 13
45: Bugatti_58 + 8
46: ACFishHook_58 + 15
47: BabyRay_56 + 1
48: Phantastic_57 + 5
49: OlanP_58 + 1
50: Rockstar_56

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51: Croquant_60 + 1
52: Nyxis_53 + 116
53: Cindaradix_50
54: Badger_51 + 12
55: Arturo_52 + 1
56: Miramae_51
57: HamSlice_52 + 2
58: Cerulean_54 + 3
59: Obama12_54 + 1
60: Koan_51
61: Noelle_53
62: AvatarAnPeg_51 + 1
63: Stasia_52
64: Mundrea_52
65: SheldonCooper_55
66: Shygu2_52
67: Tarynearal_47 + 1
68: Twigg_49
69: Anissanae_56
70: Spouty_57 + 28
71: Elephantoon_56
72: LoneWolf_58
73: Darrell_59
74: Keziacharles14_57
75: Smiaccoli3_44
76: Stellammi_164
77: Jace_81
78: TPA4_54

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 347106 Report

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

Pham number 347106 has 412 members, 28 are drafts.

Phages represented in each track:
• Track 1 : Edison31_53, Rowdy_58, DustyMartin_58, Shapes_58, Kristoff_54
• Track 2 : DontArgue_53
• Track 3 : Goose_54, OKCentral2016_53, Chupacabra_53
• Track 4 : Trike_52, Drake94_52, Severus_52, KittenMittens_51, PeaceMeal1_52
• Track 5 : Twister_52, WalterMcMickey_52, Rebeuca_54
• Track 6 : Topanga_52, RhynO_55
• Track 7 : Poompha_53
• Track 8 : Eaglepride_55
• Track 9 : 40AC_58
• Track 10 : Kimona_53
• Track 11 : Benvolio_54, Echild_57
• Track 12 : ChipMunk_59, EvilGenius_59, KingCyrus_59
• Track 13 : Phaded_58, IronMan_57, Jaan_57, Tristan_56, Landor_57, Pukovnik_56, Bactobuster_56
• Track 14 : DeerParkTS_55
• Track 15 : Larenn_56, Malec_57
• Track 16 : NicoleTera_56
• Track 17 : NaSiaTalie_57, Flare16_57, Sknot_57, MiculUcigas_57, Centaur_58, Terrific_58
• Track 18 : AN3_60, VA6_58, Deloris_58
• Track 19 : XianYue_56
• Track 20 : Iwokeuplikedis_60
• Track 21 : Updawg_58, Equemioh13_58, HarryHoudini_58, WideWale_58, Baehexic_56, Piro94_57, Drake55_59, Gratitude_58
• Track 22 : ForesterFrank_56
• Track 23 : RedRock_59
• Track 24 : DudeLittle_56
• Track 25 : LionsBait_57, HippoHollow_57
• Track 26 : EZMoney23_55, 20ES_60, First_0059
• Track 27 : Retro23_58
• Track 28 : Leogania_57, BengiVuitton_59, BiancaTri92_57
• Track 29 : Loser_59
• Track 30 : Dalmatian_58, Anselm_58
• Track 31 : AnnaL29_59
• Track 32 : Prudy_57
• Track 33 : TarsusIV_56
• Track 34 : Acolyte_52

• Track 35 : BobSwaget_53
• Track 36 : NothingSpecial_55
• Track 37 : ArcherNM_52
• Track 38 : BabyBack_56
• Track 39 : GaugeLDP_55
• Track 40 : Bigflo_59, Phoxy_59, Wooldri_61, Malinsilva_61, Spike509_59, Sabia_59, Lilith_60, Hercules11_59, Watson_59, Snickers_59, TinyPebbles_58, Grub_59, Beauxregard13_59, Anubis_62, Sabinator_58, LugYA_62, Bxz2_55, LarryKay_59, PGHhamlin_61, PotatoSplit_61, Ollie_59, Phoebe_60, Fernando_59, Soshari_61, GtownJaz_59, AgronaGT15_58, SoYo_59, Vix_59, DaHudson_59, MadMarie_59, StepMih_59, BreSam8_59, MuchMore_62, KADY_59, MoneyMay_59, Methuselah_55, HashRod_60, BuzzBuzz_57, Marie_59, Gwennie_59, Daishi_58, Farber_59, Taurus_60, Dieselweasel_60, Zetzy_58, Microwolf_59, Penny1_60, Colbster_59, EpicPhail_60, MarQuardt_59, P28Green_60, Pembroke_59, Aglet_60, Montavir_58, GingkoMaracino_59, Grum1_59, AugsMagnumOpus_62, Misomonster_60, LBerry_60, Grif_59, Tiffany_59, Stagni_59, Rummer_58, Lowa_59, JenCasNa_60, Louie6_58, Mainiac_59, Cullens_59
• Track 41 : SoilDragon_59, Jobu08_58
• Track 42 : Panamaxus_53, Lambert1_55, Caviar_55, Noella_55, ResDef_55, Hookmount_55, EtoileNova_56, Texage_54, Pocahontas_55, Todacoro_55, Margo_55, QuinnKiro_54, Norbert_54, Veracruz_54, Popcicle_55
• Track 43 : MA5_56
• Track 44 : Goose1X_56, Fred313_56, Marchesa_56, HelDan_56, Roimos_56, Kachowdy_56, Goose1D_50, BabyJohn_54, Scout_56, Shep_56, Zarafa_56, Heathen_56, DropBear_56, Chiqui_54
• Track 45 : Bugatti_58, Giroux_58, Idleandcovert_57, Pistachio_58, Puppy_58, Clammy_58, TNguyen7_57, SaturnRing_57, BlueBird_58
• Track 46 : ACFishhook_58, Heliosoles_58, Manu_59, Calvinny_59, HaveUMetTed_60, PhishRPhriends_57, Kalnoky_60, PurpleHaze_59, Kalb97_60, JeppNRM_60, Marius_60, Groupthink_60, Pawn_59, Phranny_60, Reba_59, ClownCar_59
• Track 47 : BabyRay_56, Cat_54
• Track 48 : Phantastic_57, JF4_54, B1_51, JF2_54, MK4_56, Isca_55
• Track 49 : OlanP_58, Gemma_58
• Track 50 : Rockstar_56
• Track 51 : Croquant_60, JHC117_59
• Track 52 : Nyxis_53, Buckaroo_52, Lemur_53, SenorClean_53, Ulysses_52, Chaph_53, Mayonnaise_52, JetBlade_53, Blackmoor_53, TroyPia_54, Caelakin_53, LittleB_53, Iceman_53, DirtyDunning_52, Phacado_53, Wizard007_53, BubbleTrouble_52, Skipitt_52, Kremtemulon_53, TiroTheta9_53, LeoAvram_53, Roosevelt_52, Florean_53, MeeZee_53, Spino_52, Dhanush_53, Pipcraft_51, Maverick_53, Eagle_53, NorthStar_52, Commander_53, Rosa24_52, Northrop_53, Taquarus_53, BellusTerra_54, Sultana_53, Connomayer_53, Eros_53, LochMonster_54, Shaka_53, Camperdownii_51, Peaches_53, LittleGuy_53, Clarenza_52, Citius_53, Deano_52, Eapen_53, Phontbonne_53, Ohfah_54, Annyong_53, Funston_52, Palestino_52, OKaNui_53, Wilbur_53, Rocksand_53, JoongJeon_52, Mazhar510_53, TygerBlood_53, Koreni_52, Polymorphads_54, Millski_52, Gadost_53, Nebs_54, Avle17_53, Medusa_53, NotAPhaseMom_53, Sabertooth_53, Lunsford_54, Bartimeaus_53, Morrow_54, Bruiser_52, Burger_51, SteMason_52, Albee_53, Iracema64_54, Maxo_54, Flux_53, Houdini22_53, Cintron_52, Eris_52, Junimo_52, Sparxx_54, Pumbaa_53, Lorenzo_53, YoSam321_53, Kingmustik0402_53, Skadoosh_54, KekoraPapaka_53, Relief_52, Jaykayelowell_51, Melvin_55, Wander_53, ICleared_53, Nemo27_53, PeterPeter_53,

RockieBear_53, Scamp_53, Bombshell_53, Phelipe_54, Ruin_53, KFPoly_52, Huxley_52, Alberto7_54, Romney_53, Thanksgivukkah_52, Baby16_53, LappelDuVide_53, Tinybot_52, Druantia_53, Abdiel_53, Broseidon_53, Holli_52, Cocoaberry_53, Phighter1804_53, Kyee_53, CentreCat_53, Eurydice_54
• Track 53 : Cindaradix_50
• Track 54 : Badger_51, Bumblebee11_51, Cici_52, Xena_51, Datway_52, PetiteSangsue_52, Katalie136_52, Achebe_51, Morpher26_52, Wile_52, AbbysRanger_52, Backyardigan_51, Perplexer_52
• Track 55 : Arturo_52, Kratark_53
• Track 56 : Miramae_51
• Track 57 : HamSlice_52, TinaFeyge_53, Kampy_53
• Track 58 : Cerulean_54, BangNhom_54, Happiness_52, ChampagnePapi_55
• Track 59 : Obama12_54, LHTSCC_55
• Track 60 : Koan_51
• Track 61 : Noelle_53
• Track 62 : AvatarAhPeg_51, Stink_52
• Track 63 : Stasia_52
• Track 64 : Mundrea_52
• Track 65 : SheldonCooper_55
• Track 66 : Shygu2_52
• Track 67 : Tarynearal_47, Swirley_51
• Track 68 : Twigg_49
• Track 69 : Arissanae_56
• Track 70 : Spouty_57, Beemo_57, Qobbit_57, Onglai_56, Phaeder_57, Catalina_58, RyeScarlet_57, ExplosioNervosa_57, Scherzo_57, Fayely_57, Sachima_57, Lilleskat_57, Priya_57, Hanray_57, Eidsmoe_57, Myxus_57, Holex_57, EdogawaKiddo_57, Aliter_57, Ugenie5_54, Conquerage_57, Phonnegut_57, Pioneer_57, EmyBug_56, PackMan_56, Ayanochan_56, HortumSL17_57, Jiawan_57, Tubs_57
• Track 71 : Elephantoon_56
• Track 72 : LoneWolf_58
• Track 73 : Darrell_59
• Track 74 : Keziacharles14_57
• Track 75 : Srilaccoli3_44
• Track 76 : Stellammi_164
• Track 77 : Jace_81
• Track 78 : TPA4_54

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

The start number called the most often in the published annotations is 25, it was called in 231 of the 384 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_60, 40AC_58, ACFishhook_58, AN3_60, Acolyte_52, Aglet_60, AgronaGT15_58, Aliter_57, AnnaL29_59, Anselm_58, Anubis_62, ArcherNM_52, Arissanae_56, AugsMagnumOpus_62, Ayanochan_56, B1_51, BabyJohn_54, Bactobuster_56, Baehexic_56, Beauxregard13_59, Beemo_57, BengiVuitton_59, Benvolio_54, BiancaTri92_57, Bigflo_59, BlueBird_58, BobSwaget_53, BreSam8_59, Bugatti_58, BuzzBuzz_57, Bxz2_55, Calvinny_59, Catalina_58, Caviar_55,

Centaur_58, ChipMunk_59, Chiqui_54, Chupacabra_53, Clammy_58, ClownCar_59, Colbster_59, Conquerage_57, Croquant_60, Cullens_59, DaHudson_59, Daishi_58, Dalmatian_58, Darrell_59, DeerParkTS_55, Deloris_58, Dieselweasel_60, DontArgue_53, Drake55_59, Drake94_52, DropBear_56, DudeLittle_56, EZMoney23_55, Eaglepride_55, Echild_57, EdogawaKiddo_57, Eidsmoe_57, Elephantoon_56, EmyBug_56, EpicPhail_60, Equemioh13_58, EtoileNova_56, EvilGenius_59, ExplosioNervosa_57, Farber_59, Fayely_57, Fernando_59, First_0059, Flare16_57, Fred313_56, GaugeLDP_55, Gemma_58, GingkoMaracino_59, Giroux_58, Goose1D_50, Goose1X_56, Goose_54, Gratitude_58, Grif_59, Groupthink_60, Grub_59, Grum1_59, GtownJaz_59, Gwennie_59, Hanray_57, HarryHoudini_58, HashRod_60, HaveUMetTed_60, Heathen_56, HelDan_56, Heliosoles_58, Hercules11_59, HippoHollow_57, Holex_57, Hookmount_55, HortumSL17_57, Idleandcovert_57, IronMan_57, Isca_55, Iwokeuplikedis_60, JF2_54, JF4_54, JHC117_59, Jaan_57, JenCasNa_60, JeppNRM_60, Jiawan_57, Jobu08_58, KADY_59, Kachowdy_56, Kalb97_60, Kalnoky_60, Keziacharles14_57, KingCyrus_59, KittenMittens_51, LBerry_60, Lambert1_55, Landor_57, Larenn_56, LarryKay_59, Leogania_57, Lilith_60, Lilleskat_57, LionsBait_57, LoneWolf_58, Loser_59, Louie6_58, Lowa_59, LugYA_62, MA5_56, MK4_56, MadMarie_59, Mainiac_59, Malec_57, Malinsilva_61, Manu_59, MarQuardt_59, Marchesa_56, Margo_55, Marie_59, Marius_60, Methuselah_55, Microwolf_59, MiculUcigas_57, Misomonster_60, MoneyMay_59, Montavir_58, MuchMore_62, Myxus_57, NaSiaTalie_57, NicoleTera_56, Noella_55, Norbert_54, NothingSpecial_55, OKCentral2016_53, OlanP_58, Ollie_59, Onglai_56, P28Green_60, PGHhamlin_61, PackMan_56, Panamaxus_53, Pawn_59, PeaceMeal1_52, Pembroke_59, Penny1_60, Phaded_58, Phaeder_57, Phantastic_57, PhishRPhriends_57, Phoebe_60, Phonnegut_57, Phoxy_59, Phranny_60, Pioneer_57, Piro94_57, Pistachio_58, Pocahontas_55, Poompha_53, Popcicle_55, PotatoSplit_61, Priya_57, Prudy_57, Pukovnik_56, Puppy_58, PurpleHaze_59, Qobbit_57, QuinnKiro_54, Reba_59, Rebeuca_54, RedRock_59, ResDef_55, Retro23_58, RhynO_55, Roimos_56, Rummer_58, RyeScarlet_57, Sabia_59, Sabinator_58, Sachima_57, SaturnRing_57, Scherzo_57, Scout_56, Severus_52, Shep_56, Sknot_57, Snickers_59, SoYo_59, SoilDragon_59, Soshari_61, Spike509_59, Spouty_57, Stagni_59, Stellammi_164, StepMih_59, Swirley_51, TNguyen7_57, TarsusIV_56, Tarynearal_47, Taurus_60, Terrific_58, Texage_54, Tiffany_59, TinyPebbles_58, Todacoro_55, Topanga_52, Trike_52, Tristan_56, Tubs_57, Twigg_49, Twister_52, Ugenie5_54, Updawg_58, VA6_58, Veracruz_54, Vix_59, WalterMcMickey_52, Watson_59, WideWale_58, Wooldri_61, XianYue_56, Zarafa_56, Zetzy_58,

Genes that have the "Most Annotated" start but do not call it:
• DustyMartin_58, Edison31_53, Kristoff_54, Rockstar_56, Rowdy_58, Shapes_58,

Genes that do not have the "Most Annotated" start:
• AbbysRanger_52, Abdiel_53, Achebe_51, Albee_53, Alberto7_54, Annyong_53, Arturo_52, AvatarAhPeg_51, Avle17_53, Baby16_53, BabyBack_56, BabyRay_56, Backyardigan_51, Badger_51, BangNhom_54, Bartimeaus_53, BellusTerra_54, Blackmoor_53, Bombshell_53, Broseidon_53, Bruiser_52, BubbleTrouble_52, Buckaroo_52, Bumblebee11_51, Burger_51, Caelakin_53, Camperdownii_51, Cat_54, CentreCat_53, Cerulean_54, ChampagnePapi_55, Chaph_53, Cici_52, Cindaradix_50, Cintron_52, Citius_53, Clarenza_52, Cocoaberry_53, Commander_53, Connomayer_53, Datway_52, Deano_52, Dhanush_53, DirtyDunning_52, Druantia_53, Eagle_53, Eapen_53, Eris_52, Eros_53, Eurydice_54, Florean_53, Flux_53, ForesterFrank_56, Funston_52, Gadost_53, HamSlice_52,

Happiness_52, Holli_52, Houdini22_53, Huxley_52, ICleared_53, Iceman_53, Iracema64_54, Jace_81, Jaykayelowell_51, JetBlade_53, JoongJeon_52, Junimo_52, KFPoly_52, Kampy_53, Katalie136_52, KekoraPapaka_53, Kimona_53, Kingmustik0402_53, Koan_51, Koreni_52, Kratark_53, Kremtemulon_53, Kyee_53, LHTSCC_55, LappelDuVide_53, Lemur_53, LeoAvram_53, LittleB_53, LittleGuy_53, LochMonster_54, Lorenzo_53, Lunsford_54, Maverick_53, Maxo_54, Mayonnaise_52, Mazhar510_53, Medusa_53, MeeZee_53, Melvin_55, Millski_52, Miramae_51, Morpher26_52, Morrow_54, Mundrea_52, Nebs_54, Nemo27_53, Noelle_53, NorthStar_52, Northrop_53, NotAPhaseMom_53, Nyxis_53, OKaNui_53, Obama12_54, Ohfah_54, Palestino_52, Peaches_53, Perplexer_52, PeterPeter_53, PetiteSangsue_52, Phacado_53, Phelipe_54, Phighter1804_53, Phontbonne_53, Pipcraft_51, Polymorphads_54, Pumbaa_53, Relief_52, RockieBear_53, Rocksand_53, Romney_53, Roosevelt_52, Rosa24_52, Ruin_53, Sabertooth_53, Scamp_53, SenorClean_53, Shaka_53, SheldonCooper_55, Shygu2_52, Skadoosh_54, Skipitt_52, Sparxx_54, Spino_52, Srilaccoli3_44, Stasia_52, SteMason_52, Stink_52, Sultana_53, TPA4_54, Taquarus_53, Thanksgivukkah_52, TinaFeyge_53, Tinybot_52, TiroTheta9_53, TroyPia_54, TygerBlood_53, Ulysses_52, Wander_53, Wilbur_53, Wile_52, Wizard007_53, Xena_51, YoSam321_53,

Summary by start number:

Start 6:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 384
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_81 (singleton),

Start 8:
• Found in 1 of 412 (0.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: TPA4_54 (singleton),

Start 9:
• Found in 121 of 412 (29.4%) of genes in pham
• Manual Annotations of this start: 3 of 384
• Called 2.5% of time when present
• Phage (with cluster) where this start called: HamSlice_52 (A4), Kampy_53 (A4), TinaFeyge_53 (A4),

Start 12:
• Found in 7 of 412 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 384
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Rockstar_56 (A3),

Start 14:
• Found in 10 of 412 (2.4%) of genes in pham
• Manual Annotations of this start: 2 of 384
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Cindaradix_50 (A4), SheldonCooper_55 (A4),

Start 18:
• Found in 1 of 412 (0.2%) of genes in pham
• Manual Annotations of this start: 1 of 384
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Srilaccoli3_44 (CH),

Start 19:
• Found in 38 of 412 (9.2%) of genes in pham
• Manual Annotations of this start: 2 of 384
• Called 13.2% of time when present
• Phage (with cluster) where this start called: DustyMartin_58 (A10), Edison31_53 (A10), Kristoff_54 (A10), Rowdy_58 (A10), Shapes_58 (A10),

Start 23:
• Found in 139 of 412 (33.7%) of genes in pham
• Manual Annotations of this start: 126 of 384
• Called 96.4% of time when present
• Phage (with cluster) where this start called: Abdiel_53 (A4), Albee_53 (A4), Alberto7_54 (A4), Annyong_53 (A4), Arturo_52 (A4), AvatarAhPeg_51 (A4), Avle17_53 (A4), Baby16_53 (A4), BabyRay_56 (A3), BangNhom_54 (A4), Bartimeaus_53 (A4), BellusTerra_54 (A4), Blackmoor_53 (A4), Bombshell_53 (A4), Broseidon_53 (A4), Bruiser_52 (A4), BubbleTrouble_52 (A4), Buckaroo_52 (A4), Burger_51 (A4), Caelakin_53 (A4), Camperdownii_51 (A4), Cat_54 (A3), CentreCat_53 (A4), Cerulean_54 (A4), ChampagnePapi_55 (A4), Chaph_53 (A4), Cintron_52 (A4), Citius_53 (A4), Clarenza_52 (A4), Cocoaberry_53 (A4), Commander_53 (A4), Connomayer_53 (A4), Deano_52 (A4), Dhanush_53 (A4), DirtyDunning_52 (A4), Druantia_53 (A4), Eagle_53 (A4), Eapen_53 (A4), Eris_52 (A4), Eros_53 (A4), Eurydice_54 (A4), Florean_53 (A4), Flux_53 (A4), Funston_52 (A4), Gadost_53 (A4), Happiness_52 (A4), Holli_52 (A4), Houdini22_53 (A4), Huxley_52 (A4), ICleared_53 (A4), Iceman_53 (A4), Iracema64_54 (A4), Jaykayelowell_51 (A4), JetBlade_53 (A4), JoongJeon_52 (A4), Junimo_52 (A4), KFPoly_52 (A4), KekoraPapaka_53 (A4), Kimona_53 (A19), Kingmustik0402_53 (A4), Koan_51 (A4), Koreni_52 (A4), Kratark_53 (A4), Kremtemulon_53 (A4), Kyee_53 (A4), LHTSCC_55 (A4), LappelDuVide_53 (A4), Lemur_53 (A4), LeoAvram_53 (A4), LittleB_53 (A4), LittleGuy_53 (A4), LochMonster_54 (A4), Lorenzo_53 (A4), Lunsford_54 (A4), Maverick_53 (A4), Maxo_54 (A4), Mayonnaise_52 (A4), Mazhar510_53 (A4), Medusa_53 (A4), MeeZee_53 (A4), Melvin_55 (A4), Millski_52 (A4), Miramae_51 (A4), Morrow_54 (A4), Mundrea_52 (A4), Nebs_54 (A4), Nemo27_53 (A4), Noelle_53 (A4), NorthStar_52 (A4), Northrop_53 (A4), NotAPhaseMom_53 (A4), Nyxis_53 (A4), OKaNui_53 (A4), Obama12_54 (A4), Ohfah_54 (A4), Palestino_52 (A4), Peaches_53 (A4), PeterPeter_53 (A4), Phacado_53 (A4), Phelipe_54 (A4), Phighter1804_53 (A4), Phontbonne_53 (A4), Pipcraft_51 (A4), Polymorphads_54 (A4), Pumbaa_53 (A4), Relief_52 (A4), RockieBear_53 (A4), Rocksand_53 (A4), Romney_53 (A4), Roosevelt_52 (A4), Rosa24_52 (A4), Ruin_53 (A4), Sabertooth_53 (A4), Scamp_53 (A4), SenorClean_53 (A4), Shaka_53 (A4), Skadoosh_54 (A4), Skipitt_52 (A4), Sparxx_54 (A4), Spino_52 (A4), SteMason_52 (A4), Stink_52 (A4), Sultana_53 (A4), Taquarus_53 (A4), Thanksgivukkah_52 (A4), Tinybot_52 (A4), TiroTheta9_53 (A4), TroyPia_54 (A4), TygerBlood_53 (A4), Ulysses_52 (A4), Wander_53 (A4), Wilbur_53 (A4), Wizard007_53 (A4), YoSam321_53 (A4),

Start 24:
• Found in 17 of 412 (4.1%) of genes in pham

• Manual Annotations of this start: 17 of 384
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbysRanger_52 (A4), Achebe_51 (A4), BabyBack_56 (A2), Backyardigan_51 (A4), Badger_51 (A4), Bumblebee11_51 (A4), Cici_52 (A4), Datway_52 (A4), ForesterFrank_56 (A2), Katalie136_52 (A4), Morpher26_52 (A4), Perplexer_52 (A4), PetiteSangsue_52 (A4), Shygu2_52 (A4), Stasia_52 (A4), Wile_52 (A4), Xena_51 (A4),

Start 25:
• Found in 253 of 412 (61.4%) of genes in pham
• Manual Annotations of this start: 231 of 384
• Called 97.6% of time when present
• Phage (with cluster) where this start called: 20ES_60 (A2), 40AC_58 (A17), ACFishhook_58 (A3), AN3_60 (A2), Acolyte_52 (A2), Aglet_60 (A3), AgronaGT15_58 (A3), Aliter_57 (A9), AnnaL29_59 (A2), Anselm_58 (A2), Anubis_62 (A3), ArcherNM_52 (A2), Arissanae_56 (A9), AugsMagnumOpus_62 (A3), Ayanochan_56 (A9), B1_51 (A3), BabyJohn_54 (A3), Bactobuster_56 (A2), Baehexic_56 (A2), Beauxregard13_59 (A3), Beemo_57 (A9), BengiVuitton_59 (A2), Benvolio_54 (A2), BiancaTri92_57 (A2), Bigflo_59 (A3), BlueBird_58 (A3), BobSwaget_53 (A2), BreSam8_59 (A3), Bugatti_58 (A3), BuzzBuzz_57 (A3), Bxz2_55 (A3), Calvinny_59 (A3), Catalina_58 (A9), Caviar_55 (A3), Centaur_58 (A2), ChipMunk_59 (A2), Chiqui_54 (A3), Chupacabra_53 (A10), Clammy_58 (A3), ClownCar_59 (A3), Colbster_59 (A3), Conquerage_57 (A9), Croquant_60 (A3), Cullens_59 (A3), DaHudson_59 (A3), Daishi_58 (A3), Dalmatian_58 (A2), Darrell_59 (A9), DeerParkTS_55 (A2), Deloris_58 (A2), Dieselweasel_60 (A3), DontArgue_53 (A10), Drake55_59 (A2), Drake94_52 (A10), DropBear_56 (A3), DudeLittle_56 (A2), EZMoney23_55 (A2), Eaglepride_55 (A10), Echild_57 (A2), EdogawaKiddo_57 (A9), Eidsmoe_57 (A9), Elephantoon_56 (A9), EmyBug_56 (A9), EpicPhail_60 (A3), Equemioh13_58 (A2), EtoileNova_56 (A3), EvilGenius_59 (A2), ExplosioNervosa_57 (A9), Farber_59 (A3), Fayely_57 (A9), Fernando_59 (A3), First_0059 (A2), Flare16_57 (A2), Fred313_56 (A3), GaugeLDP_55 (A2), Gemma_58 (A3), GingkoMaracino_59 (A3), Giroux_58 (A3), Goose1D_50 (A3), Goose1X_56 (A3), Goose_54 (A10), Gratitude_58 (A2), Grif_59 (A3), Groupthink_60 (A3), Grub_59 (A3), Grum1_59 (A3), GtownJaz_59 (A3), Gwennie_59 (A3), Hanray_57 (A9), HarryHoudini_58 (A2), HashRod_60 (A3), HaveUMetTed_60 (A3), Heathen_56 (A3), HelDan_56 (A3), Heliosoles_58 (A3), Hercules11_59 (A3), HippoHollow_57 (A2), Holex_57 (A9), Hookmount_55 (A3), HortumSL17_57 (A9), Idleandcovert_57 (A3), IronMan_57 (A2), Isca_55 (A3), Iwokeuplikedis_60 (A2), JF2_54 (A3), JF4_54 (A3), JHC117_59 (A3), Jaan_57 (A2), JenCasNa_60 (A3), JeppNRM_60 (A3), Jiawan_57 (A9), Jobu08_58 (A3), KADY_59 (A3), Kachowdy_56 (A3), Kalb97_60 (A3), Kalnoky_60 (A3), Keziacharles14_57 (A9), KingCyrus_59 (A2), KittenMittens_51 (A10), LBerry_60 (A3), Lambert1_55 (A3), Landor_57 (A2), Larenn_56 (A2), LarryKay_59 (A3), Leogania_57 (A2), Lilith_60 (A3), Lilleskat_57 (A9), LionsBait_57 (A2), LoneWolf_58 (A9), Loser_59 (A2), Louie6_58 (A3), Lowa_59 (A3), LugYA_62 (A3), MA5_56 (A3), MK4_56 (A3), MadMarie_59 (A3), Mainiac_59 (A3), Malec_57 (A2), Malinsilva_61 (A3), Manu_59 (A3), MarQuardt_59 (A3), Marchesa_56 (A3), Margo_55 (A3), Marie_59 (A3), Marius_60 (A3), Methuselah_55 (A3), Microwolf_59 (A3), MiculUcigas_57 (A2), Misomonster_60 (A3), MoneyMay_59 (A3), Montavir_58 (A3), MuchMore_62 (A3), Myxus_57 (A9), NaSiaTalie_57 (A2), NicoleTera_56 (A2), Noella_55 (A3), Norbert_54 (A3), NothingSpecial_55 (A2), OKCentral2016_53 (A10), OlanP_58 (A3), Ollie_59 (A3), Onglai_56 (A9), P28Green_60 (A3), PGHhamlin_61 (A3), PackMan_56 (A9), Panamaxus_53 (A3), Pawn_59 (A3), PeaceMeal1_52 (A10), Pembroke_59 (A3), Penny1_60 (A3), Phaded_58 (A2), Phaeder_57 (A9),

Phantastic_57 (A3), PhishRPhriends_57 (A3), Phoebe_60 (A3), Phonnegut_57 (A9), Phoxy_59 (A3), Phranny_60 (A3), Pioneer_57 (A9), Piro94_57 (A2), Pistachio_58 (A3), Pocahontas_55 (A3), Poompha_53 (A10), Popcicle_55 (A3), PotatoSplit_61 (A3), Priya_57 (A9), Prudy_57 (A2), Pukovnik_56 (A2), Puppy_58 (A3), PurpleHaze_59 (A3), Qobbit_57 (A9), QuinnKiro_54 (A3), Reba_59 (A3), Rebeuca_54 (A10), RedRock_59 (A2), ResDef_55 (A3), Retro23_58 (A2), RhynO_55 (A10), Roimos_56 (A3), Rummer_58 (A3), RyeScarlet_57 (A9), Sabia_59 (A3), Sabinator_58 (A3), Sachima_57 (A9), SaturnRing_57 (A3), Scherzo_57 (A9), Scout_56 (A3), Severus_52 (A10), Shep_56 (A3), Sknot_57 (A2), Snickers_59 (A3), SoYo_59 (A3), SoilDragon_59 (A3), Soshari_61 (A3), Spike509_59 (A3), Spouty_57 (A9), Stagni_59 (A3), Stellammi_164 (UNK), StepMih_59 (A3), Swirley_51 (A5), TNguyen7_57 (A3), TarsusIV_56 (A2), Tarynearal_47 (A5), Taurus_60 (A3), Terrific_58 (A2), Texage_54 (A3), Tiffany_59 (A3), TinyPebbles_58 (A3), Todacoro_55 (A3), Topanga_52 (A10), Trike_52 (A10), Tristan_56 (A2), Tubs_57 (A9), Twigg_49 (A5), Twister_52 (A10), Ugenie5_54 (A9), Updawg_58 (A2), VA6_58 (A2), Veracruz_54 (A3), Vix_59 (A3), WalterMcMickey_52 (A10), Watson_59 (A3), WideWale_58 (A2), Wooldri_61 (A3), XianYue_56 (A2), Zarafa_56 (A3), Zetzy_58 (A3),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, CH, A10, A19, A17, A3, A2, A5, A4, A9, UNK,

Info for manual annotations of cluster A10:
•Start number 19 was manually annotated 2 times for cluster A10.
•Start number 25 was manually annotated 15 times for cluster A10.

Info for manual annotations of cluster A19:
•Start number 23 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:
•Start number 24 was manually annotated 2 times for cluster A2.
•Start number 25 was manually annotated 55 times for cluster A2.

Info for manual annotations of cluster A3:
•Start number 12 was manually annotated 1 time for cluster A3.
•Start number 23 was manually annotated 1 time for cluster A3.
•Start number 25 was manually annotated 123 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 9 was manually annotated 3 times for cluster A4.
•Start number 14 was manually annotated 2 times for cluster A4.
•Start number 23 was manually annotated 124 times for cluster A4.
•Start number 24 was manually annotated 15 times for cluster A4.

Info for manual annotations of cluster A5:
•Start number 25 was manually annotated 3 times for cluster A5.

Info for manual annotations of cluster A9:
•Start number 25 was manually annotated 34 times for cluster A9.

Info for manual annotations of cluster CH:
•Start number 18 was manually annotated 1 time for cluster CH.

Info for manual annotations of cluster UNK:
•Start number 25 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: 20ES_60 Start: 38647, Stop: 38324, Start Num: 25
Candidate Starts for 20ES_60:
(Start: 25 @38647 has 231 MA's), (31, 38524), (32, 38509), (34, 38503), (35, 38500), (36, 38497), (43, 38470), (45, 38443), (50, 38404),

Gene: 40AC_58 Start: 39262, Stop: 38960, Start Num: 25
Candidate Starts for 40AC_58:
(Start: 25 @39262 has 231 MA's), (26, 39196), (32, 39124), (34, 39118), (35, 39115), (36, 39112), (43, 39085), (45, 39058), (50, 39019),

Gene: ACFishhook_58 Start: 37950, Stop: 37657, Start Num: 25
Candidate Starts for ACFishhook_58:
(Start: 25 @37950 has 231 MA's), (32, 37809), (36, 37797), (38, 37788),

Gene: AN3_60 Start: 37335, Stop: 37009, Start Num: 25
Candidate Starts for AN3_60:
(Start: 25 @37335 has 231 MA's), (32, 37194), (34, 37188), (35, 37185), (36, 37182), (43, 37155), (45, 37128), (50, 37089),

Gene: AbbysRanger_52 Start: 37346, Stop: 37068, Start Num: 24
Candidate Starts for AbbysRanger_52:
(15, 37391), (16, 37388), (Start: 24 @37346 has 17 MA's), (36, 37193), (38, 37184), (42, 37169),

Gene: Abdiel_53 Start: 37381, Stop: 37106, Start Num: 23
Candidate Starts for Abdiel_53:
(Start: 9 @37471 has 3 MA's), (Start: 23 @37381 has 126 MA's), (36, 37228), (38, 37219),

Gene: Achebe_51 Start: 37329, Stop: 37051, Start Num: 24
Candidate Starts for Achebe_51:
(15, 37374), (16, 37371), (Start: 24 @37329 has 17 MA's), (36, 37176), (38, 37167), (42, 37152),

Gene: Acolyte_52 Start: 37328, Stop: 37029, Start Num: 25
Candidate Starts for Acolyte_52:
(Start: 25 @37328 has 231 MA's), (32, 37190), (34, 37184), (35, 37181), (36, 37178), (43, 37151), (45, 37124), (49, 37094), (50, 37085), (52, 37055), (53, 37043),

Gene: Aglet_60 Start: 37993, Stop: 37700, Start Num: 25
Candidate Starts for Aglet_60:
(7, 38080), (Start: 25 @37993 has 231 MA's), (32, 37852), (36, 37840), (38, 37831), (58, 37714),

Gene: AgronaGT15_58 Start: 37841, Stop: 37548, Start Num: 25
Candidate Starts for AgronaGT15_58:
(7, 37928), (Start: 25 @37841 has 231 MA's), (32, 37700), (36, 37688), (38, 37679), (58, 37562),

Gene: Albee_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Albee_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Alberto7_54 Start: 37717, Stop: 37442, Start Num: 23
Candidate Starts for Alberto7_54:
(Start: 9 @37807 has 3 MA's), (Start: 23 @37717 has 126 MA's), (36, 37564), (38, 37555),

Gene: Aliter_57 Start: 37884, Stop: 37606, Start Num: 25
Candidate Starts for Aliter_57:
(Start: 25 @37884 has 231 MA's), (32, 37746), (34, 37740), (35, 37737), (36, 37734), (43, 37707), (48, 37653), (50, 37641),

Gene: AnnaL29_59 Start: 39057, Stop: 38731, Start Num: 25
Candidate Starts for AnnaL29_59:
(Start: 25 @39057 has 231 MA's), (30, 38937), (32, 38919), (34, 38913), (35, 38910), (36, 38907), (43, 38880), (45, 38853), (50, 38814), (55, 38763), (56, 38757),

Gene: Annyong_53 Start: 37425, Stop: 37150, Start Num: 23
Candidate Starts for Annyong_53:
(Start: 9 @37515 has 3 MA's), (Start: 23 @37425 has 126 MA's), (36, 37272), (38, 37263),

Gene: Anselm_58 Start: 38407, Stop: 38084, Start Num: 25
Candidate Starts for Anselm_58:
(Start: 25 @38407 has 231 MA's), (26, 38341), (30, 38287), (32, 38269), (34, 38263), (35, 38260), (36, 38257), (43, 38230), (45, 38203), (50, 38164), (52, 38134),

Gene: Anubis_62 Start: 37879, Stop: 37586, Start Num: 25
Candidate Starts for Anubis_62:
(7, 37966), (Start: 25 @37879 has 231 MA's), (32, 37738), (36, 37726), (38, 37717), (58, 37600),

Gene: ArcherNM_52 Start: 38061, Stop: 37741, Start Num: 25
Candidate Starts for ArcherNM_52:
(Start: 25 @38061 has 231 MA's), (30, 37941), (32, 37923), (34, 37917), (35, 37914), (36, 37911), (43, 37884), (45, 37857), (50, 37818), (55, 37767), (59, 37755), (62, 37746),

Gene: Arissanae_56 Start: 38575, Stop: 38294, Start Num: 25
Candidate Starts for Arissanae_56:
(Start: 25 @38575 has 231 MA's), (32, 38437), (35, 38428), (36, 38425), (43, 38398), (45, 38371), (50, 38332),

Gene: Arturo_52 Start: 37652, Stop: 37377, Start Num: 23
Candidate Starts for Arturo_52:
(Start: 14 @37697 has 2 MA's), (Start: 23 @37652 has 126 MA's), (36, 37499), (38, 37490), (42, 37475),

Gene: AugsMagnumOpus_62 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for AugsMagnumOpus_62:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: AvatarAhPeg_51 Start: 37165, Stop: 36890, Start Num: 23
Candidate Starts for AvatarAhPeg_51:

(Start: 23 @37165 has 126 MA's), (36, 37012), (37, 37006), (38, 37003),

Gene: Avle17_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Avle17_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Ayanochan_56 Start: 38042, Stop: 37764, Start Num: 25
Candidate Starts for Ayanochan_56:
(Start: 25 @38042 has 231 MA's), (32, 37904), (34, 37898), (35, 37895), (36, 37892), (43, 37865), (48, 37811), (50, 37799),

Gene: B1_51 Start: 35979, Stop: 35686, Start Num: 25
Candidate Starts for B1_51:
(Start: 12 @36033 has 1 MA's), (Start: 25 @35979 has 231 MA's), (36, 35826), (38, 35817), (42, 35802),

Gene: Baby16_53 Start: 37391, Stop: 37116, Start Num: 23
Candidate Starts for Baby16_53:
(Start: 9 @37481 has 3 MA's), (Start: 23 @37391 has 126 MA's), (36, 37238), (38, 37229),

Gene: BabyBack_56 Start: 38693, Stop: 38370, Start Num: 24
Candidate Starts for BabyBack_56:
(Start: 24 @38693 has 17 MA's), (32, 38555), (34, 38549), (35, 38546), (36, 38543), (43, 38516), (46, 38486), (50, 38450), (52, 38420), (55, 38399),

Gene: BabyJohn_54 Start: 37800, Stop: 37507, Start Num: 25
Candidate Starts for BabyJohn_54:
(Start: 25 @37800 has 231 MA's), (36, 37647), (38, 37638), (42, 37623),

Gene: BabyRay_56 Start: 37770, Stop: 37456, Start Num: 23
Candidate Starts for BabyRay_56:
(Start: 23 @37770 has 126 MA's), (36, 37617), (38, 37608), (42, 37593), (54, 37482),

Gene: Backyardigan_51 Start: 37362, Stop: 37084, Start Num: 24
Candidate Starts for Backyardigan_51:
(15, 37407), (16, 37404), (Start: 24 @37362 has 17 MA's), (36, 37209), (38, 37200), (42, 37185),

Gene: Bactobuster_56 Start: 39010, Stop: 38684, Start Num: 25
Candidate Starts for Bactobuster_56:
(Start: 25 @39010 has 231 MA's), (32, 38869), (34, 38863), (35, 38860), (36, 38857), (43, 38830), (45, 38803), (50, 38764), (52, 38734), (55, 38713),

Gene: Badger_51 Start: 37330, Stop: 37052, Start Num: 24
Candidate Starts for Badger_51:
(15, 37375), (16, 37372), (Start: 24 @37330 has 17 MA's), (36, 37177), (38, 37168), (42, 37153),

Gene: Baehexic_56 Start: 38173, Stop: 37853, Start Num: 25
Candidate Starts for Baehexic_56:
(Start: 25 @38173 has 231 MA's), (26, 38107), (34, 38029), (35, 38026), (36, 38023), (43, 37996), (45, 37969), (50, 37930), (55, 37879),

Gene: BangNhom_54 Start: 37816, Stop: 37541, Start Num: 23
Candidate Starts for BangNhom_54:

(Start: 14 @37861 has 2 MA's), (21, 37822), (Start: 23 @37816 has 126 MA's), (36, 37663), (38, 37654),

Gene: Bartimeaus_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Bartimeaus_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Beauxregard13_59 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for Beauxregard13_59:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: Beemo_57 Start: 38054, Stop: 37776, Start Num: 25
Candidate Starts for Beemo_57:
(Start: 25 @38054 has 231 MA's), (32, 37916), (34, 37910), (35, 37907), (36, 37904), (43, 37877), (48, 37823), (50, 37811),

Gene: BellusTerra_54 Start: 37381, Stop: 37106, Start Num: 23
Candidate Starts for BellusTerra_54:
(Start: 9 @37471 has 3 MA's), (Start: 23 @37381 has 126 MA's), (36, 37228), (38, 37219),

Gene: BengiVuitton_59 Start: 38618, Stop: 38292, Start Num: 25
Candidate Starts for BengiVuitton_59:
(Start: 25 @38618 has 231 MA's), (32, 38477), (34, 38471), (35, 38468), (36, 38465), (43, 38438), (45, 38411), (50, 38372),

Gene: Benvolio_54 Start: 37431, Stop: 37108, Start Num: 25
Candidate Starts for Benvolio_54:
(Start: 25 @37431 has 231 MA's), (32, 37293), (34, 37287), (35, 37284), (36, 37281), (43, 37254), (45, 37227), (50, 37188), (52, 37158), (55, 37137),

Gene: BiancaTri92_57 Start: 38766, Stop: 38494, Start Num: 25
Candidate Starts for BiancaTri92_57:
(Start: 25 @38766 has 231 MA's), (32, 38631), (34, 38625), (35, 38622), (36, 38619), (43, 38592), (45, 38565), (50, 38526),

Gene: Bigflo_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Bigflo_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: Blackmoor_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Blackmoor_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: BlueBird_58 Start: 37811, Stop: 37518, Start Num: 25
Candidate Starts for BlueBird_58:
(Start: 19 @37841 has 2 MA's), (Start: 25 @37811 has 231 MA's), (27, 37715), (36, 37658), (38, 37649), (42, 37634), (58, 37532),

Gene: BobSwaget_53 Start: 36907, Stop: 36587, Start Num: 25
Candidate Starts for BobSwaget_53:
(2, 37132), (3, 37123), (Start: 25 @36907 has 231 MA's), (32, 36769), (34, 36763), (35, 36760), (36, 36757), (43, 36730), (45, 36703), (50, 36664), (55, 36613), (57, 36601),

Gene: Bombshell_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Bombshell_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: BreSam8_59 Start: 37986, Stop: 37693, Start Num: 25
Candidate Starts for BreSam8_59:
(7, 38073), (Start: 25 @37986 has 231 MA's), (32, 37845), (36, 37833), (38, 37824), (58, 37707),

Gene: Broseidon_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Broseidon_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Bruiser_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Bruiser_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: BubbleTrouble_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for BubbleTrouble_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Buckaroo_52 Start: 37384, Stop: 37109, Start Num: 23
Candidate Starts for Buckaroo_52:
(Start: 9 @37474 has 3 MA's), (Start: 23 @37384 has 126 MA's), (36, 37231), (38, 37222),

Gene: Bugatti_58 Start: 37811, Stop: 37518, Start Num: 25
Candidate Starts for Bugatti_58:
(Start: 19 @37841 has 2 MA's), (Start: 25 @37811 has 231 MA's), (27, 37715), (36, 37658), (38, 37649), (42, 37634), (58, 37532),

Gene: Bumblebee11_51 Start: 37332, Stop: 37054, Start Num: 24
Candidate Starts for Bumblebee11_51:
(15, 37377), (16, 37374), (Start: 24 @37332 has 17 MA's), (36, 37179), (38, 37170), (42, 37155),

Gene: Burger_51 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Burger_51:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: BuzzBuzz_57 Start: 38020, Stop: 37727, Start Num: 25
Candidate Starts for BuzzBuzz_57:
(7, 38107), (Start: 25 @38020 has 231 MA's), (32, 37879), (36, 37867), (38, 37858), (58, 37741),

Gene: Bxz2_55 Start: 38027, Stop: 37734, Start Num: 25
Candidate Starts for Bxz2_55:
(7, 38114), (Start: 25 @38027 has 231 MA's), (32, 37886), (36, 37874), (38, 37865), (58, 37748),

Gene: Caelakin_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Caelakin_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Calvinny_59 Start: 37878, Stop: 37585, Start Num: 25
Candidate Starts for Calvinny_59:
(Start: 25 @37878 has 231 MA's), (32, 37737), (36, 37725), (38, 37716),

Gene: Camperdownii_51 Start: 37054, Stop: 36779, Start Num: 23
Candidate Starts for Camperdownii_51:
(Start: 9 @37144 has 3 MA's), (Start: 23 @37054 has 126 MA's), (36, 36901), (38, 36892),

Gene: Cat_54 Start: 37383, Stop: 37069, Start Num: 23
Candidate Starts for Cat_54:
(Start: 23 @37383 has 126 MA's), (36, 37230), (38, 37221), (42, 37206), (54, 37095),

Gene: Catalina_58 Start: 37957, Stop: 37679, Start Num: 25
Candidate Starts for Catalina_58:
(Start: 25 @37957 has 231 MA's), (32, 37819), (34, 37813), (35, 37810), (36, 37807), (43, 37780), (48, 37726), (50, 37714),

Gene: Caviar_55 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Caviar_55:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Centaur_58 Start: 38387, Stop: 38070, Start Num: 25
Candidate Starts for Centaur_58:
(Start: 25 @38387 has 231 MA's), (32, 38252), (34, 38246), (35, 38243), (36, 38240), (43, 38213), (45, 38186), (50, 38147), (55, 38096),

Gene: CentreCat_53 Start: 37383, Stop: 37108, Start Num: 23
Candidate Starts for CentreCat_53:
(Start: 9 @37473 has 3 MA's), (Start: 23 @37383 has 126 MA's), (36, 37230), (38, 37221),

Gene: Cerulean_54 Start: 37817, Stop: 37542, Start Num: 23
Candidate Starts for Cerulean_54:
(Start: 14 @37862 has 2 MA's), (21, 37823), (Start: 23 @37817 has 126 MA's), (36, 37664), (38, 37655),

Gene: ChampagnePapi_55 Start: 37816, Stop: 37541, Start Num: 23
Candidate Starts for ChampagnePapi_55:
(Start: 14 @37861 has 2 MA's), (21, 37822), (Start: 23 @37816 has 126 MA's), (36, 37663), (38, 37654),

Gene: Chaph_53 Start: 37391, Stop: 37116, Start Num: 23
Candidate Starts for Chaph_53:
(Start: 9 @37481 has 3 MA's), (Start: 23 @37391 has 126 MA's), (36, 37238), (38, 37229),

Gene: ChipMunk_59 Start: 39757, Stop: 39434, Start Num: 25
Candidate Starts for ChipMunk_59:
(Start: 25 @39757 has 231 MA's), (30, 39637), (32, 39619), (34, 39613), (35, 39610), (36, 39607), (43, 39580), (45, 39553), (50, 39514),

Gene: Chiqui_54 Start: 37809, Stop: 37516, Start Num: 25
Candidate Starts for Chiqui_54:
(Start: 25 @37809 has 231 MA's), (36, 37656), (38, 37647), (42, 37632),

Gene: Chupacabra_53 Start: 37296, Stop: 37006, Start Num: 25
Candidate Starts for Chupacabra_53:

(Start: 19 @37323 has 2 MA's), (Start: 25 @37296 has 231 MA's), (32, 37155), (36, 37143), (38, 37134), (42, 37119),

Gene: Cici_52 Start: 37347, Stop: 37069, Start Num: 24
Candidate Starts for Cici_52:
(15, 37392), (16, 37389), (Start: 24 @37347 has 17 MA's), (36, 37194), (38, 37185), (42, 37170),

Gene: Cindaradix_50 Start: 37055, Stop: 36735, Start Num: 14
Candidate Starts for Cindaradix_50:
(Start: 14 @37055 has 2 MA's), (Start: 23 @37010 has 126 MA's), (36, 36857), (38, 36848),

Gene: Cintron_52 Start: 37357, Stop: 37082, Start Num: 23
Candidate Starts for Cintron_52:
(Start: 9 @37447 has 3 MA's), (Start: 23 @37357 has 126 MA's), (36, 37204), (38, 37195),

Gene: Citius_53 Start: 37401, Stop: 37126, Start Num: 23
Candidate Starts for Citius_53:
(Start: 9 @37491 has 3 MA's), (Start: 23 @37401 has 126 MA's), (36, 37248), (38, 37239),

Gene: Clammy_58 Start: 37811, Stop: 37518, Start Num: 25
Candidate Starts for Clammy_58:
(Start: 19 @37841 has 2 MA's), (Start: 25 @37811 has 231 MA's), (27, 37715), (36, 37658), (38, 37649), (42, 37634), (58, 37532),

Gene: Clarenza_52 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Clarenza_52:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: ClownCar_59 Start: 37871, Stop: 37578, Start Num: 25
Candidate Starts for ClownCar_59:
(Start: 25 @37871 has 231 MA's), (32, 37730), (36, 37718), (38, 37709),

Gene: Cocoaberry_53 Start: 37384, Stop: 37109, Start Num: 23
Candidate Starts for Cocoaberry_53:
(Start: 9 @37474 has 3 MA's), (Start: 23 @37384 has 126 MA's), (36, 37231), (38, 37222),

Gene: Colbster_59 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for Colbster_59:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: Commander_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Commander_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: Connomayer_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Connomayer_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Conquerage_57 Start: 38028, Stop: 37750, Start Num: 25
Candidate Starts for Conquerage_57:
(Start: 25 @38028 has 231 MA's), (32, 37890), (34, 37884), (35, 37881), (36, 37878), (43, 37851), (48, 37797), (50, 37785),

Gene: Croquant_60 Start: 37991, Stop: 37698, Start Num: 25
Candidate Starts for Croquant_60:
(Start: 25 @37991 has 231 MA's), (36, 37838), (38, 37829), (58, 37712),

Gene: Cullens_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Cullens_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: DaHudson_59 Start: 37985, Stop: 37692, Start Num: 25
Candidate Starts for DaHudson_59:
(7, 38072), (Start: 25 @37985 has 231 MA's), (32, 37844), (36, 37832), (38, 37823), (58, 37706),

Gene: Daishi_58 Start: 36861, Stop: 36568, Start Num: 25
Candidate Starts for Daishi_58:
(7, 36948), (Start: 25 @36861 has 231 MA's), (32, 36720), (36, 36708), (38, 36699), (58, 36582),

Gene: Dalmatian_58 Start: 38380, Stop: 38057, Start Num: 25
Candidate Starts for Dalmatian_58:
(Start: 25 @38380 has 231 MA's), (26, 38314), (30, 38260), (32, 38242), (34, 38236), (35, 38233), (36, 38230), (43, 38203), (45, 38176), (50, 38137), (52, 38107),

Gene: Darrell_59 Start: 38653, Stop: 38372, Start Num: 25
Candidate Starts for Darrell_59:
(Start: 25 @38653 has 231 MA's), (31, 38530), (32, 38515), (34, 38509), (35, 38506), (36, 38503), (43, 38476), (45, 38449), (50, 38410),

Gene: Datway_52 Start: 37318, Stop: 37040, Start Num: 24
Candidate Starts for Datway_52:
(15, 37363), (16, 37360), (Start: 24 @37318 has 17 MA's), (36, 37165), (38, 37156), (42, 37141),

Gene: Deano_52 Start: 37388, Stop: 37113, Start Num: 23
Candidate Starts for Deano_52:
(Start: 9 @37478 has 3 MA's), (Start: 23 @37388 has 126 MA's), (36, 37235), (38, 37226),

Gene: DeerParkTS_55 Start: 37499, Stop: 37179, Start Num: 25
Candidate Starts for DeerParkTS_55:
(Start: 25 @37499 has 231 MA's), (32, 37364), (35, 37355), (36, 37352), (43, 37325), (45, 37298), (50, 37259), (52, 37229),

Gene: Deloris_58 Start: 38287, Stop: 37961, Start Num: 25
Candidate Starts for Deloris_58:
(Start: 25 @38287 has 231 MA's), (32, 38146), (34, 38140), (35, 38137), (36, 38134), (43, 38107), (45, 38080), (50, 38041),

Gene: Dhanush_53 Start: 37383, Stop: 37108, Start Num: 23
Candidate Starts for Dhanush_53:
(Start: 9 @37473 has 3 MA's), (Start: 23 @37383 has 126 MA's), (36, 37230), (38, 37221),

Gene: Dieselweasel_60 Start: 37995, Stop: 37702, Start Num: 25
Candidate Starts for Dieselweasel_60:
(7, 38082), (Start: 25 @37995 has 231 MA's), (32, 37854), (36, 37842), (38, 37833), (58, 37716),

Gene: DirtyDunning_52 Start: 37392, Stop: 37117, Start Num: 23

Candidate Starts for DirtyDunning_52:
(Start: 9 @37482 has 3 MA's), (Start: 23 @37392 has 126 MA's), (36, 37239), (38, 37230),

Gene: DontArgue_53 Start: 36479, Stop: 36180, Start Num: 25
Candidate Starts for DontArgue_53:
(Start: 25 @36479 has 231 MA's), (32, 36329), (36, 36317), (38, 36308), (42, 36293), (60, 36185),

Gene: Drake55_59 Start: 38469, Stop: 38149, Start Num: 25
Candidate Starts for Drake55_59:
(Start: 25 @38469 has 231 MA's), (26, 38403), (34, 38325), (35, 38322), (36, 38319), (43, 38292), (45, 38265), (50, 38226), (55, 38175),

Gene: Drake94_52 Start: 36531, Stop: 36241, Start Num: 25
Candidate Starts for Drake94_52:
(Start: 25 @36531 has 231 MA's), (32, 36390), (36, 36378), (38, 36369), (42, 36354),

Gene: DropBear_56 Start: 37707, Stop: 37414, Start Num: 25
Candidate Starts for DropBear_56:
(Start: 25 @37707 has 231 MA's), (36, 37554), (38, 37545), (42, 37530),

Gene: Druantia_53 Start: 37383, Stop: 37108, Start Num: 23
Candidate Starts for Druantia_53:
(Start: 9 @37473 has 3 MA's), (Start: 23 @37383 has 126 MA's), (36, 37230), (38, 37221),

Gene: DudeLittle_56 Start: 38146, Stop: 37823, Start Num: 25
Candidate Starts for DudeLittle_56:
(Start: 25 @38146 has 231 MA's), (26, 38080), (32, 38008), (34, 38002), (35, 37999), (36, 37996), (43, 37969), (45, 37942), (50, 37903), (52, 37873),

Gene: DustyMartin_58 Start: 37428, Stop: 37081, Start Num: 19
Candidate Starts for DustyMartin_58:
(Start: 19 @37428 has 2 MA's), (Start: 25 @37398 has 231 MA's), (32, 37257), (36, 37245), (38, 37236), (42, 37221), (54, 37125),

Gene: EZMoney23_55 Start: 37861, Stop: 37586, Start Num: 25
Candidate Starts for EZMoney23_55:
(Start: 25 @37861 has 231 MA's), (31, 37738), (32, 37723), (34, 37717), (35, 37714), (36, 37711), (43, 37684), (45, 37657), (50, 37618),

Gene: Eagle_53 Start: 37405, Stop: 37130, Start Num: 23
Candidate Starts for Eagle_53:
(Start: 9 @37495 has 3 MA's), (Start: 23 @37405 has 126 MA's), (36, 37252), (38, 37243),

Gene: Eaglepride_55 Start: 37480, Stop: 37070, Start Num: 25
Candidate Starts for Eaglepride_55:
(Start: 25 @37480 has 231 MA's), (28, 37381), (32, 37339), (36, 37327), (38, 37318), (64, 37099),

Gene: Eapen_53 Start: 37375, Stop: 37100, Start Num: 23
Candidate Starts for Eapen_53:
(Start: 9 @37465 has 3 MA's), (Start: 23 @37375 has 126 MA's), (36, 37222), (38, 37213),

Gene: Echild_57 Start: 37455, Stop: 37132, Start Num: 25
Candidate Starts for Echild_57:

(Start: 25 @37455 has 231 MA's), (32, 37317), (34, 37311), (35, 37308), (36, 37305), (43, 37278), (45, 37251), (50, 37212), (52, 37182), (55, 37161),

Gene: Edison31_53 Start: 37356, Stop: 37009, Start Num: 19
Candidate Starts for Edison31_53:
(Start: 19 @37356 has 2 MA's), (Start: 25 @37326 has 231 MA's), (32, 37185), (36, 37173), (38, 37164), (42, 37149), (54, 37053),

Gene: EdogawaKiddo_57 Start: 38005, Stop: 37727, Start Num: 25
Candidate Starts for EdogawaKiddo_57:
(Start: 25 @38005 has 231 MA's), (32, 37867), (34, 37861), (35, 37858), (36, 37855), (43, 37828), (48, 37774), (50, 37762),

Gene: Eidsmoe_57 Start: 38020, Stop: 37742, Start Num: 25
Candidate Starts for Eidsmoe_57:
(Start: 25 @38020 has 231 MA's), (32, 37882), (34, 37876), (35, 37873), (36, 37870), (43, 37843), (48, 37789), (50, 37777),

Gene: Elephantoon_56 Start: 37395, Stop: 37114, Start Num: 25
Candidate Starts for Elephantoon_56:
(Start: 25 @37395 has 231 MA's), (32, 37257), (34, 37251), (35, 37248), (36, 37245), (43, 37218), (45, 37191), (50, 37152),

Gene: EmyBug_56 Start: 38022, Stop: 37744, Start Num: 25
Candidate Starts for EmyBug_56:
(Start: 25 @38022 has 231 MA's), (32, 37884), (34, 37878), (35, 37875), (36, 37872), (43, 37845), (48, 37791), (50, 37779),

Gene: EpicPhail_60 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for EpicPhail_60:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: Equemioh13_58 Start: 38292, Stop: 37972, Start Num: 25
Candidate Starts for Equemioh13_58:
(Start: 25 @38292 has 231 MA's), (26, 38226), (34, 38148), (35, 38145), (36, 38142), (43, 38115), (45, 38088), (50, 38049), (55, 37998),

Gene: Eris_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Eris_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Eros_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Eros_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: EtoileNova_56 Start: 37768, Stop: 37478, Start Num: 25
Candidate Starts for EtoileNova_56:
(Start: 19 @37798 has 2 MA's), (Start: 25 @37768 has 231 MA's), (36, 37615), (38, 37606), (42, 37591),

Gene: Eurydice_54 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Eurydice_54:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: EvilGenius_59 Start: 39758, Stop: 39435, Start Num: 25
Candidate Starts for EvilGenius_59:
(Start: 25 @39758 has 231 MA's), (30, 39638), (32, 39620), (34, 39614), (35, 39611), (36, 39608), (43, 39581), (45, 39554), (50, 39515),

Gene: ExplosioNervosa_57 Start: 38088, Stop: 37810, Start Num: 25
Candidate Starts for ExplosioNervosa_57:
(Start: 25 @38088 has 231 MA's), (32, 37950), (34, 37944), (35, 37941), (36, 37938), (43, 37911), (48, 37857), (50, 37845),

Gene: Farber_59 Start: 37982, Stop: 37689, Start Num: 25
Candidate Starts for Farber_59:
(7, 38069), (Start: 25 @37982 has 231 MA's), (32, 37841), (36, 37829), (38, 37820), (58, 37703),

Gene: Fayely_57 Start: 37989, Stop: 37711, Start Num: 25
Candidate Starts for Fayely_57:
(Start: 25 @37989 has 231 MA's), (32, 37851), (34, 37845), (35, 37842), (36, 37839), (43, 37812), (48, 37758), (50, 37746),

Gene: Fernando_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Fernando_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: First_0059 Start: 38547, Stop: 38224, Start Num: 25
Candidate Starts for First_0059:
(Start: 25 @38547 has 231 MA's), (31, 38424), (32, 38409), (34, 38403), (35, 38400), (36, 38397), (43, 38370), (45, 38343), (50, 38304),

Gene: Flare16_57 Start: 38048, Stop: 37731, Start Num: 25
Candidate Starts for Flare16_57:
(Start: 25 @38048 has 231 MA's), (32, 37913), (34, 37907), (35, 37904), (36, 37901), (43, 37874), (45, 37847), (50, 37808), (55, 37757),

Gene: Florean_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Florean_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: Flux_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Flux_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: ForesterFrank_56 Start: 38659, Stop: 38339, Start Num: 24
Candidate Starts for ForesterFrank_56:
(Start: 24 @38659 has 17 MA's), (30, 38539), (32, 38521), (34, 38515), (35, 38512), (36, 38509), (43, 38482), (45, 38455), (50, 38416), (62, 38344),

Gene: Fred313_56 Start: 37398, Stop: 37105, Start Num: 25
Candidate Starts for Fred313_56:
(Start: 25 @37398 has 231 MA's), (36, 37245), (38, 37236), (42, 37221),

Gene: Funston_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Funston_52:

(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Gadost_53 Start: 37384, Stop: 37109, Start Num: 23
Candidate Starts for Gadost_53:
(Start: 9 @37474 has 3 MA's), (Start: 23 @37384 has 126 MA's), (36, 37231), (38, 37222),

Gene: GaugeLDP_55 Start: 38243, Stop: 37968, Start Num: 25
Candidate Starts for GaugeLDP_55:
(Start: 25 @38243 has 231 MA's), (32, 38105), (34, 38099), (35, 38096), (36, 38093), (43, 38066), (45, 38039), (50, 38000),

Gene: Gemma_58 Start: 37874, Stop: 37581, Start Num: 25
Candidate Starts for Gemma_58:
(Start: 25 @37874 has 231 MA's), (28, 37775), (32, 37733), (36, 37721), (38, 37712),

Gene: GingkoMaracino_59 Start: 37878, Stop: 37585, Start Num: 25
Candidate Starts for GingkoMaracino_59:
(7, 37965), (Start: 25 @37878 has 231 MA's), (32, 37737), (36, 37725), (38, 37716), (58, 37599),

Gene: Giroux_58 Start: 37810, Stop: 37517, Start Num: 25
Candidate Starts for Giroux_58:
(Start: 19 @37840 has 2 MA's), (Start: 25 @37810 has 231 MA's), (27, 37714), (36, 37657), (38, 37648), (42, 37633), (58, 37531),

Gene: Goose_54 Start: 37112, Stop: 36822, Start Num: 25
Candidate Starts for Goose_54:
(Start: 19 @37139 has 2 MA's), (Start: 25 @37112 has 231 MA's), (32, 36971), (36, 36959), (38, 36950), (42, 36935),

Gene: Goose1D_50 Start: 33888, Stop: 33595, Start Num: 25
Candidate Starts for Goose1D_50:
(Start: 25 @33888 has 231 MA's), (36, 33735), (38, 33726), (42, 33711),

Gene: Goose1X_56 Start: 37030, Stop: 36737, Start Num: 25
Candidate Starts for Goose1X_56:
(Start: 25 @37030 has 231 MA's), (36, 36877), (38, 36868), (42, 36853),

Gene: Gratitude_58 Start: 38292, Stop: 37972, Start Num: 25
Candidate Starts for Gratitude_58:
(Start: 25 @38292 has 231 MA's), (26, 38226), (34, 38148), (35, 38145), (36, 38142), (43, 38115), (45, 38088), (50, 38049), (55, 37998),

Gene: Grif_59 Start: 38067, Stop: 37774, Start Num: 25
Candidate Starts for Grif_59:
(7, 38154), (Start: 25 @38067 has 231 MA's), (32, 37926), (36, 37914), (38, 37905), (58, 37788),

Gene: Groupthink_60 Start: 37878, Stop: 37585, Start Num: 25
Candidate Starts for Groupthink_60:
(Start: 25 @37878 has 231 MA's), (32, 37737), (36, 37725), (38, 37716),

Gene: Grub_59 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for Grub_59:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: Grum1_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Grum1_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: GtownJaz_59 Start: 37994, Stop: 37701, Start Num: 25
Candidate Starts for GtownJaz_59:
(7, 38081), (Start: 25 @37994 has 231 MA's), (32, 37853), (36, 37841), (38, 37832), (58, 37715),

Gene: Gwennie_59 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for Gwennie_59:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: HamSlice_52 Start: 37468, Stop: 37103, Start Num: 9
Candidate Starts for HamSlice_52:
(Start: 9 @37468 has 3 MA's), (Start: 23 @37378 has 126 MA's), (36, 37225), (38, 37216),

Gene: Hanray_57 Start: 38009, Stop: 37731, Start Num: 25
Candidate Starts for Hanray_57:
(Start: 25 @38009 has 231 MA's), (32, 37871), (34, 37865), (35, 37862), (36, 37859), (43, 37832), (48, 37778), (50, 37766),

Gene: Happiness_52 Start: 37399, Stop: 37124, Start Num: 23
Candidate Starts for Happiness_52:
(Start: 14 @37444 has 2 MA's), (21, 37405), (Start: 23 @37399 has 126 MA's), (36, 37246), (38, 37237),

Gene: HarryHoudini_58 Start: 38478, Stop: 38158, Start Num: 25
Candidate Starts for HarryHoudini_58:
(Start: 25 @38478 has 231 MA's), (26, 38412), (34, 38334), (35, 38331), (36, 38328), (43, 38301), (45, 38274), (50, 38235), (55, 38184),

Gene: HashRod_60 Start: 38020, Stop: 37727, Start Num: 25
Candidate Starts for HashRod_60:
(7, 38107), (Start: 25 @38020 has 231 MA's), (32, 37879), (36, 37867), (38, 37858), (58, 37741),

Gene: HaveUMetTed_60 Start: 37863, Stop: 37570, Start Num: 25
Candidate Starts for HaveUMetTed_60:
(Start: 25 @37863 has 231 MA's), (32, 37722), (36, 37710), (38, 37701),

Gene: Heathen_56 Start: 37496, Stop: 37203, Start Num: 25
Candidate Starts for Heathen_56:
(Start: 25 @37496 has 231 MA's), (36, 37343), (38, 37334), (42, 37319),

Gene: HelDan_56 Start: 37712, Stop: 37419, Start Num: 25
Candidate Starts for HelDan_56:
(Start: 25 @37712 has 231 MA's), (36, 37559), (38, 37550), (42, 37535),

Gene: Heliosoles_58 Start: 37881, Stop: 37588, Start Num: 25
Candidate Starts for Heliosoles_58:
(Start: 25 @37881 has 231 MA's), (32, 37740), (36, 37728), (38, 37719),

Gene: Hercules11_59 Start: 38001, Stop: 37708, Start Num: 25

Candidate Starts for Hercules11_59:
(7, 38088), (Start: 25 @38001 has 231 MA's), (32, 37860), (36, 37848), (38, 37839), (58, 37722),

Gene: HippoHollow_57 Start: 39607, Stop: 39332, Start Num: 25
Candidate Starts for HippoHollow_57:
(1, 39898), (2, 39832), (3, 39823), (Start: 25 @39607 has 231 MA's), (32, 39469), (34, 39463), (35, 39460), (36, 39457), (43, 39430), (45, 39403), (49, 39373), (50, 39364),

Gene: Holex_57 Start: 38025, Stop: 37747, Start Num: 25
Candidate Starts for Holex_57:
(Start: 25 @38025 has 231 MA's), (32, 37887), (34, 37881), (35, 37878), (36, 37875), (43, 37848), (48, 37794), (50, 37782),

Gene: Holli_52 Start: 37170, Stop: 36895, Start Num: 23
Candidate Starts for Holli_52:
(Start: 9 @37260 has 3 MA's), (Start: 23 @37170 has 126 MA's), (36, 37017), (38, 37008),

Gene: Hookmount_55 Start: 37765, Stop: 37475, Start Num: 25
Candidate Starts for Hookmount_55:
(Start: 19 @37795 has 2 MA's), (Start: 25 @37765 has 231 MA's), (36, 37612), (38, 37603), (42, 37588),

Gene: HortumSL17_57 Start: 37956, Stop: 37678, Start Num: 25
Candidate Starts for HortumSL17_57:
(Start: 25 @37956 has 231 MA's), (32, 37818), (34, 37812), (35, 37809), (36, 37806), (43, 37779), (48, 37725), (50, 37713),

Gene: Houdini22_53 Start: 37384, Stop: 37109, Start Num: 23
Candidate Starts for Houdini22_53:
(Start: 9 @37474 has 3 MA's), (Start: 23 @37384 has 126 MA's), (36, 37231), (38, 37222),

Gene: Huxley_52 Start: 37441, Stop: 37166, Start Num: 23
Candidate Starts for Huxley_52:
(Start: 9 @37531 has 3 MA's), (Start: 23 @37441 has 126 MA's), (36, 37288), (38, 37279),

Gene: ICleared_53 Start: 37409, Stop: 37134, Start Num: 23
Candidate Starts for ICleared_53:
(Start: 9 @37499 has 3 MA's), (Start: 23 @37409 has 126 MA's), (36, 37256), (38, 37247),

Gene: Iceman_53 Start: 37666, Stop: 37391, Start Num: 23
Candidate Starts for Iceman_53:
(Start: 9 @37756 has 3 MA's), (Start: 23 @37666 has 126 MA's), (36, 37513), (38, 37504),

Gene: Idleandcovert_57 Start: 37811, Stop: 37518, Start Num: 25
Candidate Starts for Idleandcovert_57:
(Start: 19 @37841 has 2 MA's), (Start: 25 @37811 has 231 MA's), (27, 37715), (36, 37658), (38, 37649), (42, 37634), (58, 37532),

Gene: Iracema64_54 Start: 37644, Stop: 37369, Start Num: 23
Candidate Starts for Iracema64_54:
(Start: 9 @37734 has 3 MA's), (Start: 23 @37644 has 126 MA's), (36, 37491), (38, 37482),

Gene: IronMan_57 Start: 39193, Stop: 38867, Start Num: 25

Candidate Starts for IronMan_57:
(Start: 25 @39193 has 231 MA's), (32, 39052), (34, 39046), (35, 39043), (36, 39040), (43, 39013), (45, 38986), (50, 38947), (52, 38917), (55, 38896),

Gene: Isca_55 Start: 37278, Stop: 36985, Start Num: 25
Candidate Starts for Isca_55:
(Start: 12 @37332 has 1 MA's), (Start: 25 @37278 has 231 MA's), (36, 37125), (38, 37116), (42, 37101),

Gene: Iwokeuplikedis_60 Start: 38111, Stop: 37788, Start Num: 25
Candidate Starts for Iwokeuplikedis_60:
(Start: 25 @38111 has 231 MA's), (32, 37973), (34, 37967), (35, 37964), (36, 37961), (43, 37934), (45, 37907), (50, 37868), (52, 37838), (55, 37817),

Gene: JF2_54 Start: 35979, Stop: 35686, Start Num: 25
Candidate Starts for JF2_54:
(Start: 12 @36033 has 1 MA's), (Start: 25 @35979 has 231 MA's), (36, 35826), (38, 35817), (42, 35802),

Gene: JF4_54 Start: 35979, Stop: 35686, Start Num: 25
Candidate Starts for JF4_54:
(Start: 12 @36033 has 1 MA's), (Start: 25 @35979 has 231 MA's), (36, 35826), (38, 35817), (42, 35802),

Gene: JHC117_59 Start: 37991, Stop: 37698, Start Num: 25
Candidate Starts for JHC117_59:
(Start: 25 @37991 has 231 MA's), (36, 37838), (38, 37829), (58, 37712),

Gene: Jaan_57 Start: 39353, Stop: 39033, Start Num: 25
Candidate Starts for Jaan_57:
(Start: 25 @39353 has 231 MA's), (32, 39218), (34, 39212), (35, 39209), (36, 39206), (43, 39179), (45, 39152), (50, 39113), (52, 39083), (55, 39062),

Gene: Jace_81 Start: 45050, Stop: 45430, Start Num: 6
Candidate Starts for Jace_81:
(Start: 6 @45050 has 1 MA's), (28, 45275), (32, 45314), (36, 45326), (39, 45338), (41, 45344),

Gene: Jaykayelowell_51 Start: 37373, Stop: 37098, Start Num: 23
Candidate Starts for Jaykayelowell_51:
(Start: 9 @37463 has 3 MA's), (Start: 23 @37373 has 126 MA's), (36, 37220), (38, 37211),

Gene: JenCasNa_60 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for JenCasNa_60:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: JeppNRM_60 Start: 37879, Stop: 37586, Start Num: 25
Candidate Starts for JeppNRM_60:
(Start: 25 @37879 has 231 MA's), (32, 37738), (36, 37726), (38, 37717),

Gene: JetBlade_53 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for JetBlade_53:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: Jiawan_57 Start: 38041, Stop: 37763, Start Num: 25
Candidate Starts for Jiawan_57:
(Start: 25 @38041 has 231 MA's), (32, 37903), (34, 37897), (35, 37894), (36, 37891), (43, 37864), (48, 37810), (50, 37798),

Gene: Jobu08_58 Start: 37824, Stop: 37531, Start Num: 25
Candidate Starts for Jobu08_58:
(7, 37911), (Start: 25 @37824 has 231 MA's), (36, 37671), (38, 37662), (58, 37545),

Gene: JoongJeon_52 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for JoongJeon_52:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Junimo_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Junimo_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: KADY_59 Start: 38020, Stop: 37727, Start Num: 25
Candidate Starts for KADY_59:
(7, 38107), (Start: 25 @38020 has 231 MA's), (32, 37879), (36, 37867), (38, 37858), (58, 37741),

Gene: KFPoly_52 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for KFPoly_52:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: Kachowdy_56 Start: 37748, Stop: 37455, Start Num: 25
Candidate Starts for Kachowdy_56:
(Start: 25 @37748 has 231 MA's), (36, 37595), (38, 37586), (42, 37571),

Gene: Kalb97_60 Start: 37877, Stop: 37584, Start Num: 25
Candidate Starts for Kalb97_60:
(Start: 25 @37877 has 231 MA's), (32, 37736), (36, 37724), (38, 37715),

Gene: Kalnoky_60 Start: 37875, Stop: 37582, Start Num: 25
Candidate Starts for Kalnoky_60:
(Start: 25 @37875 has 231 MA's), (32, 37734), (36, 37722), (38, 37713),

Gene: Kampy_53 Start: 37472, Stop: 37107, Start Num: 9
Candidate Starts for Kampy_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Katalie136_52 Start: 37332, Stop: 37054, Start Num: 24
Candidate Starts for Katalie136_52:
(15, 37377), (16, 37374), (Start: 24 @37332 has 17 MA's), (36, 37179), (38, 37170), (42, 37155),

Gene: KekoraPapaka_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for KekoraPapaka_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Keziacharles14_57 Start: 39097, Stop: 38816, Start Num: 25
Candidate Starts for Keziacharles14_57:
(Start: 25 @39097 has 231 MA's), (28, 39004), (31, 38974), (32, 38959), (34, 38953), (35, 38950), (36, 38947), (43, 38920), (45, 38893), (50, 38854),

Gene: Kimona_53 Start: 35989, Stop: 35708, Start Num: 23
Candidate Starts for Kimona_53:
(Start: 19 @36016 has 2 MA's), (Start: 23 @35989 has 126 MA's), (27, 35881), (32, 35836), (36, 35824), (38, 35815), (42, 35800), (45, 35770),

Gene: KingCyrus_59 Start: 39753, Stop: 39430, Start Num: 25
Candidate Starts for KingCyrus_59:
(Start: 25 @39753 has 231 MA's), (30, 39633), (32, 39615), (34, 39609), (35, 39606), (36, 39603), (43, 39576), (45, 39549), (50, 39510),

Gene: Kingmustik0402_53 Start: 37369, Stop: 37094, Start Num: 23
Candidate Starts for Kingmustik0402_53:
(Start: 9 @37459 has 3 MA's), (Start: 23 @37369 has 126 MA's), (36, 37216), (38, 37207),

Gene: KittenMittens_51 Start: 36539, Stop: 36249, Start Num: 25
Candidate Starts for KittenMittens_51:
(Start: 25 @36539 has 231 MA's), (32, 36398), (36, 36386), (38, 36377), (42, 36362),

Gene: Koan_51 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Koan_51:
(Start: 9 @37470 has 3 MA's), (22, 37383), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Koreni_52 Start: 37061, Stop: 36786, Start Num: 23
Candidate Starts for Koreni_52:
(Start: 9 @37151 has 3 MA's), (Start: 23 @37061 has 126 MA's), (36, 36908), (38, 36899),

Gene: Kratark_53 Start: 37535, Stop: 37260, Start Num: 23
Candidate Starts for Kratark_53:
(Start: 14 @37580 has 2 MA's), (Start: 23 @37535 has 126 MA's), (36, 37382), (38, 37373), (42, 37358),

Gene: Kremtemulon_53 Start: 37328, Stop: 37053, Start Num: 23
Candidate Starts for Kremtemulon_53:
(Start: 9 @37418 has 3 MA's), (Start: 23 @37328 has 126 MA's), (36, 37175), (38, 37166),

Gene: Kristoff_54 Start: 37714, Stop: 37370, Start Num: 19
Candidate Starts for Kristoff_54:
(Start: 19 @37714 has 2 MA's), (Start: 25 @37687 has 231 MA's), (32, 37546), (36, 37534), (38, 37525), (42, 37510), (54, 37414),

Gene: Kyee_53 Start: 37378, Stop: 37103, Start Num: 23
Candidate Starts for Kyee_53:
(Start: 9 @37468 has 3 MA's), (Start: 23 @37378 has 126 MA's), (36, 37225), (38, 37216),

Gene: LBerry_60 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for LBerry_60:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: LHTSCC_55 Start: 37816, Stop: 37541, Start Num: 23
Candidate Starts for LHTSCC_55:
(Start: 14 @37861 has 2 MA's), (Start: 23 @37816 has 126 MA's), (36, 37663), (38, 37654),

Gene: Lambert1_55 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Lambert1_55:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Landor_57 Start: 39271, Stop: 38945, Start Num: 25
Candidate Starts for Landor_57:
(Start: 25 @39271 has 231 MA's), (32, 39130), (34, 39124), (35, 39121), (36, 39118), (43, 39091), (45, 39064), (50, 39025), (52, 38995), (55, 38974),

Gene: LappelDuVide_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for LappelDuVide_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: Larenn_56 Start: 38162, Stop: 37842, Start Num: 25
Candidate Starts for Larenn_56:
(2, 38387), (3, 38378), (Start: 25 @38162 has 231 MA's), (32, 38024), (34, 38018), (35, 38015), (36, 38012), (43, 37985), (45, 37958), (50, 37919), (55, 37868), (56, 37862),

Gene: LarryKay_59 Start: 38022, Stop: 37729, Start Num: 25
Candidate Starts for LarryKay_59:
(7, 38109), (Start: 25 @38022 has 231 MA's), (32, 37881), (36, 37869), (38, 37860), (58, 37743),

Gene: Lemur_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Lemur_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: LeoAvram_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for LeoAvram_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Leogania_57 Start: 39144, Stop: 38872, Start Num: 25
Candidate Starts for Leogania_57:
(Start: 25 @39144 has 231 MA's), (32, 39009), (34, 39003), (35, 39000), (36, 38997), (43, 38970), (45, 38943), (50, 38904),

Gene: Lilith_60 Start: 37985, Stop: 37692, Start Num: 25
Candidate Starts for Lilith_60:
(7, 38072), (Start: 25 @37985 has 231 MA's), (32, 37844), (36, 37832), (38, 37823), (58, 37706),

Gene: Lilleskat_57 Start: 37958, Stop: 37680, Start Num: 25
Candidate Starts for Lilleskat_57:
(Start: 25 @37958 has 231 MA's), (32, 37820), (34, 37814), (35, 37811), (36, 37808), (43, 37781), (48, 37727), (50, 37715),

Gene: LionsBait_57 Start: 39608, Stop: 39333, Start Num: 25
Candidate Starts for LionsBait_57:
(1, 39899), (2, 39833), (3, 39824), (Start: 25 @39608 has 231 MA's), (32, 39470), (34, 39464), (35, 39461), (36, 39458), (43, 39431), (45, 39404), (49, 39374), (50, 39365),

Gene: LittleB_53 Start: 37381, Stop: 37106, Start Num: 23
Candidate Starts for LittleB_53:
(Start: 9 @37471 has 3 MA's), (Start: 23 @37381 has 126 MA's), (36, 37228), (38, 37219),

Gene: LittleGuy_53 Start: 37276, Stop: 37001, Start Num: 23
Candidate Starts for LittleGuy_53:
(Start: 9 @37366 has 3 MA's), (Start: 23 @37276 has 126 MA's), (36, 37123), (38, 37114),

Gene: LochMonster_54 Start: 37616, Stop: 37341, Start Num: 23
Candidate Starts for LochMonster_54:
(Start: 9 @37706 has 3 MA's), (Start: 23 @37616 has 126 MA's), (36, 37463), (38, 37454),

Gene: LoneWolf_58 Start: 37989, Stop: 37708, Start Num: 25
Candidate Starts for LoneWolf_58:
(2, 38214), (3, 38205), (Start: 25 @37989 has 231 MA's), (31, 37866), (32, 37851), (34, 37845), (35, 37842), (36, 37839), (43, 37812), (45, 37785), (50, 37746),

Gene: Lorenzo_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Lorenzo_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Loser_59 Start: 39004, Stop: 38684, Start Num: 25
Candidate Starts for Loser_59:
(Start: 25 @39004 has 231 MA's), (30, 38884), (32, 38866), (34, 38860), (35, 38857), (36, 38854), (43, 38827), (45, 38800), (50, 38761), (55, 38710),

Gene: Louie6_58 Start: 38021, Stop: 37728, Start Num: 25
Candidate Starts for Louie6_58:
(7, 38108), (Start: 25 @38021 has 231 MA's), (32, 37880), (36, 37868), (38, 37859), (58, 37742),

Gene: Lowa_59 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for Lowa_59:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: LugYA_62 Start: 37993, Stop: 37700, Start Num: 25
Candidate Starts for LugYA_62:
(7, 38080), (Start: 25 @37993 has 231 MA's), (32, 37852), (36, 37840), (38, 37831), (58, 37714),

Gene: Lunsford_54 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for Lunsford_54:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: MA5_56 Start: 37182, Stop: 36868, Start Num: 25
Candidate Starts for MA5_56:
(Start: 25 @37182 has 231 MA's), (36, 37029), (42, 37005), (61, 36894),

Gene: MK4_56 Start: 37263, Stop: 36970, Start Num: 25
Candidate Starts for MK4_56:
(Start: 12 @37317 has 1 MA's), (Start: 25 @37263 has 231 MA's), (36, 37110), (38, 37101), (42, 37086),

Gene: MadMarie_59 Start: 37994, Stop: 37701, Start Num: 25
Candidate Starts for MadMarie_59:
(7, 38081), (Start: 25 @37994 has 231 MA's), (32, 37853), (36, 37841), (38, 37832), (58, 37715),

Gene: Mainiac_59 Start: 37986, Stop: 37693, Start Num: 25

Candidate Starts for Mainiac_59:
(7, 38073), (Start: 25 @37986 has 231 MA's), (32, 37845), (36, 37833), (38, 37824), (58, 37707),

Gene: Malec_57 Start: 38729, Stop: 38409, Start Num: 25
Candidate Starts for Malec_57:
(2, 38954), (3, 38945), (Start: 25 @38729 has 231 MA's), (32, 38591), (34, 38585), (35, 38582), (36, 38579), (43, 38552), (45, 38525), (50, 38486), (55, 38435), (56, 38429),

Gene: Malinsilva_61 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for Malinsilva_61:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: Manu_59 Start: 37878, Stop: 37585, Start Num: 25
Candidate Starts for Manu_59:
(Start: 25 @37878 has 231 MA's), (32, 37737), (36, 37725), (38, 37716),

Gene: MarQuardt_59 Start: 37994, Stop: 37701, Start Num: 25
Candidate Starts for MarQuardt_59:
(7, 38081), (Start: 25 @37994 has 231 MA's), (32, 37853), (36, 37841), (38, 37832), (58, 37715),

Gene: Marchesa_56 Start: 37698, Stop: 37405, Start Num: 25
Candidate Starts for Marchesa_56:
(Start: 25 @37698 has 231 MA's), (36, 37545), (38, 37536), (42, 37521),

Gene: Margo_55 Start: 37790, Stop: 37500, Start Num: 25
Candidate Starts for Margo_55:
(Start: 19 @37820 has 2 MA's), (Start: 25 @37790 has 231 MA's), (36, 37637), (38, 37628), (42, 37613),

Gene: Marie_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Marie_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: Marius_60 Start: 37875, Stop: 37582, Start Num: 25
Candidate Starts for Marius_60:
(Start: 25 @37875 has 231 MA's), (32, 37734), (36, 37722), (38, 37713),

Gene: Maverick_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Maverick_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Maxo_54 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Maxo_54:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Mayonnaise_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Mayonnaise_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Mazhar510_53 Start: 37381, Stop: 37106, Start Num: 23
Candidate Starts for Mazhar510_53:
(Start: 9 @37471 has 3 MA's), (Start: 23 @37381 has 126 MA's), (36, 37228), (38, 37219),

Gene: Medusa_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Medusa_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: MeeZee_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for MeeZee_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Melvin_55 Start: 37375, Stop: 37100, Start Num: 23
Candidate Starts for Melvin_55:
(Start: 9 @37465 has 3 MA's), (Start: 23 @37375 has 126 MA's), (36, 37222), (38, 37213),

Gene: Methuselah_55 Start: 38016, Stop: 37723, Start Num: 25
Candidate Starts for Methuselah_55:
(7, 38103), (Start: 25 @38016 has 231 MA's), (32, 37875), (36, 37863), (38, 37854), (58, 37737),

Gene: Microwolf_59 Start: 38008, Stop: 37715, Start Num: 25
Candidate Starts for Microwolf_59:
(7, 38095), (Start: 25 @38008 has 231 MA's), (32, 37867), (36, 37855), (38, 37846), (58, 37729),

Gene: MiculUcigas_57 Start: 37951, Stop: 37634, Start Num: 25
Candidate Starts for MiculUcigas_57:
(Start: 25 @37951 has 231 MA's), (32, 37816), (34, 37810), (35, 37807), (36, 37804), (43, 37777), (45, 37750), (50, 37711), (55, 37660),

Gene: Millski_52 Start: 37381, Stop: 37106, Start Num: 23
Candidate Starts for Millski_52:
(Start: 9 @37471 has 3 MA's), (Start: 23 @37381 has 126 MA's), (36, 37228), (38, 37219),

Gene: Miramae_51 Start: 36827, Stop: 36552, Start Num: 23
Candidate Starts for Miramae_51:
(Start: 23 @36827 has 126 MA's), (36, 36674), (37, 36668), (38, 36665), (40, 36659),

Gene: Misomonster_60 Start: 38019, Stop: 37726, Start Num: 25
Candidate Starts for Misomonster_60:
(7, 38106), (Start: 25 @38019 has 231 MA's), (32, 37878), (36, 37866), (38, 37857), (58, 37740),

Gene: MoneyMay_59 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for MoneyMay_59:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: Montavir_58 Start: 37993, Stop: 37700, Start Num: 25
Candidate Starts for Montavir_58:
(7, 38080), (Start: 25 @37993 has 231 MA's), (32, 37852), (36, 37840), (38, 37831), (58, 37714),

Gene: Morpher26_52 Start: 37353, Stop: 37075, Start Num: 24
Candidate Starts for Morpher26_52:
(15, 37398), (16, 37395), (Start: 24 @37353 has 17 MA's), (36, 37200), (38, 37191), (42, 37176),

Gene: Morrow_54 Start: 37386, Stop: 37111, Start Num: 23
Candidate Starts for Morrow_54:
(Start: 9 @37476 has 3 MA's), (Start: 23 @37386 has 126 MA's), (36, 37233), (38, 37224),

Gene: MuchMore_62 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for MuchMore_62:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: Mundrea_52 Start: 37379, Stop: 37101, Start Num: 23
Candidate Starts for Mundrea_52:
(Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217), (42, 37202),

Gene: Myxus_57 Start: 37956, Stop: 37678, Start Num: 25
Candidate Starts for Myxus_57:
(Start: 25 @37956 has 231 MA's), (32, 37818), (34, 37812), (35, 37809), (36, 37806), (43, 37779), (48, 37725), (50, 37713),

Gene: NaSiaTalie_57 Start: 38045, Stop: 37728, Start Num: 25
Candidate Starts for NaSiaTalie_57:
(Start: 25 @38045 has 231 MA's), (32, 37910), (34, 37904), (35, 37901), (36, 37898), (43, 37871), (45, 37844), (50, 37805), (55, 37754),

Gene: Nebs_54 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Nebs_54:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Nemo27_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Nemo27_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: NicoleTera_56 Start: 38338, Stop: 38018, Start Num: 25
Candidate Starts for NicoleTera_56:
(Start: 25 @38338 has 231 MA's), (32, 38200), (34, 38194), (35, 38191), (36, 38188), (43, 38161), (45, 38134), (50, 38095), (55, 38044),

Gene: Noella_55 Start: 37765, Stop: 37475, Start Num: 25
Candidate Starts for Noella_55:
(Start: 19 @37795 has 2 MA's), (Start: 25 @37765 has 231 MA's), (36, 37612), (38, 37603), (42, 37588),

Gene: Noelle_53 Start: 37655, Stop: 37383, Start Num: 23
Candidate Starts for Noelle_53:
(Start: 23 @37655 has 126 MA's), (36, 37502), (38, 37493), (42, 37478),

Gene: Norbert_54 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Norbert_54:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: NorthStar_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for NorthStar_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Northrop_53 Start: 37376, Stop: 37101, Start Num: 23
Candidate Starts for Northrop_53:
(Start: 9 @37466 has 3 MA's), (Start: 23 @37376 has 126 MA's), (36, 37223), (38, 37214),

Gene: NotAPhaseMom_53 Start: 37384, Stop: 37109, Start Num: 23
Candidate Starts for NotAPhaseMom_53:
(Start: 9 @37474 has 3 MA's), (Start: 23 @37384 has 126 MA's), (36, 37231), (38, 37222),

Gene: NothingSpecial_55 Start: 38538, Stop: 38239, Start Num: 25
Candidate Starts for NothingSpecial_55:
(Start: 25 @38538 has 231 MA's), (30, 38418), (32, 38400), (34, 38394), (35, 38391), (36, 38388), (43, 38361), (45, 38334), (49, 38304), (50, 38295), (52, 38265),

Gene: Nyxis_53 Start: 37270, Stop: 36995, Start Num: 23
Candidate Starts for Nyxis_53:
(Start: 9 @37360 has 3 MA's), (Start: 23 @37270 has 126 MA's), (36, 37117), (38, 37108),

Gene: OKCentral2016_53 Start: 37015, Stop: 36725, Start Num: 25
Candidate Starts for OKCentral2016_53:
(Start: 19 @37042 has 2 MA's), (Start: 25 @37015 has 231 MA's), (32, 36874), (36, 36862), (38, 36853), (42, 36838),

Gene: OKaNui_53 Start: 37430, Stop: 37155, Start Num: 23
Candidate Starts for OKaNui_53:
(Start: 9 @37520 has 3 MA's), (Start: 23 @37430 has 126 MA's), (36, 37277), (38, 37268),

Gene: Obama12_54 Start: 37800, Stop: 37525, Start Num: 23
Candidate Starts for Obama12_54:
(Start: 14 @37845 has 2 MA's), (Start: 23 @37800 has 126 MA's), (36, 37647), (38, 37638),

Gene: Ohfah_54 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Ohfah_54:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: OlanP_58 Start: 38051, Stop: 37758, Start Num: 25
Candidate Starts for OlanP_58:
(Start: 25 @38051 has 231 MA's), (28, 37952), (32, 37910), (36, 37898), (38, 37889),

Gene: Ollie_59 Start: 37863, Stop: 37570, Start Num: 25
Candidate Starts for Ollie_59:
(7, 37950), (Start: 25 @37863 has 231 MA's), (32, 37722), (36, 37710), (38, 37701), (58, 37584),

Gene: Onglai_56 Start: 36297, Stop: 36019, Start Num: 25
Candidate Starts for Onglai_56:
(Start: 25 @36297 has 231 MA's), (32, 36159), (34, 36153), (35, 36150), (36, 36147), (43, 36120), (48, 36066), (50, 36054),

Gene: P28Green_60 Start: 37995, Stop: 37702, Start Num: 25
Candidate Starts for P28Green_60:
(7, 38082), (Start: 25 @37995 has 231 MA's), (32, 37854), (36, 37842), (38, 37833), (58, 37716),

Gene: PGHhamlin_61 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for PGHhamlin_61:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: PackMan_56 Start: 37956, Stop: 37678, Start Num: 25
Candidate Starts for PackMan_56:

(Start: 25 @37956 has 231 MA's), (32, 37818), (34, 37812), (35, 37809), (36, 37806), (43, 37779), (48, 37725), (50, 37713),

Gene: Palestino_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Palestino_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Panamaxus_53 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Panamaxus_53:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Pawn_59 Start: 37882, Stop: 37589, Start Num: 25
Candidate Starts for Pawn_59:
(Start: 25 @37882 has 231 MA's), (32, 37741), (36, 37729), (38, 37720),

Gene: PeaceMeal1_52 Start: 36540, Stop: 36250, Start Num: 25
Candidate Starts for PeaceMeal1_52:
(Start: 25 @36540 has 231 MA's), (32, 36399), (36, 36387), (38, 36378), (42, 36363),

Gene: Peaches_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Peaches_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: Pembroke_59 Start: 37993, Stop: 37700, Start Num: 25
Candidate Starts for Pembroke_59:
(7, 38080), (Start: 25 @37993 has 231 MA's), (32, 37852), (36, 37840), (38, 37831), (58, 37714),

Gene: Penny1_60 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for Penny1_60:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: Perplexer_52 Start: 37329, Stop: 37051, Start Num: 24
Candidate Starts for Perplexer_52:
(15, 37374), (16, 37371), (Start: 24 @37329 has 17 MA's), (36, 37176), (38, 37167), (42, 37152),

Gene: PeterPeter_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for PeterPeter_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: PetiteSangsue_52 Start: 37332, Stop: 37054, Start Num: 24
Candidate Starts for PetiteSangsue_52:
(15, 37377), (16, 37374), (Start: 24 @37332 has 17 MA's), (36, 37179), (38, 37170), (42, 37155),

Gene: Phacado_53 Start: 37379, Stop: 37104, Start Num: 23
Candidate Starts for Phacado_53:
(Start: 9 @37469 has 3 MA's), (Start: 23 @37379 has 126 MA's), (36, 37226), (38, 37217),

Gene: Phaded_58 Start: 39250, Stop: 38924, Start Num: 25
Candidate Starts for Phaded_58:
(Start: 25 @39250 has 231 MA's), (32, 39109), (34, 39103), (35, 39100), (36, 39097), (43, 39070), (45, 39043), (50, 39004), (52, 38974), (55, 38953),

Gene: Phaeder_57 Start: 37956, Stop: 37678, Start Num: 25
Candidate Starts for Phaeder_57:
(Start: 25 @37956 has 231 MA's), (32, 37818), (34, 37812), (35, 37809), (36, 37806), (43, 37779), (48, 37725), (50, 37713),

Gene: Phantastic_57 Start: 37440, Stop: 37147, Start Num: 25
Candidate Starts for Phantastic_57:
(Start: 12 @37494 has 1 MA's), (Start: 25 @37440 has 231 MA's), (36, 37287), (38, 37278), (42, 37263),

Gene: Phelipe_54 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Phelipe_54:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Phighter1804_53 Start: 37441, Stop: 37166, Start Num: 23
Candidate Starts for Phighter1804_53:
(Start: 9 @37531 has 3 MA's), (Start: 23 @37441 has 126 MA's), (36, 37288), (38, 37279),

Gene: PhishRPhriends_57 Start: 37059, Stop: 36766, Start Num: 25
Candidate Starts for PhishRPhriends_57:
(Start: 25 @37059 has 231 MA's), (32, 36918), (36, 36906), (38, 36897),

Gene: Phoebe_60 Start: 37985, Stop: 37692, Start Num: 25
Candidate Starts for Phoebe_60:
(7, 38072), (Start: 25 @37985 has 231 MA's), (32, 37844), (36, 37832), (38, 37823), (58, 37706),

Gene: Phonnegut_57 Start: 38053, Stop: 37775, Start Num: 25
Candidate Starts for Phonnegut_57:
(Start: 25 @38053 has 231 MA's), (32, 37915), (34, 37909), (35, 37906), (36, 37903), (43, 37876), (48, 37822), (50, 37810),

Gene: Phontbonne_53 Start: 37271, Stop: 36996, Start Num: 23
Candidate Starts for Phontbonne_53:
(Start: 9 @37361 has 3 MA's), (Start: 23 @37271 has 126 MA's), (36, 37118), (38, 37109),

Gene: Phoxy_59 Start: 38017, Stop: 37724, Start Num: 25
Candidate Starts for Phoxy_59:
(7, 38104), (Start: 25 @38017 has 231 MA's), (32, 37876), (36, 37864), (38, 37855), (58, 37738),

Gene: Phranny_60 Start: 37864, Stop: 37571, Start Num: 25
Candidate Starts for Phranny_60:
(Start: 25 @37864 has 231 MA's), (32, 37723), (36, 37711), (38, 37702),

Gene: Pioneer_57 Start: 38053, Stop: 37775, Start Num: 25
Candidate Starts for Pioneer_57:
(Start: 25 @38053 has 231 MA's), (32, 37915), (34, 37909), (35, 37906), (36, 37903), (43, 37876), (48, 37822), (50, 37810),

Gene: Pipcraft_51 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Pipcraft_51:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Piro94_57 Start: 38395, Stop: 38075, Start Num: 25

Candidate Starts for Piro94_57:
(Start: 25 @38395 has 231 MA's), (26, 38329), (34, 38251), (35, 38248), (36, 38245), (43, 38218), (45, 38191), (50, 38152), (55, 38101),

Gene: Pistachio_58 Start: 37358, Stop: 37065, Start Num: 25
Candidate Starts for Pistachio_58:
(Start: 19 @37388 has 2 MA's), (Start: 25 @37358 has 231 MA's), (27, 37262), (36, 37205), (38, 37196), (42, 37181), (58, 37079),

Gene: Pocahontas_55 Start: 37761, Stop: 37471, Start Num: 25
Candidate Starts for Pocahontas_55:
(Start: 19 @37791 has 2 MA's), (Start: 25 @37761 has 231 MA's), (36, 37608), (38, 37599), (42, 37584),

Gene: Polymorphads_54 Start: 37373, Stop: 37098, Start Num: 23
Candidate Starts for Polymorphads_54:
(Start: 9 @37463 has 3 MA's), (Start: 23 @37373 has 126 MA's), (36, 37220), (38, 37211),

Gene: Poompha_53 Start: 36538, Stop: 36248, Start Num: 25
Candidate Starts for Poompha_53:
(Start: 25 @36538 has 231 MA's), (36, 36385), (38, 36376), (42, 36361),

Gene: Popcicle_55 Start: 37761, Stop: 37471, Start Num: 25
Candidate Starts for Popcicle_55:
(Start: 19 @37791 has 2 MA's), (Start: 25 @37761 has 231 MA's), (36, 37608), (38, 37599), (42, 37584),

Gene: PotatoSplit_61 Start: 37996, Stop: 37703, Start Num: 25
Candidate Starts for PotatoSplit_61:
(7, 38083), (Start: 25 @37996 has 231 MA's), (32, 37855), (36, 37843), (38, 37834), (58, 37717),

Gene: Priya_57 Start: 38023, Stop: 37745, Start Num: 25
Candidate Starts for Priya_57:
(Start: 25 @38023 has 231 MA's), (32, 37885), (34, 37879), (35, 37876), (36, 37873), (43, 37846), (48, 37792), (50, 37780),

Gene: Prudy_57 Start: 38840, Stop: 38520, Start Num: 25
Candidate Starts for Prudy_57:
(Start: 25 @38840 has 231 MA's), (30, 38720), (32, 38702), (34, 38696), (35, 38693), (36, 38690), (43, 38663), (45, 38636), (50, 38597), (55, 38546), (62, 38525),

Gene: Pukovnik_56 Start: 38902, Stop: 38582, Start Num: 25
Candidate Starts for Pukovnik_56:
(Start: 25 @38902 has 231 MA's), (32, 38767), (34, 38761), (35, 38758), (36, 38755), (43, 38728), (45, 38701), (50, 38662), (52, 38632), (55, 38611),

Gene: Pumbaa_53 Start: 37325, Stop: 37050, Start Num: 23
Candidate Starts for Pumbaa_53:
(Start: 9 @37415 has 3 MA's), (Start: 23 @37325 has 126 MA's), (36, 37172), (38, 37163),

Gene: Puppy_58 Start: 37430, Stop: 37137, Start Num: 25
Candidate Starts for Puppy_58:

(Start: 19 @37460 has 2 MA's), (Start: 25 @37430 has 231 MA's), (27, 37334), (36, 37277), (38, 37268), (42, 37253), (58, 37151),

Gene: PurpleHaze_59 Start: 37877, Stop: 37584, Start Num: 25
Candidate Starts for PurpleHaze_59:
(Start: 25 @37877 has 231 MA's), (32, 37736), (36, 37724), (38, 37715),

Gene: Qobbit_57 Start: 37985, Stop: 37707, Start Num: 25
Candidate Starts for Qobbit_57:
(Start: 25 @37985 has 231 MA's), (32, 37847), (34, 37841), (35, 37838), (36, 37835), (43, 37808), (48, 37754), (50, 37742),

Gene: QuinnKiro_54 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for QuinnKiro_54:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Reba_59 Start: 37537, Stop: 37244, Start Num: 25
Candidate Starts for Reba_59:
(Start: 25 @37537 has 231 MA's), (32, 37396), (36, 37384), (38, 37375),

Gene: Rebeuca_54 Start: 37688, Stop: 37371, Start Num: 25
Candidate Starts for Rebeuca_54:
(Start: 19 @37715 has 2 MA's), (Start: 25 @37688 has 231 MA's), (32, 37547), (36, 37535), (38, 37526), (42, 37511), (54, 37415),

Gene: RedRock_59 Start: 39237, Stop: 38911, Start Num: 25
Candidate Starts for RedRock_59:
(Start: 25 @39237 has 231 MA's), (30, 39117), (32, 39099), (34, 39093), (35, 39090), (36, 39087), (43, 39060), (45, 39033), (50, 38994), (55, 38943), (56, 38937),

Gene: Relief_52 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Relief_52:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: ResDef_55 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for ResDef_55:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Retro23_58 Start: 38400, Stop: 38077, Start Num: 25
Candidate Starts for Retro23_58:
(Start: 25 @38400 has 231 MA's), (26, 38334), (30, 38280), (34, 38256), (35, 38253), (36, 38250), (43, 38223), (45, 38196), (50, 38157), (52, 38127),

Gene: RhynO_55 Start: 37487, Stop: 37170, Start Num: 25
Candidate Starts for RhynO_55:
(Start: 19 @37517 has 2 MA's), (Start: 25 @37487 has 231 MA's), (32, 37346), (36, 37334), (38, 37325), (42, 37310), (54, 37214),

Gene: RockieBear_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for RockieBear_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Rocksand_53 Start: 37376, Stop: 37101, Start Num: 23
Candidate Starts for Rocksand_53:
(Start: 9 @37466 has 3 MA's), (Start: 23 @37376 has 126 MA's), (36, 37223), (38, 37214),

Gene: Rockstar_56 Start: 37326, Stop: 36979, Start Num: 12
Candidate Starts for Rockstar_56:
(Start: 12 @37326 has 1 MA's), (Start: 25 @37272 has 231 MA's), (36, 37119), (38, 37110), (42, 37095),

Gene: Roimos_56 Start: 37628, Stop: 37335, Start Num: 25
Candidate Starts for Roimos_56:
(Start: 25 @37628 has 231 MA's), (36, 37475), (38, 37466), (42, 37451),

Gene: Romney_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Romney_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Roosevelt_52 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Roosevelt_52:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Rosa24_52 Start: 37408, Stop: 37133, Start Num: 23
Candidate Starts for Rosa24_52:
(Start: 9 @37498 has 3 MA's), (Start: 23 @37408 has 126 MA's), (36, 37255), (38, 37246),

Gene: Rowdy_58 Start: 37428, Stop: 37081, Start Num: 19
Candidate Starts for Rowdy_58:
(Start: 19 @37428 has 2 MA's), (Start: 25 @37398 has 231 MA's), (32, 37257), (36, 37245), (38, 37236), (42, 37221), (54, 37125),

Gene: Ruin_53 Start: 37373, Stop: 37098, Start Num: 23
Candidate Starts for Ruin_53:
(Start: 9 @37463 has 3 MA's), (Start: 23 @37373 has 126 MA's), (36, 37220), (38, 37211),

Gene: Rummer_58 Start: 38020, Stop: 37727, Start Num: 25
Candidate Starts for Rummer_58:
(7, 38107), (Start: 25 @38020 has 231 MA's), (32, 37879), (36, 37867), (38, 37858), (58, 37741),

Gene: RyeScarlet_57 Start: 38028, Stop: 37750, Start Num: 25
Candidate Starts for RyeScarlet_57:
(Start: 25 @38028 has 231 MA's), (32, 37890), (34, 37884), (35, 37881), (36, 37878), (43, 37851), (48, 37797), (50, 37785),

Gene: Sabertooth_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Sabertooth_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Sabia_59 Start: 38001, Stop: 37708, Start Num: 25
Candidate Starts for Sabia_59:
(7, 38088), (Start: 25 @38001 has 231 MA's), (32, 37860), (36, 37848), (38, 37839), (58, 37722),

Gene: Sabinator_58 Start: 37991, Stop: 37698, Start Num: 25

Candidate Starts for Sabinator_58:
(7, 38078), (Start: 25 @37991 has 231 MA's), (32, 37850), (36, 37838), (38, 37829), (58, 37712),

Gene: Sachima_57 Start: 37938, Stop: 37660, Start Num: 25
Candidate Starts for Sachima_57:
(Start: 25 @37938 has 231 MA's), (32, 37800), (34, 37794), (35, 37791), (36, 37788), (43, 37761), (48, 37707), (50, 37695),

Gene: SaturnRing_57 Start: 37811, Stop: 37518, Start Num: 25
Candidate Starts for SaturnRing_57:
(Start: 19 @37841 has 2 MA's), (Start: 25 @37811 has 231 MA's), (27, 37715), (36, 37658), (38, 37649), (42, 37634), (58, 37532),

Gene: Scamp_53 Start: 37382, Stop: 37107, Start Num: 23
Candidate Starts for Scamp_53:
(Start: 9 @37472 has 3 MA's), (Start: 23 @37382 has 126 MA's), (36, 37229), (38, 37220),

Gene: Scherzo_57 Start: 38242, Stop: 37964, Start Num: 25
Candidate Starts for Scherzo_57:
(Start: 25 @38242 has 231 MA's), (32, 38104), (34, 38098), (35, 38095), (36, 38092), (43, 38065), (48, 38011), (50, 37999),

Gene: Scout_56 Start: 36959, Stop: 36666, Start Num: 25
Candidate Starts for Scout_56:
(Start: 25 @36959 has 231 MA's), (36, 36806), (38, 36797), (42, 36782),

Gene: SenorClean_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for SenorClean_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Severus_52 Start: 36538, Stop: 36248, Start Num: 25
Candidate Starts for Severus_52:
(Start: 25 @36538 has 231 MA's), (32, 36397), (36, 36385), (38, 36376), (42, 36361),

Gene: Shaka_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Shaka_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Shapes_58 Start: 37428, Stop: 37081, Start Num: 19
Candidate Starts for Shapes_58:
(Start: 19 @37428 has 2 MA's), (Start: 25 @37398 has 231 MA's), (32, 37257), (36, 37245), (38, 37236), (42, 37221), (54, 37125),

Gene: SheldonCooper_55 Start: 37862, Stop: 37542, Start Num: 14
Candidate Starts for SheldonCooper_55:
(Start: 14 @37862 has 2 MA's), (21, 37823), (Start: 23 @37817 has 126 MA's), (36, 37664), (38, 37655),

Gene: Shep_56 Start: 36709, Stop: 36416, Start Num: 25
Candidate Starts for Shep_56:
(Start: 25 @36709 has 231 MA's), (36, 36556), (38, 36547), (42, 36532),

Gene: Shygu2_52 Start: 37381, Stop: 37082, Start Num: 24

Candidate Starts for Shygu2_52:
(15, 37426), (16, 37423), (Start: 24 @37381 has 17 MA's), (36, 37204), (38, 37195),

Gene: Skadoosh_54 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Skadoosh_54:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Skipitt_52 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for Skipitt_52:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: Sknot_57 Start: 38048, Stop: 37731, Start Num: 25
Candidate Starts for Sknot_57:
(Start: 25 @38048 has 231 MA's), (32, 37913), (34, 37907), (35, 37904), (36, 37901), (43, 37874), (45, 37847), (50, 37808), (55, 37757),

Gene: Snickers_59 Start: 37966, Stop: 37673, Start Num: 25
Candidate Starts for Snickers_59:
(7, 38053), (Start: 25 @37966 has 231 MA's), (32, 37825), (36, 37813), (38, 37804), (58, 37687),

Gene: SoYo_59 Start: 37904, Stop: 37611, Start Num: 25
Candidate Starts for SoYo_59:
(7, 37991), (Start: 25 @37904 has 231 MA's), (32, 37763), (36, 37751), (38, 37742), (58, 37625),

Gene: SoilDragon_59 Start: 37440, Stop: 37147, Start Num: 25
Candidate Starts for SoilDragon_59:
(7, 37527), (Start: 25 @37440 has 231 MA's), (36, 37287), (38, 37278), (58, 37161),

Gene: Soshari_61 Start: 38016, Stop: 37723, Start Num: 25
Candidate Starts for Soshari_61:
(7, 38103), (Start: 25 @38016 has 231 MA's), (32, 37875), (36, 37863), (38, 37854), (58, 37737),

Gene: Sparxx_54 Start: 37375, Stop: 37100, Start Num: 23
Candidate Starts for Sparxx_54:
(Start: 9 @37465 has 3 MA's), (Start: 23 @37375 has 126 MA's), (36, 37222), (38, 37213),

Gene: Spike509_59 Start: 38017, Stop: 37724, Start Num: 25
Candidate Starts for Spike509_59:
(7, 38104), (Start: 25 @38017 has 231 MA's), (32, 37876), (36, 37864), (38, 37855), (58, 37738),

Gene: Spino_52 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Spino_52:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Spouty_57 Start: 38022, Stop: 37744, Start Num: 25
Candidate Starts for Spouty_57:
(Start: 25 @38022 has 231 MA's), (32, 37884), (34, 37878), (35, 37875), (36, 37872), (43, 37845), (48, 37791), (50, 37779),

Gene: Srilaccoli3_44 Start: 42785, Stop: 42423, Start Num: 18
Candidate Starts for Srilaccoli3_44:
(Start: 18 @42785 has 1 MA's), (29, 42602), (35, 42563), (51, 42464),

Gene: Stagni_59 Start: 37995, Stop: 37702, Start Num: 25
Candidate Starts for Stagni_59:
(7, 38082), (Start: 25 @37995 has 231 MA's), (32, 37854), (36, 37842), (38, 37833), (58, 37716),

Gene: Stasia_52 Start: 37257, Stop: 36985, Start Num: 24
Candidate Starts for Stasia_52:
(15, 37302), (16, 37299), (Start: 24 @37257 has 17 MA's), (36, 37104), (38, 37095), (42, 37080),

Gene: SteMason_52 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for SteMason_52:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Stellammi_164 Start: 74940, Stop: 75215, Start Num: 25
Candidate Starts for Stellammi_164:
(20, 74928), (Start: 25 @74940 has 231 MA's), (32, 75090), (36, 75102),

Gene: StepMih_59 Start: 37986, Stop: 37693, Start Num: 25
Candidate Starts for StepMih_59:
(7, 38073), (Start: 25 @37986 has 231 MA's), (32, 37845), (36, 37833), (38, 37824), (58, 37707),

Gene: Stink_52 Start: 37107, Stop: 36832, Start Num: 23
Candidate Starts for Stink_52:
(Start: 23 @37107 has 126 MA's), (36, 36954), (37, 36948), (38, 36945),

Gene: Sultana_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for Sultana_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Swirley_51 Start: 37021, Stop: 36671, Start Num: 25
Candidate Starts for Swirley_51:
(17, 37051), (Start: 25 @37021 has 231 MA's), (28, 36922), (32, 36880), (33, 36877), (36, 36868), (63, 36685),

Gene: TNguyen7_57 Start: 37777, Stop: 37484, Start Num: 25
Candidate Starts for TNguyen7_57:
(Start: 19 @37807 has 2 MA's), (Start: 25 @37777 has 231 MA's), (27, 37681), (36, 37624), (38, 37615), (42, 37600), (58, 37498),

Gene: TPA4_54 Start: 39893, Stop: 40261, Start Num: 8
Candidate Starts for TPA4_54:
(8, 39893), (10, 39914), (11, 39920), (13, 39932), (44, 40202), (47, 40241),

Gene: Taquarus_53 Start: 37383, Stop: 37108, Start Num: 23
Candidate Starts for Taquarus_53:
(Start: 9 @37473 has 3 MA's), (Start: 23 @37383 has 126 MA's), (36, 37230), (38, 37221),

Gene: TarsusIV_56 Start: 38026, Stop: 37703, Start Num: 25
Candidate Starts for TarsusIV_56:
(Start: 25 @38026 has 231 MA's), (32, 37888), (34, 37882), (35, 37879), (36, 37876), (43, 37849), (45, 37822), (50, 37783),

Gene: Tarynearal_47 Start: 36463, Stop: 36113, Start Num: 25
Candidate Starts for Tarynearal_47:

(17, 36493), (Start: 25 @36463 has 231 MA's), (28, 36364), (32, 36322), (33, 36319), (36, 36310), (63, 36127),

Gene: Taurus_60 Start: 37992, Stop: 37699, Start Num: 25
Candidate Starts for Taurus_60:
(7, 38079), (Start: 25 @37992 has 231 MA's), (32, 37851), (36, 37839), (38, 37830), (58, 37713),

Gene: Terrific_58 Start: 38402, Stop: 38085, Start Num: 25
Candidate Starts for Terrific_58:
(Start: 25 @38402 has 231 MA's), (32, 38267), (34, 38261), (35, 38258), (36, 38255), (43, 38228), (45, 38201), (50, 38162), (55, 38111),

Gene: Texage_54 Start: 37765, Stop: 37475, Start Num: 25
Candidate Starts for Texage_54:
(Start: 19 @37795 has 2 MA's), (Start: 25 @37765 has 231 MA's), (36, 37612), (38, 37603), (42, 37588),

Gene: Thanksgivukkah_52 Start: 37378, Stop: 37103, Start Num: 23
Candidate Starts for Thanksgivukkah_52:
(Start: 9 @37468 has 3 MA's), (Start: 23 @37378 has 126 MA's), (36, 37225), (38, 37216),

Gene: Tiffany_59 Start: 37878, Stop: 37585, Start Num: 25
Candidate Starts for Tiffany_59:
(7, 37965), (Start: 25 @37878 has 231 MA's), (32, 37737), (36, 37725), (38, 37716), (58, 37599),

Gene: TinaFeyge_53 Start: 37465, Stop: 37100, Start Num: 9
Candidate Starts for TinaFeyge_53:
(Start: 9 @37465 has 3 MA's), (Start: 23 @37375 has 126 MA's), (36, 37222), (38, 37213),

Gene: TinyPebbles_58 Start: 38022, Stop: 37729, Start Num: 25
Candidate Starts for TinyPebbles_58:
(7, 38109), (Start: 25 @38022 has 231 MA's), (32, 37881), (36, 37869), (38, 37860), (58, 37743),

Gene: Tinybot_52 Start: 37407, Stop: 37132, Start Num: 23
Candidate Starts for Tinybot_52:
(Start: 9 @37497 has 3 MA's), (Start: 23 @37407 has 126 MA's), (36, 37254), (38, 37245),

Gene: TiroTheta9_53 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for TiroTheta9_53:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: Todacoro_55 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Todacoro_55:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Topanga_52 Start: 37329, Stop: 37012, Start Num: 25
Candidate Starts for Topanga_52:
(Start: 19 @37359 has 2 MA's), (Start: 25 @37329 has 231 MA's), (32, 37188), (36, 37176), (38, 37167), (42, 37152), (54, 37056),

Gene: Trike_52 Start: 36547, Stop: 36257, Start Num: 25
Candidate Starts for Trike_52:

(Start: 25 @36547 has 231 MA's), (32, 36406), (36, 36394), (38, 36385), (42, 36370),

Gene: Tristan_56 Start: 39078, Stop: 38758, Start Num: 25
Candidate Starts for Tristan_56:
(Start: 25 @39078 has 231 MA's), (32, 38943), (34, 38937), (35, 38934), (36, 38931), (43, 38904), (45, 38877), (50, 38838), (52, 38808), (55, 38787),

Gene: TroyPia_54 Start: 37378, Stop: 37103, Start Num: 23
Candidate Starts for TroyPia_54:
(Start: 9 @37468 has 3 MA's), (Start: 23 @37378 has 126 MA's), (36, 37225), (38, 37216),

Gene: Tubs_57 Start: 37956, Stop: 37678, Start Num: 25
Candidate Starts for Tubs_57:
(Start: 25 @37956 has 231 MA's), (32, 37818), (34, 37812), (35, 37809), (36, 37806), (43, 37779), (48, 37725), (50, 37713),

Gene: Twigg_49 Start: 36660, Stop: 36310, Start Num: 25
Candidate Starts for Twigg_49:
(4, 36825), (5, 36807), (17, 36690), (Start: 25 @36660 has 231 MA's), (28, 36561), (32, 36519), (33, 36516), (36, 36507), (63, 36324),

Gene: Twister_52 Start: 37249, Stop: 36932, Start Num: 25
Candidate Starts for Twister_52:
(Start: 19 @37276 has 2 MA's), (Start: 25 @37249 has 231 MA's), (32, 37108), (36, 37096), (38, 37087), (42, 37072), (54, 36976),

Gene: TygerBlood_53 Start: 37380, Stop: 37105, Start Num: 23
Candidate Starts for TygerBlood_53:
(Start: 9 @37470 has 3 MA's), (Start: 23 @37380 has 126 MA's), (36, 37227), (38, 37218),

Gene: Ugenie5_54 Start: 38241, Stop: 37963, Start Num: 25
Candidate Starts for Ugenie5_54:
(Start: 25 @38241 has 231 MA's), (32, 38103), (34, 38097), (35, 38094), (36, 38091), (43, 38064), (48, 38010), (50, 37998),

Gene: Ulysses_52 Start: 37057, Stop: 36782, Start Num: 23
Candidate Starts for Ulysses_52:
(Start: 9 @37147 has 3 MA's), (Start: 23 @37057 has 126 MA's), (36, 36904), (38, 36895),

Gene: Updawg_58 Start: 38292, Stop: 37972, Start Num: 25
Candidate Starts for Updawg_58:
(Start: 25 @38292 has 231 MA's), (26, 38226), (34, 38148), (35, 38145), (36, 38142), (43, 38115), (45, 38088), (50, 38049), (55, 37998),

Gene: VA6_58 Start: 38513, Stop: 38187, Start Num: 25
Candidate Starts for VA6_58:
(Start: 25 @38513 has 231 MA's), (32, 38372), (34, 38366), (35, 38363), (36, 38360), (43, 38333), (45, 38306), (50, 38267),

Gene: Veracruz_54 Start: 37764, Stop: 37474, Start Num: 25
Candidate Starts for Veracruz_54:
(Start: 19 @37794 has 2 MA's), (Start: 25 @37764 has 231 MA's), (36, 37611), (38, 37602), (42, 37587),

Gene: Vix_59 Start: 38075, Stop: 37782, Start Num: 25
Candidate Starts for Vix_59:
(7, 38162), (Start: 25 @38075 has 231 MA's), (32, 37934), (36, 37922), (38, 37913), (58, 37796),

Gene: WalterMcMickey_52 Start: 37249, Stop: 36932, Start Num: 25
Candidate Starts for WalterMcMickey_52:
(Start: 19 @37276 has 2 MA's), (Start: 25 @37249 has 231 MA's), (32, 37108), (36, 37096), (38, 37087), (42, 37072), (54, 36976),

Gene: Wander_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Wander_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Watson_59 Start: 37984, Stop: 37691, Start Num: 25
Candidate Starts for Watson_59:
(7, 38071), (Start: 25 @37984 has 231 MA's), (32, 37843), (36, 37831), (38, 37822), (58, 37705),

Gene: WideWale_58 Start: 38292, Stop: 37972, Start Num: 25
Candidate Starts for WideWale_58:
(Start: 25 @38292 has 231 MA's), (26, 38226), (34, 38148), (35, 38145), (36, 38142), (43, 38115), (45, 38088), (50, 38049), (55, 37998),

Gene: Wilbur_53 Start: 37377, Stop: 37102, Start Num: 23
Candidate Starts for Wilbur_53:
(Start: 9 @37467 has 3 MA's), (Start: 23 @37377 has 126 MA's), (36, 37224), (38, 37215),

Gene: Wile_52 Start: 37363, Stop: 37085, Start Num: 24
Candidate Starts for Wile_52:
(15, 37408), (16, 37405), (Start: 24 @37363 has 17 MA's), (36, 37210), (38, 37201), (42, 37186),

Gene: Wizard007_53 Start: 37385, Stop: 37110, Start Num: 23
Candidate Starts for Wizard007_53:
(Start: 9 @37475 has 3 MA's), (Start: 23 @37385 has 126 MA's), (36, 37232), (38, 37223),

Gene: Wooldri_61 Start: 37904, Stop: 37611, Start Num: 25
Candidate Starts for Wooldri_61:
(7, 37991), (Start: 25 @37904 has 231 MA's), (32, 37763), (36, 37751), (38, 37742), (58, 37625),

Gene: Xena_51 Start: 37329, Stop: 37051, Start Num: 24
Candidate Starts for Xena_51:
(15, 37374), (16, 37371), (Start: 24 @37329 has 17 MA's), (36, 37176), (38, 37167), (42, 37152),

Gene: XianYue_56 Start: 37791, Stop: 37468, Start Num: 25
Candidate Starts for XianYue_56:
(Start: 25 @37791 has 231 MA's), (34, 37647), (35, 37644), (36, 37641), (43, 37614), (45, 37587), (50, 37548), (52, 37518),

Gene: YoSam321_53 Start: 37374, Stop: 37099, Start Num: 23
Candidate Starts for YoSam321_53:
(Start: 9 @37464 has 3 MA's), (Start: 23 @37374 has 126 MA's), (36, 37221), (38, 37212),

Gene: Zarafa_56 Start: 37721, Stop: 37428, Start Num: 25

Candidate Starts for Zarafa_56:
(Start: 25 @37721 has 231 MA's), (36, 37568), (38, 37559), (42, 37544),

Gene: Zetzy_58 Start: 37555, Stop: 37262, Start Num: 25
Candidate Starts for Zetzy_58:
(7, 37642), (Start: 25 @37555 has 231 MA's), (32, 37414), (36, 37402), (38, 37393), (58, 37276),