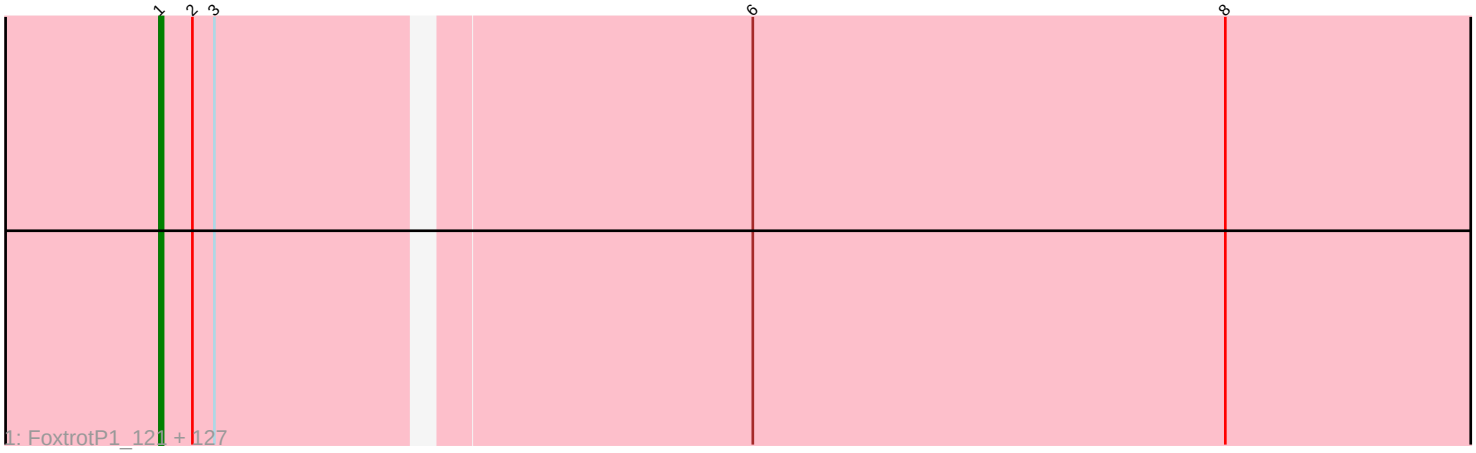
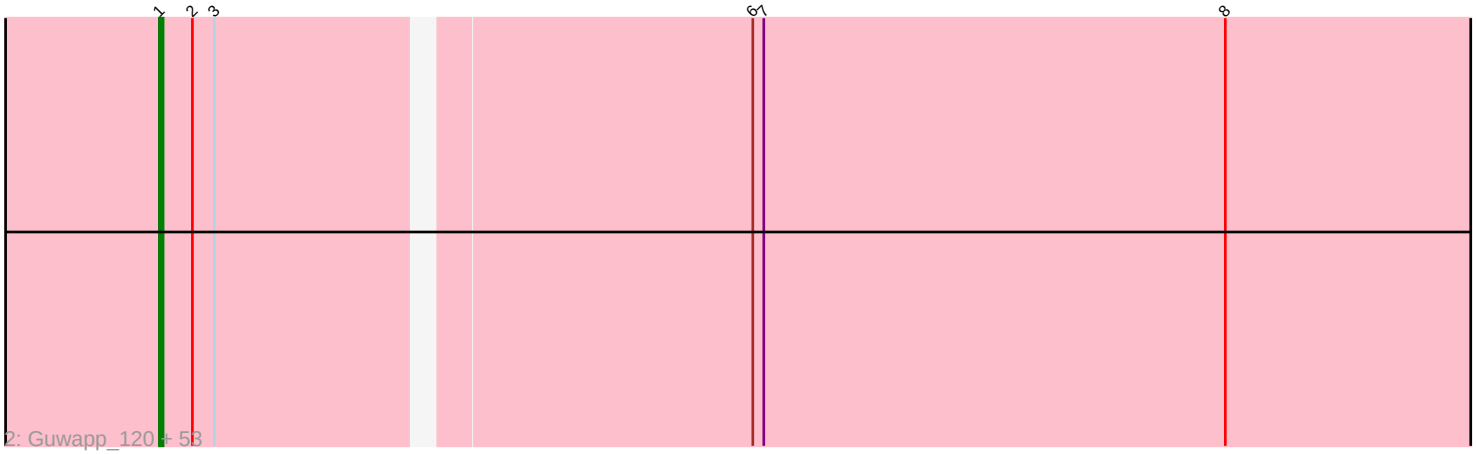
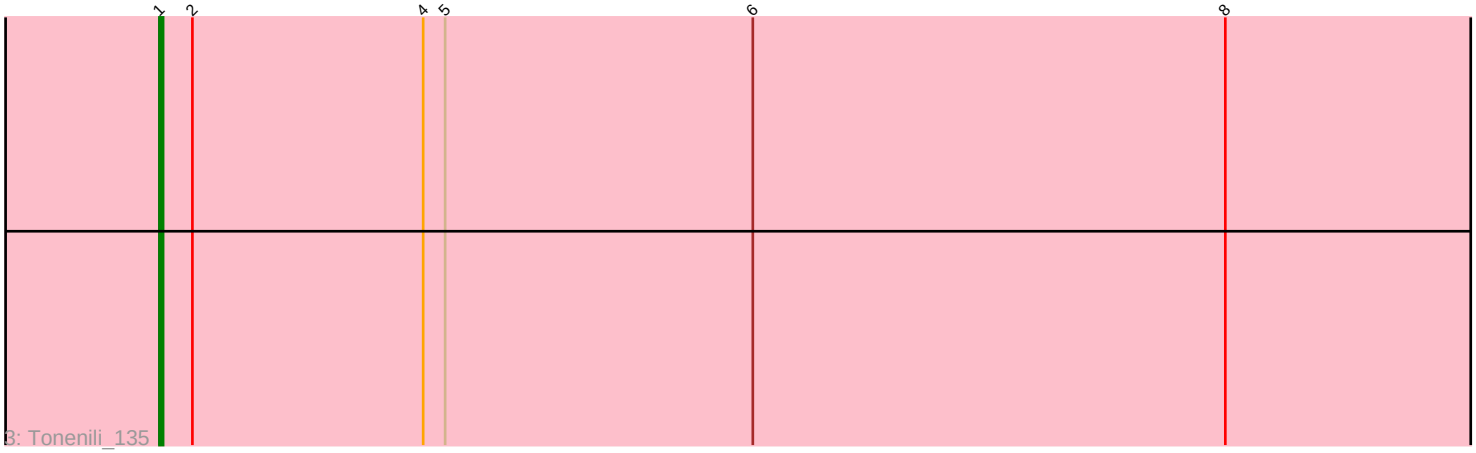
Zoomed Pham 515







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 515 Report

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

Pham number 515 has 183 members, 16 are drafts.

Phages represented in each track:
• Track 1 : FoxtrotP1_121, Spud_120, NedWong_122, Pivoine_120, Melpomini_115, Ewok_122, CharlieB_117, Salacia_125, Jessibeth14_120, SrishMeg2525_120, Audrick_123, ChaylaJr_116, ScottMcG_117, Gabriel_121, Ghost_119, ValleyTerrace_121, JayJay_121, Roots515_119, Dietrick_113, Naija_120, Quasimodo_122, Phlegm_123, Matsumoto_117, YemiJoy2021_122, CindyLou_122, ShiaLabeouf_120, Issimir_119, Specks_126, Mikro_118, Delilah_121, Rahel_120, ParkTD_122, Colt_112, Napoleon13_117, Dandelion_126, Caravan_115, Loanshark_120, QBert_115, Breeniome_120, Shelob_123, Kamryn_121, Burrough_121, Erdmann_121, Atlantean_120, DirtMonster_115, MikeLiesIn_122, Astraea_117, Capablanca_123, Megamind_120, Cane17_111, BigCity_128, SilverDipper_122, DrPhinkDaddy_120, Latch_121, Bread_120, Ngannou_117, Gamgam_121, Cactojaque_116, Blubba_112, BackyardAgain_118, Shrimp_121, Trinitium_118, Ava3_122, Cali_116, Nappy_123, Iota_116, Norm_122, Janiyra_123, Turret_116, Sprinklers_117, ZygoTaiga_119, MoMoMixon_121, Daffodil_126, Catera_117, ChickenPhender_117, I3_126, Adlitam_121, Zalkecks_122, Bigswole_124, BananaFence_120, Pio_125, EmToTheThree_123, Zeenon_122, FudgeTart_119, Nidhogg_122, Grasshills_127, Izajani_121, YoungMoneyMata_122, Asterius_117, Rabinovish_118, Willis_122, BeanWater_113, StubbySaigey_124, McWolfish_119, Amataga_121, Morizzled23_121, Tortoise16_118, Momo_120, InigoMontoya_122, Drazdys_119, Pleione_124, NoodleTree_128, JustHall_118, EmmaElysia_121, Maby2021_121, Concombre_126, Bonray_121, Blackbrain_116, Phox_118, Delylah_124, EggyFarm_128, Lee7_118, Gizmo_125, Patter_121, TinyTim_121, Bipolarisk_120, Naval22_125, Littleton_121, Flabslab_115, PurduePete_121, Yucca_120, Bxz1_118, Wally_120, Khaleesi_120, Teardrop_120, Chomp_118, Babyland_122, Rizal_116
• Track 2 : Guwapp_120, DTDevon_121, JPickles_118, Darko_121, Koguma_118, FrayBell_126, LinStu_119, Sebata_121, Chargie21_117, LordLeafolot_124, ET08_109, Mangeria_121, Grungle_108, StephanieG_119, Essence_118, RoMag_116, EasyJones_123, Shaqnato_114, Pier_125, ErnieJ_115, Alice_113, Basquiat_117, Derek_120, Yassified_118, Jemmno_121, Spec_116, Shnickers_121, LolaVinca_121, SmallFry_121, Jaygup_121, Sauce_121, Lukilu_111, Pinkcreek_112, Halldule_114, Ading_121, JulietS_115, Kboogie_125, Phusco_121, Ronan_115, NuevoMundo_126, ArcherS7_120, Shifa_109, McGee_123, InterFolia_127, Stubby_113, Jedediah_124, IkeLoa_114, Fludd_121, BadAgartude_117, Tyke_121, LifeSavor_119, Bangla1971_122, LRRHood_114, HyRo_111
• Track 3 : Tonenili_135

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

The start number called the most often in the published annotations is 1, it was called in 167 of the 167 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ading_121, Adlitam_121, Alice_113, Amataga_121, ArcherS7_120, Asterius_117, Astraea_117, Atlantean_120, Audrick_123, Ava3_122, Babyland_122, BackyardAgain_118, BadAgartude_117, BananaFence_120, Bangla1971_122, Basquiat_117, BeanWater_113, BigCity_128, Bigswole_124, Bipolarisk_120, Blackbrain_116, Blubba_112, Bonray_121, Bread_120, Breeniome_120, Burrough_121, Bxz1_118, Cactojaque_116, Cali_116, Cane17_111, Capablanca_123, Caravan_115, Catera_117, Chargie21_117, CharlieB_117, ChaylaJr_116, ChickenPhender_117, Chomp_118, CindyLou_122, Colt_112, Concombre_126, DTDevon_121, Daffodil_126, Dandelion_126, Darko_121, Delilah_121, Delylah_124, Derek_120, Dietrick_113, DirtMonster_115, DrPhinkDaddy_120, Drazdys_119, ET08_109, EasyJones_123, EggyFarm_128, EmToTheThree_123, EmmaElysia_121, Erdmann_121, ErnieJ_115, Essence_118, Ewok_122, Flabslab_115, Fludd_121, FoxtrotP1_121, FrayBell_126, FudgeTart_119, Gabriel_121, Gamgam_121, Ghost_119, Gizmo_125, Grasshills_127, Grungle_108, Guwapp_120, Halldule_114, HyRo_111, I3_126, IkeLoa_114, InigoMontoya_122, InterFolia_127, Iota_116, Issimir_119, Izajani_121, JPickles_118, Janiyra_123, JayJay_121, Jaygup_121, Jedediah_124, Jemmno_121, Jessibeth14_120, JulietS_115, JustHall_118, Kamryn_121, Kboogie_125, Khaleesi_120, Koguma_118, LRRHood_114, Latch_121, Lee7_118, LifeSavor_119, LinStu_119, Littleton_121, Loanshark_120, LolaVinca_121, LordLeafolot_124, Lukilu_111, Maby2021_121, Mangeria_121, Matsumoto_117, McGee_123, McWolfish_119, Megamind_120, Melpomini_115, MikeLiesIn_122, Mikro_118, MoMoMixon_121, Momo_120, Morizzled23_121, Naija_120, Napoleon13_117, Nappy_123, Naval22_125, NedWong_122, Ngannou_117, Nidhogg_122, NoodleTree_128, Norm_122, NuevoMundo_126, ParkTD_122, Patter_121, Phlegm_123, Phox_118, Phusco_121, Pier_125, Pinkcreek_112, Pio_125, Pivoine_120, Pleione_124, PurduePete_121, QBert_115, Quasimodo_122, Rabinovish_118, Rahel_120, Rizal_116, RoMag_116, Ronan_115, Roots515_119, Salacia_125, Sauce_121, ScottMcG_117, Sebata_121, Shaqnato_114, Shelob_123, ShiaLabeouf_120, Shifa_109, Shnickers_121, Shrimp_121, SilverDipper_122, SmallFry_121, Spec_116, Specks_126, Sprinklers_117, Spud_120, SrishMeg2525_120, StephanieG_119, StubbySaigey_124, Stubby_113, Teardrop_120, TinyTim_121, Tonenili_135, Tortoise16_118, Trinitium_118, Turret_116, Tyke_121, ValleyTerrace_121, Wally_120, Willis_122, Yassified_118, YemiJoy2021_122, YoungMoneyMata_122, Yucca_120, Zalkecks_122, Zeenon_122, ZygoTaiga_119,

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

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

Summary by start number:

Start 1:
• Found in 183 of 183 (100.0%) of genes in pham
• Manual Annotations of this start: 167 of 167
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ading_121 (C1), Adlitam_121 (C1), Alice_113 (C1), Amataga_121 (C1), ArcherS7_120 (C1), Asterius_117 (C1), Astraea_117 (C1), Atlantean_120 (C1), Audrick_123 (C1), Ava3_122 (C1), Babyland_122 (C1), BackyardAgain_118 (C1), BadAgartude_117 (C1), BananaFence_120 (C1), Bangla1971_122 (C1), Basquiat_117 (C1), BeanWater_113 (C1), BigCity_128 (C1), Bigswole_124 (C1), Bipolarisk_120 (C1), Blackbrain_116 (C1), Blubba_112 (C1), Bonray_121 (C1), Bread_120 (C1), Breeniome_120 (C1), Burrough_121 (C1), Bxz1_118 (C1), Cactojaque_116 (C1), Cali_116 (C1), Cane17_111 (C1), Capablanca_123 (C1), Caravan_115 (C1), Catera_117 (C1), Chargie21_117 (C1), CharlieB_117 (C1), ChaylaJr_116 (C1), ChickenPhender_117 (C1), Chomp_118 (C1), CindyLou_122 (C1), Colt_112 (C1), Concombre_126 (C1), DTDevon_121 (C1), Daffodil_126 (C1), Dandelion_126 (C1), Darko_121 (C1), Delilah_121 (C1), Delylah_124 (C1), Derek_120 (C1), Dietrick_113 (C1), DirtMonster_115 (C1), DrPhinkDaddy_120 (C1), Drazdys_119 (C1), ET08_109 (C1), EasyJones_123 (C1), EggyFarm_128 (C1), EmToTheThree_123 (C1), EmmaElysia_121 (C1), Erdmann_121 (C1), ErnieJ_115 (C1), Essence_118 (C1), Ewok_122 (C1), Flabslab_115 (C1), Fludd_121 (C1), FoxtrotP1_121 (C1), FrayBell_126 (C1), FudgeTart_119 (C1), Gabriel_121 (C1), Gamgam_121 (C1), Ghost_119 (C1), Gizmo_125 (C1), Grasshills_127 (C1), Grungle_108 (C1), Guwapp_120 (C1), Halldule_114 (C1), HyRo_111 (C1), I3_126 (C1), IkeLoa_114 (C1), InigoMontoya_122 (C1), InterFolia_127 (C1), Iota_116 (C1), Issimir_119 (C1), Izajani_121 (C1), JPickles_118 (C1), Janiyra_123 (C1), JayJay_121 (C1), Jaygup_121 (C1), Jedediah_124 (C1), Jemmno_121 (C1), Jessibeth14_120 (C1), JulietS_115 (C1), JustHall_118 (C1), Kamryn_121 (C1), Kboogie_125 (C1), Khaleesi_120 (C1), Koguma_118 (C1), LRRHood_114 (C1), Latch_121 (C1), Lee7_118 (C1), LifeSavor_119 (C1), LinStu_119 (C1), Littleton_121 (C1), Loanshark_120 (C1), LolaVinca_121 (C1), LordLeafolot_124 (C1), Lukilu_111 (C1), Maby2021_121 (C1), Mangeria_121 (C1), Matsumoto_117 (C1), McGee_123 (C1), McWolfish_119 (C1), Megamind_120 (C1), Melpomini_115 (C1), MikeLiesIn_122 (C1), Mikro_118 (C1), MoMoMixon_121 (C1), Momo_120 (C1), Morizzled23_121 (C1), Naija_120 (C1), Napoleon13_117 (C1), Nappy_123 (C1), Naval22_125 (C1), NedWong_122 (C1), Ngannou_117 (C1), Nidhogg_122 (C1), NoodleTree_128 (C1), Norm_122 (C1), NuevoMundo_126 (C1), ParkTD_122 (C1), Patter_121 (C1), Phlegm_123 (C1), Phox_118 (C1), Phusco_121 (C1), Pier_125 (C1), Pinkcreek_112 (C1), Pio_125 (C1), Pivoine_120 (C1), Pleione_124 (C1), PurduePete_121 (C1), QBert_115 (C1), Quasimodo_122 (C1), Rabinovish_118 (C1), Rahel_120 (C1), Rizal_116 (C1), RoMag_116 (C1), Ronan_115 (C1), Roots515_119 (C1), Salacia_125 (C1), Sauce_121 (C1), ScottMcG_117 (C1), Sebata_121 (C1), Shaqnato_114 (C1), Shelob_123 (C1), ShiaLabeouf_120 (C1), Shifa_109 (C1), Shnickers_121 (C1), Shrimp_121 (C1), SilverDipper_122 (C1), SmallFry_121 (C1), Spec_116 (C1), Specks_126 (C1), Sprinklers_117 (C1), Spud_120 (C1), SrishMeg2525_120 (C1), StephanieG_119 (C1), StubbySaigey_124 (C1), Stubby_113 (C1), Teardrop_120 (C1), TinyTim_121 (C1), Tonenili_135 (C1), Tortoise16_118 (C1), Trinitium_118 (C1), Turret_116 (C1), Tyke_121 (C1), ValleyTerrace_121 (C1), Wally_120 (C1), Willis_122 (C1), Yassified_118 (C1), YemiJoy2021_122 (C1), YoungMoneyMata_122 (C1), Yucca_120 (C1), Zalkecks_122 (C1), Zeenon_122 (C1), ZygoTaiga_119 (C1),

Summary by clusters:

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:
•Start number 1 was manually annotated 167 times for cluster C1.

Gene Information:

Gene: Ading_121 Start: 63450, Stop: 63953, Start Num: 1
Candidate Starts for Ading_121:
(Start: 1 @63450 has 167 MA's), (2, 63459), (3, 63465), (6, 63603), (7, 63606), (8, 63732), (9, 63834),

Gene: Adlitam_121 Start: 63467, Stop: 63970, Start Num: 1
Candidate Starts for Adlitam_121:
(Start: 1 @63467 has 167 MA's), (2, 63476), (3, 63482), (6, 63620), (8, 63749), (9, 63851),

Gene: Alice_113 Start: 62756, Stop: 63259, Start Num: 1
Candidate Starts for Alice_113:
(Start: 1 @62756 has 167 MA's), (2, 62765), (3, 62771), (6, 62909), (7, 62912), (8, 63038), (9, 63140),

Gene: Amataga_121 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Amataga_121:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: ArcherS7_120 Start: 63030, Stop: 63533, Start Num: 1
Candidate Starts for ArcherS7_120:
(Start: 1 @63030 has 167 MA's), (2, 63039), (3, 63045), (6, 63183), (7, 63186), (8, 63312), (9, 63414),

Gene: Asterius_117 Start: 63706, Stop: 64209, Start Num: 1
Candidate Starts for Asterius_117:
(Start: 1 @63706 has 167 MA's), (2, 63715), (3, 63721), (6, 63859), (8, 63988), (9, 64090),

Gene: Astraea_117 Start: 62481, Stop: 62984, Start Num: 1
Candidate Starts for Astraea_117:
(Start: 1 @62481 has 167 MA's), (2, 62490), (3, 62496), (6, 62634), (8, 62763), (9, 62865),

Gene: Atlantean_120 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Atlantean_120:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Audrick_123 Start: 62691, Stop: 63194, Start Num: 1
Candidate Starts for Audrick_123:
(Start: 1 @62691 has 167 MA's), (2, 62700), (3, 62706), (6, 62844), (8, 62973), (9, 63075),

Gene: Ava3_122 Start: 63625, Stop: 64128, Start Num: 1
Candidate Starts for Ava3_122:
(Start: 1 @63625 has 167 MA's), (2, 63634), (3, 63640), (6, 63778), (8, 63907), (9, 64009),

Gene: Babyland_122 Start: 62800, Stop: 63303, Start Num: 1
Candidate Starts for Babyland_122:
(Start: 1 @62800 has 167 MA's), (2, 62809), (3, 62815), (6, 62953), (8, 63082), (9, 63184),

Gene: BackyardAgain_118 Start: 62628, Stop: 63131, Start Num: 1
Candidate Starts for BackyardAgain_118:
(Start: 1 @62628 has 167 MA's), (2, 62637), (3, 62643), (6, 62781), (8, 62910), (9, 63012),

Gene: BadAgartude_117 Start: 63917, Stop: 64420, Start Num: 1
Candidate Starts for BadAgartude_117:
(Start: 1 @63917 has 167 MA's), (2, 63926), (3, 63932), (6, 64070), (7, 64073), (8, 64199), (9, 64301),

Gene: BananaFence_120 Start: 63881, Stop: 64384, Start Num: 1
Candidate Starts for BananaFence_120:
(Start: 1 @63881 has 167 MA's), (2, 63890), (3, 63896), (6, 64034), (8, 64163), (9, 64265),

Gene: Bangla1971_122 Start: 63160, Stop: 63663, Start Num: 1
Candidate Starts for Bangla1971_122:
(Start: 1 @63160 has 167 MA's), (2, 63169), (3, 63175), (6, 63313), (7, 63316), (8, 63442), (9, 63544),

Gene: Basquiat_117 Start: 62354, Stop: 62857, Start Num: 1
Candidate Starts for Basquiat_117:
(Start: 1 @62354 has 167 MA's), (2, 62363), (3, 62369), (6, 62507), (7, 62510), (8, 62636), (9, 62738),

Gene: BeanWater_113 Start: 63479, Stop: 63982, Start Num: 1
Candidate Starts for BeanWater_113:
(Start: 1 @63479 has 167 MA's), (2, 63488), (3, 63494), (6, 63632), (8, 63761), (9, 63863),

Gene: BigCity_128 Start: 66141, Stop: 66644, Start Num: 1
Candidate Starts for BigCity_128:
(Start: 1 @66141 has 167 MA's), (2, 66150), (3, 66156), (6, 66294), (8, 66423), (9, 66525),

Gene: Bigswole_124 Start: 65426, Stop: 65929, Start Num: 1
Candidate Starts for Bigswole_124:
(Start: 1 @65426 has 167 MA's), (2, 65435), (3, 65441), (6, 65579), (8, 65708), (9, 65810),

Gene: Bipolarisk_120 Start: 63883, Stop: 64386, Start Num: 1
Candidate Starts for Bipolarisk_120:
(Start: 1 @63883 has 167 MA's), (2, 63892), (3, 63898), (6, 64036), (8, 64165), (9, 64267),

Gene: Blackbrain_116 Start: 62175, Stop: 62678, Start Num: 1
Candidate Starts for Blackbrain_116:
(Start: 1 @62175 has 167 MA's), (2, 62184), (3, 62190), (6, 62328), (8, 62457), (9, 62559),

Gene: Blubba_112 Start: 63917, Stop: 64420, Start Num: 1
Candidate Starts for Blubba_112:
(Start: 1 @63917 has 167 MA's), (2, 63926), (3, 63932), (6, 64070), (8, 64199), (9, 64301),

Gene: Bonray_121 Start: 64056, Stop: 64559, Start Num: 1
Candidate Starts for Bonray_121:
(Start: 1 @64056 has 167 MA's), (2, 64065), (3, 64071), (6, 64209), (8, 64338), (9, 64440),

Gene: Bread_120 Start: 63711, Stop: 64214, Start Num: 1
Candidate Starts for Bread_120:
(Start: 1 @63711 has 167 MA's), (2, 63720), (3, 63726), (6, 63864), (8, 63993), (9, 64095),

Gene: Breeniome_120 Start: 62059, Stop: 62562, Start Num: 1
Candidate Starts for Breeniome_120:
(Start: 1 @62059 has 167 MA's), (2, 62068), (3, 62074), (6, 62212), (8, 62341), (9, 62443),

Gene: Burrough_121 Start: 64210, Stop: 64713, Start Num: 1
Candidate Starts for Burrough_121:
(Start: 1 @64210 has 167 MA's), (2, 64219), (3, 64225), (6, 64363), (8, 64492), (9, 64594),

Gene: Bxz1_118 Start: 65413, Stop: 65916, Start Num: 1
Candidate Starts for Bxz1_118:
(Start: 1 @65413 has 167 MA's), (2, 65422), (3, 65428), (6, 65566), (8, 65695), (9, 65797),

Gene: Cactojaque_116 Start: 62282, Stop: 62785, Start Num: 1
Candidate Starts for Cactojaque_116:
(Start: 1 @62282 has 167 MA's), (2, 62291), (3, 62297), (6, 62435), (8, 62564), (9, 62666),

Gene: Cali_116 Start: 64212, Stop: 64715, Start Num: 1
Candidate Starts for Cali_116:
(Start: 1 @64212 has 167 MA's), (2, 64221), (3, 64227), (6, 64365), (8, 64494), (9, 64596),

Gene: Cane17_111 Start: 63975, Stop: 64478, Start Num: 1
Candidate Starts for Cane17_111:
(Start: 1 @63975 has 167 MA's), (2, 63984), (3, 63990), (6, 64128), (8, 64257), (9, 64359),

Gene: Capablanca_123 Start: 64462, Stop: 64965, Start Num: 1
Candidate Starts for Capablanca_123:
(Start: 1 @64462 has 167 MA's), (2, 64471), (3, 64477), (6, 64615), (8, 64744), (9, 64846),

Gene: Caravan_115 Start: 63569, Stop: 64072, Start Num: 1
Candidate Starts for Caravan_115:
(Start: 1 @63569 has 167 MA's), (2, 63578), (3, 63584), (6, 63722), (8, 63851), (9, 63953),

Gene: Catera_117 Start: 62486, Stop: 62989, Start Num: 1
Candidate Starts for Catera_117:
(Start: 1 @62486 has 167 MA's), (2, 62495), (3, 62501), (6, 62639), (8, 62768), (9, 62870),

Gene: Chargie21_117 Start: 62354, Stop: 62857, Start Num: 1
Candidate Starts for Chargie21_117:
(Start: 1 @62354 has 167 MA's), (2, 62363), (3, 62369), (6, 62507), (7, 62510), (8, 62636), (9, 62738),

Gene: CharlieB_117 Start: 62616, Stop: 63119, Start Num: 1
Candidate Starts for CharlieB_117:
(Start: 1 @62616 has 167 MA's), (2, 62625), (3, 62631), (6, 62769), (8, 62898), (9, 63000),

Gene: ChaylaJr_116 Start: 62108, Stop: 62611, Start Num: 1
Candidate Starts for ChaylaJr_116:
(Start: 1 @62108 has 167 MA's), (2, 62117), (3, 62123), (6, 62261), (8, 62390), (9, 62492),

Gene: ChickenPhender_117 Start: 62411, Stop: 62914, Start Num: 1
Candidate Starts for ChickenPhender_117:
(Start: 1 @62411 has 167 MA's), (2, 62420), (3, 62426), (6, 62564), (8, 62693), (9, 62795),

Gene: Chomp_118 Start: 64001, Stop: 64504, Start Num: 1

Candidate Starts for Chomp_118:
(Start: 1 @64001 has 167 MA's), (2, 64010), (3, 64016), (6, 64154), (8, 64283), (9, 64385),

Gene: CindyLou_122 Start: 64041, Stop: 64544, Start Num: 1
Candidate Starts for CindyLou_122:
(Start: 1 @64041 has 167 MA's), (2, 64050), (3, 64056), (6, 64194), (8, 64323), (9, 64425),

Gene: Colt_112 Start: 64571, Stop: 65074, Start Num: 1
Candidate Starts for Colt_112:
(Start: 1 @64571 has 167 MA's), (2, 64580), (3, 64586), (6, 64724), (8, 64853), (9, 64955),

Gene: Concombre_126 Start: 66374, Stop: 66877, Start Num: 1
Candidate Starts for Concombre_126:
(Start: 1 @66374 has 167 MA's), (2, 66383), (3, 66389), (6, 66527), (8, 66656), (9, 66758),

Gene: DTDevon_121 Start: 64252, Stop: 64755, Start Num: 1
Candidate Starts for DTDevon_121:
(Start: 1 @64252 has 167 MA's), (2, 64261), (3, 64267), (6, 64405), (7, 64408), (8, 64534), (9, 64636),

Gene: Daffodil_126 Start: 64183, Stop: 64686, Start Num: 1
Candidate Starts for Daffodil_126:
(Start: 1 @64183 has 167 MA's), (2, 64192), (3, 64198), (6, 64336), (8, 64465), (9, 64567),

Gene: Dandelion_126 Start: 66375, Stop: 66878, Start Num: 1
Candidate Starts for Dandelion_126:
(Start: 1 @66375 has 167 MA's), (2, 66384), (3, 66390), (6, 66528), (8, 66657), (9, 66759),

Gene: Darko_121 Start: 63885, Stop: 64388, Start Num: 1
Candidate Starts for Darko_121:
(Start: 1 @63885 has 167 MA's), (2, 63894), (3, 63900), (6, 64038), (7, 64041), (8, 64167), (9, 64269),

Gene: Delilah_121 Start: 64337, Stop: 64840, Start Num: 1
Candidate Starts for Delilah_121:
(Start: 1 @64337 has 167 MA's), (2, 64346), (3, 64352), (6, 64490), (8, 64619), (9, 64721),

Gene: Delylah_124 Start: 63876, Stop: 64379, Start Num: 1
Candidate Starts for Delylah_124:
(Start: 1 @63876 has 167 MA's), (2, 63885), (3, 63891), (6, 64029), (8, 64158), (9, 64260),

Gene: Derek_120 Start: 63802, Stop: 64305, Start Num: 1
Candidate Starts for Derek_120:
(Start: 1 @63802 has 167 MA's), (2, 63811), (3, 63817), (6, 63955), (7, 63958), (8, 64084), (9, 64186),

Gene: Dietrick_113 Start: 61878, Stop: 62381, Start Num: 1
Candidate Starts for Dietrick_113:
(Start: 1 @61878 has 167 MA's), (2, 61887), (3, 61893), (6, 62031), (8, 62160), (9, 62262),

Gene: DirtMonster_115 Start: 63136, Stop: 63639, Start Num: 1
Candidate Starts for DirtMonster_115:
(Start: 1 @63136 has 167 MA's), (2, 63145), (3, 63151), (6, 63289), (8, 63418), (9, 63520),

Gene: DrPhinkDaddy_120 Start: 64405, Stop: 64908, Start Num: 1
Candidate Starts for DrPhinkDaddy_120:

(Start: 1 @64405 has 167 MA's), (2, 64414), (3, 64420), (6, 64558), (8, 64687), (9, 64789),

Gene: Drazdys_119 Start: 62866, Stop: 63369, Start Num: 1
Candidate Starts for Drazdys_119:
(Start: 1 @62866 has 167 MA's), (2, 62875), (3, 62881), (6, 63019), (8, 63148), (9, 63250),

Gene: ET08_109 Start: 62866, Stop: 63369, Start Num: 1
Candidate Starts for ET08_109:
(Start: 1 @62866 has 167 MA's), (2, 62875), (3, 62881), (6, 63019), (7, 63022), (8, 63148), (9, 63250),

Gene: EasyJones_123 Start: 63008, Stop: 63511, Start Num: 1
Candidate Starts for EasyJones_123:
(Start: 1 @63008 has 167 MA's), (2, 63017), (3, 63023), (6, 63161), (7, 63164), (8, 63290), (9, 63392),

Gene: EggyFarm_128 Start: 66141, Stop: 66644, Start Num: 1
Candidate Starts for EggyFarm_128:
(Start: 1 @66141 has 167 MA's), (2, 66150), (3, 66156), (6, 66294), (8, 66423), (9, 66525),

Gene: EmToTheThree_123 Start: 65145, Stop: 65648, Start Num: 1
Candidate Starts for EmToTheThree_123:
(Start: 1 @65145 has 167 MA's), (2, 65154), (3, 65160), (6, 65298), (8, 65427), (9, 65529),

Gene: EmmaElysia_121 Start: 62931, Stop: 63434, Start Num: 1
Candidate Starts for EmmaElysia_121:
(Start: 1 @62931 has 167 MA's), (2, 62940), (3, 62946), (6, 63084), (8, 63213), (9, 63315),

Gene: Erdmann_121 Start: 64184, Stop: 64687, Start Num: 1
Candidate Starts for Erdmann_121:
(Start: 1 @64184 has 167 MA's), (2, 64193), (3, 64199), (6, 64337), (8, 64466), (9, 64568),

Gene: ErnieJ_115 Start: 62163, Stop: 62666, Start Num: 1
Candidate Starts for ErnieJ_115:
(Start: 1 @62163 has 167 MA's), (2, 62172), (3, 62178), (6, 62316), (7, 62319), (8, 62445), (9, 62547),

Gene: Essence_118 Start: 63032, Stop: 63535, Start Num: 1
Candidate Starts for Essence_118:
(Start: 1 @63032 has 167 MA's), (2, 63041), (3, 63047), (6, 63185), (7, 63188), (8, 63314), (9, 63416),

Gene: Ewok_122 Start: 63571, Stop: 64074, Start Num: 1
Candidate Starts for Ewok_122:
(Start: 1 @63571 has 167 MA's), (2, 63580), (3, 63586), (6, 63724), (8, 63853), (9, 63955),

Gene: Flabslab_115 Start: 61264, Stop: 61767, Start Num: 1
Candidate Starts for Flabslab_115:
(Start: 1 @61264 has 167 MA's), (2, 61273), (3, 61279), (6, 61417), (8, 61546), (9, 61648),

Gene: Fludd_121 Start: 62794, Stop: 63297, Start Num: 1
Candidate Starts for Fludd_121:
(Start: 1 @62794 has 167 MA's), (2, 62803), (3, 62809), (6, 62947), (7, 62950), (8, 63076), (9, 63178),

Gene: FoxtrotP1_121 Start: 65354, Stop: 65857, Start Num: 1
Candidate Starts for FoxtrotP1_121:
(Start: 1 @65354 has 167 MA's), (2, 65363), (3, 65369), (6, 65507), (8, 65636), (9, 65738),

Gene: FrayBell_126 Start: 64518, Stop: 65021, Start Num: 1
Candidate Starts for FrayBell_126:
(Start: 1 @64518 has 167 MA's), (2, 64527), (3, 64533), (6, 64671), (7, 64674), (8, 64800), (9, 64902),

Gene: FudgeTart_119 Start: 63214, Stop: 63717, Start Num: 1
Candidate Starts for FudgeTart_119:
(Start: 1 @63214 has 167 MA's), (2, 63223), (3, 63229), (6, 63367), (8, 63496), (9, 63598),

Gene: Gabriel_121 Start: 62438, Stop: 62941, Start Num: 1
Candidate Starts for Gabriel_121:
(Start: 1 @62438 has 167 MA's), (2, 62447), (3, 62453), (6, 62591), (8, 62720), (9, 62822),

Gene: Gamgam_121 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Gamgam_121:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Ghost_119 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Ghost_119:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Gizmo_125 Start: 65334, Stop: 65837, Start Num: 1
Candidate Starts for Gizmo_125:
(Start: 1 @65334 has 167 MA's), (2, 65343), (3, 65349), (6, 65487), (8, 65616), (9, 65718),

Gene: Grasshills_127 Start: 66141, Stop: 66644, Start Num: 1
Candidate Starts for Grasshills_127:
(Start: 1 @66141 has 167 MA's), (2, 66150), (3, 66156), (6, 66294), (8, 66423), (9, 66525),

Gene: Grungle_108 Start: 60456, Stop: 60959, Start Num: 1
Candidate Starts for Grungle_108:
(Start: 1 @60456 has 167 MA's), (2, 60465), (3, 60471), (6, 60609), (7, 60612), (8, 60738), (9, 60840),

Gene: Guwapp_120 Start: 62603, Stop: 63106, Start Num: 1
Candidate Starts for Guwapp_120:
(Start: 1 @62603 has 167 MA's), (2, 62612), (3, 62618), (6, 62756), (7, 62759), (8, 62885), (9, 62987),

Gene: Halldule_114 Start: 61482, Stop: 61985, Start Num: 1
Candidate Starts for Halldule_114:
(Start: 1 @61482 has 167 MA's), (2, 61491), (3, 61497), (6, 61635), (7, 61638), (8, 61764), (9, 61866),

Gene: HyRo_111 Start: 62719, Stop: 63222, Start Num: 1
Candidate Starts for HyRo_111:
(Start: 1 @62719 has 167 MA's), (2, 62728), (3, 62734), (6, 62872), (7, 62875), (8, 63001), (9, 63103),

Gene: I3_126 Start: 64669, Stop: 65172, Start Num: 1
Candidate Starts for I3_126:
(Start: 1 @64669 has 167 MA's), (2, 64678), (3, 64684), (6, 64822), (8, 64951), (9, 65053),

Gene: IkeLoa_114 Start: 62539, Stop: 63042, Start Num: 1
Candidate Starts for IkeLoa_114:
(Start: 1 @62539 has 167 MA's), (2, 62548), (3, 62554), (6, 62692), (7, 62695), (8, 62821), (9, 62923),

Gene: InigoMontoya_122 Start: 62673, Stop: 63176, Start Num: 1
Candidate Starts for InigoMontoya_122:
(Start: 1 @62673 has 167 MA's), (2, 62682), (3, 62688), (6, 62826), (8, 62955), (9, 63057),

Gene: InterFolia_127 Start: 65453, Stop: 65956, Start Num: 1
Candidate Starts for InterFolia_127:
(Start: 1 @65453 has 167 MA's), (2, 65462), (3, 65468), (6, 65606), (7, 65609), (8, 65735), (9, 65837),

Gene: Iota_116 Start: 63150, Stop: 63653, Start Num: 1
Candidate Starts for Iota_116:
(Start: 1 @63150 has 167 MA's), (2, 63159), (3, 63165), (6, 63303), (8, 63432), (9, 63534),

Gene: Issimir_119 Start: 64158, Stop: 64661, Start Num: 1
Candidate Starts for Issimir_119:
(Start: 1 @64158 has 167 MA's), (2, 64167), (3, 64173), (6, 64311), (8, 64440), (9, 64542),

Gene: Izajani_121 Start: 64364, Stop: 64867, Start Num: 1
Candidate Starts for Izajani_121:
(Start: 1 @64364 has 167 MA's), (2, 64373), (3, 64379), (6, 64517), (8, 64646), (9, 64748),

Gene: JPickles_118 Start: 61943, Stop: 62446, Start Num: 1
Candidate Starts for JPickles_118:
(Start: 1 @61943 has 167 MA's), (2, 61952), (3, 61958), (6, 62096), (7, 62099), (8, 62225), (9, 62327),

Gene: Janiyra_123 Start: 63639, Stop: 64142, Start Num: 1
Candidate Starts for Janiyra_123:
(Start: 1 @63639 has 167 MA's), (2, 63648), (3, 63654), (6, 63792), (8, 63921), (9, 64023),

Gene: JayJay_121 Start: 65149, Stop: 65652, Start Num: 1
Candidate Starts for JayJay_121:
(Start: 1 @65149 has 167 MA's), (2, 65158), (3, 65164), (6, 65302), (8, 65431), (9, 65533),

Gene: Jaygup_121 Start: 63468, Stop: 63971, Start Num: 1
Candidate Starts for Jaygup_121:
(Start: 1 @63468 has 167 MA's), (2, 63477), (3, 63483), (6, 63621), (7, 63624), (8, 63750), (9, 63852),

Gene: Jedediah_124 Start: 64001, Stop: 64504, Start Num: 1
Candidate Starts for Jedediah_124:
(Start: 1 @64001 has 167 MA's), (2, 64010), (3, 64016), (6, 64154), (7, 64157), (8, 64283), (9, 64385),

Gene: Jemmno_121 Start: 63448, Stop: 63951, Start Num: 1
Candidate Starts for Jemmno_121:
(Start: 1 @63448 has 167 MA's), (2, 63457), (3, 63463), (6, 63601), (7, 63604), (8, 63730), (9, 63832),

Gene: Jessibeth14_120 Start: 63980, Stop: 64483, Start Num: 1
Candidate Starts for Jessibeth14_120:
(Start: 1 @63980 has 167 MA's), (2, 63989), (3, 63995), (6, 64133), (8, 64262), (9, 64364),

Gene: JulietS_115 Start: 61335, Stop: 61838, Start Num: 1
Candidate Starts for JulietS_115:
(Start: 1 @61335 has 167 MA's), (2, 61344), (3, 61350), (6, 61488), (7, 61491), (8, 61617), (9, 61719),

Gene: JustHall_118 Start: 63507, Stop: 64010, Start Num: 1

Candidate Starts for JustHall_118:
(Start: 1 @63507 has 167 MA's), (2, 63516), (3, 63522), (6, 63660), (8, 63789), (9, 63891),

Gene: Kamryn_121 Start: 64786, Stop: 65289, Start Num: 1
Candidate Starts for Kamryn_121:
(Start: 1 @64786 has 167 MA's), (2, 64795), (3, 64801), (6, 64939), (8, 65068), (9, 65170),

Gene: Kboogie_125 Start: 63151, Stop: 63654, Start Num: 1
Candidate Starts for Kboogie_125:
(Start: 1 @63151 has 167 MA's), (2, 63160), (3, 63166), (6, 63304), (7, 63307), (8, 63433), (9, 63535),

Gene: Khaleesi_120 Start: 64083, Stop: 64586, Start Num: 1
Candidate Starts for Khaleesi_120:
(Start: 1 @64083 has 167 MA's), (2, 64092), (3, 64098), (6, 64236), (8, 64365), (9, 64467),

Gene: Koguma_118 Start: 61628, Stop: 62131, Start Num: 1
Candidate Starts for Koguma_118:
(Start: 1 @61628 has 167 MA's), (2, 61637), (3, 61643), (6, 61781), (7, 61784), (8, 61910), (9, 62012),

Gene: LRRHood_114 Start: 63426, Stop: 63929, Start Num: 1
Candidate Starts for LRRHood_114:
(Start: 1 @63426 has 167 MA's), (2, 63435), (3, 63441), (6, 63579), (7, 63582), (8, 63708), (9, 63810),

Gene: Latch_121 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Latch_121:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Lee7_118 Start: 64717, Stop: 65220, Start Num: 1
Candidate Starts for Lee7_118:
(Start: 1 @64717 has 167 MA's), (2, 64726), (3, 64732), (6, 64870), (8, 64999), (9, 65101),

Gene: LifeSavor_119 Start: 63400, Stop: 63903, Start Num: 1
Candidate Starts for LifeSavor_119:
(Start: 1 @63400 has 167 MA's), (2, 63409), (3, 63415), (6, 63553), (7, 63556), (8, 63682), (9, 63784),

Gene: LinStu_119 Start: 64045, Stop: 64548, Start Num: 1
Candidate Starts for LinStu_119:
(Start: 1 @64045 has 167 MA's), (2, 64054), (3, 64060), (6, 64198), (7, 64201), (8, 64327), (9, 64429),

Gene: Littleton_121 Start: 63530, Stop: 64033, Start Num: 1
Candidate Starts for Littleton_121:
(Start: 1 @63530 has 167 MA's), (2, 63539), (3, 63545), (6, 63683), (8, 63812), (9, 63914),

Gene: Loanshark_120 Start: 64051, Stop: 64554, Start Num: 1
Candidate Starts for Loanshark_120:
(Start: 1 @64051 has 167 MA's), (2, 64060), (3, 64066), (6, 64204), (8, 64333), (9, 64435),

Gene: LolaVinca_121 Start: 64404, Stop: 64907, Start Num: 1
Candidate Starts for LolaVinca_121:
(Start: 1 @64404 has 167 MA's), (2, 64413), (3, 64419), (6, 64557), (7, 64560), (8, 64686), (9, 64788),

Gene: LordLeafolot_124 Start: 65370, Stop: 65873, Start Num: 1
Candidate Starts for LordLeafolot_124:

(Start: 1 @65370 has 167 MA's), (2, 65379), (3, 65385), (6, 65523), (7, 65526), (8, 65652), (9, 65754),

Gene: Lukilu_111 Start: 64436, Stop: 64939, Start Num: 1
Candidate Starts for Lukilu_111:
(Start: 1 @64436 has 167 MA's), (2, 64445), (3, 64451), (6, 64589), (7, 64592), (8, 64718), (9, 64820),

Gene: Maby2021_121 Start: 64177, Stop: 64680, Start Num: 1
Candidate Starts for Maby2021_121:
(Start: 1 @64177 has 167 MA's), (2, 64186), (3, 64192), (6, 64330), (8, 64459), (9, 64561),

Gene: Mangeria_121 Start: 64247, Stop: 64750, Start Num: 1
Candidate Starts for Mangeria_121:
(Start: 1 @64247 has 167 MA's), (2, 64256), (3, 64262), (6, 64400), (7, 64403), (8, 64529), (9, 64631),

Gene: Matsumoto_117 Start: 63028, Stop: 63531, Start Num: 1
Candidate Starts for Matsumoto_117:
(Start: 1 @63028 has 167 MA's), (2, 63037), (3, 63043), (6, 63181), (8, 63310), (9, 63412),

Gene: McGee_123 Start: 62792, Stop: 63295, Start Num: 1
Candidate Starts for McGee_123:
(Start: 1 @62792 has 167 MA's), (2, 62801), (3, 62807), (6, 62945), (7, 62948), (8, 63074), (9, 63176),

Gene: McWolfish_119 Start: 63966, Stop: 64469, Start Num: 1
Candidate Starts for McWolfish_119:
(Start: 1 @63966 has 167 MA's), (2, 63975), (3, 63981), (6, 64119), (8, 64248), (9, 64350),

Gene: Megamind_120 Start: 63850, Stop: 64353, Start Num: 1
Candidate Starts for Megamind_120:
(Start: 1 @63850 has 167 MA's), (2, 63859), (3, 63865), (6, 64003), (8, 64132), (9, 64234),

Gene: Melpomini_115 Start: 61316, Stop: 61819, Start Num: 1
Candidate Starts for Melpomini_115:
(Start: 1 @61316 has 167 MA's), (2, 61325), (3, 61331), (6, 61469), (8, 61598), (9, 61700),

Gene: MikeLiesIn_122 Start: 64197, Stop: 64700, Start Num: 1
Candidate Starts for MikeLiesIn_122:
(Start: 1 @64197 has 167 MA's), (2, 64206), (3, 64212), (6, 64350), (8, 64479), (9, 64581),

Gene: Mikro_118 Start: 65420, Stop: 65923, Start Num: 1
Candidate Starts for Mikro_118:
(Start: 1 @65420 has 167 MA's), (2, 65429), (3, 65435), (6, 65573), (8, 65702), (9, 65804),

Gene: MoMoMixon_121 Start: 63673, Stop: 64176, Start Num: 1
Candidate Starts for MoMoMixon_121:
(Start: 1 @63673 has 167 MA's), (2, 63682), (3, 63688), (6, 63826), (8, 63955), (9, 64057),

Gene: Momo_120 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Momo_120:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Morizzled23_121 Start: 63077, Stop: 63580, Start Num: 1
Candidate Starts for Morizzled23_121:
(Start: 1 @63077 has 167 MA's), (2, 63086), (3, 63092), (6, 63230), (8, 63359), (9, 63461),

Gene: Naija_120 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Naija_120:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Napoleon13_117 Start: 61754, Stop: 62257, Start Num: 1
Candidate Starts for Napoleon13_117:
(Start: 1 @61754 has 167 MA's), (2, 61763), (3, 61769), (6, 61907), (8, 62036), (9, 62138),

Gene: Nappy_123 Start: 65107, Stop: 65610, Start Num: 1
Candidate Starts for Nappy_123:
(Start: 1 @65107 has 167 MA's), (2, 65116), (3, 65122), (6, 65260), (8, 65389), (9, 65491),

Gene: Naval22_125 Start: 65640, Stop: 66143, Start Num: 1
Candidate Starts for Naval22_125:
(Start: 1 @65640 has 167 MA's), (2, 65649), (3, 65655), (6, 65793), (8, 65922), (9, 66024),

Gene: NedWong_122 Start: 64184, Stop: 64687, Start Num: 1
Candidate Starts for NedWong_122:
(Start: 1 @64184 has 167 MA's), (2, 64193), (3, 64199), (6, 64337), (8, 64466), (9, 64568),

Gene: Ngannou_117 Start: 61694, Stop: 62197, Start Num: 1
Candidate Starts for Ngannou_117:
(Start: 1 @61694 has 167 MA's), (2, 61703), (3, 61709), (6, 61847), (8, 61976), (9, 62078),

Gene: Nidhogg_122 Start: 63918, Stop: 64421, Start Num: 1
Candidate Starts for Nidhogg_122:
(Start: 1 @63918 has 167 MA's), (2, 63927), (3, 63933), (6, 64071), (8, 64200), (9, 64302),

Gene: NoodleTree_128 Start: 64277, Stop: 64780, Start Num: 1
Candidate Starts for NoodleTree_128:
(Start: 1 @64277 has 167 MA's), (2, 64286), (3, 64292), (6, 64430), (8, 64559), (9, 64661),

Gene: Norm_122 Start: 64879, Stop: 65382, Start Num: 1
Candidate Starts for Norm_122:
(Start: 1 @64879 has 167 MA's), (2, 64888), (3, 64894), (6, 65032), (8, 65161), (9, 65263),

Gene: NuevoMundo_126 Start: 66459, Stop: 66962, Start Num: 1
Candidate Starts for NuevoMundo_126:
(Start: 1 @66459 has 167 MA's), (2, 66468), (3, 66474), (6, 66612), (7, 66615), (8, 66741), (9, 66843),

Gene: ParkTD_122 Start: 64180, Stop: 64683, Start Num: 1
Candidate Starts for ParkTD_122:
(Start: 1 @64180 has 167 MA's), (2, 64189), (3, 64195), (6, 64333), (8, 64462), (9, 64564),

Gene: Patter_121 Start: 62729, Stop: 63232, Start Num: 1
Candidate Starts for Patter_121:
(Start: 1 @62729 has 167 MA's), (2, 62738), (3, 62744), (6, 62882), (8, 63011), (9, 63113),

Gene: Phlegm_123 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Phlegm_123:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Phox_118 Start: 64460, Stop: 64963, Start Num: 1
Candidate Starts for Phox_118:
(Start: 1 @64460 has 167 MA's), (2, 64469), (3, 64475), (6, 64613), (8, 64742), (9, 64844),

Gene: Phusco_121 Start: 63477, Stop: 63980, Start Num: 1
Candidate Starts for Phusco_121:
(Start: 1 @63477 has 167 MA's), (2, 63486), (3, 63492), (6, 63630), (7, 63633), (8, 63759), (9, 63861),

Gene: Pier_125 Start: 66467, Stop: 66970, Start Num: 1
Candidate Starts for Pier_125:
(Start: 1 @66467 has 167 MA's), (2, 66476), (3, 66482), (6, 66620), (7, 66623), (8, 66749), (9, 66851),

Gene: Pinkcreek_112 Start: 61811, Stop: 62314, Start Num: 1
Candidate Starts for Pinkcreek_112:
(Start: 1 @61811 has 167 MA's), (2, 61820), (3, 61826), (6, 61964), (7, 61967), (8, 62093), (9, 62195),

Gene: Pio_125 Start: 66069, Stop: 66572, Start Num: 1
Candidate Starts for Pio_125:
(Start: 1 @66069 has 167 MA's), (2, 66078), (3, 66084), (6, 66222), (8, 66351), (9, 66453),

Gene: Pivoine_120 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for Pivoine_120:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Pleione_124 Start: 64347, Stop: 64850, Start Num: 1
Candidate Starts for Pleione_124:
(Start: 1 @64347 has 167 MA's), (2, 64356), (3, 64362), (6, 64500), (8, 64629), (9, 64731),

Gene: PurduePete_121 Start: 64604, Stop: 65107, Start Num: 1
Candidate Starts for PurduePete_121:
(Start: 1 @64604 has 167 MA's), (2, 64613), (3, 64619), (6, 64757), (8, 64886), (9, 64988),

Gene: QBert_115 Start: 63184, Stop: 63687, Start Num: 1
Candidate Starts for QBert_115:
(Start: 1 @63184 has 167 MA's), (2, 63193), (3, 63199), (6, 63337), (8, 63466), (9, 63568),

Gene: Quasimodo_122 Start: 64139, Stop: 64642, Start Num: 1
Candidate Starts for Quasimodo_122:
(Start: 1 @64139 has 167 MA's), (2, 64148), (3, 64154), (6, 64292), (8, 64421), (9, 64523),

Gene: Rabinovish_118 Start: 64377, Stop: 64880, Start Num: 1
Candidate Starts for Rabinovish_118:
(Start: 1 @64377 has 167 MA's), (2, 64386), (3, 64392), (6, 64530), (8, 64659), (9, 64761),

Gene: Rahel_120 Start: 63069, Stop: 63572, Start Num: 1
Candidate Starts for Rahel_120:
(Start: 1 @63069 has 167 MA's), (2, 63078), (3, 63084), (6, 63222), (8, 63351), (9, 63453),

Gene: Rizal_116 Start: 62217, Stop: 62720, Start Num: 1
Candidate Starts for Rizal_116:
(Start: 1 @62217 has 167 MA's), (2, 62226), (3, 62232), (6, 62370), (8, 62499), (9, 62601),

Gene: RoMag_116 Start: 63391, Stop: 63894, Start Num: 1

Candidate Starts for RoMag_116:
(Start: 1 @63391 has 167 MA's), (2, 63400), (3, 63406), (6, 63544), (7, 63547), (8, 63673), (9, 63775),

Gene: Ronan_115 Start: 61340, Stop: 61843, Start Num: 1
Candidate Starts for Ronan_115:
(Start: 1 @61340 has 167 MA's), (2, 61349), (3, 61355), (6, 61493), (7, 61496), (8, 61622), (9, 61724),

Gene: Roots515_119 Start: 64377, Stop: 64880, Start Num: 1
Candidate Starts for Roots515_119:
(Start: 1 @64377 has 167 MA's), (2, 64386), (3, 64392), (6, 64530), (8, 64659), (9, 64761),

Gene: Salacia_125 Start: 64518, Stop: 65021, Start Num: 1
Candidate Starts for Salacia_125:
(Start: 1 @64518 has 167 MA's), (2, 64527), (3, 64533), (6, 64671), (8, 64800), (9, 64902),

Gene: Sauce_121 Start: 63124, Stop: 63627, Start Num: 1
Candidate Starts for Sauce_121:
(Start: 1 @63124 has 167 MA's), (2, 63133), (3, 63139), (6, 63277), (7, 63280), (8, 63406), (9, 63508),

Gene: ScottMcG_117 Start: 63140, Stop: 63643, Start Num: 1
Candidate Starts for ScottMcG_117:
(Start: 1 @63140 has 167 MA's), (2, 63149), (3, 63155), (6, 63293), (8, 63422), (9, 63524),

Gene: Sebata_121 Start: 64603, Stop: 65106, Start Num: 1
Candidate Starts for Sebata_121:
(Start: 1 @64603 has 167 MA's), (2, 64612), (3, 64618), (6, 64756), (7, 64759), (8, 64885), (9, 64987),

Gene: Shaqnato_114 Start: 62184, Stop: 62687, Start Num: 1
Candidate Starts for Shaqnato_114:
(Start: 1 @62184 has 167 MA's), (2, 62193), (3, 62199), (6, 62337), (7, 62340), (8, 62466), (9, 62568),

Gene: Shelob_123 Start: 64976, Stop: 65479, Start Num: 1
Candidate Starts for Shelob_123:
(Start: 1 @64976 has 167 MA's), (2, 64985), (3, 64991), (6, 65129), (8, 65258), (9, 65360),

Gene: ShiaLabeouf_120 Start: 63504, Stop: 64007, Start Num: 1
Candidate Starts for ShiaLabeouf_120:
(Start: 1 @63504 has 167 MA's), (2, 63513), (3, 63519), (6, 63657), (8, 63786), (9, 63888),

Gene: Shifa_109 Start: 61985, Stop: 62488, Start Num: 1
Candidate Starts for Shifa_109:
(Start: 1 @61985 has 167 MA's), (2, 61994), (3, 62000), (6, 62138), (7, 62141), (8, 62267), (9, 62369),

Gene: Shnickers_121 Start: 63468, Stop: 63971, Start Num: 1
Candidate Starts for Shnickers_121:
(Start: 1 @63468 has 167 MA's), (2, 63477), (3, 63483), (6, 63621), (7, 63624), (8, 63750), (9, 63852),

Gene: Shrimp_121 Start: 64188, Stop: 64691, Start Num: 1
Candidate Starts for Shrimp_121:
(Start: 1 @64188 has 167 MA's), (2, 64197), (3, 64203), (6, 64341), (8, 64470), (9, 64572),

Gene: SilverDipper_122 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for SilverDipper_122:

(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: SmallFry_121 Start: 62693, Stop: 63196, Start Num: 1
Candidate Starts for SmallFry_121:
(Start: 1 @62693 has 167 MA's), (2, 62702), (3, 62708), (6, 62846), (7, 62849), (8, 62975), (9, 63077),

Gene: Spec_116 Start: 63233, Stop: 63736, Start Num: 1
Candidate Starts for Spec_116:
(Start: 1 @63233 has 167 MA's), (2, 63242), (3, 63248), (6, 63386), (7, 63389), (8, 63515), (9, 63617),

Gene: Specks_126 Start: 65368, Stop: 65871, Start Num: 1
Candidate Starts for Specks_126:
(Start: 1 @65368 has 167 MA's), (2, 65377), (3, 65383), (6, 65521), (8, 65650), (9, 65752),

Gene: Sprinklers_117 Start: 62749, Stop: 63252, Start Num: 1
Candidate Starts for Sprinklers_117:
(Start: 1 @62749 has 167 MA's), (2, 62758), (3, 62764), (6, 62902), (8, 63031), (9, 63133),

Gene: Spud_120 Start: 64264, Stop: 64767, Start Num: 1
Candidate Starts for Spud_120:
(Start: 1 @64264 has 167 MA's), (2, 64273), (3, 64279), (6, 64417), (8, 64546), (9, 64648),

Gene: SrishMeg2525_120 Start: 64286, Stop: 64789, Start Num: 1
Candidate Starts for SrishMeg2525_120:
(Start: 1 @64286 has 167 MA's), (2, 64295), (3, 64301), (6, 64439), (8, 64568), (9, 64670),

Gene: StephanieG_119 Start: 65096, Stop: 65599, Start Num: 1
Candidate Starts for StephanieG_119:
(Start: 1 @65096 has 167 MA's), (2, 65105), (3, 65111), (6, 65249), (7, 65252), (8, 65378), (9, 65480),

Gene: Stubby_113 Start: 62301, Stop: 62804, Start Num: 1
Candidate Starts for Stubby_113:
(Start: 1 @62301 has 167 MA's), (2, 62310), (3, 62316), (6, 62454), (7, 62457), (8, 62583), (9, 62685),

Gene: StubbySaigey_124 Start: 62882, Stop: 63385, Start Num: 1
Candidate Starts for StubbySaigey_124:
(Start: 1 @62882 has 167 MA's), (2, 62891), (3, 62897), (6, 63035), (8, 63164), (9, 63266),

Gene: Teardrop_120 Start: 62692, Stop: 63195, Start Num: 1
Candidate Starts for Teardrop_120:
(Start: 1 @62692 has 167 MA's), (2, 62701), (3, 62707), (6, 62845), (8, 62974), (9, 63076),

Gene: TinyTim_121 Start: 63944, Stop: 64447, Start Num: 1
Candidate Starts for TinyTim_121:
(Start: 1 @63944 has 167 MA's), (2, 63953), (3, 63959), (6, 64097), (8, 64226), (9, 64328),

Gene: Tonenili_135 Start: 67441, Stop: 67953, Start Num: 1
Candidate Starts for Tonenili_135:
(Start: 1 @67441 has 167 MA's), (2, 67450), (4, 67513), (5, 67519), (6, 67603), (8, 67732),

Gene: Tortoise16_118 Start: 63293, Stop: 63796, Start Num: 1
Candidate Starts for Tortoise16_118:
(Start: 1 @63293 has 167 MA's), (2, 63302), (3, 63308), (6, 63446), (8, 63575), (9, 63677),

Gene: Trinitium_118 Start: 62648, Stop: 63151, Start Num: 1
Candidate Starts for Trinitium_118:
(Start: 1 @62648 has 167 MA's), (2, 62657), (3, 62663), (6, 62801), (8, 62930), (9, 63032),

Gene: Turret_116 Start: 62093, Stop: 62596, Start Num: 1
Candidate Starts for Turret_116:
(Start: 1 @62093 has 167 MA's), (2, 62102), (3, 62108), (6, 62246), (8, 62375), (9, 62477),

Gene: Tyke_121 Start: 64599, Stop: 65102, Start Num: 1
Candidate Starts for Tyke_121:
(Start: 1 @64599 has 167 MA's), (2, 64608), (3, 64614), (6, 64752), (7, 64755), (8, 64881), (9, 64983),

Gene: ValleyTerrace_121 Start: 62712, Stop: 63215, Start Num: 1
Candidate Starts for ValleyTerrace_121:
(Start: 1 @62712 has 167 MA's), (2, 62721), (3, 62727), (6, 62865), (8, 62994), (9, 63096),

Gene: Wally_120 Start: 62722, Stop: 63225, Start Num: 1
Candidate Starts for Wally_120:
(Start: 1 @62722 has 167 MA's), (2, 62731), (3, 62737), (6, 62875), (8, 63004), (9, 63106),

Gene: Willis_122 Start: 64079, Stop: 64582, Start Num: 1
Candidate Starts for Willis_122:
(Start: 1 @64079 has 167 MA's), (2, 64088), (3, 64094), (6, 64232), (8, 64361), (9, 64463),

Gene: Yassified_118 Start: 62799, Stop: 63302, Start Num: 1
Candidate Starts for Yassified_118:
(Start: 1 @62799 has 167 MA's), (2, 62808), (3, 62814), (6, 62952), (7, 62955), (8, 63081), (9, 63183),

Gene: YemiJoy2021_122 Start: 64181, Stop: 64684, Start Num: 1
Candidate Starts for YemiJoy2021_122:
(Start: 1 @64181 has 167 MA's), (2, 64190), (3, 64196), (6, 64334), (8, 64463), (9, 64565),

Gene: YoungMoneyMata_122 Start: 63348, Stop: 63851, Start Num: 1
Candidate Starts for YoungMoneyMata_122:
(Start: 1 @63348 has 167 MA's), (2, 63357), (3, 63363), (6, 63501), (8, 63630), (9, 63732),

Gene: Yucca_120 Start: 63863, Stop: 64366, Start Num: 1
Candidate Starts for Yucca_120:
(Start: 1 @63863 has 167 MA's), (2, 63872), (3, 63878), (6, 64016), (8, 64145), (9, 64247),

Gene: Zalkecks_122 Start: 63864, Stop: 64367, Start Num: 1
Candidate Starts for Zalkecks_122:
(Start: 1 @63864 has 167 MA's), (2, 63873), (3, 63879), (6, 64017), (8, 64146), (9, 64248),

Gene: Zeenon_122 Start: 63949, Stop: 64452, Start Num: 1
Candidate Starts for Zeenon_122:
(Start: 1 @63949 has 167 MA's), (2, 63958), (3, 63964), (6, 64102), (8, 64231), (9, 64333),

Gene: ZygoTaiga_119 Start: 65109, Stop: 65612, Start Num: 1
Candidate Starts for ZygoTaiga_119:
(Start: 1 @65109 has 167 MA's), (2, 65118), (3, 65124), (6, 65262), (8, 65391), (9, 65493),