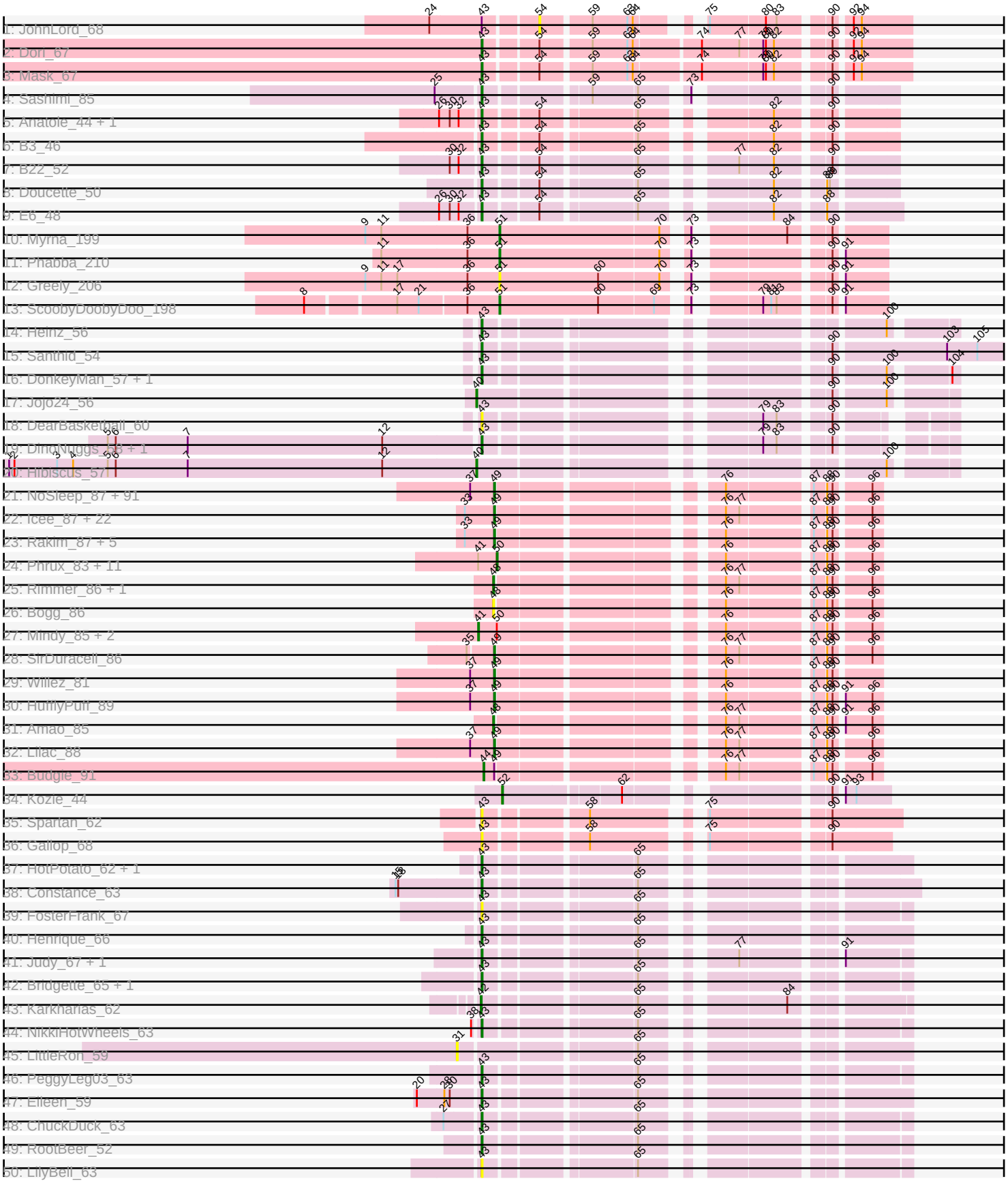
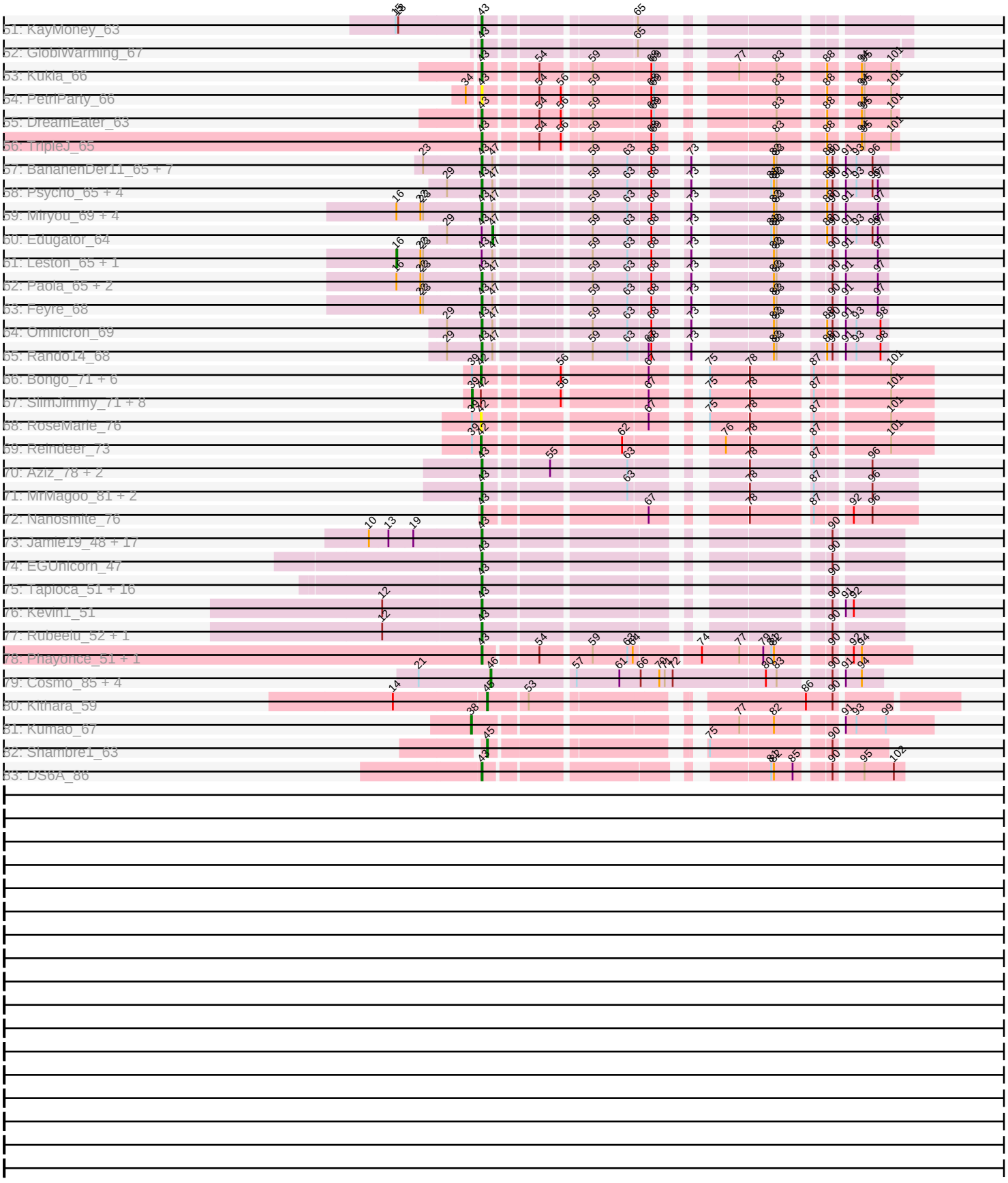
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1: JohnLord_68
2: Dori_67
3: Mask_67
4: Sashimi_85
5: Anatole_44 + 1
6: B3_46
7: B22_52
8: Doucette_50
9: E6_48
10: Myrna_199
11: Phabba_210
12: Greely_206
13: ScoobyDoobyDoo_198
14: Heinz_56
15: Santhid_54
16: DonkeyMan_57 + 1
17: JoJo24_56
18: DearBasketball_60
19: DinoNuggs_73 + 1
20: Hibiscus_57
21: NoSleep_87 + 91
22: Icee_87 + 22
23: Rakim_87 + 5
24: Phrux_83 + 11
25: Rimmer_86 + 1
26: Bogg_86
27: Mindy_85 + 2
28: SirDuracell_86
29: Willez_81
30: HuffyPuff_89
31: Amao_85
32: Lilac_88
33: Budgie_91
34: Kozie_44
35: Spartan_62
36: Gallop_68
37: HotPotato_62 + 1
38: Constance_63
39: FosterFrank_67
40: Henrique_66
41: Judy_67 + 1
42: Bridgette_65 + 1
43: Karkharias_62
44: NikkiHotWheels_63
45: LittleRon_59
46: PeggyLeg03_63
47: Eileen_59
48: ChuckDuck_63
49: RootBeer_52
50: LilyBell_63

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51: KayMoney_63
52: GlobiWarming_67
53: Kukla_66
54: PetriParty_66
55: DreamEater_63
56: TripleJ_65
57: BananenDer11_65 + 7
58: Psycho_65 + 4
59: Miryou_69 + 4
60: Edugator_64
61: Leston_65 + 1
62: Paola_65 + 2
63: Feyre_68
64: Omnicron_69
65: Rando14_68
66: Bongo_71 + 6
67: SlimJimmy_71 + 8
68: RoseMarie_76
69: Reindeer_73
70: Aziz_78 + 2
71: MrMagoo_81 + 2
72: Nanosmite_76
73: Jamie19_48 + 17
74: EGUnicorn_47
75: Tapioca_51 + 16
76: Kevin1_51
77: Rubeelu_52 + 1
78: Phayonce_51 + 1
79: Cosmo_85 + 4
80: Kithara_59
81: Kumao_67
82: Shambre1_63
83: DS6A_86

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 347178 Report

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

Pham number 347178 has 296 members, 30 are drafts.

Phages represented in each track:
- Track 1 : JohnLord_68
- Track 2 : Dori_67
- Track 3 : Mask_67
- Track 4 : Sashimi_85
- Track 5 : Anatole_44, E1_44
- Track 6 : B3_46
- Track 7 : B22_52
- Track 8 : Doucette_50
- Track 9 : E6_48
- Track 10 : Myrna_199
- Track 11 : Phabba_210
- Track 12 : Greely_206
- Track 13 : ScoobyDoobyDoo_198
- Track 14 : Heinz_56
- Track 15 : Santhid_54
- Track 16 : DonkeyMan_57, Tarzan_57
- Track 17 : Jojo24_56
- Track 18 : DearBasketball_60
- Track 19 : DinoNuggs_58, Reyja_59
- Track 20 : Hibiscus_57
- Track 21 : NoSleep_87, MPhalcon_87, Bench_89, GoldenSpark_90, MISSy_87, Petra64142_90, Filch_87, Porky_85, Elite2014_85, Tarkin_85, FireRed_90, Palpatine_88, ABCat_83, Highbury_85, Murica_89, FairyPath_87, Maxxinista_88, Czyszczon1_87, Misfit_87, Hopey_86, Lilpickle_85, Emmina_86, Mosby_82, NelitzaMV_84, Pumpkin_89, Dusk_83, Contagion_82, Pharsalus_83, Terminus_89, Becksu_85, Command613_88, Elph10_86, BugsBunny_86, ChosenOne_86, AmericanBeauty_90, Thresher_88, Livelaughbron_88, Ptowny_83, Simpliphy_85, Marshmallow_84, Phaja_84, Youngblood_89, Stark_87, BadStone_83, Tomaszewski_81, RiverMonster_86, Cjw1_86, TeardropMSU_82, Ukulele_81, Sassay_81, Nimrod_87, Kostya_86, Policronamos_89, Quallification_87, TBrady12_89, SophKB_83, Paperbeatsrock_85, Kanye_83, Argent26_90, JeTaime_86, Buck_87, Lilizi_87, Dumbo_86, Nala_88, Stank_89, Holt_91, NonchalantPear_86, GooberAzure_89, PaddyBaddy_86, DrDrey_86, Xandras_85, Brewer_82, MadamMonkfish_86, OrionPax_85, Murphy_86, Phaux_88, xkcd_89, Gemini_91, Goku_85, PhatBacter_90, StormChicken_88, Thimble_87, Greep_90, Bruin_83, Miniwave_81, Eureka_85, HanKaySha_86, Saints25_85, MollyToe_81, Tuco_87, ShereKhan_84, IHOP_84

• Track 22 : Icee_87, Adnama_90, Traaww1_82, Glexan_85, Balomoji_86, Gator_84, Sotrice96_87, Cookies_83, Bask21_86, Cactus_89, Hoonter_89, Wiggin_88, Harella_86, FoghornLeghorn_80, Asriel_85, Barbarian_85, Moldemort_89, ChotaBhai_86, Flypotenuse_82, DoctorDiddles_85, Daikon_88, BigBubba_86, Pat3_84
• Track 23 : Rakim_87, Myrale_86, Gage_88, StolenFromERC_89, Kimchi_90, Goldilocks_89
• Track 24 : Phrux_83, Teaspoon_87, CrystalP_85, 244_87, StellaBean_84, BaboJay_84, Manda_88, Henry_84, Inca_83, YassJohnny_83, BilboSwaggins_84, ShamWow_86
• Track 25 : Rimmer_86, TeamEdward_87
• Track 26 : Bogg_86
• Track 27 : Mindy_85, Easy2Say_87, Toto_84
• Track 28 : SirDuracell_86
• Track 29 : Willez_81
• Track 30 : HufflyPuff_89
• Track 31 : Amao_85
• Track 32 : Lilac_88
• Track 33 : Budgie_91
• Track 34 : Kozie_44
• Track 35 : Spartan_62
• Track 36 : Gallop_68
• Track 37 : HotPotato_62, Peas_64
• Track 38 : Constance_63
• Track 39 : FosterFrank_67
• Track 40 : Henrique_66
• Track 41 : Judy_67, NidoQ_60
• Track 42 : Bridgette_65, Pucara_59
• Track 43 : Karkharias_62
• Track 44 : NikkiHotWheels_63
• Track 45 : LittleRon_59
• Track 46 : PeggyLeg03_63
• Track 47 : Eileen_59
• Track 48 : ChuckDuck_63
• Track 49 : RootBeer_52
• Track 50 : LilyBell_63
• Track 51 : KayMoney_63
• Track 52 : GlobiWarming_67
• Track 53 : Kukla_66
• Track 54 : PetriParty_66
• Track 55 : DreamEater_63
• Track 56 : TripleJ_65
• Track 57 : BananenDer11_65, InvictusManeo_63, DoubleChamp_62, Kratio_63, Agent47_65, Collard_63, ViviJ_64, LilDirt_64
• Track 58 : Psycho_65, Dadosky_67, AlleyCat_67, Larva_66, Neighly_67
• Track 59 : Miryou_69, SoSeph_66, Waterfoul_67, Heftyboy_66, Thyatira_68
• Track 60 : Edugator_64
• Track 61 : Leston_65, Guillsminger_66
• Track 62 : Paola_65, Gengar_65, OkiRoe_66
• Track 63 : Feyre_68
• Track 64 : Omnicron_69
• Track 65 : Rando14_68

• Track 66 : Bongo_71, IPhane7_71, KleverKiS_70, PegLeg_70, Bricole_70, LilhomieP_71, Auspice_71
• Track 67 : SlimJimmy_71, FreakyGoo_73, Skinny_74, Dulcita_72, Izel_72, TyDawg_71, Glaske16_73, TpudiCK_73, Diminimus_72
• Track 68 : RoseMarie_76
• Track 69 : Reindeer_73
• Track 70 : Aziz_78, GenevaB15_79, Estes_80
• Track 71 : MrMagoo_81, GardenSalsa_80, Rey_78
• Track 72 : Nanosmite_76
• Track 73 : Jamie19_48, ShrimpFriedEgg_54, Impisi_55, Spinach_54, Nenae_54, Purgamenstris_54, Raymond7_48, Charlie_50, Panchino_47, BabeRuth_55, Hanako_54, Andies_47, PhancyPhin_54, SpongeBob_48, Redi_54, Bosection6_48, Phrann_51, Snekmaggedon_48
• Track 74 : EGUnicorn_47
• Track 75 : Tapioca_51, Melville_52, Fulbright_48, Parmesanjohn_49, Tessdabest_50, Phloss_47, Magsby_49, Schnauzer_50, Duplicity_49, Tortoise12_48, Gex_49, Xerxes_49, Silvafighter_50, Chewbacca_51, Pipsqueaks_49, Smurph_49, Carcharodon_49
• Track 76 : Kevin1_51
• Track 77 : Rubeelu_52, Butters_52
• Track 78 : Phayonce_51, Mao1_69
• Track 79 : Cosmo_85, EniyanLRS_81, Azrael100_84, Wildcat_85, MaryV_85
• Track 80 : Kithara_59
• Track 81 : Kumao_67
• Track 82 : Shambre1_63
• Track 83 : DS6A_86

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

The start number called the most often in the published annotations is 49, it was called in 115 of the 266 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ABCat_83, Adnama_90, AmericanBeauty_90, Argent26_90, Asriel_85, BadStone_83, Balomoji_86, Barbarian_85, Bask21_86, Becksu_85, Bench_89, BigBubba_86, Brewer_82, Bruin_83, Buck_87, BugsBunny_86, Cactus_89, ChosenOne_86, ChotaBhai_86, Cjw1_86, Command613_88, Contagion_82, Cookies_83, Czyszczon1_87, Daikon_88, DoctorDiddles_85, DrDrey_86, Dumbo_86, Dusk_83, Elite2014_85, Elph10_86, Emmina_86, Eureka_85, FairyPath_87, Filch_87, FireRed_90, Flypotenuse_82, FoghornLeghorn_80, Gage_88, Gator_84, Gemini_91, Glexan_85, Goku_85, GoldenSpark_90, Goldilocks_89, GooberAzure_89, Greep_90, HanKaySha_86, Harella_86, Highbury_85, Holt_91, Hoonter_89, Hopey_86, HufflyPuff_89, IHOP_84, Icee_87, JeTaime_86, Kanye_83, Kimchi_90, Kostya_86, Lilac_88, Lilizi_87, Lilpickle_85, Livelaughbron_88, MISSy_87, MPhalcon_87, MadamMonkfish_86, Marshmallow_84, Maxxinista_88, Miniwave_81, Misfit_87, Moldemort_89, MollyToe_81, Mosby_82, Murica_89, Murphy_86, Myrale_86, Nala_88, NelitzaMV_84, Nimrod_87, NoSleep_87, NonchalantPear_86, OrionPax_85, PaddyBaddy_86, Palpatine_88, Paperbeatsrock_85, Pat3_84, Petra64142_90, Phaja_84, Pharsalus_83, PhatBacter_90, Phaux_88, Policronamos_89, Porky_85, Ptowny_83, Pumpkin_89,

Quallification_87, Rakim_87, RiverMonster_86, Saints25_85, Sassay_81, ShereKhan_84, Simpliphy_85, SirDuracell_86, SophKB_83, Sotrice96_87, Stank_89, Stark_87, StolenFromERC_89, StormChicken_88, TBrady12_89, Tarkin_85, TeardropMSU_82, Terminus_89, Thimble_87, Thresher_88, Tomaszewski_81, Traaww1_82, Tuco_87, Ukulele_81, Wiggin_88, Willez_81, Xandras_85, Youngblood_89, xkcd_89,

Genes that have the "Most Annotated" start but do not call it:
• Budgie_91,

Genes that do not have the "Most Annotated" start:
• 244_87, Agent47_65, AlleyCat_67, Amao_85, Anatole_44, Andies_47, Auspice_71, Aziz_78, Azrael100_84, B22_52, B3_46, BabeRuth_55, BaboJay_84, BananenDer11_65, BilboSwaggins_84, Bogg_86, Bongo_71, Bosection6_48, Bricole_70, Bridgette_65, Butters_52, Carcharodon_49, Charlie_50, Chewbacca_51, ChuckDuck_63, Collard_63, Constance_63, Cosmo_85, CrystalP_85, DS6A_86, Dadosky_67, DearBasketball_60, Diminimus_72, DinoNuggs_58, DonkeyMan_57, Dori_67, DoubleChamp_62, Doucette_50, DreamEater_63, Dulcita_72, Duplicity_49, E1_44, E6_48, EGUnicorn_47, Easy2Say_87, Edugator_64, Eileen_59, EniyanLRS_81, Estes_80, Feyre_68, FosterFrank_67, FreakyGoo_73, Fulbright_48, Gallop_68, GardenSalsa_80, GenevaB15_79, Gengar_65, Gex_49, Glaske16_73, GlobiWarming_67, Greely_206, Guillsminger_66, Hanako_54, Heftyboy_66, Heinz_56, Henrique_66, Henry_84, Hibiscus_57, HotPotato_62, IPhane7_71, Impisi_55, Inca_83, InvictusManeo_63, Izel_72, Jamie19_48, JohnLord_68, Jojo24_56, Judy_67, Karkharias_62, KayMoney_63, Kevin1_51, Kithara_59, KleverKiS_70, Kozie_44, Kratio_63, Kukla_66, Kumao_67, Larva_66, Leston_65, LilDirt_64, LilhomieP_71, LilyBell_63, LittleRon_59, Magsby_49, Manda_88, Mao1_69, MaryV_85, Mask_67, Melville_52, Mindy_85, Miryou_69, MrMagoo_81, Myrna_199, Nanosmite_76, Neighly_67, Nenae_54, NidoQ_60, NikkiHotWheels_63, OkiRoe_66, Omnicron_69, Panchino_47, Paola_65, Parmesanjohn_49, Peas_64, PegLeg_70, PeggyLeg03_63, PetriParty_66, Phabba_210, PhancyPhin_54, Phayonce_51, Phloss_47, Phrann_51, Phrux_83, Pipsqueaks_49, Psycho_65, Pucara_59, Purgamenstris_54, Rando14_68, Raymond7_48, Redi_54, Reindeer_73, Rey_78, Reyja_59, Rimmer_86, RootBeer_52, RoseMarie_76, Rubeelu_52, Santhid_54, Sashimi_85, Schnauzer_50, ScoobyDoobyDoo_198, ShamWow_86, Shambre1_63, ShrimpFriedEgg_54, Silvafighter_50, Skinny_74, SlimJimmy_71, Smurph_49, Snekmaggedon_48, SoSeph_66, Spartan_62, Spinach_54, SpongeBob_48, StellaBean_84, Tapioca_51, Tarzan_57, TeamEdward_87, Teaspoon_87, Tessdabest_50, Thyatira_68, Tortoise12_48, Toto_84, TpudiCK_73, TripleJ_65, TyDawg_71, ViviJ_64, Waterfoul_67, Wildcat_85, Xerxes_49, YassJohnny_83,

Summary by start number:

Start 16:
• Found in 10 of 296 (3.4%) of genes in pham
• Manual Annotations of this start: 2 of 266
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Guillsminger_66 (K5), Leston_65 (K5),

Start 31:
• Found in 1 of 296 (0.3%) of genes in pham
• No Manual Annotations of this start.

• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleRon_59 (FA),

Start 38:
• Found in 2 of 296 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Kumao_67 (singleton),

Start 39:
• Found in 18 of 296 (6.1%) of genes in pham
• Manual Annotations of this start: 8 of 266
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Diminimus_72 (M1), Dulcita_72 (M1), FreakyGoo_73 (M1), Glaske16_73 (M1), Izel_72 (M1), Skinny_74 (M1), SlimJimmy_71 (M1), TpudiCK_73 (M1), TyDawg_71 (M1),

Start 40:
• Found in 2 of 296 (0.7%) of genes in pham
• Manual Annotations of this start: 2 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hibiscus_57 (DY), Jojo24_56 (DY),

Start 41:
• Found in 15 of 296 (5.1%) of genes in pham
• Manual Annotations of this start: 3 of 266
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Easy2Say_87 (E), Mindy_85 (E), Toto_84 (E),

Start 42:
• Found in 19 of 296 (6.4%) of genes in pham
• Manual Annotations of this start: 8 of 266
• Called 52.6% of time when present
• Phage (with cluster) where this start called: Auspice_71 (M1), Bongo_71 (M1), Bricole_70 (M1), IPhane7_71 (M1), Karkharias_62 (FA), KleverKiS_70 (M1), LilhomieP_71 (M1), PegLeg_70 (M1), Reindeer_73 (M1), RoseMarie_76 (M1),

Start 43:
• Found in 116 of 296 (39.2%) of genes in pham
• Manual Annotations of this start: 99 of 266
• Called 96.6% of time when present
• Phage (with cluster) where this start called: Agent47_65 (K5), AlleyCat_67 (K5), Anatole_44 (BV), Andies_47 (N), Aziz_78 (M2), B22_52 (BW), B3_46 (BV), BabeRuth_55 (N), BananenDer11_65 (K5), Bosection6_48 (N), Bridgette_65 (FA), Butters_52 (N), Carcharodon_49 (N), Charlie_50 (N), Chewbacca_51 (N), ChuckDuck_63 (FA), Collard_63 (K5), Constance_63 (FA), DS6A_86 (singleton), Dadosky_67 (K5), DearBasketball_60 (DY), DinoNuggs_58 (DY), DonkeyMan_57 (DY), Dori_67 (AD), DoubleChamp_62 (K5), Doucette_50 (BW), DreamEater_63 (FJ), Duplicity_49 (N), E1_44 (BV), E6_48 (BW), EGUnicorn_47 (N), Eileen_59 (FA), Estes_80 (M2), Feyre_68 (K5), FosterFrank_67 (FA), Fulbright_48 (N), Gallop_68 (ES), GardenSalsa_80 (M2), GenevaB15_79 (M2), Gengar_65 (K5), Gex_49 (N), GlobiWarming_67 (FA), Hanako_54 (N), Heftyboy_66 (K5), Heinz_56 (DY),

Henrique_66 (FA), HotPotato_62 (FA), Impisi_55 (N), InvictusManeo_63 (K5), Jamie19_48 (N), Judy_67 (FA), KayMoney_63 (FA), Kevin1_51 (N), Kratio_63 (K5), Kukla_66 (FJ), Larva_66 (K5), LilDirt_64 (K5), LilyBell_63 (FA), Magsby_49 (N), Mao1_69 (AD), Mask_67 (AD), Melville_52 (N), Miryou_69 (K5), MrMagoo_81 (M2), Nanosmite_76 (M3), Neighly_67 (K3), Nenae_54 (N), NidoQ_60 (FA), NikkiHotWheels_63 (FA), OkiRoe_66 (K5), Omnicron_69 (K5), Panchino_47 (N), Paola_65 (K5), Parmesanjohn_49 (N), Peas_64 (FA), PeggyLeg03_63 (FA), PetriParty_66 (FJ), PhancyPhin_54 (N), Phayonce_51 (P5), Phloss_47 (N), Phrann_51 (N), Pipsqueaks_49 (N), Psycho_65 (K5), Pucara_59 (FA), Purgamenstris_54 (N), Rando14_68 (K5), Raymond7_48 (N), Redi_54 (N), Rey_78 (M2), Reyja_59 (DY), RootBeer_52 (FA), Rubeelu_52 (N), Santhid_54 (DY), Sashimi_85 (AY), Schnauzer_50 (N), ShrimpFriedEgg_54 (N), Silvafighter_50 (N), Smurph_49 (N), Snekmaggedon_48 (N), SoSeph_66 (K5), Spartan_62 (ES), Spinach_54 (N), SpongeBob_48 (N), Tapioca_51 (N), Tarzan_57 (DY), Tessdabest_50 (N), Thyatira_68 (K5), Tortoise12_48 (N), TripleJ_65 (FJ), ViviJ_64 (K5), Waterfoul_67 (K5), Xerxes_49 (N),

Start 44:
• Found in 1 of 296 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Budgie_91 (E),

Start 45:
• Found in 2 of 296 (0.7%) of genes in pham
• Manual Annotations of this start: 2 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kithara_59 (singleton), Shambre1_63 (singleton),

Start 46:
• Found in 5 of 296 (1.7%) of genes in pham
• Manual Annotations of this start: 5 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Azrael100_84 (V), Cosmo_85 (V), EniyanLRS_81 (V), MaryV_85 (V), Wildcat_85 (V),

Start 47:
• Found in 27 of 296 (9.1%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 3.7% of time when present
• Phage (with cluster) where this start called: Edugator_64 (K5),

Start 48:
• Found in 4 of 296 (1.4%) of genes in pham
• Manual Annotations of this start: 3 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amao_85 (E), Bogg_86 (E), Rimmer_86 (E), TeamEdward_87 (E),

Start 49:
• Found in 126 of 296 (42.6%) of genes in pham
• Manual Annotations of this start: 115 of 266

• Called 99.2% of time when present
• Phage (with cluster) where this start called: ABCat_83 (E), Adnama_90 (E), AmericanBeauty_90 (E), Argent26_90 (E), Asriel_85 (E), BadStone_83 (E), Balomoji_86 (E), Barbarian_85 (E), Bask21_86 (E), Becksu_85 (E), Bench_89 (E), BigBubba_86 (E), Brewer_82 (E), Bruin_83 (E), Buck_87 (E), BugsBunny_86 (E), Cactus_89 (E), ChosenOne_86 (E), ChotaBhai_86 (E), Cjw1_86 (E), Command613_88 (E), Contagion_82 (E), Cookies_83 (E), Czyszczon1_87 (E), Daikon_88 (E), DoctorDiddles_85 (E), DrDrey_86 (E), Dumbo_86 (E), Dusk_83 (E), Elite2014_85 (E), Elph10_86 (E), Emmina_86 (E), Eureka_85 (E), FairyPath_87 (E), Filch_87 (E), FireRed_90 (E), Flypotenuse_82 (E), FoghornLeghorn_80 (E), Gage_88 (E), Gator_84 (E), Gemini_91 (E), Glexan_85 (E), Goku_85 (E), GoldenSpark_90 (E), Goldilocks_89 (E), GooberAzure_89 (E), Greep_90 (E), HanKaySha_86 (E), Harella_86 (E), Highbury_85 (E), Holt_91 (E), Hoonter_89 (E), Hopey_86 (E), HufflyPuff_89 (E), IHOP_84 (E), Icee_87 (E), JeTaime_86 (E), Kanye_83 (E), Kimchi_90 (E), Kostya_86 (E), Lilac_88 (E), Lilizi_87 (E), Lilpickle_85 (E), Livelaughbron_88 (E), MISSy_87 (E), MPhalcon_87 (E), MadamMonkfish_86 (E), Marshmallow_84 (E), Maxxinista_88 (E), Miniwave_81 (E), Misfit_87 (E), Moldemort_89 (E), MollyToe_81 (E), Mosby_82 (E), Murica_89 (E), Murphy_86 (E), Myrale_86 (E), Nala_88 (E), NelitzaMV_84 (E), Nimrod_87 (E), NoSleep_87 (E), NonchalantPear_86 (E), OrionPax_85 (E), PaddyBaddy_86 (E), Palpatine_88 (E), Paperbeatsrock_85 (E), Pat3_84 (E), Petra64142_90 (E), Phaja_84 (E), Pharsalus_83 (E), PhatBacter_90 (E), Phaux_88 (E), Policronamos_89 (E), Porky_85 (E), Ptowny_83 (E), Pumpkin_89 (E), Quallification_87 (E), Rakim_87 (E), RiverMonster_86 (E), Saints25_85 (E), Sassay_81 (E), ShereKhan_84 (E), Simpliphy_85 (E), SirDuracell_86 (E), SophKB_83 (E), Sotrice96_87 (E), Stank_89 (E), Stark_87 (E), StolenFromERC_89 (E), StormChicken_88 (E), TBrady12_89 (E), Tarkin_85 (E), TeardropMSU_82 (E), Terminus_89 (E), Thimble_87 (E), Thresher_88 (E), Tomaszewski_81 (E), Traaww1_82 (E), Tuco_87 (E), Ukulele_81 (E), Wiggin_88 (E), Willez_81 (E), Xandras_85 (E), Youngblood_89 (E), xkcd_89 (E),

Start 50:
• Found in 15 of 296 (5.1%) of genes in pham
• Manual Annotations of this start: 12 of 266
• Called 80.0% of time when present
• Phage (with cluster) where this start called: 244_87 (E), BaboJay_84 (E), BilboSwaggins_84 (E), CrystalP_85 (E), Henry_84 (E), Inca_83 (E), Manda_88 (E), Phrux_83 (E), ShamWow_86 (E), StellaBean_84 (E), Teaspoon_87 (E), YassJohnny_83 (E),

Start 51:
• Found in 4 of 296 (1.4%) of genes in pham
• Manual Annotations of this start: 3 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Greely_206 (C2), Myrna_199 (C2), Phabba_210 (C2), ScoobyDoobyDoo_198 (C2),

Start 52:
• Found in 1 of 296 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 266
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kozie_44 (EI),

Start 54:

• Found in 15 of 296 (5.1%) of genes in pham
• No Manual Annotations of this start.
• Called 6.7% of time when present
• Phage (with cluster) where this start called: JohnLord_68 (AD),

Summary by clusters:

There are 20 clusters represented in this pham: V, E, M3, P5, M2, EI, N, K3, FA, BV, BW, M1, K5, DY, AY, C2, FJ, singleton, ES, AD,

Info for manual annotations of cluster AD:
•Start number 43 was manually annotated 3 times for cluster AD.

Info for manual annotations of cluster AY:
•Start number 43 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster BV:
•Start number 43 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:
•Start number 43 was manually annotated 3 times for cluster BW.

Info for manual annotations of cluster C2:
•Start number 51 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster DY:
•Start number 40 was manually annotated 2 times for cluster DY.
•Start number 43 was manually annotated 5 times for cluster DY.

Info for manual annotations of cluster E:
•Start number 41 was manually annotated 3 times for cluster E.
•Start number 44 was manually annotated 1 time for cluster E.
•Start number 48 was manually annotated 3 times for cluster E.
•Start number 49 was manually annotated 115 times for cluster E.
•Start number 50 was manually annotated 12 times for cluster E.

Info for manual annotations of cluster EI:
•Start number 52 was manually annotated 1 time for cluster EI.

Info for manual annotations of cluster FA:
•Start number 42 was manually annotated 1 time for cluster FA.
•Start number 43 was manually annotated 13 times for cluster FA.

Info for manual annotations of cluster FJ:
•Start number 43 was manually annotated 3 times for cluster FJ.

Info for manual annotations of cluster K5:
•Start number 16 was manually annotated 2 times for cluster K5.
•Start number 43 was manually annotated 22 times for cluster K5.
•Start number 47 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster M1:
•Start number 39 was manually annotated 8 times for cluster M1.
•Start number 42 was manually annotated 7 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 43 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 43 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster N:
•Start number 43 was manually annotated 37 times for cluster N.

Info for manual annotations of cluster P5:
•Start number 43 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster V:
•Start number 46 was manually annotated 5 times for cluster V.

Gene Information:

Gene: 244_87 Start: 52340, Stop: 52702, Start Num: 50
Candidate Starts for 244_87:
(Start: 41 @52319 has 3 MA's), (Start: 50 @52340 has 12 MA's), (76, 52553), (87, 52637), (88, 52649), (90, 52655), (96, 52691),

Gene: ABCat_83 Start: 52732, Stop: 53094, Start Num: 49
Candidate Starts for ABCat_83:
(37, 52705), (Start: 49 @52732 has 115 MA's), (76, 52945), (87, 53029), (88, 53041), (90, 53047), (96, 53083),

Gene: Adnama_90 Start: 52618, Stop: 52980, Start Num: 49
Candidate Starts for Adnama_90:
(33, 52585), (Start: 49 @52618 has 115 MA's), (76, 52831), (77, 52846), (87, 52915), (88, 52927), (90, 52933), (96, 52969),

Gene: Agent47_65 Start: 45856, Stop: 46221, Start Num: 43
Candidate Starts for Agent47_65:
(23, 45793), (Start: 43 @45856 has 99 MA's), (Start: 47 @45868 has 1 MA's), (59, 45958), (63, 45997), (68, 46021), (73, 46048), (82, 46117), (83, 46120), (88, 46162), (90, 46168), (91, 46174), (93, 46186), (96, 46204),

Gene: AlleyCat_67 Start: 46184, Stop: 46549, Start Num: 43
Candidate Starts for AlleyCat_67:
(29, 46148), (Start: 43 @46184 has 99 MA's), (Start: 47 @46196 has 1 MA's), (59, 46286), (63, 46325), (68, 46349), (73, 46376), (81, 46442), (82, 46445), (83, 46448), (88, 46490), (90, 46496), (91, 46502), (93, 46514), (96, 46532), (97, 46538),

Gene: Amao_85 Start: 51813, Stop: 52175, Start Num: 48
Candidate Starts for Amao_85:

(Start: 48 @51813 has 3 MA's), (76, 52026), (77, 52041), (87, 52110), (88, 52122), (90, 52128), (91, 52134), (96, 52164),

Gene: AmericanBeauty_90 Start: 52901, Stop: 53263, Start Num: 49
Candidate Starts for AmericanBeauty_90:
(37, 52874), (Start: 49 @52901 has 115 MA's), (76, 53114), (87, 53198), (88, 53210), (90, 53216), (96, 53252),

Gene: Anatole_44 Start: 29853, Stop: 30233, Start Num: 43
Candidate Starts for Anatole_44:
(26, 29811), (30, 29823), (32, 29832), (Start: 43 @29853 has 99 MA's), (54, 29907), (65, 30003), (82, 30117), (90, 30168),

Gene: Andies_47 Start: 34063, Stop: 34455, Start Num: 43
Candidate Starts for Andies_47:
(10, 33940), (13, 33961), (19, 33988), (Start: 43 @34063 has 99 MA's), (90, 34384),

Gene: Argent26_90 Start: 52539, Stop: 52901, Start Num: 49
Candidate Starts for Argent26_90:
(37, 52512), (Start: 49 @52539 has 115 MA's), (76, 52752), (87, 52836), (88, 52848), (90, 52854), (96, 52890),

Gene: Asriel_85 Start: 50955, Stop: 51317, Start Num: 49
Candidate Starts for Asriel_85:
(33, 50922), (Start: 49 @50955 has 115 MA's), (76, 51168), (77, 51183), (87, 51252), (88, 51264), (90, 51270), (96, 51306),

Gene: Auspice_71 Start: 46676, Stop: 47095, Start Num: 42
Candidate Starts for Auspice_71:
(Start: 39 @46667 has 8 MA's), (Start: 42 @46676 has 8 MA's), (56, 46754), (67, 46841), (75, 46871), (78, 46913), (87, 46973), (101, 47048),

Gene: Aziz_78 Start: 48719, Stop: 49120, Start Num: 43
Candidate Starts for Aziz_78:
(Start: 43 @48719 has 99 MA's), (55, 48785), (63, 48863), (78, 48956), (87, 49016), (96, 49070),

Gene: Azrael100_84 Start: 52399, Stop: 52803, Start Num: 46
Candidate Starts for Azrael100_84:
(21, 52318), (Start: 46 @52399 has 5 MA's), (57, 52486), (61, 52534), (66, 52558), (70, 52579), (71, 52585), (72, 52594), (80, 52696), (83, 52708), (90, 52756), (91, 52762), (94, 52780),

Gene: B22_52 Start: 33281, Stop: 33661, Start Num: 43
Candidate Starts for B22_52:
(30, 33251), (32, 33260), (Start: 43 @33281 has 99 MA's), (54, 33335), (65, 33431), (77, 33509), (82, 33545), (90, 33596),

Gene: B3_46 Start: 30516, Stop: 30896, Start Num: 43
Candidate Starts for B3_46:
(Start: 43 @30516 has 99 MA's), (54, 30570), (65, 30666), (82, 30780), (90, 30831),

Gene: BabeRuth_55 Start: 35784, Stop: 36176, Start Num: 43
Candidate Starts for BabeRuth_55:
(10, 35661), (13, 35682), (19, 35709), (Start: 43 @35784 has 99 MA's), (90, 36105),

Gene: BaboJay_84 Start: 52341, Stop: 52703, Start Num: 50
Candidate Starts for BaboJay_84:
(Start: 41 @52320 has 3 MA's), (Start: 50 @52341 has 12 MA's), (76, 52554), (87, 52638), (88, 52650), (90, 52656), (96, 52692),

Gene: BadStone_83 Start: 52301, Stop: 52663, Start Num: 49
Candidate Starts for BadStone_83:
(37, 52274), (Start: 49 @52301 has 115 MA's), (76, 52514), (87, 52598), (88, 52610), (90, 52616), (96, 52652),

Gene: Balomoji_86 Start: 52725, Stop: 53087, Start Num: 49
Candidate Starts for Balomoji_86:
(33, 52692), (Start: 49 @52725 has 115 MA's), (76, 52938), (77, 52953), (87, 53022), (88, 53034), (90, 53040), (96, 53076),

Gene: BananenDer11_65 Start: 45817, Stop: 46182, Start Num: 43
Candidate Starts for BananenDer11_65:
(23, 45754), (Start: 43 @45817 has 99 MA's), (Start: 47 @45829 has 1 MA's), (59, 45919), (63, 45958), (68, 45982), (73, 46009), (82, 46078), (83, 46081), (88, 46123), (90, 46129), (91, 46135), (93, 46147), (96, 46165),

Gene: Barbarian_85 Start: 50955, Stop: 51317, Start Num: 49
Candidate Starts for Barbarian_85:
(33, 50922), (Start: 49 @50955 has 115 MA's), (76, 51168), (77, 51183), (87, 51252), (88, 51264), (90, 51270), (96, 51306),

Gene: Bask21_86 Start: 51578, Stop: 51940, Start Num: 49
Candidate Starts for Bask21_86:
(33, 51545), (Start: 49 @51578 has 115 MA's), (76, 51791), (77, 51806), (87, 51875), (88, 51887), (90, 51893), (96, 51929),

Gene: Becksu_85 Start: 52931, Stop: 53293, Start Num: 49
Candidate Starts for Becksu_85:
(37, 52904), (Start: 49 @52931 has 115 MA's), (76, 53144), (87, 53228), (88, 53240), (90, 53246), (96, 53282),

Gene: Bench_89 Start: 52396, Stop: 52758, Start Num: 49
Candidate Starts for Bench_89:
(37, 52369), (Start: 49 @52396 has 115 MA's), (76, 52609), (87, 52693), (88, 52705), (90, 52711), (96, 52747),

Gene: BigBubba_86 Start: 51971, Stop: 52333, Start Num: 49
Candidate Starts for BigBubba_86:
(33, 51938), (Start: 49 @51971 has 115 MA's), (76, 52184), (77, 52199), (87, 52268), (88, 52280), (90, 52286), (96, 52322),

Gene: BilboSwaggins_84 Start: 52698, Stop: 53060, Start Num: 50
Candidate Starts for BilboSwaggins_84:
(Start: 41 @52677 has 3 MA's), (Start: 50 @52698 has 12 MA's), (76, 52911), (87, 52995), (88, 53007), (90, 53013), (96, 53049),

Gene: Bogg_86 Start: 51787, Stop: 52149, Start Num: 48

Candidate Starts for Bogg_86:
(Start: 48 @51787 has 3 MA's), (76, 52000), (87, 52084), (88, 52096), (90, 52102), (96, 52138),

Gene: Bongo_71 Start: 46680, Stop: 47099, Start Num: 42
Candidate Starts for Bongo_71:
(Start: 39 @46671 has 8 MA's), (Start: 42 @46680 has 8 MA's), (56, 46758), (67, 46845), (75, 46875), (78, 46917), (87, 46977), (101, 47052),

Gene: Bosection6_48 Start: 33529, Stop: 33921, Start Num: 43
Candidate Starts for Bosection6_48:
(10, 33406), (13, 33427), (19, 33454), (Start: 43 @33529 has 99 MA's), (90, 33850),

Gene: Brewer_82 Start: 51198, Stop: 51560, Start Num: 49
Candidate Starts for Brewer_82:
(37, 51171), (Start: 49 @51198 has 115 MA's), (76, 51411), (87, 51495), (88, 51507), (90, 51513), (96, 51549),

Gene: Bricole_70 Start: 46403, Stop: 46822, Start Num: 42
Candidate Starts for Bricole_70:
(Start: 39 @46394 has 8 MA's), (Start: 42 @46403 has 8 MA's), (56, 46481), (67, 46568), (75, 46598), (78, 46640), (87, 46700), (101, 46775),

Gene: Bridgette_65 Start: 40727, Stop: 41116, Start Num: 43
Candidate Starts for Bridgette_65:
(Start: 43 @40727 has 99 MA's), (65, 40877),

Gene: Bruin_83 Start: 51275, Stop: 51637, Start Num: 49
Candidate Starts for Bruin_83:
(37, 51248), (Start: 49 @51275 has 115 MA's), (76, 51488), (87, 51572), (88, 51584), (90, 51590), (96, 51626),

Gene: Buck_87 Start: 52980, Stop: 53342, Start Num: 49
Candidate Starts for Buck_87:
(37, 52953), (Start: 49 @52980 has 115 MA's), (76, 53193), (87, 53277), (88, 53289), (90, 53295), (96, 53331),

Gene: Budgie_91 Start: 52407, Stop: 52781, Start Num: 44
Candidate Starts for Budgie_91:
(Start: 44 @52407 has 1 MA's), (Start: 49 @52419 has 115 MA's), (76, 52632), (77, 52647), (87, 52716), (88, 52728), (90, 52734), (96, 52770),

Gene: BugsBunny_86 Start: 52804, Stop: 53166, Start Num: 49
Candidate Starts for BugsBunny_86:
(37, 52777), (Start: 49 @52804 has 115 MA's), (76, 53017), (87, 53101), (88, 53113), (90, 53119), (96, 53155),

Gene: Butters_52 Start: 35124, Stop: 35516, Start Num: 43
Candidate Starts for Butters_52:
(12, 35016), (Start: 43 @35124 has 99 MA's), (90, 35445),

Gene: Cactus_89 Start: 51619, Stop: 51981, Start Num: 49
Candidate Starts for Cactus_89:

(33, 51586), (Start: 49 @51619 has 115 MA's), (76, 51832), (77, 51847), (87, 51916), (88, 51928), (90, 51934), (96, 51970),

Gene: Carcharodon_49 Start: 34516, Stop: 34908, Start Num: 43
Candidate Starts for Carcharodon_49:
(Start: 43 @34516 has 99 MA's), (90, 34837),

Gene: Charlie_50 Start: 33268, Stop: 33660, Start Num: 43
Candidate Starts for Charlie_50:
(10, 33145), (13, 33166), (19, 33193), (Start: 43 @33268 has 99 MA's), (90, 33589),

Gene: Chewbacca_51 Start: 34516, Stop: 34908, Start Num: 43
Candidate Starts for Chewbacca_51:
(Start: 43 @34516 has 99 MA's), (90, 34837),

Gene: ChosenOne_86 Start: 51756, Stop: 52118, Start Num: 49
Candidate Starts for ChosenOne_86:
(37, 51729), (Start: 49 @51756 has 115 MA's), (76, 51969), (87, 52053), (88, 52065), (90, 52071), (96, 52107),

Gene: ChotaBhai_86 Start: 51943, Stop: 52305, Start Num: 49
Candidate Starts for ChotaBhai_86:
(33, 51910), (Start: 49 @51943 has 115 MA's), (76, 52156), (77, 52171), (87, 52240), (88, 52252), (90, 52258), (96, 52294),

Gene: ChuckDuck_63 Start: 40338, Stop: 40727, Start Num: 43
Candidate Starts for ChuckDuck_63:
(27, 40302), (Start: 43 @40338 has 99 MA's), (65, 40488),

Gene: Cjw1_86 Start: 53450, Stop: 53812, Start Num: 49
Candidate Starts for Cjw1_86:
(37, 53423), (Start: 49 @53450 has 115 MA's), (76, 53663), (87, 53747), (88, 53759), (90, 53765), (96, 53801),

Gene: Collard_63 Start: 45817, Stop: 46182, Start Num: 43
Candidate Starts for Collard_63:
(23, 45754), (Start: 43 @45817 has 99 MA's), (Start: 47 @45829 has 1 MA's), (59, 45919), (63, 45958), (68, 45982), (73, 46009), (82, 46078), (83, 46081), (88, 46123), (90, 46129), (91, 46135), (93, 46147), (96, 46165),

Gene: Command613_88 Start: 52795, Stop: 53157, Start Num: 49
Candidate Starts for Command613_88:
(37, 52768), (Start: 49 @52795 has 115 MA's), (76, 53008), (87, 53092), (88, 53104), (90, 53110), (96, 53146),

Gene: Constance_63 Start: 40957, Stop: 41358, Start Num: 43
Candidate Starts for Constance_63:
(15, 40867), (18, 40870), (Start: 43 @40957 has 99 MA's), (65, 41107),

Gene: Contagion_82 Start: 51556, Stop: 51918, Start Num: 49
Candidate Starts for Contagion_82:
(37, 51529), (Start: 49 @51556 has 115 MA's), (76, 51769), (87, 51853), (88, 51865), (90, 51871), (96, 51907),

Gene: Cookies_83 Start: 51800, Stop: 52162, Start Num: 49
Candidate Starts for Cookies_83:
(33, 51767), (Start: 49 @51800 has 115 MA's), (76, 52013), (77, 52028), (87, 52097), (88, 52109), (90, 52115), (96, 52151),

Gene: Cosmo_85 Start: 52400, Stop: 52804, Start Num: 46
Candidate Starts for Cosmo_85:
(21, 52319), (Start: 46 @52400 has 5 MA's), (57, 52487), (61, 52535), (66, 52559), (70, 52580), (71, 52586), (72, 52595), (80, 52697), (83, 52709), (90, 52757), (91, 52763), (94, 52781),

Gene: CrystalP_85 Start: 52698, Stop: 53060, Start Num: 50
Candidate Starts for CrystalP_85:
(Start: 41 @52677 has 3 MA's), (Start: 50 @52698 has 12 MA's), (76, 52911), (87, 52995), (88, 53007), (90, 53013), (96, 53049),

Gene: Czyszczon1_87 Start: 52259, Stop: 52621, Start Num: 49
Candidate Starts for Czyszczon1_87:
(37, 52232), (Start: 49 @52259 has 115 MA's), (76, 52472), (87, 52556), (88, 52568), (90, 52574), (96, 52610),

Gene: DS6A_86 Start: 55827, Stop: 56213, Start Num: 43
Candidate Starts for DS6A_86:
(Start: 43 @55827 has 99 MA's), (81, 56088), (82, 56091), (85, 56112), (90, 56142), (95, 56169), (102, 56202),

Gene: Dadosky_67 Start: 46186, Stop: 46551, Start Num: 43
Candidate Starts for Dadosky_67:
(29, 46150), (Start: 43 @46186 has 99 MA's), (Start: 47 @46198 has 1 MA's), (59, 46288), (63, 46327), (68, 46351), (73, 46378), (81, 46444), (82, 46447), (83, 46450), (88, 46492), (90, 46498), (91, 46504), (93, 46516), (96, 46534), (97, 46540),

Gene: Daikon_88 Start: 52746, Stop: 53108, Start Num: 49
Candidate Starts for Daikon_88:
(33, 52713), (Start: 49 @52746 has 115 MA's), (76, 52959), (77, 52974), (87, 53043), (88, 53055), (90, 53061), (96, 53097),

Gene: DearBasketball_60 Start: 38874, Stop: 39290, Start Num: 43
Candidate Starts for DearBasketball_60:
(Start: 43 @38874 has 99 MA's), (79, 39126), (83, 39141), (90, 39189),

Gene: Diminimus_72 Start: 46666, Stop: 47094, Start Num: 39
Candidate Starts for Diminimus_72:
(Start: 39 @46666 has 8 MA's), (Start: 42 @46675 has 8 MA's), (56, 46753), (67, 46840), (75, 46870), (78, 46912), (87, 46972), (101, 47047),

Gene: DinoNuggs_58 Start: 38515, Stop: 38931, Start Num: 43
Candidate Starts for DinoNuggs_58:
(5, 38104), (6, 38113), (7, 38194), (12, 38413), (Start: 43 @38515 has 99 MA's), (79, 38767), (83, 38782), (90, 38830),

Gene: DoctorDiddles_85 Start: 51987, Stop: 52349, Start Num: 49
Candidate Starts for DoctorDiddles_85:

(33, 51954), (Start: 49 @51987 has 115 MA's), (76, 52200), (77, 52215), (87, 52284), (88, 52296), (90, 52302), (96, 52338),

Gene: DonkeyMan_57 Start: 37973, Stop: 38404, Start Num: 43
Candidate Starts for DonkeyMan_57:
(Start: 43 @37973 has 99 MA's), (90, 38288), (100, 38339), (104, 38396),

Gene: Dori_67 Start: 52520, Stop: 52948, Start Num: 43
Candidate Starts for Dori_67:
(Start: 43 @52520 has 99 MA's), (54, 52574), (59, 52625), (63, 52664), (64, 52670), (74, 52739), (77, 52781), (79, 52805), (80, 52808), (82, 52817), (90, 52868), (92, 52883), (94, 52892),

Gene: DoubleChamp_62 Start: 45817, Stop: 46182, Start Num: 43
Candidate Starts for DoubleChamp_62:
(23, 45754), (Start: 43 @45817 has 99 MA's), (Start: 47 @45829 has 1 MA's), (59, 45919), (63, 45958), (68, 45982), (73, 46009), (82, 46078), (83, 46081), (88, 46123), (90, 46129), (91, 46135), (93, 46147), (96, 46165),

Gene: Doucette_50 Start: 32710, Stop: 33090, Start Num: 43
Candidate Starts for Doucette_50:
(Start: 43 @32710 has 99 MA's), (54, 32764), (65, 32860), (82, 32974), (88, 33019), (89, 33022),

Gene: DrDrey_86 Start: 53178, Stop: 53540, Start Num: 49
Candidate Starts for DrDrey_86:
(37, 53151), (Start: 49 @53178 has 115 MA's), (76, 53391), (87, 53475), (88, 53487), (90, 53493), (96, 53529),

Gene: DreamEater_63 Start: 40056, Stop: 40433, Start Num: 43
Candidate Starts for DreamEater_63:
(Start: 43 @40056 has 99 MA's), (54, 40110), (56, 40134), (59, 40158), (68, 40221), (69, 40224), (83, 40320), (88, 40362), (94, 40392), (95, 40395), (101, 40425),

Gene: Dulcita_72 Start: 46667, Stop: 47095, Start Num: 39
Candidate Starts for Dulcita_72:
(Start: 39 @46667 has 8 MA's), (Start: 42 @46676 has 8 MA's), (56, 46754), (67, 46841), (75, 46871), (78, 46913), (87, 46973), (101, 47048),

Gene: Dumbo_86 Start: 51661, Stop: 52023, Start Num: 49
Candidate Starts for Dumbo_86:
(37, 51634), (Start: 49 @51661 has 115 MA's), (76, 51874), (87, 51958), (88, 51970), (90, 51976), (96, 52012),

Gene: Duplicity_49 Start: 34525, Stop: 34917, Start Num: 43
Candidate Starts for Duplicity_49:
(Start: 43 @34525 has 99 MA's), (90, 34846),

Gene: Dusk_83 Start: 51961, Stop: 52323, Start Num: 49
Candidate Starts for Dusk_83:
(37, 51934), (Start: 49 @51961 has 115 MA's), (76, 52174), (87, 52258), (88, 52270), (90, 52276), (96, 52312),

Gene: E1_44 Start: 29853, Stop: 30233, Start Num: 43
Candidate Starts for E1_44:

(26, 29811), (30, 29823), (32, 29832), (Start: 43 @29853 has 99 MA's), (54, 29907), (65, 30003), (82, 30117), (90, 30168),

Gene: E6_48 Start: 32434, Stop: 32817, Start Num: 43
Candidate Starts for E6_48:
(26, 32392), (30, 32404), (32, 32413), (Start: 43 @32434 has 99 MA's), (54, 32488), (65, 32584), (82, 32698), (88, 32743),

Gene: EGUnicorn_47 Start: 33216, Stop: 33608, Start Num: 43
Candidate Starts for EGUnicorn_47:
(Start: 43 @33216 has 99 MA's), (90, 33537),

Gene: Easy2Say_87 Start: 53142, Stop: 53525, Start Num: 41
Candidate Starts for Easy2Say_87:
(Start: 41 @53142 has 3 MA's), (Start: 50 @53163 has 12 MA's), (76, 53376), (87, 53460), (88, 53472), (90, 53478), (96, 53514),

Gene: Edugator_64 Start: 47616, Stop: 47969, Start Num: 47
Candidate Starts for Edugator_64:
(29, 47568), (Start: 43 @47604 has 99 MA's), (Start: 47 @47616 has 1 MA's), (59, 47706), (63, 47745), (68, 47769), (73, 47796), (81, 47862), (82, 47865), (83, 47868), (88, 47910), (90, 47916), (91, 47922), (93, 47934), (96, 47952), (97, 47958),

Gene: Eileen_59 Start: 38213, Stop: 38605, Start Num: 43
Candidate Starts for Eileen_59:
(20, 38147), (28, 38177), (30, 38183), (Start: 43 @38213 has 99 MA's), (65, 38363),

Gene: Elite2014_85 Start: 51755, Stop: 52117, Start Num: 49
Candidate Starts for Elite2014_85:
(37, 51728), (Start: 49 @51755 has 115 MA's), (76, 51968), (87, 52052), (88, 52064), (90, 52070), (96, 52106),

Gene: Elph10_86 Start: 51757, Stop: 52119, Start Num: 49
Candidate Starts for Elph10_86:
(37, 51730), (Start: 49 @51757 has 115 MA's), (76, 51970), (87, 52054), (88, 52066), (90, 52072), (96, 52108),

Gene: Emmina_86 Start: 51659, Stop: 52021, Start Num: 49
Candidate Starts for Emmina_86:
(37, 51632), (Start: 49 @51659 has 115 MA's), (76, 51872), (87, 51956), (88, 51968), (90, 51974), (96, 52010),

Gene: EniyanLRS_81 Start: 52139, Stop: 52543, Start Num: 46
Candidate Starts for EniyanLRS_81:
(21, 52058), (Start: 46 @52139 has 5 MA's), (57, 52226), (61, 52274), (66, 52298), (70, 52319), (71, 52325), (72, 52334), (80, 52436), (83, 52448), (90, 52496), (91, 52502), (94, 52520),

Gene: Estes_80 Start: 49066, Stop: 49467, Start Num: 43
Candidate Starts for Estes_80:
(Start: 43 @49066 has 99 MA's), (55, 49132), (63, 49210), (78, 49303), (87, 49363), (96, 49417),

Gene: Eureka_85 Start: 52671, Stop: 53033, Start Num: 49
Candidate Starts for Eureka_85:

(37, 52644), (Start: 49 @52671 has 115 MA's), (76, 52884), (87, 52968), (88, 52980), (90, 52986), (96, 53022),

Gene: FairyPath_87 Start: 52874, Stop: 53236, Start Num: 49
Candidate Starts for FairyPath_87:
(37, 52847), (Start: 49 @52874 has 115 MA's), (76, 53087), (87, 53171), (88, 53183), (90, 53189), (96, 53225),

Gene: Feyre_68 Start: 49578, Stop: 49943, Start Num: 43
Candidate Starts for Feyre_68:
(22, 49515), (23, 49518), (Start: 43 @49578 has 99 MA's), (Start: 47 @49590 has 1 MA's), (59, 49680), (63, 49719), (68, 49743), (73, 49770), (82, 49839), (83, 49842), (90, 49890), (91, 49896), (97, 49932),

Gene: Filch_87 Start: 51684, Stop: 52046, Start Num: 49
Candidate Starts for Filch_87:
(37, 51657), (Start: 49 @51684 has 115 MA's), (76, 51897), (87, 51981), (88, 51993), (90, 51999), (96, 52035),

Gene: FireRed_90 Start: 53249, Stop: 53611, Start Num: 49
Candidate Starts for FireRed_90:
(37, 53222), (Start: 49 @53249 has 115 MA's), (76, 53462), (87, 53546), (88, 53558), (90, 53564), (96, 53600),

Gene: Flypotenuse_82 Start: 51609, Stop: 51971, Start Num: 49
Candidate Starts for Flypotenuse_82:
(33, 51576), (Start: 49 @51609 has 115 MA's), (76, 51822), (77, 51837), (87, 51906), (88, 51918), (90, 51924), (96, 51960),

Gene: FoghornLeghorn_80 Start: 50622, Stop: 50984, Start Num: 49
Candidate Starts for FoghornLeghorn_80:
(33, 50589), (Start: 49 @50622 has 115 MA's), (76, 50835), (77, 50850), (87, 50919), (88, 50931), (90, 50937), (96, 50973),

Gene: FosterFrank_67 Start: 40055, Stop: 40444, Start Num: 43
Candidate Starts for FosterFrank_67:
(Start: 43 @40055 has 99 MA's), (65, 40205),

Gene: FreakyGoo_73 Start: 47146, Stop: 47574, Start Num: 39
Candidate Starts for FreakyGoo_73:
(Start: 39 @47146 has 8 MA's), (Start: 42 @47155 has 8 MA's), (56, 47233), (67, 47320), (75, 47350), (78, 47392), (87, 47452), (101, 47527),

Gene: Fulbright_48 Start: 33605, Stop: 33997, Start Num: 43
Candidate Starts for Fulbright_48:
(Start: 43 @33605 has 99 MA's), (90, 33926),

Gene: Gage_88 Start: 52402, Stop: 52764, Start Num: 49
Candidate Starts for Gage_88:
(33, 52369), (Start: 49 @52402 has 115 MA's), (76, 52615), (87, 52699), (88, 52711), (90, 52717), (96, 52753),

Gene: Gallop_68 Start: 44638, Stop: 45021, Start Num: 43
Candidate Starts for Gallop_68:

(Start: 43 @44638 has 99 MA's), (58, 44740), (75, 44836), (90, 44956),

Gene: GardenSalsa_80 Start: 49270, Stop: 49671, Start Num: 43
Candidate Starts for GardenSalsa_80:
(Start: 43 @49270 has 99 MA's), (63, 49414), (78, 49507), (87, 49567), (96, 49621),

Gene: Gator_84 Start: 52452, Stop: 52814, Start Num: 49
Candidate Starts for Gator_84:
(33, 52419), (Start: 49 @52452 has 115 MA's), (76, 52665), (77, 52680), (87, 52749), (88, 52761), (90, 52767), (96, 52803),

Gene: Gemini_91 Start: 53056, Stop: 53418, Start Num: 49
Candidate Starts for Gemini_91:
(37, 53029), (Start: 49 @53056 has 115 MA's), (76, 53269), (87, 53353), (88, 53365), (90, 53371), (96, 53407),

Gene: GenevaB15_79 Start: 48719, Stop: 49120, Start Num: 43
Candidate Starts for GenevaB15_79:
(Start: 43 @48719 has 99 MA's), (55, 48785), (63, 48863), (78, 48956), (87, 49016), (96, 49070),

Gene: Gengar_65 Start: 47565, Stop: 47930, Start Num: 43
Candidate Starts for Gengar_65:
(Start: 16 @47475 has 2 MA's), (22, 47502), (23, 47505), (Start: 43 @47565 has 99 MA's), (Start: 47 @47577 has 1 MA's), (59, 47667), (63, 47706), (68, 47730), (73, 47757), (82, 47826), (83, 47829), (90, 47877), (91, 47883), (97, 47919),

Gene: Gex_49 Start: 34532, Stop: 34924, Start Num: 43
Candidate Starts for Gex_49:
(Start: 43 @34532 has 99 MA's), (90, 34853),

Gene: Glaske16_73 Start: 47145, Stop: 47573, Start Num: 39
Candidate Starts for Glaske16_73:
(Start: 39 @47145 has 8 MA's), (Start: 42 @47154 has 8 MA's), (56, 47232), (67, 47319), (75, 47349), (78, 47391), (87, 47451), (101, 47526),

Gene: Glexan_85 Start: 52739, Stop: 53101, Start Num: 49
Candidate Starts for Glexan_85:
(33, 52706), (Start: 49 @52739 has 115 MA's), (76, 52952), (77, 52967), (87, 53036), (88, 53048), (90, 53054), (96, 53090),

Gene: GlobiWarming_67 Start: 40113, Stop: 40502, Start Num: 43
Candidate Starts for GlobiWarming_67:
(Start: 43 @40113 has 99 MA's), (65, 40263),

Gene: Goku_85 Start: 52400, Stop: 52762, Start Num: 49
Candidate Starts for Goku_85:
(37, 52373), (Start: 49 @52400 has 115 MA's), (76, 52613), (87, 52697), (88, 52709), (90, 52715), (96, 52751),

Gene: GoldenSpark_90 Start: 52539, Stop: 52901, Start Num: 49
Candidate Starts for GoldenSpark_90:
(37, 52512), (Start: 49 @52539 has 115 MA's), (76, 52752), (87, 52836), (88, 52848), (90, 52854), (96, 52890),

Gene: Goldilocks_89 Start: 51897, Stop: 52259, Start Num: 49
Candidate Starts for Goldilocks_89:
(33, 51864), (Start: 49 @51897 has 115 MA's), (76, 52110), (87, 52194), (88, 52206), (90, 52212), (96, 52248),

Gene: GooberAzure_89 Start: 52539, Stop: 52901, Start Num: 49
Candidate Starts for GooberAzure_89:
(37, 52512), (Start: 49 @52539 has 115 MA's), (76, 52752), (87, 52836), (88, 52848), (90, 52854), (96, 52890),

Gene: Greely_206 Start: 116895, Stop: 117263, Start Num: 51
Candidate Starts for Greely_206:
(9, 116745), (11, 116763), (17, 116781), (36, 116859), (Start: 51 @116895 has 3 MA's), (60, 117006), (70, 117072), (73, 117090), (90, 117210), (91, 117216),

Gene: Greep_90 Start: 53535, Stop: 53897, Start Num: 49
Candidate Starts for Greep_90:
(37, 53508), (Start: 49 @53535 has 115 MA's), (76, 53748), (87, 53832), (88, 53844), (90, 53850), (96, 53886),

Gene: Guillsminger_66 Start: 47417, Stop: 47872, Start Num: 16
Candidate Starts for Guillsminger_66:
(Start: 16 @47417 has 2 MA's), (22, 47444), (23, 47447), (Start: 43 @47507 has 99 MA's), (Start: 47 @47519 has 1 MA's), (59, 47609), (63, 47648), (68, 47672), (73, 47699), (82, 47768), (83, 47771), (90, 47819), (91, 47825), (97, 47861),

Gene: HanKaySha_86 Start: 51837, Stop: 52199, Start Num: 49
Candidate Starts for HanKaySha_86:
(37, 51810), (Start: 49 @51837 has 115 MA's), (76, 52050), (87, 52134), (88, 52146), (90, 52152), (96, 52188),

Gene: Hanako_54 Start: 35784, Stop: 36176, Start Num: 43
Candidate Starts for Hanako_54:
(10, 35661), (13, 35682), (19, 35709), (Start: 43 @35784 has 99 MA's), (90, 36105),

Gene: Harella_86 Start: 53255, Stop: 53617, Start Num: 49
Candidate Starts for Harella_86:
(33, 53222), (Start: 49 @53255 has 115 MA's), (76, 53468), (77, 53483), (87, 53552), (88, 53564), (90, 53570), (96, 53606),

Gene: Heftyboy_66 Start: 47886, Stop: 48251, Start Num: 43
Candidate Starts for Heftyboy_66:
(Start: 16 @47796 has 2 MA's), (22, 47823), (23, 47826), (Start: 43 @47886 has 99 MA's), (Start: 47 @47898 has 1 MA's), (59, 47988), (63, 48027), (68, 48051), (73, 48078), (82, 48147), (83, 48150), (88, 48192), (90, 48198), (91, 48204), (97, 48240),

Gene: Heinz_56 Start: 36903, Stop: 37334, Start Num: 43
Candidate Starts for Heinz_56:
(Start: 43 @36903 has 99 MA's), (100, 37269),

Gene: Henrique_66 Start: 39825, Stop: 40217, Start Num: 43
Candidate Starts for Henrique_66:

(Start: 43 @39825 has 99 MA's), (65, 39975),

Gene: Henry_84 Start: 52138, Stop: 52500, Start Num: 50
Candidate Starts for Henry_84:
(Start: 41 @52117 has 3 MA's), (Start: 50 @52138 has 12 MA's), (76, 52351), (87, 52435), (88, 52447), (90, 52453), (96, 52489),

Gene: Hibiscus_57 Start: 36872, Stop: 37315, Start Num: 40
Candidate Starts for Hibiscus_57:
(1, 36347), (2, 36353), (3, 36401), (4, 36419), (5, 36458), (6, 36467), (7, 36548), (12, 36767), (Start: 40 @36872 has 2 MA's), (100, 37250),

Gene: Highbury_85 Start: 51828, Stop: 52190, Start Num: 49
Candidate Starts for Highbury_85:
(37, 51801), (Start: 49 @51828 has 115 MA's), (76, 52041), (87, 52125), (88, 52137), (90, 52143), (96, 52179),

Gene: Holt_91 Start: 52953, Stop: 53315, Start Num: 49
Candidate Starts for Holt_91:
(37, 52926), (Start: 49 @52953 has 115 MA's), (76, 53166), (87, 53250), (88, 53262), (90, 53268), (96, 53304),

Gene: Hoonter_89 Start: 52399, Stop: 52761, Start Num: 49
Candidate Starts for Hoonter_89:
(33, 52366), (Start: 49 @52399 has 115 MA's), (76, 52612), (77, 52627), (87, 52696), (88, 52708), (90, 52714), (96, 52750),

Gene: Hopey_86 Start: 52369, Stop: 52731, Start Num: 49
Candidate Starts for Hopey_86:
(37, 52342), (Start: 49 @52369 has 115 MA's), (76, 52582), (87, 52666), (88, 52678), (90, 52684), (96, 52720),

Gene: HotPotato_62 Start: 40281, Stop: 40673, Start Num: 43
Candidate Starts for HotPotato_62:
(Start: 43 @40281 has 99 MA's), (65, 40431),

Gene: HufflyPuff_89 Start: 53202, Stop: 53564, Start Num: 49
Candidate Starts for HufflyPuff_89:
(37, 53175), (Start: 49 @53202 has 115 MA's), (76, 53415), (87, 53499), (88, 53511), (90, 53517), (91, 53523), (96, 53553),

Gene: IHOP_84 Start: 52301, Stop: 52663, Start Num: 49
Candidate Starts for IHOP_84:
(37, 52274), (Start: 49 @52301 has 115 MA's), (76, 52514), (87, 52598), (88, 52610), (90, 52616), (96, 52652),

Gene: IPhane7_71 Start: 46680, Stop: 47099, Start Num: 42
Candidate Starts for IPhane7_71:
(Start: 39 @46671 has 8 MA's), (Start: 42 @46680 has 8 MA's), (56, 46758), (67, 46845), (75, 46875), (78, 46917), (87, 46977), (101, 47052),

Gene: Icee_87 Start: 52066, Stop: 52428, Start Num: 49
Candidate Starts for Icee_87:

(33, 52033), (Start: 49 @52066 has 115 MA's), (76, 52279), (77, 52294), (87, 52363), (88, 52375), (90, 52381), (96, 52417),

Gene: Impisi_55 Start: 35581, Stop: 35973, Start Num: 43
Candidate Starts for Impisi_55:
(10, 35458), (13, 35479), (19, 35506), (Start: 43 @35581 has 99 MA's), (90, 35902),

Gene: Inca_83 Start: 50790, Stop: 51152, Start Num: 50
Candidate Starts for Inca_83:
(Start: 41 @50769 has 3 MA's), (Start: 50 @50790 has 12 MA's), (76, 51003), (87, 51087), (88, 51099), (90, 51105), (96, 51141),

Gene: InvictusManeo_63 Start: 45860, Stop: 46225, Start Num: 43
Candidate Starts for InvictusManeo_63:
(23, 45797), (Start: 43 @45860 has 99 MA's), (Start: 47 @45872 has 1 MA's), (59, 45962), (63, 46001), (68, 46025), (73, 46052), (82, 46121), (83, 46124), (88, 46166), (90, 46172), (91, 46178), (93, 46190), (96, 46208),

Gene: Izel_72 Start: 46666, Stop: 47094, Start Num: 39
Candidate Starts for Izel_72:
(Start: 39 @46666 has 8 MA's), (Start: 42 @46675 has 8 MA's), (56, 46753), (67, 46840), (75, 46870), (78, 46912), (87, 46972), (101, 47047),

Gene: Jamie19_48 Start: 34075, Stop: 34467, Start Num: 43
Candidate Starts for Jamie19_48:
(10, 33952), (13, 33973), (19, 34000), (Start: 43 @34075 has 99 MA's), (90, 34396),

Gene: JeTaime_86 Start: 53018, Stop: 53380, Start Num: 49
Candidate Starts for JeTaime_86:
(37, 52991), (Start: 49 @53018 has 115 MA's), (76, 53231), (87, 53315), (88, 53327), (90, 53333), (96, 53369),

Gene: JohnLord_68 Start: 50343, Stop: 50684, Start Num: 54
Candidate Starts for JohnLord_68:
(24, 50232), (Start: 43 @50289 has 99 MA's), (54, 50343), (59, 50394), (63, 50433), (64, 50439), (75, 50484), (80, 50544), (83, 50556), (90, 50604), (92, 50619), (94, 50628),

Gene: Jojo24_56 Start: 37218, Stop: 37661, Start Num: 40
Candidate Starts for Jojo24_56:
(Start: 40 @37218 has 2 MA's), (90, 37545), (100, 37596),

Gene: Judy_67 Start: 41178, Stop: 41567, Start Num: 43
Candidate Starts for Judy_67:
(Start: 43 @41178 has 99 MA's), (65, 41328), (77, 41403), (91, 41496),

Gene: Kanye_83 Start: 51885, Stop: 52247, Start Num: 49
Candidate Starts for Kanye_83:
(37, 51858), (Start: 49 @51885 has 115 MA's), (76, 52098), (87, 52182), (88, 52194), (90, 52200), (96, 52236),

Gene: Karkharias_62 Start: 39837, Stop: 40226, Start Num: 42
Candidate Starts for Karkharias_62:
(Start: 42 @39837 has 8 MA's), (65, 39987), (84, 40113),

Gene: KayMoney_63 Start: 40303, Stop: 40695, Start Num: 43
Candidate Starts for KayMoney_63:
(15, 40213), (18, 40216), (Start: 43 @40303 has 99 MA's), (65, 40453),

Gene: Kevin1_51 Start: 34560, Stop: 34952, Start Num: 43
Candidate Starts for Kevin1_51:
(12, 34452), (Start: 43 @34560 has 99 MA's), (90, 34881), (91, 34887), (92, 34896),

Gene: Kimchi_90 Start: 52405, Stop: 52767, Start Num: 49
Candidate Starts for Kimchi_90:
(33, 52372), (Start: 49 @52405 has 115 MA's), (76, 52618), (87, 52702), (88, 52714), (90, 52720), (96, 52756),

Gene: Kithara_59 Start: 44925, Stop: 44470, Start Num: 45
Candidate Starts for Kithara_59:
(14, 45027), (Start: 45 @44925 has 2 MA's), (53, 44883), (86, 44625), (90, 44595),

Gene: KleverKiS_70 Start: 46397, Stop: 46816, Start Num: 42
Candidate Starts for KleverKiS_70:
(Start: 39 @46388 has 8 MA's), (Start: 42 @46397 has 8 MA's), (56, 46475), (67, 46562), (75, 46592), (78, 46634), (87, 46694), (101, 46769),

Gene: Kostya_86 Start: 52403, Stop: 52765, Start Num: 49
Candidate Starts for Kostya_86:
(37, 52376), (Start: 49 @52403 has 115 MA's), (76, 52616), (87, 52700), (88, 52712), (90, 52718), (96, 52754),

Gene: Kozie_44 Start: 32286, Stop: 32642, Start Num: 52
Candidate Starts for Kozie_44:
(Start: 52 @32286 has 1 MA's), (62, 32409), (90, 32586), (91, 32592), (93, 32604),

Gene: Kratio_63 Start: 45599, Stop: 45964, Start Num: 43
Candidate Starts for Kratio_63:
(23, 45536), (Start: 43 @45599 has 99 MA's), (Start: 47 @45611 has 1 MA's), (59, 45701), (63, 45740), (68, 45764), (73, 45791), (82, 45860), (83, 45863), (88, 45905), (90, 45911), (91, 45917), (93, 45929), (96, 45947),

Gene: Kukla_66 Start: 40006, Stop: 40383, Start Num: 43
Candidate Starts for Kukla_66:
(Start: 43 @40006 has 99 MA's), (54, 40060), (59, 40108), (68, 40171), (69, 40174), (77, 40231), (83, 40270), (88, 40312), (94, 40342), (95, 40345), (101, 40375),

Gene: Kumao_67 Start: 47222, Stop: 47653, Start Num: 38
Candidate Starts for Kumao_67:
(Start: 38 @47222 has 1 MA's), (77, 47462), (82, 47498), (91, 47555), (93, 47567), (99, 47600),

Gene: Larva_66 Start: 47058, Stop: 47423, Start Num: 43
Candidate Starts for Larva_66:
(29, 47022), (Start: 43 @47058 has 99 MA's), (Start: 47 @47070 has 1 MA's), (59, 47160), (63, 47199), (68, 47223), (73, 47250), (81, 47316), (82, 47319), (83, 47322), (88, 47364), (90, 47370), (91, 47376), (93, 47388), (96, 47406), (97, 47412),

Gene: Leston_65 Start: 47546, Stop: 48001, Start Num: 16
Candidate Starts for Leston_65:
(Start: 16 @47546 has 2 MA's), (22, 47573), (23, 47576), (Start: 43 @47636 has 99 MA's), (Start: 47 @47648 has 1 MA's), (59, 47738), (63, 47777), (68, 47801), (73, 47828), (82, 47897), (83, 47900), (90, 47948), (91, 47954), (97, 47990),

Gene: LilDirt_64 Start: 45618, Stop: 45983, Start Num: 43
Candidate Starts for LilDirt_64:
(23, 45555), (Start: 43 @45618 has 99 MA's), (Start: 47 @45630 has 1 MA's), (59, 45720), (63, 45759), (68, 45783), (73, 45810), (82, 45879), (83, 45882), (88, 45924), (90, 45930), (91, 45936), (93, 45948), (96, 45966),

Gene: Lilac_88 Start: 52154, Stop: 52516, Start Num: 49
Candidate Starts for Lilac_88:
(37, 52127), (Start: 49 @52154 has 115 MA's), (76, 52367), (77, 52382), (87, 52451), (88, 52463), (90, 52469), (96, 52505),

Gene: LilhomieP_71 Start: 47159, Stop: 47578, Start Num: 42
Candidate Starts for LilhomieP_71:
(Start: 39 @47150 has 8 MA's), (Start: 42 @47159 has 8 MA's), (56, 47237), (67, 47324), (75, 47354), (78, 47396), (87, 47456), (101, 47531),

Gene: Lilizi_87 Start: 51867, Stop: 52229, Start Num: 49
Candidate Starts for Lilizi_87:
(37, 51840), (Start: 49 @51867 has 115 MA's), (76, 52080), (87, 52164), (88, 52176), (90, 52182), (96, 52218),

Gene: Lilpickle_85 Start: 51755, Stop: 52117, Start Num: 49
Candidate Starts for Lilpickle_85:
(37, 51728), (Start: 49 @51755 has 115 MA's), (76, 51968), (87, 52052), (88, 52064), (90, 52070), (96, 52106),

Gene: LilyBell_63 Start: 39885, Stop: 40274, Start Num: 43
Candidate Starts for LilyBell_63:
(Start: 43 @39885 has 99 MA's), (65, 40035),

Gene: LittleRon_59 Start: 39811, Stop: 40230, Start Num: 31
Candidate Starts for LittleRon_59:
(31, 39811), (65, 39988),

Gene: Livelaughbron_88 Start: 53330, Stop: 53692, Start Num: 49
Candidate Starts for Livelaughbron_88:
(37, 53303), (Start: 49 @53330 has 115 MA's), (76, 53543), (87, 53627), (88, 53639), (90, 53645), (96, 53681),

Gene: MISSy_87 Start: 52261, Stop: 52623, Start Num: 49
Candidate Starts for MISSy_87:
(37, 52234), (Start: 49 @52261 has 115 MA's), (76, 52474), (87, 52558), (88, 52570), (90, 52576), (96, 52612),

Gene: MPhalcon_87 Start: 52254, Stop: 52616, Start Num: 49
Candidate Starts for MPhalcon_87:

(37, 52227), (Start: 49 @52254 has 115 MA's), (76, 52467), (87, 52551), (88, 52563), (90, 52569), (96, 52605),

Gene: MadamMonkfish_86 Start: 51482, Stop: 51844, Start Num: 49
Candidate Starts for MadamMonkfish_86:
(37, 51455), (Start: 49 @51482 has 115 MA's), (76, 51695), (87, 51779), (88, 51791), (90, 51797), (96, 51833),

Gene: Magsby_49 Start: 34533, Stop: 34925, Start Num: 43
Candidate Starts for Magsby_49:
(Start: 43 @34533 has 99 MA's), (90, 34854),

Gene: Manda_88 Start: 53750, Stop: 54112, Start Num: 50
Candidate Starts for Manda_88:
(Start: 41 @53729 has 3 MA's), (Start: 50 @53750 has 12 MA's), (76, 53963), (87, 54047), (88, 54059), (90, 54065), (96, 54101),

Gene: Mao1_69 Start: 50980, Stop: 51408, Start Num: 43
Candidate Starts for Mao1_69:
(Start: 43 @50980 has 99 MA's), (54, 51034), (59, 51085), (63, 51124), (64, 51130), (74, 51199), (77, 51241), (79, 51265), (81, 51274), (82, 51277), (90, 51328), (92, 51343), (94, 51352),

Gene: Marshmallow_84 Start: 53031, Stop: 53393, Start Num: 49
Candidate Starts for Marshmallow_84:
(37, 53004), (Start: 49 @53031 has 115 MA's), (76, 53244), (87, 53328), (88, 53340), (90, 53346), (96, 53382),

Gene: MaryV_85 Start: 52221, Stop: 52625, Start Num: 46
Candidate Starts for MaryV_85:
(21, 52140), (Start: 46 @52221 has 5 MA's), (57, 52308), (61, 52356), (66, 52380), (70, 52401), (71, 52407), (72, 52416), (80, 52518), (83, 52530), (90, 52578), (91, 52584), (94, 52602),

Gene: Mask_67 Start: 53263, Stop: 53691, Start Num: 43
Candidate Starts for Mask_67:
(Start: 43 @53263 has 99 MA's), (54, 53317), (59, 53368), (63, 53407), (64, 53413), (74, 53482), (79, 53548), (80, 53551), (82, 53560), (90, 53611), (92, 53626), (94, 53635),

Gene: Maxxinista_88 Start: 52127, Stop: 52489, Start Num: 49
Candidate Starts for Maxxinista_88:
(37, 52100), (Start: 49 @52127 has 115 MA's), (76, 52340), (87, 52424), (88, 52436), (90, 52442), (96, 52478),

Gene: Melville_52 Start: 34517, Stop: 34909, Start Num: 43
Candidate Starts for Melville_52:
(Start: 43 @34517 has 99 MA's), (90, 34838),

Gene: Mindy_85 Start: 51283, Stop: 51666, Start Num: 41
Candidate Starts for Mindy_85:
(Start: 41 @51283 has 3 MA's), (Start: 50 @51304 has 12 MA's), (76, 51517), (87, 51601), (88, 51613), (90, 51619), (96, 51655),

Gene: Miniwave_81 Start: 51799, Stop: 52161, Start Num: 49
Candidate Starts for Miniwave_81:

(37, 51772), (Start: 49 @51799 has 115 MA's), (76, 52012), (87, 52096), (88, 52108), (90, 52114), (96, 52150),

Gene: Miryou_69 Start: 50262, Stop: 50627, Start Num: 43
Candidate Starts for Miryou_69:
(Start: 16 @50172 has 2 MA's), (22, 50199), (23, 50202), (Start: 43 @50262 has 99 MA's), (Start: 47 @50274 has 1 MA's), (59, 50364), (63, 50403), (68, 50427), (73, 50454), (82, 50523), (83, 50526), (88, 50568), (90, 50574), (91, 50580), (97, 50616),

Gene: Misfit_87 Start: 53273, Stop: 53635, Start Num: 49
Candidate Starts for Misfit_87:
(37, 53246), (Start: 49 @53273 has 115 MA's), (76, 53486), (87, 53570), (88, 53582), (90, 53588), (96, 53624),

Gene: Moldemort_89 Start: 52218, Stop: 52580, Start Num: 49
Candidate Starts for Moldemort_89:
(33, 52185), (Start: 49 @52218 has 115 MA's), (76, 52431), (77, 52446), (87, 52515), (88, 52527), (90, 52533), (96, 52569),

Gene: MollyToe_81 Start: 51100, Stop: 51462, Start Num: 49
Candidate Starts for MollyToe_81:
(37, 51073), (Start: 49 @51100 has 115 MA's), (76, 51313), (87, 51397), (88, 51409), (90, 51415), (96, 51451),

Gene: Mosby_82 Start: 51556, Stop: 51918, Start Num: 49
Candidate Starts for Mosby_82:
(37, 51529), (Start: 49 @51556 has 115 MA's), (76, 51769), (87, 51853), (88, 51865), (90, 51871), (96, 51907),

Gene: MrMagoo_81 Start: 49270, Stop: 49671, Start Num: 43
Candidate Starts for MrMagoo_81:
(Start: 43 @49270 has 99 MA's), (63, 49414), (78, 49507), (87, 49567), (96, 49621),

Gene: Murica_89 Start: 53202, Stop: 53564, Start Num: 49
Candidate Starts for Murica_89:
(37, 53175), (Start: 49 @53202 has 115 MA's), (76, 53415), (87, 53499), (88, 53511), (90, 53517), (96, 53553),

Gene: Murphy_86 Start: 52639, Stop: 53001, Start Num: 49
Candidate Starts for Murphy_86:
(37, 52612), (Start: 49 @52639 has 115 MA's), (76, 52852), (87, 52936), (88, 52948), (90, 52954), (96, 52990),

Gene: Myrale_86 Start: 52762, Stop: 53124, Start Num: 49
Candidate Starts for Myrale_86:
(33, 52729), (Start: 49 @52762 has 115 MA's), (76, 52975), (87, 53059), (88, 53071), (90, 53077), (96, 53113),

Gene: Myrna_199 Start: 116281, Stop: 116649, Start Num: 51
Candidate Starts for Myrna_199:
(9, 116131), (11, 116149), (36, 116245), (Start: 51 @116281 has 3 MA's), (70, 116458), (73, 116476), (84, 116560), (90, 116596),

Gene: Nala_88 Start: 52763, Stop: 53125, Start Num: 49
Candidate Starts for Nala_88:
(37, 52736), (Start: 49 @52763 has 115 MA's), (76, 52976), (87, 53060), (88, 53072), (90, 53078), (96, 53114),

Gene: Nanosmite_76 Start: 48317, Stop: 48718, Start Num: 43
Candidate Starts for Nanosmite_76:
(Start: 43 @48317 has 99 MA's), (67, 48482), (78, 48554), (87, 48614), (92, 48647), (96, 48668),

Gene: Neighly_67 Start: 47057, Stop: 47422, Start Num: 43
Candidate Starts for Neighly_67:
(29, 47021), (Start: 43 @47057 has 99 MA's), (Start: 47 @47069 has 1 MA's), (59, 47159), (63, 47198), (68, 47222), (73, 47249), (81, 47315), (82, 47318), (83, 47321), (88, 47363), (90, 47369), (91, 47375), (93, 47387), (96, 47405), (97, 47411),

Gene: NelitzaMV_84 Start: 51845, Stop: 52207, Start Num: 49
Candidate Starts for NelitzaMV_84:
(37, 51818), (Start: 49 @51845 has 115 MA's), (76, 52058), (87, 52142), (88, 52154), (90, 52160), (96, 52196),

Gene: Nenae_54 Start: 35786, Stop: 36178, Start Num: 43
Candidate Starts for Nenae_54:
(10, 35663), (13, 35684), (19, 35711), (Start: 43 @35786 has 99 MA's), (90, 36107),

Gene: NidoQ_60 Start: 40302, Stop: 40691, Start Num: 43
Candidate Starts for NidoQ_60:
(Start: 43 @40302 has 99 MA's), (65, 40452), (77, 40527), (91, 40620),

Gene: NikkiHotWheels_63 Start: 39888, Stop: 40277, Start Num: 43
Candidate Starts for NikkiHotWheels_63:
(Start: 38 @39882 has 1 MA's), (Start: 43 @39888 has 99 MA's), (65, 40038),

Gene: Nimrod_87 Start: 53466, Stop: 53828, Start Num: 49
Candidate Starts for Nimrod_87:
(37, 53439), (Start: 49 @53466 has 115 MA's), (76, 53679), (87, 53763), (88, 53775), (90, 53781), (96, 53817),

Gene: NoSleep_87 Start: 52100, Stop: 52462, Start Num: 49
Candidate Starts for NoSleep_87:
(37, 52073), (Start: 49 @52100 has 115 MA's), (76, 52313), (87, 52397), (88, 52409), (90, 52415), (96, 52451),

Gene: NonchalantPear_86 Start: 51956, Stop: 52318, Start Num: 49
Candidate Starts for NonchalantPear_86:
(37, 51929), (Start: 49 @51956 has 115 MA's), (76, 52169), (87, 52253), (88, 52265), (90, 52271), (96, 52307),

Gene: OkiRoe_66 Start: 47934, Stop: 48299, Start Num: 43
Candidate Starts for OkiRoe_66:
(Start: 16 @47844 has 2 MA's), (22, 47871), (23, 47874), (Start: 43 @47934 has 99 MA's), (Start: 47 @47946 has 1 MA's), (59, 48036), (63, 48075), (68, 48099), (73, 48126), (82, 48195), (83, 48198), (90, 48246), (91, 48252), (97, 48288),

Gene: Omnicron_69 Start: 48055, Stop: 48420, Start Num: 43
Candidate Starts for Omnicron_69:
(29, 48019), (Start: 43 @48055 has 99 MA's), (Start: 47 @48067 has 1 MA's), (59, 48157), (63, 48196), (68, 48220), (73, 48247), (82, 48316), (83, 48319), (88, 48361), (90, 48367), (91, 48373), (93, 48385), (98, 48412),

Gene: OrionPax_85 Start: 51851, Stop: 52213, Start Num: 49
Candidate Starts for OrionPax_85:
(37, 51824), (Start: 49 @51851 has 115 MA's), (76, 52064), (87, 52148), (88, 52160), (90, 52166), (96, 52202),

Gene: PaddyBaddy_86 Start: 51851, Stop: 52213, Start Num: 49
Candidate Starts for PaddyBaddy_86:
(37, 51824), (Start: 49 @51851 has 115 MA's), (76, 52064), (87, 52148), (88, 52160), (90, 52166), (96, 52202),

Gene: Palpatine_88 Start: 53229, Stop: 53591, Start Num: 49
Candidate Starts for Palpatine_88:
(37, 53202), (Start: 49 @53229 has 115 MA's), (76, 53442), (87, 53526), (88, 53538), (90, 53544), (96, 53580),

Gene: Panchino_47 Start: 35421, Stop: 35813, Start Num: 43
Candidate Starts for Panchino_47:
(10, 35298), (13, 35319), (19, 35346), (Start: 43 @35421 has 99 MA's), (90, 35742),

Gene: Paola_65 Start: 47507, Stop: 47872, Start Num: 43
Candidate Starts for Paola_65:
(Start: 16 @47417 has 2 MA's), (22, 47444), (23, 47447), (Start: 43 @47507 has 99 MA's), (Start: 47 @47519 has 1 MA's), (59, 47609), (63, 47648), (68, 47672), (73, 47699), (82, 47768), (83, 47771), (90, 47819), (91, 47825), (97, 47861),

Gene: Paperbeatsrock_85 Start: 52477, Stop: 52839, Start Num: 49
Candidate Starts for Paperbeatsrock_85:
(37, 52450), (Start: 49 @52477 has 115 MA's), (76, 52690), (87, 52774), (88, 52786), (90, 52792), (96, 52828),

Gene: Parmesanjohn_49 Start: 34536, Stop: 34928, Start Num: 43
Candidate Starts for Parmesanjohn_49:
(Start: 43 @34536 has 99 MA's), (90, 34857),

Gene: Pat3_84 Start: 50872, Stop: 51234, Start Num: 49
Candidate Starts for Pat3_84:
(33, 50839), (Start: 49 @50872 has 115 MA's), (76, 51085), (77, 51100), (87, 51169), (88, 51181), (90, 51187), (96, 51223),

Gene: Peas_64 Start: 41595, Stop: 41996, Start Num: 43
Candidate Starts for Peas_64:
(Start: 43 @41595 has 99 MA's), (65, 41745),

Gene: PegLeg_70 Start: 46420, Stop: 46839, Start Num: 42
Candidate Starts for PegLeg_70:
(Start: 39 @46411 has 8 MA's), (Start: 42 @46420 has 8 MA's), (56, 46498), (67, 46585), (75, 46615), (78, 46657), (87, 46717), (101, 46792),

Gene: PeggyLeg03_63 Start: 40587, Stop: 40976, Start Num: 43
Candidate Starts for PeggyLeg03_63:
(Start: 43 @40587 has 99 MA's), (65, 40737),

Gene: Petra64142_90 Start: 53696, Stop: 54058, Start Num: 49
Candidate Starts for Petra64142_90:
(37, 53669), (Start: 49 @53696 has 115 MA's), (76, 53909), (87, 53993), (88, 54005), (90, 54011), (96, 54047),

Gene: PetriParty_66 Start: 39175, Stop: 39552, Start Num: 43
Candidate Starts for PetriParty_66:
(34, 39163), (Start: 43 @39175 has 99 MA's), (54, 39229), (56, 39253), (59, 39277), (68, 39340), (69, 39343), (83, 39439), (88, 39481), (94, 39511), (95, 39514), (101, 39544),

Gene: Phabba_210 Start: 116249, Stop: 116617, Start Num: 51
Candidate Starts for Phabba_210:
(11, 116117), (36, 116213), (Start: 51 @116249 has 3 MA's), (70, 116426), (73, 116444), (90, 116564), (91, 116570),

Gene: Phaja_84 Start: 52303, Stop: 52665, Start Num: 49
Candidate Starts for Phaja_84:
(37, 52276), (Start: 49 @52303 has 115 MA's), (76, 52516), (87, 52600), (88, 52612), (90, 52618), (96, 52654),

Gene: PhancyPhin_54 Start: 35780, Stop: 36172, Start Num: 43
Candidate Starts for PhancyPhin_54:
(10, 35657), (13, 35678), (19, 35705), (Start: 43 @35780 has 99 MA's), (90, 36101),

Gene: Pharsalus_83 Start: 52277, Stop: 52639, Start Num: 49
Candidate Starts for Pharsalus_83:
(37, 52250), (Start: 49 @52277 has 115 MA's), (76, 52490), (87, 52574), (88, 52586), (90, 52592), (96, 52628),

Gene: PhatBacter_90 Start: 53249, Stop: 53611, Start Num: 49
Candidate Starts for PhatBacter_90:
(37, 53222), (Start: 49 @53249 has 115 MA's), (76, 53462), (87, 53546), (88, 53558), (90, 53564), (96, 53600),

Gene: Phaux_88 Start: 53244, Stop: 53606, Start Num: 49
Candidate Starts for Phaux_88:
(37, 53217), (Start: 49 @53244 has 115 MA's), (76, 53457), (87, 53541), (88, 53553), (90, 53559), (96, 53595),

Gene: Phayonce_51 Start: 37143, Stop: 37571, Start Num: 43
Candidate Starts for Phayonce_51:
(Start: 43 @37143 has 99 MA's), (54, 37197), (59, 37248), (63, 37287), (64, 37293), (74, 37362), (77, 37404), (79, 37428), (81, 37437), (82, 37440), (90, 37491), (92, 37506), (94, 37515),

Gene: Phloss_47 Start: 33943, Stop: 34335, Start Num: 43
Candidate Starts for Phloss_47:
(Start: 43 @33943 has 99 MA's), (90, 34264),

Gene: Phrann_51 Start: 36063, Stop: 36455, Start Num: 43
Candidate Starts for Phrann_51:
(10, 35940), (13, 35961), (19, 35988), (Start: 43 @36063 has 99 MA's), (90, 36384),

Gene: Phrux_83 Start: 51798, Stop: 52160, Start Num: 50
Candidate Starts for Phrux_83:
(Start: 41 @51777 has 3 MA's), (Start: 50 @51798 has 12 MA's), (76, 52011), (87, 52095), (88, 52107), (90, 52113), (96, 52149),

Gene: Pipsqueaks_49 Start: 34513, Stop: 34905, Start Num: 43
Candidate Starts for Pipsqueaks_49:
(Start: 43 @34513 has 99 MA's), (90, 34834),

Gene: Policronamos_89 Start: 53244, Stop: 53606, Start Num: 49
Candidate Starts for Policronamos_89:
(37, 53217), (Start: 49 @53244 has 115 MA's), (76, 53457), (87, 53541), (88, 53553), (90, 53559), (96, 53595),

Gene: Porky_85 Start: 51667, Stop: 52029, Start Num: 49
Candidate Starts for Porky_85:
(37, 51640), (Start: 49 @51667 has 115 MA's), (76, 51880), (87, 51964), (88, 51976), (90, 51982), (96, 52018),

Gene: Psycho_65 Start: 46183, Stop: 46548, Start Num: 43
Candidate Starts for Psycho_65:
(29, 46147), (Start: 43 @46183 has 99 MA's), (Start: 47 @46195 has 1 MA's), (59, 46285), (63, 46324), (68, 46348), (73, 46375), (81, 46441), (82, 46444), (83, 46447), (88, 46489), (90, 46495), (91, 46501), (93, 46513), (96, 46531), (97, 46537),

Gene: Ptowny_83 Start: 51139, Stop: 51501, Start Num: 49
Candidate Starts for Ptowny_83:
(37, 51112), (Start: 49 @51139 has 115 MA's), (76, 51352), (87, 51436), (88, 51448), (90, 51454), (96, 51490),

Gene: Pucara_59 Start: 40031, Stop: 40420, Start Num: 43
Candidate Starts for Pucara_59:
(Start: 43 @40031 has 99 MA's), (65, 40181),

Gene: Pumpkin_89 Start: 52895, Stop: 53257, Start Num: 49
Candidate Starts for Pumpkin_89:
(37, 52868), (Start: 49 @52895 has 115 MA's), (76, 53108), (87, 53192), (88, 53204), (90, 53210), (96, 53246),

Gene: Purgamenstris_54 Start: 35784, Stop: 36176, Start Num: 43
Candidate Starts for Purgamenstris_54:
(10, 35661), (13, 35682), (19, 35709), (Start: 43 @35784 has 99 MA's), (90, 36105),

Gene: Quallification_87 Start: 52885, Stop: 53247, Start Num: 49
Candidate Starts for Quallification_87:
(37, 52858), (Start: 49 @52885 has 115 MA's), (76, 53098), (87, 53182), (88, 53194), (90, 53200), (96, 53236),

Gene: Rakim_87 Start: 52214, Stop: 52576, Start Num: 49

Candidate Starts for Rakim_87:
(33, 52181), (Start: 49 @52214 has 115 MA's), (76, 52427), (87, 52511), (88, 52523), (90, 52529), (96, 52565),

Gene: Rando14_68 Start: 46839, Stop: 47204, Start Num: 43
Candidate Starts for Rando14_68:
(29, 46803), (Start: 43 @46839 has 99 MA's), (Start: 47 @46851 has 1 MA's), (59, 46941), (63, 46980), (67, 47001), (68, 47004), (73, 47031), (82, 47100), (83, 47103), (88, 47145), (90, 47151), (91, 47157), (93, 47169), (98, 47196),

Gene: Raymond7_48 Start: 35572, Stop: 35964, Start Num: 43
Candidate Starts for Raymond7_48:
(10, 35449), (13, 35470), (19, 35497), (Start: 43 @35572 has 99 MA's), (90, 35893),

Gene: Redi_54 Start: 35783, Stop: 36175, Start Num: 43
Candidate Starts for Redi_54:
(10, 35660), (13, 35681), (19, 35708), (Start: 43 @35783 has 99 MA's), (90, 36104),

Gene: Reindeer_73 Start: 47812, Stop: 48231, Start Num: 42
Candidate Starts for Reindeer_73:
(Start: 39 @47803 has 8 MA's), (Start: 42 @47812 has 8 MA's), (62, 47950), (76, 48025), (78, 48049), (87, 48109), (101, 48184),

Gene: Rey_78 Start: 48943, Stop: 49344, Start Num: 43
Candidate Starts for Rey_78:
(Start: 43 @48943 has 99 MA's), (63, 49087), (78, 49180), (87, 49240), (96, 49294),

Gene: Reyja_59 Start: 38515, Stop: 38931, Start Num: 43
Candidate Starts for Reyja_59:
(5, 38104), (6, 38113), (7, 38194), (12, 38413), (Start: 43 @38515 has 99 MA's), (79, 38767), (83, 38782), (90, 38830),

Gene: Rimmer_86 Start: 52254, Stop: 52616, Start Num: 48
Candidate Starts for Rimmer_86:
(Start: 48 @52254 has 3 MA's), (76, 52467), (77, 52482), (87, 52551), (88, 52563), (90, 52569), (96, 52605),

Gene: RiverMonster_86 Start: 52415, Stop: 52777, Start Num: 49
Candidate Starts for RiverMonster_86:
(37, 52388), (Start: 49 @52415 has 115 MA's), (76, 52628), (87, 52712), (88, 52724), (90, 52730), (96, 52766),

Gene: RootBeer_52 Start: 36912, Stop: 37301, Start Num: 43
Candidate Starts for RootBeer_52:
(Start: 43 @36912 has 99 MA's), (65, 37062),

Gene: RoseMarie_76 Start: 50037, Stop: 50456, Start Num: 42
Candidate Starts for RoseMarie_76:
(Start: 39 @50028 has 8 MA's), (Start: 42 @50037 has 8 MA's), (67, 50202), (75, 50232), (78, 50274), (87, 50334), (101, 50409),

Gene: Rubeelu_52 Start: 35124, Stop: 35516, Start Num: 43
Candidate Starts for Rubeelu_52:

(12, 35016), (Start: 43 @35124 has 99 MA's), (90, 35445),

Gene: Saints25_85 Start: 51828, Stop: 52190, Start Num: 49
Candidate Starts for Saints25_85:
(37, 51801), (Start: 49 @51828 has 115 MA's), (76, 52041), (87, 52125), (88, 52137), (90, 52143), (96, 52179),

Gene: Santhid_54 Start: 36000, Stop: 36518, Start Num: 43
Candidate Starts for Santhid_54:
(Start: 43 @36000 has 99 MA's), (90, 36315), (103, 36435), (105, 36468),

Gene: Sashimi_85 Start: 47693, Stop: 48073, Start Num: 43
Candidate Starts for Sashimi_85:
(25, 47648), (Start: 43 @47693 has 99 MA's), (59, 47795), (65, 47843), (73, 47885), (90, 48008),

Gene: Sassay_81 Start: 50518, Stop: 50880, Start Num: 49
Candidate Starts for Sassay_81:
(37, 50491), (Start: 49 @50518 has 115 MA's), (76, 50731), (87, 50815), (88, 50827), (90, 50833), (96, 50869),

Gene: Schnauzer_50 Start: 34536, Stop: 34928, Start Num: 43
Candidate Starts for Schnauzer_50:
(Start: 43 @34536 has 99 MA's), (90, 34857),

Gene: ScoobyDoobyDoo_198 Start: 114464, Stop: 114832, Start Num: 51
Candidate Starts for ScoobyDoobyDoo_198:
(8, 114260), (17, 114353), (21, 114377), (36, 114428), (Start: 51 @114464 has 3 MA's), (60, 114575), (69, 114635), (73, 114659), (79, 114716), (81, 114725), (83, 114731), (90, 114779), (91, 114785),

Gene: ShamWow_86 Start: 52698, Stop: 53060, Start Num: 50
Candidate Starts for ShamWow_86:
(Start: 41 @52677 has 3 MA's), (Start: 50 @52698 has 12 MA's), (76, 52911), (87, 52995), (88, 53007), (90, 53013), (96, 53049),

Gene: Shambre1_63 Start: 40417, Stop: 40782, Start Num: 45
Candidate Starts for Shambre1_63:
(Start: 45 @40417 has 2 MA's), (75, 40609), (90, 40729),

Gene: ShereKhan_84 Start: 52810, Stop: 53172, Start Num: 49
Candidate Starts for ShereKhan_84:
(37, 52783), (Start: 49 @52810 has 115 MA's), (76, 53023), (87, 53107), (88, 53119), (90, 53125), (96, 53161),

Gene: ShrimpFriedEgg_54 Start: 35783, Stop: 36175, Start Num: 43
Candidate Starts for ShrimpFriedEgg_54:
(10, 35660), (13, 35681), (19, 35708), (Start: 43 @35783 has 99 MA's), (90, 36104),

Gene: Silvafighter_50 Start: 34509, Stop: 34901, Start Num: 43
Candidate Starts for Silvafighter_50:
(Start: 43 @34509 has 99 MA's), (90, 34830),

Gene: Simpliphy_85 Start: 51818, Stop: 52180, Start Num: 49
Candidate Starts for Simpliphy_85:

(37, 51791), (Start: 49 @51818 has 115 MA's), (76, 52031), (87, 52115), (88, 52127), (90, 52133), (96, 52169),

Gene: SirDuracell_86 Start: 51469, Stop: 51831, Start Num: 49
Candidate Starts for SirDuracell_86:
(35, 51442), (Start: 49 @51469 has 115 MA's), (76, 51682), (77, 51697), (87, 51766), (88, 51778), (90, 51784), (96, 51820),

Gene: Skinny_74 Start: 47579, Stop: 48007, Start Num: 39
Candidate Starts for Skinny_74:
(Start: 39 @47579 has 8 MA's), (Start: 42 @47588 has 8 MA's), (56, 47666), (67, 47753), (75, 47783), (78, 47825), (87, 47885), (101, 47960),

Gene: SlimJimmy_71 Start: 47135, Stop: 47563, Start Num: 39
Candidate Starts for SlimJimmy_71:
(Start: 39 @47135 has 8 MA's), (Start: 42 @47144 has 8 MA's), (56, 47222), (67, 47309), (75, 47339), (78, 47381), (87, 47441), (101, 47516),

Gene: Smurph_49 Start: 34536, Stop: 34928, Start Num: 43
Candidate Starts for Smurph_49:
(Start: 43 @34536 has 99 MA's), (90, 34857),

Gene: Snekmaggedon_48 Start: 34075, Stop: 34467, Start Num: 43
Candidate Starts for Snekmaggedon_48:
(10, 33952), (13, 33973), (19, 34000), (Start: 43 @34075 has 99 MA's), (90, 34396),

Gene: SoSeph_66 Start: 47886, Stop: 48251, Start Num: 43
Candidate Starts for SoSeph_66:
(Start: 16 @47796 has 2 MA's), (22, 47823), (23, 47826), (Start: 43 @47886 has 99 MA's), (Start: 47 @47898 has 1 MA's), (59, 47988), (63, 48027), (68, 48051), (73, 48078), (82, 48147), (83, 48150), (88, 48192), (90, 48198), (91, 48204), (97, 48240),

Gene: SophKB_83 Start: 51496, Stop: 51858, Start Num: 49
Candidate Starts for SophKB_83:
(37, 51469), (Start: 49 @51496 has 115 MA's), (76, 51709), (87, 51793), (88, 51805), (90, 51811), (96, 51847),

Gene: Sotrice96_87 Start: 52362, Stop: 52724, Start Num: 49
Candidate Starts for Sotrice96_87:
(33, 52329), (Start: 49 @52362 has 115 MA's), (76, 52575), (77, 52590), (87, 52659), (88, 52671), (90, 52677), (96, 52713),

Gene: Spartan_62 Start: 44375, Stop: 44770, Start Num: 43
Candidate Starts for Spartan_62:
(Start: 43 @44375 has 99 MA's), (58, 44477), (75, 44573), (90, 44693),

Gene: Spinach_54 Start: 35783, Stop: 36175, Start Num: 43
Candidate Starts for Spinach_54:
(10, 35660), (13, 35681), (19, 35708), (Start: 43 @35783 has 99 MA's), (90, 36104),

Gene: SpongeBob_48 Start: 34075, Stop: 34467, Start Num: 43
Candidate Starts for SpongeBob_48:
(10, 33952), (13, 33973), (19, 34000), (Start: 43 @34075 has 99 MA's), (90, 34396),

Gene: Stank_89 Start: 52757, Stop: 53119, Start Num: 49
Candidate Starts for Stank_89:
(37, 52730), (Start: 49 @52757 has 115 MA's), (76, 52970), (87, 53054), (88, 53066), (90, 53072), (96, 53108),

Gene: Stark_87 Start: 52298, Stop: 52660, Start Num: 49
Candidate Starts for Stark_87:
(37, 52271), (Start: 49 @52298 has 115 MA's), (76, 52511), (87, 52595), (88, 52607), (90, 52613), (96, 52649),

Gene: StellaBean_84 Start: 52022, Stop: 52384, Start Num: 50
Candidate Starts for StellaBean_84:
(Start: 41 @52001 has 3 MA's), (Start: 50 @52022 has 12 MA's), (76, 52235), (87, 52319), (88, 52331), (90, 52337), (96, 52373),

Gene: StolenFromERC_89 Start: 52402, Stop: 52764, Start Num: 49
Candidate Starts for StolenFromERC_89:
(33, 52369), (Start: 49 @52402 has 115 MA's), (76, 52615), (87, 52699), (88, 52711), (90, 52717), (96, 52753),

Gene: StormChicken_88 Start: 53197, Stop: 53559, Start Num: 49
Candidate Starts for StormChicken_88:
(37, 53170), (Start: 49 @53197 has 115 MA's), (76, 53410), (87, 53494), (88, 53506), (90, 53512), (96, 53548),

Gene: TBrady12_89 Start: 52238, Stop: 52600, Start Num: 49
Candidate Starts for TBrady12_89:
(37, 52211), (Start: 49 @52238 has 115 MA's), (76, 52451), (87, 52535), (88, 52547), (90, 52553), (96, 52589),

Gene: Tapioca_51 Start: 34502, Stop: 34894, Start Num: 43
Candidate Starts for Tapioca_51:
(Start: 43 @34502 has 99 MA's), (90, 34823),

Gene: Tarkin_85 Start: 52486, Stop: 52848, Start Num: 49
Candidate Starts for Tarkin_85:
(37, 52459), (Start: 49 @52486 has 115 MA's), (76, 52699), (87, 52783), (88, 52795), (90, 52801), (96, 52837),

Gene: Tarzan_57 Start: 37228, Stop: 37659, Start Num: 43
Candidate Starts for Tarzan_57:
(Start: 43 @37228 has 99 MA's), (90, 37543), (100, 37594), (104, 37651),

Gene: TeamEdward_87 Start: 52855, Stop: 53217, Start Num: 48
Candidate Starts for TeamEdward_87:
(Start: 48 @52855 has 3 MA's), (76, 53068), (77, 53083), (87, 53152), (88, 53164), (90, 53170), (96, 53206),

Gene: TeardropMSU_82 Start: 51486, Stop: 51848, Start Num: 49
Candidate Starts for TeardropMSU_82:
(37, 51459), (Start: 49 @51486 has 115 MA's), (76, 51699), (87, 51783), (88, 51795), (90, 51801), (96, 51837),

Gene: Teaspoon_87 Start: 52341, Stop: 52703, Start Num: 50
Candidate Starts for Teaspoon_87:
(Start: 41 @52320 has 3 MA's), (Start: 50 @52341 has 12 MA's), (76, 52554), (87, 52638), (88, 52650), (90, 52656), (96, 52692),

Gene: Terminus_89 Start: 53273, Stop: 53635, Start Num: 49
Candidate Starts for Terminus_89:
(37, 53246), (Start: 49 @53273 has 115 MA's), (76, 53486), (87, 53570), (88, 53582), (90, 53588), (96, 53624),

Gene: Tessdabest_50 Start: 34533, Stop: 34925, Start Num: 43
Candidate Starts for Tessdabest_50:
(Start: 43 @34533 has 99 MA's), (90, 34854),

Gene: Thimble_87 Start: 51718, Stop: 52080, Start Num: 49
Candidate Starts for Thimble_87:
(37, 51691), (Start: 49 @51718 has 115 MA's), (76, 51931), (87, 52015), (88, 52027), (90, 52033), (96, 52069),

Gene: Thresher_88 Start: 53357, Stop: 53719, Start Num: 49
Candidate Starts for Thresher_88:
(37, 53330), (Start: 49 @53357 has 115 MA's), (76, 53570), (87, 53654), (88, 53666), (90, 53672), (96, 53708),

Gene: Thyatira_68 Start: 49878, Stop: 50243, Start Num: 43
Candidate Starts for Thyatira_68:
(Start: 16 @49788 has 2 MA's), (22, 49815), (23, 49818), (Start: 43 @49878 has 99 MA's), (Start: 47 @49890 has 1 MA's), (59, 49980), (63, 50019), (68, 50043), (73, 50070), (82, 50139), (83, 50142), (88, 50184), (90, 50190), (91, 50196), (97, 50232),

Gene: Tomaszewski_81 Start: 51649, Stop: 52011, Start Num: 49
Candidate Starts for Tomaszewski_81:
(37, 51622), (Start: 49 @51649 has 115 MA's), (76, 51862), (87, 51946), (88, 51958), (90, 51964), (96, 52000),

Gene: Tortoise12_48 Start: 33219, Stop: 33611, Start Num: 43
Candidate Starts for Tortoise12_48:
(Start: 43 @33219 has 99 MA's), (90, 33540),

Gene: Toto_84 Start: 52677, Stop: 53060, Start Num: 41
Candidate Starts for Toto_84:
(Start: 41 @52677 has 3 MA's), (Start: 50 @52698 has 12 MA's), (76, 52911), (87, 52995), (88, 53007), (90, 53013), (96, 53049),

Gene: TpudiCK_73 Start: 46670, Stop: 47098, Start Num: 39
Candidate Starts for TpudiCK_73:
(Start: 39 @46670 has 8 MA's), (Start: 42 @46679 has 8 MA's), (56, 46757), (67, 46844), (75, 46874), (78, 46916), (87, 46976), (101, 47051),

Gene: Traaww1_82 Start: 51784, Stop: 52146, Start Num: 49
Candidate Starts for Traaww1_82:

(33, 51751), (Start: 49 @51784 has 115 MA's), (76, 51997), (77, 52012), (87, 52081), (88, 52093), (90, 52099), (96, 52135),

Gene: TripleJ_65 Start: 39433, Stop: 39810, Start Num: 43
Candidate Starts for TripleJ_65:
(Start: 43 @39433 has 99 MA's), (54, 39487), (56, 39511), (59, 39535), (68, 39598), (69, 39601), (83, 39697), (88, 39739), (94, 39769), (95, 39772), (101, 39802),

Gene: Tuco_87 Start: 53245, Stop: 53607, Start Num: 49
Candidate Starts for Tuco_87:
(37, 53218), (Start: 49 @53245 has 115 MA's), (76, 53458), (87, 53542), (88, 53554), (90, 53560), (96, 53596),

Gene: TyDawg_71 Start: 46671, Stop: 47099, Start Num: 39
Candidate Starts for TyDawg_71:
(Start: 39 @46671 has 8 MA's), (Start: 42 @46680 has 8 MA's), (56, 46758), (67, 46845), (75, 46875), (78, 46917), (87, 46977), (101, 47052),

Gene: Ukulele_81 Start: 51631, Stop: 51993, Start Num: 49
Candidate Starts for Ukulele_81:
(37, 51604), (Start: 49 @51631 has 115 MA's), (76, 51844), (87, 51928), (88, 51940), (90, 51946), (96, 51982),

Gene: ViviJ_64 Start: 45617, Stop: 45982, Start Num: 43
Candidate Starts for ViviJ_64:
(23, 45554), (Start: 43 @45617 has 99 MA's), (Start: 47 @45629 has 1 MA's), (59, 45719), (63, 45758), (68, 45782), (73, 45809), (82, 45878), (83, 45881), (88, 45923), (90, 45929), (91, 45935), (93, 45947), (96, 45965),

Gene: Waterfoul_67 Start: 47948, Stop: 48313, Start Num: 43
Candidate Starts for Waterfoul_67:
(Start: 16 @47858 has 2 MA's), (22, 47885), (23, 47888), (Start: 43 @47948 has 99 MA's), (Start: 47 @47960 has 1 MA's), (59, 48050), (63, 48089), (68, 48113), (73, 48140), (82, 48209), (83, 48212), (88, 48254), (90, 48260), (91, 48266), (97, 48302),

Gene: Wiggin_88 Start: 52185, Stop: 52547, Start Num: 49
Candidate Starts for Wiggin_88:
(33, 52152), (Start: 49 @52185 has 115 MA's), (76, 52398), (77, 52413), (87, 52482), (88, 52494), (90, 52500), (96, 52536),

Gene: Wildcat_85 Start: 52231, Stop: 52635, Start Num: 46
Candidate Starts for Wildcat_85:
(21, 52150), (Start: 46 @52231 has 5 MA's), (57, 52318), (61, 52366), (66, 52390), (70, 52411), (71, 52417), (72, 52426), (80, 52528), (83, 52540), (90, 52588), (91, 52594), (94, 52612),

Gene: Willez_81 Start: 50518, Stop: 50880, Start Num: 49
Candidate Starts for Willez_81:
(37, 50491), (Start: 49 @50518 has 115 MA's), (76, 50731), (87, 50815), (88, 50827), (90, 50833),

Gene: Xandras_85 Start: 51730, Stop: 52092, Start Num: 49
Candidate Starts for Xandras_85:
(37, 51703), (Start: 49 @51730 has 115 MA's), (76, 51943), (87, 52027), (88, 52039), (90, 52045), (96, 52081),

Gene: Xerxes_49 Start: 34533, Stop: 34925, Start Num: 43
Candidate Starts for Xerxes_49:
(Start: 43 @34533 has 99 MA's), (90, 34854),

Gene: YassJohnny_83 Start: 51649, Stop: 52011, Start Num: 50
Candidate Starts for YassJohnny_83:
(Start: 41 @51628 has 3 MA's), (Start: 50 @51649 has 12 MA's), (76, 51862), (87, 51946), (88, 51958), (90, 51964), (96, 52000),

Gene: Youngblood_89 Start: 53200, Stop: 53562, Start Num: 49
Candidate Starts for Youngblood_89:
(37, 53173), (Start: 49 @53200 has 115 MA's), (76, 53413), (87, 53497), (88, 53509), (90, 53515), (96, 53551),

Gene: xkcd_89 Start: 53387, Stop: 53749, Start Num: 49
Candidate Starts for xkcd_89:
(37, 53360), (Start: 49 @53387 has 115 MA's), (76, 53600), (87, 53684), (88, 53696), (90, 53702), (96, 53738),