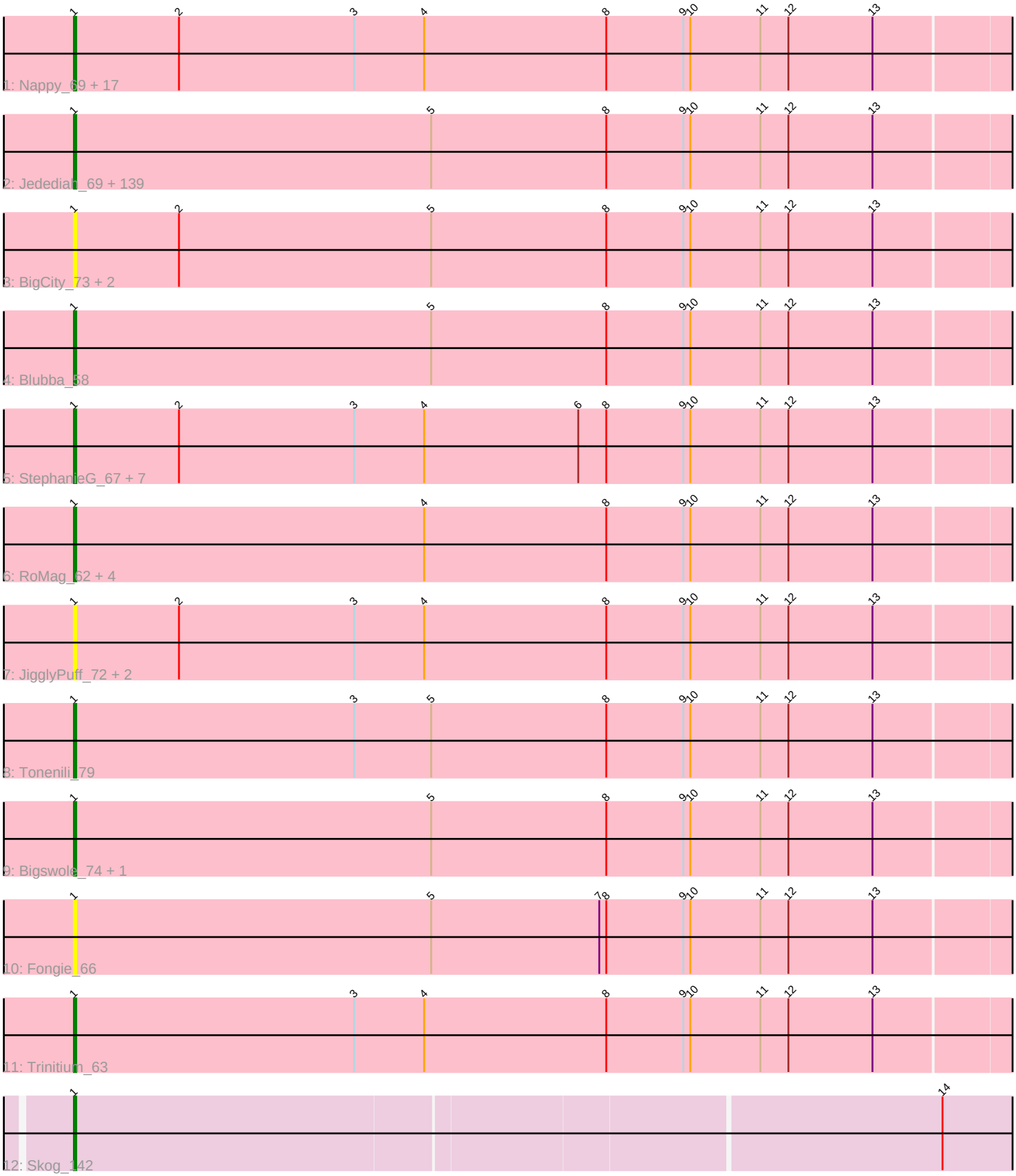
Pham 334461


1: Nappy_69 + 17
2: Jedediah_69 + 139
3: BigCity_73 + 2
4: Blubba_68
5: StephanieG_67 + 7
6: RoMag_62 + 4
7: JigglyPuff_72 + 2
8: Tonenili_79
9: Bigswole_74 + 1
10: Fongie_66
11: Trinitium_63
12: Skog_142

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 334461 Report

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

Pham number 334461 has 184 members, 23 are drafts.

Phages represented in each track:
• Track 1 : Nappy_69, Cactojaque_62, Chargie21_63, Duckfeet_60, QBert_62, Cali_64, EmToTheThree_71, Delylah_70, Ablatia_64, Basquiat_63, Kboogie_69, BeanWater_61, Iota_62, Adlitam_67, CharlieB_65, ChickenPhender_63, ET08_58, Sprinklers_64
• Track 2 : Jedediah_69, FudgeTart_69, LolaVinca_70, Bipolarisk_67, FoxtrotP1_68, Kamryn_67, Littleton_67, Ewok_68, PharkleMinkus_74, Guwapp_66, Delilah_68, Dessert_68, Nidhogg_68, Breeniome_69, StubbySaigey_68, CindyLou_68, Salacia_70, Gabriel_69, Spec_67, Willis_68, Janiyra_69, Loanshark_68, Derek_67, Jezreel_66, NedWong_69, InterFolia_77, Puhon_72, ShiaLabeouf_67, Chomp_66, Jemmno_67, DrPhinkDaddy_67, ValleyTerrace_67, Lethe_66, Momo_66, Asterius_69, Belieber_61, Ngannou_62, Burrough_67, YoungMoneyMata_67, Quasimodo_67, EmmaElysia_66, McWolfish_66, Erdmann_68, Fludd_67, Flabslab_64, BananaFence_68, Jaygup_67, Shelob_70, Audrick_69, GlutenPhree_68, SilverDipper_68, Maguvora_73, BackyardAgain_64, Essence_66, Caravan_64, MikeLiesIn_68, Pupusa_72, Wally_66, Maby2021_68, Catera_66, Naija_66, ChaylaJr_63, DTDevon_68, Mikro_65, Fixie_60, Primadonna_63, Phlegm_69, McGee_67, ZygoTaiga_67, Ghost_66, OrediggerDelux_69, Gizmo_71, Babyland_66, Teardrop_67, Pio_72, SoilZilla_63, LordLeafolot_74, Labradorite_69, Amataga_67, Tortoise16_65, Mangeria_71, Turret_62, Izajani_68, Blackbrain_62, SmallFry_67, MoMoMixon_68, Atlantean_66, SVoro_66, Shnickers_67, Specks_73, Zalkecks_69, JPickles_66, Rizal_65, Zeenon_69, LifeSavor_66, Patter_67, Drazdys_67, Matsumoto_66, Pivoine_66, YemiJoy2021_68, Montpel_64, SrishMeg2525_67, PurduePete_67, Yucca_67, TinyTim_68, Cleatunium_63, Bangla1971_68, FrayBell_74, Rahel_68, Bread_67, Spud_67, Dietrick_61, Phusco_67, Megamind_67, Khaleesi_67, Ading_67, Norm_68, JustHall_63, SiwenD96_67, Shrimp_68, Bonray_68, ArcherS7_67, Daffodil_71, Lunareta_64, Latch_67, Bowman_69, ParkTD_68, InigoMontoya_68, GoldenSnow_72, Substance289_63, ScottMcG_65, Tainan_72, Pleione_70, Naval22_75, JayJay_74, Capablanca_69, Darko_67, Gamgam_67, Tyke_69, Bxz1_67
• Track 3 : BigCity_73, Grasshills_73, EggyFarm_73
• Track 4 : Blubba_58
• Track 5 : StephanieG_67, NoodleTree_68, Rocha_65, Ava3_69, Pier_70, Jessibeth14_66, Lee7_69, NuevoMundo_73
• Track 6 : RoMag_62, IkeLoa_62, Domi_61, Issimir_67, LookingGlass_69
• Track 7 : JigglyPuff_72, Demodog_72, Concombre_73
• Track 8 : Tonenili_79
• Track 9 : Bigswole_74, I3_71

• Track 10 : Fongie_66
• Track 11 : Trinitium_63
• Track 12 : Skog_142

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 161 of the 161 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ablatia_64, Ading_67, Adlitam_67, Amataga_67, ArcherS7_67, Asterius_69, Atlantean_66, Audrick_69, Ava3_69, Babyland_66, BackyardAgain_64, BananaFence_68, Bangla1971_68, Basquiat_63, BeanWater_61, Belieber_61, BigCity_73, Bigswole_74, Bipolarisk_67, Blackbrain_62, Blubba_58, Bonray_68, Bowman_69, Bread_67, Breeniome_69, Burrough_67, Bxz1_67, Cactojaque_62, Cali_64, Capablanca_69, Caravan_64, Catera_66, Chargie21_63, CharlieB_65, ChaylaJr_63, ChickenPhender_63, Chomp_66, CindyLou_68, Cleatunium_63, Concombre_73, DTDevon_68, Daffodil_71, Darko_67, Delilah_68, Delylah_70, Demodog_72, Derek_67, Dessert_68, Dietrick_61, Domi_61, DrPhinkDaddy_67, Drazdys_67, Duckfeet_60, ET08_58, EggyFarm_73, EmToTheThree_71, EmmaElysia_66, Erdmann_68, Essence_66, Ewok_68, Fixie_60, Flabslab_64, Fludd_67, Fongie_66, FoxtrotP1_68, FrayBell_74, FudgeTart_69, Gabriel_69, Gamgam_67, Ghost_66, Gizmo_71, GlutenPhree_68, GoldenSnow_72, Grasshills_73, Guwapp_66, I3_71, IkeLoa_62, InigoMontoya_68, InterFolia_77, Iota_62, Issimir_67, Izajani_68, JPickles_66, Janiyra_69, JayJay_74, Jaygup_67, Jedediah_69, Jemmno_67, Jessibeth14_66, Jezreel_66, JigglyPuff_72, JustHall_63, Kamryn_67, Kboogie_69, Khaleesi_67, Labradorite_69, Latch_67, Lee7_69, Lethe_66, LifeSavor_66, Littleton_67, Loanshark_68, LolaVinca_70, LookingGlass_69, LordLeafolot_74, Lunareta_64, Maby2021_68, Maguvora_73, Mangeria_71, Matsumoto_66, McGee_67, McWolfish_66, Megamind_67, MikeLiesIn_68, Mikro_65, MoMoMixon_68, Momo_66, Montpel_64, Naija_66, Nappy_69, Naval22_75, NedWong_69, Ngannou_62, Nidhogg_68, NoodleTree_68, Norm_68, NuevoMundo_73, OrediggerDelux_69, ParkTD_68, Patter_67, PharkleMinkus_74, Phlegm_69, Phusco_67, Pier_70, Pio_72, Pivoine_66, Pleione_70, Primadonna_63, Puhon_72, Pupusa_72, PurduePete_67, QBert_62, Quasimodo_67, Rahel_68, Rizal_65, RoMag_62, Rocha_65, SVoro_66, Salacia_70, ScottMcG_65, Shelob_70, ShiaLabeouf_67, Shnickers_67, Shrimp_68, SilverDipper_68, SiwenD96_67, Skog_142, SmallFry_67, SoilZilla_63, Spec_67, Specks_73, Sprinklers_64, Spud_67, SrishMeg2525_67, StephanieG_67, StubbySaigey_68, Substance289_63, Tainan_72, Teardrop_67, TinyTim_68, Tonenili_79, Tortoise16_65, Trinitium_63, Turret_62, Tyke_69, ValleyTerrace_67, Wally_66, Willis_68, YemiJoy2021_68, YoungMoneyMata_67, Yucca_67, Zalkecks_69, Zeenon_69, ZygoTaiga_67,

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 184 of 184 (100.0%) of genes in pham
• Manual Annotations of this start: 161 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ablatia_64 (C1), Ading_67 (C1), Adlitam_67 (C1), Amataga_67 (C1), ArcherS7_67 (C1), Asterius_69 (C1), Atlantean_66 (C1), Audrick_69 (C1), Ava3_69 (C1), Babyland_66 (C1), BackyardAgain_64 (C1), BananaFence_68 (C1), Bangla1971_68 (C1), Basquiat_63 (C1), BeanWater_61 (C1), Belieber_61 (C1), BigCity_73 (C1), Bigswole_74 (C1), Bipolarisk_67 (C1), Blackbrain_62 (C1), Blubba_58 (C1), Bonray_68 (C1), Bowman_69 (C1), Bread_67 (C1), Breeniome_69 (C1), Burrough_67 (C1), Bxz1_67 (C1), Cactojaque_62 (C1), Cali_64 (C1), Capablanca_69 (C1), Caravan_64 (C1), Catera_66 (C1), Chargie21_63 (C1), CharlieB_65 (C1), ChaylaJr_63 (C1), ChickenPhender_63 (C1), Chomp_66 (C1), CindyLou_68 (C1), Cleatunium_63 (C1), Concombre_73 (C1), DTDevon_68 (C1), Daffodil_71 (C1), Darko_67 (C1), Delilah_68 (C1), Delylah_70 (C1), Demodog_72 (C1), Derek_67 (C1), Dessert_68 (C1), Dietrick_61 (C1), Domi_61 (C1), DrPhinkDaddy_67 (C1), Drazdys_67 (C1), Duckfeet_60 (C1), ET08_58 (C1), EggyFarm_73 (C1), EmToTheThree_71 (C1), EmmaElysia_66 (C1), Erdmann_68 (C1), Essence_66 (C1), Ewok_68 (C1), Fixie_60 (C1), Flabslab_64 (C1), Fludd_67 (C1), Fongie_66 (C1), FoxtrotP1_68 (C1), FrayBell_74 (C1), FudgeTart_69 (C1), Gabriel_69 (C1), Gamgam_67 (C1), Ghost_66 (C1), Gizmo_71 (C1), GlutenPhree_68 (C1), GoldenSnow_72 (C1), Grasshills_73 (C1), Guwapp_66 (C1), I3_71 (C1), IkeLoa_62 (C1), InigoMontoya_68 (C1), InterFolia_77 (C1), Iota_62 (C1), Issimir_67 (C1), Izajani_68 (C1), JPickles_66 (C1), Janiyra_69 (C1), JayJay_74 (C1), Jaygup_67 (C1), Jedediah_69 (C1), Jemmno_67 (C1), Jessibeth14_66 (C1), Jezreel_66 (C1), JigglyPuff_72 (C1), JustHall_63 (C1), Kamryn_67 (C1), Kboogie_69 (C1), Khaleesi_67 (C1), Labradorite_69 (C1), Latch_67 (C1), Lee7_69 (C1), Lethe_66 (C1), LifeSavor_66 (C1), Littleton_67 (C1), Loanshark_68 (C1), LolaVinca_70 (C1), LookingGlass_69 (C1), LordLeafolot_74 (C1), Lunareta_64 (C1), Maby2021_68 (C1), Maguvora_73 (C1), Mangeria_71 (C1), Matsumoto_66 (C1), McGee_67 (C1), McWolfish_66 (C1), Megamind_67 (C1), MikeLiesIn_68 (C1), Mikro_65 (C1), MoMoMixon_68 (C1), Momo_66 (C1), Montpel_64 (C1), Naija_66 (C1), Nappy_69 (C1), Naval22_75 (C1), NedWong_69 (C1), Ngannou_62 (C1), Nidhogg_68 (C1), NoodleTree_68 (C1), Norm_68 (C1), NuevoMundo_73 (C1), OrediggerDelux_69 (C1), ParkTD_68 (C1), Patter_67 (C1), PharkleMinkus_74 (C1), Phlegm_69 (C1), Phusco_67 (C1), Pier_70 (C1), Pio_72 (C1), Pivoine_66 (C1), Pleione_70 (C1), Primadonna_63 (C1), Puhon_72 (C1), Pupusa_72 (C1), PurduePete_67 (C1), QBert_62 (C1), Quasimodo_67 (C1), Rahel_68 (C1), Rizal_65 (C1), RoMag_62 (C1), Rocha_65 (C1), SVoro_66 (C1), Salacia_70 (C1), ScottMcG_65 (C1), Shelob_70 (C1), ShiaLabeouf_67 (C1), Shnickers_67 (C1), Shrimp_68 (C1), SilverDipper_68 (C1), SiwenD96_67 (C1), Skog_142 (DO), SmallFry_67 (C1), SoilZilla_63 (C1), Spec_67 (C1), Specks_73 (C1), Sprinklers_64 (C1), Spud_67 (C1), SrishMeg2525_67 (C1), StephanieG_67 (C1), StubbySaigey_68 (C1), Substance289_63 (C1), Tainan_72 (C1), Teardrop_67 (C1), TinyTim_68 (C1), Tonenili_79 (C1), Tortoise16_65 (C1), Trinitium_63 (C1), Turret_62 (C1), Tyke_69 (C1), ValleyTerrace_67 (C1), Wally_66 (C1), Willis_68 (C1), YemiJoy2021_68 (C1), YoungMoneyMata_67 (C1), Yucca_67 (C1), Zalkecks_69 (C1), Zeenon_69 (C1), ZygoTaiga_67 (C1),

Summary by clusters:

There are 2 clusters represented in this pham: DO, C1,

Info for manual annotations of cluster C1:
•Start number 1 was manually annotated 160 times for cluster C1.

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

Gene Information:

Gene: Ablatia_64 Start: 21046, Stop: 21561, Start Num: 1
Candidate Starts for Ablatia_64:
(Start: 1 @21046 has 161 MA's), (2, 21091), (3, 21166), (4, 21196), (8, 21274), (9, 21307), (10, 21310), (11, 21340), (12, 21352), (13, 21388),

Gene: Ading_67 Start: 21088, Stop: 21603, Start Num: 1
Candidate Starts for Ading_67:
(Start: 1 @21088 has 161 MA's), (5, 21241), (8, 21316), (9, 21349), (10, 21352), (11, 21382), (12, 21394), (13, 21430),

Gene: Adlitam_67 Start: 21105, Stop: 21620, Start Num: 1
Candidate Starts for Adlitam_67:
(Start: 1 @21105 has 161 MA's), (2, 21150), (3, 21225), (4, 21255), (8, 21333), (9, 21366), (10, 21369), (11, 21399), (12, 21411), (13, 21447),

Gene: Amataga_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Amataga_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: ArcherS7_67 Start: 21472, Stop: 21987, Start Num: 1
Candidate Starts for ArcherS7_67:
(Start: 1 @21472 has 161 MA's), (5, 21625), (8, 21700), (9, 21733), (10, 21736), (11, 21766), (12, 21778), (13, 21814),

Gene: Asterius_69 Start: 21504, Stop: 22019, Start Num: 1
Candidate Starts for Asterius_69:
(Start: 1 @21504 has 161 MA's), (5, 21657), (8, 21732), (9, 21765), (10, 21768), (11, 21798), (12, 21810), (13, 21846),

Gene: Atlantean_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Atlantean_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Audrick_69 Start: 21088, Stop: 21603, Start Num: 1
Candidate Starts for Audrick_69:
(Start: 1 @21088 has 161 MA's), (5, 21241), (8, 21316), (9, 21349), (10, 21352), (11, 21382), (12, 21394), (13, 21430),

Gene: Ava3_69 Start: 22221, Stop: 22736, Start Num: 1

Candidate Starts for Ava3_69:
(Start: 1 @22221 has 161 MA's), (2, 22266), (3, 22341), (4, 22371), (6, 22437), (8, 22449), (9, 22482), (10, 22485), (11, 22515), (12, 22527), (13, 22563),

Gene: Babyland_66 Start: 20547, Stop: 21062, Start Num: 1
Candidate Starts for Babyland_66:
(Start: 1 @20547 has 161 MA's), (5, 20700), (8, 20775), (9, 20808), (10, 20811), (11, 20841), (12, 20853), (13, 20889),

Gene: BackyardAgain_64 Start: 21040, Stop: 21555, Start Num: 1
Candidate Starts for BackyardAgain_64:
(Start: 1 @21040 has 161 MA's), (5, 21193), (8, 21268), (9, 21301), (10, 21304), (11, 21334), (12, 21346), (13, 21382),

Gene: BananaFence_68 Start: 22047, Stop: 22562, Start Num: 1
Candidate Starts for BananaFence_68:
(Start: 1 @22047 has 161 MA's), (5, 22200), (8, 22275), (9, 22308), (10, 22311), (11, 22341), (12, 22353), (13, 22389),

Gene: Bangla1971_68 Start: 21602, Stop: 22117, Start Num: 1
Candidate Starts for Bangla1971_68:
(Start: 1 @21602 has 161 MA's), (5, 21755), (8, 21830), (9, 21863), (10, 21866), (11, 21896), (12, 21908), (13, 21944),

Gene: Basquiat_63 Start: 20591, Stop: 21106, Start Num: 1
Candidate Starts for Basquiat_63:
(Start: 1 @20591 has 161 MA's), (2, 20636), (3, 20711), (4, 20741), (8, 20819), (9, 20852), (10, 20855), (11, 20885), (12, 20897), (13, 20933),

Gene: BeanWater_61 Start: 21513, Stop: 22028, Start Num: 1
Candidate Starts for BeanWater_61:
(Start: 1 @21513 has 161 MA's), (2, 21558), (3, 21633), (4, 21663), (8, 21741), (9, 21774), (10, 21777), (11, 21807), (12, 21819), (13, 21855),

Gene: Belieber_61 Start: 20461, Stop: 20976, Start Num: 1
Candidate Starts for Belieber_61:
(Start: 1 @20461 has 161 MA's), (5, 20614), (8, 20689), (9, 20722), (10, 20725), (11, 20755), (12, 20767), (13, 20803),

Gene: BigCity_73 Start: 23661, Stop: 24176, Start Num: 1
Candidate Starts for BigCity_73:
(Start: 1 @23661 has 161 MA's), (2, 23706), (5, 23814), (8, 23889), (9, 23922), (10, 23925), (11, 23955), (12, 23967), (13, 24003),

Gene: Bigswole_74 Start: 24695, Stop: 25210, Start Num: 1
Candidate Starts for Bigswole_74:
(Start: 1 @24695 has 161 MA's), (5, 24848), (8, 24923), (9, 24956), (10, 24959), (11, 24989), (12, 25001), (13, 25037),

Gene: Bipolarisk_67 Start: 21874, Stop: 22389, Start Num: 1
Candidate Starts for Bipolarisk_67:
(Start: 1 @21874 has 161 MA's), (5, 22027), (8, 22102), (9, 22135), (10, 22138), (11, 22168), (12, 22180), (13, 22216),

Gene: Blackbrain_62 Start: 20408, Stop: 20923, Start Num: 1
Candidate Starts for Blackbrain_62:
(Start: 1 @20408 has 161 MA's), (5, 20561), (8, 20636), (9, 20669), (10, 20672), (11, 20702), (12, 20714), (13, 20750),

Gene: Blubba_58 Start: 19277, Stop: 19792, Start Num: 1
Candidate Starts for Blubba_58:
(Start: 1 @19277 has 161 MA's), (5, 19430), (8, 19505), (9, 19538), (10, 19541), (11, 19571), (12, 19583), (13, 19619),

Gene: Bonray_68 Start: 22151, Stop: 22666, Start Num: 1
Candidate Starts for Bonray_68:
(Start: 1 @22151 has 161 MA's), (5, 22304), (8, 22379), (9, 22412), (10, 22415), (11, 22445), (12, 22457), (13, 22493),

Gene: Bowman_69 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for Bowman_69:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Bread_67 Start: 21844, Stop: 22359, Start Num: 1
Candidate Starts for Bread_67:
(Start: 1 @21844 has 161 MA's), (5, 21997), (8, 22072), (9, 22105), (10, 22108), (11, 22138), (12, 22150), (13, 22186),

Gene: Breeniome_69 Start: 21351, Stop: 21866, Start Num: 1
Candidate Starts for Breeniome_69:
(Start: 1 @21351 has 161 MA's), (5, 21504), (8, 21579), (9, 21612), (10, 21615), (11, 21645), (12, 21657), (13, 21693),

Gene: Burrough_67 Start: 21877, Stop: 22392, Start Num: 1
Candidate Starts for Burrough_67:
(Start: 1 @21877 has 161 MA's), (5, 22030), (8, 22105), (9, 22138), (10, 22141), (11, 22171), (12, 22183), (13, 22219),

Gene: Bxz1_67 Start: 22928, Stop: 23443, Start Num: 1
Candidate Starts for Bxz1_67:
(Start: 1 @22928 has 161 MA's), (5, 23081), (8, 23156), (9, 23189), (10, 23192), (11, 23222), (12, 23234), (13, 23270),

Gene: Cactojaque_62 Start: 20515, Stop: 21030, Start Num: 1
Candidate Starts for Cactojaque_62:
(Start: 1 @20515 has 161 MA's), (2, 20560), (3, 20635), (4, 20665), (8, 20743), (9, 20776), (10, 20779), (11, 20809), (12, 20821), (13, 20857),

Gene: Cali_64 Start: 22750, Stop: 23265, Start Num: 1
Candidate Starts for Cali_64:
(Start: 1 @22750 has 161 MA's), (2, 22795), (3, 22870), (4, 22900), (8, 22978), (9, 23011), (10, 23014), (11, 23044), (12, 23056), (13, 23092),

Gene: Capablanca_69 Start: 22234, Stop: 22749, Start Num: 1
Candidate Starts for Capablanca_69:

(Start: 1 @22234 has 161 MA's), (5, 22387), (8, 22462), (9, 22495), (10, 22498), (11, 22528), (12, 22540), (13, 22576),

Gene: Caravan_64 Start: 21222, Stop: 21737, Start Num: 1
Candidate Starts for Caravan_64:
(Start: 1 @21222 has 161 MA's), (5, 21375), (8, 21450), (9, 21483), (10, 21486), (11, 21516), (12, 21528), (13, 21564),

Gene: Catera_66 Start: 21043, Stop: 21558, Start Num: 1
Candidate Starts for Catera_66:
(Start: 1 @21043 has 161 MA's), (5, 21196), (8, 21271), (9, 21304), (10, 21307), (11, 21337), (12, 21349), (13, 21385),

Gene: Chargie21_63 Start: 20591, Stop: 21106, Start Num: 1
Candidate Starts for Chargie21_63:
(Start: 1 @20591 has 161 MA's), (2, 20636), (3, 20711), (4, 20741), (8, 20819), (9, 20852), (10, 20855), (11, 20885), (12, 20897), (13, 20933),

Gene: CharlieB_65 Start: 20748, Stop: 21263, Start Num: 1
Candidate Starts for CharlieB_65:
(Start: 1 @20748 has 161 MA's), (2, 20793), (3, 20868), (4, 20898), (8, 20976), (9, 21009), (10, 21012), (11, 21042), (12, 21054), (13, 21090),

Gene: ChaylaJr_63 Start: 20622, Stop: 21137, Start Num: 1
Candidate Starts for ChaylaJr_63:
(Start: 1 @20622 has 161 MA's), (5, 20775), (8, 20850), (9, 20883), (10, 20886), (11, 20916), (12, 20928), (13, 20964),

Gene: ChickenPhender_63 Start: 20639, Stop: 21154, Start Num: 1
Candidate Starts for ChickenPhender_63:
(Start: 1 @20639 has 161 MA's), (2, 20684), (3, 20759), (4, 20789), (8, 20867), (9, 20900), (10, 20903), (11, 20933), (12, 20945), (13, 20981),

Gene: Chomp_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Chomp_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: CindyLou_68 Start: 21634, Stop: 22149, Start Num: 1
Candidate Starts for CindyLou_68:
(Start: 1 @21634 has 161 MA's), (5, 21787), (8, 21862), (9, 21895), (10, 21898), (11, 21928), (12, 21940), (13, 21976),

Gene: Cleatunium_63 Start: 21259, Stop: 21774, Start Num: 1
Candidate Starts for Cleatunium_63:
(Start: 1 @21259 has 161 MA's), (5, 21412), (8, 21487), (9, 21520), (10, 21523), (11, 21553), (12, 21565), (13, 21601),

Gene: Concombre_73 Start: 24222, Stop: 24737, Start Num: 1
Candidate Starts for Concombre_73:
(Start: 1 @24222 has 161 MA's), (2, 24267), (3, 24342), (4, 24372), (8, 24450), (9, 24483), (10, 24486), (11, 24516), (12, 24528), (13, 24564),

Gene: DTDevon_68 Start: 22273, Stop: 22788, Start Num: 1
Candidate Starts for DTDevon_68:
(Start: 1 @22273 has 161 MA's), (5, 22426), (8, 22501), (9, 22534), (10, 22537), (11, 22567), (12, 22579), (13, 22615),

Gene: Daffodil_71 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for Daffodil_71:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Darko_67 Start: 22016, Stop: 22531, Start Num: 1
Candidate Starts for Darko_67:
(Start: 1 @22016 has 161 MA's), (5, 22169), (8, 22244), (9, 22277), (10, 22280), (11, 22310), (12, 22322), (13, 22358),

Gene: Delilah_68 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for Delilah_68:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Delylah_70 Start: 21941, Stop: 22456, Start Num: 1
Candidate Starts for Delylah_70:
(Start: 1 @21941 has 161 MA's), (2, 21986), (3, 22061), (4, 22091), (8, 22169), (9, 22202), (10, 22205), (11, 22235), (12, 22247), (13, 22283),

Gene: Demodog_72 Start: 24222, Stop: 24737, Start Num: 1
Candidate Starts for Demodog_72:
(Start: 1 @24222 has 161 MA's), (2, 24267), (3, 24342), (4, 24372), (8, 24450), (9, 24483), (10, 24486), (11, 24516), (12, 24528), (13, 24564),

Gene: Derek_67 Start: 21440, Stop: 21955, Start Num: 1
Candidate Starts for Derek_67:
(Start: 1 @21440 has 161 MA's), (5, 21593), (8, 21668), (9, 21701), (10, 21704), (11, 21734), (12, 21746), (13, 21782),

Gene: Dessert_68 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Dessert_68:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Dietrick_61 Start: 20281, Stop: 20796, Start Num: 1
Candidate Starts for Dietrick_61:
(Start: 1 @20281 has 161 MA's), (5, 20434), (8, 20509), (9, 20542), (10, 20545), (11, 20575), (12, 20587), (13, 20623),

Gene: Domi_61 Start: 21051, Stop: 21566, Start Num: 1
Candidate Starts for Domi_61:
(Start: 1 @21051 has 161 MA's), (4, 21201), (8, 21279), (9, 21312), (10, 21315), (11, 21345), (12, 21357), (13, 21393),

Gene: DrPhinkDaddy_67 Start: 22215, Stop: 22730, Start Num: 1
Candidate Starts for DrPhinkDaddy_67:

(Start: 1 @22215 has 161 MA's), (5, 22368), (8, 22443), (9, 22476), (10, 22479), (11, 22509), (12, 22521), (13, 22557),

Gene: Drazdys_67 Start: 21946, Stop: 22461, Start Num: 1
Candidate Starts for Drazdys_67:
(Start: 1 @21946 has 161 MA's), (5, 22099), (8, 22174), (9, 22207), (10, 22210), (11, 22240), (12, 22252), (13, 22288),

Gene: Duckfeet_60 Start: 20715, Stop: 21230, Start Num: 1
Candidate Starts for Duckfeet_60:
(Start: 1 @20715 has 161 MA's), (2, 20760), (3, 20835), (4, 20865), (8, 20943), (9, 20976), (10, 20979), (11, 21009), (12, 21021), (13, 21057),

Gene: ET08_58 Start: 20616, Stop: 21131, Start Num: 1
Candidate Starts for ET08_58:
(Start: 1 @20616 has 161 MA's), (2, 20661), (3, 20736), (4, 20766), (8, 20844), (9, 20877), (10, 20880), (11, 20910), (12, 20922), (13, 20958),

Gene: EggyFarm_73 Start: 23661, Stop: 24176, Start Num: 1
Candidate Starts for EggyFarm_73:
(Start: 1 @23661 has 161 MA's), (2, 23706), (5, 23814), (8, 23889), (9, 23922), (10, 23925), (11, 23955), (12, 23967), (13, 24003),

Gene: EmToTheThree_71 Start: 23635, Stop: 24150, Start Num: 1
Candidate Starts for EmToTheThree_71:
(Start: 1 @23635 has 161 MA's), (2, 23680), (3, 23755), (4, 23785), (8, 23863), (9, 23896), (10, 23899), (11, 23929), (12, 23941), (13, 23977),

Gene: EmmaElysia_66 Start: 20679, Stop: 21194, Start Num: 1
Candidate Starts for EmmaElysia_66:
(Start: 1 @20679 has 161 MA's), (5, 20832), (8, 20907), (9, 20940), (10, 20943), (11, 20973), (12, 20985), (13, 21021),

Gene: Erdmann_68 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for Erdmann_68:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Essence_66 Start: 20963, Stop: 21478, Start Num: 1
Candidate Starts for Essence_66:
(Start: 1 @20963 has 161 MA's), (5, 21116), (8, 21191), (9, 21224), (10, 21227), (11, 21257), (12, 21269), (13, 21305),

Gene: Ewok_68 Start: 22166, Stop: 22681, Start Num: 1
Candidate Starts for Ewok_68:
(Start: 1 @22166 has 161 MA's), (5, 22319), (8, 22394), (9, 22427), (10, 22430), (11, 22460), (12, 22472), (13, 22508),

Gene: Fixie_60 Start: 20308, Stop: 20823, Start Num: 1
Candidate Starts for Fixie_60:
(Start: 1 @20308 has 161 MA's), (5, 20461), (8, 20536), (9, 20569), (10, 20572), (11, 20602), (12, 20614), (13, 20650),

Gene: Flabslab_64 Start: 21185, Stop: 21700, Start Num: 1
Candidate Starts for Flabslab_64:
(Start: 1 @21185 has 161 MA's), (5, 21338), (8, 21413), (9, 21446), (10, 21449), (11, 21479), (12, 21491), (13, 21527),

Gene: Fludd_67 Start: 21038, Stop: 21553, Start Num: 1
Candidate Starts for Fludd_67:
(Start: 1 @21038 has 161 MA's), (5, 21191), (8, 21266), (9, 21299), (10, 21302), (11, 21332), (12, 21344), (13, 21380),

Gene: Fongie_66 Start: 22382, Stop: 22897, Start Num: 1
Candidate Starts for Fongie_66:
(Start: 1 @22382 has 161 MA's), (5, 22535), (7, 22607), (8, 22610), (9, 22643), (10, 22646), (11, 22676), (12, 22688), (13, 22724),

Gene: FoxtrotP1_68 Start: 22550, Stop: 23065, Start Num: 1
Candidate Starts for FoxtrotP1_68:
(Start: 1 @22550 has 161 MA's), (5, 22703), (8, 22778), (9, 22811), (10, 22814), (11, 22844), (12, 22856), (13, 22892),

Gene: FrayBell_74 Start: 23677, Stop: 24192, Start Num: 1
Candidate Starts for FrayBell_74:
(Start: 1 @23677 has 161 MA's), (5, 23830), (8, 23905), (9, 23938), (10, 23941), (11, 23971), (12, 23983), (13, 24019),

Gene: FudgeTart_69 Start: 22085, Stop: 22600, Start Num: 1
Candidate Starts for FudgeTart_69:
(Start: 1 @22085 has 161 MA's), (5, 22238), (8, 22313), (9, 22346), (10, 22349), (11, 22379), (12, 22391), (13, 22427),

Gene: Gabriel_69 Start: 21342, Stop: 21857, Start Num: 1
Candidate Starts for Gabriel_69:
(Start: 1 @21342 has 161 MA's), (5, 21495), (8, 21570), (9, 21603), (10, 21606), (11, 21636), (12, 21648), (13, 21684),

Gene: Gamgam_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Gamgam_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Ghost_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Ghost_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Gizmo_71 Start: 21846, Stop: 22361, Start Num: 1
Candidate Starts for Gizmo_71:
(Start: 1 @21846 has 161 MA's), (5, 21999), (8, 22074), (9, 22107), (10, 22110), (11, 22140), (12, 22152), (13, 22188),

Gene: GlutenPhree_68 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for GlutenPhree_68:

(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: GoldenSnow_72 Start: 23676, Stop: 24191, Start Num: 1
Candidate Starts for GoldenSnow_72:
(Start: 1 @23676 has 161 MA's), (5, 23829), (8, 23904), (9, 23937), (10, 23940), (11, 23970), (12, 23982), (13, 24018),

Gene: Grasshills_73 Start: 23661, Stop: 24176, Start Num: 1
Candidate Starts for Grasshills_73:
(Start: 1 @23661 has 161 MA's), (2, 23706), (5, 23814), (8, 23889), (9, 23922), (10, 23925), (11, 23955), (12, 23967), (13, 24003),

Gene: Guwapp_66 Start: 21204, Stop: 21719, Start Num: 1
Candidate Starts for Guwapp_66:
(Start: 1 @21204 has 161 MA's), (5, 21357), (8, 21432), (9, 21465), (10, 21468), (11, 21498), (12, 21510), (13, 21546),

Gene: I3_71 Start: 22073, Stop: 22588, Start Num: 1
Candidate Starts for I3_71:
(Start: 1 @22073 has 161 MA's), (5, 22226), (8, 22301), (9, 22334), (10, 22337), (11, 22367), (12, 22379), (13, 22415),

Gene: IkeLoa_62 Start: 20848, Stop: 21363, Start Num: 1
Candidate Starts for IkeLoa_62:
(Start: 1 @20848 has 161 MA's), (4, 20998), (8, 21076), (9, 21109), (10, 21112), (11, 21142), (12, 21154), (13, 21190),

Gene: InigoMontoya_68 Start: 21070, Stop: 21585, Start Num: 1
Candidate Starts for InigoMontoya_68:
(Start: 1 @21070 has 161 MA's), (5, 21223), (8, 21298), (9, 21331), (10, 21334), (11, 21364), (12, 21376), (13, 21412),

Gene: InterFolia_77 Start: 24615, Stop: 25130, Start Num: 1
Candidate Starts for InterFolia_77:
(Start: 1 @24615 has 161 MA's), (5, 24768), (8, 24843), (9, 24876), (10, 24879), (11, 24909), (12, 24921), (13, 24957),

Gene: Iota_62 Start: 21204, Stop: 21719, Start Num: 1
Candidate Starts for Iota_62:
(Start: 1 @21204 has 161 MA's), (2, 21249), (3, 21324), (4, 21354), (8, 21432), (9, 21465), (10, 21468), (11, 21498), (12, 21510), (13, 21546),

Gene: Issimir_67 Start: 22106, Stop: 22621, Start Num: 1
Candidate Starts for Issimir_67:
(Start: 1 @22106 has 161 MA's), (4, 22256), (8, 22334), (9, 22367), (10, 22370), (11, 22400), (12, 22412), (13, 22448),

Gene: Izajani_68 Start: 22179, Stop: 22694, Start Num: 1
Candidate Starts for Izajani_68:
(Start: 1 @22179 has 161 MA's), (5, 22332), (8, 22407), (9, 22440), (10, 22443), (11, 22473), (12, 22485), (13, 22521),

Gene: JPickles_66 Start: 20303, Stop: 20818, Start Num: 1
Candidate Starts for JPickles_66:
(Start: 1 @20303 has 161 MA's), (5, 20456), (8, 20531), (9, 20564), (10, 20567), (11, 20597), (12, 20609), (13, 20645),

Gene: Janiyra_69 Start: 21868, Stop: 22383, Start Num: 1
Candidate Starts for Janiyra_69:
(Start: 1 @21868 has 161 MA's), (5, 22021), (8, 22096), (9, 22129), (10, 22132), (11, 22162), (12, 22174), (13, 22210),

Gene: JayJay_74 Start: 22660, Stop: 23175, Start Num: 1
Candidate Starts for JayJay_74:
(Start: 1 @22660 has 161 MA's), (5, 22813), (8, 22888), (9, 22921), (10, 22924), (11, 22954), (12, 22966), (13, 23002),

Gene: Jaygup_67 Start: 21105, Stop: 21620, Start Num: 1
Candidate Starts for Jaygup_67:
(Start: 1 @21105 has 161 MA's), (5, 21258), (8, 21333), (9, 21366), (10, 21369), (11, 21399), (12, 21411), (13, 21447),

Gene: Jedediah_69 Start: 21606, Stop: 22121, Start Num: 1
Candidate Starts for Jedediah_69:
(Start: 1 @21606 has 161 MA's), (5, 21759), (8, 21834), (9, 21867), (10, 21870), (11, 21900), (12, 21912), (13, 21948),

Gene: Jemmno_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Jemmno_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Jessibeth14_66 Start: 21625, Stop: 22140, Start Num: 1
Candidate Starts for Jessibeth14_66:
(Start: 1 @21625 has 161 MA's), (2, 21670), (3, 21745), (4, 21775), (6, 21841), (8, 21853), (9, 21886), (10, 21889), (11, 21919), (12, 21931), (13, 21967),

Gene: Jezreel_66 Start: 21422, Stop: 21937, Start Num: 1
Candidate Starts for Jezreel_66:
(Start: 1 @21422 has 161 MA's), (5, 21575), (8, 21650), (9, 21683), (10, 21686), (11, 21716), (12, 21728), (13, 21764),

Gene: JigglyPuff_72 Start: 23615, Stop: 24130, Start Num: 1
Candidate Starts for JigglyPuff_72:
(Start: 1 @23615 has 161 MA's), (2, 23660), (3, 23735), (4, 23765), (8, 23843), (9, 23876), (10, 23879), (11, 23909), (12, 23921), (13, 23957),

Gene: JustHall_63 Start: 21428, Stop: 21943, Start Num: 1
Candidate Starts for JustHall_63:
(Start: 1 @21428 has 161 MA's), (5, 21581), (8, 21656), (9, 21689), (10, 21692), (11, 21722), (12, 21734), (13, 21770),

Gene: Kamryn_67 Start: 21782, Stop: 22297, Start Num: 1
Candidate Starts for Kamryn_67:

(Start: 1 @21782 has 161 MA's), (5, 21935), (8, 22010), (9, 22043), (10, 22046), (11, 22076), (12, 22088), (13, 22124),

Gene: Kboogie_69 Start: 21150, Stop: 21665, Start Num: 1
Candidate Starts for Kboogie_69:
(Start: 1 @21150 has 161 MA's), (2, 21195), (3, 21270), (4, 21300), (8, 21378), (9, 21411), (10, 21414), (11, 21444), (12, 21456), (13, 21492),

Gene: Khaleesi_67 Start: 21910, Stop: 22425, Start Num: 1
Candidate Starts for Khaleesi_67:
(Start: 1 @21910 has 161 MA's), (5, 22063), (8, 22138), (9, 22171), (10, 22174), (11, 22204), (12, 22216), (13, 22252),

Gene: Labradorite_69 Start: 21226, Stop: 21741, Start Num: 1
Candidate Starts for Labradorite_69:
(Start: 1 @21226 has 161 MA's), (5, 21379), (8, 21454), (9, 21487), (10, 21490), (11, 21520), (12, 21532), (13, 21568),

Gene: Latch_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Latch_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Lee7_69 Start: 21841, Stop: 22356, Start Num: 1
Candidate Starts for Lee7_69:
(Start: 1 @21841 has 161 MA's), (2, 21886), (3, 21961), (4, 21991), (6, 22057), (8, 22069), (9, 22102), (10, 22105), (11, 22135), (12, 22147), (13, 22183),

Gene: Lethe_66 Start: 22104, Stop: 22619, Start Num: 1
Candidate Starts for Lethe_66:
(Start: 1 @22104 has 161 MA's), (5, 22257), (8, 22332), (9, 22365), (10, 22368), (11, 22398), (12, 22410), (13, 22446),

Gene: LifeSavor_66 Start: 20828, Stop: 21343, Start Num: 1
Candidate Starts for LifeSavor_66:
(Start: 1 @20828 has 161 MA's), (5, 20981), (8, 21056), (9, 21089), (10, 21092), (11, 21122), (12, 21134), (13, 21170),

Gene: Littleton_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Littleton_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Loanshark_68 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for Loanshark_68:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: LolaVinca_70 Start: 23324, Stop: 23839, Start Num: 1
Candidate Starts for LolaVinca_70:
(Start: 1 @23324 has 161 MA's), (5, 23477), (8, 23552), (9, 23585), (10, 23588), (11, 23618), (12, 23630), (13, 23666),

Gene: LookingGlass_69 Start: 22606, Stop: 23121, Start Num: 1
Candidate Starts for LookingGlass_69:
(Start: 1 @22606 has 161 MA's), (4, 22756), (8, 22834), (9, 22867), (10, 22870), (11, 22900), (12, 22912), (13, 22948),

Gene: LordLeafolot_74 Start: 23676, Stop: 24191, Start Num: 1
Candidate Starts for LordLeafolot_74:
(Start: 1 @23676 has 161 MA's), (5, 23829), (8, 23904), (9, 23937), (10, 23940), (11, 23970), (12, 23982), (13, 24018),

Gene: Lunareta_64 Start: 22059, Stop: 22574, Start Num: 1
Candidate Starts for Lunareta_64:
(Start: 1 @22059 has 161 MA's), (5, 22212), (8, 22287), (9, 22320), (10, 22323), (11, 22353), (12, 22365), (13, 22401),

Gene: Maby2021_68 Start: 21844, Stop: 22359, Start Num: 1
Candidate Starts for Maby2021_68:
(Start: 1 @21844 has 161 MA's), (5, 21997), (8, 22072), (9, 22105), (10, 22108), (11, 22138), (12, 22150), (13, 22186),

Gene: Maguvora_73 Start: 23674, Stop: 24189, Start Num: 1
Candidate Starts for Maguvora_73:
(Start: 1 @23674 has 161 MA's), (5, 23827), (8, 23902), (9, 23935), (10, 23938), (11, 23968), (12, 23980), (13, 24016),

Gene: Mangeria_71 Start: 23187, Stop: 23702, Start Num: 1
Candidate Starts for Mangeria_71:
(Start: 1 @23187 has 161 MA's), (5, 23340), (8, 23415), (9, 23448), (10, 23451), (11, 23481), (12, 23493), (13, 23529),

Gene: Matsumoto_66 Start: 21070, Stop: 21585, Start Num: 1
Candidate Starts for Matsumoto_66:
(Start: 1 @21070 has 161 MA's), (5, 21223), (8, 21298), (9, 21331), (10, 21334), (11, 21364), (12, 21376), (13, 21412),

Gene: McGee_67 Start: 20293, Stop: 20808, Start Num: 1
Candidate Starts for McGee_67:
(Start: 1 @20293 has 161 MA's), (5, 20446), (8, 20521), (9, 20554), (10, 20557), (11, 20587), (12, 20599), (13, 20635),

Gene: McWolfish_66 Start: 21591, Stop: 22106, Start Num: 1
Candidate Starts for McWolfish_66:
(Start: 1 @21591 has 161 MA's), (5, 21744), (8, 21819), (9, 21852), (10, 21855), (11, 21885), (12, 21897), (13, 21933),

Gene: Megamind_67 Start: 21829, Stop: 22344, Start Num: 1
Candidate Starts for Megamind_67:
(Start: 1 @21829 has 161 MA's), (5, 21982), (8, 22057), (9, 22090), (10, 22093), (11, 22123), (12, 22135), (13, 22171),

Gene: MikeLiesIn_68 Start: 22176, Stop: 22691, Start Num: 1
Candidate Starts for MikeLiesIn_68:

(Start: 1 @22176 has 161 MA's), (5, 22329), (8, 22404), (9, 22437), (10, 22440), (11, 22470), (12, 22482), (13, 22518),

Gene: Mikro_65 Start: 22650, Stop: 23165, Start Num: 1
Candidate Starts for Mikro_65:
(Start: 1 @22650 has 161 MA's), (5, 22803), (8, 22878), (9, 22911), (10, 22914), (11, 22944), (12, 22956), (13, 22992),

Gene: MoMoMixon_68 Start: 22261, Stop: 22776, Start Num: 1
Candidate Starts for MoMoMixon_68:
(Start: 1 @22261 has 161 MA's), (5, 22414), (8, 22489), (9, 22522), (10, 22525), (11, 22555), (12, 22567), (13, 22603),

Gene: Momo_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Momo_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Montpel_64 Start: 22059, Stop: 22574, Start Num: 1
Candidate Starts for Montpel_64:
(Start: 1 @22059 has 161 MA's), (5, 22212), (8, 22287), (9, 22320), (10, 22323), (11, 22353), (12, 22365), (13, 22401),

Gene: Naija_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Naija_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Nappy_69 Start: 22465, Stop: 22980, Start Num: 1
Candidate Starts for Nappy_69:
(Start: 1 @22465 has 161 MA's), (2, 22510), (3, 22585), (4, 22615), (8, 22693), (9, 22726), (10, 22729), (11, 22759), (12, 22771), (13, 22807),

Gene: Naval22_75 Start: 23186, Stop: 23701, Start Num: 1
Candidate Starts for Naval22_75:
(Start: 1 @23186 has 161 MA's), (5, 23339), (8, 23414), (9, 23447), (10, 23450), (11, 23480), (12, 23492), (13, 23528),

Gene: NedWong_69 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for NedWong_69:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Ngannou_62 Start: 20091, Stop: 20606, Start Num: 1
Candidate Starts for Ngannou_62:
(Start: 1 @20091 has 161 MA's), (5, 20244), (8, 20319), (9, 20352), (10, 20355), (11, 20385), (12, 20397), (13, 20433),

Gene: Nidhogg_68 Start: 22017, Stop: 22532, Start Num: 1
Candidate Starts for Nidhogg_68:
(Start: 1 @22017 has 161 MA's), (5, 22170), (8, 22245), (9, 22278), (10, 22281), (11, 22311), (12, 22323), (13, 22359),

Gene: NoodleTree_68 Start: 22024, Stop: 22539, Start Num: 1
Candidate Starts for NoodleTree_68:
(Start: 1 @22024 has 161 MA's), (2, 22069), (3, 22144), (4, 22174), (6, 22240), (8, 22252), (9, 22285), (10, 22288), (11, 22318), (12, 22330), (13, 22366),

Gene: Norm_68 Start: 22164, Stop: 22679, Start Num: 1
Candidate Starts for Norm_68:
(Start: 1 @22164 has 161 MA's), (5, 22317), (8, 22392), (9, 22425), (10, 22428), (11, 22458), (12, 22470), (13, 22506),

Gene: NuevoMundo_73 Start: 23223, Stop: 23738, Start Num: 1
Candidate Starts for NuevoMundo_73:
(Start: 1 @23223 has 161 MA's), (2, 23268), (3, 23343), (4, 23373), (6, 23439), (8, 23451), (9, 23484), (10, 23487), (11, 23517), (12, 23529), (13, 23565),

Gene: OrediggerDelux_69 Start: 21845, Stop: 22360, Start Num: 1
Candidate Starts for OrediggerDelux_69:
(Start: 1 @21845 has 161 MA's), (5, 21998), (8, 22073), (9, 22106), (10, 22109), (11, 22139), (12, 22151), (13, 22187),

Gene: ParkTD_68 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for ParkTD_68:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Patter_67 Start: 21126, Stop: 21641, Start Num: 1
Candidate Starts for Patter_67:
(Start: 1 @21126 has 161 MA's), (5, 21279), (8, 21354), (9, 21387), (10, 21390), (11, 21420), (12, 21432), (13, 21468),

Gene: PharkleMinkus_74 Start: 23677, Stop: 24192, Start Num: 1
Candidate Starts for PharkleMinkus_74:
(Start: 1 @23677 has 161 MA's), (5, 23830), (8, 23905), (9, 23938), (10, 23941), (11, 23971), (12, 23983), (13, 24019),

Gene: Phlegm_69 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Phlegm_69:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Phusco_67 Start: 21919, Stop: 22434, Start Num: 1
Candidate Starts for Phusco_67:
(Start: 1 @21919 has 161 MA's), (5, 22072), (8, 22147), (9, 22180), (10, 22183), (11, 22213), (12, 22225), (13, 22261),

Gene: Pier_70 Start: 21921, Stop: 22436, Start Num: 1
Candidate Starts for Pier_70:
(Start: 1 @21921 has 161 MA's), (2, 21966), (3, 22041), (4, 22071), (6, 22137), (8, 22149), (9, 22182), (10, 22185), (11, 22215), (12, 22227), (13, 22263),

Gene: Pio_72 Start: 23317, Stop: 23832, Start Num: 1
Candidate Starts for Pio_72:

(Start: 1 @23317 has 161 MA's), (5, 23470), (8, 23545), (9, 23578), (10, 23581), (11, 23611), (12, 23623), (13, 23659),

Gene: Pivoine_66 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for Pivoine_66:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Pleione_70 Start: 22162, Stop: 22677, Start Num: 1
Candidate Starts for Pleione_70:
(Start: 1 @22162 has 161 MA's), (5, 22315), (8, 22390), (9, 22423), (10, 22426), (11, 22456), (12, 22468), (13, 22504),

Gene: Primadonna_63 Start: 21508, Stop: 22023, Start Num: 1
Candidate Starts for Primadonna_63:
(Start: 1 @21508 has 161 MA's), (5, 21661), (8, 21736), (9, 21769), (10, 21772), (11, 21802), (12, 21814), (13, 21850),

Gene: Puhon_72 Start: 23691, Stop: 24206, Start Num: 1
Candidate Starts for Puhon_72:
(Start: 1 @23691 has 161 MA's), (5, 23844), (8, 23919), (9, 23952), (10, 23955), (11, 23985), (12, 23997), (13, 24033),

Gene: Pupusa_72 Start: 24044, Stop: 24559, Start Num: 1
Candidate Starts for Pupusa_72:
(Start: 1 @24044 has 161 MA's), (5, 24197), (8, 24272), (9, 24305), (10, 24308), (11, 24338), (12, 24350), (13, 24386),

Gene: PurduePete_67 Start: 21887, Stop: 22402, Start Num: 1
Candidate Starts for PurduePete_67:
(Start: 1 @21887 has 161 MA's), (5, 22040), (8, 22115), (9, 22148), (10, 22151), (11, 22181), (12, 22193), (13, 22229),

Gene: QBert_62 Start: 21958, Stop: 22473, Start Num: 1
Candidate Starts for QBert_62:
(Start: 1 @21958 has 161 MA's), (2, 22003), (3, 22078), (4, 22108), (8, 22186), (9, 22219), (10, 22222), (11, 22252), (12, 22264), (13, 22300),

Gene: Quasimodo_67 Start: 22127, Stop: 22642, Start Num: 1
Candidate Starts for Quasimodo_67:
(Start: 1 @22127 has 161 MA's), (5, 22280), (8, 22355), (9, 22388), (10, 22391), (11, 22421), (12, 22433), (13, 22469),

Gene: Rahel_68 Start: 21478, Stop: 21993, Start Num: 1
Candidate Starts for Rahel_68:
(Start: 1 @21478 has 161 MA's), (5, 21631), (8, 21706), (9, 21739), (10, 21742), (11, 21772), (12, 21784), (13, 21820),

Gene: Rizal_65 Start: 21080, Stop: 21595, Start Num: 1
Candidate Starts for Rizal_65:
(Start: 1 @21080 has 161 MA's), (5, 21233), (8, 21308), (9, 21341), (10, 21344), (11, 21374), (12, 21386), (13, 21422),

Gene: RoMag_62 Start: 21082, Stop: 21597, Start Num: 1
Candidate Starts for RoMag_62:
(Start: 1 @21082 has 161 MA's), (4, 21232), (8, 21310), (9, 21343), (10, 21346), (11, 21376), (12, 21388), (13, 21424),

Gene: Rocha_65 Start: 21169, Stop: 21684, Start Num: 1
Candidate Starts for Rocha_65:
(Start: 1 @21169 has 161 MA's), (2, 21214), (3, 21289), (4, 21319), (6, 21385), (8, 21397), (9, 21430), (10, 21433), (11, 21463), (12, 21475), (13, 21511),

Gene: SVoro_66 Start: 22157, Stop: 22672, Start Num: 1
Candidate Starts for SVoro_66:
(Start: 1 @22157 has 161 MA's), (5, 22310), (8, 22385), (9, 22418), (10, 22421), (11, 22451), (12, 22463), (13, 22499),

Gene: Salacia_70 Start: 22221, Stop: 22736, Start Num: 1
Candidate Starts for Salacia_70:
(Start: 1 @22221 has 161 MA's), (5, 22374), (8, 22449), (9, 22482), (10, 22485), (11, 22515), (12, 22527), (13, 22563),

Gene: ScottMcG_65 Start: 21941, Stop: 22456, Start Num: 1
Candidate Starts for ScottMcG_65:
(Start: 1 @21941 has 161 MA's), (5, 22094), (8, 22169), (9, 22202), (10, 22205), (11, 22235), (12, 22247), (13, 22283),

Gene: Shelob_70 Start: 23155, Stop: 23670, Start Num: 1
Candidate Starts for Shelob_70:
(Start: 1 @23155 has 161 MA's), (5, 23308), (8, 23383), (9, 23416), (10, 23419), (11, 23449), (12, 23461), (13, 23497),

Gene: ShiaLabeouf_67 Start: 21546, Stop: 22061, Start Num: 1
Candidate Starts for ShiaLabeouf_67:
(Start: 1 @21546 has 161 MA's), (5, 21699), (8, 21774), (9, 21807), (10, 21810), (11, 21840), (12, 21852), (13, 21888),

Gene: Shnickers_67 Start: 21105, Stop: 21620, Start Num: 1
Candidate Starts for Shnickers_67:
(Start: 1 @21105 has 161 MA's), (5, 21258), (8, 21333), (9, 21366), (10, 21369), (11, 21399), (12, 21411), (13, 21447),

Gene: Shrimp_68 Start: 22167, Stop: 22682, Start Num: 1
Candidate Starts for Shrimp_68:
(Start: 1 @22167 has 161 MA's), (5, 22320), (8, 22395), (9, 22428), (10, 22431), (11, 22461), (12, 22473), (13, 22509),

Gene: SilverDipper_68 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for SilverDipper_68:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: SiwenD96_67 Start: 22541, Stop: 23056, Start Num: 1
Candidate Starts for SiwenD96_67:

(Start: 1 @22541 has 161 MA's), (5, 22694), (8, 22769), (9, 22802), (10, 22805), (11, 22835), (12, 22847), (13, 22883),

Gene: Skog_142 Start: 58575, Stop: 59078, Start Num: 1
Candidate Starts for Skog_142:
(Start: 1 @58575 has 161 MA's), (14, 58938),

Gene: SmallFry_67 Start: 21105, Stop: 21620, Start Num: 1
Candidate Starts for SmallFry_67:
(Start: 1 @21105 has 161 MA's), (5, 21258), (8, 21333), (9, 21366), (10, 21369), (11, 21399), (12, 21411), (13, 21447),

Gene: SoilZilla_63 Start: 21607, Stop: 22122, Start Num: 1
Candidate Starts for SoilZilla_63:
(Start: 1 @21607 has 161 MA's), (5, 21760), (8, 21835), (9, 21868), (10, 21871), (11, 21901), (12, 21913), (13, 21949),

Gene: Spec_67 Start: 21249, Stop: 21764, Start Num: 1
Candidate Starts for Spec_67:
(Start: 1 @21249 has 161 MA's), (5, 21402), (8, 21477), (9, 21510), (10, 21513), (11, 21543), (12, 21555), (13, 21591),

Gene: Specks_73 Start: 23638, Stop: 24153, Start Num: 1
Candidate Starts for Specks_73:
(Start: 1 @23638 has 161 MA's), (5, 23791), (8, 23866), (9, 23899), (10, 23902), (11, 23932), (12, 23944), (13, 23980),

Gene: Sprinklers_64 Start: 21139, Stop: 21654, Start Num: 1
Candidate Starts for Sprinklers_64:
(Start: 1 @21139 has 161 MA's), (2, 21184), (3, 21259), (4, 21289), (8, 21367), (9, 21400), (10, 21403), (11, 21433), (12, 21445), (13, 21481),

Gene: Spud_67 Start: 22478, Stop: 22993, Start Num: 1
Candidate Starts for Spud_67:
(Start: 1 @22478 has 161 MA's), (5, 22631), (8, 22706), (9, 22739), (10, 22742), (11, 22772), (12, 22784), (13, 22820),

Gene: SrishMeg2525_67 Start: 21874, Stop: 22389, Start Num: 1
Candidate Starts for SrishMeg2525_67:
(Start: 1 @21874 has 161 MA's), (5, 22027), (8, 22102), (9, 22135), (10, 22138), (11, 22168), (12, 22180), (13, 22216),

Gene: StephanieG_67 Start: 22539, Stop: 23054, Start Num: 1
Candidate Starts for StephanieG_67:
(Start: 1 @22539 has 161 MA's), (2, 22584), (3, 22659), (4, 22689), (6, 22755), (8, 22767), (9, 22800), (10, 22803), (11, 22833), (12, 22845), (13, 22881),

Gene: StubbySaigey_68 Start: 20803, Stop: 21318, Start Num: 1
Candidate Starts for StubbySaigey_68:
(Start: 1 @20803 has 161 MA's), (5, 20956), (8, 21031), (9, 21064), (10, 21067), (11, 21097), (12, 21109), (13, 21145),

Gene: Substance289_63 Start: 20579, Stop: 21094, Start Num: 1

Candidate Starts for Substance289_63:
(Start: 1 @20579 has 161 MA's), (5, 20732), (8, 20807), (9, 20840), (10, 20843), (11, 20873), (12, 20885), (13, 20921),

Gene: Tainan_72 Start: 23676, Stop: 24191, Start Num: 1
Candidate Starts for Tainan_72:
(Start: 1 @23676 has 161 MA's), (5, 23829), (8, 23904), (9, 23937), (10, 23940), (11, 23970), (12, 23982), (13, 24018),

Gene: Teardrop_67 Start: 20962, Stop: 21477, Start Num: 1
Candidate Starts for Teardrop_67:
(Start: 1 @20962 has 161 MA's), (5, 21115), (8, 21190), (9, 21223), (10, 21226), (11, 21256), (12, 21268), (13, 21304),

Gene: TinyTim_68 Start: 22163, Stop: 22678, Start Num: 1
Candidate Starts for TinyTim_68:
(Start: 1 @22163 has 161 MA's), (5, 22316), (8, 22391), (9, 22424), (10, 22427), (11, 22457), (12, 22469), (13, 22505),

Gene: Tonenili_79 Start: 24981, Stop: 25496, Start Num: 1
Candidate Starts for Tonenili_79:
(Start: 1 @24981 has 161 MA's), (3, 25101), (5, 25134), (8, 25209), (9, 25242), (10, 25245), (11, 25275), (12, 25287), (13, 25323),

Gene: Tortoise16_65 Start: 21613, Stop: 22128, Start Num: 1
Candidate Starts for Tortoise16_65:
(Start: 1 @21613 has 161 MA's), (5, 21766), (8, 21841), (9, 21874), (10, 21877), (11, 21907), (12, 21919), (13, 21955),

Gene: Trinitium_63 Start: 20624, Stop: 21139, Start Num: 1
Candidate Starts for Trinitium_63:
(Start: 1 @20624 has 161 MA's), (3, 20744), (4, 20774), (8, 20852), (9, 20885), (10, 20888), (11, 20918), (12, 20930), (13, 20966),

Gene: Turret_62 Start: 20290, Stop: 20805, Start Num: 1
Candidate Starts for Turret_62:
(Start: 1 @20290 has 161 MA's), (5, 20443), (8, 20518), (9, 20551), (10, 20554), (11, 20584), (12, 20596), (13, 20632),

Gene: Tyke_69 Start: 22517, Stop: 23032, Start Num: 1
Candidate Starts for Tyke_69:
(Start: 1 @22517 has 161 MA's), (5, 22670), (8, 22745), (9, 22778), (10, 22781), (11, 22811), (12, 22823), (13, 22859),

Gene: ValleyTerrace_67 Start: 21109, Stop: 21624, Start Num: 1
Candidate Starts for ValleyTerrace_67:
(Start: 1 @21109 has 161 MA's), (5, 21262), (8, 21337), (9, 21370), (10, 21373), (11, 21403), (12, 21415), (13, 21451),

Gene: Wally_66 Start: 20718, Stop: 21233, Start Num: 1
Candidate Starts for Wally_66:
(Start: 1 @20718 has 161 MA's), (5, 20871), (8, 20946), (9, 20979), (10, 20982), (11, 21012), (12, 21024), (13, 21060),

Gene: Willis_68 Start: 22058, Stop: 22573, Start Num: 1
Candidate Starts for Willis_68:
(Start: 1 @22058 has 161 MA's), (5, 22211), (8, 22286), (9, 22319), (10, 22322), (11, 22352), (12, 22364), (13, 22400),

Gene: YemiJoy2021_68 Start: 21844, Stop: 22359, Start Num: 1
Candidate Starts for YemiJoy2021_68:
(Start: 1 @21844 has 161 MA's), (5, 21997), (8, 22072), (9, 22105), (10, 22108), (11, 22138), (12, 22150), (13, 22186),

Gene: YoungMoneyMata_67 Start: 20860, Stop: 21375, Start Num: 1
Candidate Starts for YoungMoneyMata_67:
(Start: 1 @20860 has 161 MA's), (5, 21013), (8, 21088), (9, 21121), (10, 21124), (11, 21154), (12, 21166), (13, 21202),

Gene: Yucca_67 Start: 22085, Stop: 22600, Start Num: 1
Candidate Starts for Yucca_67:
(Start: 1 @22085 has 161 MA's), (5, 22238), (8, 22313), (9, 22346), (10, 22349), (11, 22379), (12, 22391), (13, 22427),

Gene: Zalkecks_69 Start: 21848, Stop: 22363, Start Num: 1
Candidate Starts for Zalkecks_69:
(Start: 1 @21848 has 161 MA's), (5, 22001), (8, 22076), (9, 22109), (10, 22112), (11, 22142), (12, 22154), (13, 22190),

Gene: Zeenon_69 Start: 22150, Stop: 22665, Start Num: 1
Candidate Starts for Zeenon_69:
(Start: 1 @22150 has 161 MA's), (5, 22303), (8, 22378), (9, 22411), (10, 22414), (11, 22444), (12, 22456), (13, 22492),

Gene: ZygoTaiga_67 Start: 22164, Stop: 22679, Start Num: 1
Candidate Starts for ZygoTaiga_67:
(Start: 1 @22164 has 161 MA's), (5, 22317), (8, 22392), (9, 22425), (10, 22428), (11, 22458), (12, 22470), (13, 22506),