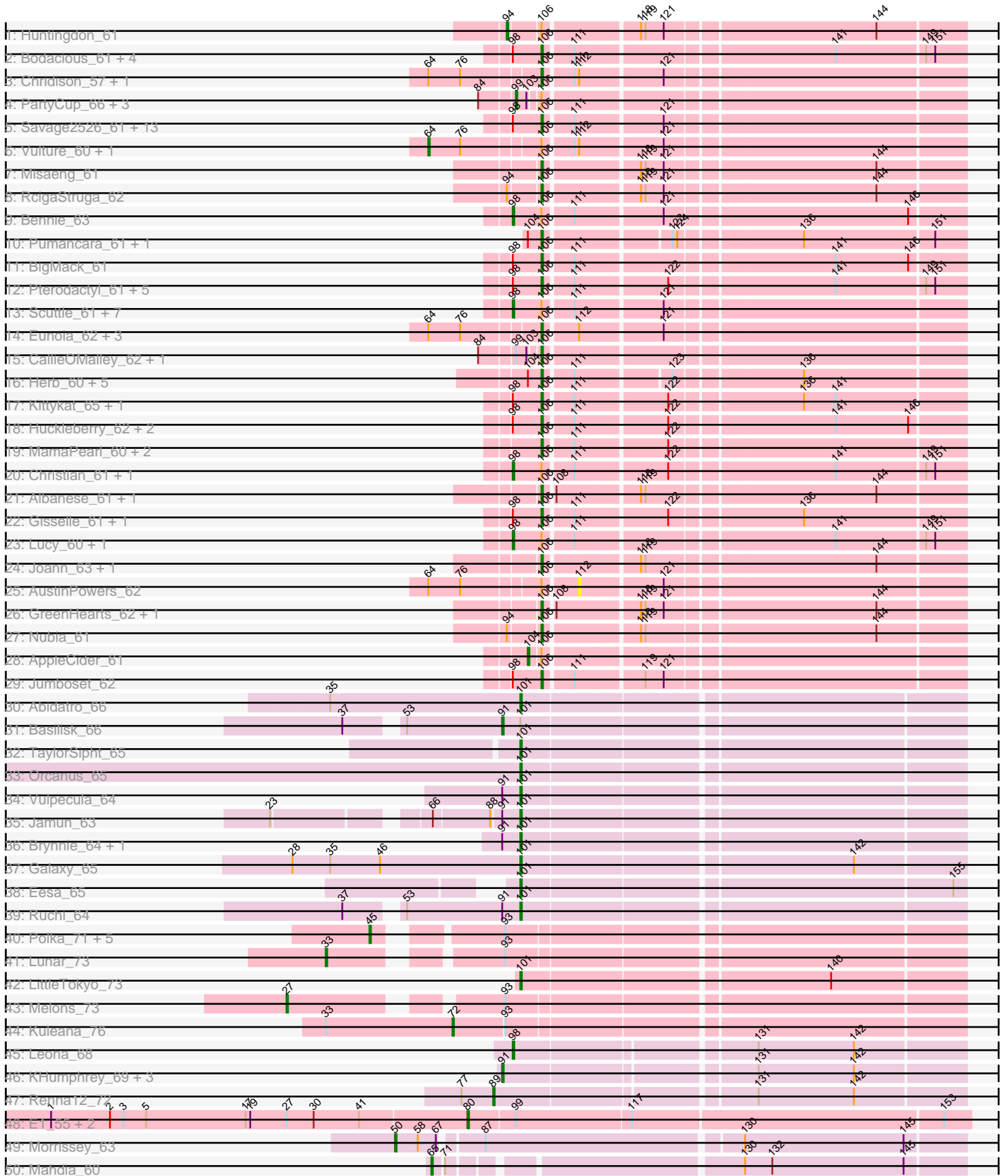
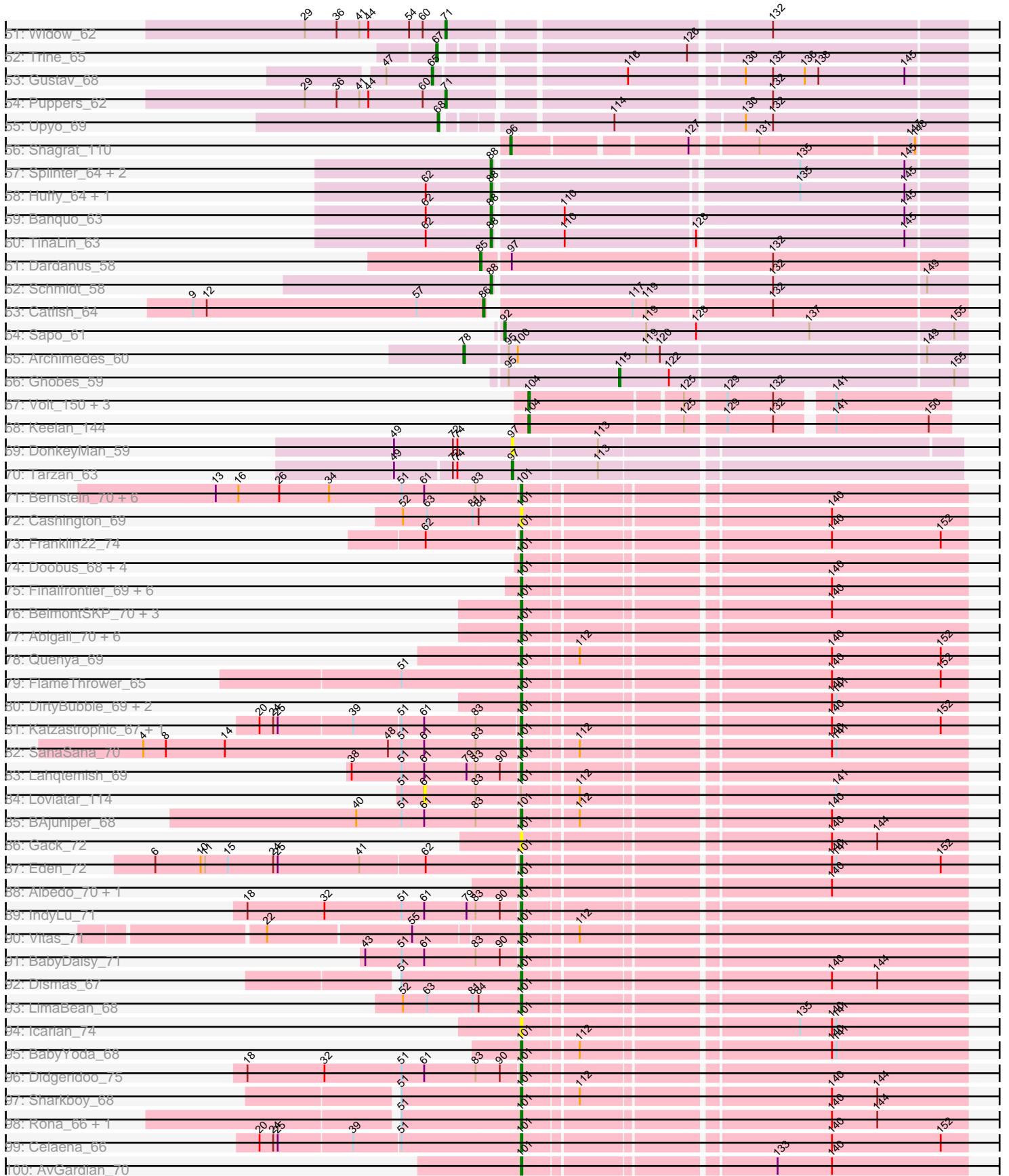


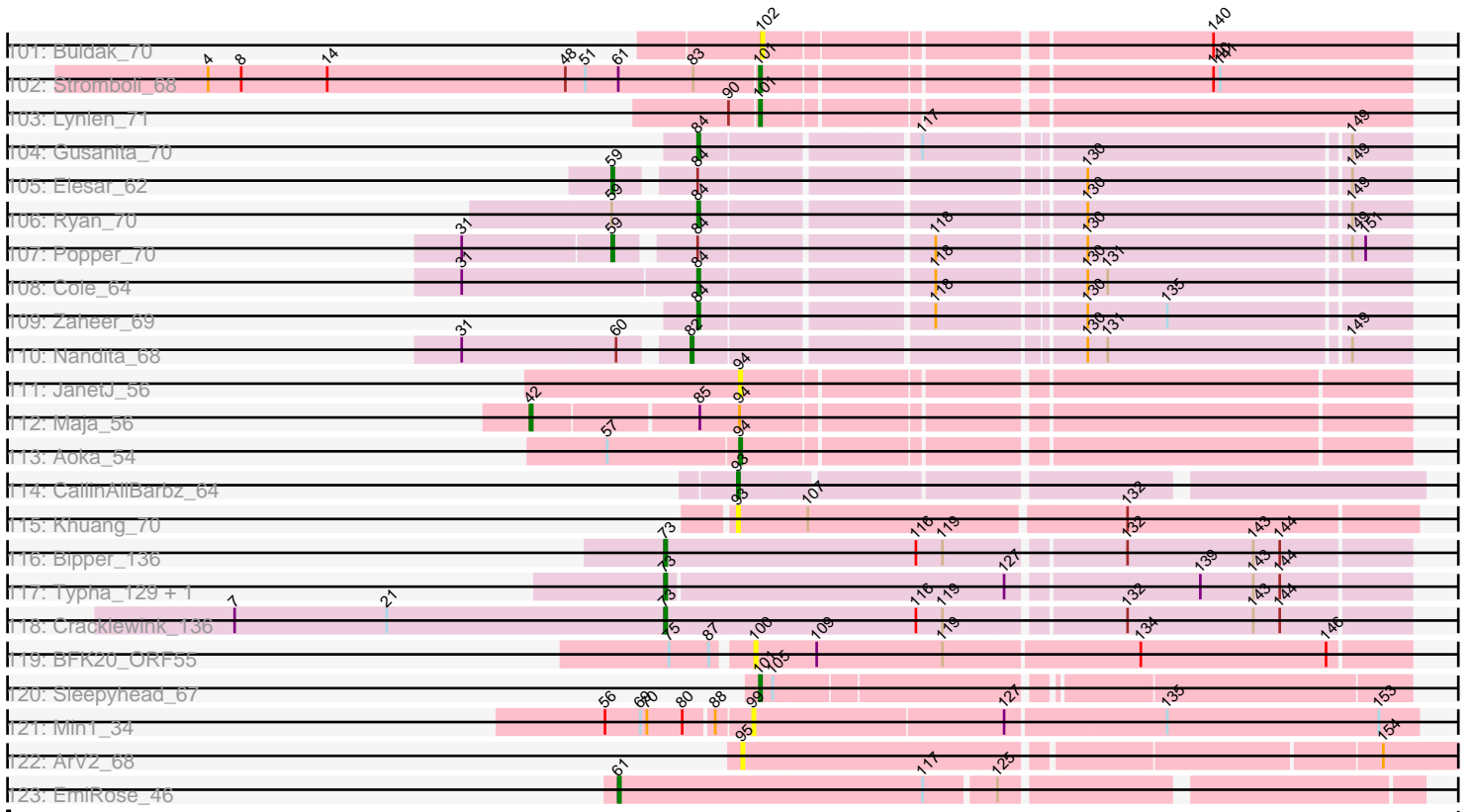
Pham 163334



Pham 163334



Pham 163334



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 163334 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163334 has 226 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Huntingdon_61
- Track 2 : Bodacious_61, CristinaYang_61, Nancia_61, LilStuart_60, Lasagna_59
- Track 3 : Chridison_57, Supakev_60
- Track 4 : PartyCup_66, Wayne_64, Suppi_62, Canowicakte_62
- Track 5 : Savage2526_61, Potatoes_62, BrotherBLo_62, Zorro_62, TattModd_61, Wawa_62, Rozby_60, Immaculata_62, Kalizoi_63, Cholula_62, Korra_62, Riverdale_61, Beethoven_63, Carpal_61
- Track 6 : Vulture_60, HunterDalle_60
- Track 7 : Misaeng_61
- Track 8 : RcigaStruga_62
- Track 9 : Bennie_63
- Track 10 : Pumancara_61, PinkFriday_62
- Track 11 : BigMack_61
- Track 12 : Pterodactyl_61, Makoto_60, Lennox_61, ChewChew_61, OurGirlNessie_59, WonderBoy_59
- Track 13 : Scuttle_61, MrGloopy_62, RAP15_63, Glenn_64, Vallejo_62, Dino_62, MeganNoll_63, Fluke_62
- Track 14 : Eunoia_62, OMalley_60, Aledel_60, Riovina_60
- Track 15 : CallieOMalley_62, Litotes_62
- Track 16 : Herb_60, Maria1952_59, Daiboju_60, Sergei_60, KingBob_60, Temper16_60
- Track 17 : Kittykat_65, Preamble_64
- Track 18 : Huckleberry_62, Moki_62, HeadNerd_62
- Track 19 : MamaPearl_60, EstebanJulior_60, Urla_62
- Track 20 : Christian_61, PitaDog_61
- Track 21 : Albanese_61, Greenhouse_61
- Track 22 : Gisselle_61, DreamTeam_61
- Track 23 : Lucy_60, DrRobert_59
- Track 24 : Joann_63, Oxynfrius_62
- Track 25 : AustinPowers_62
- Track 26 : GreenHearts_62, Lakshmi_61
- Track 27 : Nubia_61
- Track 28 : AppleCider_61
- Track 29 : Jumboset_62
- Track 30 : Abidatro_66
- Track 31 : Basilisk_66
- Track 32 : TaylorSipht_65

- Track 33 : Orcanus_65
- Track 34 : Vulpecula_64
- Track 35 : Jamun_63
- Track 36 : Brynnie_64, Chickaboom_70
- Track 37 : Galaxy_65
- Track 38 : Eesa_65
- Track 39 : Ruchi_64
- Track 40 : Polka_71, Cote_75, Amelia_71, Kepler_75, Daob_71, Coral_72
- Track 41 : Lunar_73
- Track 42 : LittleTokyo_73
- Track 43 : Melons_73
- Track 44 : Kuleana_76
- Track 45 : Leona_68
- Track 46 : KHumphrey_69, Juno112_70, PhluffyCoco_69, RedFox_71
- Track 47 : Renna12_72
- Track 48 : E1_55, Anatole_55, B3_57
- Track 49 : Morrissey_63
- Track 50 : Mahdia_60
- Track 51 : Widow_62
- Track 52 : Trine_65
- Track 53 : Gustav_68
- Track 54 : Puppies_62
- Track 55 : Upyo_69
- Track 56 : Shagrat_110
- Track 57 : Splinter_64, TZGordon_65, Vendetta_64
- Track 58 : Huffy_64, DinoDaryn_64
- Track 59 : Banquo_63
- Track 60 : TinaLin_63
- Track 61 : Dardanus_58
- Track 62 : Schmidt_58
- Track 63 : Catfish_64
- Track 64 : Sapo_61
- Track 65 : Archimedes_60
- Track 66 : Ghobes_59
- Track 67 : Volt_150, Guey18_149, Fryberger_144, Ronaldo_147
- Track 68 : Keelan_144
- Track 69 : DonkeyMan_59
- Track 70 : Tarzan_63
- Track 71 : Bernstein_70, Brahms_70, Coltrane_70, Clayda5_72, Armstrong_70, Skylord_70, Rollins_70
- Track 72 : Cashington_69
- Track 73 : Franklin22_74
- Track 74 : Doobus_68, Albright_69, BubbaBear_68, DickRichards_68, Avocadoman_69
- Track 75 : Finalfrontier_69, Eula_69, TukTuk_70, Jovita_68, Nicky22_69, Swervy_70, Slay_70
- Track 76 : BelmontSKP_70, Arroyo_71, SansAfet_72, AnnaLie_70
- Track 77 : Abigail_70, Johnathan_70, SarBear_72, CroZenni_71, QMacho_72, Burritobowl_72, Phisb_74
- Track 78 : Quenya_69
- Track 79 : FlameThrower_65
- Track 80 : DirtyBubble_69, Elva_73, Stoor_69
- Track 81 : Katzastrophic_67, Bachaco_67

- Track 82 : SanaSana_70
- Track 83 : Lahqtemish_69
- Track 84 : Loviatar_114
- Track 85 : BAjuniper_68
- Track 86 : Gack_72
- Track 87 : Eden_72
- Track 88 : Albedo_70, Kenzers_69
- Track 89 : IndyLu_71
- Track 90 : Vitas_71
- Track 91 : BabyDaisy_71
- Track 92 : Dismas_67
- Track 93 : LimaBean_68
- Track 94 : Icarian_74
- Track 95 : BabyYoda_68
- Track 96 : Didgeridoo_75
- Track 97 : Sharkboy_68
- Track 98 : Rona_66, Kieran_65
- Track 99 : Celaena_66
- Track 100 : AvGardian_70
- Track 101 : Buldak_70
- Track 102 : Stromboli_68
- Track 103 : Lynlen_71
- Track 104 : Gusanita_70
- Track 105 : Elesar_62
- Track 106 : Ryan_70
- Track 107 : Popper_70
- Track 108 : Cole_64
- Track 109 : Zaheer_69
- Track 110 : Nandita_68
- Track 111 : JanetJ_56
- Track 112 : Maja_56
- Track 113 : Aoka_54
- Track 114 : CallinAllBarbz_64
- Track 115 : Khuang_70
- Track 116 : Bipper_136
- Track 117 : Typha_129, Hilltopfarm_134
- Track 118 : Cracklewink_136
- Track 119 : BFK20_ORF55
- Track 120 : Sleepyhead_67
- Track 121 : Min1_34
- Track 122 : ArV2_68
- Track 123 : EmiRose_46

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

The start number called the most often in the published annotations is 101, it was called in 67 of the 205 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_66, Abigail_70, Albedo_70, Albright_69, AnnaLie_70, Armstrong_70, Arroyo_71, AvGardian_70, Avocadoman_69, BAJuniper_68, BabyDaisy_71, BabyYoda_68, Bachaco_67, BelmontSKP_70, Bernstein_70, Brahms_70, Brynnie_64, BubbaBear_68, Burritobowl_72, Cashington_69, Celaena_66, Chickaboom_70, Clayda5_72, Coltrane_70, CroZenni_71, DickRichards_68, Didgeridoo_75, DirtyBubble_69, Dismas_67, Doobus_68, Eden_72, Eesa_65, Elva_73, Eula_69, Finalfrontier_69, FlameThrower_65, Franklin22_74, Gack_72, Galaxy_65, Icarian_74, IndyLu_71, Jamun_63, Johnathan_70, Jovita_68, Katzastrophic_67, Kenzers_69, Kieran_65, Lahqtemish_69, LimaBean_68, LittleTokyo_73, Lynlen_71, Nicky22_69, Orcanus_65, Phisb_74, QMacho_72, Quenya_69, Rollins_70, Rona_66, Ruchi_64, SanaSana_70, SansAfet_72, SarBear_72, Sharkboy_68, Skylord_70, Slay_70, Sleepyhead_67, Stoor_69, Stromboli_68, Swervy_70, TaylorSipt_65, TukTuk_70, Vitas_71, Vulpecula_64,

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

- Basilisk_66, Loviatar_114,

Genes that do not have the "Most Annotated" start:

- Albanese_61, Aledel_60, Amelia_71, Anatole_55, Aoka_54, AppleCider_61, ArV2_68, Archimedes_60, AustinPowers_62, B3_57, BFK20_ORF55, Banquo_63, Beethoven_63, Bennie_63, BigMack_61, Bipper_136, Bodacious_61, BrotherBLO_62, Buldak_70, CallieOMalley_62, CallinAllBarbz_64, Canowicakte_62, Carpal_61, Catfish_64, ChewChew_61, Cholula_62, Chridison_57, Christian_61, Cole_64, Coral_72, Cote_75, Cracklewink_136, CristinaYang_61, Daiboju_60, Daob_71, Dardanus_58, DinoDaryn_64, Dino_62, DonkeyMan_59, DrRobert_59, DreamTeam_61, E1_55, Elesar_62, EmiRose_46, EstebanJulior_60, Eunoia_62, Fluke_62, Fryberger_144, Ghobes_59, Gisselle_61, Glenn_64, GreenHearts_62, Greenhouse_61, Guey18_149, Gusanita_70, Gustav_68, HeadNerd_62, Herb_60, Hilltopfarm_134, Huckleberry_62, Huffy_64, HunterDalle_60, Huntingdon_61, Immaculata_62, JanetJ_56, Joann_63, Jumboset_62, Juno112_70, KHumphrey_69, Kalizoi_63, Keelan_144, Kepler_75, Khuang_70, KingBob_60, Kittykat_65, Korra_62, Kuleana_76, Lakshmi_61, Lasagna_59, Lennox_61, Leona_68, LilStuart_60, Litotes_62, Lucy_60, Lunar_73, Mahdia_60, Maja_56, Makoto_60, MamaPearl_60, Maria1952_59, MeganNoll_63, Melons_73, Min1_34, Misaeng_61, Moki_62, Morrissey_63, MrGloopy_62, Nancia_61, Nandita_68, Nubia_61, OMalley_60, OurGirlNessie_59, Oxyfrius_62, PartyCup_66, PhluffyCoco_69, PinkFriday_62, PitaDog_61, Polka_71, Popper_70, Potatoes_62, Preamble_64, Pterodactyl_61, Pumancara_61, Puppies_62, RAP15_63, RcigaStruga_62, RedFox_71, Renna12_72, Riovina_60, Riverdale_61, Ronaldo_147, Rozby_60, Ryan_70, Sapo_61, Savage2526_61, Schmidt_58, Scuttle_61, Sergei_60, Shagrat_110, Splinter_64, Supakev_60, Suppi_62, TZGordon_65, Tarzan_63, TattModd_61, Temper16_60, TinaLin_63, Trine_65, Typha_129, Upyo_69, Urla_62, Vallejo_62, Vendetta_64, Volt_150, Vulture_60, Wawa_62, Wayne_64, Widow_62, WonderBoy_59, Zaheer_69, Zorro_62,

Summary by start number:

Start 27:

- Found in 4 of 226 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Melons_73 (AS2),

Start 33:

- Found in 2 of 226 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lunar_73 (AS2),

Start 42:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maja_56 (FO),

Start 45:

- Found in 6 of 226 (2.7%) of genes in pham
- Manual Annotations of this start: 6 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia_71 (AS2), Coral_72 (AS2), Cote_75 (AS2), Daob_71 (AS2), Kepler_75 (AS2), Polka_71 (AS2),

Start 50:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey_63 (CD),

Start 59:

- Found in 3 of 226 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Elesar_62 (FF), Popper_70 (FF),

Start 61:

- Found in 18 of 226 (8.0%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 11.1% of time when present
- Phage (with cluster) where this start called: EmiRose_46 (singleton), Loviatar_114 (EB),

Start 64:

- Found in 9 of 226 (4.0%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 22.2% of time when present
- Phage (with cluster) where this start called: HunterDalle_60 (AK), Vulture_60 (AK),

Start 65:

- Found in 2 of 226 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav_68 (CD), Mahdia_60 (CD),

Start 67:

- Found in 2 of 226 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 205

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Trine_65 (CD),

Start 68:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo_69 (CD),

Start 71:

- Found in 3 of 226 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Puppies_62 (CD), Widow_62 (CD),

Start 72:

- Found in 3 of 226 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Kuleana_76 (AS2),

Start 73:

- Found in 4 of 226 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper_136 (Y), Cracklewink_136 (Y), Hilltopfarm_134 (Y), Typha_129 (Y),

Start 78:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_60 (DA),

Start 80:

- Found in 4 of 226 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 205
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Anatole_55 (BV), B3_57 (BV), E1_55 (BV),

Start 82:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nandita_68 (FF),

Start 84:

- Found in 14 of 226 (6.2%) of genes in pham
- Manual Annotations of this start: 4 of 205
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Cole_64 (FF), Gusanita_70 (FF), Ryan_70 (FF), Zaheer_69 (FF),

Start 85:

- Found in 2 of 226 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Dardanus_58 (CU3),

Start 86:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Catfish_64 (CU5),

Start 88:

- Found in 10 of 226 (4.4%) of genes in pham
- Manual Annotations of this start: 8 of 205
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Banquo_63 (CU1), DinoDaryn_64 (CU1), Huff_64 (CU1), Schmidt_58 (CU4), Splinter_64 (CU1), TZGordon_65 (CU1), TinaLin_63 (CU1), Vendetta_64 (CU1),

Start 89:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Renna12_72 (AS3),

Start 91:

- Found in 10 of 226 (4.4%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Basilisk_66 (AS1), Juno112_70 (AS3), KHumphrey_69 (AS3), PhluffyCoco_69 (AS3), RedFox_71 (AS3),

Start 92:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sapo_61 (DA),

Start 93:

- Found in 11 of 226 (4.9%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 18.2% of time when present
- Phage (with cluster) where this start called: CallinAllBarbz_64 (FP), Khuang_70 (UNK),

Start 94:

- Found in 6 of 226 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aoka_54 (FO), Huntingdon_61 (AK), JanetJ_56 (FO),

Start 95:

- Found in 3 of 226 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: ArV2_68 (singleton),

Start 96:

- Found in 1 of 226 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_110 (CF),

Start 97:

- Found in 3 of 226 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 205
- Called 66.7% of time when present
- Phage (with cluster) where this start called: DonkeyMan_59 (DY), Tarzan_63 (DY),

Start 98:

- Found in 48 of 226 (21.2%) of genes in pham
- Manual Annotations of this start: 14 of 205
- Called 29.2% of time when present
- Phage (with cluster) where this start called: Bennie_63 (AK), Christian_61 (AK), Dino_62 (AK), DrRobert_59 (AK), Fluke_62 (AK), Glenn_64 (AK), Leona_68 (AS3), Lucy_60 (AK), MeganNoll_63 (AK), MrGloopy_62 (AK), PitaDog_61 (AK), RAP15_63 (AK), Scuttle_61 (AK), Vallejo_62 (AK),

Start 99:

- Found in 10 of 226 (4.4%) of genes in pham
- Manual Annotations of this start: 3 of 205
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Canowicakte_62 (AK), Min1_34 (singleton), PartyCup_66 (AK), Suppi_62 (AK), Wayne_64 (AK),

Start 100:

- Found in 2 of 226 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BFK20_ORF55 (singleton),

Start 101:

- Found in 75 of 226 (33.2%) of genes in pham
- Manual Annotations of this start: 67 of 205
- Called 97.3% of time when present
- Phage (with cluster) where this start called: Abidatro_66 (AS1), Abigail_70 (EB), Albedo_70 (EB), Albright_69 (EB), AnnaLie_70 (EB), Armstrong_70 (EB), Arroyo_71 (EB), AvGardian_70 (EB), Avocadoman_69 (EB), BAjuniper_68 (EB), BabyDaisy_71 (EB), BabyYoda_68 (EB), Bachaco_67 (EB), BelmontSKP_70 (EB), Bernstein_70 (EB), Brahms_70 (EB), Brynnie_64 (AS1), BubbaBear_68 (EB), Burritobowl_72 (EB), Cashington_69 (EB), Celaena_66 (EB), Chickaboom_70 (AS1), Clayda5_72 (EB), Coltrane_70 (EB), CroZenni_71 (EB), DickRichards_68 (EB), Didgeridoo_75 (EB), DirtyBubble_69 (EB), Dismas_67 (EB), Doobus_68 (EB), Eden_72 (EB), Eesa_65

(AS1), Elva_73 (EB), Eula_69 (EB), Finalfrontier_69 (EB), FlameThrower_65 (EB), Franklin22_74 (EB), Gack_72 (EB), Galaxy_65 (AS1), Icarian_74 (EB), IndyLu_71 (EB), Jamun_63 (AS1), Johnathan_70 (EB), Jovita_68 (EB), Katzastrophic_67 (EB), Kenzers_69 (EB), Kieran_65 (EB), Lahqtemish_69 (EB), LimaBean_68 (EB), LittleTokyo_73 (AS2), Lynlen_71 (EB), Nicky22_69 (EB), Orcanus_65 (AS1), Phisb_74 (EB), QMacho_72 (EB), Quenya_69 (EB), Rollins_70 (EB), Rona_66 (EB), Ruchi_64 (AS1), SanaSana_70 (EB), SansAfet_72 (EB), SarBear_72 (EB), Sharkboy_68 (EB), Skylord_70 (EB), Slay_70 (EB), Sleepyhead_67 (singleton), Stoor_69 (EB), Stromboli_68 (EB), Swervy_70 (EB), TaylorSipht_65 (AS1), TukTuk_70 (EB), Vitas_71 (EB), Vulpecula_64 (AS1),

Start 102:

- Found in 1 of 226 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buldak_70 (EB),

Start 104:

- Found in 14 of 226 (6.2%) of genes in pham
- Manual Annotations of this start: 6 of 205
- Called 42.9% of time when present
- Phage (with cluster) where this start called: AppleCider_61 (AK), Fryberger_144 (DP), Guey18_149 (DP), Keelan_144 (DP), Ronaldo_147 (DP), Volt_150 (DP),

Start 106:

- Found in 84 of 226 (37.2%) of genes in pham
- Manual Annotations of this start: 60 of 205
- Called 73.8% of time when present
- Phage (with cluster) where this start called: Albanese_61 (AK), Aledel_60 (AK), Beethoven_63 (AK), BigMack_61 (AK), Bodacious_61 (AK), BrotherBLo_62 (AK), CallieOMalley_62 (AK), Carpal_61 (AK), ChewChew_61 (AK), Cholula_62 (AK), Chridison_57 (AK), CristinaYang_61 (AK), Daiboju_60 (AK), DreamTeam_61 (AK), EstebanJulior_60 (AK), Eunoia_62 (AK), Gisselle_61 (AK), GreenHearts_62 (AK), Greenhouse_61 (AK), HeadNerd_62 (AK), Herb_60 (AK), Huckleberry_62 (AK), Immaculata_62 (AK), Joann_63 (AK), Jumboset_62 (AK), Kalizoi_63 (AK), KingBob_60 (AK), Kittykat_65 (AK), Korra_62 (AK), Lakshmi_61 (AK), Lasagna_59 (AK), Lennox_61 (AK), LilStuart_60 (AK), Litotes_62 (AK), Makoto_60 (AK), MamaPearl_60 (AK), Maria1952_59 (AK), Misaeng_61 (AK), Moki_62 (AK), Nancia_61 (AK), Nubia_61 (AK), OMalley_60 (AK), OurGirlNessie_59 (AK), Oxynfrius_62 (AK), PinkFriday_62 (AK), Potatoes_62 (AK), Preamble_64 (AK), Pterodactyl_61 (AK), Pumancara_61 (AK), RcigaStruga_62 (AK), Rivovina_60 (AK), Riverdale_61 (AK), Rozby_60 (AK), Savage2526_61 (AK), Sergei_60 (AK), Supakev_60 (AK), TattModd_61 (AK), Temper16_60 (AK), Urla_62 (AK), Wawa_62 (AK), WonderBoy_59 (AK), Zorro_62 (AK),

Start 112:

- Found in 16 of 226 (7.1%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: AustinPowers_62 (AK),

Start 115:

- Found in 1 of 226 (0.4%) of genes in pham

- Manual Annotations of this start: 1 of 205
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ghobes_59 (DA),

Summary by clusters:

There are 21 clusters represented in this pham: AS3, AS2, AS1, UNK, DA, CU1, AK, DY, CU5, FP, EB, BV, CU4, FF, CF, Y, CU3, singleton, CD, DP, FO,

Info for manual annotations of cluster AK:

- Start number 64 was manually annotated 2 times for cluster AK.
- Start number 94 was manually annotated 1 time for cluster AK.
- Start number 98 was manually annotated 13 times for cluster AK.
- Start number 99 was manually annotated 3 times for cluster AK.
- Start number 104 was manually annotated 1 time for cluster AK.
- Start number 106 was manually annotated 60 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 91 was manually annotated 1 time for cluster AS1.
- Start number 101 was manually annotated 9 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 27 was manually annotated 1 time for cluster AS2.
- Start number 33 was manually annotated 1 time for cluster AS2.
- Start number 45 was manually annotated 6 times for cluster AS2.
- Start number 72 was manually annotated 1 time for cluster AS2.
- Start number 101 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 89 was manually annotated 1 time for cluster AS3.
- Start number 91 was manually annotated 1 time for cluster AS3.
- Start number 98 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster BV:

- Start number 80 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster CD:

- Start number 50 was manually annotated 1 time for cluster CD.
- Start number 65 was manually annotated 2 times for cluster CD.
- Start number 67 was manually annotated 1 time for cluster CD.
- Start number 68 was manually annotated 1 time for cluster CD.
- Start number 71 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster CF:

- Start number 96 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster CU1:

- Start number 88 was manually annotated 7 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 85 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 88 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 86 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DA:

- Start number 78 was manually annotated 1 time for cluster DA.
- Start number 92 was manually annotated 1 time for cluster DA.
- Start number 115 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DP:

- Start number 104 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster DY:

- Start number 97 was manually annotated 1 time for cluster DY.

Info for manual annotations of cluster EB:

- Start number 101 was manually annotated 56 times for cluster EB.

Info for manual annotations of cluster FF:

- Start number 59 was manually annotated 2 times for cluster FF.
- Start number 82 was manually annotated 1 time for cluster FF.
- Start number 84 was manually annotated 4 times for cluster FF.

Info for manual annotations of cluster FO:

- Start number 42 was manually annotated 1 time for cluster FO.
- Start number 94 was manually annotated 1 time for cluster FO.

Info for manual annotations of cluster FP:

- Start number 93 was manually annotated 1 time for cluster FP.

Info for manual annotations of cluster Y:

- Start number 73 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Abidatro_66 Start: 38766, Stop: 39044, Start Num: 101

Candidate Starts for Abidatro_66:

(35, 38640), (Start: 101 @38766 has 67 MA's),

Gene: Abigail_70 Start: 40540, Stop: 40815, Start Num: 101

Candidate Starts for Abigail_70:

(Start: 101 @40540 has 67 MA's),

Gene: Albanese_61 Start: 43774, Stop: 44034, Start Num: 106

Candidate Starts for Albanese_61:

(Start: 106 @43774 has 60 MA's), (108, 43780), (118, 43831), (119, 43834), (144, 43978),

Gene: Albedo_70 Start: 41350, Stop: 41625, Start Num: 101

Candidate Starts for Albedo_70:

(Start: 101 @41350 has 67 MA's), (140, 41536),

Gene: Albright_69 Start: 40420, Stop: 40695, Start Num: 101

Candidate Starts for Albright_69:

(Start: 101 @40420 has 67 MA's),

Gene: Aledel_60 Start: 43400, Stop: 43660, Start Num: 106

Candidate Starts for Aledel_60:

(Start: 64 @43331 has 2 MA's), (76, 43352), (Start: 106 @43400 has 60 MA's), (112, 43421), (121, 43472),

Gene: Amelia_71 Start: 37701, Stop: 38054, Start Num: 45

Candidate Starts for Amelia_71:

(Start: 45 @37701 has 6 MA's), (Start: 93 @37767 has 1 MA's),

Gene: Anatole_55 Start: 34869, Stop: 35189, Start Num: 80

Candidate Starts for Anatole_55:

(1, 34596), (2, 34635), (3, 34644), (5, 34659), (17, 34725), (19, 34728), (Start: 27 @34752 has 1 MA's), (30, 34770), (41, 34800), (Start: 80 @34869 has 3 MA's), (Start: 99 @34899 has 3 MA's), (117, 34974), (153, 35172),

Gene: AnnaLie_70 Start: 41202, Stop: 41477, Start Num: 101

Candidate Starts for AnnaLie_70:

(Start: 101 @41202 has 67 MA's), (140, 41388),

Gene: Aoka_54 Start: 36392, Stop: 36673, Start Num: 94

Candidate Starts for Aoka_54:

(57, 36335), (Start: 94 @36392 has 2 MA's),

Gene: AppleCider_61 Start: 43353, Stop: 43619, Start Num: 104

Candidate Starts for AppleCider_61:

(Start: 104 @43353 has 6 MA's), (Start: 106 @43359 has 60 MA's),

Gene: ArV2_68 Start: 37011, Stop: 37319, Start Num: 95

Candidate Starts for ArV2_68:

(95, 37011), (154, 37284),

Gene: Archimedes_60 Start: 44555, Stop: 44878, Start Num: 78

Candidate Starts for Archimedes_60:

(Start: 78 @44555 has 1 MA's), (95, 44582), (100, 44588), (119, 44672), (120, 44681), (149, 44852),

Gene: Armstrong_70 Start: 39580, Stop: 39855, Start Num: 101

Candidate Starts for Armstrong_70:

(13, 39382), (16, 39397), (26, 39424), (34, 39457), (51, 39505), (Start: 61 @39520 has 1 MA's), (83, 39553), (Start: 101 @39580 has 67 MA's),

Gene: Arroyo_71 Start: 41666, Stop: 41941, Start Num: 101

Candidate Starts for Arroyo_71:

(Start: 101 @41666 has 67 MA's), (140, 41852),

Gene: AustinPowers_62 Start: 43443, Stop: 43682, Start Num: 112

Candidate Starts for AustinPowers_62:

(Start: 64 @43353 has 2 MA's), (76, 43374), (Start: 106 @43422 has 60 MA's), (112, 43443), (121, 43494),

Gene: AvGardian_70 Start: 41184, Stop: 41459, Start Num: 101
Candidate Starts for AvGardian_70:
(Start: 101 @41184 has 67 MA's), (133, 41334), (140, 41370),

Gene: Avocadoman_69 Start: 40737, Stop: 41012, Start Num: 101
Candidate Starts for Avocadoman_69:
(Start: 101 @40737 has 67 MA's),

Gene: B3_57 Start: 35532, Stop: 35852, Start Num: 80
Candidate Starts for B3_57:
(1, 35259), (2, 35298), (3, 35307), (5, 35322), (17, 35388), (19, 35391), (Start: 27 @35415 has 1 MA's), (30, 35433), (41, 35463), (Start: 80 @35532 has 3 MA's), (Start: 99 @35562 has 3 MA's), (117, 35637), (153, 35835),

Gene: BAjuniper_68 Start: 41633, Stop: 41908, Start Num: 101
Candidate Starts for BAjuniper_68:
(40, 41528), (51, 41558), (Start: 61 @41573 has 1 MA's), (83, 41606), (Start: 101 @41633 has 67 MA's), (112, 41666), (140, 41819),

Gene: BFK20_ORF55 Start: 42590, Stop: 42880, Start Num: 100
Candidate Starts for BFK20_ORF55:
(75, 42557), (87, 42575), (100, 42590), (109, 42617), (119, 42674), (134, 42761), (146, 42845),

Gene: BabyDaisy_71 Start: 41763, Stop: 42038, Start Num: 101
Candidate Starts for BabyDaisy_71:
(43, 41664), (51, 41688), (Start: 61 @41703 has 1 MA's), (83, 41736), (90, 41751), (Start: 101 @41763 has 67 MA's),

Gene: BabyYoda_68 Start: 41093, Stop: 41368, Start Num: 101
Candidate Starts for BabyYoda_68:
(Start: 101 @41093 has 67 MA's), (112, 41126), (140, 41279), (141, 41282),

Gene: Bachaco_67 Start: 42043, Stop: 42318, Start Num: 101
Candidate Starts for Bachaco_67:
(20, 41878), (24, 41887), (25, 41890), (39, 41938), (51, 41968), (Start: 61 @41983 has 1 MA's), (83, 42016), (Start: 101 @42043 has 67 MA's), (140, 42229), (152, 42301),

Gene: Banquo_63 Start: 39126, Stop: 39422, Start Num: 88
Candidate Starts for Banquo_63:
(62, 39084), (Start: 88 @39126 has 8 MA's), (110, 39168), (145, 39384),

Gene: Basilisk_66 Start: 38281, Stop: 38571, Start Num: 91
Candidate Starts for Basilisk_66:
(37, 38188), (53, 38218), (Start: 91 @38281 has 2 MA's), (Start: 101 @38293 has 67 MA's),

Gene: Beethoven_63 Start: 43598, Stop: 43858, Start Num: 106
Candidate Starts for Beethoven_63:
(Start: 98 @43580 has 14 MA's), (Start: 106 @43598 has 60 MA's), (111, 43616), (121, 43670),

Gene: BelmontSKP_70 Start: 41202, Stop: 41477, Start Num: 101

Candidate Starts for BelmontSKP_70:
(Start: 101 @41202 has 67 MA's), (140, 41388),

Gene: Bennie_63 Start: 42720, Stop: 42998, Start Num: 98
Candidate Starts for Bennie_63:
(Start: 98 @42720 has 14 MA's), (Start: 106 @42738 has 60 MA's), (111, 42756), (121, 42810), (146, 42963),

Gene: Bernstein_70 Start: 39578, Stop: 39853, Start Num: 101
Candidate Starts for Bernstein_70:
(13, 39380), (16, 39395), (26, 39422), (34, 39455), (51, 39503), (Start: 61 @39518 has 1 MA's), (83, 39551), (Start: 101 @39578 has 67 MA's),

Gene: BigMack_61 Start: 43021, Stop: 43281, Start Num: 106
Candidate Starts for BigMack_61:
(Start: 98 @43003 has 14 MA's), (Start: 106 @43021 has 60 MA's), (111, 43039), (141, 43198), (146, 43246),

Gene: Bipper_136 Start: 77103, Stop: 77429, Start Num: 73
Candidate Starts for Bipper_136:
(Start: 73 @77103 has 4 MA's), (116, 77217), (119, 77229), (132, 77304), (143, 77361), (144, 77373),

Gene: Bodacious_61 Start: 42903, Stop: 43163, Start Num: 106
Candidate Starts for Bodacious_61:
(Start: 98 @42885 has 14 MA's), (Start: 106 @42903 has 60 MA's), (111, 42921), (141, 43080), (149, 43137), (151, 43143),

Gene: Brahms_70 Start: 39480, Stop: 39755, Start Num: 101
Candidate Starts for Brahms_70:
(13, 39282), (16, 39297), (26, 39324), (34, 39357), (51, 39405), (Start: 61 @39420 has 1 MA's), (83, 39453), (Start: 101 @39480 has 67 MA's),

Gene: BrotherBLo_62 Start: 43314, Stop: 43574, Start Num: 106
Candidate Starts for BrotherBLo_62:
(Start: 98 @43296 has 14 MA's), (Start: 106 @43314 has 60 MA's), (111, 43332), (121, 43386),

Gene: Brynnie_64 Start: 38238, Stop: 38516, Start Num: 101
Candidate Starts for Brynnie_64:
(Start: 91 @38226 has 2 MA's), (Start: 101 @38238 has 67 MA's),

Gene: BubbaBear_68 Start: 41351, Stop: 41626, Start Num: 101
Candidate Starts for BubbaBear_68:
(Start: 101 @41351 has 67 MA's),

Gene: Buldak_70 Start: 39158, Stop: 39433, Start Num: 102
Candidate Starts for Buldak_70:
(102, 39158), (140, 39344),

Gene: Burritobowl_72 Start: 40954, Stop: 41229, Start Num: 101
Candidate Starts for Burritobowl_72:
(Start: 101 @40954 has 67 MA's),

Gene: CallieOMalley_62 Start: 43522, Stop: 43782, Start Num: 106

Candidate Starts for CallieOMalley_62:

(Start: 84 @43489 has 4 MA's), (Start: 99 @43510 has 3 MA's), (103, 43516), (Start: 106 @43522 has 60 MA's),

Gene: CallinAllBarbz_64 Start: 40753, Stop: 41040, Start Num: 93

Candidate Starts for CallinAllBarbz_64:

(Start: 93 @40753 has 1 MA's),

Gene: Canowicakte_62 Start: 43562, Stop: 43834, Start Num: 99

Candidate Starts for Canowicakte_62:

(Start: 84 @43541 has 4 MA's), (Start: 99 @43562 has 3 MA's), (103, 43568), (Start: 106 @43574 has 60 MA's),

Gene: Carpal_61 Start: 43369, Stop: 43629, Start Num: 106

Candidate Starts for Carpal_61:

(Start: 98 @43351 has 14 MA's), (Start: 106 @43369 has 60 MA's), (111, 43387), (121, 43441),

Gene: Cashington_69 Start: 41137, Stop: 41412, Start Num: 101

Candidate Starts for Cashington_69:

(52, 41062), (63, 41077), (81, 41107), (Start: 84 @41110 has 4 MA's), (Start: 101 @41137 has 67 MA's), (140, 41323),

Gene: Catfish_64 Start: 41148, Stop: 41444, Start Num: 86

Candidate Starts for Catfish_64:

(9, 40959), (12, 40968), (57, 41106), (Start: 86 @41148 has 1 MA's), (117, 41235), (119, 41244), (132, 41319),

Gene: Celaena_66 Start: 41809, Stop: 42084, Start Num: 101

Candidate Starts for Celaena_66:

(20, 41641), (24, 41650), (25, 41653), (39, 41701), (51, 41731), (Start: 101 @41809 has 67 MA's), (140, 41995), (152, 42067),

Gene: ChewChew_61 Start: 43103, Stop: 43363, Start Num: 106

Candidate Starts for ChewChew_61:

(Start: 98 @43085 has 14 MA's), (Start: 106 @43103 has 60 MA's), (111, 43121), (122, 43178), (141, 43280), (149, 43337), (151, 43343),

Gene: Chickaboom_70 Start: 38402, Stop: 38680, Start Num: 101

Candidate Starts for Chickaboom_70:

(Start: 91 @38390 has 2 MA's), (Start: 101 @38402 has 67 MA's),

Gene: Cholula_62 Start: 43324, Stop: 43584, Start Num: 106

Candidate Starts for Cholula_62:

(Start: 98 @43306 has 14 MA's), (Start: 106 @43324 has 60 MA's), (111, 43342), (121, 43396),

Gene: Chridison_57 Start: 42676, Stop: 42936, Start Num: 106

Candidate Starts for Chridison_57:

(Start: 64 @42607 has 2 MA's), (76, 42628), (Start: 106 @42676 has 60 MA's), (111, 42694), (112, 42697), (121, 42748),

Gene: Christian_61 Start: 42727, Stop: 43005, Start Num: 98

Candidate Starts for Christian_61:

(Start: 98 @42727 has 14 MA's), (Start: 106 @42745 has 60 MA's), (111, 42763), (122, 42820), (141, 42922), (149, 42979), (151, 42985),

Gene: Clayda5_72 Start: 39546, Stop: 39821, Start Num: 101

Candidate Starts for Clayda5_72:

(13, 39348), (16, 39363), (26, 39390), (34, 39423), (51, 39471), (Start: 61 @39486 has 1 MA's), (83, 39519), (Start: 101 @39546 has 67 MA's),

Gene: Cole_64 Start: 41483, Stop: 41779, Start Num: 84

Candidate Starts for Cole_64:

(31, 41378), (Start: 84 @41483 has 4 MA's), (118, 41579), (130, 41639), (131, 41648),

Gene: Coltrane_70 Start: 39480, Stop: 39755, Start Num: 101

Candidate Starts for Coltrane_70:

(13, 39282), (16, 39297), (26, 39324), (34, 39357), (51, 39405), (Start: 61 @39420 has 1 MA's), (83, 39453), (Start: 101 @39480 has 67 MA's),

Gene: Coral_72 Start: 37893, Stop: 38243, Start Num: 45

Candidate Starts for Coral_72:

(Start: 45 @37893 has 6 MA's), (Start: 93 @37956 has 1 MA's),

Gene: Cote_75 Start: 38617, Stop: 38970, Start Num: 45

Candidate Starts for Cote_75:

(Start: 45 @38617 has 6 MA's), (Start: 93 @38683 has 1 MA's),

Gene: Cracklewink_136 Start: 76262, Stop: 76588, Start Num: 73

Candidate Starts for Cracklewink_136:

(7, 76067), (21, 76136), (Start: 73 @76262 has 4 MA's), (116, 76376), (119, 76388), (132, 76463), (143, 76520), (144, 76532),

Gene: CristinaYang_61 Start: 43030, Stop: 43290, Start Num: 106

Candidate Starts for CristinaYang_61:

(Start: 98 @43012 has 14 MA's), (Start: 106 @43030 has 60 MA's), (111, 43048), (141, 43207), (149, 43264), (151, 43270),

Gene: CroZenni_71 Start: 41008, Stop: 41283, Start Num: 101

Candidate Starts for CroZenni_71:

(Start: 101 @41008 has 67 MA's),

Gene: Daiboju_60 Start: 43614, Stop: 43871, Start Num: 106

Candidate Starts for Daiboju_60:

(Start: 104 @43605 has 6 MA's), (Start: 106 @43614 has 60 MA's), (111, 43632), (123, 43689), (136, 43767),

Gene: Daob_71 Start: 37543, Stop: 37893, Start Num: 45

Candidate Starts for Daob_71:

(Start: 45 @37543 has 6 MA's), (Start: 93 @37606 has 1 MA's),

Gene: Dardanus_58 Start: 37373, Stop: 37678, Start Num: 85

Candidate Starts for Dardanus_58:

(Start: 85 @37373 has 1 MA's), (Start: 97 @37391 has 1 MA's), (132, 37553),

Gene: DickRichards_68 Start: 40877, Stop: 41152, Start Num: 101

Candidate Starts for DickRichards_68:

(Start: 101 @40877 has 67 MA's),

Gene: Didgeridoo_75 Start: 42192, Stop: 42467, Start Num: 101

Candidate Starts for Didgeridoo_75:

(18, 42015), (32, 42066), (51, 42117), (Start: 61 @42132 has 1 MA's), (83, 42165), (90, 42180), (Start: 101 @42192 has 67 MA's),

Gene: Dino_62 Start: 43208, Stop: 43486, Start Num: 98

Candidate Starts for Dino_62:

(Start: 98 @43208 has 14 MA's), (Start: 106 @43226 has 60 MA's), (111, 43244), (121, 43298),

Gene: DinoDaryn_64 Start: 39227, Stop: 39523, Start Num: 88

Candidate Starts for DinoDaryn_64:

(62, 39185), (Start: 88 @39227 has 8 MA's), (135, 39416), (145, 39485),

Gene: DirtyBubble_69 Start: 41228, Stop: 41503, Start Num: 101

Candidate Starts for DirtyBubble_69:

(Start: 101 @41228 has 67 MA's), (140, 41414), (141, 41417),

Gene: Dismas_67 Start: 41256, Stop: 41531, Start Num: 101

Candidate Starts for Dismas_67:

(51, 41181), (Start: 101 @41256 has 67 MA's), (140, 41442), (144, 41472),

Gene: DonkeyMan_59 Start: 39766, Stop: 40047, Start Num: 97

Candidate Starts for DonkeyMan_59:

(49, 39688), (Start: 72 @39727 has 1 MA's), (74, 39730), (Start: 97 @39766 has 1 MA's), (113, 39820),

Gene: Doobus_68 Start: 40732, Stop: 41007, Start Num: 101

Candidate Starts for Doobus_68:

(Start: 101 @40732 has 67 MA's),

Gene: DrRobert_59 Start: 42246, Stop: 42524, Start Num: 98

Candidate Starts for DrRobert_59:

(Start: 98 @42246 has 14 MA's), (Start: 106 @42264 has 60 MA's), (111, 42282), (141, 42441), (149, 42498), (151, 42504),

Gene: DreamTeam_61 Start: 42752, Stop: 43012, Start Num: 106

Candidate Starts for DreamTeam_61:

(Start: 98 @42734 has 14 MA's), (Start: 106 @42752 has 60 MA's), (111, 42770), (122, 42827), (136, 42908),

Gene: E1_55 Start: 34794, Stop: 35114, Start Num: 80

Candidate Starts for E1_55:

(1, 34521), (2, 34560), (3, 34569), (5, 34584), (17, 34650), (19, 34653), (Start: 27 @34677 has 1 MA's), (30, 34695), (41, 34725), (Start: 80 @34794 has 3 MA's), (Start: 99 @34824 has 3 MA's), (117, 34899), (153, 35097),

Gene: Eden_72 Start: 40483, Stop: 40758, Start Num: 101

Candidate Starts for Eden_72:

(6, 40246), (10, 40276), (11, 40279), (15, 40294), (24, 40324), (25, 40327), (41, 40381), (62, 40423), (Start: 101 @40483 has 67 MA's), (140, 40669), (141, 40672), (152, 40741),

Gene: Eesa_65 Start: 39439, Stop: 39717, Start Num: 101

Candidate Starts for Eesa_65:

(Start: 101 @39439 has 67 MA's), (155, 39709),

Gene: Elesar_62 Start: 42571, Stop: 42897, Start Num: 59

Candidate Starts for Elesar_62:

(Start: 59 @42571 has 2 MA's), (Start: 84 @42601 has 4 MA's), (130, 42757), (149, 42871),

Gene: Elva_73 Start: 41675, Stop: 41950, Start Num: 101

Candidate Starts for Elva_73:

(Start: 101 @41675 has 67 MA's), (140, 41861), (141, 41864),

Gene: EmiRose_46 Start: 36892, Stop: 37236, Start Num: 61

Candidate Starts for EmiRose_46:

(Start: 61 @36892 has 1 MA's), (117, 37030), (125, 37060),

Gene: EstebanJulior_60 Start: 43409, Stop: 43669, Start Num: 106

Candidate Starts for EstebanJulior_60:

(Start: 106 @43409 has 60 MA's), (111, 43427), (122, 43484),

Gene: Eula_69 Start: 40916, Stop: 41191, Start Num: 101

Candidate Starts for Eula_69:

(Start: 101 @40916 has 67 MA's), (140, 41102),

Gene: Eunoia_62 Start: 44077, Stop: 44337, Start Num: 106

Candidate Starts for Eunoia_62:

(Start: 64 @44008 has 2 MA's), (76, 44029), (Start: 106 @44077 has 60 MA's), (112, 44098), (121, 44149),

Gene: Finalfrontier_69 Start: 41583, Stop: 41858, Start Num: 101

Candidate Starts for Finalfrontier_69:

(Start: 101 @41583 has 67 MA's), (140, 41769),

Gene: FlameThrower_65 Start: 40846, Stop: 41121, Start Num: 101

Candidate Starts for FlameThrower_65:

(51, 40768), (Start: 101 @40846 has 67 MA's), (140, 41032), (152, 41104),

Gene: Fluke_62 Start: 43458, Stop: 43736, Start Num: 98

Candidate Starts for Fluke_62:

(Start: 98 @43458 has 14 MA's), (Start: 106 @43476 has 60 MA's), (111, 43494), (121, 43548),

Gene: Franklin22_74 Start: 40216, Stop: 40491, Start Num: 101

Candidate Starts for Franklin22_74:

(62, 40156), (Start: 101 @40216 has 67 MA's), (140, 40402), (152, 40474),

Gene: Fryberger_144 Start: 66223, Stop: 66480, Start Num: 104

Candidate Starts for Fryberger_144:

(Start: 104 @66223 has 6 MA's), (125, 66319), (129, 66343), (132, 66373), (141, 66406),

Gene: Gack_72 Start: 40197, Stop: 40472, Start Num: 101

Candidate Starts for Gack_72:

(Start: 101 @40197 has 67 MA's), (140, 40383), (144, 40413),

Gene: Galaxy_65 Start: 37453, Stop: 37731, Start Num: 101

Candidate Starts for Galaxy_65:

(28, 37303), (35, 37327), (46, 37360), (Start: 101 @37453 has 67 MA's), (142, 37660),

Gene: Ghobes_59 Start: 45003, Stop: 45227, Start Num: 115

Candidate Starts for Ghobes_59:

(95, 44931), (Start: 115 @45003 has 1 MA's), (122, 45036), (155, 45219),

Gene: Gisselle_61 Start: 42752, Stop: 43012, Start Num: 106

Candidate Starts for Gisselle_61:

(Start: 98 @42734 has 14 MA's), (Start: 106 @42752 has 60 MA's), (111, 42770), (122, 42827), (136, 42908),

Gene: Glenn_64 Start: 44035, Stop: 44313, Start Num: 98

Candidate Starts for Glenn_64:

(Start: 98 @44035 has 14 MA's), (Start: 106 @44053 has 60 MA's), (111, 44071), (121, 44125),

Gene: GreenHearts_62 Start: 43911, Stop: 44171, Start Num: 106

Candidate Starts for GreenHearts_62:

(Start: 106 @43911 has 60 MA's), (108, 43917), (118, 43968), (119, 43971), (121, 43983), (144, 44115),

Gene: Greenhouse_61 Start: 43637, Stop: 43897, Start Num: 106

Candidate Starts for Greenhouse_61:

(Start: 106 @43637 has 60 MA's), (108, 43643), (118, 43694), (119, 43697), (144, 43841),

Gene: Guey18_149 Start: 67884, Stop: 68141, Start Num: 104

Candidate Starts for Guey18_149:

(Start: 104 @67884 has 6 MA's), (125, 67980), (129, 68004), (132, 68034), (141, 68067),

Gene: Gusanita_70 Start: 42391, Stop: 42687, Start Num: 84

Candidate Starts for Gusanita_70:

(Start: 84 @42391 has 4 MA's), (117, 42481), (149, 42661),

Gene: Gustav_68 Start: 43674, Stop: 44000, Start Num: 65

Candidate Starts for Gustav_68:

(47, 43644), (Start: 65 @43674 has 2 MA's), (116, 43788), (130, 43857), (132, 43875), (136, 43896), (138, 43905), (145, 43962),

Gene: HeadNerd_62 Start: 42632, Stop: 42892, Start Num: 106

Candidate Starts for HeadNerd_62:

(Start: 98 @42614 has 14 MA's), (Start: 106 @42632 has 60 MA's), (111, 42650), (122, 42707), (141, 42809), (146, 42857),

Gene: Herb_60 Start: 43613, Stop: 43870, Start Num: 106

Candidate Starts for Herb_60:

(Start: 104 @43604 has 6 MA's), (Start: 106 @43613 has 60 MA's), (111, 43631), (123, 43688), (136, 43766),

Gene: Hilltopfarm_134 Start: 76128, Stop: 76451, Start Num: 73

Candidate Starts for Hilltopfarm_134:

(Start: 73 @76128 has 4 MA's), (127, 76278), (139, 76359), (143, 76383), (144, 76395),

Gene: Huckleberry_62 Start: 42636, Stop: 42896, Start Num: 106
Candidate Starts for Huckleberry_62:
(Start: 98 @42618 has 14 MA's), (Start: 106 @42636 has 60 MA's), (111, 42654), (122, 42711), (141, 42813), (146, 42861),

Gene: Huffu_64 Start: 39227, Stop: 39523, Start Num: 88
Candidate Starts for Huffu_64:
(62, 39185), (Start: 88 @39227 has 8 MA's), (135, 39416), (145, 39485),

Gene: HunterDalle_60 Start: 42928, Stop: 43257, Start Num: 64
Candidate Starts for HunterDalle_60:
(Start: 64 @42928 has 2 MA's), (76, 42949), (Start: 106 @42997 has 60 MA's), (111, 43015), (112, 43018), (121, 43069),

Gene: Huntingdon_61 Start: 43533, Stop: 43811, Start Num: 94
Candidate Starts for Huntingdon_61:
(Start: 94 @43533 has 2 MA's), (Start: 106 @43551 has 60 MA's), (118, 43608), (119, 43611), (121, 43623), (144, 43755),

Gene: Icarian_74 Start: 41856, Stop: 42131, Start Num: 101
Candidate Starts for Icarian_74:
(Start: 101 @41856 has 67 MA's), (135, 42021), (140, 42042), (141, 42045),

Gene: Immaculata_62 Start: 43324, Stop: 43584, Start Num: 106
Candidate Starts for Immaculata_62:
(Start: 98 @43306 has 14 MA's), (Start: 106 @43324 has 60 MA's), (111, 43342), (121, 43396),

Gene: IndyLu_71 Start: 41495, Stop: 41770, Start Num: 101
Candidate Starts for IndyLu_71:
(18, 41318), (32, 41369), (51, 41420), (Start: 61 @41435 has 1 MA's), (79, 41462), (83, 41468), (90, 41483), (Start: 101 @41495 has 67 MA's),

Gene: Jamun_63 Start: 38467, Stop: 38745, Start Num: 101
Candidate Starts for Jamun_63:
(23, 38326), (66, 38413), (Start: 88 @38449 has 8 MA's), (Start: 91 @38455 has 2 MA's), (Start: 101 @38467 has 67 MA's),

Gene: JanetJ_56 Start: 36634, Stop: 36915, Start Num: 94
Candidate Starts for JanetJ_56:
(Start: 94 @36634 has 2 MA's),

Gene: Joann_63 Start: 43843, Stop: 44103, Start Num: 106
Candidate Starts for Joann_63:
(Start: 106 @43843 has 60 MA's), (118, 43900), (119, 43903), (144, 44047),

Gene: Johnathan_70 Start: 40508, Stop: 40783, Start Num: 101
Candidate Starts for Johnathan_70:
(Start: 101 @40508 has 67 MA's),

Gene: Jovita_68 Start: 40684, Stop: 40959, Start Num: 101
Candidate Starts for Jovita_68:
(Start: 101 @40684 has 67 MA's), (140, 40870),

Gene: Jumboset_62 Start: 43444, Stop: 43704, Start Num: 106

Candidate Starts for Jumboset_62:

(Start: 98 @43426 has 14 MA's), (Start: 106 @43444 has 60 MA's), (111, 43462), (119, 43504), (121, 43516),

Gene: Juno112_70 Start: 38104, Stop: 38391, Start Num: 91

Candidate Starts for Juno112_70:

(Start: 91 @38104 has 2 MA's), (131, 38257), (142, 38320),

Gene: KHumphrey_69 Start: 37978, Stop: 38265, Start Num: 91

Candidate Starts for KHumphrey_69:

(Start: 91 @37978 has 2 MA's), (131, 38131), (142, 38194),

Gene: Kalizoi_63 Start: 43182, Stop: 43442, Start Num: 106

Candidate Starts for Kalizoi_63:

(Start: 98 @43164 has 14 MA's), (Start: 106 @43182 has 60 MA's), (111, 43200), (121, 43254),

Gene: Katzastrophic_67 Start: 41352, Stop: 41627, Start Num: 101

Candidate Starts for Katzastrophic_67:

(20, 41187), (24, 41196), (25, 41199), (39, 41247), (51, 41277), (Start: 61 @41292 has 1 MA's), (83, 41325), (Start: 101 @41352 has 67 MA's), (140, 41538), (152, 41610),

Gene: Keelan_144 Start: 66560, Stop: 66817, Start Num: 104

Candidate Starts for Keelan_144:

(Start: 104 @66560 has 6 MA's), (125, 66656), (129, 66680), (132, 66710), (141, 66743), (150, 66803),

Gene: Kenzers_69 Start: 40798, Stop: 41073, Start Num: 101

Candidate Starts for Kenzers_69:

(Start: 101 @40798 has 67 MA's), (140, 40984),

Gene: Kepler_75 Start: 38025, Stop: 38375, Start Num: 45

Candidate Starts for Kepler_75:

(Start: 45 @38025 has 6 MA's), (Start: 93 @38088 has 1 MA's),

Gene: Khuang_70 Start: 39192, Stop: 39488, Start Num: 93

Candidate Starts for Khuang_70:

(Start: 93 @39192 has 1 MA's), (107, 39222), (132, 39360),

Gene: Kieran_65 Start: 41080, Stop: 41355, Start Num: 101

Candidate Starts for Kieran_65:

(51, 41005), (Start: 101 @41080 has 67 MA's), (140, 41266), (144, 41296),

Gene: KingBob_60 Start: 43614, Stop: 43871, Start Num: 106

Candidate Starts for KingBob_60:

(Start: 104 @43605 has 6 MA's), (Start: 106 @43614 has 60 MA's), (111, 43632), (123, 43689), (136, 43767),

Gene: Kittykat_65 Start: 43266, Stop: 43526, Start Num: 106

Candidate Starts for Kittykat_65:

(Start: 98 @43248 has 14 MA's), (Start: 106 @43266 has 60 MA's), (111, 43284), (122, 43341), (136, 43422), (141, 43443),

Gene: Korra_62 Start: 43371, Stop: 43631, Start Num: 106
Candidate Starts for Korra_62:
(Start: 98 @43353 has 14 MA's), (Start: 106 @43371 has 60 MA's), (111, 43389), (121, 43443),

Gene: Kuleana_76 Start: 38455, Stop: 38775, Start Num: 72
Candidate Starts for Kuleana_76:
(Start: 33 @38371 has 1 MA's), (Start: 72 @38455 has 1 MA's), (Start: 93 @38488 has 1 MA's),

Gene: Lahqtemish_69 Start: 41710, Stop: 41985, Start Num: 101
Candidate Starts for Lahqtemish_69:
(38, 41602), (51, 41635), (Start: 61 @41650 has 1 MA's), (79, 41677), (83, 41683), (90, 41698), (Start: 101 @41710 has 67 MA's),

Gene: Lakshmi_61 Start: 43678, Stop: 43938, Start Num: 106
Candidate Starts for Lakshmi_61:
(Start: 106 @43678 has 60 MA's), (108, 43684), (118, 43735), (119, 43738), (121, 43750), (144, 43882),

Gene: Lasagna_59 Start: 42266, Stop: 42526, Start Num: 106
Candidate Starts for Lasagna_59:
(Start: 98 @42248 has 14 MA's), (Start: 106 @42266 has 60 MA's), (111, 42284), (141, 42443), (149, 42500), (151, 42506),

Gene: Lennox_61 Start: 42751, Stop: 43011, Start Num: 106
Candidate Starts for Lennox_61:
(Start: 98 @42733 has 14 MA's), (Start: 106 @42751 has 60 MA's), (111, 42769), (122, 42826), (141, 42928), (149, 42985), (151, 42991),

Gene: Leona_68 Start: 38237, Stop: 38518, Start Num: 98
Candidate Starts for Leona_68:
(Start: 98 @38237 has 14 MA's), (131, 38384), (142, 38447),

Gene: LilStuart_60 Start: 42614, Stop: 42874, Start Num: 106
Candidate Starts for LilStuart_60:
(Start: 98 @42596 has 14 MA's), (Start: 106 @42614 has 60 MA's), (111, 42632), (141, 42791), (149, 42848), (151, 42854),

Gene: LimaBean_68 Start: 40790, Stop: 41065, Start Num: 101
Candidate Starts for LimaBean_68:
(52, 40715), (63, 40730), (81, 40760), (Start: 84 @40763 has 4 MA's), (Start: 101 @40790 has 67 MA's),

Gene: Litotes_62 Start: 43156, Stop: 43416, Start Num: 106
Candidate Starts for Litotes_62:
(Start: 84 @43123 has 4 MA's), (Start: 99 @43144 has 3 MA's), (103, 43150), (Start: 106 @43156 has 60 MA's),

Gene: LittleTokyo_73 Start: 38604, Stop: 38882, Start Num: 101
Candidate Starts for LittleTokyo_73:
(Start: 101 @38604 has 67 MA's), (140, 38796),

Gene: Loviatar_114 Start: 42044, Stop: 42379, Start Num: 61

Candidate Starts for Loviatar_114:

(51, 42029), (Start: 61 @42044 has 1 MA's), (83, 42077), (Start: 101 @42104 has 67 MA's), (112, 42137), (141, 42293),

Gene: Lucy_60 Start: 42591, Stop: 42869, Start Num: 98

Candidate Starts for Lucy_60:

(Start: 98 @42591 has 14 MA's), (Start: 106 @42609 has 60 MA's), (111, 42627), (141, 42786), (149, 42843), (151, 42849),

Gene: Lunar_73 Start: 37996, Stop: 38376, Start Num: 33

Candidate Starts for Lunar_73:

(Start: 33 @37996 has 1 MA's), (Start: 93 @38089 has 1 MA's),

Gene: Lynlen_71 Start: 40984, Stop: 41259, Start Num: 101

Candidate Starts for Lynlen_71:

(90, 40972), (Start: 101 @40984 has 67 MA's),

Gene: Mahdia_60 Start: 41790, Stop: 42113, Start Num: 65

Candidate Starts for Mahdia_60:

(Start: 65 @41790 has 2 MA's), (Start: 71 @41796 has 2 MA's), (130, 41970), (132, 41988), (145, 42075),

Gene: Maja_56 Start: 36343, Stop: 36714, Start Num: 42

Candidate Starts for Maja_56:

(Start: 42 @36343 has 1 MA's), (Start: 85 @36415 has 1 MA's), (Start: 94 @36433 has 2 MA's),

Gene: Makoto_60 Start: 42571, Stop: 42831, Start Num: 106

Candidate Starts for Makoto_60:

(Start: 98 @42553 has 14 MA's), (Start: 106 @42571 has 60 MA's), (111, 42589), (122, 42646), (141, 42748), (149, 42805), (151, 42811),

Gene: MamaPearl_60 Start: 43409, Stop: 43669, Start Num: 106

Candidate Starts for MamaPearl_60:

(Start: 106 @43409 has 60 MA's), (111, 43427), (122, 43484),

Gene: Maria1952_59 Start: 43613, Stop: 43870, Start Num: 106

Candidate Starts for Maria1952_59:

(Start: 104 @43604 has 6 MA's), (Start: 106 @43613 has 60 MA's), (111, 43631), (123, 43688), (136, 43766),

Gene: MeganNoll_63 Start: 43904, Stop: 44182, Start Num: 98

Candidate Starts for MeganNoll_63:

(Start: 98 @43904 has 14 MA's), (Start: 106 @43922 has 60 MA's), (111, 43940), (121, 43994),

Gene: Melons_73 Start: 37979, Stop: 38383, Start Num: 27

Candidate Starts for Melons_73:

(Start: 27 @37979 has 1 MA's), (Start: 93 @38096 has 1 MA's),

Gene: Min1_34 Start: 16506, Stop: 16799, Start Num: 99

Candidate Starts for Min1_34:

(56, 16446), (69, 16461), (70, 16464), (Start: 80 @16479 has 3 MA's), (Start: 88 @16491 has 8 MA's), (Start: 99 @16506 has 3 MA's), (127, 16617), (135, 16686), (153, 16782),

Gene: Misaeng_61 Start: 43477, Stop: 43737, Start Num: 106

Candidate Starts for Misaeng_61:

(Start: 106 @43477 has 60 MA's), (118, 43534), (119, 43537), (121, 43549), (144, 43681),

Gene: Moki_62 Start: 42825, Stop: 43085, Start Num: 106

Candidate Starts for Moki_62:

(Start: 98 @42807 has 14 MA's), (Start: 106 @42825 has 60 MA's), (111, 42843), (122, 42900), (141, 43002), (146, 43050),

Gene: Morrissey_63 Start: 43651, Stop: 44007, Start Num: 50

Candidate Starts for Morrissey_63:

(Start: 50 @43651 has 1 MA's), (58, 43666), (Start: 67 @43678 has 1 MA's), (87, 43702), (130, 43864), (145, 43969),

Gene: MrGloopy_62 Start: 43347, Stop: 43625, Start Num: 98

Candidate Starts for MrGloopy_62:

(Start: 98 @43347 has 14 MA's), (Start: 106 @43365 has 60 MA's), (111, 43383), (121, 43437),

Gene: Nancia_61 Start: 42902, Stop: 43162, Start Num: 106

Candidate Starts for Nancia_61:

(Start: 98 @42884 has 14 MA's), (Start: 106 @42902 has 60 MA's), (111, 42920), (141, 43079), (149, 43136), (151, 43142),

Gene: Nandita_68 Start: 42024, Stop: 42323, Start Num: 82

Candidate Starts for Nandita_68:

(31, 41931), (60, 42000), (Start: 82 @42024 has 1 MA's), (130, 42183), (131, 42192), (149, 42297),

Gene: Nicky22_69 Start: 41321, Stop: 41596, Start Num: 101

Candidate Starts for Nicky22_69:

(Start: 101 @41321 has 67 MA's), (140, 41507),

Gene: Nubia_61 Start: 43705, Stop: 43965, Start Num: 106

Candidate Starts for Nubia_61:

(Start: 94 @43687 has 2 MA's), (Start: 106 @43705 has 60 MA's), (118, 43762), (119, 43765), (144, 43909),

Gene: OMalley_60 Start: 43400, Stop: 43660, Start Num: 106

Candidate Starts for OMalley_60:

(Start: 64 @43331 has 2 MA's), (76, 43352), (Start: 106 @43400 has 60 MA's), (112, 43421), (121, 43472),

Gene: Orcanus_65 Start: 39051, Stop: 39329, Start Num: 101

Candidate Starts for Orcanus_65:

(Start: 101 @39051 has 67 MA's),

Gene: OurGirlNessie_59 Start: 42225, Stop: 42485, Start Num: 106

Candidate Starts for OurGirlNessie_59:

(Start: 98 @42207 has 14 MA's), (Start: 106 @42225 has 60 MA's), (111, 42243), (122, 42300), (141, 42402), (149, 42459), (151, 42465),

Gene: Oxynfrius_62 Start: 43823, Stop: 44083, Start Num: 106

Candidate Starts for Oxynfrius_62:

(Start: 106 @43823 has 60 MA's), (118, 43880), (119, 43883), (144, 44027),

Gene: PartyCup_66 Start: 43576, Stop: 43848, Start Num: 99
Candidate Starts for PartyCup_66:
(Start: 84 @43555 has 4 MA's), (Start: 99 @43576 has 3 MA's), (103, 43582), (Start: 106 @43588 has 60 MA's),

Gene: Phisb_74 Start: 41092, Stop: 41367, Start Num: 101
Candidate Starts for Phisb_74:
(Start: 101 @41092 has 67 MA's),

Gene: PhluffyCoco_69 Start: 38203, Stop: 38490, Start Num: 91
Candidate Starts for PhluffyCoco_69:
(Start: 91 @38203 has 2 MA's), (131, 38356), (142, 38419),

Gene: PinkFriday_62 Start: 42959, Stop: 43216, Start Num: 106
Candidate Starts for PinkFriday_62:
(Start: 104 @42950 has 6 MA's), (Start: 106 @42959 has 60 MA's), (123, 43034), (124, 43037), (136, 43112), (151, 43196),

Gene: PitaDog_61 Start: 42609, Stop: 42887, Start Num: 98
Candidate Starts for PitaDog_61:
(Start: 98 @42609 has 14 MA's), (Start: 106 @42627 has 60 MA's), (111, 42645), (122, 42702), (141, 42804), (149, 42861), (151, 42867),

Gene: Polka_71 Start: 37650, Stop: 38003, Start Num: 45
Candidate Starts for Polka_71:
(Start: 45 @37650 has 6 MA's), (Start: 93 @37716 has 1 MA's),

Gene: Popper_70 Start: 41441, Stop: 41767, Start Num: 59
Candidate Starts for Popper_70:
(31, 41375), (Start: 59 @41441 has 2 MA's), (Start: 84 @41471 has 4 MA's), (118, 41567), (130, 41627), (149, 41741), (151, 41747),

Gene: Potatoes_62 Start: 43324, Stop: 43584, Start Num: 106
Candidate Starts for Potatoes_62:
(Start: 98 @43306 has 14 MA's), (Start: 106 @43324 has 60 MA's), (111, 43342), (121, 43396),

Gene: Preamble_64 Start: 43037, Stop: 43297, Start Num: 106
Candidate Starts for Preamble_64:
(Start: 98 @43019 has 14 MA's), (Start: 106 @43037 has 60 MA's), (111, 43055), (122, 43112), (136, 43193), (141, 43214),

Gene: Pterodactyl_61 Start: 42938, Stop: 43198, Start Num: 106
Candidate Starts for Pterodactyl_61:
(Start: 98 @42920 has 14 MA's), (Start: 106 @42938 has 60 MA's), (111, 42956), (122, 43013), (141, 43115), (149, 43172), (151, 43178),

Gene: Pumancara_61 Start: 42494, Stop: 42751, Start Num: 106
Candidate Starts for Pumancara_61:
(Start: 104 @42485 has 6 MA's), (Start: 106 @42494 has 60 MA's), (123, 42569), (124, 42572), (136, 42647), (151, 42731),

Gene: Puppies_62 Start: 41790, Stop: 42113, Start Num: 71

Candidate Starts for Poppers_62:
(29, 41697), (36, 41718), (41, 41733), (44, 41739), (60, 41775), (Start: 71 @41790 has 2 MA's), (132, 41988),

Gene: QMacho_72 Start: 41222, Stop: 41497, Start Num: 101
Candidate Starts for QMacho_72:
(Start: 101 @41222 has 67 MA's),

Gene: Quenya_69 Start: 41516, Stop: 41791, Start Num: 101
Candidate Starts for Quenya_69:
(Start: 101 @41516 has 67 MA's), (112, 41549), (140, 41702), (152, 41774),

Gene: RAP15_63 Start: 43905, Stop: 44183, Start Num: 98
Candidate Starts for RAP15_63:
(Start: 98 @43905 has 14 MA's), (Start: 106 @43923 has 60 MA's), (111, 43941), (121, 43995),

Gene: RcigaStruga_62 Start: 43551, Stop: 43811, Start Num: 106
Candidate Starts for RcigaStruga_62:
(Start: 94 @43533 has 2 MA's), (Start: 106 @43551 has 60 MA's), (118, 43608), (119, 43611), (121, 43623), (144, 43755),

Gene: RedFox_71 Start: 38363, Stop: 38650, Start Num: 91
Candidate Starts for RedFox_71:
(Start: 91 @38363 has 2 MA's), (131, 38516), (142, 38579),

Gene: Renna12_72 Start: 38798, Stop: 39091, Start Num: 89
Candidate Starts for Renna12_72:
(77, 38777), (Start: 89 @38798 has 1 MA's), (131, 38957), (142, 39020),

Gene: Riovina_60 Start: 43400, Stop: 43660, Start Num: 106
Candidate Starts for Riovina_60:
(Start: 64 @43331 has 2 MA's), (76, 43352), (Start: 106 @43400 has 60 MA's), (112, 43421), (121, 43472),

Gene: Riverdale_61 Start: 43055, Stop: 43315, Start Num: 106
Candidate Starts for Riverdale_61:
(Start: 98 @43037 has 14 MA's), (Start: 106 @43055 has 60 MA's), (111, 43073), (121, 43127),

Gene: Rollins_70 Start: 39578, Stop: 39853, Start Num: 101
Candidate Starts for Rollins_70:
(13, 39380), (16, 39395), (26, 39422), (34, 39455), (51, 39503), (Start: 61 @39518 has 1 MA's), (83, 39551), (Start: 101 @39578 has 67 MA's),

Gene: Rona_66 Start: 41247, Stop: 41522, Start Num: 101
Candidate Starts for Rona_66:
(51, 41172), (Start: 101 @41247 has 67 MA's), (140, 41433), (144, 41463),

Gene: Ronaldo_147 Start: 67378, Stop: 67635, Start Num: 104
Candidate Starts for Ronaldo_147:
(Start: 104 @67378 has 6 MA's), (125, 67474), (129, 67498), (132, 67528), (141, 67561),

Gene: Rozby_60 Start: 42859, Stop: 43119, Start Num: 106
Candidate Starts for Rozby_60:

(Start: 98 @42841 has 14 MA's), (Start: 106 @42859 has 60 MA's), (111, 42877), (121, 42931),

Gene: Ruchi_64 Start: 38215, Stop: 38493, Start Num: 101

Candidate Starts for Ruchi_64:

(37, 38110), (53, 38140), (Start: 91 @38203 has 2 MA's), (Start: 101 @38215 has 67 MA's),

Gene: Ryan_70 Start: 42477, Stop: 42773, Start Num: 84

Candidate Starts for Ryan_70:

(Start: 59 @42438 has 2 MA's), (Start: 84 @42477 has 4 MA's), (130, 42633), (149, 42747),

Gene: SanaSana_70 Start: 41542, Stop: 41817, Start Num: 101

Candidate Starts for SanaSana_70:

(4, 41296), (8, 41311), (14, 41350), (48, 41458), (51, 41467), (Start: 61 @41482 has 1 MA's), (83, 41515), (Start: 101 @41542 has 67 MA's), (112, 41575), (140, 41728), (141, 41731),

Gene: SansAfet_72 Start: 41068, Stop: 41343, Start Num: 101

Candidate Starts for SansAfet_72:

(Start: 101 @41068 has 67 MA's), (140, 41254),

Gene: Sapo_61 Start: 45211, Stop: 45513, Start Num: 92

Candidate Starts for Sapo_61:

(Start: 92 @45211 has 1 MA's), (119, 45304), (128, 45337), (137, 45412), (155, 45505),

Gene: SarBear_72 Start: 41148, Stop: 41423, Start Num: 101

Candidate Starts for SarBear_72:

(Start: 101 @41148 has 67 MA's),

Gene: Savage2526_61 Start: 43082, Stop: 43342, Start Num: 106

Candidate Starts for Savage2526_61:

(Start: 98 @43064 has 14 MA's), (Start: 106 @43082 has 60 MA's), (111, 43100), (121, 43154),

Gene: Schmidt_58 Start: 36837, Stop: 37133, Start Num: 88

Candidate Starts for Schmidt_58:

(Start: 88 @36837 has 8 MA's), (132, 37008), (149, 37107),

Gene: Scuttle_61 Start: 43375, Stop: 43653, Start Num: 98

Candidate Starts for Scuttle_61:

(Start: 98 @43375 has 14 MA's), (Start: 106 @43393 has 60 MA's), (111, 43411), (121, 43465),

Gene: Sergei_60 Start: 43614, Stop: 43871, Start Num: 106

Candidate Starts for Sergei_60:

(Start: 104 @43605 has 6 MA's), (Start: 106 @43614 has 60 MA's), (111, 43632), (123, 43689), (136, 43767),

Gene: Shagrat_110 Start: 58151, Stop: 58423, Start Num: 96

Candidate Starts for Shagrat_110:

(Start: 96 @58151 has 1 MA's), (127, 58256), (131, 58295), (147, 58391), (148, 58394),

Gene: Sharkboy_68 Start: 41611, Stop: 41886, Start Num: 101

Candidate Starts for Sharkboy_68:

(51, 41536), (Start: 101 @41611 has 67 MA's), (112, 41644), (140, 41797), (144, 41827),

Gene: Skylord_70 Start: 39495, Stop: 39770, Start Num: 101

Candidate Starts for Skylord_70:

(13, 39297), (16, 39312), (26, 39339), (34, 39372), (51, 39420), (Start: 61 @39435 has 1 MA's), (83, 39468), (Start: 101 @39495 has 67 MA's),

Gene: Slay_70 Start: 41458, Stop: 41733, Start Num: 101

Candidate Starts for Slay_70:

(Start: 101 @41458 has 67 MA's), (140, 41644),

Gene: Sleepyhead_67 Start: 43516, Stop: 43788, Start Num: 101

Candidate Starts for Sleepyhead_67:

(Start: 101 @43516 has 67 MA's), (105, 43522),

Gene: Splinter_64 Start: 40315, Stop: 40611, Start Num: 88

Candidate Starts for Splinter_64:

(Start: 88 @40315 has 8 MA's), (135, 40504), (145, 40573),

Gene: Stoor_69 Start: 41350, Stop: 41625, Start Num: 101

Candidate Starts for Stoor_69:

(Start: 101 @41350 has 67 MA's), (140, 41536), (141, 41539),

Gene: Stromboli_68 Start: 41130, Stop: 41405, Start Num: 101

Candidate Starts for Stromboli_68:

(4, 40884), (8, 40899), (14, 40938), (48, 41046), (51, 41055), (Start: 61 @41070 has 1 MA's), (83, 41103), (Start: 101 @41130 has 67 MA's), (140, 41316), (141, 41319),

Gene: Supakev_60 Start: 43425, Stop: 43685, Start Num: 106

Candidate Starts for Supakev_60:

(Start: 64 @43356 has 2 MA's), (76, 43377), (Start: 106 @43425 has 60 MA's), (111, 43443), (112, 43446), (121, 43497),

Gene: Suppi_62 Start: 43562, Stop: 43834, Start Num: 99

Candidate Starts for Suppi_62:

(Start: 84 @43541 has 4 MA's), (Start: 99 @43562 has 3 MA's), (103, 43568), (Start: 106 @43574 has 60 MA's),

Gene: Swervy_70 Start: 41047, Stop: 41322, Start Num: 101

Candidate Starts for Swervy_70:

(Start: 101 @41047 has 67 MA's), (140, 41233),

Gene: TZGordon_65 Start: 39203, Stop: 39499, Start Num: 88

Candidate Starts for TZGordon_65:

(Start: 88 @39203 has 8 MA's), (135, 39392), (145, 39461),

Gene: Tarzan_63 Start: 39834, Stop: 40118, Start Num: 97

Candidate Starts for Tarzan_63:

(49, 39759), (Start: 72 @39795 has 1 MA's), (74, 39798), (Start: 97 @39834 has 1 MA's), (113, 39888),

Gene: TattModd_61 Start: 43209, Stop: 43469, Start Num: 106

Candidate Starts for TattModd_61:

(Start: 98 @43191 has 14 MA's), (Start: 106 @43209 has 60 MA's), (111, 43227), (121, 43281),

Gene: TaylorSipht_65 Start: 38681, Stop: 38959, Start Num: 101

Candidate Starts for TaylorSipt_65:
(Start: 101 @38681 has 67 MA's),

Gene: Temper16_60 Start: 43614, Stop: 43871, Start Num: 106
Candidate Starts for Temper16_60:
(Start: 104 @43605 has 6 MA's), (Start: 106 @43614 has 60 MA's), (111, 43632), (123, 43689), (136, 43767),

Gene: TinaLin_63 Start: 39046, Stop: 39342, Start Num: 88
Candidate Starts for TinaLin_63:
(62, 39004), (Start: 88 @39046 has 8 MA's), (110, 39088), (128, 39172), (145, 39304),

Gene: Trine_65 Start: 43058, Stop: 43372, Start Num: 67
Candidate Starts for Trine_65:
(Start: 67 @43058 has 1 MA's), (126, 43199),

Gene: TukTuk_70 Start: 41237, Stop: 41512, Start Num: 101
Candidate Starts for TukTuk_70:
(Start: 101 @41237 has 67 MA's), (140, 41423),

Gene: Typha_129 Start: 74982, Stop: 75305, Start Num: 73
Candidate Starts for Typha_129:
(Start: 73 @74982 has 4 MA's), (127, 75132), (139, 75213), (143, 75237), (144, 75249),

Gene: Upyo_69 Start: 44979, Stop: 45296, Start Num: 68
Candidate Starts for Upyo_69:
(Start: 68 @44979 has 1 MA's), (114, 45075), (130, 45153), (132, 45171),

Gene: Urla_62 Start: 43603, Stop: 43863, Start Num: 106
Candidate Starts for Urla_62:
(Start: 106 @43603 has 60 MA's), (111, 43621), (122, 43678),

Gene: Vallejo_62 Start: 43253, Stop: 43531, Start Num: 98
Candidate Starts for Vallejo_62:
(Start: 98 @43253 has 14 MA's), (Start: 106 @43271 has 60 MA's), (111, 43289), (121, 43343),

Gene: Vendetta_64 Start: 40315, Stop: 40611, Start Num: 88
Candidate Starts for Vendetta_64:
(Start: 88 @40315 has 8 MA's), (135, 40504), (145, 40573),

Gene: Vitas_71 Start: 39646, Stop: 39921, Start Num: 101
Candidate Starts for Vitas_71:
(22, 39487), (55, 39580), (Start: 101 @39646 has 67 MA's), (112, 39679),

Gene: Volt_150 Start: 67542, Stop: 67799, Start Num: 104
Candidate Starts for Volt_150:
(Start: 104 @67542 has 6 MA's), (125, 67638), (129, 67662), (132, 67692), (141, 67725),

Gene: Vulpecula_64 Start: 37410, Stop: 37688, Start Num: 101
Candidate Starts for Vulpecula_64:
(Start: 91 @37398 has 2 MA's), (Start: 101 @37410 has 67 MA's),

Gene: Vulture_60 Start: 42928, Stop: 43257, Start Num: 64

Candidate Starts for Vulture_60:

(Start: 64 @42928 has 2 MA's), (76, 42949), (Start: 106 @42997 has 60 MA's), (111, 43015), (112, 43018), (121, 43069),

Gene: Wawa_62 Start: 43514, Stop: 43774, Start Num: 106

Candidate Starts for Wawa_62:

(Start: 98 @43496 has 14 MA's), (Start: 106 @43514 has 60 MA's), (111, 43532), (121, 43586),

Gene: Wayne_64 Start: 44019, Stop: 44291, Start Num: 99

Candidate Starts for Wayne_64:

(Start: 84 @43998 has 4 MA's), (Start: 99 @44019 has 3 MA's), (103, 44025), (Start: 106 @44031 has 60 MA's),

Gene: Widow_62 Start: 42336, Stop: 42659, Start Num: 71

Candidate Starts for Widow_62:

(29, 42243), (36, 42264), (41, 42279), (44, 42285), (54, 42312), (60, 42321), (Start: 71 @42336 has 2 MA's), (132, 42534),

Gene: WonderBoy_59 Start: 42399, Stop: 42659, Start Num: 106

Candidate Starts for WonderBoy_59:

(Start: 98 @42381 has 14 MA's), (Start: 106 @42399 has 60 MA's), (111, 42417), (122, 42474), (141, 42576), (149, 42633), (151, 42639),

Gene: Zaheer_69 Start: 42523, Stop: 42819, Start Num: 84

Candidate Starts for Zaheer_69:

(Start: 84 @42523 has 4 MA's), (118, 42619), (130, 42679), (135, 42715),

Gene: Zorro_62 Start: 43226, Stop: 43486, Start Num: 106

Candidate Starts for Zorro_62:

(Start: 98 @43208 has 14 MA's), (Start: 106 @43226 has 60 MA's), (111, 43244), (121, 43298),