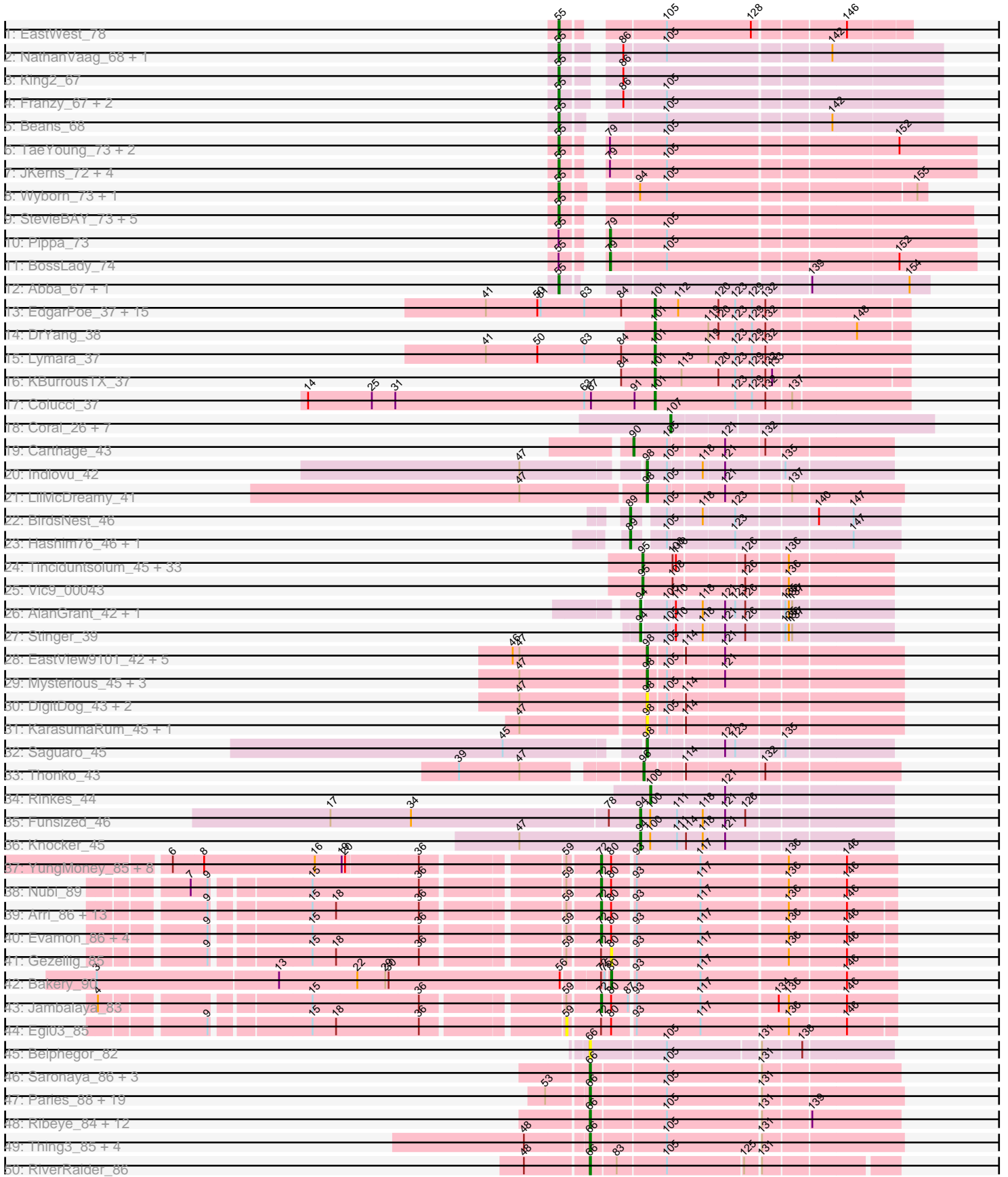
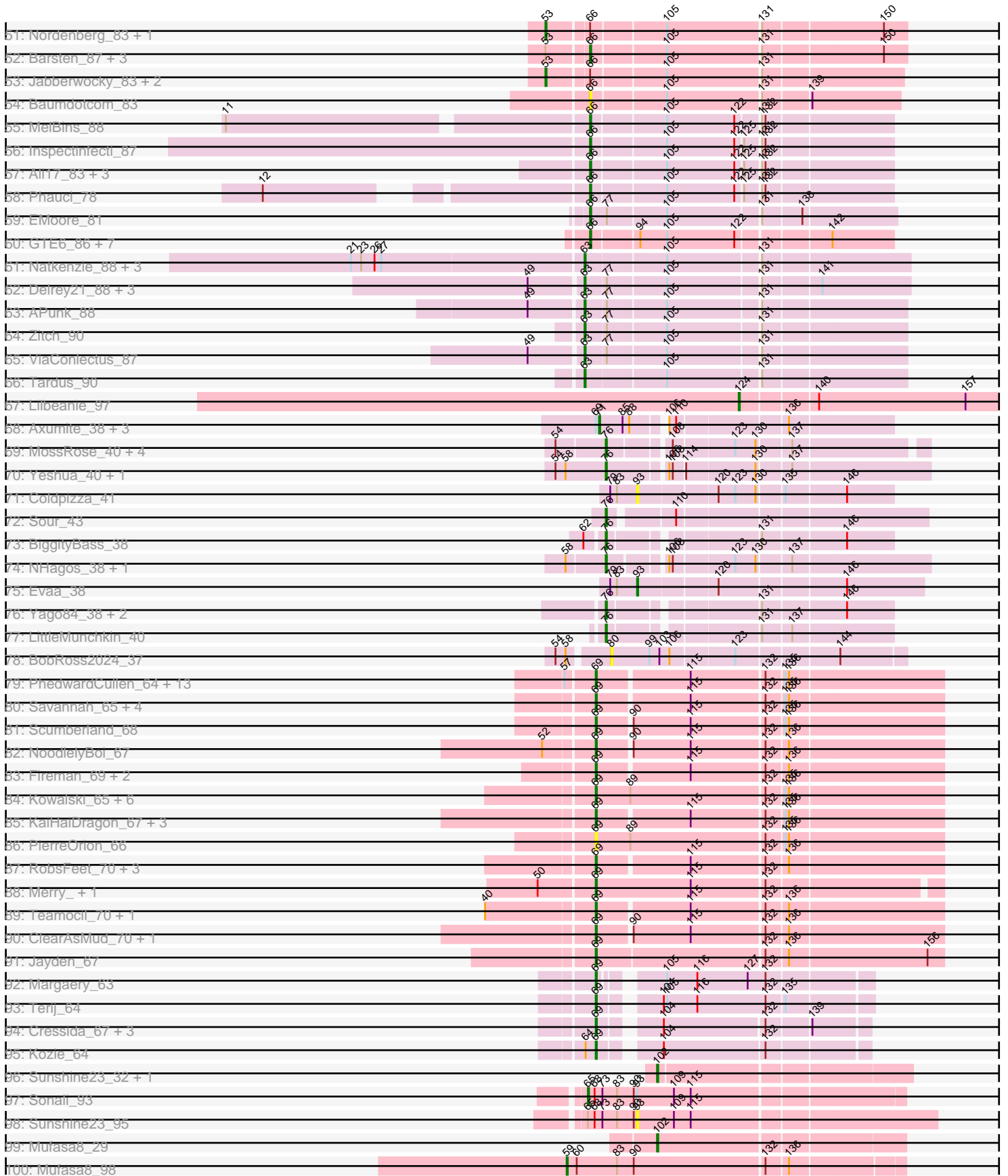


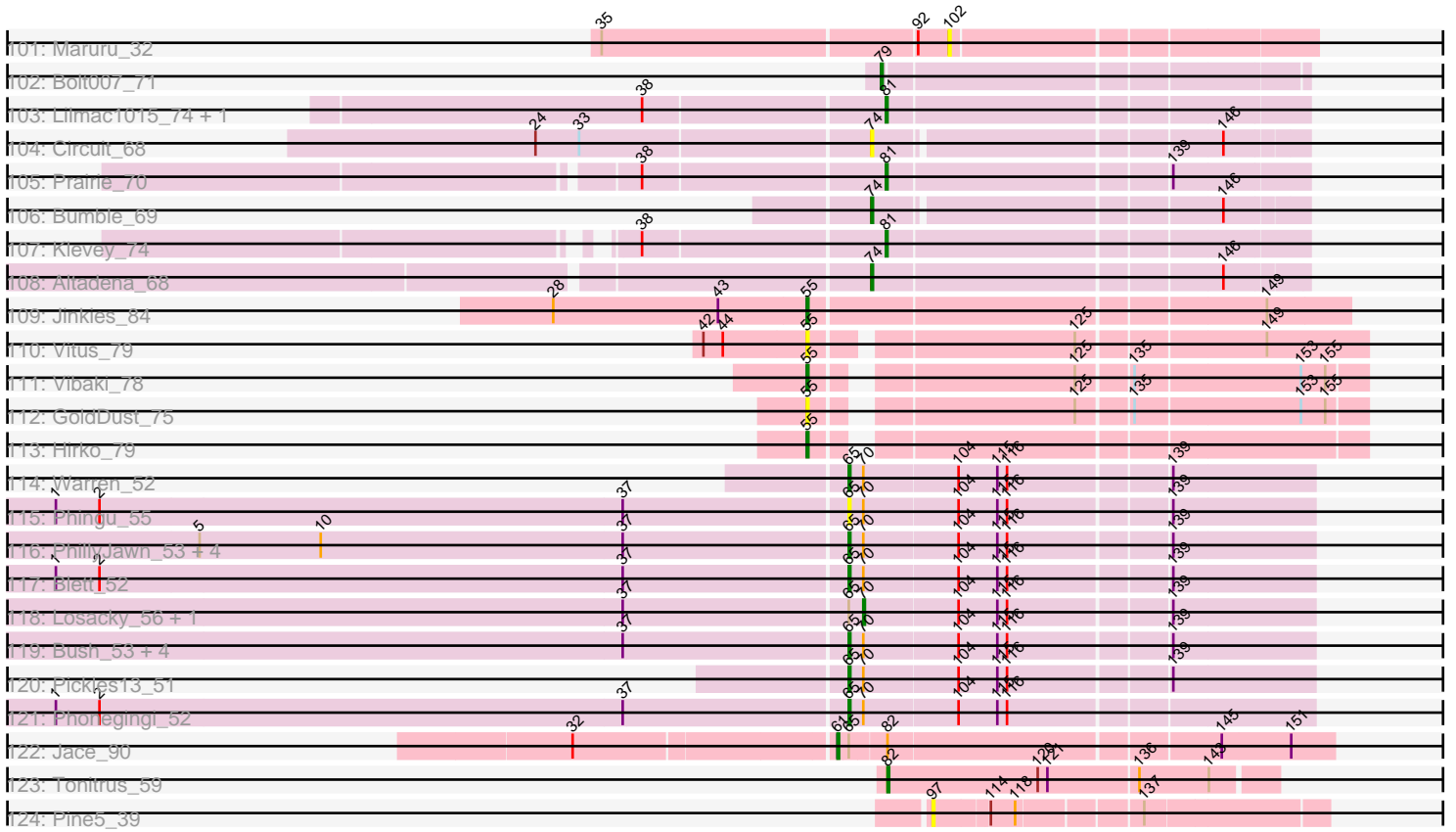
Pham 215732



Pham 215732



Pham 215732



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 215732 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215732 has 352 members, 59 are drafts.

Phages represented in each track:

- Track 1 : EastWest_78
- Track 2 : NathanVaag_68, Piccoletto_69
- Track 3 : King2_67
- Track 4 : Franzy_67, Jawnski_68, Brent_69
- Track 5 : Beans_68
- Track 6 : TaeYoung_73, Grekaycon_73, Martha_72
- Track 7 : JKerns_72, Shade_72, Jordan_73, Sonny_72, Zartrosa_74
- Track 8 : Wyborn_73, Sicarius2_74
- Track 9 : StevieBAY_73, GravityBall_72, BigDome_72, Timinator_73, LeeroyJ_73, BarretLemon_72
- Track 10 : Pippa_73
- Track 11 : BossLady_74
- Track 12 : Abba_67, Nostromo_69
- Track 13 : EdgarPoe_37, Tophat_37, Chubster_37, Mordred_37, PrincessTrina_37, JayCookie_37, Chipper1996_370, Conboy_37, JaNo_37, HumptyDumpty_37, Chocolat_37, MoyaNatalis_37, Kabreeze_37, Linus_37, RosiePosie_37, Scavito_37
- Track 14 : DrYang_38
- Track 15 : Lymara_37
- Track 16 : KBurrousTX_37
- Track 17 : Colucci_37
- Track 18 : Coral_26, Lunar_27, Polka_26, HannahPhantana_27, Daob_27, Amelia_27, Cote_27, Melons_27
- Track 19 : Carthage_43
- Track 20 : Indlovu_42
- Track 21 : LilMcDreamy_41
- Track 22 : BirdsNest_46
- Track 23 : Hashim76_46, Zenteno07_48
- Track 24 : Tinciduntolum_45, Hedgerow_44, TA17A_45, Rhinoforte_44, LilSmirk_44, Boyle_44, Eaglehorse_44, Ares_44, Lars_44, MasterPo_44, FrenchFry_44, Bananafish_44, Blocker23_44, Tres_44, Holeinone_44, Sabella_43, PrinceCharming_44, Allegro_44, Glass_44, Lephleur_44, ItsyBitsy1_44, Kheth_44, Kaleb_44, Phantasmagoria_44, LizLemon_44, Brownie5_44, Calamitous_44, Faze9_43, West99_44, Coffee_44, Kolhan_44, Godines_44, Laurie_43, Opia_44
- Track 25 : Vic9_00043
- Track 26 : AlanGrant_42, Vincenzo_41
- Track 27 : Stinger_39

- Track 28 : EastView9101_42, SirJeffery_44, Rita130_44, Acadian_44, Donny_44, Suigeneris_44
- Track 29 : Mysterious_45, Reprobate_44, Nehemiah_43, Phelemich_43
- Track 30 : DigitDog_43, Nangang_43, Shenyu_43
- Track 31 : KarasumaRum_45, StinkyVeggy_45
- Track 32 : Saguaro_45
- Track 33 : Thonko_43
- Track 34 : Rinkes_44
- Track 35 : Funsized_46
- Track 36 : Knocker_45
- Track 37 : YungMoney_85, CoveyB_87, ClamChowder_88, Danyall_86, TillyBobJoe_84, PinkCoffee_87, Fugax_89, Mutzi_85, Barb_89
- Track 38 : Nubi_89
- Track 39 : Arri_86, VanDeWege_88, CherryCola_86, RogerDodger_89, Phlop_83, Portcullis_86, PullumCavea_84, Wizard_81, Savbucketdawg_81, KimmyK_84, Valary_87, Shinji_85, Twister6_85, Fireball_89
- Track 40 : Evamon_86, SmokingBunny_87, Togo_86, Halo3_85, Salvador_86
- Track 41 : Gezellig_85
- Track 42 : Bakery_90
- Track 43 : Jambalaya_83
- Track 44 : Egi03_85
- Track 45 : Belphegor_82
- Track 46 : Saronaya_86, Gustavo_86, StorminNorm_85, Gaea_85
- Track 47 : Paries_88, Fitzgerald_82, Shivanishola_86, Baddon_82, Bibwit_82, Sitar_83, Lennon_84, Sanjuju_82, McKinley_87, Brandonk123_88, Sedona_82, ChadMasterC_83, Angelicage_83, Kewpiedoll_85, Affeca_86, BobBob_86, Stultus_79, FuegoCuervo_89, Ailee_82, Love_90
- Track 48 : Ribeye_84, LilHam_78, Tycho_84, Ashertheman_84, Derg_77, YorkOnyx_83, Tangerine_84, Bizzy_84, Kroos_84, Flatwoods_84, SchottB_83, JKSyngboy_81, Kwobi_85
- Track 49 : Thing3_85, Fosterous_86, Galadriel_85, Rofo_84, Kamashten_85
- Track 50 : RiverRaider_86
- Track 51 : Nordenberg_83, Charming_87
- Track 52 : Barsten_87, Geodirt_84, Tangent_87, Vivi2_88
- Track 53 : Jabberwocky_83, Keitabear_82, MoontowerMania_85
- Track 54 : Baumdotcom_83
- Track 55 : MelBins_88
- Track 56 : Inspectinfecti_87
- Track 57 : Ali17_83, Phinally_86, Leonard_86, Hans_87
- Track 58 : Phauci_78
- Track 59 : EMoore_81
- Track 60 : GTE6_86, Dexeert_82, Twonlo_84, RoadKill_84, Kwekel_87, Tiamoceli_80, EdmundFerry_85, Chickadee_87
- Track 61 : Natkenzie_88, Sampson_90, Scioto_88, Abblin_88
- Track 62 : Delrey21_88, Verity_87, Zipp_88, DoctorFroggo_88
- Track 63 : APunk_88
- Track 64 : Zitch_90
- Track 65 : ViaConlectus_87
- Track 66 : Tardus_90
- Track 67 : Lilbeanie_97
- Track 68 : Axumite_38, Shatter_38, Ligma_38, Fresco_38
- Track 69 : MossRose_40, MakoManhole_40, CaiB_40, AnarQue_40, CloverMinnie_40

- Track 70 : Yeshua_40, Wooper_40
- Track 71 : Coldpizza_41
- Track 72 : Sour_43
- Track 73 : BiggityBass_38
- Track 74 : NHagos_38, AksarBAT_38
- Track 75 : Evaa_38
- Track 76 : Yago84_38, Sisko_38, AnClar_39
- Track 77 : LittleMunchkin_40
- Track 78 : BobRoss2024_37
- Track 79 : PhedwardCullen_64, Phorgeous_66, CrazyRich_65, Pulchra_68, Glorp_67, Ganandorf_65, Shotgun_66, Honeyfin_67, Crisis_67, Antares_66, Selwyn23_67, Jefe_66, Busephilis_65, Phrancesco_66
- Track 80 : Savannah_65, LittleFortune_68, Cranjis_67, Hermeonysus_66, Quhwah_70
- Track 81 : Scumberland_68
- Track 82 : NoodlelyBoi_67
- Track 83 : Fireman_69, Ariadne_76, Smarties_76
- Track 84 : Kowalski_65, Jollipop_67, Ramiel05_65, BrazzalePHS_65, PiperSansNom_67, Paschalis_66, Onika_65
- Track 85 : KaiHaiDragon_67, Piperis_67, EarickHC_67, Yeti_68
- Track 86 : PierreOrion_66
- Track 87 : RobsFeet_70, Metamorphoo_69, Tyumbra_65, Shrubaron_68
- Track 88 : Merry_, Sunny_
- Track 89 : Teamocil_70, Gina_70
- Track 90 : ClearAsMud_70, SirFrank_67
- Track 91 : Jayden_67
- Track 92 : Margaery_63
- Track 93 : Terij_64
- Track 94 : Cressida_67, MementoMori_65, Cinna_64, Matzah_66
- Track 95 : Kozie_64
- Track 96 : Sunshine23_32, Sonali_32
- Track 97 : Sonali_93
- Track 98 : Sunshine23_95
- Track 99 : Mufasa8_29
- Track 100 : Mufasa8_98
- Track 101 : Maruru_32
- Track 102 : Bolt007_71
- Track 103 : Lilmac1015_74, CalWood4100_74
- Track 104 : Circuit_68
- Track 105 : Prairie_70
- Track 106 : Bumble_69
- Track 107 : Klevey_74
- Track 108 : Altadena_68
- Track 109 : Jinkies_84
- Track 110 : Vitus_79
- Track 111 : Vibaki_78
- Track 112 : GoldDust_75
- Track 113 : Hirko_79
- Track 114 : Warren_52
- Track 115 : Phingu_55
- Track 116 : PhillyJawn_53, Guzman_52, CookieDog_52, Appa_52, Dropshot_52
- Track 117 : Blett_52
- Track 118 : Losacky_56, Antuna_54

- Track 119 : Bush_53, Jakelyne_55, Violeta_54, Carrillo_54, MenE_54
- Track 120 : Pickles13_51
- Track 121 : Phonegingi_52
- Track 122 : Jace_90
- Track 123 : Tonitrus_59
- Track 124 : Pine5_39

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

The start number called the most often in the published annotations is 66, it was called in 55 of the 293 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_86, Ailee_82, Ali17_83, Angelicage_83, Ashertheman_84, Baddon_82, Barsten_87, Baumdotcom_83, Belphegor_82, Bibwit_82, Bizzy_84, BobBob_86, Brandonk123_88, ChadMasterC_83, Chickadee_87, Derg_77, Dextert_82, EMOore_81, EdmundFerry_85, Fitzgerald_82, Flatwoods_84, Fosterous_86, FuegoCuervo_89, GTE6_86, Gaea_85, Galadriel_85, Geodirt_84, Gustavo_86, Hans_87, Inspectinfecti_87, JKSyngboy_81, Kamashten_85, Kewpiedoll_85, Kroos_84, Kwekel_87, Kwobi_85, Lennon_84, Leonard_86, LilHam_78, Love_90, McKinley_87, MelBins_88, Paries_88, Phauci_78, Phinally_86, Ribeye_84, RiverRaider_86, RoadKill_84, Rofo_84, Sanjuju_82, Saronaya_86, SchottB_83, Sedona_82, Shivanishola_86, Sitar_83, StorminNorm_85, Stultus_79, Tangent_87, Tangerine_84, Thing3_85, Tiamoceli_80, Twonlo_84, Tycho_84, Vivi2_88, YorkOnyx_83,

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

- Charming_87, Jabberwocky_83, Keitabear_82, MoontowerMania_85, Nordenberg_83,

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

- APunk_88, Abba_67, Abblin_88, Acadian_44, AksarBAT_38, AlanGrant_42, Allegro_44, Altadena_68, Amelia_27, AnClar_39, AnarQue_40, Antares_66, Antuna_54, Appa_52, Ares_44, Ariadne_76, Arri_86, Axumite_38, Bakery_90, Bananafish_44, Barb_89, BarretLemon_72, Beans_68, BigDome_72, BiggityBass_38, BirdsNest_46, Blett_52, Blocker23_44, BobRoss2024_37, Bolt007_71, BossLady_74, Boyle_44, BrazzalePHS_65, Brent_69, Brownie5_44, Bumble_69, Busephilis_65, Bush_53, CaiB_40, CalWood4100_74, Calamitous_44, Carrillo_54, Carthage_43, CherryCola_86, Chipper1996_370, Chocolat_37, Chubster_37, Cinna_64, Circuit_68, ClamChowder_88, ClearAsMud_70, CloverMinnie_40, Coffee_44, Coldpizza_41, Colucci_37, Conboy_37, CookieDog_52, Coral_26, Cote_27, CoveyB_87, Cranjjs_67, CrazyRich_65, Cressida_67, Crisis_67, Danyall_86, Daob_27, Delrey21_88, DigitDog_43, DoctorFroggo_88, Donny_44, DrYang_38, Dropshot_52, Eaglehorse_44, EarickHC_67, EastView9101_42, EastWest_78, EdgarPoe_37, Egi03_85, Evaa_38, Evamon_86, Faze9_43, Fireball_89, Fireman_69, Franzy_67, FrenchFry_44, Fresco_38, Fugax_89, Funsized_46, Ganandorf_65, Gezellig_85, Gina_70, Glass_44, Glorp_67, Godines_44, GoldDust_75, GravityBall_72, Grekaycon_73, Guzman_52, Halo3_85, HannahPhantana_27, Hashim76_46, Hedgerow_44, Hermeonysus_66, Hirko_79, Holeinone_44, Honeyfin_67, HumptyDumpty_37, Indlovu_42, ItsyBitsy1_44,

JKerns_72, JaNo_37, Jace_90, Jakelyne_55, Jambalaya_83, Jawnski_68, JayCookie_37, Jayden_67, Jefe_66, Jinkies_84, Jollipop_67, Jordan_73, KBurrousTX_37, Kabreeze_37, KaiHaiDragon_67, Kaleb_44, KarasumaRum_45, Kheth_44, KimmyK_84, King2_67, Klevey_74, Knocker_45, Kolhan_44, Kowalski_65, Kozi_64, Lars_44, Laurie_43, LeeroyJ_73, Lephleur_44, Ligma_38, LilMcDreamy_41, LilSmirk_44, Lilbeanie_97, Lilmac1015_74, Linus_37, LittleFortune_68, LittleMunchkin_40, LizLemon_44, Losacky_56, Lunar_27, Lymara_37, MakoManhole_40, Margaery_63, Martha_72, Maruru_32, MasterPo_44, Matzah_66, Melons_27, MementoMori_65, MenE_54, Merry_, Metamorphoo_69, Mordred_37, MossRose_40, MoyaNatalis_37, Mufasa8_29, Mufasa8_98, Mutzi_85, Mysterious_45, NHagos_38, Nangang_43, NathanVaag_68, Natkenzie_88, Nehemiah_43, NoodlelyBoi_67, Nostromo_69, Nubi_89, Onika_65, Opia_44, Paschalis_66, Phantasmagoria_44, PhedwardCullen_64, Phelemich_43, PhillyJawn_53, Phingu_55, Phlop_83, Phonegingi_52, Phorgeous_66, Phrancesco_66, Piccoletto_69, Pickles13_51, PierreOrion_66, Pine5_39, PinkCoffee_87, PiperSansNom_67, Piperis_67, Pippa_73, Polka_26, Portcullis_86, Prairie_70, PrinceCharming_44, PrincessTrina_37, Pulchra_68, PullumCavea_84, Quhwah_70, Ramiel05_65, Reprobate_44, Rhinoforte_44, Rinke_44, Rita130_44, RobsFeet_70, RogerDodger_89, RosiePosie_37, Sabella_43, Saguaro_45, Salvador_86, Sampson_90, Savannah_65, Savbucketdawg_81, Scavito_37, Scioto_88, Scumberland_68, Selwyn23_67, Shade_72, Shatter_38, Shenyu_43, Shinji_85, Shotgun_66, Shrubaron_68, Sicarius2_74, SirFrank_67, SirJeffery_44, Sisko_38, Smarties_76, SmokingBunny_87, Sonali_32, Sonali_93, Sonny_72, Sour_43, StevieBAY_73, Stinger_39, StinkyVeggy_45, Suigeneris_44, Sunny_, Sunshine23_32, Sunshine23_95, TA17A_45, TaeYoung_73, Tardus_90, Teamocil_70, Terij_64, Thonko_43, TillyBobJoe_84, Timinator_73, Tinciduntolum_45, Togo_86, Tonitrus_59, Tophat_37, Tres_44, Twister6_85, Tyumbra_65, Valary_87, VanDeWege_88, Verity_87, ViaConlectus_87, Vibaki_78, Vic9_00043, Vincenzo_41, Violeta_54, Vitus_79, Warren_52, West99_44, Wizard_81, Wooper_40, Wyborn_73, Yago84_38, Yeshua_40, Yeti_68, YungMoney_85, Zartrosa_74, Zenteno07_48, Zipp_88, Zitch_90,

Summary by start number:

Start 53:

- Found in 29 of 352 (8.2%) of genes in pham
- Manual Annotations of this start: 5 of 293
- Called 17.2% of time when present
- Phage (with cluster) where this start called: Charming_87 (DE1), Jabberwocky_83 (DE1), Keitabear_82 (DE1), MoontowerMania_85 (DE1), Nordenberg_83 (DE1),

Start 55:

- Found in 33 of 352 (9.4%) of genes in pham
- Manual Annotations of this start: 27 of 293
- Called 93.9% of time when present
- Phage (with cluster) where this start called: Abba_67 (AO3), BarretLemon_72 (AO2), Beans_68 (AO1), BigDome_72 (AO2), Brent_69 (AO1), EastWest_78 (AO), Franzy_67 (AO1), GoldDust_75 (FL), GravityBall_72 (AO2), Grekaycon_73 (AO2), Hirko_79 (FL), JKerns_72 (AO2), Jawnski_68 (AO1), Jinkies_84 (FL), Jordan_73 (AO2), King2_67 (AO1), LeeroyJ_73 (AO2), Martha_72 (AO2), NathanVaag_68 (AO1), Nostromo_69 (AO3), Piccoletto_69 (AO1), Shade_72 (AO2), Sicarius2_74 (AO2), Sonny_72 (AO2), StevieBAY_73 (AO2), TaeYoung_73 (AO2), Timinator_73 (AO2), Vibaki_78 (FL), Vitus_79 (FL), Wyborn_73 (AO2), Zartrosa_74 (AO2),

Start 59:

- Found in 33 of 352 (9.4%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 6.1% of time when present
- Phage (with cluster) where this start called: Egi03_85 (DC1), Mufasa8_98 (FG),

Start 61:

- Found in 1 of 352 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_90 (singleton),

Start 63:

- Found in 30 of 352 (8.5%) of genes in pham
- Manual Annotations of this start: 9 of 293
- Called 40.0% of time when present
- Phage (with cluster) where this start called: APunk_88 (DE4), Abblin_88 (DE4), Delrey21_88 (DE4), DoctorFroggo_88 (DE4), Natkenzie_88 (DE4), Sampson_90 (DE4), Scioto_88 (DE4), Tardus_90 (DE4), Verity_87 (DE4), ViaConlectus_87 (DE4), Zipp_88 (DE4), Zitch_90 (DE4),

Start 65:

- Found in 20 of 352 (5.7%) of genes in pham
- Manual Annotations of this start: 9 of 293
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Appa_52 (GA), Blett_52 (GA), Bush_53 (GA), Carrillo_54 (GA), CookieDog_52 (GA), Dropshot_52 (GA), Guzman_52 (GA), Jakelyne_55 (GA), MenE_54 (GA), PhillyJawn_53 (GA), Phingu_55 (GA), Phonegingi_52 (GA), Pickles13_51 (GA), Sonali_93 (FG), Violeta_54 (GA), Warren_52 (GA),

Start 66:

- Found in 70 of 352 (19.9%) of genes in pham
- Manual Annotations of this start: 55 of 293
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Affeca_86 (DE1), Ailee_82 (DE1), Ali17_83 (DE2), Angelicage_83 (DE1), Ashertheman_84 (DE1), Baddon_82 (DE1), Barsten_87 (DE1), Baumdotcom_83 (DE1), Belphegor_82 (DE), Bibwit_82 (DE1), Bizzy_84 (DE1), BobBob_86 (DE1), Brandonk123_88 (DE1), ChadMasterC_83 (DE1), Chickadee_87 (DE3), Derg_77 (DE1), Dextert_82 (DE3), EMOore_81 (DE2), EdmundFerry_85 (DE3), Fitzgerald_82 (DE1), Flatwoods_84 (DE1), Fosterous_86 (DE1), FuegoCuervo_89 (DE1), GTE6_86 (DE3), Gaea_85 (DE1), Galadriel_85 (DE1), Geodirt_84 (DE1), Gustavo_86 (DE1), Hans_87 (DE2), Inspectinfecti_87 (DE2), JKSyngboy_81 (DE1), Kamashten_85 (DE1), Kewpiedoll_85 (DE1), Kroos_84 (DE1), Kwekel_87 (DE3), Kwobi_85 (DE1), Lennon_84 (DE1), Leonard_86 (DE2), LilHam_78 (DE1), Love_90 (DE1), McKinley_87 (DE1), MelBins_88 (DE2), Paries_88 (DE1), Phauci_78 (DE2), Phinally_86 (DE2), Ribeye_84 (DE1), RiverRaider_86 (DE1), RoadKill_84 (DE3), Rofo_84 (DE1), Sanjuju_82 (DE1), Saronaya_86 (DE1), SchottB_83 (DE1), Sedona_82 (DE1), Shivanishola_86 (DE1), Sitar_83 (DE1), StorminNorm_85 (DE1), Stultus_79 (DE1), Tangent_87 (DE1), Tangerine_84 (DE1), Thing3_85 (DE1), Tiamoceli_80 (DE3), Twonlo_84 (DE3), Tycho_84 (DE1), Vivi2_88 (DE1), YorkOnyx_83 (DE1),

Start 69:

- Found in 58 of 352 (16.5%) of genes in pham
- Manual Annotations of this start: 49 of 293
- Called 93.1% of time when present
- Phage (with cluster) where this start called: Antares_66 (EC), Ariadne_76 (EC), BrazzalePHS_65 (EC), Busephilis_65 (EC), Cinna_64 (EI), ClearAsMud_70 (EC), Cranjis_67 (EC), CrazyRich_65 (EC), Cressida_67 (EI), Crisis_67 (EC), EarickHC_67 (EC), Fireman_69 (EC), Ganandorf_65 (EC), Gina_70 (EC), Glorp_67 (EC), Hermeonysus_66 (EC), Honeyfin_67 (EC), Jayden_67 (EC), Jefe_66 (EC), Jollipop_67 (EC), KaiHaiDragon_67 (EC), Kowalski_65 (EC), Kozie_64 (EI), LittleFortune_68 (EC), Margaery_63 (EI), Matzah_66 (EI), MementoMori_65 (EI), Merry_ (EC), Metamorphoo_69 (EC), NoodlelyBoi_67 (EC), Onika_65 (EC), Paschalis_66 (EC), PhedwardCullen_64 (EC), Phorgeous_66 (EC), Phrancesco_66 (EC), PierreOrion_66 (EC), PiperSansNom_67 (EC), Piperis_67 (EC), Pulchra_68 (EC), Quhwah_70 (EC), Ramiel05_65 (EC), RobsFeet_70 (EC), Savannah_65 (EC), Scumberland_68 (EC), Selwyn23_67 (EC), Shotgun_66 (EC), Shrubaron_68 (EC), SirFrank_67 (EC), Smarties_76 (EC), Sunny_ (EC), Teamocil_70 (EC), Terij_64 (EI), Tyumbra_65 (EC), Yeti_68 (EC),

Start 70:

- Found in 17 of 352 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Antuna_54 (GA), Losacky_56 (GA),

Start 71:

- Found in 4 of 352 (1.1%) of genes in pham
- Manual Annotations of this start: 4 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite_38 (DR), Fresco_38 (DR), Ligma_38 (DR), Shatter_38 (DR),

Start 72:

- Found in 33 of 352 (9.4%) of genes in pham
- Manual Annotations of this start: 27 of 293
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Arri_86 (DC1), Barb_89 (DC1), CherryCola_86 (DC1), ClamChowder_88 (DC1), CoveyB_87 (DC1), Danyall_86 (DC1), Evamon_86 (DC1), Fireball_89 (DC1), Fugax_89 (DC1), Halo3_85 (DC1), Jambalaya_83 (DC1), KimmyK_84 (DC1), Mutzi_85 (DC1), Nubi_89 (DC1), Phlop_83 (DC1), PinkCoffee_87 (DC1), Portcullis_86 (DC1), PullumCavea_84 (DC1), RogerDodger_89 (DC1), Salvador_86 (DC1), Savbucketdawg_81 (DC1), Shinji_85 (DC1), SmokingBunny_87 (DC1), TillyBobJoe_84 (DC1), Togo_86 (DC1), Twister6_85 (DC1), Valary_87 (DC1), VanDeWege_88 (DC1), Wizard_81 (DC1), YungMoney_85 (DC1),

Start 74:

- Found in 3 of 352 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena_68 (FH), Bumble_69 (FH), Circuit_68 (FH),

Start 76:

- Found in 15 of 352 (4.3%) of genes in pham
- Manual Annotations of this start: 13 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AksarBAT_38 (DR), AnClar_39 (DR), AnarQue_40 (DR), BiggityBass_38 (DR), CaiB_40 (DR), CloverMinnie_40 (DR), LittleMunchkin_40 (DR), MakoManhole_40 (DR), MossRose_40 (DR), NHagos_38 (DR), Sisko_38 (DR), Sour_43 (DR), Wooper_40 (DR), Yago84_38 (DR), Yeshua_40 (DR),

Start 79:

- Found in 13 of 352 (3.7%) of genes in pham
- Manual Annotations of this start: 3 of 293
- Called 23.1% of time when present
- Phage (with cluster) where this start called: Bolt007_71 (FH), BossLady_74 (AO2), Pippa_73 (AO2),

Start 80:

- Found in 34 of 352 (9.7%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 8.8% of time when present
- Phage (with cluster) where this start called: Bakery_90 (DC1), BobRoss2024_37 (DR), Gezellig_85 (DC1),

Start 81:

- Found in 4 of 352 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CalWood4100_74 (FH), Klevey_74 (FH), Lilmac1015_74 (FH), Prairie_70 (FH),

Start 82:

- Found in 2 of 352 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tonitrus_59 (singleton),

Start 89:

- Found in 11 of 352 (3.1%) of genes in pham
- Manual Annotations of this start: 3 of 293
- Called 27.3% of time when present
- Phage (with cluster) where this start called: BirdsNest_46 (B13), Hashim76_46 (B13), Zenteno07_48 (B13),

Start 90:

- Found in 8 of 352 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Carthage_43 (B1),

Start 93:

- Found in 37 of 352 (10.5%) of genes in pham

- Manual Annotations of this start: 1 of 293
- Called 8.1% of time when present
- Phage (with cluster) where this start called: Coldpizza_41 (DR), Evaa_38 (DR), Sunshine23_95 (FG),

Start 94:

- Found in 15 of 352 (4.3%) of genes in pham
- Manual Annotations of this start: 5 of 293
- Called 33.3% of time when present
- Phage (with cluster) where this start called: AlanGrant_42 (B4), Funsized_46 (B9), Knocker_45 (B9), Stinger_39 (B4), Vincenzo_41 (B4),

Start 95:

- Found in 35 of 352 (9.9%) of genes in pham
- Manual Annotations of this start: 31 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_44 (B2), Ares_44 (B2), Bananafish_44 (B2), Blocker23_44 (B2), Boyle_44 (B2), Brownie5_44 (B2), Calamitous_44 (B2), Coffee_44 (B2), Eaglehorse_44 (B2), Faze9_43 (B2), FrenchFry_44 (B2), Glass_44 (B2), Godines_44 (B2), Hedgerow_44 (B2), Holeinone_44 (B2), ItsyBitsy1_44 (B2), Kaleb_44 (B2), Kheth_44 (B2), Kolhan_44 (B2), Lars_44 (B2), Laurie_43 (B2), Lephleur_44 (B2), LilSmirk_44 (B2), LizLemon_44 (B2), MasterPo_44 (B2), Opia_44 (B2), Phantasmagoria_44 (B2), PrinceCharming_44 (B2), Rhinoforte_44 (B2), Sabella_43 (B2), TA17A_45 (B2), Tinciduntolum_45 (B2), Tres_44 (B2), Vic9_00043 (B2), West99_44 (B2),

Start 96:

- Found in 1 of 352 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_43 (B8),

Start 97:

- Found in 1 of 352 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pine5_39 (singleton),

Start 98:

- Found in 18 of 352 (5.1%) of genes in pham
- Manual Annotations of this start: 9 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_44 (B5), DigitDog_43 (B5), Donny_44 (B5), EastView9101_42 (B5), Indlovu_42 (B11), KarasumaRum_45 (B5), LilMcDreamy_41 (B12), Mysterious_45 (B5), Nangang_43 (B5), Nehemiah_43 (B5), Phelemich_43 (B5), Reprobate_44 (B5), Rita130_44 (B5), Saguario_45 (B7), Shenyu_43 (B5), SirJeffery_44 (B5), StinkyVeggy_45 (B5), Suigeneris_44 (B5),

Start 100:

- Found in 3 of 352 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Rinkes_44 (B9),

Start 101:

- Found in 20 of 352 (5.7%) of genes in pham
- Manual Annotations of this start: 19 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chipper1996_370 (AR), Chocolat_37 (AR), Chubster_37 (AR), Colucci_37 (AR), Conboy_37 (AR), DrYang_38 (AR), EdgarPoe_37 (AR), HumptyDumpty_37 (AR), JaNo_37 (AR), JayCookie_37 (AR), KBurrousTX_37 (AR), Kabreeze_37 (AR), Linus_37 (AR), Lymara_37 (AR), Mordred_37 (AR), MoyaNatalis_37 (AR), PrincessTrina_37 (AR), RosiePosie_37 (AR), Scavito_37 (AR), Tophat_37 (AR),

Start 102:

- Found in 4 of 352 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maruru_32 (FG), Mufasa8_29 (FG), Sonali_32 (FG), Sunshine23_32 (FG),

Start 107:

- Found in 8 of 352 (2.3%) of genes in pham
- Manual Annotations of this start: 8 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia_27 (AS2), Coral_26 (AS2), Cote_27 (AS2), Daob_27 (AS2), HannahPhantana_27 (AS2), Lunar_27 (AS2), Melons_27 (AS2), Polka_26 (AS2),

Start 124:

- Found in 1 of 352 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 293
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie_97 (DE5),

Summary by clusters:

There are 31 clusters represented in this pham: singleton, AO1, DE, B12, B13, FG, FH, DR, B4, FL, AS2, EI, AO, AR, AO3, EC, GA, DC1, DE1, DE2, DE3, DE4, DE5, B11, B5, B7, B1, B2, B8, B9, AO2,

Info for manual annotations of cluster AO:

- Start number 55 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 55 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 55 was manually annotated 15 times for cluster AO2.
- Start number 79 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 55 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 101 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster AS2:

- Start number 107 was manually annotated 8 times for cluster AS2.

Info for manual annotations of cluster B1:

- Start number 90 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B11:

- Start number 98 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 98 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 89 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 95 was manually annotated 31 times for cluster B2.

Info for manual annotations of cluster B4:

- Start number 94 was manually annotated 3 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 98 was manually annotated 6 times for cluster B5.

Info for manual annotations of cluster B7:

- Start number 98 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 96 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 94 was manually annotated 2 times for cluster B9.
- Start number 100 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster DC1:

- Start number 72 was manually annotated 27 times for cluster DC1.
- Start number 80 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 53 was manually annotated 5 times for cluster DE1.
- Start number 66 was manually annotated 40 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 66 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 66 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 63 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 124 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DR:

- Start number 71 was manually annotated 4 times for cluster DR.
- Start number 76 was manually annotated 13 times for cluster DR.
- Start number 93 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster EC:

- Start number 69 was manually annotated 42 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 69 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster FG:

- Start number 59 was manually annotated 1 time for cluster FG.
- Start number 65 was manually annotated 1 time for cluster FG.
- Start number 102 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FH:

- Start number 74 was manually annotated 2 times for cluster FH.
- Start number 79 was manually annotated 1 time for cluster FH.
- Start number 81 was manually annotated 3 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 55 was manually annotated 3 times for cluster FL.

Info for manual annotations of cluster GA:

- Start number 65 was manually annotated 8 times for cluster GA.
- Start number 70 was manually annotated 1 time for cluster GA.

Gene Information:

Gene: APunk_88 Start: 58714, Stop: 58983, Start Num: 63

Candidate Starts for APunk_88:

(49, 58669), (Start: 63 @58714 has 9 MA's), (77, 58732), (105, 58783), (131, 58861),

Gene: Abba_67 Start: 42825, Stop: 42538, Start Num: 55

Candidate Starts for Abba_67:

(Start: 55 @42825 has 27 MA's), (139, 42639), (154, 42555),

Gene: Abblin_88 Start: 58873, Stop: 59145, Start Num: 63

Candidate Starts for Abblin_88:

(21, 58672), (23, 58681), (26, 58693), (27, 58699), (Start: 63 @58873 has 9 MA's), (105, 58942), (131, 59020),

Gene: Acadian_44 Start: 39648, Stop: 39439, Start Num: 98

Candidate Starts for Acadian_44:

(46, 39762), (47, 39756), (Start: 98 @39648 has 9 MA's), (105, 39633), (114, 39621), (121, 39588),

Gene: Affeca_86 Start: 58157, Stop: 58420, Start Num: 66
Candidate Starts for Affeca_86:
(Start: 53 @58124 has 5 MA's), (Start: 66 @58157 has 55 MA's), (105, 58220), (131, 58301),

Gene: Ailee_82 Start: 57328, Stop: 57591, Start Num: 66
Candidate Starts for Ailee_82:
(Start: 53 @57295 has 5 MA's), (Start: 66 @57328 has 55 MA's), (105, 57391), (131, 57472),

Gene: AksarBAT_38 Start: 33442, Stop: 33182, Start Num: 76
Candidate Starts for AksarBAT_38:
(58, 33475), (Start: 76 @33442 has 13 MA's), (106, 33400), (108, 33397), (123, 33346), (130, 33328),
(137, 33301),

Gene: AlanGrant_42 Start: 39951, Stop: 39745, Start Num: 94
Candidate Starts for AlanGrant_42:
(Start: 94 @39951 has 5 MA's), (105, 39930), (110, 39924), (118, 39903), (121, 39885), (123, 39876),
(126, 39867), (135, 39837), (136, 39834), (137, 39831),

Gene: Ali17_83 Start: 57614, Stop: 57865, Start Num: 66
Candidate Starts for Ali17_83:
(Start: 66 @57614 has 55 MA's), (105, 57677), (122, 57737), (125, 57743), (131, 57755), (132, 57758),

Gene: Allegro_44 Start: 39432, Stop: 39226, Start Num: 95
Candidate Starts for Allegro_44:
(Start: 95 @39432 has 31 MA's), (108, 39405), (110, 39402), (126, 39348), (136, 39315),

Gene: Altadena_68 Start: 43198, Stop: 42947, Start Num: 74
Candidate Starts for Altadena_68:
(Start: 74 @43198 has 2 MA's), (146, 42994),

Gene: Amelia_27 Start: 19057, Stop: 18836, Start Num: 107
Candidate Starts for Amelia_27:
(Start: 107 @19057 has 8 MA's),

Gene: AnClar_39 Start: 35606, Stop: 35379, Start Num: 76
Candidate Starts for AnClar_39:
(Start: 76 @35606 has 13 MA's), (131, 35489), (146, 35420),

Gene: AnarQue_40 Start: 34838, Stop: 34584, Start Num: 76
Candidate Starts for AnarQue_40:
(54, 34880), (Start: 76 @34838 has 13 MA's), (108, 34790), (123, 34739), (130, 34721), (137, 34694),

Gene: Angelicage_83 Start: 58231, Stop: 58494, Start Num: 66
Candidate Starts for Angelicage_83:
(Start: 53 @58198 has 5 MA's), (Start: 66 @58231 has 55 MA's), (105, 58294), (131, 58375),

Gene: Antares_66 Start: 41631, Stop: 41924, Start Num: 69
Candidate Starts for Antares_66:
(57, 41607), (Start: 69 @41631 has 49 MA's), (115, 41709), (132, 41772), (135, 41787), (136, 41790),

Gene: Antuna_54 Start: 32652, Stop: 32918, Start Num: 70
Candidate Starts for Antuna_54:

(37, 32508), (Start: 65 @32643 has 9 MA's), (Start: 70 @32652 has 1 MA's), (104, 32709), (115, 32733), (116, 32739), (139, 32832),

Gene: Appa_52 Start: 32408, Stop: 32683, Start Num: 65

Candidate Starts for Appa_52:

(5, 32012), (10, 32087), (37, 32273), (Start: 65 @32408 has 9 MA's), (Start: 70 @32417 has 1 MA's), (104, 32474), (115, 32498), (116, 32504), (139, 32597),

Gene: Ares_44 Start: 39502, Stop: 39296, Start Num: 95

Candidate Starts for Ares_44:

(Start: 95 @39502 has 31 MA's), (108, 39475), (110, 39472), (126, 39418), (136, 39385),

Gene: Ariadne_76 Start: 43251, Stop: 43544, Start Num: 69

Candidate Starts for Ariadne_76:

(Start: 69 @43251 has 49 MA's), (115, 43329), (132, 43392), (136, 43410),

Gene: Arri_86 Start: 56263, Stop: 56015, Start Num: 72

Candidate Starts for Arri_86:

(9, 56575), (15, 56497), (18, 56476), (36, 56404), (Start: 59 @56290 has 1 MA's), (Start: 72 @56263 has 27 MA's), (Start: 80 @56254 has 1 MA's), (Start: 93 @56236 has 1 MA's), (117, 56179), (136, 56104), (146, 56056),

Gene: Ashertheman_84 Start: 56563, Stop: 56823, Start Num: 66

Candidate Starts for Ashertheman_84:

(Start: 66 @56563 has 55 MA's), (105, 56626), (131, 56707), (139, 56746),

Gene: Axumite_38 Start: 32837, Stop: 32601, Start Num: 71

Candidate Starts for Axumite_38:

(Start: 69 @32840 has 49 MA's), (Start: 71 @32837 has 4 MA's), (85, 32816), (88, 32810), (106, 32786), (110, 32780), (136, 32690),

Gene: Baddon_82 Start: 57243, Stop: 57506, Start Num: 66

Candidate Starts for Baddon_82:

(Start: 53 @57210 has 5 MA's), (Start: 66 @57243 has 55 MA's), (105, 57306), (131, 57387),

Gene: Bakery_90 Start: 58633, Stop: 58391, Start Num: 80

Candidate Starts for Bakery_90:

(3, 59074), (13, 58915), (22, 58846), (29, 58822), (30, 58819), (56, 58666), (Start: 72 @58639 has 27 MA's), (75, 58636), (Start: 80 @58633 has 1 MA's), (Start: 93 @58615 has 1 MA's), (117, 58558), (146, 58435),

Gene: Bananafish_44 Start: 39438, Stop: 39232, Start Num: 95

Candidate Starts for Bananafish_44:

(Start: 95 @39438 has 31 MA's), (108, 39411), (110, 39408), (126, 39354), (136, 39321),

Gene: Barb_89 Start: 56790, Stop: 56539, Start Num: 72

Candidate Starts for Barb_89:

(6, 57147), (8, 57120), (16, 57021), (19, 56997), (20, 56994), (36, 56931), (Start: 59 @56817 has 1 MA's), (Start: 72 @56790 has 27 MA's), (Start: 80 @56781 has 1 MA's), (Start: 93 @56763 has 1 MA's), (117, 56706), (136, 56631), (146, 56583),

Gene: BarretLemon_72 Start: 46543, Stop: 46214, Start Num: 55

Candidate Starts for BarretLemon_72:

(Start: 55 @46543 has 27 MA's),

Gene: Barsten_87 Start: 58499, Stop: 58765, Start Num: 66

Candidate Starts for Barsten_87:

(Start: 53 @58466 has 5 MA's), (Start: 66 @58499 has 55 MA's), (105, 58562), (131, 58643), (150, 58745),

Gene: Baumdotcom_83 Start: 56963, Stop: 57223, Start Num: 66

Candidate Starts for Baumdotcom_83:

(Start: 66 @56963 has 55 MA's), (105, 57026), (131, 57107), (139, 57146),

Gene: Beans_68 Start: 45863, Stop: 45561, Start Num: 55

Candidate Starts for Beans_68:

(Start: 55 @45863 has 27 MA's), (105, 45794), (142, 45656),

Gene: Belphegor_82 Start: 58991, Stop: 59245, Start Num: 66

Candidate Starts for Belphegor_82:

(Start: 66 @58991 has 55 MA's), (105, 59057), (131, 59135), (138, 59168),

Gene: Bibwit_82 Start: 56692, Stop: 56955, Start Num: 66

Candidate Starts for Bibwit_82:

(Start: 53 @56659 has 5 MA's), (Start: 66 @56692 has 55 MA's), (105, 56755), (131, 56836),

Gene: BigDome_72 Start: 46718, Stop: 46389, Start Num: 55

Candidate Starts for BigDome_72:

(Start: 55 @46718 has 27 MA's),

Gene: BiggityBass_38 Start: 35067, Stop: 34840, Start Num: 76

Candidate Starts for BiggityBass_38:

(62, 35082), (Start: 76 @35067 has 13 MA's), (131, 34950), (146, 34881),

Gene: BirdsNest_46 Start: 37877, Stop: 37662, Start Num: 89

Candidate Starts for BirdsNest_46:

(Start: 89 @37877 has 3 MA's), (105, 37853), (118, 37826), (123, 37799), (140, 37733), (147, 37703),

Gene: Bizzy_84 Start: 56320, Stop: 56580, Start Num: 66

Candidate Starts for Bizzy_84:

(Start: 66 @56320 has 55 MA's), (105, 56383), (131, 56464), (139, 56503),

Gene: Blett_52 Start: 32593, Stop: 32868, Start Num: 65

Candidate Starts for Blett_52:

(1, 32110), (2, 32137), (37, 32458), (Start: 65 @32593 has 9 MA's), (Start: 70 @32602 has 1 MA's), (104, 32659), (115, 32683), (116, 32689), (139, 32782),

Gene: Blocker23_44 Start: 39556, Stop: 39350, Start Num: 95

Candidate Starts for Blocker23_44:

(Start: 95 @39556 has 31 MA's), (108, 39529), (110, 39526), (126, 39472), (136, 39439),

Gene: BobBob_86 Start: 57531, Stop: 57794, Start Num: 66

Candidate Starts for BobBob_86:

(Start: 53 @57498 has 5 MA's), (Start: 66 @57531 has 55 MA's), (105, 57594), (131, 57675),

Gene: BobRoss2024_37 Start: 32952, Stop: 32707, Start Num: 80

Candidate Starts for BobRoss2024_37:
(54, 32994), (58, 32985), (Start: 80 @32952 has 1 MA's), (99, 32919), (103, 32910), (106, 32901),
(123, 32847), (144, 32763),

Gene: Bolt007_71 Start: 45075, Stop: 44833, Start Num: 79
Candidate Starts for Bolt007_71:
(Start: 79 @45075 has 3 MA's),

Gene: BossLady_74 Start: 47057, Stop: 46746, Start Num: 79
Candidate Starts for BossLady_74:
(Start: 55 @47078 has 27 MA's), (Start: 79 @47057 has 3 MA's), (105, 47009), (152, 46814),

Gene: Boyle_44 Start: 39557, Stop: 39351, Start Num: 95
Candidate Starts for Boyle_44:
(Start: 95 @39557 has 31 MA's), (108, 39530), (110, 39527), (126, 39473), (136, 39440),

Gene: Brandonk123_88 Start: 57696, Stop: 57959, Start Num: 66
Candidate Starts for Brandonk123_88:
(Start: 53 @57663 has 5 MA's), (Start: 66 @57696 has 55 MA's), (105, 57759), (131, 57840),

Gene: BrazzalePHS_65 Start: 41393, Stop: 41692, Start Num: 69
Candidate Starts for BrazzalePHS_65:
(Start: 69 @41393 has 49 MA's), (Start: 89 @41423 has 3 MA's), (132, 41540), (135, 41555), (136,
41558),

Gene: Brent_69 Start: 46039, Stop: 45731, Start Num: 55
Candidate Starts for Brent_69:
(Start: 55 @46039 has 27 MA's), (86, 46000), (105, 45964),

Gene: Brownie5_44 Start: 39563, Stop: 39357, Start Num: 95
Candidate Starts for Brownie5_44:
(Start: 95 @39563 has 31 MA's), (108, 39536), (110, 39533), (126, 39479), (136, 39446),

Gene: Bumble_69 Start: 44314, Stop: 44069, Start Num: 74
Candidate Starts for Bumble_69:
(Start: 74 @44314 has 2 MA's), (146, 44116),

Gene: Busephilis_65 Start: 41338, Stop: 41631, Start Num: 69
Candidate Starts for Busephilis_65:
(57, 41314), (Start: 69 @41338 has 49 MA's), (115, 41416), (132, 41479), (135, 41494), (136, 41497),

Gene: Bush_53 Start: 32542, Stop: 32817, Start Num: 65
Candidate Starts for Bush_53:
(37, 32407), (Start: 65 @32542 has 9 MA's), (Start: 70 @32551 has 1 MA's), (104, 32608), (115,
32632), (116, 32638), (139, 32731),

Gene: CaiB_40 Start: 34824, Stop: 34570, Start Num: 76
Candidate Starts for CaiB_40:
(54, 34866), (Start: 76 @34824 has 13 MA's), (108, 34776), (123, 34725), (130, 34707), (137, 34680),

Gene: CalWood4100_74 Start: 45377, Stop: 45132, Start Num: 81
Candidate Starts for CalWood4100_74:
(38, 45521), (Start: 81 @45377 has 3 MA's),

Gene: Calamitous_44 Start: 39443, Stop: 39237, Start Num: 95

Candidate Starts for Calamitous_44:

(Start: 95 @39443 has 31 MA's), (108, 39416), (110, 39413), (126, 39359), (136, 39326),

Gene: Carrillo_54 Start: 32516, Stop: 32791, Start Num: 65

Candidate Starts for Carrillo_54:

(37, 32381), (Start: 65 @32516 has 9 MA's), (Start: 70 @32525 has 1 MA's), (104, 32582), (115, 32606), (116, 32612), (139, 32705),

Gene: Carthage_43 Start: 38107, Stop: 37892, Start Num: 90

Candidate Starts for Carthage_43:

(Start: 90 @38107 has 1 MA's), (105, 38077), (121, 38032), (132, 37999),

Gene: ChadMasterC_83 Start: 58686, Stop: 58949, Start Num: 66

Candidate Starts for ChadMasterC_83:

(Start: 53 @58653 has 5 MA's), (Start: 66 @58686 has 55 MA's), (105, 58749), (131, 58830),

Gene: Charming_87 Start: 56965, Stop: 57264, Start Num: 53

Candidate Starts for Charming_87:

(Start: 53 @56965 has 5 MA's), (Start: 66 @56998 has 55 MA's), (105, 57061), (131, 57142), (150, 57244),

Gene: CherryCola_86 Start: 56676, Stop: 56428, Start Num: 72

Candidate Starts for CherryCola_86:

(9, 56988), (15, 56910), (18, 56889), (36, 56817), (Start: 59 @56703 has 1 MA's), (Start: 72 @56676 has 27 MA's), (Start: 80 @56667 has 1 MA's), (Start: 93 @56649 has 1 MA's), (117, 56592), (136, 56517), (146, 56469),

Gene: Chickadee_87 Start: 56050, Stop: 56301, Start Num: 66

Candidate Starts for Chickadee_87:

(Start: 66 @56050 has 55 MA's), (Start: 94 @56089 has 5 MA's), (105, 56113), (122, 56173), (142, 56248),

Gene: Chipper1996_370 Start: 30385, Stop: 30167, Start Num: 101

Candidate Starts for Chipper1996_370:

(41, 30535), (50, 30490), (51, 30487), (Start: 63 @30448 has 9 MA's), (84, 30415), (Start: 101 @30385 has 19 MA's), (112, 30364), (120, 30328), (123, 30313), (129, 30298), (132, 30286),

Gene: Chocolat_37 Start: 30385, Stop: 30167, Start Num: 101

Candidate Starts for Chocolat_37:

(41, 30535), (50, 30490), (51, 30487), (Start: 63 @30448 has 9 MA's), (84, 30415), (Start: 101 @30385 has 19 MA's), (112, 30364), (120, 30328), (123, 30313), (129, 30298), (132, 30286),

Gene: Chubster_37 Start: 30157, Stop: 29939, Start Num: 101

Candidate Starts for Chubster_37:

(41, 30307), (50, 30262), (51, 30259), (Start: 63 @30220 has 9 MA's), (84, 30187), (Start: 101 @30157 has 19 MA's), (112, 30136), (120, 30100), (123, 30085), (129, 30070), (132, 30058),

Gene: Cinna_64 Start: 43061, Stop: 43273, Start Num: 69

Candidate Starts for Cinna_64:

(Start: 69 @43061 has 49 MA's), (104, 43103), (132, 43190), (139, 43226),

Gene: Circuit_68 Start: 44623, Stop: 44378, Start Num: 74
Candidate Starts for Circuit_68:
(24, 44824), (33, 44797), (Start: 74 @44623 has 2 MA's), (146, 44425),

Gene: ClamChowder_88 Start: 56790, Stop: 56539, Start Num: 72
Candidate Starts for ClamChowder_88:
(6, 57147), (8, 57120), (16, 57021), (19, 56997), (20, 56994), (36, 56931), (Start: 59 @56817 has 1 MA's), (Start: 72 @56790 has 27 MA's), (Start: 80 @56781 has 1 MA's), (Start: 93 @56763 has 1 MA's), (117, 56706), (136, 56631), (146, 56583),

Gene: ClearAsMud_70 Start: 41913, Stop: 42206, Start Num: 69
Candidate Starts for ClearAsMud_70:
(Start: 69 @41913 has 49 MA's), (Start: 90 @41940 has 1 MA's), (115, 41991), (132, 42054), (136, 42072),

Gene: CloverMinnie_40 Start: 34764, Stop: 34510, Start Num: 76
Candidate Starts for CloverMinnie_40:
(54, 34806), (Start: 76 @34764 has 13 MA's), (108, 34716), (123, 34665), (130, 34647), (137, 34620),

Gene: Coffee_44 Start: 39546, Stop: 39340, Start Num: 95
Candidate Starts for Coffee_44:
(Start: 95 @39546 has 31 MA's), (108, 39519), (110, 39516), (126, 39462), (136, 39429),

Gene: Coldpizza_41 Start: 37616, Stop: 37404, Start Num: 93
Candidate Starts for Coldpizza_41:
(Start: 79 @37640 has 3 MA's), (83, 37634), (Start: 93 @37616 has 1 MA's), (120, 37550), (123, 37535), (130, 37517), (135, 37496), (146, 37445),

Gene: Colucci_37 Start: 29963, Stop: 29742, Start Num: 101
Candidate Starts for Colucci_37:
(14, 30272), (25, 30215), (31, 30194), (Start: 63 @30026 has 9 MA's), (67, 30020), (91, 29981), (Start: 101 @29963 has 19 MA's), (123, 29891), (129, 29876), (132, 29864), (137, 29843),

Gene: Conboy_37 Start: 30384, Stop: 30166, Start Num: 101
Candidate Starts for Conboy_37:
(41, 30534), (50, 30489), (51, 30486), (Start: 63 @30447 has 9 MA's), (84, 30414), (Start: 101 @30384 has 19 MA's), (112, 30363), (120, 30327), (123, 30312), (129, 30297), (132, 30285),

Gene: CookieDog_52 Start: 32516, Stop: 32791, Start Num: 65
Candidate Starts for CookieDog_52:
(5, 32120), (10, 32195), (37, 32381), (Start: 65 @32516 has 9 MA's), (Start: 70 @32525 has 1 MA's), (104, 32582), (115, 32606), (116, 32612), (139, 32705),

Gene: Coral_26 Start: 18896, Stop: 18675, Start Num: 107
Candidate Starts for Coral_26:
(Start: 107 @18896 has 8 MA's),

Gene: Cote_27 Start: 19041, Stop: 18820, Start Num: 107
Candidate Starts for Cote_27:
(Start: 107 @19041 has 8 MA's),

Gene: CoveyB_87 Start: 56277, Stop: 56026, Start Num: 72
Candidate Starts for CoveyB_87:

(6, 56634), (8, 56607), (16, 56508), (19, 56484), (20, 56481), (36, 56418), (Start: 59 @56304 has 1 MA's), (Start: 72 @56277 has 27 MA's), (Start: 80 @56268 has 1 MA's), (Start: 93 @56250 has 1 MA's), (117, 56193), (136, 56118), (146, 56070),

Gene: Cranjis_67 Start: 41586, Stop: 41879, Start Num: 69

Candidate Starts for Cranjis_67:

(Start: 69 @41586 has 49 MA's), (115, 41664), (132, 41727), (135, 41742), (136, 41745),

Gene: CrazyRich_65 Start: 41392, Stop: 41685, Start Num: 69

Candidate Starts for CrazyRich_65:

(57, 41368), (Start: 69 @41392 has 49 MA's), (115, 41470), (132, 41533), (135, 41548), (136, 41551),

Gene: Cressida_67 Start: 42667, Stop: 42879, Start Num: 69

Candidate Starts for Cressida_67:

(Start: 69 @42667 has 49 MA's), (104, 42709), (132, 42796), (139, 42832),

Gene: Crisis_67 Start: 41401, Stop: 41694, Start Num: 69

Candidate Starts for Crisis_67:

(57, 41377), (Start: 69 @41401 has 49 MA's), (115, 41479), (132, 41542), (135, 41557), (136, 41560),

Gene: Danyall_86 Start: 55971, Stop: 55720, Start Num: 72

Candidate Starts for Danyall_86:

(6, 56328), (8, 56301), (16, 56202), (19, 56178), (20, 56175), (36, 56112), (Start: 59 @55998 has 1 MA's), (Start: 72 @55971 has 27 MA's), (Start: 80 @55962 has 1 MA's), (Start: 93 @55944 has 1 MA's), (117, 55887), (136, 55812), (146, 55764),

Gene: Daob_27 Start: 19046, Stop: 18825, Start Num: 107

Candidate Starts for Daob_27:

(Start: 107 @19046 has 8 MA's),

Gene: Delrey21_88 Start: 60349, Stop: 60621, Start Num: 63

Candidate Starts for Delrey21_88:

(49, 60304), (Start: 63 @60349 has 9 MA's), (77, 60367), (105, 60418), (131, 60496), (141, 60544),

Gene: Derg_77 Start: 55217, Stop: 55477, Start Num: 66

Candidate Starts for Derg_77:

(Start: 66 @55217 has 55 MA's), (105, 55280), (131, 55361), (139, 55400),

Gene: Dxdert_82 Start: 54559, Stop: 54810, Start Num: 66

Candidate Starts for Dxdert_82:

(Start: 66 @54559 has 55 MA's), (Start: 94 @54598 has 5 MA's), (105, 54622), (122, 54682), (142, 54757),

Gene: DigitDog_43 Start: 39348, Stop: 39139, Start Num: 98

Candidate Starts for DigitDog_43:

(47, 39456), (Start: 98 @39348 has 9 MA's), (105, 39333), (114, 39321),

Gene: DoctorFroggo_88 Start: 60349, Stop: 60621, Start Num: 63

Candidate Starts for DoctorFroggo_88:

(49, 60304), (Start: 63 @60349 has 9 MA's), (77, 60367), (105, 60418), (131, 60496), (141, 60544),

Gene: Donny_44 Start: 39653, Stop: 39444, Start Num: 98

Candidate Starts for Donny_44:

(46, 39767), (47, 39761), (Start: 98 @39653 has 9 MA's), (105, 39638), (114, 39626), (121, 39593),

Gene: DrYang_38 Start: 31723, Stop: 31505, Start Num: 101

Candidate Starts for DrYang_38:

(Start: 101 @31723 has 19 MA's), (119, 31675), (120, 31666), (123, 31651), (129, 31636), (132, 31624), (148, 31549),

Gene: Dropshot_52 Start: 32243, Stop: 32518, Start Num: 65

Candidate Starts for Dropshot_52:

(5, 31847), (10, 31922), (37, 32108), (Start: 65 @32243 has 9 MA's), (Start: 70 @32252 has 1 MA's), (104, 32309), (115, 32333), (116, 32339), (139, 32432),

Gene: EMoore_81 Start: 58164, Stop: 58421, Start Num: 66

Candidate Starts for EMoore_81:

(Start: 66 @58164 has 55 MA's), (77, 58179), (105, 58230), (131, 58308), (138, 58341),

Gene: Eaglehorse_44 Start: 39470, Stop: 39264, Start Num: 95

Candidate Starts for Eaglehorse_44:

(Start: 95 @39470 has 31 MA's), (108, 39443), (110, 39440), (126, 39386), (136, 39353),

Gene: EarickHC_67 Start: 41323, Stop: 41616, Start Num: 69

Candidate Starts for EarickHC_67:

(Start: 69 @41323 has 49 MA's), (115, 41401), (132, 41464), (135, 41479), (136, 41482),

Gene: EastView9101_42 Start: 39303, Stop: 39094, Start Num: 98

Candidate Starts for EastView9101_42:

(46, 39417), (47, 39411), (Start: 98 @39303 has 9 MA's), (105, 39288), (114, 39276), (121, 39243),

Gene: EastWest_78 Start: 46071, Stop: 45799, Start Num: 55

Candidate Starts for EastWest_78:

(Start: 55 @46071 has 27 MA's), (105, 46002), (128, 45927), (146, 45852),

Gene: EdgarPoe_37 Start: 30384, Stop: 30166, Start Num: 101

Candidate Starts for EdgarPoe_37:

(41, 30534), (50, 30489), (51, 30486), (Start: 63 @30447 has 9 MA's), (84, 30414), (Start: 101 @30384 has 19 MA's), (112, 30363), (120, 30327), (123, 30312), (129, 30297), (132, 30285),

Gene: EdmundFerry_85 Start: 55426, Stop: 55677, Start Num: 66

Candidate Starts for EdmundFerry_85:

(Start: 66 @55426 has 55 MA's), (Start: 94 @55465 has 5 MA's), (105, 55489), (122, 55549), (142, 55624),

Gene: Egi03_85 Start: 55725, Stop: 55450, Start Num: 59

Candidate Starts for Egi03_85:

(9, 56010), (15, 55932), (18, 55911), (36, 55839), (Start: 59 @55725 has 1 MA's), (Start: 72 @55698 has 27 MA's), (Start: 80 @55689 has 1 MA's), (Start: 93 @55671 has 1 MA's), (117, 55614), (136, 55539), (146, 55491),

Gene: Evaa_38 Start: 33917, Stop: 33678, Start Num: 93

Candidate Starts for Evaa_38:

(Start: 79 @33941 has 3 MA's), (83, 33935), (Start: 93 @33917 has 1 MA's), (120, 33851), (146, 33746),

Gene: Evamon_86 Start: 56075, Stop: 55827, Start Num: 72

Candidate Starts for Evamon_86:

(9, 56387), (15, 56309), (36, 56216), (Start: 59 @56102 has 1 MA's), (Start: 72 @56075 has 27 MA's), (Start: 80 @56066 has 1 MA's), (Start: 93 @56048 has 1 MA's), (117, 55991), (136, 55916), (146, 55868),

Gene: Faze9_43 Start: 39566, Stop: 39360, Start Num: 95

Candidate Starts for Faze9_43:

(Start: 95 @39566 has 31 MA's), (108, 39539), (110, 39536), (126, 39482), (136, 39449),

Gene: Fireball_89 Start: 56537, Stop: 56289, Start Num: 72

Candidate Starts for Fireball_89:

(9, 56849), (15, 56771), (18, 56750), (36, 56678), (Start: 59 @56564 has 1 MA's), (Start: 72 @56537 has 27 MA's), (Start: 80 @56528 has 1 MA's), (Start: 93 @56510 has 1 MA's), (117, 56453), (136, 56378), (146, 56330),

Gene: Fireman_69 Start: 43363, Stop: 43656, Start Num: 69

Candidate Starts for Fireman_69:

(Start: 69 @43363 has 49 MA's), (115, 43441), (132, 43504), (136, 43522),

Gene: Fitzgerald_82 Start: 57842, Stop: 58105, Start Num: 66

Candidate Starts for Fitzgerald_82:

(Start: 53 @57809 has 5 MA's), (Start: 66 @57842 has 55 MA's), (105, 57905), (131, 57986),

Gene: Flatwoods_84 Start: 56131, Stop: 56391, Start Num: 66

Candidate Starts for Flatwoods_84:

(Start: 66 @56131 has 55 MA's), (105, 56194), (131, 56275), (139, 56314),

Gene: Fosterous_86 Start: 57990, Stop: 58253, Start Num: 66

Candidate Starts for Fosterous_86:

(48, 57939), (Start: 66 @57990 has 55 MA's), (105, 58053), (131, 58134),

Gene: Franzy_67 Start: 46121, Stop: 45813, Start Num: 55

Candidate Starts for Franzy_67:

(Start: 55 @46121 has 27 MA's), (86, 46082), (105, 46046),

Gene: FrenchFry_44 Start: 39560, Stop: 39354, Start Num: 95

Candidate Starts for FrenchFry_44:

(Start: 95 @39560 has 31 MA's), (108, 39533), (110, 39530), (126, 39476), (136, 39443),

Gene: Fresco_38 Start: 32837, Stop: 32601, Start Num: 71

Candidate Starts for Fresco_38:

(Start: 69 @32840 has 49 MA's), (Start: 71 @32837 has 4 MA's), (85, 32816), (88, 32810), (106, 32786), (110, 32780), (136, 32690),

Gene: FuegoCuervo_89 Start: 58028, Stop: 58291, Start Num: 66

Candidate Starts for FuegoCuervo_89:

(Start: 53 @57995 has 5 MA's), (Start: 66 @58028 has 55 MA's), (105, 58091), (131, 58172),

Gene: Fugax_89 Start: 56782, Stop: 56531, Start Num: 72

Candidate Starts for Fugax_89:

(6, 57139), (8, 57112), (16, 57013), (19, 56989), (20, 56986), (36, 56923), (Start: 59 @56809 has 1 MA's), (Start: 72 @56782 has 27 MA's), (Start: 80 @56773 has 1 MA's), (Start: 93 @56755 has 1

MA's), (117, 56698), (136, 56623), (146, 56575),

Gene: Funsized_46 Start: 41756, Stop: 41544, Start Num: 94

Candidate Starts for Funsized_46:

(17, 42029), (34, 41957), (78, 41783), (Start: 94 @41756 has 5 MA's), (Start: 100 @41747 has 1 MA's), (111, 41723), (118, 41702), (121, 41684), (126, 41666),

Gene: GTE6_86 Start: 56599, Stop: 56850, Start Num: 66

Candidate Starts for GTE6_86:

(Start: 66 @56599 has 55 MA's), (Start: 94 @56638 has 5 MA's), (105, 56662), (122, 56722), (142, 56797),

Gene: Gaea_85 Start: 56481, Stop: 56741, Start Num: 66

Candidate Starts for Gaea_85:

(Start: 66 @56481 has 55 MA's), (105, 56544), (131, 56625),

Gene: Galadriel_85 Start: 58206, Stop: 58469, Start Num: 66

Candidate Starts for Galadriel_85:

(48, 58155), (Start: 66 @58206 has 55 MA's), (105, 58269), (131, 58350),

Gene: Ganandorf_65 Start: 41419, Stop: 41712, Start Num: 69

Candidate Starts for Ganandorf_65:

(57, 41395), (Start: 69 @41419 has 49 MA's), (115, 41497), (132, 41560), (135, 41575), (136, 41578),

Gene: Geodirt_84 Start: 58493, Stop: 58759, Start Num: 66

Candidate Starts for Geodirt_84:

(Start: 53 @58460 has 5 MA's), (Start: 66 @58493 has 55 MA's), (105, 58556), (131, 58637), (150, 58739),

Gene: Gezellig_85 Start: 55912, Stop: 55673, Start Num: 80

Candidate Starts for Gezellig_85:

(9, 56233), (15, 56155), (18, 56134), (36, 56062), (Start: 59 @55948 has 1 MA's), (Start: 72 @55921 has 27 MA's), (Start: 80 @55912 has 1 MA's), (Start: 93 @55894 has 1 MA's), (117, 55837), (136, 55762), (146, 55714),

Gene: Gina_70 Start: 41480, Stop: 41773, Start Num: 69

Candidate Starts for Gina_70:

(40, 41387), (Start: 69 @41480 has 49 MA's), (115, 41558), (132, 41621), (136, 41639),

Gene: Glass_44 Start: 39560, Stop: 39354, Start Num: 95

Candidate Starts for Glass_44:

(Start: 95 @39560 has 31 MA's), (108, 39533), (110, 39530), (126, 39476), (136, 39443),

Gene: Glorp_67 Start: 41383, Stop: 41676, Start Num: 69

Candidate Starts for Glorp_67:

(57, 41359), (Start: 69 @41383 has 49 MA's), (115, 41461), (132, 41524), (135, 41539), (136, 41542),

Gene: Godines_44 Start: 39502, Stop: 39296, Start Num: 95

Candidate Starts for Godines_44:

(Start: 95 @39502 has 31 MA's), (108, 39475), (110, 39472), (126, 39418), (136, 39385),

Gene: GoldDust_75 Start: 48481, Stop: 48173, Start Num: 55

Candidate Starts for GoldDust_75:

(Start: 55 @48481 has 27 MA's), (125, 48340), (135, 48310), (153, 48211), (155, 48196),

Gene: GravityBall_72 Start: 46734, Stop: 46405, Start Num: 55

Candidate Starts for GravityBall_72:

(Start: 55 @46734 has 27 MA's),

Gene: Grekaycon_73 Start: 46991, Stop: 46659, Start Num: 55

Candidate Starts for Grekaycon_73:

(Start: 55 @46991 has 27 MA's), (Start: 79 @46970 has 3 MA's), (105, 46922), (152, 46727),

Gene: Gustavo_86 Start: 57313, Stop: 57573, Start Num: 66

Candidate Starts for Gustavo_86:

(Start: 66 @57313 has 55 MA's), (105, 57376), (131, 57457),

Gene: Guzman_52 Start: 32499, Stop: 32774, Start Num: 65

Candidate Starts for Guzman_52:

(5, 32103), (10, 32178), (37, 32364), (Start: 65 @32499 has 9 MA's), (Start: 70 @32508 has 1 MA's), (104, 32565), (115, 32589), (116, 32595), (139, 32688),

Gene: Halo3_85 Start: 56796, Stop: 56545, Start Num: 72

Candidate Starts for Halo3_85:

(9, 57108), (15, 57030), (36, 56937), (Start: 59 @56823 has 1 MA's), (Start: 72 @56796 has 27 MA's), (Start: 80 @56787 has 1 MA's), (Start: 93 @56769 has 1 MA's), (117, 56712), (136, 56637), (146, 56589),

Gene: HannahPhantana_27 Start: 19053, Stop: 18832, Start Num: 107

Candidate Starts for HannahPhantana_27:

(Start: 107 @19053 has 8 MA's),

Gene: Hans_87 Start: 58571, Stop: 58822, Start Num: 66

Candidate Starts for Hans_87:

(Start: 66 @58571 has 55 MA's), (105, 58634), (122, 58694), (125, 58700), (131, 58712), (132, 58715),

Gene: Hashim76_46 Start: 38349, Stop: 38134, Start Num: 89

Candidate Starts for Hashim76_46:

(Start: 89 @38349 has 3 MA's), (105, 38325), (123, 38271), (147, 38175),

Gene: Hedgerow_44 Start: 39542, Stop: 39336, Start Num: 95

Candidate Starts for Hedgerow_44:

(Start: 95 @39542 has 31 MA's), (108, 39515), (110, 39512), (126, 39458), (136, 39425),

Gene: Hermeonysus_66 Start: 41314, Stop: 41607, Start Num: 69

Candidate Starts for Hermeonysus_66:

(Start: 69 @41314 has 49 MA's), (115, 41392), (132, 41455), (135, 41470), (136, 41473),

Gene: Hirko_79 Start: 48513, Stop: 48205, Start Num: 55

Candidate Starts for Hirko_79:

(Start: 55 @48513 has 27 MA's),

Gene: Holeinone_44 Start: 39422, Stop: 39216, Start Num: 95

Candidate Starts for Holeinone_44:

(Start: 95 @39422 has 31 MA's), (108, 39395), (110, 39392), (126, 39338), (136, 39305),

Gene: Honeyfin_67 Start: 41574, Stop: 41867, Start Num: 69

Candidate Starts for Honeyfin_67:

(57, 41550), (Start: 69 @41574 has 49 MA's), (115, 41652), (132, 41715), (135, 41730), (136, 41733),

Gene: HumptyDumpty_37 Start: 30383, Stop: 30165, Start Num: 101

Candidate Starts for HumptyDumpty_37:

(41, 30533), (50, 30488), (51, 30485), (Start: 63 @30446 has 9 MA's), (84, 30413), (Start: 101 @30383 has 19 MA's), (112, 30362), (120, 30326), (123, 30311), (129, 30296), (132, 30284),

Gene: Indlovu_42 Start: 38503, Stop: 38300, Start Num: 98

Candidate Starts for Indlovu_42:

(47, 38602), (Start: 98 @38503 has 9 MA's), (105, 38485), (118, 38458), (121, 38440), (135, 38392),

Gene: Inspectinfecti_87 Start: 58519, Stop: 58770, Start Num: 66

Candidate Starts for Inspectinfecti_87:

(Start: 66 @58519 has 55 MA's), (105, 58582), (122, 58642), (125, 58648), (131, 58660), (132, 58663),

Gene: ItsyBitsy1_44 Start: 39424, Stop: 39218, Start Num: 95

Candidate Starts for ItsyBitsy1_44:

(Start: 95 @39424 has 31 MA's), (108, 39397), (110, 39394), (126, 39340), (136, 39307),

Gene: JKSyngboy_81 Start: 56985, Stop: 57245, Start Num: 66

Candidate Starts for JKSyngboy_81:

(Start: 66 @56985 has 55 MA's), (105, 57048), (131, 57129), (139, 57168),

Gene: JKerns_72 Start: 46983, Stop: 46651, Start Num: 55

Candidate Starts for JKerns_72:

(Start: 55 @46983 has 27 MA's), (Start: 79 @46962 has 3 MA's), (105, 46914),

Gene: JaNo_37 Start: 30383, Stop: 30165, Start Num: 101

Candidate Starts for JaNo_37:

(41, 30533), (50, 30488), (51, 30485), (Start: 63 @30446 has 9 MA's), (84, 30413), (Start: 101 @30383 has 19 MA's), (112, 30362), (120, 30326), (123, 30311), (129, 30296), (132, 30284),

Gene: Jabberwocky_83 Start: 58270, Stop: 58566, Start Num: 53

Candidate Starts for Jabberwocky_83:

(Start: 53 @58270 has 5 MA's), (Start: 66 @58303 has 55 MA's), (105, 58366), (131, 58447),

Gene: Jace_90 Start: 50456, Stop: 50166, Start Num: 61

Candidate Starts for Jace_90:

(32, 50609), (Start: 61 @50456 has 1 MA's), (Start: 65 @50450 has 9 MA's), (Start: 82 @50429 has 1 MA's), (145, 50234), (151, 50192),

Gene: Jakelyne_55 Start: 32609, Stop: 32884, Start Num: 65

Candidate Starts for Jakelyne_55:

(37, 32474), (Start: 65 @32609 has 9 MA's), (Start: 70 @32618 has 1 MA's), (104, 32675), (115, 32699), (116, 32705), (139, 32798),

Gene: Jambalaya_83 Start: 55378, Stop: 55127, Start Num: 72

Candidate Starts for Jambalaya_83:

(4, 55774), (15, 55612), (36, 55519), (Start: 59 @55405 has 1 MA's), (Start: 72 @55378 has 27 MA's), (Start: 80 @55369 has 1 MA's), (87, 55354), (Start: 93 @55351 has 1 MA's), (117, 55294), (134, 55228), (136, 55219), (146, 55171),

Gene: Jawnski_68 Start: 45564, Stop: 45256, Start Num: 55

Candidate Starts for Jawnski_68:

(Start: 55 @45564 has 27 MA's), (86, 45525), (105, 45489),

Gene: JayCookie_37 Start: 30387, Stop: 30169, Start Num: 101

Candidate Starts for JayCookie_37:

(41, 30537), (50, 30492), (51, 30489), (Start: 63 @30450 has 9 MA's), (84, 30417), (Start: 101 @30387 has 19 MA's), (112, 30366), (120, 30330), (123, 30315), (129, 30300), (132, 30288),

Gene: Jayden_67 Start: 41914, Stop: 42210, Start Num: 69

Candidate Starts for Jayden_67:

(Start: 69 @41914 has 49 MA's), (132, 42058), (136, 42076), (156, 42196),

Gene: Jefe_66 Start: 41369, Stop: 41662, Start Num: 69

Candidate Starts for Jefe_66:

(57, 41345), (Start: 69 @41369 has 49 MA's), (115, 41447), (132, 41510), (135, 41525), (136, 41528),

Gene: Jinkies_84 Start: 48737, Stop: 48420, Start Num: 55

Candidate Starts for Jinkies_84:

(28, 48893), (43, 48791), (Start: 55 @48737 has 27 MA's), (149, 48470),

Gene: Jollipop_67 Start: 41751, Stop: 42050, Start Num: 69

Candidate Starts for Jollipop_67:

(Start: 69 @41751 has 49 MA's), (Start: 89 @41781 has 3 MA's), (132, 41898), (135, 41913), (136, 41916),

Gene: Jordan_73 Start: 47141, Stop: 46809, Start Num: 55

Candidate Starts for Jordan_73:

(Start: 55 @47141 has 27 MA's), (Start: 79 @47120 has 3 MA's), (105, 47072),

Gene: KBurrousTX_37 Start: 31486, Stop: 31268, Start Num: 101

Candidate Starts for KBurrousTX_37:

(84, 31513), (Start: 101 @31486 has 19 MA's), (113, 31462), (120, 31429), (123, 31414), (129, 31399), (132, 31387), (133, 31381),

Gene: Kabreeze_37 Start: 30383, Stop: 30165, Start Num: 101

Candidate Starts for Kabreeze_37:

(41, 30533), (50, 30488), (51, 30485), (Start: 63 @30446 has 9 MA's), (84, 30413), (Start: 101 @30383 has 19 MA's), (112, 30362), (120, 30326), (123, 30311), (129, 30296), (132, 30284),

Gene: KaiHaiDragon_67 Start: 41323, Stop: 41616, Start Num: 69

Candidate Starts for KaiHaiDragon_67:

(Start: 69 @41323 has 49 MA's), (115, 41401), (132, 41464), (135, 41479), (136, 41482),

Gene: Kaleb_44 Start: 39557, Stop: 39351, Start Num: 95

Candidate Starts for Kaleb_44:

(Start: 95 @39557 has 31 MA's), (108, 39530), (110, 39527), (126, 39473), (136, 39440),

Gene: Kamashten_85 Start: 58100, Stop: 58363, Start Num: 66

Candidate Starts for Kamashten_85:

(48, 58049), (Start: 66 @58100 has 55 MA's), (105, 58163), (131, 58244),

Gene: KarasumaRum_45 Start: 39790, Stop: 39581, Start Num: 98

Candidate Starts for KarasumaRum_45:

(47, 39898), (Start: 98 @39790 has 9 MA's), (105, 39775), (114, 39763),

Gene: Keitabear_82 Start: 58580, Stop: 58876, Start Num: 53

Candidate Starts for Keitabear_82:

(Start: 53 @58580 has 5 MA's), (Start: 66 @58613 has 55 MA's), (105, 58676), (131, 58757),

Gene: Kewpiedoll_85 Start: 58474, Stop: 58737, Start Num: 66

Candidate Starts for Kewpiedoll_85:

(Start: 53 @58441 has 5 MA's), (Start: 66 @58474 has 55 MA's), (105, 58537), (131, 58618),

Gene: Kheth_44 Start: 39445, Stop: 39239, Start Num: 95

Candidate Starts for Kheth_44:

(Start: 95 @39445 has 31 MA's), (108, 39418), (110, 39415), (126, 39361), (136, 39328),

Gene: KimmyK_84 Start: 56368, Stop: 56120, Start Num: 72

Candidate Starts for KimmyK_84:

(9, 56680), (15, 56602), (18, 56581), (36, 56509), (Start: 59 @56395 has 1 MA's), (Start: 72 @56368 has 27 MA's), (Start: 80 @56359 has 1 MA's), (Start: 93 @56341 has 1 MA's), (117, 56284), (136, 56209), (146, 56161),

Gene: King2_67 Start: 46100, Stop: 45792, Start Num: 55

Candidate Starts for King2_67:

(Start: 55 @46100 has 27 MA's), (86, 46061),

Gene: Klevey_74 Start: 45284, Stop: 45039, Start Num: 81

Candidate Starts for Klevey_74:

(38, 45428), (Start: 81 @45284 has 3 MA's),

Gene: Knocker_45 Start: 40870, Stop: 40658, Start Num: 94

Candidate Starts for Knocker_45:

(47, 40978), (Start: 94 @40870 has 5 MA's), (Start: 100 @40861 has 1 MA's), (111, 40837), (114, 40831), (118, 40816), (121, 40798),

Gene: Kolhan_44 Start: 39436, Stop: 39230, Start Num: 95

Candidate Starts for Kolhan_44:

(Start: 95 @39436 has 31 MA's), (108, 39409), (110, 39406), (126, 39352), (136, 39319),

Gene: Kowalski_65 Start: 41388, Stop: 41687, Start Num: 69

Candidate Starts for Kowalski_65:

(Start: 69 @41388 has 49 MA's), (Start: 89 @41418 has 3 MA's), (132, 41535), (135, 41550), (136, 41553),

Gene: Kozie_64 Start: 42302, Stop: 42514, Start Num: 69

Candidate Starts for Kozie_64:

(64, 42293), (Start: 69 @42302 has 49 MA's), (104, 42344), (132, 42431),

Gene: Kroos_84 Start: 56981, Stop: 57241, Start Num: 66

Candidate Starts for Kroos_84:

(Start: 66 @56981 has 55 MA's), (105, 57044), (131, 57125), (139, 57164),

Gene: Kwekel_87 Start: 55963, Stop: 56214, Start Num: 66

Candidate Starts for Kwekel_87:
(Start: 66 @55963 has 55 MA's), (Start: 94 @56002 has 5 MA's), (105, 56026), (122, 56086), (142, 56161),

Gene: Kwobi_85 Start: 57490, Stop: 57750, Start Num: 66
Candidate Starts for Kwobi_85:
(Start: 66 @57490 has 55 MA's), (105, 57553), (131, 57634), (139, 57673),

Gene: Lars_44 Start: 39547, Stop: 39341, Start Num: 95
Candidate Starts for Lars_44:
(Start: 95 @39547 has 31 MA's), (108, 39520), (110, 39517), (126, 39463), (136, 39430),

Gene: Laurie_43 Start: 38946, Stop: 38740, Start Num: 95
Candidate Starts for Laurie_43:
(Start: 95 @38946 has 31 MA's), (108, 38919), (110, 38916), (126, 38862), (136, 38829),

Gene: LeeroyJ_73 Start: 46660, Stop: 46331, Start Num: 55
Candidate Starts for LeeroyJ_73:
(Start: 55 @46660 has 27 MA's),

Gene: Lennon_84 Start: 59043, Stop: 59306, Start Num: 66
Candidate Starts for Lennon_84:
(Start: 53 @59010 has 5 MA's), (Start: 66 @59043 has 55 MA's), (105, 59106), (131, 59187),

Gene: Leonard_86 Start: 58581, Stop: 58832, Start Num: 66
Candidate Starts for Leonard_86:
(Start: 66 @58581 has 55 MA's), (105, 58644), (122, 58704), (125, 58710), (131, 58722), (132, 58725),

Gene: Lephleur_44 Start: 39440, Stop: 39234, Start Num: 95
Candidate Starts for Lephleur_44:
(Start: 95 @39440 has 31 MA's), (108, 39413), (110, 39410), (126, 39356), (136, 39323),

Gene: Ligma_38 Start: 32837, Stop: 32601, Start Num: 71
Candidate Starts for Ligma_38:
(Start: 69 @32840 has 49 MA's), (Start: 71 @32837 has 4 MA's), (85, 32816), (88, 32810), (106, 32786), (110, 32780), (136, 32690),

Gene: LilHam_78 Start: 54602, Stop: 54862, Start Num: 66
Candidate Starts for LilHam_78:
(Start: 66 @54602 has 55 MA's), (105, 54665), (131, 54746), (139, 54785),

Gene: LilMcDreamy_41 Start: 38754, Stop: 38542, Start Num: 98
Candidate Starts for LilMcDreamy_41:
(47, 38862), (Start: 98 @38754 has 9 MA's), (105, 38736), (121, 38691), (137, 38637),

Gene: LilSmirk_44 Start: 39434, Stop: 39228, Start Num: 95
Candidate Starts for LilSmirk_44:
(Start: 95 @39434 has 31 MA's), (108, 39407), (110, 39404), (126, 39350), (136, 39317),

Gene: Lilbeanie_97 Start: 58823, Stop: 59047, Start Num: 124
Candidate Starts for Lilbeanie_97:
(Start: 124 @58823 has 1 MA's), (140, 58886), (157, 59015),

Gene: Lilmac1015_74 Start: 45377, Stop: 45132, Start Num: 81
Candidate Starts for Lilmac1015_74:
(38, 45521), (Start: 81 @45377 has 3 MA's),

Gene: Linus_37 Start: 30384, Stop: 30166, Start Num: 101
Candidate Starts for Linus_37:
(41, 30534), (50, 30489), (51, 30486), (Start: 63 @30447 has 9 MA's), (84, 30414), (Start: 101 @30384 has 19 MA's), (112, 30363), (120, 30327), (123, 30312), (129, 30297), (132, 30285),

Gene: LittleFortune_68 Start: 41679, Stop: 41972, Start Num: 69
Candidate Starts for LittleFortune_68:
(Start: 69 @41679 has 49 MA's), (115, 41757), (132, 41820), (135, 41835), (136, 41838),

Gene: LittleMunchkin_40 Start: 36172, Stop: 35945, Start Num: 76
Candidate Starts for LittleMunchkin_40:
(Start: 76 @36172 has 13 MA's), (131, 36055), (137, 36031),

Gene: LizLemon_44 Start: 39556, Stop: 39350, Start Num: 95
Candidate Starts for LizLemon_44:
(Start: 95 @39556 has 31 MA's), (108, 39529), (110, 39526), (126, 39472), (136, 39439),

Gene: Losacky_56 Start: 32783, Stop: 33049, Start Num: 70
Candidate Starts for Losacky_56:
(37, 32639), (Start: 65 @32774 has 9 MA's), (Start: 70 @32783 has 1 MA's), (104, 32840), (115, 32864), (116, 32870), (139, 32963),

Gene: Love_90 Start: 58854, Stop: 59117, Start Num: 66
Candidate Starts for Love_90:
(Start: 53 @58821 has 5 MA's), (Start: 66 @58854 has 55 MA's), (105, 58917), (131, 58998),

Gene: Lunar_27 Start: 19041, Stop: 18820, Start Num: 107
Candidate Starts for Lunar_27:
(Start: 107 @19041 has 8 MA's),

Gene: Lymara_37 Start: 30202, Stop: 29981, Start Num: 101
Candidate Starts for Lymara_37:
(41, 30352), (50, 30307), (Start: 63 @30265 has 9 MA's), (84, 30232), (Start: 101 @30202 has 19 MA's), (119, 30154), (123, 30130), (129, 30115), (132, 30103),

Gene: MakoManhole_40 Start: 34842, Stop: 34588, Start Num: 76
Candidate Starts for MakoManhole_40:
(54, 34884), (Start: 76 @34842 has 13 MA's), (108, 34794), (123, 34743), (130, 34725), (137, 34698),

Gene: Margaery_63 Start: 42267, Stop: 42482, Start Num: 69
Candidate Starts for Margaery_63:
(Start: 69 @42267 has 49 MA's), (105, 42309), (116, 42336), (127, 42381), (132, 42396),

Gene: Martha_72 Start: 46927, Stop: 46595, Start Num: 55
Candidate Starts for Martha_72:
(Start: 55 @46927 has 27 MA's), (Start: 79 @46906 has 3 MA's), (105, 46858), (152, 46663),

Gene: Maruru_32 Start: 29698, Stop: 29486, Start Num: 102
Candidate Starts for Maruru_32:

(35, 29905), (92, 29716), (Start: 102 @29698 has 2 MA's),

Gene: MasterPo_44 Start: 39443, Stop: 39237, Start Num: 95

Candidate Starts for MasterPo_44:

(Start: 95 @39443 has 31 MA's), (108, 39416), (110, 39413), (126, 39359), (136, 39326),

Gene: Matzah_66 Start: 43128, Stop: 43340, Start Num: 69

Candidate Starts for Matzah_66:

(Start: 69 @43128 has 49 MA's), (104, 43170), (132, 43257), (139, 43293),

Gene: McKinley_87 Start: 57834, Stop: 58097, Start Num: 66

Candidate Starts for McKinley_87:

(Start: 53 @57801 has 5 MA's), (Start: 66 @57834 has 55 MA's), (105, 57897), (131, 57978),

Gene: MelBins_88 Start: 59070, Stop: 59321, Start Num: 66

Candidate Starts for MelBins_88:

(11, 58767), (Start: 66 @59070 has 55 MA's), (105, 59133), (122, 59193), (131, 59211), (132, 59214),

Gene: Melons_27 Start: 19041, Stop: 18820, Start Num: 107

Candidate Starts for Melons_27:

(Start: 107 @19041 has 8 MA's),

Gene: MementoMori_65 Start: 42723, Stop: 42935, Start Num: 69

Candidate Starts for MementoMori_65:

(Start: 69 @42723 has 49 MA's), (104, 42765), (132, 42852), (139, 42888),

Gene: MenE_54 Start: 32665, Stop: 32940, Start Num: 65

Candidate Starts for MenE_54:

(37, 32530), (Start: 65 @32665 has 9 MA's), (Start: 70 @32674 has 1 MA's), (104, 32731), (115, 32755), (116, 32761), (139, 32854),

Gene: Merry_ Start: 43564, Stop: 43854, Start Num: 69

Candidate Starts for Merry_:

(50, 43516), (Start: 69 @43564 has 49 MA's), (115, 43648), (132, 43711),

Gene: Metamorphoo_69 Start: 42657, Stop: 42950, Start Num: 69

Candidate Starts for Metamorphoo_69:

(Start: 69 @42657 has 49 MA's), (115, 42735), (132, 42798), (136, 42816),

Gene: MoontowerMania_85 Start: 58915, Stop: 59211, Start Num: 53

Candidate Starts for MoontowerMania_85:

(Start: 53 @58915 has 5 MA's), (Start: 66 @58948 has 55 MA's), (105, 59011), (131, 59092),

Gene: Mordred_37 Start: 30383, Stop: 30165, Start Num: 101

Candidate Starts for Mordred_37:

(41, 30533), (50, 30488), (51, 30485), (Start: 63 @30446 has 9 MA's), (84, 30413), (Start: 101 @30383 has 19 MA's), (112, 30362), (120, 30326), (123, 30311), (129, 30296), (132, 30284),

Gene: MossRose_40 Start: 34821, Stop: 34567, Start Num: 76

Candidate Starts for MossRose_40:

(54, 34863), (Start: 76 @34821 has 13 MA's), (108, 34773), (123, 34722), (130, 34704), (137, 34677),

Gene: MoyaNatalis_37 Start: 30387, Stop: 30169, Start Num: 101

Candidate Starts for MoyaNatalis_37:

(41, 30537), (50, 30492), (51, 30489), (Start: 63 @30450 has 9 MA's), (84, 30417), (Start: 101 @30387 has 19 MA's), (112, 30366), (120, 30330), (123, 30315), (129, 30300), (132, 30288),

Gene: Mufasa8_29 Start: 27032, Stop: 26823, Start Num: 102

Candidate Starts for Mufasa8_29:

(Start: 102 @27032 has 2 MA's),

Gene: Mufasa8_98 Start: 57231, Stop: 56944, Start Num: 59

Candidate Starts for Mufasa8_98:

(Start: 59 @57231 has 1 MA's), (60, 57222), (83, 57186), (Start: 90 @57171 has 1 MA's), (132, 57057), (136, 57039),

Gene: Mutzi_85 Start: 56931, Stop: 56680, Start Num: 72

Candidate Starts for Mutzi_85:

(6, 57288), (8, 57261), (16, 57162), (19, 57138), (20, 57135), (36, 57072), (Start: 59 @56958 has 1 MA's), (Start: 72 @56931 has 27 MA's), (Start: 80 @56922 has 1 MA's), (Start: 93 @56904 has 1 MA's), (117, 56847), (136, 56772), (146, 56724),

Gene: Mysterious_45 Start: 39920, Stop: 39711, Start Num: 98

Candidate Starts for Mysterious_45:

(47, 40028), (Start: 98 @39920 has 9 MA's), (105, 39905), (121, 39860),

Gene: NHagos_38 Start: 33445, Stop: 33185, Start Num: 76

Candidate Starts for NHagos_38:

(58, 33478), (Start: 76 @33445 has 13 MA's), (106, 33403), (108, 33400), (123, 33349), (130, 33331), (137, 33304),

Gene: Nangang_43 Start: 39713, Stop: 39504, Start Num: 98

Candidate Starts for Nangang_43:

(47, 39821), (Start: 98 @39713 has 9 MA's), (105, 39698), (114, 39686),

Gene: NathanVaag_68 Start: 45795, Stop: 45487, Start Num: 55

Candidate Starts for NathanVaag_68:

(Start: 55 @45795 has 27 MA's), (86, 45756), (105, 45720), (142, 45582),

Gene: Natkenzie_88 Start: 58873, Stop: 59145, Start Num: 63

Candidate Starts for Natkenzie_88:

(21, 58672), (23, 58681), (26, 58693), (27, 58699), (Start: 63 @58873 has 9 MA's), (105, 58942), (131, 59020),

Gene: Nehemiah_43 Start: 39920, Stop: 39711, Start Num: 98

Candidate Starts for Nehemiah_43:

(47, 40028), (Start: 98 @39920 has 9 MA's), (105, 39905), (121, 39860),

Gene: NoodlelyBoi_67 Start: 42162, Stop: 42455, Start Num: 69

Candidate Starts for NoodlelyBoi_67:

(52, 42120), (Start: 69 @42162 has 49 MA's), (Start: 90 @42189 has 1 MA's), (115, 42240), (132, 42303), (136, 42321),

Gene: Nordenberg_83 Start: 56540, Stop: 56839, Start Num: 53

Candidate Starts for Nordenberg_83:

(Start: 53 @56540 has 5 MA's), (Start: 66 @56573 has 55 MA's), (105, 56636), (131, 56717), (150, 56819),

Gene: Nostromo_69 Start: 43577, Stop: 43287, Start Num: 55
Candidate Starts for Nostromo_69:
(Start: 55 @43577 has 27 MA's), (139, 43391), (154, 43307),

Gene: Nubi_89 Start: 56334, Stop: 56083, Start Num: 72
Candidate Starts for Nubi_89:
(7, 56661), (9, 56646), (15, 56568), (36, 56475), (Start: 59 @56361 has 1 MA's), (Start: 72 @56334 has 27 MA's), (Start: 80 @56325 has 1 MA's), (Start: 93 @56307 has 1 MA's), (117, 56250), (136, 56175), (146, 56127),

Gene: Onika_65 Start: 41397, Stop: 41696, Start Num: 69
Candidate Starts for Onika_65:
(Start: 69 @41397 has 49 MA's), (Start: 89 @41427 has 3 MA's), (132, 41544), (135, 41559), (136, 41562),

Gene: Opia_44 Start: 39429, Stop: 39223, Start Num: 95
Candidate Starts for Opia_44:
(Start: 95 @39429 has 31 MA's), (108, 39402), (110, 39399), (126, 39345), (136, 39312),

Gene: Paries_88 Start: 59125, Stop: 59388, Start Num: 66
Candidate Starts for Paries_88:
(Start: 53 @59092 has 5 MA's), (Start: 66 @59125 has 55 MA's), (105, 59188), (131, 59269),

Gene: Paschalis_66 Start: 41416, Stop: 41715, Start Num: 69
Candidate Starts for Paschalis_66:
(Start: 69 @41416 has 49 MA's), (Start: 89 @41446 has 3 MA's), (132, 41563), (135, 41578), (136, 41581),

Gene: Phantasmagoria_44 Start: 39441, Stop: 39235, Start Num: 95
Candidate Starts for Phantasmagoria_44:
(Start: 95 @39441 has 31 MA's), (108, 39414), (110, 39411), (126, 39357), (136, 39324),

Gene: Phauci_78 Start: 55646, Stop: 55897, Start Num: 66
Candidate Starts for Phauci_78:
(12, 55400), (Start: 66 @55646 has 55 MA's), (105, 55709), (122, 55769), (125, 55775), (131, 55787), (132, 55790),

Gene: PhedwardCullen_64 Start: 41139, Stop: 41432, Start Num: 69
Candidate Starts for PhedwardCullen_64:
(57, 41115), (Start: 69 @41139 has 49 MA's), (115, 41217), (132, 41280), (135, 41295), (136, 41298),

Gene: Phelemich_43 Start: 39919, Stop: 39710, Start Num: 98
Candidate Starts for Phelemich_43:
(47, 40027), (Start: 98 @39919 has 9 MA's), (105, 39904), (121, 39859),

Gene: PhillyJawn_53 Start: 32405, Stop: 32680, Start Num: 65
Candidate Starts for PhillyJawn_53:
(5, 32009), (10, 32084), (37, 32270), (Start: 65 @32405 has 9 MA's), (Start: 70 @32414 has 1 MA's), (104, 32471), (115, 32495), (116, 32501), (139, 32594),

Gene: Phinally_86 Start: 58578, Stop: 58829, Start Num: 66
Candidate Starts for Phinally_86:
(Start: 66 @58578 has 55 MA's), (105, 58641), (122, 58701), (125, 58707), (131, 58719), (132, 58722),

Gene: Phingu_55 Start: 32629, Stop: 32904, Start Num: 65
Candidate Starts for Phingu_55:
(1, 32146), (2, 32173), (37, 32494), (Start: 65 @32629 has 9 MA's), (Start: 70 @32638 has 1 MA's),
(104, 32695), (115, 32719), (116, 32725), (139, 32818),

Gene: Phlop_83 Start: 55971, Stop: 55723, Start Num: 72
Candidate Starts for Phlop_83:
(9, 56283), (15, 56205), (18, 56184), (36, 56112), (Start: 59 @55998 has 1 MA's), (Start: 72 @55971
has 27 MA's), (Start: 80 @55962 has 1 MA's), (Start: 93 @55944 has 1 MA's), (117, 55887), (136,
55812), (146, 55764),

Gene: Phonegingi_52 Start: 32447, Stop: 32722, Start Num: 65
Candidate Starts for Phonegingi_52:
(1, 31964), (2, 31991), (37, 32312), (Start: 65 @32447 has 9 MA's), (Start: 70 @32456 has 1 MA's),
(104, 32513), (115, 32537), (116, 32543),

Gene: Phorgeous_66 Start: 41205, Stop: 41498, Start Num: 69
Candidate Starts for Phorgeous_66:
(57, 41181), (Start: 69 @41205 has 49 MA's), (115, 41283), (132, 41346), (135, 41361), (136, 41364),

Gene: Phrancesco_66 Start: 41528, Stop: 41821, Start Num: 69
Candidate Starts for Phrancesco_66:
(57, 41504), (Start: 69 @41528 has 49 MA's), (115, 41606), (132, 41669), (135, 41684), (136, 41687),

Gene: Piccoletto_69 Start: 45957, Stop: 45649, Start Num: 55
Candidate Starts for Piccoletto_69:
(Start: 55 @45957 has 27 MA's), (86, 45918), (105, 45882), (142, 45744),

Gene: Pickles13_51 Start: 32723, Stop: 32998, Start Num: 65
Candidate Starts for Pickles13_51:
(Start: 65 @32723 has 9 MA's), (Start: 70 @32732 has 1 MA's), (104, 32789), (115, 32813), (116,
32819), (139, 32912),

Gene: PierreOrion_66 Start: 41628, Stop: 41927, Start Num: 69
Candidate Starts for PierreOrion_66:
(Start: 69 @41628 has 49 MA's), (Start: 89 @41658 has 3 MA's), (132, 41775), (135, 41790), (136,
41793),

Gene: Pine5_39 Start: 32324, Stop: 32103, Start Num: 97
Candidate Starts for Pine5_39:
(97, 32324), (114, 32294), (118, 32279), (137, 32210),

Gene: PinkCoffee_87 Start: 55835, Stop: 55587, Start Num: 72
Candidate Starts for PinkCoffee_87:
(6, 56192), (8, 56165), (16, 56066), (19, 56042), (20, 56039), (36, 55976), (Start: 59 @55862 has 1
MA's), (Start: 72 @55835 has 27 MA's), (Start: 80 @55826 has 1 MA's), (Start: 93 @55808 has 1
MA's), (117, 55751), (136, 55676), (146, 55628),

Gene: PiperSansNom_67 Start: 41707, Stop: 42006, Start Num: 69

Candidate Starts for PiperSansNom_67:

(Start: 69 @41707 has 49 MA's), (Start: 89 @41737 has 3 MA's), (132, 41854), (135, 41869), (136, 41872),

Gene: Piperis_67 Start: 41330, Stop: 41623, Start Num: 69

Candidate Starts for Piperis_67:

(Start: 69 @41330 has 49 MA's), (115, 41408), (132, 41471), (135, 41486), (136, 41489),

Gene: Pippa_73 Start: 46951, Stop: 46640, Start Num: 79

Candidate Starts for Pippa_73:

(Start: 55 @46972 has 27 MA's), (Start: 79 @46951 has 3 MA's), (105, 46903),

Gene: Polka_26 Start: 18904, Stop: 18683, Start Num: 107

Candidate Starts for Polka_26:

(Start: 107 @18904 has 8 MA's),

Gene: Portcullis_86 Start: 55977, Stop: 55729, Start Num: 72

Candidate Starts for Portcullis_86:

(9, 56289), (15, 56211), (18, 56190), (36, 56118), (Start: 59 @56004 has 1 MA's), (Start: 72 @55977 has 27 MA's), (Start: 80 @55968 has 1 MA's), (Start: 93 @55950 has 1 MA's), (117, 55893), (136, 55818), (146, 55770),

Gene: Prairie_70 Start: 44683, Stop: 44438, Start Num: 81

Candidate Starts for Prairie_70:

(38, 44827), (Start: 81 @44683 has 3 MA's), (139, 44518),

Gene: PrinceCharming_44 Start: 39549, Stop: 39343, Start Num: 95

Candidate Starts for PrinceCharming_44:

(Start: 95 @39549 has 31 MA's), (108, 39522), (110, 39519), (126, 39465), (136, 39432),

Gene: PrincessTrina_37 Start: 30387, Stop: 30169, Start Num: 101

Candidate Starts for PrincessTrina_37:

(41, 30537), (50, 30492), (51, 30489), (Start: 63 @30450 has 9 MA's), (84, 30417), (Start: 101 @30387 has 19 MA's), (112, 30366), (120, 30330), (123, 30315), (129, 30300), (132, 30288),

Gene: Pulchra_68 Start: 41726, Stop: 42019, Start Num: 69

Candidate Starts for Pulchra_68:

(57, 41702), (Start: 69 @41726 has 49 MA's), (115, 41804), (132, 41867), (135, 41882), (136, 41885),

Gene: PullumCavea_84 Start: 56148, Stop: 55900, Start Num: 72

Candidate Starts for PullumCavea_84:

(9, 56460), (15, 56382), (18, 56361), (36, 56289), (Start: 59 @56175 has 1 MA's), (Start: 72 @56148 has 27 MA's), (Start: 80 @56139 has 1 MA's), (Start: 93 @56121 has 1 MA's), (117, 56064), (136, 55989), (146, 55941),

Gene: Quhwah_70 Start: 42015, Stop: 42308, Start Num: 69

Candidate Starts for Quhwah_70:

(Start: 69 @42015 has 49 MA's), (115, 42093), (132, 42156), (135, 42171), (136, 42174),

Gene: Ramiel05_65 Start: 41388, Stop: 41687, Start Num: 69

Candidate Starts for Ramiel05_65:

(Start: 69 @41388 has 49 MA's), (Start: 89 @41418 has 3 MA's), (132, 41535), (135, 41550), (136, 41553),

Gene: Reprobate_44 Start: 39924, Stop: 39715, Start Num: 98
Candidate Starts for Reprobate_44:
(47, 40032), (Start: 98 @39924 has 9 MA's), (105, 39909), (121, 39864),

Gene: Rhinoforte_44 Start: 39550, Stop: 39344, Start Num: 95
Candidate Starts for Rhinoforte_44:
(Start: 95 @39550 has 31 MA's), (108, 39523), (110, 39520), (126, 39466), (136, 39433),

Gene: Ribeye_84 Start: 56456, Stop: 56716, Start Num: 66
Candidate Starts for Ribeye_84:
(Start: 66 @56456 has 55 MA's), (105, 56519), (131, 56600), (139, 56639),

Gene: Rinkes_44 Start: 40426, Stop: 40223, Start Num: 100
Candidate Starts for Rinkes_44:
(Start: 100 @40426 has 1 MA's), (121, 40363),

Gene: Rita130_44 Start: 39651, Stop: 39442, Start Num: 98
Candidate Starts for Rita130_44:
(46, 39765), (47, 39759), (Start: 98 @39651 has 9 MA's), (105, 39636), (114, 39624), (121, 39591),

Gene: RiverRaider_86 Start: 55943, Stop: 56194, Start Num: 66
Candidate Starts for RiverRaider_86:
(48, 55889), (Start: 66 @55943 has 55 MA's), (83, 55964), (105, 56006), (125, 56072), (131, 56084),

Gene: RoadKill_84 Start: 55492, Stop: 55743, Start Num: 66
Candidate Starts for RoadKill_84:
(Start: 66 @55492 has 55 MA's), (Start: 94 @55531 has 5 MA's), (105, 55555), (122, 55615), (142, 55690),

Gene: RobsFeet_70 Start: 42943, Stop: 43236, Start Num: 69
Candidate Starts for RobsFeet_70:
(Start: 69 @42943 has 49 MA's), (115, 43021), (132, 43084), (136, 43102),

Gene: Rofo_84 Start: 57573, Stop: 57836, Start Num: 66
Candidate Starts for Rofo_84:
(48, 57522), (Start: 66 @57573 has 55 MA's), (105, 57636), (131, 57717),

Gene: RogerDodger_89 Start: 56736, Stop: 56488, Start Num: 72
Candidate Starts for RogerDodger_89:
(9, 57048), (15, 56970), (18, 56949), (36, 56877), (Start: 59 @56763 has 1 MA's), (Start: 72 @56736 has 27 MA's), (Start: 80 @56727 has 1 MA's), (Start: 93 @56709 has 1 MA's), (117, 56652), (136, 56577), (146, 56529),

Gene: RosiePosie_37 Start: 30386, Stop: 30168, Start Num: 101
Candidate Starts for RosiePosie_37:
(41, 30536), (50, 30491), (51, 30488), (Start: 63 @30449 has 9 MA's), (84, 30416), (Start: 101 @30386 has 19 MA's), (112, 30365), (120, 30329), (123, 30314), (129, 30299), (132, 30287),

Gene: Sabella_43 Start: 39434, Stop: 39228, Start Num: 95
Candidate Starts for Sabella_43:
(Start: 95 @39434 has 31 MA's), (108, 39407), (110, 39404), (126, 39350), (136, 39317),

Gene: Saguaro_45 Start: 40648, Stop: 40445, Start Num: 98
Candidate Starts for Saguaro_45:
(45, 40756), (Start: 98 @40648 has 9 MA's), (121, 40585), (123, 40576), (135, 40537),

Gene: Salvador_86 Start: 56073, Stop: 55825, Start Num: 72
Candidate Starts for Salvador_86:
(9, 56385), (15, 56307), (36, 56214), (Start: 59 @56100 has 1 MA's), (Start: 72 @56073 has 27 MA's),
(Start: 80 @56064 has 1 MA's), (Start: 93 @56046 has 1 MA's), (117, 55989), (136, 55914), (146,
55866),

Gene: Sampson_90 Start: 59024, Stop: 59296, Start Num: 63
Candidate Starts for Sampson_90:
(21, 58823), (23, 58832), (26, 58844), (27, 58850), (Start: 63 @59024 has 9 MA's), (105, 59093), (131,
59171),

Gene: Sanjuju_82 Start: 57928, Stop: 58191, Start Num: 66
Candidate Starts for Sanjuju_82:
(Start: 53 @57895 has 5 MA's), (Start: 66 @57928 has 55 MA's), (105, 57991), (131, 58072),

Gene: Saronaya_86 Start: 57313, Stop: 57573, Start Num: 66
Candidate Starts for Saronaya_86:
(Start: 66 @57313 has 55 MA's), (105, 57376), (131, 57457),

Gene: Savannah_65 Start: 41445, Stop: 41738, Start Num: 69
Candidate Starts for Savannah_65:
(Start: 69 @41445 has 49 MA's), (115, 41523), (132, 41586), (135, 41601), (136, 41604),

Gene: Savbucketdawg_81 Start: 55415, Stop: 55167, Start Num: 72
Candidate Starts for Savbucketdawg_81:
(9, 55727), (15, 55649), (18, 55628), (36, 55556), (Start: 59 @55442 has 1 MA's), (Start: 72 @55415
has 27 MA's), (Start: 80 @55406 has 1 MA's), (Start: 93 @55388 has 1 MA's), (117, 55331), (136,
55256), (146, 55208),

Gene: Scavito_37 Start: 30384, Stop: 30166, Start Num: 101
Candidate Starts for Scavito_37:
(41, 30534), (50, 30489), (51, 30486), (Start: 63 @30447 has 9 MA's), (84, 30414), (Start: 101 @30384
has 19 MA's), (112, 30363), (120, 30327), (123, 30312), (129, 30297), (132, 30285),

Gene: SchottB_83 Start: 57376, Stop: 57636, Start Num: 66
Candidate Starts for SchottB_83:
(Start: 66 @57376 has 55 MA's), (105, 57439), (131, 57520), (139, 57559),

Gene: Scioto_88 Start: 58874, Stop: 59146, Start Num: 63
Candidate Starts for Scioto_88:
(21, 58673), (23, 58682), (26, 58694), (27, 58700), (Start: 63 @58874 has 9 MA's), (105, 58943), (131,
59021),

Gene: Scumberland_68 Start: 41640, Stop: 41933, Start Num: 69
Candidate Starts for Scumberland_68:
(Start: 69 @41640 has 49 MA's), (Start: 90 @41667 has 1 MA's), (115, 41718), (132, 41781), (135,
41796), (136, 41799),

Gene: Sedona_82 Start: 58425, Stop: 58688, Start Num: 66

Candidate Starts for Sedona_82:

(Start: 53 @58392 has 5 MA's), (Start: 66 @58425 has 55 MA's), (105, 58488), (131, 58569),

Gene: Selwyn23_67 Start: 41557, Stop: 41850, Start Num: 69

Candidate Starts for Selwyn23_67:

(57, 41533), (Start: 69 @41557 has 49 MA's), (115, 41635), (132, 41698), (135, 41713), (136, 41716),

Gene: Shade_72 Start: 46747, Stop: 46415, Start Num: 55

Candidate Starts for Shade_72:

(Start: 55 @46747 has 27 MA's), (Start: 79 @46726 has 3 MA's), (105, 46678),

Gene: Shatter_38 Start: 32837, Stop: 32601, Start Num: 71

Candidate Starts for Shatter_38:

(Start: 69 @32840 has 49 MA's), (Start: 71 @32837 has 4 MA's), (85, 32816), (88, 32810), (106, 32786), (110, 32780), (136, 32690),

Gene: Shenyu_43 Start: 39713, Stop: 39504, Start Num: 98

Candidate Starts for Shenyu_43:

(47, 39821), (Start: 98 @39713 has 9 MA's), (105, 39698), (114, 39686),

Gene: Shinji_85 Start: 56154, Stop: 55906, Start Num: 72

Candidate Starts for Shinji_85:

(9, 56466), (15, 56388), (18, 56367), (36, 56295), (Start: 59 @56181 has 1 MA's), (Start: 72 @56154 has 27 MA's), (Start: 80 @56145 has 1 MA's), (Start: 93 @56127 has 1 MA's), (117, 56070), (136, 55995), (146, 55947),

Gene: Shivanishola_86 Start: 56589, Stop: 56852, Start Num: 66

Candidate Starts for Shivanishola_86:

(Start: 53 @56556 has 5 MA's), (Start: 66 @56589 has 55 MA's), (105, 56652), (131, 56733),

Gene: Shotgun_66 Start: 41324, Stop: 41617, Start Num: 69

Candidate Starts for Shotgun_66:

(57, 41300), (Start: 69 @41324 has 49 MA's), (115, 41402), (132, 41465), (135, 41480), (136, 41483),

Gene: Shrubaron_68 Start: 42538, Stop: 42831, Start Num: 69

Candidate Starts for Shrubaron_68:

(Start: 69 @42538 has 49 MA's), (115, 42616), (132, 42679), (136, 42697),

Gene: Sicarius2_74 Start: 44932, Stop: 44645, Start Num: 55

Candidate Starts for Sicarius2_74:

(Start: 55 @44932 has 27 MA's), (Start: 94 @44884 has 5 MA's), (105, 44860), (155, 44653),

Gene: SirFrank_67 Start: 41608, Stop: 41901, Start Num: 69

Candidate Starts for SirFrank_67:

(Start: 69 @41608 has 49 MA's), (Start: 90 @41635 has 1 MA's), (115, 41686), (132, 41749), (136, 41767),

Gene: SirJeffery_44 Start: 39650, Stop: 39441, Start Num: 98

Candidate Starts for SirJeffery_44:

(46, 39764), (47, 39758), (Start: 98 @39650 has 9 MA's), (105, 39635), (114, 39623), (121, 39590),

Gene: Sisko_38 Start: 33610, Stop: 33383, Start Num: 76

Candidate Starts for Sisko_38:

(Start: 76 @33610 has 13 MA's), (131, 33493), (146, 33424),

Gene: Sitar_83 Start: 58447, Stop: 58710, Start Num: 66

Candidate Starts for Sitar_83:

(Start: 53 @58414 has 5 MA's), (Start: 66 @58447 has 55 MA's), (105, 58510), (131, 58591),

Gene: Smarties_76 Start: 43251, Stop: 43544, Start Num: 69

Candidate Starts for Smarties_76:

(Start: 69 @43251 has 49 MA's), (115, 43329), (132, 43392), (136, 43410),

Gene: SmokingBunny_87 Start: 57069, Stop: 56821, Start Num: 72

Candidate Starts for SmokingBunny_87:

(9, 57381), (15, 57303), (36, 57210), (Start: 59 @57096 has 1 MA's), (Start: 72 @57069 has 27 MA's), (Start: 80 @57060 has 1 MA's), (Start: 93 @57042 has 1 MA's), (117, 56985), (136, 56910), (146, 56862),

Gene: Sonali_93 Start: 57959, Stop: 57690, Start Num: 65

Candidate Starts for Sonali_93:

(Start: 65 @57959 has 9 MA's), (68, 57953), (73, 57947), (83, 57935), (Start: 90 @57920 has 1 MA's), (Start: 93 @57917 has 1 MA's), (109, 57884), (115, 57869),

Gene: Sonali_32 Start: 30335, Stop: 30120, Start Num: 102

Candidate Starts for Sonali_32:

(Start: 102 @30335 has 2 MA's),

Gene: Sonny_72 Start: 46702, Stop: 46370, Start Num: 55

Candidate Starts for Sonny_72:

(Start: 55 @46702 has 27 MA's), (Start: 79 @46681 has 3 MA's), (105, 46633),

Gene: Sour_43 Start: 37566, Stop: 37306, Start Num: 76

Candidate Starts for Sour_43:

(Start: 76 @37566 has 13 MA's), (110, 37515),

Gene: StevieBAY_73 Start: 46953, Stop: 46624, Start Num: 55

Candidate Starts for StevieBAY_73:

(Start: 55 @46953 has 27 MA's),

Gene: Stinger_39 Start: 37776, Stop: 37570, Start Num: 94

Candidate Starts for Stinger_39:

(Start: 94 @37776 has 5 MA's), (105, 37755), (110, 37749), (118, 37728), (121, 37710), (126, 37692), (135, 37662), (136, 37659), (137, 37656),

Gene: StinkyVeggy_45 Start: 39790, Stop: 39581, Start Num: 98

Candidate Starts for StinkyVeggy_45:

(47, 39898), (Start: 98 @39790 has 9 MA's), (105, 39775), (114, 39763),

Gene: StorminNorm_85 Start: 57257, Stop: 57517, Start Num: 66

Candidate Starts for StorminNorm_85:

(Start: 66 @57257 has 55 MA's), (105, 57320), (131, 57401),

Gene: Stultus_79 Start: 56719, Stop: 56982, Start Num: 66

Candidate Starts for Stultus_79:

(Start: 53 @56686 has 5 MA's), (Start: 66 @56719 has 55 MA's), (105, 56782), (131, 56863),

Gene: Suigeneris_44 Start: 39653, Stop: 39444, Start Num: 98
Candidate Starts for Suigeneris_44:
(46, 39767), (47, 39761), (Start: 98 @39653 has 9 MA's), (105, 39638), (114, 39626), (121, 39593),

Gene: Sunny_ Start: 43566, Stop: 43856, Start Num: 69
Candidate Starts for Sunny_:
(50, 43518), (Start: 69 @43566 has 49 MA's), (115, 43650), (132, 43713),

Gene: Sunshine23_32 Start: 29942, Stop: 29730, Start Num: 102
Candidate Starts for Sunshine23_32:
(Start: 102 @29942 has 2 MA's),

Gene: Sunshine23_95 Start: 57525, Stop: 57268, Start Num: 93
Candidate Starts for Sunshine23_95:
(Start: 65 @57567 has 9 MA's), (68, 57561), (73, 57555), (83, 57543), (Start: 90 @57528 has 1 MA's),
(Start: 93 @57525 has 1 MA's), (109, 57492), (115, 57477),

Gene: TA17A_45 Start: 39424, Stop: 39218, Start Num: 95
Candidate Starts for TA17A_45:
(Start: 95 @39424 has 31 MA's), (108, 39397), (110, 39394), (126, 39340), (136, 39307),

Gene: TaeYoung_73 Start: 46899, Stop: 46567, Start Num: 55
Candidate Starts for TaeYoung_73:
(Start: 55 @46899 has 27 MA's), (Start: 79 @46878 has 3 MA's), (105, 46830), (152, 46635),

Gene: Tangent_87 Start: 57279, Stop: 57545, Start Num: 66
Candidate Starts for Tangent_87:
(Start: 53 @57246 has 5 MA's), (Start: 66 @57279 has 55 MA's), (105, 57342), (131, 57423), (150, 57525),

Gene: Tangerine_84 Start: 56314, Stop: 56574, Start Num: 66
Candidate Starts for Tangerine_84:
(Start: 66 @56314 has 55 MA's), (105, 56377), (131, 56458), (139, 56497),

Gene: Tardus_90 Start: 59420, Stop: 59689, Start Num: 63
Candidate Starts for Tardus_90:
(Start: 63 @59420 has 9 MA's), (105, 59489), (131, 59567),

Gene: Teamocil_70 Start: 41573, Stop: 41866, Start Num: 69
Candidate Starts for Teamocil_70:
(40, 41480), (Start: 69 @41573 has 49 MA's), (115, 41651), (132, 41714), (136, 41732),

Gene: Terij_64 Start: 41499, Stop: 41717, Start Num: 69
Candidate Starts for Terij_64:
(Start: 69 @41499 has 49 MA's), (104, 41541), (105, 41544), (116, 41571), (132, 41631), (135, 41646),

Gene: Thing3_85 Start: 58100, Stop: 58363, Start Num: 66
Candidate Starts for Thing3_85:
(48, 58049), (Start: 66 @58100 has 55 MA's), (105, 58163), (131, 58244),

Gene: Thonko_43 Start: 36961, Stop: 36752, Start Num: 96
Candidate Starts for Thonko_43:

(39, 37108), (47, 37054), (Start: 96 @36961 has 1 MA's), (114, 36931), (132, 36865),

Gene: Tiamoceli_80 Start: 55382, Stop: 55633, Start Num: 66

Candidate Starts for Tiamoceli_80:

(Start: 66 @55382 has 55 MA's), (Start: 94 @55421 has 5 MA's), (105, 55445), (122, 55505), (142, 55580),

Gene: TillyBobJoe_84 Start: 55955, Stop: 55707, Start Num: 72

Candidate Starts for TillyBobJoe_84:

(6, 56312), (8, 56285), (16, 56186), (19, 56162), (20, 56159), (36, 56096), (Start: 59 @55982 has 1 MA's), (Start: 72 @55955 has 27 MA's), (Start: 80 @55946 has 1 MA's), (Start: 93 @55928 has 1 MA's), (117, 55871), (136, 55796), (146, 55748),

Gene: Timinator_73 Start: 46773, Stop: 46444, Start Num: 55

Candidate Starts for Timinator_73:

(Start: 55 @46773 has 27 MA's),

Gene: Tinciduntolum_45 Start: 39562, Stop: 39356, Start Num: 95

Candidate Starts for Tinciduntolum_45:

(Start: 95 @39562 has 31 MA's), (108, 39535), (110, 39532), (126, 39478), (136, 39445),

Gene: Togo_86 Start: 57069, Stop: 56821, Start Num: 72

Candidate Starts for Togo_86:

(9, 57381), (15, 57303), (36, 57210), (Start: 59 @57096 has 1 MA's), (Start: 72 @57069 has 27 MA's), (Start: 80 @57060 has 1 MA's), (Start: 93 @57042 has 1 MA's), (117, 56985), (136, 56910), (146, 56862),

Gene: Tonitrus_59 Start: 44270, Stop: 44503, Start Num: 82

Candidate Starts for Tonitrus_59:

(Start: 82 @44270 has 1 MA's), (120, 44363), (121, 44369), (136, 44423), (143, 44465),

Gene: Tophat_37 Start: 30385, Stop: 30167, Start Num: 101

Candidate Starts for Tophat_37:

(41, 30535), (50, 30490), (51, 30487), (Start: 63 @30448 has 9 MA's), (84, 30415), (Start: 101 @30385 has 19 MA's), (112, 30364), (120, 30328), (123, 30313), (129, 30298), (132, 30286),

Gene: Tres_44 Start: 39437, Stop: 39231, Start Num: 95

Candidate Starts for Tres_44:

(Start: 95 @39437 has 31 MA's), (108, 39410), (110, 39407), (126, 39353), (136, 39320),

Gene: Twister6_85 Start: 55418, Stop: 55170, Start Num: 72

Candidate Starts for Twister6_85:

(9, 55730), (15, 55652), (18, 55631), (36, 55559), (Start: 59 @55445 has 1 MA's), (Start: 72 @55418 has 27 MA's), (Start: 80 @55409 has 1 MA's), (Start: 93 @55391 has 1 MA's), (117, 55334), (136, 55259), (146, 55211),

Gene: Twonlo_84 Start: 56083, Stop: 56334, Start Num: 66

Candidate Starts for Twonlo_84:

(Start: 66 @56083 has 55 MA's), (Start: 94 @56122 has 5 MA's), (105, 56146), (122, 56206), (142, 56281),

Gene: Tycho_84 Start: 56791, Stop: 57051, Start Num: 66

Candidate Starts for Tycho_84:

(Start: 66 @56791 has 55 MA's), (105, 56854), (131, 56935), (139, 56974),

Gene: Tyrumbra_65 Start: 42225, Stop: 42518, Start Num: 69

Candidate Starts for Tyrumbra_65:

(Start: 69 @42225 has 49 MA's), (115, 42303), (132, 42366), (136, 42384),

Gene: Valary_87 Start: 57061, Stop: 56813, Start Num: 72

Candidate Starts for Valary_87:

(9, 57373), (15, 57295), (18, 57274), (36, 57202), (Start: 59 @57088 has 1 MA's), (Start: 72 @57061 has 27 MA's), (Start: 80 @57052 has 1 MA's), (Start: 93 @57034 has 1 MA's), (117, 56977), (136, 56902), (146, 56854),

Gene: VanDeWege_88 Start: 56586, Stop: 56338, Start Num: 72

Candidate Starts for VanDeWege_88:

(9, 56898), (15, 56820), (18, 56799), (36, 56727), (Start: 59 @56613 has 1 MA's), (Start: 72 @56586 has 27 MA's), (Start: 80 @56577 has 1 MA's), (Start: 93 @56559 has 1 MA's), (117, 56502), (136, 56427), (146, 56379),

Gene: Verity_87 Start: 60121, Stop: 60393, Start Num: 63

Candidate Starts for Verity_87:

(49, 60076), (Start: 63 @60121 has 9 MA's), (77, 60139), (105, 60190), (131, 60268), (141, 60316),

Gene: ViaConlectus_87 Start: 57801, Stop: 58070, Start Num: 63

Candidate Starts for ViaConlectus_87:

(49, 57756), (Start: 63 @57801 has 9 MA's), (77, 57819), (105, 57870), (131, 57948),

Gene: Vibaki_78 Start: 47924, Stop: 47616, Start Num: 55

Candidate Starts for Vibaki_78:

(Start: 55 @47924 has 27 MA's), (125, 47783), (135, 47753), (153, 47654), (155, 47639),

Gene: Vic9_00043 Start: 39943, Stop: 39737, Start Num: 95

Candidate Starts for Vic9_00043:

(Start: 95 @39943 has 31 MA's), (108, 39916), (126, 39859), (136, 39826),

Gene: Vincenzo_41 Start: 39951, Stop: 39745, Start Num: 94

Candidate Starts for Vincenzo_41:

(Start: 94 @39951 has 5 MA's), (105, 39930), (110, 39924), (118, 39903), (121, 39885), (123, 39876), (126, 39867), (135, 39837), (136, 39834), (137, 39831),

Gene: Violeta_54 Start: 32507, Stop: 32782, Start Num: 65

Candidate Starts for Violeta_54:

(37, 32372), (Start: 65 @32507 has 9 MA's), (Start: 70 @32516 has 1 MA's), (104, 32573), (115, 32597), (116, 32603), (139, 32696),

Gene: Vitus_79 Start: 47279, Stop: 46962, Start Num: 55

Candidate Starts for Vitus_79:

(42, 47342), (44, 47330), (Start: 55 @47279 has 27 MA's), (125, 47132), (149, 47024),

Gene: Vivi2_88 Start: 58335, Stop: 58601, Start Num: 66

Candidate Starts for Vivi2_88:

(Start: 53 @58302 has 5 MA's), (Start: 66 @58335 has 55 MA's), (105, 58398), (131, 58479), (150, 58581),

Gene: Warren_52 Start: 32462, Stop: 32737, Start Num: 65

Candidate Starts for Warren_52:

(Start: 65 @32462 has 9 MA's), (Start: 70 @32471 has 1 MA's), (104, 32528), (115, 32552), (116, 32558), (139, 32651),

Gene: West99_44 Start: 39557, Stop: 39351, Start Num: 95

Candidate Starts for West99_44:

(Start: 95 @39557 has 31 MA's), (108, 39530), (110, 39527), (126, 39473), (136, 39440),

Gene: Wizard_81 Start: 55921, Stop: 55673, Start Num: 72

Candidate Starts for Wizard_81:

(9, 56233), (15, 56155), (18, 56134), (36, 56062), (Start: 59 @55948 has 1 MA's), (Start: 72 @55921 has 27 MA's), (Start: 80 @55912 has 1 MA's), (Start: 93 @55894 has 1 MA's), (117, 55837), (136, 55762), (146, 55714),

Gene: Wooper_40 Start: 34857, Stop: 34591, Start Num: 76

Candidate Starts for Wooper_40:

(54, 34902), (58, 34893), (Start: 76 @34857 has 13 MA's), (106, 34809), (108, 34806), (114, 34797), (130, 34737), (137, 34710),

Gene: Wyborn_73 Start: 45667, Stop: 45380, Start Num: 55

Candidate Starts for Wyborn_73:

(Start: 55 @45667 has 27 MA's), (Start: 94 @45619 has 5 MA's), (105, 45595), (155, 45388),

Gene: Yago84_38 Start: 33684, Stop: 33457, Start Num: 76

Candidate Starts for Yago84_38:

(Start: 76 @33684 has 13 MA's), (131, 33567), (146, 33498),

Gene: Yeshua_40 Start: 34834, Stop: 34568, Start Num: 76

Candidate Starts for Yeshua_40:

(54, 34879), (58, 34870), (Start: 76 @34834 has 13 MA's), (106, 34786), (108, 34783), (114, 34774), (130, 34714), (137, 34687),

Gene: Yeti_68 Start: 41362, Stop: 41655, Start Num: 69

Candidate Starts for Yeti_68:

(Start: 69 @41362 has 49 MA's), (115, 41440), (132, 41503), (135, 41518), (136, 41521),

Gene: YorkOnyx_83 Start: 56426, Stop: 56686, Start Num: 66

Candidate Starts for YorkOnyx_83:

(Start: 66 @56426 has 55 MA's), (105, 56489), (131, 56570), (139, 56609),

Gene: YungMoney_85 Start: 57771, Stop: 57520, Start Num: 72

Candidate Starts for YungMoney_85:

(6, 58128), (8, 58101), (16, 58002), (19, 57978), (20, 57975), (36, 57912), (Start: 59 @57798 has 1 MA's), (Start: 72 @57771 has 27 MA's), (Start: 80 @57762 has 1 MA's), (Start: 93 @57744 has 1 MA's), (117, 57687), (136, 57612), (146, 57564),

Gene: Zartrosa_74 Start: 46999, Stop: 46667, Start Num: 55

Candidate Starts for Zartrosa_74:

(Start: 55 @46999 has 27 MA's), (Start: 79 @46978 has 3 MA's), (105, 46930),

Gene: Zenteno07_48 Start: 38553, Stop: 38338, Start Num: 89

Candidate Starts for Zenteno07_48:

(Start: 89 @38553 has 3 MA's), (105, 38529), (123, 38475), (147, 38379),

Gene: Zipp_88 Start: 60092, Stop: 60364, Start Num: 63

Candidate Starts for Zipp_88:

(49, 60047), (Start: 63 @60092 has 9 MA's), (77, 60110), (105, 60161), (131, 60239), (141, 60287),

Gene: Zitch_90 Start: 58345, Stop: 58614, Start Num: 63

Candidate Starts for Zitch_90:

(Start: 63 @58345 has 9 MA's), (77, 58363), (105, 58414), (131, 58492),