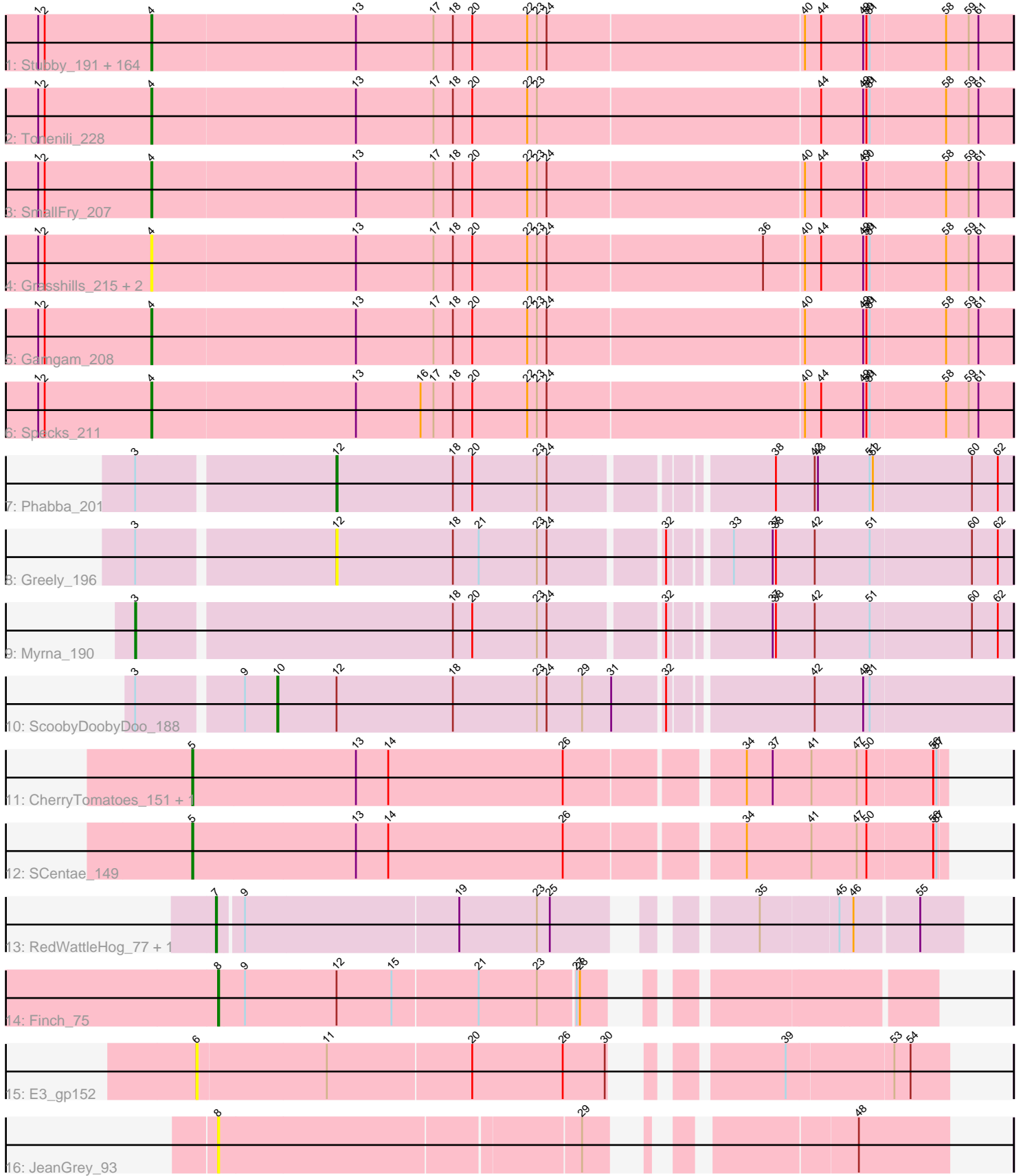


Pham 191086



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 191086 Report

This analysis was run 11/02/24 on database version 579.

Pham number 191086 has 184 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Stubby_191, NuevoMundo_210, Amataga_208, Burrough_209, Concombre_212, Napoleon13_204, Morizzled23_204, Willis_208, InigoMontoya_210, Drazdys_205, JustHall_201, Breeniome_206, RoMag_202, Shelob_208, Iota_202, Ghost_207, Bonray_209, Blackbrain_204, ParkTD_206, MikeLiesIn_209, Derek_204, LifeSavor_206, Rahel_208, Basquiat_204, Littleton_210, Demodog_213, Yassified_204, Patter_208, JigglyPuff_214, I3_217, SilverDipper_211, CindyLou_208, Latch_207, Naval22_212, Ngannou_204, LolaVinca_205, Teardrop_204, Daffodil_212, Colt_198, Khaleesi_206, Bread_202, HyRo_195, Chomp_207, Babyland_210, Melpomini_202, Fludd_207, BadAgartude_201, Shrimp_209, Dietrick_196, Issimir_200, Janiyra_210, Turret_200, Phlegm_211, YemiJoy2021_208, Norm_207, Megamind_204, StubbySaigey_212, Audrick_209, ZygoTaiga_204, Koguma_206, Phusco_205, Erdmann_208, Astraea_201, Kboogie_211, ChickenPhender_203, MoMoMixon_205, ChaylaJr_204, Zeenon_209, FudgeTart_202, Gabriel_210, EmToTheThree_207, Quasimodo_209, Gizmo_213, Sauce_203, FrayBell_210, Asterius_203, JayJay_205, Chargie21_204, McGee_206, Salacia_207, Mikro_203, Pinkcreek_191, Lukilu_198, Capablanca_212, Delilah_205, Halldule_200, Ava3_206, Grungle_191, Zalkecks_206, Maby2021_207, Cactojaque_202, EasyJones_210, Ewok_206, DrPhinkDaddy_204, Shaqnato_198, Tortoise16_205, ErnieJ_200, EmmaElysia_210, Phox_208, Momo_208, NoodleTree_213, Alice_194, DirtMonster_200, Pleione_211, Mangeria_208, Darko_206, Ading_208, Tyke_205, Cane17_198, Sprinklers_205, Domi_201, Matsumoto_206, StephanieG_203, Wally_205, Jemmno_206, Yucca_207, YoungMoneyMata_205, QBert_199, Pier_208, Naija_208, Atlantean_207, Shnickers_205, BeanWater_199, Trinitium_203, FoxtrotP1_205, Blackdragon_202, BackyardAgain_202, NedWong_206, Izajani_205, BananaFence_204, InterFolia_210, Kamryn_206, Pivoine_208, Blubba_196, Bigswole_212, Jessibeth14_207, LRRHood_200, LinStu_206, Ronan_203, Nappy_208, Jedediah_207, Lee7_207, Essence_204, SrishMeg2525_204, Dandelion_215, Flabslab_202, ShiaLabeouf_204, Roots515_209, Guwapp_202, IkeLoa_199, Rabinovich_200, Nidhogg_208, McWolfish_204, Adlitam_206, Delylah_209, Loanshark_204, ValleyTerrace_208, Pio_215, CharlieB_201, Shifa_184, Sebata_208, Bipolarisk_205, TinyTim_205, Caravan_198, PurduePete_207
- Track 2 : Tonenili_228
- Track 3 : SmallFry_207
- Track 4 : Grasshills_215, EggyFarm_216, BigCity_216
- Track 5 : Gamgam_208
- Track 6 : Specks_211

- Track 7 : Phabba_201
- Track 8 : Greely_196
- Track 9 : Myrna_190
- Track 10 : ScoobyDoobyDoo_188
- Track 11 : CherryTomatoes_151, Pupper_150
- Track 12 : SCentae_149
- Track 13 : RedWattleHog_77, Stormageddon_74
- Track 14 : Finch_75
- Track 15 : E3_gp152
- Track 16 : JeanGrey_93

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

The start number called the most often in the published annotations is 4, it was called in 158 of the 167 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading_208, Adlitam_206, Alice_194, Amataga_208, Asterius_203, Astraea_201, Atlantean_207, Audrick_209, Ava3_206, Babyland_210, BackyardAgain_202, BadAgartude_201, BananaFence_204, Basquiat_204, BeanWater_199, BigCity_216, Bigswole_212, Bipolarisk_205, Blackbrain_204, Blackdragon_202, Blubba_196, Bonray_209, Bread_202, Breeniome_206, Burrough_209, Cactojaque_202, Cane17_198, Capablanca_212, Caravan_198, Chargie21_204, CharlieB_201, ChaylaJr_204, ChickenPhender_203, Chomp_207, CindyLou_208, Colt_198, Concombre_212, Daffodil_212, Dandelion_215, Darko_206, Delilah_205, Delylah_209, Demodog_213, Derek_204, Dietrick_196, DirtMonster_200, Domi_201, DrPhinkDaddy_204, Drazdys_205, EasyJones_210, EggyFarm_216, EmToTheThree_207, EmmaElysia_210, Erdmann_208, ErnieJ_200, Essence_204, Ewok_206, Flabslab_202, Fludd_207, FoxtrotP1_205, FrayBell_210, FudgeTart_202, Gabriel_210, Gangam_208, Ghost_207, Gizmo_213, Grasshills_215, Grungle_191, Guwapp_202, Halldule_200, HyRo_195, I3_217, IkeLoa_199, InigoMontoya_210, InterFolia_210, Iota_202, Issimir_200, Izajani_205, Janiyra_210, JayJay_205, Jedediah_207, Jemmno_206, Jessibeth14_207, JigglyPuff_214, JustHall_201, Kamryn_206, Kboogie_211, Khaleesi_206, Koguma_206, LRRHood_200, Latch_207, Lee7_207, LifeSavor_206, LinStu_206, Littleton_210, Loanshark_204, LolaVinca_205, Lukilu_198, Maby2021_207, Mangeria_208, Matsumoto_206, McGee_206, McWolfish_204, Megamind_204, Melpomini_202, MikeLiesIn_209, Mikro_203, MoMoMixon_205, Momo_208, Morizzled23_204, Naija_208, Napoleon13_204, Nappy_208, Naval22_212, NedWong_206, Ngannou_204, Nidhogg_208, NoodleTree_213, Norm_207, NuevoMundo_210, ParkTD_206, Patter_208, Phlegm_211, Phox_208, Phusco_205, Pier_208, Pinkcreek_191, Pio_215, Pivoine_208, Pleione_211, PurduePete_207, QBert_199, Quasimodo_209, Rabinovish_200, Rahel_208, RoMag_202, Ronan_203, Roots515_209, Salacia_207, Sauce_203, Sebata_208, Shaqnato_198, Shelob_208, ShiaLabeouf_204, Shifa_184, Shnickers_205, Shrimp_209, SilverDipper_211, SmallFry_207, Specks_211, Sprinklers_205, SrishMeg2525_204, StephanieG_203, StubbySaigey_212, Stubby_191, Teardrop_204, TinyTim_205, Tonenili_228, Tortoise16_205, Trinitium_203, Turret_200, Tyke_205, ValleyTerrace_208, Wally_205, Willis_208, Yassified_204, YemiJoy2021_208, YoungMoneyMata_205, Yucca_207, Zalkecks_206, Zeenon_209, ZygoTaiga_204,

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

-

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

- CherryTomatoes_151, E3_gp152, Finch_75, Greely_196, JeanGrey_93, Myrna_190, Phabba_201, Pupper_150, RedWattleHog_77, SCentae_149, ScoobyDoobyDoo_188, Stormageddon_74,

Summary by start number:

Start 3:

- Found in 4 of 184 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Myrna_190 (C2),

Start 4:

- Found in 172 of 184 (93.5%) of genes in pham
- Manual Annotations of this start: 158 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ading_208 (C1), Adlitam_206 (C1), Alice_194 (C1), Amataga_208 (C1), Asterius_203 (C1), Astraea_201 (C1), Atlantean_207 (C1), Audrick_209 (C1), Ava3_206 (C1), Babyland_210 (C1), BackyardAgain_202 (C1), BadAgartude_201 (C1), BananaFence_204 (C1), Basquiat_204 (C1), BeanWater_199 (C1), BigCity_216 (C1), Bigswole_212 (C1), Bipolarisk_205 (C1), Blackbrain_204 (C1), Blackdragon_202 (C1), Blubba_196 (C1), Bonray_209 (C1), Bread_202 (C1), Breeniome_206 (C1), Burrough_209 (C1), Cactojaque_202 (C1), Cane17_198 (C1), Capablanca_212 (C1), Caravan_198 (C1), Chargie21_204 (C1), CharlieB_201 (C1), ChaylaJr_204 (C1), ChickenPhender_203 (C1), Chomp_207 (C1), CindyLou_208 (C1), Colt_198 (C1), Concombre_212 (C1), Daffodil_212 (C1), Dandelion_215 (C1), Darko_206 (C1), Delilah_205 (C1), Delylah_209 (C1), Demodog_213 (C1), Derek_204 (C1), Dietrick_196 (C1), DirtMonster_200 (C1), Domi_201 (C1), DrPhinkDaddy_204 (C1), Drazdys_205 (C1), EasyJones_210 (C1), EggyFarm_216 (C1), EmToTheThree_207 (C1), EmmaElysia_210 (C1), Erdmann_208 (C1), ErnieJ_200 (C1), Essence_204 (C1), Ewok_206 (C1), Flabslab_202 (C1), Fludd_207 (C1), FoxtrotP1_205 (C1), FrayBell_210 (C1), FudgeTart_202 (C1), Gabriel_210 (C1), Gamgam_208 (C1), Ghost_207 (C1), Gizmo_213 (C1), Grasshills_215 (C1), Grungle_191 (C1), Guwapp_202 (C1), Halldule_200 (C1), HyRo_195 (C1), I3_217 (C1), IkeLoa_199 (C1), InigoMontoya_210 (C1), InterFolia_210 (C1), Iota_202 (C1), Issimir_200 (C1), Izajani_205 (C1), Janiyra_210 (C1), JayJay_205 (C1), Jedediah_207 (C1), Jemmno_206 (C1), Jessibeth14_207 (C1), JigglyPuff_214 (C1), JustHall_201 (C1), Kamryn_206 (C1), Kboogie_211 (C1), Khaleesi_206 (C1), Koguma_206 (C1), LRRHood_200 (C1), Latch_207 (C1), Lee7_207 (C1), LifeSavor_206 (C1), LinStu_206 (C1), Littleton_210 (C1), Loanshark_204 (C1), LolaVinca_205 (C1), Lukilu_198 (C1), Maby2021_207 (C1), Mangeria_208 (C1), Matsumoto_206 (C1), McGee_206 (C1), McWolfish_204 (C1), Megamind_204 (C1), Melpomini_202 (C1), MikeLiesIn_209 (C1), Mikro_203 (C1), MoMoMixon_205 (C1), Momo_208 (C1), Morizzled23_204 (C1), Naija_208 (C1), Napoleon13_204 (C1), Nappy_208 (C1), Naval22_212 (C1), NedWong_206 (C1), Ngannou_204 (C1), Nidhogg_208 (C1), NoodleTree_213 (C1), Norm_207 (C1), NuevoMundo_210 (C1), ParkTD_206 (C1), Patter_208 (C1), Phlegm_211 (C1), Phox_208 (C1), Phusco_205 (C1), Pier_208

(C1), Pinkcreek_191 (C1), Pio_215 (C1), Pivoine_208 (C1), Pleione_211 (C1), PurduePete_207 (C1), QBert_199 (C1), Quasimodo_209 (C1), Rabinovich_200 (C1), Rahel_208 (C1), RoMag_202 (C1), Ronan_203 (C1), Roots515_209 (C1), Salacia_207 (C1), Sauce_203 (C1), Sebata_208 (C1), Shaqnato_198 (C1), Shelob_208 (C1), ShiaLabeouf_204 (C1), Shifa_184 (C1), Shnickers_205 (C1), Shrimp_209 (C1), SilverDipper_211 (C1), SmallFry_207 (C1), Specks_211 (C1), Sprinklers_205 (C1), SrishMeg2525_204 (C1), StephanieG_203 (C1), StubbySaigey_212 (C1), Stubby_191 (C1), Teardrop_204 (C1), TinyTim_205 (C1), Tonenili_228 (C1), Tortoise16_205 (C1), Trinitium_203 (C1), Turret_200 (C1), Tyke_205 (C1), ValleyTerrace_208 (C1), Wally_205 (C1), Willis_208 (C1), Yassified_204 (C1), YemiJoy2021_208 (C1), YoungMoneyMata_205 (C1), Yucca_207 (C1), Zalkecks_206 (C1), Zeenon_209 (C1), ZygoTaiga_204 (C1),

Start 5:

- Found in 3 of 184 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_151 (DO), Pupper_150 (DO), SCentae_149 (DO),

Start 6:

- Found in 1 of 184 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp152 (singleton),

Start 7:

- Found in 2 of 184 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_77 (DX), Stormageddon_74 (DX),

Start 8:

- Found in 2 of 184 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_75 (singleton), JeanGrey_93 (singleton),

Start 10:

- Found in 1 of 184 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_188 (C2),

Start 12:

- Found in 4 of 184 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Greely_196 (C2), Phabba_201 (C2),

Summary by clusters:

There are 5 clusters represented in this pham: C2, C1, singleton, DX, DO,

Info for manual annotations of cluster C1:

- Start number 4 was manually annotated 158 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 3 was manually annotated 1 time for cluster C2.
- Start number 10 was manually annotated 1 time for cluster C2.
- Start number 12 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster DO:

- Start number 5 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DX:

- Start number 7 was manually annotated 2 times for cluster DX.

Gene Information:

Gene: Ading_208 Start: 111928, Stop: 112716, Start Num: 4

Candidate Starts for Ading_208:

(1, 111823), (2, 111829), (Start: 4 @111928 has 158 MA's), (13, 112114), (17, 112186), (18, 112204), (20, 112222), (22, 112273), (23, 112282), (24, 112291), (40, 112525), (44, 112540), (49, 112579), (50, 112582), (51, 112585), (58, 112654), (59, 112675), (61, 112684),

Gene: Adlitam_206 Start: 110532, Stop: 111320, Start Num: 4

Candidate Starts for Adlitam_206:

(1, 110427), (2, 110433), (Start: 4 @110532 has 158 MA's), (13, 110718), (17, 110790), (18, 110808), (20, 110826), (22, 110877), (23, 110886), (24, 110895), (40, 111129), (44, 111144), (49, 111183), (50, 111186), (51, 111189), (58, 111258), (59, 111279), (61, 111288),

Gene: Alice_194 Start: 110500, Stop: 111288, Start Num: 4

Candidate Starts for Alice_194:

(1, 110395), (2, 110401), (Start: 4 @110500 has 158 MA's), (13, 110686), (17, 110758), (18, 110776), (20, 110794), (22, 110845), (23, 110854), (24, 110863), (40, 111097), (44, 111112), (49, 111151), (50, 111154), (51, 111157), (58, 111226), (59, 111247), (61, 111256),

Gene: Amataga_208 Start: 110344, Stop: 111132, Start Num: 4

Candidate Starts for Amataga_208:

(1, 110239), (2, 110245), (Start: 4 @110344 has 158 MA's), (13, 110530), (17, 110602), (18, 110620), (20, 110638), (22, 110689), (23, 110698), (24, 110707), (40, 110941), (44, 110956), (49, 110995), (50, 110998), (51, 111001), (58, 111070), (59, 111091), (61, 111100),

Gene: Asterius_203 Start: 110753, Stop: 111541, Start Num: 4

Candidate Starts for Asterius_203:

(1, 110648), (2, 110654), (Start: 4 @110753 has 158 MA's), (13, 110939), (17, 111011), (18, 111029), (20, 111047), (22, 111098), (23, 111107), (24, 111116), (40, 111350), (44, 111365), (49, 111404), (50, 111407), (51, 111410), (58, 111479), (59, 111500), (61, 111509),

Gene: Astraea_201 Start: 109948, Stop: 110736, Start Num: 4

Candidate Starts for Astraea_201:

(1, 109843), (2, 109849), (Start: 4 @109948 has 158 MA's), (13, 110134), (17, 110206), (18, 110224), (20, 110242), (22, 110293), (23, 110302), (24, 110311), (40, 110545), (44, 110560), (49, 110599), (50, 110602), (51, 110605), (58, 110674), (59, 110695), (61, 110704),

Gene: Atlantean_207 Start: 110344, Stop: 111132, Start Num: 4

Candidate Starts for Atlantean_207:

(1, 110239), (2, 110245), (Start: 4 @110344 has 158 MA's), (13, 110530), (17, 110602), (18, 110620), (20, 110638), (22, 110689), (23, 110698), (24, 110707), (40, 110941), (44, 110956), (49, 110995), (50, 110998), (51, 111001), (58, 111070), (59, 111091), (61, 111100),

Gene: Audrick_209 Start: 110234, Stop: 111022, Start Num: 4

Candidate Starts for Audrick_209:

(1, 110129), (2, 110135), (Start: 4 @110234 has 158 MA's), (13, 110420), (17, 110492), (18, 110510), (20, 110528), (22, 110579), (23, 110588), (24, 110597), (40, 110831), (44, 110846), (49, 110885), (50, 110888), (51, 110891), (58, 110960), (59, 110981), (61, 110990),

Gene: Ava3_206 Start: 110778, Stop: 111566, Start Num: 4

Candidate Starts for Ava3_206:

(1, 110673), (2, 110679), (Start: 4 @110778 has 158 MA's), (13, 110964), (17, 111036), (18, 111054), (20, 111072), (22, 111123), (23, 111132), (24, 111141), (40, 111375), (44, 111390), (49, 111429), (50, 111432), (51, 111435), (58, 111504), (59, 111525), (61, 111534),

Gene: Babyland_210 Start: 111121, Stop: 111909, Start Num: 4

Candidate Starts for Babyland_210:

(1, 111016), (2, 111022), (Start: 4 @111121 has 158 MA's), (13, 111307), (17, 111379), (18, 111397), (20, 111415), (22, 111466), (23, 111475), (24, 111484), (40, 111718), (44, 111733), (49, 111772), (50, 111775), (51, 111778), (58, 111847), (59, 111868), (61, 111877),

Gene: BackyardAgain_202 Start: 109030, Stop: 109818, Start Num: 4

Candidate Starts for BackyardAgain_202:

(1, 108925), (2, 108931), (Start: 4 @109030 has 158 MA's), (13, 109216), (17, 109288), (18, 109306), (20, 109324), (22, 109375), (23, 109384), (24, 109393), (40, 109627), (44, 109642), (49, 109681), (50, 109684), (51, 109687), (58, 109756), (59, 109777), (61, 109786),

Gene: BadAgartude_201 Start: 110443, Stop: 111231, Start Num: 4

Candidate Starts for BadAgartude_201:

(1, 110338), (2, 110344), (Start: 4 @110443 has 158 MA's), (13, 110629), (17, 110701), (18, 110719), (20, 110737), (22, 110788), (23, 110797), (24, 110806), (40, 111040), (44, 111055), (49, 111094), (50, 111097), (51, 111100), (58, 111169), (59, 111190), (61, 111199),

Gene: BananaFence_204 Start: 110577, Stop: 111365, Start Num: 4

Candidate Starts for BananaFence_204:

(1, 110472), (2, 110478), (Start: 4 @110577 has 158 MA's), (13, 110763), (17, 110835), (18, 110853), (20, 110871), (22, 110922), (23, 110931), (24, 110940), (40, 111174), (44, 111189), (49, 111228), (50, 111231), (51, 111234), (58, 111303), (59, 111324), (61, 111333),

Gene: Basquiat_204 Start: 109856, Stop: 110644, Start Num: 4

Candidate Starts for Basquiat_204:

(1, 109751), (2, 109757), (Start: 4 @109856 has 158 MA's), (13, 110042), (17, 110114), (18, 110132), (20, 110150), (22, 110201), (23, 110210), (24, 110219), (40, 110453), (44, 110468), (49, 110507), (50, 110510), (51, 110513), (58, 110582), (59, 110603), (61, 110612),

Gene: BeanWater_199 Start: 110382, Stop: 111170, Start Num: 4

Candidate Starts for BeanWater_199:

(1, 110277), (2, 110283), (Start: 4 @110382 has 158 MA's), (13, 110568), (17, 110640), (18, 110658), (20, 110676), (22, 110727), (23, 110736), (24, 110745), (40, 110979), (44, 110994), (49, 111033), (50, 111036), (51, 111039), (58, 111108), (59, 111129), (61, 111138),

Gene: BigCity_216 Start: 113953, Stop: 114741, Start Num: 4

Candidate Starts for BigCity_216:

(1, 113848), (2, 113854), (Start: 4 @113953 has 158 MA's), (13, 114139), (17, 114211), (18, 114229), (20, 114247), (22, 114298), (23, 114307), (24, 114316), (36, 114514), (40, 114550), (44, 114565), (49, 114604), (50, 114607), (51, 114610), (58, 114679), (59, 114700), (61, 114709),

Gene: Bigswole_212 Start: 113804, Stop: 114592, Start Num: 4

Candidate Starts for Bigswole_212:

(1, 113699), (2, 113705), (Start: 4 @113804 has 158 MA's), (13, 113990), (17, 114062), (18, 114080), (20, 114098), (22, 114149), (23, 114158), (24, 114167), (40, 114401), (44, 114416), (49, 114455), (50, 114458), (51, 114461), (58, 114530), (59, 114551), (61, 114560),

Gene: Bipolarisk_205 Start: 111047, Stop: 111835, Start Num: 4

Candidate Starts for Bipolarisk_205:

(1, 110942), (2, 110948), (Start: 4 @111047 has 158 MA's), (13, 111233), (17, 111305), (18, 111323), (20, 111341), (22, 111392), (23, 111401), (24, 111410), (40, 111644), (44, 111659), (49, 111698), (50, 111701), (51, 111704), (58, 111773), (59, 111794), (61, 111803),

Gene: Blackbrain_204 Start: 110941, Stop: 111729, Start Num: 4

Candidate Starts for Blackbrain_204:

(1, 110836), (2, 110842), (Start: 4 @110941 has 158 MA's), (13, 111127), (17, 111199), (18, 111217), (20, 111235), (22, 111286), (23, 111295), (24, 111304), (40, 111538), (44, 111553), (49, 111592), (50, 111595), (51, 111598), (58, 111667), (59, 111688), (61, 111697),

Gene: Blackdragon_202 Start: 110680, Stop: 111468, Start Num: 4

Candidate Starts for Blackdragon_202:

(1, 110575), (2, 110581), (Start: 4 @110680 has 158 MA's), (13, 110866), (17, 110938), (18, 110956), (20, 110974), (22, 111025), (23, 111034), (24, 111043), (40, 111277), (44, 111292), (49, 111331), (50, 111334), (51, 111337), (58, 111406), (59, 111427), (61, 111436),

Gene: Blubba_196 Start: 114066, Stop: 114854, Start Num: 4

Candidate Starts for Blubba_196:

(1, 113961), (2, 113967), (Start: 4 @114066 has 158 MA's), (13, 114252), (17, 114324), (18, 114342), (20, 114360), (22, 114411), (23, 114420), (24, 114429), (40, 114663), (44, 114678), (49, 114717), (50, 114720), (51, 114723), (58, 114792), (59, 114813), (61, 114822),

Gene: Bonray_209 Start: 112449, Stop: 113237, Start Num: 4

Candidate Starts for Bonray_209:

(1, 112344), (2, 112350), (Start: 4 @112449 has 158 MA's), (13, 112635), (17, 112707), (18, 112725), (20, 112743), (22, 112794), (23, 112803), (24, 112812), (40, 113046), (44, 113061), (49, 113100), (50, 113103), (51, 113106), (58, 113175), (59, 113196), (61, 113205),

Gene: Bread_202 Start: 110447, Stop: 111235, Start Num: 4

Candidate Starts for Bread_202:

(1, 110342), (2, 110348), (Start: 4 @110447 has 158 MA's), (13, 110633), (17, 110705), (18, 110723), (20, 110741), (22, 110792), (23, 110801), (24, 110810), (40, 111044), (44, 111059), (49, 111098), (50, 111101), (51, 111104), (58, 111173), (59, 111194), (61, 111203),

Gene: Breeniome_206 Start: 109901, Stop: 110689, Start Num: 4

Candidate Starts for Breeniome_206:

(1, 109796), (2, 109802), (Start: 4 @109901 has 158 MA's), (13, 110087), (17, 110159), (18, 110177), (20, 110195), (22, 110246), (23, 110255), (24, 110264), (40, 110498), (44, 110513), (49, 110552), (50, 110555), (51, 110558), (58, 110627), (59, 110648), (61, 110657),

Gene: Burrough_209 Start: 112217, Stop: 113005, Start Num: 4

Candidate Starts for Burrough_209:

(1, 112112), (2, 112118), (Start: 4 @112217 has 158 MA's), (13, 112403), (17, 112475), (18, 112493), (20, 112511), (22, 112562), (23, 112571), (24, 112580), (40, 112814), (44, 112829), (49, 112868), (50, 112871), (51, 112874), (58, 112943), (59, 112964), (61, 112973),

Gene: Cactojaque_202 Start: 109876, Stop: 110664, Start Num: 4

Candidate Starts for Cactojaque_202:

(1, 109771), (2, 109777), (Start: 4 @109876 has 158 MA's), (13, 110062), (17, 110134), (18, 110152), (20, 110170), (22, 110221), (23, 110230), (24, 110239), (40, 110473), (44, 110488), (49, 110527), (50, 110530), (51, 110533), (58, 110602), (59, 110623), (61, 110632),

Gene: Cane17_198 Start: 114475, Stop: 115263, Start Num: 4

Candidate Starts for Cane17_198:

(1, 114370), (2, 114376), (Start: 4 @114475 has 158 MA's), (13, 114661), (17, 114733), (18, 114751), (20, 114769), (22, 114820), (23, 114829), (24, 114838), (40, 115072), (44, 115087), (49, 115126), (50, 115129), (51, 115132), (58, 115201), (59, 115222), (61, 115231),

Gene: Capablanca_212 Start: 113044, Stop: 113832, Start Num: 4

Candidate Starts for Capablanca_212:

(1, 112939), (2, 112945), (Start: 4 @113044 has 158 MA's), (13, 113230), (17, 113302), (18, 113320), (20, 113338), (22, 113389), (23, 113398), (24, 113407), (40, 113641), (44, 113656), (49, 113695), (50, 113698), (51, 113701), (58, 113770), (59, 113791), (61, 113800),

Gene: Caravan_198 Start: 111164, Stop: 111952, Start Num: 4

Candidate Starts for Caravan_198:

(1, 111059), (2, 111065), (Start: 4 @111164 has 158 MA's), (13, 111350), (17, 111422), (18, 111440), (20, 111458), (22, 111509), (23, 111518), (24, 111527), (40, 111761), (44, 111776), (49, 111815), (50, 111818), (51, 111821), (58, 111890), (59, 111911), (61, 111920),

Gene: Chargie21_204 Start: 109856, Stop: 110644, Start Num: 4

Candidate Starts for Chargie21_204:

(1, 109751), (2, 109757), (Start: 4 @109856 has 158 MA's), (13, 110042), (17, 110114), (18, 110132), (20, 110150), (22, 110201), (23, 110210), (24, 110219), (40, 110453), (44, 110468), (49, 110507), (50, 110510), (51, 110513), (58, 110582), (59, 110603), (61, 110612),

Gene: CharlieB_201 Start: 110584, Stop: 111372, Start Num: 4

Candidate Starts for CharlieB_201:

(1, 110479), (2, 110485), (Start: 4 @110584 has 158 MA's), (13, 110770), (17, 110842), (18, 110860), (20, 110878), (22, 110929), (23, 110938), (24, 110947), (40, 111181), (44, 111196), (49, 111235), (50, 111238), (51, 111241), (58, 111310), (59, 111331), (61, 111340),

Gene: ChaylaJr_204 Start: 110284, Stop: 111072, Start Num: 4

Candidate Starts for ChaylaJr_204:

(1, 110179), (2, 110185), (Start: 4 @110284 has 158 MA's), (13, 110470), (17, 110542), (18, 110560), (20, 110578), (22, 110629), (23, 110638), (24, 110647), (40, 110881), (44, 110896), (49, 110935), (50, 110938), (51, 110941), (58, 111010), (59, 111031), (61, 111040),

Gene: CherryTomatoes_151 Start: 104131, Stop: 104805, Start Num: 5

Candidate Starts for CherryTomatoes_151:

(Start: 5 @104131 has 3 MA's), (13, 104281), (14, 104311), (26, 104473), (34, 104623), (37, 104647), (41, 104683), (47, 104725), (50, 104734), (56, 104794), (57, 104797),

Gene: ChickenPhender_203 Start: 110003, Stop: 110791, Start Num: 4

Candidate Starts for ChickenPhender_203:

(1, 109898), (2, 109904), (Start: 4 @110003 has 158 MA's), (13, 110189), (17, 110261), (18, 110279), (20, 110297), (22, 110348), (23, 110357), (24, 110366), (40, 110600), (44, 110615), (49, 110654), (50, 110657), (51, 110660), (58, 110729), (59, 110750), (61, 110759),

Gene: Chomp_207 Start: 111633, Stop: 112421, Start Num: 4

Candidate Starts for Chomp_207:

(1, 111528), (2, 111534), (Start: 4 @111633 has 158 MA's), (13, 111819), (17, 111891), (18, 111909), (20, 111927), (22, 111978), (23, 111987), (24, 111996), (40, 112230), (44, 112245), (49, 112284), (50, 112287), (51, 112290), (58, 112359), (59, 112380), (61, 112389),

Gene: CindyLou_208 Start: 111893, Stop: 112681, Start Num: 4

Candidate Starts for CindyLou_208:

(1, 111788), (2, 111794), (Start: 4 @111893 has 158 MA's), (13, 112079), (17, 112151), (18, 112169), (20, 112187), (22, 112238), (23, 112247), (24, 112256), (40, 112490), (44, 112505), (49, 112544), (50, 112547), (51, 112550), (58, 112619), (59, 112640), (61, 112649),

Gene: Colt_198 Start: 113706, Stop: 114494, Start Num: 4

Candidate Starts for Colt_198:

(1, 113601), (2, 113607), (Start: 4 @113706 has 158 MA's), (13, 113892), (17, 113964), (18, 113982), (20, 114000), (22, 114051), (23, 114060), (24, 114069), (40, 114303), (44, 114318), (49, 114357), (50, 114360), (51, 114363), (58, 114432), (59, 114453), (61, 114462),

Gene: Concombre_212 Start: 113496, Stop: 114284, Start Num: 4

Candidate Starts for Concombre_212:

(1, 113391), (2, 113397), (Start: 4 @113496 has 158 MA's), (13, 113682), (17, 113754), (18, 113772), (20, 113790), (22, 113841), (23, 113850), (24, 113859), (40, 114093), (44, 114108), (49, 114147), (50, 114150), (51, 114153), (58, 114222), (59, 114243), (61, 114252),

Gene: Daffodil_212 Start: 111347, Stop: 112135, Start Num: 4

Candidate Starts for Daffodil_212:

(1, 111242), (2, 111248), (Start: 4 @111347 has 158 MA's), (13, 111533), (17, 111605), (18, 111623), (20, 111641), (22, 111692), (23, 111701), (24, 111710), (40, 111944), (44, 111959), (49, 111998), (50, 112001), (51, 112004), (58, 112073), (59, 112094), (61, 112103),

Gene: Dandelion_215 Start: 114980, Stop: 115768, Start Num: 4

Candidate Starts for Dandelion_215:

(1, 114875), (2, 114881), (Start: 4 @114980 has 158 MA's), (13, 115166), (17, 115238), (18, 115256), (20, 115274), (22, 115325), (23, 115334), (24, 115343), (40, 115577), (44, 115592), (49, 115631), (50, 115634), (51, 115637), (58, 115706), (59, 115727), (61, 115736),

Gene: Darko_206 Start: 110581, Stop: 111369, Start Num: 4

Candidate Starts for Darko_206:

(1, 110476), (2, 110482), (Start: 4 @110581 has 158 MA's), (13, 110767), (17, 110839), (18, 110857), (20, 110875), (22, 110926), (23, 110935), (24, 110944), (40, 111178), (44, 111193), (49, 111232), (50, 111235), (51, 111238), (58, 111307), (59, 111328), (61, 111337),

Gene: Delilah_205 Start: 111465, Stop: 112253, Start Num: 4

Candidate Starts for Delilah_205:

(1, 111360), (2, 111366), (Start: 4 @111465 has 158 MA's), (13, 111651), (17, 111723), (18, 111741), (20, 111759), (22, 111810), (23, 111819), (24, 111828), (40, 112062), (44, 112077), (49, 112116), (50, 112119), (51, 112122), (58, 112191), (59, 112212), (61, 112221),

Gene: Delylah_209 Start: 111754, Stop: 112542, Start Num: 4

Candidate Starts for Delylah_209:

(1, 111649), (2, 111655), (Start: 4 @111754 has 158 MA's), (13, 111940), (17, 112012), (18, 112030), (20, 112048), (22, 112099), (23, 112108), (24, 112117), (40, 112351), (44, 112366), (49, 112405), (50, 112408), (51, 112411), (58, 112480), (59, 112501), (61, 112510),

Gene: Demodog_213 Start: 113506, Stop: 114294, Start Num: 4

Candidate Starts for Demodog_213:

(1, 113401), (2, 113407), (Start: 4 @113506 has 158 MA's), (13, 113692), (17, 113764), (18, 113782), (20, 113800), (22, 113851), (23, 113860), (24, 113869), (40, 114103), (44, 114118), (49, 114157), (50, 114160), (51, 114163), (58, 114232), (59, 114253), (61, 114262),

Gene: Derek_204 Start: 110910, Stop: 111698, Start Num: 4

Candidate Starts for Derek_204:

(1, 110805), (2, 110811), (Start: 4 @110910 has 158 MA's), (13, 111096), (17, 111168), (18, 111186), (20, 111204), (22, 111255), (23, 111264), (24, 111273), (40, 111507), (44, 111522), (49, 111561), (50, 111564), (51, 111567), (58, 111636), (59, 111657), (61, 111666),

Gene: Dietrick_196 Start: 109586, Stop: 110374, Start Num: 4

Candidate Starts for Dietrick_196:

(1, 109481), (2, 109487), (Start: 4 @109586 has 158 MA's), (13, 109772), (17, 109844), (18, 109862), (20, 109880), (22, 109931), (23, 109940), (24, 109949), (40, 110183), (44, 110198), (49, 110237), (50, 110240), (51, 110243), (58, 110312), (59, 110333), (61, 110342),

Gene: DirtMonster_200 Start: 110826, Stop: 111614, Start Num: 4

Candidate Starts for DirtMonster_200:

(1, 110721), (2, 110727), (Start: 4 @110826 has 158 MA's), (13, 111012), (17, 111084), (18, 111102), (20, 111120), (22, 111171), (23, 111180), (24, 111189), (40, 111423), (44, 111438), (49, 111477), (50, 111480), (51, 111483), (58, 111552), (59, 111573), (61, 111582),

Gene: Domi_201 Start: 110937, Stop: 111725, Start Num: 4

Candidate Starts for Domi_201:

(1, 110832), (2, 110838), (Start: 4 @110937 has 158 MA's), (13, 111123), (17, 111195), (18, 111213), (20, 111231), (22, 111282), (23, 111291), (24, 111300), (40, 111534), (44, 111549), (49, 111588), (50, 111591), (51, 111594), (58, 111663), (59, 111684), (61, 111693),

Gene: DrPhinkDaddy_204 Start: 112125, Stop: 112913, Start Num: 4

Candidate Starts for DrPhinkDaddy_204:

(1, 112020), (2, 112026), (Start: 4 @112125 has 158 MA's), (13, 112311), (17, 112383), (18, 112401), (20, 112419), (22, 112470), (23, 112479), (24, 112488), (40, 112722), (44, 112737), (49, 112776), (50, 112779), (51, 112782), (58, 112851), (59, 112872), (61, 112881),

Gene: Drazdys_205 Start: 111027, Stop: 111815, Start Num: 4

Candidate Starts for Drazdys_205:

(1, 110922), (2, 110928), (Start: 4 @111027 has 158 MA's), (13, 111213), (17, 111285), (18, 111303), (20, 111321), (22, 111372), (23, 111381), (24, 111390), (40, 111624), (44, 111639), (49, 111678), (50,

111681), (51, 111684), (58, 111753), (59, 111774), (61, 111783),

Gene: E3_gp152 Start: 101849, Stop: 102472, Start Num: 6

Candidate Starts for E3_gp152:

(6, 101849), (11, 101966), (20, 102098), (26, 102182), (30, 102221), (39, 102326), (53, 102422), (54, 102437),

Gene: EasyJones_210 Start: 111099, Stop: 111887, Start Num: 4

Candidate Starts for EasyJones_210:

(1, 110994), (2, 111000), (Start: 4 @111099 has 158 MA's), (13, 111285), (17, 111357), (18, 111375), (20, 111393), (22, 111444), (23, 111453), (24, 111462), (40, 111696), (44, 111711), (49, 111750), (50, 111753), (51, 111756), (58, 111825), (59, 111846), (61, 111855),

Gene: EggyFarm_216 Start: 113954, Stop: 114742, Start Num: 4

Candidate Starts for EggyFarm_216:

(1, 113849), (2, 113855), (Start: 4 @113954 has 158 MA's), (13, 114140), (17, 114212), (18, 114230), (20, 114248), (22, 114299), (23, 114308), (24, 114317), (36, 114515), (40, 114551), (44, 114566), (49, 114605), (50, 114608), (51, 114611), (58, 114680), (59, 114701), (61, 114710),

Gene: EmToTheThree_207 Start: 111498, Stop: 112286, Start Num: 4

Candidate Starts for EmToTheThree_207:

(1, 111393), (2, 111399), (Start: 4 @111498 has 158 MA's), (13, 111684), (17, 111756), (18, 111774), (20, 111792), (22, 111843), (23, 111852), (24, 111861), (40, 112095), (44, 112110), (49, 112149), (50, 112152), (51, 112155), (58, 112224), (59, 112245), (61, 112254),

Gene: EmmaElysia_210 Start: 111517, Stop: 112305, Start Num: 4

Candidate Starts for EmmaElysia_210:

(1, 111412), (2, 111418), (Start: 4 @111517 has 158 MA's), (13, 111703), (17, 111775), (18, 111793), (20, 111811), (22, 111862), (23, 111871), (24, 111880), (40, 112114), (44, 112129), (49, 112168), (50, 112171), (51, 112174), (58, 112243), (59, 112264), (61, 112273),

Gene: Erdmann_208 Start: 111456, Stop: 112244, Start Num: 4

Candidate Starts for Erdmann_208:

(1, 111351), (2, 111357), (Start: 4 @111456 has 158 MA's), (13, 111642), (17, 111714), (18, 111732), (20, 111750), (22, 111801), (23, 111810), (24, 111819), (40, 112053), (44, 112068), (49, 112107), (50, 112110), (51, 112113), (58, 112182), (59, 112203), (61, 112212),

Gene: ErnieJ_200 Start: 109278, Stop: 110066, Start Num: 4

Candidate Starts for ErnieJ_200:

(1, 109173), (2, 109179), (Start: 4 @109278 has 158 MA's), (13, 109464), (17, 109536), (18, 109554), (20, 109572), (22, 109623), (23, 109632), (24, 109641), (40, 109875), (44, 109890), (49, 109929), (50, 109932), (51, 109935), (58, 110004), (59, 110025), (61, 110034),

Gene: Essence_204 Start: 110239, Stop: 111027, Start Num: 4

Candidate Starts for Essence_204:

(1, 110134), (2, 110140), (Start: 4 @110239 has 158 MA's), (13, 110425), (17, 110497), (18, 110515), (20, 110533), (22, 110584), (23, 110593), (24, 110602), (40, 110836), (44, 110851), (49, 110890), (50, 110893), (51, 110896), (58, 110965), (59, 110986), (61, 110995),

Gene: Ewok_206 Start: 111375, Stop: 112163, Start Num: 4

Candidate Starts for Ewok_206:

(1, 111270), (2, 111276), (Start: 4 @111375 has 158 MA's), (13, 111561), (17, 111633), (18, 111651), (20, 111669), (22, 111720), (23, 111729), (24, 111738), (40, 111972), (44, 111987), (49, 112026), (50,

112029), (51, 112032), (58, 112101), (59, 112122), (61, 112131),

Gene: Finch_75 Start: 63700, Stop: 64284, Start Num: 8

Candidate Starts for Finch_75:

(Start: 8 @63700 has 1 MA's), (9, 63724), (Start: 12 @63808 has 1 MA's), (15, 63859), (21, 63937), (23, 63991), (27, 64024), (28, 64027),

Gene: Flabslab_202 Start: 109420, Stop: 110208, Start Num: 4

Candidate Starts for Flabslab_202:

(1, 109315), (2, 109321), (Start: 4 @109420 has 158 MA's), (13, 109606), (17, 109678), (18, 109696), (20, 109714), (22, 109765), (23, 109774), (24, 109783), (40, 110017), (44, 110032), (49, 110071), (50, 110074), (51, 110077), (58, 110146), (59, 110167), (61, 110176),

Gene: Fludd_207 Start: 110811, Stop: 111599, Start Num: 4

Candidate Starts for Fludd_207:

(1, 110706), (2, 110712), (Start: 4 @110811 has 158 MA's), (13, 110997), (17, 111069), (18, 111087), (20, 111105), (22, 111156), (23, 111165), (24, 111174), (40, 111408), (44, 111423), (49, 111462), (50, 111465), (51, 111468), (58, 111537), (59, 111558), (61, 111567),

Gene: FoxtrotP1_205 Start: 112055, Stop: 112843, Start Num: 4

Candidate Starts for FoxtrotP1_205:

(1, 111950), (2, 111956), (Start: 4 @112055 has 158 MA's), (13, 112241), (17, 112313), (18, 112331), (20, 112349), (22, 112400), (23, 112409), (24, 112418), (40, 112652), (44, 112667), (49, 112706), (50, 112709), (51, 112712), (58, 112781), (59, 112802), (61, 112811),

Gene: FrayBell_210 Start: 110900, Stop: 111688, Start Num: 4

Candidate Starts for FrayBell_210:

(1, 110795), (2, 110801), (Start: 4 @110900 has 158 MA's), (13, 111086), (17, 111158), (18, 111176), (20, 111194), (22, 111245), (23, 111254), (24, 111263), (40, 111497), (44, 111512), (49, 111551), (50, 111554), (51, 111557), (58, 111626), (59, 111647), (61, 111656),

Gene: FudgeTart_202 Start: 110522, Stop: 111310, Start Num: 4

Candidate Starts for FudgeTart_202:

(1, 110417), (2, 110423), (Start: 4 @110522 has 158 MA's), (13, 110708), (17, 110780), (18, 110798), (20, 110816), (22, 110867), (23, 110876), (24, 110885), (40, 111119), (44, 111134), (49, 111173), (50, 111176), (51, 111179), (58, 111248), (59, 111269), (61, 111278),

Gene: Gabriel_210 Start: 109977, Stop: 110765, Start Num: 4

Candidate Starts for Gabriel_210:

(1, 109872), (2, 109878), (Start: 4 @109977 has 158 MA's), (13, 110163), (17, 110235), (18, 110253), (20, 110271), (22, 110322), (23, 110331), (24, 110340), (40, 110574), (44, 110589), (49, 110628), (50, 110631), (51, 110634), (58, 110703), (59, 110724), (61, 110733),

Gene: Gamgam_208 Start: 110334, Stop: 111122, Start Num: 4

Candidate Starts for Gamgam_208:

(1, 110229), (2, 110235), (Start: 4 @110334 has 158 MA's), (13, 110520), (17, 110592), (18, 110610), (20, 110628), (22, 110679), (23, 110688), (24, 110697), (40, 110931), (49, 110985), (50, 110988), (51, 110991), (58, 111060), (59, 111081), (61, 111090),

Gene: Ghost_207 Start: 110255, Stop: 111043, Start Num: 4

Candidate Starts for Ghost_207:

(1, 110150), (2, 110156), (Start: 4 @110255 has 158 MA's), (13, 110441), (17, 110513), (18, 110531), (20, 110549), (22, 110600), (23, 110609), (24, 110618), (40, 110852), (44, 110867), (49, 110906), (50,

110909), (51, 110912), (58, 110981), (59, 111002), (61, 111011),

Gene: Gizmo_213 Start: 113373, Stop: 114161, Start Num: 4

Candidate Starts for Gizmo_213:

(1, 113268), (2, 113274), (Start: 4 @113373 has 158 MA's), (13, 113559), (17, 113631), (18, 113649), (20, 113667), (22, 113718), (23, 113727), (24, 113736), (40, 113970), (44, 113985), (49, 114024), (50, 114027), (51, 114030), (58, 114099), (59, 114120), (61, 114129),

Gene: Grasshills_215 Start: 113953, Stop: 114741, Start Num: 4

Candidate Starts for Grasshills_215:

(1, 113848), (2, 113854), (Start: 4 @113953 has 158 MA's), (13, 114139), (17, 114211), (18, 114229), (20, 114247), (22, 114298), (23, 114307), (24, 114316), (36, 114514), (40, 114550), (44, 114565), (49, 114604), (50, 114607), (51, 114610), (58, 114679), (59, 114700), (61, 114709),

Gene: Greely_196 Start: 108382, Stop: 108978, Start Num: 12

Candidate Starts for Greely_196:

(Start: 3 @108208 has 1 MA's), (Start: 12 @108382 has 1 MA's), (18, 108490), (21, 108514), (23, 108568), (24, 108577), (32, 108673), (33, 108721), (37, 108757), (38, 108760), (42, 108796), (51, 108847), (60, 108940), (62, 108964),

Gene: Grungle_191 Start: 108292, Stop: 109080, Start Num: 4

Candidate Starts for Grungle_191:

(1, 108187), (2, 108193), (Start: 4 @108292 has 158 MA's), (13, 108478), (17, 108550), (18, 108568), (20, 108586), (22, 108637), (23, 108646), (24, 108655), (40, 108889), (44, 108904), (49, 108943), (50, 108946), (51, 108949), (58, 109018), (59, 109039), (61, 109048),

Gene: Guwapp_202 Start: 109089, Stop: 109877, Start Num: 4

Candidate Starts for Guwapp_202:

(1, 108984), (2, 108990), (Start: 4 @109089 has 158 MA's), (13, 109275), (17, 109347), (18, 109365), (20, 109383), (22, 109434), (23, 109443), (24, 109452), (40, 109686), (44, 109701), (49, 109740), (50, 109743), (51, 109746), (58, 109815), (59, 109836), (61, 109845),

Gene: Halldule_200 Start: 109474, Stop: 110262, Start Num: 4

Candidate Starts for Halldule_200:

(1, 109369), (2, 109375), (Start: 4 @109474 has 158 MA's), (13, 109660), (17, 109732), (18, 109750), (20, 109768), (22, 109819), (23, 109828), (24, 109837), (40, 110071), (44, 110086), (49, 110125), (50, 110128), (51, 110131), (58, 110200), (59, 110221), (61, 110230),

Gene: HyRo_195 Start: 110598, Stop: 111386, Start Num: 4

Candidate Starts for HyRo_195:

(1, 110493), (2, 110499), (Start: 4 @110598 has 158 MA's), (13, 110784), (17, 110856), (18, 110874), (20, 110892), (22, 110943), (23, 110952), (24, 110961), (40, 111195), (44, 111210), (49, 111249), (50, 111252), (51, 111255), (58, 111324), (59, 111345), (61, 111354),

Gene: I3_217 Start: 113334, Stop: 114122, Start Num: 4

Candidate Starts for I3_217:

(1, 113229), (2, 113235), (Start: 4 @113334 has 158 MA's), (13, 113520), (17, 113592), (18, 113610), (20, 113628), (22, 113679), (23, 113688), (24, 113697), (40, 113931), (44, 113946), (49, 113985), (50, 113988), (51, 113991), (58, 114060), (59, 114081), (61, 114090),

Gene: IkeLoa_199 Start: 109996, Stop: 110784, Start Num: 4

Candidate Starts for IkeLoa_199:

(1, 109891), (2, 109897), (Start: 4 @109996 has 158 MA's), (13, 110182), (17, 110254), (18, 110272), (20, 110290), (22, 110341), (23, 110350), (24, 110359), (40, 110593), (44, 110608), (49, 110647), (50, 110650), (51, 110653), (58, 110722), (59, 110743), (61, 110752),

Gene: InigoMontoya_210 Start: 111008, Stop: 111796, Start Num: 4

Candidate Starts for InigoMontoya_210:

(1, 110903), (2, 110909), (Start: 4 @111008 has 158 MA's), (13, 111194), (17, 111266), (18, 111284), (20, 111302), (22, 111353), (23, 111362), (24, 111371), (40, 111605), (44, 111620), (49, 111659), (50, 111662), (51, 111665), (58, 111734), (59, 111755), (61, 111764),

Gene: InterFolia_210 Start: 112706, Stop: 113494, Start Num: 4

Candidate Starts for InterFolia_210:

(1, 112601), (2, 112607), (Start: 4 @112706 has 158 MA's), (13, 112892), (17, 112964), (18, 112982), (20, 113000), (22, 113051), (23, 113060), (24, 113069), (40, 113303), (44, 113318), (49, 113357), (50, 113360), (51, 113363), (58, 113432), (59, 113453), (61, 113462),

Gene: Iota_202 Start: 110693, Stop: 111481, Start Num: 4

Candidate Starts for Iota_202:

(1, 110588), (2, 110594), (Start: 4 @110693 has 158 MA's), (13, 110879), (17, 110951), (18, 110969), (20, 110987), (22, 111038), (23, 111047), (24, 111056), (40, 111290), (44, 111305), (49, 111344), (50, 111347), (51, 111350), (58, 111419), (59, 111440), (61, 111449),

Gene: Issimir_200 Start: 110646, Stop: 111434, Start Num: 4

Candidate Starts for Issimir_200:

(1, 110541), (2, 110547), (Start: 4 @110646 has 158 MA's), (13, 110832), (17, 110904), (18, 110922), (20, 110940), (22, 110991), (23, 111000), (24, 111009), (40, 111243), (44, 111258), (49, 111297), (50, 111300), (51, 111303), (58, 111372), (59, 111393), (61, 111402),

Gene: Izajani_205 Start: 111515, Stop: 112303, Start Num: 4

Candidate Starts for Izajani_205:

(1, 111410), (2, 111416), (Start: 4 @111515 has 158 MA's), (13, 111701), (17, 111773), (18, 111791), (20, 111809), (22, 111860), (23, 111869), (24, 111878), (40, 112112), (44, 112127), (49, 112166), (50, 112169), (51, 112172), (58, 112241), (59, 112262), (61, 112271),

Gene: Janiyra_210 Start: 111233, Stop: 112021, Start Num: 4

Candidate Starts for Janiyra_210:

(1, 111128), (2, 111134), (Start: 4 @111233 has 158 MA's), (13, 111419), (17, 111491), (18, 111509), (20, 111527), (22, 111578), (23, 111587), (24, 111596), (40, 111830), (44, 111845), (49, 111884), (50, 111887), (51, 111890), (58, 111959), (59, 111980), (61, 111989),

Gene: JayJay_205 Start: 111930, Stop: 112718, Start Num: 4

Candidate Starts for JayJay_205:

(1, 111825), (2, 111831), (Start: 4 @111930 has 158 MA's), (13, 112116), (17, 112188), (18, 112206), (20, 112224), (22, 112275), (23, 112284), (24, 112293), (40, 112527), (44, 112542), (49, 112581), (50, 112584), (51, 112587), (58, 112656), (59, 112677), (61, 112686),

Gene: JeanGrey_93 Start: 73402, Stop: 73989, Start Num: 8

Candidate Starts for JeanGrey_93:

(Start: 8 @73402 has 1 MA's), (29, 73726), (48, 73906),

Gene: Jedediah_207 Start: 111107, Stop: 111895, Start Num: 4

Candidate Starts for Jedediah_207:

(1, 111002), (2, 111008), (Start: 4 @111107 has 158 MA's), (13, 111293), (17, 111365), (18, 111383), (20, 111401), (22, 111452), (23, 111461), (24, 111470), (40, 111704), (44, 111719), (49, 111758), (50, 111761), (51, 111764), (58, 111833), (59, 111854), (61, 111863),

Gene: Jemmno_206 Start: 109936, Stop: 110724, Start Num: 4

Candidate Starts for Jemmno_206:

(1, 109831), (2, 109837), (Start: 4 @109936 has 158 MA's), (13, 110122), (17, 110194), (18, 110212), (20, 110230), (22, 110281), (23, 110290), (24, 110299), (40, 110533), (44, 110548), (49, 110587), (50, 110590), (51, 110593), (58, 110662), (59, 110683), (61, 110692),

Gene: Jessibeth14_207 Start: 112124, Stop: 112912, Start Num: 4

Candidate Starts for Jessibeth14_207:

(1, 112019), (2, 112025), (Start: 4 @112124 has 158 MA's), (13, 112310), (17, 112382), (18, 112400), (20, 112418), (22, 112469), (23, 112478), (24, 112487), (40, 112721), (44, 112736), (49, 112775), (50, 112778), (51, 112781), (58, 112850), (59, 112871), (61, 112880),

Gene: JigglyPuff_214 Start: 113504, Stop: 114292, Start Num: 4

Candidate Starts for JigglyPuff_214:

(1, 113399), (2, 113405), (Start: 4 @113504 has 158 MA's), (13, 113690), (17, 113762), (18, 113780), (20, 113798), (22, 113849), (23, 113858), (24, 113867), (40, 114101), (44, 114116), (49, 114155), (50, 114158), (51, 114161), (58, 114230), (59, 114251), (61, 114260),

Gene: JustHall_201 Start: 110140, Stop: 110928, Start Num: 4

Candidate Starts for JustHall_201:

(1, 110035), (2, 110041), (Start: 4 @110140 has 158 MA's), (13, 110326), (17, 110398), (18, 110416), (20, 110434), (22, 110485), (23, 110494), (24, 110503), (40, 110737), (44, 110752), (49, 110791), (50, 110794), (51, 110797), (58, 110866), (59, 110887), (61, 110896),

Gene: Kamryn_206 Start: 111770, Stop: 112558, Start Num: 4

Candidate Starts for Kamryn_206:

(1, 111665), (2, 111671), (Start: 4 @111770 has 158 MA's), (13, 111956), (17, 112028), (18, 112046), (20, 112064), (22, 112115), (23, 112124), (24, 112133), (40, 112367), (44, 112382), (49, 112421), (50, 112424), (51, 112427), (58, 112496), (59, 112517), (61, 112526),

Gene: Kboogie_211 Start: 110798, Stop: 111586, Start Num: 4

Candidate Starts for Kboogie_211:

(1, 110693), (2, 110699), (Start: 4 @110798 has 158 MA's), (13, 110984), (17, 111056), (18, 111074), (20, 111092), (22, 111143), (23, 111152), (24, 111161), (40, 111395), (44, 111410), (49, 111449), (50, 111452), (51, 111455), (58, 111524), (59, 111545), (61, 111554),

Gene: Khaleesi_206 Start: 111591, Stop: 112379, Start Num: 4

Candidate Starts for Khaleesi_206:

(1, 111486), (2, 111492), (Start: 4 @111591 has 158 MA's), (13, 111777), (17, 111849), (18, 111867), (20, 111885), (22, 111936), (23, 111945), (24, 111954), (40, 112188), (44, 112203), (49, 112242), (50, 112245), (51, 112248), (58, 112317), (59, 112338), (61, 112347),

Gene: Koguma_206 Start: 110451, Stop: 111239, Start Num: 4

Candidate Starts for Koguma_206:

(1, 110346), (2, 110352), (Start: 4 @110451 has 158 MA's), (13, 110637), (17, 110709), (18, 110727), (20, 110745), (22, 110796), (23, 110805), (24, 110814), (40, 111048), (44, 111063), (49, 111102), (50, 111105), (51, 111108), (58, 111177), (59, 111198), (61, 111207),

Gene: LRRHood_200 Start: 110796, Stop: 111584, Start Num: 4

Candidate Starts for LRRHood_200:

(1, 110691), (2, 110697), (Start: 4 @110796 has 158 MA's), (13, 110982), (17, 111054), (18, 111072), (20, 111090), (22, 111141), (23, 111150), (24, 111159), (40, 111393), (44, 111408), (49, 111447), (50, 111450), (51, 111453), (58, 111522), (59, 111543), (61, 111552),

Gene: Latch_207 Start: 110344, Stop: 111132, Start Num: 4

Candidate Starts for Latch_207:

(1, 110239), (2, 110245), (Start: 4 @110344 has 158 MA's), (13, 110530), (17, 110602), (18, 110620), (20, 110638), (22, 110689), (23, 110698), (24, 110707), (40, 110941), (44, 110956), (49, 110995), (50, 110998), (51, 111001), (58, 111070), (59, 111091), (61, 111100),

Gene: Lee7_207 Start: 112971, Stop: 113759, Start Num: 4

Candidate Starts for Lee7_207:

(1, 112866), (2, 112872), (Start: 4 @112971 has 158 MA's), (13, 113157), (17, 113229), (18, 113247), (20, 113265), (22, 113316), (23, 113325), (24, 113334), (40, 113568), (44, 113583), (49, 113622), (50, 113625), (51, 113628), (58, 113697), (59, 113718), (61, 113727),

Gene: LifeSavor_206 Start: 110869, Stop: 111657, Start Num: 4

Candidate Starts for LifeSavor_206:

(1, 110764), (2, 110770), (Start: 4 @110869 has 158 MA's), (13, 111055), (17, 111127), (18, 111145), (20, 111163), (22, 111214), (23, 111223), (24, 111232), (40, 111466), (44, 111481), (49, 111520), (50, 111523), (51, 111526), (58, 111595), (59, 111616), (61, 111625),

Gene: LinStu_206 Start: 111083, Stop: 111871, Start Num: 4

Candidate Starts for LinStu_206:

(1, 110978), (2, 110984), (Start: 4 @111083 has 158 MA's), (13, 111269), (17, 111341), (18, 111359), (20, 111377), (22, 111428), (23, 111437), (24, 111446), (40, 111680), (44, 111695), (49, 111734), (50, 111737), (51, 111740), (58, 111809), (59, 111830), (61, 111839),

Gene: Littleton_210 Start: 111581, Stop: 112369, Start Num: 4

Candidate Starts for Littleton_210:

(1, 111476), (2, 111482), (Start: 4 @111581 has 158 MA's), (13, 111767), (17, 111839), (18, 111857), (20, 111875), (22, 111926), (23, 111935), (24, 111944), (40, 112178), (44, 112193), (49, 112232), (50, 112235), (51, 112238), (58, 112307), (59, 112328), (61, 112337),

Gene: Loanshark_204 Start: 110906, Stop: 111694, Start Num: 4

Candidate Starts for Loanshark_204:

(1, 110801), (2, 110807), (Start: 4 @110906 has 158 MA's), (13, 111092), (17, 111164), (18, 111182), (20, 111200), (22, 111251), (23, 111260), (24, 111269), (40, 111503), (44, 111518), (49, 111557), (50, 111560), (51, 111563), (58, 111632), (59, 111653), (61, 111662),

Gene: LolaVinca_205 Start: 112136, Stop: 112924, Start Num: 4

Candidate Starts for LolaVinca_205:

(1, 112031), (2, 112037), (Start: 4 @112136 has 158 MA's), (13, 112322), (17, 112394), (18, 112412), (20, 112430), (22, 112481), (23, 112490), (24, 112499), (40, 112733), (44, 112748), (49, 112787), (50, 112790), (51, 112793), (58, 112862), (59, 112883), (61, 112892),

Gene: Lukilu_198 Start: 111806, Stop: 112594, Start Num: 4

Candidate Starts for Lukilu_198:

(1, 111701), (2, 111707), (Start: 4 @111806 has 158 MA's), (13, 111992), (17, 112064), (18, 112082), (20, 112100), (22, 112151), (23, 112160), (24, 112169), (40, 112403), (44, 112418), (49, 112457), (50, 112460), (51, 112463), (58, 112532), (59, 112553), (61, 112562),

Gene: Maby2021_207 Start: 112035, Stop: 112823, Start Num: 4

Candidate Starts for Maby2021_207:

(1, 111930), (2, 111936), (Start: 4 @112035 has 158 MA's), (13, 112221), (17, 112293), (18, 112311), (20, 112329), (22, 112380), (23, 112389), (24, 112398), (40, 112632), (44, 112647), (49, 112686), (50, 112689), (51, 112692), (58, 112761), (59, 112782), (61, 112791),

Gene: Mangeria_208 Start: 112137, Stop: 112925, Start Num: 4

Candidate Starts for Mangeria_208:

(1, 112032), (2, 112038), (Start: 4 @112137 has 158 MA's), (13, 112323), (17, 112395), (18, 112413), (20, 112431), (22, 112482), (23, 112491), (24, 112500), (40, 112734), (44, 112749), (49, 112788), (50, 112791), (51, 112794), (58, 112863), (59, 112884), (61, 112893),

Gene: Matsumoto_206 Start: 110786, Stop: 111574, Start Num: 4

Candidate Starts for Matsumoto_206:

(1, 110681), (2, 110687), (Start: 4 @110786 has 158 MA's), (13, 110972), (17, 111044), (18, 111062), (20, 111080), (22, 111131), (23, 111140), (24, 111149), (40, 111383), (44, 111398), (49, 111437), (50, 111440), (51, 111443), (58, 111512), (59, 111533), (61, 111542),

Gene: McGee_206 Start: 109980, Stop: 110768, Start Num: 4

Candidate Starts for McGee_206:

(1, 109875), (2, 109881), (Start: 4 @109980 has 158 MA's), (13, 110166), (17, 110238), (18, 110256), (20, 110274), (22, 110325), (23, 110334), (24, 110343), (40, 110577), (44, 110592), (49, 110631), (50, 110634), (51, 110637), (58, 110706), (59, 110727), (61, 110736),

Gene: McWolfish_204 Start: 110802, Stop: 111590, Start Num: 4

Candidate Starts for McWolfish_204:

(1, 110697), (2, 110703), (Start: 4 @110802 has 158 MA's), (13, 110988), (17, 111060), (18, 111078), (20, 111096), (22, 111147), (23, 111156), (24, 111165), (40, 111399), (44, 111414), (49, 111453), (50, 111456), (51, 111459), (58, 111528), (59, 111549), (61, 111558),

Gene: Megamind_204 Start: 111093, Stop: 111881, Start Num: 4

Candidate Starts for Megamind_204:

(1, 110988), (2, 110994), (Start: 4 @111093 has 158 MA's), (13, 111279), (17, 111351), (18, 111369), (20, 111387), (22, 111438), (23, 111447), (24, 111456), (40, 111690), (44, 111705), (49, 111744), (50, 111747), (51, 111750), (58, 111819), (59, 111840), (61, 111849),

Gene: Melpomini_202 Start: 109878, Stop: 110666, Start Num: 4

Candidate Starts for Melpomini_202:

(1, 109773), (2, 109779), (Start: 4 @109878 has 158 MA's), (13, 110064), (17, 110136), (18, 110154), (20, 110172), (22, 110223), (23, 110232), (24, 110241), (40, 110475), (44, 110490), (49, 110529), (50, 110532), (51, 110535), (58, 110604), (59, 110625), (61, 110634),

Gene: MikeLiesIn_209 Start: 112229, Stop: 113017, Start Num: 4

Candidate Starts for MikeLiesIn_209:

(1, 112124), (2, 112130), (Start: 4 @112229 has 158 MA's), (13, 112415), (17, 112487), (18, 112505), (20, 112523), (22, 112574), (23, 112583), (24, 112592), (40, 112826), (44, 112841), (49, 112880), (50, 112883), (51, 112886), (58, 112955), (59, 112976), (61, 112985),

Gene: Mikro_203 Start: 112778, Stop: 113566, Start Num: 4

Candidate Starts for Mikro_203:

(1, 112673), (2, 112679), (Start: 4 @112778 has 158 MA's), (13, 112964), (17, 113036), (18, 113054), (20, 113072), (22, 113123), (23, 113132), (24, 113141), (40, 113375), (44, 113390), (49, 113429), (50, 113432), (51, 113435), (58, 113504), (59, 113525), (61, 113534),

Gene: MoMoMixon_205 Start: 111268, Stop: 112056, Start Num: 4

Candidate Starts for MoMoMixon_205:

(1, 111163), (2, 111169), (Start: 4 @111268 has 158 MA's), (13, 111454), (17, 111526), (18, 111544), (20, 111562), (22, 111613), (23, 111622), (24, 111631), (40, 111865), (44, 111880), (49, 111919), (50, 111922), (51, 111925), (58, 111994), (59, 112015), (61, 112024),

Gene: Momo_208 Start: 110344, Stop: 111132, Start Num: 4

Candidate Starts for Momo_208:

(1, 110239), (2, 110245), (Start: 4 @110344 has 158 MA's), (13, 110530), (17, 110602), (18, 110620), (20, 110638), (22, 110689), (23, 110698), (24, 110707), (40, 110941), (44, 110956), (49, 110995), (50, 110998), (51, 111001), (58, 111070), (59, 111091), (61, 111100),

Gene: Morizzled23_204 Start: 109711, Stop: 110499, Start Num: 4

Candidate Starts for Morizzled23_204:

(1, 109606), (2, 109612), (Start: 4 @109711 has 158 MA's), (13, 109897), (17, 109969), (18, 109987), (20, 110005), (22, 110056), (23, 110065), (24, 110074), (40, 110308), (44, 110323), (49, 110362), (50, 110365), (51, 110368), (58, 110437), (59, 110458), (61, 110467),

Gene: Myrna_190 Start: 107878, Stop: 108648, Start Num: 3

Candidate Starts for Myrna_190:

(Start: 3 @107878 has 1 MA's), (18, 108160), (20, 108178), (23, 108238), (24, 108247), (32, 108343), (37, 108427), (38, 108430), (42, 108466), (51, 108517), (60, 108610), (62, 108634),

Gene: Naija_208 Start: 111047, Stop: 111835, Start Num: 4

Candidate Starts for Naija_208:

(1, 110942), (2, 110948), (Start: 4 @111047 has 158 MA's), (13, 111233), (17, 111305), (18, 111323), (20, 111341), (22, 111392), (23, 111401), (24, 111410), (40, 111644), (44, 111659), (49, 111698), (50, 111701), (51, 111704), (58, 111773), (59, 111794), (61, 111803),

Gene: Napoleon13_204 Start: 110075, Stop: 110863, Start Num: 4

Candidate Starts for Napoleon13_204:

(1, 109970), (2, 109976), (Start: 4 @110075 has 158 MA's), (13, 110261), (17, 110333), (18, 110351), (20, 110369), (22, 110420), (23, 110429), (24, 110438), (40, 110672), (44, 110687), (49, 110726), (50, 110729), (51, 110732), (58, 110801), (59, 110822), (61, 110831),

Gene: Nappy_208 Start: 112741, Stop: 113529, Start Num: 4

Candidate Starts for Nappy_208:

(1, 112636), (2, 112642), (Start: 4 @112741 has 158 MA's), (13, 112927), (17, 112999), (18, 113017), (20, 113035), (22, 113086), (23, 113095), (24, 113104), (40, 113338), (44, 113353), (49, 113392), (50, 113395), (51, 113398), (58, 113467), (59, 113488), (61, 113497),

Gene: Naval22_212 Start: 112824, Stop: 113612, Start Num: 4

Candidate Starts for Naval22_212:

(1, 112719), (2, 112725), (Start: 4 @112824 has 158 MA's), (13, 113010), (17, 113082), (18, 113100), (20, 113118), (22, 113169), (23, 113178), (24, 113187), (40, 113421), (44, 113436), (49, 113475), (50, 113478), (51, 113481), (58, 113550), (59, 113571), (61, 113580),

Gene: NedWong_206 Start: 111480, Stop: 112268, Start Num: 4

Candidate Starts for NedWong_206:

(1, 111375), (2, 111381), (Start: 4 @111480 has 158 MA's), (13, 111666), (17, 111738), (18, 111756), (20, 111774), (22, 111825), (23, 111834), (24, 111843), (40, 112077), (44, 112092), (49, 112131), (50, 112134), (51, 112137), (58, 112206), (59, 112227), (61, 112236),

Gene: Ngannou_204 Start: 109326, Stop: 110114, Start Num: 4

Candidate Starts for Ngannou_204:

(1, 109221), (2, 109227), (Start: 4 @109326 has 158 MA's), (13, 109512), (17, 109584), (18, 109602), (20, 109620), (22, 109671), (23, 109680), (24, 109689), (40, 109923), (44, 109938), (49, 109977), (50, 109980), (51, 109983), (58, 110052), (59, 110073), (61, 110082),

Gene: Nidhogg_208 Start: 111873, Stop: 112661, Start Num: 4

Candidate Starts for Nidhogg_208:

(1, 111768), (2, 111774), (Start: 4 @111873 has 158 MA's), (13, 112059), (17, 112131), (18, 112149), (20, 112167), (22, 112218), (23, 112227), (24, 112236), (40, 112470), (44, 112485), (49, 112524), (50, 112527), (51, 112530), (58, 112599), (59, 112620), (61, 112629),

Gene: NoodleTree_213 Start: 111780, Stop: 112568, Start Num: 4

Candidate Starts for NoodleTree_213:

(1, 111675), (2, 111681), (Start: 4 @111780 has 158 MA's), (13, 111966), (17, 112038), (18, 112056), (20, 112074), (22, 112125), (23, 112134), (24, 112143), (40, 112377), (44, 112392), (49, 112431), (50, 112434), (51, 112437), (58, 112506), (59, 112527), (61, 112536),

Gene: Norm_207 Start: 111782, Stop: 112570, Start Num: 4

Candidate Starts for Norm_207:

(1, 111677), (2, 111683), (Start: 4 @111782 has 158 MA's), (13, 111968), (17, 112040), (18, 112058), (20, 112076), (22, 112127), (23, 112136), (24, 112145), (40, 112379), (44, 112394), (49, 112433), (50, 112436), (51, 112439), (58, 112508), (59, 112529), (61, 112538),

Gene: NuevoMundo_210 Start: 113334, Stop: 114122, Start Num: 4

Candidate Starts for NuevoMundo_210:

(1, 113229), (2, 113235), (Start: 4 @113334 has 158 MA's), (13, 113520), (17, 113592), (18, 113610), (20, 113628), (22, 113679), (23, 113688), (24, 113697), (40, 113931), (44, 113946), (49, 113985), (50, 113988), (51, 113991), (58, 114060), (59, 114081), (61, 114090),

Gene: ParkTD_206 Start: 111344, Stop: 112132, Start Num: 4

Candidate Starts for ParkTD_206:

(1, 111239), (2, 111245), (Start: 4 @111344 has 158 MA's), (13, 111530), (17, 111602), (18, 111620), (20, 111638), (22, 111689), (23, 111698), (24, 111707), (40, 111941), (44, 111956), (49, 111995), (50, 111998), (51, 112001), (58, 112070), (59, 112091), (61, 112100),

Gene: Patter_208 Start: 110358, Stop: 111146, Start Num: 4

Candidate Starts for Patter_208:

(1, 110253), (2, 110259), (Start: 4 @110358 has 158 MA's), (13, 110544), (17, 110616), (18, 110634), (20, 110652), (22, 110703), (23, 110712), (24, 110721), (40, 110955), (44, 110970), (49, 111009), (50, 111012), (51, 111015), (58, 111084), (59, 111105), (61, 111114),

Gene: Phabba_201 Start: 107957, Stop: 108553, Start Num: 12

Candidate Starts for Phabba_201:

(Start: 3 @107783 has 1 MA's), (Start: 12 @107957 has 1 MA's), (18, 108065), (20, 108083), (23, 108143), (24, 108152), (38, 108335), (42, 108371), (43, 108374), (51, 108422), (52, 108425), (60, 108515), (62, 108539),

Gene: Phlegm_211 Start: 111047, Stop: 111835, Start Num: 4

Candidate Starts for Phlegm_211:

(1, 110942), (2, 110948), (Start: 4 @111047 has 158 MA's), (13, 111233), (17, 111305), (18, 111323), (20, 111341), (22, 111392), (23, 111401), (24, 111410), (40, 111644), (44, 111659), (49, 111698), (50,

111701), (51, 111704), (58, 111773), (59, 111794), (61, 111803),

Gene: Phox_208 Start: 112002, Stop: 112790, Start Num: 4

Candidate Starts for Phox_208:

(1, 111897), (2, 111903), (Start: 4 @112002 has 158 MA's), (13, 112188), (17, 112260), (18, 112278), (20, 112296), (22, 112347), (23, 112356), (24, 112365), (40, 112599), (44, 112614), (49, 112653), (50, 112656), (51, 112659), (58, 112728), (59, 112749), (61, 112758),

Gene: Phusco_205 Start: 109879, Stop: 110667, Start Num: 4

Candidate Starts for Phusco_205:

(1, 109774), (2, 109780), (Start: 4 @109879 has 158 MA's), (13, 110065), (17, 110137), (18, 110155), (20, 110173), (22, 110224), (23, 110233), (24, 110242), (40, 110476), (44, 110491), (49, 110530), (50, 110533), (51, 110536), (58, 110605), (59, 110626), (61, 110635),

Gene: Pier_208 Start: 112876, Stop: 113664, Start Num: 4

Candidate Starts for Pier_208:

(1, 112771), (2, 112777), (Start: 4 @112876 has 158 MA's), (13, 113062), (17, 113134), (18, 113152), (20, 113170), (22, 113221), (23, 113230), (24, 113239), (40, 113473), (44, 113488), (49, 113527), (50, 113530), (51, 113533), (58, 113602), (59, 113623), (61, 113632),

Gene: Pinkcreek_191 Start: 110255, Stop: 111043, Start Num: 4

Candidate Starts for Pinkcreek_191:

(1, 110150), (2, 110156), (Start: 4 @110255 has 158 MA's), (13, 110441), (17, 110513), (18, 110531), (20, 110549), (22, 110600), (23, 110609), (24, 110618), (40, 110852), (44, 110867), (49, 110906), (50, 110909), (51, 110912), (58, 110981), (59, 111002), (61, 111011),

Gene: Pio_215 Start: 114071, Stop: 114859, Start Num: 4

Candidate Starts for Pio_215:

(1, 113966), (2, 113972), (Start: 4 @114071 has 158 MA's), (13, 114257), (17, 114329), (18, 114347), (20, 114365), (22, 114416), (23, 114425), (24, 114434), (40, 114668), (44, 114683), (49, 114722), (50, 114725), (51, 114728), (58, 114797), (59, 114818), (61, 114827),

Gene: Pivoine_208 Start: 111047, Stop: 111835, Start Num: 4

Candidate Starts for Pivoine_208:

(1, 110942), (2, 110948), (Start: 4 @111047 has 158 MA's), (13, 111233), (17, 111305), (18, 111323), (20, 111341), (22, 111392), (23, 111401), (24, 111410), (40, 111644), (44, 111659), (49, 111698), (50, 111701), (51, 111704), (58, 111773), (59, 111794), (61, 111803),

Gene: Pleione_211 Start: 111822, Stop: 112610, Start Num: 4

Candidate Starts for Pleione_211:

(1, 111717), (2, 111723), (Start: 4 @111822 has 158 MA's), (13, 112008), (17, 112080), (18, 112098), (20, 112116), (22, 112167), (23, 112176), (24, 112185), (40, 112419), (44, 112434), (49, 112473), (50, 112476), (51, 112479), (58, 112548), (59, 112569), (61, 112578),

Gene: Pupper_150 Start: 104371, Stop: 105045, Start Num: 5

Candidate Starts for Pupper_150:

(Start: 5 @104371 has 3 MA's), (13, 104521), (14, 104551), (26, 104713), (34, 104863), (37, 104887), (41, 104923), (47, 104965), (50, 104974), (56, 105034), (57, 105037),

Gene: PurduePete_207 Start: 112050, Stop: 112838, Start Num: 4

Candidate Starts for PurduePete_207:

(1, 111945), (2, 111951), (Start: 4 @112050 has 158 MA's), (13, 112236), (17, 112308), (18, 112326), (20, 112344), (22, 112395), (23, 112404), (24, 112413), (40, 112647), (44, 112662), (49, 112701), (50,

112704), (51, 112707), (58, 112776), (59, 112797), (61, 112806),

Gene: QBert_199 Start: 110403, Stop: 111191, Start Num: 4

Candidate Starts for QBert_199:

(1, 110298), (2, 110304), (Start: 4 @110403 has 158 MA's), (13, 110589), (17, 110661), (18, 110679), (20, 110697), (22, 110748), (23, 110757), (24, 110766), (40, 111000), (44, 111015), (49, 111054), (50, 111057), (51, 111060), (58, 111129), (59, 111150), (61, 111159),

Gene: Quasimodo_209 Start: 111673, Stop: 112461, Start Num: 4

Candidate Starts for Quasimodo_209:

(1, 111568), (2, 111574), (Start: 4 @111673 has 158 MA's), (13, 111859), (17, 111931), (18, 111949), (20, 111967), (22, 112018), (23, 112027), (24, 112036), (40, 112270), (44, 112285), (49, 112324), (50, 112327), (51, 112330), (58, 112399), (59, 112420), (61, 112429),

Gene: Rabinovish_200 Start: 111948, Stop: 112736, Start Num: 4

Candidate Starts for Rabinovish_200:

(1, 111843), (2, 111849), (Start: 4 @111948 has 158 MA's), (13, 112134), (17, 112206), (18, 112224), (20, 112242), (22, 112293), (23, 112302), (24, 112311), (40, 112545), (44, 112560), (49, 112599), (50, 112602), (51, 112605), (58, 112674), (59, 112695), (61, 112704),

Gene: Rahel_208 Start: 110782, Stop: 111570, Start Num: 4

Candidate Starts for Rahel_208:

(1, 110677), (2, 110683), (Start: 4 @110782 has 158 MA's), (13, 110968), (17, 111040), (18, 111058), (20, 111076), (22, 111127), (23, 111136), (24, 111145), (40, 111379), (44, 111394), (49, 111433), (50, 111436), (51, 111439), (58, 111508), (59, 111529), (61, 111538),

Gene: RedWattleHog_77 Start: 69602, Stop: 70216, Start Num: 7

Candidate Starts for RedWattleHog_77:

(Start: 7 @69602 has 2 MA's), (9, 69623), (19, 69818), (23, 69890), (25, 69902), (35, 70040), (45, 70109), (46, 70121), (55, 70178),

Gene: RoMag_202 Start: 111093, Stop: 111881, Start Num: 4

Candidate Starts for RoMag_202:

(1, 110988), (2, 110994), (Start: 4 @111093 has 158 MA's), (13, 111279), (17, 111351), (18, 111369), (20, 111387), (22, 111438), (23, 111447), (24, 111456), (40, 111690), (44, 111705), (49, 111744), (50, 111747), (51, 111750), (58, 111819), (59, 111840), (61, 111849),

Gene: Ronan_203 Start: 109485, Stop: 110273, Start Num: 4

Candidate Starts for Ronan_203:

(1, 109380), (2, 109386), (Start: 4 @109485 has 158 MA's), (13, 109671), (17, 109743), (18, 109761), (20, 109779), (22, 109830), (23, 109839), (24, 109848), (40, 110082), (44, 110097), (49, 110136), (50, 110139), (51, 110142), (58, 110211), (59, 110232), (61, 110241),

Gene: Roots515_209 Start: 112601, Stop: 113389, Start Num: 4

Candidate Starts for Roots515_209:

(1, 112496), (2, 112502), (Start: 4 @112601 has 158 MA's), (13, 112787), (17, 112859), (18, 112877), (20, 112895), (22, 112946), (23, 112955), (24, 112964), (40, 113198), (44, 113213), (49, 113252), (50, 113255), (51, 113258), (58, 113327), (59, 113348), (61, 113357),

Gene: SCentae_149 Start: 104522, Stop: 105196, Start Num: 5

Candidate Starts for SCentae_149:

(Start: 5 @104522 has 3 MA's), (13, 104672), (14, 104702), (26, 104864), (34, 105014), (41, 105074), (47, 105116), (50, 105125), (56, 105185), (57, 105188),

Gene: Salacia_207 Start: 111185, Stop: 111973, Start Num: 4

Candidate Starts for Salacia_207:

(1, 111080), (2, 111086), (Start: 4 @111185 has 158 MA's), (13, 111371), (17, 111443), (18, 111461), (20, 111479), (22, 111530), (23, 111539), (24, 111548), (40, 111782), (44, 111797), (49, 111836), (50, 111839), (51, 111842), (58, 111911), (59, 111932), (61, 111941),

Gene: Sauce_203 Start: 109999, Stop: 110787, Start Num: 4

Candidate Starts for Sauce_203:

(1, 109894), (2, 109900), (Start: 4 @109999 has 158 MA's), (13, 110185), (17, 110257), (18, 110275), (20, 110293), (22, 110344), (23, 110353), (24, 110362), (40, 110596), (44, 110611), (49, 110650), (50, 110653), (51, 110656), (58, 110725), (59, 110746), (61, 110755),

Gene: ScoobyDoobyDoo_188 Start: 105071, Stop: 105730, Start Num: 10

Candidate Starts for ScoobyDoobyDoo_188:

(Start: 3 @104951 has 1 MA's), (9, 105041), (Start: 10 @105071 has 1 MA's), (Start: 12 @105125 has 1 MA's), (18, 105233), (23, 105311), (24, 105320), (29, 105353), (31, 105380), (32, 105425), (42, 105548), (49, 105593), (51, 105599),

Gene: Sebata_208 Start: 112508, Stop: 113296, Start Num: 4

Candidate Starts for Sebata_208:

(1, 112403), (2, 112409), (Start: 4 @112508 has 158 MA's), (13, 112694), (17, 112766), (18, 112784), (20, 112802), (22, 112853), (23, 112862), (24, 112871), (40, 113105), (44, 113120), (49, 113159), (50, 113162), (51, 113165), (58, 113234), (59, 113255), (61, 113264),

Gene: Shaqnato_198 Start: 110216, Stop: 111004, Start Num: 4

Candidate Starts for Shaqnato_198:

(1, 110111), (2, 110117), (Start: 4 @110216 has 158 MA's), (13, 110402), (17, 110474), (18, 110492), (20, 110510), (22, 110561), (23, 110570), (24, 110579), (40, 110813), (44, 110828), (49, 110867), (50, 110870), (51, 110873), (58, 110942), (59, 110963), (61, 110972),

Gene: Shelob_208 Start: 112956, Stop: 113744, Start Num: 4

Candidate Starts for Shelob_208:

(1, 112851), (2, 112857), (Start: 4 @112956 has 158 MA's), (13, 113142), (17, 113214), (18, 113232), (20, 113250), (22, 113301), (23, 113310), (24, 113319), (40, 113553), (44, 113568), (49, 113607), (50, 113610), (51, 113613), (58, 113682), (59, 113703), (61, 113712),

Gene: ShiaLabeouf_204 Start: 109990, Stop: 110778, Start Num: 4

Candidate Starts for ShiaLabeouf_204:

(1, 109885), (2, 109891), (Start: 4 @109990 has 158 MA's), (13, 110176), (17, 110248), (18, 110266), (20, 110284), (22, 110335), (23, 110344), (24, 110353), (40, 110587), (44, 110602), (49, 110641), (50, 110644), (51, 110647), (58, 110716), (59, 110737), (61, 110746),

Gene: Shifa_184 Start: 110567, Stop: 111355, Start Num: 4

Candidate Starts for Shifa_184:

(1, 110462), (2, 110468), (Start: 4 @110567 has 158 MA's), (13, 110753), (17, 110825), (18, 110843), (20, 110861), (22, 110912), (23, 110921), (24, 110930), (40, 111164), (44, 111179), (49, 111218), (50, 111221), (51, 111224), (58, 111293), (59, 111314), (61, 111323),

Gene: Shnickers_205 Start: 110054, Stop: 110842, Start Num: 4

Candidate Starts for Shnickers_205:

(1, 109949), (2, 109955), (Start: 4 @110054 has 158 MA's), (13, 110240), (17, 110312), (18, 110330), (20, 110348), (22, 110399), (23, 110408), (24, 110417), (40, 110651), (44, 110666), (49, 110705), (50,

110708), (51, 110711), (58, 110780), (59, 110801), (61, 110810),

Gene: Shrimp_209 Start: 112111, Stop: 112899, Start Num: 4

Candidate Starts for Shrimp_209:

(1, 112006), (2, 112012), (Start: 4 @112111 has 158 MA's), (13, 112297), (17, 112369), (18, 112387), (20, 112405), (22, 112456), (23, 112465), (24, 112474), (40, 112708), (44, 112723), (49, 112762), (50, 112765), (51, 112768), (58, 112837), (59, 112858), (61, 112867),

Gene: SilverDipper_211 Start: 111603, Stop: 112391, Start Num: 4

Candidate Starts for SilverDipper_211:

(1, 111498), (2, 111504), (Start: 4 @111603 has 158 MA's), (13, 111789), (17, 111861), (18, 111879), (20, 111897), (22, 111948), (23, 111957), (24, 111966), (40, 112200), (44, 112215), (49, 112254), (50, 112257), (51, 112260), (58, 112329), (59, 112350), (61, 112359),

Gene: SmallFry_207 Start: 110148, Stop: 110936, Start Num: 4

Candidate Starts for SmallFry_207:

(1, 110043), (2, 110049), (Start: 4 @110148 has 158 MA's), (13, 110334), (17, 110406), (18, 110424), (20, 110442), (22, 110493), (23, 110502), (24, 110511), (40, 110745), (44, 110760), (49, 110799), (50, 110802), (58, 110874), (59, 110895), (61, 110904),

Gene: Specks_211 Start: 112455, Stop: 113243, Start Num: 4

Candidate Starts for Specks_211:

(1, 112350), (2, 112356), (Start: 4 @112455 has 158 MA's), (13, 112641), (16, 112701), (17, 112713), (18, 112731), (20, 112749), (22, 112800), (23, 112809), (24, 112818), (40, 113052), (44, 113067), (49, 113106), (50, 113109), (51, 113112), (58, 113181), (59, 113202), (61, 113211),

Gene: Sprinklers_205 Start: 110706, Stop: 111494, Start Num: 4

Candidate Starts for Sprinklers_205:

(1, 110601), (2, 110607), (Start: 4 @110706 has 158 MA's), (13, 110892), (17, 110964), (18, 110982), (20, 111000), (22, 111051), (23, 111060), (24, 111069), (40, 111303), (44, 111318), (49, 111357), (50, 111360), (51, 111363), (58, 111432), (59, 111453), (61, 111462),

Gene: SrishMeg2525_204 Start: 111582, Stop: 112370, Start Num: 4

Candidate Starts for SrishMeg2525_204:

(1, 111477), (2, 111483), (Start: 4 @111582 has 158 MA's), (13, 111768), (17, 111840), (18, 111858), (20, 111876), (22, 111927), (23, 111936), (24, 111945), (40, 112179), (44, 112194), (49, 112233), (50, 112236), (51, 112239), (58, 112308), (59, 112329), (61, 112338),

Gene: StephanieG_203 Start: 111613, Stop: 112401, Start Num: 4

Candidate Starts for StephanieG_203:

(1, 111508), (2, 111514), (Start: 4 @111613 has 158 MA's), (13, 111799), (17, 111871), (18, 111889), (20, 111907), (22, 111958), (23, 111967), (24, 111976), (40, 112210), (44, 112225), (49, 112264), (50, 112267), (51, 112270), (58, 112339), (59, 112360), (61, 112369),

Gene: Stormageddon_74 Start: 69583, Stop: 70197, Start Num: 7

Candidate Starts for Stormageddon_74:

(Start: 7 @69583 has 2 MA's), (9, 69604), (19, 69799), (23, 69871), (25, 69883), (35, 70021), (45, 70090), (46, 70102), (55, 70159),

Gene: Stubby_191 Start: 110458, Stop: 111246, Start Num: 4

Candidate Starts for Stubby_191:

(1, 110353), (2, 110359), (Start: 4 @110458 has 158 MA's), (13, 110644), (17, 110716), (18, 110734), (20, 110752), (22, 110803), (23, 110812), (24, 110821), (40, 111055), (44, 111070), (49, 111109), (50,

111112), (51, 111115), (58, 111184), (59, 111205), (61, 111214),

Gene: StubbySaigey_212 Start: 111137, Stop: 111925, Start Num: 4

Candidate Starts for StubbySaigey_212:

(1, 111032), (2, 111038), (Start: 4 @111137 has 158 MA's), (13, 111323), (17, 111395), (18, 111413), (20, 111431), (22, 111482), (23, 111491), (24, 111500), (40, 111734), (44, 111749), (49, 111788), (50, 111791), (51, 111794), (58, 111863), (59, 111884), (61, 111893),

Gene: Teardrop_204 Start: 109650, Stop: 110438, Start Num: 4

Candidate Starts for Teardrop_204:

(1, 109545), (2, 109551), (Start: 4 @109650 has 158 MA's), (13, 109836), (17, 109908), (18, 109926), (20, 109944), (22, 109995), (23, 110004), (24, 110013), (40, 110247), (44, 110262), (49, 110301), (50, 110304), (51, 110307), (58, 110376), (59, 110397), (61, 110406),

Gene: TinyTim_205 Start: 110431, Stop: 111219, Start Num: 4

Candidate Starts for TinyTim_205:

(1, 110326), (2, 110332), (Start: 4 @110431 has 158 MA's), (13, 110617), (17, 110689), (18, 110707), (20, 110725), (22, 110776), (23, 110785), (24, 110794), (40, 111028), (44, 111043), (49, 111082), (50, 111085), (51, 111088), (58, 111157), (59, 111178), (61, 111187),

Gene: Tonenili_228 Start: 117252, Stop: 118040, Start Num: 4

Candidate Starts for Tonenili_228:

(1, 117147), (2, 117153), (Start: 4 @117252 has 158 MA's), (13, 117438), (17, 117510), (18, 117528), (20, 117546), (22, 117597), (23, 117606), (44, 117864), (49, 117903), (50, 117906), (51, 117909), (58, 117978), (59, 117999), (61, 118008),

Gene: Tortoise16_205 Start: 110893, Stop: 111681, Start Num: 4

Candidate Starts for Tortoise16_205:

(1, 110788), (2, 110794), (Start: 4 @110893 has 158 MA's), (13, 111079), (17, 111151), (18, 111169), (20, 111187), (22, 111238), (23, 111247), (24, 111256), (40, 111490), (44, 111505), (49, 111544), (50, 111547), (51, 111550), (58, 111619), (59, 111640), (61, 111649),

Gene: Trinitium_203 Start: 110178, Stop: 110966, Start Num: 4

Candidate Starts for Trinitium_203:

(1, 110073), (2, 110079), (Start: 4 @110178 has 158 MA's), (13, 110364), (17, 110436), (18, 110454), (20, 110472), (22, 110523), (23, 110532), (24, 110541), (40, 110775), (44, 110790), (49, 110829), (50, 110832), (51, 110835), (58, 110904), (59, 110925), (61, 110934),

Gene: Turret_200 Start: 109760, Stop: 110548, Start Num: 4

Candidate Starts for Turret_200:

(1, 109655), (2, 109661), (Start: 4 @109760 has 158 MA's), (13, 109946), (17, 110018), (18, 110036), (20, 110054), (22, 110105), (23, 110114), (24, 110123), (40, 110357), (44, 110372), (49, 110411), (50, 110414), (51, 110417), (58, 110486), (59, 110507), (61, 110516),

Gene: Tyke_205 Start: 112260, Stop: 113048, Start Num: 4

Candidate Starts for Tyke_205:

(1, 112155), (2, 112161), (Start: 4 @112260 has 158 MA's), (13, 112446), (17, 112518), (18, 112536), (20, 112554), (22, 112605), (23, 112614), (24, 112623), (40, 112857), (44, 112872), (49, 112911), (50, 112914), (51, 112917), (58, 112986), (59, 113007), (61, 113016),

Gene: ValleyTerrace_208 Start: 110344, Stop: 111132, Start Num: 4

Candidate Starts for ValleyTerrace_208:

(1, 110239), (2, 110245), (Start: 4 @110344 has 158 MA's), (13, 110530), (17, 110602), (18, 110620), (20, 110638), (22, 110689), (23, 110698), (24, 110707), (40, 110941), (44, 110956), (49, 110995), (50, 110998), (51, 111001), (58, 111070), (59, 111091), (61, 111100),

Gene: Wally_205 Start: 110328, Stop: 111116, Start Num: 4

Candidate Starts for Wally_205:

(1, 110223), (2, 110229), (Start: 4 @110328 has 158 MA's), (13, 110514), (17, 110586), (18, 110604), (20, 110622), (22, 110673), (23, 110682), (24, 110691), (40, 110925), (44, 110940), (49, 110979), (50, 110982), (51, 110985), (58, 111054), (59, 111075), (61, 111084),

Gene: Willis_208 Start: 111242, Stop: 112030, Start Num: 4

Candidate Starts for Willis_208:

(1, 111137), (2, 111143), (Start: 4 @111242 has 158 MA's), (13, 111428), (17, 111500), (18, 111518), (20, 111536), (22, 111587), (23, 111596), (24, 111605), (40, 111839), (44, 111854), (49, 111893), (50, 111896), (51, 111899), (58, 111968), (59, 111989), (61, 111998),

Gene: Yassified_204 Start: 110683, Stop: 111471, Start Num: 4

Candidate Starts for Yassified_204:

(1, 110578), (2, 110584), (Start: 4 @110683 has 158 MA's), (13, 110869), (17, 110941), (18, 110959), (20, 110977), (22, 111028), (23, 111037), (24, 111046), (40, 111280), (44, 111295), (49, 111334), (50, 111337), (51, 111340), (58, 111409), (59, 111430), (61, 111439),

Gene: YemiJoy2021_208 Start: 111998, Stop: 112786, Start Num: 4

Candidate Starts for YemiJoy2021_208:

(1, 111893), (2, 111899), (Start: 4 @111998 has 158 MA's), (13, 112184), (17, 112256), (18, 112274), (20, 112292), (22, 112343), (23, 112352), (24, 112361), (40, 112595), (44, 112610), (49, 112649), (50, 112652), (51, 112655), (58, 112724), (59, 112745), (61, 112754),

Gene: YoungMoneyMata_205 Start: 110540, Stop: 111328, Start Num: 4

Candidate Starts for YoungMoneyMata_205:

(1, 110435), (2, 110441), (Start: 4 @110540 has 158 MA's), (13, 110726), (17, 110798), (18, 110816), (20, 110834), (22, 110885), (23, 110894), (24, 110903), (40, 111137), (44, 111152), (49, 111191), (50, 111194), (51, 111197), (58, 111266), (59, 111287), (61, 111296),

Gene: Yucca_207 Start: 111990, Stop: 112778, Start Num: 4

Candidate Starts for Yucca_207:

(1, 111885), (2, 111891), (Start: 4 @111990 has 158 MA's), (13, 112176), (17, 112248), (18, 112266), (20, 112284), (22, 112335), (23, 112344), (24, 112353), (40, 112587), (44, 112602), (49, 112641), (50, 112644), (51, 112647), (58, 112716), (59, 112737), (61, 112746),

Gene: Zalkecks_206 Start: 111071, Stop: 111859, Start Num: 4

Candidate Starts for Zalkecks_206:

(1, 110966), (2, 110972), (Start: 4 @111071 has 158 MA's), (13, 111257), (17, 111329), (18, 111347), (20, 111365), (22, 111416), (23, 111425), (24, 111434), (40, 111668), (44, 111683), (49, 111722), (50, 111725), (51, 111728), (58, 111797), (59, 111818), (61, 111827),

Gene: Zeenon_209 Start: 111642, Stop: 112430, Start Num: 4

Candidate Starts for Zeenon_209:

(1, 111537), (2, 111543), (Start: 4 @111642 has 158 MA's), (13, 111828), (17, 111900), (18, 111918), (20, 111936), (22, 111987), (23, 111996), (24, 112005), (40, 112239), (44, 112254), (49, 112293), (50, 112296), (51, 112299), (58, 112368), (59, 112389), (61, 112398),

Gene: ZygoTaiga_204 Start: 112262, Stop: 113050, Start Num: 4

Candidate Starts for ZygoTaiga_204:

(1, 112157), (2, 112163), (Start: 4 @112262 has 158 MA's), (13, 112448), (17, 112520), (18, 112538), (20, 112556), (22, 112607), (23, 112616), (24, 112625), (40, 112859), (44, 112874), (49, 112913), (50, 112916), (51, 112919), (58, 112988), (59, 113009), (61, 113018),