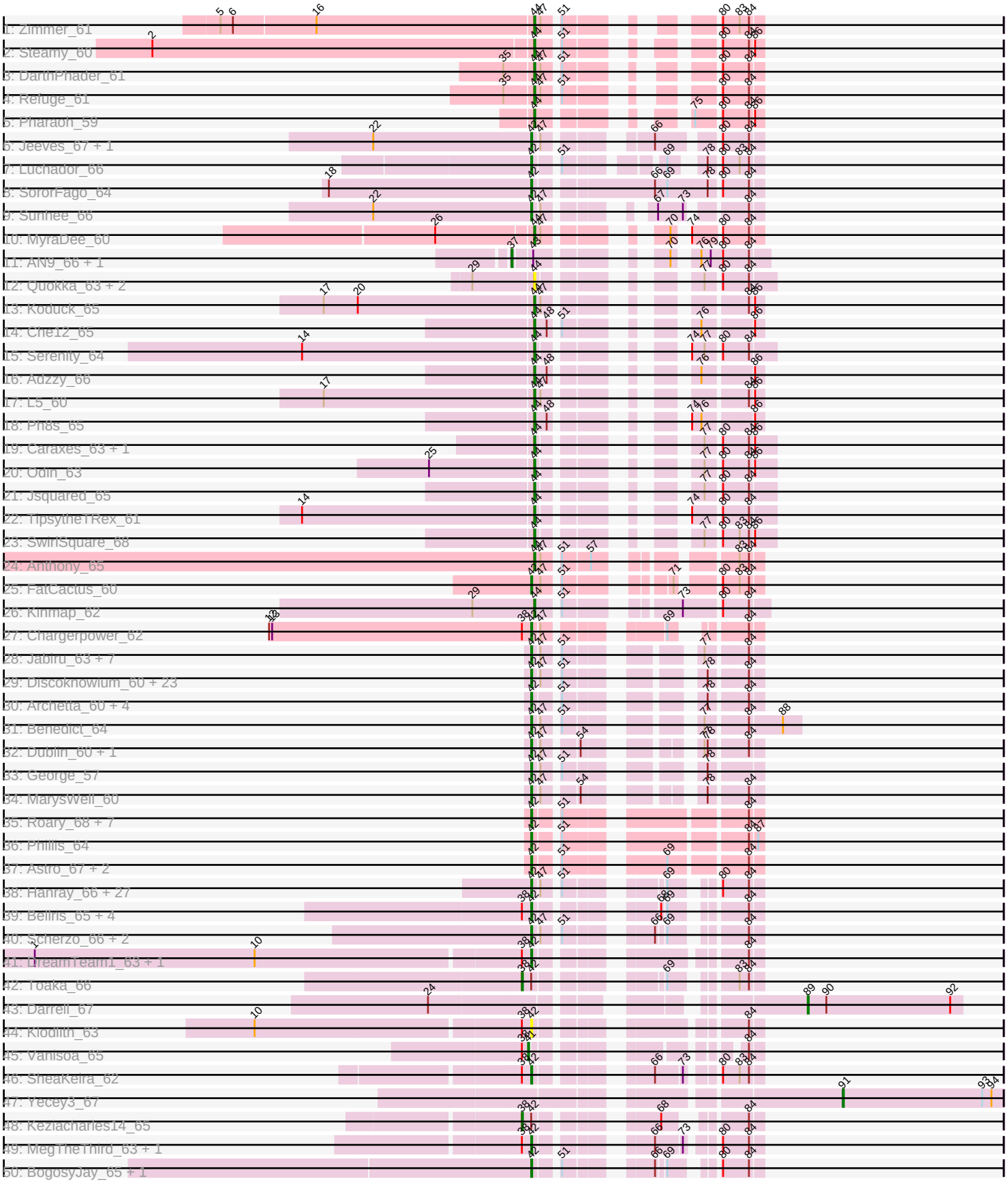
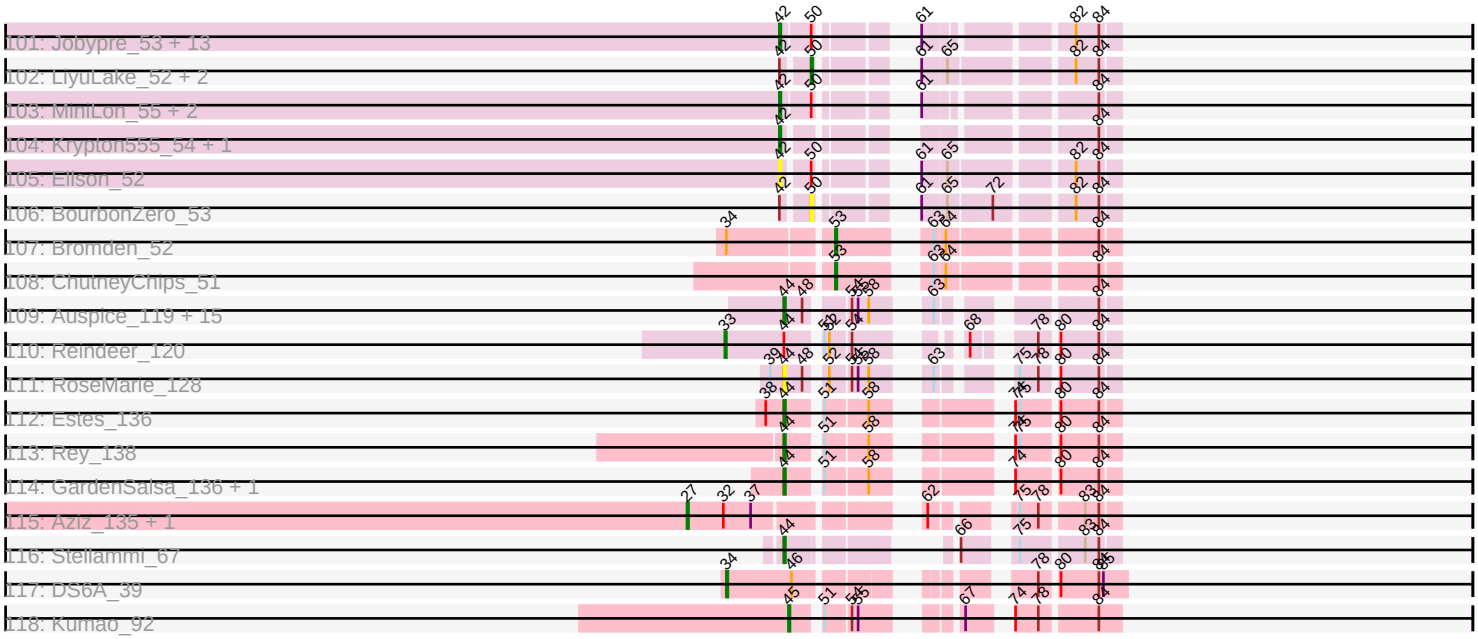
Pham 347141


1: Zimmer_61
2: Steamy_60
3: DarthPhader_61
4: Refuge_61
5: Pharaoh_59
6: Jeeves_67 + 1
7: Luchador_66
8: SororFago_64
9: Sunnee_66
10: MyraDee_60
11: AN9_66 + 1
12: Quokka_63 + 2
13: Koduck_65
14: Che12_65
15: Serenity_64
16: Adzzy_66
17: L5_60
18: Phi8s_65
19: Caraxes_63 + 1
20: Odin_63
21: Jsquared_65
22: TipsytheTRex_61
23: SwirlSquare_68
24: Anthony_65
25: FatCactus_60
26: Kinmap_62
27: Chargerpower_62
28: Jabiru_63 + 7
29: Discoknowium_60 + 23
30: Archetta_60 + 4
31: Benedict_64
32: Dublin_60 + 1
33: George_57
34: MarysWell_60
35: Roary_68 + 7
36: Phillis_64
37: Astro_67 + 2
38: Hanray_66 + 27
39: Bellris_65 + 4
40: Scherzo_66 + 2
41: DreamTeam1_63 + 1
42: Toaka_66
43: Darrell_67
44: Klodilth_63
45: Vanisoa_65
46: Sheakeira_62
47: Yecey3_67
48: Keziacharles14_65
49: MegTheThird_63 + 1
50: BogosyJay_65 + 1

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51: Arissanae_64
52: Elephantoon_64
53: Velki_61 + 11
54: Pisa4_54 + 1
55: Jarvi_60 + 29
56: DartGoblin_62 + 1
57: Apocalypse_63 + 1
58: Stinson_61
59: TruMudaTree_60 + 3
60: Curiosium_64
61: Yunkel11_63 + 2
62: Emerson_61
63: TiniBug_61 + 4
64: LaterM_60
65: Bern_61 + 2
66: Atiba_61 + 3
67: LindNT_59 + 3
68: Jayhawk_61 + 1
69: Ramen_61 + 3
70: QuincyRose_59 + 1
71: Megsy_62
72: LastHope_63
73: Adonis_60
74: YoureAdopted_59
75: Tiri_61
76: Pokerus_59
77: Beezoo_62
78: Deby_60
79: TingHuaYa_62
80: Geraldini_63
81: Sulley_60
82: MeaningOfLife_61
83: Khepana_60
84: Kraw_63 + 13
85: Y2_61 + 2
86: Lebo14_62 + 2
87: MissDaisy_60 + 3
88: Ruthiejr_64
89: OmniCritical_62
90: AlleyCat_56 + 5
91: OkiRoe_55 + 2
92: DoubleChamp_51 + 6
93: Hefty boy_55 + 5
94: Kratio_52
95: Gengar_54
96: Thyatira_57
97: Rando14_56
98: Omnicron_58
99: Aminay_60
100: Boilgate_55

Pham 347141


101: Jobypre_53 + 13
102: LiyuLake_52 + 2
103: MiniLon_55 + 2
104: Krypton555_54 + 1
105: Ellson_52
106: BourbonZero_53
107: Bromden_52
108: ChutneyChips_51
109: Auspice_119 + 15
110: Reindeer_120
111: RoseMarie_128
112: Estes_136
113: Rey_138
114: GardenSalsa_136 + 1
115: Aziz_135 + 1
116: Stellammi_67
117: DS6A_39
118: Kumao_92

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 347141 Report

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

Pham number 347141 has 341 members, 30 are drafts.

Phages represented in each track:
- Track 1 : Zimmer_61
- Track 2 : Steamy_60
- Track 3 : DarthPhader_61
- Track 4 : Refuge_61
- Track 5 : Pharaoh_59
- Track 6 : Jeeves_67, Gail_65
- Track 7 : Luchador_66
- Track 8 : SororFago_64
- Track 9 : Sunhee_66
- Track 10 : MyraDee_60
- Track 11 : AN9_66, ANI8_66
- Track 12 : Quokka_63, MajorMajor_63, Bradman_64
- Track 13 : Koduck_65
- Track 14 : Che12_65
- Track 15 : Serenity_64
- Track 16 : Adzzy_66
- Track 17 : L5_60
- Track 18 : Ph8s_65
- Track 19 : Caraxes_63, Superchunk_63
- Track 20 : Odin_63
- Track 21 : Jsquared_65
- Track 22 : TipsytheTRex_61
- Track 23 : SwirlSquare_68
- Track 24 : Anthony_65
- Track 25 : FatCactus_60
- Track 26 : Kinmap_62
- Track 27 : Chargerpower_62
- Track 28 : Jabiru_63, Airmid_62, PetterN_67, UnionJack_63, Naca_62, Scorpia_64, Chadwick_64, ElTiger69_64
- Track 29 : Discoknowium_60, HuhtaEnerson15_60, Twigg_60, ForGetIt_63, Tiger_62, Aragog_62, Phlorence_61, Bonamassa_60, Cuco_61, Prinashe11_60, PickleBack_63, Jovo_63, Florence4_59, Milcery_60, Swirley_62, Florence1_57, Coog_59, Theia_59, Conspiracy_63, Midas2_59, AgentM_62, Tarynearal_59, LittleCherry_60, Lev2_63
- Track 30 : Archetta_60, Zolita_61, Ghoulboy_62, SydNat_62, Bluefalcon_58
- Track 31 : Benedict_64
- Track 32 : Dublin_60, Micasa_60

• Track 33 : George_57
• Track 34 : MarysWell_60
• Track 35 : Roary_68, Danforth_67, Saintus_62, Expelliarmus_64, Stephig9_66, Smeadley_67, Dixon_66, Caitlin_66
• Track 36 : Phillis_64
• Track 37 : Astro_67, NearlyHeadless_67, Groundhog_66
• Track 38 : Hanray_66, Sachima_66, EmyBug_63, Alma_64, PackMan_65, Conquerage_64, Phaeder_66, Priya_64, Beemo_67, HortumSL17_67, Jiawan_66, Holex_66, Qobbit_64, EdogawaKiddo_66, ExplosioNervosa_64, Pioneer_67, Catalina_68, Spouty_64, Tubs_66, RyeScarlet_67, Onglai_65, Eidsmoe_64, Phonnegut_67, Aliter_67, Lilleskat_65, Fayely_64, Myxus_66, Ayanochan_63
• Track 39 : Bellris_65, CogOmlette_63, Minispark_63, Rahalelujah_65, WorldCup_63
• Track 40 : Scherzo_66, Ugenie5_62, LoneWolf_66
• Track 41 : DreamTeam1_63, Charm_63
• Track 42 : Toaka_66
• Track 43 : Darrell_67
• Track 44 : Klodlith_63
• Track 45 : Vanisoa_65
• Track 46 : SheaKeira_62
• Track 47 : Yecey3_67
• Track 48 : Keziacharles14_65
• Track 49 : MegTheThird_63, Celestialunch_63
• Track 50 : BogosyJay_65, Maminiaina_65
• Track 51 : Arissanae_64
• Track 52 : Elephantoon_64
• Track 53 : Veliki_61, MacKat_55, Clipper_63, Devera_67, JAWS_60, TaiwanKao_62, CrimD_61, Dole_65, Zavala_62, Padpat_62, Mynx_61, Illumine_65
• Track 54 : Pisa4_54, Pisa1_60
• Track 55 : Jarvi_60, Rosmarinus_60, Boiiii_60, BGlluviae_60, Dalmuri_60, Peel_60, Hyperbowlee_60, Asayake_60, Jeckyll_60, Durfee_60, CaseJules_62, BEEST_60, ShiaSurprise_61, Inky_60, Joy99_60, Capricorn_60, Lunahalos_60, Blizzard_60, Ageofdapage_63, CallaLilly_60, Belladonna_60, Adephagia_60, CREW_60, Homura_60, Topper_60, Spock_60, Tachez_60, Twitch_60, Piatt_60, Llorens_60
• Track 56 : DartGoblin_62, Bella96_61
• Track 57 : Apocalypse_63, Angelica_60
• Track 58 : Stinson_61
• Track 59 : TruffulaTree_60, BarrelRoll_60, Rapunzel97_61, Slimphazie_60
• Track 60 : Curiosium_64
• Track 61 : Yunkel11_63, Guanica15_63, Efra2_64
• Track 62 : Emerson_61
• Track 63 : TiniBug_61, DrHayes_61, SamuelLPlaqson_61, Urkel_61, Anma_61
• Track 64 : LaterM_60
• Track 65 : Bern_61, BaghaKamala_59, CheetoDust_59
• Track 66 : Atiba_61, Lokum_61, AlishaPH_60, Padfoot_60
• Track 67 : LindNT_59, Murucutumbu_61, TreyKay_61, Prithvi_61
• Track 68 : Jayhawk_61, Anaya_62
• Track 69 : Ramen_61, Zabiza_55, ActinUp_60, HedwigODU_60
• Track 70 : QuincyRose_59, Ganymede_61
• Track 71 : Megsy_62
• Track 72 : LastHope_63
• Track 73 : Adonis_60
• Track 74 : YoureAdopted_59
• Track 75 : Tiri_61

• Track 76 : Pokerus_59
• Track 77 : Beezoo_62
• Track 78 : Deby_60
• Track 79 : TingHuaYa_62
• Track 80 : Geraldini_63
• Track 81 : Sulley_60
• Track 82 : MeaningOfLife_61
• Track 83 : Kheparia_60
• Track 84 : Kraw_63, Eponine_65, Taquito_62, Malthus_64, YasnayaPolyana_62, Juliette_65, Slarp_63, Fionnbharth_63, Mitti_63, Wintermute_63, Qhanda_65, SamScheppers_61, Chancellor_63, Cheetobro_63
• Track 85 : Y2_61, Y10_61, JF1_63
• Track 86 : Lebo14_62, DanSyl44_66, Nolwazi_65
• Track 87 : MissDaisy_60, Bobquesha_64, Patt_59, Reptar3000_60
• Track 88 : Ruthiejr_64
• Track 89 : OmniCritical_62
• Track 90 : AlleyCat_56, Larva_55, Edugator_53, Neighly_56, Psycho_54, Dadosky_56
• Track 91 : OkiRoe_55, Feyre_57, Miryou_58
• Track 92 : DoubleChamp_51, Agent47_54, BananenDer11_54, LilDirt_53, Collard_52, InvictusManeo_52, ViviJ_53
• Track 93 : Heftyboy_55, Guillsminger_55, Leston_54, Waterfoul_56, Paola_54, SoSeph_55
• Track 94 : Kratio_52
• Track 95 : Gengar_54
• Track 96 : Thyatira_57
• Track 97 : Rando14_56
• Track 98 : Omnicron_58
• Track 99 : Aminay_60
• Track 100 : Boilgate_55
• Track 101 : Jobypre_53, Kingsolomon_52, Finnry_52, Bellis_53, Clautastrophe_52, Red305_53, Samty_52, Jubie_52, Snenia_52, MsGreen_52, Nicholas_52, Lumos_54, TriFive_54, Moostard_52
• Track 102 : LiyuLake_52, KirDoubleO7_51, DuncansLeg_53
• Track 103 : MiniLon_55, MiniMac_55, Lolly9_52
• Track 104 : Krypton555_54, Whirlwind_53
• Track 105 : Ellson_52
• Track 106 : BourbonZero_53
• Track 107 : Bromden_52
• Track 108 : ChutneyChips_51
• Track 109 : Auspice_119, Dulcita_120, Diminimus_120, Skinny_125, IPhane7_117, Izel_120, Bricole_121, KleverKiS_122, FreakyGoo_120, PegLeg_123, Glaske16_122, TyDawg_114, TpudiCK_121, LilhomieP_119, Bongo_119, SlimJimmy_119
• Track 110 : Reindeer_120
• Track 111 : RoseMarie_128
• Track 112 : Estes_136
• Track 113 : Rey_138
• Track 114 : GardenSalsa_136, MrMagoo_138
• Track 115 : Aziz_135, GenevaB15_138
• Track 116 : Stellammi_67
• Track 117 : DS6A_39
• Track 118 : Kumao_92

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

The start number called the most often in the published annotations is 42, it was called in 248 of the 311 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ActinUp_60, Adephagia_60, Adonis_60, Agent47_54, AgentM_62, Ageofdapage_63, Airmid_62, Aliter_67, AlleyCat_56, Alma_64, Aminay_60, Anaya_62, Angelica_60, Anma_61, Apocalypse_63, Aragog_62, Archetta_60, Asayake_60, Astro_67, Ayanochan_63, BEEST_60, BGlluviae_60, BaghaKamala_59, BananenDer11_54, BarrelRoll_60, Beemo_67, Beezoo_62, Bella96_61, Belladonna_60, Bellis_53, Bellris_65, Benedict_64, Bern_61, Blizzard_60, Bluefalcon_58, BogosyJay_65, Boiiii_60, Boilgate_55, Bonamassa_60, CREW_60, Caitlin_66, CallaLilly_60, Capricorn_60, CaseJules_62, Catalina_68, Celestialunch_63, Chadwick_64, Chancellor_63, Chargerpower_62, Charm_63, CheetoDust_59, Cheetobro_63, Clautastrophe_52, Clipper_63, CogOmlette_63, Collard_52, Conquerage_64, Conspiracy_63, Coog_59, CrimD_61, Cuco_61, Curiosium_64, Dadosky_56, Dalmuri_60, DanSyl44_66, Danforth_67, DartGoblin_62, Deby_60, Devera_67, Discoknowium_60, Dixon_66, Dole_65, DoubleChamp_51, DrHayes_61, DreamTeam1_63, Dublin_60, Durfee_60, EdogawaKiddo_66, Edugator_53, Efra2_64, Eidsmoe_64, ElTiger69_64, Ellson_52, EmyBug_63, Eponine_65, Expelliarmus_64, ExplosioNervosa_64, FatCactus_60, Fayely_64, Feyre_57, Finnry_52, Fionnbharth_63, Florence1_57, Florence4_59, ForGetIt_63, Gail_65, Ganymede_61, Gengar_54, George_57, Geraldini_63, Ghoulboy_62, Groundhog_66, Guanica15_63, Guillsminger_55, Hanray_66, HedwigODU_60, Heftyboy_55, Holex_66, Homura_60, HortumSL17_67, HuhtaEnerson15_60, Hyperbowlee_60, Illumine_65, Inky_60, InvictusManeo_52, JAWS_60, JF1_63, Jabiru_63, Jarvi_60, Jayhawk_61, Jeckyll_60, Jeeves_67, Jiawan_66, Jobypre_53, Jovo_63, Joy99_60, Jubie_52, Juliette_65, Kheparia_60, Kingsolomon_52, Klodlith_63, Kratio_52, Kraw_63, Krypton555_54, Larva_55, LastHope_63, LaterM_60, Lebo14_62, Leston_54, Lev2_63, LilDirt_53, Lilleskat_65, LindNT_59, LittleCherry_60, Llorens_60, Lolly9_52, LoneWolf_66, Luchador_66, Lumos_54, Lunahalos_60, MacKat_55, Malthus_64, Maminiaina_65, MarysWell_60, MeaningOfLife_61, MegTheThird_63, Megsy_62, Micasa_60, Midas2_59, Milcery_60, MiniLon_55, MiniMac_55, Minispark_63, Miryou_58, Mitti_63, Moostard_52, MsGreen_52, Murucutumbu_61, Mynx_61, Myxus_66, Naca_62, NearlyHeadless_67, Neighly_56, Nicholas_52, Nolwazi_65, OkiRoe_55, OmniCritical_62, Omnicron_58, Onglai_65, PackMan_65, Padpat_62, Paola_54, Peel_60, PetterN_67, Phaeder_66, Phillis_64, Phlorence_61, Phonnegut_67, Piatt_60, PickleBack_63, Pioneer_67, Pokerus_59, Prinashe11_60, Prithvi_61, Priya_64, Psycho_54, Qhanda_65, Qobbit_64, QuincyRose_59, Rahalelujah_65, Ramen_61, Rando14_56, Rapunzel97_61, Red305_53, Roary_68, Rosmarinus_60, Ruthiejr_64, RyeScarlet_67, Sachima_66, Saintus_62, SamScheppers_61, Samty_52, SamuelLPlaqson_61, Scherzo_66, Scorpia_64, SheaKeira_62, ShiaSurprise_61, Slarp_63, Slimphazie_60, Smeadley_67, Snenia_52, SoSeph_55, SororFago_64, Spock_60, Spouty_64, Stephig9_66, Stinson_61, Sulley_60, Sunhee_66, Swirley_62, SydNat_62, Tachez_60, TaiwanKao_62, Taquito_62, Tarynearal_59, Theia_59, Thyatira_57, Tiger_62, TingHuaYa_62, TiniBug_61, Tiri_61, Topper_60, TreyKay_61, TriFive_54, TruffulaTree_60, Tubs_66, Twigg_60, Twitch_60, Ugenie5_62, UnionJack_63, Urkel_61, Veliki_61, ViviJ_53, Waterfoul_56, Whirlwind_53,

Wintermute_63, WorldCup_63, Y10_61, Y2_61, YasnayaPolyana_62, YoureAdopted_59, Yunkel11_63, Zabiza_55, Zavala_62, Zolita_61,

Genes that have the "Most Annotated" start but do not call it:
• AlishaPH_60, Atiba_61, BourbonZero_53, DuncansLeg_53, Emerson_61, Keziacharles14_65, KirDoubleO7_51, LiyuLake_52, Lokum_61, Padfoot_60, Pisa1_60, Pisa4_54, Toaka_66,

Genes that do not have the "Most Annotated" start:
• AN9_66, ANI8_66, Adzzy_66, Anthony_65, Arissanae_64, Auspice_119, Aziz_135, Bobquesha_64, Bongo_119, Bradman_64, Bricole_121, Bromden_52, Caraxes_63, Che12_65, ChutneyChips_51, DS6A_39, Darrell_67, DarthPhader_61, Diminimus_120, Dulcita_120, Elephantoon_64, Estes_136, FreakyGoo_120, GardenSalsa_136, GenevaB15_138, Glaske16_122, IPhane7_117, Izel_120, Jsquared_65, Kinmap_62, KleverKiS_122, Koduck_65, Kumao_92, L5_60, LilhomieP_119, MajorMajor_63, MissDaisy_60, MrMagoo_138, MyraDee_60, Odin_63, Patt_59, PegLeg_123, Ph8s_65, Pharaoh_59, Quokka_63, Refuge_61, Reindeer_120, Reptar3000_60, Rey_138, RoseMarie_128, Serenity_64, Skinny_125, SlimJimmy_119, Steamy_60, Stellammi_67, Superchunk_63, SwirlSquare_68, TipsytheTRex_61, TpudiCK_121, TyDawg_114, Vanisoa_65, Yecey3_67, Zimmer_61,

Summary by start number:

Start 27:
• Found in 2 of 341 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aziz_135 (M2), GenevaB15_138 (M2),

Start 33:
• Found in 1 of 341 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Reindeer_120 (M1),

Start 34:
• Found in 2 of 341 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 311
• Called 50.0% of time when present
• Phage (with cluster) where this start called: DS6A_39 (singleton),

Start 37:
• Found in 4 of 341 (1.2%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 50.0% of time when present
• Phage (with cluster) where this start called: AN9_66 (A2), ANI8_66 (A2),

Start 38:
• Found in 17 of 341 (5.0%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 11.8% of time when present
• Phage (with cluster) where this start called: Keziacharles14_65 (A9), Toaka_66 (A9),

Start 41:
• Found in 3 of 341 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Arissanae_64 (A9), Vanisoa_65 (A9),

Start 42:
• Found in 278 of 341 (81.5%) of genes in pham
• Manual Annotations of this start: 248 of 311
• Called 95.3% of time when present
• Phage (with cluster) where this start called: ActinUp_60 (K1), Adephagia_60 (K1), Adonis_60 (K1), Agent47_54 (K5), AgentM_62 (A5), Ageofdapage_63 (K1), Airmid_62 (A5), Aliter_67 (A9), AlleyCat_56 (K5), Alma_64 (A9), Aminay_60 (K7), Anaya_62 (K1), Angelica_60 (K1), Anma_61 (K1), Apocalypse_63 (K1), Aragog_62 (A5), Archetta_60 (A5), Asayake_60 (K1), Astro_67 (A8), Ayanochan_63 (A9), BEEST_60 (K1), BGlluviae_60 (K1), BaghaKamala_59 (K1), BananenDer11_54 (K5), BarrelRoll_60 (K1), Beemo_67 (A9), Beezoo_62 (K1), Bella96_61 (K1), Belladonna_60 (K1), Bellis_53 (L3), Bellris_65 (A9), Benedict_64 (A5), Bern_61 (K1), Blizzard_60 (K1), Bluefalcon_58 (A5), BogosyJay_65 (A9), Boiiii_60 (K1), Boilgate_55 (K8), Bonamassa_60 (A5), CREW_60 (K1), Caitlin_66 (A8), CallaLilly_60 (K1), Capricorn_60 (K1), CaseJules_62 (K1), Catalina_68 (A9), Celestialunch_63 (A9), Chadwick_64 (A5), Chancellor_63 (K4), Chargerpower_62 (A22), Charm_63 (A9), CheetoDust_59 (K1), Cheetobro_63 (K4), Clautastrophe_52 (L3), Clipper_63 (K1), CogOmlette_63 (A9), Collard_52 (K5), Conquerage_64 (A9), Conspiracy_63 (A5), Coog_59 (A5), CrimD_61 (K1), Cuco_61 (A5), Curiosium_64 (K1), Dadosky_56 (K5), Dalmuri_60 (K1), DanSyl44_66 (K4), Danforth_67 (A8), DartGoblin_62 (K1), Deby_60 (K1), Devera_67 (K1), Discoknowium_60 (A5), Dixon_66 (A8), Dole_65 (K1), DoubleChamp_51 (K5), DrHayes_61 (K1), DreamTeam1_63 (A9), Dublin_60 (A5), Durfee_60 (K1), EdogawaKiddo_66 (A9), Edugator_53 (K5), Efra2_64 (K1), Eidsmoe_64 (A9), ElTiger69_64 (A5), Ellson_52 (L3), EmyBug_63 (A9), Eponine_65 (K4), Expelliarmus_64 (A8), ExplosioNervosa_64 (A9), FatCactus_60 (A20), Fayely_64 (A9), Feyre_57 (K5), Finnry_52 (L3), Fionnbharth_63 (K4), Florence1_57 (A5), Florence4_59 (A5), ForGetIt_63 (A5), Gail_65 (A14), Ganymede_61 (K1), Gengar_54 (K5), George_57 (A5), Geraldini_63 (K1), Ghoulboy_62 (A5), Groundhog_66 (A8), Guanica15_63 (K1), Guillsminger_55 (K5), Hanray_66 (A9), HedwigODU_60 (K1), Heftyboy_55 (K5), Holex_66 (A9), Homura_60 (K1), HortumSL17_67 (A9), HuhtaEnerson15_60 (A5), Hyperbowlee_60 (K1), Illumine_65 (K1), Inky_60 (K1), InvictusManeo_52 (K5), JAWS_60 (K1), JF1_63 (K4), Jabiru_63 (A5), Jarvi_60 (K1), Jayhawk_61 (K1), Jeckyll_60 (K1), Jeeves_67 (A14), Jiawan_66 (A9), Jobypre_53 (L3), Jovo_63 (A5), Joy99_60 (K1), Jubie_52 (L3), Juliette_65 (K4), Kheparia_60 (K1), Kingsolomon_52 (L3), Klodlith_63 (A9), Kratio_52 (K5), Kraw_63 (K4), Krypton555_54 (L3), Larva_55 (K5), LastHope_63 (K1), LaterM_60 (K1), Lebo14_62 (K4), Leston_54 (K5), Lev2_63 (A5), LilDirt_53 (K5), Lilleskat_65 (A9), LindNT_59 (K1), LittleCherry_60 (A5), Llorens_60 (K1), Lolly9_52 (L3), LoneWolf_66 (A9), Luchador_66 (A14), Lumos_54 (L3), Lunahalos_60 (K1), MacKat_55 (K1), Malthus_64 (K4), Maminiaina_65 (A9), MarysWell_60 (A5), MeaningOfLife_61 (K1), MegTheThird_63 (A9), Megsy_62 (K1), Micasa_60 (A5), Midas2_59 (A5), Milcery_60 (A5), MiniLon_55 (L3), MiniMac_55 (L3), Minispark_63 (A9), Miryou_58 (K5), Mitti_63 (K4), Moostard_52 (L3), MsGreen_52 (L3), Murucutumbu_61 (K1), Mynx_61 (K1), Myxus_66 (A9), Naca_62 (A5), NearlyHeadless_67 (A8), Neighly_56 (K3), Nicholas_52 (L3), Nolwazi_65 (K4), OkiRoe_55 (K5), OmniCritical_62 (K4), Omnicron_58 (K5), Onglai_65 (A9), PackMan_65 (A9), Padpat_62 (K1), Paola_54

(K5), Peel_60 (K1), PetterN_67 (A5), Phaeder_66 (A9), Phillis_64 (A8), Phlorence_61 (A5), Phonnegut_67 (A9), Piatt_60 (K1), PickleBack_63 (A5), Pioneer_67 (A9), Pokerus_59 (K1), Prinashe11_60 (A5), Prithvi_61 (K1), Priya_64 (A9), Psycho_54 (K5), Qhanda_65 (K4), Qobbit_64 (A9), QuincyRose_59 (K1), Rahalelujah_65 (A9), Ramen_61 (K1), Rando14_56 (K5), Rapunzel97_61 (K1), Red305_53 (L3), Roary_68 (A8), Rosmarinus_60 (K1), Ruthiejr_64 (K4), RyeScarlet_67 (A9), Sachima_66 (A9), Saintus_62 (A8), SamScheppers_61 (K4), Samty_52 (L3), SamuelLPlaqson_61 (K1), Scherzo_66 (A9), Scorpia_64 (A5), SheaKeira_62 (A9), ShiaSurprise_61 (K1), Slarp_63 (K4), Slimphazie_60 (K1), Smeadley_67 (A8), Snenia_52 (L3), SoSeph_55 (K5), SororFago_64 (A14), Spock_60 (K1), Spouty_64 (A9), Stephig9_66 (A8), Stinson_61 (K1), Sulley_60 (K1), Sunhee_66 (A14), Swirley_62 (A5), SydNat_62 (A5), Tachez_60 (K1), TaiwanKao_62 (K1), Taquito_62 (K4), Tarynearal_59 (A5), Theia_59 (A5), Thyatira_57 (K5), Tiger_62 (A5), TingHuaYa_62 (K1), TiniBug_61 (K1), Tiri_61 (K1), Topper_60 (K1), TreyKay_61 (K1), TriFive_54 (L3), TruffulaTree_60 (K1), Tubs_66 (A9), Twigg_60 (A5), Twitch_60 (K1), Ugenie5_62 (A9), UnionJack_63 (A5), Urkel_61 (K1), Veliki_61 (K1), ViviJ_53 (K5), Waterfoul_56 (K5), Whirlwind_53 (L3), Wintermute_63 (K4), WorldCup_63 (A9), Y10_61 (K4), Y2_61 (K4), YasnayaPolyana_62 (K4), YoureAdopted_59 (K1), Yunkel11_63 (K1), Zabiza_55 (K1), Zavala_62 (K1), Zolita_61 (A5),

Start 44:
• Found in 46 of 341 (13.5%) of genes in pham
• Manual Annotations of this start: 39 of 311
• Called 97.8% of time when present
• Phage (with cluster) where this start called: Adzzy_66 (A2), Anthony_65 (A20), Auspice_119 (M1), Bongo_119 (M1), Bradman_64 (A2), Bricole_121 (M1), Caraxes_63 (A2), Che12_65 (A2), DarthPhader_61 (A12), Diminimus_120 (M1), Dulcita_120 (M1), Estes_136 (M2), FreakyGoo_120 (M1), GardenSalsa_136 (M2), Glaske16_122 (M1), IPhane7_117 (M1), Izel_120 (M1), Jsquared_65 (A2), Kinmap_62 (A21), KleverKiS_122 (M1), Koduck_65 (A2), L5_60 (A2), LilhomieP_119 (M1), MajorMajor_63 (A2), MrMagoo_138 (M2), MyraDee_60 (A18), Odin_63 (A2), PegLeg_123 (M1), Ph8s_65 (A2), Pharaoh_59 (A12), Quokka_63 (A2), Refuge_61 (A12), Rey_138 (M2), RoseMarie_128 (M1), Serenity_64 (A2), Skinny_125 (M1), SlimJimmy_119 (M1), Steamy_60 (A12), Stellammi_67 (UNK), Superchunk_63 (A2), SwirlSquare_68 (A2), TipsytheTRex_61 (A2), TpudiCK_121 (M1), TyDawg_114 (M1), Zimmer_61 (A12),

Start 45:
• Found in 1 of 341 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumao_92 (singleton),

Start 47:
• Found in 170 of 341 (49.9%) of genes in pham
• Manual Annotations of this start: 4 of 311
• Called 4.1% of time when present
• Phage (with cluster) where this start called: AlishaPH_60 (K1), Atiba_61 (K1), Emerson_61 (K1), Lokum_61 (K1), Padfoot_60 (K1), Pisa1_60 (K1), Pisa4_54 (K1),

Start 49:
• Found in 4 of 341 (1.2%) of genes in pham
• Manual Annotations of this start: 3 of 311

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bobquesha_64 (K4), MissDaisy_60 (K4), Patt_59 (K4), Reptar3000_60 (K4),

Start 50:
• Found in 25 of 341 (7.3%) of genes in pham
• Manual Annotations of this start: 1 of 311
• Called 16.0% of time when present
• Phage (with cluster) where this start called: BourbonZero_53 (L3), DuncansLeg_53 (L3), KirDoubleO7_51 (L3), LiyuLake_52 (L3),

Start 53:
• Found in 2 of 341 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bromden_52 (L4), ChutneyChips_51 (L4),

Start 89:
• Found in 2 of 341 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Darrell_67 (A9), Elephantoon_64 (A9),

Start 91:
• Found in 1 of 341 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 311
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yecey3_67 (A9),

Summary by clusters:

There are 22 clusters represented in this pham: singleton, K4, K3, K1, M1, K5, M2, K8, A14, A12, A18, A2, A5, A9, A8, L4, L3, UNK, A20, A21, A22, K7,

Info for manual annotations of cluster A12:
•Start number 44 was manually annotated 5 times for cluster A12.

Info for manual annotations of cluster A14:
•Start number 42 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A18:
•Start number 44 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:
•Start number 37 was manually annotated 2 times for cluster A2.
•Start number 44 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A20:
•Start number 42 was manually annotated 1 time for cluster A20.
•Start number 44 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A21:

•Start number 44 was manually annotated 1 time for cluster A21.

Info for manual annotations of cluster A22:
•Start number 42 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A5:
•Start number 42 was manually annotated 40 times for cluster A5.

Info for manual annotations of cluster A8:
•Start number 42 was manually annotated 12 times for cluster A8.

Info for manual annotations of cluster A9:
•Start number 38 was manually annotated 2 times for cluster A9.
•Start number 41 was manually annotated 2 times for cluster A9.
•Start number 42 was manually annotated 39 times for cluster A9.
•Start number 89 was manually annotated 2 times for cluster A9.
•Start number 91 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster K1:
•Start number 42 was manually annotated 86 times for cluster K1.
•Start number 47 was manually annotated 4 times for cluster K1.

Info for manual annotations of cluster K4:
•Start number 42 was manually annotated 19 times for cluster K4.
•Start number 49 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K5:
•Start number 42 was manually annotated 25 times for cluster K5.

Info for manual annotations of cluster K7:
•Start number 42 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:
•Start number 42 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L3:
•Start number 42 was manually annotated 18 times for cluster L3.
•Start number 50 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L4:
•Start number 53 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster M1:
•Start number 33 was manually annotated 1 time for cluster M1.
•Start number 44 was manually annotated 14 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 27 was manually annotated 2 times for cluster M2.
•Start number 44 was manually annotated 4 times for cluster M2.

Info for manual annotations of cluster UNK:
•Start number 44 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: AN9_66 Start: 40276, Stop: 40106, Start Num: 37
Candidate Starts for AN9_66:
(Start: 37 @40276 has 2 MA's), (43, 40261), (70, 40183), (76, 40168), (79, 40159), (80, 40147), (84, 40123),

Gene: ANI8_66 Start: 40276, Stop: 40106, Start Num: 37
Candidate Starts for ANI8_66:
(Start: 37 @40276 has 2 MA's), (43, 40261), (70, 40183), (76, 40168), (79, 40159), (80, 40147), (84, 40123),

Gene: ActinUp_60 Start: 41125, Stop: 41289, Start Num: 42
Candidate Starts for ActinUp_60:
(36, 41110), (Start: 42 @41125 has 248 MA's), (Start: 47 @41131 has 4 MA's), (51, 41149), (84, 41278), (86, 41281),

Gene: Adephagia_60 Start: 41132, Stop: 41296, Start Num: 42
Candidate Starts for Adephagia_60:
(Start: 42 @41132 has 248 MA's), (Start: 47 @41138 has 4 MA's), (51, 41156), (72, 41231), (84, 41285), (86, 41288),

Gene: Adonis_60 Start: 41367, Stop: 41531, Start Num: 42
Candidate Starts for Adonis_60:
(Start: 42 @41367 has 248 MA's), (Start: 47 @41373 has 4 MA's), (51, 41391), (84, 41520), (86, 41523),

Gene: Adzzy_66 Start: 39083, Stop: 38940, Start Num: 44
Candidate Starts for Adzzy_66:
(Start: 44 @39083 has 39 MA's), (48, 39071), (76, 38990), (86, 38948),

Gene: Agent47_54 Start: 38364, Stop: 38531, Start Num: 42
Candidate Starts for Agent47_54:
(23, 38262), (Start: 42 @38364 has 248 MA's), (48, 38376), (51, 38388), (58, 38412), (72, 38463), (84, 38520), (86, 38523),

Gene: AgentM_62 Start: 40126, Stop: 39974, Start Num: 42
Candidate Starts for AgentM_62:
(Start: 42 @40126 has 248 MA's), (Start: 47 @40120 has 4 MA's), (51, 40108), (78, 40018), (84, 39985),

Gene: Ageofdapage_63 Start: 42108, Stop: 42269, Start Num: 42
Candidate Starts for Ageofdapage_63:
(Start: 42 @42108 has 248 MA's), (Start: 47 @42114 has 4 MA's), (51, 42132), (72, 42204), (84, 42258), (86, 42261),

Gene: Airmid_62 Start: 40118, Stop: 39966, Start Num: 42
Candidate Starts for Airmid_62:
(Start: 42 @40118 has 248 MA's), (Start: 47 @40112 has 4 MA's), (51, 40100), (77, 40013), (84, 39977),

Gene: AlishaPH_60 Start: 41399, Stop: 41557, Start Num: 47
Candidate Starts for AlishaPH_60:
(Start: 42 @41393 has 248 MA's), (Start: 47 @41399 has 4 MA's), (51, 41417), (72, 41492), (84, 41546), (86, 41549),

Gene: Aliter_67 Start: 40348, Stop: 40199, Start Num: 42
Candidate Starts for Aliter_67:
(Start: 42 @40348 has 248 MA's), (Start: 47 @40342 has 4 MA's), (51, 40330), (69, 40264), (80, 40234), (84, 40210),

Gene: AlleyCat_56 Start: 38668, Stop: 38835, Start Num: 42
Candidate Starts for AlleyCat_56:
(23, 38566), (Start: 42 @38668 has 248 MA's), (48, 38680), (51, 38692), (58, 38716), (72, 38767), (82, 38809), (84, 38824), (86, 38827),

Gene: Alma_64 Start: 40243, Stop: 40094, Start Num: 42
Candidate Starts for Alma_64:
(Start: 42 @40243 has 248 MA's), (Start: 47 @40237 has 4 MA's), (51, 40225), (69, 40159), (80, 40129), (84, 40105),

Gene: Aminay_60 Start: 40828, Stop: 40986, Start Num: 42
Candidate Starts for Aminay_60:
(Start: 42 @40828 has 248 MA's), (48, 40840), (51, 40852), (78, 40942), (83, 40966), (84, 40975),

Gene: Anaya_62 Start: 41648, Stop: 41815, Start Num: 42
Candidate Starts for Anaya_62:
(Start: 42 @41648 has 248 MA's), (Start: 47 @41654 has 4 MA's), (80, 41780), (82, 41789), (84, 41804), (86, 41807),

Gene: Angelica_60 Start: 41275, Stop: 41439, Start Num: 42
Candidate Starts for Angelica_60:
(Start: 42 @41275 has 248 MA's), (Start: 47 @41281 has 4 MA's), (51, 41299), (72, 41374), (80, 41404), (84, 41428),

Gene: Anma_61 Start: 42019, Stop: 42177, Start Num: 42
Candidate Starts for Anma_61:
(Start: 42 @42019 has 248 MA's), (Start: 47 @42025 has 4 MA's), (51, 42043), (52, 42046), (80, 42142), (84, 42166), (86, 42169),

Gene: Anthony_65 Start: 40664, Stop: 40509, Start Num: 44
Candidate Starts for Anthony_65:
(Start: 44 @40664 has 39 MA's), (Start: 47 @40658 has 4 MA's), (51, 40646), (57, 40622), (83, 40529), (84, 40520),

Gene: Apocalypse_63 Start: 42044, Stop: 42205, Start Num: 42
Candidate Starts for Apocalypse_63:
(Start: 42 @42044 has 248 MA's), (Start: 47 @42050 has 4 MA's), (51, 42068), (72, 42140), (80, 42170), (84, 42194),

Gene: Aragog_62 Start: 40146, Stop: 39994, Start Num: 42
Candidate Starts for Aragog_62:

(Start: 42 @40146 has 248 MA's), (Start: 47 @40140 has 4 MA's), (51, 40128), (78, 40038), (84, 40005),

Gene: Archetta_60 Start: 40330, Stop: 40178, Start Num: 42
Candidate Starts for Archetta_60:
(Start: 42 @40330 has 248 MA's), (51, 40312), (78, 40222), (84, 40189),

Gene: Arissanae_64 Start: 40777, Stop: 40631, Start Num: 41
Candidate Starts for Arissanae_64:
(Start: 38 @40783 has 2 MA's), (Start: 41 @40777 has 2 MA's), (81, 40654), (84, 40642),

Gene: Asayake_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for Asayake_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: Astro_67 Start: 39968, Stop: 39795, Start Num: 42
Candidate Starts for Astro_67:
(Start: 42 @39968 has 248 MA's), (51, 39950), (69, 39872), (84, 39806),

Gene: Atiba_61 Start: 41101, Stop: 41259, Start Num: 47
Candidate Starts for Atiba_61:
(Start: 42 @41095 has 248 MA's), (Start: 47 @41101 has 4 MA's), (51, 41119), (72, 41194), (84, 41248), (86, 41251),

Gene: Auspice_119 Start: 63668, Stop: 63817, Start Num: 44
Candidate Starts for Auspice_119:
(Start: 44 @63668 has 39 MA's), (48, 63680), (54, 63701), (55, 63704), (58, 63710), (63, 63731), (84, 63806),

Gene: Ayanochan_63 Start: 40026, Stop: 39877, Start Num: 42
Candidate Starts for Ayanochan_63:
(Start: 42 @40026 has 248 MA's), (Start: 47 @40020 has 4 MA's), (51, 40008), (69, 39942), (80, 39912), (84, 39888),

Gene: Aziz_135 Start: 65233, Stop: 65445, Start Num: 27
Candidate Starts for Aziz_135:
(Start: 27 @65233 has 2 MA's), (32, 65257), (Start: 37 @65275 has 2 MA's), (62, 65356), (75, 65389), (78, 65401), (83, 65425), (84, 65434),

Gene: BEEST_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for BEEST_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: BGlluviae_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for BGlluviae_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: BaghaKamala_59 Start: 40476, Stop: 40640, Start Num: 42
Candidate Starts for BaghaKamala_59:

(Start: 42 @40476 has 248 MA's), (Start: 47 @40482 has 4 MA's), (72, 40575), (80, 40605), (84, 40629), (86, 40632),

Gene: BananenDer11_54 Start: 38325, Stop: 38492, Start Num: 42
Candidate Starts for BananenDer11_54:
(23, 38223), (Start: 42 @38325 has 248 MA's), (48, 38337), (51, 38349), (58, 38373), (72, 38424), (84, 38481), (86, 38484),

Gene: BarrelRoll_60 Start: 41099, Stop: 41263, Start Num: 42
Candidate Starts for BarrelRoll_60:
(Start: 42 @41099 has 248 MA's), (Start: 47 @41105 has 4 MA's), (51, 41123), (72, 41198), (80, 41228), (82, 41237), (84, 41252),

Gene: Beemo_67 Start: 40518, Stop: 40369, Start Num: 42
Candidate Starts for Beemo_67:
(Start: 42 @40518 has 248 MA's), (Start: 47 @40512 has 4 MA's), (51, 40500), (69, 40434), (80, 40404), (84, 40380),

Gene: Beezoo_62 Start: 42083, Stop: 42247, Start Num: 42
Candidate Starts for Beezoo_62:
(Start: 42 @42083 has 248 MA's), (Start: 47 @42089 has 4 MA's), (51, 42107), (80, 42212), (84, 42236),

Gene: Bella96_61 Start: 41864, Stop: 42022, Start Num: 42
Candidate Starts for Bella96_61:
(Start: 42 @41864 has 248 MA's), (Start: 47 @41870 has 4 MA's), (51, 41888), (80, 41987), (84, 42011), (86, 42014),

Gene: Belladonna_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Belladonna_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Bellis_53 Start: 40421, Stop: 40579, Start Num: 42
Candidate Starts for Bellis_53:
(Start: 42 @40421 has 248 MA's), (Start: 50 @40439 has 1 MA's), (61, 40475), (82, 40553), (84, 40568),

Gene: Bellris_65 Start: 39913, Stop: 39764, Start Num: 42
Candidate Starts for Bellris_65:
(Start: 38 @39922 has 2 MA's), (Start: 42 @39913 has 248 MA's), (68, 39832), (69, 39829), (84, 39775),

Gene: Benedict_64 Start: 40407, Stop: 40219, Start Num: 42
Candidate Starts for Benedict_64:
(Start: 42 @40407 has 248 MA's), (Start: 47 @40401 has 4 MA's), (51, 40389), (77, 40302), (84, 40266), (88, 40236),

Gene: Bern_61 Start: 40066, Stop: 40233, Start Num: 42
Candidate Starts for Bern_61:
(Start: 42 @40066 has 248 MA's), (Start: 47 @40072 has 4 MA's), (72, 40168), (80, 40198), (84, 40222), (86, 40225),

Gene: Blizzard_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for Blizzard_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: Bluefalcon_58 Start: 40350, Stop: 40198, Start Num: 42
Candidate Starts for Bluefalcon_58:
(Start: 42 @40350 has 248 MA's), (51, 40332), (78, 40242), (84, 40209),

Gene: Bobquesha_64 Start: 39659, Stop: 39811, Start Num: 49
Candidate Starts for Bobquesha_64:
(Start: 49 @39659 has 3 MA's), (69, 39734), (78, 39767), (84, 39800),

Gene: BogosyJay_65 Start: 40318, Stop: 40169, Start Num: 42
Candidate Starts for BogosyJay_65:
(Start: 42 @40318 has 248 MA's), (51, 40300), (66, 40240), (69, 40234), (80, 40204), (84, 40180),

Gene: Boiiii_60 Start: 41449, Stop: 41613, Start Num: 42
Candidate Starts for Boiiii_60:
(Start: 42 @41449 has 248 MA's), (Start: 47 @41455 has 4 MA's), (51, 41473), (72, 41548), (84, 41602), (86, 41605),

Gene: Boilgate_55 Start: 40489, Stop: 40644, Start Num: 42
Candidate Starts for Boilgate_55:
(15, 40279), (30, 40441), (Start: 41 @40486 has 2 MA's), (Start: 42 @40489 has 248 MA's), (51, 40513), (73, 40588), (80, 40609), (84, 40633),

Gene: Bonamassa_60 Start: 39968, Stop: 39816, Start Num: 42
Candidate Starts for Bonamassa_60:
(Start: 42 @39968 has 248 MA's), (Start: 47 @39962 has 4 MA's), (51, 39950), (78, 39860), (84, 39827),

Gene: Bongo_119 Start: 63284, Stop: 63433, Start Num: 44
Candidate Starts for Bongo_119:
(Start: 44 @63284 has 39 MA's), (48, 63296), (54, 63317), (55, 63320), (58, 63326), (63, 63347), (84, 63422),

Gene: BourbonZero_53 Start: 40479, Stop: 40625, Start Num: 50
Candidate Starts for BourbonZero_53:
(Start: 42 @40464 has 248 MA's), (Start: 50 @40479 has 1 MA's), (61, 40515), (65, 40530), (72, 40557), (82, 40599), (84, 40614),

Gene: Bradman_64 Start: 39432, Stop: 39280, Start Num: 44
Candidate Starts for Bradman_64:
(29, 39489), (Start: 44 @39432 has 39 MA's), (77, 39339), (80, 39327), (84, 39303),

Gene: Bricole_121 Start: 63432, Stop: 63581, Start Num: 44
Candidate Starts for Bricole_121:
(Start: 44 @63432 has 39 MA's), (48, 63444), (54, 63465), (55, 63468), (58, 63474), (63, 63495), (84, 63570),

Gene: Bromden_52 Start: 39680, Stop: 39823, Start Num: 53
Candidate Starts for Bromden_52:

(Start: 34 @39617 has 1 MA's), (Start: 53 @39680 has 2 MA's), (63, 39722), (64, 39728), (84, 39812),

Gene: CREW_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for CREW_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Caitlin_66 Start: 39675, Stop: 39502, Start Num: 42
Candidate Starts for Caitlin_66:
(Start: 42 @39675 has 248 MA's), (51, 39657), (84, 39513),

Gene: CallaLilly_60 Start: 41173, Stop: 41337, Start Num: 42
Candidate Starts for CallaLilly_60:
(Start: 42 @41173 has 248 MA's), (Start: 47 @41179 has 4 MA's), (51, 41197), (72, 41272), (84, 41326), (86, 41329),

Gene: Capricorn_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Capricorn_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Caraxes_63 Start: 38825, Stop: 38673, Start Num: 44
Candidate Starts for Caraxes_63:
(Start: 44 @38825 has 39 MA's), (77, 38732), (80, 38720), (84, 38696), (86, 38693),

Gene: CaseJules_62 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for CaseJules_62:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: Catalina_68 Start: 40421, Stop: 40272, Start Num: 42
Candidate Starts for Catalina_68:
(Start: 42 @40421 has 248 MA's), (Start: 47 @40415 has 4 MA's), (51, 40403), (69, 40337), (80, 40307), (84, 40283),

Gene: Celestialunch_63 Start: 39862, Stop: 39704, Start Num: 42
Candidate Starts for Celestialunch_63:
(Start: 38 @39871 has 2 MA's), (Start: 42 @39862 has 248 MA's), (66, 39784), (73, 39760), (80, 39739), (84, 39715),

Gene: Chadwick_64 Start: 40094, Stop: 39942, Start Num: 42
Candidate Starts for Chadwick_64:
(Start: 42 @40094 has 248 MA's), (Start: 47 @40088 has 4 MA's), (51, 40076), (77, 39989), (84, 39953),

Gene: Chancellor_63 Start: 40757, Stop: 40921, Start Num: 42
Candidate Starts for Chancellor_63:
(11, 40532), (28, 40709), (31, 40730), (Start: 42 @40757 has 248 MA's), (51, 40781), (69, 40844), (78, 40877), (84, 40910),

Gene: Chargerpower_62 Start: 38721, Stop: 38578, Start Num: 42
Candidate Starts for Chargerpower_62:

(12, 38973), (13, 38970), (Start: 38 @38730 has 2 MA's), (Start: 42 @38721 has 248 MA's), (Start: 47 @38715 has 4 MA's), (69, 38634), (84, 38589),

Gene: Charm_63 Start: 39921, Stop: 39760, Start Num: 42
Candidate Starts for Charm_63:
(1, 40392), (10, 40179), (Start: 38 @39930 has 2 MA's), (Start: 42 @39921 has 248 MA's), (84, 39771),

Gene: Che12_65 Start: 39044, Stop: 38901, Start Num: 44
Candidate Starts for Che12_65:
(Start: 44 @39044 has 39 MA's), (48, 39032), (51, 39026), (76, 38951), (86, 38909),

Gene: CheetoDust_59 Start: 40520, Stop: 40687, Start Num: 42
Candidate Starts for CheetoDust_59:
(Start: 42 @40520 has 248 MA's), (Start: 47 @40526 has 4 MA's), (72, 40622), (80, 40652), (84, 40676), (86, 40679),

Gene: Cheetobro_63 Start: 40754, Stop: 40918, Start Num: 42
Candidate Starts for Cheetobro_63:
(11, 40529), (28, 40706), (31, 40727), (Start: 42 @40754 has 248 MA's), (51, 40778), (69, 40841), (78, 40874), (84, 40907),

Gene: ChutneyChips_51 Start: 39044, Stop: 39187, Start Num: 53
Candidate Starts for ChutneyChips_51:
(Start: 53 @39044 has 2 MA's), (63, 39086), (64, 39092), (84, 39176),

Gene: Clautastrophe_52 Start: 40418, Stop: 40576, Start Num: 42
Candidate Starts for Clautastrophe_52:
(Start: 42 @40418 has 248 MA's), (Start: 50 @40436 has 1 MA's), (61, 40472), (82, 40550), (84, 40565),

Gene: Clipper_63 Start: 41698, Stop: 41862, Start Num: 42
Candidate Starts for Clipper_63:
(Start: 42 @41698 has 248 MA's), (Start: 47 @41704 has 4 MA's), (51, 41722), (72, 41797), (84, 41851), (86, 41854),

Gene: CogOmlette_63 Start: 39910, Stop: 39761, Start Num: 42
Candidate Starts for CogOmlette_63:
(Start: 38 @39919 has 2 MA's), (Start: 42 @39910 has 248 MA's), (68, 39829), (69, 39826), (84, 39772),

Gene: Collard_52 Start: 38325, Stop: 38492, Start Num: 42
Candidate Starts for Collard_52:
(23, 38223), (Start: 42 @38325 has 248 MA's), (48, 38337), (51, 38349), (58, 38373), (72, 38424), (84, 38481), (86, 38484),

Gene: Conquerage_64 Start: 40012, Stop: 39863, Start Num: 42
Candidate Starts for Conquerage_64:
(Start: 42 @40012 has 248 MA's), (Start: 47 @40006 has 4 MA's), (51, 39994), (69, 39928), (80, 39898), (84, 39874),

Gene: Conspiracy_63 Start: 40368, Stop: 40216, Start Num: 42
Candidate Starts for Conspiracy_63:

(Start: 42 @40368 has 248 MA's), (Start: 47 @40362 has 4 MA's), (51, 40350), (78, 40260), (84, 40227),

Gene: Coog_59 Start: 40182, Stop: 40030, Start Num: 42
Candidate Starts for Coog_59:
(Start: 42 @40182 has 248 MA's), (Start: 47 @40176 has 4 MA's), (51, 40164), (78, 40074), (84, 40041),

Gene: CrimD_61 Start: 41656, Stop: 41820, Start Num: 42
Candidate Starts for CrimD_61:
(Start: 42 @41656 has 248 MA's), (Start: 47 @41662 has 4 MA's), (51, 41680), (72, 41755), (84, 41809), (86, 41812),

Gene: Cuco_61 Start: 40042, Stop: 39890, Start Num: 42
Candidate Starts for Cuco_61:
(Start: 42 @40042 has 248 MA's), (Start: 47 @40036 has 4 MA's), (51, 40024), (78, 39934), (84, 39901),

Gene: Curiosium_64 Start: 40772, Stop: 40939, Start Num: 42
Candidate Starts for Curiosium_64:
(Start: 42 @40772 has 248 MA's), (Start: 47 @40778 has 4 MA's), (59, 40826), (80, 40904), (82, 40913), (83, 40919), (84, 40928), (86, 40931),

Gene: DS6A_39 Start: 32218, Stop: 32024, Start Num: 34
Candidate Starts for DS6A_39:
(Start: 34 @32218 has 1 MA's), (46, 32176), (78, 32074), (80, 32065), (84, 32041), (85, 32038),

Gene: Dadosky_56 Start: 38670, Stop: 38837, Start Num: 42
Candidate Starts for Dadosky_56:
(23, 38568), (Start: 42 @38670 has 248 MA's), (48, 38682), (51, 38694), (58, 38718), (72, 38769), (82, 38811), (84, 38826), (86, 38829),

Gene: Dalmuri_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Dalmuri_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: DanSyl44_66 Start: 41948, Stop: 42112, Start Num: 42
Candidate Starts for DanSyl44_66:
(11, 41723), (28, 41900), (31, 41921), (Start: 42 @41948 has 248 MA's), (69, 42035), (78, 42068), (84, 42101),

Gene: Danforth_67 Start: 40022, Stop: 39849, Start Num: 42
Candidate Starts for Danforth_67:
(Start: 42 @40022 has 248 MA's), (51, 40004), (84, 39860),

Gene: Darrell_67 Start: 40849, Stop: 40700, Start Num: 89
Candidate Starts for Darrell_67:
(24, 41098), (Start: 89 @40849 has 2 MA's), (90, 40831), (92, 40711),

Gene: DartGoblin_62 Start: 41836, Stop: 41994, Start Num: 42
Candidate Starts for DartGoblin_62:

(Start: 42 @41836 has 248 MA's), (Start: 47 @41842 has 4 MA's), (51, 41860), (80, 41959), (84, 41983), (86, 41986),

Gene: DarthPhader_61 Start: 41122, Stop: 40982, Start Num: 44
Candidate Starts for DarthPhader_61:
(35, 41149), (Start: 44 @41122 has 39 MA's), (Start: 47 @41116 has 4 MA's), (51, 41104), (80, 41017), (84, 40993),

Gene: Deby_60 Start: 41297, Stop: 41464, Start Num: 42
Candidate Starts for Deby_60:
(Start: 42 @41297 has 248 MA's), (Start: 47 @41303 has 4 MA's), (54, 41336), (72, 41399), (80, 41429), (84, 41453), (86, 41456),

Gene: Devera_67 Start: 42665, Stop: 42826, Start Num: 42
Candidate Starts for Devera_67:
(Start: 42 @42665 has 248 MA's), (Start: 47 @42671 has 4 MA's), (51, 42689), (72, 42761), (84, 42815), (86, 42818),

Gene: Diminimus_120 Start: 63279, Stop: 63428, Start Num: 44
Candidate Starts for Diminimus_120:
(Start: 44 @63279 has 39 MA's), (48, 63291), (54, 63312), (55, 63315), (58, 63321), (63, 63342), (84, 63417),

Gene: Discoknowium_60 Start: 39885, Stop: 39733, Start Num: 42
Candidate Starts for Discoknowium_60:
(Start: 42 @39885 has 248 MA's), (Start: 47 @39879 has 4 MA's), (51, 39867), (78, 39777), (84, 39744),

Gene: Dixon_66 Start: 39542, Stop: 39369, Start Num: 42
Candidate Starts for Dixon_66:
(Start: 42 @39542 has 248 MA's), (51, 39524), (84, 39380),

Gene: Dole_65 Start: 42668, Stop: 42829, Start Num: 42
Candidate Starts for Dole_65:
(Start: 42 @42668 has 248 MA's), (Start: 47 @42674 has 4 MA's), (51, 42692), (72, 42764), (84, 42818), (86, 42821),

Gene: DoubleChamp_51 Start: 38325, Stop: 38492, Start Num: 42
Candidate Starts for DoubleChamp_51:
(23, 38223), (Start: 42 @38325 has 248 MA's), (48, 38337), (51, 38349), (58, 38373), (72, 38424), (84, 38481), (86, 38484),

Gene: DrHayes_61 Start: 42019, Stop: 42177, Start Num: 42
Candidate Starts for DrHayes_61:
(Start: 42 @42019 has 248 MA's), (Start: 47 @42025 has 4 MA's), (51, 42043), (52, 42046), (80, 42142), (84, 42166), (86, 42169),

Gene: DreamTeam1_63 Start: 39753, Stop: 39592, Start Num: 42
Candidate Starts for DreamTeam1_63:
(1, 40224), (10, 40011), (Start: 38 @39762 has 2 MA's), (Start: 42 @39753 has 248 MA's), (84, 39603),

Gene: Dublin_60 Start: 40039, Stop: 39890, Start Num: 42
Candidate Starts for Dublin_60:

(Start: 42 @40039 has 248 MA's), (Start: 47 @40033 has 4 MA's), (54, 40006), (77, 39937), (78, 39934), (84, 39901),

Gene: Dulcita_120 Start: 63280, Stop: 63429, Start Num: 44
Candidate Starts for Dulcita_120:
(Start: 44 @63280 has 39 MA's), (48, 63292), (54, 63313), (55, 63316), (58, 63322), (63, 63343), (84, 63418),

Gene: DuncansLeg_53 Start: 40461, Stop: 40607, Start Num: 50
Candidate Starts for DuncansLeg_53:
(Start: 42 @40446 has 248 MA's), (Start: 50 @40461 has 1 MA's), (61, 40497), (65, 40512), (82, 40581), (84, 40596),

Gene: Durfee_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for Durfee_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: EdogawaKiddo_66 Start: 40388, Stop: 40239, Start Num: 42
Candidate Starts for EdogawaKiddo_66:
(Start: 42 @40388 has 248 MA's), (Start: 47 @40382 has 4 MA's), (51, 40370), (69, 40304), (80, 40274), (84, 40250),

Gene: Edugator_53 Start: 40091, Stop: 40258, Start Num: 42
Candidate Starts for Edugator_53:
(23, 39989), (Start: 42 @40091 has 248 MA's), (48, 40103), (51, 40115), (58, 40139), (72, 40190), (82, 40232), (84, 40247), (86, 40250),

Gene: Efra2_64 Start: 41207, Stop: 41377, Start Num: 42
Candidate Starts for Efra2_64:
(Start: 42 @41207 has 248 MA's), (48, 41219), (52, 41234), (68, 41297), (71, 41309), (84, 41366), (86, 41369),

Gene: Eidsmoe_64 Start: 40004, Stop: 39855, Start Num: 42
Candidate Starts for Eidsmoe_64:
(Start: 42 @40004 has 248 MA's), (Start: 47 @39998 has 4 MA's), (51, 39986), (69, 39920), (80, 39890), (84, 39866),

Gene: ElTiger69_64 Start: 40342, Stop: 40190, Start Num: 42
Candidate Starts for ElTiger69_64:
(Start: 42 @40342 has 248 MA's), (Start: 47 @40336 has 4 MA's), (51, 40324), (77, 40237), (84, 40201),

Gene: Elephantoon_64 Start: 39594, Stop: 39445, Start Num: 89
Candidate Starts for Elephantoon_64:
(24, 39897), (56, 39756), (Start: 89 @39594 has 2 MA's), (90, 39576), (92, 39456),

Gene: Ellson_52 Start: 40476, Stop: 40637, Start Num: 42
Candidate Starts for Ellson_52:
(Start: 42 @40476 has 248 MA's), (Start: 50 @40491 has 1 MA's), (61, 40527), (65, 40542), (82, 40611), (84, 40626),

Gene: Emerson_61 Start: 41122, Stop: 41280, Start Num: 47

Candidate Starts for Emerson_61:
(Start: 42 @41116 has 248 MA's), (Start: 47 @41122 has 4 MA's), (51, 41140), (72, 41215), (84, 41269), (86, 41272),

Gene: EmyBug_63 Start: 40006, Stop: 39857, Start Num: 42
Candidate Starts for EmyBug_63:
(Start: 42 @40006 has 248 MA's), (Start: 47 @40000 has 4 MA's), (51, 39988), (69, 39922), (80, 39892), (84, 39868),

Gene: Eponine_65 Start: 41600, Stop: 41764, Start Num: 42
Candidate Starts for Eponine_65:
(11, 41375), (28, 41552), (31, 41573), (Start: 42 @41600 has 248 MA's), (51, 41624), (69, 41687), (78, 41720), (84, 41753),

Gene: Estes_136 Start: 65447, Stop: 65605, Start Num: 44
Candidate Starts for Estes_136:
(Start: 38 @65435 has 2 MA's), (Start: 44 @65447 has 39 MA's), (51, 65465), (58, 65489), (74, 65546), (75, 65549), (80, 65570), (84, 65594),

Gene: Expelliarmus_64 Start: 39746, Stop: 39573, Start Num: 42
Candidate Starts for Expelliarmus_64:
(Start: 42 @39746 has 248 MA's), (51, 39728), (84, 39584),

Gene: ExplosioNervosa_64 Start: 40072, Stop: 39923, Start Num: 42
Candidate Starts for ExplosioNervosa_64:
(Start: 42 @40072 has 248 MA's), (Start: 47 @40066 has 4 MA's), (51, 40054), (69, 39988), (80, 39958), (84, 39934),

Gene: FatCactus_60 Start: 39594, Stop: 39439, Start Num: 42
Candidate Starts for FatCactus_60:
(Start: 42 @39594 has 248 MA's), (Start: 47 @39585 has 4 MA's), (51, 39573), (71, 39504), (80, 39474), (83, 39459), (84, 39450),

Gene: Fayely_64 Start: 39973, Stop: 39824, Start Num: 42
Candidate Starts for Fayely_64:
(Start: 42 @39973 has 248 MA's), (Start: 47 @39967 has 4 MA's), (51, 39955), (69, 39889), (80, 39859), (84, 39835),

Gene: Feyre_57 Start: 42050, Stop: 42217, Start Num: 42
Candidate Starts for Feyre_57:
(Start: 42 @42050 has 248 MA's), (48, 42062), (51, 42074), (58, 42098), (72, 42149), (82, 42191), (84, 42206), (86, 42209),

Gene: Finnry_52 Start: 40683, Stop: 40844, Start Num: 42
Candidate Starts for Finnry_52:
(Start: 42 @40683 has 248 MA's), (Start: 50 @40701 has 1 MA's), (61, 40737), (82, 40818), (84, 40833),

Gene: Fionnbharth_63 Start: 40998, Stop: 41162, Start Num: 42
Candidate Starts for Fionnbharth_63:
(11, 40773), (28, 40950), (31, 40971), (Start: 42 @40998 has 248 MA's), (51, 41022), (69, 41085), (78, 41118), (84, 41151),

Gene: Florence1_57 Start: 39480, Stop: 39328, Start Num: 42
Candidate Starts for Florence1_57:
(Start: 42 @39480 has 248 MA's), (Start: 47 @39474 has 4 MA's), (51, 39462), (78, 39372), (84, 39339),

Gene: Florence4_59 Start: 39480, Stop: 39328, Start Num: 42
Candidate Starts for Florence4_59:
(Start: 42 @39480 has 248 MA's), (Start: 47 @39474 has 4 MA's), (51, 39462), (78, 39372), (84, 39339),

Gene: ForGetIt_63 Start: 40393, Stop: 40241, Start Num: 42
Candidate Starts for ForGetIt_63:
(Start: 42 @40393 has 248 MA's), (Start: 47 @40387 has 4 MA's), (51, 40375), (78, 40285), (84, 40252),

Gene: FreakyGoo_120 Start: 63764, Stop: 63913, Start Num: 44
Candidate Starts for FreakyGoo_120:
(Start: 44 @63764 has 39 MA's), (48, 63776), (54, 63797), (55, 63800), (58, 63806), (63, 63827), (84, 63902),

Gene: Gail_65 Start: 41004, Stop: 40843, Start Num: 42
Candidate Starts for Gail_65:
(22, 41157), (Start: 42 @41004 has 248 MA's), (Start: 47 @40998 has 4 MA's), (66, 40926), (80, 40878), (84, 40854),

Gene: Ganymede_61 Start: 41511, Stop: 41675, Start Num: 42
Candidate Starts for Ganymede_61:
(Start: 42 @41511 has 248 MA's), (Start: 47 @41517 has 4 MA's), (51, 41535), (72, 41610), (80, 41640), (84, 41664), (86, 41667),

Gene: GardenSalsa_136 Start: 65626, Stop: 65784, Start Num: 44
Candidate Starts for GardenSalsa_136:
(Start: 44 @65626 has 39 MA's), (51, 65644), (58, 65668), (74, 65725), (80, 65749), (84, 65773),

Gene: GenevaB15_138 Start: 65233, Stop: 65445, Start Num: 27
Candidate Starts for GenevaB15_138:
(Start: 27 @65233 has 2 MA's), (32, 65257), (Start: 37 @65275 has 2 MA's), (62, 65356), (75, 65389), (78, 65401), (83, 65425), (84, 65434),

Gene: Gengar_54 Start: 40069, Stop: 40236, Start Num: 42
Candidate Starts for Gengar_54:
(3, 39766), (4, 39775), (23, 39967), (Start: 42 @40069 has 248 MA's), (48, 40081), (51, 40093), (58, 40117), (72, 40168), (82, 40210), (84, 40225), (86, 40228),

Gene: George_57 Start: 39712, Stop: 39560, Start Num: 42
Candidate Starts for George_57:
(Start: 42 @39712 has 248 MA's), (Start: 47 @39706 has 4 MA's), (51, 39694), (78, 39604),

Gene: Geraldini_63 Start: 42165, Stop: 42332, Start Num: 42
Candidate Starts for Geraldini_63:
(Start: 42 @42165 has 248 MA's), (Start: 47 @42171 has 4 MA's), (80, 42297), (82, 42306), (84, 42321),

Gene: Ghoulboy_62 Start: 40604, Stop: 40452, Start Num: 42
Candidate Starts for Ghoulboy_62:
(Start: 42 @40604 has 248 MA's), (51, 40586), (78, 40496), (84, 40463),

Gene: Glaske16_122 Start: 64397, Stop: 64546, Start Num: 44
Candidate Starts for Glaske16_122:
(Start: 44 @64397 has 39 MA's), (48, 64409), (54, 64430), (55, 64433), (58, 64439), (63, 64460), (84, 64535),

Gene: Groundhog_66 Start: 39946, Stop: 39773, Start Num: 42
Candidate Starts for Groundhog_66:
(Start: 42 @39946 has 248 MA's), (51, 39928), (69, 39850), (84, 39784),

Gene: Guanica15_63 Start: 40948, Stop: 41118, Start Num: 42
Candidate Starts for Guanica15_63:
(Start: 42 @40948 has 248 MA's), (48, 40960), (52, 40975), (68, 41038), (71, 41050), (84, 41107), (86, 41110),

Gene: Guillsminger_55 Start: 40040, Stop: 40207, Start Num: 42
Candidate Starts for Guillsminger_55:
(3, 39737), (4, 39746), (23, 39938), (Start: 42 @40040 has 248 MA's), (48, 40052), (51, 40064), (58, 40088), (72, 40139), (82, 40181), (84, 40196),

Gene: Hanray_66 Start: 40336, Stop: 40187, Start Num: 42
Candidate Starts for Hanray_66:
(Start: 42 @40336 has 248 MA's), (Start: 47 @40330 has 4 MA's), (51, 40318), (69, 40252), (80, 40222), (84, 40198),

Gene: HedwigODU_60 Start: 41125, Stop: 41289, Start Num: 42
Candidate Starts for HedwigODU_60:
(36, 41110), (Start: 42 @41125 has 248 MA's), (Start: 47 @41131 has 4 MA's), (51, 41149), (84, 41278), (86, 41281),

Gene: Heftyboy_55 Start: 40412, Stop: 40579, Start Num: 42
Candidate Starts for Heftyboy_55:
(3, 40109), (4, 40118), (23, 40310), (Start: 42 @40412 has 248 MA's), (48, 40424), (51, 40436), (58, 40460), (72, 40511), (82, 40553), (84, 40568),

Gene: Holex_66 Start: 40352, Stop: 40203, Start Num: 42
Candidate Starts for Holex_66:
(Start: 42 @40352 has 248 MA's), (Start: 47 @40346 has 4 MA's), (51, 40334), (69, 40268), (80, 40238), (84, 40214),

Gene: Homura_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Homura_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: HortumSL17_67 Start: 40420, Stop: 40271, Start Num: 42
Candidate Starts for HortumSL17_67:
(Start: 42 @40420 has 248 MA's), (Start: 47 @40414 has 4 MA's), (51, 40402), (69, 40336), (80, 40306), (84, 40282),

Gene: HuhtaEnerson15_60 Start: 39862, Stop: 39710, Start Num: 42
Candidate Starts for HuhtaEnerson15_60:
(Start: 42 @39862 has 248 MA's), (Start: 47 @39856 has 4 MA's), (51, 39844), (78, 39754), (84, 39721),

Gene: Hyperbowlee_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for Hyperbowlee_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: IPhane7_117 Start: 63284, Stop: 63433, Start Num: 44
Candidate Starts for IPhane7_117:
(Start: 44 @63284 has 39 MA's), (48, 63296), (54, 63317), (55, 63320), (58, 63326), (63, 63347), (84, 63422),

Gene: Illumine_65 Start: 42667, Stop: 42828, Start Num: 42
Candidate Starts for Illumine_65:
(Start: 42 @42667 has 248 MA's), (Start: 47 @42673 has 4 MA's), (51, 42691), (72, 42763), (84, 42817), (86, 42820),

Gene: Inky_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Inky_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: InvictusManeo_52 Start: 38368, Stop: 38535, Start Num: 42
Candidate Starts for InvictusManeo_52:
(23, 38266), (Start: 42 @38368 has 248 MA's), (48, 38380), (51, 38392), (58, 38416), (72, 38467), (84, 38524), (86, 38527),

Gene: Izel_120 Start: 63279, Stop: 63428, Start Num: 44
Candidate Starts for Izel_120:
(Start: 44 @63279 has 39 MA's), (48, 63291), (54, 63312), (55, 63315), (58, 63321), (63, 63342), (84, 63417),

Gene: JAWS_60 Start: 41105, Stop: 41263, Start Num: 42
Candidate Starts for JAWS_60:
(Start: 42 @41105 has 248 MA's), (Start: 47 @41111 has 4 MA's), (51, 41129), (72, 41198), (84, 41252), (86, 41255),

Gene: JF1_63 Start: 40915, Stop: 41079, Start Num: 42
Candidate Starts for JF1_63:
(11, 40690), (28, 40867), (31, 40888), (Start: 42 @40915 has 248 MA's), (51, 40939), (69, 41002), (78, 41035), (84, 41068),

Gene: Jabiru_63 Start: 40261, Stop: 40109, Start Num: 42
Candidate Starts for Jabiru_63:
(Start: 42 @40261 has 248 MA's), (Start: 47 @40255 has 4 MA's), (51, 40243), (77, 40156), (84, 40120),

Gene: Jarvi_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Jarvi_60:

(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Jayhawk_61 Start: 41120, Stop: 41284, Start Num: 42
Candidate Starts for Jayhawk_61:
(Start: 42 @41120 has 248 MA's), (Start: 47 @41126 has 4 MA's), (80, 41249), (82, 41258), (84, 41273), (86, 41276),

Gene: Jeckyll_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Jeckyll_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Jeeves_67 Start: 39998, Stop: 39837, Start Num: 42
Candidate Starts for Jeeves_67:
(22, 40151), (Start: 42 @39998 has 248 MA's), (Start: 47 @39992 has 4 MA's), (66, 39920), (80, 39872), (84, 39848),

Gene: Jiawan_66 Start: 40368, Stop: 40219, Start Num: 42
Candidate Starts for Jiawan_66:
(Start: 42 @40368 has 248 MA's), (Start: 47 @40362 has 4 MA's), (51, 40350), (69, 40284), (80, 40254), (84, 40230),

Gene: Jobypre_53 Start: 40418, Stop: 40576, Start Num: 42
Candidate Starts for Jobypre_53:
(Start: 42 @40418 has 248 MA's), (Start: 50 @40436 has 1 MA's), (61, 40472), (82, 40550), (84, 40565),

Gene: Jovo_63 Start: 40649, Stop: 40497, Start Num: 42
Candidate Starts for Jovo_63:
(Start: 42 @40649 has 248 MA's), (Start: 47 @40643 has 4 MA's), (51, 40631), (78, 40541), (84, 40508),

Gene: Joy99_60 Start: 41179, Stop: 41343, Start Num: 42
Candidate Starts for Joy99_60:
(Start: 42 @41179 has 248 MA's), (Start: 47 @41185 has 4 MA's), (51, 41203), (72, 41278), (84, 41332), (86, 41335),

Gene: Jsquared_65 Start: 39590, Stop: 39438, Start Num: 44
Candidate Starts for Jsquared_65:
(Start: 44 @39590 has 39 MA's), (77, 39497), (80, 39485), (84, 39461),

Gene: Jubie_52 Start: 40553, Stop: 40711, Start Num: 42
Candidate Starts for Jubie_52:
(Start: 42 @40553 has 248 MA's), (Start: 50 @40571 has 1 MA's), (61, 40607), (82, 40685), (84, 40700),

Gene: Juliette_65 Start: 41062, Stop: 41226, Start Num: 42
Candidate Starts for Juliette_65:
(11, 40837), (28, 41014), (31, 41035), (Start: 42 @41062 has 248 MA's), (51, 41086), (69, 41149), (78, 41182), (84, 41215),

Gene: Keziacharles14_65 Start: 41367, Stop: 41209, Start Num: 38

Candidate Starts for Keziacharles14_65:
(Start: 38 @41367 has 2 MA's), (Start: 42 @41358 has 248 MA's), (68, 41274), (84, 41220),

Gene: Kheparia_60 Start: 39113, Stop: 39271, Start Num: 42
Candidate Starts for Kheparia_60:
(Start: 42 @39113 has 248 MA's), (Start: 47 @39119 has 4 MA's), (51, 39137), (52, 39140), (80, 39236), (83, 39251), (84, 39260), (86, 39263),

Gene: Kingsolomon_52 Start: 40419, Stop: 40580, Start Num: 42
Candidate Starts for Kingsolomon_52:
(Start: 42 @40419 has 248 MA's), (Start: 50 @40437 has 1 MA's), (61, 40473), (82, 40554), (84, 40569),

Gene: Kinmap_62 Start: 38733, Stop: 38560, Start Num: 44
Candidate Starts for Kinmap_62:
(29, 38793), (Start: 44 @38733 has 39 MA's), (51, 38715), (73, 38634), (80, 38601), (84, 38577),

Gene: KirDoubleO7_51 Start: 40465, Stop: 40611, Start Num: 50
Candidate Starts for KirDoubleO7_51:
(Start: 42 @40450 has 248 MA's), (Start: 50 @40465 has 1 MA's), (61, 40501), (65, 40516), (82, 40585), (84, 40600),

Gene: KleverKiS_122 Start: 64769, Stop: 64918, Start Num: 44
Candidate Starts for KleverKiS_122:
(Start: 44 @64769 has 39 MA's), (48, 64781), (54, 64802), (55, 64805), (58, 64811), (63, 64832), (84, 64907),

Gene: Klodlith_63 Start: 39818, Stop: 39657, Start Num: 42
Candidate Starts for Klodlith_63:
(10, 40076), (Start: 38 @39827 has 2 MA's), (Start: 42 @39818 has 248 MA's), (84, 39668),

Gene: Koduck_65 Start: 39435, Stop: 39292, Start Num: 44
Candidate Starts for Koduck_65:
(17, 39636), (20, 39603), (Start: 44 @39435 has 39 MA's), (Start: 47 @39429 has 4 MA's), (84, 39303), (86, 39300),

Gene: Kratio_52 Start: 38110, Stop: 38277, Start Num: 42
Candidate Starts for Kratio_52:
(23, 38008), (Start: 42 @38110 has 248 MA's), (48, 38122), (Start: 50 @38128 has 1 MA's), (51, 38134), (58, 38158), (72, 38209), (84, 38266), (86, 38269),

Gene: Kraw_63 Start: 40750, Stop: 40914, Start Num: 42
Candidate Starts for Kraw_63:
(11, 40525), (28, 40702), (31, 40723), (Start: 42 @40750 has 248 MA's), (51, 40774), (69, 40837), (78, 40870), (84, 40903),

Gene: Krypton555_54 Start: 40655, Stop: 40813, Start Num: 42
Candidate Starts for Krypton555_54:
(Start: 42 @40655 has 248 MA's), (84, 40802),

Gene: Kumao_92 Start: 57451, Stop: 57603, Start Num: 45
Candidate Starts for Kumao_92:

(Start: 45 @57451 has 1 MA's), (51, 57466), (54, 57481), (55, 57484), (67, 57523), (74, 57541), (78, 57556), (84, 57589),

Gene: L5_60 Start: 39522, Stop: 39379, Start Num: 44
Candidate Starts for L5_60:
(17, 39723), (Start: 44 @39522 has 39 MA's), (Start: 47 @39516 has 4 MA's), (84, 39390), (86, 39387),

Gene: Larva_55 Start: 39542, Stop: 39709, Start Num: 42
Candidate Starts for Larva_55:
(23, 39440), (Start: 42 @39542 has 248 MA's), (48, 39554), (51, 39566), (58, 39590), (72, 39641), (82, 39683), (84, 39698), (86, 39701),

Gene: LastHope_63 Start: 40287, Stop: 40457, Start Num: 42
Candidate Starts for LastHope_63:
(7, 40026), (Start: 42 @40287 has 248 MA's), (48, 40299), (68, 40377), (71, 40389), (84, 40446), (86, 40449),

Gene: LaterM_60 Start: 41716, Stop: 41877, Start Num: 42
Candidate Starts for LaterM_60:
(19, 41548), (21, 41566), (Start: 42 @41716 has 248 MA's), (Start: 47 @41722 has 4 MA's), (51, 41740), (80, 41842), (84, 41866), (86, 41869),

Gene: Lebo14_62 Start: 41083, Stop: 41247, Start Num: 42
Candidate Starts for Lebo14_62:
(11, 40858), (28, 41035), (31, 41056), (Start: 42 @41083 has 248 MA's), (69, 41170), (78, 41203), (84, 41236),

Gene: Leston_54 Start: 40169, Stop: 40336, Start Num: 42
Candidate Starts for Leston_54:
(3, 39866), (4, 39875), (23, 40067), (Start: 42 @40169 has 248 MA's), (48, 40181), (51, 40193), (58, 40217), (72, 40268), (82, 40310), (84, 40325),

Gene: Lev2_63 Start: 40281, Stop: 40129, Start Num: 42
Candidate Starts for Lev2_63:
(Start: 42 @40281 has 248 MA's), (Start: 47 @40275 has 4 MA's), (51, 40263), (78, 40173), (84, 40140),

Gene: LilDirt_53 Start: 38126, Stop: 38293, Start Num: 42
Candidate Starts for LilDirt_53:
(23, 38024), (Start: 42 @38126 has 248 MA's), (48, 38138), (51, 38150), (58, 38174), (72, 38225), (84, 38282), (86, 38285),

Gene: LilhomieP_119 Start: 64562, Stop: 64711, Start Num: 44
Candidate Starts for LilhomieP_119:
(Start: 44 @64562 has 39 MA's), (48, 64574), (54, 64595), (55, 64598), (58, 64604), (63, 64625), (84, 64700),

Gene: Lilleskat_65 Start: 40204, Stop: 40055, Start Num: 42
Candidate Starts for Lilleskat_65:
(Start: 42 @40204 has 248 MA's), (Start: 47 @40198 has 4 MA's), (51, 40186), (69, 40120), (80, 40090), (84, 40066),

Gene: LindNT_59 Start: 41322, Stop: 41486, Start Num: 42

Candidate Starts for LindNT_59:
(Start: 42 @41322 has 248 MA's), (Start: 47 @41328 has 4 MA's), (51, 41346), (84, 41475), (86, 41478),

Gene: LittleCherry_60 Start: 39732, Stop: 39580, Start Num: 42
Candidate Starts for LittleCherry_60:
(Start: 42 @39732 has 248 MA's), (Start: 47 @39726 has 4 MA's), (51, 39714), (78, 39624), (84, 39591),

Gene: LiyuLake_52 Start: 40481, Stop: 40627, Start Num: 50
Candidate Starts for LiyuLake_52:
(Start: 42 @40466 has 248 MA's), (Start: 50 @40481 has 1 MA's), (61, 40517), (65, 40532), (82, 40601), (84, 40616),

Gene: Llorens_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Llorens_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: Lokum_61 Start: 41257, Stop: 41415, Start Num: 47
Candidate Starts for Lokum_61:
(Start: 42 @41251 has 248 MA's), (Start: 47 @41257 has 4 MA's), (51, 41275), (72, 41350), (84, 41404), (86, 41407),

Gene: Lolly9_52 Start: 40240, Stop: 40398, Start Num: 42
Candidate Starts for Lolly9_52:
(Start: 42 @40240 has 248 MA's), (Start: 50 @40258 has 1 MA's), (61, 40294), (84, 40387),

Gene: LoneWolf_66 Start: 40322, Stop: 40173, Start Num: 42
Candidate Starts for LoneWolf_66:
(Start: 42 @40322 has 248 MA's), (Start: 47 @40316 has 4 MA's), (51, 40304), (66, 40244), (69, 40238), (84, 40184),

Gene: Luchador_66 Start: 41501, Stop: 41346, Start Num: 42
Candidate Starts for Luchador_66:
(Start: 42 @41501 has 248 MA's), (51, 41483), (69, 41411), (78, 41390), (80, 41381), (83, 41366), (84, 41357),

Gene: Lumos_54 Start: 40415, Stop: 40573, Start Num: 42
Candidate Starts for Lumos_54:
(Start: 42 @40415 has 248 MA's), (Start: 50 @40433 has 1 MA's), (61, 40469), (82, 40547), (84, 40562),

Gene: Lunahalos_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Lunahalos_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: MacKat_55 Start: 36582, Stop: 36746, Start Num: 42
Candidate Starts for MacKat_55:
(Start: 42 @36582 has 248 MA's), (Start: 47 @36588 has 4 MA's), (51, 36606), (72, 36681), (84, 36735), (86, 36738),

Gene: MajorMajor_63 Start: 39432, Stop: 39280, Start Num: 44
Candidate Starts for MajorMajor_63:
(29, 39489), (Start: 44 @39432 has 39 MA's), (77, 39339), (80, 39327), (84, 39303),

Gene: Malthus_64 Start: 40750, Stop: 40914, Start Num: 42
Candidate Starts for Malthus_64:
(11, 40525), (28, 40702), (31, 40723), (Start: 42 @40750 has 248 MA's), (51, 40774), (69, 40837), (78, 40870), (84, 40903),

Gene: Maminiaina_65 Start: 40300, Stop: 40151, Start Num: 42
Candidate Starts for Maminiaina_65:
(Start: 42 @40300 has 248 MA's), (51, 40282), (66, 40222), (69, 40216), (80, 40186), (84, 40162),

Gene: MarysWell_60 Start: 40282, Stop: 40133, Start Num: 42
Candidate Starts for MarysWell_60:
(Start: 42 @40282 has 248 MA's), (Start: 47 @40276 has 4 MA's), (54, 40249), (78, 40177), (84, 40144),

Gene: MeaningOfLife_61 Start: 41993, Stop: 42157, Start Num: 42
Candidate Starts for MeaningOfLife_61:
(Start: 42 @41993 has 248 MA's), (Start: 47 @41999 has 4 MA's), (51, 42017), (72, 42092), (80, 42122), (84, 42146), (86, 42149),

Gene: MegTheThird_63 Start: 39861, Stop: 39703, Start Num: 42
Candidate Starts for MegTheThird_63:
(Start: 38 @39870 has 2 MA's), (Start: 42 @39861 has 248 MA's), (66, 39783), (73, 39759), (80, 39738), (84, 39714),

Gene: Megsy_62 Start: 41393, Stop: 41554, Start Num: 42
Candidate Starts for Megsy_62:
(8, 41132), (Start: 42 @41393 has 248 MA's), (Start: 47 @41399 has 4 MA's), (51, 41417), (72, 41489), (82, 41528), (84, 41543), (86, 41546),

Gene: Micasa_60 Start: 40004, Stop: 39855, Start Num: 42
Candidate Starts for Micasa_60:
(Start: 42 @40004 has 248 MA's), (Start: 47 @39998 has 4 MA's), (54, 39971), (77, 39902), (78, 39899), (84, 39866),

Gene: Midas2_59 Start: 40182, Stop: 40030, Start Num: 42
Candidate Starts for Midas2_59:
(Start: 42 @40182 has 248 MA's), (Start: 47 @40176 has 4 MA's), (51, 40164), (78, 40074), (84, 40041),

Gene: Milcery_60 Start: 39680, Stop: 39528, Start Num: 42
Candidate Starts for Milcery_60:
(Start: 42 @39680 has 248 MA's), (Start: 47 @39674 has 4 MA's), (51, 39662), (78, 39572), (84, 39539),

Gene: MiniLon_55 Start: 40241, Stop: 40399, Start Num: 42
Candidate Starts for MiniLon_55:
(Start: 42 @40241 has 248 MA's), (Start: 50 @40259 has 1 MA's), (61, 40295), (84, 40388),

Gene: MiniMac_55 Start: 40239, Stop: 40397, Start Num: 42

Candidate Starts for MiniMac_55:
(Start: 42 @40239 has 248 MA's), (Start: 50 @40257 has 1 MA's), (61, 40293), (84, 40386),

Gene: Minispark_63 Start: 39907, Stop: 39758, Start Num: 42
Candidate Starts for Minispark_63:
(Start: 38 @39916 has 2 MA's), (Start: 42 @39907 has 248 MA's), (68, 39826), (69, 39823), (84, 39769),

Gene: Miryou_58 Start: 42766, Stop: 42933, Start Num: 42
Candidate Starts for Miryou_58:
(Start: 42 @42766 has 248 MA's), (48, 42778), (51, 42790), (58, 42814), (72, 42865), (82, 42907), (84, 42922), (86, 42925),

Gene: MissDaisy_60 Start: 39674, Stop: 39826, Start Num: 49
Candidate Starts for MissDaisy_60:
(Start: 49 @39674 has 3 MA's), (69, 39749), (78, 39782), (84, 39815),

Gene: Mitti_63 Start: 40929, Stop: 41093, Start Num: 42
Candidate Starts for Mitti_63:
(11, 40704), (28, 40881), (31, 40902), (Start: 42 @40929 has 248 MA's), (51, 40953), (69, 41016), (78, 41049), (84, 41082),

Gene: Moostard_52 Start: 40421, Stop: 40579, Start Num: 42
Candidate Starts for Moostard_52:
(Start: 42 @40421 has 248 MA's), (Start: 50 @40439 has 1 MA's), (61, 40475), (82, 40553), (84, 40568),

Gene: MrMagoo_138 Start: 65627, Stop: 65785, Start Num: 44
Candidate Starts for MrMagoo_138:
(Start: 44 @65627 has 39 MA's), (51, 65645), (58, 65669), (74, 65726), (80, 65750), (84, 65774),

Gene: MsGreen_52 Start: 40418, Stop: 40576, Start Num: 42
Candidate Starts for MsGreen_52:
(Start: 42 @40418 has 248 MA's), (Start: 50 @40436 has 1 MA's), (61, 40472), (82, 40550), (84, 40565),

Gene: Murucutumbu_61 Start: 42093, Stop: 42257, Start Num: 42
Candidate Starts for Murucutumbu_61:
(Start: 42 @42093 has 248 MA's), (Start: 47 @42099 has 4 MA's), (51, 42117), (84, 42246), (86, 42249),

Gene: Mynx_61 Start: 41435, Stop: 41599, Start Num: 42
Candidate Starts for Mynx_61:
(Start: 42 @41435 has 248 MA's), (Start: 47 @41441 has 4 MA's), (51, 41459), (72, 41534), (84, 41588), (86, 41591),

Gene: MyraDee_60 Start: 36959, Stop: 36816, Start Num: 44
Candidate Starts for MyraDee_60:
(26, 37049), (Start: 44 @36959 has 39 MA's), (Start: 47 @36953 has 4 MA's), (70, 36881), (74, 36875), (80, 36851), (84, 36827),

Gene: Myxus_66 Start: 40420, Stop: 40271, Start Num: 42
Candidate Starts for Myxus_66:

(Start: 42 @40420 has 248 MA's), (Start: 47 @40414 has 4 MA's), (51, 40402), (69, 40336), (80, 40306), (84, 40282),

Gene: Naca_62 Start: 40646, Stop: 40494, Start Num: 42
Candidate Starts for Naca_62:
(Start: 42 @40646 has 248 MA's), (Start: 47 @40640 has 4 MA's), (51, 40628), (77, 40541), (84, 40505),

Gene: NearlyHeadless_67 Start: 39788, Stop: 39615, Start Num: 42
Candidate Starts for NearlyHeadless_67:
(Start: 42 @39788 has 248 MA's), (51, 39770), (69, 39692), (84, 39626),

Gene: Neighly_56 Start: 39541, Stop: 39708, Start Num: 42
Candidate Starts for Neighly_56:
(23, 39439), (Start: 42 @39541 has 248 MA's), (48, 39553), (51, 39565), (58, 39589), (72, 39640), (82, 39682), (84, 39697), (86, 39700),

Gene: Nicholas_52 Start: 40419, Stop: 40580, Start Num: 42
Candidate Starts for Nicholas_52:
(Start: 42 @40419 has 248 MA's), (Start: 50 @40437 has 1 MA's), (61, 40473), (82, 40554), (84, 40569),

Gene: Nolwazi_65 Start: 40896, Stop: 41060, Start Num: 42
Candidate Starts for Nolwazi_65:
(11, 40671), (28, 40848), (31, 40869), (Start: 42 @40896 has 248 MA's), (69, 40983), (78, 41016), (84, 41049),

Gene: Odin_63 Start: 39209, Stop: 39057, Start Num: 44
Candidate Starts for Odin_63:
(25, 39308), (Start: 44 @39209 has 39 MA's), (77, 39116), (80, 39104), (84, 39080), (86, 39077),

Gene: OkiRoe_55 Start: 40437, Stop: 40604, Start Num: 42
Candidate Starts for OkiRoe_55:
(Start: 42 @40437 has 248 MA's), (48, 40449), (51, 40461), (58, 40485), (72, 40536), (82, 40578), (84, 40593), (86, 40596),

Gene: OmniCritical_62 Start: 40819, Stop: 40983, Start Num: 42
Candidate Starts for OmniCritical_62:
(11, 40579), (28, 40771), (31, 40792), (Start: 42 @40819 has 248 MA's), (51, 40843), (69, 40906), (78, 40939), (84, 40972),

Gene: Omnicron_58 Start: 40537, Stop: 40707, Start Num: 42
Candidate Starts for Omnicron_58:
(23, 40435), (Start: 42 @40537 has 248 MA's), (48, 40549), (Start: 50 @40555 has 1 MA's), (51, 40561), (58, 40585), (72, 40639), (82, 40681), (84, 40696),

Gene: Onglai_65 Start: 38624, Stop: 38475, Start Num: 42
Candidate Starts for Onglai_65:
(Start: 42 @38624 has 248 MA's), (Start: 47 @38618 has 4 MA's), (51, 38606), (69, 38540), (80, 38510), (84, 38486),

Gene: PackMan_65 Start: 40295, Stop: 40146, Start Num: 42
Candidate Starts for PackMan_65:

(Start: 42 @40295 has 248 MA's), (Start: 47 @40289 has 4 MA's), (51, 40277), (69, 40211), (80, 40181), (84, 40157),

Gene: Padfoot_60 Start: 41453, Stop: 41611, Start Num: 47
Candidate Starts for Padfoot_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: Padpat_62 Start: 41116, Stop: 41280, Start Num: 42
Candidate Starts for Padpat_62:
(Start: 42 @41116 has 248 MA's), (Start: 47 @41122 has 4 MA's), (51, 41140), (72, 41215), (84, 41269), (86, 41272),

Gene: Paola_54 Start: 40040, Stop: 40207, Start Num: 42
Candidate Starts for Paola_54:
(3, 39737), (4, 39746), (23, 39938), (Start: 42 @40040 has 248 MA's), (48, 40052), (51, 40064), (58, 40088), (72, 40139), (82, 40181), (84, 40196),

Gene: Patt_59 Start: 39398, Stop: 39550, Start Num: 49
Candidate Starts for Patt_59:
(Start: 49 @39398 has 3 MA's), (69, 39473), (78, 39506), (84, 39539),

Gene: Peel_60 Start: 41252, Stop: 41416, Start Num: 42
Candidate Starts for Peel_60:
(Start: 42 @41252 has 248 MA's), (Start: 47 @41258 has 4 MA's), (51, 41276), (72, 41351), (84, 41405), (86, 41408),

Gene: PegLeg_123 Start: 64446, Stop: 64595, Start Num: 44
Candidate Starts for PegLeg_123:
(Start: 44 @64446 has 39 MA's), (48, 64458), (54, 64479), (55, 64482), (58, 64488), (63, 64509), (84, 64584),

Gene: PetterN_67 Start: 40392, Stop: 40240, Start Num: 42
Candidate Starts for PetterN_67:
(Start: 42 @40392 has 248 MA's), (Start: 47 @40386 has 4 MA's), (51, 40374), (77, 40287), (84, 40251),

Gene: Ph8s_65 Start: 39383, Stop: 39240, Start Num: 44
Candidate Starts for Ph8s_65:
(Start: 44 @39383 has 39 MA's), (48, 39371), (74, 39299), (76, 39290), (86, 39248),

Gene: Phaeder_66 Start: 40295, Stop: 40146, Start Num: 42
Candidate Starts for Phaeder_66:
(Start: 42 @40295 has 248 MA's), (Start: 47 @40289 has 4 MA's), (51, 40277), (69, 40211), (80, 40181), (84, 40157),

Gene: Pharaoh_59 Start: 39999, Stop: 39856, Start Num: 44
Candidate Starts for Pharaoh_59:
(Start: 44 @39999 has 39 MA's), (75, 39912), (80, 39891), (84, 39867), (86, 39864),

Gene: Phillis_64 Start: 39236, Stop: 39063, Start Num: 42
Candidate Starts for Phillis_64:
(Start: 42 @39236 has 248 MA's), (51, 39218), (84, 39074), (87, 39068),

Gene: Phlorence_61 Start: 40026, Stop: 39874, Start Num: 42
Candidate Starts for Phlorence_61:
(Start: 42 @40026 has 248 MA's), (Start: 47 @40020 has 4 MA's), (51, 40008), (78, 39918), (84, 39885),

Gene: Phonnegut_67 Start: 40517, Stop: 40368, Start Num: 42
Candidate Starts for Phonnegut_67:
(Start: 42 @40517 has 248 MA's), (Start: 47 @40511 has 4 MA's), (51, 40499), (69, 40433), (80, 40403), (84, 40379),

Gene: Piatt_60 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for Piatt_60:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: PickleBack_63 Start: 40203, Stop: 40051, Start Num: 42
Candidate Starts for PickleBack_63:
(Start: 42 @40203 has 248 MA's), (Start: 47 @40197 has 4 MA's), (51, 40185), (78, 40095), (84, 40062),

Gene: Pioneer_67 Start: 40517, Stop: 40368, Start Num: 42
Candidate Starts for Pioneer_67:
(Start: 42 @40517 has 248 MA's), (Start: 47 @40511 has 4 MA's), (51, 40499), (69, 40433), (80, 40403), (84, 40379),

Gene: Pisa1_60 Start: 42104, Stop: 42259, Start Num: 47
Candidate Starts for Pisa1_60:
(Start: 42 @42098 has 248 MA's), (Start: 47 @42104 has 4 MA's), (51, 42122), (52, 42125), (60, 42158), (80, 42224), (84, 42248), (86, 42251),

Gene: Pisa4_54 Start: 37473, Stop: 37628, Start Num: 47
Candidate Starts for Pisa4_54:
(Start: 42 @37467 has 248 MA's), (Start: 47 @37473 has 4 MA's), (51, 37491), (52, 37494), (60, 37527), (80, 37593), (84, 37617), (86, 37620),

Gene: Pokerus_59 Start: 41165, Stop: 41332, Start Num: 42
Candidate Starts for Pokerus_59:
(Start: 42 @41165 has 248 MA's), (72, 41267), (80, 41297), (84, 41321),

Gene: Prinashe11_60 Start: 39741, Stop: 39589, Start Num: 42
Candidate Starts for Prinashe11_60:
(Start: 42 @39741 has 248 MA's), (Start: 47 @39735 has 4 MA's), (51, 39723), (78, 39633), (84, 39600),

Gene: Prithvi_61 Start: 41322, Stop: 41486, Start Num: 42
Candidate Starts for Prithvi_61:
(Start: 42 @41322 has 248 MA's), (Start: 47 @41328 has 4 MA's), (51, 41346), (84, 41475), (86, 41478),

Gene: Priya_64 Start: 40007, Stop: 39858, Start Num: 42
Candidate Starts for Priya_64:

(Start: 42 @40007 has 248 MA's), (Start: 47 @40001 has 4 MA's), (51, 39989), (69, 39923), (80, 39893), (84, 39869),

Gene: Psycho_54 Start: 38667, Stop: 38834, Start Num: 42
Candidate Starts for Psycho_54:
(23, 38565), (Start: 42 @38667 has 248 MA's), (48, 38679), (51, 38691), (58, 38715), (72, 38766), (82, 38808), (84, 38823), (86, 38826),

Gene: Qhanda_65 Start: 40766, Stop: 40930, Start Num: 42
Candidate Starts for Qhanda_65:
(11, 40541), (28, 40718), (31, 40739), (Start: 42 @40766 has 248 MA's), (51, 40790), (69, 40853), (78, 40886), (84, 40919),

Gene: Qobbit_64 Start: 39969, Stop: 39820, Start Num: 42
Candidate Starts for Qobbit_64:
(Start: 42 @39969 has 248 MA's), (Start: 47 @39963 has 4 MA's), (51, 39951), (69, 39885), (80, 39855), (84, 39831),

Gene: QuincyRose_59 Start: 41511, Stop: 41675, Start Num: 42
Candidate Starts for QuincyRose_59:
(Start: 42 @41511 has 248 MA's), (Start: 47 @41517 has 4 MA's), (51, 41535), (72, 41610), (80, 41640), (84, 41664), (86, 41667),

Gene: Quokka_63 Start: 39432, Stop: 39280, Start Num: 44
Candidate Starts for Quokka_63:
(29, 39489), (Start: 44 @39432 has 39 MA's), (77, 39339), (80, 39327), (84, 39303),

Gene: Rahalelujah_65 Start: 39922, Stop: 39773, Start Num: 42
Candidate Starts for Rahalelujah_65:
(Start: 38 @39931 has 2 MA's), (Start: 42 @39922 has 248 MA's), (68, 39841), (69, 39838), (84, 39784),

Gene: Ramen_61 Start: 41127, Stop: 41291, Start Num: 42
Candidate Starts for Ramen_61:
(36, 41112), (Start: 42 @41127 has 248 MA's), (Start: 47 @41133 has 4 MA's), (51, 41151), (84, 41280), (86, 41283),

Gene: Rando14_56 Start: 38237, Stop: 38407, Start Num: 42
Candidate Starts for Rando14_56:
(23, 38135), (Start: 42 @38237 has 248 MA's), (48, 38249), (Start: 50 @38255 has 1 MA's), (51, 38261), (58, 38285), (72, 38339), (82, 38381), (84, 38396), (86, 38399),

Gene: Rapunzel97_61 Start: 41114, Stop: 41278, Start Num: 42
Candidate Starts for Rapunzel97_61:
(Start: 42 @41114 has 248 MA's), (Start: 47 @41120 has 4 MA's), (51, 41138), (72, 41213), (80, 41243), (82, 41252), (84, 41267),

Gene: Red305_53 Start: 40418, Stop: 40576, Start Num: 42
Candidate Starts for Red305_53:
(Start: 42 @40418 has 248 MA's), (Start: 50 @40436 has 1 MA's), (61, 40472), (82, 40550), (84, 40565),

Gene: Refuge_61 Start: 41137, Stop: 40997, Start Num: 44

Candidate Starts for Refuge_61:
(35, 41164), (Start: 44 @41137 has 39 MA's), (Start: 47 @41131 has 4 MA's), (51, 41119), (80, 41032), (84, 41008),

Gene: Reindeer_120 Start: 64620, Stop: 64802, Start Num: 33
Candidate Starts for Reindeer_120:
(Start: 33 @64620 has 1 MA's), (Start: 44 @64659 has 39 MA's), (51, 64677), (52, 64680), (54, 64692), (68, 64731), (78, 64758), (80, 64767), (84, 64791),

Gene: Reptar3000_60 Start: 39386, Stop: 39538, Start Num: 49
Candidate Starts for Reptar3000_60:
(Start: 49 @39386 has 3 MA's), (69, 39461), (78, 39494), (84, 39527),

Gene: Rey_138 Start: 65174, Stop: 65332, Start Num: 44
Candidate Starts for Rey_138:
(Start: 44 @65174 has 39 MA's), (51, 65192), (58, 65216), (74, 65273), (75, 65276), (80, 65297), (84, 65321),

Gene: Roary_68 Start: 40007, Stop: 39834, Start Num: 42
Candidate Starts for Roary_68:
(Start: 42 @40007 has 248 MA's), (51, 39989), (84, 39845),

Gene: RoseMarie_128 Start: 67157, Stop: 67306, Start Num: 44
Candidate Starts for RoseMarie_128:
(39, 67148), (Start: 44 @67157 has 39 MA's), (48, 67169), (52, 67178), (54, 67190), (55, 67193), (58, 67199), (63, 67220), (75, 67250), (78, 67262), (80, 67271), (84, 67295),

Gene: Rosmarinus_60 Start: 41238, Stop: 41402, Start Num: 42
Candidate Starts for Rosmarinus_60:
(Start: 42 @41238 has 248 MA's), (Start: 47 @41244 has 4 MA's), (51, 41262), (72, 41337), (84, 41391), (86, 41394),

Gene: Ruthiejr_64 Start: 40800, Stop: 40964, Start Num: 42
Candidate Starts for Ruthiejr_64:
(11, 40575), (28, 40752), (31, 40773), (Start: 42 @40800 has 248 MA's), (51, 40824), (69, 40887), (78, 40920), (84, 40953),

Gene: RyeScarlet_67 Start: 40492, Stop: 40343, Start Num: 42
Candidate Starts for RyeScarlet_67:
(Start: 42 @40492 has 248 MA's), (Start: 47 @40486 has 4 MA's), (51, 40474), (69, 40408), (80, 40378), (84, 40354),

Gene: Sachima_66 Start: 40321, Stop: 40172, Start Num: 42
Candidate Starts for Sachima_66:
(Start: 42 @40321 has 248 MA's), (Start: 47 @40315 has 4 MA's), (51, 40303), (69, 40237), (80, 40207), (84, 40183),

Gene: Saintus_62 Start: 36672, Stop: 36499, Start Num: 42
Candidate Starts for Saintus_62:
(Start: 42 @36672 has 248 MA's), (51, 36654), (84, 36510),

Gene: SamScheppers_61 Start: 41229, Stop: 41393, Start Num: 42
Candidate Starts for SamScheppers_61:

(11, 41004), (28, 41181), (31, 41202), (Start: 42 @41229 has 248 MA's), (51, 41253), (69, 41316), (78, 41349), (84, 41382),

Gene: Samty_52 Start: 40420, Stop: 40581, Start Num: 42
Candidate Starts for Samty_52:
(Start: 42 @40420 has 248 MA's), (Start: 50 @40438 has 1 MA's), (61, 40474), (82, 40555), (84, 40570),

Gene: SamuelLPlaqson_61 Start: 42019, Stop: 42177, Start Num: 42
Candidate Starts for SamuelLPlaqson_61:
(Start: 42 @42019 has 248 MA's), (Start: 47 @42025 has 4 MA's), (51, 42043), (52, 42046), (80, 42142), (84, 42166), (86, 42169),

Gene: Scherzo_66 Start: 40652, Stop: 40503, Start Num: 42
Candidate Starts for Scherzo_66:
(Start: 42 @40652 has 248 MA's), (Start: 47 @40646 has 4 MA's), (51, 40634), (66, 40574), (69, 40568), (84, 40514),

Gene: Scorpia_64 Start: 40451, Stop: 40299, Start Num: 42
Candidate Starts for Scorpia_64:
(Start: 42 @40451 has 248 MA's), (Start: 47 @40445 has 4 MA's), (51, 40433), (77, 40346), (84, 40310),

Gene: Serenity_64 Start: 39562, Stop: 39410, Start Num: 44
Candidate Starts for Serenity_64:
(14, 39784), (Start: 44 @39562 has 39 MA's), (74, 39481), (77, 39469), (80, 39457), (84, 39433),

Gene: SheaKeira_62 Start: 39772, Stop: 39614, Start Num: 42
Candidate Starts for SheaKeira_62:
(Start: 38 @39781 has 2 MA's), (Start: 42 @39772 has 248 MA's), (66, 39694), (73, 39670), (80, 39649), (83, 39634), (84, 39625),

Gene: ShiaSurprise_61 Start: 41447, Stop: 41611, Start Num: 42
Candidate Starts for ShiaSurprise_61:
(Start: 42 @41447 has 248 MA's), (Start: 47 @41453 has 4 MA's), (51, 41471), (72, 41546), (84, 41600), (86, 41603),

Gene: Skinny_125 Start: 65562, Stop: 65711, Start Num: 44
Candidate Starts for Skinny_125:
(Start: 44 @65562 has 39 MA's), (48, 65574), (54, 65595), (55, 65598), (58, 65604), (63, 65625), (84, 65700),

Gene: Slarp_63 Start: 40757, Stop: 40921, Start Num: 42
Candidate Starts for Slarp_63:
(11, 40532), (28, 40709), (31, 40730), (Start: 42 @40757 has 248 MA's), (51, 40781), (69, 40844), (78, 40877), (84, 40910),

Gene: SlimJimmy_119 Start: 64271, Stop: 64420, Start Num: 44
Candidate Starts for SlimJimmy_119:
(Start: 44 @64271 has 39 MA's), (48, 64283), (54, 64304), (55, 64307), (58, 64313), (63, 64334), (84, 64409),

Gene: Slimphazie_60 Start: 41114, Stop: 41278, Start Num: 42

Candidate Starts for Slimphazie_60:
(Start: 42 @41114 has 248 MA's), (Start: 47 @41120 has 4 MA's), (51, 41138), (72, 41213), (80, 41243), (82, 41252), (84, 41267),

Gene: Smeadley_67 Start: 39868, Stop: 39695, Start Num: 42
Candidate Starts for Smeadley_67:
(Start: 42 @39868 has 248 MA's), (51, 39850), (84, 39706),

Gene: Snenia_52 Start: 40419, Stop: 40577, Start Num: 42
Candidate Starts for Snenia_52:
(Start: 42 @40419 has 248 MA's), (Start: 50 @40437 has 1 MA's), (61, 40473), (82, 40551), (84, 40566),

Gene: SoSeph_55 Start: 40412, Stop: 40579, Start Num: 42
Candidate Starts for SoSeph_55:
(3, 40109), (4, 40118), (23, 40310), (Start: 42 @40412 has 248 MA's), (48, 40424), (51, 40436), (58, 40460), (72, 40511), (82, 40553), (84, 40568),

Gene: SororFago_64 Start: 40881, Stop: 40684, Start Num: 42
Candidate Starts for SororFago_64:
(18, 41076), (Start: 42 @40881 has 248 MA's), (66, 40779), (69, 40767), (78, 40728), (80, 40719), (84, 40695),

Gene: Spock_60 Start: 41251, Stop: 41415, Start Num: 42
Candidate Starts for Spock_60:
(Start: 42 @41251 has 248 MA's), (Start: 47 @41257 has 4 MA's), (51, 41275), (72, 41350), (84, 41404), (86, 41407),

Gene: Spouty_64 Start: 40006, Stop: 39857, Start Num: 42
Candidate Starts for Spouty_64:
(Start: 42 @40006 has 248 MA's), (Start: 47 @40000 has 4 MA's), (51, 39988), (69, 39922), (80, 39892), (84, 39868),

Gene: Steamy_60 Start: 39733, Stop: 39590, Start Num: 44
Candidate Starts for Steamy_60:
(2, 40096), (Start: 44 @39733 has 39 MA's), (51, 39715), (80, 39625), (84, 39601), (86, 39598),

Gene: Stellammi_67 Start: 39941, Stop: 40081, Start Num: 44
Candidate Starts for Stellammi_67:
(Start: 44 @39941 has 39 MA's), (66, 40001), (75, 40025), (83, 40061), (84, 40070),

Gene: Stephig9_66 Start: 39802, Stop: 39629, Start Num: 42
Candidate Starts for Stephig9_66:
(Start: 42 @39802 has 248 MA's), (51, 39784), (84, 39640),

Gene: Stinson_61 Start: 41616, Stop: 41780, Start Num: 42
Candidate Starts for Stinson_61:
(Start: 42 @41616 has 248 MA's), (Start: 47 @41622 has 4 MA's), (51, 41640), (70, 41709), (72, 41715), (84, 41769), (86, 41772),

Gene: Sulley_60 Start: 41302, Stop: 41466, Start Num: 42
Candidate Starts for Sulley_60:

(Start: 42 @41302 has 248 MA's), (Start: 47 @41308 has 4 MA's), (51, 41326), (70, 41395), (72, 41401), (80, 41431), (84, 41455), (86, 41458),

Gene: Sunhee_66 Start: 39448, Stop: 39299, Start Num: 42
Candidate Starts for Sunhee_66:
(22, 39601), (Start: 42 @39448 has 248 MA's), (Start: 47 @39442 has 4 MA's), (67, 39379), (73, 39355), (84, 39310),

Gene: Superchunk_63 Start: 38825, Stop: 38673, Start Num: 44
Candidate Starts for Superchunk_63:
(Start: 44 @38825 has 39 MA's), (77, 38732), (80, 38720), (84, 38696), (86, 38693),

Gene: SwirlSquare_68 Start: 39747, Stop: 39595, Start Num: 44
Candidate Starts for SwirlSquare_68:
(Start: 44 @39747 has 39 MA's), (77, 39654), (80, 39642), (83, 39627), (84, 39618), (86, 39615),

Gene: Swirley_62 Start: 40071, Stop: 39919, Start Num: 42
Candidate Starts for Swirley_62:
(Start: 42 @40071 has 248 MA's), (Start: 47 @40065 has 4 MA's), (51, 40053), (78, 39963), (84, 39930),

Gene: SydNat_62 Start: 40613, Stop: 40461, Start Num: 42
Candidate Starts for SydNat_62:
(Start: 42 @40613 has 248 MA's), (51, 40595), (78, 40505), (84, 40472),

Gene: Tachez_60 Start: 41095, Stop: 41259, Start Num: 42
Candidate Starts for Tachez_60:
(Start: 42 @41095 has 248 MA's), (Start: 47 @41101 has 4 MA's), (51, 41119), (72, 41194), (84, 41248), (86, 41251),

Gene: TaiwanKao_62 Start: 41384, Stop: 41548, Start Num: 42
Candidate Starts for TaiwanKao_62:
(Start: 42 @41384 has 248 MA's), (Start: 47 @41390 has 4 MA's), (51, 41408), (72, 41483), (84, 41537), (86, 41540),

Gene: Taquito_62 Start: 40992, Stop: 41156, Start Num: 42
Candidate Starts for Taquito_62:
(11, 40767), (28, 40944), (31, 40965), (Start: 42 @40992 has 248 MA's), (51, 41016), (69, 41079), (78, 41112), (84, 41145),

Gene: Tarynearal_59 Start: 39666, Stop: 39514, Start Num: 42
Candidate Starts for Tarynearal_59:
(Start: 42 @39666 has 248 MA's), (Start: 47 @39660 has 4 MA's), (51, 39648), (78, 39558), (84, 39525),

Gene: Theia_59 Start: 40266, Stop: 40114, Start Num: 42
Candidate Starts for Theia_59:
(Start: 42 @40266 has 248 MA's), (Start: 47 @40260 has 4 MA's), (51, 40248), (78, 40158), (84, 40125),

Gene: Thyatira_57 Start: 42370, Stop: 42537, Start Num: 42
Candidate Starts for Thyatira_57:

(Start: 42 @42370 has 248 MA's), (48, 42382), (51, 42394), (58, 42418), (72, 42469), (82, 42511), (84, 42526),

Gene: Tiger_62 Start: 39947, Stop: 39795, Start Num: 42
Candidate Starts for Tiger_62:
(Start: 42 @39947 has 248 MA's), (Start: 47 @39941 has 4 MA's), (51, 39929), (78, 39839), (84, 39806),

Gene: TingHuaYa_62 Start: 40455, Stop: 40625, Start Num: 42
Candidate Starts for TingHuaYa_62:
(40, 40452), (Start: 42 @40455 has 248 MA's), (48, 40467), (68, 40545), (71, 40557), (84, 40614), (86, 40617),

Gene: TiniBug_61 Start: 42015, Stop: 42173, Start Num: 42
Candidate Starts for TiniBug_61:
(Start: 42 @42015 has 248 MA's), (Start: 47 @42021 has 4 MA's), (51, 42039), (52, 42042), (80, 42138), (84, 42162), (86, 42165),

Gene: TipsytheTRex_61 Start: 39632, Stop: 39480, Start Num: 44
Candidate Starts for TipsytheTRex_61:
(14, 39854), (Start: 44 @39632 has 39 MA's), (74, 39551), (80, 39527), (84, 39503),

Gene: Tiri_61 Start: 41410, Stop: 41577, Start Num: 42
Candidate Starts for Tiri_61:
(9, 41149), (Start: 42 @41410 has 248 MA's), (Start: 47 @41416 has 4 MA's), (72, 41512), (80, 41542), (82, 41551), (84, 41566), (86, 41569),

Gene: Toaka_66 Start: 40403, Stop: 40245, Start Num: 38
Candidate Starts for Toaka_66:
(Start: 38 @40403 has 2 MA's), (Start: 42 @40394 has 248 MA's), (69, 40310), (83, 40265), (84, 40256),

Gene: Topper_60 Start: 41250, Stop: 41414, Start Num: 42
Candidate Starts for Topper_60:
(Start: 42 @41250 has 248 MA's), (Start: 47 @41256 has 4 MA's), (51, 41274), (72, 41349), (84, 41403), (86, 41406),

Gene: TpudiCK_121 Start: 63284, Stop: 63433, Start Num: 44
Candidate Starts for TpudiCK_121:
(Start: 44 @63284 has 39 MA's), (48, 63296), (54, 63317), (55, 63320), (58, 63326), (63, 63347), (84, 63422),

Gene: TreyKay_61 Start: 41322, Stop: 41486, Start Num: 42
Candidate Starts for TreyKay_61:
(Start: 42 @41322 has 248 MA's), (Start: 47 @41328 has 4 MA's), (51, 41346), (84, 41475), (86, 41478),

Gene: TriFive_54 Start: 40418, Stop: 40576, Start Num: 42
Candidate Starts for TriFive_54:
(Start: 42 @40418 has 248 MA's), (Start: 50 @40436 has 1 MA's), (61, 40472), (82, 40550), (84, 40565),

Gene: TruffulaTree_60 Start: 41110, Stop: 41274, Start Num: 42

Candidate Starts for TruffulaTree_60:
(Start: 42 @41110 has 248 MA's), (Start: 47 @41116 has 4 MA's), (51, 41134), (72, 41209), (80, 41239), (82, 41248), (84, 41263),

Gene: Tubs_66 Start: 40295, Stop: 40146, Start Num: 42
Candidate Starts for Tubs_66:
(Start: 42 @40295 has 248 MA's), (Start: 47 @40289 has 4 MA's), (51, 40277), (69, 40211), (80, 40181), (84, 40157),

Gene: Twigg_60 Start: 39719, Stop: 39567, Start Num: 42
Candidate Starts for Twigg_60:
(Start: 42 @39719 has 248 MA's), (Start: 47 @39713 has 4 MA's), (51, 39701), (78, 39611), (84, 39578),

Gene: Twitch_60 Start: 41252, Stop: 41416, Start Num: 42
Candidate Starts for Twitch_60:
(Start: 42 @41252 has 248 MA's), (Start: 47 @41258 has 4 MA's), (51, 41276), (72, 41351), (84, 41405), (86, 41408),

Gene: TyDawg_114 Start: 63287, Stop: 63436, Start Num: 44
Candidate Starts for TyDawg_114:
(Start: 44 @63287 has 39 MA's), (48, 63299), (54, 63320), (55, 63323), (58, 63329), (63, 63350), (84, 63425),

Gene: Ugenie5_62 Start: 40651, Stop: 40502, Start Num: 42
Candidate Starts for Ugenie5_62:
(Start: 42 @40651 has 248 MA's), (Start: 47 @40645 has 4 MA's), (51, 40633), (66, 40573), (69, 40567), (84, 40513),

Gene: UnionJack_63 Start: 39933, Stop: 39781, Start Num: 42
Candidate Starts for UnionJack_63:
(Start: 42 @39933 has 248 MA's), (Start: 47 @39927 has 4 MA's), (51, 39915), (77, 39828), (84, 39792),

Gene: Urkel_61 Start: 42019, Stop: 42177, Start Num: 42
Candidate Starts for Urkel_61:
(Start: 42 @42019 has 248 MA's), (Start: 47 @42025 has 4 MA's), (51, 42043), (52, 42046), (80, 42142), (84, 42166), (86, 42169),

Gene: Vanisoa_65 Start: 41342, Stop: 41196, Start Num: 41
Candidate Starts for Vanisoa_65:
(Start: 38 @41348 has 2 MA's), (Start: 41 @41342 has 2 MA's), (84, 41207),

Gene: Veliki_61 Start: 41096, Stop: 41254, Start Num: 42
Candidate Starts for Veliki_61:
(Start: 42 @41096 has 248 MA's), (Start: 47 @41102 has 4 MA's), (51, 41120), (72, 41189), (84, 41243), (86, 41246),

Gene: ViviJ_53 Start: 38125, Stop: 38292, Start Num: 42
Candidate Starts for ViviJ_53:
(23, 38023), (Start: 42 @38125 has 248 MA's), (48, 38137), (51, 38149), (58, 38173), (72, 38224), (84, 38281), (86, 38284),

Gene: Waterfoul_56 Start: 40474, Stop: 40641, Start Num: 42
Candidate Starts for Waterfoul_56:
(3, 40171), (4, 40180), (23, 40372), (Start: 42 @40474 has 248 MA's), (48, 40486), (51, 40498), (58, 40522), (72, 40573), (82, 40615), (84, 40630),

Gene: Whirlwind_53 Start: 40234, Stop: 40392, Start Num: 42
Candidate Starts for Whirlwind_53:
(Start: 42 @40234 has 248 MA's), (84, 40381),

Gene: Wintermute_63 Start: 40987, Stop: 41151, Start Num: 42
Candidate Starts for Wintermute_63:
(11, 40762), (28, 40939), (31, 40960), (Start: 42 @40987 has 248 MA's), (51, 41011), (69, 41074), (78, 41107), (84, 41140),

Gene: WorldCup_63 Start: 39916, Stop: 39767, Start Num: 42
Candidate Starts for WorldCup_63:
(Start: 38 @39925 has 2 MA's), (Start: 42 @39916 has 248 MA's), (68, 39835), (69, 39832), (84, 39778),

Gene: Y10_61 Start: 40915, Stop: 41079, Start Num: 42
Candidate Starts for Y10_61:
(11, 40690), (28, 40867), (31, 40888), (Start: 42 @40915 has 248 MA's), (51, 40939), (69, 41002), (78, 41035), (84, 41068),

Gene: Y2_61 Start: 40915, Stop: 41079, Start Num: 42
Candidate Starts for Y2_61:
(11, 40690), (28, 40867), (31, 40888), (Start: 42 @40915 has 248 MA's), (51, 40939), (69, 41002), (78, 41035), (84, 41068),

Gene: YasnayaPolyana_62 Start: 40840, Stop: 41004, Start Num: 42
Candidate Starts for YasnayaPolyana_62:
(11, 40615), (28, 40792), (31, 40813), (Start: 42 @40840 has 248 MA's), (51, 40864), (69, 40927), (78, 40960), (84, 40993),

Gene: Yecey3_67 Start: 40309, Stop: 40154, Start Num: 91
Candidate Starts for Yecey3_67:
(Start: 91 @40309 has 1 MA's), (93, 40174), (94, 40165),

Gene: YoureAdopted_59 Start: 41239, Stop: 41403, Start Num: 42
Candidate Starts for YoureAdopted_59:
(Start: 42 @41239 has 248 MA's), (Start: 47 @41245 has 4 MA's), (80, 41368), (84, 41392),

Gene: Yunkel11_63 Start: 40947, Stop: 41123, Start Num: 42
Candidate Starts for Yunkel11_63:
(Start: 42 @40947 has 248 MA's), (48, 40959), (52, 40974), (68, 41043), (71, 41055), (84, 41112), (86, 41115),

Gene: Zabiza_55 Start: 37430, Stop: 37594, Start Num: 42
Candidate Starts for Zabiza_55:
(36, 37415), (Start: 42 @37430 has 248 MA's), (Start: 47 @37436 has 4 MA's), (51, 37454), (84, 37583), (86, 37586),

Gene: Zavala_62 Start: 41395, Stop: 41559, Start Num: 42

Candidate Starts for Zavala_62:
(Start: 42 @41395 has 248 MA's), (Start: 47 @41401 has 4 MA's), (51, 41419), (72, 41494), (84, 41548), (86, 41551),

Gene: Zimmer_61 Start: 40965, Stop: 40825, Start Num: 44
Candidate Starts for Zimmer_61:
(5, 41262), (6, 41250), (16, 41172), (Start: 44 @40965 has 39 MA's), (Start: 47 @40959 has 4 MA's), (51, 40947), (80, 40860), (83, 40845), (84, 40836),

Gene: Zolita_61 Start: 40617, Stop: 40465, Start Num: 42
Candidate Starts for Zolita_61:
(Start: 42 @40617 has 248 MA's), (51, 40599), (78, 40509), (84, 40476),