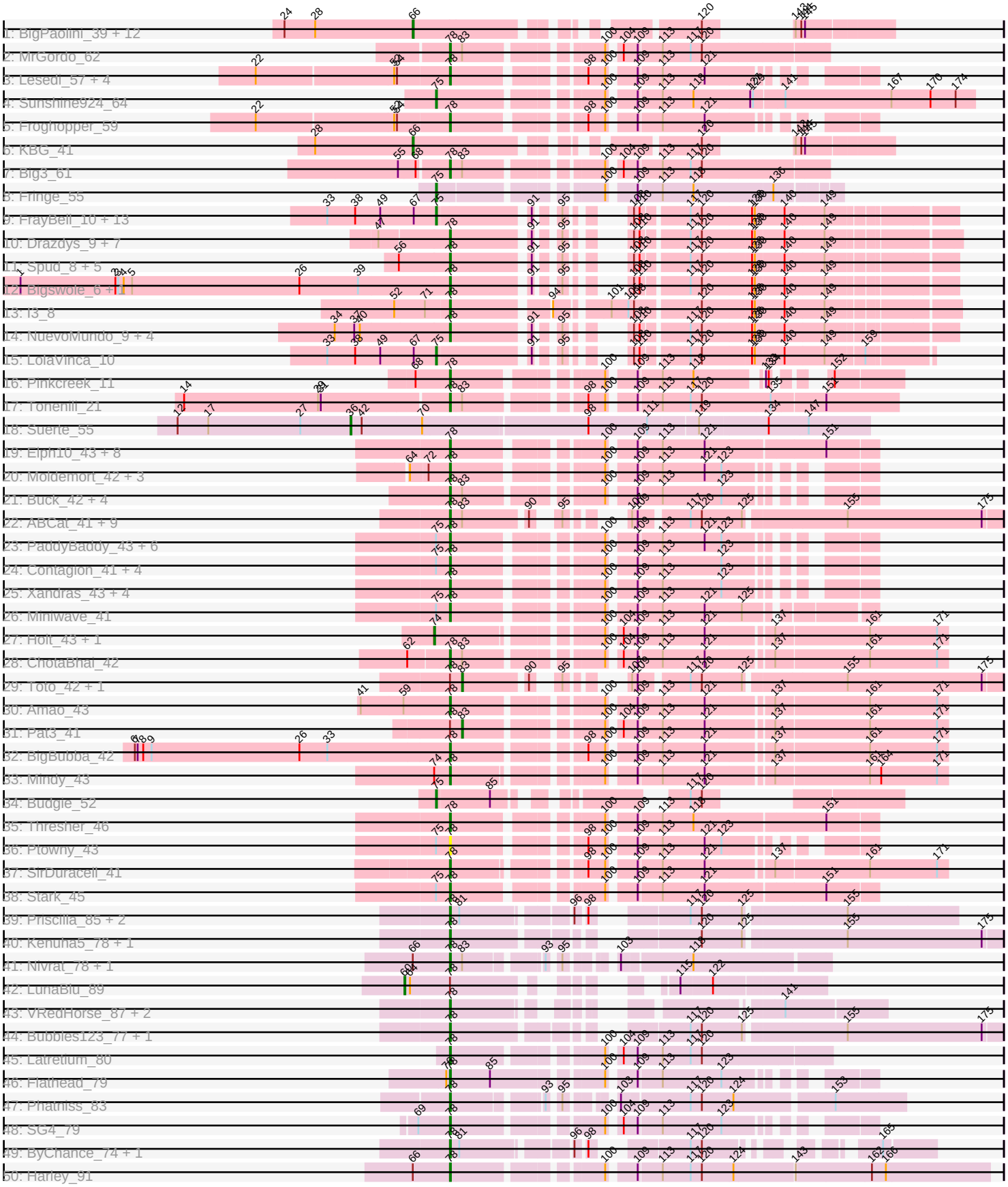
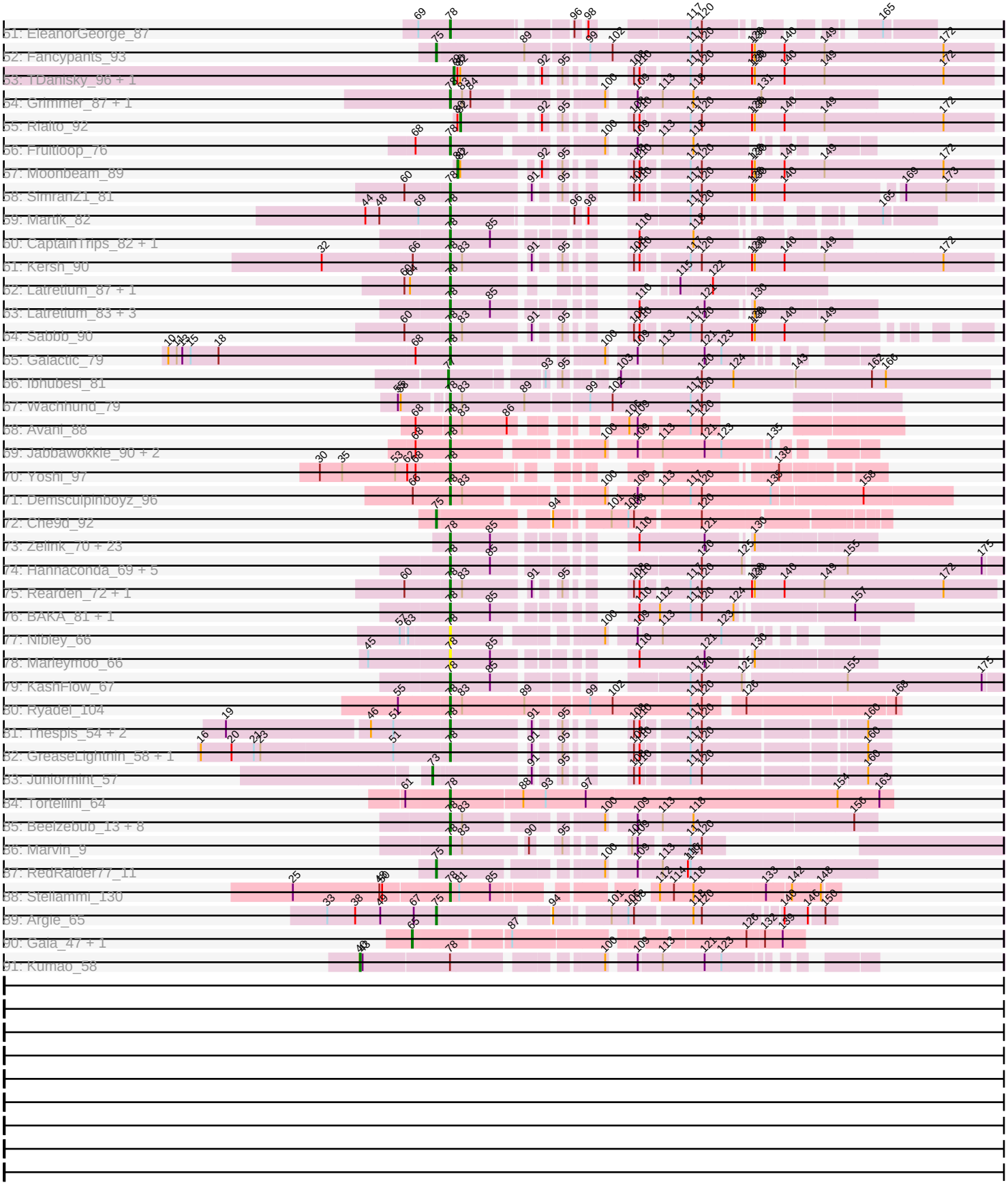
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1: BigPaolini_39 + 12
2: MrGordo_62
3: Leseul_57 + 4
4: Sunshine924_64
5: Froghopper_59
6: KBG_41
7: Big3_61
8: Fringe_55
9: FrayBell_10 + 13
10: Drazdys_9 + 7
11: Spud_8 + 5
12: Bigswole_6 + 1
13: I3_8
14: NuevoMundo_9 + 4
15: LolaVinca_10
16: Pinkcreek_11
17: Tonehill_21
18: Suente_55
19: Elph10_43 + 8
20: Moldemort_42 + 3
21: Buck_42 + 4
22: ABCat_41 + 9
23: PaddyBaddy_43 + 6
24: Contagion_41 + 4
25: Xandras_43 + 4
26: Miniwave_41
27: Holt_43 + 1
28: ChotaBhai_42
29: Toto_42 + 1
30: Amao_43
31: Pat3_41
32: BigBubba_42
33: Mindy_43
34: Budgie_52
35: Thresher_46
36: Ptowny_43
37: SirDuracell_41
38: Stark_45
39: Priscilla_85 + 2
40: Kenuna5_78 + 1
41: Nivrat_78 + 1
42: LunaBlu_89
43: VRedHorse_87 + 2
44: Bubbles123_77 + 1
45: Latretium_80
46: Flathead_79
47: Phathiss_83
48: SG4_79
49: ByChance_74 + 1
50: Haley_91

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51: EleanorGeorge_87
52: Fancypants_93
53: YDanisky_96 + 1
54: Grimmer_87 + 1
55: Rialto_92
56: Fruitloop_76
57: Moonbeam_89
58: Simran21_81
59: Martik_82
60: CaptainTrips_82 + 1
61: Kersh_90
62: Latretium_87 + 1
63: Latretium_83 + 3
64: Sabbb_90
65: Galactic_79
66: Ibnubesi_81
67: Wachhund_79
68: Avani_88
69: Jabbawokkie_90 + 2
70: Yoshi_97
71: Demsculpinboyz_96
72: Che9d_92
73: Zellnk_70 + 23
74: Hannaconda_69 + 5
75: Rearden_72 + 1
76: BAKA_81 + 1
77: Nibley_66
78: Maneymoo_66
79: KashFlow_67
80: Ryadel_104
81: Thespis_54 + 2
82: GreaseLightnin_58 + 1
83: Juniormint_57
84: Tortellini_64
85: Beelzebub_13 + 8
86: Marvin_9
87: RedRaider77_11
88: Stellamml_130
89: Argie_65
90: Gaia_47 + 1
91: Kumao_58

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 347231 Report

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

Pham number 347231 has 236 members, 19 are drafts.

Phages represented in each track:
• Track 1 : BigPaolini_39, Cueylyss_40, LunarLander_41, Eyeball_40, Doom_40, Wilkins_39, ILeeKay_42, Topgun_39, Phlippers_38, Puppet_40, Graduation_42, Licorice_42, Smairt_41
• Track 2 : MrGordo_62
• Track 3 : Lesedi_57, Fajezeel_62, Acme_63, Bxb1_55, Greg_62
• Track 4 : Sunshine924_64
• Track 5 : Froghopper_59
• Track 6 : KBG_41
• Track 7 : Big3_61
• Track 8 : Fringe_55
• Track 9 : FrayBell_10, JayJay_9, Tainan_10, Sebata_9, Specks_10, InterFolia_10, GoldenSnow_10, Pupusa_10, Maguvora_11, Puhon_10, JigglyPuff_8, PharkleMinkus_10, LordLeafolot_10, LinStu_9
• Track 10 : Drazdys_9, Kamryn_7, Jezreel_7, Tyke_9, Mikro_7, DTDevon_9, NoodleTree_7, Bxz1_7
• Track 11 : Spud_8, Nidhogg_7, MoMoMixon_7, Naval22_8, Pio_8, Sauce_7
• Track 12 : Bigswole_6, Lethe_7
• Track 13 : I3_8
• Track 14 : NuevoMundo_9, StephanieG_9, Pier_10, Astraea_9, Dandelion_10
• Track 15 : LolaVinca_10
• Track 16 : Pinkcreek_11
• Track 17 : Tonenili_21
• Track 18 : Suerte_55
• Track 19 : Elph10_43, NoSleep_45, Murphy_45, Maxxinista_45, Cjw1_44, Lilac_46, Lilizi_43, Czyszczon1_44, RiverMonster_44
• Track 20 : Moldemort_42, MadamMonkfish_42, Bogg_42, AmericanBeauty_43
• Track 21 : Buck_42, TeamEdward_44, StormChicken_43, Rimmer_42, Youngblood_43
• Track 22 : ABCat_41, Inca_40, BilboSwaggins_42, IHOP_41, Tuco_44, Myrale_43, CrystalP_43, ShamWow_43, StellaBean_41, Phaja_41
• Track 23 : PaddyBaddy_43, DrDrey_44, Phrux_42, HanKaySha_43, 244_45, Hopey_44, ShereKhan_42
• Track 24 : Contagion_41, Cookies_41, Mosby_40, TeardropMSU_40, Tomaszewski_40
• Track 25 : Xandras_43, JeTaime_44, OrionPax_43, Filch_44, Pumpkin_45
• Track 26 : Miniwave_41
• Track 27 : Holt_43, DoctorDiddles_42

• Track 28 : ChotaBhai_42
• Track 29 : Toto_42, Marshmallow_42
• Track 30 : Amao_43
• Track 31 : Pat3_41
• Track 32 : BigBubba_42
• Track 33 : Mindy_43
• Track 34 : Budgie_52
• Track 35 : Thresher_46
• Track 36 : Ptowny_43
• Track 37 : SirDuracell_41
• Track 38 : Stark_45
• Track 39 : Priscilla_85, Koella_77, NormanBulbieJr_83
• Track 40 : Kenuha5_78, Nekros_71
• Track 41 : Nivrat_78, LilMoolah_80
• Track 42 : LunaBlu_89
• Track 43 : VRedHorse_87, Estave1_94, Avani_91
• Track 44 : Bubbles123_77, Shauna1_82
• Track 45 : Latretium_80
• Track 46 : Flathead_79
• Track 47 : Phatniss_83
• Track 48 : SG4_79
• Track 49 : ByChance_74, ShowerHandel_83
• Track 50 : Harley_91
• Track 51 : EleanorGeorge_87
• Track 52 : Fancypants_93
• Track 53 : TDanisky_96, Sparkdehlily_95
• Track 54 : Grimmer_87, Mahavrat_77
• Track 55 : Rialto_92
• Track 56 : Fruitloop_76
• Track 57 : Moonbeam_89
• Track 58 : SimranZ1_81
• Track 59 : Martik_82
• Track 60 : CaptainTrips_82, MinionDave_78
• Track 61 : Kersh_90
• Track 62 : Latretium_87, Dante_84
• Track 63 : Latretium_83, Wanda_76, Minerva_78, Klein_72
• Track 64 : Sabbb_90
• Track 65 : Galactic_79
• Track 66 : Ibhubesi_81
• Track 67 : Wachhund_79
• Track 68 : Avani_88
• Track 69 : Jabbawokkie_90, Blarby_90, Zapner_89
• Track 70 : Yoshi_97
• Track 71 : Demsculpinboyz_96
• Track 72 : Che9d_92
• Track 73 : Zelink_70, Superphikiman_70, Schatzie_67, Kalah2_67, Ejimix_72, MiaZeal_73, JuicyJay_71, Halley_74, Phoebus_75, Beem_72, DmpstrDiver_72, Odette_71, HokkenD_65, FairyPath_41, Porcelain_72, ThreeRngTarjay_70, NihilNomen_73, Redno2_69, Quallification_42, Hughesyang_71, Dallas_71, Lucky2013_70, Squint_73, Ariel_72
• Track 74 : Hannaconda_69, BronnyJames_66, Aubs_83, Shaboozey_65, SuperGrey_83, Donkeykong_89
• Track 75 : Rearden_72, Pollywog_88

• Track 76 : BAKA_81, Duke13_79
• Track 77 : Nibley_66
• Track 78 : Marleymoo_66
• Track 79 : KashFlow_67
• Track 80 : Ryadel_104
• Track 81 : Thespis_54, Brusacoram_54, Atcoo_54
• Track 82 : GreaseLightnin_58, StevieRay_57
• Track 83 : Juniormint_57
• Track 84 : Tortellini_64
• Track 85 : Beelzebub_13, Corazon_10, FeliMaine_11, Lilbit_11, LittleLaf_10, Pringar_10, Clarkson_11, JoieB_11, Huphlepuff_11
• Track 86 : Marvin_9
• Track 87 : RedRaider77_11
• Track 88 : Stellammi_130
• Track 89 : Argie_65
• Track 90 : Gaia_47, Nebkiss_50
• Track 91 : Kumao_58

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

The start number called the most often in the published annotations is 78, it was called in 172 of the 217 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 244_45, ABCat_41, Acme_63, Amao_43, AmericanBeauty_43, Ariel_72, Astraea_9, Atcoo_54, Aubs_83, Avani_88, Avani_91, BAKA_81, Beelzebub_13, Beem_72, Big3_61, BigBubba_42, Bigswole_6, BilboSwaggins_42, Blarby_90, Bogg_42, BronnyJames_66, Brusacoram_54, Bubbles123_77, Buck_42, Bxb1_55, Bxz1_7, ByChance_74, CaptainTrips_82, ChotaBhai_42, Cjw1_44, Clarkson_11, Contagion_41, Cookies_41, Corazon_10, CrystalP_43, Czyszczon1_44, DTDevon_9, Dallas_71, Dandelion_10, Dante_84, Demsculpinboyz_96, DmpstrDiver_72, Donkeykong_89, DrDrey_44, Drazdys_9, Duke13_79, Ejimix_72, EleanorGeorge_87, Elph10_43, Estave1_94, FairyPath_41, Fajezeel_62, FeliMaine_11, Filch_44, Flathead_79, Froghopper_59, Fruitloop_76, Galactic_79, GreaseLightnin_58, Greg_62, Grimmer_87, Halley_74, HanKaySha_43, Hannaconda_69, Harley_91, HokkenD_65, Hopey_44, Hughesyang_71, Huphlepuff_11, I3_8, IHOP_41, Inca_40, Jabbawokkie_90, JeTaime_44, Jezreel_7, JoieB_11, JuicyJay_71, Kalah2_67, Kamryn_7, KashFlow_67, Kenuha5_78, Kersh_90, Klein_72, Koella_77, Latretium_80, Latretium_83, Latretium_87, Lesedi_57, Lethe_7, LilMoolah_80, Lilac_46, Lilbit_11, Lilizi_43, LittleLaf_10, Lucky2013_70, MadamMonkfish_42, Mahavrat_77, Marleymoo_66, Martik_82, Marvin_9, Maxxinista_45, MiaZeal_73, Mikro_7, Mindy_43, Minerva_78, MinionDave_78, Miniwave_41, MoMoMixon_7, Moldemort_42, Mosby_40, MrGordo_62, Murphy_45, Myrale_43, Naval22_8, Nekros_71, Nibley_66, Nidhogg_7, NihilNomen_73, Nivrat_78, NoSleep_45, NoodleTree_7, NormanBulbieJr_83, NuevoMundo_9, Odette_71, OrionPax_43, PaddyBaddy_43, Phaja_41, Phatniss_83, Phoebus_75, Phrux_42, Pier_10, Pinkcreek_11, Pio_8, Pollywog_88, Porcelain_72, Pringar_10, Priscilla_85, Ptowny_43, Pumpkin_45, Quallification_42, Rearden_72, Redno2_69, Rimmer_42, RiverMonster_44, Ryadel_104, SG4_79, Sabbb_90, Sauce_7, Schatzie_67, Shaboozey_65, ShamWow_43, Shauna1_82, ShereKhan_42, ShowerHandel_83,

SimranZ1_81, SirDuracell_41, Spud_8, Squint_73, Stark_45, StellaBean_41, Stellammi_130, StephanieG_9, StevieRay_57, StormChicken_43, SuperGrey_83, Superphikiman_70, TeamEdward_44, TeardropMSU_40, Thespis_54, ThreeRngTarjay_70, Thresher_46, Tomaszewski_40, Tonenili_21, Tortellini_64, Tuco_44, Tyke_9, VRedHorse_87, Wachhund_79, Wanda_76, Xandras_43, Yoshi_97, Youngblood_43, Zapner_89, Zelink_70,

Genes that have the "Most Annotated" start but do not call it:
• Kumao_58, LunaBlu_89, Marshmallow_42, Pat3_41, Toto_42,

Genes that do not have the "Most Annotated" start:
• Argie_65, BigPaolini_39, Budgie_52, Che9d_92, Cueylyss_40, DoctorDiddles_42, Doom_40, Eyeball_40, Fancypants_93, FrayBell_10, Fringe_55, Gaia_47, GoldenSnow_10, Graduation_42, Holt_43, ILeeKay_42, Ibhubesi_81, InterFolia_10, JayJay_9, JigglyPuff_8, Juniormint_57, KBG_41, Licorice_42, LinStu_9, LolaVinca_10, LordLeafolot_10, LunarLander_41, Maguvora_11, Moonbeam_89, Nebkiss_50, PharkleMinkus_10, Phlippers_38, Puhon_10, Puppet_40, Pupusa_10, RedRaider77_11, Rialto_92, Sebata_9, Smairt_41, Sparkdehlily_95, Specks_10, Suerte_55, Sunshine924_64, TDanisky_96, Tainan_10, Topgun_39, Wilkins_39,

Summary by start number:

Start 36:
• Found in 1 of 236 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Suerte_55 (CZ4),

Start 40:
• Found in 6 of 236 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Kumao_58 (singleton),

Start 60:
• Found in 7 of 236 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 14.3% of time when present
• Phage (with cluster) where this start called: LunaBlu_89 (F1),

Start 65:
• Found in 2 of 236 (0.8%) of genes in pham
• Manual Annotations of this start: 2 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gaia_47 (X), Nebkiss_50 (X),

Start 66:
• Found in 19 of 236 (8.1%) of genes in pham
• Manual Annotations of this start: 13 of 217
• Called 73.7% of time when present
• Phage (with cluster) where this start called: BigPaolini_39 (A1), Cueylyss_40 (A1), Doom_40 (A1), Eyeball_40 (A1), Graduation_42 (A1), ILeeKay_42 (A1), KBG_41 (A1), Licorice_42 (A1), LunarLander_41 (A1), Phlippers_38 (A1), Puppet_40 (A1),

Smairt_41 (A1), Topgun_39 (A1), Wilkins_39 (A1),

Start 73:
• Found in 1 of 236 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Juniormint_57 (P1),

Start 74:
• Found in 3 of 236 (1.3%) of genes in pham
• Manual Annotations of this start: 2 of 217
• Called 66.7% of time when present
• Phage (with cluster) where this start called: DoctorDiddles_42 (E), Holt_43 (E),

Start 75:
• Found in 37 of 236 (15.7%) of genes in pham
• Manual Annotations of this start: 16 of 217
• Called 59.5% of time when present
• Phage (with cluster) where this start called: Argie_65 (W), Budgie_52 (E), Che9d_92 (F2), Fancypants_93 (F1), FrayBell_10 (C1), Fringe_55 (B1), GoldenSnow_10 (C1), InterFolia_10 (C1), JayJay_9 (C1), JigglyPuff_8 (C1), LinStu_9 (C1), LolaVinca_10 (C1), LordLeafolot_10 (C1), Maguvora_11 (C1), PharkleMinkus_10 (C1), Puhon_10 (C1), Pupusa_10 (C1), RedRaider77_11 (S), Sebata_9 (C1), Specks_10 (C1), Sunshine924_64 (A1), Tainan_10 (C1),

Start 77:
• Found in 1 of 236 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibhubesi_81 (F1),

Start 78:
• Found in 189 of 236 (80.1%) of genes in pham
• Manual Annotations of this start: 172 of 217
• Called 97.4% of time when present
• Phage (with cluster) where this start called: 244_45 (E), ABCat_41 (E), Acme_63 (A1), Amao_43 (E), AmericanBeauty_43 (E), Ariel_72 (J), Astraea_9 (C1), Atcoo_54 (P1), Aubs_83 (F1), Avani_88 (F2), Avani_91 (F2), BAKA_81 (J), Beelzebub_13 (S), Beem_72 (J), Big3_61 (A1), BigBubba_42 (E), Bigswole_6 (C1), BilboSwaggins_42 (E), Blarby_90 (F), Bogg_42 (E), BronnyJames_66 (J), Brusacoram_54 (P1), Bubbles123_77 (F1), Buck_42 (E), Bxb1_55 (A1), Bxz1_7 (C1), ByChance_74 (F1), CaptainTrips_82 (F1), ChotaBhai_42 (E), Cjw1_44 (E), Clarkson_11 (S), Contagion_41 (E), Cookies_41 (E), Corazon_10 (S), CrystalP_43 (E), Czyszczon1_44 (E), DTDevon_9 (C1), Dallas_71 (J), Dandelion_10 (C1), Dante_84 (F1), Demsculpinboyz_96 (F2), DmpstrDiver_72 (J), Donkeykong_89 (F1), DrDrey_44 (E), Drazdys_9 (C1), Duke13_79 (J), Ejimix_72 (J), EleanorGeorge_87 (F1), Elph10_43 (E), Estave1_94 (F1), FairyPath_41 (E), Fajezeel_62 (A1), FeliMaine_11 (S), Filch_44 (E), Flathead_79 (F1), Froghopper_59 (A1), Fruitloop_76 (F1), Galactic_79 (F1), GreaseLightnin_58 (P1), Greg_62 (A1), Grimmer_87 (F1), Halley_74 (J), HanKaySha_43 (E), Hannaconda_69 (J), Harley_91 (F1), HokkenD_65 (J), Hopey_44 (E), Hughesyang_71 (J), Huphlepuff_11 (S), I3_8 (C1), IHOP_41 (E), Inca_40 (E), Jabbawokkie_90 (F2), JeTaime_44 (E), Jezreel_7 (C1), JoieB_11 (S), JuicyJay_71 (J), Kalah2_67 (J), Kamryn_7 (C1), KashFlow_67 (J), Kenuha5_78 (F1),

Kersh_90 (F1), Klein_72 (J), Koella_77 (F1), Latretium_80 (F1), Latretium_83 (F1), Latretium_87 (F1), Lesedi_57 (A1), Lethe_7 (C1), LilMoolah_80 (F1), Lilac_46 (E), Lilbit_11 (S), Lilizi_43 (E), LittleLaf_10 (S), Lucky2013_70 (J), MadamMonkfish_42 (E), Mahavrat_77 (F1), Marleymoo_66 (J), Martik_82 (F1), Marvin_9 (S), Maxxinista_45 (E), MiaZeal_73 (J), Mikro_7 (C1), Mindy_43 (E), Minerva_78 (J), MinionDave_78 (F1), Miniwave_41 (E), MoMoMixon_7 (C1), Moldemort_42 (E), Mosby_40 (E), MrGordo_62 (A1), Murphy_45 (E), Myrale_43 (E), Naval22_8 (C1), Nekros_71 (J), Nibley_66 (J), Nidhogg_7 (C1), NihilNomen_73 (J), Nivrat_78 (F1), NoSleep_45 (E), NoodleTree_7 (C1), NormanBulbieJr_83 (F1), NuevoMundo_9 (C1), Odette_71 (J), OrionPax_43 (E), PaddyBaddy_43 (E), Phaja_41 (E), Phatniss_83 (F1), Phoebus_75 (J), Phrux_42 (E), Pier_10 (C1), Pinkcreek_11 (C1), Pio_8 (C1), Pollywog_88 (F1), Porcelain_72 (J), Pringar_10 (S), Priscilla_85 (F1), Ptowny_43 (E), Pumpkin_45 (E), Quallification_42 (E), Rearden_72 (J), Redno2_69 (J), Rimmer_42 (E), RiverMonster_44 (E), Ryadel_104 (O), SG4_79 (F1), Sabbb_90 (F1), Sauce_7 (C1), Schatzie_67 (J), Shaboozey_65 (J), ShamWow_43 (E), Shauna1_82 (F1), ShereKhan_42 (E), ShowerHandel_83 (F1), SimranZ1_81 (F1), SirDuracell_41 (E), Spud_8 (C1), Squint_73 (J), Stark_45 (E), StellaBean_41 (E), Stellammi_130 (UNK), StephanieG_9 (C1), StevieRay_57 (P1), StormChicken_43 (E), SuperGrey_83 (F1), Superphikiman_70 (J), TeamEdward_44 (E), TeardropMSU_40 (E), Thespis_54 (P1), ThreeRngTarjay_70 (J), Thresher_46 (E), Tomaszewski_40 (E), Tonenili_21 (C1), Tortellini_64 (P2), Tuco_44 (E), Tyke_9 (C1), VRedHorse_87 (F1), Wachhund_79 (F1), Wanda_76 (J), Xandras_43 (E), Yoshi_97 (F2), Youngblood_43 (E), Zapner_89 (F2), Zelink_70 (J),

Start 79:
• Found in 2 of 236 (0.8%) of genes in pham
• Manual Annotations of this start: 2 of 217
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sparkdehlily_95 (F1), TDanisky_96 (F1),

Start 80:
• Found in 4 of 236 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Moonbeam_89 (F1),

Start 82:
• Found in 4 of 236 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 217
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Rialto_92 (F1),

Start 83:
• Found in 44 of 236 (18.6%) of genes in pham
• Manual Annotations of this start: 3 of 217
• Called 6.8% of time when present
• Phage (with cluster) where this start called: Marshmallow_42 (E), Pat3_41 (E), Toto_42 (E),

Summary by clusters:

There are 17 clusters represented in this pham: P2, F1, F2, P1, E, F, J, singleton, CZ4, A1, S, O, W, X, C1, UNK, B1,

Info for manual annotations of cluster A1:
•Start number 66 was manually annotated 13 times for cluster A1.
•Start number 75 was manually annotated 1 time for cluster A1.
•Start number 78 was manually annotated 8 times for cluster A1.

Info for manual annotations of cluster B1:
•Start number 75 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster C1:
•Start number 75 was manually annotated 9 times for cluster C1.
•Start number 78 was manually annotated 24 times for cluster C1.

Info for manual annotations of cluster CZ4:
•Start number 36 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster E:
•Start number 74 was manually annotated 2 times for cluster E.
•Start number 75 was manually annotated 1 time for cluster E.
•Start number 78 was manually annotated 52 times for cluster E.
•Start number 83 was manually annotated 3 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 60 was manually annotated 1 time for cluster F1.
•Start number 75 was manually annotated 1 time for cluster F1.
•Start number 77 was manually annotated 1 time for cluster F1.
•Start number 78 was manually annotated 36 times for cluster F1.
•Start number 79 was manually annotated 2 times for cluster F1.
•Start number 80 was manually annotated 1 time for cluster F1.
•Start number 82 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 75 was manually annotated 1 time for cluster F2.
•Start number 78 was manually annotated 6 times for cluster F2.

Info for manual annotations of cluster J:
•Start number 78 was manually annotated 28 times for cluster J.

Info for manual annotations of cluster O:
•Start number 78 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster P1:
•Start number 73 was manually annotated 1 time for cluster P1.
•Start number 78 was manually annotated 5 times for cluster P1.

Info for manual annotations of cluster P2:
•Start number 78 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster S:
•Start number 75 was manually annotated 1 time for cluster S.
•Start number 78 was manually annotated 10 times for cluster S.

Info for manual annotations of cluster UNK:
•Start number 78 was manually annotated 1 time for cluster UNK.

Info for manual annotations of cluster W:
•Start number 75 was manually annotated 1 time for cluster W.

Info for manual annotations of cluster X:
•Start number 65 was manually annotated 2 times for cluster X.

Gene Information:

Gene: 244_45 Start: 35533, Stop: 35168, Start Num: 78
Candidate Starts for 244_45:
(Start: 75 @35548 has 16 MA's), (Start: 78 @35533 has 172 MA's), (100, 35398), (109, 35374), (113, 35350), (121, 35305), (123, 35287),

Gene: ABCat_41 Start: 35824, Stop: 35336, Start Num: 78
Candidate Starts for ABCat_41:
(Start: 78 @35824 has 172 MA's), (Start: 83 @35812 has 3 MA's), (90, 35749), (95, 35734), (107, 35707), (109, 35701), (117, 35656), (120, 35644), (125, 35602), (155, 35500), (175, 35356),

Gene: Acme_63 Start: 41329, Stop: 40964, Start Num: 78
Candidate Starts for Acme_63:
(22, 41530), (52, 41386), (54, 41383), (Start: 78 @41329 has 172 MA's), (98, 41212), (100, 41194), (109, 41170), (113, 41146), (121, 41101),

Gene: Amao_43 Start: 34812, Stop: 34333, Start Num: 78
Candidate Starts for Amao_43:
(41, 34905), (59, 34860), (Start: 78 @34812 has 172 MA's), (100, 34674), (109, 34650), (113, 34626), (121, 34581), (137, 34515), (161, 34416), (171, 34344),

Gene: AmericanBeauty_43 Start: 35021, Stop: 34656, Start Num: 78
Candidate Starts for AmericanBeauty_43:
(64, 35060), (72, 35042), (Start: 78 @35021 has 172 MA's), (100, 34886), (109, 34862), (113, 34838), (121, 34793), (123, 34775),

Gene: Argie_65 Start: 48661, Stop: 49026, Start Num: 75
Candidate Starts for Argie_65:
(33, 48544), (38, 48574), (49, 48601), (67, 48637), (Start: 75 @48661 has 16 MA's), (94, 48766), (101, 48814), (105, 48832), (108, 48838), (118, 48895), (120, 48904), (140, 48976), (146, 49000), (150, 49015),

Gene: Ariel_72 Start: 46298, Stop: 45933, Start Num: 78
Candidate Starts for Ariel_72:
(Start: 78 @46298 has 172 MA's), (85, 46256), (110, 46160), (121, 46091), (130, 46052),

Gene: Astraea_9 Start: 2499, Stop: 2930, Start Num: 78
Candidate Starts for Astraea_9:
(34, 2394), (37, 2415), (Start: 40 @2421 has 1 MA's), (Start: 78 @2499 has 172 MA's), (91, 2574), (95, 2589), (108, 2616), (110, 2622), (117, 2667), (120, 2679), (128, 2730), (130, 2733), (140, 2763), (149, 2805),

Gene: Atcoo_54 Start: 36879, Stop: 37241, Start Num: 78
Candidate Starts for Atcoo_54:
(19, 36651), (46, 36798), (51, 36822), (Start: 78 @36879 has 172 MA's), (91, 36954), (95, 36969), (108, 36996), (110, 37002), (117, 37047), (120, 37059), (160, 37218),

Gene: Aubs_83 Start: 50008, Stop: 50520, Start Num: 78
Candidate Starts for Aubs_83:
(Start: 78 @50008 has 172 MA's), (85, 50050), (120, 50212), (125, 50254), (155, 50356), (175, 50500),

Gene: Avani_88 Start: 46792, Stop: 47127, Start Num: 78
Candidate Starts for Avani_88:
(68, 46759), (Start: 78 @46792 has 172 MA's), (Start: 83 @46804 has 3 MA's), (86, 46852), (106, 46927), (109, 46936), (117, 46984), (120, 46996),

Gene: Avani_91 Start: 47610, Stop: 47966, Start Num: 78
Candidate Starts for Avani_91:
(Start: 78 @47610 has 172 MA's), (141, 47862),

Gene: BAKA_81 Start: 52347, Stop: 51940, Start Num: 78
Candidate Starts for BAKA_81:
(Start: 78 @52347 has 172 MA's), (85, 52305), (110, 52209), (112, 52188), (117, 52155), (120, 52143), (124, 52110), (157, 52002),

Gene: Beelzebub_13 Start: 3753, Stop: 4160, Start Num: 78
Candidate Starts for Beelzebub_13:
(Start: 78 @3753 has 172 MA's), (Start: 83 @3765 has 3 MA's), (100, 3891), (109, 3915), (113, 3939), (118, 3972), (156, 4137),

Gene: Beem_72 Start: 50575, Stop: 50210, Start Num: 78
Candidate Starts for Beem_72:
(Start: 78 @50575 has 172 MA's), (85, 50533), (110, 50437), (121, 50368), (130, 50329),

Gene: Big3_61 Start: 41706, Stop: 41350, Start Num: 78
Candidate Starts for Big3_61:
(55, 41754), (68, 41736), (Start: 78 @41706 has 172 MA's), (Start: 83 @41694 has 3 MA's), (100, 41568), (104, 41559), (109, 41544), (113, 41520), (117, 41490), (120, 41478),

Gene: BigBubba_42 Start: 34670, Stop: 34191, Start Num: 78
Candidate Starts for BigBubba_42:
(6, 35006), (7, 35003), (8, 34997), (9, 34988), (26, 34829), (33, 34799), (Start: 78 @34670 has 172 MA's), (98, 34550), (100, 34532), (109, 34508), (113, 34484), (121, 34439), (137, 34373), (161, 34274), (171, 34202),

Gene: BigPaolini_39 Start: 30429, Stop: 30067, Start Num: 66
Candidate Starts for BigPaolini_39:
(24, 30567), (28, 30534), (Start: 66 @30429 has 13 MA's), (120, 30186), (143, 30165), (144, 30159), (145, 30156),

Gene: Bigswole_6 Start: 2050, Stop: 2481, Start Num: 78
Candidate Starts for Bigswole_6:
(1, 1606), (2, 1708), (3, 1711), (4, 1717), (5, 1726), (26, 1906), (39, 1969), (Start: 78 @2050 has 172 MA's), (91, 2125), (95, 2140), (108, 2167), (110, 2173), (117, 2218), (120, 2230), (128, 2281), (130,

2284), (140, 2314), (149, 2356),

Gene: BilboSwaggins_42 Start: 35832, Stop: 35344, Start Num: 78
Candidate Starts for BilboSwaggins_42:
(Start: 78 @35832 has 172 MA's), (Start: 83 @35820 has 3 MA's), (90, 35757), (95, 35742), (107, 35715), (109, 35709), (117, 35664), (120, 35652), (125, 35610), (155, 35508), (175, 35364),

Gene: Blarby_90 Start: 47520, Stop: 47888, Start Num: 78
Candidate Starts for Blarby_90:
(68, 47484), (Start: 78 @47520 has 172 MA's), (100, 47655), (109, 47679), (113, 47703), (121, 47748), (123, 47766), (135, 47814),

Gene: Bogg_42 Start: 34449, Stop: 34084, Start Num: 78
Candidate Starts for Bogg_42:
(64, 34488), (72, 34470), (Start: 78 @34449 has 172 MA's), (100, 34314), (109, 34290), (113, 34266), (121, 34221), (123, 34203),

Gene: BronnyJames_66 Start: 44654, Stop: 44142, Start Num: 78
Candidate Starts for BronnyJames_66:
(Start: 78 @44654 has 172 MA's), (85, 44612), (120, 44450), (125, 44408), (155, 44306), (175, 44162),

Gene: Brusacoram_54 Start: 36385, Stop: 36747, Start Num: 78
Candidate Starts for Brusacoram_54:
(19, 36157), (46, 36304), (51, 36328), (Start: 78 @36385 has 172 MA's), (91, 36460), (95, 36475), (108, 36502), (110, 36508), (117, 36553), (120, 36565), (160, 36724),

Gene: Bubbles123_77 Start: 48885, Stop: 49397, Start Num: 78
Candidate Starts for Bubbles123_77:
(Start: 78 @48885 has 172 MA's), (117, 49077), (120, 49089), (125, 49131), (155, 49233), (175, 49377),

Gene: Buck_42 Start: 35321, Stop: 34953, Start Num: 78
Candidate Starts for Buck_42:
(Start: 78 @35321 has 172 MA's), (Start: 83 @35309 has 3 MA's), (100, 35183), (109, 35159), (113, 35135), (123, 35072),

Gene: Budgie_52 Start: 36596, Stop: 36261, Start Num: 75
Candidate Starts for Budgie_52:
(Start: 75 @36596 has 16 MA's), (85, 36542), (117, 36404), (120, 36392),

Gene: Bxb1_55 Start: 39572, Stop: 39207, Start Num: 78
Candidate Starts for Bxb1_55:
(22, 39773), (52, 39629), (54, 39626), (Start: 78 @39572 has 172 MA's), (98, 39455), (100, 39437), (109, 39413), (113, 39389), (121, 39344),

Gene: Bxz1_7 Start: 2148, Stop: 2579, Start Num: 78
Candidate Starts for Bxz1_7:
(47, 2091), (Start: 78 @2148 has 172 MA's), (91, 2223), (95, 2238), (108, 2265), (110, 2271), (117, 2316), (120, 2328), (128, 2379), (130, 2382), (140, 2412), (149, 2454),

Gene: ByChance_74 Start: 45038, Stop: 45421, Start Num: 78
Candidate Starts for ByChance_74:

(Start: 78 @45038 has 172 MA's), (81, 45047), (96, 45149), (98, 45158), (117, 45230), (120, 45242), (165, 45368),

Gene: CaptainTrips_82 Start: 48768, Stop: 49100, Start Num: 78
Candidate Starts for CaptainTrips_82:
(Start: 78 @48768 has 172 MA's), (85, 48810), (110, 48906), (118, 48963),

Gene: Che9d_92 Start: 49021, Stop: 49440, Start Num: 75
Candidate Starts for Che9d_92:
(Start: 75 @49021 has 16 MA's), (94, 49126), (101, 49174), (105, 49192), (108, 49198), (120, 49264),

Gene: ChotaBhai_42 Start: 34264, Stop: 33785, Start Num: 78
Candidate Starts for ChotaBhai_42:
(62, 34303), (Start: 78 @34264 has 172 MA's), (Start: 83 @34252 has 3 MA's), (100, 34126), (104, 34117), (109, 34102), (113, 34078), (121, 34033), (137, 33967), (161, 33868), (171, 33796),

Gene: Cjw1_44 Start: 36482, Stop: 36078, Start Num: 78
Candidate Starts for Cjw1_44:
(Start: 78 @36482 has 172 MA's), (100, 36347), (109, 36323), (113, 36299), (121, 36254), (151, 36131),

Gene: Clarkson_11 Start: 3529, Stop: 3936, Start Num: 78
Candidate Starts for Clarkson_11:
(Start: 78 @3529 has 172 MA's), (Start: 83 @3541 has 3 MA's), (100, 3667), (109, 3691), (113, 3715), (118, 3748), (156, 3913),

Gene: Contagion_41 Start: 34707, Stop: 34342, Start Num: 78
Candidate Starts for Contagion_41:
(Start: 75 @34722 has 16 MA's), (Start: 78 @34707 has 172 MA's), (100, 34572), (109, 34548), (113, 34524), (123, 34461),

Gene: Cookies_41 Start: 35072, Stop: 34707, Start Num: 78
Candidate Starts for Cookies_41:
(Start: 75 @35087 has 16 MA's), (Start: 78 @35072 has 172 MA's), (100, 34937), (109, 34913), (113, 34889), (123, 34826),

Gene: Corazon_10 Start: 3482, Stop: 3889, Start Num: 78
Candidate Starts for Corazon_10:
(Start: 78 @3482 has 172 MA's), (Start: 83 @3494 has 3 MA's), (100, 3620), (109, 3644), (113, 3668), (118, 3701), (156, 3866),

Gene: CrystalP_43 Start: 35832, Stop: 35344, Start Num: 78
Candidate Starts for CrystalP_43:
(Start: 78 @35832 has 172 MA's), (Start: 83 @35820 has 3 MA's), (90, 35757), (95, 35742), (107, 35715), (109, 35709), (117, 35664), (120, 35652), (125, 35610), (155, 35508), (175, 35364),

Gene: Cueylyss_40 Start: 32157, Stop: 31795, Start Num: 66
Candidate Starts for Cueylyss_40:
(24, 32295), (28, 32262), (Start: 66 @32157 has 13 MA's), (120, 31914), (143, 31893), (144, 31887), (145, 31884),

Gene: Czyszczon1_44 Start: 35291, Stop: 34887, Start Num: 78
Candidate Starts for Czyszczon1_44:

(Start: 78 @35291 has 172 MA's), (100, 35156), (109, 35132), (113, 35108), (121, 35063), (151, 34940),

Gene: DTDevon_9 Start: 2817, Stop: 3251, Start Num: 78
Candidate Starts for DTDevon_9:
(47, 2760), (Start: 78 @2817 has 172 MA's), (91, 2892), (95, 2907), (108, 2934), (110, 2940), (117, 2985), (120, 2997), (128, 3048), (130, 3051), (140, 3081), (149, 3123),

Gene: Dallas_71 Start: 49496, Stop: 49131, Start Num: 78
Candidate Starts for Dallas_71:
(Start: 78 @49496 has 172 MA's), (85, 49454), (110, 49358), (121, 49289), (130, 49250),

Gene: Dandelion_10 Start: 3168, Stop: 3599, Start Num: 78
Candidate Starts for Dandelion_10:
(34, 3063), (37, 3084), (Start: 40 @3090 has 1 MA's), (Start: 78 @3168 has 172 MA's), (91, 3243), (95, 3258), (108, 3285), (110, 3291), (117, 3336), (120, 3348), (128, 3399), (130, 3402), (140, 3432), (149, 3474),

Gene: Dante_84 Start: 51687, Stop: 51980, Start Num: 78
Candidate Starts for Dante_84:
(Start: 60 @51639 has 1 MA's), (64, 51645), (Start: 78 @51687 has 172 MA's), (115, 51831), (122, 51864),

Gene: Demsculpinboyz_96 Start: 48718, Stop: 49200, Start Num: 78
Candidate Starts for Demsculpinboyz_96:
(Start: 66 @48679 has 13 MA's), (Start: 78 @48718 has 172 MA's), (Start: 83 @48730 has 3 MA's), (100, 48856), (109, 48880), (113, 48904), (117, 48934), (120, 48946), (135, 49018), (158, 49108),

Gene: DmpstrDiver_72 Start: 49923, Stop: 49558, Start Num: 78
Candidate Starts for DmpstrDiver_72:
(Start: 78 @49923 has 172 MA's), (85, 49881), (110, 49785), (121, 49716), (130, 49677),

Gene: DoctorDiddles_42 Start: 34192, Stop: 33701, Start Num: 74
Candidate Starts for DoctorDiddles_42:
(Start: 74 @34192 has 2 MA's), (100, 34042), (104, 34033), (109, 34018), (113, 33994), (121, 33949), (137, 33883), (161, 33784), (171, 33712),

Gene: Donkeykong_89 Start: 51613, Stop: 52125, Start Num: 78
Candidate Starts for Donkeykong_89:
(Start: 78 @51613 has 172 MA's), (85, 51655), (120, 51817), (125, 51859), (155, 51961), (175, 52105),

Gene: Doom_40 Start: 32350, Stop: 31988, Start Num: 66
Candidate Starts for Doom_40:
(24, 32488), (28, 32455), (Start: 66 @32350 has 13 MA's), (120, 32107), (143, 32086), (144, 32080), (145, 32077),

Gene: DrDrey_44 Start: 36335, Stop: 35970, Start Num: 78
Candidate Starts for DrDrey_44:
(Start: 75 @36350 has 16 MA's), (Start: 78 @36335 has 172 MA's), (100, 36200), (109, 36176), (113, 36152), (121, 36107), (123, 36089),

Gene: Drazdys_9 Start: 2817, Stop: 3251, Start Num: 78
Candidate Starts for Drazdys_9:

(47, 2760), (Start: 78 @2817 has 172 MA's), (91, 2892), (95, 2907), (108, 2934), (110, 2940), (117, 2985), (120, 2997), (128, 3048), (130, 3051), (140, 3081), (149, 3123),

Gene: Duke13_79 Start: 51559, Stop: 51152, Start Num: 78
Candidate Starts for Duke13_79:
(Start: 78 @51559 has 172 MA's), (85, 51517), (110, 51421), (112, 51400), (117, 51367), (120, 51355), (124, 51322), (157, 51214),

Gene: Ejimix_72 Start: 51361, Stop: 50996, Start Num: 78
Candidate Starts for Ejimix_72:
(Start: 78 @51361 has 172 MA's), (85, 51319), (110, 51223), (121, 51154), (130, 51115),

Gene: EleanorGeorge_87 Start: 51109, Stop: 51492, Start Num: 78
Candidate Starts for EleanorGeorge_87:
(69, 51076), (Start: 78 @51109 has 172 MA's), (96, 51220), (98, 51229), (117, 51301), (120, 51313), (165, 51439),

Gene: Elph10_43 Start: 34783, Stop: 34379, Start Num: 78
Candidate Starts for Elph10_43:
(Start: 78 @34783 has 172 MA's), (100, 34648), (109, 34624), (113, 34600), (121, 34555), (151, 34432),

Gene: Estave1_94 Start: 53968, Stop: 54324, Start Num: 78
Candidate Starts for Estave1_94:
(Start: 78 @53968 has 172 MA's), (141, 54220),

Gene: Eyeball_40 Start: 31827, Stop: 31465, Start Num: 66
Candidate Starts for Eyeball_40:
(24, 31965), (28, 31932), (Start: 66 @31827 has 13 MA's), (120, 31584), (143, 31563), (144, 31557), (145, 31554),

Gene: FairyPath_41 Start: 35211, Stop: 34846, Start Num: 78
Candidate Starts for FairyPath_41:
(Start: 78 @35211 has 172 MA's), (85, 35169), (110, 35073), (121, 35004), (130, 34965),

Gene: Fajezeel_62 Start: 40619, Stop: 40254, Start Num: 78
Candidate Starts for Fajezeel_62:
(22, 40820), (52, 40676), (54, 40673), (Start: 78 @40619 has 172 MA's), (98, 40502), (100, 40484), (109, 40460), (113, 40436), (121, 40391),

Gene: Fancypants_93 Start: 52418, Stop: 52996, Start Num: 75
Candidate Starts for Fancypants_93:
(Start: 75 @52418 has 16 MA's), (89, 52508), (99, 52571), (102, 52595), (117, 52679), (120, 52691), (128, 52742), (130, 52745), (140, 52775), (149, 52817), (172, 52943),

Gene: FeliMaine_11 Start: 3530, Stop: 3937, Start Num: 78
Candidate Starts for FeliMaine_11:
(Start: 78 @3530 has 172 MA's), (Start: 83 @3542 has 3 MA's), (100, 3668), (109, 3692), (113, 3716), (118, 3749), (156, 3914),

Gene: Filch_44 Start: 35012, Stop: 34647, Start Num: 78
Candidate Starts for Filch_44:
(Start: 78 @35012 has 172 MA's), (100, 34877), (109, 34853), (113, 34829), (123, 34766),

Gene: Flathead_79 Start: 48157, Stop: 48534, Start Num: 78
Candidate Starts for Flathead_79:
(76, 48154), (Start: 78 @48157 has 172 MA's), (85, 48199), (100, 48304), (109, 48328), (113, 48352), (123, 48415),

Gene: FrayBell_10 Start: 2978, Stop: 3421, Start Num: 75
Candidate Starts for FrayBell_10:
(33, 2861), (38, 2891), (49, 2918), (67, 2954), (Start: 75 @2978 has 16 MA's), (91, 3065), (95, 3080), (108, 3107), (110, 3113), (117, 3158), (120, 3170), (128, 3221), (130, 3224), (140, 3254), (149, 3296),

Gene: Fringe_55 Start: 47885, Stop: 47511, Start Num: 75
Candidate Starts for Fringe_55:
(Start: 75 @47885 has 16 MA's), (100, 47735), (109, 47711), (113, 47687), (118, 47654), (136, 47573),

Gene: Froghopper_59 Start: 39967, Stop: 39602, Start Num: 78
Candidate Starts for Froghopper_59:
(22, 40168), (52, 40024), (54, 40021), (Start: 78 @39967 has 172 MA's), (98, 39850), (100, 39832), (109, 39808), (113, 39784), (121, 39739),

Gene: Fruitloop_76 Start: 48252, Stop: 48602, Start Num: 78
Candidate Starts for Fruitloop_76:
(68, 48216), (Start: 78 @48252 has 172 MA's), (100, 48387), (109, 48411), (113, 48435), (118, 48468),

Gene: Gaia_47 Start: 36098, Stop: 35730, Start Num: 65
Candidate Starts for Gaia_47:
(Start: 65 @36098 has 2 MA's), (87, 36005), (126, 35789), (132, 35771), (139, 35753),

Gene: Galactic_79 Start: 48078, Stop: 48443, Start Num: 78
Candidate Starts for Galactic_79:
(10, 47778), (11, 47787), (13, 47793), (15, 47802), (18, 47832), (68, 48042), (Start: 78 @48078 has 172 MA's), (100, 48213), (109, 48237), (113, 48261), (121, 48306), (123, 48324),

Gene: GoldenSnow_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for GoldenSnow_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Graduation_42 Start: 32744, Stop: 32382, Start Num: 66
Candidate Starts for Graduation_42:
(24, 32882), (28, 32849), (Start: 66 @32744 has 13 MA's), (120, 32501), (143, 32480), (144, 32474), (145, 32471),

Gene: GreaseLightnin_58 Start: 38269, Stop: 38631, Start Num: 78
Candidate Starts for GreaseLightnin_58:
(16, 38008), (20, 38041), (21, 38065), (23, 38071), (51, 38212), (Start: 78 @38269 has 172 MA's), (91, 38344), (95, 38359), (108, 38386), (110, 38392), (117, 38437), (120, 38449), (160, 38608),

Gene: Greg_62 Start: 40619, Stop: 40254, Start Num: 78
Candidate Starts for Greg_62:
(22, 40820), (52, 40676), (54, 40673), (Start: 78 @40619 has 172 MA's), (98, 40502), (100, 40484), (109, 40460), (113, 40436), (121, 40391),

Gene: Grimmer_87 Start: 49019, Stop: 49426, Start Num: 78
Candidate Starts for Grimmer_87:
(Start: 78 @49019 has 172 MA's), (Start: 83 @49031 has 3 MA's), (84, 49040), (100, 49157), (109, 49181), (113, 49205), (118, 49238), (131, 49310),

Gene: Halley_74 Start: 50575, Stop: 50210, Start Num: 78
Candidate Starts for Halley_74:
(Start: 78 @50575 has 172 MA's), (85, 50533), (110, 50437), (121, 50368), (130, 50329),

Gene: HanKaySha_43 Start: 34995, Stop: 34630, Start Num: 78
Candidate Starts for HanKaySha_43:
(Start: 75 @35010 has 16 MA's), (Start: 78 @34995 has 172 MA's), (100, 34860), (109, 34836), (113, 34812), (121, 34767), (123, 34749),

Gene: Hannaconda_69 Start: 45759, Stop: 45247, Start Num: 78
Candidate Starts for Hannaconda_69:
(Start: 78 @45759 has 172 MA's), (85, 45717), (120, 45555), (125, 45513), (155, 45411), (175, 45267),

Gene: Harley_91 Start: 51213, Stop: 51740, Start Num: 78
Candidate Starts for Harley_91:
(Start: 66 @51174 has 13 MA's), (Start: 78 @51213 has 172 MA's), (100, 51351), (109, 51375), (113, 51399), (117, 51429), (120, 51441), (124, 51474), (143, 51537), (162, 51615), (166, 51630),

Gene: HokkenD_65 Start: 48844, Stop: 48479, Start Num: 78
Candidate Starts for HokkenD_65:
(Start: 78 @48844 has 172 MA's), (85, 48802), (110, 48706), (121, 48637), (130, 48598),

Gene: Holt_43 Start: 34307, Stop: 33816, Start Num: 74
Candidate Starts for Holt_43:
(Start: 74 @34307 has 2 MA's), (100, 34157), (104, 34148), (109, 34133), (113, 34109), (121, 34064), (137, 33998), (161, 33899), (171, 33827),

Gene: Hopey_44 Start: 35530, Stop: 35165, Start Num: 78
Candidate Starts for Hopey_44:
(Start: 75 @35545 has 16 MA's), (Start: 78 @35530 has 172 MA's), (100, 35395), (109, 35371), (113, 35347), (121, 35302), (123, 35284),

Gene: Hughesyang_71 Start: 50504, Stop: 50139, Start Num: 78
Candidate Starts for Hughesyang_71:
(Start: 78 @50504 has 172 MA's), (85, 50462), (110, 50366), (121, 50297), (130, 50258),

Gene: Huphlepuff_11 Start: 3259, Stop: 3666, Start Num: 78
Candidate Starts for Huphlepuff_11:
(Start: 78 @3259 has 172 MA's), (Start: 83 @3271 has 3 MA's), (100, 3397), (109, 3421), (113, 3445), (118, 3478), (156, 3643),

Gene: I3_8 Start: 2847, Stop: 3332, Start Num: 78
Candidate Starts for I3_8:
(52, 2790), (71, 2823), (Start: 78 @2847 has 172 MA's), (94, 2940), (101, 2988), (105, 3006), (108, 3012), (120, 3078), (128, 3129), (130, 3132), (140, 3162), (149, 3204),

Gene: IHOP_41 Start: 35396, Stop: 34908, Start Num: 78
Candidate Starts for IHOP_41:

(Start: 78 @35396 has 172 MA's), (Start: 83 @35384 has 3 MA's), (90, 35321), (95, 35306), (107, 35279), (109, 35273), (117, 35228), (120, 35216), (125, 35174), (155, 35072), (175, 34928),

Gene: ILeeKay_42 Start: 32194, Stop: 31832, Start Num: 66
Candidate Starts for ILeeKay_42:
(24, 32332), (28, 32299), (Start: 66 @32194 has 13 MA's), (120, 31951), (143, 31930), (144, 31924), (145, 31921),

Gene: Ibhubesi_81 Start: 47329, Stop: 47838, Start Num: 77
Candidate Starts for Ibhubesi_81:
(Start: 77 @47329 has 1 MA's), (93, 47413), (95, 47422), (103, 47458), (120, 47539), (124, 47572), (143, 47635), (162, 47713), (166, 47728),

Gene: Inca_40 Start: 33921, Stop: 33433, Start Num: 78
Candidate Starts for Inca_40:
(Start: 78 @33921 has 172 MA's), (Start: 83 @33909 has 3 MA's), (90, 33846), (95, 33831), (107, 33804), (109, 33798), (117, 33753), (120, 33741), (125, 33699), (155, 33597), (175, 33453),

Gene: InterFolia_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for InterFolia_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Jabbawokkie_90 Start: 47440, Stop: 47808, Start Num: 78
Candidate Starts for Jabbawokkie_90:
(68, 47404), (Start: 78 @47440 has 172 MA's), (100, 47575), (109, 47599), (113, 47623), (121, 47668), (123, 47686), (135, 47734),

Gene: JayJay_9 Start: 2506, Stop: 2949, Start Num: 75
Candidate Starts for JayJay_9:
(33, 2389), (38, 2419), (49, 2446), (67, 2482), (Start: 75 @2506 has 16 MA's), (91, 2593), (95, 2608), (108, 2635), (110, 2641), (117, 2686), (120, 2698), (128, 2749), (130, 2752), (140, 2782), (149, 2824),

Gene: JeTaime_44 Start: 36054, Stop: 35689, Start Num: 78
Candidate Starts for JeTaime_44:
(Start: 78 @36054 has 172 MA's), (100, 35919), (109, 35895), (113, 35871), (123, 35808),

Gene: Jezreel_7 Start: 2148, Stop: 2579, Start Num: 78
Candidate Starts for Jezreel_7:
(47, 2091), (Start: 78 @2148 has 172 MA's), (91, 2223), (95, 2238), (108, 2265), (110, 2271), (117, 2316), (120, 2328), (128, 2379), (130, 2382), (140, 2412), (149, 2454),

Gene: JigglyPuff_8 Start: 2522, Stop: 2965, Start Num: 75
Candidate Starts for JigglyPuff_8:
(33, 2405), (38, 2435), (49, 2462), (67, 2498), (Start: 75 @2522 has 16 MA's), (91, 2609), (95, 2624), (108, 2651), (110, 2657), (117, 2702), (120, 2714), (128, 2765), (130, 2768), (140, 2798), (149, 2840),

Gene: JoieB_11 Start: 3478, Stop: 3885, Start Num: 78
Candidate Starts for JoieB_11:
(Start: 78 @3478 has 172 MA's), (Start: 83 @3490 has 3 MA's), (100, 3616), (109, 3640), (113, 3664), (118, 3697), (156, 3862),

Gene: JuicyJay_71 Start: 51709, Stop: 51344, Start Num: 78

Candidate Starts for JuicyJay_71:
(Start: 78 @51709 has 172 MA's), (85, 51667), (110, 51571), (121, 51502), (130, 51463),

Gene: Juniormint_57 Start: 37791, Stop: 38165, Start Num: 73
Candidate Starts for Juniormint_57:
(Start: 73 @37791 has 1 MA's), (91, 37878), (95, 37893), (108, 37920), (110, 37926), (117, 37971), (120, 37983), (160, 38142),

Gene: KBG_41 Start: 33134, Stop: 32772, Start Num: 66
Candidate Starts for KBG_41:
(28, 33239), (Start: 66 @33134 has 13 MA's), (120, 32891), (143, 32870), (144, 32864), (145, 32861),

Gene: Kalah2_67 Start: 49868, Stop: 49503, Start Num: 78
Candidate Starts for Kalah2_67:
(Start: 78 @49868 has 172 MA's), (85, 49826), (110, 49730), (121, 49661), (130, 49622),

Gene: Kamryn_7 Start: 2148, Stop: 2579, Start Num: 78
Candidate Starts for Kamryn_7:
(47, 2091), (Start: 78 @2148 has 172 MA's), (91, 2223), (95, 2238), (108, 2265), (110, 2271), (117, 2316), (120, 2328), (128, 2379), (130, 2382), (140, 2412), (149, 2454),

Gene: KashFlow_67 Start: 45630, Stop: 45118, Start Num: 78
Candidate Starts for KashFlow_67:
(Start: 78 @45630 has 172 MA's), (85, 45588), (117, 45438), (120, 45426), (125, 45384), (155, 45282), (175, 45138),

Gene: Kenuha5_78 Start: 49646, Stop: 50158, Start Num: 78
Candidate Starts for Kenuha5_78:
(Start: 78 @49646 has 172 MA's), (120, 49850), (125, 49892), (155, 49994), (175, 50138),

Gene: Kersh_90 Start: 52725, Stop: 53210, Start Num: 78
Candidate Starts for Kersh_90:
(32, 52599), (Start: 66 @52695 has 13 MA's), (Start: 78 @52725 has 172 MA's), (Start: 83 @52737 has 3 MA's), (91, 52800), (95, 52815), (108, 52842), (110, 52848), (117, 52893), (120, 52905), (128, 52956), (130, 52959), (140, 52989), (149, 53031), (172, 53157),

Gene: Klein_72 Start: 49891, Stop: 49526, Start Num: 78
Candidate Starts for Klein_72:
(Start: 78 @49891 has 172 MA's), (85, 49849), (110, 49753), (121, 49684), (130, 49645),

Gene: Koella_77 Start: 46451, Stop: 46915, Start Num: 78
Candidate Starts for Koella_77:
(Start: 78 @46451 has 172 MA's), (81, 46460), (96, 46562), (98, 46571), (117, 46643), (120, 46655), (125, 46697), (155, 46799),

Gene: Kumao_58 Start: 42552, Stop: 43010, Start Num: 40
Candidate Starts for Kumao_58:
(Start: 40 @42552 has 1 MA's), (43, 42555), (Start: 78 @42645 has 172 MA's), (100, 42780), (109, 42804), (113, 42828), (121, 42873), (123, 42891),

Gene: Latretium_80 Start: 47741, Stop: 48100, Start Num: 78
Candidate Starts for Latretium_80:

(Start: 78 @47741 has 172 MA's), (100, 47879), (104, 47888), (109, 47903), (113, 47927), (117, 47957), (120, 47969),

Gene: Latretium_87 Start: 49978, Stop: 50271, Start Num: 78
Candidate Starts for Latretium_87:
(Start: 60 @49930 has 1 MA's), (64, 49936), (Start: 78 @49978 has 172 MA's), (115, 50122), (122, 50155),

Gene: Latretium_83 Start: 48583, Stop: 48948, Start Num: 78
Candidate Starts for Latretium_83:
(Start: 78 @48583 has 172 MA's), (85, 48625), (110, 48721), (121, 48790), (130, 48829),

Gene: Lesedi_57 Start: 39252, Stop: 38887, Start Num: 78
Candidate Starts for Lesedi_57:
(22, 39453), (52, 39309), (54, 39306), (Start: 78 @39252 has 172 MA's), (98, 39135), (100, 39117), (109, 39093), (113, 39069), (121, 39024),

Gene: Lethe_7 Start: 2050, Stop: 2481, Start Num: 78
Candidate Starts for Lethe_7:
(1, 1606), (2, 1708), (3, 1711), (4, 1717), (5, 1726), (26, 1906), (39, 1969), (Start: 78 @2050 has 172 MA's), (91, 2125), (95, 2140), (108, 2167), (110, 2173), (117, 2218), (120, 2230), (128, 2281), (130, 2284), (140, 2314), (149, 2356),

Gene: Licorice_42 Start: 33025, Stop: 32663, Start Num: 66
Candidate Starts for Licorice_42:
(24, 33163), (28, 33130), (Start: 66 @33025 has 13 MA's), (120, 32782), (143, 32761), (144, 32755), (145, 32752),

Gene: LilMoolah_80 Start: 49043, Stop: 49381, Start Num: 78
Candidate Starts for LilMoolah_80:
(Start: 66 @49004 has 13 MA's), (Start: 78 @49043 has 172 MA's), (Start: 83 @49055 has 3 MA's), (93, 49127), (95, 49136), (103, 49172), (118, 49244),

Gene: Lilac_46 Start: 35189, Stop: 34785, Start Num: 78
Candidate Starts for Lilac_46:
(Start: 78 @35189 has 172 MA's), (100, 35054), (109, 35030), (113, 35006), (121, 34961), (151, 34838),

Gene: Lilbit_11 Start: 3530, Stop: 3937, Start Num: 78
Candidate Starts for Lilbit_11:
(Start: 78 @3530 has 172 MA's), (Start: 83 @3542 has 3 MA's), (100, 3668), (109, 3692), (113, 3716), (118, 3749), (156, 3914),

Gene: Lilizi_43 Start: 34863, Stop: 34459, Start Num: 78
Candidate Starts for Lilizi_43:
(Start: 78 @34863 has 172 MA's), (100, 34728), (109, 34704), (113, 34680), (121, 34635), (151, 34512),

Gene: LinStu_9 Start: 3505, Stop: 3948, Start Num: 75
Candidate Starts for LinStu_9:
(33, 3388), (38, 3418), (49, 3445), (67, 3481), (Start: 75 @3505 has 16 MA's), (91, 3592), (95, 3607), (108, 3634), (110, 3640), (117, 3685), (120, 3697), (128, 3748), (130, 3751), (140, 3781), (149, 3823),

Gene: LittleLaf_10 Start: 3259, Stop: 3666, Start Num: 78
Candidate Starts for LittleLaf_10:
(Start: 78 @3259 has 172 MA's), (Start: 83 @3271 has 3 MA's), (100, 3397), (109, 3421), (113, 3445), (118, 3478), (156, 3643),

Gene: LolaVinca_10 Start: 2977, Stop: 3399, Start Num: 75
Candidate Starts for LolaVinca_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295), (159, 3334),

Gene: LordLeafolot_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for LordLeafolot_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Lucky2013_70 Start: 46314, Stop: 45949, Start Num: 78
Candidate Starts for Lucky2013_70:
(Start: 78 @46314 has 172 MA's), (85, 46272), (110, 46176), (121, 46107), (130, 46068),

Gene: LunaBlu_89 Start: 51072, Stop: 51413, Start Num: 60
Candidate Starts for LunaBlu_89:
(Start: 60 @51072 has 1 MA's), (64, 51078), (Start: 78 @51120 has 172 MA's), (115, 51264), (122, 51297),

Gene: LunarLander_41 Start: 32151, Stop: 31789, Start Num: 66
Candidate Starts for LunarLander_41:
(24, 32289), (28, 32256), (Start: 66 @32151 has 13 MA's), (120, 31908), (143, 31887), (144, 31881), (145, 31878),

Gene: MadamMonkfish_42 Start: 34547, Stop: 34182, Start Num: 78
Candidate Starts for MadamMonkfish_42:
(64, 34586), (72, 34568), (Start: 78 @34547 has 172 MA's), (100, 34412), (109, 34388), (113, 34364), (121, 34319), (123, 34301),

Gene: Maguvora_11 Start: 2979, Stop: 3422, Start Num: 75
Candidate Starts for Maguvora_11:
(33, 2862), (38, 2892), (49, 2919), (67, 2955), (Start: 75 @2979 has 16 MA's), (91, 3066), (95, 3081), (108, 3108), (110, 3114), (117, 3159), (120, 3171), (128, 3222), (130, 3225), (140, 3255), (149, 3297),

Gene: Mahavrat_77 Start: 46587, Stop: 46994, Start Num: 78
Candidate Starts for Mahavrat_77:
(Start: 78 @46587 has 172 MA's), (Start: 83 @46599 has 3 MA's), (84, 46608), (100, 46725), (109, 46749), (113, 46773), (118, 46806), (131, 46878),

Gene: Marleymoo_66 Start: 48687, Stop: 48322, Start Num: 78
Candidate Starts for Marleymoo_66:
(45, 48771), (Start: 78 @48687 has 172 MA's), (85, 48645), (110, 48549), (121, 48480), (130, 48441),

Gene: Marshmallow_42 Start: 35818, Stop: 35342, Start Num: 83
Candidate Starts for Marshmallow_42:
(Start: 78 @35830 has 172 MA's), (Start: 83 @35818 has 3 MA's), (90, 35755), (95, 35740), (107, 35713), (109, 35707), (117, 35662), (120, 35650), (125, 35608), (155, 35506), (175, 35362),

Gene: Martik_82 Start: 51049, Stop: 51432, Start Num: 78
Candidate Starts for Martik_82:
(44, 50959), (48, 50974), (69, 51016), (Start: 78 @51049 has 172 MA's), (96, 51160), (98, 51169), (117, 51241), (120, 51253), (165, 51379),

Gene: Marvin_9 Start: 3241, Stop: 3600, Start Num: 78
Candidate Starts for Marvin_9:
(Start: 78 @3241 has 172 MA's), (Start: 83 @3253 has 3 MA's), (90, 3316), (95, 3331), (107, 3358), (109, 3364), (117, 3409), (120, 3421),

Gene: Maxxinista_45 Start: 35159, Stop: 34755, Start Num: 78
Candidate Starts for Maxxinista_45:
(Start: 78 @35159 has 172 MA's), (100, 35024), (109, 35000), (113, 34976), (121, 34931), (151, 34808),

Gene: MiaZeal_73 Start: 46970, Stop: 46605, Start Num: 78
Candidate Starts for MiaZeal_73:
(Start: 78 @46970 has 172 MA's), (85, 46928), (110, 46832), (121, 46763), (130, 46724),

Gene: Mikro_7 Start: 3147, Stop: 3578, Start Num: 78
Candidate Starts for Mikro_7:
(47, 3090), (Start: 78 @3147 has 172 MA's), (91, 3222), (95, 3237), (108, 3264), (110, 3270), (117, 3315), (120, 3327), (128, 3378), (130, 3381), (140, 3411), (149, 3453),

Gene: Mindy_43 Start: 34793, Stop: 34317, Start Num: 78
Candidate Starts for Mindy_43:
(Start: 74 @34808 has 2 MA's), (Start: 78 @34793 has 172 MA's), (100, 34658), (109, 34634), (113, 34610), (121, 34565), (137, 34499), (161, 34400), (164, 34388), (171, 34328),

Gene: Minerva_78 Start: 51991, Stop: 51626, Start Num: 78
Candidate Starts for Minerva_78:
(Start: 78 @51991 has 172 MA's), (85, 51949), (110, 51853), (121, 51784), (130, 51745),

Gene: MinionDave_78 Start: 48768, Stop: 49100, Start Num: 78
Candidate Starts for MinionDave_78:
(Start: 78 @48768 has 172 MA's), (85, 48810), (110, 48906), (118, 48963),

Gene: Miniwave_41 Start: 35246, Stop: 34860, Start Num: 78
Candidate Starts for Miniwave_41:
(Start: 75 @35261 has 16 MA's), (Start: 78 @35246 has 172 MA's), (100, 35111), (109, 35087), (113, 35063), (121, 35018), (125, 34979),

Gene: MoMoMixon_7 Start: 2383, Stop: 2814, Start Num: 78
Candidate Starts for MoMoMixon_7:
(56, 2347), (Start: 78 @2383 has 172 MA's), (91, 2458), (95, 2473), (108, 2500), (110, 2506), (117, 2551), (120, 2563), (128, 2614), (130, 2617), (140, 2647), (149, 2689),

Gene: Moldemort_42 Start: 34776, Stop: 34411, Start Num: 78
Candidate Starts for Moldemort_42:
(64, 34815), (72, 34797), (Start: 78 @34776 has 172 MA's), (100, 34641), (109, 34617), (113, 34593), (121, 34548), (123, 34530),

Gene: Moonbeam_89 Start: 51150, Stop: 51629, Start Num: 80
Candidate Starts for Moonbeam_89:
(Start: 80 @51150 has 1 MA's), (Start: 82 @51153 has 1 MA's), (92, 51222), (95, 51234), (108, 51261), (110, 51267), (117, 51312), (120, 51324), (128, 51375), (130, 51378), (140, 51408), (149, 51450), (172, 51576),

Gene: Mosby_40 Start: 34707, Stop: 34342, Start Num: 78
Candidate Starts for Mosby_40:
(Start: 75 @34722 has 16 MA's), (Start: 78 @34707 has 172 MA's), (100, 34572), (109, 34548), (113, 34524), (123, 34461),

Gene: MrGordo_62 Start: 40946, Stop: 40590, Start Num: 78
Candidate Starts for MrGordo_62:
(Start: 78 @40946 has 172 MA's), (Start: 83 @40934 has 3 MA's), (100, 40808), (104, 40799), (109, 40784), (113, 40760), (117, 40730), (120, 40718),

Gene: Murphy_45 Start: 35671, Stop: 35267, Start Num: 78
Candidate Starts for Murphy_45:
(Start: 78 @35671 has 172 MA's), (100, 35536), (109, 35512), (113, 35488), (121, 35443), (151, 35320),

Gene: Myrale_43 Start: 35695, Stop: 35207, Start Num: 78
Candidate Starts for Myrale_43:
(Start: 78 @35695 has 172 MA's), (Start: 83 @35683 has 3 MA's), (90, 35620), (95, 35605), (107, 35578), (109, 35572), (117, 35527), (120, 35515), (125, 35473), (155, 35371), (175, 35227),

Gene: Naval22_8 Start: 2383, Stop: 2814, Start Num: 78
Candidate Starts for Naval22_8:
(56, 2347), (Start: 78 @2383 has 172 MA's), (91, 2458), (95, 2473), (108, 2500), (110, 2506), (117, 2551), (120, 2563), (128, 2614), (130, 2617), (140, 2647), (149, 2689),

Gene: Nebkiss_50 Start: 35799, Stop: 35431, Start Num: 65
Candidate Starts for Nebkiss_50:
(Start: 65 @35799 has 2 MA's), (87, 35706), (126, 35490), (132, 35472), (139, 35454),

Gene: Nekros_71 Start: 48970, Stop: 48458, Start Num: 78
Candidate Starts for Nekros_71:
(Start: 78 @48970 has 172 MA's), (120, 48766), (125, 48724), (155, 48622), (175, 48478),

Gene: Nibley_66 Start: 45326, Stop: 44961, Start Num: 78
Candidate Starts for Nibley_66:
(57, 45374), (63, 45368), (Start: 78 @45326 has 172 MA's), (100, 45191), (109, 45167), (113, 45143), (123, 45080),

Gene: Nidhogg_7 Start: 2383, Stop: 2814, Start Num: 78
Candidate Starts for Nidhogg_7:
(56, 2347), (Start: 78 @2383 has 172 MA's), (91, 2458), (95, 2473), (108, 2500), (110, 2506), (117, 2551), (120, 2563), (128, 2614), (130, 2617), (140, 2647), (149, 2689),

Gene: NihilNomen_73 Start: 50662, Stop: 50297, Start Num: 78
Candidate Starts for NihilNomen_73:
(Start: 78 @50662 has 172 MA's), (85, 50620), (110, 50524), (121, 50455), (130, 50416),

Gene: Nivrat_78 Start: 48916, Stop: 49254, Start Num: 78
Candidate Starts for Nivrat_78:
(Start: 66 @48877 has 13 MA's), (Start: 78 @48916 has 172 MA's), (Start: 83 @48928 has 3 MA's), (93, 49000), (95, 49009), (103, 49045), (118, 49117),

Gene: NoSleep_45 Start: 35431, Stop: 35027, Start Num: 78
Candidate Starts for NoSleep_45:
(Start: 78 @35431 has 172 MA's), (100, 35296), (109, 35272), (113, 35248), (121, 35203), (151, 35080),

Gene: NoodleTree_7 Start: 2148, Stop: 2579, Start Num: 78
Candidate Starts for NoodleTree_7:
(47, 2091), (Start: 78 @2148 has 172 MA's), (91, 2223), (95, 2238), (108, 2265), (110, 2271), (117, 2316), (120, 2328), (128, 2379), (130, 2382), (140, 2412), (149, 2454),

Gene: NormanBulbieJr_83 Start: 50465, Stop: 50929, Start Num: 78
Candidate Starts for NormanBulbieJr_83:
(Start: 78 @50465 has 172 MA's), (81, 50474), (96, 50576), (98, 50585), (117, 50657), (120, 50669), (125, 50711), (155, 50813),

Gene: NuevoMundo_9 Start: 2841, Stop: 3272, Start Num: 78
Candidate Starts for NuevoMundo_9:
(34, 2736), (37, 2757), (Start: 40 @2763 has 1 MA's), (Start: 78 @2841 has 172 MA's), (91, 2916), (95, 2931), (108, 2958), (110, 2964), (117, 3009), (120, 3021), (128, 3072), (130, 3075), (140, 3105), (149, 3147),

Gene: Odette_71 Start: 49705, Stop: 49340, Start Num: 78
Candidate Starts for Odette_71:
(Start: 78 @49705 has 172 MA's), (85, 49663), (110, 49567), (121, 49498), (130, 49459),

Gene: OrionPax_43 Start: 35001, Stop: 34636, Start Num: 78
Candidate Starts for OrionPax_43:
(Start: 78 @35001 has 172 MA's), (100, 34866), (109, 34842), (113, 34818), (123, 34755),

Gene: PaddyBaddy_43 Start: 35008, Stop: 34643, Start Num: 78
Candidate Starts for PaddyBaddy_43:
(Start: 75 @35023 has 16 MA's), (Start: 78 @35008 has 172 MA's), (100, 34873), (109, 34849), (113, 34825), (121, 34780), (123, 34762),

Gene: Pat3_41 Start: 33929, Stop: 33462, Start Num: 83
Candidate Starts for Pat3_41:
(Start: 78 @33941 has 172 MA's), (Start: 83 @33929 has 3 MA's), (100, 33803), (104, 33794), (109, 33779), (113, 33755), (121, 33710), (137, 33644), (161, 33545), (171, 33473),

Gene: Phaja_41 Start: 35395, Stop: 34907, Start Num: 78
Candidate Starts for Phaja_41:
(Start: 78 @35395 has 172 MA's), (Start: 83 @35383 has 3 MA's), (90, 35320), (95, 35305), (107, 35278), (109, 35272), (117, 35227), (120, 35215), (125, 35173), (155, 35071), (175, 34927),

Gene: PharkleMinkus_10 Start: 2978, Stop: 3421, Start Num: 75
Candidate Starts for PharkleMinkus_10:
(33, 2861), (38, 2891), (49, 2918), (67, 2954), (Start: 75 @2978 has 16 MA's), (91, 3065), (95, 3080), (108, 3107), (110, 3113), (117, 3158), (120, 3170), (128, 3221), (130, 3224), (140, 3254), (149, 3296),

Gene: Phatniss_83 Start: 49365, Stop: 49781, Start Num: 78
Candidate Starts for Phatniss_83:
(Start: 78 @49365 has 172 MA's), (93, 49449), (95, 49458), (103, 49494), (117, 49563), (120, 49575), (124, 49608), (153, 49707),

Gene: Phlippers_38 Start: 32612, Stop: 32250, Start Num: 66
Candidate Starts for Phlippers_38:
(24, 32750), (28, 32717), (Start: 66 @32612 has 13 MA's), (120, 32369), (143, 32348), (144, 32342), (145, 32339),

Gene: Phoebus_75 Start: 51844, Stop: 51479, Start Num: 78
Candidate Starts for Phoebus_75:
(Start: 78 @51844 has 172 MA's), (85, 51802), (110, 51706), (121, 51637), (130, 51598),

Gene: Phrux_42 Start: 34994, Stop: 34629, Start Num: 78
Candidate Starts for Phrux_42:
(Start: 75 @35009 has 16 MA's), (Start: 78 @34994 has 172 MA's), (100, 34859), (109, 34835), (113, 34811), (121, 34766), (123, 34748),

Gene: Pier_10 Start: 2844, Stop: 3275, Start Num: 78
Candidate Starts for Pier_10:
(34, 2739), (37, 2760), (Start: 40 @2766 has 1 MA's), (Start: 78 @2844 has 172 MA's), (91, 2919), (95, 2934), (108, 2961), (110, 2967), (117, 3012), (120, 3024), (128, 3075), (130, 3078), (140, 3108), (149, 3150),

Gene: Pinkcreek_11 Start: 4628, Stop: 5008, Start Num: 78
Candidate Starts for Pinkcreek_11:
(68, 4592), (Start: 78 @4628 has 172 MA's), (100, 4763), (109, 4787), (113, 4811), (118, 4844), (133, 4904), (134, 4907), (152, 4937),

Gene: Pio_8 Start: 2537, Stop: 2968, Start Num: 78
Candidate Starts for Pio_8:
(56, 2501), (Start: 78 @2537 has 172 MA's), (91, 2612), (95, 2627), (108, 2654), (110, 2660), (117, 2705), (120, 2717), (128, 2768), (130, 2771), (140, 2801), (149, 2843),

Gene: Pollywog_88 Start: 51599, Stop: 52084, Start Num: 78
Candidate Starts for Pollywog_88:
(Start: 60 @51560 has 1 MA's), (Start: 78 @51599 has 172 MA's), (Start: 83 @51611 has 3 MA's), (91, 51674), (95, 51689), (108, 51716), (110, 51722), (117, 51767), (120, 51779), (128, 51830), (130, 51833), (140, 51863), (149, 51905), (172, 52031),

Gene: Porcelain_72 Start: 46970, Stop: 46605, Start Num: 78
Candidate Starts for Porcelain_72:
(Start: 78 @46970 has 172 MA's), (85, 46928), (110, 46832), (121, 46763), (130, 46724),

Gene: Pringar_10 Start: 3084, Stop: 3491, Start Num: 78
Candidate Starts for Pringar_10:
(Start: 78 @3084 has 172 MA's), (Start: 83 @3096 has 3 MA's), (100, 3222), (109, 3246), (113, 3270), (118, 3303), (156, 3468),

Gene: Priscilla_85 Start: 50563, Stop: 51027, Start Num: 78
Candidate Starts for Priscilla_85:

(Start: 78 @50563 has 172 MA's), (81, 50572), (96, 50674), (98, 50683), (117, 50755), (120, 50767), (125, 50809), (155, 50911),

Gene: Ptowny_43 Start: 34586, Stop: 34221, Start Num: 78
Candidate Starts for Ptowny_43:
(Start: 75 @34601 has 16 MA's), (Start: 78 @34586 has 172 MA's), (98, 34469), (100, 34451), (109, 34427), (113, 34403), (121, 34358), (123, 34340),

Gene: Puhon_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for Puhon_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Pumpkin_45 Start: 35920, Stop: 35555, Start Num: 78
Candidate Starts for Pumpkin_45:
(Start: 78 @35920 has 172 MA's), (100, 35785), (109, 35761), (113, 35737), (123, 35674),

Gene: Puppet_40 Start: 32097, Stop: 31735, Start Num: 66
Candidate Starts for Puppet_40:
(24, 32235), (28, 32202), (Start: 66 @32097 has 13 MA's), (120, 31854), (143, 31833), (144, 31827), (145, 31824),

Gene: Pupusa_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for Pupusa_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Quallification_42 Start: 35222, Stop: 34857, Start Num: 78
Candidate Starts for Quallification_42:
(Start: 78 @35222 has 172 MA's), (85, 35180), (110, 35084), (121, 35015), (130, 34976),

Gene: Rearden_72 Start: 47623, Stop: 47135, Start Num: 78
Candidate Starts for Rearden_72:
(Start: 60 @47662 has 1 MA's), (Start: 78 @47623 has 172 MA's), (Start: 83 @47611 has 3 MA's), (91, 47548), (95, 47533), (108, 47506), (110, 47500), (117, 47455), (120, 47443), (128, 47392), (130, 47389), (140, 47359), (149, 47317), (172, 47191),

Gene: RedRaider77_11 Start: 3531, Stop: 3950, Start Num: 75
Candidate Starts for RedRaider77_11:
(Start: 75 @3531 has 16 MA's), (100, 3681), (109, 3705), (113, 3729), (116, 3756), (117, 3759),

Gene: Redno2_69 Start: 47458, Stop: 47093, Start Num: 78
Candidate Starts for Redno2_69:
(Start: 78 @47458 has 172 MA's), (85, 47416), (110, 47320), (121, 47251), (130, 47212),

Gene: Rialto_92 Start: 51249, Stop: 51725, Start Num: 82
Candidate Starts for Rialto_92:
(Start: 80 @51246 has 1 MA's), (Start: 82 @51249 has 1 MA's), (92, 51318), (95, 51330), (108, 51357), (110, 51363), (117, 51408), (120, 51420), (128, 51471), (130, 51474), (140, 51504), (149, 51546), (172, 51672),

Gene: Rimmer_42 Start: 34931, Stop: 34563, Start Num: 78
Candidate Starts for Rimmer_42:

(Start: 78 @34931 has 172 MA's), (Start: 83 @34919 has 3 MA's), (100, 34793), (109, 34769), (113, 34745), (123, 34682),

Gene: RiverMonster_44 Start: 35447, Stop: 35043, Start Num: 78
Candidate Starts for RiverMonster_44:
(Start: 78 @35447 has 172 MA's), (100, 35312), (109, 35288), (113, 35264), (121, 35219), (151, 35096),

Gene: Ryadel_104 Start: 63381, Stop: 62932, Start Num: 78
Candidate Starts for Ryadel_104:
(55, 63432), (Start: 78 @63381 has 172 MA's), (Start: 83 @63369 has 3 MA's), (89, 63303), (99, 63240), (102, 63216), (117, 63132), (120, 63120), (126, 63087), (168, 62937),

Gene: SG4_79 Start: 48739, Stop: 49107, Start Num: 78
Candidate Starts for SG4_79:
(69, 48706), (Start: 78 @48739 has 172 MA's), (100, 48877), (104, 48886), (109, 48901), (113, 48925), (123, 48988),

Gene: Sabbb_90 Start: 48794, Stop: 49228, Start Num: 78
Candidate Starts for Sabbb_90:
(Start: 60 @48755 has 1 MA's), (Start: 78 @48794 has 172 MA's), (Start: 83 @48806 has 3 MA's), (91, 48869), (95, 48884), (108, 48911), (110, 48917), (117, 48962), (120, 48974), (128, 49025), (130, 49028), (140, 49058), (149, 49100),

Gene: Sauce_7 Start: 2387, Stop: 2818, Start Num: 78
Candidate Starts for Sauce_7:
(56, 2351), (Start: 78 @2387 has 172 MA's), (91, 2462), (95, 2477), (108, 2504), (110, 2510), (117, 2555), (120, 2567), (128, 2618), (130, 2621), (140, 2651), (149, 2693),

Gene: Schatzie_67 Start: 49452, Stop: 49087, Start Num: 78
Candidate Starts for Schatzie_67:
(Start: 78 @49452 has 172 MA's), (85, 49410), (110, 49314), (121, 49245), (130, 49206),

Gene: Sebata_9 Start: 3505, Stop: 3948, Start Num: 75
Candidate Starts for Sebata_9:
(33, 3388), (38, 3418), (49, 3445), (67, 3481), (Start: 75 @3505 has 16 MA's), (91, 3592), (95, 3607), (108, 3634), (110, 3640), (117, 3685), (120, 3697), (128, 3748), (130, 3751), (140, 3781), (149, 3823),

Gene: Shaboozey_65 Start: 44675, Stop: 44163, Start Num: 78
Candidate Starts for Shaboozey_65:
(Start: 78 @44675 has 172 MA's), (85, 44633), (120, 44471), (125, 44429), (155, 44327), (175, 44183),

Gene: ShamWow_43 Start: 35832, Stop: 35344, Start Num: 78
Candidate Starts for ShamWow_43:
(Start: 78 @35832 has 172 MA's), (Start: 83 @35820 has 3 MA's), (90, 35757), (95, 35742), (107, 35715), (109, 35709), (117, 35664), (120, 35652), (125, 35610), (155, 35508), (175, 35364),

Gene: Shauna1_82 Start: 49932, Stop: 50444, Start Num: 78
Candidate Starts for Shauna1_82:
(Start: 78 @49932 has 172 MA's), (117, 50124), (120, 50136), (125, 50178), (155, 50280), (175, 50424),

Gene: ShereKhan_42 Start: 35964, Stop: 35599, Start Num: 78

Candidate Starts for ShereKhan_42:
(Start: 75 @35979 has 16 MA's), (Start: 78 @35964 has 172 MA's), (100, 35829), (109, 35805), (113, 35781), (121, 35736), (123, 35718),

Gene: ShowerHandel_83 Start: 48976, Stop: 49359, Start Num: 78
Candidate Starts for ShowerHandel_83:
(Start: 78 @48976 has 172 MA's), (81, 48985), (96, 49087), (98, 49096), (117, 49168), (120, 49180), (165, 49306),

Gene: SimranZ1_81 Start: 48125, Stop: 48592, Start Num: 78
Candidate Starts for SimranZ1_81:
(Start: 60 @48086 has 1 MA's), (Start: 78 @48125 has 172 MA's), (91, 48200), (95, 48215), (108, 48242), (110, 48248), (117, 48293), (120, 48305), (128, 48356), (130, 48359), (140, 48389), (169, 48503), (173, 48545),

Gene: SirDuracell_41 Start: 33680, Stop: 33204, Start Num: 78
Candidate Starts for SirDuracell_41:
(Start: 78 @33680 has 172 MA's), (98, 33563), (100, 33545), (109, 33521), (113, 33497), (121, 33452), (137, 33386), (161, 33287), (171, 33215),

Gene: Smairt_41 Start: 32245, Stop: 31883, Start Num: 66
Candidate Starts for Smairt_41:
(24, 32383), (28, 32350), (Start: 66 @32245 has 13 MA's), (120, 32002), (143, 31981), (144, 31975), (145, 31972),

Gene: Sparkdehlily_95 Start: 49514, Stop: 49996, Start Num: 79
Candidate Starts for Sparkdehlily_95:
(Start: 79 @49514 has 2 MA's), (Start: 80 @49517 has 1 MA's), (Start: 82 @49520 has 1 MA's), (92, 49589), (95, 49601), (108, 49628), (110, 49634), (117, 49679), (120, 49691), (128, 49742), (130, 49745), (140, 49775), (149, 49817), (172, 49943),

Gene: Specks_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for Specks_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: Spud_8 Start: 2537, Stop: 2968, Start Num: 78
Candidate Starts for Spud_8:
(56, 2501), (Start: 78 @2537 has 172 MA's), (91, 2612), (95, 2627), (108, 2654), (110, 2660), (117, 2705), (120, 2717), (128, 2768), (130, 2771), (140, 2801), (149, 2843),

Gene: Squint_73 Start: 47089, Stop: 46724, Start Num: 78
Candidate Starts for Squint_73:
(Start: 78 @47089 has 172 MA's), (85, 47047), (110, 46951), (121, 46882), (130, 46843),

Gene: Stark_45 Start: 35450, Stop: 35046, Start Num: 78
Candidate Starts for Stark_45:
(Start: 75 @35465 has 16 MA's), (Start: 78 @35450 has 172 MA's), (100, 35315), (109, 35291), (113, 35267), (121, 35222), (151, 35099),

Gene: StellaBean_41 Start: 35156, Stop: 34668, Start Num: 78
Candidate Starts for StellaBean_41:

(Start: 78 @35156 has 172 MA's), (Start: 83 @35144 has 3 MA's), (90, 35081), (95, 35066), (107, 35039), (109, 35033), (117, 34988), (120, 34976), (125, 34934), (155, 34832), (175, 34688),

Gene: Stellammi_130 Start: 61513, Stop: 61869, Start Num: 78
Candidate Starts for Stellammi_130:
(25, 61351), (48, 61444), (50, 61447), (Start: 78 @61513 has 172 MA's), (81, 61522), (85, 61555), (112, 61687), (114, 61702), (118, 61723), (133, 61798), (142, 61822), (148, 61852),

Gene: StephanieG_9 Start: 2844, Stop: 3275, Start Num: 78
Candidate Starts for StephanieG_9:
(34, 2739), (37, 2760), (Start: 40 @2766 has 1 MA's), (Start: 78 @2844 has 172 MA's), (91, 2919), (95, 2934), (108, 2961), (110, 2967), (117, 3012), (120, 3024), (128, 3075), (130, 3078), (140, 3108), (149, 3150),

Gene: StevieRay_57 Start: 37992, Stop: 38351, Start Num: 78
Candidate Starts for StevieRay_57:
(16, 37731), (20, 37764), (21, 37788), (23, 37794), (51, 37935), (Start: 78 @37992 has 172 MA's), (91, 38067), (95, 38082), (108, 38109), (110, 38115), (117, 38160), (120, 38172), (160, 38328),

Gene: StormChicken_43 Start: 35539, Stop: 35171, Start Num: 78
Candidate Starts for StormChicken_43:
(Start: 78 @35539 has 172 MA's), (Start: 83 @35527 has 3 MA's), (100, 35401), (109, 35377), (113, 35353), (123, 35290),

Gene: Suerte_55 Start: 39354, Stop: 39890, Start Num: 36
Candidate Starts for Suerte_55:
(12, 39168), (17, 39201), (27, 39300), (Start: 36 @39354 has 1 MA's), (42, 39366), (70, 39429), (98, 39597), (111, 39660), (119, 39711), (134, 39783), (147, 39825),

Gene: Sunshine924_64 Start: 40630, Stop: 40100, Start Num: 75
Candidate Starts for Sunshine924_64:
(Start: 75 @40630 has 16 MA's), (100, 40477), (109, 40453), (113, 40429), (118, 40396), (127, 40336), (129, 40333), (141, 40303), (167, 40189), (170, 40147), (174, 40120),

Gene: SuperGrey_83 Start: 51298, Stop: 51810, Start Num: 78
Candidate Starts for SuperGrey_83:
(Start: 78 @51298 has 172 MA's), (85, 51340), (120, 51502), (125, 51544), (155, 51646), (175, 51790),

Gene: Superphikiman_70 Start: 46180, Stop: 45815, Start Num: 78
Candidate Starts for Superphikiman_70:
(Start: 78 @46180 has 172 MA's), (85, 46138), (110, 46042), (121, 45973), (130, 45934),

Gene: TDanisky_96 Start: 49514, Stop: 49996, Start Num: 79
Candidate Starts for TDanisky_96:
(Start: 79 @49514 has 2 MA's), (Start: 80 @49517 has 1 MA's), (Start: 82 @49520 has 1 MA's), (92, 49589), (95, 49601), (108, 49628), (110, 49634), (117, 49679), (120, 49691), (128, 49742), (130, 49745), (140, 49775), (149, 49817), (172, 49943),

Gene: Tainan_10 Start: 2977, Stop: 3420, Start Num: 75
Candidate Starts for Tainan_10:
(33, 2860), (38, 2890), (49, 2917), (67, 2953), (Start: 75 @2977 has 16 MA's), (91, 3064), (95, 3079), (108, 3106), (110, 3112), (117, 3157), (120, 3169), (128, 3220), (130, 3223), (140, 3253), (149, 3295),

Gene: TeamEdward_44 Start: 35536, Stop: 35168, Start Num: 78
Candidate Starts for TeamEdward_44:
(Start: 78 @35536 has 172 MA's), (Start: 83 @35524 has 3 MA's), (100, 35398), (109, 35374), (113, 35350), (123, 35287),

Gene: TeardropMSU_40 Start: 34933, Stop: 34568, Start Num: 78
Candidate Starts for TeardropMSU_40:
(Start: 75 @34948 has 16 MA's), (Start: 78 @34933 has 172 MA's), (100, 34798), (109, 34774), (113, 34750), (123, 34687),

Gene: Thespis_54 Start: 36385, Stop: 36747, Start Num: 78
Candidate Starts for Thespis_54:
(19, 36157), (46, 36304), (51, 36328), (Start: 78 @36385 has 172 MA's), (91, 36460), (95, 36475), (108, 36502), (110, 36508), (117, 36553), (120, 36565), (160, 36724),

Gene: ThreeRngTarjay_70 Start: 50738, Stop: 50373, Start Num: 78
Candidate Starts for ThreeRngTarjay_70:
(Start: 78 @50738 has 172 MA's), (85, 50696), (110, 50600), (121, 50531), (130, 50492),

Gene: Thresher_46 Start: 36685, Stop: 36281, Start Num: 78
Candidate Starts for Thresher_46:
(Start: 78 @36685 has 172 MA's), (100, 36550), (109, 36526), (113, 36502), (118, 36469), (151, 36334),

Gene: Tomaszewski_40 Start: 34800, Stop: 34435, Start Num: 78
Candidate Starts for Tomaszewski_40:
(Start: 75 @34815 has 16 MA's), (Start: 78 @34800 has 172 MA's), (100, 34665), (109, 34641), (113, 34617), (123, 34554),

Gene: Tonenili_21 Start: 6415, Stop: 6846, Start Num: 78
Candidate Starts for Tonenili_21:
(14, 6136), (29, 6280), (31, 6283), (Start: 78 @6415 has 172 MA's), (Start: 83 @6427 has 3 MA's), (98, 6535), (100, 6553), (109, 6577), (113, 6601), (117, 6631), (120, 6643), (135, 6715), (151, 6769),

Gene: Topgun_39 Start: 31551, Stop: 31189, Start Num: 66
Candidate Starts for Topgun_39:
(24, 31689), (28, 31656), (Start: 66 @31551 has 13 MA's), (120, 31308), (143, 31287), (144, 31281), (145, 31278),

Gene: Tortellini_64 Start: 43747, Stop: 44214, Start Num: 78
Candidate Starts for Tortellini_64:
(61, 43702), (Start: 78 @43747 has 172 MA's), (88, 43822), (93, 43846), (97, 43888), (154, 44155), (163, 44200),

Gene: Toto_42 Start: 35820, Stop: 35344, Start Num: 83
Candidate Starts for Toto_42:
(Start: 78 @35832 has 172 MA's), (Start: 83 @35820 has 3 MA's), (90, 35757), (95, 35742), (107, 35715), (109, 35709), (117, 35664), (120, 35652), (125, 35610), (155, 35508), (175, 35364),

Gene: Tuco_44 Start: 36340, Stop: 35852, Start Num: 78
Candidate Starts for Tuco_44:
(Start: 78 @36340 has 172 MA's), (Start: 83 @36328 has 3 MA's), (90, 36265), (95, 36250), (107, 36223), (109, 36217), (117, 36172), (120, 36160), (125, 36118), (155, 36016), (175, 35872),

Gene: Tyke_9 Start: 2817, Stop: 3251, Start Num: 78
Candidate Starts for Tyke_9:
(47, 2760), (Start: 78 @2817 has 172 MA's), (91, 2892), (95, 2907), (108, 2934), (110, 2940), (117, 2985), (120, 2997), (128, 3048), (130, 3051), (140, 3081), (149, 3123),

Gene: VRedHorse_87 Start: 48107, Stop: 48463, Start Num: 78
Candidate Starts for VRedHorse_87:
(Start: 78 @48107 has 172 MA's), (141, 48359),

Gene: Wachhund_79 Start: 46376, Stop: 46765, Start Num: 78
Candidate Starts for Wachhund_79:
(55, 46334), (58, 46337), (Start: 78 @46376 has 172 MA's), (Start: 83 @46388 has 3 MA's), (89, 46454), (99, 46517), (102, 46541), (117, 46625), (120, 46637),

Gene: Wanda_76 Start: 50200, Stop: 49835, Start Num: 78
Candidate Starts for Wanda_76:
(Start: 78 @50200 has 172 MA's), (85, 50158), (110, 50062), (121, 49993), (130, 49954),

Gene: Wilkins_39 Start: 31484, Stop: 31122, Start Num: 66
Candidate Starts for Wilkins_39:
(24, 31622), (28, 31589), (Start: 66 @31484 has 13 MA's), (120, 31241), (143, 31220), (144, 31214), (145, 31211),

Gene: Xandras_43 Start: 35049, Stop: 34684, Start Num: 78
Candidate Starts for Xandras_43:
(Start: 78 @35049 has 172 MA's), (100, 34914), (109, 34890), (113, 34866), (123, 34803),

Gene: Yoshi_97 Start: 50855, Stop: 51199, Start Num: 78
Candidate Starts for Yoshi_97:
(30, 50720), (35, 50744), (53, 50801), (62, 50813), (68, 50822), (Start: 78 @50855 has 172 MA's), (138, 51101),

Gene: Youngblood_43 Start: 35542, Stop: 35174, Start Num: 78
Candidate Starts for Youngblood_43:
(Start: 78 @35542 has 172 MA's), (Start: 83 @35530 has 3 MA's), (100, 35404), (109, 35380), (113, 35356), (123, 35293),

Gene: Zapner_89 Start: 47534, Stop: 47902, Start Num: 78
Candidate Starts for Zapner_89:
(68, 47498), (Start: 78 @47534 has 172 MA's), (100, 47669), (109, 47693), (113, 47717), (121, 47762), (123, 47780), (135, 47828),

Gene: Zelink_70 Start: 51051, Stop: 50686, Start Num: 78
Candidate Starts for Zelink_70:
(Start: 78 @51051 has 172 MA's), (85, 51009), (110, 50913), (121, 50844), (130, 50805),