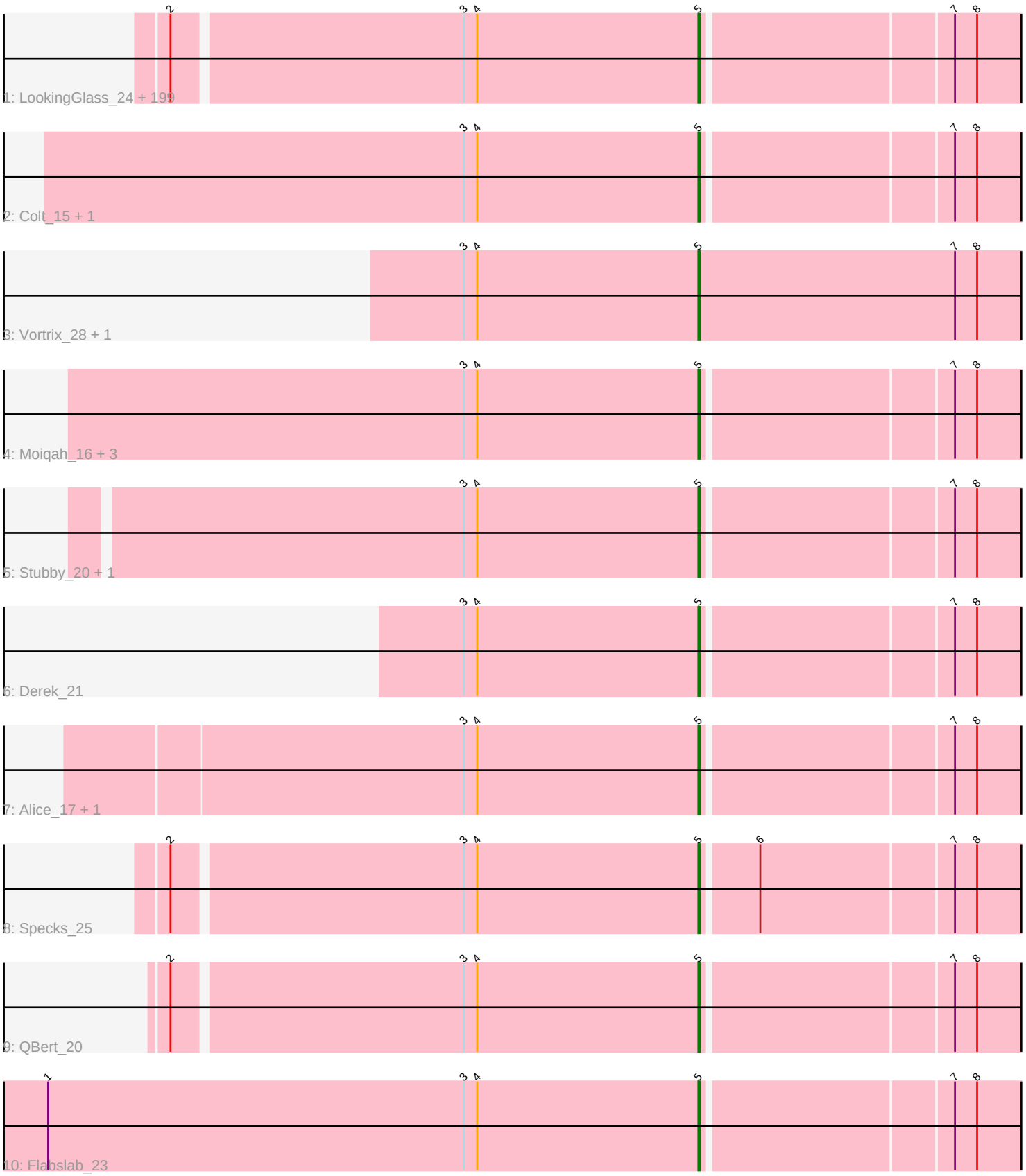
Pham 289084


2
3
4
5
7
8
1: LookingGlass_24 + 199
2: Colt_15 + 1
3: Vortrix_28 + 1
4: Moiqah_16 + 3
5: Stubby_20 + 1
6: Derek_21
7: Alice_17 + 1
6
8: Specks_25
9: QBert_20
1
10: Flapslab_23

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 289084 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289084 has 216 members, 37 are drafts.

Phages represented in each track:
• Track 1 : LookingGlass_24, McGee_21, OrediggerDelux_21, Kboogie_21, Asterius_23, Labradorite_19, LolaVinca_24, Teardrop_20, Pleione_23, Ghost_21, ZygoTaiga_22, GlutenPhree_21, Chomp_20, Ava3_22, Janiyra_20, Bigswole_26, Koguma_18, RoMag_16, Amataga_20, Ablatia_20, EmToTheThree_24, BackyardAgain_19, Izajani_22, Matsumoto_20, Turret_20, Shnickers_20, Jessibeth14_21, Khaleesi_21, MoMoMixon_23, Astraea_22, Rizal_20, IkeLoa_17, Primadonna_17, Blackbrain_20, NedWong_22, Ewok_21, Belieber_19, Patter_20, I3_23, LifeSavor_21, FoxtrotP1_22, CharlieB_22, ArcherS7_20, Drazdys_22, Zalkecks_23, LordLeafolot_27, Phlegm_22, PurduePete_21, SrishMeg2525_21, Phox_21, Domi_16, JulietS_17, Rabinovish_21, TinyTim_21, Montpel_21, Bangla1971_20, Babyland_20, Bread_22, SmallFry_20, BeanWater_17, ET08_18, Lee7_21, EggyFarm_25, Morizzled23_20, InigoMontoya_22, Concombre_21, ChickenPhender_20, Ading_20, Atlantean_20, Bonray_21, Spud_24, NuevoMundo_25, Norm_21, Yucca_21, Grasshills_25, Nappy_23, Sprinklers_22, InterFolia_27, Lunareta_21, FrayBell_27, Bowman_21, Darko_20, Burrough_22, Ronan_17, Cali_23, PharkleMinkus_27, Fongie_21, Latch_20, Pier_23, Loanshark_21, Fixie_19, Tyke_23, Gamgam_20, Trinitium_20, Bxz1_23, Basquiat_20, Yassified_19, ScottMcG_23, ParkTD_21, Shelob_24, Daffodil_23, Breeniome_21, Adlitam_20, Salacia_23, Gabriel_21, Jedediah_21, YemiJoy2021_22, Zeenon_24, Tainan_27, Delilah_21, Blackdragon_18, JigglyPuff_22, Kamryn_20, Guwapp_20, Dandelion_25, StubbySaigey_21, FudgeTart_22, Sauce_23, CindyLou_20, ChaylaJr_20, ErnieJ_24, Dietrick_18, DrPhinkDaddy_21, BobaPhatt_19, Shaqnato_18, Sebata_23, Willis_22, Melpomini_20, Delylah_24, Bipolarisk_21, Halldule_18, Jezreel_20, Littleton_21, Jemmno_20, Cleatunium_18, ShiaLabeouf_20, Spec_19, Maturis_22, Duckfeet_20, Naval22_23, BigCity_25, ValleyTerrace_20, BadAgartude_23, Quasimodo_20, YoungMoneyMata_21, Mikro_20, Iota_19, Tortoise16_19, DeejaClivia_18, Essence_20, Ngannou_20, Phusco_20, Maby2021_22, NoodleTree_20, Erdmann_22, Pupusa_27, BananaFence_23, Lukilu_16, EasyJones_21, Momo_20, EmmaElysia_20, Capablanca_22, DirtMonster_19, Chargie21_20, LinStu_23, Roots515_21, Jaygup_20, SilverDipper_21, LRRHood_20, Audrick_22, StephanieG_22, McWolfish_21, Caravan_21, Demodog_20, Rocha_20, Gizmo_23, Issimir_21, Nidhogg_23, Substance289_19, JustHall_20, Pivoine_20, Rahel_20, JayJay_24, Megamind_21, Catera_20, Fludd_20, JPickles_20, SVoro_21, Dessert_19, MikeLiesIn_22, Pio_24, Mangeria_24, Grungle_16, Wally_20, Shrimp_21, Cactojaque_19, Lethe_22, DTDevon_22, Napoleon13_20, Naija_20
• Track 2 : Colt_15, Cane17_15

• Track 3 : Vortrix_28, Tonenili_27
• Track 4 : Moiqah_16, Shifa_19, HyRo_20, Moby_16
• Track 5 : Stubby_20, Pinkcreek_14
• Track 6 : Derek_21
• Track 7 : Alice_17, Bezza_15
• Track 8 : Specks_25
• Track 9 : QBert_20
• Track 10 : Flabslab_23

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

The start number called the most often in the published annotations is 5, it was called in 179 of the 179 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ablatia_20, Ading_20, Adlitam_20, Alice_17, Amataga_20, ArcherS7_20, Asterius_23, Astraea_22, Atlantean_20, Audrick_22, Ava3_22, Babyland_20, BackyardAgain_19, BadAgartude_23, BananaFence_23, Bangla1971_20, Basquiat_20, BeanWater_17, Belieber_19, Bezza_15, BigCity_25, Bigswole_26, Bipolarisk_21, Blackbrain_20, Blackdragon_18, BobaPhatt_19, Bonray_21, Bowman_21, Bread_22, Breeniome_21, Burrough_22, Bxz1_23, Cactojaque_19, Cali_23, Cane17_15, Capablanca_22, Caravan_21, Catera_20, Chargie21_20, CharlieB_22, ChaylaJr_20, ChickenPhender_20, Chomp_20, CindyLou_20, Cleatunium_18, Colt_15, Concombre_21, DTDevon_22, Daffodil_23, Dandelion_25, Darko_20, DeejaClivia_18, Delilah_21, Delylah_24, Demodog_20, Derek_21, Dessert_19, Dietrick_18, DirtMonster_19, Domi_16, DrPhinkDaddy_21, Drazdys_22, Duckfeet_20, ET08_18, EasyJones_21, EggyFarm_25, EmToTheThree_24, EmmaElysia_20, Erdmann_22, ErnieJ_24, Essence_20, Ewok_21, Fixie_19, Flabslab_23, Fludd_20, Fongie_21, FoxtrotP1_22, FrayBell_27, FudgeTart_22, Gabriel_21, Gamgam_20, Ghost_21, Gizmo_23, GlutenPhree_21, Grasshills_25, Grungle_16, Guwapp_20, Halldule_18, HyRo_20, I3_23, IkeLoa_17, InigoMontoya_22, InterFolia_27, Iota_19, Issimir_21, Izajani_22, JPickles_20, Janiyra_20, JayJay_24, Jaygup_20, Jedediah_21, Jemmno_20, Jessibeth14_21, Jezreel_20, JigglyPuff_22, JulietS_17, JustHall_20, Kamryn_20, Kboogie_21, Khaleesi_21, Koguma_18, LRRHood_20, Labradorite_19, Latch_20, Lee7_21, Lethe_22, LifeSavor_21, LinStu_23, Littleton_21, Loanshark_21, LolaVinca_24, LookingGlass_24, LordLeafolot_27, Lukilu_16, Lunareta_21, Maby2021_22, Mangeria_24, Matsumoto_20, Maturis_22, McGee_21, McWolfish_21, Megamind_21, Melpomini_20, MikeLiesIn_22, Mikro_20, MoMoMixon_23, Moby_16, Moiqah_16, Momo_20, Montpel_21, Morizzled23_20, Naija_20, Napoleon13_20, Nappy_23, Naval22_23, NedWong_22, Ngannou_20, Nidhogg_23, NoodleTree_20, Norm_21, NuevoMundo_25, OrediggerDelux_21, ParkTD_21, Patter_20, PharkleMinkus_27, Phlegm_22, Phox_21, Phusco_20, Pier_23, Pinkcreek_14, Pio_24, Pivoine_20, Pleione_23, Primadonna_17, Pupusa_27, PurduePete_21, QBert_20, Quasimodo_20, Rabinovish_21, Rahel_20, Rizal_20, RoMag_16, Rocha_20, Ronan_17, Roots515_21, SVoro_21, Salacia_23, Sauce_23, ScottMcG_23, Sebata_23, Shaqnato_18, Shelob_24, ShiaLabeouf_20, Shifa_19, Shnickers_20, Shrimp_21, SilverDipper_21, SmallFry_20, Spec_19, Specks_25, Sprinklers_22, Spud_24, SrishMeg2525_21, StephanieG_22, StubbySaigey_21, Stubby_20, Substance289_19, Tainan_27, Teardrop_20, TinyTim_21, Tonenili_27,

Tortoise16_19, Trinitium_20, Turret_20, Tyke_23, ValleyTerrace_20, Vortrix_28, Wally_20, Willis_22, Yassified_19, YemiJoy2021_22, YoungMoneyMata_21, Yucca_21, Zalkecks_23, Zeenon_24, ZygoTaiga_22,

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 5:
• Found in 216 of 216 (100.0%) of genes in pham
• Manual Annotations of this start: 179 of 179
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ablatia_20 (C1), Ading_20 (C1), Adlitam_20 (C1), Alice_17 (C1), Amataga_20 (C1), ArcherS7_20 (C1), Asterius_23 (C1), Astraea_22 (C1), Atlantean_20 (C1), Audrick_22 (C1), Ava3_22 (C1), Babyland_20 (C1), BackyardAgain_19 (C1), BadAgartude_23 (C1), BananaFence_23 (C1), Bangla1971_20 (C1), Basquiat_20 (C1), BeanWater_17 (C1), Belieber_19 (C1), Bezza_15 (C1), BigCity_25 (C1), Bigswole_26 (C1), Bipolarisk_21 (C1), Blackbrain_20 (C1), Blackdragon_18 (C1), BobaPhatt_19 (C1), Bonray_21 (C1), Bowman_21 (C1), Bread_22 (C1), Breeniome_21 (C1), Burrough_22 (C1), Bxz1_23 (C1), Cactojaque_19 (C1), Cali_23 (C1), Cane17_15 (C1), Capablanca_22 (C1), Caravan_21 (C1), Catera_20 (C1), Chargie21_20 (C1), CharlieB_22 (C1), ChaylaJr_20 (C1), ChickenPhender_20 (C1), Chomp_20 (C1), CindyLou_20 (C1), Cleatunium_18 (C1), Colt_15 (C1), Concombre_21 (C1), DTDevon_22 (C1), Daffodil_23 (C1), Dandelion_25 (C1), Darko_20 (C1), DeejaClivia_18 (C1), Delilah_21 (C1), Delylah_24 (C1), Demodog_20 (C1), Derek_21 (C1), Dessert_19 (C1), Dietrick_18 (C1), DirtMonster_19 (C1), Domi_16 (C1), DrPhinkDaddy_21 (C1), Drazdys_22 (C1), Duckfeet_20 (C1), ET08_18 (C1), EasyJones_21 (C1), EggyFarm_25 (C1), EmToTheThree_24 (C1), EmmaElysia_20 (C1), Erdmann_22 (C1), ErnieJ_24 (C1), Essence_20 (C1), Ewok_21 (C1), Fixie_19 (C1), Flabslab_23 (C1), Fludd_20 (C1), Fongie_21 (C1), FoxtrotP1_22 (C1), FrayBell_27 (C1), FudgeTart_22 (C1), Gabriel_21 (C1), Gamgam_20 (C1), Ghost_21 (C1), Gizmo_23 (C1), GlutenPhree_21 (C1), Grasshills_25 (C1), Grungle_16 (C1), Guwapp_20 (C1), Halldule_18 (C1), HyRo_20 (C1), I3_23 (C1), IkeLoa_17 (C1), InigoMontoya_22 (C1), InterFolia_27 (C1), Iota_19 (C1), Issimir_21 (C1), Izajani_22 (C1), JPickles_20 (C1), Janiyra_20 (C1), JayJay_24 (C1), Jaygup_20 (C1), Jedediah_21 (C1), Jemmno_20 (C1), Jessibeth14_21 (C1), Jezreel_20 (C1), JigglyPuff_22 (C1), JulietS_17 (C1), JustHall_20 (C1), Kamryn_20 (C1), Kboogie_21 (C1), Khaleesi_21 (C1), Koguma_18 (C1), LRRHood_20 (C1), Labradorite_19 (C1), Latch_20 (C1), Lee7_21 (C1), Lethe_22 (C1), LifeSavor_21 (C1), LinStu_23 (C1), Littleton_21 (C1), Loanshark_21 (C1), LolaVinca_24 (C1), LookingGlass_24 (C1), LordLeafolot_27 (C1), Lukilu_16 (C1), Lunareta_21 (C1), Maby2021_22 (C1), Mangeria_24 (C1), Matsumoto_20 (C1), Maturis_22 (C1), McGee_21 (C1), McWolfish_21 (C1), Megamind_21 (C1), Melpomini_20 (C1), MikeLiesIn_22 (C1), Mikro_20 (C1), MoMoMixon_23 (C1), Moby_16 (C1), Moiqah_16 (C1), Momo_20 (C1), Montpel_21 (C1), Morizzled23_20 (C1), Naija_20 (C1), Napoleon13_20 (C1), Nappy_23 (C1), Naval22_23 (C1), NedWong_22 (C1), Ngannou_20 (C1), Nidhogg_23 (C1), NoodleTree_20 (C1), Norm_21 (C1), NuevoMundo_25 (C1), OrediggerDelux_21 (C1), ParkTD_21 (C1), Patter_20 (C1), PharkleMinkus_27 (C1), Phlegm_22 (C1), Phox_21 (C1), Phusco_20

(C1), Pier_23 (C1), Pinkcreek_14 (C1), Pio_24 (C1), Pivoine_20 (C1), Pleione_23 (C1), Primadonna_17 (C1), Pupusa_27 (C1), PurduePete_21 (C1), QBert_20 (C1), Quasimodo_20 (C1), Rabinovish_21 (C1), Rahel_20 (C1), Rizal_20 (C1), RoMag_16 (C1), Rocha_20 (C1), Ronan_17 (C1), Roots515_21 (C1), SVoro_21 (C1), Salacia_23 (C1), Sauce_23 (C1), ScottMcG_23 (C1), Sebata_23 (C1), Shaqnato_18 (C1), Shelob_24 (C1), ShiaLabeouf_20 (C1), Shifa_19 (C1), Shnickers_20 (C1), Shrimp_21 (C1), SilverDipper_21 (C1), SmallFry_20 (C1), Spec_19 (C1), Specks_25 (C1), Sprinklers_22 (C1), Spud_24 (C1), SrishMeg2525_21 (C1), StephanieG_22 (C1), StubbySaigey_21 (C1), Stubby_20 (C1), Substance289_19 (C1), Tainan_27 (C1), Teardrop_20 (C1), TinyTim_21 (C1), Tonenili_27 (C1), Tortoise16_19 (C1), Trinitium_20 (C1), Turret_20 (C1), Tyke_23 (C1), ValleyTerrace_20 (C1), Vortrix_28 (C1), Wally_20 (C1), Willis_22 (C1), Yassified_19 (C1), YemiJoy2021_22 (C1), YoungMoneyMata_21 (C1), Yucca_21 (C1), Zalkecks_23 (C1), Zeenon_24 (C1), ZygoTaiga_22 (C1),

Summary by clusters:

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:
•Start number 5 was manually annotated 179 times for cluster C1.

Gene Information:

Gene: Ablatia_20 Start: 6310, Stop: 6537, Start Num: 5
Candidate Starts for Ablatia_20:
(2, 5962), (3, 6151), (4, 6160), (Start: 5 @6310 has 179 MA's), (7, 6472), (8, 6487),

Gene: Ading_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Ading_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: Adlitam_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Adlitam_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Alice_17 Start: 6179, Stop: 6406, Start Num: 5
Candidate Starts for Alice_17:
(3, 6020), (4, 6029), (Start: 5 @6179 has 179 MA's), (7, 6341), (8, 6356),

Gene: Amataga_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Amataga_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: ArcherS7_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for ArcherS7_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Asterius_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Asterius_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Astraea_22 Start: 7025, Stop: 7252, Start Num: 5
Candidate Starts for Astraea_22:
(2, 6677), (3, 6866), (4, 6875), (Start: 5 @7025 has 179 MA's), (7, 7187), (8, 7202),

Gene: Atlantean_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Atlantean_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Audrick_22 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Audrick_22:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: Ava3_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Ava3_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Babyland_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Babyland_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: BackyardAgain_19 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for BackyardAgain_19:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: BadAgartude_23 Start: 7746, Stop: 7973, Start Num: 5
Candidate Starts for BadAgartude_23:
(2, 7398), (3, 7587), (4, 7596), (Start: 5 @7746 has 179 MA's), (7, 7908), (8, 7923),

Gene: BananaFence_23 Start: 7311, Stop: 7538, Start Num: 5
Candidate Starts for BananaFence_23:
(2, 6963), (3, 7152), (4, 7161), (Start: 5 @7311 has 179 MA's), (7, 7473), (8, 7488),

Gene: Bangla1971_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Bangla1971_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Basquiat_20 Start: 6289, Stop: 6516, Start Num: 5
Candidate Starts for Basquiat_20:
(2, 5941), (3, 6130), (4, 6139), (Start: 5 @6289 has 179 MA's), (7, 6451), (8, 6466),

Gene: BeanWater_17 Start: 6728, Stop: 6955, Start Num: 5
Candidate Starts for BeanWater_17:
(2, 6380), (3, 6569), (4, 6578), (Start: 5 @6728 has 179 MA's), (7, 6890), (8, 6905),

Gene: Belieber_19 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Belieber_19:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Bezza_15 Start: 6179, Stop: 6406, Start Num: 5
Candidate Starts for Bezza_15:
(3, 6020), (4, 6029), (Start: 5 @6179 has 179 MA's), (7, 6341), (8, 6356),

Gene: BigCity_25 Start: 8678, Stop: 8905, Start Num: 5
Candidate Starts for BigCity_25:
(2, 8330), (3, 8519), (4, 8528), (Start: 5 @8678 has 179 MA's), (7, 8840), (8, 8855),

Gene: Bigswole_26 Start: 8741, Stop: 8968, Start Num: 5
Candidate Starts for Bigswole_26:
(2, 8393), (3, 8582), (4, 8591), (Start: 5 @8741 has 179 MA's), (7, 8903), (8, 8918),

Gene: Bipolarisk_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Bipolarisk_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Blackbrain_20 Start: 6349, Stop: 6576, Start Num: 5
Candidate Starts for Blackbrain_20:
(2, 6001), (3, 6190), (4, 6199), (Start: 5 @6349 has 179 MA's), (7, 6511), (8, 6526),

Gene: Blackdragon_18 Start: 6155, Stop: 6382, Start Num: 5
Candidate Starts for Blackdragon_18:
(2, 5807), (3, 5996), (4, 6005), (Start: 5 @6155 has 179 MA's), (7, 6317), (8, 6332),

Gene: BobaPhatt_19 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for BobaPhatt_19:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Bonray_21 Start: 7412, Stop: 7639, Start Num: 5
Candidate Starts for Bonray_21:
(2, 7064), (3, 7253), (4, 7262), (Start: 5 @7412 has 179 MA's), (7, 7574), (8, 7589),

Gene: Bowman_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Bowman_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Bread_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Bread_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Breeniome_21 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Breeniome_21:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Burrough_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Burrough_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Bxz1_23 Start: 7851, Stop: 8078, Start Num: 5
Candidate Starts for Bxz1_23:
(2, 7503), (3, 7692), (4, 7701), (Start: 5 @7851 has 179 MA's), (7, 8013), (8, 8028),

Gene: Cactojaque_19 Start: 6238, Stop: 6465, Start Num: 5
Candidate Starts for Cactojaque_19:
(2, 5890), (3, 6079), (4, 6088), (Start: 5 @6238 has 179 MA's), (7, 6400), (8, 6415),

Gene: Cali_23 Start: 8722, Stop: 8949, Start Num: 5

Candidate Starts for Cali_23:
(2, 8374), (3, 8563), (4, 8572), (Start: 5 @8722 has 179 MA's), (7, 8884), (8, 8899),

Gene: Cane17_15 Start: 5760, Stop: 5987, Start Num: 5
Candidate Starts for Cane17_15:
(3, 5601), (4, 5610), (Start: 5 @5760 has 179 MA's), (7, 5922), (8, 5937),

Gene: Capablanca_22 Start: 7433, Stop: 7660, Start Num: 5
Candidate Starts for Capablanca_22:
(2, 7085), (3, 7274), (4, 7283), (Start: 5 @7433 has 179 MA's), (7, 7595), (8, 7610),

Gene: Caravan_21 Start: 6692, Stop: 6919, Start Num: 5
Candidate Starts for Caravan_21:
(2, 6344), (3, 6533), (4, 6542), (Start: 5 @6692 has 179 MA's), (7, 6854), (8, 6869),

Gene: Catera_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Catera_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Chargie21_20 Start: 6289, Stop: 6516, Start Num: 5
Candidate Starts for Chargie21_20:
(2, 5941), (3, 6130), (4, 6139), (Start: 5 @6289 has 179 MA's), (7, 6451), (8, 6466),

Gene: CharlieB_22 Start: 6687, Stop: 6914, Start Num: 5
Candidate Starts for CharlieB_22:
(2, 6339), (3, 6528), (4, 6537), (Start: 5 @6687 has 179 MA's), (7, 6849), (8, 6864),

Gene: ChaylaJr_20 Start: 6376, Stop: 6603, Start Num: 5
Candidate Starts for ChaylaJr_20:
(2, 6028), (3, 6217), (4, 6226), (Start: 5 @6376 has 179 MA's), (7, 6538), (8, 6553),

Gene: ChickenPhender_20 Start: 6334, Stop: 6561, Start Num: 5
Candidate Starts for ChickenPhender_20:
(2, 5986), (3, 6175), (4, 6184), (Start: 5 @6334 has 179 MA's), (7, 6496), (8, 6511),

Gene: Chomp_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Chomp_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: CindyLou_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for CindyLou_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Cleatunium_18 Start: 6580, Stop: 6807, Start Num: 5
Candidate Starts for Cleatunium_18:
(2, 6232), (3, 6421), (4, 6430), (Start: 5 @6580 has 179 MA's), (7, 6742), (8, 6757),

Gene: Colt_15 Start: 5766, Stop: 5993, Start Num: 5
Candidate Starts for Colt_15:
(3, 5607), (4, 5616), (Start: 5 @5766 has 179 MA's), (7, 5928), (8, 5943),

Gene: Concombre_21 Start: 7374, Stop: 7601, Start Num: 5
Candidate Starts for Concombre_21:

(2, 7026), (3, 7215), (4, 7224), (Start: 5 @7374 has 179 MA's), (7, 7536), (8, 7551),

Gene: DTDevon_22 Start: 7472, Stop: 7699, Start Num: 5
Candidate Starts for DTDevon_22:
(2, 7124), (3, 7313), (4, 7322), (Start: 5 @7472 has 179 MA's), (7, 7634), (8, 7649),

Gene: Daffodil_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Daffodil_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Dandelion_25 Start: 8201, Stop: 8428, Start Num: 5
Candidate Starts for Dandelion_25:
(2, 7853), (3, 8042), (4, 8051), (Start: 5 @8201 has 179 MA's), (7, 8363), (8, 8378),

Gene: Darko_20 Start: 7280, Stop: 7507, Start Num: 5
Candidate Starts for Darko_20:
(2, 6932), (3, 7121), (4, 7130), (Start: 5 @7280 has 179 MA's), (7, 7442), (8, 7457),

Gene: DeejaClivia_18 Start: 6197, Stop: 6424, Start Num: 5
Candidate Starts for DeejaClivia_18:
(2, 5849), (3, 6038), (4, 6047), (Start: 5 @6197 has 179 MA's), (7, 6359), (8, 6374),

Gene: Delilah_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Delilah_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Delylah_24 Start: 7445, Stop: 7672, Start Num: 5
Candidate Starts for Delylah_24:
(2, 7097), (3, 7286), (4, 7295), (Start: 5 @7445 has 179 MA's), (7, 7607), (8, 7622),

Gene: Demodog_20 Start: 7374, Stop: 7601, Start Num: 5
Candidate Starts for Demodog_20:
(2, 7026), (3, 7215), (4, 7224), (Start: 5 @7374 has 179 MA's), (7, 7536), (8, 7551),

Gene: Derek_21 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Derek_21:
(3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Dessert_19 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Dessert_19:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Dietrick_18 Start: 6306, Stop: 6533, Start Num: 5
Candidate Starts for Dietrick_18:
(2, 5958), (3, 6147), (4, 6156), (Start: 5 @6306 has 179 MA's), (7, 6468), (8, 6483),

Gene: DirtMonster_19 Start: 7433, Stop: 7660, Start Num: 5
Candidate Starts for DirtMonster_19:
(2, 7085), (3, 7274), (4, 7283), (Start: 5 @7433 has 179 MA's), (7, 7595), (8, 7610),

Gene: Domi_16 Start: 6423, Stop: 6650, Start Num: 5
Candidate Starts for Domi_16:
(2, 6075), (3, 6264), (4, 6273), (Start: 5 @6423 has 179 MA's), (7, 6585), (8, 6600),

Gene: DrPhinkDaddy_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for DrPhinkDaddy_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Drazdys_22 Start: 7173, Stop: 7400, Start Num: 5
Candidate Starts for Drazdys_22:
(2, 6825), (3, 7014), (4, 7023), (Start: 5 @7173 has 179 MA's), (7, 7335), (8, 7350),

Gene: Duckfeet_20 Start: 6848, Stop: 7075, Start Num: 5
Candidate Starts for Duckfeet_20:
(2, 6500), (3, 6689), (4, 6698), (Start: 5 @6848 has 179 MA's), (7, 7010), (8, 7025),

Gene: ET08_18 Start: 7115, Stop: 7342, Start Num: 5
Candidate Starts for ET08_18:
(2, 6767), (3, 6956), (4, 6965), (Start: 5 @7115 has 179 MA's), (7, 7277), (8, 7292),

Gene: EasyJones_21 Start: 6289, Stop: 6516, Start Num: 5
Candidate Starts for EasyJones_21:
(2, 5941), (3, 6130), (4, 6139), (Start: 5 @6289 has 179 MA's), (7, 6451), (8, 6466),

Gene: EggyFarm_25 Start: 8678, Stop: 8905, Start Num: 5
Candidate Starts for EggyFarm_25:
(2, 8330), (3, 8519), (4, 8528), (Start: 5 @8678 has 179 MA's), (7, 8840), (8, 8855),

Gene: EmToTheThree_24 Start: 8832, Stop: 9059, Start Num: 5
Candidate Starts for EmToTheThree_24:
(2, 8484), (3, 8673), (4, 8682), (Start: 5 @8832 has 179 MA's), (7, 8994), (8, 9009),

Gene: EmmaElysia_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for EmmaElysia_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Erdmann_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Erdmann_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: ErnieJ_24 Start: 7479, Stop: 7706, Start Num: 5
Candidate Starts for ErnieJ_24:
(2, 7131), (3, 7320), (4, 7329), (Start: 5 @7479 has 179 MA's), (7, 7641), (8, 7656),

Gene: Essence_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Essence_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Ewok_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Ewok_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Fixie_19 Start: 6289, Stop: 6516, Start Num: 5
Candidate Starts for Fixie_19:
(2, 5941), (3, 6130), (4, 6139), (Start: 5 @6289 has 179 MA's), (7, 6451), (8, 6466),

Gene: Flabslab_23 Start: 7578, Stop: 7805, Start Num: 5
Candidate Starts for Flabslab_23:
(1, 7137), (3, 7419), (4, 7428), (Start: 5 @7578 has 179 MA's), (7, 7740), (8, 7755),

Gene: Fludd_20 Start: 6290, Stop: 6517, Start Num: 5
Candidate Starts for Fludd_20:
(2, 5942), (3, 6131), (4, 6140), (Start: 5 @6290 has 179 MA's), (7, 6452), (8, 6467),

Gene: Fongie_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Fongie_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: FoxtrotP1_22 Start: 7977, Stop: 8204, Start Num: 5
Candidate Starts for FoxtrotP1_22:
(2, 7629), (3, 7818), (4, 7827), (Start: 5 @7977 has 179 MA's), (7, 8139), (8, 8154),

Gene: FrayBell_27 Start: 8998, Stop: 9225, Start Num: 5
Candidate Starts for FrayBell_27:
(2, 8650), (3, 8839), (4, 8848), (Start: 5 @8998 has 179 MA's), (7, 9160), (8, 9175),

Gene: FudgeTart_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for FudgeTart_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Gabriel_21 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Gabriel_21:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Gamgam_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Gamgam_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Ghost_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Ghost_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Gizmo_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Gizmo_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: GlutenPhree_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for GlutenPhree_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Grasshills_25 Start: 8678, Stop: 8905, Start Num: 5
Candidate Starts for Grasshills_25:
(2, 8330), (3, 8519), (4, 8528), (Start: 5 @8678 has 179 MA's), (7, 8840), (8, 8855),

Gene: Grungle_16 Start: 5257, Stop: 5484, Start Num: 5
Candidate Starts for Grungle_16:
(2, 4909), (3, 5098), (4, 5107), (Start: 5 @5257 has 179 MA's), (7, 5419), (8, 5434),

Gene: Guwapp_20 Start: 6304, Stop: 6531, Start Num: 5

Candidate Starts for Guwapp_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Halldule_18 Start: 5900, Stop: 6127, Start Num: 5
Candidate Starts for Halldule_18:
(2, 5552), (3, 5741), (4, 5750), (Start: 5 @5900 has 179 MA's), (7, 6062), (8, 6077),

Gene: HyRo_20 Start: 7314, Stop: 7541, Start Num: 5
Candidate Starts for HyRo_20:
(3, 7155), (4, 7164), (Start: 5 @7314 has 179 MA's), (7, 7476), (8, 7491),

Gene: I3_23 Start: 7967, Stop: 8194, Start Num: 5
Candidate Starts for I3_23:
(2, 7619), (3, 7808), (4, 7817), (Start: 5 @7967 has 179 MA's), (7, 8129), (8, 8144),

Gene: IkeLoa_17 Start: 6434, Stop: 6661, Start Num: 5
Candidate Starts for IkeLoa_17:
(2, 6086), (3, 6275), (4, 6284), (Start: 5 @6434 has 179 MA's), (7, 6596), (8, 6611),

Gene: InigoMontoya_22 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for InigoMontoya_22:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: InterFolia_27 Start: 8995, Stop: 9222, Start Num: 5
Candidate Starts for InterFolia_27:
(2, 8647), (3, 8836), (4, 8845), (Start: 5 @8995 has 179 MA's), (7, 9157), (8, 9172),

Gene: Iota_19 Start: 7197, Stop: 7424, Start Num: 5
Candidate Starts for Iota_19:
(2, 6849), (3, 7038), (4, 7047), (Start: 5 @7197 has 179 MA's), (7, 7359), (8, 7374),

Gene: Issimir_21 Start: 7412, Stop: 7639, Start Num: 5
Candidate Starts for Issimir_21:
(2, 7064), (3, 7253), (4, 7262), (Start: 5 @7412 has 179 MA's), (7, 7574), (8, 7589),

Gene: Izajani_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Izajani_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: JPickles_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for JPickles_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Janiyra_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Janiyra_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: JayJay_24 Start: 7395, Stop: 7622, Start Num: 5
Candidate Starts for JayJay_24:
(2, 7047), (3, 7236), (4, 7245), (Start: 5 @7395 has 179 MA's), (7, 7557), (8, 7572),

Gene: Jaygup_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Jaygup_20:

(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Jedediah_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Jedediah_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Jemmno_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Jemmno_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Jessibeth14_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Jessibeth14_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Jezreel_20 Start: 6635, Stop: 6862, Start Num: 5
Candidate Starts for Jezreel_20:
(2, 6287), (3, 6476), (4, 6485), (Start: 5 @6635 has 179 MA's), (7, 6797), (8, 6812),

Gene: JigglyPuff_22 Start: 7423, Stop: 7650, Start Num: 5
Candidate Starts for JigglyPuff_22:
(2, 7075), (3, 7264), (4, 7273), (Start: 5 @7423 has 179 MA's), (7, 7585), (8, 7600),

Gene: JulietS_17 Start: 5533, Stop: 5760, Start Num: 5
Candidate Starts for JulietS_17:
(2, 5185), (3, 5374), (4, 5383), (Start: 5 @5533 has 179 MA's), (7, 5695), (8, 5710),

Gene: JustHall_20 Start: 7303, Stop: 7530, Start Num: 5
Candidate Starts for JustHall_20:
(2, 6955), (3, 7144), (4, 7153), (Start: 5 @7303 has 179 MA's), (7, 7465), (8, 7480),

Gene: Kamryn_20 Start: 6638, Stop: 6865, Start Num: 5
Candidate Starts for Kamryn_20:
(2, 6290), (3, 6479), (4, 6488), (Start: 5 @6638 has 179 MA's), (7, 6800), (8, 6815),

Gene: Kboogie_21 Start: 6306, Stop: 6533, Start Num: 5
Candidate Starts for Kboogie_21:
(2, 5958), (3, 6147), (4, 6156), (Start: 5 @6306 has 179 MA's), (7, 6468), (8, 6483),

Gene: Khaleesi_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Khaleesi_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Koguma_18 Start: 5900, Stop: 6127, Start Num: 5
Candidate Starts for Koguma_18:
(2, 5552), (3, 5741), (4, 5750), (Start: 5 @5900 has 179 MA's), (7, 6062), (8, 6077),

Gene: LRRHood_20 Start: 7826, Stop: 8053, Start Num: 5
Candidate Starts for LRRHood_20:
(2, 7478), (3, 7667), (4, 7676), (Start: 5 @7826 has 179 MA's), (7, 7988), (8, 8003),

Gene: Labradorite_19 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Labradorite_19:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Latch_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Latch_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Lee7_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Lee7_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Lethe_22 Start: 7358, Stop: 7585, Start Num: 5
Candidate Starts for Lethe_22:
(2, 7010), (3, 7199), (4, 7208), (Start: 5 @7358 has 179 MA's), (7, 7520), (8, 7535),

Gene: LifeSavor_21 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for LifeSavor_21:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: LinStu_23 Start: 8009, Stop: 8236, Start Num: 5
Candidate Starts for LinStu_23:
(2, 7661), (3, 7850), (4, 7859), (Start: 5 @8009 has 179 MA's), (7, 8171), (8, 8186),

Gene: Littleton_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Littleton_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Loanshark_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Loanshark_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: LolaVinca_24 Start: 8101, Stop: 8328, Start Num: 5
Candidate Starts for LolaVinca_24:
(2, 7753), (3, 7942), (4, 7951), (Start: 5 @8101 has 179 MA's), (7, 8263), (8, 8278),

Gene: LookingGlass_24 Start: 7937, Stop: 8164, Start Num: 5
Candidate Starts for LookingGlass_24:
(2, 7589), (3, 7778), (4, 7787), (Start: 5 @7937 has 179 MA's), (7, 8099), (8, 8114),

Gene: LordLeafolot_27 Start: 8997, Stop: 9224, Start Num: 5
Candidate Starts for LordLeafolot_27:
(2, 8649), (3, 8838), (4, 8847), (Start: 5 @8997 has 179 MA's), (7, 9159), (8, 9174),

Gene: Lukilu_16 Start: 6250, Stop: 6477, Start Num: 5
Candidate Starts for Lukilu_16:
(2, 5902), (3, 6091), (4, 6100), (Start: 5 @6250 has 179 MA's), (7, 6412), (8, 6427),

Gene: Lunareta_21 Start: 7100, Stop: 7327, Start Num: 5
Candidate Starts for Lunareta_21:
(2, 6752), (3, 6941), (4, 6950), (Start: 5 @7100 has 179 MA's), (7, 7262), (8, 7277),

Gene: Maby2021_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Maby2021_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Mangeria_24 Start: 7917, Stop: 8144, Start Num: 5
Candidate Starts for Mangeria_24:
(2, 7569), (3, 7758), (4, 7767), (Start: 5 @7917 has 179 MA's), (7, 8079), (8, 8094),

Gene: Matsumoto_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Matsumoto_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Maturis_22 Start: 7163, Stop: 7390, Start Num: 5
Candidate Starts for Maturis_22:
(2, 6815), (3, 7004), (4, 7013), (Start: 5 @7163 has 179 MA's), (7, 7325), (8, 7340),

Gene: McGee_21 Start: 6306, Stop: 6533, Start Num: 5
Candidate Starts for McGee_21:
(2, 5958), (3, 6147), (4, 6156), (Start: 5 @6306 has 179 MA's), (7, 6468), (8, 6483),

Gene: McWolfish_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for McWolfish_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Megamind_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Megamind_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Melpomini_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Melpomini_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: MikeLiesIn_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for MikeLiesIn_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Mikro_20 Start: 7634, Stop: 7861, Start Num: 5
Candidate Starts for Mikro_20:
(2, 7286), (3, 7475), (4, 7484), (Start: 5 @7634 has 179 MA's), (7, 7796), (8, 7811),

Gene: MoMoMixon_23 Start: 7741, Stop: 7968, Start Num: 5
Candidate Starts for MoMoMixon_23:
(2, 7393), (3, 7582), (4, 7591), (Start: 5 @7741 has 179 MA's), (7, 7903), (8, 7918),

Gene: Moby_16 Start: 4666, Stop: 4893, Start Num: 5
Candidate Starts for Moby_16:
(3, 4507), (4, 4516), (Start: 5 @4666 has 179 MA's), (7, 4828), (8, 4843),

Gene: Moiqah_16 Start: 4666, Stop: 4893, Start Num: 5
Candidate Starts for Moiqah_16:
(3, 4507), (4, 4516), (Start: 5 @4666 has 179 MA's), (7, 4828), (8, 4843),

Gene: Momo_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Momo_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Montpel_21 Start: 7100, Stop: 7327, Start Num: 5

Candidate Starts for Montpel_21:
(2, 6752), (3, 6941), (4, 6950), (Start: 5 @7100 has 179 MA's), (7, 7262), (8, 7277),

Gene: Morizzled23_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Morizzled23_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: Naija_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Naija_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Napoleon13_20 Start: 6306, Stop: 6533, Start Num: 5
Candidate Starts for Napoleon13_20:
(2, 5958), (3, 6147), (4, 6156), (Start: 5 @6306 has 179 MA's), (7, 6468), (8, 6483),

Gene: Nappy_23 Start: 7591, Stop: 7818, Start Num: 5
Candidate Starts for Nappy_23:
(2, 7243), (3, 7432), (4, 7441), (Start: 5 @7591 has 179 MA's), (7, 7753), (8, 7768),

Gene: Naval22_23 Start: 7741, Stop: 7968, Start Num: 5
Candidate Starts for Naval22_23:
(2, 7393), (3, 7582), (4, 7591), (Start: 5 @7741 has 179 MA's), (7, 7903), (8, 7918),

Gene: NedWong_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for NedWong_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Ngannou_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Ngannou_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: Nidhogg_23 Start: 7741, Stop: 7968, Start Num: 5
Candidate Starts for Nidhogg_23:
(2, 7393), (3, 7582), (4, 7591), (Start: 5 @7741 has 179 MA's), (7, 7903), (8, 7918),

Gene: NoodleTree_20 Start: 6635, Stop: 6862, Start Num: 5
Candidate Starts for NoodleTree_20:
(2, 6287), (3, 6476), (4, 6485), (Start: 5 @6635 has 179 MA's), (7, 6797), (8, 6812),

Gene: Norm_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Norm_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: NuevoMundo_25 Start: 8743, Stop: 8970, Start Num: 5
Candidate Starts for NuevoMundo_25:
(2, 8395), (3, 8584), (4, 8593), (Start: 5 @8743 has 179 MA's), (7, 8905), (8, 8920),

Gene: OrediggerDelux_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for OrediggerDelux_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: ParkTD_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for ParkTD_21:

(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Patter_20 Start: 6325, Stop: 6552, Start Num: 5
Candidate Starts for Patter_20:
(2, 5977), (3, 6166), (4, 6175), (Start: 5 @6325 has 179 MA's), (7, 6487), (8, 6502),

Gene: PharkleMinkus_27 Start: 8998, Stop: 9225, Start Num: 5
Candidate Starts for PharkleMinkus_27:
(2, 8650), (3, 8839), (4, 8848), (Start: 5 @8998 has 179 MA's), (7, 9160), (8, 9175),

Gene: Phlegm_22 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Phlegm_22:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Phox_21 Start: 7823, Stop: 8050, Start Num: 5
Candidate Starts for Phox_21:
(2, 7475), (3, 7664), (4, 7673), (Start: 5 @7823 has 179 MA's), (7, 7985), (8, 8000),

Gene: Phusco_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Phusco_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Pier_23 Start: 7306, Stop: 7533, Start Num: 5
Candidate Starts for Pier_23:
(2, 6958), (3, 7147), (4, 7156), (Start: 5 @7306 has 179 MA's), (7, 7468), (8, 7483),

Gene: Pinkcreek_14 Start: 5502, Stop: 5729, Start Num: 5
Candidate Starts for Pinkcreek_14:
(3, 5343), (4, 5352), (Start: 5 @5502 has 179 MA's), (7, 5664), (8, 5679),

Gene: Pio_24 Start: 8240, Stop: 8467, Start Num: 5
Candidate Starts for Pio_24:
(2, 7892), (3, 8081), (4, 8090), (Start: 5 @8240 has 179 MA's), (7, 8402), (8, 8417),

Gene: Pivoine_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Pivoine_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Pleione_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Pleione_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Primadonna_17 Start: 6779, Stop: 7006, Start Num: 5
Candidate Starts for Primadonna_17:
(2, 6431), (3, 6620), (4, 6629), (Start: 5 @6779 has 179 MA's), (7, 6941), (8, 6956),

Gene: Pupusa_27 Start: 8997, Stop: 9224, Start Num: 5
Candidate Starts for Pupusa_27:
(2, 8649), (3, 8838), (4, 8847), (Start: 5 @8997 has 179 MA's), (7, 9159), (8, 9174),

Gene: PurduePete_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for PurduePete_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: QBert_20 Start: 7823, Stop: 8050, Start Num: 5
Candidate Starts for QBert_20:
(2, 7475), (3, 7664), (4, 7673), (Start: 5 @7823 has 179 MA's), (7, 7985), (8, 8000),

Gene: Quasimodo_20 Start: 7307, Stop: 7534, Start Num: 5
Candidate Starts for Quasimodo_20:
(2, 6959), (3, 7148), (4, 7157), (Start: 5 @7307 has 179 MA's), (7, 7469), (8, 7484),

Gene: Rabinovish_21 Start: 8111, Stop: 8338, Start Num: 5
Candidate Starts for Rabinovish_21:
(2, 7763), (3, 7952), (4, 7961), (Start: 5 @8111 has 179 MA's), (7, 8273), (8, 8288),

Gene: Rahel_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Rahel_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Rizal_20 Start: 6303, Stop: 6530, Start Num: 5
Candidate Starts for Rizal_20:
(2, 5955), (3, 6144), (4, 6153), (Start: 5 @6303 has 179 MA's), (7, 6465), (8, 6480),

Gene: RoMag_16 Start: 6385, Stop: 6612, Start Num: 5
Candidate Starts for RoMag_16:
(2, 6037), (3, 6226), (4, 6235), (Start: 5 @6385 has 179 MA's), (7, 6547), (8, 6562),

Gene: Rocha_20 Start: 6634, Stop: 6861, Start Num: 5
Candidate Starts for Rocha_20:
(2, 6286), (3, 6475), (4, 6484), (Start: 5 @6634 has 179 MA's), (7, 6796), (8, 6811),

Gene: Ronan_17 Start: 5234, Stop: 5461, Start Num: 5
Candidate Starts for Ronan_17:
(2, 4886), (3, 5075), (4, 5084), (Start: 5 @5234 has 179 MA's), (7, 5396), (8, 5411),

Gene: Roots515_21 Start: 7417, Stop: 7644, Start Num: 5
Candidate Starts for Roots515_21:
(2, 7069), (3, 7258), (4, 7267), (Start: 5 @7417 has 179 MA's), (7, 7579), (8, 7594),

Gene: SVoro_21 Start: 7412, Stop: 7639, Start Num: 5
Candidate Starts for SVoro_21:
(2, 7064), (3, 7253), (4, 7262), (Start: 5 @7412 has 179 MA's), (7, 7574), (8, 7589),

Gene: Salacia_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Salacia_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Sauce_23 Start: 7786, Stop: 8013, Start Num: 5
Candidate Starts for Sauce_23:
(2, 7438), (3, 7627), (4, 7636), (Start: 5 @7786 has 179 MA's), (7, 7948), (8, 7963),

Gene: ScottMcG_23 Start: 7974, Stop: 8201, Start Num: 5
Candidate Starts for ScottMcG_23:
(2, 7626), (3, 7815), (4, 7824), (Start: 5 @7974 has 179 MA's), (7, 8136), (8, 8151),

Gene: Sebata_23 Start: 8009, Stop: 8236, Start Num: 5
Candidate Starts for Sebata_23:
(2, 7661), (3, 7850), (4, 7859), (Start: 5 @8009 has 179 MA's), (7, 8171), (8, 8186),

Gene: Shaqnato_18 Start: 6239, Stop: 6466, Start Num: 5
Candidate Starts for Shaqnato_18:
(2, 5891), (3, 6080), (4, 6089), (Start: 5 @6239 has 179 MA's), (7, 6401), (8, 6416),

Gene: Shelob_24 Start: 8547, Stop: 8774, Start Num: 5
Candidate Starts for Shelob_24:
(2, 8199), (3, 8388), (4, 8397), (Start: 5 @8547 has 179 MA's), (7, 8709), (8, 8724),

Gene: ShiaLabeouf_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for ShiaLabeouf_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Shifa_19 Start: 6745, Stop: 6972, Start Num: 5
Candidate Starts for Shifa_19:
(3, 6586), (4, 6595), (Start: 5 @6745 has 179 MA's), (7, 6907), (8, 6922),

Gene: Shnickers_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Shnickers_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Shrimp_21 Start: 7422, Stop: 7649, Start Num: 5
Candidate Starts for Shrimp_21:
(2, 7074), (3, 7263), (4, 7272), (Start: 5 @7422 has 179 MA's), (7, 7584), (8, 7599),

Gene: SilverDipper_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for SilverDipper_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: SmallFry_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for SmallFry_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Spec_19 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Spec_19:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Specks_25 Start: 8178, Stop: 8405, Start Num: 5
Candidate Starts for Specks_25:
(2, 7830), (3, 8019), (4, 8028), (Start: 5 @8178 has 179 MA's), (6, 8214), (7, 8340), (8, 8355),

Gene: Sprinklers_22 Start: 7148, Stop: 7375, Start Num: 5
Candidate Starts for Sprinklers_22:
(2, 6800), (3, 6989), (4, 6998), (Start: 5 @7148 has 179 MA's), (7, 7310), (8, 7325),

Gene: Spud_24 Start: 8240, Stop: 8467, Start Num: 5
Candidate Starts for Spud_24:
(2, 7892), (3, 8081), (4, 8090), (Start: 5 @8240 has 179 MA's), (7, 8402), (8, 8417),

Gene: SrishMeg2525_21 Start: 7418, Stop: 7645, Start Num: 5

Candidate Starts for SrishMeg2525_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: StephanieG_22 Start: 7331, Stop: 7558, Start Num: 5
Candidate Starts for StephanieG_22:
(2, 6983), (3, 7172), (4, 7181), (Start: 5 @7331 has 179 MA's), (7, 7493), (8, 7508),

Gene: Stubby_20 Start: 6925, Stop: 7152, Start Num: 5
Candidate Starts for Stubby_20:
(3, 6766), (4, 6775), (Start: 5 @6925 has 179 MA's), (7, 7087), (8, 7102),

Gene: StubbySaigey_21 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for StubbySaigey_21:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Substance289_19 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Substance289_19:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Tainan_27 Start: 8997, Stop: 9224, Start Num: 5
Candidate Starts for Tainan_27:
(2, 8649), (3, 8838), (4, 8847), (Start: 5 @8997 has 179 MA's), (7, 9159), (8, 9174),

Gene: Teardrop_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Teardrop_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: TinyTim_21 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for TinyTim_21:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Tonenili_27 Start: 8637, Stop: 8876, Start Num: 5
Candidate Starts for Tonenili_27:
(3, 8478), (4, 8487), (Start: 5 @8637 has 179 MA's), (7, 8811), (8, 8826),

Gene: Tortoise16_19 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Tortoise16_19:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Trinitium_20 Start: 6304, Stop: 6531, Start Num: 5
Candidate Starts for Trinitium_20:
(2, 5956), (3, 6145), (4, 6154), (Start: 5 @6304 has 179 MA's), (7, 6466), (8, 6481),

Gene: Turret_20 Start: 6287, Stop: 6514, Start Num: 5
Candidate Starts for Turret_20:
(2, 5939), (3, 6128), (4, 6137), (Start: 5 @6287 has 179 MA's), (7, 6449), (8, 6464),

Gene: Tyke_23 Start: 7716, Stop: 7943, Start Num: 5
Candidate Starts for Tyke_23:
(2, 7368), (3, 7557), (4, 7566), (Start: 5 @7716 has 179 MA's), (7, 7878), (8, 7893),

Gene: ValleyTerrace_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for ValleyTerrace_20:

(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Vortrix_28 Start: 8825, Stop: 9064, Start Num: 5
Candidate Starts for Vortrix_28:
(3, 8666), (4, 8675), (Start: 5 @8825 has 179 MA's), (7, 8999), (8, 9014),

Gene: Wally_20 Start: 6308, Stop: 6535, Start Num: 5
Candidate Starts for Wally_20:
(2, 5960), (3, 6149), (4, 6158), (Start: 5 @6308 has 179 MA's), (7, 6470), (8, 6485),

Gene: Willis_22 Start: 7313, Stop: 7540, Start Num: 5
Candidate Starts for Willis_22:
(2, 6965), (3, 7154), (4, 7163), (Start: 5 @7313 has 179 MA's), (7, 7475), (8, 7490),

Gene: Yassified_19 Start: 6311, Stop: 6538, Start Num: 5
Candidate Starts for Yassified_19:
(2, 5963), (3, 6152), (4, 6161), (Start: 5 @6311 has 179 MA's), (7, 6473), (8, 6488),

Gene: YemiJoy2021_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for YemiJoy2021_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: YoungMoneyMata_21 Start: 6351, Stop: 6578, Start Num: 5
Candidate Starts for YoungMoneyMata_21:
(2, 6003), (3, 6192), (4, 6201), (Start: 5 @6351 has 179 MA's), (7, 6513), (8, 6528),

Gene: Yucca_21 Start: 7340, Stop: 7567, Start Num: 5
Candidate Starts for Yucca_21:
(2, 6992), (3, 7181), (4, 7190), (Start: 5 @7340 has 179 MA's), (7, 7502), (8, 7517),

Gene: Zalkecks_23 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for Zalkecks_23:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),

Gene: Zeenon_24 Start: 7419, Stop: 7646, Start Num: 5
Candidate Starts for Zeenon_24:
(2, 7071), (3, 7260), (4, 7269), (Start: 5 @7419 has 179 MA's), (7, 7581), (8, 7596),

Gene: ZygoTaiga_22 Start: 7418, Stop: 7645, Start Num: 5
Candidate Starts for ZygoTaiga_22:
(2, 7070), (3, 7259), (4, 7268), (Start: 5 @7418 has 179 MA's), (7, 7580), (8, 7595),