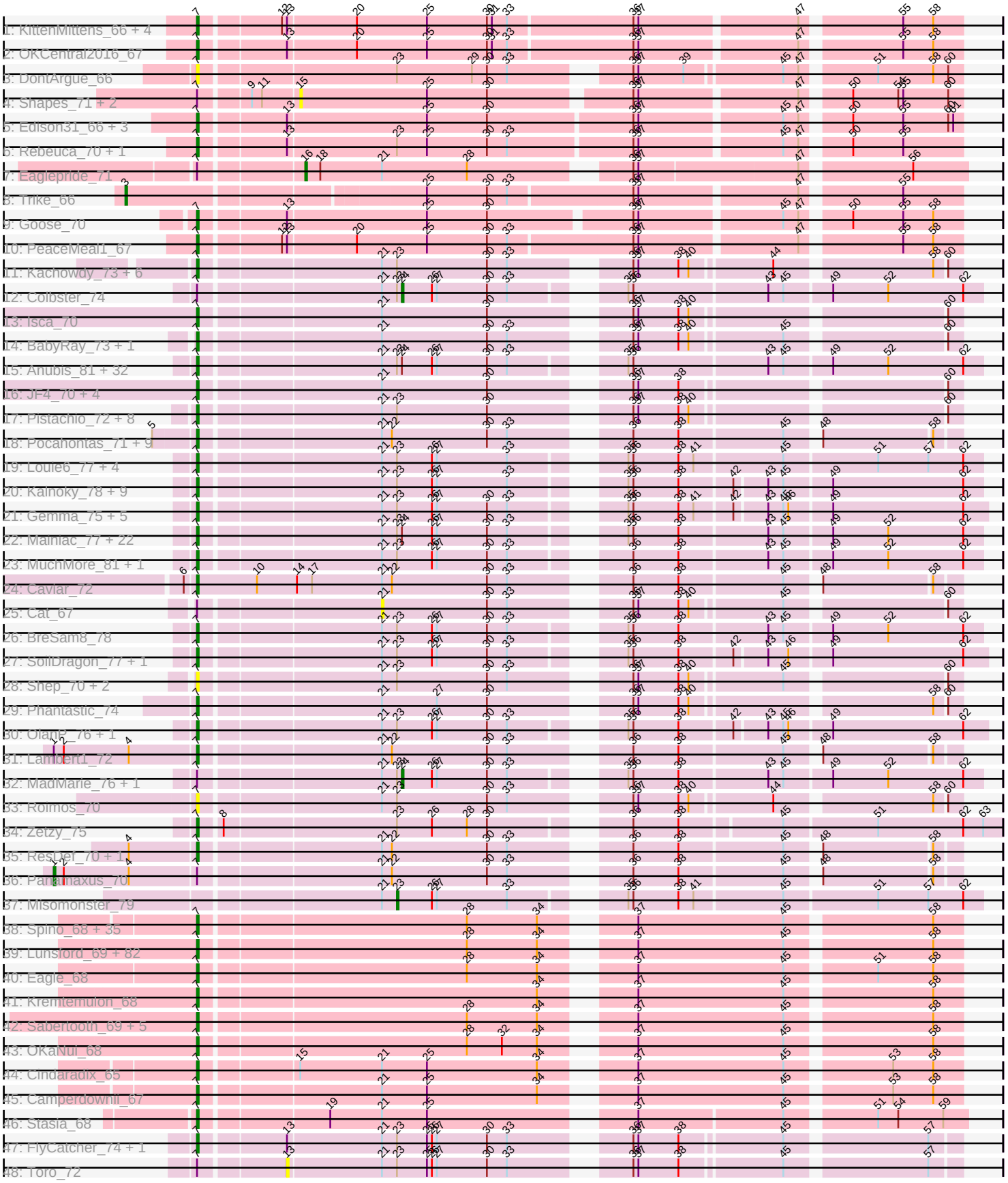
Pham 343570


1: KittenMittens_66 + 4
2: OKCentral2016_67
3: DontArgue_66
4: Shapes_71 + 2
5: Edison31_66 + 3
6: Rebeuca_70 + 1
7: Eaglepride_71
8: Trike_66
9: Goose_70
10: PeaceMeal1_67
11: Kachowdy_73 + 6
12: Colbster_74
13: Isca_70
14: BabyRay_73 + 1
15: Anubis_81 + 32
16: JF4_70 + 4
17: Pistachio_72 + 8
18: Pocahontas_71 + 9
19: Loule6_77 + 4
20: Kahoky_78 + 9
21: Gemma_75 + 5
22: Maniac_77 + 22
23: MuchMore_81 + 1
24: Caviar_72
25: Cat_67
26: BreSam8_78
27: SoilDragon_77 + 1
28: Shep_70 + 2
29: Phantastic_74
30: OlanR_76 + 1
31: Lambert1_72
32: MadMarie_76 + 1
33: Rolmos_70
34: Zetzy_75
35: ResUser_70 + 1
36: Pantamaxus_70
37: Misomonster_79
38: Spino_68 + 35
39: Lunsford_69 + 82
40: Eagle_68
41: Kremlemulon_68
42: Sabertooth_69 + 5
43: OKaNut_68
44: Cindaradix_65
45: Camperdownii_67
46: Stasia_68
47: FlyCatcher_74 + 1
48: Toro_72

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 343570 Report

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

Pham number 343570 has 288 members, 24 are drafts.

Phages represented in each track:
• Track 1 : KittenMittens_66, Severus_67, Poompha_66, Chupacabra_67, Drake94_67
• Track 2 : OKCentral2016_67
• Track 3 : DontArgue_66
• Track 4 : Shapes_71, DustyMartin_71, Rowdy_71
• Track 5 : Edison31_66, WalterMcMickey_68, Twister_68, Topanga_66
• Track 6 : Rebeuca_70, Kristoff_68
• Track 7 : Eaglepride_71
• Track 8 : Trike_66
• Track 9 : Goose_70
• Track 10 : PeaceMeal1_67
• Track 11 : Kachowdy_73, Marchesa_70, HelDan_72, DropBear_73, Heathen_72, Scout_71, Fred313_70
• Track 12 : Colbster_74
• Track 13 : Isca_70
• Track 14 : BabyRay_73, Zarafa_70
• Track 15 : Anubis_81, Marie_76, SoYo_75, Gwennie_78, Ollie_78, Soshari_80, Beauxregard13_77, Cullens_78, MoneyMay_77, Hercules11_78, HashRod_79, Grif_76, Sabinator_76, P28Green_78, Fernando_78, Spike509_78, LugYA_81, Bxz2_73, AgronaGT15_75, EpicPhail_79, GingkoMaracino_78, JenCasNa_79, Penny1_78, Croquant_75, PotatoSplit_79, Phoxy_78, Farber_78, Tiffany_77, Rummer_77, Phoebe_79, Taurus_79, Grum1_77, Methuselah_71
• Track 16 : JF4_70, MA5_72, B1_64, Rockstar_71, JF2_70
• Track 17 : Pistachio_72, SaturnRing_72, Idleandcovert_73, BlueBird_75, Giroux_75, Bugatti_75, Clammy_74, TNguyen7_73, Puppy_73
• Track 18 : Pocahontas_71, Veracruz_69, QuinnKiro_71, Noella_72, Texage_70, Margo_72, Norbert_68, Hookmount_72, Popcicle_72, Todacoro_72
• Track 19 : Louie6_77, BuzzBuzz_72, KADY_75, TinyPebbles_77, Wooldri_80
• Track 20 : Kalnoky_78, JeppNRM_78, ACFishhook_75, Calvinny_77, Marius_78, Heliosoles_75, Kalb97_78, Groupthink_78, PurpleHaze_77, Pawn_76
• Track 21 : Gemma_75, HaveUMetTed_78, PhishRPhriends_74, Reba_73, Phranny_74, Manu_77
• Track 22 : Mainiac_77, Grub_76, Daishi_77, Pembroke_78, MarQuardt_78, Sabia_76, Stagni_75, Microwolf_74, Vix_74, Watson_77, LarryKay_78, Montavir_73, Lowa_78, GtownJaz_78, Malinsilva_80, Bigflo_76, StepMih_77, DaHudson_77, LBerry_79, Aglet_79, PGHhamlin_80, Dieselweasel_78, Snickers_78
• Track 23 : MuchMore_81, AugsMagnumOpus_81

• Track 24 : Caviar_72
• Track 25 : Cat_67
• Track 26 : BreSam8_78
• Track 27 : SoilDragon_77, Jobu08_74
• Track 28 : Shep_70, Goose1D_64, Goose1X_70
• Track 29 : Phantastic_74
• Track 30 : OlanP_76, ClownCar_77
• Track 31 : Lambert1_72
• Track 32 : MadMarie_76, Lilith_76
• Track 33 : Roimos_70
• Track 34 : Zetzy_75
• Track 35 : ResDef_70, EtoileNova_70
• Track 36 : Panamaxus_70
• Track 37 : Misomonster_79
• Track 38 : Spino_68, Eris_68, Maverick_68, Iracema64_69, Funston_68, Phacado_69, LochMonster_70, Houdini22_68, PeterPeter_69, Avle17_69, Kratark_68, Mazhar510_69, JoongJeon_68, Happiness_68, Mayonnaise_66, MeeZee_68, BangNhom_67, LHTSCC_71, Kyee_69, NotAPhaseMom_68, Cerulean_70, Palestino_68, JetBlade_69, SheldonCooper_69, Cocoaberry_69, Tinybot_68, Nemo27_68, Gadost_69, ChampagnePapi_71, Phighter1804_69, Sultana_69, Obama12_70, Wander_69, Ulysses_68, Rosa24_66, DirtyDunning_68
• Track 39 : Lunsford_69, Kingmustik0402_69, Medusa_69, Kampy_68, Phontbonne_69, Blackmoor_68, Lorenzo_69, Skipitt_68, Eros_69, Junimo_65, Northrop_66, TiroTheta9_68, Clarenza_68, Baby16_69, Rocksand_66, Huxley_68, Iceman_68, KekoraPapaka_66, Shaka_67, Holli_68, Bartimeaus_69, Koan_66, Morrow_70, Burger_67, NorthStar_67, Pumbaa_69, SenorClean_70, Ohfah_70, BubbleTrouble_68, Phelipe_70, Deano_66, Abdiel_69, Cintron_69, Bruiser_68, Taquarus_68, Alberto7_70, Citius_69, Skadoosh_67, Roosevelt_67, Dhanush_69, Melvin_71, Peaches_67, KFPoly_68, Nyxis_68, Connomayer_69, LeoAvram_68, Commander_67, Polymorphads_69, Eapen_69, Ruin_69, Chaph_69, Jaykayelowell_66, Buckaroo_65, Koreni_68, Scamp_69, Florean_69, ICleared_68, Relief_68, Wilbur_69, Bombshell_69, LittleB_69, Millski_68, SteMason_69, Romney_68, Annyong_68, TroyPia_70, Arturo_66, Maxo_70, CentreCat_69, Flux_69, Druantia_68, Caelakin_68, Albee_69, TygerBlood_69, LittleGuy_69, Eurydice_70, LappelDuVide_69, BellusTerra_70, TinaFeyge_67, Nebs_70, Thanksgivukkah_68, Lemur_69, RockieBear_69
• Track 40 : Eagle_68
• Track 41 : Kremtemulon_68
• Track 42 : Sabertooth_69, HamSlice_65, Broseidon_69, Pipcraft_66, YoSam321_69, Sparxx_70
• Track 43 : OKaNui_68
• Track 44 : Cindaradix_65
• Track 45 : Camperdownii_67
• Track 46 : Stasia_68
• Track 47 : FlyCatcher_74, Sheen_73
• Track 48 : Toro_72

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

The start number called the most often in the published annotations is 7, it was called in 257 of the 264 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ACFishhook_75, Abdiel_69, Aglet_79, AgronaGT15_75, Albee_69, Alberto7_70, Annyong_68, Anubis_81, Arturo_66, AugsMagnumOpus_81, Avle17_69, B1_64, Baby16_69, BabyRay_73, BangNhom_67, Bartimeaus_69, Beauxregard13_77, BellusTerra_70, Bigflo_76, Blackmoor_68, BlueBird_75, Bombshell_69, BreSam8_78, Broseidon_69, Bruiser_68, BubbleTrouble_68, Buckaroo_65, Bugatti_75, Burger_67, BuzzBuzz_72, Bxz2_73, Caelakin_68, Calvinny_77, Camperdownii_67, Caviar_72, CentreCat_69, Cerulean_70, ChampagnePapi_71, Chaph_69, Chupacabra_67, Cindaradix_65, Cintron_69, Citius_69, Clammy_74, Clarenza_68, ClownCar_77, Cocoaberry_69, Commander_67, Connomayer_69, Croquant_75, Cullens_78, DaHudson_77, Daishi_77, Deano_66, Dhanush_69, Dieselweasel_78, DirtyDunning_68, DontArgue_66, Drake94_67, DropBear_73, Druantia_68, Eagle_68, Eapen_69, Edison31_66, EpicPhail_79, Eris_68, Eros_69, EtoileNova_70, Eurydice_70, Farber_78, Fernando_78, Florean_69, Flux_69, FlyCatcher_74, Fred313_70, Funston_68, Gadost_69, Gemma_75, GingkoMaracino_78, Giroux_75, Goose1D_64, Goose1X_70, Goose_70, Grif_76, Groupthink_78, Grub_76, Grum1_77, GtownJaz_78, Gwennie_78, HamSlice_65, Happiness_68, HashRod_79, HaveUMetTed_78, Heathen_72, HelDan_72, Heliosoles_75, Hercules11_78, Holli_68, Hookmount_72, Houdini22_68, Huxley_68, ICleared_68, Iceman_68, Idleandcovert_73, Iracema64_69, Isca_70, JF2_70, JF4_70, Jaykayelowell_66, JenCasNa_79, JeppNRM_78, JetBlade_69, Jobu08_74, JoongJeon_68, Junimo_65, KADY_75, KFPoly_68, Kachowdy_73, Kalb97_78, Kalnoky_78, Kampy_68, KekoraPapaka_66, Kingmustik0402_69, KittenMittens_66, Koan_66, Koreni_68, Kratark_68, Kremtemulon_68, Kristoff_68, Kyee_69, LBerry_79, LHTSCC_71, Lambert1_72, LappelDuVide_69, LarryKay_78, Lemur_69, LeoAvram_68, LittleB_69, LittleGuy_69, LochMonster_70, Lorenzo_69, Louie6_77, Lowa_78, LugYA_81, Lunsford_69, MA5_72, Mainiac_77, Malinsilva_80, Manu_77, MarQuardt_78, Marchesa_70, Margo_72, Marie_76, Marius_78, Maverick_68, Maxo_70, Mayonnaise_66, Mazhar510_69, Medusa_69, MeeZee_68, Melvin_71, Methuselah_71, Microwolf_74, Millski_68, MoneyMay_77, Montavir_73, Morrow_70, MuchMore_81, Nebs_70, Nemo27_68, Noella_72, Norbert_68, NorthStar_67, Northrop_66, NotAPhaseMom_68, Nyxis_68, OKCentral2016_67, OKaNui_68, Obama12_70, Ohfah_70, OlanP_76, Ollie_78, P28Green_78, PGHhamlin_80, Palestino_68, Pawn_76, PeaceMeal1_67, Peaches_67, Pembroke_78, Penny1_78, PeterPeter_69, Phacado_69, Phantastic_74, Phelipe_70, Phighter1804_69, PhishRPhriends_74, Phoebe_79, Phontbonne_69, Phoxy_78, Phranny_74, Pipcraft_66, Pistachio_72, Pocahontas_71, Polymorphads_69, Poompha_66, Popcicle_72, PotatoSplit_79, Pumbaa_69, Puppy_73, PurpleHaze_77, QuinnKiro_71, Reba_73, Rebeuca_70, Relief_68, ResDef_70, RockieBear_69, Rocksand_66, Rockstar_71, Roimos_70, Romney_68, Roosevelt_67, Rosa24_66, Ruin_69, Rummer_77, Sabertooth_69, Sabia_76, Sabinator_76, SaturnRing_72, Scamp_69, Scout_71, SenorClean_70, Severus_67, Shaka_67, Sheen_73, SheldonCooper_69, Shep_70, Skadoosh_67, Skipitt_68, Snickers_78, SoYo_75, SoilDragon_77, Soshari_80, Sparxx_70, Spike509_78, Spino_68, Stagni_75, Stasia_68, SteMason_69, StepMih_77, Sultana_69, TNguyen7_73, Taquarus_68, Taurus_79, Texage_70, Thanksgivukkah_68, Tiffany_77, TinaFeyge_67, TinyPebbles_77, Tinybot_68, TiroTheta9_68, Todacoro_72, Topanga_66, TroyPia_70, Twister_68, TygerBlood_69, Ulysses_68, Veracruz_69, Vix_74, WalterMcMickey_68, Wander_69, Watson_77, Wilbur_69, Wooldri_80, YoSam321_69, Zarafa_70, Zetzy_75,

Genes that have the "Most Annotated" start but do not call it:
• Cat_67, Colbster_74, DustyMartin_71, Eaglepride_71, Lilith_76, MadMarie_76, Panamaxus_70, Rowdy_71, Shapes_71, Toro_72,

Genes that do not have the "Most Annotated" start:
• Misomonster_79, Trike_66,

Summary by start number:

Start 1:
• Found in 2 of 288 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 264
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Panamaxus_70 (A3),

Start 3:
• Found in 1 of 288 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 264
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trike_66 (A10),

Start 7:
• Found in 286 of 288 (99.3%) of genes in pham
• Manual Annotations of this start: 257 of 264
• Called 96.5% of time when present
• Phage (with cluster) where this start called: ACFishhook_75 (A3), Abdiel_69 (A4), Aglet_79 (A3), AgronaGT15_75 (A3), Albee_69 (A4), Alberto7_70 (A4), Annyong_68 (A4), Anubis_81 (A3), Arturo_66 (A4), AugsMagnumOpus_81 (A3), Avle17_69 (A4), B1_64 (A3), Baby16_69 (A4), BabyRay_73 (A3), BangNhom_67 (A4), Bartimeaus_69 (A4), Beauxregard13_77 (A3), BellusTerra_70 (A4), Bigflo_76 (A3), Blackmoor_68 (A4), BlueBird_75 (A3), Bombshell_69 (A4), BreSam8_78 (A3), Broseidon_69 (A4), Bruiser_68 (A4), BubbleTrouble_68 (A4), Buckaroo_65 (A4), Bugatti_75 (A3), Burger_67 (A4), BuzzBuzz_72 (A3), Bxz2_73 (A3), Caelakin_68 (A4), Calvinny_77 (A3), Camperdownii_67 (A4), Caviar_72 (A3), CentreCat_69 (A4), Cerulean_70 (A4), ChampagnePapi_71 (A4), Chaph_69 (A4), Chupacabra_67 (A10), Cindaradix_65 (A4), Cintron_69 (A4), Citius_69 (A4), Clammy_74 (A3), Clarenza_68 (A4), ClownCar_77 (A3), Cocoaberry_69 (A4), Commander_67 (A4), Connomayer_69 (A4), Croquant_75 (A3), Cullens_78 (A3), DaHudson_77 (A3), Daishi_77 (A3), Deano_66 (A4), Dhanush_69 (A4), Dieselweasel_78 (A3), DirtyDunning_68 (A4), DontArgue_66 (A10), Drake94_67 (A10), DropBear_73 (A3), Druantia_68 (A4), Eagle_68 (A4), Eapen_69 (A4), Edison31_66 (A10), EpicPhail_79 (A3), Eris_68 (A4), Eros_69 (A4), EtoileNova_70 (A3), Eurydice_70 (A4), Farber_78 (A3), Fernando_78 (A3), Florean_69 (A4), Flux_69 (A4), FlyCatcher_74 (A7), Fred313_70 (A3), Funston_68 (A4), Gadost_69 (A4), Gemma_75 (A3), GingkoMaracino_78 (A3), Giroux_75 (A3), Goose1D_64 (A3), Goose1X_70 (A3), Goose_70 (A10), Grif_76 (A3), Groupthink_78 (A3), Grub_76 (A3), Grum1_77 (A3), GtownJaz_78 (A3), Gwennie_78 (A3), HamSlice_65 (A4), Happiness_68 (A4), HashRod_79 (A3), HaveUMetTed_78 (A3), Heathen_72 (A3), HelDan_72 (A3), Heliosoles_75 (A3), Hercules11_78 (A3), Holli_68 (A4), Hookmount_72 (A3), Houdini22_68 (A4), Huxley_68 (A4), ICleared_68 (A4), Iceman_68 (A4), Idleandcovert_73 (A3), Iracema64_69 (A4), Isca_70 (A3), JF2_70 (A3), JF4_70 (A3), Jaykayelowell_66 (A4), JenCasNa_79 (A3), JeppNRM_78 (A3), JetBlade_69 (A4), Jobu08_74 (A3), JoongJeon_68 (A4), Junimo_65 (A4), KADY_75 (A3), KFPoly_68 (A4), Kachowdy_73 (A3), Kalb97_78 (A3), Kalnoky_78 (A3),

Kampy_68 (A4), KekoraPapaka_66 (A4), Kingmustik0402_69 (A4), KittenMittens_66 (A10), Koan_66 (A4), Koreni_68 (A4), Kratark_68 (A4), Kremtemulon_68 (A4), Kristoff_68 (A10), Kyee_69 (A4), LBerry_79 (A3), LHTSCC_71 (A4), Lambert1_72 (A3), LappelDuVide_69 (A4), LarryKay_78 (A3), Lemur_69 (A4), LeoAvram_68 (A4), LittleB_69 (A4), LittleGuy_69 (A4), LochMonster_70 (A4), Lorenzo_69 (A4), Louie6_77 (A3), Lowa_78 (A3), LugYA_81 (A3), Lunsford_69 (A4), MA5_72 (A3), Mainiac_77 (A3), Malinsilva_80 (A3), Manu_77 (A3), MarQuardt_78 (A3), Marchesa_70 (A3), Margo_72 (A3), Marie_76 (A3), Marius_78 (A3), Maverick_68 (A4), Maxo_70 (A4), Mayonnaise_66 (A4), Mazhar510_69 (A4), Medusa_69 (A4), MeeZee_68 (A4), Melvin_71 (A4), Methuselah_71 (A3), Microwolf_74 (A3), Millski_68 (A4), MoneyMay_77 (A3), Montavir_73 (A3), Morrow_70 (A4), MuchMore_81 (A3), Nebs_70 (A4), Nemo27_68 (A4), Noella_72 (A3), Norbert_68 (A3), NorthStar_67 (A4), Northrop_66 (A4), NotAPhaseMom_68 (A4), Nyxis_68 (A4), OKCentral2016_67 (A10), OKaNui_68 (A4), Obama12_70 (A4), Ohfah_70 (A4), OlanP_76 (A3), Ollie_78 (A3), P28Green_78 (A3), PGHhamlin_80 (A3), Palestino_68 (A4), Pawn_76 (A3), PeaceMeal1_67 (A10), Peaches_67 (A4), Pembroke_78 (A3), Penny1_78 (A3), PeterPeter_69 (A4), Phacado_69 (A4), Phantastic_74 (A3), Phelipe_70 (A4), Phighter1804_69 (A4), PhishRPhriends_74 (A3), Phoebe_79 (A3), Phontbonne_69 (A4), Phoxy_78 (A3), Phranny_74 (A3), Pipcraft_66 (A4), Pistachio_72 (A3), Pocahontas_71 (A3), Polymorphads_69 (A4), Poompha_66 (A10), Popcicle_72 (A3), PotatoSplit_79 (A3), Pumbaa_69 (A4), Puppy_73 (A3), PurpleHaze_77 (A3), QuinnKiro_71 (A3), Reba_73 (A3), Rebeuca_70 (A10), Relief_68 (A4), ResDef_70 (A3), RockieBear_69 (A4), Rocksand_66 (A4), Rockstar_71 (A3), Roimos_70 (A3), Romney_68 (A4), Roosevelt_67 (A4), Rosa24_66 (A4), Ruin_69 (A4), Rummer_77 (A3), Sabertooth_69 (A4), Sabia_76 (A3), Sabinator_76 (A3), SaturnRing_72 (A3), Scamp_69 (A4), Scout_71 (A3), SenorClean_70 (A4), Severus_67 (A10), Shaka_67 (A4), Sheen_73 (A7), SheldonCooper_69 (A4), Shep_70 (A3), Skadoosh_67 (A4), Skipitt_68 (A4), Snickers_78 (A3), SoYo_75 (A3), SoilDragon_77 (A3), Soshari_80 (A3), Sparxx_70 (A4), Spike509_78 (A3), Spino_68 (A4), Stagni_75 (A3), Stasia_68 (A4), SteMason_69 (A4), StepMih_77 (A3), Sultana_69 (A4), TNguyen7_73 (A3), Taquarus_68 (A4), Taurus_79 (A3), Texage_70 (A3), Thanksgivukkah_68 (A4), Tiffany_77 (A3), TinaFeyge_67 (A4), TinyPebbles_77 (A3), Tinybot_68 (A4), TiroTheta9_68 (A4), Todacoro_72 (A3), Topanga_66 (A10), TroyPia_70 (A4), Twister_68 (A10), TygerBlood_69 (A4), Ulysses_68 (A4), Veracruz_69 (A3), Vix_74 (A3), WalterMcMickey_68 (A10), Wander_69 (A4), Watson_77 (A3), Wilbur_69 (A4), Wooldri_80 (A3), YoSam321_69 (A4), Zarafa_70 (A3), Zetzy_75 (A3),

Start 13:
• Found in 17 of 288 (5.9%) of genes in pham
• No Manual Annotations of this start.
• Called 5.9% of time when present
• Phage (with cluster) where this start called: Toro_72 (A7),

Start 15:
• Found in 4 of 288 (1.4%) of genes in pham
• No Manual Annotations of this start.
• Called 75.0% of time when present
• Phage (with cluster) where this start called: DustyMartin_71 (A10), Rowdy_71 (A10), Shapes_71 (A10),

Start 16:
• Found in 1 of 288 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 264

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Eaglepride_71 (A10),

Start 21:
• Found in 140 of 288 (48.6%) of genes in pham
• No Manual Annotations of this start.
• Called 0.7% of time when present
• Phage (with cluster) where this start called: Cat_67 (A3),

Start 23:
• Found in 115 of 288 (39.9%) of genes in pham
• Manual Annotations of this start: 1 of 264
• Called 0.9% of time when present
• Phage (with cluster) where this start called: Misomonster_79 (A3),

Start 24:
• Found in 59 of 288 (20.5%) of genes in pham
• Manual Annotations of this start: 3 of 264
• Called 5.1% of time when present
• Phage (with cluster) where this start called: Colbster_74 (A3), Lilith_76 (A3), MadMarie_76 (A3),

Summary by clusters:

There are 4 clusters represented in this pham: A3, A10, A7, A4,

Info for manual annotations of cluster A10:
•Start number 3 was manually annotated 1 time for cluster A10.
•Start number 7 was manually annotated 14 times for cluster A10.
•Start number 16 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A3:
•Start number 1 was manually annotated 1 time for cluster A3.
•Start number 7 was manually annotated 118 times for cluster A3.
•Start number 23 was manually annotated 1 time for cluster A3.
•Start number 24 was manually annotated 3 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 7 was manually annotated 124 times for cluster A4.

Info for manual annotations of cluster A7:
•Start number 7 was manually annotated 1 time for cluster A7.

Gene Information:

Gene: ACFishhook_75 Start: 44366, Stop: 43935, Start Num: 7
Candidate Starts for ACFishhook_75:
(Start: 7 @44366 has 257 MA's), (21, 44264), (Start: 23 @44255 has 1 MA's), (26, 44234), (27, 44231), (33, 44189), (35, 44138), (36, 44135), (38, 44108), (42, 44078), (43, 44060), (45, 44051), (49, 44024), (62, 43946),

Gene: Abdiel_69 Start: 43590, Stop: 43168, Start Num: 7
Candidate Starts for Abdiel_69:
(Start: 7 @43590 has 257 MA's), (28, 43437), (34, 43395), (37, 43353), (45, 43266), (58, 43185),

Gene: Aglet_79 Start: 44481, Stop: 44047, Start Num: 7
Candidate Starts for Aglet_79:
(Start: 7 @44481 has 257 MA's), (21, 44379), (Start: 23 @44370 has 1 MA's), (Start: 24 @44367 has 3 MA's), (26, 44349), (27, 44346), (30, 44316), (33, 44304), (35, 44253), (36, 44250), (38, 44223), (43, 44172), (45, 44163), (49, 44136), (52, 44103), (62, 44058),

Gene: AgronaGT15_75 Start: 44329, Stop: 43895, Start Num: 7
Candidate Starts for AgronaGT15_75:
(Start: 7 @44329 has 257 MA's), (21, 44227), (Start: 23 @44218 has 1 MA's), (Start: 24 @44215 has 3 MA's), (26, 44197), (27, 44194), (30, 44164), (33, 44152), (35, 44101), (36, 44098), (43, 44020), (45, 44011), (49, 43984), (52, 43951), (62, 43906),

Gene: Albee_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Albee_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Alberto7_70 Start: 43914, Stop: 43492, Start Num: 7
Candidate Starts for Alberto7_70:
(Start: 7 @43914 has 257 MA's), (28, 43761), (34, 43719), (37, 43677), (45, 43590), (58, 43509),

Gene: Annyong_68 Start: 43622, Stop: 43200, Start Num: 7
Candidate Starts for Annyong_68:
(Start: 7 @43622 has 257 MA's), (28, 43469), (34, 43427), (37, 43385), (45, 43298), (58, 43217),

Gene: Anubis_81 Start: 44367, Stop: 43933, Start Num: 7
Candidate Starts for Anubis_81:
(Start: 7 @44367 has 257 MA's), (21, 44265), (Start: 23 @44256 has 1 MA's), (Start: 24 @44253 has 3 MA's), (26, 44235), (27, 44232), (30, 44202), (33, 44190), (35, 44139), (36, 44136), (43, 44058), (45, 44049), (49, 44022), (52, 43989), (62, 43944),

Gene: Arturo_66 Start: 43704, Stop: 43282, Start Num: 7
Candidate Starts for Arturo_66:
(Start: 7 @43704 has 257 MA's), (28, 43551), (34, 43509), (37, 43467), (45, 43380), (58, 43299),

Gene: AugsMagnumOpus_81 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for AugsMagnumOpus_81:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Avle17_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Avle17_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: B1_64 Start: 42264, Stop: 41851, Start Num: 7
Candidate Starts for B1_64:
(Start: 7 @42264 has 257 MA's), (21, 42162), (30, 42099), (36, 42030), (37, 42027), (38, 42003), (60, 41859),

Gene: Baby16_69 Start: 43588, Stop: 43166, Start Num: 7
Candidate Starts for Baby16_69:
(Start: 7 @43588 has 257 MA's), (28, 43435), (34, 43393), (37, 43351), (45, 43264), (58, 43183),

Gene: BabyRay_73 Start: 44020, Stop: 43607, Start Num: 7
Candidate Starts for BabyRay_73:
(Start: 7 @44020 has 257 MA's), (21, 43918), (30, 43855), (33, 43843), (36, 43786), (37, 43783), (38, 43759), (40, 43753), (45, 43702), (60, 43615),

Gene: BangNhom_67 Start: 44016, Stop: 43594, Start Num: 7
Candidate Starts for BangNhom_67:
(Start: 7 @44016 has 257 MA's), (28, 43863), (34, 43821), (37, 43779), (45, 43692), (58, 43611),

Gene: Bartimeaus_69 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Bartimeaus_69:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Beauxregard13_77 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for Beauxregard13_77:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: BellusTerra_70 Start: 43617, Stop: 43195, Start Num: 7
Candidate Starts for BellusTerra_70:
(Start: 7 @43617 has 257 MA's), (28, 43464), (34, 43422), (37, 43380), (45, 43293), (58, 43212),

Gene: Bigflo_76 Start: 44480, Stop: 44046, Start Num: 7
Candidate Starts for Bigflo_76:
(Start: 7 @44480 has 257 MA's), (21, 44378), (Start: 23 @44369 has 1 MA's), (Start: 24 @44366 has 3 MA's), (26, 44348), (27, 44345), (30, 44315), (33, 44303), (35, 44252), (36, 44249), (38, 44222), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Blackmoor_68 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Blackmoor_68:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: BlueBird_75 Start: 44091, Stop: 43678, Start Num: 7
Candidate Starts for BlueBird_75:
(Start: 7 @44091 has 257 MA's), (21, 43989), (Start: 23 @43980 has 1 MA's), (30, 43926), (36, 43857), (37, 43854), (38, 43830), (40, 43824), (60, 43686),

Gene: Bombshell_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Bombshell_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: BreSam8_78 Start: 44474, Stop: 44040, Start Num: 7
Candidate Starts for BreSam8_78:
(Start: 7 @44474 has 257 MA's), (21, 44372), (Start: 23 @44363 has 1 MA's), (26, 44342), (27, 44339), (30, 44309), (33, 44297), (35, 44246), (36, 44243), (38, 44216), (43, 44165), (45, 44156), (49, 44129), (52, 44096), (62, 44051),

Gene: Broseidon_69 Start: 43579, Stop: 43157, Start Num: 7

Candidate Starts for Broseidon_69:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Bruiser_68 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Bruiser_68:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: BubbleTrouble_68 Start: 43604, Stop: 43182, Start Num: 7
Candidate Starts for BubbleTrouble_68:
(Start: 7 @43604 has 257 MA's), (28, 43451), (34, 43409), (37, 43367), (45, 43280), (58, 43199),

Gene: Buckaroo_65 Start: 43581, Stop: 43159, Start Num: 7
Candidate Starts for Buckaroo_65:
(Start: 7 @43581 has 257 MA's), (28, 43428), (34, 43386), (37, 43344), (45, 43257), (58, 43176),

Gene: Bugatti_75 Start: 44091, Stop: 43678, Start Num: 7
Candidate Starts for Bugatti_75:
(Start: 7 @44091 has 257 MA's), (21, 43989), (Start: 23 @43980 has 1 MA's), (30, 43926), (36, 43857), (37, 43854), (38, 43830), (40, 43824), (60, 43686),

Gene: Burger_67 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Burger_67:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: BuzzBuzz_72 Start: 44508, Stop: 44074, Start Num: 7
Candidate Starts for BuzzBuzz_72:
(Start: 7 @44508 has 257 MA's), (21, 44406), (Start: 23 @44397 has 1 MA's), (26, 44376), (27, 44373), (33, 44331), (35, 44280), (36, 44277), (38, 44250), (41, 44241), (45, 44190), (51, 44136), (57, 44106), (62, 44085),

Gene: Bxz2_73 Start: 44515, Stop: 44081, Start Num: 7
Candidate Starts for Bxz2_73:
(Start: 7 @44515 has 257 MA's), (21, 44413), (Start: 23 @44404 has 1 MA's), (Start: 24 @44401 has 3 MA's), (26, 44383), (27, 44380), (30, 44350), (33, 44338), (35, 44287), (36, 44284), (43, 44206), (45, 44197), (49, 44170), (52, 44137), (62, 44092),

Gene: Caelakin_68 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Caelakin_68:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Calvinny_77 Start: 44294, Stop: 43863, Start Num: 7
Candidate Starts for Calvinny_77:
(Start: 7 @44294 has 257 MA's), (21, 44192), (Start: 23 @44183 has 1 MA's), (26, 44162), (27, 44159), (33, 44117), (35, 44066), (36, 44063), (38, 44036), (42, 44006), (43, 43988), (45, 43979), (49, 43952), (62, 43874),

Gene: Camperdownii_67 Start: 43251, Stop: 42829, Start Num: 7
Candidate Starts for Camperdownii_67:
(Start: 7 @43251 has 257 MA's), (21, 43149), (25, 43122), (34, 43056), (37, 43014), (45, 42927), (53, 42870), (58, 42846),

Gene: Cat_67 Start: 43721, Stop: 43410, Start Num: 21
Candidate Starts for Cat_67:

(Start: 7 @43823 has 257 MA's), (21, 43721), (30, 43658), (33, 43646), (36, 43589), (37, 43586), (38, 43562), (40, 43556), (45, 43505), (60, 43418),

Gene: Caviar_72 Start: 44057, Stop: 43635, Start Num: 7
Candidate Starts for Caviar_72:
(6, 44063), (Start: 7 @44057 has 257 MA's), (10, 44021), (14, 43997), (17, 43988), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: CentreCat_69 Start: 43616, Stop: 43194, Start Num: 7
Candidate Starts for CentreCat_69:
(Start: 7 @43616 has 257 MA's), (28, 43463), (34, 43421), (37, 43379), (45, 43292), (58, 43211),

Gene: Cerulean_70 Start: 44017, Stop: 43595, Start Num: 7
Candidate Starts for Cerulean_70:
(Start: 7 @44017 has 257 MA's), (28, 43864), (34, 43822), (37, 43780), (45, 43693), (58, 43612),

Gene: ChampagnePapi_71 Start: 44016, Stop: 43594, Start Num: 7
Candidate Starts for ChampagnePapi_71:
(Start: 7 @44016 has 257 MA's), (28, 43863), (34, 43821), (37, 43779), (45, 43692), (58, 43611),

Gene: Chaph_69 Start: 43588, Stop: 43166, Start Num: 7
Candidate Starts for Chaph_69:
(Start: 7 @43588 has 257 MA's), (28, 43435), (34, 43393), (37, 43351), (45, 43264), (58, 43183),

Gene: Chupacabra_67 Start: 43379, Stop: 42948, Start Num: 7
Candidate Starts for Chupacabra_67:
(Start: 7 @43379 has 257 MA's), (12, 43334), (13, 43331), (20, 43292), (25, 43250), (30, 43214), (31, 43211), (33, 43202), (36, 43130), (37, 43127), (47, 43037), (55, 42983), (58, 42965),

Gene: Cindaradix_65 Start: 43479, Stop: 43057, Start Num: 7
Candidate Starts for Cindaradix_65:
(Start: 7 @43479 has 257 MA's), (15, 43425), (21, 43377), (25, 43350), (34, 43284), (37, 43242), (45, 43155), (53, 43098), (58, 43074),

Gene: Cintron_69 Start: 43727, Stop: 43305, Start Num: 7
Candidate Starts for Cintron_69:
(Start: 7 @43727 has 257 MA's), (28, 43574), (34, 43532), (37, 43490), (45, 43403), (58, 43322),

Gene: Citius_69 Start: 43598, Stop: 43176, Start Num: 7
Candidate Starts for Citius_69:
(Start: 7 @43598 has 257 MA's), (28, 43445), (34, 43403), (37, 43361), (45, 43274), (58, 43193),

Gene: Clammy_74 Start: 44091, Stop: 43678, Start Num: 7
Candidate Starts for Clammy_74:
(Start: 7 @44091 has 257 MA's), (21, 43989), (Start: 23 @43980 has 1 MA's), (30, 43926), (36, 43857), (37, 43854), (38, 43830), (40, 43824), (60, 43686),

Gene: Clarenza_68 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Clarenza_68:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: ClownCar_77 Start: 44290, Stop: 43856, Start Num: 7
Candidate Starts for ClownCar_77:

(Start: 7 @44290 has 257 MA's), (21, 44188), (Start: 23 @44179 has 1 MA's), (26, 44158), (27, 44155), (30, 44125), (33, 44113), (35, 44062), (36, 44059), (38, 44032), (42, 44002), (43, 43984), (45, 43975), (46, 43972), (49, 43948), (62, 43870),

Gene: Cocoaberry_69 Start: 43581, Stop: 43159, Start Num: 7
Candidate Starts for Cocoaberry_69:
(Start: 7 @43581 has 257 MA's), (28, 43428), (34, 43386), (37, 43344), (45, 43257), (58, 43176),

Gene: Colbster_74 Start: 44370, Stop: 44050, Start Num: 24
Candidate Starts for Colbster_74:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: Commander_67 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Commander_67:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: Connomayer_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Connomayer_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Croquant_75 Start: 44481, Stop: 44044, Start Num: 7
Candidate Starts for Croquant_75:
(Start: 7 @44481 has 257 MA's), (21, 44379), (Start: 23 @44370 has 1 MA's), (Start: 24 @44367 has 3 MA's), (26, 44349), (27, 44346), (30, 44316), (33, 44304), (35, 44250), (36, 44247), (43, 44169), (45, 44160), (49, 44133), (52, 44100), (62, 44055),

Gene: Cullens_78 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for Cullens_78:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: DaHudson_77 Start: 44473, Stop: 44039, Start Num: 7
Candidate Starts for DaHudson_77:
(Start: 7 @44473 has 257 MA's), (21, 44371), (Start: 23 @44362 has 1 MA's), (Start: 24 @44359 has 3 MA's), (26, 44341), (27, 44338), (30, 44308), (33, 44296), (35, 44245), (36, 44242), (38, 44215), (43, 44164), (45, 44155), (49, 44128), (52, 44095), (62, 44050),

Gene: Daishi_77 Start: 43348, Stop: 42914, Start Num: 7
Candidate Starts for Daishi_77:
(Start: 7 @43348 has 257 MA's), (21, 43246), (Start: 23 @43237 has 1 MA's), (Start: 24 @43234 has 3 MA's), (26, 43216), (27, 43213), (30, 43183), (33, 43171), (35, 43120), (36, 43117), (38, 43090), (43, 43039), (45, 43030), (49, 43003), (52, 42970), (62, 42925),

Gene: Deano_66 Start: 43585, Stop: 43163, Start Num: 7
Candidate Starts for Deano_66:
(Start: 7 @43585 has 257 MA's), (28, 43432), (34, 43390), (37, 43348), (45, 43261), (58, 43180),

Gene: Dhanush_69 Start: 43580, Stop: 43158, Start Num: 7
Candidate Starts for Dhanush_69:
(Start: 7 @43580 has 257 MA's), (28, 43427), (34, 43385), (37, 43343), (45, 43256), (58, 43175),

Gene: Dieselweasel_78 Start: 44482, Stop: 44048, Start Num: 7
Candidate Starts for Dieselweasel_78:
(Start: 7 @44482 has 257 MA's), (21, 44380), (Start: 23 @44371 has 1 MA's), (Start: 24 @44368 has 3 MA's), (26, 44350), (27, 44347), (30, 44317), (33, 44305), (35, 44254), (36, 44251), (38, 44224), (43, 44173), (45, 44164), (49, 44137), (52, 44104), (62, 44059),

Gene: DirtyDunning_68 Start: 43592, Stop: 43170, Start Num: 7
Candidate Starts for DirtyDunning_68:
(Start: 7 @43592 has 257 MA's), (28, 43439), (34, 43397), (37, 43355), (45, 43268), (58, 43187),

Gene: DontArgue_66 Start: 42344, Stop: 41928, Start Num: 7
Candidate Starts for DontArgue_66:
(Start: 7 @42344 has 257 MA's), (Start: 23 @42233 has 1 MA's), (29, 42188), (30, 42179), (33, 42167), (36, 42110), (37, 42107), (39, 42080), (45, 42026), (47, 42017), (51, 41978), (58, 41945), (60, 41936),

Gene: Drake94_67 Start: 42510, Stop: 42079, Start Num: 7
Candidate Starts for Drake94_67:
(Start: 7 @42510 has 257 MA's), (12, 42465), (13, 42462), (20, 42423), (25, 42381), (30, 42345), (31, 42342), (33, 42333), (36, 42261), (37, 42258), (47, 42168), (55, 42114), (58, 42096),

Gene: DropBear_73 Start: 44009, Stop: 43596, Start Num: 7
Candidate Starts for DropBear_73:
(Start: 7 @44009 has 257 MA's), (21, 43907), (Start: 23 @43898 has 1 MA's), (30, 43844), (33, 43832), (36, 43775), (37, 43772), (38, 43748), (40, 43742), (44, 43697), (58, 43610), (60, 43604),

Gene: Druantia_68 Start: 43580, Stop: 43158, Start Num: 7
Candidate Starts for Druantia_68:
(Start: 7 @43580 has 257 MA's), (28, 43427), (34, 43385), (37, 43343), (45, 43256), (58, 43175),

Gene: DustyMartin_71 Start: 43468, Stop: 43097, Start Num: 15
Candidate Starts for DustyMartin_71:
(Start: 7 @43522 has 257 MA's), (9, 43495), (11, 43489), (15, 43468), (25, 43393), (30, 43357), (36, 43279), (37, 43276), (47, 43186), (50, 43162), (54, 43135), (55, 43132), (60, 43105),

Gene: Eagle_68 Start: 43638, Stop: 43216, Start Num: 7
Candidate Starts for Eagle_68:
(Start: 7 @43638 has 257 MA's), (28, 43485), (34, 43443), (37, 43401), (45, 43314), (51, 43266), (58, 43233),

Gene: Eaglepride_71 Start: 43434, Stop: 43069, Start Num: 16
Candidate Starts for Eaglepride_71:
(Start: 7 @43491 has 257 MA's), (Start: 16 @43434 has 1 MA's), (18, 43425), (21, 43389), (28, 43338), (36, 43257), (37, 43254), (47, 43161), (56, 43101),

Gene: Eapen_69 Start: 43572, Stop: 43150, Start Num: 7
Candidate Starts for Eapen_69:
(Start: 7 @43572 has 257 MA's), (28, 43419), (34, 43377), (37, 43335), (45, 43248), (58, 43167),

Gene: Edison31_66 Start: 43243, Stop: 42812, Start Num: 7
Candidate Starts for Edison31_66:
(Start: 7 @43243 has 257 MA's), (13, 43195), (25, 43114), (30, 43078), (36, 42994), (37, 42991), (45, 42910), (47, 42901), (50, 42877), (55, 42847), (60, 42820), (61, 42817),

Gene: EpicPhail_79 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for EpicPhail_79:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: Eris_68 Start: 43592, Stop: 43170, Start Num: 7
Candidate Starts for Eris_68:
(Start: 7 @43592 has 257 MA's), (28, 43439), (34, 43397), (37, 43355), (45, 43268), (58, 43187),

Gene: Eros_69 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Eros_69:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: EtoileNova_70 Start: 44052, Stop: 43639, Start Num: 7
Candidate Starts for EtoileNova_70:
(4, 44091), (Start: 7 @44052 has 257 MA's), (21, 43950), (22, 43944), (30, 43887), (33, 43875), (36, 43818), (38, 43791), (45, 43731), (48, 43716), (58, 43653),

Gene: Eurydice_70 Start: 43613, Stop: 43191, Start Num: 7
Candidate Starts for Eurydice_70:
(Start: 7 @43613 has 257 MA's), (28, 43460), (34, 43418), (37, 43376), (45, 43289), (58, 43208),

Gene: Farber_78 Start: 44470, Stop: 44036, Start Num: 7
Candidate Starts for Farber_78:
(Start: 7 @44470 has 257 MA's), (21, 44368), (Start: 23 @44359 has 1 MA's), (Start: 24 @44356 has 3 MA's), (26, 44338), (27, 44335), (30, 44305), (33, 44293), (35, 44242), (36, 44239), (43, 44161), (45, 44152), (49, 44125), (52, 44092), (62, 44047),

Gene: Fernando_78 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for Fernando_78:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Florean_69 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Florean_69:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: Flux_69 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Flux_69:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: FlyCatcher_74 Start: 47594, Stop: 47181, Start Num: 7
Candidate Starts for FlyCatcher_74:
(Start: 7 @47594 has 257 MA's), (13, 47546), (21, 47492), (Start: 23 @47483 has 1 MA's), (25, 47465), (26, 47462), (27, 47459), (30, 47429), (33, 47417), (36, 47360), (37, 47357), (38, 47333), (45, 47276), (57, 47198),

Gene: Fred313_70 Start: 43703, Stop: 43290, Start Num: 7
Candidate Starts for Fred313_70:

(Start: 7 @43703 has 257 MA's), (21, 43601), (Start: 23 @43592 has 1 MA's), (30, 43538), (33, 43526), (36, 43469), (37, 43466), (38, 43442), (40, 43436), (44, 43391), (58, 43304), (60, 43298),

Gene: Funston_68 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Funston_68:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Gadost_69 Start: 43581, Stop: 43159, Start Num: 7
Candidate Starts for Gadost_69:
(Start: 7 @43581 has 257 MA's), (28, 43428), (34, 43386), (37, 43344), (45, 43257), (58, 43176),

Gene: Gemma_75 Start: 44293, Stop: 43859, Start Num: 7
Candidate Starts for Gemma_75:
(Start: 7 @44293 has 257 MA's), (21, 44191), (Start: 23 @44182 has 1 MA's), (26, 44161), (27, 44158), (30, 44128), (33, 44116), (35, 44065), (36, 44062), (38, 44035), (41, 44026), (42, 44005), (43, 43987), (45, 43978), (46, 43975), (49, 43951), (62, 43873),

Gene: GingkoMaracino_78 Start: 44366, Stop: 43932, Start Num: 7
Candidate Starts for GingkoMaracino_78:
(Start: 7 @44366 has 257 MA's), (21, 44264), (Start: 23 @44255 has 1 MA's), (Start: 24 @44252 has 3 MA's), (26, 44234), (27, 44231), (30, 44201), (33, 44189), (35, 44138), (36, 44135), (43, 44057), (45, 44048), (49, 44021), (52, 43988), (62, 43943),

Gene: Giroux_75 Start: 44090, Stop: 43677, Start Num: 7
Candidate Starts for Giroux_75:
(Start: 7 @44090 has 257 MA's), (21, 43988), (Start: 23 @43979 has 1 MA's), (30, 43925), (36, 43856), (37, 43853), (38, 43829), (40, 43823), (60, 43685),

Gene: Goose_70 Start: 43189, Stop: 42761, Start Num: 7
Candidate Starts for Goose_70:
(Start: 7 @43189 has 257 MA's), (13, 43141), (25, 43060), (30, 43024), (36, 42943), (37, 42940), (45, 42859), (47, 42850), (50, 42826), (55, 42796), (58, 42778),

Gene: Goose1D_64 Start: 40190, Stop: 39777, Start Num: 7
Candidate Starts for Goose1D_64:
(Start: 7 @40190 has 257 MA's), (21, 40088), (Start: 23 @40079 has 1 MA's), (30, 40025), (33, 40013), (36, 39956), (37, 39953), (38, 39929), (40, 39923), (45, 39872), (60, 39785),

Gene: Goose1X_70 Start: 43332, Stop: 42919, Start Num: 7
Candidate Starts for Goose1X_70:
(Start: 7 @43332 has 257 MA's), (21, 43230), (Start: 23 @43221 has 1 MA's), (30, 43167), (33, 43155), (36, 43098), (37, 43095), (38, 43071), (40, 43065), (45, 43014), (60, 42927),

Gene: Grif_76 Start: 44557, Stop: 44120, Start Num: 7
Candidate Starts for Grif_76:
(Start: 7 @44557 has 257 MA's), (21, 44455), (Start: 23 @44446 has 1 MA's), (Start: 24 @44443 has 3 MA's), (26, 44425), (27, 44422), (30, 44392), (33, 44380), (35, 44326), (36, 44323), (43, 44245), (45, 44236), (49, 44209), (52, 44176), (62, 44131),

Gene: Groupthink_78 Start: 44294, Stop: 43863, Start Num: 7
Candidate Starts for Groupthink_78:
(Start: 7 @44294 has 257 MA's), (21, 44192), (Start: 23 @44183 has 1 MA's), (26, 44162), (27, 44159), (33, 44117), (35, 44066), (36, 44063), (38, 44036), (42, 44006), (43, 43988), (45, 43979), (49, 43952),

(62, 43874),

Gene: Grub_76 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for Grub_76:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (Start: 24 @44358 has 3 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (35, 44244), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Grum1_77 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for Grum1_77:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: GtownJaz_78 Start: 44481, Stop: 44047, Start Num: 7
Candidate Starts for GtownJaz_78:
(Start: 7 @44481 has 257 MA's), (21, 44379), (Start: 23 @44370 has 1 MA's), (Start: 24 @44367 has 3 MA's), (26, 44349), (27, 44346), (30, 44316), (33, 44304), (35, 44253), (36, 44250), (38, 44223), (43, 44172), (45, 44163), (49, 44136), (52, 44103), (62, 44058),

Gene: Gwennie_78 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for Gwennie_78:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: HamSlice_65 Start: 43575, Stop: 43153, Start Num: 7
Candidate Starts for HamSlice_65:
(Start: 7 @43575 has 257 MA's), (28, 43422), (34, 43380), (37, 43338), (45, 43251), (58, 43170),

Gene: Happiness_68 Start: 43599, Stop: 43177, Start Num: 7
Candidate Starts for Happiness_68:
(Start: 7 @43599 has 257 MA's), (28, 43446), (34, 43404), (37, 43362), (45, 43275), (58, 43194),

Gene: HashRod_79 Start: 44508, Stop: 44074, Start Num: 7
Candidate Starts for HashRod_79:
(Start: 7 @44508 has 257 MA's), (21, 44406), (Start: 23 @44397 has 1 MA's), (Start: 24 @44394 has 3 MA's), (26, 44376), (27, 44373), (30, 44343), (33, 44331), (35, 44280), (36, 44277), (43, 44199), (45, 44190), (49, 44163), (52, 44130), (62, 44085),

Gene: HaveUMetTed_78 Start: 44282, Stop: 43848, Start Num: 7
Candidate Starts for HaveUMetTed_78:
(Start: 7 @44282 has 257 MA's), (21, 44180), (Start: 23 @44171 has 1 MA's), (26, 44150), (27, 44147), (30, 44117), (33, 44105), (35, 44054), (36, 44051), (38, 44024), (41, 44015), (42, 43994), (43, 43976), (45, 43967), (46, 43964), (49, 43940), (62, 43862),

Gene: Heathen_72 Start: 43798, Stop: 43385, Start Num: 7
Candidate Starts for Heathen_72:
(Start: 7 @43798 has 257 MA's), (21, 43696), (Start: 23 @43687 has 1 MA's), (30, 43633), (33, 43621), (36, 43564), (37, 43561), (38, 43537), (40, 43531), (44, 43486), (58, 43399), (60, 43393),

Gene: HelDan_72 Start: 44014, Stop: 43601, Start Num: 7
Candidate Starts for HelDan_72:

(Start: 7 @44014 has 257 MA's), (21, 43912), (Start: 23 @43903 has 1 MA's), (30, 43849), (33, 43837), (36, 43780), (37, 43777), (38, 43753), (40, 43747), (44, 43702), (58, 43615), (60, 43609),

Gene: Heliosoles_75 Start: 44297, Stop: 43866, Start Num: 7
Candidate Starts for Heliosoles_75:
(Start: 7 @44297 has 257 MA's), (21, 44195), (Start: 23 @44186 has 1 MA's), (26, 44165), (27, 44162), (33, 44120), (35, 44069), (36, 44066), (38, 44039), (42, 44009), (43, 43991), (45, 43982), (49, 43955), (62, 43877),

Gene: Hercules11_78 Start: 44492, Stop: 44055, Start Num: 7
Candidate Starts for Hercules11_78:
(Start: 7 @44492 has 257 MA's), (21, 44390), (Start: 23 @44381 has 1 MA's), (Start: 24 @44378 has 3 MA's), (26, 44360), (27, 44357), (30, 44327), (33, 44315), (35, 44261), (36, 44258), (43, 44180), (45, 44171), (49, 44144), (52, 44111), (62, 44066),

Gene: Holli_68 Start: 43367, Stop: 42945, Start Num: 7
Candidate Starts for Holli_68:
(Start: 7 @43367 has 257 MA's), (28, 43214), (34, 43172), (37, 43130), (45, 43043), (58, 42962),

Gene: Hookmount_72 Start: 44049, Stop: 43636, Start Num: 7
Candidate Starts for Hookmount_72:
(5, 44073), (Start: 7 @44049 has 257 MA's), (21, 43947), (22, 43941), (30, 43884), (33, 43872), (36, 43815), (38, 43788), (45, 43728), (48, 43713), (58, 43650),

Gene: Houdini22_68 Start: 43581, Stop: 43159, Start Num: 7
Candidate Starts for Houdini22_68:
(Start: 7 @43581 has 257 MA's), (28, 43428), (34, 43386), (37, 43344), (45, 43257), (58, 43176),

Gene: Huxley_68 Start: 43641, Stop: 43219, Start Num: 7
Candidate Starts for Huxley_68:
(Start: 7 @43641 has 257 MA's), (28, 43488), (34, 43446), (37, 43404), (45, 43317), (58, 43236),

Gene: ICleared_68 Start: 43645, Stop: 43223, Start Num: 7
Candidate Starts for ICleared_68:
(Start: 7 @43645 has 257 MA's), (28, 43492), (34, 43450), (37, 43408), (45, 43321), (58, 43240),

Gene: Iceman_68 Start: 43866, Stop: 43444, Start Num: 7
Candidate Starts for Iceman_68:
(Start: 7 @43866 has 257 MA's), (28, 43713), (34, 43671), (37, 43629), (45, 43542), (58, 43461),

Gene: Idleandcovert_73 Start: 44091, Stop: 43678, Start Num: 7
Candidate Starts for Idleandcovert_73:
(Start: 7 @44091 has 257 MA's), (21, 43989), (Start: 23 @43980 has 1 MA's), (30, 43926), (36, 43857), (37, 43854), (38, 43830), (40, 43824), (60, 43686),

Gene: Iracema64_69 Start: 43844, Stop: 43422, Start Num: 7
Candidate Starts for Iracema64_69:
(Start: 7 @43844 has 257 MA's), (28, 43691), (34, 43649), (37, 43607), (45, 43520), (58, 43439),

Gene: Isca_70 Start: 43569, Stop: 43156, Start Num: 7
Candidate Starts for Isca_70:
(Start: 7 @43569 has 257 MA's), (21, 43467), (30, 43404), (36, 43335), (37, 43332), (38, 43308), (40, 43302), (60, 43164),

Gene: JF2_70 Start: 42264, Stop: 41851, Start Num: 7
Candidate Starts for JF2_70:
(Start: 7 @42264 has 257 MA's), (21, 42162), (30, 42099), (36, 42030), (37, 42027), (38, 42003), (60, 41859),

Gene: JF4_70 Start: 42264, Stop: 41851, Start Num: 7
Candidate Starts for JF4_70:
(Start: 7 @42264 has 257 MA's), (21, 42162), (30, 42099), (36, 42030), (37, 42027), (38, 42003), (60, 41859),

Gene: Jaykayelowell_66 Start: 43570, Stop: 43148, Start Num: 7
Candidate Starts for Jaykayelowell_66:
(Start: 7 @43570 has 257 MA's), (28, 43417), (34, 43375), (37, 43333), (45, 43246), (58, 43165),

Gene: JenCasNa_79 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for JenCasNa_79:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: JeppNRM_78 Start: 44295, Stop: 43864, Start Num: 7
Candidate Starts for JeppNRM_78:
(Start: 7 @44295 has 257 MA's), (21, 44193), (Start: 23 @44184 has 1 MA's), (26, 44163), (27, 44160), (33, 44118), (35, 44067), (36, 44064), (38, 44037), (42, 44007), (43, 43989), (45, 43980), (49, 43953), (62, 43875),

Gene: JetBlade_69 Start: 43607, Stop: 43185, Start Num: 7
Candidate Starts for JetBlade_69:
(Start: 7 @43607 has 257 MA's), (28, 43454), (34, 43412), (37, 43370), (45, 43283), (58, 43202),

Gene: Jobu08_74 Start: 44311, Stop: 43877, Start Num: 7
Candidate Starts for Jobu08_74:
(Start: 7 @44311 has 257 MA's), (21, 44209), (Start: 23 @44200 has 1 MA's), (26, 44179), (27, 44176), (30, 44146), (33, 44134), (35, 44083), (36, 44080), (38, 44053), (42, 44023), (43, 44005), (46, 43993), (49, 43969), (62, 43891),

Gene: JoongJeon_68 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for JoongJeon_68:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Junimo_65 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Junimo_65:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: KADY_75 Start: 44508, Stop: 44074, Start Num: 7
Candidate Starts for KADY_75:
(Start: 7 @44508 has 257 MA's), (21, 44406), (Start: 23 @44397 has 1 MA's), (26, 44376), (27, 44373), (33, 44331), (35, 44280), (36, 44277), (38, 44250), (41, 44241), (45, 44190), (51, 44136), (57, 44106), (62, 44085),

Gene: KFPoly_68 Start: 43571, Stop: 43149, Start Num: 7
Candidate Starts for KFPoly_68:

(Start: 7 @43571 has 257 MA's), (28, 43418), (34, 43376), (37, 43334), (45, 43247), (58, 43166),

Gene: Kachowdy_73 Start: 44050, Stop: 43637, Start Num: 7
Candidate Starts for Kachowdy_73:
(Start: 7 @44050 has 257 MA's), (21, 43948), (Start: 23 @43939 has 1 MA's), (30, 43885), (33, 43873), (36, 43816), (37, 43813), (38, 43789), (40, 43783), (44, 43738), (58, 43651), (60, 43645),

Gene: Kalb97_78 Start: 44293, Stop: 43862, Start Num: 7
Candidate Starts for Kalb97_78:
(Start: 7 @44293 has 257 MA's), (21, 44191), (Start: 23 @44182 has 1 MA's), (26, 44161), (27, 44158), (33, 44116), (35, 44065), (36, 44062), (38, 44035), (42, 44005), (43, 43987), (45, 43978), (49, 43951), (62, 43873),

Gene: Kalnoky_78 Start: 44291, Stop: 43860, Start Num: 7
Candidate Starts for Kalnoky_78:
(Start: 7 @44291 has 257 MA's), (21, 44189), (Start: 23 @44180 has 1 MA's), (26, 44159), (27, 44156), (33, 44114), (35, 44063), (36, 44060), (38, 44033), (42, 44003), (43, 43985), (45, 43976), (49, 43949), (62, 43871),

Gene: Kampy_68 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Kampy_68:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: KekoraPapaka_66 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for KekoraPapaka_66:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Kingmustik0402_69 Start: 43566, Stop: 43144, Start Num: 7
Candidate Starts for Kingmustik0402_69:
(Start: 7 @43566 has 257 MA's), (28, 43413), (34, 43371), (37, 43329), (45, 43242), (58, 43161),

Gene: KittenMittens_66 Start: 42518, Stop: 42087, Start Num: 7
Candidate Starts for KittenMittens_66:
(Start: 7 @42518 has 257 MA's), (12, 42473), (13, 42470), (20, 42431), (25, 42389), (30, 42353), (31, 42350), (33, 42341), (36, 42269), (37, 42266), (47, 42176), (55, 42122), (58, 42104),

Gene: Koan_66 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Koan_66:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Koreni_68 Start: 43258, Stop: 42836, Start Num: 7
Candidate Starts for Koreni_68:
(Start: 7 @43258 has 257 MA's), (28, 43105), (34, 43063), (37, 43021), (45, 42934), (58, 42853),

Gene: Kratark_68 Start: 43614, Stop: 43192, Start Num: 7
Candidate Starts for Kratark_68:
(Start: 7 @43614 has 257 MA's), (28, 43461), (34, 43419), (37, 43377), (45, 43290), (58, 43209),

Gene: Kremtemulon_68 Start: 43710, Stop: 43288, Start Num: 7
Candidate Starts for Kremtemulon_68:
(Start: 7 @43710 has 257 MA's), (34, 43515), (37, 43473), (45, 43386), (58, 43305),

Gene: Kristoff_68 Start: 43820, Stop: 43389, Start Num: 7

Candidate Starts for Kristoff_68:
(Start: 7 @43820 has 257 MA's), (13, 43772), (Start: 23 @43709 has 1 MA's), (25, 43691), (30, 43655), (33, 43643), (36, 43571), (37, 43568), (45, 43487), (47, 43478), (50, 43454), (55, 43424),

Gene: Kyee_69 Start: 43575, Stop: 43153, Start Num: 7
Candidate Starts for Kyee_69:
(Start: 7 @43575 has 257 MA's), (28, 43422), (34, 43380), (37, 43338), (45, 43251), (58, 43170),

Gene: LBerry_79 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for LBerry_79:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (38, 44226), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: LHTSCC_71 Start: 44016, Stop: 43594, Start Num: 7
Candidate Starts for LHTSCC_71:
(Start: 7 @44016 has 257 MA's), (28, 43863), (34, 43821), (37, 43779), (45, 43692), (58, 43611),

Gene: Lambert1_72 Start: 44048, Stop: 43635, Start Num: 7
Candidate Starts for Lambert1_72:
(Start: 1 @44132 has 1 MA's), (2, 44126), (4, 44087), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: LappelDuVide_69 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for LappelDuVide_69:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: LarryKay_78 Start: 44512, Stop: 44075, Start Num: 7
Candidate Starts for LarryKay_78:
(Start: 7 @44512 has 257 MA's), (21, 44410), (Start: 23 @44401 has 1 MA's), (Start: 24 @44398 has 3 MA's), (26, 44380), (27, 44377), (30, 44347), (33, 44335), (35, 44284), (36, 44281), (38, 44254), (43, 44203), (45, 44194), (49, 44164), (52, 44131), (62, 44086),

Gene: Lemur_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Lemur_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: LeoAvram_68 Start: 43607, Stop: 43185, Start Num: 7
Candidate Starts for LeoAvram_68:
(Start: 7 @43607 has 257 MA's), (28, 43454), (34, 43412), (37, 43370), (45, 43283), (58, 43202),

Gene: Lilith_76 Start: 44359, Stop: 44039, Start Num: 24
Candidate Starts for Lilith_76:
(Start: 7 @44473 has 257 MA's), (21, 44371), (Start: 23 @44362 has 1 MA's), (Start: 24 @44359 has 3 MA's), (26, 44341), (27, 44338), (30, 44308), (33, 44296), (35, 44245), (36, 44242), (38, 44215), (43, 44164), (45, 44155), (49, 44128), (52, 44095), (62, 44050),

Gene: LittleB_69 Start: 43578, Stop: 43156, Start Num: 7
Candidate Starts for LittleB_69:
(Start: 7 @43578 has 257 MA's), (28, 43425), (34, 43383), (37, 43341), (45, 43254), (58, 43173),

Gene: LittleGuy_69 Start: 43473, Stop: 43051, Start Num: 7
Candidate Starts for LittleGuy_69:

(Start: 7 @43473 has 257 MA's), (28, 43320), (34, 43278), (37, 43236), (45, 43149), (58, 43068),

Gene: LochMonster_70 Start: 43816, Stop: 43394, Start Num: 7
Candidate Starts for LochMonster_70:
(Start: 7 @43816 has 257 MA's), (28, 43663), (34, 43621), (37, 43579), (45, 43492), (58, 43411),

Gene: Lorenzo_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Lorenzo_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Louie6_77 Start: 44510, Stop: 44076, Start Num: 7
Candidate Starts for Louie6_77:
(Start: 7 @44510 has 257 MA's), (21, 44408), (Start: 23 @44399 has 1 MA's), (26, 44378), (27, 44375), (33, 44333), (35, 44282), (36, 44279), (38, 44252), (41, 44243), (45, 44192), (51, 44138), (57, 44108), (62, 44087),

Gene: Lowa_78 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for Lowa_78:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (Start: 24 @44358 has 3 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (35, 44244), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: LugYA_81 Start: 44484, Stop: 44047, Start Num: 7
Candidate Starts for LugYA_81:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44253), (36, 44250), (43, 44172), (45, 44163), (49, 44136), (52, 44103), (62, 44058),

Gene: Lunsford_69 Start: 43571, Stop: 43149, Start Num: 7
Candidate Starts for Lunsford_69:
(Start: 7 @43571 has 257 MA's), (28, 43418), (34, 43376), (37, 43334), (45, 43247), (58, 43166),

Gene: MA5_72 Start: 43473, Stop: 43060, Start Num: 7
Candidate Starts for MA5_72:
(Start: 7 @43473 has 257 MA's), (21, 43371), (30, 43308), (36, 43239), (37, 43236), (38, 43212), (60, 43068),

Gene: MadMarie_76 Start: 44367, Stop: 44047, Start Num: 24
Candidate Starts for MadMarie_76:
(Start: 7 @44481 has 257 MA's), (21, 44379), (Start: 23 @44370 has 1 MA's), (Start: 24 @44367 has 3 MA's), (26, 44349), (27, 44346), (30, 44316), (33, 44304), (35, 44253), (36, 44250), (38, 44223), (43, 44172), (45, 44163), (49, 44136), (52, 44103), (62, 44058),

Gene: Mainiac_77 Start: 44473, Stop: 44039, Start Num: 7
Candidate Starts for Mainiac_77:
(Start: 7 @44473 has 257 MA's), (21, 44371), (Start: 23 @44362 has 1 MA's), (Start: 24 @44359 has 3 MA's), (26, 44341), (27, 44338), (30, 44308), (33, 44296), (35, 44245), (36, 44242), (38, 44215), (43, 44164), (45, 44155), (49, 44128), (52, 44095), (62, 44050),

Gene: Malinsilva_80 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for Malinsilva_80:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (Start: 24 @44358 has 3 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (35, 44244), (36, 44241), (38, 44214), (43,

44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Manu_77 Start: 44297, Stop: 43863, Start Num: 7
Candidate Starts for Manu_77:
(Start: 7 @44297 has 257 MA's), (21, 44195), (Start: 23 @44186 has 1 MA's), (26, 44165), (27, 44162), (30, 44132), (33, 44120), (35, 44069), (36, 44066), (38, 44039), (41, 44030), (42, 44009), (43, 43991), (45, 43982), (46, 43979), (49, 43955), (62, 43877),

Gene: MarQuardt_78 Start: 44482, Stop: 44048, Start Num: 7
Candidate Starts for MarQuardt_78:
(Start: 7 @44482 has 257 MA's), (21, 44380), (Start: 23 @44371 has 1 MA's), (Start: 24 @44368 has 3 MA's), (26, 44350), (27, 44347), (30, 44317), (33, 44305), (35, 44254), (36, 44251), (38, 44224), (43, 44173), (45, 44164), (49, 44137), (52, 44104), (62, 44059),

Gene: Marchesa_70 Start: 44000, Stop: 43587, Start Num: 7
Candidate Starts for Marchesa_70:
(Start: 7 @44000 has 257 MA's), (21, 43898), (Start: 23 @43889 has 1 MA's), (30, 43835), (33, 43823), (36, 43766), (37, 43763), (38, 43739), (40, 43733), (44, 43688), (58, 43601), (60, 43595),

Gene: Margo_72 Start: 44074, Stop: 43661, Start Num: 7
Candidate Starts for Margo_72:
(5, 44098), (Start: 7 @44074 has 257 MA's), (21, 43972), (22, 43966), (30, 43909), (33, 43897), (36, 43840), (38, 43813), (45, 43753), (48, 43738), (58, 43675),

Gene: Marie_76 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for Marie_76:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Marius_78 Start: 44291, Stop: 43860, Start Num: 7
Candidate Starts for Marius_78:
(Start: 7 @44291 has 257 MA's), (21, 44189), (Start: 23 @44180 has 1 MA's), (26, 44159), (27, 44156), (33, 44114), (35, 44063), (36, 44060), (38, 44033), (42, 44003), (43, 43985), (45, 43976), (49, 43949), (62, 43871),

Gene: Maverick_68 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Maverick_68:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Maxo_70 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Maxo_70:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Mayonnaise_66 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Mayonnaise_66:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Mazhar510_69 Start: 43578, Stop: 43156, Start Num: 7
Candidate Starts for Mazhar510_69:
(Start: 7 @43578 has 257 MA's), (28, 43425), (34, 43383), (37, 43341), (45, 43254), (58, 43173),

Gene: Medusa_69 Start: 43591, Stop: 43169, Start Num: 7

Candidate Starts for Medusa_69:
(Start: 7 @43591 has 257 MA's), (28, 43438), (34, 43396), (37, 43354), (45, 43267), (58, 43186),

Gene: MeeZee_68 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for MeeZee_68:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Melvin_71 Start: 43572, Stop: 43150, Start Num: 7
Candidate Starts for Melvin_71:
(Start: 7 @43572 has 257 MA's), (28, 43419), (34, 43377), (37, 43335), (45, 43248), (58, 43167),

Gene: Methuselah_71 Start: 44504, Stop: 44070, Start Num: 7
Candidate Starts for Methuselah_71:
(Start: 7 @44504 has 257 MA's), (21, 44402), (Start: 23 @44393 has 1 MA's), (Start: 24 @44390 has 3 MA's), (26, 44372), (27, 44369), (30, 44339), (33, 44327), (35, 44276), (36, 44273), (43, 44195), (45, 44186), (49, 44159), (52, 44126), (62, 44081),

Gene: Microwolf_74 Start: 44496, Stop: 44062, Start Num: 7
Candidate Starts for Microwolf_74:
(Start: 7 @44496 has 257 MA's), (21, 44394), (Start: 23 @44385 has 1 MA's), (Start: 24 @44382 has 3 MA's), (26, 44364), (27, 44361), (30, 44331), (33, 44319), (35, 44268), (36, 44265), (38, 44238), (43, 44187), (45, 44178), (49, 44151), (52, 44118), (62, 44073),

Gene: Millski_68 Start: 43578, Stop: 43156, Start Num: 7
Candidate Starts for Millski_68:
(Start: 7 @43578 has 257 MA's), (28, 43425), (34, 43383), (37, 43341), (45, 43254), (58, 43173),

Gene: Misomonster_79 Start: 44396, Stop: 44073, Start Num: 23
Candidate Starts for Misomonster_79:
(21, 44405), (Start: 23 @44396 has 1 MA's), (26, 44375), (27, 44372), (33, 44330), (35, 44279), (36, 44276), (38, 44249), (41, 44240), (45, 44189), (51, 44135), (57, 44105), (62, 44084),

Gene: MoneyMay_77 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for MoneyMay_77:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Montavir_73 Start: 44480, Stop: 44046, Start Num: 7
Candidate Starts for Montavir_73:
(Start: 7 @44480 has 257 MA's), (21, 44378), (Start: 23 @44369 has 1 MA's), (Start: 24 @44366 has 3 MA's), (26, 44348), (27, 44345), (30, 44315), (33, 44303), (35, 44252), (36, 44249), (38, 44222), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Morrow_70 Start: 43619, Stop: 43197, Start Num: 7
Candidate Starts for Morrow_70:
(Start: 7 @43619 has 257 MA's), (28, 43466), (34, 43424), (37, 43382), (45, 43295), (58, 43214),

Gene: MuchMore_81 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for MuchMore_81:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Nebs_70 Start: 43616, Stop: 43194, Start Num: 7
Candidate Starts for Nebs_70:
(Start: 7 @43616 has 257 MA's), (28, 43463), (34, 43421), (37, 43379), (45, 43292), (58, 43211),

Gene: Nemo27_68 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Nemo27_68:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: Noella_72 Start: 44049, Stop: 43636, Start Num: 7
Candidate Starts for Noella_72:
(5, 44073), (Start: 7 @44049 has 257 MA's), (21, 43947), (22, 43941), (30, 43884), (33, 43872), (36, 43815), (38, 43788), (45, 43728), (48, 43713), (58, 43650),

Gene: Norbert_68 Start: 44047, Stop: 43634, Start Num: 7
Candidate Starts for Norbert_68:
(5, 44071), (Start: 7 @44047 has 257 MA's), (21, 43945), (22, 43939), (30, 43882), (33, 43870), (36, 43813), (38, 43786), (45, 43726), (48, 43711), (58, 43648),

Gene: NorthStar_67 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for NorthStar_67:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Northrop_66 Start: 43573, Stop: 43151, Start Num: 7
Candidate Starts for Northrop_66:
(Start: 7 @43573 has 257 MA's), (28, 43420), (34, 43378), (37, 43336), (45, 43249), (58, 43168),

Gene: NotAPhaseMom_68 Start: 43581, Stop: 43159, Start Num: 7
Candidate Starts for NotAPhaseMom_68:
(Start: 7 @43581 has 257 MA's), (28, 43428), (34, 43386), (37, 43344), (45, 43257), (58, 43176),

Gene: Nyxis_68 Start: 43467, Stop: 43045, Start Num: 7
Candidate Starts for Nyxis_68:
(Start: 7 @43467 has 257 MA's), (28, 43314), (34, 43272), (37, 43230), (45, 43143), (58, 43062),

Gene: OKCentral2016_67 Start: 42617, Stop: 42186, Start Num: 7
Candidate Starts for OKCentral2016_67:
(Start: 7 @42617 has 257 MA's), (13, 42569), (20, 42530), (25, 42488), (30, 42452), (31, 42449), (33, 42440), (36, 42368), (37, 42365), (47, 42275), (55, 42221), (58, 42203),

Gene: OKaNui_68 Start: 43627, Stop: 43205, Start Num: 7
Candidate Starts for OKaNui_68:
(Start: 7 @43627 has 257 MA's), (28, 43474), (32, 43453), (34, 43432), (37, 43390), (45, 43303), (58, 43222),

Gene: Obama12_70 Start: 44000, Stop: 43578, Start Num: 7
Candidate Starts for Obama12_70:
(Start: 7 @44000 has 257 MA's), (28, 43847), (34, 43805), (37, 43763), (45, 43676), (58, 43595),

Gene: Ohfah_70 Start: 43616, Stop: 43194, Start Num: 7
Candidate Starts for Ohfah_70:
(Start: 7 @43616 has 257 MA's), (28, 43463), (34, 43421), (37, 43379), (45, 43292), (58, 43211),

Gene: OlanP_76 Start: 44470, Stop: 44036, Start Num: 7
Candidate Starts for OlanP_76:
(Start: 7 @44470 has 257 MA's), (21, 44368), (Start: 23 @44359 has 1 MA's), (26, 44338), (27, 44335), (30, 44305), (33, 44293), (35, 44242), (36, 44239), (38, 44212), (42, 44182), (43, 44164), (45, 44155), (46, 44152), (49, 44128), (62, 44050),

Gene: Ollie_78 Start: 44351, Stop: 43917, Start Num: 7
Candidate Starts for Ollie_78:
(Start: 7 @44351 has 257 MA's), (21, 44249), (Start: 23 @44240 has 1 MA's), (Start: 24 @44237 has 3 MA's), (26, 44219), (27, 44216), (30, 44186), (33, 44174), (35, 44123), (36, 44120), (43, 44042), (45, 44033), (49, 44006), (52, 43973), (62, 43928),

Gene: P28Green_78 Start: 44486, Stop: 44049, Start Num: 7
Candidate Starts for P28Green_78:
(Start: 7 @44486 has 257 MA's), (21, 44384), (Start: 23 @44375 has 1 MA's), (Start: 24 @44372 has 3 MA's), (26, 44354), (27, 44351), (30, 44321), (33, 44309), (35, 44255), (36, 44252), (43, 44174), (45, 44165), (49, 44138), (52, 44105), (62, 44060),

Gene: PGHhamlin_80 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for PGHhamlin_80:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (Start: 24 @44358 has 3 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (35, 44244), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Palestino_68 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Palestino_68:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Panamaxus_70 Start: 44132, Stop: 43635, Start Num: 1
Candidate Starts for Panamaxus_70:
(Start: 1 @44132 has 1 MA's), (2, 44126), (4, 44087), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: Pawn_76 Start: 44298, Stop: 43867, Start Num: 7
Candidate Starts for Pawn_76:
(Start: 7 @44298 has 257 MA's), (21, 44196), (Start: 23 @44187 has 1 MA's), (26, 44166), (27, 44163), (33, 44121), (35, 44070), (36, 44067), (38, 44040), (42, 44010), (43, 43992), (45, 43983), (49, 43956), (62, 43878),

Gene: PeaceMeal1_67 Start: 42519, Stop: 42088, Start Num: 7
Candidate Starts for PeaceMeal1_67:
(Start: 7 @42519 has 257 MA's), (12, 42474), (13, 42471), (20, 42432), (25, 42390), (30, 42354), (33, 42342), (36, 42270), (37, 42267), (47, 42177), (55, 42123), (58, 42105),

Gene: Peaches_67 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Peaches_67:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: Pembroke_78 Start: 44481, Stop: 44047, Start Num: 7
Candidate Starts for Pembroke_78:
(Start: 7 @44481 has 257 MA's), (21, 44379), (Start: 23 @44370 has 1 MA's), (Start: 24 @44367 has 3 MA's), (26, 44349), (27, 44346), (30, 44316), (33, 44304), (35, 44253), (36, 44250), (38, 44223), (43, 44172), (45, 44163), (49, 44136), (52, 44103), (62, 44058),

Gene: Penny1_78 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for Penny1_78:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: PeterPeter_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for PeterPeter_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Phacado_69 Start: 43576, Stop: 43154, Start Num: 7
Candidate Starts for Phacado_69:
(Start: 7 @43576 has 257 MA's), (28, 43423), (34, 43381), (37, 43339), (45, 43252), (58, 43171),

Gene: Phantastic_74 Start: 43731, Stop: 43318, Start Num: 7
Candidate Starts for Phantastic_74:
(Start: 7 @43731 has 257 MA's), (21, 43629), (27, 43596), (30, 43566), (36, 43497), (37, 43494), (38, 43470), (40, 43464), (58, 43332), (60, 43326),

Gene: Phelipe_70 Start: 43616, Stop: 43194, Start Num: 7
Candidate Starts for Phelipe_70:
(Start: 7 @43616 has 257 MA's), (28, 43463), (34, 43421), (37, 43379), (45, 43292), (58, 43211),

Gene: Phighter1804_69 Start: 43641, Stop: 43219, Start Num: 7
Candidate Starts for Phighter1804_69:
(Start: 7 @43641 has 257 MA's), (28, 43488), (34, 43446), (37, 43404), (45, 43317), (58, 43236),

Gene: PhishRPhriends_74 Start: 43478, Stop: 43044, Start Num: 7
Candidate Starts for PhishRPhriends_74:
(Start: 7 @43478 has 257 MA's), (21, 43376), (Start: 23 @43367 has 1 MA's), (26, 43346), (27, 43343), (30, 43313), (33, 43301), (35, 43250), (36, 43247), (38, 43220), (41, 43211), (42, 43190), (43, 43172), (45, 43163), (46, 43160), (49, 43136), (62, 43058),

Gene: Phoebe_79 Start: 44476, Stop: 44039, Start Num: 7
Candidate Starts for Phoebe_79:
(Start: 7 @44476 has 257 MA's), (21, 44374), (Start: 23 @44365 has 1 MA's), (Start: 24 @44362 has 3 MA's), (26, 44344), (27, 44341), (30, 44311), (33, 44299), (35, 44245), (36, 44242), (43, 44164), (45, 44155), (49, 44128), (52, 44095), (62, 44050),

Gene: Phontbonne_69 Start: 43483, Stop: 43061, Start Num: 7
Candidate Starts for Phontbonne_69:
(Start: 7 @43483 has 257 MA's), (28, 43330), (34, 43288), (37, 43246), (45, 43159), (58, 43078),

Gene: Phoxy_78 Start: 44505, Stop: 44071, Start Num: 7
Candidate Starts for Phoxy_78:
(Start: 7 @44505 has 257 MA's), (21, 44403), (Start: 23 @44394 has 1 MA's), (Start: 24 @44391 has 3 MA's), (26, 44373), (27, 44370), (30, 44340), (33, 44328), (35, 44277), (36, 44274), (43, 44196), (45, 44187), (49, 44160), (52, 44127), (62, 44082),

Gene: Phranny_74 Start: 43461, Stop: 43027, Start Num: 7
Candidate Starts for Phranny_74:

(Start: 7 @43461 has 257 MA's), (21, 43359), (Start: 23 @43350 has 1 MA's), (26, 43329), (27, 43326), (30, 43296), (33, 43284), (35, 43233), (36, 43230), (38, 43203), (41, 43194), (42, 43173), (43, 43155), (45, 43146), (46, 43143), (49, 43119), (62, 43041),

Gene: Pipcraft_66 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Pipcraft_66:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Pistachio_72 Start: 43638, Stop: 43225, Start Num: 7
Candidate Starts for Pistachio_72:
(Start: 7 @43638 has 257 MA's), (21, 43536), (Start: 23 @43527 has 1 MA's), (30, 43473), (36, 43404), (37, 43401), (38, 43377), (40, 43371), (60, 43233),

Gene: Pocahontas_71 Start: 44045, Stop: 43632, Start Num: 7
Candidate Starts for Pocahontas_71:
(5, 44069), (Start: 7 @44045 has 257 MA's), (21, 43943), (22, 43937), (30, 43880), (33, 43868), (36, 43811), (38, 43784), (45, 43724), (48, 43709), (58, 43646),

Gene: Polymorphads_69 Start: 43597, Stop: 43175, Start Num: 7
Candidate Starts for Polymorphads_69:
(Start: 7 @43597 has 257 MA's), (28, 43444), (34, 43402), (37, 43360), (45, 43273), (58, 43192),

Gene: Poompha_66 Start: 42517, Stop: 42086, Start Num: 7
Candidate Starts for Poompha_66:
(Start: 7 @42517 has 257 MA's), (12, 42472), (13, 42469), (20, 42430), (25, 42388), (30, 42352), (31, 42349), (33, 42340), (36, 42268), (37, 42265), (47, 42175), (55, 42121), (58, 42103),

Gene: Popcicle_72 Start: 44045, Stop: 43632, Start Num: 7
Candidate Starts for Popcicle_72:
(5, 44069), (Start: 7 @44045 has 257 MA's), (21, 43943), (22, 43937), (30, 43880), (33, 43868), (36, 43811), (38, 43784), (45, 43724), (48, 43709), (58, 43646),

Gene: PotatoSplit_79 Start: 44484, Stop: 44050, Start Num: 7
Candidate Starts for PotatoSplit_79:
(Start: 7 @44484 has 257 MA's), (21, 44382), (Start: 23 @44373 has 1 MA's), (Start: 24 @44370 has 3 MA's), (26, 44352), (27, 44349), (30, 44319), (33, 44307), (35, 44256), (36, 44253), (43, 44175), (45, 44166), (49, 44139), (52, 44106), (62, 44061),

Gene: Pumbaa_69 Start: 43522, Stop: 43100, Start Num: 7
Candidate Starts for Pumbaa_69:
(Start: 7 @43522 has 257 MA's), (28, 43369), (34, 43327), (37, 43285), (45, 43198), (58, 43117),

Gene: Puppy_73 Start: 43710, Stop: 43297, Start Num: 7
Candidate Starts for Puppy_73:
(Start: 7 @43710 has 257 MA's), (21, 43608), (Start: 23 @43599 has 1 MA's), (30, 43545), (36, 43476), (37, 43473), (38, 43449), (40, 43443), (60, 43305),

Gene: PurpleHaze_77 Start: 44293, Stop: 43862, Start Num: 7
Candidate Starts for PurpleHaze_77:
(Start: 7 @44293 has 257 MA's), (21, 44191), (Start: 23 @44182 has 1 MA's), (26, 44161), (27, 44158), (33, 44116), (35, 44065), (36, 44062), (38, 44035), (42, 44005), (43, 43987), (45, 43978), (49, 43951), (62, 43873),

Gene: QuinnKiro_71 Start: 44048, Stop: 43635, Start Num: 7
Candidate Starts for QuinnKiro_71:
(5, 44072), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: Reba_73 Start: 43134, Stop: 42700, Start Num: 7
Candidate Starts for Reba_73:
(Start: 7 @43134 has 257 MA's), (21, 43032), (Start: 23 @43023 has 1 MA's), (26, 43002), (27, 42999), (30, 42969), (33, 42957), (35, 42906), (36, 42903), (38, 42876), (41, 42867), (42, 42846), (43, 42828), (45, 42819), (46, 42816), (49, 42792), (62, 42714),

Gene: Rebeuca_70 Start: 43821, Stop: 43390, Start Num: 7
Candidate Starts for Rebeuca_70:
(Start: 7 @43821 has 257 MA's), (13, 43773), (Start: 23 @43710 has 1 MA's), (25, 43692), (30, 43656), (33, 43644), (36, 43572), (37, 43569), (45, 43488), (47, 43479), (50, 43455), (55, 43425),

Gene: Relief_68 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Relief_68:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: ResDef_70 Start: 44048, Stop: 43635, Start Num: 7
Candidate Starts for ResDef_70:
(4, 44087), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: RockieBear_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for RockieBear_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Rocksand_66 Start: 43573, Stop: 43151, Start Num: 7
Candidate Starts for Rocksand_66:
(Start: 7 @43573 has 257 MA's), (28, 43420), (34, 43378), (37, 43336), (45, 43249), (58, 43168),

Gene: Rockstar_71 Start: 43557, Stop: 43144, Start Num: 7
Candidate Starts for Rockstar_71:
(Start: 7 @43557 has 257 MA's), (21, 43455), (30, 43392), (36, 43323), (37, 43320), (38, 43296), (60, 43152),

Gene: Roimos_70 Start: 43930, Stop: 43517, Start Num: 7
Candidate Starts for Roimos_70:
(Start: 7 @43930 has 257 MA's), (21, 43828), (Start: 23 @43819 has 1 MA's), (30, 43765), (33, 43753), (36, 43696), (37, 43693), (38, 43669), (40, 43663), (44, 43618), (58, 43531), (60, 43525),

Gene: Romney_68 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Romney_68:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Roosevelt_67 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Roosevelt_67:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Rosa24_66 Start: 43608, Stop: 43186, Start Num: 7
Candidate Starts for Rosa24_66:

(Start: 7 @43608 has 257 MA's), (28, 43455), (34, 43413), (37, 43371), (45, 43284), (58, 43203),

Gene: Rowdy_71 Start: 43468, Stop: 43097, Start Num: 15
Candidate Starts for Rowdy_71:
(Start: 7 @43522 has 257 MA's), (9, 43495), (11, 43489), (15, 43468), (25, 43393), (30, 43357), (36, 43279), (37, 43276), (47, 43186), (50, 43162), (54, 43135), (55, 43132), (60, 43105),

Gene: Ruin_69 Start: 43570, Stop: 43148, Start Num: 7
Candidate Starts for Ruin_69:
(Start: 7 @43570 has 257 MA's), (28, 43417), (34, 43375), (37, 43333), (45, 43246), (58, 43165),

Gene: Rummer_77 Start: 44508, Stop: 44074, Start Num: 7
Candidate Starts for Rummer_77:
(Start: 7 @44508 has 257 MA's), (21, 44406), (Start: 23 @44397 has 1 MA's), (Start: 24 @44394 has 3 MA's), (26, 44376), (27, 44373), (30, 44343), (33, 44331), (35, 44280), (36, 44277), (43, 44199), (45, 44190), (49, 44163), (52, 44130), (62, 44085),

Gene: Sabertooth_69 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Sabertooth_69:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Sabia_76 Start: 44488, Stop: 44054, Start Num: 7
Candidate Starts for Sabia_76:
(Start: 7 @44488 has 257 MA's), (21, 44386), (Start: 23 @44377 has 1 MA's), (Start: 24 @44374 has 3 MA's), (26, 44356), (27, 44353), (30, 44323), (33, 44311), (35, 44260), (36, 44257), (38, 44230), (43, 44179), (45, 44170), (49, 44143), (52, 44110), (62, 44065),

Gene: Sabinator_76 Start: 44482, Stop: 44045, Start Num: 7
Candidate Starts for Sabinator_76:
(Start: 7 @44482 has 257 MA's), (21, 44380), (Start: 23 @44371 has 1 MA's), (Start: 24 @44368 has 3 MA's), (26, 44350), (27, 44347), (30, 44317), (33, 44305), (35, 44251), (36, 44248), (43, 44170), (45, 44161), (49, 44134), (52, 44101), (62, 44056),

Gene: SaturnRing_72 Start: 44091, Stop: 43678, Start Num: 7
Candidate Starts for SaturnRing_72:
(Start: 7 @44091 has 257 MA's), (21, 43989), (Start: 23 @43980 has 1 MA's), (30, 43926), (36, 43857), (37, 43854), (38, 43830), (40, 43824), (60, 43686),

Gene: Scamp_69 Start: 43579, Stop: 43157, Start Num: 7
Candidate Starts for Scamp_69:
(Start: 7 @43579 has 257 MA's), (28, 43426), (34, 43384), (37, 43342), (45, 43255), (58, 43174),

Gene: Scout_71 Start: 43261, Stop: 42848, Start Num: 7
Candidate Starts for Scout_71:
(Start: 7 @43261 has 257 MA's), (21, 43159), (Start: 23 @43150 has 1 MA's), (30, 43096), (33, 43084), (36, 43027), (37, 43024), (38, 43000), (40, 42994), (44, 42949), (58, 42862), (60, 42856),

Gene: SenorClean_70 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for SenorClean_70:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Severus_67 Start: 42517, Stop: 42086, Start Num: 7
Candidate Starts for Severus_67:

(Start: 7 @42517 has 257 MA's), (12, 42472), (13, 42469), (20, 42430), (25, 42388), (30, 42352), (31, 42349), (33, 42340), (36, 42268), (37, 42265), (47, 42175), (55, 42121), (58, 42103),

Gene: Shaka_67 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Shaka_67:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Shapes_71 Start: 43468, Stop: 43097, Start Num: 15
Candidate Starts for Shapes_71:
(Start: 7 @43522 has 257 MA's), (9, 43495), (11, 43489), (15, 43468), (25, 43393), (30, 43357), (36, 43279), (37, 43276), (47, 43186), (50, 43162), (54, 43135), (55, 43132), (60, 43105),

Gene: Sheen_73 Start: 47483, Stop: 47070, Start Num: 7
Candidate Starts for Sheen_73:
(Start: 7 @47483 has 257 MA's), (13, 47435), (21, 47381), (Start: 23 @47372 has 1 MA's), (25, 47354), (26, 47351), (27, 47348), (30, 47318), (33, 47306), (36, 47249), (37, 47246), (38, 47222), (45, 47165), (57, 47087),

Gene: SheldonCooper_69 Start: 44017, Stop: 43595, Start Num: 7
Candidate Starts for SheldonCooper_69:
(Start: 7 @44017 has 257 MA's), (28, 43864), (34, 43822), (37, 43780), (45, 43693), (58, 43612),

Gene: Shep_70 Start: 43011, Stop: 42598, Start Num: 7
Candidate Starts for Shep_70:
(Start: 7 @43011 has 257 MA's), (21, 42909), (Start: 23 @42900 has 1 MA's), (30, 42846), (33, 42834), (36, 42777), (37, 42774), (38, 42750), (40, 42744), (45, 42693), (60, 42606),

Gene: Skadoosh_67 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Skadoosh_67:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Skipitt_68 Start: 43571, Stop: 43149, Start Num: 7
Candidate Starts for Skipitt_68:
(Start: 7 @43571 has 257 MA's), (28, 43418), (34, 43376), (37, 43334), (45, 43247), (58, 43166),

Gene: Snickers_78 Start: 44453, Stop: 44019, Start Num: 7
Candidate Starts for Snickers_78:
(Start: 7 @44453 has 257 MA's), (21, 44351), (Start: 23 @44342 has 1 MA's), (Start: 24 @44339 has 3 MA's), (26, 44321), (27, 44318), (30, 44288), (33, 44276), (35, 44225), (36, 44222), (38, 44195), (43, 44144), (45, 44135), (49, 44108), (52, 44075), (62, 44030),

Gene: SoYo_75 Start: 44395, Stop: 43958, Start Num: 7
Candidate Starts for SoYo_75:
(Start: 7 @44395 has 257 MA's), (21, 44293), (Start: 23 @44284 has 1 MA's), (Start: 24 @44281 has 3 MA's), (26, 44263), (27, 44260), (30, 44230), (33, 44218), (35, 44164), (36, 44161), (43, 44083), (45, 44074), (49, 44047), (52, 44014), (62, 43969),

Gene: SoilDragon_77 Start: 43927, Stop: 43493, Start Num: 7
Candidate Starts for SoilDragon_77:
(Start: 7 @43927 has 257 MA's), (21, 43825), (Start: 23 @43816 has 1 MA's), (26, 43795), (27, 43792), (30, 43762), (33, 43750), (35, 43699), (36, 43696), (38, 43669), (42, 43639), (43, 43621), (46, 43609), (49, 43585), (62, 43507),

Gene: Soshari_80 Start: 44504, Stop: 44070, Start Num: 7
Candidate Starts for Soshari_80:
(Start: 7 @44504 has 257 MA's), (21, 44402), (Start: 23 @44393 has 1 MA's), (Start: 24 @44390 has 3 MA's), (26, 44372), (27, 44369), (30, 44339), (33, 44327), (35, 44276), (36, 44273), (43, 44195), (45, 44186), (49, 44159), (52, 44126), (62, 44081),

Gene: Sparxx_70 Start: 43572, Stop: 43150, Start Num: 7
Candidate Starts for Sparxx_70:
(Start: 7 @43572 has 257 MA's), (28, 43419), (34, 43377), (37, 43335), (45, 43248), (58, 43167),

Gene: Spike509_78 Start: 44505, Stop: 44071, Start Num: 7
Candidate Starts for Spike509_78:
(Start: 7 @44505 has 257 MA's), (21, 44403), (Start: 23 @44394 has 1 MA's), (Start: 24 @44391 has 3 MA's), (26, 44373), (27, 44370), (30, 44340), (33, 44328), (35, 44277), (36, 44274), (43, 44196), (45, 44187), (49, 44160), (52, 44127), (62, 44082),

Gene: Spino_68 Start: 43580, Stop: 43158, Start Num: 7
Candidate Starts for Spino_68:
(Start: 7 @43580 has 257 MA's), (28, 43427), (34, 43385), (37, 43343), (45, 43256), (58, 43175),

Gene: Stagni_75 Start: 44483, Stop: 44049, Start Num: 7
Candidate Starts for Stagni_75:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44255), (36, 44252), (38, 44225), (43, 44174), (45, 44165), (49, 44138), (52, 44105), (62, 44060),

Gene: Stasia_68 Start: 43786, Stop: 43364, Start Num: 7
Candidate Starts for Stasia_68:
(Start: 7 @43786 has 257 MA's), (19, 43714), (21, 43684), (25, 43657), (37, 43549), (45, 43465), (51, 43417), (54, 43405), (59, 43378),

Gene: SteMason_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for SteMason_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: StepMih_77 Start: 44474, Stop: 44040, Start Num: 7
Candidate Starts for StepMih_77:
(Start: 7 @44474 has 257 MA's), (21, 44372), (Start: 23 @44363 has 1 MA's), (Start: 24 @44360 has 3 MA's), (26, 44342), (27, 44339), (30, 44309), (33, 44297), (35, 44246), (36, 44243), (38, 44216), (43, 44165), (45, 44156), (49, 44129), (52, 44096), (62, 44051),

Gene: Sultana_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for Sultana_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: TNguyen7_73 Start: 44051, Stop: 43638, Start Num: 7
Candidate Starts for TNguyen7_73:
(Start: 7 @44051 has 257 MA's), (21, 43949), (Start: 23 @43940 has 1 MA's), (30, 43886), (36, 43817), (37, 43814), (38, 43790), (40, 43784), (60, 43646),

Gene: Taquarus_68 Start: 43580, Stop: 43158, Start Num: 7
Candidate Starts for Taquarus_68:
(Start: 7 @43580 has 257 MA's), (28, 43427), (34, 43385), (37, 43343), (45, 43256), (58, 43175),

Gene: Taurus_79 Start: 44483, Stop: 44046, Start Num: 7
Candidate Starts for Taurus_79:
(Start: 7 @44483 has 257 MA's), (21, 44381), (Start: 23 @44372 has 1 MA's), (Start: 24 @44369 has 3 MA's), (26, 44351), (27, 44348), (30, 44318), (33, 44306), (35, 44252), (36, 44249), (43, 44171), (45, 44162), (49, 44135), (52, 44102), (62, 44057),

Gene: Texage_70 Start: 44049, Stop: 43636, Start Num: 7
Candidate Starts for Texage_70:
(5, 44073), (Start: 7 @44049 has 257 MA's), (21, 43947), (22, 43941), (30, 43884), (33, 43872), (36, 43815), (38, 43788), (45, 43728), (48, 43713), (58, 43650),

Gene: Thanksgivukkah_68 Start: 43575, Stop: 43153, Start Num: 7
Candidate Starts for Thanksgivukkah_68:
(Start: 7 @43575 has 257 MA's), (28, 43422), (34, 43380), (37, 43338), (45, 43251), (58, 43170),

Gene: Tiffany_77 Start: 44368, Stop: 43931, Start Num: 7
Candidate Starts for Tiffany_77:
(Start: 7 @44368 has 257 MA's), (21, 44266), (Start: 23 @44257 has 1 MA's), (Start: 24 @44254 has 3 MA's), (26, 44236), (27, 44233), (30, 44203), (33, 44191), (35, 44137), (36, 44134), (43, 44056), (45, 44047), (49, 44020), (52, 43987), (62, 43942),

Gene: TinaFeyge_67 Start: 43572, Stop: 43150, Start Num: 7
Candidate Starts for TinaFeyge_67:
(Start: 7 @43572 has 257 MA's), (28, 43419), (34, 43377), (37, 43335), (45, 43248), (58, 43167),

Gene: TinyPebbles_77 Start: 44510, Stop: 44076, Start Num: 7
Candidate Starts for TinyPebbles_77:
(Start: 7 @44510 has 257 MA's), (21, 44408), (Start: 23 @44399 has 1 MA's), (26, 44378), (27, 44375), (33, 44333), (35, 44282), (36, 44279), (38, 44252), (41, 44243), (45, 44192), (51, 44138), (57, 44108), (62, 44087),

Gene: Tinybot_68 Start: 43607, Stop: 43185, Start Num: 7
Candidate Starts for Tinybot_68:
(Start: 7 @43607 has 257 MA's), (28, 43454), (34, 43412), (37, 43370), (45, 43283), (58, 43202),

Gene: TiroTheta9_68 Start: 43571, Stop: 43149, Start Num: 7
Candidate Starts for TiroTheta9_68:
(Start: 7 @43571 has 257 MA's), (28, 43418), (34, 43376), (37, 43334), (45, 43247), (58, 43166),

Gene: Todacoro_72 Start: 44048, Stop: 43635, Start Num: 7
Candidate Starts for Todacoro_72:
(5, 44072), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: Topanga_66 Start: 43246, Stop: 42815, Start Num: 7
Candidate Starts for Topanga_66:
(Start: 7 @43246 has 257 MA's), (13, 43198), (25, 43117), (30, 43081), (36, 42997), (37, 42994), (45, 42913), (47, 42904), (50, 42880), (55, 42850), (60, 42823), (61, 42820),

Gene: Toro_72 Start: 47546, Stop: 47181, Start Num: 13
Candidate Starts for Toro_72:

(Start: 7 @47594 has 257 MA's), (13, 47546), (21, 47492), (Start: 23 @47483 has 1 MA's), (25, 47465), (26, 47462), (27, 47459), (30, 47429), (33, 47417), (36, 47360), (37, 47357), (38, 47333), (45, 47276), (57, 47198),

Gene: Trike_66 Start: 42557, Stop: 42090, Start Num: 3
Candidate Starts for Trike_66:
(Start: 3 @42557 has 1 MA's), (25, 42392), (30, 42356), (33, 42344), (36, 42272), (37, 42269), (47, 42179), (55, 42125),

Gene: TroyPia_70 Start: 43611, Stop: 43189, Start Num: 7
Candidate Starts for TroyPia_70:
(Start: 7 @43611 has 257 MA's), (28, 43458), (34, 43416), (37, 43374), (45, 43287), (58, 43206),

Gene: Twister_68 Start: 43367, Stop: 42936, Start Num: 7
Candidate Starts for Twister_68:
(Start: 7 @43367 has 257 MA's), (13, 43319), (25, 43238), (30, 43202), (36, 43118), (37, 43115), (45, 43034), (47, 43025), (50, 43001), (55, 42971), (60, 42944), (61, 42941),

Gene: TygerBlood_69 Start: 43577, Stop: 43155, Start Num: 7
Candidate Starts for TygerBlood_69:
(Start: 7 @43577 has 257 MA's), (28, 43424), (34, 43382), (37, 43340), (45, 43253), (58, 43172),

Gene: Ulysses_68 Start: 43263, Stop: 42841, Start Num: 7
Candidate Starts for Ulysses_68:
(Start: 7 @43263 has 257 MA's), (28, 43110), (34, 43068), (37, 43026), (45, 42939), (58, 42858),

Gene: Veracruz_69 Start: 44048, Stop: 43635, Start Num: 7
Candidate Starts for Veracruz_69:
(5, 44072), (Start: 7 @44048 has 257 MA's), (21, 43946), (22, 43940), (30, 43883), (33, 43871), (36, 43814), (38, 43787), (45, 43727), (48, 43712), (58, 43649),

Gene: Vix_74 Start: 44563, Stop: 44129, Start Num: 7
Candidate Starts for Vix_74:
(Start: 7 @44563 has 257 MA's), (21, 44461), (Start: 23 @44452 has 1 MA's), (Start: 24 @44449 has 3 MA's), (26, 44431), (27, 44428), (30, 44398), (33, 44386), (35, 44335), (36, 44332), (38, 44305), (43, 44254), (45, 44245), (49, 44218), (52, 44185), (62, 44140),

Gene: WalterMcMickey_68 Start: 43367, Stop: 42936, Start Num: 7
Candidate Starts for WalterMcMickey_68:
(Start: 7 @43367 has 257 MA's), (13, 43319), (25, 43238), (30, 43202), (36, 43118), (37, 43115), (45, 43034), (47, 43025), (50, 43001), (55, 42971), (60, 42944), (61, 42941),

Gene: Wander_69 Start: 43574, Stop: 43152, Start Num: 7
Candidate Starts for Wander_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Watson_77 Start: 44472, Stop: 44038, Start Num: 7
Candidate Starts for Watson_77:
(Start: 7 @44472 has 257 MA's), (21, 44370), (Start: 23 @44361 has 1 MA's), (Start: 24 @44358 has 3 MA's), (26, 44340), (27, 44337), (30, 44307), (33, 44295), (35, 44244), (36, 44241), (38, 44214), (43, 44163), (45, 44154), (49, 44127), (52, 44094), (62, 44049),

Gene: Wilbur_69 Start: 43574, Stop: 43152, Start Num: 7

Candidate Starts for Wilbur_69:
(Start: 7 @43574 has 257 MA's), (28, 43421), (34, 43379), (37, 43337), (45, 43250), (58, 43169),

Gene: Wooldri_80 Start: 44392, Stop: 43958, Start Num: 7
Candidate Starts for Wooldri_80:
(Start: 7 @44392 has 257 MA's), (21, 44290), (Start: 23 @44281 has 1 MA's), (26, 44260), (27, 44257), (33, 44215), (35, 44164), (36, 44161), (38, 44134), (41, 44125), (45, 44074), (51, 44020), (57, 43990), (62, 43969),

Gene: YoSam321_69 Start: 43571, Stop: 43149, Start Num: 7
Candidate Starts for YoSam321_69:
(Start: 7 @43571 has 257 MA's), (28, 43418), (34, 43376), (37, 43334), (45, 43247), (58, 43166),

Gene: Zarafa_70 Start: 44023, Stop: 43610, Start Num: 7
Candidate Starts for Zarafa_70:
(Start: 7 @44023 has 257 MA's), (21, 43921), (30, 43858), (33, 43846), (36, 43789), (37, 43786), (38, 43762), (40, 43756), (45, 43705), (60, 43618),

Gene: Zetzy_75 Start: 44052, Stop: 43609, Start Num: 7
Candidate Starts for Zetzy_75:
(Start: 7 @44052 has 257 MA's), (8, 44040), (Start: 23 @43941 has 1 MA's), (26, 43920), (28, 43899), (30, 43887), (36, 43821), (38, 43794), (45, 43737), (51, 43683), (62, 43632), (63, 43620),