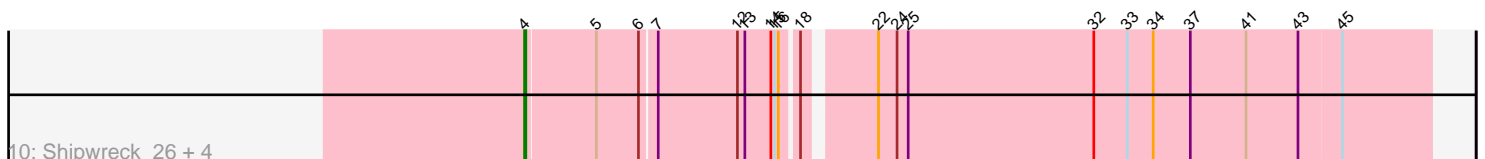
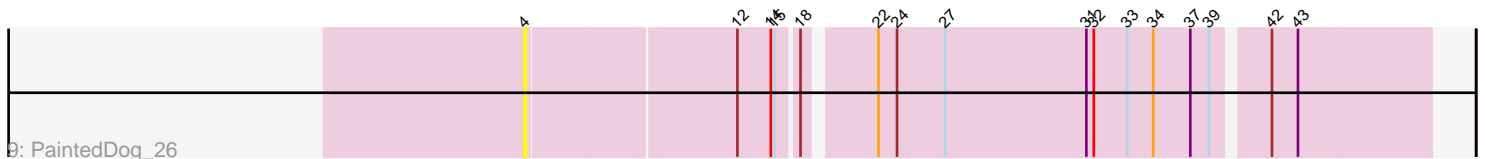
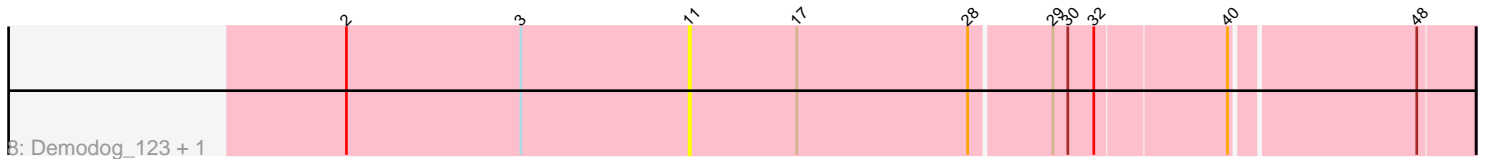
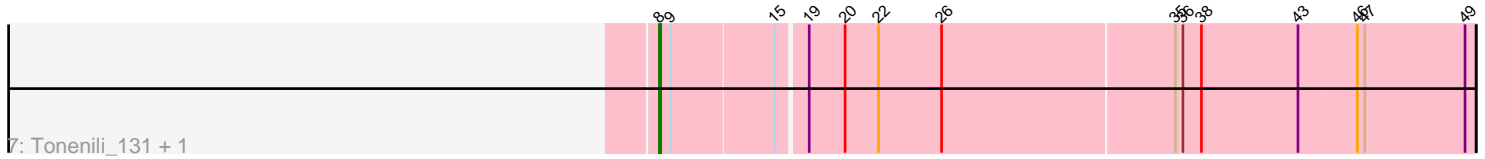
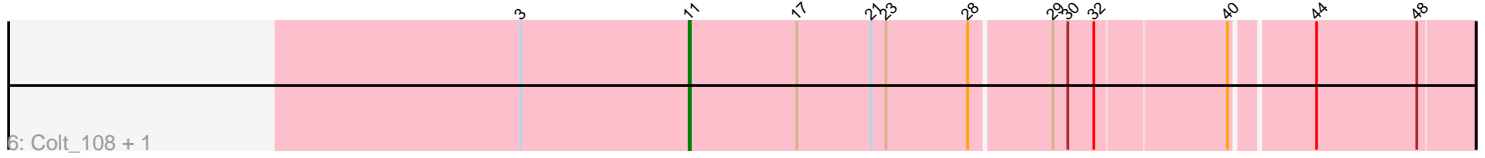
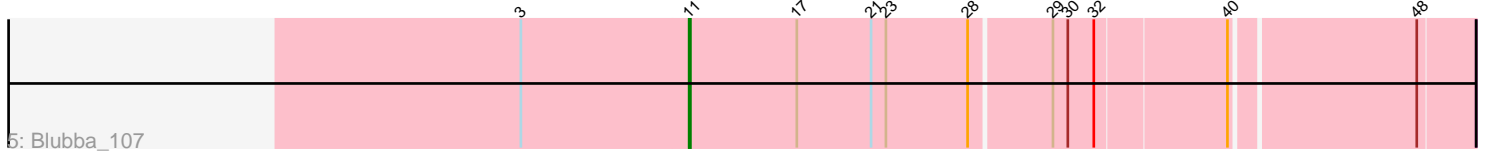
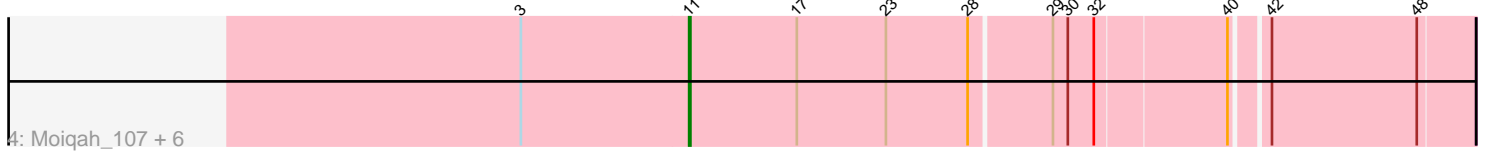
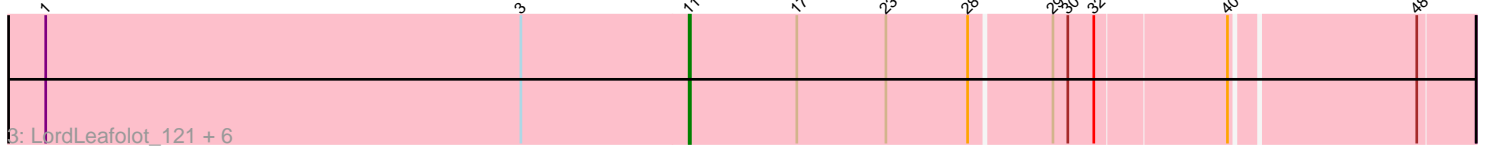
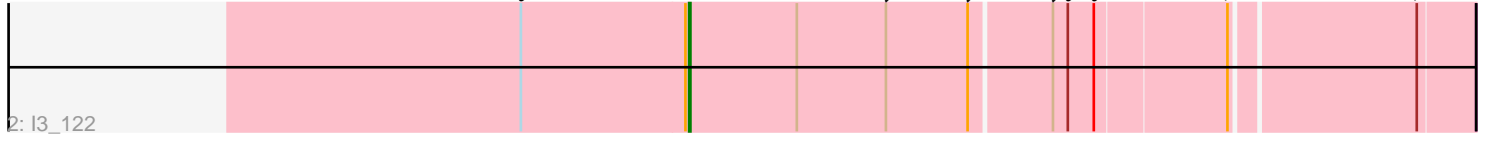
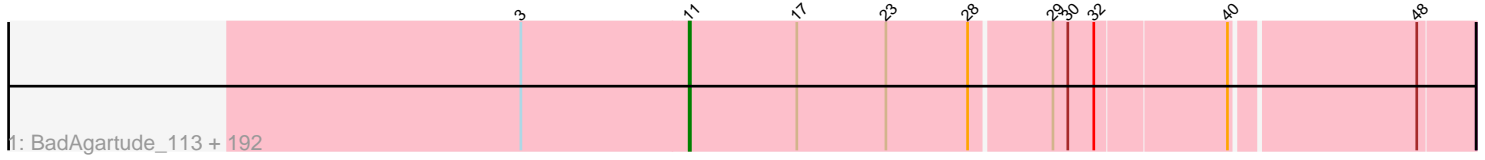


Pham 311226



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 311226 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311226 has 221 members, 37 are drafts.

Phages represented in each track:

- Track 1 : BadAgartude_113, FoxtrotP1_117, DeejaClivia_104, Ewok_118, Sauce_117, Caravan_111, Dietrick_109, JPickles_114, Darko_117, CharlieB_113, Koguma_114, Naija_116, Spud_116, LinStu_115, Audrick_119, SilverDipper_118, LRRHood_110, NedWong_118, SrishMeg2525_116, Fludd_117, Substance289_114, Pivoine_116, InterFolia_123, Sebata_117, Basquiat_113, Rizal_112, GlutenPhree_118, Izajani_117, Rocha_115, JayJay_122, Ghost_115, ValleyTerrace_117, EggyFarm_124, Shaqnato_110, Grasshills_123, Roots515_115, Blackdragon_112, Kboogie_121, Drazdys_115, YemiJoy2021_118, Burrough_117, OrediggerDelux_114, Matsumoto_115, JigglyPuff_124, FrayBell_122, ErnieJ_111, Delylah_120, ShiaLabeouf_116, ET08_105, SVoro_114, DTDevon_117, ChaylaJr_112, Issimir_115, CindyLou_118, Mangeria_117, Delilah_117, Astraea_113, ArcherS7_116, Grungle_104, Spec_112, EasyJones_119, Maby2021_117, Amataga_117, TinyTim_117, Loanshark_116, Essence_114, Gizmo_121, Breeniome_116, Shelob_119, PharkleMinkus_120, Tainan_120, Derek_116, Atlantean_116, Yassified_114, Erdmann_117, MikeLiesIn_118, Jemmno_117, Pier_121, Fixie_113, Napoleon13_113, Cali_112, RoMag_112, Capablanca_119, DrPhinkDaddy_116, Sprinklers_113, Jaygup_117, Shnickers_117, SmallFry_117, Jezreel_117, ChickenPhender_113, Latch_117, Lethe_115, Ading_117, Bangla1971_118, BackyardAgain_114, Jessibeth14_116, Rahel_116, Norm_118, Flabslab_111, Janiyra_119, Nappy_119, Kamryn_117, Phlegm_119, Melpomini_111, Bigswole_120, MoMoMixon_117, Phusco_117, Teardrop_116, Dandelion_122, Lunareta_115, Ngannou_113, Trinitium_114, BigCity_124, Tortoise16_114, Maturis_114, ParkTD_118, ZygoTaiga_115, Duckfeet_109, Zalkecks_118, Adlitam_117, BananaFence_116, Nidhogg_118, Chargie21_113, JulietS_111, Zeenon_118, EmToTheThree_119, Belieber_112, Bowman_113, Gabriel_117, YoungMoneyMata_118, Asterius_120, Ronan_111, Turret_112, McGee_119, Catera_113, Rabinovish_114, Phox_114, Primadonna_110, Specks_122, Blackbrain_112, QBert_111, Pupusa_122, StubbySaigey_120, Willis_118, BeanWater_109, Ava3_118, Iota_112, Morizzled23_117, Halldule_110, Pio_121, SoilZilla_112, Wally_116, LookingGlass_117, Jedediah_120, Domi_110, McWolfish_115, StephanieG_115, ScottMcG_113, NoodleTree_124, Momo_116, BobaPhatt_112, EmmaElysia_117, Mikro_114, Bread_116, Pleione_120, Babyland_118, Lee7_114, Tyke_117, Cactojaque_112, Bipolarisk_116, Dessert_113, Patter_117, Megamind_116, Gamgam_117, Littleton_117, Naval22_125, IkeLoa_110, Daffodil_122, PurduePete_117, Yucca_116, LifeSavor_115, Ablatia_116, Bxz1_114, Fongie_114, NuevoMundo_122, Guwapp_116, DirtMonster_111, JustHall_114, InigoMontoya_118, Quasimodo_118, Khaleesi_116, Montpel_115, Chomp_116

- Track 2 : I3_122
- Track 3 : LordLeafolot_121, Cleatunium_110, Labradorite_115, LolaVinca_117, Shrimp_117, Salacia_121, Bonray_117
- Track 4 : Moiqah_107, Moby_108, Alice_109, Pinkcreek_108, Shifa_105, Stubby_109, HyRo_107
- Track 5 : Blubba_107
- Track 6 : Colt_108, Cane17_107
- Track 7 : Tonenili_131, Vortrix_130
- Track 8 : Demodog_123, Concombres_122
- Track 9 : PaintedDog_26
- Track 10 : Shipwreck_26, Brujita_27, Pygmy_26, Island3_27, Bogie_26

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

The start number called the most often in the published annotations is 11, it was called in 178 of the 184 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_116, Ading_117, Adlitam_117, Alice_109, Amataga_117, ArcherS7_116, Asterius_120, Astraea_113, Atlantean_116, Audrick_119, Ava3_118, Babyland_118, BackyardAgain_114, BadAgartude_113, BananaFence_116, Bangla1971_118, Basquiat_113, BeanWater_109, Belieber_112, BigCity_124, Bigswole_120, Bipolarisk_116, Blackbrain_112, Blackdragon_112, Blubba_107, BobaPhatt_112, Bonray_117, Bowman_113, Bread_116, Breeniome_116, Burrough_117, Bxz1_114, Cactojaque_112, Cali_112, Cane17_107, Capablanca_119, Caravan_111, Catera_113, Chargie21_113, CharlieB_113, ChaylaJr_112, ChickenPhender_113, Chomp_116, CindyLou_118, Cleatunium_110, Colt_108, Concombres_122, DTDevon_117, Daffodil_122, Dandelion_122, Darko_117, DeejaClivia_104, Delilah_117, Delylah_120, Demodog_123, Derek_116, Dessert_113, Dietrick_109, DirtMonster_111, Domi_110, DrPhinkDaddy_116, Drazdys_115, Duckfeet_109, ET08_105, EasyJones_119, EggyFarm_124, EmToTheThree_119, EmmaElysia_117, Erdmann_117, ErnieJ_111, Essence_114, Ewok_118, Fixie_113, Flabslab_111, Fludd_117, Fongie_114, FoxtrotP1_117, FrayBell_122, Gabriel_117, Gangam_117, Ghost_115, Gizmo_121, GlutenPhree_118, Grasshills_123, Grungle_104, Guwapp_116, Halldule_110, HyRo_107, I3_122, IkeLoa_110, InigoMontoya_118, InterFolia_123, Iota_112, Issimir_115, Izajani_117, JPickles_114, Janiyra_119, JayJay_122, Jaygup_117, Jediah_120, Jemmno_117, Jessibeth14_116, Jezreel_117, JigglyPuff_124, JulietS_111, JustHall_114, Kamryn_117, Kboogie_121, Khaleesi_116, Koguma_114, LRRHood_110, Labradorite_115, Latch_117, Lee7_114, Lethe_115, LifeSavor_115, LinStu_115, Littleton_117, Loanshark_116, LolaVinca_117, LookingGlass_117, LordLeafolot_121, Lunareta_115, Maby2021_117, Mangeria_117, Matsumoto_115, Maturis_114, McGee_119, McWolfish_115, Megamind_116, Melpomini_111, MikeLiesIn_118, Mikro_114, MoMoMixon_117, Moby_108, Moiqah_107, Momo_116, Montpel_115, Morizzled23_117, Naija_116, Napoleon13_113, Nappy_119, Naval22_125, NedWong_118, Ngannou_113, Nidhogg_118, NoodleTree_124, Norm_118, NuevoMundo_122, OrediggerDelux_114, ParkTD_118, Patter_117, PharkleMinkus_120, Phlegm_119, Phox_114, Phusco_117, Pier_121, Pinkcreek_108, Pio_121, Pivoine_116, Pleione_120, Primadonna_110, Pupusa_122, PurduePete_117, QBert_111, Quasimodo_118, Rabinovish_114, Rahel_116,

Rizal_112, RoMag_112, Rocha_115, Ronan_111, Roots515_115, SVoro_114, Salacia_121, Sauce_117, ScottMcG_113, Sebata_117, Shaqnato_110, Shelob_119, ShiaLabeouf_116, Shifa_105, Shnickers_117, Shrimp_117, SilverDipper_118, SmallFry_117, SoilZilla_112, Spec_112, Specks_122, Sprinklers_113, Spud_116, SrishMeg2525_116, StephanieG_115, StubbySaigey_120, Stubby_109, Substance289_114, Tainan_120, Teardrop_116, TinyTim_117, Tortoise16_114, Trinitium_114, Turret_112, Tyke_117, ValleyTerrace_117, Wally_116, Willis_118, Yassified_114, YemiJoy2021_118, YoungMoneyMata_118, Yucca_116, Zalkecks_118, Zeenon_118, ZygoTaiga_115,

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

-

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

- Bogie_26, Brujita_27, Island3_27, PaintedDog_26, Pygmy_26, Shipwreck_26, Tonenili_131, Vortrix_130,

Summary by start number:

Start 4:

- Found in 6 of 221 (2.7%) of genes in pham
- Manual Annotations of this start: 5 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bogie_26 (P1), Brujita_27 (I1), Island3_27 (I1), PaintedDog_26 (I1), Pygmy_26 (P1), Shipwreck_26 (P1),

Start 8:

- Found in 2 of 221 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonenili_131 (C1), Vortrix_130 (C1),

Start 11:

- Found in 213 of 221 (96.4%) of genes in pham
- Manual Annotations of this start: 178 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia_116 (C1), Ading_117 (C1), Adlitam_117 (C1), Alice_109 (C1), Amataga_117 (C1), ArcherS7_116 (C1), Asterius_120 (C1), Astraea_113 (C1), Atlantean_116 (C1), Audrick_119 (C1), Ava3_118 (C1), Babyland_118 (C1), BackyardAgain_114 (C1), BadAgartude_113 (C1), BananaFence_116 (C1), Bangla1971_118 (C1), Basquiat_113 (C1), BeanWater_109 (C1), Belieber_112 (C1), BigCity_124 (C1), Bigswole_120 (C1), Bipolarisk_116 (C1), Blackbrain_112 (C1), Blackdragon_112 (C1), Blubba_107 (C1), BobaPhatt_112 (C1), Bonray_117 (C1), Bowman_113 (C1), Bread_116 (C1), Breeniome_116 (C1), Burrough_117 (C1), Bxz1_114 (C1), Cactojaque_112 (C1), Cali_112 (C1), Cane17_107 (C1), Capablanca_119 (C1), Caravan_111 (C1), Catera_113 (C1), Chargie21_113 (C1), CharlieB_113 (C1), ChaylaJr_112 (C1), ChickenPhender_113 (C1), Chomp_116 (C1), CindyLou_118 (C1), Cleatunium_110 (C1), Colt_108 (C1), Concombre_122 (C1), DTDevon_117 (C1), Daffodil_122 (C1), Dandelion_122 (C1), Darko_117 (C1), DeejaClivia_104 (C1), Delilah_117 (C1), Delylah_120 (C1), Demodog_123 (C1), Derek_116 (C1), Dessert_113 (C1), Dietrick_109 (C1), DirtMonster_111 (C1), Domi_110 (C1), DrPhinkDaddy_116 (C1), Drazdys_115 (C1), Duckfeet_109 (C1), ET08_105 (C1), EasyJones_119 (C1),

EggyFarm_124 (C1), EmToTheThree_119 (C1), EmmaElysia_117 (C1), Erdmann_117 (C1), ErnieJ_111 (C1), Essence_114 (C1), Ewok_118 (C1), Fixie_113 (C1), Flabslab_111 (C1), Fludd_117 (C1), Fongie_114 (C1), FoxtrotP1_117 (C1), FrayBell_122 (C1), Gabriel_117 (C1), Gamgam_117 (C1), Ghost_115 (C1), Gizmo_121 (C1), GlutenPhree_118 (C1), Grasshills_123 (C1), Grungle_104 (C1), Guwapp_116 (C1), Halldule_110 (C1), HyRo_107 (C1), I3_122 (C1), IkeLoa_110 (C1), InigoMontoya_118 (C1), InterFolia_123 (C1), Iota_112 (C1), Issimir_115 (C1), Izajani_117 (C1), JPickles_114 (C1), Janiyr_119 (C1), JayJay_122 (C1), Jaygup_117 (C1), Jedediah_120 (C1), Jemmno_117 (C1), Jessibeth14_116 (C1), Jezreel_117 (C1), JigglyPuff_124 (C1), JulietS_111 (C1), JustHall_114 (C1), Kamryn_117 (C1), Kboogie_121 (C1), Khaleesi_116 (C1), Koguma_114 (C1), LRRHood_110 (C1), Labradorite_115 (C1), Latch_117 (C1), Lee7_114 (C1), Lethe_115 (C1), LifeSavor_115 (C1), LinStu_115 (C1), Littleton_117 (C1), Loanshark_116 (C1), LolaVinca_117 (C1), LookingGlass_117 (C1), LordLeafolot_121 (C1), Lunareta_115 (C1), Maby2021_117 (C1), Mangeria_117 (C1), Matsumoto_115 (C1), Maturis_114 (C1), McGee_119 (C1), McWolfish_115 (C1), Megamind_116 (C1), Melpomini_111 (C1), MikeLiesIn_118 (C1), Mikro_114 (C1), MoMoMixon_117 (C1), Moby_108 (C1), Moiqah_107 (C1), Momo_116 (C1), Montpel_115 (C1), Morizzled23_117 (C1), Naija_116 (C1), Napoleon13_113 (C1), Nappy_119 (C1), Naval22_125 (C1), NedWong_118 (C1), Ngannou_113 (C1), Nidhogg_118 (C1), NoodleTree_124 (C1), Norm_118 (C1), NuevoMundo_122 (C1), OrediggerDelux_114 (C1), ParkTD_118 (C1), Patter_117 (C1), PharkleMinkus_120 (C1), Phlegm_119 (C1), Phox_114 (C1), Phusco_117 (C1), Pier_121 (C1), Pinkcreek_108 (C1), Pio_121 (C1), Pivoine_116 (C1), Pleione_120 (C1), Primadonna_110 (C1), Pupusa_122 (C1), PurduePete_117 (C1), QBert_111 (C1), Quasimodo_118 (C1), Rabinovish_114 (C1), Rahel_116 (C1), Rizal_112 (C1), RoMag_112 (C1), Rocha_115 (C1), Ronan_111 (C1), Roots515_115 (C1), SVoro_114 (C1), Salacia_121 (C1), Sauce_117 (C1), ScottMcG_113 (C1), Sebata_117 (C1), Shaqnato_110 (C1), Shelob_119 (C1), ShiaLabeouf_116 (C1), Shifa_105 (C1), Shnickers_117 (C1), Shrimp_117 (C1), SilverDipper_118 (C1), SmallFry_117 (C1), SoilZilla_112 (C1), Spec_112 (C1), Specks_122 (C1), Sprinklers_113 (C1), Spud_116 (C1), SrishMeg2525_116 (C1), StephanieG_115 (C1), StubbySaigey_120 (C1), Stubby_109 (C1), Substance289_114 (C1), Tainan_120 (C1), Teardrop_116 (C1), TinyTim_117 (C1), Tortoise16_114 (C1), Trinitium_114 (C1), Turret_112 (C1), Tyke_117 (C1), ValleyTerrace_117 (C1), Wally_116 (C1), Willis_118 (C1), Yassified_114 (C1), YemiJoy2021_118 (C1), YoungMoneyMata_118 (C1), Yucca_116 (C1), Zalkecks_118 (C1), Zeenon_118 (C1), ZygoTaiga_115 (C1),

Summary by clusters:

There are 3 clusters represented in this pham: I1, C1, P1,

Info for manual annotations of cluster C1:

- Start number 8 was manually annotated 1 time for cluster C1.
- Start number 11 was manually annotated 178 times for cluster C1.

Info for manual annotations of cluster I1:

- Start number 4 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster P1:

- Start number 4 was manually annotated 3 times for cluster P1.

Gene Information:

Gene: Ablatia_116 Start: 59743, Stop: 60351, Start Num: 11

Candidate Starts for Ablatia_116:

(3, 59608), (Start: 11 @59743 has 178 MA's), (17, 59830), (23, 59902), (28, 59968), (29, 60031), (30, 60043), (32, 60064), (40, 60166), (48, 60307),

Gene: Ading_117 Start: 60127, Stop: 60735, Start Num: 11

Candidate Starts for Ading_117:

(3, 59992), (Start: 11 @60127 has 178 MA's), (17, 60214), (23, 60286), (28, 60352), (29, 60415), (30, 60427), (32, 60448), (40, 60550), (48, 60691),

Gene: Adlitam_117 Start: 60144, Stop: 60752, Start Num: 11

Candidate Starts for Adlitam_117:

(3, 60009), (Start: 11 @60144 has 178 MA's), (17, 60231), (23, 60303), (28, 60369), (29, 60432), (30, 60444), (32, 60465), (40, 60567), (48, 60708),

Gene: Alice_109 Start: 59432, Stop: 60040, Start Num: 11

Candidate Starts for Alice_109:

(3, 59297), (Start: 11 @59432 has 178 MA's), (17, 59519), (23, 59591), (28, 59657), (29, 59720), (30, 59732), (32, 59753), (40, 59855), (42, 59879), (48, 59996),

Gene: Amataga_117 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Amataga_117:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: ArcherS7_116 Start: 59707, Stop: 60315, Start Num: 11

Candidate Starts for ArcherS7_116:

(3, 59572), (Start: 11 @59707 has 178 MA's), (17, 59794), (23, 59866), (28, 59932), (29, 59995), (30, 60007), (32, 60028), (40, 60130), (48, 60271),

Gene: Asterius_120 Start: 60383, Stop: 60991, Start Num: 11

Candidate Starts for Asterius_120:

(3, 60248), (Start: 11 @60383 has 178 MA's), (17, 60470), (23, 60542), (28, 60608), (29, 60671), (30, 60683), (32, 60704), (40, 60806), (48, 60947),

Gene: Astraea_113 Start: 59158, Stop: 59766, Start Num: 11

Candidate Starts for Astraea_113:

(3, 59023), (Start: 11 @59158 has 178 MA's), (17, 59245), (23, 59317), (28, 59383), (29, 59446), (30, 59458), (32, 59479), (40, 59581), (48, 59722),

Gene: Atlantean_116 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Atlantean_116:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Audrick_119 Start: 59368, Stop: 59976, Start Num: 11

Candidate Starts for Audrick_119:

(3, 59233), (Start: 11 @59368 has 178 MA's), (17, 59455), (23, 59527), (28, 59593), (29, 59656), (30, 59668), (32, 59689), (40, 59791), (48, 59932),

Gene: Ava3_118 Start: 60302, Stop: 60910, Start Num: 11

Candidate Starts for Ava3_118:

(3, 60167), (Start: 11 @60302 has 178 MA's), (17, 60389), (23, 60461), (28, 60527), (29, 60590), (30, 60602), (32, 60623), (40, 60725), (48, 60866),

Gene: Babyland_118 Start: 59477, Stop: 60085, Start Num: 11

Candidate Starts for Babyland_118:

(3, 59342), (Start: 11 @59477 has 178 MA's), (17, 59564), (23, 59636), (28, 59702), (29, 59765), (30, 59777), (32, 59798), (40, 59900), (48, 60041),

Gene: BackyardAgain_114 Start: 59305, Stop: 59913, Start Num: 11

Candidate Starts for BackyardAgain_114:

(3, 59170), (Start: 11 @59305 has 178 MA's), (17, 59392), (23, 59464), (28, 59530), (29, 59593), (30, 59605), (32, 59626), (40, 59728), (48, 59869),

Gene: BadAgartude_113 Start: 60594, Stop: 61202, Start Num: 11

Candidate Starts for BadAgartude_113:

(3, 60459), (Start: 11 @60594 has 178 MA's), (17, 60681), (23, 60753), (28, 60819), (29, 60882), (30, 60894), (32, 60915), (40, 61017), (48, 61158),

Gene: BananaFence_116 Start: 60558, Stop: 61166, Start Num: 11

Candidate Starts for BananaFence_116:

(3, 60423), (Start: 11 @60558 has 178 MA's), (17, 60645), (23, 60717), (28, 60783), (29, 60846), (30, 60858), (32, 60879), (40, 60981), (48, 61122),

Gene: Bangla1971_118 Start: 59837, Stop: 60445, Start Num: 11

Candidate Starts for Bangla1971_118:

(3, 59702), (Start: 11 @59837 has 178 MA's), (17, 59924), (23, 59996), (28, 60062), (29, 60125), (30, 60137), (32, 60158), (40, 60260), (48, 60401),

Gene: Basquiat_113 Start: 59031, Stop: 59639, Start Num: 11

Candidate Starts for Basquiat_113:

(3, 58896), (Start: 11 @59031 has 178 MA's), (17, 59118), (23, 59190), (28, 59256), (29, 59319), (30, 59331), (32, 59352), (40, 59454), (48, 59595),

Gene: BeanWater_109 Start: 60156, Stop: 60764, Start Num: 11

Candidate Starts for BeanWater_109:

(3, 60021), (Start: 11 @60156 has 178 MA's), (17, 60243), (23, 60315), (28, 60381), (29, 60444), (30, 60456), (32, 60477), (40, 60579), (48, 60720),

Gene: Belieber_112 Start: 59631, Stop: 60239, Start Num: 11

Candidate Starts for Belieber_112:

(3, 59496), (Start: 11 @59631 has 178 MA's), (17, 59718), (23, 59790), (28, 59856), (29, 59919), (30, 59931), (32, 59952), (40, 60054), (48, 60195),

Gene: BigCity_124 Start: 62818, Stop: 63426, Start Num: 11

Candidate Starts for BigCity_124:

(3, 62683), (Start: 11 @62818 has 178 MA's), (17, 62905), (23, 62977), (28, 63043), (29, 63106), (30, 63118), (32, 63139), (40, 63241), (48, 63382),

Gene: Bigswole_120 Start: 62103, Stop: 62711, Start Num: 11

Candidate Starts for Bigswole_120:

(3, 61968), (Start: 11 @62103 has 178 MA's), (17, 62190), (23, 62262), (28, 62328), (29, 62391), (30, 62403), (32, 62424), (40, 62526), (48, 62667),

Gene: Bipolarisk_116 Start: 60560, Stop: 61168, Start Num: 11

Candidate Starts for Bipolarisk_116:

(3, 60425), (Start: 11 @60560 has 178 MA's), (17, 60647), (23, 60719), (28, 60785), (29, 60848), (30, 60860), (32, 60881), (40, 60983), (48, 61124),

Gene: Blackbrain_112 Start: 58852, Stop: 59460, Start Num: 11

Candidate Starts for Blackbrain_112:

(3, 58717), (Start: 11 @58852 has 178 MA's), (17, 58939), (23, 59011), (28, 59077), (29, 59140), (30, 59152), (32, 59173), (40, 59275), (48, 59416),

Gene: Blackdragon_112 Start: 59985, Stop: 60593, Start Num: 11

Candidate Starts for Blackdragon_112:

(3, 59850), (Start: 11 @59985 has 178 MA's), (17, 60072), (23, 60144), (28, 60210), (29, 60273), (30, 60285), (32, 60306), (40, 60408), (48, 60549),

Gene: Blubba_107 Start: 60594, Stop: 61202, Start Num: 11

Candidate Starts for Blubba_107:

(3, 60459), (Start: 11 @60594 has 178 MA's), (17, 60681), (21, 60741), (23, 60753), (28, 60819), (29, 60882), (30, 60894), (32, 60915), (40, 61017), (48, 61158),

Gene: BobaPhatt_112 Start: 58920, Stop: 59528, Start Num: 11

Candidate Starts for BobaPhatt_112:

(3, 58785), (Start: 11 @58920 has 178 MA's), (17, 59007), (23, 59079), (28, 59145), (29, 59208), (30, 59220), (32, 59241), (40, 59343), (48, 59484),

Gene: Bogie_26 Start: 24022, Stop: 24717, Start Num: 4

Candidate Starts for Bogie_26:

(Start: 4 @24022 has 5 MA's), (5, 24076), (6, 24109), (7, 24121), (12, 24184), (13, 24190), (14, 24211), (15, 24214), (16, 24217), (18, 24229), (22, 24277), (24, 24292), (25, 24301), (32, 24448), (33, 24475), (34, 24496), (37, 24526), (41, 24571), (43, 24613), (45, 24646),

Gene: Bonray_117 Start: 60733, Stop: 61341, Start Num: 11

Candidate Starts for Bonray_117:

(1, 60214), (3, 60598), (Start: 11 @60733 has 178 MA's), (17, 60820), (23, 60892), (28, 60958), (29, 61021), (30, 61033), (32, 61054), (40, 61156), (48, 61297),

Gene: Bowman_113 Start: 60294, Stop: 60902, Start Num: 11

Candidate Starts for Bowman_113:

(3, 60159), (Start: 11 @60294 has 178 MA's), (17, 60381), (23, 60453), (28, 60519), (29, 60582), (30, 60594), (32, 60615), (40, 60717), (48, 60858),

Gene: Bread_116 Start: 60388, Stop: 60996, Start Num: 11

Candidate Starts for Bread_116:

(3, 60253), (Start: 11 @60388 has 178 MA's), (17, 60475), (23, 60547), (28, 60613), (29, 60676), (30, 60688), (32, 60709), (40, 60811), (48, 60952),

Gene: Breeniome_116 Start: 58736, Stop: 59344, Start Num: 11

Candidate Starts for Breeniome_116:

(3, 58601), (Start: 11 @58736 has 178 MA's), (17, 58823), (23, 58895), (28, 58961), (29, 59024), (30, 59036), (32, 59057), (40, 59159), (48, 59300),

Gene: Brujita_27 Start: 24377, Stop: 25072, Start Num: 4

Candidate Starts for Brujita_27:

(Start: 4 @24377 has 5 MA's), (5, 24431), (6, 24464), (7, 24476), (12, 24539), (13, 24545), (14, 24566), (15, 24569), (16, 24572), (18, 24584), (22, 24632), (24, 24647), (25, 24656), (32, 24803), (33, 24830), (34, 24851), (37, 24881), (41, 24926), (43, 24968), (45, 25001),

Gene: Burrough_117 Start: 60887, Stop: 61495, Start Num: 11

Candidate Starts for Burrough_117:

(3, 60752), (Start: 11 @60887 has 178 MA's), (17, 60974), (23, 61046), (28, 61112), (29, 61175), (30, 61187), (32, 61208), (40, 61310), (48, 61451),

Gene: Bxz1_114 Start: 62090, Stop: 62698, Start Num: 11

Candidate Starts for Bxz1_114:

(3, 61955), (Start: 11 @62090 has 178 MA's), (17, 62177), (23, 62249), (28, 62315), (29, 62378), (30, 62390), (32, 62411), (40, 62513), (48, 62654),

Gene: Cactojaque_112 Start: 58959, Stop: 59567, Start Num: 11

Candidate Starts for Cactojaque_112:

(3, 58824), (Start: 11 @58959 has 178 MA's), (17, 59046), (23, 59118), (28, 59184), (29, 59247), (30, 59259), (32, 59280), (40, 59382), (48, 59523),

Gene: Cali_112 Start: 60889, Stop: 61497, Start Num: 11

Candidate Starts for Cali_112:

(3, 60754), (Start: 11 @60889 has 178 MA's), (17, 60976), (23, 61048), (28, 61114), (29, 61177), (30, 61189), (32, 61210), (40, 61312), (48, 61453),

Gene: Cane17_107 Start: 60652, Stop: 61260, Start Num: 11

Candidate Starts for Cane17_107:

(3, 60517), (Start: 11 @60652 has 178 MA's), (17, 60739), (21, 60799), (23, 60811), (28, 60877), (29, 60940), (30, 60952), (32, 60973), (40, 61075), (44, 61135), (48, 61216),

Gene: Capablanca_119 Start: 61139, Stop: 61747, Start Num: 11

Candidate Starts for Capablanca_119:

(3, 61004), (Start: 11 @61139 has 178 MA's), (17, 61226), (23, 61298), (28, 61364), (29, 61427), (30, 61439), (32, 61460), (40, 61562), (48, 61703),

Gene: Caravan_111 Start: 60246, Stop: 60854, Start Num: 11

Candidate Starts for Caravan_111:

(3, 60111), (Start: 11 @60246 has 178 MA's), (17, 60333), (23, 60405), (28, 60471), (29, 60534), (30, 60546), (32, 60567), (40, 60669), (48, 60810),

Gene: Catera_113 Start: 59163, Stop: 59771, Start Num: 11

Candidate Starts for Catera_113:

(3, 59028), (Start: 11 @59163 has 178 MA's), (17, 59250), (23, 59322), (28, 59388), (29, 59451), (30, 59463), (32, 59484), (40, 59586), (48, 59727),

Gene: Chargie21_113 Start: 59031, Stop: 59639, Start Num: 11

Candidate Starts for Chargie21_113:

(3, 58896), (Start: 11 @59031 has 178 MA's), (17, 59118), (23, 59190), (28, 59256), (29, 59319), (30, 59331), (32, 59352), (40, 59454), (48, 59595),

Gene: CharlieB_113 Start: 59293, Stop: 59901, Start Num: 11

Candidate Starts for CharlieB_113:

(3, 59158), (Start: 11 @59293 has 178 MA's), (17, 59380), (23, 59452), (28, 59518), (29, 59581), (30, 59593), (32, 59614), (40, 59716), (48, 59857),

Gene: ChaylaJr_112 Start: 58785, Stop: 59393, Start Num: 11

Candidate Starts for ChaylaJr_112:

(3, 58650), (Start: 11 @58785 has 178 MA's), (17, 58872), (23, 58944), (28, 59010), (29, 59073), (30, 59085), (32, 59106), (40, 59208), (48, 59349),

Gene: ChickenPhender_113 Start: 59088, Stop: 59696, Start Num: 11

Candidate Starts for ChickenPhender_113:

(3, 58953), (Start: 11 @59088 has 178 MA's), (17, 59175), (23, 59247), (28, 59313), (29, 59376), (30, 59388), (32, 59409), (40, 59511), (48, 59652),

Gene: Chomp_116 Start: 60678, Stop: 61286, Start Num: 11

Candidate Starts for Chomp_116:

(3, 60543), (Start: 11 @60678 has 178 MA's), (17, 60765), (23, 60837), (28, 60903), (29, 60966), (30, 60978), (32, 60999), (40, 61101), (48, 61242),

Gene: CindyLou_118 Start: 60718, Stop: 61326, Start Num: 11

Candidate Starts for CindyLou_118:

(3, 60583), (Start: 11 @60718 has 178 MA's), (17, 60805), (23, 60877), (28, 60943), (29, 61006), (30, 61018), (32, 61039), (40, 61141), (48, 61282),

Gene: Cleatunium_110 Start: 59375, Stop: 59983, Start Num: 11

Candidate Starts for Cleatunium_110:

(1, 58856), (3, 59240), (Start: 11 @59375 has 178 MA's), (17, 59462), (23, 59534), (28, 59600), (29, 59663), (30, 59675), (32, 59696), (40, 59798), (48, 59939),

Gene: Colt_108 Start: 61248, Stop: 61856, Start Num: 11

Candidate Starts for Colt_108:

(3, 61113), (Start: 11 @61248 has 178 MA's), (17, 61335), (21, 61395), (23, 61407), (28, 61473), (29, 61536), (30, 61548), (32, 61569), (40, 61671), (44, 61731), (48, 61812),

Gene: Concombre_122 Start: 63051, Stop: 63659, Start Num: 11

Candidate Starts for Concombre_122:

(2, 62775), (3, 62916), (Start: 11 @63051 has 178 MA's), (17, 63138), (28, 63276), (29, 63339), (30, 63351), (32, 63372), (40, 63474), (48, 63615),

Gene: DTDevon_117 Start: 60929, Stop: 61537, Start Num: 11

Candidate Starts for DTDevon_117:

(3, 60794), (Start: 11 @60929 has 178 MA's), (17, 61016), (23, 61088), (28, 61154), (29, 61217), (30, 61229), (32, 61250), (40, 61352), (48, 61493),

Gene: Daffodil_122 Start: 60860, Stop: 61468, Start Num: 11

Candidate Starts for Daffodil_122:

(3, 60725), (Start: 11 @60860 has 178 MA's), (17, 60947), (23, 61019), (28, 61085), (29, 61148), (30, 61160), (32, 61181), (40, 61283), (48, 61424),

Gene: Dandelion_122 Start: 63052, Stop: 63660, Start Num: 11

Candidate Starts for Dandelion_122:

(3, 62917), (Start: 11 @63052 has 178 MA's), (17, 63139), (23, 63211), (28, 63277), (29, 63340), (30, 63352), (32, 63373), (40, 63475), (48, 63616),

Gene: Darko_117 Start: 60562, Stop: 61170, Start Num: 11

Candidate Starts for Darko_117:

(3, 60427), (Start: 11 @60562 has 178 MA's), (17, 60649), (23, 60721), (28, 60787), (29, 60850), (30, 60862), (32, 60883), (40, 60985), (48, 61126),

Gene: DeejaClivia_104 Start: 57228, Stop: 57836, Start Num: 11

Candidate Starts for DeejaClivia_104:

(3, 57093), (Start: 11 @57228 has 178 MA's), (17, 57315), (23, 57387), (28, 57453), (29, 57516), (30, 57528), (32, 57549), (40, 57651), (48, 57792),

Gene: Delilah_117 Start: 61014, Stop: 61622, Start Num: 11

Candidate Starts for Delilah_117:

(3, 60879), (Start: 11 @61014 has 178 MA's), (17, 61101), (23, 61173), (28, 61239), (29, 61302), (30, 61314), (32, 61335), (40, 61437), (48, 61578),

Gene: Delylah_120 Start: 60553, Stop: 61161, Start Num: 11

Candidate Starts for Delylah_120:

(3, 60418), (Start: 11 @60553 has 178 MA's), (17, 60640), (23, 60712), (28, 60778), (29, 60841), (30, 60853), (32, 60874), (40, 60976), (48, 61117),

Gene: Demodog_123 Start: 63060, Stop: 63668, Start Num: 11

Candidate Starts for Demodog_123:

(2, 62784), (3, 62925), (Start: 11 @63060 has 178 MA's), (17, 63147), (28, 63285), (29, 63348), (30, 63360), (32, 63381), (40, 63483), (48, 63624),

Gene: Derek_116 Start: 60479, Stop: 61087, Start Num: 11

Candidate Starts for Derek_116:

(3, 60344), (Start: 11 @60479 has 178 MA's), (17, 60566), (23, 60638), (28, 60704), (29, 60767), (30, 60779), (32, 60800), (40, 60902), (48, 61043),

Gene: Dessert_113 Start: 58955, Stop: 59563, Start Num: 11

Candidate Starts for Dessert_113:

(3, 58820), (Start: 11 @58955 has 178 MA's), (17, 59042), (23, 59114), (28, 59180), (29, 59243), (30, 59255), (32, 59276), (40, 59378), (48, 59519),

Gene: Dietrick_109 Start: 58555, Stop: 59163, Start Num: 11

Candidate Starts for Dietrick_109:

(3, 58420), (Start: 11 @58555 has 178 MA's), (17, 58642), (23, 58714), (28, 58780), (29, 58843), (30, 58855), (32, 58876), (40, 58978), (48, 59119),

Gene: DirtMonster_111 Start: 59813, Stop: 60421, Start Num: 11

Candidate Starts for DirtMonster_111:

(3, 59678), (Start: 11 @59813 has 178 MA's), (17, 59900), (23, 59972), (28, 60038), (29, 60101), (30, 60113), (32, 60134), (40, 60236), (48, 60377),

Gene: Domi_110 Start: 59901, Stop: 60509, Start Num: 11

Candidate Starts for Domi_110:

(3, 59766), (Start: 11 @59901 has 178 MA's), (17, 59988), (23, 60060), (28, 60126), (29, 60189), (30, 60201), (32, 60222), (40, 60324), (48, 60465),

Gene: DrPhinkDaddy_116 Start: 61082, Stop: 61690, Start Num: 11

Candidate Starts for DrPhinkDaddy_116:

(3, 60947), (Start: 11 @61082 has 178 MA's), (17, 61169), (23, 61241), (28, 61307), (29, 61370), (30, 61382), (32, 61403), (40, 61505), (48, 61646),

Gene: Drazdys_115 Start: 59543, Stop: 60151, Start Num: 11

Candidate Starts for Drazdys_115:

(3, 59408), (Start: 11 @59543 has 178 MA's), (17, 59630), (23, 59702), (28, 59768), (29, 59831), (30, 59843), (32, 59864), (40, 59966), (48, 60107),

Gene: Duckfeet_109 Start: 59005, Stop: 59613, Start Num: 11

Candidate Starts for Duckfeet_109:

(3, 58870), (Start: 11 @59005 has 178 MA's), (17, 59092), (23, 59164), (28, 59230), (29, 59293), (30, 59305), (32, 59326), (40, 59428), (48, 59569),

Gene: ET08_105 Start: 59543, Stop: 60151, Start Num: 11

Candidate Starts for ET08_105:

(3, 59408), (Start: 11 @59543 has 178 MA's), (17, 59630), (23, 59702), (28, 59768), (29, 59831), (30, 59843), (32, 59864), (40, 59966), (48, 60107),

Gene: EasyJones_119 Start: 59685, Stop: 60293, Start Num: 11

Candidate Starts for EasyJones_119:

(3, 59550), (Start: 11 @59685 has 178 MA's), (17, 59772), (23, 59844), (28, 59910), (29, 59973), (30, 59985), (32, 60006), (40, 60108), (48, 60249),

Gene: EggyFarm_124 Start: 62818, Stop: 63426, Start Num: 11

Candidate Starts for EggyFarm_124:

(3, 62683), (Start: 11 @62818 has 178 MA's), (17, 62905), (23, 62977), (28, 63043), (29, 63106), (30, 63118), (32, 63139), (40, 63241), (48, 63382),

Gene: EmToTheThree_119 Start: 61822, Stop: 62430, Start Num: 11

Candidate Starts for EmToTheThree_119:

(3, 61687), (Start: 11 @61822 has 178 MA's), (17, 61909), (23, 61981), (28, 62047), (29, 62110), (30, 62122), (32, 62143), (40, 62245), (48, 62386),

Gene: EmmaElysia_117 Start: 59608, Stop: 60216, Start Num: 11

Candidate Starts for EmmaElysia_117:

(3, 59473), (Start: 11 @59608 has 178 MA's), (17, 59695), (23, 59767), (28, 59833), (29, 59896), (30, 59908), (32, 59929), (40, 60031), (48, 60172),

Gene: Erdmann_117 Start: 60861, Stop: 61469, Start Num: 11

Candidate Starts for Erdmann_117:

(3, 60726), (Start: 11 @60861 has 178 MA's), (17, 60948), (23, 61020), (28, 61086), (29, 61149), (30, 61161), (32, 61182), (40, 61284), (48, 61425),

Gene: ErnieJ_111 Start: 58826, Stop: 59434, Start Num: 11

Candidate Starts for ErnieJ_111:

(3, 58691), (Start: 11 @58826 has 178 MA's), (17, 58913), (23, 58985), (28, 59051), (29, 59114), (30, 59126), (32, 59147), (40, 59249), (48, 59390),

Gene: Essence_114 Start: 59709, Stop: 60317, Start Num: 11

Candidate Starts for Essence_114:

(3, 59574), (Start: 11 @59709 has 178 MA's), (17, 59796), (23, 59868), (28, 59934), (29, 59997), (30, 60009), (32, 60030), (40, 60132), (48, 60273),

Gene: Ewok_118 Start: 60248, Stop: 60856, Start Num: 11

Candidate Starts for Ewok_118:

(3, 60113), (Start: 11 @60248 has 178 MA's), (17, 60335), (23, 60407), (28, 60473), (29, 60536), (30, 60548), (32, 60569), (40, 60671), (48, 60812),

Gene: Fixie_113 Start: 59502, Stop: 60110, Start Num: 11

Candidate Starts for Fixie_113:

(3, 59367), (Start: 11 @59502 has 178 MA's), (17, 59589), (23, 59661), (28, 59727), (29, 59790), (30, 59802), (32, 59823), (40, 59925), (48, 60066),

Gene: Flabslab_111 Start: 57940, Stop: 58548, Start Num: 11

Candidate Starts for Flabslab_111:

(3, 57805), (Start: 11 @57940 has 178 MA's), (17, 58027), (23, 58099), (28, 58165), (29, 58228), (30, 58240), (32, 58261), (40, 58363), (48, 58504),

Gene: Fludd_117 Start: 59466, Stop: 60074, Start Num: 11

Candidate Starts for Fludd_117:

(3, 59331), (Start: 11 @59466 has 178 MA's), (17, 59553), (23, 59625), (28, 59691), (29, 59754), (30, 59766), (32, 59787), (40, 59889), (48, 60030),

Gene: Fongie_114 Start: 60461, Stop: 61069, Start Num: 11

Candidate Starts for Fongie_114:

(3, 60326), (Start: 11 @60461 has 178 MA's), (17, 60548), (23, 60620), (28, 60686), (29, 60749), (30, 60761), (32, 60782), (40, 60884), (48, 61025),

Gene: FoxtrotP1_117 Start: 62031, Stop: 62639, Start Num: 11

Candidate Starts for FoxtrotP1_117:

(3, 61896), (Start: 11 @62031 has 178 MA's), (17, 62118), (23, 62190), (28, 62256), (29, 62319), (30, 62331), (32, 62352), (40, 62454), (48, 62595),

Gene: FrayBell_122 Start: 61195, Stop: 61803, Start Num: 11

Candidate Starts for FrayBell_122:

(3, 61060), (Start: 11 @61195 has 178 MA's), (17, 61282), (23, 61354), (28, 61420), (29, 61483), (30, 61495), (32, 61516), (40, 61618), (48, 61759),

Gene: Gabriel_117 Start: 59115, Stop: 59723, Start Num: 11

Candidate Starts for Gabriel_117:

(3, 58980), (Start: 11 @59115 has 178 MA's), (17, 59202), (23, 59274), (28, 59340), (29, 59403), (30, 59415), (32, 59436), (40, 59538), (48, 59679),

Gene: Gamgam_117 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Gamgam_117:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Ghost_115 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Ghost_115:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Gizmo_121 Start: 62011, Stop: 62619, Start Num: 11

Candidate Starts for Gizmo_121:

(3, 61876), (Start: 11 @62011 has 178 MA's), (17, 62098), (23, 62170), (28, 62236), (29, 62299), (30, 62311), (32, 62332), (40, 62434), (48, 62575),

Gene: GlutenPhree_118 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for GlutenPhree_118:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Grasshills_123 Start: 62818, Stop: 63426, Start Num: 11

Candidate Starts for Grasshills_123:

(3, 62683), (Start: 11 @62818 has 178 MA's), (17, 62905), (23, 62977), (28, 63043), (29, 63106), (30, 63118), (32, 63139), (40, 63241), (48, 63382),

Gene: Grungle_104 Start: 57133, Stop: 57741, Start Num: 11

Candidate Starts for Grungle_104:

(3, 56998), (Start: 11 @57133 has 178 MA's), (17, 57220), (23, 57292), (28, 57358), (29, 57421), (30, 57433), (32, 57454), (40, 57556), (48, 57697),

Gene: Guwapp_116 Start: 59280, Stop: 59888, Start Num: 11

Candidate Starts for Guwapp_116:

(3, 59145), (Start: 11 @59280 has 178 MA's), (17, 59367), (23, 59439), (28, 59505), (29, 59568), (30, 59580), (32, 59601), (40, 59703), (48, 59844),

Gene: Halldule_110 Start: 58159, Stop: 58767, Start Num: 11

Candidate Starts for Halldule_110:

(3, 58024), (Start: 11 @58159 has 178 MA's), (17, 58246), (23, 58318), (28, 58384), (29, 58447), (30, 58459), (32, 58480), (40, 58582), (48, 58723),

Gene: HyRo_107 Start: 59396, Stop: 60004, Start Num: 11

Candidate Starts for HyRo_107:

(3, 59261), (Start: 11 @59396 has 178 MA's), (17, 59483), (23, 59555), (28, 59621), (29, 59684), (30, 59696), (32, 59717), (40, 59819), (42, 59843), (48, 59960),

Gene: I3_122 Start: 61346, Stop: 61954, Start Num: 11

Candidate Starts for I3_122:

(3, 61211), (10, 61343), (Start: 11 @61346 has 178 MA's), (17, 61433), (23, 61505), (28, 61571), (29, 61634), (30, 61646), (32, 61667), (40, 61769), (48, 61910),

Gene: IkeLoa_110 Start: 59215, Stop: 59823, Start Num: 11

Candidate Starts for IkeLoa_110:

(3, 59080), (Start: 11 @59215 has 178 MA's), (17, 59302), (23, 59374), (28, 59440), (29, 59503), (30, 59515), (32, 59536), (40, 59638), (48, 59779),

Gene: InigoMontoya_118 Start: 59350, Stop: 59958, Start Num: 11

Candidate Starts for InigoMontoya_118:

(3, 59215), (Start: 11 @59350 has 178 MA's), (17, 59437), (23, 59509), (28, 59575), (29, 59638), (30, 59650), (32, 59671), (40, 59773), (48, 59914),

Gene: InterFolia_123 Start: 62130, Stop: 62738, Start Num: 11

Candidate Starts for InterFolia_123:

(3, 61995), (Start: 11 @62130 has 178 MA's), (17, 62217), (23, 62289), (28, 62355), (29, 62418), (30, 62430), (32, 62451), (40, 62553), (48, 62694),

Gene: Iota_112 Start: 59827, Stop: 60435, Start Num: 11

Candidate Starts for Iota_112:

(3, 59692), (Start: 11 @59827 has 178 MA's), (17, 59914), (23, 59986), (28, 60052), (29, 60115), (30, 60127), (32, 60148), (40, 60250), (48, 60391),

Gene: Island3_27 Start: 24377, Stop: 25072, Start Num: 4

Candidate Starts for Island3_27:

(Start: 4 @24377 has 5 MA's), (5, 24431), (6, 24464), (7, 24476), (12, 24539), (13, 24545), (14, 24566), (15, 24569), (16, 24572), (18, 24584), (22, 24632), (24, 24647), (25, 24656), (32, 24803), (33, 24830), (34, 24851), (37, 24881), (41, 24926), (43, 24968), (45, 25001),

Gene: Issimir_115 Start: 60835, Stop: 61443, Start Num: 11

Candidate Starts for Issimir_115:

(3, 60700), (Start: 11 @60835 has 178 MA's), (17, 60922), (23, 60994), (28, 61060), (29, 61123), (30, 61135), (32, 61156), (40, 61258), (48, 61399),

Gene: Izajani_117 Start: 61041, Stop: 61649, Start Num: 11

Candidate Starts for Izajani_117:

(3, 60906), (Start: 11 @61041 has 178 MA's), (17, 61128), (23, 61200), (28, 61266), (29, 61329), (30, 61341), (32, 61362), (40, 61464), (48, 61605),

Gene: JPickles_114 Start: 58620, Stop: 59228, Start Num: 11

Candidate Starts for JPickles_114:

(3, 58485), (Start: 11 @58620 has 178 MA's), (17, 58707), (23, 58779), (28, 58845), (29, 58908), (30, 58920), (32, 58941), (40, 59043), (48, 59184),

Gene: Janiyra_119 Start: 60316, Stop: 60924, Start Num: 11

Candidate Starts for Janiyra_119:

(3, 60181), (Start: 11 @60316 has 178 MA's), (17, 60403), (23, 60475), (28, 60541), (29, 60604), (30, 60616), (32, 60637), (40, 60739), (48, 60880),

Gene: JayJay_122 Start: 61826, Stop: 62434, Start Num: 11

Candidate Starts for JayJay_122:

(3, 61691), (Start: 11 @61826 has 178 MA's), (17, 61913), (23, 61985), (28, 62051), (29, 62114), (30, 62126), (32, 62147), (40, 62249), (48, 62390),

Gene: Jaygup_117 Start: 60145, Stop: 60753, Start Num: 11

Candidate Starts for Jaygup_117:

(3, 60010), (Start: 11 @60145 has 178 MA's), (17, 60232), (23, 60304), (28, 60370), (29, 60433), (30, 60445), (32, 60466), (40, 60568), (48, 60709),

Gene: Jedediah_120 Start: 60678, Stop: 61286, Start Num: 11

Candidate Starts for Jedediah_120:

(3, 60543), (Start: 11 @60678 has 178 MA's), (17, 60765), (23, 60837), (28, 60903), (29, 60966), (30, 60978), (32, 60999), (40, 61101), (48, 61242),

Gene: Jemmno_117 Start: 60125, Stop: 60733, Start Num: 11

Candidate Starts for Jemmno_117:

(3, 59990), (Start: 11 @60125 has 178 MA's), (17, 60212), (23, 60284), (28, 60350), (29, 60413), (30, 60425), (32, 60446), (40, 60548), (48, 60689),

Gene: Jessibeth14_116 Start: 60657, Stop: 61265, Start Num: 11

Candidate Starts for Jessibeth14_116:

(3, 60522), (Start: 11 @60657 has 178 MA's), (17, 60744), (23, 60816), (28, 60882), (29, 60945), (30, 60957), (32, 60978), (40, 61080), (48, 61221),

Gene: Jezreel_117 Start: 60810, Stop: 61418, Start Num: 11

Candidate Starts for Jezreel_117:

(3, 60675), (Start: 11 @60810 has 178 MA's), (17, 60897), (23, 60969), (28, 61035), (29, 61098), (30, 61110), (32, 61131), (40, 61233), (48, 61374),

Gene: JigglyPuff_124 Start: 62975, Stop: 63583, Start Num: 11

Candidate Starts for JigglyPuff_124:

(3, 62840), (Start: 11 @62975 has 178 MA's), (17, 63062), (23, 63134), (28, 63200), (29, 63263), (30, 63275), (32, 63296), (40, 63398), (48, 63539),

Gene: JulietS_111 Start: 58012, Stop: 58620, Start Num: 11

Candidate Starts for JulietS_111:

(3, 57877), (Start: 11 @58012 has 178 MA's), (17, 58099), (23, 58171), (28, 58237), (29, 58300), (30, 58312), (32, 58333), (40, 58435), (48, 58576),

Gene: JustHall_114 Start: 60184, Stop: 60792, Start Num: 11

Candidate Starts for JustHall_114:

(3, 60049), (Start: 11 @60184 has 178 MA's), (17, 60271), (23, 60343), (28, 60409), (29, 60472), (30, 60484), (32, 60505), (40, 60607), (48, 60748),

Gene: Kamryn_117 Start: 61462, Stop: 62070, Start Num: 11

Candidate Starts for Kamryn_117:

(3, 61327), (Start: 11 @61462 has 178 MA's), (17, 61549), (23, 61621), (28, 61687), (29, 61750), (30, 61762), (32, 61783), (40, 61885), (48, 62026),

Gene: Kboogie_121 Start: 59828, Stop: 60436, Start Num: 11

Candidate Starts for Kboogie_121:

(3, 59693), (Start: 11 @59828 has 178 MA's), (17, 59915), (23, 59987), (28, 60053), (29, 60116), (30, 60128), (32, 60149), (40, 60251), (48, 60392),

Gene: Khaleesi_116 Start: 60760, Stop: 61368, Start Num: 11

Candidate Starts for Khaleesi_116:

(3, 60625), (Start: 11 @60760 has 178 MA's), (17, 60847), (23, 60919), (28, 60985), (29, 61048), (30, 61060), (32, 61081), (40, 61183), (48, 61324),

Gene: Koguma_114 Start: 58305, Stop: 58913, Start Num: 11

Candidate Starts for Koguma_114:

(3, 58170), (Start: 11 @58305 has 178 MA's), (17, 58392), (23, 58464), (28, 58530), (29, 58593), (30, 58605), (32, 58626), (40, 58728), (48, 58869),

Gene: LRRHood_110 Start: 60103, Stop: 60711, Start Num: 11

Candidate Starts for LRRHood_110:

(3, 59968), (Start: 11 @60103 has 178 MA's), (17, 60190), (23, 60262), (28, 60328), (29, 60391), (30, 60403), (32, 60424), (40, 60526), (48, 60667),

Gene: Labradorite_115 Start: 58842, Stop: 59450, Start Num: 11

Candidate Starts for Labradorite_115:

(1, 58323), (3, 58707), (Start: 11 @58842 has 178 MA's), (17, 58929), (23, 59001), (28, 59067), (29, 59130), (30, 59142), (32, 59163), (40, 59265), (48, 59406),

Gene: Latch_117 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Latch_117:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Lee7_114 Start: 61394, Stop: 62002, Start Num: 11

Candidate Starts for Lee7_114:

(3, 61259), (Start: 11 @61394 has 178 MA's), (17, 61481), (23, 61553), (28, 61619), (29, 61682), (30, 61694), (32, 61715), (40, 61817), (48, 61958),

Gene: Lethe_115 Start: 60832, Stop: 61440, Start Num: 11

Candidate Starts for Lethe_115:

(3, 60697), (Start: 11 @60832 has 178 MA's), (17, 60919), (23, 60991), (28, 61057), (29, 61120), (30, 61132), (32, 61153), (40, 61255), (48, 61396),

Gene: LifeSavor_115 Start: 60077, Stop: 60685, Start Num: 11

Candidate Starts for LifeSavor_115:

(3, 59942), (Start: 11 @60077 has 178 MA's), (17, 60164), (23, 60236), (28, 60302), (29, 60365), (30, 60377), (32, 60398), (40, 60500), (48, 60641),

Gene: LinStu_115 Start: 60722, Stop: 61330, Start Num: 11

Candidate Starts for LinStu_115:

(3, 60587), (Start: 11 @60722 has 178 MA's), (17, 60809), (23, 60881), (28, 60947), (29, 61010), (30, 61022), (32, 61043), (40, 61145), (48, 61286),

Gene: Littleton_117 Start: 60207, Stop: 60815, Start Num: 11

Candidate Starts for Littleton_117:

(3, 60072), (Start: 11 @60207 has 178 MA's), (17, 60294), (23, 60366), (28, 60432), (29, 60495), (30, 60507), (32, 60528), (40, 60630), (48, 60771),

Gene: Loanshark_116 Start: 60728, Stop: 61336, Start Num: 11

Candidate Starts for Loanshark_116:

(3, 60593), (Start: 11 @60728 has 178 MA's), (17, 60815), (23, 60887), (28, 60953), (29, 61016), (30, 61028), (32, 61049), (40, 61151), (48, 61292),

Gene: LolaVinca_117 Start: 61080, Stop: 61688, Start Num: 11

Candidate Starts for LolaVinca_117:

(1, 60561), (3, 60945), (Start: 11 @61080 has 178 MA's), (17, 61167), (23, 61239), (28, 61305), (29, 61368), (30, 61380), (32, 61401), (40, 61503), (48, 61644),

Gene: LookingGlass_117 Start: 60905, Stop: 61513, Start Num: 11

Candidate Starts for LookingGlass_117:

(3, 60770), (Start: 11 @60905 has 178 MA's), (17, 60992), (23, 61064), (28, 61130), (29, 61193), (30, 61205), (32, 61226), (40, 61328), (48, 61469),

Gene: LordLeafolot_121 Start: 62047, Stop: 62655, Start Num: 11

Candidate Starts for LordLeafolot_121:

(1, 61528), (3, 61912), (Start: 11 @62047 has 178 MA's), (17, 62134), (23, 62206), (28, 62272), (29, 62335), (30, 62347), (32, 62368), (40, 62470), (48, 62611),

Gene: Lunareta_115 Start: 62000, Stop: 62608, Start Num: 11

Candidate Starts for Lunareta_115:

(3, 61865), (Start: 11 @62000 has 178 MA's), (17, 62087), (23, 62159), (28, 62225), (29, 62288), (30, 62300), (32, 62321), (40, 62423), (48, 62564),

Gene: Maby2021_117 Start: 60854, Stop: 61462, Start Num: 11

Candidate Starts for Maby2021_117:

(3, 60719), (Start: 11 @60854 has 178 MA's), (17, 60941), (23, 61013), (28, 61079), (29, 61142), (30, 61154), (32, 61175), (40, 61277), (48, 61418),

Gene: Mangeria_117 Start: 60923, Stop: 61531, Start Num: 11

Candidate Starts for Mangeria_117:

(3, 60788), (Start: 11 @60923 has 178 MA's), (17, 61010), (23, 61082), (28, 61148), (29, 61211), (30, 61223), (32, 61244), (40, 61346), (48, 61487),

Gene: Matsumoto_115 Start: 59706, Stop: 60314, Start Num: 11

Candidate Starts for Matsumoto_115:

(3, 59571), (Start: 11 @59706 has 178 MA's), (17, 59793), (23, 59865), (28, 59931), (29, 59994), (30, 60006), (32, 60027), (40, 60129), (48, 60270),

Gene: Maturis_114 Start: 60496, Stop: 61104, Start Num: 11

Candidate Starts for Maturis_114:

(3, 60361), (Start: 11 @60496 has 178 MA's), (17, 60583), (23, 60655), (28, 60721), (29, 60784), (30, 60796), (32, 60817), (40, 60919), (48, 61060),

Gene: McGee_119 Start: 59469, Stop: 60077, Start Num: 11

Candidate Starts for McGee_119:

(3, 59334), (Start: 11 @59469 has 178 MA's), (17, 59556), (23, 59628), (28, 59694), (29, 59757), (30, 59769), (32, 59790), (40, 59892), (48, 60033),

Gene: McWolfish_115 Start: 60643, Stop: 61251, Start Num: 11

Candidate Starts for McWolfish_115:

(3, 60508), (Start: 11 @60643 has 178 MA's), (17, 60730), (23, 60802), (28, 60868), (29, 60931), (30, 60943), (32, 60964), (40, 61066), (48, 61207),

Gene: Megamind_116 Start: 60527, Stop: 61135, Start Num: 11

Candidate Starts for Megamind_116:

(3, 60392), (Start: 11 @60527 has 178 MA's), (17, 60614), (23, 60686), (28, 60752), (29, 60815), (30, 60827), (32, 60848), (40, 60950), (48, 61091),

Gene: Melpomini_111 Start: 57993, Stop: 58601, Start Num: 11

Candidate Starts for Melpomini_111:

(3, 57858), (Start: 11 @57993 has 178 MA's), (17, 58080), (23, 58152), (28, 58218), (29, 58281), (30, 58293), (32, 58314), (40, 58416), (48, 58557),

Gene: MikeLiesIn_118 Start: 60874, Stop: 61482, Start Num: 11

Candidate Starts for MikeLiesIn_118:

(3, 60739), (Start: 11 @60874 has 178 MA's), (17, 60961), (23, 61033), (28, 61099), (29, 61162), (30, 61174), (32, 61195), (40, 61297), (48, 61438),

Gene: Mikro_114 Start: 62097, Stop: 62705, Start Num: 11

Candidate Starts for Mikro_114:

(3, 61962), (Start: 11 @62097 has 178 MA's), (17, 62184), (23, 62256), (28, 62322), (29, 62385), (30, 62397), (32, 62418), (40, 62520), (48, 62661),

Gene: MoMoMixon_117 Start: 60350, Stop: 60958, Start Num: 11

Candidate Starts for MoMoMixon_117:

(3, 60215), (Start: 11 @60350 has 178 MA's), (17, 60437), (23, 60509), (28, 60575), (29, 60638), (30, 60650), (32, 60671), (40, 60773), (48, 60914),

Gene: Moby_108 Start: 57274, Stop: 57882, Start Num: 11

Candidate Starts for Moby_108:

(3, 57139), (Start: 11 @57274 has 178 MA's), (17, 57361), (23, 57433), (28, 57499), (29, 57562), (30, 57574), (32, 57595), (40, 57697), (42, 57721), (48, 57838),

Gene: Moiqah_107 Start: 57251, Stop: 57859, Start Num: 11

Candidate Starts for Moiqah_107:

(3, 57116), (Start: 11 @57251 has 178 MA's), (17, 57338), (23, 57410), (28, 57476), (29, 57539), (30, 57551), (32, 57572), (40, 57674), (42, 57698), (48, 57815),

Gene: Momo_116 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Momo_116:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Montpel_115 Start: 61998, Stop: 62606, Start Num: 11

Candidate Starts for Montpel_115:

(3, 61863), (Start: 11 @61998 has 178 MA's), (17, 62085), (23, 62157), (28, 62223), (29, 62286), (30, 62298), (32, 62319), (40, 62421), (48, 62562),

Gene: Morizzled23_117 Start: 59754, Stop: 60362, Start Num: 11

Candidate Starts for Morizzled23_117:

(3, 59619), (Start: 11 @59754 has 178 MA's), (17, 59841), (23, 59913), (28, 59979), (29, 60042), (30, 60054), (32, 60075), (40, 60177), (48, 60318),

Gene: Naija_116 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Naija_116:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Napoleon13_113 Start: 58431, Stop: 59039, Start Num: 11

Candidate Starts for Napoleon13_113:

(3, 58296), (Start: 11 @58431 has 178 MA's), (17, 58518), (23, 58590), (28, 58656), (29, 58719), (30, 58731), (32, 58752), (40, 58854), (48, 58995),

Gene: Nappy_119 Start: 61784, Stop: 62392, Start Num: 11

Candidate Starts for Nappy_119:

(3, 61649), (Start: 11 @61784 has 178 MA's), (17, 61871), (23, 61943), (28, 62009), (29, 62072), (30, 62084), (32, 62105), (40, 62207), (48, 62348),

Gene: Naval22_125 Start: 62317, Stop: 62925, Start Num: 11

Candidate Starts for Naval22_125:

(3, 62182), (Start: 11 @62317 has 178 MA's), (17, 62404), (23, 62476), (28, 62542), (29, 62605), (30, 62617), (32, 62638), (40, 62740), (48, 62881),

Gene: NedWong_118 Start: 60861, Stop: 61469, Start Num: 11

Candidate Starts for NedWong_118:

(3, 60726), (Start: 11 @60861 has 178 MA's), (17, 60948), (23, 61020), (28, 61086), (29, 61149), (30, 61161), (32, 61182), (40, 61284), (48, 61425),

Gene: Ngannou_113 Start: 58371, Stop: 58979, Start Num: 11

Candidate Starts for Ngannou_113:

(3, 58236), (Start: 11 @58371 has 178 MA's), (17, 58458), (23, 58530), (28, 58596), (29, 58659), (30, 58671), (32, 58692), (40, 58794), (48, 58935),

Gene: Nidhogg_118 Start: 60595, Stop: 61203, Start Num: 11

Candidate Starts for Nidhogg_118:

(3, 60460), (Start: 11 @60595 has 178 MA's), (17, 60682), (23, 60754), (28, 60820), (29, 60883), (30, 60895), (32, 60916), (40, 61018), (48, 61159),

Gene: NoodleTree_124 Start: 60954, Stop: 61562, Start Num: 11

Candidate Starts for NoodleTree_124:

(3, 60819), (Start: 11 @60954 has 178 MA's), (17, 61041), (23, 61113), (28, 61179), (29, 61242), (30, 61254), (32, 61275), (40, 61377), (48, 61518),

Gene: Norm_118 Start: 61556, Stop: 62164, Start Num: 11

Candidate Starts for Norm_118:

(3, 61421), (Start: 11 @61556 has 178 MA's), (17, 61643), (23, 61715), (28, 61781), (29, 61844), (30, 61856), (32, 61877), (40, 61979), (48, 62120),

Gene: NuevoMundo_122 Start: 63135, Stop: 63743, Start Num: 11

Candidate Starts for NuevoMundo_122:

(3, 63000), (Start: 11 @63135 has 178 MA's), (17, 63222), (23, 63294), (28, 63360), (29, 63423), (30, 63435), (32, 63456), (40, 63558), (48, 63699),

Gene: OrediggerDelux_114 Start: 61391, Stop: 61999, Start Num: 11

Candidate Starts for OrediggerDelux_114:

(3, 61256), (Start: 11 @61391 has 178 MA's), (17, 61478), (23, 61550), (28, 61616), (29, 61679), (30, 61691), (32, 61712), (40, 61814), (48, 61955),

Gene: PaintedDog_26 Start: 23818, Stop: 24501, Start Num: 4

Candidate Starts for PaintedDog_26:

(Start: 4 @23818 has 5 MA's), (12, 23980), (14, 24007), (15, 24010), (18, 24025), (22, 24073), (24, 24088), (27, 24124), (31, 24238), (32, 24244), (33, 24271), (34, 24292), (37, 24322), (39, 24337), (42, 24376), (43, 24397),

Gene: ParkTD_118 Start: 60857, Stop: 61465, Start Num: 11

Candidate Starts for ParkTD_118:

(3, 60722), (Start: 11 @60857 has 178 MA's), (17, 60944), (23, 61016), (28, 61082), (29, 61145), (30, 61157), (32, 61178), (40, 61280), (48, 61421),

Gene: Patter_117 Start: 59406, Stop: 60014, Start Num: 11

Candidate Starts for Patter_117:

(3, 59271), (Start: 11 @59406 has 178 MA's), (17, 59493), (23, 59565), (28, 59631), (29, 59694), (30, 59706), (32, 59727), (40, 59829), (48, 59970),

Gene: PharkleMinkus_120 Start: 61195, Stop: 61803, Start Num: 11

Candidate Starts for PharkleMinkus_120:

(3, 61060), (Start: 11 @61195 has 178 MA's), (17, 61282), (23, 61354), (28, 61420), (29, 61483), (30, 61495), (32, 61516), (40, 61618), (48, 61759),

Gene: Phlegm_119 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Phlegm_119:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Phox_114 Start: 61137, Stop: 61745, Start Num: 11

Candidate Starts for Phox_114:

(3, 61002), (Start: 11 @61137 has 178 MA's), (17, 61224), (23, 61296), (28, 61362), (29, 61425), (30, 61437), (32, 61458), (40, 61560), (48, 61701),

Gene: Phusco_117 Start: 60154, Stop: 60762, Start Num: 11

Candidate Starts for Phusco_117:

(3, 60019), (Start: 11 @60154 has 178 MA's), (17, 60241), (23, 60313), (28, 60379), (29, 60442), (30, 60454), (32, 60475), (40, 60577), (48, 60718),

Gene: Pier_121 Start: 63143, Stop: 63751, Start Num: 11

Candidate Starts for Pier_121:

(3, 63008), (Start: 11 @63143 has 178 MA's), (17, 63230), (23, 63302), (28, 63368), (29, 63431), (30, 63443), (32, 63464), (40, 63566), (48, 63707),

Gene: Pinkcreek_108 Start: 58488, Stop: 59096, Start Num: 11

Candidate Starts for Pinkcreek_108:

(3, 58353), (Start: 11 @58488 has 178 MA's), (17, 58575), (23, 58647), (28, 58713), (29, 58776), (30, 58788), (32, 58809), (40, 58911), (42, 58935), (48, 59052),

Gene: Pio_121 Start: 62747, Stop: 63355, Start Num: 11

Candidate Starts for Pio_121:

(3, 62612), (Start: 11 @62747 has 178 MA's), (17, 62834), (23, 62906), (28, 62972), (29, 63035), (30, 63047), (32, 63068), (40, 63170), (48, 63311),

Gene: Pivoine_116 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for Pivoine_116:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Pleione_120 Start: 61024, Stop: 61632, Start Num: 11

Candidate Starts for Pleione_120:

(3, 60889), (Start: 11 @61024 has 178 MA's), (17, 61111), (23, 61183), (28, 61249), (29, 61312), (30, 61324), (32, 61345), (40, 61447), (48, 61588),

Gene: Primadonna_110 Start: 59519, Stop: 60127, Start Num: 11

Candidate Starts for Primadonna_110:

(3, 59384), (Start: 11 @59519 has 178 MA's), (17, 59606), (23, 59678), (28, 59744), (29, 59807), (30, 59819), (32, 59840), (40, 59942), (48, 60083),

Gene: Pupusa_122 Start: 62236, Stop: 62844, Start Num: 11

Candidate Starts for Pupusa_122:

(3, 62101), (Start: 11 @62236 has 178 MA's), (17, 62323), (23, 62395), (28, 62461), (29, 62524), (30, 62536), (32, 62557), (40, 62659), (48, 62800),

Gene: PurduePete_117 Start: 61281, Stop: 61889, Start Num: 11

Candidate Starts for PurduePete_117:

(3, 61146), (Start: 11 @61281 has 178 MA's), (17, 61368), (23, 61440), (28, 61506), (29, 61569), (30, 61581), (32, 61602), (40, 61704), (48, 61845),

Gene: Pygmy_26 Start: 24022, Stop: 24717, Start Num: 4

Candidate Starts for Pygmy_26:

(Start: 4 @24022 has 5 MA's), (5, 24076), (6, 24109), (7, 24121), (12, 24184), (13, 24190), (14, 24211), (15, 24214), (16, 24217), (18, 24229), (22, 24277), (24, 24292), (25, 24301), (32, 24448), (33, 24475), (34, 24496), (37, 24526), (41, 24571), (43, 24613), (45, 24646),

Gene: QBert_111 Start: 59861, Stop: 60469, Start Num: 11

Candidate Starts for QBert_111:

(3, 59726), (Start: 11 @59861 has 178 MA's), (17, 59948), (23, 60020), (28, 60086), (29, 60149), (30, 60161), (32, 60182), (40, 60284), (48, 60425),

Gene: Quasimodo_118 Start: 60816, Stop: 61424, Start Num: 11

Candidate Starts for Quasimodo_118:

(3, 60681), (Start: 11 @60816 has 178 MA's), (17, 60903), (23, 60975), (28, 61041), (29, 61104), (30, 61116), (32, 61137), (40, 61239), (48, 61380),

Gene: Rabinovish_114 Start: 61054, Stop: 61662, Start Num: 11

Candidate Starts for Rabinovish_114:

(3, 60919), (Start: 11 @61054 has 178 MA's), (17, 61141), (23, 61213), (28, 61279), (29, 61342), (30, 61354), (32, 61375), (40, 61477), (48, 61618),

Gene: Rahel_116 Start: 59746, Stop: 60354, Start Num: 11

Candidate Starts for Rahel_116:

(3, 59611), (Start: 11 @59746 has 178 MA's), (17, 59833), (23, 59905), (28, 59971), (29, 60034), (30, 60046), (32, 60067), (40, 60169), (48, 60310),

Gene: Rizal_112 Start: 58894, Stop: 59502, Start Num: 11

Candidate Starts for Rizal_112:

(3, 58759), (Start: 11 @58894 has 178 MA's), (17, 58981), (23, 59053), (28, 59119), (29, 59182), (30, 59194), (32, 59215), (40, 59317), (48, 59458),

Gene: RoMag_112 Start: 60067, Stop: 60675, Start Num: 11

Candidate Starts for RoMag_112:

(3, 59932), (Start: 11 @60067 has 178 MA's), (17, 60154), (23, 60226), (28, 60292), (29, 60355), (30, 60367), (32, 60388), (40, 60490), (48, 60631),

Gene: Rocha_115 Start: 60320, Stop: 60928, Start Num: 11

Candidate Starts for Rocha_115:

(3, 60185), (Start: 11 @60320 has 178 MA's), (17, 60407), (23, 60479), (28, 60545), (29, 60608), (30, 60620), (32, 60641), (40, 60743), (48, 60884),

Gene: Ronan_111 Start: 58017, Stop: 58625, Start Num: 11

Candidate Starts for Ronan_111:

(3, 57882), (Start: 11 @58017 has 178 MA's), (17, 58104), (23, 58176), (28, 58242), (29, 58305), (30, 58317), (32, 58338), (40, 58440), (48, 58581),

Gene: Roots515_115 Start: 61054, Stop: 61662, Start Num: 11

Candidate Starts for Roots515_115:

(3, 60919), (Start: 11 @61054 has 178 MA's), (17, 61141), (23, 61213), (28, 61279), (29, 61342), (30, 61354), (32, 61375), (40, 61477), (48, 61618),

Gene: SVoro_114 Start: 61231, Stop: 61839, Start Num: 11

Candidate Starts for SVoro_114:

(3, 61096), (Start: 11 @61231 has 178 MA's), (17, 61318), (23, 61390), (28, 61456), (29, 61519), (30, 61531), (32, 61552), (40, 61654), (48, 61795),

Gene: Salacia_121 Start: 61195, Stop: 61803, Start Num: 11

Candidate Starts for Salacia_121:

(1, 60676), (3, 61060), (Start: 11 @61195 has 178 MA's), (17, 61282), (23, 61354), (28, 61420), (29, 61483), (30, 61495), (32, 61516), (40, 61618), (48, 61759),

Gene: Sauce_117 Start: 59801, Stop: 60409, Start Num: 11

Candidate Starts for Sauce_117:

(3, 59666), (Start: 11 @59801 has 178 MA's), (17, 59888), (23, 59960), (28, 60026), (29, 60089), (30, 60101), (32, 60122), (40, 60224), (48, 60365),

Gene: ScottMcG_113 Start: 59817, Stop: 60425, Start Num: 11

Candidate Starts for ScottMcG_113:

(3, 59682), (Start: 11 @59817 has 178 MA's), (17, 59904), (23, 59976), (28, 60042), (29, 60105), (30, 60117), (32, 60138), (40, 60240), (48, 60381),

Gene: Sebata_117 Start: 61280, Stop: 61888, Start Num: 11

Candidate Starts for Sebata_117:

(3, 61145), (Start: 11 @61280 has 178 MA's), (17, 61367), (23, 61439), (28, 61505), (29, 61568), (30, 61580), (32, 61601), (40, 61703), (48, 61844),

Gene: Shaqnato_110 Start: 58861, Stop: 59469, Start Num: 11

Candidate Starts for Shaqnato_110:

(3, 58726), (Start: 11 @58861 has 178 MA's), (17, 58948), (23, 59020), (28, 59086), (29, 59149), (30, 59161), (32, 59182), (40, 59284), (48, 59425),

Gene: Shelob_119 Start: 61653, Stop: 62261, Start Num: 11

Candidate Starts for Shelob_119:

(3, 61518), (Start: 11 @61653 has 178 MA's), (17, 61740), (23, 61812), (28, 61878), (29, 61941), (30, 61953), (32, 61974), (40, 62076), (48, 62217),

Gene: ShiaLabeouf_116 Start: 60181, Stop: 60789, Start Num: 11

Candidate Starts for ShiaLabeouf_116:

(3, 60046), (Start: 11 @60181 has 178 MA's), (17, 60268), (23, 60340), (28, 60406), (29, 60469), (30, 60481), (32, 60502), (40, 60604), (48, 60745),

Gene: Shifa_105 Start: 58662, Stop: 59270, Start Num: 11

Candidate Starts for Shifa_105:

(3, 58527), (Start: 11 @58662 has 178 MA's), (17, 58749), (23, 58821), (28, 58887), (29, 58950), (30, 58962), (32, 58983), (40, 59085), (42, 59109), (48, 59226),

Gene: Shipwreck_26 Start: 24000, Stop: 24695, Start Num: 4

Candidate Starts for Shipwreck_26:

(Start: 4 @24000 has 5 MA's), (5, 24054), (6, 24087), (7, 24099), (12, 24162), (13, 24168), (14, 24189), (15, 24192), (16, 24195), (18, 24207), (22, 24255), (24, 24270), (25, 24279), (32, 24426), (33, 24453), (34, 24474), (37, 24504), (41, 24549), (43, 24591), (45, 24624),

Gene: Shnickers_117 Start: 60145, Stop: 60753, Start Num: 11

Candidate Starts for Shnickers_117:

(3, 60010), (Start: 11 @60145 has 178 MA's), (17, 60232), (23, 60304), (28, 60370), (29, 60433), (30, 60445), (32, 60466), (40, 60568), (48, 60709),

Gene: Shrimp_117 Start: 60865, Stop: 61473, Start Num: 11

Candidate Starts for Shrimp_117:

(1, 60346), (3, 60730), (Start: 11 @60865 has 178 MA's), (17, 60952), (23, 61024), (28, 61090), (29, 61153), (30, 61165), (32, 61186), (40, 61288), (48, 61429),

Gene: SilverDipper_118 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for SilverDipper_118:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: SmallFry_117 Start: 59370, Stop: 59978, Start Num: 11

Candidate Starts for SmallFry_117:

(3, 59235), (Start: 11 @59370 has 178 MA's), (17, 59457), (23, 59529), (28, 59595), (29, 59658), (30, 59670), (32, 59691), (40, 59793), (48, 59934),

Gene: SoilZilla_112 Start: 60154, Stop: 60762, Start Num: 11

Candidate Starts for SoilZilla_112:

(3, 60019), (Start: 11 @60154 has 178 MA's), (17, 60241), (23, 60313), (28, 60379), (29, 60442), (30, 60454), (32, 60475), (40, 60577), (48, 60718),

Gene: Spec_112 Start: 59910, Stop: 60518, Start Num: 11

Candidate Starts for Spec_112:

(3, 59775), (Start: 11 @59910 has 178 MA's), (17, 59997), (23, 60069), (28, 60135), (29, 60198), (30, 60210), (32, 60231), (40, 60333), (48, 60474),

Gene: Specks_122 Start: 62045, Stop: 62653, Start Num: 11

Candidate Starts for Specks_122:

(3, 61910), (Start: 11 @62045 has 178 MA's), (17, 62132), (23, 62204), (28, 62270), (29, 62333), (30, 62345), (32, 62366), (40, 62468), (48, 62609),

Gene: Sprinklers_113 Start: 59426, Stop: 60034, Start Num: 11

Candidate Starts for Sprinklers_113:

(3, 59291), (Start: 11 @59426 has 178 MA's), (17, 59513), (23, 59585), (28, 59651), (29, 59714), (30, 59726), (32, 59747), (40, 59849), (48, 59990),

Gene: Spud_116 Start: 60941, Stop: 61549, Start Num: 11

Candidate Starts for Spud_116:

(3, 60806), (Start: 11 @60941 has 178 MA's), (17, 61028), (23, 61100), (28, 61166), (29, 61229), (30, 61241), (32, 61262), (40, 61364), (48, 61505),

Gene: SrishMeg2525_116 Start: 60963, Stop: 61571, Start Num: 11

Candidate Starts for SrishMeg2525_116:

(3, 60828), (Start: 11 @60963 has 178 MA's), (17, 61050), (23, 61122), (28, 61188), (29, 61251), (30, 61263), (32, 61284), (40, 61386), (48, 61527),

Gene: StephanieG_115 Start: 61772, Stop: 62380, Start Num: 11

Candidate Starts for StephanieG_115:

(3, 61637), (Start: 11 @61772 has 178 MA's), (17, 61859), (23, 61931), (28, 61997), (29, 62060), (30, 62072), (32, 62093), (40, 62195), (48, 62336),

Gene: Stubby_109 Start: 58978, Stop: 59586, Start Num: 11

Candidate Starts for Stubby_109:

(3, 58843), (Start: 11 @58978 has 178 MA's), (17, 59065), (23, 59137), (28, 59203), (29, 59266), (30, 59278), (32, 59299), (40, 59401), (42, 59425), (48, 59542),

Gene: StubbySaigey_120 Start: 59559, Stop: 60167, Start Num: 11

Candidate Starts for StubbySaigey_120:

(3, 59424), (Start: 11 @59559 has 178 MA's), (17, 59646), (23, 59718), (28, 59784), (29, 59847), (30, 59859), (32, 59880), (40, 59982), (48, 60123),

Gene: Substance289_114 Start: 59663, Stop: 60271, Start Num: 11

Candidate Starts for Substance289_114:

(3, 59528), (Start: 11 @59663 has 178 MA's), (17, 59750), (23, 59822), (28, 59888), (29, 59951), (30, 59963), (32, 59984), (40, 60086), (48, 60227),

Gene: Tainan_120 Start: 61367, Stop: 61975, Start Num: 11

Candidate Starts for Tainan_120:

(3, 61232), (Start: 11 @61367 has 178 MA's), (17, 61454), (23, 61526), (28, 61592), (29, 61655), (30, 61667), (32, 61688), (40, 61790), (48, 61931),

Gene: Teardrop_116 Start: 59369, Stop: 59977, Start Num: 11

Candidate Starts for Teardrop_116:

(3, 59234), (Start: 11 @59369 has 178 MA's), (17, 59456), (23, 59528), (28, 59594), (29, 59657), (30, 59669), (32, 59690), (40, 59792), (48, 59933),

Gene: TinyTim_117 Start: 60621, Stop: 61229, Start Num: 11

Candidate Starts for TinyTim_117:

(3, 60486), (Start: 11 @60621 has 178 MA's), (17, 60708), (23, 60780), (28, 60846), (29, 60909), (30, 60921), (32, 60942), (40, 61044), (48, 61185),

Gene: Tonenili_131 Start: 64088, Stop: 64720, Start Num: 8

Candidate Starts for Tonenili_131:

(Start: 8 @64088 has 1 MA's), (9, 64097), (15, 64178), (19, 64199), (20, 64226), (22, 64253), (26, 64301), (35, 64484), (36, 64487), (38, 64502), (43, 64580), (46, 64625), (47, 64631), (49, 64712),

Gene: Tortoise16_114 Start: 59970, Stop: 60578, Start Num: 11

Candidate Starts for Tortoise16_114:

(3, 59835), (Start: 11 @59970 has 178 MA's), (17, 60057), (23, 60129), (28, 60195), (29, 60258), (30, 60270), (32, 60291), (40, 60393), (48, 60534),

Gene: Trinitium_114 Start: 59325, Stop: 59933, Start Num: 11

Candidate Starts for Trinitium_114:

(3, 59190), (Start: 11 @59325 has 178 MA's), (17, 59412), (23, 59484), (28, 59550), (29, 59613), (30, 59625), (32, 59646), (40, 59748), (48, 59889),

Gene: Turret_112 Start: 58770, Stop: 59378, Start Num: 11

Candidate Starts for Turret_112:

(3, 58635), (Start: 11 @58770 has 178 MA's), (17, 58857), (23, 58929), (28, 58995), (29, 59058), (30, 59070), (32, 59091), (40, 59193), (48, 59334),

Gene: Tyke_117 Start: 61276, Stop: 61884, Start Num: 11

Candidate Starts for Tyke_117:

(3, 61141), (Start: 11 @61276 has 178 MA's), (17, 61363), (23, 61435), (28, 61501), (29, 61564), (30, 61576), (32, 61597), (40, 61699), (48, 61840),

Gene: ValleyTerrace_117 Start: 59389, Stop: 59997, Start Num: 11

Candidate Starts for ValleyTerrace_117:

(3, 59254), (Start: 11 @59389 has 178 MA's), (17, 59476), (23, 59548), (28, 59614), (29, 59677), (30, 59689), (32, 59710), (40, 59812), (48, 59953),

Gene: Vortrix_130 Start: 63404, Stop: 64036, Start Num: 8

Candidate Starts for Vortrix_130:

(Start: 8 @63404 has 1 MA's), (9, 63413), (15, 63494), (19, 63515), (20, 63542), (22, 63569), (26, 63617), (35, 63800), (36, 63803), (38, 63818), (43, 63896), (46, 63941), (47, 63947), (49, 64028),

Gene: Wally_116 Start: 59399, Stop: 60007, Start Num: 11

Candidate Starts for Wally_116:

(3, 59264), (Start: 11 @59399 has 178 MA's), (17, 59486), (23, 59558), (28, 59624), (29, 59687), (30, 59699), (32, 59720), (40, 59822), (48, 59963),

Gene: Willis_118 Start: 60756, Stop: 61364, Start Num: 11

Candidate Starts for Willis_118:

(3, 60621), (Start: 11 @60756 has 178 MA's), (17, 60843), (23, 60915), (28, 60981), (29, 61044), (30, 61056), (32, 61077), (40, 61179), (48, 61320),

Gene: Yassified_114 Start: 59476, Stop: 60084, Start Num: 11

Candidate Starts for Yassified_114:

(3, 59341), (Start: 11 @59476 has 178 MA's), (17, 59563), (23, 59635), (28, 59701), (29, 59764), (30, 59776), (32, 59797), (40, 59899), (48, 60040),

Gene: YemiJoy2021_118 Start: 60858, Stop: 61466, Start Num: 11

Candidate Starts for YemiJoy2021_118:

(3, 60723), (Start: 11 @60858 has 178 MA's), (17, 60945), (23, 61017), (28, 61083), (29, 61146), (30, 61158), (32, 61179), (40, 61281), (48, 61422),

Gene: YoungMoneyMata_118 Start: 60025, Stop: 60633, Start Num: 11

Candidate Starts for YoungMoneyMata_118:

(3, 59890), (Start: 11 @60025 has 178 MA's), (17, 60112), (23, 60184), (28, 60250), (29, 60313), (30, 60325), (32, 60346), (40, 60448), (48, 60589),

Gene: Yucca_116 Start: 60540, Stop: 61148, Start Num: 11

Candidate Starts for Yucca_116:

(3, 60405), (Start: 11 @60540 has 178 MA's), (17, 60627), (23, 60699), (28, 60765), (29, 60828), (30, 60840), (32, 60861), (40, 60963), (48, 61104),

Gene: Zalkecks_118 Start: 60541, Stop: 61149, Start Num: 11

Candidate Starts for Zalkecks_118:

(3, 60406), (Start: 11 @60541 has 178 MA's), (17, 60628), (23, 60700), (28, 60766), (29, 60829), (30, 60841), (32, 60862), (40, 60964), (48, 61105),

Gene: Zeenon_118 Start: 60626, Stop: 61234, Start Num: 11

Candidate Starts for Zeenon_118:

(3, 60491), (Start: 11 @60626 has 178 MA's), (17, 60713), (23, 60785), (28, 60851), (29, 60914), (30, 60926), (32, 60947), (40, 61049), (48, 61190),

Gene: ZygoTaiga_115 Start: 61786, Stop: 62394, Start Num: 11

Candidate Starts for ZygoTaiga_115:

(3, 61651), (Start: 11 @61786 has 178 MA's), (17, 61873), (23, 61945), (28, 62011), (29, 62074), (30, 62086), (32, 62107), (40, 62209), (48, 62350),