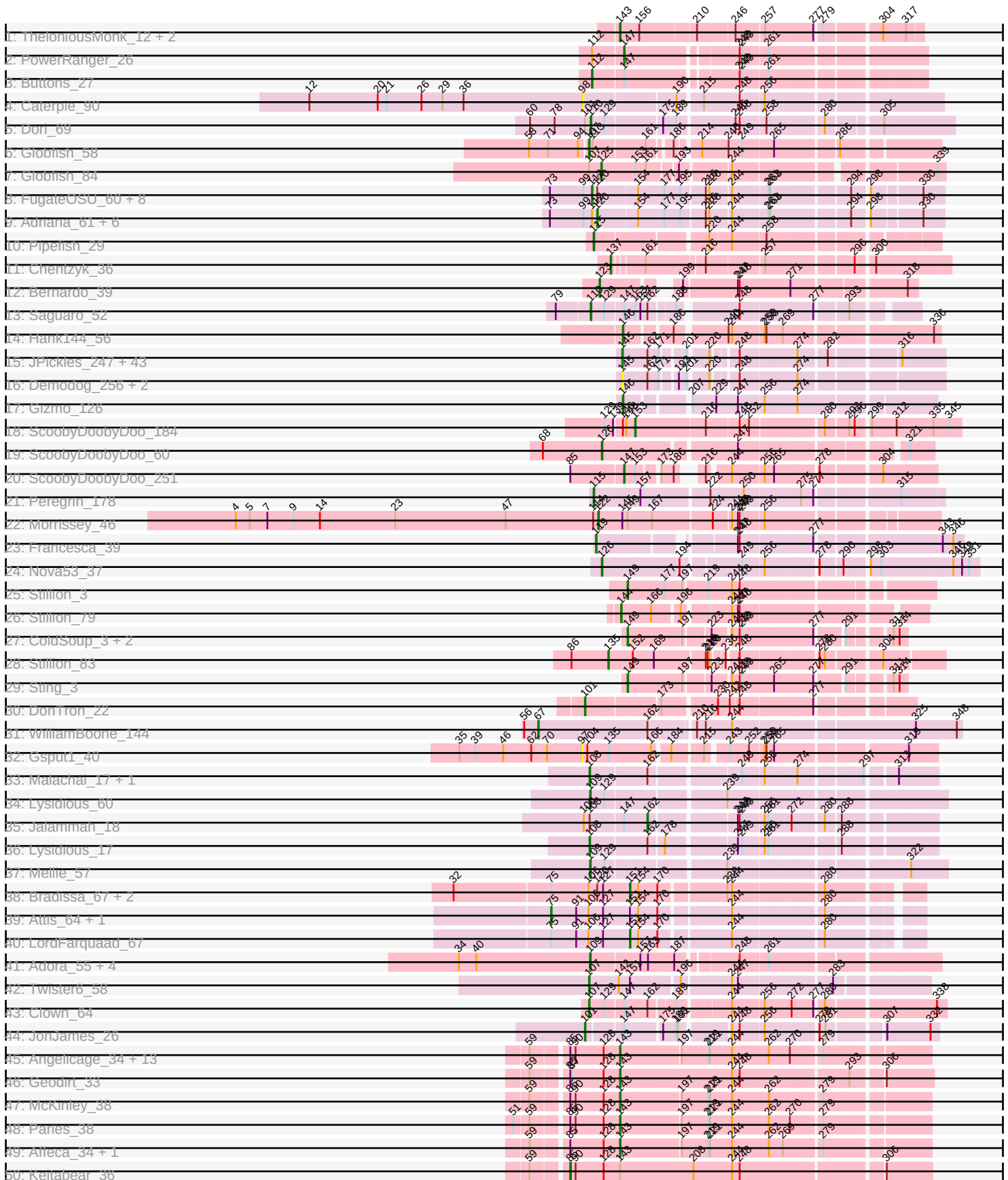
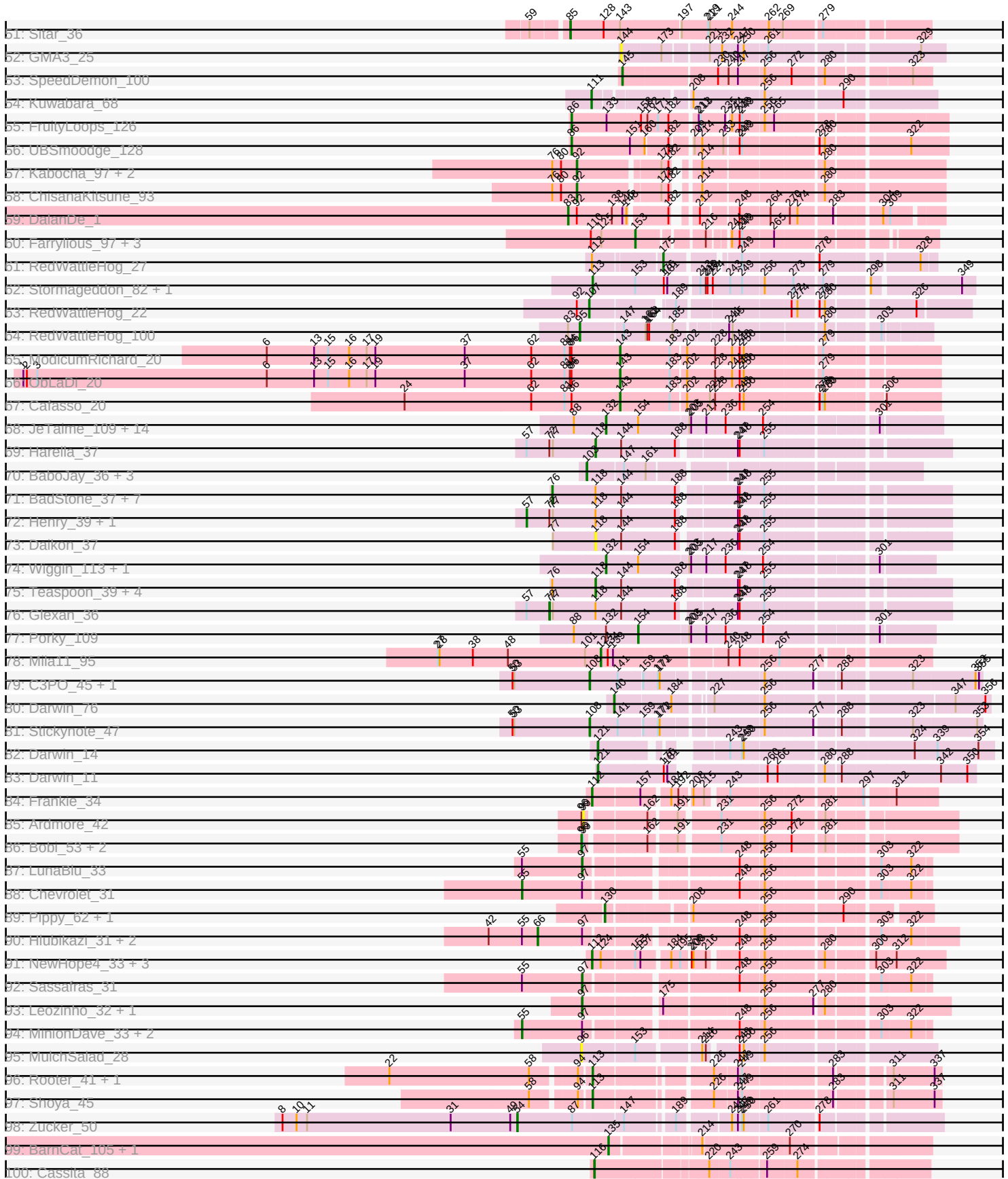


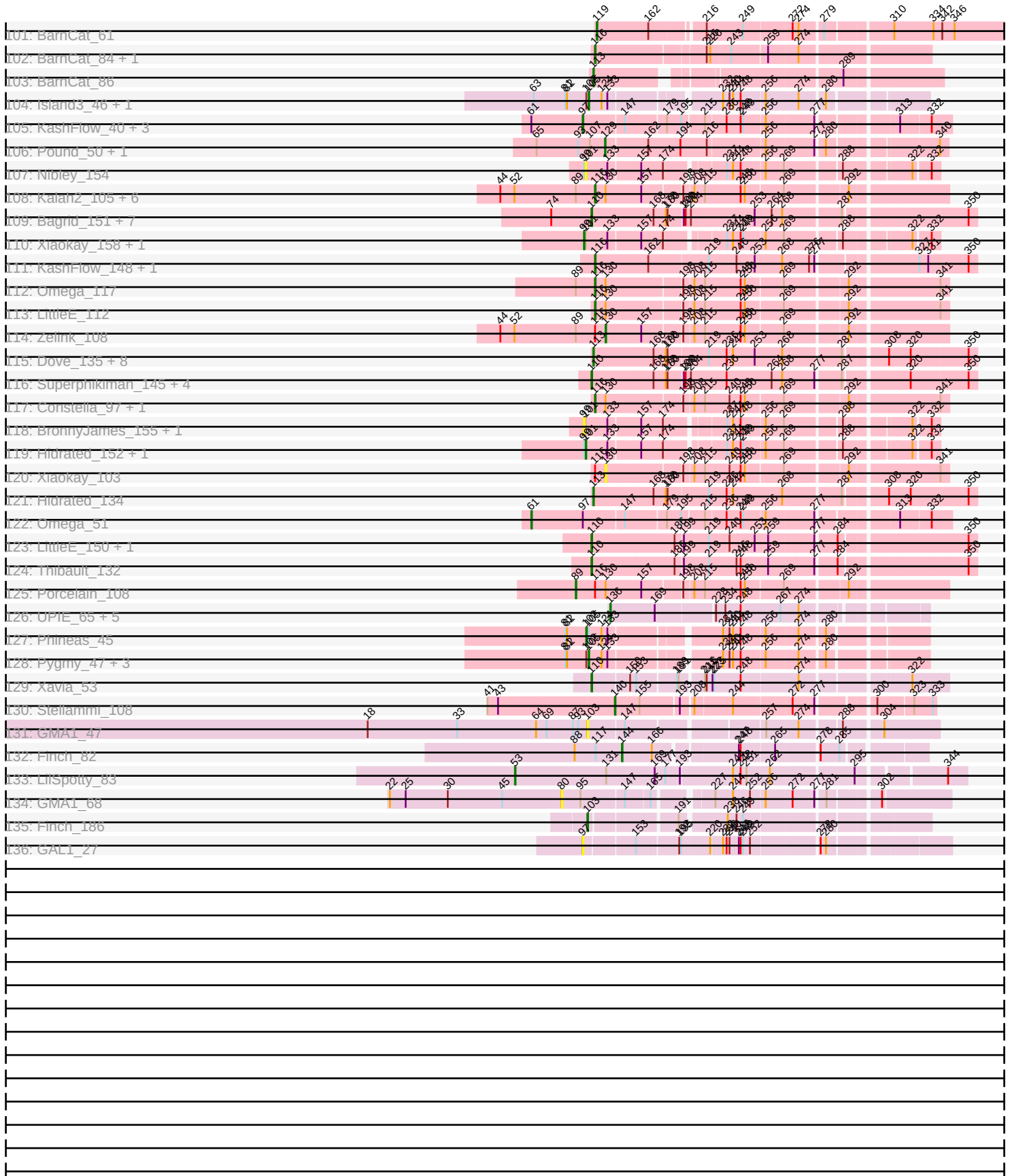
Pham 330393



Pham 330393



Pham 330393



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 330393 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330393 has 316 members, 32 are drafts.

Phages represented in each track:

- Track 1 : TheloniousMonk_12, Gwendoluna_12, Target_12
- Track 2 : PowerRanger_26
- Track 3 : Buttons_27
- Track 4 : Caterpie_90
- Track 5 : Dori_69
- Track 6 : Globfish_58
- Track 7 : Globfish_84
- Track 8 : FugateOSU_60, LeiMonet_62, Happabalu_60, Placalicious_60, Jesabah_61, Coletti_62, Orfeu_58, Toni_59, LostAndPhound_60
- Track 9 : Adriana_61, Lopsy_58, Buckeye_60, Podrick_58, Mesmerelda_59, KingTut_52, Matalotodo_59
- Track 10 : Pipefish_29
- Track 11 : Chentzyk_36
- Track 12 : Bernardo_39
- Track 13 : Saguaro_52
- Track 14 : Hank144_56
- Track 15 : JPickles_247, Primadonna_244, Basquiat_247, Darko_249, Lee7_254, Blackbrain_248, Maby2021_250, Ablatia_249, Bowman_251, Issimir_243, TinyTim_248, OrediggerDelux_251, PharkleMinkus_250, Cactojaque_244, EmToTheThree_250, Ading_252, Shrimp_252, Gizmo_255, BobaPhatt_243, Chargie21_247, Trinitium_246, ZygoTaiga_246, Yucca_250, Specks_254, Bread_246, Asterius_250, Astraea_245, McGee_251, Erdmann_251, Janiyra_253, Bonray_252, Fixie_242, Cleatunium_241, ErnieJ_243, Teardrop_248, Salacia_251, FoxtrotP1_248, Morizzled23_247, StubbySaigey_256, PurduePete_250, FudgeTart_245, Belieber_242, SrishMeg2525_247, BananaFence_247
- Track 16 : Demodog_256, SiwenD96_251, Concombre_255
- Track 17 : Gizmo_126
- Track 18 : ScoobyDoobyDoo_184
- Track 19 : ScoobyDoobyDoo_60
- Track 20 : ScoobyDoobyDoo_251
- Track 21 : Peregrin_178
- Track 22 : Morrissey_46
- Track 23 : Francesca_39
- Track 24 : Nova53_37
- Track 25 : Stillion_3
- Track 26 : Stillion_79
- Track 27 : ColdSoup_3, Jollymon_3, Amo99_3

- Track 28 : Stillion_83
- Track 29 : Sting_3
- Track 30 : DonTron_22
- Track 31 : WilliamBoone_144
- Track 32 : Gspu1_40
- Track 33 : Malachai_17, Begonia_17
- Track 34 : Lysidious_60
- Track 35 : Jalammah_18
- Track 36 : Lysidious_17
- Track 37 : Mellie_57
- Track 38 : Bradissa_67, Lilas_67, EnalisNailo_66
- Track 39 : Attis_64, SoilAssassin_64
- Track 40 : LordFarquaad_67
- Track 41 : Adora_55, Shlim410_56, Hortense_58, Howe_58, Twinkle_57
- Track 42 : Twister6_58
- Track 43 : Clown_64
- Track 44 : JonJames_26
- Track 45 : Angelicage_34, Brandonk123_37, McCrothy_36, BobBob_33, Fosterous_34, Nordenberg_30, Sedona_36, Charming_36, Galadriel_36, Tangent_36, Vivi2_38, Rofo_36, Bibwit_35, Love_39
- Track 46 : Geodirt_33
- Track 47 : McKinley_38
- Track 48 : Paries_38
- Track 49 : Affeca_34, Lennon_36
- Track 50 : Keitabear_36
- Track 51 : Sitar_36
- Track 52 : GMA3_25
- Track 53 : SpeedDemon_100
- Track 54 : Kuwabara_68
- Track 55 : FruityLoops_126
- Track 56 : UBSmoodge_128
- Track 57 : Kabocha_97, Chidiebere_96, Schomber_94
- Track 58 : ChisanaKitsune_93
- Track 59 : DalanDe_1
- Track 60 : Farrylious_97, ChisanaKitsune_96, MintFritos_94, Argena_96
- Track 61 : RedWattleHog_27
- Track 62 : Stormageddon_82, RedWattleHog_85
- Track 63 : RedWattleHog_22
- Track 64 : RedWattleHog_100
- Track 65 : ModicumRichard_20
- Track 66 : ObLaDi_20
- Track 67 : Cafasso_20
- Track 68 : JeTaime_109, Teaspoon_111, Nimrod_111, Kimchi_115, 244_112, BaboJay_110, Stank_113, Icee_112, BigBubba_112, Filch_113, Goldilocks_114, TBrady12_114, Goku_110, Xandras_110, Holt_116
- Track 69 : Harella_37
- Track 70 : BaboJay_36, Eureka_37, Bogg_37, Goku_37
- Track 71 : BadStone_37, Myrale_38, ABCat_37, Tuco_39, DrDrey_39, BilboSwaggins_38, ShamWow_38, Dusk_37
- Track 72 : Henry_39, Gator_36
- Track 73 : Daikon_37
- Track 74 : Wiggin_113, Marshmallow_109
- Track 75 : Teaspoon_39, Balomoji_37, Marshmallow_38, Pumpkin_40, Toto_38

- Track 76 : Glexan_36
- Track 77 : Porky_109
- Track 78 : Mila11_95
- Track 79 : C3PO_45, Cruella_45
- Track 80 : Darwin_76
- Track 81 : Stickynote_47
- Track 82 : Darwin_14
- Track 83 : Darwin_11
- Track 84 : Frankie_34
- Track 85 : Ardmore_42
- Track 86 : Bobi_53, Mova_51, Mutaforma13_54
- Track 87 : LunaBlu_33
- Track 88 : Chevrolet_31
- Track 89 : Pippy_62, Maravista_65
- Track 90 : Hlubikazi_31, Mandlovu_31, Strokeseat_31
- Track 91 : NewHope4_33, Coco12_30, Starcevich_34, JalFarm20_33
- Track 92 : Sassafras_31
- Track 93 : Leozinho_32, KingMidas_32
- Track 94 : MinionDave_33, Ramsey_33, Galactic_32
- Track 95 : MulchSalad_28
- Track 96 : Rooter_41, Sarge_39
- Track 97 : Shoya_45
- Track 98 : Zucker_50
- Track 99 : BarnCat_105, LeeroyJenkins_114
- Track 100 : Cassita_88
- Track 101 : BarnCat_61
- Track 102 : BarnCat_84, LeeroyJenkins_94
- Track 103 : BarnCat_86
- Track 104 : Island3_46, Brujita_46
- Track 105 : KashFlow_40, BronnyJames_39, Hannaconda_43, Shaboozey_39
- Track 106 : Pound_50, Bombitas_45
- Track 107 : Nibley_154
- Track 108 : Kalah2_105, Phoebus_113, Dallas_113, EricMillard_105, Hughesyang_111, ThreeRngTarjay_109, DmpstrDiver_113
- Track 109 : Bagrid_151, Optimus_141, Duke13_146, EricMillard_142, HokkenD_142, BAKA_150, Gonephishing_141, Klein_147
- Track 110 : Xiaokay_158, Minerva_162
- Track 111 : KashFlow_148, Nekros_146
- Track 112 : Omega_117
- Track 113 : LittleE_112
- Track 114 : Zelink_108
- Track 115 : Dove_135, Wanda_148, Zelink_143, Kalah2_140, Minerva_148, Phoebus_149, ThreeRngTarjay_144, Bobby_139, Hughesyang_148
- Track 116 : Superphikiman_145, Ariel_147, Courthouse_143, Beem_151, Hannaconda_141
- Track 117 : Constella_97, Thibault_95
- Track 118 : BronnyJames_155, Shaboozey_158
- Track 119 : Hidrated_152, Constella_158
- Track 120 : Xiaokay_103
- Track 121 : Hidrated_134
- Track 122 : Omega_51
- Track 123 : LittleE_150, Omega_154
- Track 124 : Thibault_132

- Track 125 : Porcelain_108
- Track 126 : UPIE_65, JoeDirt_64, Rose5_65, Poochiewood_65, Enceladus_63, Wamburgxpress_65
- Track 127 : Phineas_45
- Track 128 : Pygmy_47, Bogie_47, Shipwreck_47, HUHilltop_45
- Track 129 : Xavia_53
- Track 130 : Stellammi_108
- Track 131 : GMA1_47
- Track 132 : Finch_82
- Track 133 : LilSpotty_83
- Track 134 : GMA1_68
- Track 135 : Finch_186
- Track 136 : GAL1_27

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

The start number called the most often in the published annotations is 145, it was called in 43 of the 284 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_249, Ading_252, Asterius_250, Astraea_245, BananaFence_247, Basquiat_247, Belieber_242, Blackbrain_248, BobaPhatt_243, Bonray_252, Bowman_251, Bread_246, Cactojaque_244, Chargie21_247, Cleatunium_241, Concombre_255, Darko_249, Demodog_256, EmToTheThree_250, Erdmann_251, ErnieJ_243, Fixie_242, FoxtrotP1_248, FudgeTart_245, Gizmo_255, Issimir_243, JPickles_247, Janiyr_253, Lee7_254, Maby2021_250, McGee_251, Morizzled23_247, OrediggerDelux_251, PharkleMinkus_250, Primadonna_244, PurduePete_250, Salacia_251, Shrimp_252, SiwenD96_251, Specks_254, SpeedDemon_100, SrishMeg2525_247, StubbySaigey_256, Teardrop_248, TinyTim_248, Trinitium_246, Yucca_250, ZygoTaiga_246,

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

- DalanDe_1, Morrissey_46,

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

- 244_112, ABCat_37, Adora_55, Adriana_61, Affeca_34, Amo99_3, Angelicage_34, Ardmore_42, Argena_96, Ariel_147, Attis_64, BAKA_150, BaboJay_110, BaboJay_36, BadStone_37, Bagrid_151, Balomoji_37, BarnCat_105, BarnCat_61, BarnCat_84, BarnCat_86, Beem_151, Begonia_17, Bernardo_39, Bibwit_35, BigBubba_112, BilboSwaggins_38, BobBob_33, Bobby_139, Bobi_53, Bogg_37, Bogie_47, Bombitas_45, Bradissa_67, Brandonk123_37, BronnyJames_155, BronnyJames_39, Brujita_46, Buckeye_60, Buttons_27, C3PO_45, Cafasso_20, Cassita_88, Caterpie_90, Charming_36, Chentzyk_36, Chevrolet_31, Chidiebere_96, ChisanaKitsune_93, ChisanaKitsune_96, Clown_64, Coco12_30, ColdSoup_3, Coletti_62, Constella_158, Constella_97, Courthouse_143, Cruella_45, Daikon_37, Dallas_113, Darwin_11, Darwin_14, Darwin_76, DmpstrDiver_113, DonTron_22, Dori_69, Dove_135, DrDrey_39, Duke13_146, Dusk_37, EnalisNailo_66, Enceladus_63, EricMillard_105, EricMillard_142, Eureka_37, Farrylious_97, Filch_113, Finch_186, Finch_82, Fosterous_34, Francesca_39, Frankie_34, FruityLoops_126, FugateOSU_60, GAL1_27, GMA1_47, GMA1_68, GMA3_25,

Galactic_32, Galadriel_36, Gator_36, Geodirt_33, Gizmo_126, Glexan_36, Globfish_58, Globfish_84, Goku_110, Goku_37, Goldilocks_114, Gonephishing_141, Gsput1_40, Gwendoluna_12, HUHilltop_45, Hank144_56, Hannaconda_141, Hannaconda_43, Happabalu_60, Harella_37, Henry_39, Hidrated_134, Hidrated_152, Hlubikazi_31, HokkenD_142, Holt_116, Hortense_58, Howe_58, Hughesyang_111, Hughesyang_148, Icee_112, Island3_46, JalFarm20_33, Jalammah_18, JeTaime_109, Jesabah_61, JoeDirt_64, Jollymon_3, JonJames_26, Kabocha_97, Kalah2_105, Kalah2_140, KashFlow_148, KashFlow_40, Keitabear_36, Kimchi_115, KingMidās_32, KingTut_52, Klein_147, Kuwabara_68, LeeroyJenkins_114, LeeroyJenkins_94, LeiMonet_62, Lennon_36, Leozinho_32, LilSpotty_83, Lilas_67, LittleE_112, LittleE_150, Lopsy_58, LordFarquaad_67, LostAndPhound_60, Love_39, LunaBlu_33, Lysidious_17, Lysidious_60, Malachai_17, Mandlovu_31, Maravista_65, Marshmallow_109, Marshmallow_38, Matalotodo_59, McCrothy_36, McKinley_38, Mellie_57, Mesmerelda_59, Mila11_95, Minerva_148, Minerva_162, MinionDave_33, MintFritos_94, ModicumRichard_20, Mova_51, MulchSalad_28, Mutaforma13_54, Myrale_38, Nekros_146, NewHope4_33, Nibley_154, Nimrod_111, Nordenberg_30, Nova53_37, ObLaDi_20, Omega_117, Omega_154, Omega_51, Optimus_141, Orfeu_58, Paries_38, Peregrin_178, Phineas_45, Phoebus_113, Phoebus_149, Pipefish_29, Pippy_62, Placalicious_60, Podrick_58, Poochiewood_65, Porcelain_108, Porky_109, Pound_50, PowerRanger_26, Pumpkin_40, Pygmy_47, Ramsey_33, RedWattleHog_100, RedWattleHog_22, RedWattleHog_27, RedWattleHog_85, Rofo_36, Rooter_41, Rose5_65, Saguaro_52, Sarge_39, Sassafras_31, Schomber_94, ScoobyDoobyDoo_184, ScoobyDoobyDoo_251, ScoobyDoobyDoo_60, Sedona_36, Shaboozey_158, Shaboozey_39, ShamWow_38, Shipwreck_47, Shlim410_56, Shoya_45, Sitar_36, SoilAssassin_64, Stank_113, Starceвич_34, Stellammi_108, Stickynote_47, Stillion_3, Stillion_79, Stillion_83, Sting_3, Stormageddon_82, Strokeseat_31, Superphikiman_145, TBrady12_114, Tangent_36, Target_12, Teaspoon_111, Teaspoon_39, TheloniousMonk_12, Thibault_132, Thibault_95, ThreeRngTarjay_109, ThreeRngTarjay_144, Toni_59, Toto_38, Taco_39, Twinkle_57, Twister6_58, UBSmoodge_128, UPIE_65, Vivi2_38, Wamburgexpress_65, Wanda_148, Wiggin_113, WilliamBoone_144, Xandras_110, Xavia_53, Xiaokay_103, Xiaokay_158, Zelink_108, Zelink_143, Zucker_50,

Summary by start number:

Start 53:

- Found in 4 of 316 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 25.0% of time when present
- Phage (with cluster) where this start called: LilSpotty_83 (singleton),

Start 54:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zucker_50 (FN),

Start 55:

- Found in 9 of 316 (2.8%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 44.4% of time when present

- Phage (with cluster) where this start called: Chevrolet_31 (F1), Galactic_32 (F1), MinionDave_33 (F1), Ramsey_33 (F1),

Start 57:

- Found in 4 of 316 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gator_36 (E), Henry_39 (E),

Start 61:

- Found in 5 of 316 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Omega_51 (J),

Start 66:

- Found in 3 of 316 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hlubikazi_31 (F1), Mandlovu_31 (F1), Strokeseat_31 (F1),

Start 67:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone_144 (CQ1),

Start 72:

- Found in 4 of 316 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Glexan_36 (E),

Start 75:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Attis_64 (CZ2), SoilAssassin_64 (CZ2),

Start 76:

- Found in 17 of 316 (5.4%) of genes in pham
- Manual Annotations of this start: 8 of 284
- Called 47.1% of time when present
- Phage (with cluster) where this start called: ABCat_37 (E), BadStone_37 (E), BilboSwaggins_38 (E), DrDrey_39 (E), Dusk_37 (E), Myrale_38 (E), ShamWow_38 (E), Tuco_39 (E),

Start 80:

- Found in 5 of 316 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: GMA1_68 (singleton),

Start 83:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DalanDe_1 (DQ),

Start 85:

- Found in 22 of 316 (7.0%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Keitabear_36 (DE1), Sitar_36 (DE1),

Start 86:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 33.3% of time when present
- Phage (with cluster) where this start called: FruityLoops_126 (DQ), UBSmoodge_128 (DQ),

Start 89:

- Found in 10 of 316 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Porcelain_108 (J),

Start 92:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Chidiebere_96 (DQ), ChisanaKitsune_93 (DQ), Kabocha_97 (DQ), Schomber_94 (DQ),

Start 95:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 50.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_100 (DX),

Start 96:

- Found in 5 of 316 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bobi_53 (F1), Mova_51 (F1), MulchSalad_28 (F7), Mutaforma13_54 (F1),

Start 97:

- Found in 18 of 316 (5.7%) of genes in pham
- Manual Annotations of this start: 6 of 284
- Called 55.6% of time when present
- Phage (with cluster) where this start called: BronnyJames_39 (J), GAL1_27 (singleton), Gsput1_40 (CU2), Hannaconda_43 (J), KashFlow_40 (J), KingMidas_32 (F1), Leozinho_32 (F1), LunaBlu_33 (F1), Sassafras_31 (F1), Shaboozey_39 (J),

Start 98:

- Found in 1 of 316 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caterpie_90 (AD),

Start 99:

- Found in 27 of 316 (8.5%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 18.5% of time when present
- Phage (with cluster) where this start called: Ardmore_42 (F1), BronnyJames_155 (J), Minerva_162 (J), Shaboozey_158 (J), Xiaokay_158 (J),

Start 101:

- Found in 11 of 316 (3.5%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 45.5% of time when present
- Phage (with cluster) where this start called: Constella_158 (J), DonTron_22 (CP), Hidrated_152 (J), JonJames_26 (DD), Nibley_154 (J),

Start 102:

- Found in 7 of 316 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Phineas_45 (P1),

Start 103:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaboJay_36 (E), Bogg_37 (E), Eureka_37 (E), Finch_186 (singleton), GMA1_47 (singleton), Goku_37 (E),

Start 105:

- Found in 7 of 316 (2.2%) of genes in pham
- Manual Annotations of this start: 6 of 284
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Bogie_47 (P1), Brujita_46 (I1), HUHilltop_45 (P1), Island3_46 (I1), Pygmy_47 (P1), Shipwreck_47 (P1),

Start 107:

- Found in 7 of 316 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Clown_64 (DC2), Globfish_58 (AY), RedWattleHog_22 (DX), Twister6_58 (DC1),

Start 108:

- Found in 7 of 316 (2.2%) of genes in pham
- Manual Annotations of this start: 6 of 284
- Called 85.7% of time when present

- Phage (with cluster) where this start called: Begonia_17 (CV), C3PO_45 (EN), Cruella_45 (EN), Lysidious_17 (CV), Malachai_17 (CV), Stickynote_47 (EN),

Start 109:

- Found in 7 of 316 (2.2%) of genes in pham
- Manual Annotations of this start: 7 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora_55 (CZ4), Hortense_58 (CZ4), Howe_58 (CZ4), Lysidious_60 (CV), Mellie_57 (CV), Shlim410_56 (CZ4), Twinkle_57 (CZ4),

Start 110:

- Found in 23 of 316 (7.3%) of genes in pham
- Manual Annotations of this start: 17 of 284
- Called 82.6% of time when present
- Phage (with cluster) where this start called: Ariel_147 (J), BAKA_150 (J), Bagrid_151 (J), Beem_151 (J), Courthouse_143 (J), Dori_69 (AD), Duke13_146 (J), EricMillard_142 (J), Gonephishing_141 (J), Hannaconda_141 (J), HokkenD_142 (J), Klein_147 (J), LittleE_150 (J), Omega_154 (J), Optimus_141 (J), Saguaro_52 (B7), Superphikiman_145 (J), Thibault_132 (J), Xavia_53 (P3),

Start 111:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara_68 (DN4),

Start 112:

- Found in 24 of 316 (7.6%) of genes in pham
- Manual Annotations of this start: 14 of 284
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Buttons_27 (A1), Coco12_30 (F1), Coletti_62 (B1), Frankie_34 (F1), FugateOSU_60 (B1), Happabalu_60 (B1), JalFarm20_33 (F1), Jesabah_61 (B1), LeiMonet_62 (B1), LostAndPhound_60 (B1), NewHope4_33 (F1), Orfeu_58 (B1), Placalicious_60 (B1), Starcevich_34 (F1), Toni_59 (B1),

Start 113:

- Found in 17 of 316 (5.4%) of genes in pham
- Manual Annotations of this start: 16 of 284
- Called 94.1% of time when present
- Phage (with cluster) where this start called: BarnCat_86 (GB), Bobby_139 (J), Dove_135 (J), Hidrated_134 (J), Hughesyang_148 (J), Kalah2_140 (J), Minerva_148 (J), Phoebus_149 (J), RedWattleHog_85 (DX), Rooter_41 (FB), Sarge_39 (FB), Shoya_45 (FB), Stormageddon_82 (DX), ThreeRngTarjay_144 (J), Wanda_148 (J), Zelink_143 (J),

Start 115:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Peregrin_178 (CB), Pipefish_29 (B3),

Start 116:

- Found in 19 of 316 (6.0%) of genes in pham
- Manual Annotations of this start: 15 of 284
- Called 84.2% of time when present
- Phage (with cluster) where this start called: BarnCat_84 (GB), Cassita_88 (GB), Constella_97 (J), Dallas_113 (J), DmpstrDiver_113 (J), EricMillard_105 (J), Hughesyang_111 (J), Kalah2_105 (J), KashFlow_148 (J), LeeroyJenkins_94 (GB), LittleE_112 (J), Nekros_146 (J), Omega_117 (J), Phoebus_113 (J), Thibault_95 (J), ThreeRngTarjay_109 (J),

Start 118:

- Found in 18 of 316 (5.7%) of genes in pham
- Manual Annotations of this start: 6 of 284
- Called 38.9% of time when present
- Phage (with cluster) where this start called: Balomoji_37 (E), Daikon_37 (E), Harella_37 (E), Marshmallow_38 (E), Pumpkin_40 (E), Teaspoon_39 (E), Toto_38 (E),

Start 119:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarnCat_61 (GB), Francesca_39 (CG),

Start 120:

- Found in 19 of 316 (6.0%) of genes in pham
- Manual Annotations of this start: 7 of 284
- Called 36.8% of time when present
- Phage (with cluster) where this start called: Adriana_61 (B1), Buckeye_60 (B1), KingTut_52 (B1), Lopsy_58 (B1), Matalotodo_59 (B1), Mesmerelda_59 (B1), Podrick_58 (B1),

Start 121:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_11 (EN), Darwin_14 (EN),

Start 122:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey_46 (CD),

Start 123:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bernardo_39 (B3),

Start 124:

- Found in 12 of 316 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 284

- Called 8.3% of time when present
- Phage (with cluster) where this start called: Mila11_95 (EG),

Start 125:

- Found in 5 of 316 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Globfish_84 (AY),

Start 126:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nova53_37 (CG), ScoobyDoobyDoo_60 (C2),

Start 129:

- Found in 8 of 316 (2.5%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Bombitas_45 (J), Pound_50 (J),

Start 130:

- Found in 16 of 316 (5.1%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Maravista_65 (F1), Pippy_62 (F1), Xiaokay_103 (J), Zelink_108 (J),

Start 132:

- Found in 18 of 316 (5.7%) of genes in pham
- Manual Annotations of this start: 17 of 284
- Called 94.4% of time when present
- Phage (with cluster) where this start called: 244_112 (E), BaboJay_110 (E), BigBubba_112 (E), Filch_113 (E), Goku_110 (E), Goldilocks_114 (E), Holt_116 (E), Icee_112 (E), JeTaime_109 (E), Kimchi_115 (E), Marshmallow_109 (E), Nimrod_111 (E), Stank_113 (E), TBrady12_114 (E), Teaspoon_111 (E), Wiggin_113 (E), Xandras_110 (E),

Start 135:

- Found in 4 of 316 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BarnCat_105 (GB), LeeroyJenkins_114 (GB), Stillion_83 (CP),

Start 136:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 5 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Enceladus_63 (L1), JoeDirt_64 (L1), Poochiewood_65 (L1), Rose5_65 (L1), UPIE_65 (L1), Wamburgxpress_65 (L1),

Start 137:

- Found in 1 of 316 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chentzyk_36 (B3),

Start 140:

- Found in 2 of 316 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_76 (EN), Stellammi_108 (UNK),

Start 143:

- Found in 27 of 316 (8.5%) of genes in pham
- Manual Annotations of this start: 24 of 284
- Called 92.6% of time when present
- Phage (with cluster) where this start called: Affeca_34 (DE1), Angelicage_34 (DE1), Bibwit_35 (DE1), BobBob_33 (DE1), Brandonk123_37 (DE1), Cafasso_20 (DZ), Charming_36 (DE1), Fosterous_34 (DE1), Galadriel_36 (DE1), Geodirt_33 (DE1), Gwendoluna_12 (A1), Lennon_36 (DE1), Love_39 (DE1), McCrothy_36 (DE1), McKinley_38 (DE1), ModicumRichard_20 (DZ), Nordenberg_30 (DE1), ObLaDi_20 (DZ), Paries_38 (DE1), Rofo_36 (DE1), Sedona_36 (DE1), Tangent_36 (DE1), Target_12 (A1), TheloniousMonk_12 (A1), Vivi2_38 (DE1),

Start 144:

- Found in 21 of 316 (6.6%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Finch_82 (singleton), GMA3_25 (DF2), Stillion_79 (CP),

Start 145:

- Found in 50 of 316 (15.8%) of genes in pham
- Manual Annotations of this start: 43 of 284
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Ablatia_249 (C1), Ading_252 (C1), Asterius_250 (C1), Astraea_245 (C1), BananaFence_247 (C1), Basquiat_247 (C1), Belieber_242 (C1), Blackbrain_248 (C1), BobaPhatt_243 (C1), Bonray_252 (C1), Bowman_251 (C1), Bread_246 (C1), Cactojaque_244 (C1), Chargie21_247 (C1), Cleatunium_241 (C1), Concombre_255 (C1), Darko_249 (C1), Demodog_256 (C1), EmToTheThree_250 (C1), Erdmann_251 (C1), ErnieJ_243 (C1), Fixie_242 (C1), FoxtrotP1_248 (C1), FudgeTart_245 (C1), Gizmo_255 (C1), Issimir_243 (C1), JPickles_247 (C1), Janiyra_253 (C1), Lee7_254 (C1), Maby2021_250 (C1), McGee_251 (C1), Morizzled23_247 (C1), OrediggerDelux_251 (C1), PharkleMinkus_250 (C1), Primadonna_244 (C1), PurduePete_250 (C1), Salacia_251 (C1), Shrimp_252 (C1), SiwenD96_251 (C1), Specks_254 (C1), SpeedDemon_100 (DL), SrishMeg2525_247 (C1), StubbySaigey_256 (C1), Teardrop_248 (C1), TinyTim_248 (C1), Trinitium_246 (C1), Yucca_250 (C1), ZygoTaiga_246 (C1),

Start 146:

- Found in 3 of 316 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Gizmo_126 (C1), Hank144_56 (BD2),

Start 147:

- Found in 20 of 316 (6.3%) of genes in pham
- Manual Annotations of this start: 2 of 284
- Called 10.0% of time when present
- Phage (with cluster) where this start called: PowerRanger_26 (A1), ScoobyDoobyDoo_251 (C2),

Start 149:

- Found in 6 of 316 (1.9%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Amo99_3 (CP), ColdSoup_3 (CP), Jollymon_3 (CP), Stillion_3 (CP), Sting_3 (CP),

Start 151:

- Found in 8 of 316 (2.5%) of genes in pham
- Manual Annotations of this start: 4 of 284
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bradissa_67 (CY1), EnalisNailo_66 (CY1), Lilas_67 (CY1), LordFarquaad_67 (CZ2),

Start 153:

- Found in 17 of 316 (5.4%) of genes in pham
- Manual Annotations of this start: 3 of 284
- Called 29.4% of time when present
- Phage (with cluster) where this start called: Argena_96 (DQ), ChisanaKitsune_96 (DQ), Farrylous_97 (DQ), MintFritos_94 (DQ), ScoobyDoobyDoo_184 (C2),

Start 154:

- Found in 40 of 316 (12.7%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 2.5% of time when present
- Phage (with cluster) where this start called: Porky_109 (E),

Start 162:

- Found in 65 of 316 (20.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Jalammah_18 (CV),

Start 175:

- Found in 5 of 316 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 284
- Called 20.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_27 (DX),

Summary by clusters:

There are 44 clusters represented in this pham: singleton, CQ1, CZ2, DD, DL, CZ4, FB, EN, DZ, DX, FN, DQ, UNK, CU2, I1, DF2, A1, DN4, BD2, C2, C1, P3, CY1, P1, E, AD, CB, EG, J, CG, CD, GB, L1, AY, CP, DC2, CV, DC1, F1, F7, DE1, B7, B1, B3,

Info for manual annotations of cluster A1:

- Start number 112 was manually annotated 1 time for cluster A1.
- Start number 143 was manually annotated 3 times for cluster A1.
- Start number 147 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AD:

- Start number 110 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AY:

- Start number 107 was manually annotated 1 time for cluster AY.
- Start number 125 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster B1:

- Start number 112 was manually annotated 8 times for cluster B1.
- Start number 120 was manually annotated 7 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 115 was manually annotated 1 time for cluster B3.
- Start number 123 was manually annotated 1 time for cluster B3.
- Start number 137 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B7:

- Start number 110 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster BD2:

- Start number 146 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster C1:

- Start number 145 was manually annotated 42 times for cluster C1.
- Start number 146 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster C2:

- Start number 126 was manually annotated 1 time for cluster C2.
- Start number 147 was manually annotated 1 time for cluster C2.
- Start number 153 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CB:

- Start number 115 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CD:

- Start number 122 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CG:

- Start number 119 was manually annotated 1 time for cluster CG.
- Start number 126 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster CP:

- Start number 101 was manually annotated 1 time for cluster CP.
- Start number 135 was manually annotated 1 time for cluster CP.
- Start number 144 was manually annotated 1 time for cluster CP.
- Start number 149 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster CQ1:

- Start number 67 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 108 was manually annotated 3 times for cluster CV.
- Start number 109 was manually annotated 2 times for cluster CV.
- Start number 162 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 151 was manually annotated 3 times for cluster CY1.

Info for manual annotations of cluster CZ2:

- Start number 75 was manually annotated 2 times for cluster CZ2.
- Start number 151 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 109 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster DC1:

- Start number 107 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 107 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DD:

- Start number 101 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 85 was manually annotated 2 times for cluster DE1.
- Start number 143 was manually annotated 18 times for cluster DE1.

Info for manual annotations of cluster DL:

- Start number 145 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DN4:

- Start number 111 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DQ:

- Start number 83 was manually annotated 1 time for cluster DQ.
- Start number 86 was manually annotated 2 times for cluster DQ.
- Start number 92 was manually annotated 4 times for cluster DQ.
- Start number 153 was manually annotated 2 times for cluster DQ.

Info for manual annotations of cluster DX:

- Start number 95 was manually annotated 1 time for cluster DX.
- Start number 107 was manually annotated 1 time for cluster DX.
- Start number 113 was manually annotated 2 times for cluster DX.
- Start number 175 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster DZ:

- Start number 143 was manually annotated 3 times for cluster DZ.

Info for manual annotations of cluster E:

- Start number 57 was manually annotated 2 times for cluster E.
- Start number 72 was manually annotated 1 time for cluster E.
- Start number 76 was manually annotated 8 times for cluster E.
- Start number 103 was manually annotated 3 times for cluster E.
- Start number 118 was manually annotated 6 times for cluster E.
- Start number 132 was manually annotated 17 times for cluster E.
- Start number 154 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster EG:

- Start number 124 was manually annotated 1 time for cluster EG.

Info for manual annotations of cluster EN:

- Start number 108 was manually annotated 3 times for cluster EN.
- Start number 121 was manually annotated 2 times for cluster EN.
- Start number 140 was manually annotated 1 time for cluster EN.

Info for manual annotations of cluster F1:

- Start number 55 was manually annotated 4 times for cluster F1.
- Start number 66 was manually annotated 3 times for cluster F1.
- Start number 96 was manually annotated 3 times for cluster F1.
- Start number 97 was manually annotated 4 times for cluster F1.
- Start number 112 was manually annotated 5 times for cluster F1.
- Start number 130 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FB:

- Start number 113 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 54 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster GB:

- Start number 113 was manually annotated 1 time for cluster GB.
- Start number 116 was manually annotated 3 times for cluster GB.
- Start number 119 was manually annotated 1 time for cluster GB.
- Start number 135 was manually annotated 2 times for cluster GB.

Info for manual annotations of cluster I1:

- Start number 105 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster J:

- Start number 61 was manually annotated 1 time for cluster J.
- Start number 89 was manually annotated 1 time for cluster J.
- Start number 97 was manually annotated 2 times for cluster J.
- Start number 99 was manually annotated 1 time for cluster J.
- Start number 101 was manually annotated 2 times for cluster J.
- Start number 110 was manually annotated 14 times for cluster J.
- Start number 113 was manually annotated 10 times for cluster J.
- Start number 116 was manually annotated 12 times for cluster J.
- Start number 129 was manually annotated 2 times for cluster J.
- Start number 130 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster L1:

- Start number 136 was manually annotated 5 times for cluster L1.

Info for manual annotations of cluster P1:

- Start number 102 was manually annotated 1 time for cluster P1.
- Start number 105 was manually annotated 4 times for cluster P1.

Info for manual annotations of cluster P3:

- Start number 110 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster UNK:

- Start number 140 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: 244_112 Start: 62827, Stop: 63327, Start Num: 132

Candidate Starts for 244_112:

(88, 62773), (Start: 132 @62827 has 17 MA's), (Start: 154 @62881 has 1 MA's), (203, 62962), (205, 62965), (217, 62989), (236, 63022), (254, 63079), (301, 63241),

Gene: ABCat_37 Start: 34121, Stop: 33534, Start Num: 76

Candidate Starts for ABCat_37:

(Start: 76 @34121 has 8 MA's), (Start: 118 @34055 has 6 MA's), (Start: 144 @34013 has 2 MA's), (188, 33926), (247, 33848), (248, 33845), (255, 33809),

Gene: Ablatia_249 Start: 141923, Stop: 142372, Start Num: 145

Candidate Starts for Ablatia_249:

(Start: 145 @141923 has 43 MA's), (Start: 162 @141962 has 1 MA's), (171, 141980), (201, 142013), (220, 142040), (248, 142073), (274, 142160), (282, 142202), (316, 142301),

Gene: Ading_252 Start: 144356, Stop: 144805, Start Num: 145

Candidate Starts for Ading_252:

(Start: 145 @144356 has 43 MA's), (Start: 162 @144395 has 1 MA's), (171, 144413), (201, 144446), (220, 144473), (248, 144506), (274, 144593), (282, 144635), (316, 144734),

Gene: Adora_55 Start: 40141, Stop: 40647, Start Num: 109

Candidate Starts for Adora_55:

(34, 39916), (40, 39946), (Start: 109 @40141 has 7 MA's), (157, 40216), (163, 40228), (187, 40270), (248, 40357), (261, 40396),

Gene: Adriana_61 Start: 53245, Stop: 52730, Start Num: 120

Candidate Starts for Adriana_61:

(73, 53323), (Start: 99 @53269 has 1 MA's), (Start: 112 @53254 has 14 MA's), (Start: 120 @53245 has 7 MA's), (Start: 154 @53179 has 1 MA's), (177, 53134), (195, 53110), (216, 53074), (220, 53068), (244, 53035), (261, 52981), (263, 52978), (294, 52861), (298, 52840), (330, 52765),

Gene: Affeca_34 Start: 32900, Stop: 32427, Start Num: 143

Candidate Starts for Affeca_34:

(59, 33038), (Start: 85 @32984 has 2 MA's), (128, 32927), (Start: 143 @32900 has 24 MA's), (197, 32801), (219, 32759), (221, 32756), (244, 32720), (262, 32663), (269, 32639), (279, 32582),

Gene: Amo99_3 Start: 2875, Stop: 3255, Start Num: 149

Candidate Starts for Amo99_3:

(Start: 149 @2875 has 3 MA's), (197, 2959), (223, 2992), (244, 3019), (248, 3031), (249, 3034), (277, 3145), (291, 3181), (311, 3235), (314, 3244),

Gene: Angelicage_34 Start: 33318, Stop: 32845, Start Num: 143

Candidate Starts for Angelicage_34:

(59, 33456), (Start: 85 @33402 has 2 MA's), (90, 33393), (128, 33345), (Start: 143 @33318 has 24 MA's), (197, 33219), (219, 33177), (221, 33174), (244, 33138), (262, 33081), (270, 33048), (279, 33000),

Gene: Ardmore_42 Start: 34484, Stop: 35032, Start Num: 99

Candidate Starts for Ardmore_42:

(Start: 96 @34481 has 3 MA's), (Start: 99 @34484 has 1 MA's), (Start: 162 @34574 has 1 MA's), (191, 34616), (231, 34676), (256, 34742), (272, 34784), (281, 34832),

Gene: Argena_96 Start: 72813, Stop: 73226, Start Num: 153

Candidate Starts for Argena_96:

(Start: 110 @72738 has 17 MA's), (Start: 125 @72756 has 1 MA's), (Start: 153 @72813 has 3 MA's), (216, 72909), (244, 72936), (248, 72948), (249, 72951), (265, 72999),

Gene: Ariel_147 Start: 75437, Stop: 76039, Start Num: 110

Candidate Starts for Ariel_147:

(Start: 110 @75437 has 17 MA's), (168, 75542), (178, 75563), (180, 75566), (199, 75590), (200, 75593), (204, 75599), (236, 75659), (264, 75728), (268, 75746), (277, 75797), (287, 75833), (320, 75929), (350, 76025),

Gene: Asterius_250 Start: 142368, Stop: 142817, Start Num: 145

Candidate Starts for Asterius_250:

(Start: 145 @142368 has 43 MA's), (Start: 162 @142407 has 1 MA's), (171, 142425), (201, 142458), (220, 142485), (248, 142518), (274, 142605), (282, 142647), (316, 142746),

Gene: Astraea_245 Start: 141563, Stop: 142012, Start Num: 145

Candidate Starts for Astraea_245:

(Start: 145 @141563 has 43 MA's), (Start: 162 @141602 has 1 MA's), (171, 141620), (201, 141653), (220, 141680), (248, 141713), (274, 141800), (282, 141842), (316, 141941),

Gene: Attis_64 Start: 43105, Stop: 43650, Start Num: 75

Candidate Starts for Attis_64:

(Start: 75 @43105 has 2 MA's), (91, 43147), (106, 43168), (127, 43192), (Start: 151 @43231 has 4 MA's), (Start: 154 @43243 has 1 MA's), (170, 43273), (244, 43378), (280, 43516),

Gene: BAKA_150 Start: 78761, Stop: 79363, Start Num: 110

Candidate Starts for BAKA_150:

(74, 78692), (Start: 110 @78761 has 17 MA's), (168, 78866), (178, 78887), (180, 78890), (199, 78914), (200, 78917), (204, 78923), (253, 79025), (264, 79052), (268, 79070), (287, 79157), (350, 79349),

Gene: BaboJay_36 Start: 33175, Stop: 32675, Start Num: 103

Candidate Starts for BaboJay_36:

(Start: 103 @33175 has 4 MA's), (Start: 147 @33118 has 2 MA's), (161, 33082),

Gene: BaboJay_110 Start: 64000, Stop: 64500, Start Num: 132

Candidate Starts for BaboJay_110:

(88, 63946), (Start: 132 @64000 has 17 MA's), (Start: 154 @64054 has 1 MA's), (203, 64135), (205, 64138), (217, 64162), (236, 64195), (254, 64252), (301, 64414),

Gene: BadStone_37 Start: 34121, Stop: 33534, Start Num: 76

Candidate Starts for BadStone_37:

(Start: 76 @34121 has 8 MA's), (Start: 118 @34055 has 6 MA's), (Start: 144 @34013 has 2 MA's), (188, 33926), (247, 33848), (248, 33845), (255, 33809),

Gene: Bagrid_151 Start: 79456, Stop: 80058, Start Num: 110

Candidate Starts for Bagrid_151:

(74, 79387), (Start: 110 @79456 has 17 MA's), (168, 79561), (178, 79582), (180, 79585), (199, 79609), (200, 79612), (204, 79618), (253, 79720), (264, 79747), (268, 79765), (287, 79852), (350, 80044),

Gene: Balomoji_37 Start: 33789, Stop: 33268, Start Num: 118

Candidate Starts for Balomoji_37:

(Start: 76 @33855 has 8 MA's), (Start: 118 @33789 has 6 MA's), (Start: 144 @33747 has 2 MA's), (188, 33660), (247, 33582), (248, 33579), (255, 33543),

Gene: BananaFence_247 Start: 142192, Stop: 142641, Start Num: 145

Candidate Starts for BananaFence_247:

(Start: 145 @142192 has 43 MA's), (Start: 162 @142231 has 1 MA's), (171, 142249), (201, 142282), (220, 142309), (248, 142342), (274, 142429), (282, 142471), (316, 142570),

Gene: BarnCat_105 Start: 54966, Stop: 54505, Start Num: 135

Candidate Starts for BarnCat_105:

(Start: 135 @54966 has 3 MA's), (214, 54837), (270, 54714),

Gene: BarnCat_61 Start: 35513, Stop: 34857, Start Num: 119

Candidate Starts for BarnCat_61:

(Start: 119 @35513 has 2 MA's), (Start: 162 @35426 has 1 MA's), (216, 35345), (249, 35288), (272, 35210), (274, 35201), (279, 35165), (310, 35069), (334, 35006), (342, 34991), (346, 34970),

Gene: BarnCat_84 Start: 47542, Stop: 47033, Start Num: 116

Candidate Starts for BarnCat_84:

(Start: 116 @47542 has 15 MA's), (216, 47371), (220, 47365), (243, 47335), (259, 47281), (274, 47233),

Gene: BarnCat_86 Start: 49536, Stop: 49024, Start Num: 113

Candidate Starts for BarnCat_86:

(Start: 113 @49536 has 16 MA's), (289, 49179),

Gene: Basquiat_247 Start: 140478, Stop: 140927, Start Num: 145

Candidate Starts for Basquiat_247:

(Start: 145 @140478 has 43 MA's), (Start: 162 @140517 has 1 MA's), (171, 140535), (201, 140568), (220, 140595), (248, 140628), (274, 140715), (282, 140757), (316, 140856),

Gene: Beem_151 Start: 80198, Stop: 80800, Start Num: 110

Candidate Starts for Beem_151:

(Start: 110 @80198 has 17 MA's), (168, 80303), (178, 80324), (180, 80327), (199, 80351), (200, 80354), (204, 80360), (236, 80420), (264, 80489), (268, 80507), (277, 80558), (287, 80594), (320, 80690), (350, 80786),

Gene: Begonia_17 Start: 10279, Stop: 10785, Start Num: 108

Candidate Starts for Begonia_17:

(Start: 108 @10279 has 6 MA's), (Start: 162 @10369 has 1 MA's), (249, 10504), (256, 10537), (274, 10588), (297, 10681), (313, 10723),

Gene: Belieber_242 Start: 140605, Stop: 141054, Start Num: 145

Candidate Starts for Belieber_242:

(Start: 145 @140605 has 43 MA's), (Start: 162 @140644 has 1 MA's), (171, 140662), (201, 140695), (220, 140722), (248, 140755), (274, 140842), (282, 140884), (316, 140983),

Gene: Bernardo_39 Start: 36994, Stop: 37440, Start Num: 123

Candidate Starts for Bernardo_39:

(Start: 123 @36994 has 1 MA's), (199, 37090), (247, 37174), (248, 37177), (271, 37255), (318, 37423),

Gene: Bibwit_35 Start: 32719, Stop: 32246, Start Num: 143

Candidate Starts for Bibwit_35:

(59, 32857), (Start: 85 @32803 has 2 MA's), (90, 32794), (128, 32746), (Start: 143 @32719 has 24 MA's), (197, 32620), (219, 32578), (221, 32575), (244, 32539), (262, 32482), (270, 32449), (279, 32401),

Gene: BigBubba_112 Start: 62473, Stop: 62973, Start Num: 132

Candidate Starts for BigBubba_112:

(88, 62419), (Start: 132 @62473 has 17 MA's), (Start: 154 @62527 has 1 MA's), (203, 62608), (205, 62611), (217, 62635), (236, 62668), (254, 62725), (301, 62887),

Gene: BilboSwaggins_38 Start: 34129, Stop: 33542, Start Num: 76

Candidate Starts for BilboSwaggins_38:

(Start: 76 @34129 has 8 MA's), (Start: 118 @34063 has 6 MA's), (Start: 144 @34021 has 2 MA's), (188, 33934), (247, 33856), (248, 33853), (255, 33817),

Gene: Blackbrain_248 Start: 142255, Stop: 142704, Start Num: 145

Candidate Starts for Blackbrain_248:

(Start: 145 @142255 has 43 MA's), (Start: 162 @142294 has 1 MA's), (171, 142312), (201, 142345), (220, 142372), (248, 142405), (274, 142492), (282, 142534), (316, 142633),

Gene: BobBob_33 Start: 31999, Stop: 31526, Start Num: 143

Candidate Starts for BobBob_33:

(59, 32137), (Start: 85 @32083 has 2 MA's), (90, 32074), (128, 32026), (Start: 143 @31999 has 24 MA's), (197, 31900), (219, 31858), (221, 31855), (244, 31819), (262, 31762), (270, 31729), (279, 31681),

Gene: BobaPhatt_243 Start: 141373, Stop: 141822, Start Num: 145

Candidate Starts for BobaPhatt_243:

(Start: 145 @141373 has 43 MA's), (Start: 162 @141412 has 1 MA's), (171, 141430), (201, 141463), (220, 141490), (248, 141523), (274, 141610), (282, 141652), (316, 141751),

Gene: Bobby_139 Start: 80254, Stop: 80853, Start Num: 113

Candidate Starts for Bobby_139:

(Start: 113 @80254 has 16 MA's), (168, 80356), (178, 80377), (180, 80380), (219, 80443), (236, 80473), (244, 80482), (253, 80515), (268, 80560), (287, 80647), (308, 80707), (320, 80743), (350, 80839),

Gene: Bobi_53 Start: 37484, Stop: 38035, Start Num: 96

Candidate Starts for Bobi_53:

(Start: 96 @37484 has 3 MA's), (Start: 99 @37487 has 1 MA's), (Start: 162 @37577 has 1 MA's), (191, 37619), (231, 37679), (256, 37745), (272, 37787), (281, 37835),

Gene: Bogg_37 Start: 32525, Stop: 32025, Start Num: 103

Candidate Starts for Bogg_37:

(Start: 103 @32525 has 4 MA's), (Start: 147 @32468 has 2 MA's), (161, 32432),

Gene: Bogie_47 Start: 33238, Stop: 33729, Start Num: 105

Candidate Starts for Bogie_47:

(81, 33199), (82, 33202), (Start: 102 @33235 has 1 MA's), (Start: 105 @33238 has 6 MA's), (Start: 124 @33256 has 1 MA's), (133, 33265), (232, 33430), (240, 33439), (244, 33445), (248, 33457), (256, 33493), (274, 33544), (280, 33583),

Gene: Bombitas_45 Start: 41655, Stop: 42164, Start Num: 129

Candidate Starts for Bombitas_45:

(65, 41544), (93, 41613), (Start: 107 @41631 has 4 MA's), (Start: 129 @41655 has 2 MA's), (Start: 162 @41721 has 1 MA's), (194, 41775), (216, 41820), (256, 41907), (277, 41985), (280, 41997), (340, 42150),

Gene: Bonray_252 Start: 144055, Stop: 144504, Start Num: 145

Candidate Starts for Bonray_252:

(Start: 145 @144055 has 43 MA's), (Start: 162 @144094 has 1 MA's), (171, 144112), (201, 144145), (220, 144172), (248, 144205), (274, 144292), (282, 144334), (316, 144433),

Gene: Bowman_251 Start: 143170, Stop: 143619, Start Num: 145

Candidate Starts for Bowman_251:

(Start: 145 @143170 has 43 MA's), (Start: 162 @143209 has 1 MA's), (171, 143227), (201, 143260), (220, 143287), (248, 143320), (274, 143407), (282, 143449), (316, 143548),

Gene: Bradissa_67 Start: 46915, Stop: 47334, Start Num: 151

Candidate Starts for Bradissa_67:

(32, 46627), (Start: 75 @46789 has 2 MA's), (106, 46852), (Start: 120 @46867 has 7 MA's), (127, 46876), (Start: 151 @46915 has 4 MA's), (Start: 154 @46927 has 1 MA's), (170, 46957), (239, 47056), (244, 47062), (280, 47200),

Gene: Brandonk123_37 Start: 33065, Stop: 32592, Start Num: 143

Candidate Starts for Brandonk123_37:

(59, 33203), (Start: 85 @33149 has 2 MA's), (90, 33140), (128, 33092), (Start: 143 @33065 has 24 MA's), (197, 32966), (219, 32924), (221, 32921), (244, 32885), (262, 32828), (270, 32795), (279, 32747),

Gene: Bread_246 Start: 142022, Stop: 142471, Start Num: 145

Candidate Starts for Bread_246:

(Start: 145 @142022 has 43 MA's), (Start: 162 @142061 has 1 MA's), (171, 142079), (201, 142112), (220, 142139), (248, 142172), (274, 142259), (282, 142301), (316, 142400),

Gene: BronnyJames_39 Start: 35483, Stop: 36025, Start Num: 97

Candidate Starts for BronnyJames_39:

(Start: 61 @35396 has 1 MA's), (Start: 97 @35483 has 6 MA's), (Start: 147 @35546 has 2 MA's), (179, 35612), (195, 35636), (215, 35669), (236, 35702), (248, 35723), (249, 35726), (256, 35759), (277, 35837), (313, 35948), (332, 35996),

Gene: BronnyJames_155 Start: 83033, Stop: 83545, Start Num: 99

Candidate Starts for BronnyJames_155:

(Start: 99 @83033 has 1 MA's), (Start: 101 @83036 has 4 MA's), (133, 83069), (157, 83120), (174, 83156), (237, 83246), (244, 83255), (248, 83267), (256, 83303), (269, 83333), (288, 83414), (322, 83507), (332, 83531),

Gene: Brujita_46 Start: 33137, Stop: 33628, Start Num: 105

Candidate Starts for Brujita_46:

(63, 33044), (81, 33098), (82, 33101), (Start: 102 @33134 has 1 MA's), (Start: 105 @33137 has 6 MA's), (Start: 124 @33155 has 1 MA's), (133, 33164), (232, 33329), (240, 33338), (244, 33344), (248, 33356), (256, 33392), (274, 33443), (280, 33482),

Gene: Buckeye_60 Start: 52975, Stop: 52460, Start Num: 120

Candidate Starts for Buckeye_60:

(73, 53053), (Start: 99 @52999 has 1 MA's), (Start: 112 @52984 has 14 MA's), (Start: 120 @52975 has 7 MA's), (Start: 154 @52909 has 1 MA's), (177, 52864), (195, 52840), (216, 52804), (220, 52798), (244, 52765), (261, 52711), (263, 52708), (294, 52591), (298, 52570), (330, 52495),

Gene: Buttons_27 Start: 21411, Stop: 21896, Start Num: 112

Candidate Starts for Buttons_27:

(Start: 112 @21411 has 14 MA's), (Start: 147 @21459 has 2 MA's), (248, 21630), (249, 21633), (261, 21672),

Gene: C3PO_45 Start: 42754, Stop: 42164, Start Num: 108

Candidate Starts for C3PO_45:

(50, 42886), (Start: 53 @42883 has 1 MA's), (Start: 108 @42754 has 6 MA's), (141, 42706), (159, 42667), (171, 42643), (172, 42640), (256, 42496), (277, 42418), (288, 42385), (323, 42277), (352, 42175), (355, 42169),

Gene: Cactojaque_244 Start: 141201, Stop: 141650, Start Num: 145

Candidate Starts for Cactojaque_244:

(Start: 145 @141201 has 43 MA's), (Start: 162 @141240 has 1 MA's), (171, 141258), (201, 141291), (220, 141318), (248, 141351), (274, 141438), (282, 141480), (316, 141579),

Gene: Cafasso_20 Start: 18713, Stop: 18225, Start Num: 143

Candidate Starts for Cafasso_20:

(24, 19079), (62, 18863), (81, 18806), (Start: 86 @18794 has 2 MA's), (Start: 143 @18713 has 24 MA's), (183, 18629), (202, 18605), (221, 18569), (228, 18560), (248, 18521), (250, 18515), (278, 18401), (279, 18395), (280, 18392), (306, 18314),

Gene: Cassita_88 Start: 48685, Stop: 48176, Start Num: 116

Candidate Starts for Cassita_88:

(Start: 116 @48685 has 15 MA's), (220, 48508), (243, 48478), (259, 48424), (274, 48376),

Gene: Caterpie_90 Start: 57727, Stop: 58263, Start Num: 98

Candidate Starts for Caterpie_90:

(12, 57259), (20, 57376), (21, 57391), (26, 57451), (29, 57487), (36, 57523), (98, 57727), (190, 57865), (215, 57901), (248, 57958), (256, 57994),

Gene: Chargie21_247 Start: 140478, Stop: 140927, Start Num: 145

Candidate Starts for Chargie21_247:

(Start: 145 @140478 has 43 MA's), (Start: 162 @140517 has 1 MA's), (171, 140535), (201, 140568), (220, 140595), (248, 140628), (274, 140715), (282, 140757), (316, 140856),

Gene: Charming_36 Start: 32566, Stop: 32093, Start Num: 143

Candidate Starts for Charming_36:

(59, 32704), (Start: 85 @32650 has 2 MA's), (90, 32641), (128, 32593), (Start: 143 @32566 has 24 MA's), (197, 32467), (219, 32425), (221, 32422), (244, 32386), (262, 32329), (270, 32296), (279, 32248),

Gene: Chentzyk_36 Start: 34824, Stop: 35315, Start Num: 137

Candidate Starts for Chentzyk_36:

(Start: 137 @34824 has 1 MA's), (161, 34869), (216, 34959), (257, 35046), (296, 35178), (300, 35202),

Gene: Chevrolet_31 Start: 27455, Stop: 28054, Start Num: 55

Candidate Starts for Chevrolet_31:

(Start: 55 @27455 has 4 MA's), (Start: 97 @27557 has 6 MA's), (248, 27779), (256, 27815), (303, 27980), (322, 28025),

Gene: Chidiebere_96 Start: 69963, Stop: 70481, Start Num: 92

Candidate Starts for Chidiebere_96:

(Start: 76 @69921 has 8 MA's), (80, 69936), (Start: 92 @69963 has 4 MA's), (173, 70086), (182, 70095), (214, 70119), (280, 70299),

Gene: ChisanaKitsune_93 Start: 68907, Stop: 69425, Start Num: 92

Candidate Starts for ChisanaKitsune_93:

(Start: 76 @68865 has 8 MA's), (80, 68880), (Start: 92 @68907 has 4 MA's), (173, 69030), (182, 69039), (214, 69063), (280, 69243),

Gene: ChisanaKitsune_96 Start: 72440, Stop: 72853, Start Num: 153

Candidate Starts for ChisanaKitsune_96:

(Start: 110 @72365 has 17 MA's), (Start: 125 @72383 has 1 MA's), (Start: 153 @72440 has 3 MA's), (216, 72536), (244, 72563), (248, 72575), (249, 72578), (265, 72626),

Gene: Cleatunium_241 Start: 141882, Stop: 142331, Start Num: 145

Candidate Starts for Cleatunium_241:

(Start: 145 @141882 has 43 MA's), (Start: 162 @141921 has 1 MA's), (171, 141939), (201, 141972), (220, 141999), (248, 142032), (274, 142119), (282, 142161), (316, 142260),

Gene: Clown_64 Start: 45007, Stop: 45525, Start Num: 107

Candidate Starts for Clown_64:

(Start: 107 @45007 has 4 MA's), (Start: 129 @45031 has 2 MA's), (Start: 147 @45058 has 2 MA's), (Start: 162 @45097 has 1 MA's), (189, 45136), (244, 45214), (256, 45262), (272, 45304), (277, 45340), (280, 45352), (338, 45511),

Gene: Coco12_30 Start: 26826, Stop: 26320, Start Num: 112

Candidate Starts for Coco12_30:

(Start: 112 @26826 has 14 MA's), (Start: 124 @26811 has 1 MA's), (Start: 153 @26760 has 3 MA's), (157, 26751), (184, 26709), (195, 26694), (206, 26682), (208, 26679), (216, 26658), (248, 26619), (256, 26583), (280, 26493), (300, 26427), (312, 26397),

Gene: ColdSoup_3 Start: 2875, Stop: 3255, Start Num: 149

Candidate Starts for ColdSoup_3:

(Start: 149 @2875 has 3 MA's), (197, 2959), (223, 2992), (244, 3019), (248, 3031), (249, 3034), (277, 3145), (291, 3181), (311, 3235), (314, 3244),

Gene: Coletti_62 Start: 53249, Stop: 52725, Start Num: 112

Candidate Starts for Coletti_62:

(73, 53318), (Start: 99 @53264 has 1 MA's), (Start: 112 @53249 has 14 MA's), (Start: 120 @53240 has 7 MA's), (Start: 154 @53174 has 1 MA's), (177, 53129), (195, 53105), (216, 53069), (220, 53063), (244, 53030), (261, 52976), (263, 52973), (294, 52856), (298, 52835), (330, 52760),

Gene: Concombre_255 Start: 144217, Stop: 144666, Start Num: 145

Candidate Starts for Concombre_255:

(Start: 145 @144217 has 43 MA's), (Start: 162 @144256 has 1 MA's), (171, 144274), (193, 144295), (201, 144307), (220, 144334), (248, 144367), (274, 144454),

Gene: Constella_97 Start: 58172, Stop: 58714, Start Num: 116

Candidate Starts for Constella_97:

(Start: 116 @58172 has 15 MA's), (Start: 130 @58190 has 3 MA's), (198, 58310), (208, 58325), (215, 58343), (240, 58382), (248, 58400), (250, 58406), (269, 58466), (292, 58559), (341, 58700),

Gene: Constella_158 Start: 86054, Stop: 86563, Start Num: 101

Candidate Starts for Constella_158:

(Start: 99 @86051 has 1 MA's), (Start: 101 @86054 has 4 MA's), (133, 86087), (157, 86138), (174, 86174), (237, 86264), (244, 86273), (248, 86285), (249, 86288), (256, 86321), (269, 86351), (288, 86432), (322, 86525), (332, 86549),

Gene: Courthouse_143 Start: 75295, Stop: 75897, Start Num: 110

Candidate Starts for Courthouse_143:

(Start: 110 @75295 has 17 MA's), (168, 75400), (178, 75421), (180, 75424), (199, 75448), (200, 75451), (204, 75457), (236, 75517), (264, 75586), (268, 75604), (277, 75655), (287, 75691), (320, 75787), (350, 75883),

Gene: Cruella_45 Start: 42754, Stop: 42164, Start Num: 108

Candidate Starts for Cruella_45:

(50, 42886), (Start: 53 @42883 has 1 MA's), (Start: 108 @42754 has 6 MA's), (141, 42706), (159, 42667), (171, 42643), (172, 42640), (256, 42496), (277, 42418), (288, 42385), (323, 42277), (352, 42175), (355, 42169),

Gene: Daikon_37 Start: 33801, Stop: 33280, Start Num: 118

Candidate Starts for Daikon_37:

(77, 33867), (Start: 118 @33801 has 6 MA's), (Start: 144 @33759 has 2 MA's), (188, 33672), (247, 33594), (248, 33591), (255, 33555),

Gene: DalanDe_1 Start: 1, Stop: 522, Start Num: 83

Candidate Starts for DalanDe_1:

(Start: 83 @1 has 1 MA's), (Start: 92 @16 has 4 MA's), (138, 76), (Start: 145 @94 has 43 MA's), (148, 100), (182, 154), (212, 175), (248, 226), (264, 271), (270, 301), (274, 313), (283, 364), (304, 430), (309, 442),

Gene: Dallas_113 Start: 64402, Stop: 64944, Start Num: 116

Candidate Starts for Dallas_113:

(44, 64240), (52, 64264), (Start: 89 @64369 has 1 MA's), (Start: 116 @64402 has 15 MA's), (Start: 130 @64420 has 3 MA's), (157, 64477), (198, 64540), (208, 64555), (215, 64573), (248, 64630), (250, 64636), (269, 64696), (292, 64789),

Gene: Darko_249 Start: 142196, Stop: 142645, Start Num: 145

Candidate Starts for Darko_249:

(Start: 145 @142196 has 43 MA's), (Start: 162 @142235 has 1 MA's), (171, 142253), (201, 142286), (220, 142313), (248, 142346), (274, 142433), (282, 142475), (316, 142574),

Gene: Darwin_76 Start: 54919, Stop: 54362, Start Num: 140

Candidate Starts for Darwin_76:

(Start: 140 @54919 has 2 MA's), (184, 54829), (227, 54778), (256, 54700), (347, 54418), (356, 54370),

Gene: Darwin_14 Start: 7286, Stop: 7858, Start Num: 121

Candidate Starts for Darwin_14:

(Start: 121 @7286 has 2 MA's), (243, 7448), (249, 7466), (250, 7469), (324, 7727), (339, 7763), (354, 7832),

Gene: Darwin_11 Start: 6015, Stop: 6593, Start Num: 121

Candidate Starts for Darwin_11:

(Start: 121 @6015 has 2 MA's), (176, 6126), (181, 6132), (260, 6267), (266, 6282), (280, 6351), (288, 6372), (342, 6534), (350, 6579),

Gene: Demodog_256 Start: 144227, Stop: 144676, Start Num: 145

Candidate Starts for Demodog_256:

(Start: 145 @144227 has 43 MA's), (Start: 162 @144266 has 1 MA's), (171, 144284), (193, 144305), (201, 144317), (220, 144344), (248, 144377), (274, 144464),

Gene: DmpstrDiver_113 Start: 63822, Stop: 64364, Start Num: 116

Candidate Starts for DmpstrDiver_113:

(44, 63660), (52, 63684), (Start: 89 @63789 has 1 MA's), (Start: 116 @63822 has 15 MA's), (Start: 130 @63840 has 3 MA's), (157, 63897), (198, 63960), (208, 63975), (215, 63993), (248, 64050), (250, 64056), (269, 64116), (292, 64209),

Gene: DonTron_22 Start: 10785, Stop: 11264, Start Num: 101

Candidate Starts for DonTron_22:

(Start: 101 @10785 has 4 MA's), (173, 10896), (230, 10980), (242, 10998), (248, 11010), (277, 11124),

Gene: Dori_69 Start: 53193, Stop: 53732, Start Num: 110

Candidate Starts for Dori_69:

(60, 53091), (78, 53133), (Start: 101 @53184 has 4 MA's), (Start: 110 @53193 has 17 MA's), (Start: 129 @53214 has 2 MA's), (Start: 175 @53301 has 1 MA's), (189, 53322), (246, 53409), (248, 53415), (258, 53454), (280, 53541), (305, 53619),

Gene: Dove_135 Start: 75231, Stop: 75830, Start Num: 113

Candidate Starts for Dove_135:

(Start: 113 @75231 has 16 MA's), (168, 75333), (178, 75354), (180, 75357), (219, 75420), (236, 75450), (244, 75459), (253, 75492), (268, 75537), (287, 75624), (308, 75684), (320, 75720), (350, 75816),

Gene: DrDrey_39 Start: 34621, Stop: 34034, Start Num: 76

Candidate Starts for DrDrey_39:

(Start: 76 @34621 has 8 MA's), (Start: 118 @34555 has 6 MA's), (Start: 144 @34513 has 2 MA's), (188, 34426), (247, 34348), (248, 34345), (255, 34309),

Gene: Duke13_146 Start: 77046, Stop: 77648, Start Num: 110

Candidate Starts for Duke13_146:

(74, 76977), (Start: 110 @77046 has 17 MA's), (168, 77151), (178, 77172), (180, 77175), (199, 77199), (200, 77202), (204, 77208), (253, 77310), (264, 77337), (268, 77355), (287, 77442), (350, 77634),

Gene: Dusk_37 Start: 33781, Stop: 33194, Start Num: 76

Candidate Starts for Dusk_37:

(Start: 76 @33781 has 8 MA's), (Start: 118 @33715 has 6 MA's), (Start: 144 @33673 has 2 MA's),
(188, 33586), (247, 33508), (248, 33505), (255, 33469),

Gene: EmToTheThree_250 Start: 143104, Stop: 143553, Start Num: 145

Candidate Starts for EmToTheThree_250:

(Start: 145 @143104 has 43 MA's), (Start: 162 @143143 has 1 MA's), (171, 143161), (201, 143194),
(220, 143221), (248, 143254), (274, 143341), (282, 143383), (316, 143482),

Gene: EnalisNailo_66 Start: 46449, Stop: 46868, Start Num: 151

Candidate Starts for EnalisNailo_66:

(32, 46161), (Start: 75 @46323 has 2 MA's), (106, 46386), (Start: 120 @46401 has 7 MA's), (127,
46410), (Start: 151 @46449 has 4 MA's), (Start: 154 @46461 has 1 MA's), (170, 46491), (239, 46590),
(244, 46596), (280, 46734),

Gene: Enceladus_63 Start: 44580, Stop: 45038, Start Num: 136

Candidate Starts for Enceladus_63:

(Start: 136 @44580 has 5 MA's), (169, 44652), (228, 44742), (234, 44754), (248, 44775), (267, 44838),
(274, 44865),

Gene: Erdmann_251 Start: 143072, Stop: 143521, Start Num: 145

Candidate Starts for Erdmann_251:

(Start: 145 @143072 has 43 MA's), (Start: 162 @143111 has 1 MA's), (171, 143129), (201, 143162),
(220, 143189), (248, 143222), (274, 143309), (282, 143351), (316, 143450),

Gene: EricMillard_142 Start: 78398, Stop: 79000, Start Num: 110

Candidate Starts for EricMillard_142:

(74, 78329), (Start: 110 @78398 has 17 MA's), (168, 78503), (178, 78524), (180, 78527), (199, 78551),
(200, 78554), (204, 78560), (253, 78662), (264, 78689), (268, 78707), (287, 78794), (350, 78986),

Gene: EricMillard_105 Start: 63462, Stop: 64004, Start Num: 116

Candidate Starts for EricMillard_105:

(44, 63300), (52, 63324), (Start: 89 @63429 has 1 MA's), (Start: 116 @63462 has 15 MA's), (Start: 130
@63480 has 3 MA's), (157, 63537), (198, 63600), (208, 63615), (215, 63633), (248, 63690), (250,
63696), (269, 63756), (292, 63849),

Gene: ErnieJ_243 Start: 139900, Stop: 140349, Start Num: 145

Candidate Starts for ErnieJ_243:

(Start: 145 @139900 has 43 MA's), (Start: 162 @139939 has 1 MA's), (171, 139957), (201, 139990),
(220, 140017), (248, 140050), (274, 140137), (282, 140179), (316, 140278),

Gene: Eureka_37 Start: 33608, Stop: 33108, Start Num: 103

Candidate Starts for Eureka_37:

(Start: 103 @33608 has 4 MA's), (Start: 147 @33551 has 2 MA's), (161, 33515),

Gene: Farrylous_97 Start: 72578, Stop: 72991, Start Num: 153

Candidate Starts for Farrylous_97:

(Start: 110 @72503 has 17 MA's), (Start: 125 @72521 has 1 MA's), (Start: 153 @72578 has 3 MA's),
(216, 72674), (244, 72701), (248, 72713), (249, 72716), (265, 72764),

Gene: Filch_113 Start: 63036, Stop: 63536, Start Num: 132

Candidate Starts for Filch_113:

(88, 62982), (Start: 132 @63036 has 17 MA's), (Start: 154 @63090 has 1 MA's), (203, 63171), (205, 63174), (217, 63198), (236, 63231), (254, 63288), (301, 63450),

Gene: Finch_82 Start: 71334, Stop: 71777, Start Num: 144

Candidate Starts for Finch_82:

(88, 71253), (117, 71289), (Start: 144 @71334 has 2 MA's), (166, 71382), (247, 71505), (248, 71508), (265, 71559), (278, 71625), (285, 71655),

Gene: Finch_186 Start: 111122, Stop: 111628, Start Num: 103

Candidate Starts for Finch_186:

(Start: 103 @111122 has 4 MA's), (191, 111254), (238, 111326), (246, 111341), (249, 111350),

Gene: Fixie_242 Start: 143337, Stop: 143786, Start Num: 145

Candidate Starts for Fixie_242:

(Start: 145 @143337 has 43 MA's), (Start: 162 @143376 has 1 MA's), (171, 143394), (201, 143427), (220, 143454), (248, 143487), (274, 143574), (282, 143616), (316, 143715),

Gene: Fosterous_34 Start: 32991, Stop: 32518, Start Num: 143

Candidate Starts for Fosterous_34:

(59, 33129), (Start: 85 @33075 has 2 MA's), (90, 33066), (128, 33018), (Start: 143 @32991 has 24 MA's), (197, 32892), (219, 32850), (221, 32847), (244, 32811), (262, 32754), (270, 32721), (279, 32673),

Gene: FoxtrotP1_248 Start: 143658, Stop: 144107, Start Num: 145

Candidate Starts for FoxtrotP1_248:

(Start: 145 @143658 has 43 MA's), (Start: 162 @143697 has 1 MA's), (171, 143715), (201, 143748), (220, 143775), (248, 143808), (274, 143895), (282, 143937), (316, 144036),

Gene: Francesca_39 Start: 21303, Stop: 21839, Start Num: 119

Candidate Starts for Francesca_39:

(Start: 119 @21303 has 2 MA's), (247, 21498), (248, 21501), (277, 21618), (343, 21804), (346, 21822),

Gene: Frankie_34 Start: 27904, Stop: 27416, Start Num: 112

Candidate Starts for Frankie_34:

(Start: 112 @27904 has 14 MA's), (157, 27829), (184, 27787), (192, 27775), (208, 27757), (215, 27739), (243, 27712), (297, 27517), (312, 27478),

Gene: FruityLoops_126 Start: 91104, Stop: 91676, Start Num: 86

Candidate Starts for FruityLoops_126:

(Start: 86 @91104 has 2 MA's), (133, 91164), (158, 91221), (Start: 162 @91230 has 1 MA's), (171, 91248), (182, 91263), (211, 91302), (213, 91305), (235, 91347), (244, 91353), (248, 91365), (249, 91368), (256, 91401), (265, 91416),

Gene: FudgeTart_245 Start: 142162, Stop: 142611, Start Num: 145

Candidate Starts for FudgeTart_245:

(Start: 145 @142162 has 43 MA's), (Start: 162 @142201 has 1 MA's), (171, 142219), (201, 142252), (220, 142279), (248, 142312), (274, 142399), (282, 142441), (316, 142540),

Gene: FugateOSU_60 Start: 53224, Stop: 52700, Start Num: 112

Candidate Starts for FugateOSU_60:

(73, 53293), (Start: 99 @53239 has 1 MA's), (Start: 112 @53224 has 14 MA's), (Start: 120 @53215 has 7 MA's), (Start: 154 @53149 has 1 MA's), (177, 53104), (195, 53080), (216, 53044), (220, 53038),

(244, 53005), (261, 52951), (263, 52948), (294, 52831), (298, 52810), (330, 52735),

Gene: GAL1_27 Start: 22156, Stop: 22695, Start Num: 97

Candidate Starts for GAL1_27:

(Start: 97 @22156 has 6 MA's), (Start: 153 @22234 has 3 MA's), (192, 22300), (195, 22303), (220, 22348), (232, 22366), (236, 22372), (240, 22375), (247, 22390), (248, 22393), (249, 22396), (252, 22408), (278, 22510), (280, 22519),

Gene: GMA1_47 Start: 30722, Stop: 31246, Start Num: 103

Candidate Starts for GMA1_47:

(18, 30347), (33, 30500), (64, 30635), (69, 30653), (87, 30698), (93, 30707), (Start: 103 @30722 has 4 MA's), (Start: 147 @30779 has 2 MA's), (257, 30986), (274, 31037), (288, 31097), (304, 31154),

Gene: GMA1_68 Start: 40382, Stop: 40945, Start Num: 80

Candidate Starts for GMA1_68:

(22, 40088), (25, 40115), (30, 40187), (45, 40280), (80, 40382), (Start: 95 @40412 has 1 MA's), (Start: 147 @40481 has 2 MA's), (165, 40520), (227, 40598), (244, 40628), (252, 40655), (256, 40676), (272, 40718), (277, 40754), (281, 40766), (302, 40838),

Gene: GMA3_25 Start: 35593, Stop: 36075, Start Num: 144

Candidate Starts for GMA3_25:

(Start: 144 @35593 has 2 MA's), (173, 35656), (221, 35722), (232, 35743), (247, 35764), (250, 35773), (261, 35809), (329, 36034),

Gene: Galactic_32 Start: 27751, Stop: 28350, Start Num: 55

Candidate Starts for Galactic_32:

(Start: 55 @27751 has 4 MA's), (Start: 97 @27853 has 6 MA's), (248, 28075), (256, 28111), (303, 28276), (322, 28321),

Gene: Galadriel_36 Start: 33480, Stop: 33007, Start Num: 143

Candidate Starts for Galadriel_36:

(59, 33618), (Start: 85 @33564 has 2 MA's), (90, 33555), (128, 33507), (Start: 143 @33480 has 24 MA's), (197, 33381), (219, 33339), (221, 33336), (244, 33300), (262, 33243), (270, 33210), (279, 33162),

Gene: Gator_36 Start: 33782, Stop: 33150, Start Num: 57

Candidate Starts for Gator_36:

(Start: 57 @33782 has 2 MA's), (Start: 72 @33743 has 1 MA's), (77, 33737), (Start: 118 @33671 has 6 MA's), (Start: 144 @33629 has 2 MA's), (188, 33542), (247, 33464), (248, 33461), (255, 33425),

Gene: Geodirt_33 Start: 32468, Stop: 31986, Start Num: 143

Candidate Starts for Geodirt_33:

(59, 32606), (Start: 85 @32552 has 2 MA's), (87, 32549), (128, 32495), (Start: 143 @32468 has 24 MA's), (244, 32285), (248, 32273), (293, 32111), (306, 32066),

Gene: Gizmo_255 Start: 144989, Stop: 145438, Start Num: 145

Candidate Starts for Gizmo_255:

(Start: 145 @144989 has 43 MA's), (Start: 162 @145028 has 1 MA's), (171, 145046), (201, 145079), (220, 145106), (248, 145139), (274, 145226), (282, 145268), (316, 145367),

Gene: Gizmo_126 Start: 66298, Stop: 65843, Start Num: 146

Candidate Starts for Gizmo_126:

(Start: 146 @66298 has 2 MA's), (207, 66211), (229, 66175), (247, 66139), (256, 66100), (274, 66049),

Gene: Glexan_36 Start: 33731, Stop: 33138, Start Num: 72

Candidate Starts for Glexan_36:

(Start: 57 @33770 has 2 MA's), (Start: 72 @33731 has 1 MA's), (77, 33725), (Start: 118 @33659 has 6 MA's), (Start: 144 @33617 has 2 MA's), (188, 33530), (247, 33452), (248, 33449), (255, 33413),

Gene: Globfish_58 Start: 33704, Stop: 34201, Start Num: 107

Candidate Starts for Globfish_58:

(58, 33614), (71, 33644), (94, 33692), (Start: 107 @33704 has 4 MA's), (Start: 113 @33707 has 16 MA's), (161, 33788), (186, 33818), (214, 33851), (240, 33896), (249, 33917), (265, 33965), (286, 34058),

Gene: Globfish_84 Start: 46529, Stop: 47017, Start Num: 125

Candidate Starts for Globfish_84:

(Start: 107 @46508 has 4 MA's), (Start: 125 @46529 has 1 MA's), (Start: 153 @46586 has 3 MA's), (161, 46604), (193, 46646), (244, 46721), (339, 47006),

Gene: Goku_110 Start: 63579, Stop: 64079, Start Num: 132

Candidate Starts for Goku_110:

(88, 63525), (Start: 132 @63579 has 17 MA's), (Start: 154 @63633 has 1 MA's), (203, 63714), (205, 63717), (217, 63741), (236, 63774), (254, 63831), (301, 63993),

Gene: Goku_37 Start: 33337, Stop: 32837, Start Num: 103

Candidate Starts for Goku_37:

(Start: 103 @33337 has 4 MA's), (Start: 147 @33280 has 2 MA's), (161, 33244),

Gene: Goldilocks_114 Start: 63260, Stop: 63760, Start Num: 132

Candidate Starts for Goldilocks_114:

(88, 63206), (Start: 132 @63260 has 17 MA's), (Start: 154 @63314 has 1 MA's), (203, 63395), (205, 63398), (217, 63422), (236, 63455), (254, 63512), (301, 63674),

Gene: Gonephishing_141 Start: 75522, Stop: 76124, Start Num: 110

Candidate Starts for Gonephishing_141:

(74, 75453), (Start: 110 @75522 has 17 MA's), (168, 75627), (178, 75648), (180, 75651), (199, 75675), (200, 75678), (204, 75684), (253, 75786), (264, 75813), (268, 75831), (287, 75918), (350, 76110),

Gene: Gsput1_40 Start: 30337, Stop: 30849, Start Num: 97

Candidate Starts for Gsput1_40:

(35, 30127), (39, 30154), (46, 30202), (62, 30250), (70, 30277), (Start: 97 @30337 has 6 MA's), (104, 30346), (Start: 135 @30382 has 3 MA's), (166, 30451), (184, 30475), (215, 30523), (243, 30550), (252, 30580), (256, 30601), (258, 30604), (265, 30616), (319, 30802),

Gene: Gwendoluna_12 Start: 7666, Stop: 8121, Start Num: 143

Candidate Starts for Gwendoluna_12:

(Start: 143 @7666 has 24 MA's), (156, 7699), (210, 7786), (246, 7846), (257, 7888), (277, 7966), (279, 7975), (304, 8056), (317, 8095),

Gene: HUHilltop_45 Start: 31495, Stop: 31986, Start Num: 105

Candidate Starts for HUHilltop_45:

(81, 31456), (82, 31459), (Start: 102 @31492 has 1 MA's), (Start: 105 @31495 has 6 MA's), (Start: 124 @31513 has 1 MA's), (133, 31522), (232, 31687), (240, 31696), (244, 31702), (248, 31714), (256, 31750), (274, 31801), (280, 31840),

Gene: Hank144_56 Start: 39762, Stop: 39295, Start Num: 146

Candidate Starts for Hank144_56:

(Start: 146 @39762 has 2 MA's), (186, 39693), (240, 39615), (244, 39609), (256, 39561), (258, 39558), (269, 39531), (336, 39306),

Gene: Hannaconda_43 Start: 36122, Stop: 36664, Start Num: 97

Candidate Starts for Hannaconda_43:

(Start: 61 @36035 has 1 MA's), (Start: 97 @36122 has 6 MA's), (Start: 147 @36185 has 2 MA's), (179, 36251), (195, 36275), (215, 36308), (236, 36341), (248, 36362), (249, 36365), (256, 36398), (277, 36476), (313, 36587), (332, 36635),

Gene: Hannaconda_141 Start: 76044, Stop: 76646, Start Num: 110

Candidate Starts for Hannaconda_141:

(Start: 110 @76044 has 17 MA's), (168, 76149), (178, 76170), (180, 76173), (199, 76197), (200, 76200), (204, 76206), (236, 76266), (264, 76335), (268, 76353), (277, 76404), (287, 76440), (320, 76536), (350, 76632),

Gene: Happabalu_60 Start: 53248, Stop: 52724, Start Num: 112

Candidate Starts for Happabalu_60:

(73, 53317), (Start: 99 @53263 has 1 MA's), (Start: 112 @53248 has 14 MA's), (Start: 120 @53239 has 7 MA's), (Start: 154 @53173 has 1 MA's), (177, 53128), (195, 53104), (216, 53068), (220, 53062), (244, 53029), (261, 52975), (263, 52972), (294, 52855), (298, 52834), (330, 52759),

Gene: Harella_37 Start: 34175, Stop: 33654, Start Num: 118

Candidate Starts for Harella_37:

(Start: 57 @34286 has 2 MA's), (Start: 72 @34247 has 1 MA's), (77, 34241), (Start: 118 @34175 has 6 MA's), (Start: 144 @34133 has 2 MA's), (188, 34046), (247, 33968), (248, 33965), (255, 33929),

Gene: Henry_39 Start: 34174, Stop: 33542, Start Num: 57

Candidate Starts for Henry_39:

(Start: 57 @34174 has 2 MA's), (Start: 72 @34135 has 1 MA's), (77, 34129), (Start: 118 @34063 has 6 MA's), (Start: 144 @34021 has 2 MA's), (188, 33934), (247, 33856), (248, 33853), (255, 33817),

Gene: Hidrated_152 Start: 87549, Stop: 88058, Start Num: 101

Candidate Starts for Hidrated_152:

(Start: 99 @87546 has 1 MA's), (Start: 101 @87549 has 4 MA's), (133, 87582), (157, 87633), (174, 87669), (237, 87759), (244, 87768), (248, 87780), (249, 87783), (256, 87816), (269, 87846), (288, 87927), (322, 88020), (332, 88044),

Gene: Hidrated_134 Start: 78691, Stop: 79290, Start Num: 113

Candidate Starts for Hidrated_134:

(Start: 113 @78691 has 16 MA's), (168, 78793), (178, 78814), (180, 78817), (219, 78880), (236, 78910), (244, 78919), (268, 78997), (287, 79084), (308, 79144), (320, 79180), (350, 79276),

Gene: Hlubikazi_31 Start: 27761, Stop: 28381, Start Num: 66

Candidate Starts for Hlubikazi_31:

(42, 27677), (Start: 55 @27734 has 4 MA's), (Start: 66 @27761 has 3 MA's), (Start: 97 @27836 has 6 MA's), (248, 28058), (256, 28094), (303, 28259), (322, 28304),

Gene: HokkenD_142 Start: 79202, Stop: 79804, Start Num: 110

Candidate Starts for HokkenD_142:

(74, 79133), (Start: 110 @79202 has 17 MA's), (168, 79307), (178, 79328), (180, 79331), (199, 79355), (200, 79358), (204, 79364), (253, 79466), (264, 79493), (268, 79511), (287, 79598), (350, 79790),

Gene: Holt_116 Start: 63658, Stop: 64158, Start Num: 132

Candidate Starts for Holt_116:

(88, 63604), (Start: 132 @63658 has 17 MA's), (Start: 154 @63712 has 1 MA's), (203, 63793), (205, 63796), (217, 63820), (236, 63853), (254, 63910), (301, 64072),

Gene: Hortense_58 Start: 41496, Stop: 42002, Start Num: 109

Candidate Starts for Hortense_58:

(34, 41271), (40, 41301), (Start: 109 @41496 has 7 MA's), (157, 41571), (163, 41583), (187, 41625), (248, 41712), (261, 41751),

Gene: Howe_58 Start: 41496, Stop: 42002, Start Num: 109

Candidate Starts for Howe_58:

(34, 41271), (40, 41301), (Start: 109 @41496 has 7 MA's), (157, 41571), (163, 41583), (187, 41625), (248, 41712), (261, 41751),

Gene: Hughesyang_111 Start: 64353, Stop: 64895, Start Num: 116

Candidate Starts for Hughesyang_111:

(44, 64191), (52, 64215), (Start: 89 @64320 has 1 MA's), (Start: 116 @64353 has 15 MA's), (Start: 130 @64371 has 3 MA's), (157, 64428), (198, 64491), (208, 64506), (215, 64524), (248, 64581), (250, 64587), (269, 64647), (292, 64740),

Gene: Hughesyang_148 Start: 79867, Stop: 80466, Start Num: 113

Candidate Starts for Hughesyang_148:

(Start: 113 @79867 has 16 MA's), (168, 79969), (178, 79990), (180, 79993), (219, 80056), (236, 80086), (244, 80095), (253, 80128), (268, 80173), (287, 80260), (308, 80320), (320, 80356), (350, 80452),

Gene: Icee_112 Start: 62768, Stop: 63268, Start Num: 132

Candidate Starts for Icee_112:

(88, 62714), (Start: 132 @62768 has 17 MA's), (Start: 154 @62822 has 1 MA's), (203, 62903), (205, 62906), (217, 62930), (236, 62963), (254, 63020), (301, 63182),

Gene: Island3_46 Start: 33137, Stop: 33628, Start Num: 105

Candidate Starts for Island3_46:

(63, 33044), (81, 33098), (82, 33101), (Start: 102 @33134 has 1 MA's), (Start: 105 @33137 has 6 MA's), (Start: 124 @33155 has 1 MA's), (133, 33164), (232, 33329), (240, 33338), (244, 33344), (248, 33356), (256, 33392), (274, 33443), (280, 33482),

Gene: Issimir_243 Start: 142261, Stop: 142710, Start Num: 145

Candidate Starts for Issimir_243:

(Start: 145 @142261 has 43 MA's), (Start: 162 @142300 has 1 MA's), (171, 142318), (201, 142351), (220, 142378), (248, 142411), (274, 142498), (282, 142540), (316, 142639),

Gene: JPickles_247 Start: 141311, Stop: 141760, Start Num: 145

Candidate Starts for JPickles_247:

(Start: 145 @141311 has 43 MA's), (Start: 162 @141350 has 1 MA's), (171, 141368), (201, 141401), (220, 141428), (248, 141461), (274, 141548), (282, 141590), (316, 141689),

Gene: JalFarm20_33 Start: 27847, Stop: 27341, Start Num: 112

Candidate Starts for JalFarm20_33:

(Start: 112 @27847 has 14 MA's), (Start: 124 @27832 has 1 MA's), (Start: 153 @27781 has 3 MA's), (157, 27772), (184, 27730), (195, 27715), (206, 27703), (208, 27700), (216, 27679), (248, 27640),

(256, 27604), (280, 27514), (300, 27448), (312, 27418),

Gene: Jalammah_18 Start: 10634, Stop: 11050, Start Num: 162

Candidate Starts for Jalammah_18:

(100, 10535), (Start: 108 @10544 has 6 MA's), (Start: 147 @10595 has 2 MA's), (Start: 162 @10634 has 1 MA's), (247, 10763), (248, 10766), (249, 10769), (256, 10802), (261, 10808), (272, 10844), (280, 10892), (288, 10913),

Gene: Janiyra_253 Start: 142848, Stop: 143297, Start Num: 145

Candidate Starts for Janiyra_253:

(Start: 145 @142848 has 43 MA's), (Start: 162 @142887 has 1 MA's), (171, 142905), (201, 142938), (220, 142965), (248, 142998), (274, 143085), (282, 143127), (316, 143226),

Gene: JeTaime_109 Start: 62868, Stop: 63383, Start Num: 132

Candidate Starts for JeTaime_109:

(88, 62814), (Start: 132 @62868 has 17 MA's), (Start: 154 @62922 has 1 MA's), (203, 63003), (205, 63006), (217, 63030), (236, 63063), (254, 63120), (301, 63282),

Gene: Jesabah_61 Start: 53289, Stop: 52765, Start Num: 112

Candidate Starts for Jesabah_61:

(73, 53358), (Start: 99 @53304 has 1 MA's), (Start: 112 @53289 has 14 MA's), (Start: 120 @53280 has 7 MA's), (Start: 154 @53214 has 1 MA's), (177, 53169), (195, 53145), (216, 53109), (220, 53103), (244, 53070), (261, 53016), (263, 53013), (294, 52896), (298, 52875), (330, 52800),

Gene: JoeDirt_64 Start: 45013, Stop: 45471, Start Num: 136

Candidate Starts for JoeDirt_64:

(Start: 136 @45013 has 5 MA's), (169, 45085), (228, 45175), (234, 45187), (248, 45208), (267, 45271), (274, 45298),

Gene: Jollymon_3 Start: 2875, Stop: 3255, Start Num: 149

Candidate Starts for Jollymon_3:

(Start: 149 @2875 has 3 MA's), (197, 2959), (223, 2992), (244, 3019), (248, 3031), (249, 3034), (277, 3145), (291, 3181), (311, 3235), (314, 3244),

Gene: JonJames_26 Start: 9049, Stop: 9558, Start Num: 101

Candidate Starts for JonJames_26:

(Start: 101 @9049 has 4 MA's), (Start: 147 @9103 has 2 MA's), (Start: 175 @9160 has 1 MA's), (189, 9181), (191, 9184), (244, 9256), (248, 9268), (256, 9304), (278, 9385), (281, 9394), (307, 9472), (332, 9544),

Gene: Kabocha_97 Start: 70776, Stop: 71294, Start Num: 92

Candidate Starts for Kabocha_97:

(Start: 76 @70734 has 8 MA's), (80, 70749), (Start: 92 @70776 has 4 MA's), (173, 70899), (182, 70908), (214, 70932), (280, 71112),

Gene: Kalah2_105 Start: 63688, Stop: 64230, Start Num: 116

Candidate Starts for Kalah2_105:

(44, 63526), (52, 63550), (Start: 89 @63655 has 1 MA's), (Start: 116 @63688 has 15 MA's), (Start: 130 @63706 has 3 MA's), (157, 63763), (198, 63826), (208, 63841), (215, 63859), (248, 63916), (250, 63922), (269, 63982), (292, 64075),

Gene: Kalah2_140 Start: 78988, Stop: 79587, Start Num: 113

Candidate Starts for Kalah2_140:

(Start: 113 @78988 has 16 MA's), (168, 79090), (178, 79111), (180, 79114), (219, 79177), (236, 79207), (244, 79216), (253, 79249), (268, 79294), (287, 79381), (308, 79441), (320, 79477), (350, 79573),

Gene: KashFlow_40 Start: 35743, Stop: 36285, Start Num: 97

Candidate Starts for KashFlow_40:

(Start: 61 @35656 has 1 MA's), (Start: 97 @35743 has 6 MA's), (Start: 147 @35806 has 2 MA's), (179, 35872), (195, 35896), (215, 35929), (236, 35962), (248, 35983), (249, 35986), (256, 36019), (277, 36097), (313, 36208), (332, 36256),

Gene: KashFlow_148 Start: 78305, Stop: 78904, Start Num: 116

Candidate Starts for KashFlow_148:

(Start: 116 @78305 has 15 MA's), (Start: 162 @78395 has 1 MA's), (219, 78491), (246, 78536), (253, 78563), (268, 78608), (276, 78650), (277, 78659), (327, 78806), (331, 78821), (350, 78890),

Gene: Keitabear_36 Start: 34510, Stop: 33947, Start Num: 85

Candidate Starts for Keitabear_36:

(59, 34564), (Start: 85 @34510 has 2 MA's), (90, 34501), (128, 34453), (Start: 143 @34426 has 24 MA's), (208, 34306), (244, 34243), (248, 34231), (306, 34024),

Gene: Kimchi_115 Start: 63385, Stop: 63885, Start Num: 132

Candidate Starts for Kimchi_115:

(88, 63331), (Start: 132 @63385 has 17 MA's), (Start: 154 @63439 has 1 MA's), (203, 63520), (205, 63523), (217, 63547), (236, 63580), (254, 63637), (301, 63799),

Gene: KingMidas_32 Start: 28828, Stop: 29370, Start Num: 97

Candidate Starts for KingMidas_32:

(Start: 97 @28828 has 6 MA's), (Start: 175 @28942 has 1 MA's), (256, 29095), (277, 29173), (280, 29185),

Gene: KingTut_52 Start: 48894, Stop: 48379, Start Num: 120

Candidate Starts for KingTut_52:

(73, 48972), (Start: 99 @48918 has 1 MA's), (Start: 112 @48903 has 14 MA's), (Start: 120 @48894 has 7 MA's), (Start: 154 @48828 has 1 MA's), (177, 48783), (195, 48759), (216, 48723), (220, 48717), (244, 48684), (261, 48630), (263, 48627), (294, 48510), (298, 48489), (330, 48414),

Gene: Klein_147 Start: 77536, Stop: 78138, Start Num: 110

Candidate Starts for Klein_147:

(74, 77467), (Start: 110 @77536 has 17 MA's), (168, 77641), (178, 77662), (180, 77665), (199, 77689), (200, 77692), (204, 77698), (253, 77800), (264, 77827), (268, 77845), (287, 77932), (350, 78124),

Gene: Kuwabara_68 Start: 41993, Stop: 42493, Start Num: 111

Candidate Starts for Kuwabara_68:

(Start: 111 @41993 has 1 MA's), (208, 42122), (256, 42230), (290, 42350),

Gene: Lee7_254 Start: 144611, Stop: 145060, Start Num: 145

Candidate Starts for Lee7_254:

(Start: 145 @144611 has 43 MA's), (Start: 162 @144650 has 1 MA's), (171, 144668), (201, 144701), (220, 144728), (248, 144761), (274, 144848), (282, 144890), (316, 144989),

Gene: LeeroyJenkins_114 Start: 56842, Stop: 56381, Start Num: 135

Candidate Starts for LeeroyJenkins_114:

(Start: 135 @56842 has 3 MA's), (214, 56713), (270, 56590),

Gene: LeeroyJenkins_94 Start: 49860, Stop: 49351, Start Num: 116

Candidate Starts for LeeroyJenkins_94:

(Start: 116 @49860 has 15 MA's), (216, 49689), (220, 49683), (243, 49653), (259, 49599), (274, 49551),

Gene: LeiMonet_62 Start: 52635, Stop: 52111, Start Num: 112

Candidate Starts for LeiMonet_62:

(73, 52704), (Start: 99 @52650 has 1 MA's), (Start: 112 @52635 has 14 MA's), (Start: 120 @52626 has 7 MA's), (Start: 154 @52560 has 1 MA's), (177, 52515), (195, 52491), (216, 52455), (220, 52449), (244, 52416), (261, 52362), (263, 52359), (294, 52242), (298, 52221), (330, 52146),

Gene: Lennon_36 Start: 34213, Stop: 33740, Start Num: 143

Candidate Starts for Lennon_36:

(59, 34351), (Start: 85 @34297 has 2 MA's), (128, 34240), (Start: 143 @34213 has 24 MA's), (197, 34114), (219, 34072), (221, 34069), (244, 34033), (262, 33976), (269, 33952), (279, 33895),

Gene: Leozinho_32 Start: 27392, Stop: 27934, Start Num: 97

Candidate Starts for Leozinho_32:

(Start: 97 @27392 has 6 MA's), (Start: 175 @27506 has 1 MA's), (256, 27659), (277, 27737), (280, 27749),

Gene: LilSpotty_83 Start: 48505, Stop: 49212, Start Num: 53

Candidate Starts for LilSpotty_83:

(Start: 53 @48505 has 1 MA's), (131, 48661), (169, 48739), (177, 48757), (193, 48781), (244, 48865), (248, 48877), (251, 48886), (262, 48922), (295, 49051), (344, 49180),

Gene: Lilas_67 Start: 47987, Stop: 48406, Start Num: 151

Candidate Starts for Lilas_67:

(32, 47699), (Start: 75 @47861 has 2 MA's), (106, 47924), (Start: 120 @47939 has 7 MA's), (127, 47948), (Start: 151 @47987 has 4 MA's), (Start: 154 @47999 has 1 MA's), (170, 48029), (239, 48128), (244, 48134), (280, 48272),

Gene: LittleE_112 Start: 62894, Stop: 63436, Start Num: 116

Candidate Starts for LittleE_112:

(Start: 116 @62894 has 15 MA's), (Start: 130 @62912 has 3 MA's), (198, 63032), (208, 63047), (215, 63065), (248, 63122), (250, 63128), (269, 63188), (292, 63281), (341, 63422),

Gene: LittleE_150 Start: 78544, Stop: 79146, Start Num: 110

Candidate Starts for LittleE_150:

(Start: 110 @78544 has 17 MA's), (186, 78682), (199, 78694), (219, 78736), (240, 78769), (253, 78808), (259, 78829), (277, 78904), (284, 78934), (350, 79132),

Gene: Lopsy_58 Start: 51828, Stop: 51313, Start Num: 120

Candidate Starts for Lopsy_58:

(73, 51906), (Start: 99 @51852 has 1 MA's), (Start: 112 @51837 has 14 MA's), (Start: 120 @51828 has 7 MA's), (Start: 154 @51762 has 1 MA's), (177, 51717), (195, 51693), (216, 51657), (220, 51651), (244, 51618), (261, 51564), (263, 51561), (294, 51444), (298, 51423), (330, 51348),

Gene: LordFarquaad_67 Start: 43212, Stop: 43631, Start Num: 151

Candidate Starts for LordFarquaad_67:

(Start: 75 @43086 has 2 MA's), (91, 43128), (106, 43149), (127, 43173), (Start: 151 @43212 has 4 MA's), (Start: 154 @43224 has 1 MA's), (170, 43254), (244, 43359), (280, 43497),

Gene: LostAndPhound_60 Start: 52723, Stop: 52199, Start Num: 112

Candidate Starts for LostAndPhound_60:

(73, 52792), (Start: 99 @52738 has 1 MA's), (Start: 112 @52723 has 14 MA's), (Start: 120 @52714 has 7 MA's), (Start: 154 @52648 has 1 MA's), (177, 52603), (195, 52579), (216, 52543), (220, 52537), (244, 52504), (261, 52450), (263, 52447), (294, 52330), (298, 52309), (330, 52234),

Gene: Love_39 Start: 33996, Stop: 33523, Start Num: 143

Candidate Starts for Love_39:

(59, 34134), (Start: 85 @34080 has 2 MA's), (90, 34071), (128, 34023), (Start: 143 @33996 has 24 MA's), (197, 33897), (219, 33855), (221, 33852), (244, 33816), (262, 33759), (270, 33726), (279, 33678),

Gene: LunaBlu_33 Start: 28027, Stop: 28524, Start Num: 97

Candidate Starts for LunaBlu_33:

(Start: 55 @27925 has 4 MA's), (Start: 97 @28027 has 6 MA's), (248, 28249), (256, 28285), (303, 28450), (322, 28495),

Gene: Lysidious_60 Start: 40309, Stop: 40836, Start Num: 109

Candidate Starts for Lysidious_60:

(Start: 109 @40309 has 7 MA's), (Start: 129 @40330 has 2 MA's), (239, 40510),

Gene: Lysidious_17 Start: 10274, Stop: 10777, Start Num: 108

Candidate Starts for Lysidious_17:

(Start: 108 @10274 has 6 MA's), (Start: 162 @10364 has 1 MA's), (178, 10388), (247, 10493), (249, 10499), (256, 10532), (261, 10538), (288, 10643),

Gene: Maby2021_250 Start: 143650, Stop: 144099, Start Num: 145

Candidate Starts for Maby2021_250:

(Start: 145 @143650 has 43 MA's), (Start: 162 @143689 has 1 MA's), (171, 143707), (201, 143740), (220, 143767), (248, 143800), (274, 143887), (282, 143929), (316, 144028),

Gene: Malachai_17 Start: 10279, Stop: 10785, Start Num: 108

Candidate Starts for Malachai_17:

(Start: 108 @10279 has 6 MA's), (Start: 162 @10369 has 1 MA's), (249, 10504), (256, 10537), (274, 10588), (297, 10681), (313, 10723),

Gene: Mandlovu_31 Start: 27703, Stop: 28323, Start Num: 66

Candidate Starts for Mandlovu_31:

(42, 27619), (Start: 55 @27676 has 4 MA's), (Start: 66 @27703 has 3 MA's), (Start: 97 @27778 has 6 MA's), (248, 28000), (256, 28036), (303, 28201), (322, 28246),

Gene: Maravista_65 Start: 42918, Stop: 43388, Start Num: 130

Candidate Starts for Maravista_65:

(Start: 130 @42918 has 3 MA's), (208, 43035), (256, 43143), (290, 43263),

Gene: Marshmallow_38 Start: 34061, Stop: 33540, Start Num: 118

Candidate Starts for Marshmallow_38:

(Start: 76 @34127 has 8 MA's), (Start: 118 @34061 has 6 MA's), (Start: 144 @34019 has 2 MA's), (188, 33932), (247, 33854), (248, 33851), (255, 33815),

Gene: Marshmallow_109 Start: 63582, Stop: 64082, Start Num: 132

Candidate Starts for Marshmallow_109:

(Start: 132 @63582 has 17 MA's), (Start: 154 @63636 has 1 MA's), (203, 63717), (205, 63720), (217, 63744), (236, 63777), (254, 63834), (301, 63996),

Gene: Matalotodo_59 Start: 52707, Stop: 52192, Start Num: 120

Candidate Starts for Matalotodo_59:

(73, 52785), (Start: 99 @52731 has 1 MA's), (Start: 112 @52716 has 14 MA's), (Start: 120 @52707 has 7 MA's), (Start: 154 @52641 has 1 MA's), (177, 52596), (195, 52572), (216, 52536), (220, 52530), (244, 52497), (261, 52443), (263, 52440), (294, 52323), (298, 52302), (330, 52227),

Gene: McCrothy_36 Start: 33804, Stop: 33331, Start Num: 143

Candidate Starts for McCrothy_36:

(59, 33942), (Start: 85 @33888 has 2 MA's), (90, 33879), (128, 33831), (Start: 143 @33804 has 24 MA's), (197, 33705), (219, 33663), (221, 33660), (244, 33624), (262, 33567), (270, 33534), (279, 33486),

Gene: McGee_251 Start: 142298, Stop: 142747, Start Num: 145

Candidate Starts for McGee_251:

(Start: 145 @142298 has 43 MA's), (Start: 162 @142337 has 1 MA's), (171, 142355), (201, 142388), (220, 142415), (248, 142448), (274, 142535), (282, 142577), (316, 142676),

Gene: McKinley_38 Start: 34022, Stop: 33549, Start Num: 143

Candidate Starts for McKinley_38:

(59, 34160), (Start: 85 @34106 has 2 MA's), (90, 34097), (128, 34049), (Start: 143 @34022 has 24 MA's), (197, 33923), (219, 33881), (221, 33878), (244, 33842), (262, 33785), (279, 33704),

Gene: Mellie_57 Start: 38319, Stop: 38846, Start Num: 109

Candidate Starts for Mellie_57:

(Start: 109 @38319 has 7 MA's), (Start: 129 @38340 has 2 MA's), (239, 38520), (322, 38784),

Gene: Mesmerelda_59 Start: 52711, Stop: 52196, Start Num: 120

Candidate Starts for Mesmerelda_59:

(73, 52789), (Start: 99 @52735 has 1 MA's), (Start: 112 @52720 has 14 MA's), (Start: 120 @52711 has 7 MA's), (Start: 154 @52645 has 1 MA's), (177, 52600), (195, 52576), (216, 52540), (220, 52534), (244, 52501), (261, 52447), (263, 52444), (294, 52327), (298, 52306), (330, 52231),

Gene: Mila11_95 Start: 59511, Stop: 59011, Start Num: 124

Candidate Starts for Mila11_95:

(27, 59790), (28, 59787), (38, 59730), (48, 59670), (Start: 101 @59538 has 4 MA's), (Start: 124 @59511 has 1 MA's), (134, 59499), (139, 59490), (240, 59310), (248, 59292), (267, 59232),

Gene: Minerva_162 Start: 85665, Stop: 86177, Start Num: 99

Candidate Starts for Minerva_162:

(Start: 99 @85665 has 1 MA's), (Start: 101 @85668 has 4 MA's), (133, 85701), (157, 85752), (174, 85788), (237, 85878), (244, 85887), (248, 85899), (249, 85902), (256, 85935), (269, 85965), (288, 86046), (322, 86139), (332, 86163),

Gene: Minerva_148 Start: 78849, Stop: 79448, Start Num: 113

Candidate Starts for Minerva_148:

(Start: 113 @78849 has 16 MA's), (168, 78951), (178, 78972), (180, 78975), (219, 79038), (236, 79068), (244, 79077), (253, 79110), (268, 79155), (287, 79242), (308, 79302), (320, 79338), (350, 79434),

Gene: MinionDave_33 Start: 28083, Stop: 28682, Start Num: 55

Candidate Starts for MinionDave_33:

(Start: 55 @28083 has 4 MA's), (Start: 97 @28185 has 6 MA's), (248, 28407), (256, 28443), (303, 28608), (322, 28653),

Gene: MintFritos_94 Start: 72730, Stop: 73143, Start Num: 153

Candidate Starts for MintFritos_94:

(Start: 110 @72655 has 17 MA's), (Start: 125 @72673 has 1 MA's), (Start: 153 @72730 has 3 MA's), (216, 72826), (244, 72853), (248, 72865), (249, 72868), (265, 72916),

Gene: ModicumRichard_20 Start: 18713, Stop: 18225, Start Num: 143

Candidate Starts for ModicumRichard_20:

(6, 19316), (13, 19235), (15, 19211), (16, 19175), (17, 19145), (19, 19130), (37, 18977), (62, 18863), (81, 18806), (84, 18797), (Start: 86 @18794 has 2 MA's), (Start: 143 @18713 has 24 MA's), (183, 18629), (202, 18605), (228, 18560), (244, 18533), (248, 18521), (250, 18515), (279, 18395),

Gene: Morizzled23_247 Start: 141326, Stop: 141775, Start Num: 145

Candidate Starts for Morizzled23_247:

(Start: 145 @141326 has 43 MA's), (Start: 162 @141365 has 1 MA's), (171, 141383), (201, 141416), (220, 141443), (248, 141476), (274, 141563), (282, 141605), (316, 141704),

Gene: Morrissey_46 Start: 35134, Stop: 34631, Start Num: 122

Candidate Starts for Morrissey_46:

(4, 35755), (5, 35731), (7, 35701), (9, 35656), (14, 35611), (23, 35482), (47, 35293), (114, 35143), (Start: 122 @35134 has 1 MA's), (Start: 145 @35095 has 43 MA's), (Start: 149 @35086 has 3 MA's), (167, 35047), (224, 34954), (244, 34927), (247, 34918), (248, 34915), (249, 34912), (256, 34879),

Gene: Mova_51 Start: 35948, Stop: 36499, Start Num: 96

Candidate Starts for Mova_51:

(Start: 96 @35948 has 3 MA's), (Start: 99 @35951 has 1 MA's), (Start: 162 @36041 has 1 MA's), (191, 36083), (231, 36143), (256, 36209), (272, 36251), (281, 36299),

Gene: MulchSalad_28 Start: 23891, Stop: 24409, Start Num: 96

Candidate Starts for MulchSalad_28:

(Start: 96 @23891 has 3 MA's), (Start: 153 @23975 has 3 MA's), (214, 24071), (216, 24077), (248, 24119), (250, 24125), (256, 24155),

Gene: Mutaforma13_54 Start: 38739, Stop: 39290, Start Num: 96

Candidate Starts for Mutaforma13_54:

(Start: 96 @38739 has 3 MA's), (Start: 99 @38742 has 1 MA's), (Start: 162 @38832 has 1 MA's), (191, 38874), (231, 38934), (256, 39000), (272, 39042), (281, 39090),

Gene: Myrale_38 Start: 33992, Stop: 33405, Start Num: 76

Candidate Starts for Myrale_38:

(Start: 76 @33992 has 8 MA's), (Start: 118 @33926 has 6 MA's), (Start: 144 @33884 has 2 MA's), (188, 33797), (247, 33719), (248, 33716), (255, 33680),

Gene: Nekros_146 Start: 78699, Stop: 79298, Start Num: 116

Candidate Starts for Nekros_146:

(Start: 116 @78699 has 15 MA's), (Start: 162 @78789 has 1 MA's), (219, 78885), (246, 78930), (253, 78957), (268, 79002), (276, 79044), (277, 79053), (327, 79200), (331, 79215), (350, 79284),

Gene: NewHope4_33 Start: 27527, Stop: 27021, Start Num: 112

Candidate Starts for NewHope4_33:

(Start: 112 @27527 has 14 MA's), (Start: 124 @27512 has 1 MA's), (Start: 153 @27461 has 3 MA's), (157, 27452), (184, 27410), (195, 27395), (206, 27383), (208, 27380), (216, 27359), (248, 27320), (256, 27284), (280, 27194), (300, 27128), (312, 27098),

Gene: Nibley_154 Start: 82613, Stop: 83122, Start Num: 101

Candidate Starts for Nibley_154:

(Start: 99 @82610 has 1 MA's), (Start: 101 @82613 has 4 MA's), (133, 82646), (157, 82697), (174, 82733), (237, 82823), (244, 82832), (248, 82844), (256, 82880), (269, 82910), (288, 82991), (322, 83084), (332, 83108),

Gene: Nimrod_111 Start: 63730, Stop: 64230, Start Num: 132

Candidate Starts for Nimrod_111:

(88, 63676), (Start: 132 @63730 has 17 MA's), (Start: 154 @63784 has 1 MA's), (203, 63865), (205, 63868), (217, 63892), (236, 63925), (254, 63982), (301, 64144),

Gene: Nordenberg_30 Start: 32192, Stop: 31719, Start Num: 143

Candidate Starts for Nordenberg_30:

(59, 32330), (Start: 85 @32276 has 2 MA's), (90, 32267), (128, 32219), (Start: 143 @32192 has 24 MA's), (197, 32093), (219, 32051), (221, 32048), (244, 32012), (262, 31955), (270, 31922), (279, 31874),

Gene: Nova53_37 Start: 21310, Stop: 21888, Start Num: 126

Candidate Starts for Nova53_37:

(Start: 126 @21310 has 2 MA's), (194, 21442), (249, 21532), (256, 21565), (278, 21646), (290, 21679), (298, 21712), (303, 21730), (346, 21844), (349, 21859), (351, 21871),

Gene: ObLaDi_20 Start: 18692, Stop: 18204, Start Num: 143

Candidate Starts for ObLaDi_20:

(1, 19712), (2, 19706), (3, 19688), (6, 19295), (13, 19214), (15, 19190), (16, 19154), (17, 19124), (19, 19109), (37, 18956), (62, 18842), (81, 18785), (84, 18776), (Start: 86 @18773 has 2 MA's), (Start: 143 @18692 has 24 MA's), (183, 18608), (202, 18584), (228, 18539), (244, 18512), (248, 18500), (250, 18494), (279, 18374),

Gene: Omega_117 Start: 63909, Stop: 64451, Start Num: 116

Candidate Starts for Omega_117:

(Start: 89 @63876 has 1 MA's), (Start: 116 @63909 has 15 MA's), (Start: 130 @63927 has 3 MA's), (198, 64047), (208, 64062), (215, 64080), (248, 64137), (250, 64143), (269, 64203), (292, 64296), (341, 64437),

Gene: Omega_51 Start: 42659, Stop: 43288, Start Num: 61

Candidate Starts for Omega_51:

(Start: 61 @42659 has 1 MA's), (Start: 97 @42746 has 6 MA's), (Start: 147 @42809 has 2 MA's), (179, 42875), (195, 42899), (215, 42932), (236, 42965), (248, 42986), (249, 42989), (256, 43022), (277, 43100), (313, 43211), (332, 43259),

Gene: Omega_154 Start: 79628, Stop: 80230, Start Num: 110

Candidate Starts for Omega_154:

(Start: 110 @79628 has 17 MA's), (186, 79766), (199, 79778), (219, 79820), (240, 79853), (253, 79892), (259, 79913), (277, 79988), (284, 80018), (350, 80216),

Gene: Optimus_141 Start: 76720, Stop: 77322, Start Num: 110

Candidate Starts for Optimus_141:

(74, 76651), (Start: 110 @76720 has 17 MA's), (168, 76825), (178, 76846), (180, 76849), (199, 76873), (200, 76876), (204, 76882), (253, 76984), (264, 77011), (268, 77029), (287, 77116), (350, 77308),

Gene: OrediggerDelux_251 Start: 143615, Stop: 144064, Start Num: 145

Candidate Starts for OrediggerDelux_251:

(Start: 145 @143615 has 43 MA's), (Start: 162 @143654 has 1 MA's), (171, 143672), (201, 143705), (220, 143732), (248, 143765), (274, 143852), (282, 143894), (316, 143993),

Gene: Orfeu_58 Start: 52711, Stop: 52187, Start Num: 112

Candidate Starts for Orfeu_58:

(73, 52780), (Start: 99 @52726 has 1 MA's), (Start: 112 @52711 has 14 MA's), (Start: 120 @52702 has 7 MA's), (Start: 154 @52636 has 1 MA's), (177, 52591), (195, 52567), (216, 52531), (220, 52525), (244, 52492), (261, 52438), (263, 52435), (294, 52318), (298, 52297), (330, 52222),

Gene: Paries_38 Start: 33658, Stop: 33185, Start Num: 143

Candidate Starts for Paries_38:

(51, 33820), (59, 33796), (Start: 85 @33742 has 2 MA's), (90, 33733), (128, 33685), (Start: 143 @33658 has 24 MA's), (197, 33559), (219, 33517), (221, 33514), (244, 33478), (262, 33421), (270, 33388), (279, 33340),

Gene: Peregrin_178 Start: 94313, Stop: 94846, Start Num: 115

Candidate Starts for Peregrin_178:

(Start: 115 @94313 has 2 MA's), (157, 94391), (222, 94499), (250, 94553), (275, 94640), (277, 94661), (315, 94781),

Gene: PharkleMinkus_250 Start: 141563, Stop: 142012, Start Num: 145

Candidate Starts for PharkleMinkus_250:

(Start: 145 @141563 has 43 MA's), (Start: 162 @141602 has 1 MA's), (171, 141620), (201, 141653), (220, 141680), (248, 141713), (274, 141800), (282, 141842), (316, 141941),

Gene: Phineas_45 Start: 31827, Stop: 32321, Start Num: 102

Candidate Starts for Phineas_45:

(81, 31791), (82, 31794), (Start: 102 @31827 has 1 MA's), (Start: 105 @31830 has 6 MA's), (Start: 124 @31848 has 1 MA's), (133, 31857), (232, 32022), (240, 32031), (244, 32037), (248, 32049), (256, 32085), (274, 32136), (280, 32175),

Gene: Phoebus_113 Start: 65664, Stop: 66206, Start Num: 116

Candidate Starts for Phoebus_113:

(44, 65502), (52, 65526), (Start: 89 @65631 has 1 MA's), (Start: 116 @65664 has 15 MA's), (Start: 130 @65682 has 3 MA's), (157, 65739), (198, 65802), (208, 65817), (215, 65835), (248, 65892), (250, 65898), (269, 65958), (292, 66051),

Gene: Phoebus_149 Start: 81221, Stop: 81820, Start Num: 113

Candidate Starts for Phoebus_149:

(Start: 113 @81221 has 16 MA's), (168, 81323), (178, 81344), (180, 81347), (219, 81410), (236, 81440), (244, 81449), (253, 81482), (268, 81527), (287, 81614), (308, 81674), (320, 81710), (350, 81806),

Gene: Pipefish_29 Start: 27509, Stop: 27015, Start Num: 115

Candidate Starts for Pipefish_29:

(Start: 115 @27509 has 2 MA's), (220, 27344), (244, 27311), (258, 27260),

Gene: Pippy_62 Start: 40280, Stop: 40750, Start Num: 130

Candidate Starts for Pippy_62:

(Start: 130 @40280 has 3 MA's), (208, 40397), (256, 40505), (290, 40625),

Gene: Placalicious_60 Start: 53221, Stop: 52697, Start Num: 112

Candidate Starts for Placalicious_60:

(73, 53290), (Start: 99 @53236 has 1 MA's), (Start: 112 @53221 has 14 MA's), (Start: 120 @53212 has 7 MA's), (Start: 154 @53146 has 1 MA's), (177, 53101), (195, 53077), (216, 53041), (220, 53035), (244, 53002), (261, 52948), (263, 52945), (294, 52828), (298, 52807), (330, 52732),

Gene: Podrick_58 Start: 51964, Stop: 51449, Start Num: 120

Candidate Starts for Podrick_58:

(73, 52042), (Start: 99 @51988 has 1 MA's), (Start: 112 @51973 has 14 MA's), (Start: 120 @51964 has 7 MA's), (Start: 154 @51898 has 1 MA's), (177, 51853), (195, 51829), (216, 51793), (220, 51787), (244, 51754), (261, 51700), (263, 51697), (294, 51580), (298, 51559), (330, 51484),

Gene: Poochiewood_65 Start: 45021, Stop: 45479, Start Num: 136

Candidate Starts for Poochiewood_65:

(Start: 136 @45021 has 5 MA's), (169, 45093), (228, 45183), (234, 45195), (248, 45216), (267, 45279), (274, 45306),

Gene: Porcelain_108 Start: 60257, Stop: 60832, Start Num: 89

Candidate Starts for Porcelain_108:

(Start: 89 @60257 has 1 MA's), (Start: 116 @60290 has 15 MA's), (Start: 130 @60308 has 3 MA's), (157, 60365), (198, 60428), (208, 60443), (215, 60461), (248, 60518), (250, 60524), (269, 60584), (292, 60677),

Gene: Porky_109 Start: 62562, Stop: 63008, Start Num: 154

Candidate Starts for Porky_109:

(88, 62454), (Start: 132 @62508 has 17 MA's), (Start: 154 @62562 has 1 MA's), (203, 62643), (205, 62646), (217, 62670), (236, 62703), (254, 62760), (301, 62922),

Gene: Pound_50 Start: 43906, Stop: 44415, Start Num: 129

Candidate Starts for Pound_50:

(65, 43795), (93, 43864), (Start: 107 @43882 has 4 MA's), (Start: 129 @43906 has 2 MA's), (Start: 162 @43972 has 1 MA's), (194, 44026), (216, 44071), (256, 44158), (277, 44236), (280, 44248), (340, 44401),

Gene: PowerRanger_26 Start: 22001, Stop: 22438, Start Num: 147

Candidate Starts for PowerRanger_26:

(Start: 112 @21953 has 14 MA's), (Start: 147 @22001 has 2 MA's), (248, 22172), (249, 22175), (261, 22214),

Gene: Primadonna_244 Start: 142325, Stop: 142774, Start Num: 145

Candidate Starts for Primadonna_244:

(Start: 145 @142325 has 43 MA's), (Start: 162 @142364 has 1 MA's), (171, 142382), (201, 142415), (220, 142442), (248, 142475), (274, 142562), (282, 142604), (316, 142703),

Gene: Pumpkin_40 Start: 34140, Stop: 33619, Start Num: 118

Candidate Starts for Pumpkin_40:

(Start: 76 @34206 has 8 MA's), (Start: 118 @34140 has 6 MA's), (Start: 144 @34098 has 2 MA's), (188, 34011), (247, 33933), (248, 33930), (255, 33894),

Gene: PurduePete_250 Start: 143690, Stop: 144139, Start Num: 145

Candidate Starts for PurduePete_250:

(Start: 145 @143690 has 43 MA's), (Start: 162 @143729 has 1 MA's), (171, 143747), (201, 143780), (220, 143807), (248, 143840), (274, 143927), (282, 143969), (316, 144068),

Gene: Pygmy_47 Start: 33294, Stop: 33785, Start Num: 105

Candidate Starts for Pygmy_47:

(81, 33255), (82, 33258), (Start: 102 @33291 has 1 MA's), (Start: 105 @33294 has 6 MA's), (Start: 124 @33312 has 1 MA's), (133, 33321), (232, 33486), (240, 33495), (244, 33501), (248, 33513), (256, 33549), (274, 33600), (280, 33639),

Gene: Ramsey_33 Start: 27746, Stop: 28345, Start Num: 55

Candidate Starts for Ramsey_33:

(Start: 55 @27746 has 4 MA's), (Start: 97 @27848 has 6 MA's), (248, 28070), (256, 28106), (303, 28271), (322, 28316),

Gene: RedWattleHog_27 Start: 28545, Stop: 28156, Start Num: 175

Candidate Starts for RedWattleHog_27:

(Start: 112 @28650 has 14 MA's), (Start: 175 @28545 has 1 MA's), (249, 28443), (278, 28326), (328, 28179),

Gene: RedWattleHog_22 Start: 25760, Stop: 26308, Start Num: 107

Candidate Starts for RedWattleHog_22:

(Start: 92 @25739 has 4 MA's), (Start: 107 @25760 has 4 MA's), (189, 25880), (272, 26048), (274, 26057), (278, 26087), (280, 26096), (326, 26222),

Gene: RedWattleHog_85 Start: 77917, Stop: 78504, Start Num: 113

Candidate Starts for RedWattleHog_85:

(Start: 113 @77917 has 16 MA's), (Start: 153 @77989 has 3 MA's), (176, 78037), (181, 78043), (213, 78091), (216, 78100), (218, 78103), (224, 78112), (243, 78142), (249, 78160), (256, 78193), (273, 78238), (279, 78280), (298, 78340), (349, 78484),

Gene: RedWattleHog_100 Start: 85618, Stop: 86124, Start Num: 95

Candidate Starts for RedWattleHog_100:

(Start: 83 @85600 has 1 MA's), (Start: 95 @85618 has 1 MA's), (Start: 147 @85687 has 2 MA's), (161, 85723), (Start: 162 @85726 has 1 MA's), (164, 85729), (185, 85768), (241, 85846), (245, 85852), (280, 85981), (303, 86056),

Gene: Rofo_36 Start: 33056, Stop: 32583, Start Num: 143

Candidate Starts for Rofo_36:

(59, 33194), (Start: 85 @33140 has 2 MA's), (90, 33131), (128, 33083), (Start: 143 @33056 has 24 MA's), (197, 32957), (219, 32915), (221, 32912), (244, 32876), (262, 32819), (270, 32786), (279, 32738),

Gene: Rooter_41 Start: 26895, Stop: 27386, Start Num: 113

Candidate Starts for Rooter_41:

(22, 26580), (58, 26814), (94, 26880), (Start: 113 @26895 has 16 MA's), (226, 27060), (247, 27096), (249, 27102), (283, 27237), (311, 27309), (337, 27375),

Gene: Rose5_65 Start: 45033, Stop: 45491, Start Num: 136

Candidate Starts for Rose5_65:

(Start: 136 @45033 has 5 MA's), (169, 45105), (228, 45195), (234, 45207), (248, 45228), (267, 45291), (274, 45318),

Gene: Saguaro_52 Start: 46118, Stop: 45648, Start Num: 110

Candidate Starts for Saguaro_52:

(79, 46169), (Start: 110 @46118 has 17 MA's), (Start: 129 @46097 has 2 MA's), (Start: 147 @46070 has 2 MA's), (Start: 153 @46052 has 3 MA's), (157, 46043), (Start: 162 @46031 has 1 MA's), (189, 45992), (248, 45905), (277, 45791), (293, 45746),

Gene: Salacia_251 Start: 144116, Stop: 144565, Start Num: 145

Candidate Starts for Salacia_251:

(Start: 145 @144116 has 43 MA's), (Start: 162 @144155 has 1 MA's), (171, 144173), (201, 144206), (220, 144233), (248, 144266), (274, 144353), (282, 144395), (316, 144494),

Gene: Sarge_39 Start: 25703, Stop: 26194, Start Num: 113

Candidate Starts for Sarge_39:

(22, 25388), (58, 25622), (94, 25688), (Start: 113 @25703 has 16 MA's), (226, 25868), (247, 25904), (249, 25910), (283, 26045), (311, 26117), (337, 26183),

Gene: Sassafras_31 Start: 27690, Stop: 28187, Start Num: 97

Candidate Starts for Sassafras_31:

(Start: 55 @27588 has 4 MA's), (Start: 97 @27690 has 6 MA's), (248, 27912), (256, 27948), (303, 28113), (322, 28158),

Gene: Schomber_94 Start: 69164, Stop: 69682, Start Num: 92

Candidate Starts for Schomber_94:

(Start: 76 @69122 has 8 MA's), (80, 69137), (Start: 92 @69164 has 4 MA's), (173, 69287), (182, 69296), (214, 69320), (280, 69500),

Gene: ScoobyDoobyDoo_184 Start: 103006, Stop: 103509, Start Num: 153

Candidate Starts for ScoobyDoobyDoo_184:

(Start: 129 @102958 has 2 MA's), (139, 102973), (Start: 146 @102985 has 2 MA's), (148, 102991), (Start: 153 @103006 has 3 MA's), (216, 103123), (248, 103174), (252, 103189), (280, 103300), (293, 103333), (296, 103342), (299, 103357), (312, 103399), (335, 103462), (345, 103489),

Gene: ScoobyDoobyDoo_60 Start: 22027, Stop: 22503, Start Num: 126

Candidate Starts for ScoobyDoobyDoo_60:

(68, 21928), (Start: 126 @22027 has 2 MA's), (247, 22225), (321, 22462),

Gene: ScoobyDoobyDoo_251 Start: 151338, Stop: 151754, Start Num: 147

Candidate Starts for ScoobyDoobyDoo_251:

(Start: 85 @151257 has 2 MA's), (Start: 147 @151338 has 2 MA's), (Start: 153 @151356 has 3 MA's), (173, 151383), (186, 151401), (216, 151422), (244, 151452), (256, 151500), (265, 151515), (278, 151581), (304, 151668),

Gene: Sedona_36 Start: 34162, Stop: 33689, Start Num: 143

Candidate Starts for Sedona_36:

(59, 34300), (Start: 85 @34246 has 2 MA's), (90, 34237), (128, 34189), (Start: 143 @34162 has 24 MA's), (197, 34063), (219, 34021), (221, 34018), (244, 33982), (262, 33925), (270, 33892), (279, 33844),

Gene: Shaboozey_39 Start: 35483, Stop: 36025, Start Num: 97

Candidate Starts for Shaboozey_39:

(Start: 61 @35396 has 1 MA's), (Start: 97 @35483 has 6 MA's), (Start: 147 @35546 has 2 MA's), (179, 35612), (195, 35636), (215, 35669), (236, 35702), (248, 35723), (249, 35726), (256, 35759), (277, 35837), (313, 35948), (332, 35996),

Gene: Shaboozey_158 Start: 83054, Stop: 83566, Start Num: 99

Candidate Starts for Shaboozey_158:

(Start: 99 @83054 has 1 MA's), (Start: 101 @83057 has 4 MA's), (133, 83090), (157, 83141), (174, 83177), (237, 83267), (244, 83276), (248, 83288), (256, 83324), (269, 83354), (288, 83435), (322, 83528), (332, 83552),

Gene: ShamWow_38 Start: 34129, Stop: 33542, Start Num: 76

Candidate Starts for ShamWow_38:

(Start: 76 @34129 has 8 MA's), (Start: 118 @34063 has 6 MA's), (Start: 144 @34021 has 2 MA's), (188, 33934), (247, 33856), (248, 33853), (255, 33817),

Gene: Shipwreck_47 Start: 33269, Stop: 33760, Start Num: 105

Candidate Starts for Shipwreck_47:

(81, 33230), (82, 33233), (Start: 102 @33266 has 1 MA's), (Start: 105 @33269 has 6 MA's), (Start: 124 @33287 has 1 MA's), (133, 33296), (232, 33461), (240, 33470), (244, 33476), (248, 33488), (256, 33524), (274, 33575), (280, 33614),

Gene: Shlim410_56 Start: 41496, Stop: 42002, Start Num: 109

Candidate Starts for Shlim410_56:

(34, 41271), (40, 41301), (Start: 109 @41496 has 7 MA's), (157, 41571), (163, 41583), (187, 41625), (248, 41712), (261, 41751),

Gene: Shoya_45 Start: 27671, Stop: 28162, Start Num: 113

Candidate Starts for Shoya_45:

(58, 27590), (94, 27656), (Start: 113 @27671 has 16 MA's), (226, 27836), (247, 27872), (249, 27878), (283, 28013), (311, 28085), (337, 28151),

Gene: Shrimp_252 Start: 143727, Stop: 144176, Start Num: 145

Candidate Starts for Shrimp_252:

(Start: 145 @143727 has 43 MA's), (Start: 162 @143766 has 1 MA's), (171, 143784), (201, 143817), (220, 143844), (248, 143877), (274, 143964), (282, 144006), (316, 144105),

Gene: Sitar_36 Start: 34297, Stop: 33740, Start Num: 85

Candidate Starts for Sitar_36:

(59, 34351), (Start: 85 @34297 has 2 MA's), (128, 34240), (Start: 143 @34213 has 24 MA's), (197, 34114), (219, 34072), (221, 34069), (244, 34033), (262, 33976), (269, 33952), (279, 33895),

Gene: SiwenD96_251 Start: 144063, Stop: 144512, Start Num: 145

Candidate Starts for SiwenD96_251:

(Start: 145 @144063 has 43 MA's), (Start: 162 @144102 has 1 MA's), (171, 144120), (193, 144141), (201, 144153), (220, 144180), (248, 144213), (274, 144300),

Gene: SoilAssassin_64 Start: 43104, Stop: 43649, Start Num: 75

Candidate Starts for SoilAssassin_64:

(Start: 75 @43104 has 2 MA's), (91, 43146), (106, 43167), (127, 43191), (Start: 151 @43230 has 4 MA's), (Start: 154 @43242 has 1 MA's), (170, 43272), (244, 43377), (280, 43515),

Gene: Specks_254 Start: 143067, Stop: 143516, Start Num: 145

Candidate Starts for Specks_254:

(Start: 145 @143067 has 43 MA's), (Start: 162 @143106 has 1 MA's), (171, 143124), (201, 143157), (220, 143184), (248, 143217), (274, 143304), (282, 143346), (316, 143445),

Gene: SpeedDemon_100 Start: 4893, Stop: 5351, Start Num: 145

Candidate Starts for SpeedDemon_100:

(Start: 145 @4893 has 43 MA's), (230, 5040), (240, 5055), (247, 5070), (256, 5109), (272, 5151), (280, 5199), (323, 5319),

Gene: SrishMeg2525_247 Start: 143222, Stop: 143671, Start Num: 145

Candidate Starts for SrishMeg2525_247:

(Start: 145 @143222 has 43 MA's), (Start: 162 @143261 has 1 MA's), (171, 143279), (201, 143312), (220, 143339), (248, 143372), (274, 143459), (282, 143501), (316, 143600),

Gene: Stank_113 Start: 63457, Stop: 63957, Start Num: 132

Candidate Starts for Stank_113:

(88, 63403), (Start: 132 @63457 has 17 MA's), (Start: 154 @63511 has 1 MA's), (203, 63592), (205, 63595), (217, 63619), (236, 63652), (254, 63709), (301, 63871),

Gene: Starcevich_34 Start: 27605, Stop: 27099, Start Num: 112

Candidate Starts for Starcevich_34:

(Start: 112 @27605 has 14 MA's), (Start: 124 @27590 has 1 MA's), (Start: 153 @27539 has 3 MA's), (157, 27530), (184, 27488), (195, 27473), (206, 27461), (208, 27458), (216, 27437), (248, 27398), (256, 27362), (280, 27272), (300, 27206), (312, 27176),

Gene: Stellammi_108 Start: 53452, Stop: 53925, Start Num: 140

Candidate Starts for Stellammi_108:

(41, 53239), (43, 53257), (Start: 140 @53452 has 2 MA's), (155, 53491), (193, 53554), (208, 53572), (244, 53632), (272, 53722), (277, 53758), (300, 53836), (323, 53890), (333, 53920),

Gene: Stickynote_47 Start: 43021, Stop: 42431, Start Num: 108

Candidate Starts for Stickynote_47:

(50, 43153), (Start: 53 @43150 has 1 MA's), (Start: 108 @43021 has 6 MA's), (141, 42973), (159, 42934), (171, 42910), (172, 42907), (256, 42763), (277, 42685), (288, 42652), (323, 42544), (353, 42439),

Gene: Stillion_3 Start: 2875, Stop: 3330, Start Num: 149

Candidate Starts for Stillion_3:

(Start: 149 @2875 has 3 MA's), (177, 2935), (197, 2959), (219, 2995), (244, 3034), (248, 3046),

Gene: Stillion_79 Start: 51945, Stop: 52373, Start Num: 144

Candidate Starts for Stillion_79:

(Start: 144 @51945 has 2 MA's), (166, 51987), (196, 52026), (244, 52092), (247, 52101), (248, 52104),

Gene: Stillion_83 Start: 53972, Stop: 54460, Start Num: 135

Candidate Starts for Stillion_83:

(Start: 86 @53909 has 2 MA's), (Start: 135 @53972 has 3 MA's), (152, 54011), (169, 54047), (216, 54125), (218, 54128), (220, 54131), (236, 54149), (248, 54164), (278, 54281), (280, 54290), (304, 54368),

Gene: Sting_3 Start: 2872, Stop: 3252, Start Num: 149

Candidate Starts for Sting_3:

(Start: 149 @2872 has 3 MA's), (197, 2956), (223, 2989), (244, 3016), (248, 3028), (249, 3031), (265, 3079), (277, 3142), (291, 3178), (311, 3232), (314, 3241),

Gene: Stormageddon_82 Start: 77898, Stop: 78485, Start Num: 113

Candidate Starts for Stormageddon_82:

(Start: 113 @77898 has 16 MA's), (Start: 153 @77970 has 3 MA's), (176, 78018), (181, 78024), (213, 78072), (216, 78081), (218, 78084), (224, 78093), (243, 78123), (249, 78141), (256, 78174), (273, 78219), (279, 78261), (298, 78321), (349, 78465),

Gene: Strokeseat_31 Start: 27760, Stop: 28380, Start Num: 66

Candidate Starts for Strokeseat_31:

(42, 27676), (Start: 55 @27733 has 4 MA's), (Start: 66 @27760 has 3 MA's), (Start: 97 @27835 has 6 MA's), (248, 28057), (256, 28093), (303, 28258), (322, 28303),

Gene: StubbySaigey_256 Start: 142752, Stop: 143201, Start Num: 145

Candidate Starts for StubbySaigey_256:

(Start: 145 @142752 has 43 MA's), (Start: 162 @142791 has 1 MA's), (171, 142809), (201, 142842), (220, 142869), (248, 142902), (274, 142989), (282, 143031), (316, 143130),

Gene: Superphikiman_145 Start: 75577, Stop: 76179, Start Num: 110

Candidate Starts for Superphikiman_145:

(Start: 110 @75577 has 17 MA's), (168, 75682), (178, 75703), (180, 75706), (199, 75730), (200, 75733), (204, 75739), (236, 75799), (264, 75868), (268, 75886), (277, 75937), (287, 75973), (320, 76069), (350, 76165),

Gene: TBrady12_114 Start: 62894, Stop: 63394, Start Num: 132

Candidate Starts for TBrady12_114:

(88, 62840), (Start: 132 @62894 has 17 MA's), (Start: 154 @62948 has 1 MA's), (203, 63029), (205, 63032), (217, 63056), (236, 63089), (254, 63146), (301, 63308),

Gene: Tangent_36 Start: 32578, Stop: 32105, Start Num: 143

Candidate Starts for Tangent_36:

(59, 32716), (Start: 85 @32662 has 2 MA's), (90, 32653), (128, 32605), (Start: 143 @32578 has 24 MA's), (197, 32479), (219, 32437), (221, 32434), (244, 32398), (262, 32341), (270, 32308), (279, 32260),

Gene: Target_12 Start: 7244, Stop: 7699, Start Num: 143

Candidate Starts for Target_12:

(Start: 143 @7244 has 24 MA's), (156, 7277), (210, 7364), (246, 7424), (257, 7466), (277, 7544), (279, 7553), (304, 7634), (317, 7673),

Gene: Teardrop_248 Start: 142079, Stop: 142528, Start Num: 145

Candidate Starts for Teardrop_248:

(Start: 145 @142079 has 43 MA's), (Start: 162 @142118 has 1 MA's), (171, 142136), (201, 142169), (220, 142196), (248, 142229), (274, 142316), (282, 142358), (316, 142457),

Gene: Teaspoon_111 Start: 63442, Stop: 63942, Start Num: 132

Candidate Starts for Teaspoon_111:

(88, 63388), (Start: 132 @63442 has 17 MA's), (Start: 154 @63496 has 1 MA's), (203, 63577), (205, 63580), (217, 63604), (236, 63637), (254, 63694), (301, 63856),

Gene: Teaspoon_39 Start: 34016, Stop: 33495, Start Num: 118

Candidate Starts for Teaspoon_39:

(Start: 76 @34082 has 8 MA's), (Start: 118 @34016 has 6 MA's), (Start: 144 @33974 has 2 MA's), (188, 33887), (247, 33809), (248, 33806), (255, 33770),

Gene: TheloniousMonk_12 Start: 7471, Stop: 7926, Start Num: 143

Candidate Starts for TheloniousMonk_12:

(Start: 143 @7471 has 24 MA's), (156, 7504), (210, 7591), (246, 7651), (257, 7693), (277, 7771), (279, 7780), (304, 7861), (317, 7900),

Gene: Thibault_95 Start: 58448, Stop: 58990, Start Num: 116

Candidate Starts for Thibault_95:

(Start: 116 @58448 has 15 MA's), (Start: 130 @58466 has 3 MA's), (198, 58586), (208, 58601), (215, 58619), (240, 58658), (248, 58676), (250, 58682), (269, 58742), (292, 58835), (341, 58976),

Gene: Thibault_132 Start: 76186, Stop: 76788, Start Num: 110

Candidate Starts for Thibault_132:

(Start: 110 @76186 has 17 MA's), (186, 76324), (199, 76336), (219, 76378), (246, 76423), (248, 76429), (259, 76471), (277, 76546), (284, 76576), (350, 76774),

Gene: ThreeRngTarjay_109 Start: 64920, Stop: 65462, Start Num: 116

Candidate Starts for ThreeRngTarjay_109:

(44, 64758), (52, 64782), (Start: 89 @64887 has 1 MA's), (Start: 116 @64920 has 15 MA's), (Start: 130 @64938 has 3 MA's), (157, 64995), (198, 65058), (208, 65073), (215, 65091), (248, 65148), (250, 65154), (269, 65214), (292, 65307),

Gene: ThreeRngTarjay_144 Start: 79812, Stop: 80411, Start Num: 113

Candidate Starts for ThreeRngTarjay_144:

(Start: 113 @79812 has 16 MA's), (168, 79914), (178, 79935), (180, 79938), (219, 80001), (236, 80031), (244, 80040), (253, 80073), (268, 80118), (287, 80205), (308, 80265), (320, 80301), (350, 80397),

Gene: TinyTim_248 Start: 142046, Stop: 142495, Start Num: 145

Candidate Starts for TinyTim_248:

(Start: 145 @142046 has 43 MA's), (Start: 162 @142085 has 1 MA's), (171, 142103), (201, 142136), (220, 142163), (248, 142196), (274, 142283), (282, 142325), (316, 142424),

Gene: Toni_59 Start: 52612, Stop: 52088, Start Num: 112

Candidate Starts for Toni_59:

(73, 52681), (Start: 99 @52627 has 1 MA's), (Start: 112 @52612 has 14 MA's), (Start: 120 @52603 has 7 MA's), (Start: 154 @52537 has 1 MA's), (177, 52492), (195, 52468), (216, 52432), (220, 52426), (244, 52393), (261, 52339), (263, 52336), (294, 52219), (298, 52198), (330, 52123),

Gene: Toto_38 Start: 34063, Stop: 33542, Start Num: 118

Candidate Starts for Toto_38:

(Start: 76 @34129 has 8 MA's), (Start: 118 @34063 has 6 MA's), (Start: 144 @34021 has 2 MA's), (188, 33934), (247, 33856), (248, 33853), (255, 33817),

Gene: Trinitium_246 Start: 140800, Stop: 141249, Start Num: 145

Candidate Starts for Trinitium_246:

(Start: 145 @140800 has 43 MA's), (Start: 162 @140839 has 1 MA's), (171, 140857), (201, 140890), (220, 140917), (248, 140950), (274, 141037), (282, 141079), (316, 141178),

Gene: Tuco_39 Start: 34637, Stop: 34050, Start Num: 76

Candidate Starts for Tuco_39:

(Start: 76 @34637 has 8 MA's), (Start: 118 @34571 has 6 MA's), (Start: 144 @34529 has 2 MA's), (188, 34442), (247, 34364), (248, 34361), (255, 34325),

Gene: Twinkle_57 Start: 42555, Stop: 43061, Start Num: 109

Candidate Starts for Twinkle_57:

(34, 42330), (40, 42360), (Start: 109 @42555 has 7 MA's), (157, 42630), (163, 42642), (187, 42684), (248, 42771), (261, 42810),

Gene: Twister6_58 Start: 42736, Stop: 43260, Start Num: 107

Candidate Starts for Twister6_58:

(Start: 107 @42736 has 4 MA's), (142, 42787), (Start: 151 @42805 has 4 MA's), (196, 42883), (244, 42964), (247, 42973), (283, 43114),

Gene: UBSmoodge_128 Start: 91385, Stop: 91951, Start Num: 86

Candidate Starts for UBSmoodge_128:

(Start: 86 @91385 has 2 MA's), (Start: 151 @91484 has 4 MA's), (160, 91508), (182, 91541), (209, 91571), (214, 91583), (233, 91616), (248, 91637), (249, 91640), (278, 91754), (280, 91763), (322, 91889),

Gene: UPIE_65 Start: 44559, Stop: 45017, Start Num: 136

Candidate Starts for UPIE_65:

(Start: 136 @44559 has 5 MA's), (169, 44631), (228, 44721), (234, 44733), (248, 44754), (267, 44817), (274, 44844),

Gene: Vivi2_38 Start: 33736, Stop: 33263, Start Num: 143

Candidate Starts for Vivi2_38:

(59, 33874), (Start: 85 @33820 has 2 MA's), (90, 33811), (128, 33763), (Start: 143 @33736 has 24 MA's), (197, 33637), (219, 33595), (221, 33592), (244, 33556), (262, 33499), (270, 33466), (279, 33418),

Gene: Wamburgrxpress_65 Start: 44589, Stop: 45047, Start Num: 136

Candidate Starts for Wamburgrxpress_65:

(Start: 136 @44589 has 5 MA's), (169, 44661), (228, 44751), (234, 44763), (248, 44784), (267, 44847), (274, 44874),

Gene: Wanda_148 Start: 77329, Stop: 77928, Start Num: 113

Candidate Starts for Wanda_148:

(Start: 113 @77329 has 16 MA's), (168, 77431), (178, 77452), (180, 77455), (219, 77518), (236, 77548), (244, 77557), (253, 77590), (268, 77635), (287, 77722), (308, 77782), (320, 77818), (350, 77914),

Gene: Wiggin_113 Start: 62887, Stop: 63387, Start Num: 132

Candidate Starts for Wiggin_113:

(Start: 132 @62887 has 17 MA's), (Start: 154 @62941 has 1 MA's), (203, 63022), (205, 63025), (217, 63049), (236, 63082), (254, 63139), (301, 63301),

Gene: WilliamBoone_144 Start: 75606, Stop: 76268, Start Num: 67

Candidate Starts for WilliamBoone_144:

(56, 75582), (Start: 67 @75606 has 1 MA's), (Start: 162 @75792 has 1 MA's), (210, 75861), (216, 75876), (244, 75918), (325, 76194), (348, 76260),

Gene: Xandras_110 Start: 62710, Stop: 63210, Start Num: 132

Candidate Starts for Xandras_110:

(88, 62656), (Start: 132 @62710 has 17 MA's), (Start: 154 @62764 has 1 MA's), (203, 62845), (205, 62848), (217, 62872), (236, 62905), (254, 62962), (301, 63124),

Gene: Xavia_53 Start: 39307, Stop: 39837, Start Num: 110

Candidate Starts for Xavia_53:

(Start: 110 @39307 has 17 MA's), (150, 39364), (Start: 153 @39373 has 3 MA's), (189, 39436), (191, 39439), (215, 39475), (216, 39478), (223, 39487), (225, 39490), (248, 39532), (274, 39619), (322, 39781),

Gene: Xiaokay_158 Start: 87015, Stop: 87527, Start Num: 99

Candidate Starts for Xiaokay_158:

(Start: 99 @87015 has 1 MA's), (Start: 101 @87018 has 4 MA's), (133, 87051), (157, 87102), (174, 87138), (237, 87228), (244, 87237), (248, 87249), (249, 87252), (256, 87285), (269, 87315), (288, 87396), (322, 87489), (332, 87513),

Gene: Xiaokay_103 Start: 61376, Stop: 61900, Start Num: 130

Candidate Starts for Xiaokay_103:

(Start: 116 @61358 has 15 MA's), (Start: 130 @61376 has 3 MA's), (198, 61496), (208, 61511), (215, 61529), (240, 61568), (248, 61586), (250, 61592), (269, 61652), (292, 61745), (341, 61886),

Gene: Yucca_250 Start: 143605, Stop: 144054, Start Num: 145

Candidate Starts for Yucca_250:

(Start: 145 @143605 has 43 MA's), (Start: 162 @143644 has 1 MA's), (171, 143662), (201, 143695), (220, 143722), (248, 143755), (274, 143842), (282, 143884), (316, 143983),

Gene: Zelink_108 Start: 64885, Stop: 65409, Start Num: 130

Candidate Starts for Zelink_108:

(44, 64705), (52, 64729), (Start: 89 @64834 has 1 MA's), (Start: 116 @64867 has 15 MA's), (Start: 130 @64885 has 3 MA's), (157, 64942), (198, 65005), (208, 65020), (215, 65038), (248, 65095), (250, 65101), (269, 65161), (292, 65254),

Gene: Zelink_143 Start: 80141, Stop: 80740, Start Num: 113

Candidate Starts for Zelink_143:

(Start: 113 @80141 has 16 MA's), (168, 80243), (178, 80264), (180, 80267), (219, 80330), (236, 80360), (244, 80369), (253, 80402), (268, 80447), (287, 80534), (308, 80594), (320, 80630), (350, 80726),

Gene: Zucker_50 Start: 32261, Stop: 32884, Start Num: 54

Candidate Starts for Zucker_50:

(8, 31859), (10, 31883), (11, 31901), (31, 32147), (49, 32249), (Start: 54 @32261 has 1 MA's), (87, 32354), (Start: 147 @32432 has 2 MA's), (189, 32501), (244, 32579), (247, 32588), (249, 32594), (250, 32597), (261, 32633), (278, 32708),

Gene: ZygoTaiga_246 Start: 143902, Stop: 144351, Start Num: 145

Candidate Starts for ZygoTaiga_246:

(Start: 145 @143902 has 43 MA's), (Start: 162 @143941 has 1 MA's), (171, 143959), (201, 143992), (220, 144019), (248, 144052), (274, 144139), (282, 144181), (316, 144280),