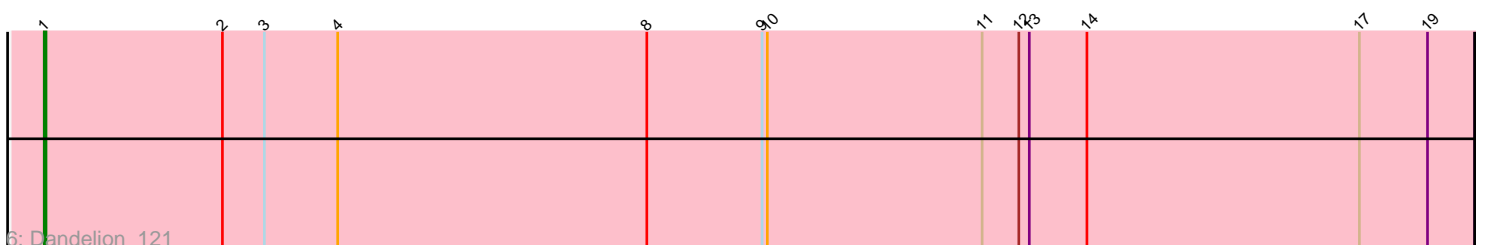
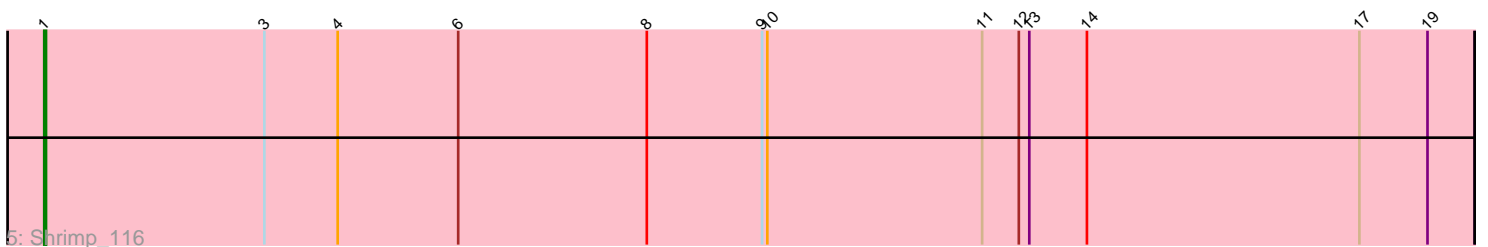
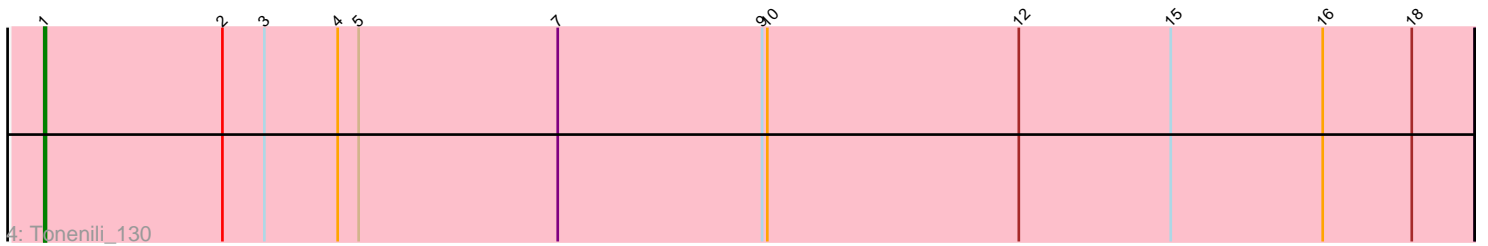
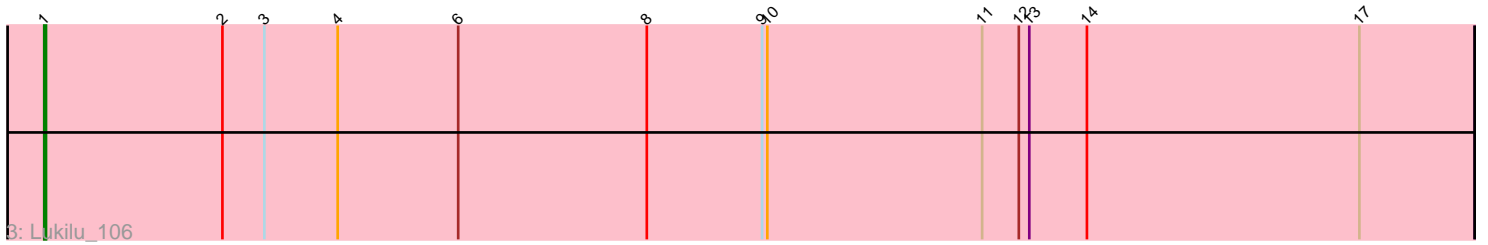
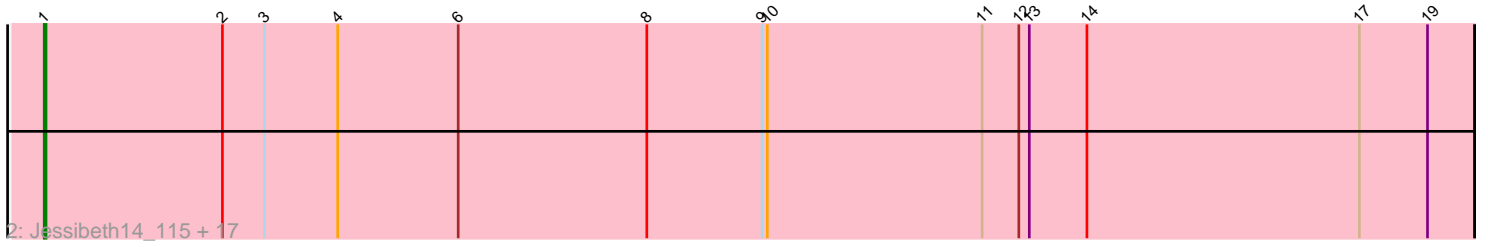
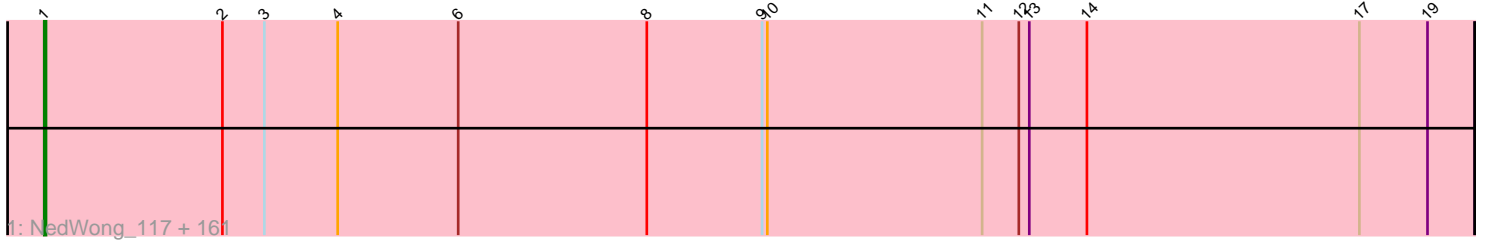


Pham 502



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 502 Report

This analysis was run 07/09/24 on database version 566.

Pham number 502 has 184 members, 17 are drafts.

Phages represented in each track:

- Track 1 : NedWong_117, BadAgartude_112, FoxtrotP1_116, I3_121, Pivoine_115, DirtMonster_110, Caravan_110, LordLeafolot_119, Bipolarisk_115, DTDevon_116, Darko_116, Dietrick_108, Spud_115, EmmaElysia_116, Janiyra_118, Audrick_118, LRRHood_109, Matsumoto_112, Ading_116, InterFolia_122, Rizal_111, Ghost_114, Izajani_116, ValleyTerrace_116, JayJay_116, Essence_113, Grasshills_122, Shaqnato_109, Roots515_114, Blackdragon_111, Naija_115, Drazdys_114, YemiJoy2021_117, ShiaLabeouf_115, ET08_104, Delylah_119, ChaylaJr_111, CindyLou_117, Issimir_114, Mangeria_116, Bigswole_119, Astraea_112, Yassified_113, StephanieG_114, ArcherS7_115, Grungle_103, EasyJones_118, Koguma_113, Maby2021_116, EggyFarm_123, Amataga_116, Momo_115, TinyTim_116, Loanshark_115, Blackbrain_111, Breeniome_115, Gizmo_120, Burrough_116, Mikro_113, Atlantean_115, Derek_115, Erdmann_116, BackyardAgain_113, MikeLiesIn_117, SilverDipper_117, Jemmno_116, Pier_120, Megamind_115, Cali_111, Napoleon13_112, Trinitium_113, Capablanca_118, Quasimodo_117, DrPhinkDaddy_115, Sprinklers_112, Jaygup_116, LolaVinca_116, Shnickers_116, SmallFry_116, Bread_115, ChickenPhender_112, Morizzled23_116, Latch_116, ScottMcG_112, Rahel_115, Jedediah_119, SrishMeg2525_115, Norm_117, Flabslab_110, JustHall_113, Delilah_116, Kamryn_116, Nappy_118, Phlegm_118, JPickles_113, Phusco_116, MoMoMixon_116, BananaFence_115, ZygoTaiga_114, ParkTD_117, Specks_121, Ngannou_112, StubbySaigey_119, Adlitam_116, Tortoise16_113, IkeLoa_109, Guwapp_115, Nidhogg_117, JulietS_110, Zeenon_117, Sauce_116, EmToTheThree_118, YoungMoneyMata_117, Salacia_120, Turret_111, Gabriel_116, FrayBell_121, Ronan_110, Rabinovish_113, Phox_113, Naval22_120, QBert_110, Catera_112, Ewok_117, NuevoMundo_121, Ava3_117, Willis_117, Lee7_113, BeanWater_108, Pio_120, Halldule_109, Zalkecks_117, InigoMontoya_117, BigCity_123, Concombre_121, Asterius_112, NoodleTree_123, McWolfish_114, Chomp_113, Pleione_119, Spec_111, Bonray_116, Cactojaque_111, Tyke_116, Patter_116, Gamgam_116, Littleton_116, Iota_111, Yucca_115, PurduePete_116, LifeSavor_114, RoMag_111, Bxz1_113, FudgeTart_114, Bangla1971_117, Melpomini_110, Wally_115, Teardrop_115, Babyland_117, Khaleesi_115, CharlieB_112, Daffodil_121
- Track 2 : Jessibeth14_115, Sebata_116, Basquiat_112, Kboogie_120, ErnieJ_110, Pinkcreek_107, Colt_107, Alice_108, Shelob_118, Cane17_106, Blubba_107, Chargie21_112, Shifa_104, McGee_118, Stubby_108, Fludd_116, LinStu_114, HyRo_106
- Track 3 : Lukilu_106
- Track 4 : Tonenili_130

- Track 5 : Shrimp_116
- Track 6 : Dandelion_121

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

The start number called the most often in the published annotations is 1, it was called in 167 of the 167 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading_116, Adlitam_116, Alice_108, Amataga_116, ArcherS7_115, Asterius_112, Astraea_112, Atlantean_115, Audrick_118, Ava3_117, Babyland_117, BackyardAgain_113, BadAgartude_112, BananaFence_115, Bangla1971_117, Basquiat_112, BeanWater_108, BigCity_123, Bigswole_119, Bipolarisk_115, Blackbrain_111, Blackdragon_111, Blubba_107, Bonray_116, Bread_115, Breeniome_115, Burrough_116, Bxz1_113, Cactojaque_111, Cali_111, Cane17_106, Capablanca_118, Caravan_110, Catera_112, Chargie21_112, CharlieB_112, ChaylaJr_111, ChickenPhender_112, Chomp_113, CindyLou_117, Colt_107, Concombre_121, DTDevon_116, Daffodil_121, Dandelion_121, Darko_116, Delilah_116, Delylah_119, Derek_115, Dietrick_108, DirtMonster_110, DrPhinkDaddy_115, Drazdys_114, ET08_104, EasyJones_118, EggyFarm_123, EmToTheThree_118, EmmaElysia_116, Erdmann_116, ErnieJ_110, Essence_113, Ewok_117, Flabslab_110, Fludd_116, FoxtrotP1_116, FrayBell_121, FudgeTart_114, Gabriel_116, Gangam_116, Ghost_114, Gizmo_120, Grasshills_122, Grungle_103, Guwapp_115, Halldule_109, HyRo_106, I3_121, IkeLoa_109, InigoMontoya_117, InterFolia_122, Iota_111, Issimir_114, Izajani_116, JPickles_113, Janiyra_118, JayJay_116, Jaygup_116, Jedediah_119, Jemmno_116, Jessibeth14_115, JulietS_110, JustHall_113, Kamryn_116, Kboogie_120, Khaleesi_115, Koguma_113, LRRHood_109, Latch_116, Lee7_113, LifeSavor_114, LinStu_114, Littleton_116, Loanshark_115, LolaVinca_116, LordLeafolot_119, Lukilu_106, Maby2021_116, Mangeria_116, Matsumoto_112, McGee_118, McWolfish_114, Megamind_115, Melpomini_110, MikeLiesIn_117, Mikro_113, MoMoMixon_116, Momo_115, Morizzled23_116, Naija_115, Napoleon13_112, Nappy_118, Naval22_120, NedWong_117, Ngannou_112, Nidhogg_117, NoodleTree_123, Norm_117, NuevoMundo_121, ParkTD_117, Patter_116, Phlegm_118, Phox_113, Phusco_116, Pier_120, Pinkcreek_107, Pio_120, Pivoine_115, Pleione_119, PurduePete_116, QBert_110, Quasimodo_117, Rabinovish_113, Rahel_115, Rizal_111, RoMag_111, Ronan_110, Roots515_114, Salacia_120, Sauce_116, ScottMcG_112, Sebata_116, Shaqnato_109, Shelob_118, ShiaLabeouf_115, Shifa_104, Shnickers_116, Shrimp_116, SilverDipper_117, SmallFry_116, Spec_111, Specks_121, Sprinklers_112, Spud_115, SrishMeg2525_115, StephanieG_114, StubbySaigey_119, Stubby_108, Teardrop_115, TinyTim_116, Tonenili_130, Tortoise16_113, Trinitium_113, Turret_111, Tyke_116, ValleyTerrace_116, Wally_115, Willis_117, Yassified_113, YemiJoy2021_117, YoungMoneyMata_117, Yucca_115, Zalkecks_117, Zeenon_117, ZygoTaiga_114,

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

-

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

-

Summary by start number:

Start 1:

- Found in 184 of 184 (100.0%) of genes in pham
- Manual Annotations of this start: 167 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ading_116 (C1), Adlitam_116 (C1), Alice_108 (C1), Amataga_116 (C1), ArcherS7_115 (C1), Asterius_112 (C1), Astraea_112 (C1), Atlantean_115 (C1), Audrick_118 (C1), Ava3_117 (C1), Babyland_117 (C1), BackyardAgain_113 (C1), BadAgartude_112 (C1), BananaFence_115 (C1), Bangla1971_117 (C1), Basquiat_112 (C1), BeanWater_108 (C1), BigCity_123 (C1), Bigswole_119 (C1), Bipolarisk_115 (C1), Blackbrain_111 (C1), Blackdragon_111 (C1), Blubba_107 (C1), Bonray_116 (C1), Bread_115 (C1), Breeniome_115 (C1), Burrough_116 (C1), Bxz1_113 (C1), Cactojaque_111 (C1), Cali_111 (C1), Cane17_106 (C1), Capablanca_118 (C1), Caravan_110 (C1), Catera_112 (C1), Chargie21_112 (C1), CharlieB_112 (C1), ChaylaJr_111 (C1), ChickenPhender_112 (C1), Chomp_113 (C1), CindyLou_117 (C1), Colt_107 (C1), Concombre_121 (C1), DTDevon_116 (C1), Daffodil_121 (C1), Dandelion_121 (C1), Darko_116 (C1), Delilah_116 (C1), Delylah_119 (C1), Derek_115 (C1), Dietrick_108 (C1), DirtMonster_110 (C1), DrPhinkDaddy_115 (C1), Drazdys_114 (C1), ET08_104 (C1), EasyJones_118 (C1), EggyFarm_123 (C1), EmToTheThree_118 (C1), EmmaElysia_116 (C1), Erdmann_116 (C1), ErnieJ_110 (C1), Essence_113 (C1), Ewok_117 (C1), Flabslab_110 (C1), Fludd_116 (C1), FoxtrotP1_116 (C1), FrayBell_121 (C1), FudgeTart_114 (C1), Gabriel_116 (C1), Gamgam_116 (C1), Ghost_114 (C1), Gizmo_120 (C1), Grasshills_122 (C1), Grungle_103 (C1), Guwapp_115 (C1), Halldule_109 (C1), HyRo_106 (C1), I3_121 (C1), IkeLoa_109 (C1), InigoMontoya_117 (C1), InterFolia_122 (C1), Iota_111 (C1), Issimir_114 (C1), Izajani_116 (C1), JPickles_113 (C1), Janiyr_118 (C1), JayJay_116 (C1), Jaygup_116 (C1), Jedediah_119 (C1), Jemmno_116 (C1), Jessibeth14_115 (C1), JulietS_110 (C1), JustHall_113 (C1), Kamryn_116 (C1), Kboogie_120 (C1), Khaleesi_115 (C1), Koguma_113 (C1), LRRHood_109 (C1), Latch_116 (C1), Lee7_113 (C1), LifeSavor_114 (C1), LinStu_114 (C1), Littleton_116 (C1), Loanshark_115 (C1), LolaVinca_116 (C1), LordLeafolot_119 (C1), Lukilu_106 (C1), Maby2021_116 (C1), Mangeria_116 (C1), Matsumoto_112 (C1), McGee_118 (C1), McWolfish_114 (C1), Megamind_115 (C1), Melpomini_110 (C1), MikeLiesIn_117 (C1), Mikro_113 (C1), MoMoMixon_116 (C1), Momo_115 (C1), Morizzled23_116 (C1), Naija_115 (C1), Napoleon13_112 (C1), Nappy_118 (C1), Naval22_120 (C1), NedWong_117 (C1), Ngannou_112 (C1), Nidhogg_117 (C1), NoodleTree_123 (C1), Norm_117 (C1), NuevoMundo_121 (C1), ParkTD_117 (C1), Patter_116 (C1), Phlegm_118 (C1), Phox_113 (C1), Phusco_116 (C1), Pier_120 (C1), Pinkcreek_107 (C1), Pio_120 (C1), Pivoine_115 (C1), Pleione_119 (C1), PurduePete_116 (C1), QBert_110 (C1), Quasimodo_117 (C1), Rabinovish_113 (C1), Rahel_115 (C1), Rizal_111 (C1), RoMag_111 (C1), Ronan_110 (C1), Roots515_114 (C1), Salacia_120 (C1), Sauce_116 (C1), ScottMcG_112 (C1), Sebata_116 (C1), Shaqato_109 (C1), Shelob_118 (C1), ShiaLabeouf_115 (C1), Shifa_104 (C1), Shnickers_116 (C1), Shrimp_116 (C1), SilverDipper_117 (C1), SmallFry_116 (C1), Spec_111 (C1), Specks_121 (C1), Sprinklers_112 (C1), Spud_115 (C1), SrishMeg2525_115 (C1), StephanieG_114 (C1), StubbySaigey_119 (C1), Stubby_108 (C1), Teardrop_115 (C1), TinyTim_116 (C1), Tonenili_130 (C1), Tortoise16_113 (C1), Trinitium_113 (C1), Turret_111 (C1), Tyke_116 (C1), ValleyTerrace_116 (C1), Wally_115 (C1), Willis_117 (C1), Yassified_113 (C1), YemiJoy2021_117 (C1), YoungMoneyMata_117 (C1), Yucca_115 (C1),

Zalkecks_117 (C1), Zeenon_117 (C1), ZygoTaiga_114 (C1),

Summary by clusters:

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:

•Start number 1 was manually annotated 167 times for cluster C1.

Gene Information:

Gene: Ading_116 Start: 59309, Stop: 60127, Start Num: 1

Candidate Starts for Ading_116:

(Start: 1 @59309 has 167 MA's), (2, 59411), (3, 59435), (4, 59477), (6, 59546), (8, 59654), (9, 59720), (10, 59723), (11, 59846), (12, 59867), (13, 59873), (14, 59906), (17, 60062), (19, 60101),

Gene: Adlitam_116 Start: 59326, Stop: 60144, Start Num: 1

Candidate Starts for Adlitam_116:

(Start: 1 @59326 has 167 MA's), (2, 59428), (3, 59452), (4, 59494), (6, 59563), (8, 59671), (9, 59737), (10, 59740), (11, 59863), (12, 59884), (13, 59890), (14, 59923), (17, 60079), (19, 60118),

Gene: Alice_108 Start: 58614, Stop: 59432, Start Num: 1

Candidate Starts for Alice_108:

(Start: 1 @58614 has 167 MA's), (2, 58716), (3, 58740), (4, 58782), (6, 58851), (8, 58959), (9, 59025), (10, 59028), (11, 59151), (12, 59172), (13, 59178), (14, 59211), (17, 59367), (19, 59406),

Gene: Amataga_116 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Amataga_116:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: ArcherS7_115 Start: 58889, Stop: 59707, Start Num: 1

Candidate Starts for ArcherS7_115:

(Start: 1 @58889 has 167 MA's), (2, 58991), (3, 59015), (4, 59057), (6, 59126), (8, 59234), (9, 59300), (10, 59303), (11, 59426), (12, 59447), (13, 59453), (14, 59486), (17, 59642), (19, 59681),

Gene: Asterius_112 Start: 59565, Stop: 60383, Start Num: 1

Candidate Starts for Asterius_112:

(Start: 1 @59565 has 167 MA's), (2, 59667), (3, 59691), (4, 59733), (6, 59802), (8, 59910), (9, 59976), (10, 59979), (11, 60102), (12, 60123), (13, 60129), (14, 60162), (17, 60318), (19, 60357),

Gene: Astraea_112 Start: 58340, Stop: 59158, Start Num: 1

Candidate Starts for Astraea_112:

(Start: 1 @58340 has 167 MA's), (2, 58442), (3, 58466), (4, 58508), (6, 58577), (8, 58685), (9, 58751), (10, 58754), (11, 58877), (12, 58898), (13, 58904), (14, 58937), (17, 59093), (19, 59132),

Gene: Atlantean_115 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Atlantean_115:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Audrick_118 Start: 58550, Stop: 59368, Start Num: 1

Candidate Starts for Audrick_118:

(Start: 1 @58550 has 167 MA's), (2, 58652), (3, 58676), (4, 58718), (6, 58787), (8, 58895), (9, 58961), (10, 58964), (11, 59087), (12, 59108), (13, 59114), (14, 59147), (17, 59303), (19, 59342),

Gene: Ava3_117 Start: 59484, Stop: 60302, Start Num: 1

Candidate Starts for Ava3_117:

(Start: 1 @59484 has 167 MA's), (2, 59586), (3, 59610), (4, 59652), (6, 59721), (8, 59829), (9, 59895), (10, 59898), (11, 60021), (12, 60042), (13, 60048), (14, 60081), (17, 60237), (19, 60276),

Gene: Babyland_117 Start: 58659, Stop: 59477, Start Num: 1

Candidate Starts for Babyland_117:

(Start: 1 @58659 has 167 MA's), (2, 58761), (3, 58785), (4, 58827), (6, 58896), (8, 59004), (9, 59070), (10, 59073), (11, 59196), (12, 59217), (13, 59223), (14, 59256), (17, 59412), (19, 59451),

Gene: BackyardAgain_113 Start: 58487, Stop: 59305, Start Num: 1

Candidate Starts for BackyardAgain_113:

(Start: 1 @58487 has 167 MA's), (2, 58589), (3, 58613), (4, 58655), (6, 58724), (8, 58832), (9, 58898), (10, 58901), (11, 59024), (12, 59045), (13, 59051), (14, 59084), (17, 59240), (19, 59279),

Gene: BadAgartude_112 Start: 59776, Stop: 60594, Start Num: 1

Candidate Starts for BadAgartude_112:

(Start: 1 @59776 has 167 MA's), (2, 59878), (3, 59902), (4, 59944), (6, 60013), (8, 60121), (9, 60187), (10, 60190), (11, 60313), (12, 60334), (13, 60340), (14, 60373), (17, 60529), (19, 60568),

Gene: BananaFence_115 Start: 59740, Stop: 60558, Start Num: 1

Candidate Starts for BananaFence_115:

(Start: 1 @59740 has 167 MA's), (2, 59842), (3, 59866), (4, 59908), (6, 59977), (8, 60085), (9, 60151), (10, 60154), (11, 60277), (12, 60298), (13, 60304), (14, 60337), (17, 60493), (19, 60532),

Gene: Bangla1971_117 Start: 59019, Stop: 59837, Start Num: 1

Candidate Starts for Bangla1971_117:

(Start: 1 @59019 has 167 MA's), (2, 59121), (3, 59145), (4, 59187), (6, 59256), (8, 59364), (9, 59430), (10, 59433), (11, 59556), (12, 59577), (13, 59583), (14, 59616), (17, 59772), (19, 59811),

Gene: Basquiat_112 Start: 58213, Stop: 59031, Start Num: 1

Candidate Starts for Basquiat_112:

(Start: 1 @58213 has 167 MA's), (2, 58315), (3, 58339), (4, 58381), (6, 58450), (8, 58558), (9, 58624), (10, 58627), (11, 58750), (12, 58771), (13, 58777), (14, 58810), (17, 58966), (19, 59005),

Gene: BeanWater_108 Start: 59338, Stop: 60156, Start Num: 1

Candidate Starts for BeanWater_108:

(Start: 1 @59338 has 167 MA's), (2, 59440), (3, 59464), (4, 59506), (6, 59575), (8, 59683), (9, 59749), (10, 59752), (11, 59875), (12, 59896), (13, 59902), (14, 59935), (17, 60091), (19, 60130),

Gene: BigCity_123 Start: 62000, Stop: 62818, Start Num: 1

Candidate Starts for BigCity_123:

(Start: 1 @62000 has 167 MA's), (2, 62102), (3, 62126), (4, 62168), (6, 62237), (8, 62345), (9, 62411), (10, 62414), (11, 62537), (12, 62558), (13, 62564), (14, 62597), (17, 62753), (19, 62792),

Gene: Bigswole_119 Start: 61285, Stop: 62103, Start Num: 1

Candidate Starts for Bigswole_119:

(Start: 1 @61285 has 167 MA's), (2, 61387), (3, 61411), (4, 61453), (6, 61522), (8, 61630), (9, 61696), (10, 61699), (11, 61822), (12, 61843), (13, 61849), (14, 61882), (17, 62038), (19, 62077),

Gene: Bipolarisk_115 Start: 59742, Stop: 60560, Start Num: 1

Candidate Starts for Bipolarisk_115:

(Start: 1 @59742 has 167 MA's), (2, 59844), (3, 59868), (4, 59910), (6, 59979), (8, 60087), (9, 60153), (10, 60156), (11, 60279), (12, 60300), (13, 60306), (14, 60339), (17, 60495), (19, 60534),

Gene: Blackbrain_111 Start: 58034, Stop: 58852, Start Num: 1

Candidate Starts for Blackbrain_111:

(Start: 1 @58034 has 167 MA's), (2, 58136), (3, 58160), (4, 58202), (6, 58271), (8, 58379), (9, 58445), (10, 58448), (11, 58571), (12, 58592), (13, 58598), (14, 58631), (17, 58787), (19, 58826),

Gene: Blackdragon_111 Start: 59167, Stop: 59985, Start Num: 1

Candidate Starts for Blackdragon_111:

(Start: 1 @59167 has 167 MA's), (2, 59269), (3, 59293), (4, 59335), (6, 59404), (8, 59512), (9, 59578), (10, 59581), (11, 59704), (12, 59725), (13, 59731), (14, 59764), (17, 59920), (19, 59959),

Gene: Blubba_107 Start: 59776, Stop: 60594, Start Num: 1

Candidate Starts for Blubba_107:

(Start: 1 @59776 has 167 MA's), (2, 59878), (3, 59902), (4, 59944), (6, 60013), (8, 60121), (9, 60187), (10, 60190), (11, 60313), (12, 60334), (13, 60340), (14, 60373), (17, 60529), (19, 60568),

Gene: Bonray_116 Start: 59915, Stop: 60733, Start Num: 1

Candidate Starts for Bonray_116:

(Start: 1 @59915 has 167 MA's), (2, 60017), (3, 60041), (4, 60083), (6, 60152), (8, 60260), (9, 60326), (10, 60329), (11, 60452), (12, 60473), (13, 60479), (14, 60512), (17, 60668), (19, 60707),

Gene: Bread_115 Start: 59570, Stop: 60388, Start Num: 1

Candidate Starts for Bread_115:

(Start: 1 @59570 has 167 MA's), (2, 59672), (3, 59696), (4, 59738), (6, 59807), (8, 59915), (9, 59981), (10, 59984), (11, 60107), (12, 60128), (13, 60134), (14, 60167), (17, 60323), (19, 60362),

Gene: Breeniome_115 Start: 57918, Stop: 58736, Start Num: 1

Candidate Starts for Breeniome_115:

(Start: 1 @57918 has 167 MA's), (2, 58020), (3, 58044), (4, 58086), (6, 58155), (8, 58263), (9, 58329), (10, 58332), (11, 58455), (12, 58476), (13, 58482), (14, 58515), (17, 58671), (19, 58710),

Gene: Burrough_116 Start: 60069, Stop: 60887, Start Num: 1

Candidate Starts for Burrough_116:

(Start: 1 @60069 has 167 MA's), (2, 60171), (3, 60195), (4, 60237), (6, 60306), (8, 60414), (9, 60480), (10, 60483), (11, 60606), (12, 60627), (13, 60633), (14, 60666), (17, 60822), (19, 60861),

Gene: Bxz1_113 Start: 61272, Stop: 62090, Start Num: 1

Candidate Starts for Bxz1_113:

(Start: 1 @61272 has 167 MA's), (2, 61374), (3, 61398), (4, 61440), (6, 61509), (8, 61617), (9, 61683), (10, 61686), (11, 61809), (12, 61830), (13, 61836), (14, 61869), (17, 62025), (19, 62064),

Gene: Cactojaque_111 Start: 58141, Stop: 58959, Start Num: 1

Candidate Starts for Cactojaque_111:

(Start: 1 @58141 has 167 MA's), (2, 58243), (3, 58267), (4, 58309), (6, 58378), (8, 58486), (9, 58552), (10, 58555), (11, 58678), (12, 58699), (13, 58705), (14, 58738), (17, 58894), (19, 58933),

Gene: Cali_111 Start: 60071, Stop: 60889, Start Num: 1

Candidate Starts for Cali_111:

(Start: 1 @60071 has 167 MA's), (2, 60173), (3, 60197), (4, 60239), (6, 60308), (8, 60416), (9, 60482), (10, 60485), (11, 60608), (12, 60629), (13, 60635), (14, 60668), (17, 60824), (19, 60863),

Gene: Cane17_106 Start: 59834, Stop: 60652, Start Num: 1

Candidate Starts for Cane17_106:

(Start: 1 @59834 has 167 MA's), (2, 59936), (3, 59960), (4, 60002), (6, 60071), (8, 60179), (9, 60245), (10, 60248), (11, 60371), (12, 60392), (13, 60398), (14, 60431), (17, 60587), (19, 60626),

Gene: Capablanca_118 Start: 60321, Stop: 61139, Start Num: 1

Candidate Starts for Capablanca_118:

(Start: 1 @60321 has 167 MA's), (2, 60423), (3, 60447), (4, 60489), (6, 60558), (8, 60666), (9, 60732), (10, 60735), (11, 60858), (12, 60879), (13, 60885), (14, 60918), (17, 61074), (19, 61113),

Gene: Caravan_110 Start: 59428, Stop: 60246, Start Num: 1

Candidate Starts for Caravan_110:

(Start: 1 @59428 has 167 MA's), (2, 59530), (3, 59554), (4, 59596), (6, 59665), (8, 59773), (9, 59839), (10, 59842), (11, 59965), (12, 59986), (13, 59992), (14, 60025), (17, 60181), (19, 60220),

Gene: Catera_112 Start: 58345, Stop: 59163, Start Num: 1

Candidate Starts for Catera_112:

(Start: 1 @58345 has 167 MA's), (2, 58447), (3, 58471), (4, 58513), (6, 58582), (8, 58690), (9, 58756), (10, 58759), (11, 58882), (12, 58903), (13, 58909), (14, 58942), (17, 59098), (19, 59137),

Gene: Chargie21_112 Start: 58213, Stop: 59031, Start Num: 1

Candidate Starts for Chargie21_112:

(Start: 1 @58213 has 167 MA's), (2, 58315), (3, 58339), (4, 58381), (6, 58450), (8, 58558), (9, 58624), (10, 58627), (11, 58750), (12, 58771), (13, 58777), (14, 58810), (17, 58966), (19, 59005),

Gene: CharlieB_112 Start: 58475, Stop: 59293, Start Num: 1

Candidate Starts for CharlieB_112:

(Start: 1 @58475 has 167 MA's), (2, 58577), (3, 58601), (4, 58643), (6, 58712), (8, 58820), (9, 58886), (10, 58889), (11, 59012), (12, 59033), (13, 59039), (14, 59072), (17, 59228), (19, 59267),

Gene: ChaylaJr_111 Start: 57967, Stop: 58785, Start Num: 1

Candidate Starts for ChaylaJr_111:

(Start: 1 @57967 has 167 MA's), (2, 58069), (3, 58093), (4, 58135), (6, 58204), (8, 58312), (9, 58378), (10, 58381), (11, 58504), (12, 58525), (13, 58531), (14, 58564), (17, 58720), (19, 58759),

Gene: ChickenPhender_112 Start: 58270, Stop: 59088, Start Num: 1

Candidate Starts for ChickenPhender_112:

(Start: 1 @58270 has 167 MA's), (2, 58372), (3, 58396), (4, 58438), (6, 58507), (8, 58615), (9, 58681), (10, 58684), (11, 58807), (12, 58828), (13, 58834), (14, 58867), (17, 59023), (19, 59062),

Gene: Chomp_113 Start: 59860, Stop: 60678, Start Num: 1

Candidate Starts for Chomp_113:

(Start: 1 @59860 has 167 MA's), (2, 59962), (3, 59986), (4, 60028), (6, 60097), (8, 60205), (9, 60271), (10, 60274), (11, 60397), (12, 60418), (13, 60424), (14, 60457), (17, 60613), (19, 60652),

Gene: CindyLou_117 Start: 59900, Stop: 60718, Start Num: 1

Candidate Starts for CindyLou_117:

(Start: 1 @59900 has 167 MA's), (2, 60002), (3, 60026), (4, 60068), (6, 60137), (8, 60245), (9, 60311), (10, 60314), (11, 60437), (12, 60458), (13, 60464), (14, 60497), (17, 60653), (19, 60692),

Gene: Colt_107 Start: 60430, Stop: 61248, Start Num: 1

Candidate Starts for Colt_107:

(Start: 1 @60430 has 167 MA's), (2, 60532), (3, 60556), (4, 60598), (6, 60667), (8, 60775), (9, 60841), (10, 60844), (11, 60967), (12, 60988), (13, 60994), (14, 61027), (17, 61183), (19, 61222),

Gene: Concombres_121 Start: 62233, Stop: 63051, Start Num: 1

Candidate Starts for Concombres_121:

(Start: 1 @62233 has 167 MA's), (2, 62335), (3, 62359), (4, 62401), (6, 62470), (8, 62578), (9, 62644), (10, 62647), (11, 62770), (12, 62791), (13, 62797), (14, 62830), (17, 62986), (19, 63025),

Gene: DTDevon_116 Start: 60111, Stop: 60929, Start Num: 1

Candidate Starts for DTDevon_116:

(Start: 1 @60111 has 167 MA's), (2, 60213), (3, 60237), (4, 60279), (6, 60348), (8, 60456), (9, 60522), (10, 60525), (11, 60648), (12, 60669), (13, 60675), (14, 60708), (17, 60864), (19, 60903),

Gene: Daffodil_121 Start: 60042, Stop: 60860, Start Num: 1

Candidate Starts for Daffodil_121:

(Start: 1 @60042 has 167 MA's), (2, 60144), (3, 60168), (4, 60210), (6, 60279), (8, 60387), (9, 60453), (10, 60456), (11, 60579), (12, 60600), (13, 60606), (14, 60639), (17, 60795), (19, 60834),

Gene: Dandelion_121 Start: 62234, Stop: 63052, Start Num: 1

Candidate Starts for Dandelion_121:

(Start: 1 @62234 has 167 MA's), (2, 62336), (3, 62360), (4, 62402), (8, 62579), (9, 62645), (10, 62648), (11, 62771), (12, 62792), (13, 62798), (14, 62831), (17, 62987), (19, 63026),

Gene: Darko_116 Start: 59744, Stop: 60562, Start Num: 1

Candidate Starts for Darko_116:

(Start: 1 @59744 has 167 MA's), (2, 59846), (3, 59870), (4, 59912), (6, 59981), (8, 60089), (9, 60155), (10, 60158), (11, 60281), (12, 60302), (13, 60308), (14, 60341), (17, 60497), (19, 60536),

Gene: Delilah_116 Start: 60196, Stop: 61014, Start Num: 1

Candidate Starts for Delilah_116:

(Start: 1 @60196 has 167 MA's), (2, 60298), (3, 60322), (4, 60364), (6, 60433), (8, 60541), (9, 60607), (10, 60610), (11, 60733), (12, 60754), (13, 60760), (14, 60793), (17, 60949), (19, 60988),

Gene: Delylah_119 Start: 59735, Stop: 60553, Start Num: 1

Candidate Starts for Delylah_119:

(Start: 1 @59735 has 167 MA's), (2, 59837), (3, 59861), (4, 59903), (6, 59972), (8, 60080), (9, 60146), (10, 60149), (11, 60272), (12, 60293), (13, 60299), (14, 60332), (17, 60488), (19, 60527),

Gene: Derek_115 Start: 59661, Stop: 60479, Start Num: 1

Candidate Starts for Derek_115:

(Start: 1 @59661 has 167 MA's), (2, 59763), (3, 59787), (4, 59829), (6, 59898), (8, 60006), (9, 60072), (10, 60075), (11, 60198), (12, 60219), (13, 60225), (14, 60258), (17, 60414), (19, 60453),

Gene: Dietrick_108 Start: 57737, Stop: 58555, Start Num: 1

Candidate Starts for Dietrick_108:

(Start: 1 @57737 has 167 MA's), (2, 57839), (3, 57863), (4, 57905), (6, 57974), (8, 58082), (9, 58148), (10, 58151), (11, 58274), (12, 58295), (13, 58301), (14, 58334), (17, 58490), (19, 58529),

Gene: DirtMonster_110 Start: 58995, Stop: 59813, Start Num: 1

Candidate Starts for DirtMonster_110:

(Start: 1 @58995 has 167 MA's), (2, 59097), (3, 59121), (4, 59163), (6, 59232), (8, 59340), (9, 59406), (10, 59409), (11, 59532), (12, 59553), (13, 59559), (14, 59592), (17, 59748), (19, 59787),

Gene: DrPhinkDaddy_115 Start: 60264, Stop: 61082, Start Num: 1

Candidate Starts for DrPhinkDaddy_115:

(Start: 1 @60264 has 167 MA's), (2, 60366), (3, 60390), (4, 60432), (6, 60501), (8, 60609), (9, 60675), (10, 60678), (11, 60801), (12, 60822), (13, 60828), (14, 60861), (17, 61017), (19, 61056),

Gene: Drazdys_114 Start: 58725, Stop: 59543, Start Num: 1

Candidate Starts for Drazdys_114:

(Start: 1 @58725 has 167 MA's), (2, 58827), (3, 58851), (4, 58893), (6, 58962), (8, 59070), (9, 59136), (10, 59139), (11, 59262), (12, 59283), (13, 59289), (14, 59322), (17, 59478), (19, 59517),

Gene: ET08_104 Start: 58725, Stop: 59543, Start Num: 1

Candidate Starts for ET08_104:

(Start: 1 @58725 has 167 MA's), (2, 58827), (3, 58851), (4, 58893), (6, 58962), (8, 59070), (9, 59136), (10, 59139), (11, 59262), (12, 59283), (13, 59289), (14, 59322), (17, 59478), (19, 59517),

Gene: EasyJones_118 Start: 58867, Stop: 59685, Start Num: 1

Candidate Starts for EasyJones_118:

(Start: 1 @58867 has 167 MA's), (2, 58969), (3, 58993), (4, 59035), (6, 59104), (8, 59212), (9, 59278), (10, 59281), (11, 59404), (12, 59425), (13, 59431), (14, 59464), (17, 59620), (19, 59659),

Gene: EggyFarm_123 Start: 62000, Stop: 62818, Start Num: 1

Candidate Starts for EggyFarm_123:

(Start: 1 @62000 has 167 MA's), (2, 62102), (3, 62126), (4, 62168), (6, 62237), (8, 62345), (9, 62411), (10, 62414), (11, 62537), (12, 62558), (13, 62564), (14, 62597), (17, 62753), (19, 62792),

Gene: EmToTheThree_118 Start: 61004, Stop: 61822, Start Num: 1

Candidate Starts for EmToTheThree_118:

(Start: 1 @61004 has 167 MA's), (2, 61106), (3, 61130), (4, 61172), (6, 61241), (8, 61349), (9, 61415), (10, 61418), (11, 61541), (12, 61562), (13, 61568), (14, 61601), (17, 61757), (19, 61796),

Gene: EmmaElysia_116 Start: 58790, Stop: 59608, Start Num: 1

Candidate Starts for EmmaElysia_116:

(Start: 1 @58790 has 167 MA's), (2, 58892), (3, 58916), (4, 58958), (6, 59027), (8, 59135), (9, 59201), (10, 59204), (11, 59327), (12, 59348), (13, 59354), (14, 59387), (17, 59543), (19, 59582),

Gene: Erdmann_116 Start: 60043, Stop: 60861, Start Num: 1

Candidate Starts for Erdmann_116:

(Start: 1 @60043 has 167 MA's), (2, 60145), (3, 60169), (4, 60211), (6, 60280), (8, 60388), (9, 60454), (10, 60457), (11, 60580), (12, 60601), (13, 60607), (14, 60640), (17, 60796), (19, 60835),

Gene: ErnieJ_110 Start: 58008, Stop: 58826, Start Num: 1

Candidate Starts for ErnieJ_110:

(Start: 1 @58008 has 167 MA's), (2, 58110), (3, 58134), (4, 58176), (6, 58245), (8, 58353), (9, 58419), (10, 58422), (11, 58545), (12, 58566), (13, 58572), (14, 58605), (17, 58761), (19, 58800),

Gene: Essence_113 Start: 58891, Stop: 59709, Start Num: 1

Candidate Starts for Essence_113:

(Start: 1 @58891 has 167 MA's), (2, 58993), (3, 59017), (4, 59059), (6, 59128), (8, 59236), (9, 59302), (10, 59305), (11, 59428), (12, 59449), (13, 59455), (14, 59488), (17, 59644), (19, 59683),

Gene: Ewok_117 Start: 59430, Stop: 60248, Start Num: 1

Candidate Starts for Ewok_117:

(Start: 1 @59430 has 167 MA's), (2, 59532), (3, 59556), (4, 59598), (6, 59667), (8, 59775), (9, 59841), (10, 59844), (11, 59967), (12, 59988), (13, 59994), (14, 60027), (17, 60183), (19, 60222),

Gene: Flabslab_110 Start: 57122, Stop: 57940, Start Num: 1

Candidate Starts for Flabslab_110:

(Start: 1 @57122 has 167 MA's), (2, 57224), (3, 57248), (4, 57290), (6, 57359), (8, 57467), (9, 57533), (10, 57536), (11, 57659), (12, 57680), (13, 57686), (14, 57719), (17, 57875), (19, 57914),

Gene: Fludd_116 Start: 58648, Stop: 59466, Start Num: 1

Candidate Starts for Fludd_116:

(Start: 1 @58648 has 167 MA's), (2, 58750), (3, 58774), (4, 58816), (6, 58885), (8, 58993), (9, 59059), (10, 59062), (11, 59185), (12, 59206), (13, 59212), (14, 59245), (17, 59401), (19, 59440),

Gene: FoxtrotP1_116 Start: 61213, Stop: 62031, Start Num: 1

Candidate Starts for FoxtrotP1_116:

(Start: 1 @61213 has 167 MA's), (2, 61315), (3, 61339), (4, 61381), (6, 61450), (8, 61558), (9, 61624), (10, 61627), (11, 61750), (12, 61771), (13, 61777), (14, 61810), (17, 61966), (19, 62005),

Gene: FrayBell_121 Start: 60377, Stop: 61195, Start Num: 1

Candidate Starts for FrayBell_121:

(Start: 1 @60377 has 167 MA's), (2, 60479), (3, 60503), (4, 60545), (6, 60614), (8, 60722), (9, 60788), (10, 60791), (11, 60914), (12, 60935), (13, 60941), (14, 60974), (17, 61130), (19, 61169),

Gene: FudgeTart_114 Start: 59072, Stop: 59890, Start Num: 1

Candidate Starts for FudgeTart_114:

(Start: 1 @59072 has 167 MA's), (2, 59174), (3, 59198), (4, 59240), (6, 59309), (8, 59417), (9, 59483), (10, 59486), (11, 59609), (12, 59630), (13, 59636), (14, 59669), (17, 59825), (19, 59864),

Gene: Gabriel_116 Start: 58297, Stop: 59115, Start Num: 1

Candidate Starts for Gabriel_116:

(Start: 1 @58297 has 167 MA's), (2, 58399), (3, 58423), (4, 58465), (6, 58534), (8, 58642), (9, 58708), (10, 58711), (11, 58834), (12, 58855), (13, 58861), (14, 58894), (17, 59050), (19, 59089),

Gene: Gamgam_116 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Gamgam_116:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Ghost_114 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Ghost_114:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Gizmo_120 Start: 61193, Stop: 62011, Start Num: 1

Candidate Starts for Gizmo_120:

(Start: 1 @61193 has 167 MA's), (2, 61295), (3, 61319), (4, 61361), (6, 61430), (8, 61538), (9, 61604), (10, 61607), (11, 61730), (12, 61751), (13, 61757), (14, 61790), (17, 61946), (19, 61985),

Gene: Grasshills_122 Start: 62000, Stop: 62818, Start Num: 1

Candidate Starts for Grasshills_122:

(Start: 1 @62000 has 167 MA's), (2, 62102), (3, 62126), (4, 62168), (6, 62237), (8, 62345), (9, 62411), (10, 62414), (11, 62537), (12, 62558), (13, 62564), (14, 62597), (17, 62753), (19, 62792),

Gene: Grungle_103 Start: 56315, Stop: 57133, Start Num: 1

Candidate Starts for Grungle_103:

(Start: 1 @56315 has 167 MA's), (2, 56417), (3, 56441), (4, 56483), (6, 56552), (8, 56660), (9, 56726), (10, 56729), (11, 56852), (12, 56873), (13, 56879), (14, 56912), (17, 57068), (19, 57107),

Gene: Guwapp_115 Start: 58462, Stop: 59280, Start Num: 1

Candidate Starts for Guwapp_115:

(Start: 1 @58462 has 167 MA's), (2, 58564), (3, 58588), (4, 58630), (6, 58699), (8, 58807), (9, 58873), (10, 58876), (11, 58999), (12, 59020), (13, 59026), (14, 59059), (17, 59215), (19, 59254),

Gene: Halldule_109 Start: 57341, Stop: 58159, Start Num: 1

Candidate Starts for Halldule_109:

(Start: 1 @57341 has 167 MA's), (2, 57443), (3, 57467), (4, 57509), (6, 57578), (8, 57686), (9, 57752), (10, 57755), (11, 57878), (12, 57899), (13, 57905), (14, 57938), (17, 58094), (19, 58133),

Gene: HyRo_106 Start: 58578, Stop: 59396, Start Num: 1

Candidate Starts for HyRo_106:

(Start: 1 @58578 has 167 MA's), (2, 58680), (3, 58704), (4, 58746), (6, 58815), (8, 58923), (9, 58989), (10, 58992), (11, 59115), (12, 59136), (13, 59142), (14, 59175), (17, 59331), (19, 59370),

Gene: I3_121 Start: 60528, Stop: 61346, Start Num: 1

Candidate Starts for I3_121:

(Start: 1 @60528 has 167 MA's), (2, 60630), (3, 60654), (4, 60696), (6, 60765), (8, 60873), (9, 60939), (10, 60942), (11, 61065), (12, 61086), (13, 61092), (14, 61125), (17, 61281), (19, 61320),

Gene: IkeLoa_109 Start: 58397, Stop: 59215, Start Num: 1

Candidate Starts for IkeLoa_109:

(Start: 1 @58397 has 167 MA's), (2, 58499), (3, 58523), (4, 58565), (6, 58634), (8, 58742), (9, 58808), (10, 58811), (11, 58934), (12, 58955), (13, 58961), (14, 58994), (17, 59150), (19, 59189),

Gene: InigoMontoya_117 Start: 58532, Stop: 59350, Start Num: 1

Candidate Starts for InigoMontoya_117:

(Start: 1 @58532 has 167 MA's), (2, 58634), (3, 58658), (4, 58700), (6, 58769), (8, 58877), (9, 58943), (10, 58946), (11, 59069), (12, 59090), (13, 59096), (14, 59129), (17, 59285), (19, 59324),

Gene: InterFolia_122 Start: 61312, Stop: 62130, Start Num: 1

Candidate Starts for InterFolia_122:

(Start: 1 @61312 has 167 MA's), (2, 61414), (3, 61438), (4, 61480), (6, 61549), (8, 61657), (9, 61723), (10, 61726), (11, 61849), (12, 61870), (13, 61876), (14, 61909), (17, 62065), (19, 62104),

Gene: Iota_111 Start: 59009, Stop: 59827, Start Num: 1

Candidate Starts for Iota_111:

(Start: 1 @59009 has 167 MA's), (2, 59111), (3, 59135), (4, 59177), (6, 59246), (8, 59354), (9, 59420), (10, 59423), (11, 59546), (12, 59567), (13, 59573), (14, 59606), (17, 59762), (19, 59801),

Gene: Issimir_114 Start: 60017, Stop: 60835, Start Num: 1

Candidate Starts for Issimir_114:

(Start: 1 @60017 has 167 MA's), (2, 60119), (3, 60143), (4, 60185), (6, 60254), (8, 60362), (9, 60428), (10, 60431), (11, 60554), (12, 60575), (13, 60581), (14, 60614), (17, 60770), (19, 60809),

Gene: Izajani_116 Start: 60223, Stop: 61041, Start Num: 1

Candidate Starts for Izajani_116:

(Start: 1 @60223 has 167 MA's), (2, 60325), (3, 60349), (4, 60391), (6, 60460), (8, 60568), (9, 60634), (10, 60637), (11, 60760), (12, 60781), (13, 60787), (14, 60820), (17, 60976), (19, 61015),

Gene: JPickles_113 Start: 57802, Stop: 58620, Start Num: 1

Candidate Starts for JPickles_113:

(Start: 1 @57802 has 167 MA's), (2, 57904), (3, 57928), (4, 57970), (6, 58039), (8, 58147), (9, 58213), (10, 58216), (11, 58339), (12, 58360), (13, 58366), (14, 58399), (17, 58555), (19, 58594),

Gene: Janiyra_118 Start: 59498, Stop: 60316, Start Num: 1

Candidate Starts for Janiyra_118:

(Start: 1 @59498 has 167 MA's), (2, 59600), (3, 59624), (4, 59666), (6, 59735), (8, 59843), (9, 59909), (10, 59912), (11, 60035), (12, 60056), (13, 60062), (14, 60095), (17, 60251), (19, 60290),

Gene: JayJay_116 Start: 61008, Stop: 61826, Start Num: 1

Candidate Starts for JayJay_116:

(Start: 1 @61008 has 167 MA's), (2, 61110), (3, 61134), (4, 61176), (6, 61245), (8, 61353), (9, 61419), (10, 61422), (11, 61545), (12, 61566), (13, 61572), (14, 61605), (17, 61761), (19, 61800),

Gene: Jaygup_116 Start: 59327, Stop: 60145, Start Num: 1

Candidate Starts for Jaygup_116:

(Start: 1 @59327 has 167 MA's), (2, 59429), (3, 59453), (4, 59495), (6, 59564), (8, 59672), (9, 59738), (10, 59741), (11, 59864), (12, 59885), (13, 59891), (14, 59924), (17, 60080), (19, 60119),

Gene: Jedediah_119 Start: 59860, Stop: 60678, Start Num: 1

Candidate Starts for Jedediah_119:

(Start: 1 @59860 has 167 MA's), (2, 59962), (3, 59986), (4, 60028), (6, 60097), (8, 60205), (9, 60271), (10, 60274), (11, 60397), (12, 60418), (13, 60424), (14, 60457), (17, 60613), (19, 60652),

Gene: Jemmno_116 Start: 59307, Stop: 60125, Start Num: 1

Candidate Starts for Jemmno_116:

(Start: 1 @59307 has 167 MA's), (2, 59409), (3, 59433), (4, 59475), (6, 59544), (8, 59652), (9, 59718), (10, 59721), (11, 59844), (12, 59865), (13, 59871), (14, 59904), (17, 60060), (19, 60099),

Gene: Jessibeth14_115 Start: 59839, Stop: 60657, Start Num: 1

Candidate Starts for Jessibeth14_115:

(Start: 1 @59839 has 167 MA's), (2, 59941), (3, 59965), (4, 60007), (6, 60076), (8, 60184), (9, 60250), (10, 60253), (11, 60376), (12, 60397), (13, 60403), (14, 60436), (17, 60592), (19, 60631),

Gene: JulietS_110 Start: 57194, Stop: 58012, Start Num: 1

Candidate Starts for JulietS_110:

(Start: 1 @57194 has 167 MA's), (2, 57296), (3, 57320), (4, 57362), (6, 57431), (8, 57539), (9, 57605), (10, 57608), (11, 57731), (12, 57752), (13, 57758), (14, 57791), (17, 57947), (19, 57986),

Gene: JustHall_113 Start: 59366, Stop: 60184, Start Num: 1

Candidate Starts for JustHall_113:

(Start: 1 @59366 has 167 MA's), (2, 59468), (3, 59492), (4, 59534), (6, 59603), (8, 59711), (9, 59777), (10, 59780), (11, 59903), (12, 59924), (13, 59930), (14, 59963), (17, 60119), (19, 60158),

Gene: Kamryn_116 Start: 60644, Stop: 61462, Start Num: 1

Candidate Starts for Kamryn_116:

(Start: 1 @60644 has 167 MA's), (2, 60746), (3, 60770), (4, 60812), (6, 60881), (8, 60989), (9, 61055), (10, 61058), (11, 61181), (12, 61202), (13, 61208), (14, 61241), (17, 61397), (19, 61436),

Gene: Kboogie_120 Start: 59010, Stop: 59828, Start Num: 1

Candidate Starts for Kboogie_120:

(Start: 1 @59010 has 167 MA's), (2, 59112), (3, 59136), (4, 59178), (6, 59247), (8, 59355), (9, 59421), (10, 59424), (11, 59547), (12, 59568), (13, 59574), (14, 59607), (17, 59763), (19, 59802),

Gene: Khaleesi_115 Start: 59942, Stop: 60760, Start Num: 1

Candidate Starts for Khaleesi_115:

(Start: 1 @59942 has 167 MA's), (2, 60044), (3, 60068), (4, 60110), (6, 60179), (8, 60287), (9, 60353), (10, 60356), (11, 60479), (12, 60500), (13, 60506), (14, 60539), (17, 60695), (19, 60734),

Gene: Koguma_113 Start: 57487, Stop: 58305, Start Num: 1

Candidate Starts for Koguma_113:

(Start: 1 @57487 has 167 MA's), (2, 57589), (3, 57613), (4, 57655), (6, 57724), (8, 57832), (9, 57898), (10, 57901), (11, 58024), (12, 58045), (13, 58051), (14, 58084), (17, 58240), (19, 58279),

Gene: LRRHood_109 Start: 59285, Stop: 60103, Start Num: 1

Candidate Starts for LRRHood_109:

(Start: 1 @59285 has 167 MA's), (2, 59387), (3, 59411), (4, 59453), (6, 59522), (8, 59630), (9, 59696), (10, 59699), (11, 59822), (12, 59843), (13, 59849), (14, 59882), (17, 60038), (19, 60077),

Gene: Latch_116 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Latch_116:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Lee7_113 Start: 60576, Stop: 61394, Start Num: 1

Candidate Starts for Lee7_113:

(Start: 1 @60576 has 167 MA's), (2, 60678), (3, 60702), (4, 60744), (6, 60813), (8, 60921), (9, 60987), (10, 60990), (11, 61113), (12, 61134), (13, 61140), (14, 61173), (17, 61329), (19, 61368),

Gene: LifeSavor_114 Start: 59259, Stop: 60077, Start Num: 1

Candidate Starts for LifeSavor_114:

(Start: 1 @59259 has 167 MA's), (2, 59361), (3, 59385), (4, 59427), (6, 59496), (8, 59604), (9, 59670), (10, 59673), (11, 59796), (12, 59817), (13, 59823), (14, 59856), (17, 60012), (19, 60051),

Gene: LinStu_114 Start: 59904, Stop: 60722, Start Num: 1

Candidate Starts for LinStu_114:

(Start: 1 @59904 has 167 MA's), (2, 60006), (3, 60030), (4, 60072), (6, 60141), (8, 60249), (9, 60315), (10, 60318), (11, 60441), (12, 60462), (13, 60468), (14, 60501), (17, 60657), (19, 60696),

Gene: Littleton_116 Start: 59389, Stop: 60207, Start Num: 1

Candidate Starts for Littleton_116:

(Start: 1 @59389 has 167 MA's), (2, 59491), (3, 59515), (4, 59557), (6, 59626), (8, 59734), (9, 59800), (10, 59803), (11, 59926), (12, 59947), (13, 59953), (14, 59986), (17, 60142), (19, 60181),

Gene: Loanshark_115 Start: 59910, Stop: 60728, Start Num: 1

Candidate Starts for Loanshark_115:

(Start: 1 @59910 has 167 MA's), (2, 60012), (3, 60036), (4, 60078), (6, 60147), (8, 60255), (9, 60321), (10, 60324), (11, 60447), (12, 60468), (13, 60474), (14, 60507), (17, 60663), (19, 60702),

Gene: LolaVinca_116 Start: 60262, Stop: 61080, Start Num: 1

Candidate Starts for LolaVinca_116:

(Start: 1 @60262 has 167 MA's), (2, 60364), (3, 60388), (4, 60430), (6, 60499), (8, 60607), (9, 60673), (10, 60676), (11, 60799), (12, 60820), (13, 60826), (14, 60859), (17, 61015), (19, 61054),

Gene: LordLeafolot_119 Start: 61229, Stop: 62047, Start Num: 1

Candidate Starts for LordLeafolot_119:

(Start: 1 @61229 has 167 MA's), (2, 61331), (3, 61355), (4, 61397), (6, 61466), (8, 61574), (9, 61640), (10, 61643), (11, 61766), (12, 61787), (13, 61793), (14, 61826), (17, 61982), (19, 62021),

Gene: Lukilu_106 Start: 59676, Stop: 60494, Start Num: 1

Candidate Starts for Lukilu_106:

(Start: 1 @59676 has 167 MA's), (2, 59778), (3, 59802), (4, 59844), (6, 59913), (8, 60021), (9, 60087), (10, 60090), (11, 60213), (12, 60234), (13, 60240), (14, 60273), (17, 60429),

Gene: Maby2021_116 Start: 60036, Stop: 60854, Start Num: 1

Candidate Starts for Maby2021_116:

(Start: 1 @60036 has 167 MA's), (2, 60138), (3, 60162), (4, 60204), (6, 60273), (8, 60381), (9, 60447), (10, 60450), (11, 60573), (12, 60594), (13, 60600), (14, 60633), (17, 60789), (19, 60828),

Gene: Mangeria_116 Start: 60105, Stop: 60923, Start Num: 1

Candidate Starts for Mangeria_116:

(Start: 1 @60105 has 167 MA's), (2, 60207), (3, 60231), (4, 60273), (6, 60342), (8, 60450), (9, 60516), (10, 60519), (11, 60642), (12, 60663), (13, 60669), (14, 60702), (17, 60858), (19, 60897),

Gene: Matsumoto_112 Start: 58888, Stop: 59706, Start Num: 1

Candidate Starts for Matsumoto_112:

(Start: 1 @58888 has 167 MA's), (2, 58990), (3, 59014), (4, 59056), (6, 59125), (8, 59233), (9, 59299), (10, 59302), (11, 59425), (12, 59446), (13, 59452), (14, 59485), (17, 59641), (19, 59680),

Gene: McGee_118 Start: 58651, Stop: 59469, Start Num: 1

Candidate Starts for McGee_118:

(Start: 1 @58651 has 167 MA's), (2, 58753), (3, 58777), (4, 58819), (6, 58888), (8, 58996), (9, 59062), (10, 59065), (11, 59188), (12, 59209), (13, 59215), (14, 59248), (17, 59404), (19, 59443),

Gene: McWolfish_114 Start: 59825, Stop: 60643, Start Num: 1

Candidate Starts for McWolfish_114:

(Start: 1 @59825 has 167 MA's), (2, 59927), (3, 59951), (4, 59993), (6, 60062), (8, 60170), (9, 60236), (10, 60239), (11, 60362), (12, 60383), (13, 60389), (14, 60422), (17, 60578), (19, 60617),

Gene: Megamind_115 Start: 59709, Stop: 60527, Start Num: 1

Candidate Starts for Megamind_115:

(Start: 1 @59709 has 167 MA's), (2, 59811), (3, 59835), (4, 59877), (6, 59946), (8, 60054), (9, 60120), (10, 60123), (11, 60246), (12, 60267), (13, 60273), (14, 60306), (17, 60462), (19, 60501),

Gene: Melpomini_110 Start: 57175, Stop: 57993, Start Num: 1

Candidate Starts for Melpomini_110:

(Start: 1 @57175 has 167 MA's), (2, 57277), (3, 57301), (4, 57343), (6, 57412), (8, 57520), (9, 57586), (10, 57589), (11, 57712), (12, 57733), (13, 57739), (14, 57772), (17, 57928), (19, 57967),

Gene: MikeLiesIn_117 Start: 60056, Stop: 60874, Start Num: 1

Candidate Starts for MikeLiesIn_117:

(Start: 1 @60056 has 167 MA's), (2, 60158), (3, 60182), (4, 60224), (6, 60293), (8, 60401), (9, 60467), (10, 60470), (11, 60593), (12, 60614), (13, 60620), (14, 60653), (17, 60809), (19, 60848),

Gene: Mikro_113 Start: 61279, Stop: 62097, Start Num: 1

Candidate Starts for Mikro_113:

(Start: 1 @61279 has 167 MA's), (2, 61381), (3, 61405), (4, 61447), (6, 61516), (8, 61624), (9, 61690), (10, 61693), (11, 61816), (12, 61837), (13, 61843), (14, 61876), (17, 62032), (19, 62071),

Gene: MoMoMixon_116 Start: 59532, Stop: 60350, Start Num: 1

Candidate Starts for MoMoMixon_116:

(Start: 1 @59532 has 167 MA's), (2, 59634), (3, 59658), (4, 59700), (6, 59769), (8, 59877), (9, 59943), (10, 59946), (11, 60069), (12, 60090), (13, 60096), (14, 60129), (17, 60285), (19, 60324),

Gene: Momo_115 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Momo_115:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Morizzled23_116 Start: 58936, Stop: 59754, Start Num: 1

Candidate Starts for Morizzled23_116:

(Start: 1 @58936 has 167 MA's), (2, 59038), (3, 59062), (4, 59104), (6, 59173), (8, 59281), (9, 59347), (10, 59350), (11, 59473), (12, 59494), (13, 59500), (14, 59533), (17, 59689), (19, 59728),

Gene: Naija_115 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Naija_115:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Napoleon13_112 Start: 57613, Stop: 58431, Start Num: 1

Candidate Starts for Napoleon13_112:

(Start: 1 @57613 has 167 MA's), (2, 57715), (3, 57739), (4, 57781), (6, 57850), (8, 57958), (9, 58024), (10, 58027), (11, 58150), (12, 58171), (13, 58177), (14, 58210), (17, 58366), (19, 58405),

Gene: Nappy_118 Start: 60966, Stop: 61784, Start Num: 1

Candidate Starts for Nappy_118:

(Start: 1 @60966 has 167 MA's), (2, 61068), (3, 61092), (4, 61134), (6, 61203), (8, 61311), (9, 61377), (10, 61380), (11, 61503), (12, 61524), (13, 61530), (14, 61563), (17, 61719), (19, 61758),

Gene: Naval22_120 Start: 61499, Stop: 62317, Start Num: 1

Candidate Starts for Naval22_120:

(Start: 1 @61499 has 167 MA's), (2, 61601), (3, 61625), (4, 61667), (6, 61736), (8, 61844), (9, 61910), (10, 61913), (11, 62036), (12, 62057), (13, 62063), (14, 62096), (17, 62252), (19, 62291),

Gene: NedWong_117 Start: 60043, Stop: 60861, Start Num: 1

Candidate Starts for NedWong_117:

(Start: 1 @60043 has 167 MA's), (2, 60145), (3, 60169), (4, 60211), (6, 60280), (8, 60388), (9, 60454), (10, 60457), (11, 60580), (12, 60601), (13, 60607), (14, 60640), (17, 60796), (19, 60835),

Gene: Ngannou_112 Start: 57553, Stop: 58371, Start Num: 1

Candidate Starts for Ngannou_112:

(Start: 1 @57553 has 167 MA's), (2, 57655), (3, 57679), (4, 57721), (6, 57790), (8, 57898), (9, 57964), (10, 57967), (11, 58090), (12, 58111), (13, 58117), (14, 58150), (17, 58306), (19, 58345),

Gene: Nidhogg_117 Start: 59777, Stop: 60595, Start Num: 1

Candidate Starts for Nidhogg_117:

(Start: 1 @59777 has 167 MA's), (2, 59879), (3, 59903), (4, 59945), (6, 60014), (8, 60122), (9, 60188), (10, 60191), (11, 60314), (12, 60335), (13, 60341), (14, 60374), (17, 60530), (19, 60569),

Gene: NoodleTree_123 Start: 60136, Stop: 60954, Start Num: 1

Candidate Starts for NoodleTree_123:

(Start: 1 @60136 has 167 MA's), (2, 60238), (3, 60262), (4, 60304), (6, 60373), (8, 60481), (9, 60547), (10, 60550), (11, 60673), (12, 60694), (13, 60700), (14, 60733), (17, 60889), (19, 60928),

Gene: Norm_117 Start: 60738, Stop: 61556, Start Num: 1

Candidate Starts for Norm_117:

(Start: 1 @60738 has 167 MA's), (2, 60840), (3, 60864), (4, 60906), (6, 60975), (8, 61083), (9, 61149), (10, 61152), (11, 61275), (12, 61296), (13, 61302), (14, 61335), (17, 61491), (19, 61530),

Gene: NuevoMundo_121 Start: 62317, Stop: 63135, Start Num: 1

Candidate Starts for NuevoMundo_121:

(Start: 1 @62317 has 167 MA's), (2, 62419), (3, 62443), (4, 62485), (6, 62554), (8, 62662), (9, 62728), (10, 62731), (11, 62854), (12, 62875), (13, 62881), (14, 62914), (17, 63070), (19, 63109),

Gene: ParkTD_117 Start: 60039, Stop: 60857, Start Num: 1

Candidate Starts for ParkTD_117:

(Start: 1 @60039 has 167 MA's), (2, 60141), (3, 60165), (4, 60207), (6, 60276), (8, 60384), (9, 60450), (10, 60453), (11, 60576), (12, 60597), (13, 60603), (14, 60636), (17, 60792), (19, 60831),

Gene: Patter_116 Start: 58588, Stop: 59406, Start Num: 1

Candidate Starts for Patter_116:

(Start: 1 @58588 has 167 MA's), (2, 58690), (3, 58714), (4, 58756), (6, 58825), (8, 58933), (9, 58999), (10, 59002), (11, 59125), (12, 59146), (13, 59152), (14, 59185), (17, 59341), (19, 59380),

Gene: Phlegm_118 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Phlegm_118:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Phox_113 Start: 60319, Stop: 61137, Start Num: 1

Candidate Starts for Phox_113:

(Start: 1 @60319 has 167 MA's), (2, 60421), (3, 60445), (4, 60487), (6, 60556), (8, 60664), (9, 60730), (10, 60733), (11, 60856), (12, 60877), (13, 60883), (14, 60916), (17, 61072), (19, 61111),

Gene: Phusco_116 Start: 59336, Stop: 60154, Start Num: 1

Candidate Starts for Phusco_116:

(Start: 1 @59336 has 167 MA's), (2, 59438), (3, 59462), (4, 59504), (6, 59573), (8, 59681), (9, 59747), (10, 59750), (11, 59873), (12, 59894), (13, 59900), (14, 59933), (17, 60089), (19, 60128),

Gene: Pier_120 Start: 62325, Stop: 63143, Start Num: 1

Candidate Starts for Pier_120:

(Start: 1 @62325 has 167 MA's), (2, 62427), (3, 62451), (4, 62493), (6, 62562), (8, 62670), (9, 62736), (10, 62739), (11, 62862), (12, 62883), (13, 62889), (14, 62922), (17, 63078), (19, 63117),

Gene: Pinkcreek_107 Start: 57670, Stop: 58488, Start Num: 1

Candidate Starts for Pinkcreek_107:

(Start: 1 @57670 has 167 MA's), (2, 57772), (3, 57796), (4, 57838), (6, 57907), (8, 58015), (9, 58081), (10, 58084), (11, 58207), (12, 58228), (13, 58234), (14, 58267), (17, 58423), (19, 58462),

Gene: Pio_120 Start: 61929, Stop: 62747, Start Num: 1

Candidate Starts for Pio_120:

(Start: 1 @61929 has 167 MA's), (2, 62031), (3, 62055), (4, 62097), (6, 62166), (8, 62274), (9, 62340), (10, 62343), (11, 62466), (12, 62487), (13, 62493), (14, 62526), (17, 62682), (19, 62721),

Gene: Pivoine_115 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for Pivoine_115:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Pleione_119 Start: 60206, Stop: 61024, Start Num: 1

Candidate Starts for Pleione_119:

(Start: 1 @60206 has 167 MA's), (2, 60308), (3, 60332), (4, 60374), (6, 60443), (8, 60551), (9, 60617), (10, 60620), (11, 60743), (12, 60764), (13, 60770), (14, 60803), (17, 60959), (19, 60998),

Gene: PurduePete_116 Start: 60463, Stop: 61281, Start Num: 1

Candidate Starts for PurduePete_116:

(Start: 1 @60463 has 167 MA's), (2, 60565), (3, 60589), (4, 60631), (6, 60700), (8, 60808), (9, 60874), (10, 60877), (11, 61000), (12, 61021), (13, 61027), (14, 61060), (17, 61216), (19, 61255),

Gene: QBert_110 Start: 59043, Stop: 59861, Start Num: 1

Candidate Starts for QBert_110:

(Start: 1 @59043 has 167 MA's), (2, 59145), (3, 59169), (4, 59211), (6, 59280), (8, 59388), (9, 59454), (10, 59457), (11, 59580), (12, 59601), (13, 59607), (14, 59640), (17, 59796), (19, 59835),

Gene: Quasimodo_117 Start: 59998, Stop: 60816, Start Num: 1

Candidate Starts for Quasimodo_117:

(Start: 1 @59998 has 167 MA's), (2, 60100), (3, 60124), (4, 60166), (6, 60235), (8, 60343), (9, 60409), (10, 60412), (11, 60535), (12, 60556), (13, 60562), (14, 60595), (17, 60751), (19, 60790),

Gene: Rabinovish_113 Start: 60236, Stop: 61054, Start Num: 1

Candidate Starts for Rabinovish_113:

(Start: 1 @60236 has 167 MA's), (2, 60338), (3, 60362), (4, 60404), (6, 60473), (8, 60581), (9, 60647), (10, 60650), (11, 60773), (12, 60794), (13, 60800), (14, 60833), (17, 60989), (19, 61028),

Gene: Rahel_115 Start: 58928, Stop: 59746, Start Num: 1

Candidate Starts for Rahel_115:

(Start: 1 @58928 has 167 MA's), (2, 59030), (3, 59054), (4, 59096), (6, 59165), (8, 59273), (9, 59339), (10, 59342), (11, 59465), (12, 59486), (13, 59492), (14, 59525), (17, 59681), (19, 59720),

Gene: Rizal_111 Start: 58076, Stop: 58894, Start Num: 1

Candidate Starts for Rizal_111:

(Start: 1 @58076 has 167 MA's), (2, 58178), (3, 58202), (4, 58244), (6, 58313), (8, 58421), (9, 58487), (10, 58490), (11, 58613), (12, 58634), (13, 58640), (14, 58673), (17, 58829), (19, 58868),

Gene: RoMag_111 Start: 59249, Stop: 60067, Start Num: 1

Candidate Starts for RoMag_111:

(Start: 1 @59249 has 167 MA's), (2, 59351), (3, 59375), (4, 59417), (6, 59486), (8, 59594), (9, 59660), (10, 59663), (11, 59786), (12, 59807), (13, 59813), (14, 59846), (17, 60002), (19, 60041),

Gene: Ronan_110 Start: 57199, Stop: 58017, Start Num: 1

Candidate Starts for Ronan_110:

(Start: 1 @57199 has 167 MA's), (2, 57301), (3, 57325), (4, 57367), (6, 57436), (8, 57544), (9, 57610), (10, 57613), (11, 57736), (12, 57757), (13, 57763), (14, 57796), (17, 57952), (19, 57991),

Gene: Roots515_114 Start: 60236, Stop: 61054, Start Num: 1

Candidate Starts for Roots515_114:

(Start: 1 @60236 has 167 MA's), (2, 60338), (3, 60362), (4, 60404), (6, 60473), (8, 60581), (9, 60647), (10, 60650), (11, 60773), (12, 60794), (13, 60800), (14, 60833), (17, 60989), (19, 61028),

Gene: Salacia_120 Start: 60377, Stop: 61195, Start Num: 1

Candidate Starts for Salacia_120:

(Start: 1 @60377 has 167 MA's), (2, 60479), (3, 60503), (4, 60545), (6, 60614), (8, 60722), (9, 60788), (10, 60791), (11, 60914), (12, 60935), (13, 60941), (14, 60974), (17, 61130), (19, 61169),

Gene: Sauce_116 Start: 58983, Stop: 59801, Start Num: 1

Candidate Starts for Sauce_116:

(Start: 1 @58983 has 167 MA's), (2, 59085), (3, 59109), (4, 59151), (6, 59220), (8, 59328), (9, 59394), (10, 59397), (11, 59520), (12, 59541), (13, 59547), (14, 59580), (17, 59736), (19, 59775),

Gene: ScottMcG_112 Start: 58999, Stop: 59817, Start Num: 1

Candidate Starts for ScottMcG_112:

(Start: 1 @58999 has 167 MA's), (2, 59101), (3, 59125), (4, 59167), (6, 59236), (8, 59344), (9, 59410), (10, 59413), (11, 59536), (12, 59557), (13, 59563), (14, 59596), (17, 59752), (19, 59791),

Gene: Sebata_116 Start: 60462, Stop: 61280, Start Num: 1

Candidate Starts for Sebata_116:

(Start: 1 @60462 has 167 MA's), (2, 60564), (3, 60588), (4, 60630), (6, 60699), (8, 60807), (9, 60873), (10, 60876), (11, 60999), (12, 61020), (13, 61026), (14, 61059), (17, 61215), (19, 61254),

Gene: Shaqnato_109 Start: 58043, Stop: 58861, Start Num: 1

Candidate Starts for Shaqnato_109:

(Start: 1 @58043 has 167 MA's), (2, 58145), (3, 58169), (4, 58211), (6, 58280), (8, 58388), (9, 58454), (10, 58457), (11, 58580), (12, 58601), (13, 58607), (14, 58640), (17, 58796), (19, 58835),

Gene: Shelob_118 Start: 60835, Stop: 61653, Start Num: 1

Candidate Starts for Shelob_118:

(Start: 1 @60835 has 167 MA's), (2, 60937), (3, 60961), (4, 61003), (6, 61072), (8, 61180), (9, 61246), (10, 61249), (11, 61372), (12, 61393), (13, 61399), (14, 61432), (17, 61588), (19, 61627),

Gene: ShiaLabeouf_115 Start: 59363, Stop: 60181, Start Num: 1

Candidate Starts for ShiaLabeouf_115:

(Start: 1 @59363 has 167 MA's), (2, 59465), (3, 59489), (4, 59531), (6, 59600), (8, 59708), (9, 59774), (10, 59777), (11, 59900), (12, 59921), (13, 59927), (14, 59960), (17, 60116), (19, 60155),

Gene: Shifa_104 Start: 57844, Stop: 58662, Start Num: 1

Candidate Starts for Shifa_104:

(Start: 1 @57844 has 167 MA's), (2, 57946), (3, 57970), (4, 58012), (6, 58081), (8, 58189), (9, 58255), (10, 58258), (11, 58381), (12, 58402), (13, 58408), (14, 58441), (17, 58597), (19, 58636),

Gene: Shnickers_116 Start: 59327, Stop: 60145, Start Num: 1

Candidate Starts for Shnickers_116:

(Start: 1 @59327 has 167 MA's), (2, 59429), (3, 59453), (4, 59495), (6, 59564), (8, 59672), (9, 59738), (10, 59741), (11, 59864), (12, 59885), (13, 59891), (14, 59924), (17, 60080), (19, 60119),

Gene: Shrimp_116 Start: 60047, Stop: 60865, Start Num: 1

Candidate Starts for Shrimp_116:

(Start: 1 @60047 has 167 MA's), (3, 60173), (4, 60215), (6, 60284), (8, 60392), (9, 60458), (10, 60461), (11, 60584), (12, 60605), (13, 60611), (14, 60644), (17, 60800), (19, 60839),

Gene: SilverDipper_117 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for SilverDipper_117:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: SmallFry_116 Start: 58552, Stop: 59370, Start Num: 1

Candidate Starts for SmallFry_116:

(Start: 1 @58552 has 167 MA's), (2, 58654), (3, 58678), (4, 58720), (6, 58789), (8, 58897), (9, 58963), (10, 58966), (11, 59089), (12, 59110), (13, 59116), (14, 59149), (17, 59305), (19, 59344),

Gene: Spec_111 Start: 59092, Stop: 59910, Start Num: 1

Candidate Starts for Spec_111:

(Start: 1 @59092 has 167 MA's), (2, 59194), (3, 59218), (4, 59260), (6, 59329), (8, 59437), (9, 59503), (10, 59506), (11, 59629), (12, 59650), (13, 59656), (14, 59689), (17, 59845), (19, 59884),

Gene: Specks_121 Start: 61227, Stop: 62045, Start Num: 1

Candidate Starts for Specks_121:

(Start: 1 @61227 has 167 MA's), (2, 61329), (3, 61353), (4, 61395), (6, 61464), (8, 61572), (9, 61638), (10, 61641), (11, 61764), (12, 61785), (13, 61791), (14, 61824), (17, 61980), (19, 62019),

Gene: Sprinklers_112 Start: 58608, Stop: 59426, Start Num: 1

Candidate Starts for Sprinklers_112:

(Start: 1 @58608 has 167 MA's), (2, 58710), (3, 58734), (4, 58776), (6, 58845), (8, 58953), (9, 59019), (10, 59022), (11, 59145), (12, 59166), (13, 59172), (14, 59205), (17, 59361), (19, 59400),

Gene: Spud_115 Start: 60123, Stop: 60941, Start Num: 1

Candidate Starts for Spud_115:

(Start: 1 @60123 has 167 MA's), (2, 60225), (3, 60249), (4, 60291), (6, 60360), (8, 60468), (9, 60534), (10, 60537), (11, 60660), (12, 60681), (13, 60687), (14, 60720), (17, 60876), (19, 60915),

Gene: SrishMeg2525_115 Start: 60145, Stop: 60963, Start Num: 1

Candidate Starts for SrishMeg2525_115:

(Start: 1 @60145 has 167 MA's), (2, 60247), (3, 60271), (4, 60313), (6, 60382), (8, 60490), (9, 60556), (10, 60559), (11, 60682), (12, 60703), (13, 60709), (14, 60742), (17, 60898), (19, 60937),

Gene: StephanieG_114 Start: 60954, Stop: 61772, Start Num: 1

Candidate Starts for StephanieG_114:

(Start: 1 @60954 has 167 MA's), (2, 61056), (3, 61080), (4, 61122), (6, 61191), (8, 61299), (9, 61365), (10, 61368), (11, 61491), (12, 61512), (13, 61518), (14, 61551), (17, 61707), (19, 61746),

Gene: Stubby_108 Start: 58160, Stop: 58978, Start Num: 1

Candidate Starts for Stubby_108:

(Start: 1 @58160 has 167 MA's), (2, 58262), (3, 58286), (4, 58328), (6, 58397), (8, 58505), (9, 58571), (10, 58574), (11, 58697), (12, 58718), (13, 58724), (14, 58757), (17, 58913), (19, 58952),

Gene: StubbySaigey_119 Start: 58741, Stop: 59559, Start Num: 1

Candidate Starts for StubbySaigey_119:

(Start: 1 @58741 has 167 MA's), (2, 58843), (3, 58867), (4, 58909), (6, 58978), (8, 59086), (9, 59152), (10, 59155), (11, 59278), (12, 59299), (13, 59305), (14, 59338), (17, 59494), (19, 59533),

Gene: Teardrop_115 Start: 58551, Stop: 59369, Start Num: 1

Candidate Starts for Teardrop_115:

(Start: 1 @58551 has 167 MA's), (2, 58653), (3, 58677), (4, 58719), (6, 58788), (8, 58896), (9, 58962), (10, 58965), (11, 59088), (12, 59109), (13, 59115), (14, 59148), (17, 59304), (19, 59343),

Gene: TinyTim_116 Start: 59803, Stop: 60621, Start Num: 1

Candidate Starts for TinyTim_116:

(Start: 1 @59803 has 167 MA's), (2, 59905), (3, 59929), (4, 59971), (6, 60040), (8, 60148), (9, 60214), (10, 60217), (11, 60340), (12, 60361), (13, 60367), (14, 60400), (17, 60556), (19, 60595),

Gene: Tonenili_130 Start: 63270, Stop: 64088, Start Num: 1

Candidate Starts for Tonenili_130:

(Start: 1 @63270 has 167 MA's), (2, 63372), (3, 63396), (4, 63438), (5, 63450), (7, 63564), (9, 63681), (10, 63684), (12, 63828), (15, 63915), (16, 64002), (18, 64053),

Gene: Tortoise16_113 Start: 59152, Stop: 59970, Start Num: 1

Candidate Starts for Tortoise16_113:

(Start: 1 @59152 has 167 MA's), (2, 59254), (3, 59278), (4, 59320), (6, 59389), (8, 59497), (9, 59563), (10, 59566), (11, 59689), (12, 59710), (13, 59716), (14, 59749), (17, 59905), (19, 59944),

Gene: Trinitium_113 Start: 58507, Stop: 59325, Start Num: 1

Candidate Starts for Trinitium_113:

(Start: 1 @58507 has 167 MA's), (2, 58609), (3, 58633), (4, 58675), (6, 58744), (8, 58852), (9, 58918), (10, 58921), (11, 59044), (12, 59065), (13, 59071), (14, 59104), (17, 59260), (19, 59299),

Gene: Turret_111 Start: 57952, Stop: 58770, Start Num: 1

Candidate Starts for Turret_111:

(Start: 1 @57952 has 167 MA's), (2, 58054), (3, 58078), (4, 58120), (6, 58189), (8, 58297), (9, 58363), (10, 58366), (11, 58489), (12, 58510), (13, 58516), (14, 58549), (17, 58705), (19, 58744),

Gene: Tyke_116 Start: 60458, Stop: 61276, Start Num: 1

Candidate Starts for Tyke_116:

(Start: 1 @60458 has 167 MA's), (2, 60560), (3, 60584), (4, 60626), (6, 60695), (8, 60803), (9, 60869), (10, 60872), (11, 60995), (12, 61016), (13, 61022), (14, 61055), (17, 61211), (19, 61250),

Gene: ValleyTerrace_116 Start: 58571, Stop: 59389, Start Num: 1

Candidate Starts for ValleyTerrace_116:

(Start: 1 @58571 has 167 MA's), (2, 58673), (3, 58697), (4, 58739), (6, 58808), (8, 58916), (9, 58982), (10, 58985), (11, 59108), (12, 59129), (13, 59135), (14, 59168), (17, 59324), (19, 59363),

Gene: Wally_115 Start: 58581, Stop: 59399, Start Num: 1

Candidate Starts for Wally_115:

(Start: 1 @58581 has 167 MA's), (2, 58683), (3, 58707), (4, 58749), (6, 58818), (8, 58926), (9, 58992), (10, 58995), (11, 59118), (12, 59139), (13, 59145), (14, 59178), (17, 59334), (19, 59373),

Gene: Willis_117 Start: 59938, Stop: 60756, Start Num: 1

Candidate Starts for Willis_117:

(Start: 1 @59938 has 167 MA's), (2, 60040), (3, 60064), (4, 60106), (6, 60175), (8, 60283), (9, 60349), (10, 60352), (11, 60475), (12, 60496), (13, 60502), (14, 60535), (17, 60691), (19, 60730),

Gene: Yassified_113 Start: 58658, Stop: 59476, Start Num: 1

Candidate Starts for Yassified_113:

(Start: 1 @58658 has 167 MA's), (2, 58760), (3, 58784), (4, 58826), (6, 58895), (8, 59003), (9, 59069), (10, 59072), (11, 59195), (12, 59216), (13, 59222), (14, 59255), (17, 59411), (19, 59450),

Gene: YemiJoy2021_117 Start: 60040, Stop: 60858, Start Num: 1

Candidate Starts for YemiJoy2021_117:

(Start: 1 @60040 has 167 MA's), (2, 60142), (3, 60166), (4, 60208), (6, 60277), (8, 60385), (9, 60451), (10, 60454), (11, 60577), (12, 60598), (13, 60604), (14, 60637), (17, 60793), (19, 60832),

Gene: YoungMoneyMata_117 Start: 59207, Stop: 60025, Start Num: 1

Candidate Starts for YoungMoneyMata_117:

(Start: 1 @59207 has 167 MA's), (2, 59309), (3, 59333), (4, 59375), (6, 59444), (8, 59552), (9, 59618), (10, 59621), (11, 59744), (12, 59765), (13, 59771), (14, 59804), (17, 59960), (19, 59999),

Gene: Yucca_115 Start: 59722, Stop: 60540, Start Num: 1

Candidate Starts for Yucca_115:

(Start: 1 @59722 has 167 MA's), (2, 59824), (3, 59848), (4, 59890), (6, 59959), (8, 60067), (9, 60133), (10, 60136), (11, 60259), (12, 60280), (13, 60286), (14, 60319), (17, 60475), (19, 60514),

Gene: Zalkecks_117 Start: 59723, Stop: 60541, Start Num: 1

Candidate Starts for Zalkecks_117:

(Start: 1 @59723 has 167 MA's), (2, 59825), (3, 59849), (4, 59891), (6, 59960), (8, 60068), (9, 60134), (10, 60137), (11, 60260), (12, 60281), (13, 60287), (14, 60320), (17, 60476), (19, 60515),

Gene: Zeenon_117 Start: 59808, Stop: 60626, Start Num: 1

Candidate Starts for Zeenon_117:

(Start: 1 @59808 has 167 MA's), (2, 59910), (3, 59934), (4, 59976), (6, 60045), (8, 60153), (9, 60219), (10, 60222), (11, 60345), (12, 60366), (13, 60372), (14, 60405), (17, 60561), (19, 60600),

Gene: ZygoTaiga_114 Start: 60968, Stop: 61786, Start Num: 1

Candidate Starts for ZygoTaiga_114:

(Start: 1 @60968 has 167 MA's), (2, 61070), (3, 61094), (4, 61136), (6, 61205), (8, 61313), (9, 61379), (10, 61382), (11, 61505), (12, 61526), (13, 61532), (14, 61565), (17, 61721), (19, 61760),