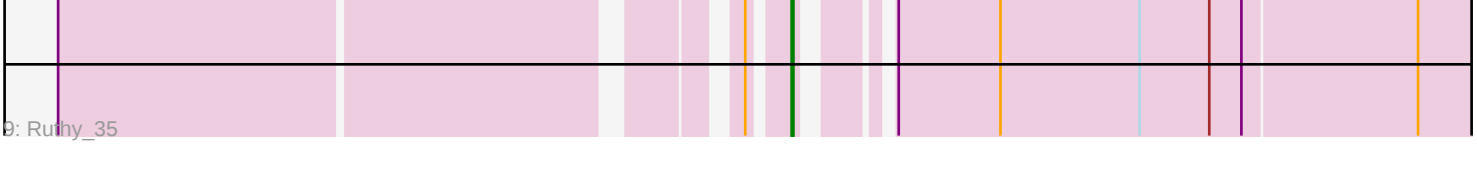
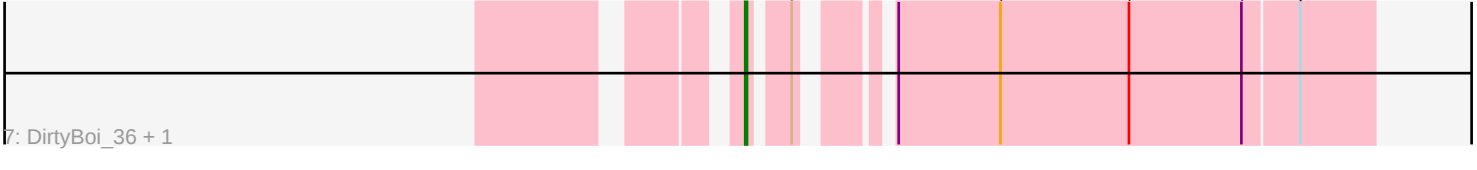
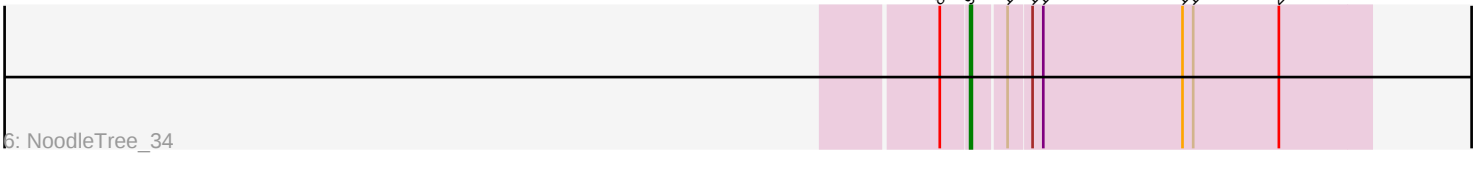
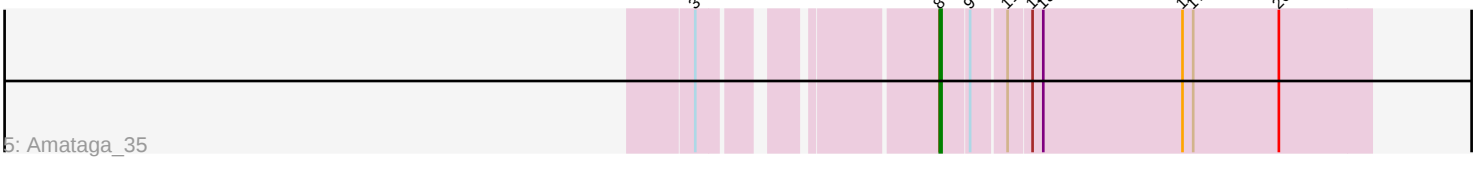
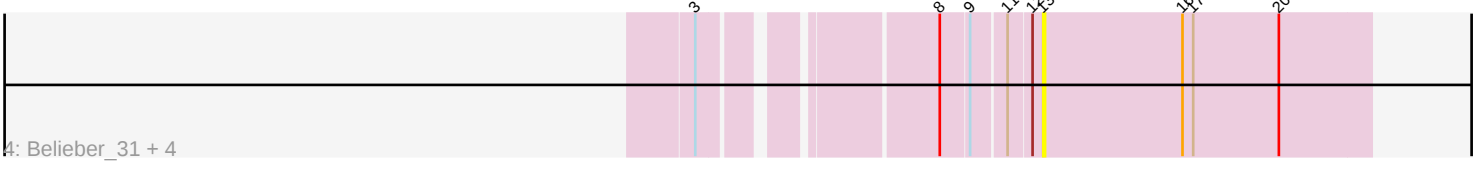
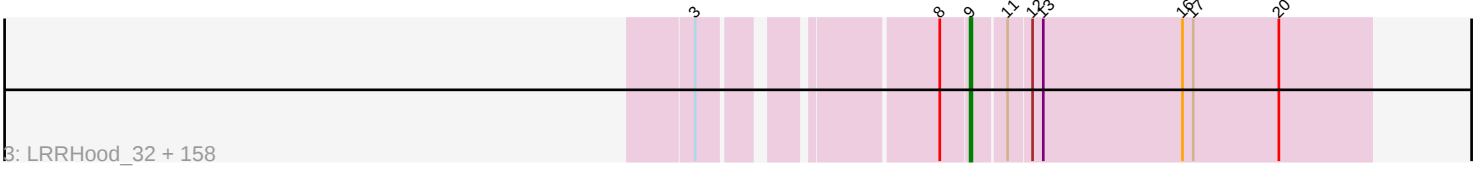
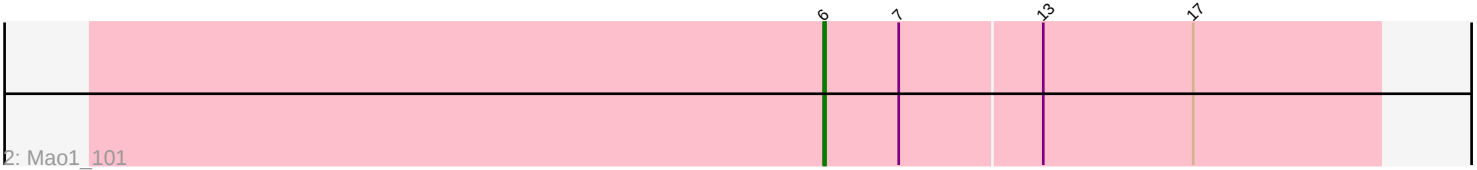
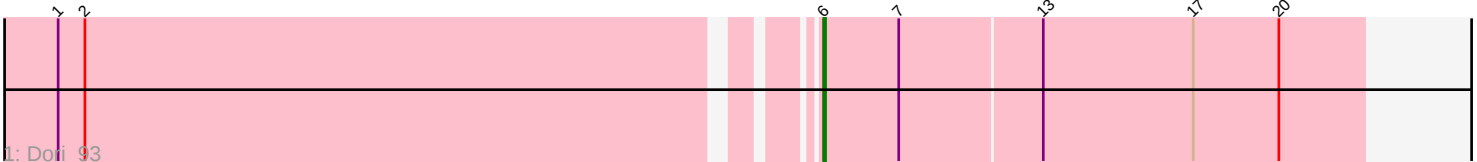


Pham 275950



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 275950 Report

This analysis was run 02/07/26 on database version 634.

Pham number 275950 has 172 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Dori_93
- Track 2 : Mao1_101
- Track 3 : LRRHood_32, Ablatia_34, Matsumoto_34, Gizmo_37, Issimir_35, Bowman_34, CharlieB_35, ET08_30, Pio_38, RaHel_35, JayJay_38, Essence_34, MikeLiesIn_35, Maby2021_36, LifeSavor_36, Drazdys_35, Momo_34, Blackdragon_30, Pupusa_41, ArcherS7_34, Grungle_28, DTDevon_36, Ewok_35, InterFolia_42, YemiJoy2021_36, Kboogie_35, OrediggerDelux_34, Bangla1971_34, Montpel_34, Asterius_36, Substance289_32, Cleatunium_31, Pleione_37, InigoMontoya_36, Morizzled23_34, Tortoise16_34, Shrimp_35, Ading_35, Bonray_35, Adlitam_35, EmToTheThree_38, SVoro_34, PurduePete_34, CindyLou_35, Izajani_36, Audrick_37, Jessibeth14_34, Loanshark_35, Rizal_33, Shnickers_35, Dessert_33, Daffodil_37, Patter_35, PharkleMinkus_40, NedWong_36, Tyke_37, Koguma_31, Zalkecks_37, Bxz1_35, Pier_37, BobaPhatt_32, SrishMeg2525_34, Littleton_35, TinyTim_35, Bread_36, Phusco_35, Shaqnato_31, Yucca_35, Delilah_35, Atlantean_35, LordLeafolot_41, EggyFarm_39, Concombre_34, Norm_35, Khaleesi_34, Janiyr_35, Catera_33, Sauce_36, SmallFry_35, ParkTD_34, Lunareta_34, Burrough_35, Derek_36, LolaVinca_38, Sprinklers_35, Latch_35, Fongie_35, ShiaLabeouf_35, FoxtrotP1_35, Chomp_35, ValleyTerrace_35, Duckfeet_32, Capablanca_37, Gamgam_35, Zeenon_37, ZygoTaiga_35, Pivoine_35, YoungMoneyMata_35, Breeniome_35, Bezza_27, Megamind_35, Gabriel_35, Salacia_37, Jedediah_35, Ronan_30, Phlegm_37, Darko_34, FrayBell_41, EmmaElysia_33, Fludd_34, BigCity_39, Erdmann_36, Cactojaque_32, Guwapp_35, Ghost_35, McWolfish_34, Cali_35, Demodog_33, Yassified_32, Tonenili_40, StubbySaigey_34, Spec_33, JulietS_30, FudgeTart_36, SilverDipper_36, DrPhinkDaddy_35, Willis_35, Sebata_35, Rocha_33, BeanWater_31, Labradorite_34, Bipolarisk_34, Jemmno_35, BackyardAgain_32, JPickles_33, Tainan_40, Fixie_32, Iota_32, Nappy_36, Naija_35, Grasshills_39, BadAgartude_36, Wally_34, RoMag_30, Mikro_33, LookingGlass_38, McGee_34, Quasimodo_35, QBert_33, Primadonna_30, Ngannou_33, Lukilu_28, Teardrop_34, StephanieG_35, GlutenPhree_36, BananaFence_36, Ava3_36, Jaygup_35, Babyland_34
- Track 4 : Belieber_31, Lee7_34, Domi_30, JigglyPuff_35, Naval22_37
- Track 5 : Amataga_35
- Track 6 : NoodleTree_34
- Track 7 : DirtyBoi_36, Hedwig_38
- Track 8 : DumpsterDude_37
- Track 9 : Ruthy_35

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

The start number called the most often in the published annotations is 9, it was called in 133 of the 140 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_34, Ading_35, Adlitam_35, ArcherS7_34, Asterius_36, Atlantean_35, Audrick_37, Ava3_36, Babyland_34, BackyardAgain_32, BadAgartude_36, BananaFence_36, Bangla1971_34, BeanWater_31, Bezza_27, BigCity_39, Bipolarisk_34, Blackdragon_30, BobaPhatt_32, Bonray_35, Bowman_34, Bread_36, Breeniome_35, Burrough_35, Bxz1_35, Cactojaque_32, Cali_35, Capablanca_37, Catera_33, CharlieB_35, Chomp_35, CindyLou_35, Cleatunium_31, Concombre_34, DTDevon_36, Daffodil_37, Darko_34, Delilah_35, Demodog_33, Derek_36, Dessert_33, DrPhinkDaddy_35, Drazdys_35, Duckfeet_32, ET08_30, EggyFarm_39, EmToTheThree_38, EmmaElysia_33, Erdmann_36, Essence_34, Ewok_35, Fixie_32, Fludd_34, Fongie_35, FoxtrotP1_35, FrayBell_41, FudgeTart_36, Gabriel_35, Gamgam_35, Ghost_35, Gizmo_37, GlutenPhree_36, Grasshills_39, Grungle_28, Guwapp_35, InigoMontoya_36, InterFolia_42, Iota_32, Issimir_35, Izajani_36, JPickles_33, Janiyra_35, JayJay_38, Jaygup_35, Jedediah_35, Jemmno_35, Jessibeth14_34, JulietS_30, Kboogie_35, Khaleesi_34, Koguma_31, LRRHood_32, Labradorite_34, Latch_35, LifeSavor_36, Littleton_35, Loanshark_35, LolaVinca_38, LookingGlass_38, LordLeafolot_41, Lukilu_28, Lunareta_34, Maby2021_36, Matsumoto_34, McGee_34, McWolfish_34, Megamind_35, MikeLiesIn_35, Mikro_33, Momo_34, Montpel_34, Morizzled23_34, Naija_35, Nappy_36, NedWong_36, Ngannou_33, NoodleTree_34, Norm_35, OrediggerDelux_34, ParkTD_34, Patter_35, PharkleMinkus_40, Phlegm_37, Phusco_35, Pier_37, Pio_38, Pivoine_35, Pleione_37, Primadonna_30, Pupusa_41, PurduePete_34, QBert_33, Quasimodo_35, Rahel_35, Rizal_33, RoMag_30, Rocha_33, Ronan_30, SVoro_34, Salacia_37, Sauce_36, Sebata_35, Shaqnato_31, ShiaLabeouf_35, Shnickers_35, Shrimp_35, SilverDipper_36, SmallFry_35, Spec_33, Sprinklers_35, SrishMeg2525_34, StephanieG_35, StubbySaigey_34, Substance289_32, Tainan_40, Teardrop_34, TinyTim_35, Tonenili_40, Tortoise16_34, Tyke_37, ValleyTerrace_35, Wally_34, Willis_35, Yassified_32, YemiJoy2021_36, YoungMoneyMata_35, Yucca_35, Zalkecks_37, Zeenon_37, ZygoTaiga_35,

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

- Amataga_35, Belieber_31, Domi_30, JigglyPuff_35, Lee7_34, Naval22_37,

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

- DirtyBoi_36, Dori_93, DumpsterDude_37, Hedwig_38, Mao1_101, Ruthy_35,

Summary by start number:

Start 4:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 3 of 140
- Called 75.0% of time when present

- Phage (with cluster) where this start called: DirtyBoi_36 (DB), DumpsterDude_37 (DW), Hedwig_38 (DB),

Start 5:

- Found in 4 of 172 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Ruthy_35 (DW),

Start 6:

- Found in 2 of 172 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dori_93 (AD), Mao1_101 (AD),

Start 8:

- Found in 166 of 172 (96.5%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 0.6% of time when present
- Phage (with cluster) where this start called: Amataga_35 (C1),

Start 9:

- Found in 166 of 172 (96.5%) of genes in pham
- Manual Annotations of this start: 133 of 140
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Ablatia_34 (C1), Ading_35 (C1), Adlitam_35 (C1), ArcherS7_34 (C1), Asterius_36 (C1), Atlantean_35 (C1), Audrick_37 (C1), Ava3_36 (C1), Babyland_34 (C1), BackyardAgain_32 (C1), BadAgartude_36 (C1), BananaFence_36 (C1), Bangla1971_34 (C1), BeanWater_31 (C1), Bezza_27 (C1), BigCity_39 (C1), Bipolarisk_34 (C1), Blackdragon_30 (C1), BobaPhatt_32 (C1), Bonray_35 (C1), Bowman_34 (C1), Bread_36 (C1), Breeniome_35 (C1), Burrough_35 (C1), Bxz1_35 (C1), Cactojaque_32 (C1), Cali_35 (C1), Capablanca_37 (C1), Catera_33 (C1), CharlieB_35 (C1), Chomp_35 (C1), CindyLou_35 (C1), Cleatunium_31 (C1), Concombre_34 (C1), DTDevon_36 (C1), Daffodil_37 (C1), Darko_34 (C1), Delilah_35 (C1), Demodog_33 (C1), Derek_36 (C1), Dessert_33 (C1), DrPhinkDaddy_35 (C1), Drazdys_35 (C1), Duckfeet_32 (C1), ET08_30 (C1), EggYFarm_39 (C1), EmToTheThree_38 (C1), EmmaElysia_33 (C1), Erdmann_36 (C1), Essence_34 (C1), Ewok_35 (C1), Fixie_32 (C1), Fludd_34 (C1), Fongie_35 (C1), FoxtrotP1_35 (C1), FrayBell_41 (C1), FudgeTart_36 (C1), Gabriel_35 (C1), Gamgam_35 (C1), Ghost_35 (C1), Gizmo_37 (C1), GlutenPhree_36 (C1), Grasshills_39 (C1), Grungle_28 (C1), Guwapp_35 (C1), InigoMontoya_36 (C1), InterFolia_42 (C1), Iota_32 (C1), Issimir_35 (C1), Izajani_36 (C1), JPickles_33 (C1), Janiyr_35 (C1), JayJay_38 (C1), Jaygup_35 (C1), Jedediah_35 (C1), Jemmno_35 (C1), Jessibeth14_34 (C1), JulietS_30 (C1), Kboogie_35 (C1), Khaleesi_34 (C1), Koguma_31 (C1), LRRHood_32 (C1), Labradorite_34 (C1), Latch_35 (C1), LifeSavor_36 (C1), Littleton_35 (C1), Loanshark_35 (C1), LolaVinca_38 (C1), LookingGlass_38 (C1), LordLeafolot_41 (C1), Lukilu_28 (C1), Lunareta_34 (C1), Maby2021_36 (C1), Matsumoto_34 (C1), McGee_34 (C1), McWolfish_34 (C1), Megamind_35 (C1), MikeLiesIn_35 (C1), Mikro_33 (C1), Momo_34 (C1), Montpel_34 (C1), Morizzled23_34 (C1), Naija_35 (C1), Nappy_36 (C1), NedWong_36 (C1), Ngannou_33 (C1), NoodleTree_34 (C1), Norm_35 (C1), OrediggerDelux_34 (C1), ParkTD_34 (C1), Patter_35 (C1), PharkleMinkus_40 (C1), Phlegm_37 (C1), Phusco_35 (C1), Pier_37 (C1), Pio_38 (C1), Pivoine_35 (C1), Pleione_37 (C1),

Primadonna_30 (C1), Pupusa_41 (C1), PurduePete_34 (C1), QBert_33 (C1), Quasimodo_35 (C1), Rahel_35 (C1), Rizal_33 (C1), RoMag_30 (C1), Rocha_33 (C1), Ronan_30 (C1), SVoro_34 (C1), Salacia_37 (C1), Sauce_36 (C1), Sebata_35 (C1), Shaqnato_31 (C1), ShiaLabeouf_35 (C1), Shnickers_35 (C1), Shrimp_35 (C1), SilverDipper_36 (C1), SmallFry_35 (C1), Spec_33 (C1), Sprinklers_35 (C1), SrishMeg2525_34 (C1), StephanieG_35 (C1), StubbySaigey_34 (C1), Substance289_32 (C1), Tainan_40 (C1), Teardrop_34 (C1), TinyTim_35 (C1), Tonenili_40 (C1), Tortoise16_34 (C1), Tyke_37 (C1), ValleyTerrace_35 (C1), Wally_34 (C1), Willis_35 (C1), Yassified_32 (C1), YemiJoy2021_36 (C1), YoungMoneyMata_35 (C1), Yucca_35 (C1), Zalkecks_37 (C1), Zeenon_37 (C1), ZygoTaiga_35 (C1),

Start 13:

- Found in 168 of 172 (97.7%) of genes in pham
- No Manual Annotations of this start.
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Belieber_31 (C1), Domi_30 (C1), JigglyPuff_35 (C1), Lee7_34 (C1), Naval22_37 (C1),

Summary by clusters:

There are 4 clusters represented in this pham: DW, C1, DB, AD,

Info for manual annotations of cluster AD:

- Start number 6 was manually annotated 2 times for cluster AD.

Info for manual annotations of cluster C1:

- Start number 8 was manually annotated 1 time for cluster C1.
- Start number 9 was manually annotated 133 times for cluster C1.

Info for manual annotations of cluster DB:

- Start number 4 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DW:

- Start number 4 was manually annotated 1 time for cluster DW.
- Start number 5 was manually annotated 1 time for cluster DW.

Gene Information:

Gene: Ablatia_34 Start: 10966, Stop: 11184, Start Num: 9

Candidate Starts for Ablatia_34:

(3, 10840), (Start: 8 @10951 has 1 MA's), (Start: 9 @10966 has 133 MA's), (11, 10984), (12, 10996), (13, 11002), (16, 11080), (17, 11086), (20, 11134),

Gene: Ading_35 Start: 11229, Stop: 11447, Start Num: 9

Candidate Starts for Ading_35:

(3, 11103), (Start: 8 @11214 has 1 MA's), (Start: 9 @11229 has 133 MA's), (11, 11247), (12, 11259), (13, 11265), (16, 11343), (17, 11349), (20, 11397),

Gene: Adlitam_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Adlitam_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Amataga_35 Start: 11235, Stop: 11468, Start Num: 8

Candidate Starts for Amataga_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: ArcherS7_34 Start: 11240, Stop: 11458, Start Num: 9

Candidate Starts for ArcherS7_34:

(3, 11114), (Start: 8 @11225 has 1 MA's), (Start: 9 @11240 has 133 MA's), (11, 11258), (12, 11270), (13, 11276), (16, 11354), (17, 11360), (20, 11408),

Gene: Asterius_36 Start: 11515, Stop: 11733, Start Num: 9

Candidate Starts for Asterius_36:

(3, 11389), (Start: 8 @11500 has 1 MA's), (Start: 9 @11515 has 133 MA's), (11, 11533), (12, 11545), (13, 11551), (16, 11629), (17, 11635), (20, 11683),

Gene: Atlantean_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Atlantean_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Audrick_37 Start: 11229, Stop: 11447, Start Num: 9

Candidate Starts for Audrick_37:

(3, 11103), (Start: 8 @11214 has 1 MA's), (Start: 9 @11229 has 133 MA's), (11, 11247), (12, 11259), (13, 11265), (16, 11343), (17, 11349), (20, 11397),

Gene: Ava3_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Ava3_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Babyland_34 Start: 10688, Stop: 10906, Start Num: 9

Candidate Starts for Babyland_34:

(3, 10562), (Start: 8 @10673 has 1 MA's), (Start: 9 @10688 has 133 MA's), (11, 10706), (12, 10718), (13, 10724), (16, 10802), (17, 10808), (20, 10856),

Gene: BackyardAgain_32 Start: 10669, Stop: 10887, Start Num: 9

Candidate Starts for BackyardAgain_32:

(3, 10543), (Start: 8 @10654 has 1 MA's), (Start: 9 @10669 has 133 MA's), (11, 10687), (12, 10699), (13, 10705), (16, 10783), (17, 10789), (20, 10837),

Gene: BadAgartude_36 Start: 11882, Stop: 12100, Start Num: 9

Candidate Starts for BadAgartude_36:

(3, 11756), (Start: 8 @11867 has 1 MA's), (Start: 9 @11882 has 133 MA's), (11, 11900), (12, 11912), (13, 11918), (16, 11996), (17, 12002), (20, 12050),

Gene: BananaFence_36 Start: 11679, Stop: 11897, Start Num: 9

Candidate Starts for BananaFence_36:

(3, 11553), (Start: 8 @11664 has 1 MA's), (Start: 9 @11679 has 133 MA's), (11, 11697), (12, 11709), (13, 11715), (16, 11793), (17, 11799), (20, 11847),

Gene: Bangla1971_34 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Bangla1971_34:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: BeanWater_31 Start: 11639, Stop: 11857, Start Num: 9

Candidate Starts for BeanWater_31:

(3, 11513), (Start: 8 @11624 has 1 MA's), (Start: 9 @11639 has 133 MA's), (11, 11657), (12, 11669), (13, 11675), (16, 11753), (17, 11759), (20, 11807),

Gene: Belieber_31 Start: 10472, Stop: 10654, Start Num: 13

Candidate Starts for Belieber_31:

(3, 10310), (Start: 8 @10421 has 1 MA's), (Start: 9 @10436 has 133 MA's), (11, 10454), (12, 10466), (13, 10472), (16, 10550), (17, 10556), (20, 10604),

Gene: Bezza_27 Start: 10315, Stop: 10533, Start Num: 9

Candidate Starts for Bezza_27:

(3, 10189), (Start: 8 @10300 has 1 MA's), (Start: 9 @10315 has 133 MA's), (11, 10333), (12, 10345), (13, 10351), (16, 10429), (17, 10435), (20, 10483),

Gene: BigCity_39 Start: 12775, Stop: 12993, Start Num: 9

Candidate Starts for BigCity_39:

(3, 12649), (Start: 8 @12760 has 1 MA's), (Start: 9 @12775 has 133 MA's), (11, 12793), (12, 12805), (13, 12811), (16, 12889), (17, 12895), (20, 12943),

Gene: Bipolarisk_34 Start: 11506, Stop: 11724, Start Num: 9

Candidate Starts for Bipolarisk_34:

(3, 11380), (Start: 8 @11491 has 1 MA's), (Start: 9 @11506 has 133 MA's), (11, 11524), (12, 11536), (13, 11542), (16, 11620), (17, 11626), (20, 11674),

Gene: Blackdragon_30 Start: 10271, Stop: 10489, Start Num: 9

Candidate Starts for Blackdragon_30:

(3, 10145), (Start: 8 @10256 has 1 MA's), (Start: 9 @10271 has 133 MA's), (11, 10289), (12, 10301), (13, 10307), (16, 10385), (17, 10391), (20, 10439),

Gene: BobaPhatt_32 Start: 10680, Stop: 10898, Start Num: 9

Candidate Starts for BobaPhatt_32:

(3, 10554), (Start: 8 @10665 has 1 MA's), (Start: 9 @10680 has 133 MA's), (11, 10698), (12, 10710), (13, 10716), (16, 10794), (17, 10800), (20, 10848),

Gene: Bonray_35 Start: 11783, Stop: 12001, Start Num: 9

Candidate Starts for Bonray_35:

(3, 11657), (Start: 8 @11768 has 1 MA's), (Start: 9 @11783 has 133 MA's), (11, 11801), (12, 11813), (13, 11819), (16, 11897), (17, 11903), (20, 11951),

Gene: Bowman_34 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Bowman_34:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Bread_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Bread_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Breeniome_35 Start: 10678, Stop: 10896, Start Num: 9

Candidate Starts for Breeniome_35:

(3, 10552), (Start: 8 @10663 has 1 MA's), (Start: 9 @10678 has 133 MA's), (11, 10696), (12, 10708), (13, 10714), (16, 10792), (17, 10798), (20, 10846),

Gene: Burrough_35 Start: 11506, Stop: 11724, Start Num: 9

Candidate Starts for Burrough_35:

(3, 11380), (Start: 8 @11491 has 1 MA's), (Start: 9 @11506 has 133 MA's), (11, 11524), (12, 11536), (13, 11542), (16, 11620), (17, 11626), (20, 11674),

Gene: Bxz1_35 Start: 12255, Stop: 12473, Start Num: 9

Candidate Starts for Bxz1_35:

(3, 12129), (Start: 8 @12240 has 1 MA's), (Start: 9 @12255 has 133 MA's), (11, 12273), (12, 12285), (13, 12291), (16, 12369), (17, 12375), (20, 12423),

Gene: Cactojaque_32 Start: 10374, Stop: 10592, Start Num: 9

Candidate Starts for Cactojaque_32:

(3, 10248), (Start: 8 @10359 has 1 MA's), (Start: 9 @10374 has 133 MA's), (11, 10392), (12, 10404), (13, 10410), (16, 10488), (17, 10494), (20, 10542),

Gene: Cali_35 Start: 12816, Stop: 13034, Start Num: 9

Candidate Starts for Cali_35:

(3, 12690), (Start: 8 @12801 has 1 MA's), (Start: 9 @12816 has 133 MA's), (11, 12834), (12, 12846), (13, 12852), (16, 12930), (17, 12936), (20, 12984),

Gene: Capablanca_37 Start: 12375, Stop: 12593, Start Num: 9

Candidate Starts for Capablanca_37:

(3, 12249), (Start: 8 @12360 has 1 MA's), (Start: 9 @12375 has 133 MA's), (11, 12393), (12, 12405), (13, 12411), (16, 12489), (17, 12495), (20, 12543),

Gene: Catera_33 Start: 10673, Stop: 10891, Start Num: 9

Candidate Starts for Catera_33:

(3, 10547), (Start: 8 @10658 has 1 MA's), (Start: 9 @10673 has 133 MA's), (11, 10691), (12, 10703), (13, 10709), (16, 10787), (17, 10793), (20, 10841),

Gene: CharlieB_35 Start: 10814, Stop: 11032, Start Num: 9

Candidate Starts for CharlieB_35:

(3, 10688), (Start: 8 @10799 has 1 MA's), (Start: 9 @10814 has 133 MA's), (11, 10832), (12, 10844), (13, 10850), (16, 10928), (17, 10934), (20, 10982),

Gene: Chomp_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Chomp_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: CindyLou_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for CindyLou_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Cleatunium_31 Start: 10945, Stop: 11163, Start Num: 9

Candidate Starts for Cleatunium_31:

(3, 10819), (Start: 8 @10930 has 1 MA's), (Start: 9 @10945 has 133 MA's), (11, 10963), (12, 10975), (13, 10981), (16, 11059), (17, 11065), (20, 11113),

Gene: Concombre_34 Start: 12021, Stop: 12239, Start Num: 9

Candidate Starts for Concombre_34:

(3, 11895), (Start: 8 @12006 has 1 MA's), (Start: 9 @12021 has 133 MA's), (11, 12039), (12, 12051), (13, 12057), (16, 12135), (17, 12141), (20, 12189),

Gene: DTDevon_36 Start: 12414, Stop: 12632, Start Num: 9

Candidate Starts for DTDevon_36:

(3, 12288), (Start: 8 @12399 has 1 MA's), (Start: 9 @12414 has 133 MA's), (11, 12432), (12, 12444), (13, 12450), (16, 12528), (17, 12534), (20, 12582),

Gene: Daffodil_37 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Daffodil_37:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Darko_34 Start: 11648, Stop: 11866, Start Num: 9

Candidate Starts for Darko_34:

(3, 11522), (Start: 8 @11633 has 1 MA's), (Start: 9 @11648 has 133 MA's), (11, 11666), (12, 11678), (13, 11684), (16, 11762), (17, 11768), (20, 11816),

Gene: Delilah_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Delilah_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Demodog_33 Start: 12021, Stop: 12239, Start Num: 9

Candidate Starts for Demodog_33:

(3, 11895), (Start: 8 @12006 has 1 MA's), (Start: 9 @12021 has 133 MA's), (11, 12039), (12, 12051), (13, 12057), (16, 12135), (17, 12141), (20, 12189),

Gene: Derek_36 Start: 11207, Stop: 11425, Start Num: 9

Candidate Starts for Derek_36:

(3, 11081), (Start: 8 @11192 has 1 MA's), (Start: 9 @11207 has 133 MA's), (11, 11225), (12, 11237), (13, 11243), (16, 11321), (17, 11327), (20, 11375),

Gene: Dessert_33 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Dessert_33:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: DirtyBoi_36 Start: 29499, Stop: 29185, Start Num: 4

Candidate Starts for DirtyBoi_36:

(Start: 4 @29499 has 3 MA's), (Start: 5 @29481 has 1 MA's), (7, 29448), (10, 29391), (14, 29319), (19, 29256), (21, 29226),

Gene: Domi_30 Start: 11103, Stop: 11285, Start Num: 13

Candidate Starts for Domi_30:

(3, 10941), (Start: 8 @11052 has 1 MA's), (Start: 9 @11067 has 133 MA's), (11, 11085), (12, 11097), (13, 11103), (16, 11181), (17, 11187), (20, 11235),

Gene: Dori_93 Start: 64171, Stop: 63872, Start Num: 6

Candidate Starts for Dori_93:

(1, 64570), (2, 64555), (Start: 6 @64171 has 2 MA's), (7, 64129), (13, 64051), (17, 63967), (20, 63919),

Gene: DrPhinkDaddy_35 Start: 11792, Stop: 12010, Start Num: 9

Candidate Starts for DrPhinkDaddy_35:

(3, 11666), (Start: 8 @11777 has 1 MA's), (Start: 9 @11792 has 133 MA's), (11, 11810), (12, 11822), (13, 11828), (16, 11906), (17, 11912), (20, 11960),

Gene: Drazdys_35 Start: 11580, Stop: 11798, Start Num: 9

Candidate Starts for Drazdys_35:

(3, 11454), (Start: 8 @11565 has 1 MA's), (Start: 9 @11580 has 133 MA's), (11, 11598), (12, 11610), (13, 11616), (16, 11694), (17, 11700), (20, 11748),

Gene: Duckfeet_32 Start: 10986, Stop: 11204, Start Num: 9

Candidate Starts for Duckfeet_32:

(3, 10860), (Start: 8 @10971 has 1 MA's), (Start: 9 @10986 has 133 MA's), (11, 11004), (12, 11016), (13, 11022), (16, 11100), (17, 11106), (20, 11154),

Gene: DumpsterDude_37 Start: 32135, Stop: 31725, Start Num: 4

Candidate Starts for DumpsterDude_37:

(1, 32480), (Start: 4 @32135 has 3 MA's), (Start: 5 @32117 has 1 MA's), (7, 32084), (10, 32027), (15, 31949), (18, 31910), (19, 31892), (22, 31796),

Gene: ET08_30 Start: 11251, Stop: 11469, Start Num: 9

Candidate Starts for ET08_30:

(3, 11125), (Start: 8 @11236 has 1 MA's), (Start: 9 @11251 has 133 MA's), (11, 11269), (12, 11281), (13, 11287), (16, 11365), (17, 11371), (20, 11419),

Gene: EggyFarm_39 Start: 12775, Stop: 12993, Start Num: 9

Candidate Starts for EggyFarm_39:

(3, 12649), (Start: 8 @12760 has 1 MA's), (Start: 9 @12775 has 133 MA's), (11, 12793), (12, 12805), (13, 12811), (16, 12889), (17, 12895), (20, 12943),

Gene: EmToTheThree_38 Start: 13209, Stop: 13427, Start Num: 9

Candidate Starts for EmToTheThree_38:

(3, 13083), (Start: 8 @13194 has 1 MA's), (Start: 9 @13209 has 133 MA's), (11, 13227), (12, 13239), (13, 13245), (16, 13323), (17, 13329), (20, 13377),

Gene: EmmaElysia_33 Start: 10434, Stop: 10652, Start Num: 9

Candidate Starts for EmmaElysia_33:

(3, 10308), (Start: 8 @10419 has 1 MA's), (Start: 9 @10434 has 133 MA's), (11, 10452), (12, 10464), (13, 10470), (16, 10548), (17, 10554), (20, 10602),

Gene: Erdmann_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Erdmann_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Essence_34 Start: 10969, Stop: 11187, Start Num: 9

Candidate Starts for Essence_34:

(3, 10843), (Start: 8 @10954 has 1 MA's), (Start: 9 @10969 has 133 MA's), (11, 10987), (12, 10999), (13, 11005), (16, 11083), (17, 11089), (20, 11137),

Gene: Ewok_35 Start: 11798, Stop: 12016, Start Num: 9

Candidate Starts for Ewok_35:

(3, 11672), (Start: 8 @11783 has 1 MA's), (Start: 9 @11798 has 133 MA's), (11, 11816), (12, 11828), (13, 11834), (16, 11912), (17, 11918), (20, 11966),

Gene: Fixie_32 Start: 10417, Stop: 10635, Start Num: 9

Candidate Starts for Fixie_32:

(3, 10291), (Start: 8 @10402 has 1 MA's), (Start: 9 @10417 has 133 MA's), (11, 10435), (12, 10447), (13, 10453), (16, 10531), (17, 10537), (20, 10585),

Gene: Fludd_34 Start: 10670, Stop: 10888, Start Num: 9

Candidate Starts for Fludd_34:

(3, 10544), (Start: 8 @10655 has 1 MA's), (Start: 9 @10670 has 133 MA's), (11, 10688), (12, 10700), (13, 10706), (16, 10784), (17, 10790), (20, 10838),

Gene: Fongie_35 Start: 12330, Stop: 12548, Start Num: 9

Candidate Starts for Fongie_35:

(3, 12204), (Start: 8 @12315 has 1 MA's), (Start: 9 @12330 has 133 MA's), (11, 12348), (12, 12360), (13, 12366), (16, 12444), (17, 12450), (20, 12498),

Gene: FoxtrotP1_35 Start: 12123, Stop: 12341, Start Num: 9

Candidate Starts for FoxtrotP1_35:

(3, 11997), (Start: 8 @12108 has 1 MA's), (Start: 9 @12123 has 133 MA's), (11, 12141), (12, 12153), (13, 12159), (16, 12237), (17, 12243), (20, 12291),

Gene: FrayBell_41 Start: 13363, Stop: 13581, Start Num: 9

Candidate Starts for FrayBell_41:

(3, 13237), (Start: 8 @13348 has 1 MA's), (Start: 9 @13363 has 133 MA's), (11, 13381), (12, 13393), (13, 13399), (16, 13477), (17, 13483), (20, 13531),

Gene: FudgeTart_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for FudgeTart_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Gabriel_35 Start: 10669, Stop: 10887, Start Num: 9

Candidate Starts for Gabriel_35:

(3, 10543), (Start: 8 @10654 has 1 MA's), (Start: 9 @10669 has 133 MA's), (11, 10687), (12, 10699), (13, 10705), (16, 10783), (17, 10789), (20, 10837),

Gene: Gamgam_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Gamgam_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Ghost_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Ghost_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Gizmo_37 Start: 11797, Stop: 12015, Start Num: 9

Candidate Starts for Gizmo_37:

(3, 11671), (Start: 8 @11782 has 1 MA's), (Start: 9 @11797 has 133 MA's), (11, 11815), (12, 11827), (13, 11833), (16, 11911), (17, 11917), (20, 11965),

Gene: GlutenPhree_36 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for GlutenPhree_36:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Grasshills_39 Start: 12775, Stop: 12993, Start Num: 9

Candidate Starts for Grasshills_39:

(3, 12649), (Start: 8 @12760 has 1 MA's), (Start: 9 @12775 has 133 MA's), (11, 12793), (12, 12805), (13, 12811), (16, 12889), (17, 12895), (20, 12943),

Gene: Grungle_28 Start: 9366, Stop: 9584, Start Num: 9

Candidate Starts for Grungle_28:

(3, 9240), (Start: 8 @9351 has 1 MA's), (Start: 9 @9366 has 133 MA's), (11, 9384), (12, 9396), (13, 9402), (16, 9480), (17, 9486), (20, 9534),

Gene: Guwapp_35 Start: 11207, Stop: 11425, Start Num: 9

Candidate Starts for Guwapp_35:

(3, 11081), (Start: 8 @11192 has 1 MA's), (Start: 9 @11207 has 133 MA's), (11, 11225), (12, 11237), (13, 11243), (16, 11321), (17, 11327), (20, 11375),

Gene: Hedwig_38 Start: 29922, Stop: 29608, Start Num: 4

Candidate Starts for Hedwig_38:

(Start: 4 @29922 has 3 MA's), (Start: 5 @29904 has 1 MA's), (7, 29871), (10, 29814), (14, 29742), (19, 29679), (21, 29649),

Gene: InigoMontoya_36 Start: 11211, Stop: 11429, Start Num: 9

Candidate Starts for InigoMontoya_36:

(3, 11085), (Start: 8 @11196 has 1 MA's), (Start: 9 @11211 has 133 MA's), (11, 11229), (12, 11241), (13, 11247), (16, 11325), (17, 11331), (20, 11379),

Gene: InterFolia_42 Start: 13901, Stop: 14119, Start Num: 9

Candidate Starts for InterFolia_42:

(3, 13775), (Start: 8 @13886 has 1 MA's), (Start: 9 @13901 has 133 MA's), (11, 13919), (12, 13931), (13, 13937), (16, 14015), (17, 14021), (20, 14069),

Gene: Iota_32 Start: 11330, Stop: 11548, Start Num: 9

Candidate Starts for Iota_32:

(3, 11204), (Start: 8 @11315 has 1 MA's), (Start: 9 @11330 has 133 MA's), (11, 11348), (12, 11360), (13, 11366), (16, 11444), (17, 11450), (20, 11498),

Gene: Issimir_35 Start: 11790, Stop: 12008, Start Num: 9

Candidate Starts for Issimir_35:

(3, 11664), (Start: 8 @11775 has 1 MA's), (Start: 9 @11790 has 133 MA's), (11, 11808), (12, 11820), (13, 11826), (16, 11904), (17, 11910), (20, 11958),

Gene: Izajani_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Izajani_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: JPickles_33 Start: 10444, Stop: 10662, Start Num: 9

Candidate Starts for JPickles_33:

(3, 10318), (Start: 8 @10429 has 1 MA's), (Start: 9 @10444 has 133 MA's), (11, 10462), (12, 10474), (13, 10480), (16, 10558), (17, 10564), (20, 10612),

Gene: Janiyra_35 Start: 11229, Stop: 11447, Start Num: 9

Candidate Starts for Janiyra_35:

(3, 11103), (Start: 8 @11214 has 1 MA's), (Start: 9 @11229 has 133 MA's), (11, 11247), (12, 11259), (13, 11265), (16, 11343), (17, 11349), (20, 11397),

Gene: JayJay_38 Start: 11760, Stop: 11978, Start Num: 9

Candidate Starts for JayJay_38:

(3, 11634), (Start: 8 @11745 has 1 MA's), (Start: 9 @11760 has 133 MA's), (11, 11778), (12, 11790), (13, 11796), (16, 11874), (17, 11880), (20, 11928),

Gene: Jaygup_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Jaygup_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Jedediah_35 Start: 10715, Stop: 10933, Start Num: 9

Candidate Starts for Jedediah_35:

(3, 10589), (Start: 8 @10700 has 1 MA's), (Start: 9 @10715 has 133 MA's), (11, 10733), (12, 10745), (13, 10751), (16, 10829), (17, 10835), (20, 10883),

Gene: Jemmno_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Jemmno_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Jessibeth14_34 Start: 11515, Stop: 11733, Start Num: 9

Candidate Starts for Jessibeth14_34:

(3, 11389), (Start: 8 @11500 has 1 MA's), (Start: 9 @11515 has 133 MA's), (11, 11533), (12, 11545), (13, 11551), (16, 11629), (17, 11635), (20, 11683),

Gene: JigglyPuff_35 Start: 12107, Stop: 12289, Start Num: 13

Candidate Starts for JigglyPuff_35:

(3, 11945), (Start: 8 @12056 has 1 MA's), (Start: 9 @12071 has 133 MA's), (11, 12089), (12, 12101), (13, 12107), (16, 12185), (17, 12191), (20, 12239),

Gene: JulietS_30 Start: 9669, Stop: 9887, Start Num: 9

Candidate Starts for JulietS_30:

(3, 9543), (Start: 8 @9654 has 1 MA's), (Start: 9 @9669 has 133 MA's), (11, 9687), (12, 9699), (13, 9705), (16, 9783), (17, 9789), (20, 9837),

Gene: Kboogie_35 Start: 10725, Stop: 10943, Start Num: 9

Candidate Starts for Kboogie_35:

(3, 10599), (Start: 8 @10710 has 1 MA's), (Start: 9 @10725 has 133 MA's), (11, 10743), (12, 10755), (13, 10761), (16, 10839), (17, 10845), (20, 10893),

Gene: Khaleesi_34 Start: 11542, Stop: 11760, Start Num: 9

Candidate Starts for Khaleesi_34:

(3, 11416), (Start: 8 @11527 has 1 MA's), (Start: 9 @11542 has 133 MA's), (11, 11560), (12, 11572), (13, 11578), (16, 11656), (17, 11662), (20, 11710),

Gene: Koguma_31 Start: 10012, Stop: 10230, Start Num: 9

Candidate Starts for Koguma_31:

(3, 9886), (Start: 8 @9997 has 1 MA's), (Start: 9 @10012 has 133 MA's), (11, 10030), (12, 10042), (13, 10048), (16, 10126), (17, 10132), (20, 10180),

Gene: LRRHood_32 Start: 11935, Stop: 12153, Start Num: 9

Candidate Starts for LRRHood_32:

(3, 11809), (Start: 8 @11920 has 1 MA's), (Start: 9 @11935 has 133 MA's), (11, 11953), (12, 11965), (13, 11971), (16, 12049), (17, 12055), (20, 12103),

Gene: Labradorite_34 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Labradorite_34:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Latch_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Latch_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Lee7_34 Start: 11828, Stop: 12010, Start Num: 13

Candidate Starts for Lee7_34:

(3, 11666), (Start: 8 @11777 has 1 MA's), (Start: 9 @11792 has 133 MA's), (11, 11810), (12, 11822), (13, 11828), (16, 11906), (17, 11912), (20, 11960),

Gene: LifeSavor_36 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for LifeSavor_36:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Littleton_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Littleton_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Loanshark_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Loanshark_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: LolaVince_38 Start: 13007, Stop: 13225, Start Num: 9

Candidate Starts for LolaVince_38:

(3, 12881), (Start: 8 @12992 has 1 MA's), (Start: 9 @13007 has 133 MA's), (11, 13025), (12, 13037), (13, 13043), (16, 13121), (17, 13127), (20, 13175),

Gene: LookingGlass_38 Start: 12566, Stop: 12784, Start Num: 9

Candidate Starts for LookingGlass_38:

(3, 12440), (Start: 8 @12551 has 1 MA's), (Start: 9 @12566 has 133 MA's), (11, 12584), (12, 12596), (13, 12602), (16, 12680), (17, 12686), (20, 12734),

Gene: LordLeafolot_41 Start: 13362, Stop: 13580, Start Num: 9

Candidate Starts for LordLeafolot_41:

(3, 13236), (Start: 8 @13347 has 1 MA's), (Start: 9 @13362 has 133 MA's), (11, 13380), (12, 13392), (13, 13398), (16, 13476), (17, 13482), (20, 13530),

Gene: Lukilu_28 Start: 10386, Stop: 10604, Start Num: 9

Candidate Starts for Lukilu_28:

(3, 10260), (Start: 8 @10371 has 1 MA's), (Start: 9 @10386 has 133 MA's), (11, 10404), (12, 10416), (13, 10422), (16, 10500), (17, 10506), (20, 10554),

Gene: Lunareta_34 Start: 11526, Stop: 11744, Start Num: 9

Candidate Starts for Lunareta_34:

(3, 11400), (Start: 8 @11511 has 1 MA's), (Start: 9 @11526 has 133 MA's), (11, 11544), (12, 11556), (13, 11562), (16, 11640), (17, 11646), (20, 11694),

Gene: Maby2021_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Maby2021_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Mao1_101 Start: 64723, Stop: 64415, Start Num: 6

Candidate Starts for Mao1_101:

(Start: 6 @64723 has 2 MA's), (7, 64681), (13, 64603), (17, 64519),

Gene: Matsumoto_34 Start: 11211, Stop: 11429, Start Num: 9

Candidate Starts for Matsumoto_34:

(3, 11085), (Start: 8 @11196 has 1 MA's), (Start: 9 @11211 has 133 MA's), (11, 11229), (12, 11241), (13, 11247), (16, 11325), (17, 11331), (20, 11379),

Gene: McGee_34 Start: 10434, Stop: 10652, Start Num: 9

Candidate Starts for McGee_34:

(3, 10308), (Start: 8 @10419 has 1 MA's), (Start: 9 @10434 has 133 MA's), (11, 10452), (12, 10464), (13, 10470), (16, 10548), (17, 10554), (20, 10602),

Gene: McWolfish_34 Start: 11542, Stop: 11760, Start Num: 9

Candidate Starts for McWolfish_34:

(3, 11416), (Start: 8 @11527 has 1 MA's), (Start: 9 @11542 has 133 MA's), (11, 11560), (12, 11572), (13, 11578), (16, 11656), (17, 11662), (20, 11710),

Gene: Megamind_35 Start: 11780, Stop: 11998, Start Num: 9

Candidate Starts for Megamind_35:

(3, 11654), (Start: 8 @11765 has 1 MA's), (Start: 9 @11780 has 133 MA's), (11, 11798), (12, 11810), (13, 11816), (16, 11894), (17, 11900), (20, 11948),

Gene: MikeLiesIn_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for MikeLiesIn_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Mikro_33 Start: 12281, Stop: 12499, Start Num: 9

Candidate Starts for Mikro_33:

(3, 12155), (Start: 8 @12266 has 1 MA's), (Start: 9 @12281 has 133 MA's), (11, 12299), (12, 12311), (13, 12317), (16, 12395), (17, 12401), (20, 12449),

Gene: Momo_34 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Momo_34:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Montpel_34 Start: 11526, Stop: 11744, Start Num: 9

Candidate Starts for Montpel_34:

(3, 11400), (Start: 8 @11511 has 1 MA's), (Start: 9 @11526 has 133 MA's), (11, 11544), (12, 11556), (13, 11562), (16, 11640), (17, 11646), (20, 11694),

Gene: Morizzled23_34 Start: 10646, Stop: 10864, Start Num: 9

Candidate Starts for Morizzled23_34:

(3, 10520), (Start: 8 @10631 has 1 MA's), (Start: 9 @10646 has 133 MA's), (11, 10664), (12, 10676), (13, 10682), (16, 10760), (17, 10766), (20, 10814),

Gene: Naija_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Naija_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Nappy_36 Start: 11960, Stop: 12178, Start Num: 9

Candidate Starts for Nappy_36:

(3, 11834), (Start: 8 @11945 has 1 MA's), (Start: 9 @11960 has 133 MA's), (11, 11978), (12, 11990), (13, 11996), (16, 12074), (17, 12080), (20, 12128),

Gene: Naval22_37 Start: 11871, Stop: 12053, Start Num: 13

Candidate Starts for Naval22_37:

(3, 11709), (Start: 8 @11820 has 1 MA's), (Start: 9 @11835 has 133 MA's), (11, 11853), (12, 11865), (13, 11871), (16, 11949), (17, 11955), (20, 12003),

Gene: NedWong_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for NedWong_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Ngannou_33 Start: 10426, Stop: 10644, Start Num: 9

Candidate Starts for Ngannou_33:

(3, 10300), (Start: 8 @10411 has 1 MA's), (Start: 9 @10426 has 133 MA's), (11, 10444), (12, 10456), (13, 10462), (16, 10540), (17, 10546), (20, 10594),

Gene: NoodleTree_34 Start: 11557, Stop: 11775, Start Num: 9

Candidate Starts for NoodleTree_34:

(Start: 8 @11542 has 1 MA's), (Start: 9 @11557 has 133 MA's), (11, 11575), (12, 11587), (13, 11593), (16, 11671), (17, 11677), (20, 11725),

Gene: Norm_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Norm_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: OrediggerDelux_34 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for OrediggerDelux_34:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: ParkTD_34 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for ParkTD_34:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Patter_35 Start: 11267, Stop: 11485, Start Num: 9

Candidate Starts for Patter_35:

(3, 11141), (Start: 8 @11252 has 1 MA's), (Start: 9 @11267 has 133 MA's), (11, 11285), (12, 11297), (13, 11303), (16, 11381), (17, 11387), (20, 11435),

Gene: PharkleMinkus_40 Start: 13363, Stop: 13581, Start Num: 9

Candidate Starts for PharkleMinkus_40:

(3, 13237), (Start: 8 @13348 has 1 MA's), (Start: 9 @13363 has 133 MA's), (11, 13381), (12, 13393), (13, 13399), (16, 13477), (17, 13483), (20, 13531),

Gene: Phlegm_37 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Phlegm_37:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Phusco_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Phusco_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Pier_37 Start: 11953, Stop: 12171, Start Num: 9

Candidate Starts for Pier_37:

(3, 11827), (Start: 8 @11938 has 1 MA's), (Start: 9 @11953 has 133 MA's), (11, 11971), (12, 11983), (13, 11989), (16, 12067), (17, 12073), (20, 12121),

Gene: Pio_38 Start: 12644, Stop: 12862, Start Num: 9

Candidate Starts for Pio_38:

(3, 12518), (Start: 8 @12629 has 1 MA's), (Start: 9 @12644 has 133 MA's), (11, 12662), (12, 12674), (13, 12680), (16, 12758), (17, 12764), (20, 12812),

Gene: Pivoine_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for Pivoine_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Pleione_37 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Pleione_37:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Primadonna_30 Start: 10899, Stop: 11117, Start Num: 9

Candidate Starts for Primadonna_30:

(3, 10773), (Start: 8 @10884 has 1 MA's), (Start: 9 @10899 has 133 MA's), (11, 10917), (12, 10929), (13, 10935), (16, 11013), (17, 11019), (20, 11067),

Gene: Pupusa_41 Start: 13586, Stop: 13804, Start Num: 9

Candidate Starts for Pupusa_41:

(3, 13460), (Start: 8 @13571 has 1 MA's), (Start: 9 @13586 has 133 MA's), (11, 13604), (12, 13616), (13, 13622), (16, 13700), (17, 13706), (20, 13754),

Gene: PurduePete_34 Start: 11506, Stop: 11724, Start Num: 9

Candidate Starts for PurduePete_34:

(3, 11380), (Start: 8 @11491 has 1 MA's), (Start: 9 @11506 has 133 MA's), (11, 11524), (12, 11536), (13, 11542), (16, 11620), (17, 11626), (20, 11674),

Gene: QBert_33 Start: 11959, Stop: 12177, Start Num: 9

Candidate Starts for QBert_33:

(3, 11833), (Start: 8 @11944 has 1 MA's), (Start: 9 @11959 has 133 MA's), (11, 11977), (12, 11989), (13, 11995), (16, 12073), (17, 12079), (20, 12127),

Gene: Quasimodo_35 Start: 12210, Stop: 12428, Start Num: 9

Candidate Starts for Quasimodo_35:

(3, 12084), (Start: 8 @12195 has 1 MA's), (Start: 9 @12210 has 133 MA's), (11, 12228), (12, 12240), (13, 12246), (16, 12324), (17, 12330), (20, 12378),

Gene: Rahel_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Rahel_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Rizal_33 Start: 10712, Stop: 10930, Start Num: 9

Candidate Starts for Rizal_33:

(3, 10586), (Start: 8 @10697 has 1 MA's), (Start: 9 @10712 has 133 MA's), (11, 10730), (12, 10742), (13, 10748), (16, 10826), (17, 10832), (20, 10880),

Gene: RoMag_30 Start: 11044, Stop: 11262, Start Num: 9

Candidate Starts for RoMag_30:

(3, 10918), (Start: 8 @11029 has 1 MA's), (Start: 9 @11044 has 133 MA's), (11, 11062), (12, 11074), (13, 11080), (16, 11158), (17, 11164), (20, 11212),

Gene: Rocha_33 Start: 10740, Stop: 10958, Start Num: 9

Candidate Starts for Rocha_33:

(3, 10614), (Start: 8 @10725 has 1 MA's), (Start: 9 @10740 has 133 MA's), (11, 10758), (12, 10770), (13, 10776), (16, 10854), (17, 10860), (20, 10908),

Gene: Ronan_30 Start: 9352, Stop: 9570, Start Num: 9

Candidate Starts for Ronan_30:

(3, 9226), (Start: 8 @9337 has 1 MA's), (Start: 9 @9352 has 133 MA's), (11, 9370), (12, 9382), (13, 9388), (16, 9466), (17, 9472), (20, 9520),

Gene: Ruthy_35 Start: 29835, Stop: 29443, Start Num: 5

Candidate Starts for Ruthy_35:

(1, 30198), (Start: 4 @29853 has 3 MA's), (Start: 5 @29835 has 1 MA's), (7, 29802), (10, 29745), (15, 29667), (18, 29628), (19, 29610), (22, 29514),

Gene: SVoro_34 Start: 11789, Stop: 12007, Start Num: 9

Candidate Starts for SVoro_34:

(3, 11663), (Start: 8 @11774 has 1 MA's), (Start: 9 @11789 has 133 MA's), (11, 11807), (12, 11819), (13, 11825), (16, 11903), (17, 11909), (20, 11957),

Gene: Salacia_37 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for Salacia_37:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Sauce_36 Start: 11922, Stop: 12140, Start Num: 9

Candidate Starts for Sauce_36:

(3, 11796), (Start: 8 @11907 has 1 MA's), (Start: 9 @11922 has 133 MA's), (11, 11940), (12, 11952), (13, 11958), (16, 12036), (17, 12042), (20, 12090),

Gene: Sebata_35 Start: 12145, Stop: 12363, Start Num: 9

Candidate Starts for Sebata_35:

(3, 12019), (Start: 8 @12130 has 1 MA's), (Start: 9 @12145 has 133 MA's), (11, 12163), (12, 12175), (13, 12181), (16, 12259), (17, 12265), (20, 12313),

Gene: Shaqnato_31 Start: 10357, Stop: 10575, Start Num: 9

Candidate Starts for Shaqnato_31:

(3, 10231), (Start: 8 @10342 has 1 MA's), (Start: 9 @10357 has 133 MA's), (11, 10375), (12, 10387), (13, 10393), (16, 10471), (17, 10477), (20, 10525),

Gene: ShiaLabeouf_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for ShiaLabeouf_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Shnickers_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Shnickers_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Shrimp_35 Start: 11799, Stop: 12017, Start Num: 9

Candidate Starts for Shrimp_35:

(3, 11673), (Start: 8 @11784 has 1 MA's), (Start: 9 @11799 has 133 MA's), (11, 11817), (12, 11829), (13, 11835), (16, 11913), (17, 11919), (20, 11967),

Gene: SilverDipper_36 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for SilverDipper_36:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: SmallFry_35 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for SmallFry_35:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Spec_33 Start: 11252, Stop: 11470, Start Num: 9

Candidate Starts for Spec_33:

(3, 11126), (Start: 8 @11237 has 1 MA's), (Start: 9 @11252 has 133 MA's), (11, 11270), (12, 11282), (13, 11288), (16, 11366), (17, 11372), (20, 11420),

Gene: Sprinklers_35 Start: 11284, Stop: 11502, Start Num: 9

Candidate Starts for Sprinklers_35:

(3, 11158), (Start: 8 @11269 has 1 MA's), (Start: 9 @11284 has 133 MA's), (11, 11302), (12, 11314), (13, 11320), (16, 11398), (17, 11404), (20, 11452),

Gene: SrishMeg2525_34 Start: 11506, Stop: 11724, Start Num: 9

Candidate Starts for SrishMeg2525_34:

(3, 11380), (Start: 8 @11491 has 1 MA's), (Start: 9 @11506 has 133 MA's), (11, 11524), (12, 11536), (13, 11542), (16, 11620), (17, 11626), (20, 11674),

Gene: StephanieG_35 Start: 11975, Stop: 12193, Start Num: 9

Candidate Starts for StephanieG_35:

(3, 11849), (Start: 8 @11960 has 1 MA's), (Start: 9 @11975 has 133 MA's), (11, 11993), (12, 12005), (13, 12011), (16, 12089), (17, 12095), (20, 12143),

Gene: StubbySaigey_34 Start: 10435, Stop: 10653, Start Num: 9

Candidate Starts for StubbySaigey_34:

(3, 10309), (Start: 8 @10420 has 1 MA's), (Start: 9 @10435 has 133 MA's), (11, 10453), (12, 10465), (13, 10471), (16, 10549), (17, 10555), (20, 10603),

Gene: Substance289_32 Start: 10720, Stop: 10938, Start Num: 9

Candidate Starts for Substance289_32:

(3, 10594), (Start: 8 @10705 has 1 MA's), (Start: 9 @10720 has 133 MA's), (11, 10738), (12, 10750), (13, 10756), (16, 10834), (17, 10840), (20, 10888),

Gene: Tainan_40 Start: 13362, Stop: 13580, Start Num: 9

Candidate Starts for Tainan_40:

(3, 13236), (Start: 8 @13347 has 1 MA's), (Start: 9 @13362 has 133 MA's), (11, 13380), (12, 13392), (13, 13398), (16, 13476), (17, 13482), (20, 13530),

Gene: Teardrop_34 Start: 10711, Stop: 10929, Start Num: 9

Candidate Starts for Teardrop_34:

(3, 10585), (Start: 8 @10696 has 1 MA's), (Start: 9 @10711 has 133 MA's), (11, 10729), (12, 10741), (13, 10747), (16, 10825), (17, 10831), (20, 10879),

Gene: TinyTim_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for TinyTim_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: Tonenili_40 Start: 13341, Stop: 13559, Start Num: 9

Candidate Starts for Tonenili_40:

(3, 13215), (Start: 8 @13326 has 1 MA's), (Start: 9 @13341 has 133 MA's), (11, 13359), (12, 13371), (13, 13377), (16, 13455), (17, 13461), (20, 13509),

Gene: Tortoise16_34 Start: 11246, Stop: 11464, Start Num: 9

Candidate Starts for Tortoise16_34:

(3, 11120), (Start: 8 @11231 has 1 MA's), (Start: 9 @11246 has 133 MA's), (11, 11264), (12, 11276), (13, 11282), (16, 11360), (17, 11366), (20, 11414),

Gene: Tyke_37 Start: 12658, Stop: 12876, Start Num: 9

Candidate Starts for Tyke_37:

(3, 12532), (Start: 8 @12643 has 1 MA's), (Start: 9 @12658 has 133 MA's), (11, 12676), (12, 12688), (13, 12694), (16, 12772), (17, 12778), (20, 12826),

Gene: ValleyTerrace_35 Start: 11250, Stop: 11468, Start Num: 9

Candidate Starts for ValleyTerrace_35:

(3, 11124), (Start: 8 @11235 has 1 MA's), (Start: 9 @11250 has 133 MA's), (11, 11268), (12, 11280), (13, 11286), (16, 11364), (17, 11370), (20, 11418),

Gene: Wally_34 Start: 10667, Stop: 10885, Start Num: 9

Candidate Starts for Wally_34:

(3, 10541), (Start: 8 @10652 has 1 MA's), (Start: 9 @10667 has 133 MA's), (11, 10685), (12, 10697), (13, 10703), (16, 10781), (17, 10787), (20, 10835),

Gene: Willis_35 Start: 11690, Stop: 11908, Start Num: 9

Candidate Starts for Willis_35:

(3, 11564), (Start: 8 @11675 has 1 MA's), (Start: 9 @11690 has 133 MA's), (11, 11708), (12, 11720), (13, 11726), (16, 11804), (17, 11810), (20, 11858),

Gene: Yassified_32 Start: 10447, Stop: 10665, Start Num: 9

Candidate Starts for Yassified_32:

(3, 10321), (Start: 8 @10432 has 1 MA's), (Start: 9 @10447 has 133 MA's), (11, 10465), (12, 10477), (13, 10483), (16, 10561), (17, 10567), (20, 10615),

Gene: YemiJoy2021_36 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for YemiJoy2021_36:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825), (13, 11831), (16, 11909), (17, 11915), (20, 11963),

Gene: YoungMoneyMata_35 Start: 11001, Stop: 11219, Start Num: 9

Candidate Starts for YoungMoneyMata_35:

(3, 10875), (Start: 8 @10986 has 1 MA's), (Start: 9 @11001 has 133 MA's), (11, 11019), (12, 11031), (13, 11037), (16, 11115), (17, 11121), (20, 11169),

Gene: Yucca_35 Start: 11717, Stop: 11935, Start Num: 9

Candidate Starts for Yucca_35:

(3, 11591), (Start: 8 @11702 has 1 MA's), (Start: 9 @11717 has 133 MA's), (11, 11735), (12, 11747), (13, 11753), (16, 11831), (17, 11837), (20, 11885),

Gene: Zalkecks_37 Start: 11799, Stop: 12017, Start Num: 9

Candidate Starts for Zalkecks_37:

(3, 11673), (Start: 8 @11784 has 1 MA's), (Start: 9 @11799 has 133 MA's), (11, 11817), (12, 11829), (13, 11835), (16, 11913), (17, 11919), (20, 11967),

Gene: Zeenon_37 Start: 11781, Stop: 11999, Start Num: 9

Candidate Starts for Zeenon_37:

(3, 11655), (Start: 8 @11766 has 1 MA's), (Start: 9 @11781 has 133 MA's), (11, 11799), (12, 11811), (13, 11817), (16, 11895), (17, 11901), (20, 11949),

Gene: ZygoTaiga_35 Start: 11795, Stop: 12013, Start Num: 9

Candidate Starts for ZygoTaiga_35:

(3, 11669), (Start: 8 @11780 has 1 MA's), (Start: 9 @11795 has 133 MA's), (11, 11813), (12, 11825),
(13, 11831), (16, 11909), (17, 11915), (20, 11963),