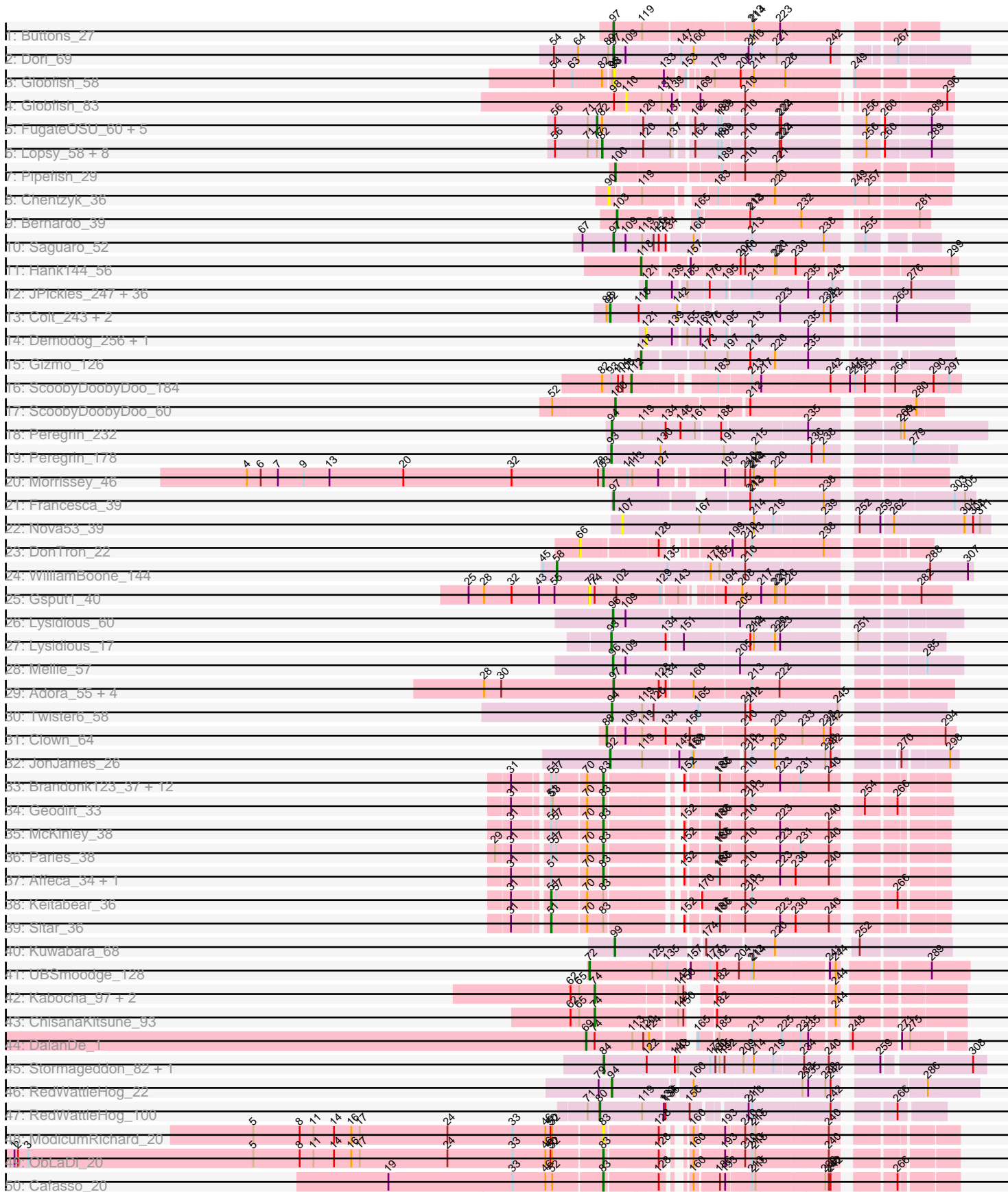
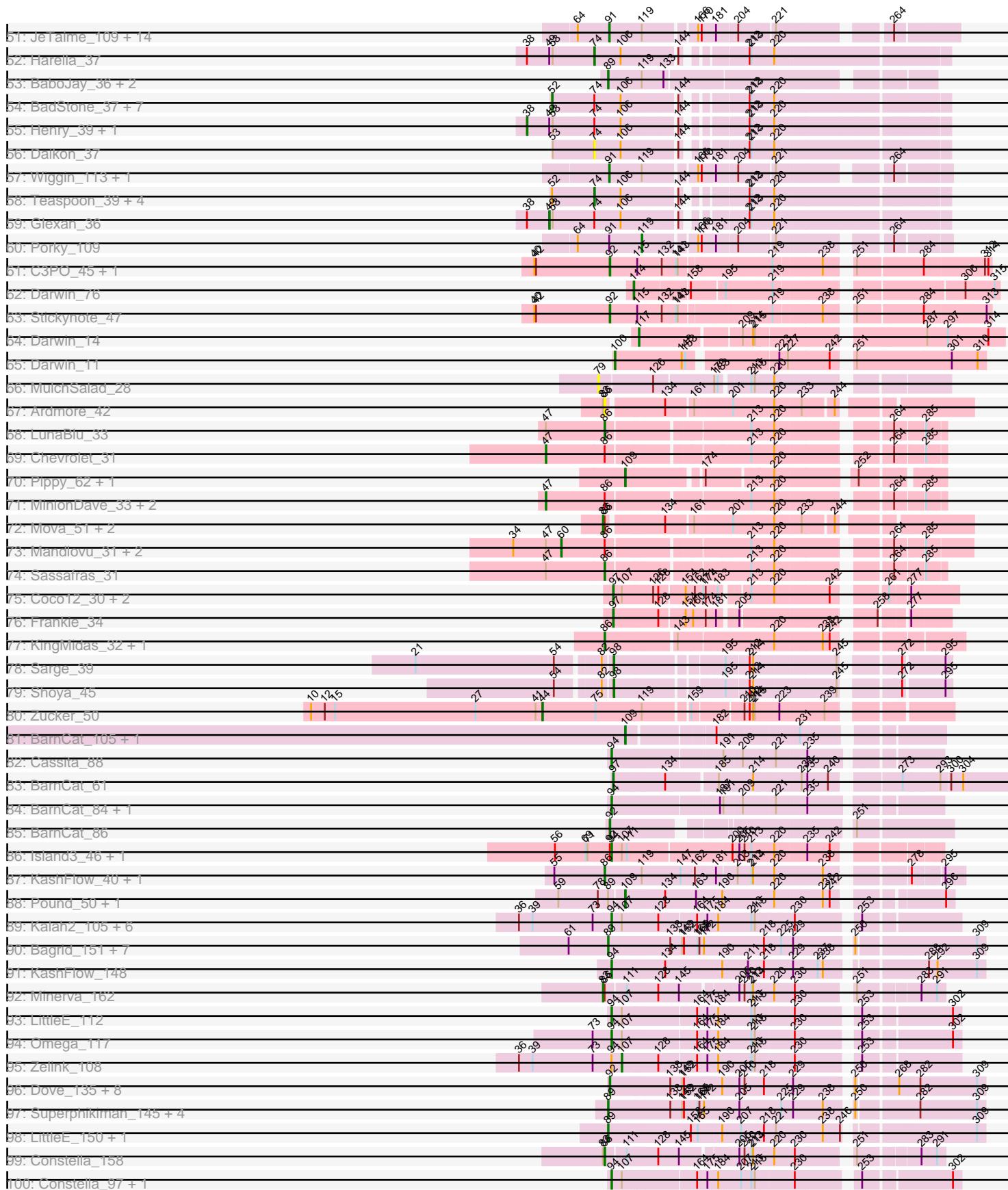


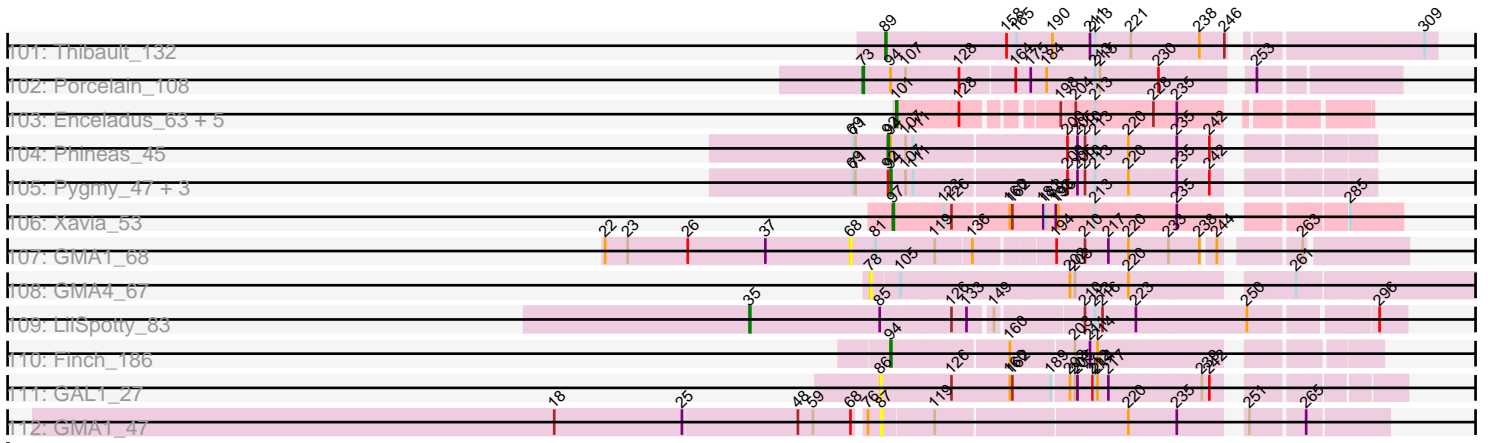
Pham 202636



Pham 202636



Pham 202636



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 202636 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202636 has 264 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Buttons_27
- Track 2 : Dori_69
- Track 3 : Globfish_58
- Track 4 : Globfish_83
- Track 5 : FugateOSU_60, Jesabah_60, Orfeu_58, Placalicious_60, Toni_59, LostAndPhound_60
- Track 6 : Lopsy_58, Buckeye_60, LeiMonet_62, Mesmerelda_61, Coletti_62, KingTut_52, Podrick_58, Adriana_61, Matalotodo_59
- Track 7 : Pipefish_29
- Track 8 : Chentzyk_36
- Track 9 : Bernardo_39
- Track 10 : Saguario_52
- Track 11 : Hank144_56
- Track 12 : JPickles_247, EmToTheThree_250, Basquiat_247, Darko_249, Blackbrain_248, Maby2021_250, Issimir_243, Ablatia_247, Cactojaque_244, TinyTim_248, Ading_252, Shrimp_252, Gizmo_255, SrishMeg2525_247, Chargie21_247, Trinitium_246, ZygoTaiga_246, Yucca_250, Specks_254, Bread_246, Astraea_245, McGee_251, Erdmann_251, Janiyra_253, Bonray_252, ErnieJ_243, Teardrop_248, Salacia_251, FoxtrotP1_248, Morizzled23_247, Lee7_249, StubbySaigey_256, PurduePete_250, FudgeTart_245, Asterius_245, Belieber_242, BananaFence_247
- Track 13 : Colt_243, Blubba_240, Cane17_242
- Track 14 : Demodog_256, Concombre_255
- Track 15 : Gizmo_126
- Track 16 : ScoobyDoobyDoo_184
- Track 17 : ScoobyDoobyDoo_60
- Track 18 : Peregrin_232
- Track 19 : Peregrin_178
- Track 20 : Morrissey_46
- Track 21 : Francesca_39
- Track 22 : Nova53_39
- Track 23 : DonTron_22
- Track 24 : WilliamBoone_144
- Track 25 : Gspu1_40
- Track 26 : Lysidious_60
- Track 27 : Lysidious_17
- Track 28 : Mellie_57

- Track 29 : Adora_55, Shlim410_56, Hortense_58, Howe_58, Twinkle_57
- Track 30 : Twister6_58
- Track 31 : Clown_64
- Track 32 : JonJames_26
- Track 33 : Brandonk123_37, Fosterous_34, Nordenberg_30, Sedona_36, Charming_36, Galadriel_36, BobBob_33, Tangent_36, Vivi2_38, Rofo_36, Angelicage_34, Bibwit_35, Love_39
- Track 34 : Geodirt_33
- Track 35 : McKinley_38
- Track 36 : Paries_38
- Track 37 : Affeca_34, Lennon_36
- Track 38 : Keitabear_36
- Track 39 : Sitar_36
- Track 40 : Kuwabara_68
- Track 41 : UBSmoodge_128
- Track 42 : Kabocha_97, Chidiebere_96, Schomber_94
- Track 43 : ChisanaKitsune_93
- Track 44 : DalanDe_1
- Track 45 : Stormageddon_82, RedWattleHog_85
- Track 46 : RedWattleHog_22
- Track 47 : RedWattleHog_100
- Track 48 : ModicumRichard_20
- Track 49 : ObLaDi_20
- Track 50 : Cafasso_20
- Track 51 : JeTaime_109, Nimrod_111, Kimchi_115, Teaspoon_111, Goku_110, 244_112, BaboJay_110, Stank_113, Icee_112, BigBubba_112, Filch_113, Goldilocks_114, TBrady12_114, Xandras_110, Holt_116
- Track 52 : Harella_37
- Track 53 : BaboJay_36, Eureka_37, Goku_37
- Track 54 : BadStone_37, Myrale_38, ABCat_37, Tuco_39, DrDrey_39, BilboSwaggins_38, ShamWow_38, Dusk_37
- Track 55 : Henry_39, Gator_36
- Track 56 : Daikon_37
- Track 57 : Wiggin_113, Marshmallow_109
- Track 58 : Teaspoon_39, Balomoji_37, Marshmallow_38, Pumpkin_40, Toto_38
- Track 59 : Glexan_36
- Track 60 : Porky_109
- Track 61 : C3PO_45, Cruella_45
- Track 62 : Darwin_76
- Track 63 : Stickynote_47
- Track 64 : Darwin_14
- Track 65 : Darwin_11
- Track 66 : MulchSalad_28
- Track 67 : Ardmore_42
- Track 68 : LunaBlu_33
- Track 69 : Chevrolet_31
- Track 70 : Pippy_62, Maravista_65
- Track 71 : MinionDave_33, Ramsey_33, Galactic_32
- Track 72 : Mova_51, Bobi_53, Mutaforma13_54
- Track 73 : Mandlovu_31, Strokeseat_31, Hlubikazi_31
- Track 74 : Sassafras_31
- Track 75 : Coco12_30, Starcevich_34, JalFarm20_33
- Track 76 : Frankie_34

- Track 77 : KingMidas_32, Leozinho_32
- Track 78 : Sarge_39
- Track 79 : Shoya_45
- Track 80 : Zucker_50
- Track 81 : BarnCat_105, LeeroyJenkins_114
- Track 82 : Cassita_88
- Track 83 : BarnCat_61
- Track 84 : BarnCat_84, LeeroyJenkins_94
- Track 85 : BarnCat_86
- Track 86 : Island3_46, Brujita_46
- Track 87 : KashFlow_40, Hannaconda_43
- Track 88 : Pound_50, Bombitas_45
- Track 89 : Kalah2_105, Phoebus_113, Dallas_113, EricMillard_105, Hughesyang_111, ThreeRngTarjay_109, DmpstrDiver_113
- Track 90 : Bagrid_151, Optimus_141, Duke13_146, EricMillard_142, HokkenD_142, BAKA_150, Gonephishing_141, Klein_147
- Track 91 : KashFlow_148
- Track 92 : Minerva_162
- Track 93 : LittleE_112
- Track 94 : Omega_117
- Track 95 : Zelink_108
- Track 96 : Dove_135, Wanda_148, Zelink_143, Kalah2_140, Minerva_148, Hughesyang_148, Phoebus_149, ThreeRngTarjay_144, Bobby_139
- Track 97 : Superphikiman_145, Ariel_147, Courthouse_143, Beem_151, Hannaconda_141
- Track 98 : LittleE_150, Omega_154
- Track 99 : Constella_158
- Track 100 : Constella_97, Thibault_95
- Track 101 : Thibault_132
- Track 102 : Porcelain_108
- Track 103 : Enceladus_63, UPIE_65, JoeDirt_64, Rose5_65, Poochiewood_65, Wamburgxpress_65
- Track 104 : Phineas_45
- Track 105 : Pygmy_47, Bogie_47, Shipwreck_47, HUHilltop_45
- Track 106 : Xavia_53
- Track 107 : GMA1_68
- Track 108 : GMA4_67
- Track 109 : LilSpotty_83
- Track 110 : Finch_186
- Track 111 : GAL1_27
- Track 112 : GMA1_47

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

The start number called the most often in the published annotations is 121, it was called in 33 of the 236 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_247, Ading_252, Asterius_245, Astraea_245, BananaFence_247, Basquiat_247, Belieber_242, Blackbrain_248, Bonray_252, Bread_246,

Cactojaque_244, Chargie21_247, Concombre_255, Darko_249, Demodog_256, EmToTheThree_250, Erdmann_251, ErnieJ_243, FoxtrotP1_248, FudgeTart_245, Gizmo_255, Issimir_243, JPickles_247, Janiyra_253, Lee7_249, Maby2021_250, McGee_251, Morizzled23_247, PurduePete_250, Salacia_251, Shrimp_252, Specks_254, 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:

-

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

- 244_112, ABCat_37, Adora_55, Adriana_61, Affeca_34, Angelicage_34, Ardmore_42, Ariel_147, BAKA_150, BaboJay_110, BaboJay_36, BadStone_37, Bagrid_151, Balomoji_37, BarnCat_105, BarnCat_61, BarnCat_84, BarnCat_86, Beem_151, Bernardo_39, Bibwit_35, BigBubba_112, BilboSwaggins_38, Blubba_240, BobBob_33, Bobby_139, Bobi_53, Bogie_47, Bombitas_45, Brandonk123_37, Brujita_46, Buckeye_60, Buttons_27, C3PO_45, Cafasso_20, Cane17_242, Cassita_88, Charming_36, Chentzyk_36, Chevrolet_31, Chidiebere_96, ChisanaKitsune_93, Clown_64, Coco12_30, Coletti_62, Colt_243, Constella_158, Constella_97, Courthouse_143, Cruella_45, Daikon_37, DalanDe_1, Dallas_113, Darwin_11, Darwin_14, Darwin_76, DmpstrDiver_113, DonTron_22, Dori_69, Dove_135, DrDrey_39, Duke13_146, Dusk_37, Enceladus_63, EricMillard_105, EricMillard_142, Eureka_37, Filch_113, Finch_186, Fosterous_34, Francesca_39, Frankie_34, FugateOSU_60, GAL1_27, GMA1_47, GMA1_68, GMA4_67, Galactic_32, Galadriel_36, Gator_36, Geodirt_33, Gizmo_126, Glexan_36, Globfish_58, Globfish_83, Goku_110, Goku_37, Goldilocks_114, Gonephishing_141, Gsput1_40, HUHilltop_45, Hank144_56, Hannaconda_141, Hannaconda_43, Harella_37, Henry_39, Hlubikazi_31, HokkenD_142, Holt_116, Hortense_58, Howe_58, Hughesyang_111, Hughesyang_148, Icee_112, Island3_46, JalFarm20_33, JeTaimie_109, Jesabah_60, JoeDirt_64, JonJames_26, Kabocha_97, Kalah2_105, Kalah2_140, KashFlow_148, KashFlow_40, Keitabear_36, Kimchi_115, KingMidas_32, KingTut_52, Klein_147, Kuwabara_68, LeeroyJenkins_114, LeeroyJenkins_94, LeiMonet_62, Lennon_36, Leozinho_32, LilSpotty_83, LittleE_112, LittleE_150, Lopsy_58, LostAndPhound_60, Love_39, LunaBlu_33, Lysidious_17, Lysidious_60, Mandlovu_31, Maravista_65, Marshmallow_109, Marshmallow_38, Matalotodo_59, McKinley_38, Mellie_57, Mesmerelda_61, Minerva_148, Minerva_162, MinionDave_33, ModicumRichard_20, Morrissey_46, Mova_51, MulchSalad_28, Mutaforma13_54, Myrale_38, Nimrod_111, Nordenberg_30, Nova53_39, ObLaDi_20, Omega_117, Omega_154, Optimus_141, Orfeu_58, Paries_38, Peregrin_178, Peregrin_232, Phineas_45, Phoebus_113, Phoebus_149, Pipefish_29, Pippy_62, Placalicious_60, Podrick_58, Poochiewood_65, Porcelain_108, Porky_109, Pound_50, Pumpkin_40, Pygmy_47, Ramsey_33, RedWattleHog_100, RedWattleHog_22, RedWattleHog_85, Rofo_36, Rose5_65, Saguaro_52, Sarge_39, Sassafras_31, Schomber_94, ScoobyDoobyDoo_184, ScoobyDoobyDoo_60, Sedona_36, ShamWow_38, Shipwreck_47, Shlim410_56, Shoya_45, Sitar_36, Stank_113, Starcevich_34, Stickynote_47, Stormageddon_82, Strokeseat_31, Superphikiman_145, TBrady12_114, Tangent_36, Teaspoon_111, Teaspoon_39, Thibault_132, Thibault_95, ThreeRngTarjay_109, ThreeRngTarjay_144, Toni_59, Toto_38, Tuco_39, Twinkle_57, Twister6_58, UBSmoodge_128, UPIE_65, Vivi2_38, Wamburgxpress_65, Wanda_148, Wiggin_113, WilliamBoone_144, Xandras_110, Xavia_53, Zelink_108, Zelink_143, Zucker_50,

Summary by start number:

Start 35:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilSpotty_83 (singleton),

Start 38:

- Found in 4 of 264 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gator_36 (E), Henry_39 (E),

Start 44:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zucker_50 (FN),

Start 47:

- Found in 9 of 264 (3.4%) of genes in pham
- Manual Annotations of this start: 4 of 236
- 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 49:

- Found in 4 of 264 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Glexan_36 (E),

Start 51:

- Found in 20 of 264 (7.6%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Keitabear_36 (DE1), Sitar_36 (DE1),

Start 52:

- Found in 17 of 264 (6.4%) of genes in pham
- Manual Annotations of this start: 7 of 236
- 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 58:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone_144 (CQ1),

Start 60:

- Found in 3 of 264 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hlubikazi_31 (F1), Mandlovu_31 (F1), Strokeseat_31 (F1),

Start 66:

- Found in 1 of 264 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonTron_22 (CP),

Start 68:

- Found in 2 of 264 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: GMA1_68 (singleton),

Start 69:

- Found in 8 of 264 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 12.5% of time when present
- Phage (with cluster) where this start called: DalanDe_1 (DQ),

Start 72:

- Found in 2 of 264 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gsput1_40 (CU2), UBSmoodge_128 (DQ),

Start 73:

- Found in 10 of 264 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Porcelain_108 (J),

Start 74:

- Found in 24 of 264 (9.1%) of genes in pham
- Manual Annotations of this start: 10 of 236
- Called 45.8% of time when present
- Phage (with cluster) where this start called: Balomoji_37 (E), Chidiebere_96 (DQ), ChisanaKitsune_93 (DQ), Daikon_37 (E), Harella_37 (E), Kabocha_97 (DQ), Marshmallow_38 (E), Pumpkin_40 (E), Schomber_94 (DQ), Teaspoon_39 (E), Toto_38 (E),

Start 77:

- Found in 15 of 264 (5.7%) of genes in pham
- Manual Annotations of this start: 5 of 236
- Called 40.0% of time when present
- Phage (with cluster) where this start called: FugateOSU_60 (B1), Jesabah_60 (B1), LostAndPhound_60 (B1), Orfeu_58 (B1), Placalicious_60 (B1), Toni_59 (B1),

Start 78:

- Found in 4 of 264 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: GMA4_67 (singleton),

Start 79:

- Found in 2 of 264 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MulchSalad_28 (F),

Start 80:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_100 (DX),

Start 82:

- Found in 19 of 264 (7.2%) of genes in pham
- Manual Annotations of this start: 6 of 236
- Called 47.4% of time when present
- Phage (with cluster) where this start called: Adriana_61 (B1), Buckeye_60 (B1), Coletti_62 (B1), KingTut_52 (B1), LeiMonet_62 (B1), Lopsy_58 (B1), Matalotodo_59 (B1), Mesmerelda_61 (B1), Podrick_58 (B1),

Start 83:

- Found in 30 of 264 (11.4%) of genes in pham
- Manual Annotations of this start: 25 of 236
- Called 86.7% of time when present
- Phage (with cluster) where this start called: Affeca_34 (DE1), Angelicage_34 (DE1), Bibwit_35 (DE1), BobBob_33 (DE1), Bobi_53 (F1), Brandonk123_37 (DE1), Cafasso_20 (DZ), Charming_36 (DE1), Fosterous_34 (DE1), Galadriel_36 (DE1), Geodirt_33 (DE1), Lennon_36 (DE1), Love_39 (DE1), McKinley_38 (DE1), Minerva_162 (J), ModicumRichard_20 (DZ), Morrissey_46 (CD), Mova_51 (F1), Mutaforma13_54 (F1), Nordenberg_30 (DE1), ObLaDi_20 (DZ), Paries_38 (DE1), Rofo_36 (DE1), Sedona_36 (DE1), Tagent_36 (DE1), Vivi2_38 (DE1),

Start 84:

- Found in 2 of 264 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_85 (DX), Stormageddon_82 (DX),

Start 86:

- Found in 20 of 264 (7.6%) of genes in pham
- Manual Annotations of this start: 7 of 236
- Called 45.0% of time when present
- Phage (with cluster) where this start called: Ardmore_42 (F1), Constella_158 (J), GAL1_27 (singleton), Hannaconda_43 (J), KashFlow_40 (J), KingMidas_32 (F1), Leozinho_32 (F1), LunaBlu_33 (F1), Sassafras_31 (F1),

Start 87:

- Found in 1 of 264 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA1_47 (singleton),

Start 88:

- Found in 4 of 264 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Clown_64 (DC2),

Start 89:

- Found in 22 of 264 (8.3%) of genes in pham
- Manual Annotations of this start: 17 of 236
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Ariel_147 (J), BAKA_150 (J), BaboJay_36 (E), Bagrid_151 (J), Beem_151 (J), Courthouse_143 (J), Duke13_146 (J), EricMillard_142 (J), Eureka_37 (E), Goku_37 (E), Gonephishing_141 (J), Hannaconda_141 (J), HokkenD_142 (J), Klein_147 (J), LittleE_150 (J), Omega_154 (J), Optimus_141 (J), Superphikiman_145 (J), Thibault_132 (J),

Start 90:

- Found in 1 of 264 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chentzyk_36 (B3),

Start 91:

- Found in 18 of 264 (6.8%) of genes in pham
- Manual Annotations of this start: 17 of 236
- 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 92:

- Found in 24 of 264 (9.1%) of genes in pham
- Manual Annotations of this start: 18 of 236
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BarnCat_86 (GB), Blubba_240 (C1), Bobby_139 (J), C3PO_45 (EN), Cane17_242 (C1), Colt_243 (C1), Cruella_45 (EN), Dove_135 (J), Hughesyang_148 (J), JonJames_26 (DD), Kalah2_140 (J), Minerva_148 (J), Phineas_45 (P1), Phoebus_149 (J), Stickynote_47 (EN), ThreeRngTarjay_144 (J), Wanda_148 (J), Zelink_143 (J),

Start 93:

- Found in 3 of 264 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Lysidious_17 (CV), Peregrin_178 (CB),

Start 94:

- Found in 28 of 264 (10.6%) of genes in pham
- Manual Annotations of this start: 25 of 236
- Called 89.3% of time when present
- Phage (with cluster) where this start called: BarnCat_84 (GB), Bogie_47 (P1), Brujita_46 (I1), Cassita_88 (GB), Constella_97 (J), Dallas_113 (J), DmpstrDiver_113 (J), EricMillard_105 (J), Finch_186 (singleton), HUHilltop_45 (P1), Hughesyang_111 (J), Island3_46 (I1), Kalah2_105 (J), KashFlow_148 (J), LeeroyJenkins_94 (GB), LittleE_112 (J), Omega_117 (J), Peregrin_232 (CB), Phoebus_113 (J), Pygmy_47 (P1), RedWattleHog_22 (DX), Shipwreck_47 (P1), Thibault_95 (J), ThreeRngTarjay_109 (J), Twister6_58 (DC1),

Start 96:

- Found in 2 of 264 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lysidious_60 (CV), Mellie_57 (CV),

Start 97:

- Found in 15 of 264 (5.7%) of genes in pham
- Manual Annotations of this start: 15 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora_55 (CZ4), BarnCat_61 (GB), Buttons_27 (A1), Coco12_30 (F1), Dori_69 (AD), Francesca_39 (CG), Frankie_34 (F1), Hortense_58 (CZ4), Howe_58 (CZ4), JalFarm20_33 (F1), Saguaro_52 (B7), Shlim410_56 (CZ4), Starcevich_34 (F1), Twinkle_57 (CZ4), Xavia_53 (P3),

Start 98:

- Found in 4 of 264 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Globfish_58 (AY), Sarge_39 (FB), Shoya_45 (FB),

Start 99:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara_68 (DN4),

Start 100:

- Found in 3 of 264 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_11 (EN), Pipefish_29 (B3), ScoobyDoobyDoo_60 (C2),

Start 101:

- Found in 6 of 264 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 236
- 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 103:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bernardo_39 (B3),

Start 107:

- Found in 24 of 264 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Nova53_39 (CG), Zelink_108 (J),

Start 109:

- Found in 11 of 264 (4.2%) of genes in pham
- Manual Annotations of this start: 6 of 236
- Called 54.5% of time when present
- Phage (with cluster) where this start called: BarnCat_105 (GB), Bombitas_45 (J), LeeroyJenkins_114 (GB), Maravista_65 (F1), Pippy_62 (F1), Pound_50 (J),

Start 110:

- Found in 1 of 264 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Globfish_83 (AY),

Start 112:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo_184 (C2),

Start 114:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_76 (EN),

Start 117:

- Found in 1 of 264 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_14 (EN),

Start 118:

- Found in 2 of 264 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gizmo_126 (C1), Hank144_56 (BD2),

Start 119:

- Found in 34 of 264 (12.9%) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 2.9% of time when present
- Phage (with cluster) where this start called: Porky_109 (E),

Start 121:

- Found in 39 of 264 (14.8%) of genes in pham
- Manual Annotations of this start: 33 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia_247 (C1), Ading_252 (C1), Asterius_245 (C1), Astraea_245 (C1), BananaFence_247 (C1), Basquiat_247 (C1), Belieber_242 (C1), Blackbrain_248 (C1), Bonray_252 (C1), Bread_246 (C1), Cactojaque_244 (C1), Chargie21_247 (C1), Concombre_255 (C1), Darko_249 (C1), Demodog_256 (C1), EmToTheThree_250 (C1), Erdmann_251 (C1), ErnieJ_243 (C1), FoxtrotP1_248 (C1), FudgeTart_245 (C1), Gizmo_255 (C1), Issimir_243 (C1), JPickles_247 (C1), Janiyra_253 (C1), Lee7_249 (C1), Maby2021_250 (C1), McGee_251 (C1), Morizzled23_247 (C1), PurduePete_250 (C1), Salacia_251 (C1), Shrimp_252 (C1), Specks_254 (C1), SrishMeg2525_247 (C1), StubbySaigey_256 (C1), Teardrop_248 (C1), TinyTim_248 (C1), Trinitium_246 (C1), Yucca_250 (C1), ZygoTaiga_246 (C1),

Summary by clusters:

There are 38 clusters represented in this pham: singleton, DD, CZ4, FB, EN, DZ, DX, FN, DQ, CU2, I1, A1, DN4, BD2, C2, CQ1, P3, P1, E, AD, F, CB, J, CG, CD, GB, L1, AY, CP, DC2, CV, DC1, F1, DE1, B7, B1, B3, C1,

Info for manual annotations of cluster A1:

- Start number 97 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster AD:

- Start number 97 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster B1:

- Start number 77 was manually annotated 5 times for cluster B1.
- Start number 82 was manually annotated 6 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 100 was manually annotated 1 time for cluster B3.
- Start number 103 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B7:

- Start number 97 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster BD2:

- Start number 118 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster C1:

- Start number 92 was manually annotated 3 times for cluster C1.
- Start number 118 was manually annotated 1 time for cluster C1.
- Start number 121 was manually annotated 33 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 100 was manually annotated 1 time for cluster C2.
- Start number 112 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CB:

- Start number 93 was manually annotated 1 time for cluster CB.
- Start number 94 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CD:

- Start number 83 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CG:

- Start number 97 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster CQ1:

- Start number 58 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 93 was manually annotated 1 time for cluster CV.
- Start number 96 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CZ4:

- Start number 97 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster DC1:

- Start number 94 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 88 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DD:

- Start number 92 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 51 was manually annotated 2 times for cluster DE1.
- Start number 83 was manually annotated 18 times for cluster DE1.

Info for manual annotations of cluster DN4:

- Start number 99 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DQ:

- Start number 69 was manually annotated 1 time for cluster DQ.
- Start number 72 was manually annotated 1 time for cluster DQ.
- Start number 74 was manually annotated 4 times for cluster DQ.

Info for manual annotations of cluster DX:

- Start number 80 was manually annotated 1 time for cluster DX.
- Start number 84 was manually annotated 2 times for cluster DX.
- Start number 94 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster DZ:

- Start number 83 was manually annotated 2 times for cluster DZ.

Info for manual annotations of cluster E:

- Start number 38 was manually annotated 2 times for cluster E.
- Start number 49 was manually annotated 1 time for cluster E.
- Start number 52 was manually annotated 7 times for cluster E.
- Start number 74 was manually annotated 6 times for cluster E.
- Start number 89 was manually annotated 3 times for cluster E.
- Start number 91 was manually annotated 17 times for cluster E.
- Start number 119 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster EN:

- Start number 92 was manually annotated 3 times for cluster EN.
- Start number 100 was manually annotated 1 time for cluster EN.
- Start number 114 was manually annotated 1 time for cluster EN.
- Start number 117 was manually annotated 1 time for cluster EN.

Info for manual annotations of cluster F1:

- Start number 47 was manually annotated 4 times for cluster F1.
- Start number 60 was manually annotated 3 times for cluster F1.
- Start number 83 was manually annotated 3 times for cluster F1.
- Start number 86 was manually annotated 4 times for cluster F1.
- Start number 97 was manually annotated 4 times for cluster F1.
- Start number 109 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FB:

- Start number 98 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 44 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster GB:

- Start number 92 was manually annotated 1 time for cluster GB.
- Start number 94 was manually annotated 3 times for cluster GB.
- Start number 97 was manually annotated 1 time for cluster GB.
- Start number 109 was manually annotated 2 times for cluster GB.

Info for manual annotations of cluster I1:

- Start number 94 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster J:

- Start number 73 was manually annotated 1 time for cluster J.
- Start number 83 was manually annotated 1 time for cluster J.
- Start number 86 was manually annotated 3 times for cluster J.
- Start number 89 was manually annotated 14 times for cluster J.
- Start number 92 was manually annotated 9 times for cluster J.
- Start number 94 was manually annotated 12 times for cluster J.
- Start number 107 was manually annotated 1 time for cluster J.
- Start number 109 was manually annotated 2 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 101 was manually annotated 5 times for cluster L1.

Info for manual annotations of cluster P1:

- Start number 92 was manually annotated 1 time for cluster P1.
- Start number 94 was manually annotated 4 times for cluster P1.

Info for manual annotations of cluster P3:

- Start number 97 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: 244_112 Start: 62827, Stop: 63327, Start Num: 91

Candidate Starts for 244_112:

(64, 62773), (Start: 91 @62827 has 17 MA's), (Start: 119 @62881 has 1 MA's), (166, 62962), (170, 62965), (181, 62989), (204, 63022), (221, 63079), (264, 63241),

Gene: ABCat_37 Start: 34121, Stop: 33534, Start Num: 52

Candidate Starts for ABCat_37:

(Start: 52 @34121 has 7 MA's), (Start: 74 @34055 has 10 MA's), (106, 34013), (144, 33926), (212, 33848), (213, 33845), (220, 33809),

Gene: Ablatia_247 Start: 141923, Stop: 142372, Start Num: 121

Candidate Starts for Ablatia_247:

(Start: 121 @141923 has 33 MA's), (139, 141962), (155, 141980), (176, 142013), (195, 142040), (213, 142073), (235, 142160), (243, 142202), (276, 142301),

Gene: Ading_252 Start: 144356, Stop: 144805, Start Num: 121

Candidate Starts for Ading_252:

(Start: 121 @144356 has 33 MA's), (139, 144395), (155, 144413), (176, 144446), (195, 144473), (213, 144506), (235, 144593), (243, 144635), (276, 144734),

Gene: Adora_55 Start: 40141, Stop: 40647, Start Num: 97

Candidate Starts for Adora_55:

(28, 39916), (30, 39946), (Start: 97 @40141 has 15 MA's), (128, 40216), (134, 40228), (160, 40270), (213, 40357), (222, 40396),

Gene: Adriana_61 Start: 53245, Stop: 52730, Start Num: 82

Candidate Starts for Adriana_61:

(56, 53323), (71, 53269), (Start: 77 @53254 has 5 MA's), (Start: 82 @53245 has 6 MA's), (120, 53179), (137, 53134), (162, 53110), (183, 53074), (189, 53068), (210, 53035), (222, 52981), (224, 52978), (256, 52861), (260, 52840), (289, 52765),

Gene: Affeca_34 Start: 32900, Stop: 32427, Start Num: 83

Candidate Starts for Affeca_34:

(31, 33038), (Start: 51 @32984 has 2 MA's), (70, 32927), (Start: 83 @32900 has 25 MA's), (152, 32801), (183, 32759), (186, 32756), (210, 32720), (223, 32663), (230, 32639), (240, 32582),

Gene: Angelicage_34 Start: 33318, Stop: 32845, Start Num: 83

Candidate Starts for Angelicage_34:

(31, 33456), (Start: 51 @33402 has 2 MA's), (57, 33393), (70, 33345), (Start: 83 @33318 has 25 MA's), (152, 33219), (183, 33177), (186, 33174), (210, 33138), (223, 33081), (231, 33048), (240, 33000),

Gene: Ardmore_42 Start: 34484, Stop: 35032, Start Num: 86

Candidate Starts for Ardmore_42:

(Start: 83 @34481 has 25 MA's), (Start: 86 @34484 has 7 MA's), (134, 34574), (161, 34616), (201, 34676), (220, 34742), (233, 34784), (244, 34832),

Gene: Ariel_147 Start: 75437, Stop: 76039, Start Num: 89

Candidate Starts for Ariel_147:

(Start: 89 @75437 has 17 MA's), (138, 75542), (149, 75563), (152, 75566), (165, 75590), (168, 75593), (172, 75599), (205, 75659), (225, 75728), (229, 75746), (238, 75797), (250, 75833), (282, 75929), (309, 76025),

Gene: Asterius_245 Start: 142368, Stop: 142817, Start Num: 121

Candidate Starts for Asterius_245:

(Start: 121 @142368 has 33 MA's), (139, 142407), (155, 142425), (176, 142458), (195, 142485), (213, 142518), (235, 142605), (243, 142647), (276, 142746),

Gene: Astraea_245 Start: 141563, Stop: 142012, Start Num: 121

Candidate Starts for Astraea_245:

(Start: 121 @141563 has 33 MA's), (139, 141602), (155, 141620), (176, 141653), (195, 141680), (213, 141713), (235, 141800), (243, 141842), (276, 141941),

Gene: BAKA_150 Start: 78761, Stop: 79363, Start Num: 89

Candidate Starts for BAKA_150:

(61, 78692), (Start: 89 @78761 has 17 MA's), (138, 78866), (149, 78887), (152, 78890), (165, 78914), (168, 78917), (172, 78923), (218, 79025), (225, 79052), (229, 79070), (250, 79157), (309, 79349),

Gene: BaboJay_36 Start: 33175, Stop: 32675, Start Num: 89

Candidate Starts for BaboJay_36:

(Start: 89 @33175 has 17 MA's), (Start: 119 @33118 has 1 MA's), (133, 33082),

Gene: BaboJay_110 Start: 64000, Stop: 64500, Start Num: 91

Candidate Starts for BaboJay_110:

(64, 63946), (Start: 91 @64000 has 17 MA's), (Start: 119 @64054 has 1 MA's), (166, 64135), (170, 64138), (181, 64162), (204, 64195), (221, 64252), (264, 64414),

Gene: BadStone_37 Start: 34121, Stop: 33534, Start Num: 52

Candidate Starts for BadStone_37:

(Start: 52 @34121 has 7 MA's), (Start: 74 @34055 has 10 MA's), (106, 34013), (144, 33926), (212, 33848), (213, 33845), (220, 33809),

Gene: Bagrid_151 Start: 79456, Stop: 80058, Start Num: 89

Candidate Starts for Bagrid_151:

(61, 79387), (Start: 89 @79456 has 17 MA's), (138, 79561), (149, 79582), (152, 79585), (165, 79609), (168, 79612), (172, 79618), (218, 79720), (225, 79747), (229, 79765), (250, 79852), (309, 80044),

Gene: Balomoji_37 Start: 33789, Stop: 33268, Start Num: 74

Candidate Starts for Balomoji_37:

(Start: 52 @33855 has 7 MA's), (Start: 74 @33789 has 10 MA's), (106, 33747), (144, 33660), (212, 33582), (213, 33579), (220, 33543),

Gene: BananaFence_247 Start: 142192, Stop: 142641, Start Num: 121

Candidate Starts for BananaFence_247:

(Start: 121 @142192 has 33 MA's), (139, 142231), (155, 142249), (176, 142282), (195, 142309), (213, 142342), (235, 142429), (243, 142471), (276, 142570),

Gene: BarnCat_105 Start: 54966, Stop: 54505, Start Num: 109

Candidate Starts for BarnCat_105:

(Start: 109 @54966 has 6 MA's), (182, 54837), (231, 54714),

Gene: BarnCat_61 Start: 35513, Stop: 34857, Start Num: 97

Candidate Starts for BarnCat_61:

(Start: 97 @35513 has 15 MA's), (134, 35426), (185, 35345), (214, 35288), (233, 35210), (235, 35201), (240, 35165), (273, 35069), (293, 35006), (300, 34991), (304, 34970),

Gene: BarnCat_84 Start: 47542, Stop: 47033, Start Num: 94

Candidate Starts for BarnCat_84:

(Start: 94 @47542 has 25 MA's), (187, 47371), (191, 47365), (209, 47335), (221, 47281), (235, 47233),

Gene: BarnCat_86 Start: 49536, Stop: 49024, Start Num: 92

Candidate Starts for BarnCat_86:

(Start: 92 @49536 has 18 MA's), (251, 49179),

Gene: Basquiat_247 Start: 140478, Stop: 140927, Start Num: 121

Candidate Starts for Basquiat_247:

(Start: 121 @140478 has 33 MA's), (139, 140517), (155, 140535), (176, 140568), (195, 140595), (213, 140628), (235, 140715), (243, 140757), (276, 140856),

Gene: Beem_151 Start: 80198, Stop: 80800, Start Num: 89

Candidate Starts for Beem_151:

(Start: 89 @80198 has 17 MA's), (138, 80303), (149, 80324), (152, 80327), (165, 80351), (168, 80354), (172, 80360), (205, 80420), (225, 80489), (229, 80507), (238, 80558), (250, 80594), (282, 80690), (309, 80786),

Gene: Belieber_242 Start: 140605, Stop: 141054, Start Num: 121

Candidate Starts for Belieber_242:

(Start: 121 @140605 has 33 MA's), (139, 140644), (155, 140662), (176, 140695), (195, 140722), (213, 140755), (235, 140842), (243, 140884), (276, 140983),

Gene: Bernardo_39 Start: 36994, Stop: 37440, Start Num: 103

Candidate Starts for Bernardo_39:

(Start: 103 @36994 has 1 MA's), (165, 37090), (212, 37174), (213, 37177), (232, 37255), (281, 37423),

Gene: Bibwit_35 Start: 32719, Stop: 32246, Start Num: 83

Candidate Starts for Bibwit_35:

(31, 32857), (Start: 51 @32803 has 2 MA's), (57, 32794), (70, 32746), (Start: 83 @32719 has 25 MA's), (152, 32620), (183, 32578), (186, 32575), (210, 32539), (223, 32482), (231, 32449), (240, 32401),

Gene: BigBubba_112 Start: 62473, Stop: 62973, Start Num: 91

Candidate Starts for BigBubba_112:

(64, 62419), (Start: 91 @62473 has 17 MA's), (Start: 119 @62527 has 1 MA's), (166, 62608), (170, 62611), (181, 62635), (204, 62668), (221, 62725), (264, 62887),

Gene: BilboSwaggins_38 Start: 34129, Stop: 33542, Start Num: 52

Candidate Starts for BilboSwaggins_38:

(Start: 52 @34129 has 7 MA's), (Start: 74 @34063 has 10 MA's), (106, 34021), (144, 33934), (212, 33856), (213, 33853), (220, 33817),

Gene: Blackbrain_248 Start: 142255, Stop: 142704, Start Num: 121

Candidate Starts for Blackbrain_248:

(Start: 121 @142255 has 33 MA's), (139, 142294), (155, 142312), (176, 142345), (195, 142372), (213, 142405), (235, 142492), (243, 142534), (276, 142633),

Gene: Blubba_240 Start: 148292, Stop: 148846, Start Num: 92

Candidate Starts for Blubba_240:

(Start: 88 @148286 has 1 MA's), (Start: 92 @148292 has 18 MA's), (116, 148340), (142, 148403), (223, 148559), (238, 148631), (242, 148643), (265, 148721),

Gene: BobBob_33 Start: 31999, Stop: 31526, Start Num: 83

Candidate Starts for BobBob_33:

(31, 32137), (Start: 51 @32083 has 2 MA's), (57, 32074), (70, 32026), (Start: 83 @31999 has 25 MA's), (152, 31900), (183, 31858), (186, 31855), (210, 31819), (223, 31762), (231, 31729), (240, 31681),

Gene: Bobby_139 Start: 80254, Stop: 80853, Start Num: 92

Candidate Starts for Bobby_139:

(Start: 92 @80254 has 18 MA's), (138, 80356), (149, 80377), (152, 80380), (190, 80443), (205, 80473), (210, 80482), (218, 80515), (229, 80560), (250, 80647), (268, 80707), (282, 80743), (309, 80839),

Gene: Bobi_53 Start: 37484, Stop: 38035, Start Num: 83

Candidate Starts for Bobi_53:

(Start: 83 @37484 has 25 MA's), (Start: 86 @37487 has 7 MA's), (134, 37577), (161, 37619), (201, 37679), (220, 37745), (233, 37787), (244, 37835),

Gene: Bogie_47 Start: 33238, Stop: 33729, Start Num: 94

Candidate Starts for Bogie_47:

(Start: 69 @33199 has 1 MA's), (71, 33202), (Start: 92 @33235 has 18 MA's), (Start: 94 @33238 has 25 MA's), (Start: 107 @33256 has 1 MA's), (111, 33265), (200, 33430), (205, 33439), (210, 33445), (213, 33457), (220, 33493), (235, 33544), (242, 33583),

Gene: Bombitas_45 Start: 41655, Stop: 42164, Start Num: 109

Candidate Starts for Bombitas_45:

(59, 41544), (78, 41613), (Start: 89 @41631 has 17 MA's), (Start: 109 @41655 has 6 MA's), (134, 41721), (163, 41775), (190, 41820), (220, 41907), (238, 41985), (242, 41997), (296, 42150),

Gene: Bonray_252 Start: 144055, Stop: 144504, Start Num: 121

Candidate Starts for Bonray_252:

(Start: 121 @144055 has 33 MA's), (139, 144094), (155, 144112), (176, 144145), (195, 144172), (213, 144205), (235, 144292), (243, 144334), (276, 144433),

Gene: Brandonk123_37 Start: 33065, Stop: 32592, Start Num: 83

Candidate Starts for Brandonk123_37:

(31, 33203), (Start: 51 @33149 has 2 MA's), (57, 33140), (70, 33092), (Start: 83 @33065 has 25 MA's), (152, 32966), (183, 32924), (186, 32921), (210, 32885), (223, 32828), (231, 32795), (240, 32747),

Gene: Bread_246 Start: 142022, Stop: 142471, Start Num: 121

Candidate Starts for Bread_246:

(Start: 121 @142022 has 33 MA's), (139, 142061), (155, 142079), (176, 142112), (195, 142139), (213, 142172), (235, 142259), (243, 142301), (276, 142400),

Gene: Brujita_46 Start: 33137, Stop: 33628, Start Num: 94

Candidate Starts for Brujita_46:

(56, 33044), (Start: 69 @33098 has 1 MA's), (71, 33101), (Start: 92 @33134 has 18 MA's), (Start: 94 @33137 has 25 MA's), (Start: 107 @33155 has 1 MA's), (111, 33164), (200, 33329), (205, 33338), (210, 33344), (213, 33356), (220, 33392), (235, 33443), (242, 33482),

Gene: Buckeye_60 Start: 52975, Stop: 52460, Start Num: 82

Candidate Starts for Buckeye_60:

(56, 53053), (71, 52999), (Start: 77 @52984 has 5 MA's), (Start: 82 @52975 has 6 MA's), (120, 52909), (137, 52864), (162, 52840), (183, 52804), (189, 52798), (210, 52765), (222, 52711), (224, 52708), (256, 52591), (260, 52570), (289, 52495),

Gene: Buttons_27 Start: 21411, Stop: 21896, Start Num: 97

Candidate Starts for Buttons_27:

(Start: 97 @21411 has 15 MA's), (Start: 119 @21459 has 1 MA's), (213, 21630), (214, 21633), (223, 21672),

Gene: C3PO_45 Start: 42754, Stop: 42164, Start Num: 92

Candidate Starts for C3PO_45:

(40, 42886), (42, 42883), (Start: 92 @42754 has 18 MA's), (115, 42706), (132, 42667), (141, 42643), (143, 42640), (219, 42496), (238, 42418), (251, 42385), (284, 42277), (312, 42175), (314, 42169),

Gene: Cactojaque_244 Start: 141201, Stop: 141650, Start Num: 121

Candidate Starts for Cactojaque_244:

(Start: 121 @141201 has 33 MA's), (139, 141240), (155, 141258), (176, 141291), (195, 141318), (213, 141351), (235, 141438), (243, 141480), (276, 141579),

Gene: Cafasso_20 Start: 18713, Stop: 18225, Start Num: 83

Candidate Starts for Cafasso_20:

(19, 19079), (33, 18863), (46, 18806), (Start: 52 @18794 has 7 MA's), (Start: 83 @18713 has 25 MA's), (128, 18629), (160, 18605), (186, 18569), (193, 18560), (213, 18521), (215, 18515), (239, 18401), (240, 18395), (242, 18392), (266, 18314),

Gene: Cane17_242 Start: 148701, Stop: 149255, Start Num: 92

Candidate Starts for Cane17_242:

(Start: 88 @148695 has 1 MA's), (Start: 92 @148701 has 18 MA's), (116, 148749), (142, 148812), (223, 148968), (238, 149040), (242, 149052), (265, 149130),

Gene: Cassita_88 Start: 48685, Stop: 48176, Start Num: 94

Candidate Starts for Cassita_88:

(Start: 94 @48685 has 25 MA's), (191, 48508), (209, 48478), (221, 48424), (235, 48376),

Gene: Chargie21_247 Start: 140478, Stop: 140927, Start Num: 121

Candidate Starts for Chargie21_247:

(Start: 121 @140478 has 33 MA's), (139, 140517), (155, 140535), (176, 140568), (195, 140595), (213, 140628), (235, 140715), (243, 140757), (276, 140856),

Gene: Charming_36 Start: 32566, Stop: 32093, Start Num: 83

Candidate Starts for Charming_36:

(31, 32704), (Start: 51 @32650 has 2 MA's), (57, 32641), (70, 32593), (Start: 83 @32566 has 25 MA's), (152, 32467), (183, 32425), (186, 32422), (210, 32386), (223, 32329), (231, 32296), (240, 32248),

Gene: Chentzyk_36 Start: 34824, Stop: 35315, Start Num: 90
Candidate Starts for Chentzyk_36:
(90, 34824), (Start: 119 @34869 has 1 MA's), (183, 34959), (220, 35046), (249, 35178), (257, 35202),

Gene: Chevrolet_31 Start: 27455, Stop: 28054, Start Num: 47
Candidate Starts for Chevrolet_31:
(Start: 47 @27455 has 4 MA's), (Start: 86 @27557 has 7 MA's), (213, 27779), (220, 27815), (264, 27980), (285, 28025),

Gene: Chidiebere_96 Start: 69963, Stop: 70481, Start Num: 74
Candidate Starts for Chidiebere_96:
(62, 69921), (65, 69936), (Start: 74 @69963 has 10 MA's), (143, 70086), (150, 70095), (182, 70119), (244, 70299),

Gene: ChisanaKitsune_93 Start: 68907, Stop: 69425, Start Num: 74
Candidate Starts for ChisanaKitsune_93:
(62, 68865), (65, 68880), (Start: 74 @68907 has 10 MA's), (143, 69030), (150, 69039), (182, 69063), (244, 69243),

Gene: Clown_64 Start: 45007, Stop: 45525, Start Num: 88
Candidate Starts for Clown_64:
(Start: 88 @45007 has 1 MA's), (Start: 109 @45031 has 6 MA's), (Start: 119 @45058 has 1 MA's), (134, 45097), (156, 45136), (210, 45214), (220, 45262), (233, 45304), (238, 45340), (242, 45352), (294, 45511),

Gene: Coco12_30 Start: 26826, Stop: 26320, Start Num: 97
Candidate Starts for Coco12_30:
(Start: 97 @26826 has 15 MA's), (Start: 107 @26811 has 1 MA's), (126, 26760), (128, 26751), (154, 26709), (162, 26694), (171, 26682), (174, 26679), (183, 26658), (213, 26619), (220, 26583), (242, 26493), (261, 26427), (277, 26397),

Gene: Coletti_62 Start: 53240, Stop: 52725, Start Num: 82
Candidate Starts for Coletti_62:
(56, 53318), (71, 53264), (Start: 77 @53249 has 5 MA's), (Start: 82 @53240 has 6 MA's), (120, 53174), (137, 53129), (162, 53105), (183, 53069), (189, 53063), (210, 53030), (222, 52976), (224, 52973), (256, 52856), (260, 52835), (289, 52760),

Gene: Colt_243 Start: 147893, Stop: 148447, Start Num: 92
Candidate Starts for Colt_243:
(Start: 88 @147887 has 1 MA's), (Start: 92 @147893 has 18 MA's), (116, 147941), (142, 148004), (223, 148160), (238, 148232), (242, 148244), (265, 148322),

Gene: Concombres_255 Start: 144217, Stop: 144666, Start Num: 121
Candidate Starts for Concombres_255:
(Start: 121 @144217 has 33 MA's), (139, 144256), (155, 144274), (169, 144295), (176, 144307), (195, 144334), (213, 144367), (235, 144454),

Gene: Constella_158 Start: 86054, Stop: 86563, Start Num: 86
Candidate Starts for Constella_158:
(Start: 83 @86051 has 25 MA's), (Start: 86 @86054 has 7 MA's), (111, 86087), (128, 86138), (145, 86174), (205, 86264), (210, 86273), (213, 86285), (214, 86288), (220, 86321), (230, 86351), (251, 86432), (283, 86525), (291, 86549),

Gene: Constella_97 Start: 58172, Stop: 58714, Start Num: 94

Candidate Starts for Constella_97:

(Start: 94 @58172 has 25 MA's), (Start: 107 @58190 has 1 MA's), (164, 58310), (175, 58325), (184, 58343), (207, 58382), (213, 58400), (215, 58406), (230, 58466), (253, 58559), (302, 58700),

Gene: Courthouse_143 Start: 75295, Stop: 75897, Start Num: 89

Candidate Starts for Courthouse_143:

(Start: 89 @75295 has 17 MA's), (138, 75400), (149, 75421), (152, 75424), (165, 75448), (168, 75451), (172, 75457), (205, 75517), (225, 75586), (229, 75604), (238, 75655), (250, 75691), (282, 75787), (309, 75883),

Gene: Cruella_45 Start: 42754, Stop: 42164, Start Num: 92

Candidate Starts for Cruella_45:

(40, 42886), (42, 42883), (Start: 92 @42754 has 18 MA's), (115, 42706), (132, 42667), (141, 42643), (143, 42640), (219, 42496), (238, 42418), (251, 42385), (284, 42277), (312, 42175), (314, 42169),

Gene: Daikon_37 Start: 33801, Stop: 33280, Start Num: 74

Candidate Starts for Daikon_37:

(53, 33867), (Start: 74 @33801 has 10 MA's), (106, 33759), (144, 33672), (212, 33594), (213, 33591), (220, 33555),

Gene: DalanDe_1 Start: 1, Stop: 522, Start Num: 69

Candidate Starts for DalanDe_1:

(Start: 69 @1 has 1 MA's), (Start: 74 @16 has 10 MA's), (113, 76), (120, 94), (124, 100), (165, 154), (185, 175), (213, 226), (225, 271), (231, 301), (235, 313), (248, 364), (271, 430), (275, 442),

Gene: Dallas_113 Start: 64402, Stop: 64944, Start Num: 94

Candidate Starts for Dallas_113:

(36, 64240), (39, 64264), (Start: 73 @64369 has 1 MA's), (Start: 94 @64402 has 25 MA's), (Start: 107 @64420 has 1 MA's), (128, 64477), (164, 64540), (175, 64555), (184, 64573), (213, 64630), (215, 64636), (230, 64696), (253, 64789),

Gene: Darko_249 Start: 142196, Stop: 142645, Start Num: 121

Candidate Starts for Darko_249:

(Start: 121 @142196 has 33 MA's), (139, 142235), (155, 142253), (176, 142286), (195, 142313), (213, 142346), (235, 142433), (243, 142475), (276, 142574),

Gene: Darwin_76 Start: 54919, Stop: 54362, Start Num: 114

Candidate Starts for Darwin_76:

(Start: 114 @54919 has 1 MA's), (158, 54829), (195, 54778), (219, 54700), (306, 54418), (315, 54370),

Gene: Darwin_14 Start: 7286, Stop: 7858, Start Num: 117

Candidate Starts for Darwin_14:

(Start: 117 @7286 has 1 MA's), (209, 7448), (214, 7466), (215, 7469), (287, 7727), (297, 7763), (314, 7832),

Gene: Darwin_11 Start: 6015, Stop: 6593, Start Num: 100

Candidate Starts for Darwin_11:

(Start: 100 @6015 has 3 MA's), (148, 6126), (153, 6132), (223, 6267), (227, 6282), (242, 6351), (251, 6372), (301, 6534), (310, 6579),

Gene: Demodog_256 Start: 144227, Stop: 144676, Start Num: 121

Candidate Starts for Demodog_256:

(Start: 121 @144227 has 33 MA's), (139, 144266), (155, 144284), (169, 144305), (176, 144317), (195, 144344), (213, 144377), (235, 144464),

Gene: DmpstrDiver_113 Start: 63822, Stop: 64364, Start Num: 94

Candidate Starts for DmpstrDiver_113:

(36, 63660), (39, 63684), (Start: 73 @63789 has 1 MA's), (Start: 94 @63822 has 25 MA's), (Start: 107 @63840 has 1 MA's), (128, 63897), (164, 63960), (175, 63975), (184, 63993), (213, 64050), (215, 64056), (230, 64116), (253, 64209),

Gene: DonTron_22 Start: 10785, Stop: 11264, Start Num: 66

Candidate Starts for DonTron_22:

(66, 10785), (128, 10896), (199, 10980), (210, 10998), (213, 11010), (238, 11124),

Gene: Dori_69 Start: 53193, Stop: 53732, Start Num: 97

Candidate Starts for Dori_69:

(54, 53091), (64, 53133), (Start: 89 @53184 has 17 MA's), (Start: 97 @53193 has 15 MA's), (Start: 109 @53214 has 6 MA's), (147, 53301), (160, 53322), (211, 53409), (213, 53415), (221, 53454), (242, 53541), (267, 53619),

Gene: Dove_135 Start: 75231, Stop: 75830, Start Num: 92

Candidate Starts for Dove_135:

(Start: 92 @75231 has 18 MA's), (138, 75333), (149, 75354), (152, 75357), (190, 75420), (205, 75450), (210, 75459), (218, 75492), (229, 75537), (250, 75624), (268, 75684), (282, 75720), (309, 75816),

Gene: DrDrey_39 Start: 34621, Stop: 34034, Start Num: 52

Candidate Starts for DrDrey_39:

(Start: 52 @34621 has 7 MA's), (Start: 74 @34555 has 10 MA's), (106, 34513), (144, 34426), (212, 34348), (213, 34345), (220, 34309),

Gene: Duke13_146 Start: 77046, Stop: 77648, Start Num: 89

Candidate Starts for Duke13_146:

(61, 76977), (Start: 89 @77046 has 17 MA's), (138, 77151), (149, 77172), (152, 77175), (165, 77199), (168, 77202), (172, 77208), (218, 77310), (225, 77337), (229, 77355), (250, 77442), (309, 77634),

Gene: Dusk_37 Start: 33781, Stop: 33194, Start Num: 52

Candidate Starts for Dusk_37:

(Start: 52 @33781 has 7 MA's), (Start: 74 @33715 has 10 MA's), (106, 33673), (144, 33586), (212, 33508), (213, 33505), (220, 33469),

Gene: EmToTheThree_250 Start: 143104, Stop: 143553, Start Num: 121

Candidate Starts for EmToTheThree_250:

(Start: 121 @143104 has 33 MA's), (139, 143143), (155, 143161), (176, 143194), (195, 143221), (213, 143254), (235, 143341), (243, 143383), (276, 143482),

Gene: Enceladus_63 Start: 44580, Stop: 45038, Start Num: 101

Candidate Starts for Enceladus_63:

(Start: 101 @44580 has 5 MA's), (128, 44652), (198, 44742), (204, 44754), (213, 44775), (228, 44838), (235, 44865),

Gene: Erdmann_251 Start: 143072, Stop: 143521, Start Num: 121

Candidate Starts for Erdmann_251:

(Start: 121 @143072 has 33 MA's), (139, 143111), (155, 143129), (176, 143162), (195, 143189), (213, 143222), (235, 143309), (243, 143351), (276, 143450),

Gene: EricMillard_142 Start: 78398, Stop: 79000, Start Num: 89

Candidate Starts for EricMillard_142:

(61, 78329), (Start: 89 @78398 has 17 MA's), (138, 78503), (149, 78524), (152, 78527), (165, 78551), (168, 78554), (172, 78560), (218, 78662), (225, 78689), (229, 78707), (250, 78794), (309, 78986),

Gene: EricMillard_105 Start: 63462, Stop: 64004, Start Num: 94

Candidate Starts for EricMillard_105:

(36, 63300), (39, 63324), (Start: 73 @63429 has 1 MA's), (Start: 94 @63462 has 25 MA's), (Start: 107 @63480 has 1 MA's), (128, 63537), (164, 63600), (175, 63615), (184, 63633), (213, 63690), (215, 63696), (230, 63756), (253, 63849),

Gene: ErnieJ_243 Start: 139900, Stop: 140349, Start Num: 121

Candidate Starts for ErnieJ_243:

(Start: 121 @139900 has 33 MA's), (139, 139939), (155, 139957), (176, 139990), (195, 140017), (213, 140050), (235, 140137), (243, 140179), (276, 140278),

Gene: Eureka_37 Start: 33608, Stop: 33108, Start Num: 89

Candidate Starts for Eureka_37:

(Start: 89 @33608 has 17 MA's), (Start: 119 @33551 has 1 MA's), (133, 33515),

Gene: Filch_113 Start: 63036, Stop: 63536, Start Num: 91

Candidate Starts for Filch_113:

(64, 62982), (Start: 91 @63036 has 17 MA's), (Start: 119 @63090 has 1 MA's), (166, 63171), (170, 63174), (181, 63198), (204, 63231), (221, 63288), (264, 63450),

Gene: Finch_186 Start: 111122, Stop: 111628, Start Num: 94

Candidate Starts for Finch_186:

(Start: 94 @111122 has 25 MA's), (160, 111254), (203, 111326), (211, 111341), (214, 111350),

Gene: Fosterous_34 Start: 32991, Stop: 32518, Start Num: 83

Candidate Starts for Fosterous_34:

(31, 33129), (Start: 51 @33075 has 2 MA's), (57, 33066), (70, 33018), (Start: 83 @32991 has 25 MA's), (152, 32892), (183, 32850), (186, 32847), (210, 32811), (223, 32754), (231, 32721), (240, 32673),

Gene: FoxtrotP1_248 Start: 143658, Stop: 144107, Start Num: 121

Candidate Starts for FoxtrotP1_248:

(Start: 121 @143658 has 33 MA's), (139, 143697), (155, 143715), (176, 143748), (195, 143775), (213, 143808), (235, 143895), (243, 143937), (276, 144036),

Gene: Francesca_39 Start: 21303, Stop: 21839, Start Num: 97

Candidate Starts for Francesca_39:

(Start: 97 @21303 has 15 MA's), (212, 21498), (213, 21501), (238, 21618), (303, 21804), (305, 21822),

Gene: Frankie_34 Start: 27904, Stop: 27416, Start Num: 97

Candidate Starts for Frankie_34:

(Start: 97 @27904 has 15 MA's), (128, 27829), (154, 27787), (160, 27775), (174, 27757), (181, 27739), (205, 27712), (258, 27517), (277, 27478),

Gene: FudgeTart_245 Start: 142162, Stop: 142611, Start Num: 121

Candidate Starts for FudgeTart_245:

(Start: 121 @142162 has 33 MA's), (139, 142201), (155, 142219), (176, 142252), (195, 142279), (213, 142312), (235, 142399), (243, 142441), (276, 142540),

Gene: FugateOSU_60 Start: 53224, Stop: 52700, Start Num: 77

Candidate Starts for FugateOSU_60:

(56, 53293), (71, 53239), (Start: 77 @53224 has 5 MA's), (Start: 82 @53215 has 6 MA's), (120, 53149), (137, 53104), (162, 53080), (183, 53044), (189, 53038), (210, 53005), (222, 52951), (224, 52948), (256, 52831), (260, 52810), (289, 52735),

Gene: GAL1_27 Start: 22156, Stop: 22695, Start Num: 86

Candidate Starts for GAL1_27:

(Start: 86 @22156 has 7 MA's), (126, 22234), (160, 22300), (162, 22303), (189, 22348), (202, 22366), (203, 22372), (205, 22375), (212, 22390), (213, 22393), (214, 22396), (217, 22408), (239, 22510), (242, 22519),

Gene: GMA1_68 Start: 40382, Stop: 40945, Start Num: 68

Candidate Starts for GMA1_68:

(22, 40088), (23, 40115), (26, 40187), (37, 40280), (68, 40382), (81, 40412), (Start: 119 @40481 has 1 MA's), (136, 40520), (194, 40598), (210, 40628), (217, 40655), (220, 40676), (233, 40718), (238, 40754), (244, 40766), (263, 40838),

Gene: GMA1_47 Start: 30722, Stop: 31246, Start Num: 87

Candidate Starts for GMA1_47:

(18, 30347), (25, 30500), (48, 30635), (59, 30653), (68, 30698), (76, 30707), (87, 30722), (Start: 119 @30779 has 1 MA's), (220, 30986), (235, 31037), (251, 31097), (265, 31154),

Gene: GMA4_67 Start: 43840, Stop: 44490, Start Num: 78

Candidate Starts for GMA4_67:

(78, 43840), (105, 43870), (202, 44059), (203, 44065), (220, 44122), (261, 44284),

Gene: Galactic_32 Start: 27751, Stop: 28350, Start Num: 47

Candidate Starts for Galactic_32:

(Start: 47 @27751 has 4 MA's), (Start: 86 @27853 has 7 MA's), (213, 28075), (220, 28111), (264, 28276), (285, 28321),

Gene: Galadriel_36 Start: 33480, Stop: 33007, Start Num: 83

Candidate Starts for Galadriel_36:

(31, 33618), (Start: 51 @33564 has 2 MA's), (57, 33555), (70, 33507), (Start: 83 @33480 has 25 MA's), (152, 33381), (183, 33339), (186, 33336), (210, 33300), (223, 33243), (231, 33210), (240, 33162),

Gene: Gator_36 Start: 33782, Stop: 33150, Start Num: 38

Candidate Starts for Gator_36:

(Start: 38 @33782 has 2 MA's), (Start: 49 @33743 has 1 MA's), (53, 33737), (Start: 74 @33671 has 10 MA's), (106, 33629), (144, 33542), (212, 33464), (213, 33461), (220, 33425),

Gene: Geodirt_33 Start: 32468, Stop: 31986, Start Num: 83

Candidate Starts for Geodirt_33:

(31, 32606), (Start: 51 @32552 has 2 MA's), (53, 32549), (70, 32495), (Start: 83 @32468 has 25 MA's), (210, 32285), (213, 32273), (254, 32111), (266, 32066),

Gene: Gizmo_255 Start: 144989, Stop: 145438, Start Num: 121

Candidate Starts for Gizmo_255:

(Start: 121 @144989 has 33 MA's), (139, 145028), (155, 145046), (176, 145079), (195, 145106), (213, 145139), (235, 145226), (243, 145268), (276, 145367),

Gene: Gizmo_126 Start: 66298, Stop: 65843, Start Num: 118
Candidate Starts for Gizmo_126:
(Start: 118 @66298 has 2 MA's), (173, 66211), (197, 66175), (212, 66139), (220, 66100), (235, 66049),

Gene: Glexan_36 Start: 33731, Stop: 33138, Start Num: 49
Candidate Starts for Glexan_36:
(Start: 38 @33770 has 2 MA's), (Start: 49 @33731 has 1 MA's), (53, 33725), (Start: 74 @33659 has 10 MA's), (106, 33617), (144, 33530), (212, 33452), (213, 33449), (220, 33413),

Gene: Globfish_58 Start: 33707, Stop: 34201, Start Num: 98
Candidate Starts for Globfish_58:
(54, 33614), (63, 33644), (Start: 82 @33692 has 6 MA's), (95, 33704), (Start: 98 @33707 has 2 MA's), (133, 33788), (153, 33818), (179, 33851), (206, 33896), (214, 33917), (226, 33965), (249, 34058),

Gene: Globfish_83 Start: 46529, Stop: 47017, Start Num: 110
Candidate Starts for Globfish_83:
(Start: 98 @46508 has 2 MA's), (110, 46529), (131, 46586), (139, 46604), (169, 46646), (210, 46721), (296, 47006),

Gene: Goku_37 Start: 33337, Stop: 32837, Start Num: 89
Candidate Starts for Goku_37:
(Start: 89 @33337 has 17 MA's), (Start: 119 @33280 has 1 MA's), (133, 33244),

Gene: Goku_110 Start: 63579, Stop: 64079, Start Num: 91
Candidate Starts for Goku_110:
(64, 63525), (Start: 91 @63579 has 17 MA's), (Start: 119 @63633 has 1 MA's), (166, 63714), (170, 63717), (181, 63741), (204, 63774), (221, 63831), (264, 63993),

Gene: Goldilocks_114 Start: 63260, Stop: 63760, Start Num: 91
Candidate Starts for Goldilocks_114:
(64, 63206), (Start: 91 @63260 has 17 MA's), (Start: 119 @63314 has 1 MA's), (166, 63395), (170, 63398), (181, 63422), (204, 63455), (221, 63512), (264, 63674),

Gene: Gonephishing_141 Start: 75522, Stop: 76124, Start Num: 89
Candidate Starts for Gonephishing_141:
(61, 75453), (Start: 89 @75522 has 17 MA's), (138, 75627), (149, 75648), (152, 75651), (165, 75675), (168, 75678), (172, 75684), (218, 75786), (225, 75813), (229, 75831), (250, 75918), (309, 76110),

Gene: Gsput1_40 Start: 30337, Stop: 30849, Start Num: 72
Candidate Starts for Gsput1_40:
(25, 30127), (28, 30154), (32, 30202), (43, 30250), (55, 30277), (Start: 72 @30337 has 1 MA's), (Start: 74 @30346 has 10 MA's), (102, 30382), (129, 30451), (143, 30475), (194, 30523), (208, 30550), (217, 30580), (220, 30601), (221, 30604), (226, 30616), (282, 30802),

Gene: HUHilltop_45 Start: 31495, Stop: 31986, Start Num: 94
Candidate Starts for HUHilltop_45:
(Start: 69 @31456 has 1 MA's), (71, 31459), (Start: 92 @31492 has 18 MA's), (Start: 94 @31495 has 25 MA's), (Start: 107 @31513 has 1 MA's), (111, 31522), (200, 31687), (205, 31696), (210, 31702), (213, 31714), (220, 31750), (235, 31801), (242, 31840),

Gene: Hank144_56 Start: 39762, Stop: 39295, Start Num: 118
Candidate Starts for Hank144_56:

(Start: 118 @39762 has 2 MA's), (157, 39693), (206, 39615), (210, 39609), (220, 39561), (221, 39558), (230, 39531), (299, 39306),

Gene: Hannaconda_43 Start: 36122, Stop: 36664, Start Num: 86

Candidate Starts for Hannaconda_43:

(55, 36035), (Start: 86 @36122 has 7 MA's), (Start: 119 @36185 has 1 MA's), (147, 36251), (162, 36275), (181, 36308), (203, 36341), (213, 36362), (214, 36365), (220, 36398), (238, 36476), (278, 36587), (295, 36635),

Gene: Hannaconda_141 Start: 76044, Stop: 76646, Start Num: 89

Candidate Starts for Hannaconda_141:

(Start: 89 @76044 has 17 MA's), (138, 76149), (149, 76170), (152, 76173), (165, 76197), (168, 76200), (172, 76206), (205, 76266), (225, 76335), (229, 76353), (238, 76404), (250, 76440), (282, 76536), (309, 76632),

Gene: Harella_37 Start: 34175, Stop: 33654, Start Num: 74

Candidate Starts for Harella_37:

(Start: 38 @34286 has 2 MA's), (Start: 49 @34247 has 1 MA's), (53, 34241), (Start: 74 @34175 has 10 MA's), (106, 34133), (144, 34046), (212, 33968), (213, 33965), (220, 33929),

Gene: Henry_39 Start: 34174, Stop: 33542, Start Num: 38

Candidate Starts for Henry_39:

(Start: 38 @34174 has 2 MA's), (Start: 49 @34135 has 1 MA's), (53, 34129), (Start: 74 @34063 has 10 MA's), (106, 34021), (144, 33934), (212, 33856), (213, 33853), (220, 33817),

Gene: Hlubikazi_31 Start: 27761, Stop: 28381, Start Num: 60

Candidate Starts for Hlubikazi_31:

(34, 27677), (Start: 47 @27734 has 4 MA's), (Start: 60 @27761 has 3 MA's), (Start: 86 @27836 has 7 MA's), (213, 28058), (220, 28094), (264, 28259), (285, 28304),

Gene: HokkenD_142 Start: 79202, Stop: 79804, Start Num: 89

Candidate Starts for HokkenD_142:

(61, 79133), (Start: 89 @79202 has 17 MA's), (138, 79307), (149, 79328), (152, 79331), (165, 79355), (168, 79358), (172, 79364), (218, 79466), (225, 79493), (229, 79511), (250, 79598), (309, 79790),

Gene: Holt_116 Start: 63658, Stop: 64158, Start Num: 91

Candidate Starts for Holt_116:

(64, 63604), (Start: 91 @63658 has 17 MA's), (Start: 119 @63712 has 1 MA's), (166, 63793), (170, 63796), (181, 63820), (204, 63853), (221, 63910), (264, 64072),

Gene: Hortense_58 Start: 41496, Stop: 42002, Start Num: 97

Candidate Starts for Hortense_58:

(28, 41271), (30, 41301), (Start: 97 @41496 has 15 MA's), (128, 41571), (134, 41583), (160, 41625), (213, 41712), (222, 41751),

Gene: Howe_58 Start: 41496, Stop: 42002, Start Num: 97

Candidate Starts for Howe_58:

(28, 41271), (30, 41301), (Start: 97 @41496 has 15 MA's), (128, 41571), (134, 41583), (160, 41625), (213, 41712), (222, 41751),

Gene: Hughesyang_111 Start: 64353, Stop: 64895, Start Num: 94

Candidate Starts for Hughesyang_111:

(36, 64191), (39, 64215), (Start: 73 @64320 has 1 MA's), (Start: 94 @64353 has 25 MA's), (Start: 107 @64371 has 1 MA's), (128, 64428), (164, 64491), (175, 64506), (184, 64524), (213, 64581), (215, 64587), (230, 64647), (253, 64740),

Gene: Hughesyang_148 Start: 79867, Stop: 80466, Start Num: 92

Candidate Starts for Hughesyang_148:

(Start: 92 @79867 has 18 MA's), (138, 79969), (149, 79990), (152, 79993), (190, 80056), (205, 80086), (210, 80095), (218, 80128), (229, 80173), (250, 80260), (268, 80320), (282, 80356), (309, 80452),

Gene: Icee_112 Start: 62768, Stop: 63268, Start Num: 91

Candidate Starts for Icee_112:

(64, 62714), (Start: 91 @62768 has 17 MA's), (Start: 119 @62822 has 1 MA's), (166, 62903), (170, 62906), (181, 62930), (204, 62963), (221, 63020), (264, 63182),

Gene: Island3_46 Start: 33137, Stop: 33628, Start Num: 94

Candidate Starts for Island3_46:

(56, 33044), (Start: 69 @33098 has 1 MA's), (71, 33101), (Start: 92 @33134 has 18 MA's), (Start: 94 @33137 has 25 MA's), (Start: 107 @33155 has 1 MA's), (111, 33164), (200, 33329), (205, 33338), (210, 33344), (213, 33356), (220, 33392), (235, 33443), (242, 33482),

Gene: Issimir_243 Start: 142261, Stop: 142710, Start Num: 121

Candidate Starts for Issimir_243:

(Start: 121 @142261 has 33 MA's), (139, 142300), (155, 142318), (176, 142351), (195, 142378), (213, 142411), (235, 142498), (243, 142540), (276, 142639),

Gene: JPickles_247 Start: 141311, Stop: 141760, Start Num: 121

Candidate Starts for JPickles_247:

(Start: 121 @141311 has 33 MA's), (139, 141350), (155, 141368), (176, 141401), (195, 141428), (213, 141461), (235, 141548), (243, 141590), (276, 141689),

Gene: JalFarm20_33 Start: 27847, Stop: 27341, Start Num: 97

Candidate Starts for JalFarm20_33:

(Start: 97 @27847 has 15 MA's), (Start: 107 @27832 has 1 MA's), (126, 27781), (128, 27772), (154, 27730), (162, 27715), (171, 27703), (174, 27700), (183, 27679), (213, 27640), (220, 27604), (242, 27514), (261, 27448), (277, 27418),

Gene: Janiyra_253 Start: 142848, Stop: 143297, Start Num: 121

Candidate Starts for Janiyra_253:

(Start: 121 @142848 has 33 MA's), (139, 142887), (155, 142905), (176, 142938), (195, 142965), (213, 142998), (235, 143085), (243, 143127), (276, 143226),

Gene: JeTaime_109 Start: 62868, Stop: 63383, Start Num: 91

Candidate Starts for JeTaime_109:

(64, 62814), (Start: 91 @62868 has 17 MA's), (Start: 119 @62922 has 1 MA's), (166, 63003), (170, 63006), (181, 63030), (204, 63063), (221, 63120), (264, 63282),

Gene: Jesabah_60 Start: 53289, Stop: 52765, Start Num: 77

Candidate Starts for Jesabah_60:

(56, 53358), (71, 53304), (Start: 77 @53289 has 5 MA's), (Start: 82 @53280 has 6 MA's), (120, 53214), (137, 53169), (162, 53145), (183, 53109), (189, 53103), (210, 53070), (222, 53016), (224, 53013), (256, 52896), (260, 52875), (289, 52800),

Gene: JoeDirt_64 Start: 45013, Stop: 45471, Start Num: 101

Candidate Starts for JoeDirt_64:

(Start: 101 @45013 has 5 MA's), (128, 45085), (198, 45175), (204, 45187), (213, 45208), (228, 45271), (235, 45298),

Gene: JonJames_26 Start: 9049, Stop: 9558, Start Num: 92

Candidate Starts for JonJames_26:

(Start: 92 @9049 has 18 MA's), (Start: 119 @9103 has 1 MA's), (145, 9160), (159, 9181), (160, 9184), (210, 9256), (213, 9268), (220, 9304), (239, 9385), (242, 9394), (270, 9472), (298, 9544),

Gene: Kabocha_97 Start: 70776, Stop: 71294, Start Num: 74

Candidate Starts for Kabocha_97:

(62, 70734), (65, 70749), (Start: 74 @70776 has 10 MA's), (143, 70899), (150, 70908), (182, 70932), (244, 71112),

Gene: Kalah2_105 Start: 63688, Stop: 64230, Start Num: 94

Candidate Starts for Kalah2_105:

(36, 63526), (39, 63550), (Start: 73 @63655 has 1 MA's), (Start: 94 @63688 has 25 MA's), (Start: 107 @63706 has 1 MA's), (128, 63763), (164, 63826), (175, 63841), (184, 63859), (213, 63916), (215, 63922), (230, 63982), (253, 64075),

Gene: Kalah2_140 Start: 78988, Stop: 79587, Start Num: 92

Candidate Starts for Kalah2_140:

(Start: 92 @78988 has 18 MA's), (138, 79090), (149, 79111), (152, 79114), (190, 79177), (205, 79207), (210, 79216), (218, 79249), (229, 79294), (250, 79381), (268, 79441), (282, 79477), (309, 79573),

Gene: KashFlow_40 Start: 35743, Stop: 36285, Start Num: 86

Candidate Starts for KashFlow_40:

(55, 35656), (Start: 86 @35743 has 7 MA's), (Start: 119 @35806 has 1 MA's), (147, 35872), (162, 35896), (181, 35929), (203, 35962), (213, 35983), (214, 35986), (220, 36019), (238, 36097), (278, 36208), (295, 36256),

Gene: KashFlow_148 Start: 78305, Stop: 78904, Start Num: 94

Candidate Starts for KashFlow_148:

(Start: 94 @78305 has 25 MA's), (134, 78395), (190, 78491), (211, 78536), (218, 78563), (229, 78608), (237, 78650), (238, 78659), (288, 78806), (292, 78821), (309, 78890),

Gene: Keitabear_36 Start: 34510, Stop: 33947, Start Num: 51

Candidate Starts for Keitabear_36:

(31, 34564), (Start: 51 @34510 has 2 MA's), (57, 34501), (70, 34453), (Start: 83 @34426 has 25 MA's), (170, 34306), (210, 34243), (213, 34231), (266, 34024),

Gene: Kimchi_115 Start: 63385, Stop: 63885, Start Num: 91

Candidate Starts for Kimchi_115:

(64, 63331), (Start: 91 @63385 has 17 MA's), (Start: 119 @63439 has 1 MA's), (166, 63520), (170, 63523), (181, 63547), (204, 63580), (221, 63637), (264, 63799),

Gene: KingMidas_32 Start: 28828, Stop: 29370, Start Num: 86

Candidate Starts for KingMidas_32:

(Start: 86 @28828 has 7 MA's), (143, 28942), (220, 29095), (238, 29173), (242, 29185),

Gene: KingTut_52 Start: 48894, Stop: 48379, Start Num: 82

Candidate Starts for KingTut_52:

(56, 48972), (71, 48918), (Start: 77 @48903 has 5 MA's), (Start: 82 @48894 has 6 MA's), (120, 48828), (137, 48783), (162, 48759), (183, 48723), (189, 48717), (210, 48684), (222, 48630), (224, 48627), (256, 48510), (260, 48489), (289, 48414),

Gene: Klein_147 Start: 77536, Stop: 78138, Start Num: 89

Candidate Starts for Klein_147:

(61, 77467), (Start: 89 @77536 has 17 MA's), (138, 77641), (149, 77662), (152, 77665), (165, 77689), (168, 77692), (172, 77698), (218, 77800), (225, 77827), (229, 77845), (250, 77932), (309, 78124),

Gene: Kuwabara_68 Start: 41993, Stop: 42493, Start Num: 99

Candidate Starts for Kuwabara_68:

(Start: 99 @41993 has 1 MA's), (174, 42122), (220, 42230), (252, 42350),

Gene: Lee7_249 Start: 144611, Stop: 145060, Start Num: 121

Candidate Starts for Lee7_249:

(Start: 121 @144611 has 33 MA's), (139, 144650), (155, 144668), (176, 144701), (195, 144728), (213, 144761), (235, 144848), (243, 144890), (276, 144989),

Gene: LeeroyJenkins_114 Start: 56842, Stop: 56381, Start Num: 109

Candidate Starts for LeeroyJenkins_114:

(Start: 109 @56842 has 6 MA's), (182, 56713), (231, 56590),

Gene: LeeroyJenkins_94 Start: 49860, Stop: 49351, Start Num: 94

Candidate Starts for LeeroyJenkins_94:

(Start: 94 @49860 has 25 MA's), (187, 49689), (191, 49683), (209, 49653), (221, 49599), (235, 49551),

Gene: LeiMonet_62 Start: 52626, Stop: 52111, Start Num: 82

Candidate Starts for LeiMonet_62:

(56, 52704), (71, 52650), (Start: 77 @52635 has 5 MA's), (Start: 82 @52626 has 6 MA's), (120, 52560), (137, 52515), (162, 52491), (183, 52455), (189, 52449), (210, 52416), (222, 52362), (224, 52359), (256, 52242), (260, 52221), (289, 52146),

Gene: Lennon_36 Start: 34213, Stop: 33740, Start Num: 83

Candidate Starts for Lennon_36:

(31, 34351), (Start: 51 @34297 has 2 MA's), (70, 34240), (Start: 83 @34213 has 25 MA's), (152, 34114), (183, 34072), (186, 34069), (210, 34033), (223, 33976), (230, 33952), (240, 33895),

Gene: Leozinho_32 Start: 27392, Stop: 27934, Start Num: 86

Candidate Starts for Leozinho_32:

(Start: 86 @27392 has 7 MA's), (143, 27506), (220, 27659), (238, 27737), (242, 27749),

Gene: LilSpotty_83 Start: 48505, Stop: 49212, Start Num: 35

Candidate Starts for LilSpotty_83:

(Start: 35 @48505 has 1 MA's), (85, 48661), (126, 48739), (133, 48757), (149, 48781), (210, 48865), (213, 48877), (216, 48886), (223, 48922), (250, 49051), (296, 49180),

Gene: LittleE_112 Start: 62894, Stop: 63436, Start Num: 94

Candidate Starts for LittleE_112:

(Start: 94 @62894 has 25 MA's), (Start: 107 @62912 has 1 MA's), (164, 63032), (175, 63047), (184, 63065), (213, 63122), (215, 63128), (230, 63188), (253, 63281), (302, 63422),

Gene: LittleE_150 Start: 78544, Stop: 79146, Start Num: 89

Candidate Starts for LittleE_150:

(Start: 89 @78544 has 17 MA's), (158, 78682), (165, 78694), (190, 78736), (207, 78769), (218, 78808), (221, 78829), (238, 78904), (246, 78934), (309, 79132),

Gene: Lopsy_58 Start: 51828, Stop: 51313, Start Num: 82

Candidate Starts for Lopsy_58:

(56, 51906), (71, 51852), (Start: 77 @51837 has 5 MA's), (Start: 82 @51828 has 6 MA's), (120, 51762), (137, 51717), (162, 51693), (183, 51657), (189, 51651), (210, 51618), (222, 51564), (224, 51561), (256, 51444), (260, 51423), (289, 51348),

Gene: LostAndPhound_60 Start: 52723, Stop: 52199, Start Num: 77

Candidate Starts for LostAndPhound_60:

(56, 52792), (71, 52738), (Start: 77 @52723 has 5 MA's), (Start: 82 @52714 has 6 MA's), (120, 52648), (137, 52603), (162, 52579), (183, 52543), (189, 52537), (210, 52504), (222, 52450), (224, 52447), (256, 52330), (260, 52309), (289, 52234),

Gene: Love_39 Start: 33996, Stop: 33523, Start Num: 83

Candidate Starts for Love_39:

(31, 34134), (Start: 51 @34080 has 2 MA's), (57, 34071), (70, 34023), (Start: 83 @33996 has 25 MA's), (152, 33897), (183, 33855), (186, 33852), (210, 33816), (223, 33759), (231, 33726), (240, 33678),

Gene: LunaBlu_33 Start: 28027, Stop: 28524, Start Num: 86

Candidate Starts for LunaBlu_33:

(Start: 47 @27925 has 4 MA's), (Start: 86 @28027 has 7 MA's), (213, 28249), (220, 28285), (264, 28450), (285, 28495),

Gene: Lysidious_60 Start: 40309, Stop: 40836, Start Num: 96

Candidate Starts for Lysidious_60:

(Start: 96 @40309 has 2 MA's), (Start: 109 @40330 has 6 MA's), (205, 40510),

Gene: Lysidious_17 Start: 10274, Stop: 10777, Start Num: 93

Candidate Starts for Lysidious_17:

(Start: 93 @10274 has 2 MA's), (134, 10364), (151, 10388), (212, 10493), (214, 10499), (220, 10532), (223, 10538), (251, 10643),

Gene: Maby2021_250 Start: 143650, Stop: 144099, Start Num: 121

Candidate Starts for Maby2021_250:

(Start: 121 @143650 has 33 MA's), (139, 143689), (155, 143707), (176, 143740), (195, 143767), (213, 143800), (235, 143887), (243, 143929), (276, 144028),

Gene: Mandlovu_31 Start: 27703, Stop: 28323, Start Num: 60

Candidate Starts for Mandlovu_31:

(34, 27619), (Start: 47 @27676 has 4 MA's), (Start: 60 @27703 has 3 MA's), (Start: 86 @27778 has 7 MA's), (213, 28000), (220, 28036), (264, 28201), (285, 28246),

Gene: Maravista_65 Start: 42918, Stop: 43388, Start Num: 109

Candidate Starts for Maravista_65:

(Start: 109 @42918 has 6 MA's), (174, 43035), (220, 43143), (252, 43263),

Gene: Marshmallow_38 Start: 34061, Stop: 33540, Start Num: 74

Candidate Starts for Marshmallow_38:

(Start: 52 @34127 has 7 MA's), (Start: 74 @34061 has 10 MA's), (106, 34019), (144, 33932), (212, 33854), (213, 33851), (220, 33815),

Gene: Marshmallow_109 Start: 63582, Stop: 64082, Start Num: 91
Candidate Starts for Marshmallow_109:
(Start: 91 @63582 has 17 MA's), (Start: 119 @63636 has 1 MA's), (166, 63717), (170, 63720), (181, 63744), (204, 63777), (221, 63834), (264, 63996),

Gene: Matalotodo_59 Start: 52707, Stop: 52192, Start Num: 82
Candidate Starts for Matalotodo_59:
(56, 52785), (71, 52731), (Start: 77 @52716 has 5 MA's), (Start: 82 @52707 has 6 MA's), (120, 52641), (137, 52596), (162, 52572), (183, 52536), (189, 52530), (210, 52497), (222, 52443), (224, 52440), (256, 52323), (260, 52302), (289, 52227),

Gene: McGee_251 Start: 142298, Stop: 142747, Start Num: 121
Candidate Starts for McGee_251:
(Start: 121 @142298 has 33 MA's), (139, 142337), (155, 142355), (176, 142388), (195, 142415), (213, 142448), (235, 142535), (243, 142577), (276, 142676),

Gene: McKinley_38 Start: 34022, Stop: 33549, Start Num: 83
Candidate Starts for McKinley_38:
(31, 34160), (Start: 51 @34106 has 2 MA's), (57, 34097), (70, 34049), (Start: 83 @34022 has 25 MA's), (152, 33923), (183, 33881), (186, 33878), (210, 33842), (223, 33785), (240, 33704),

Gene: Mellie_57 Start: 38319, Stop: 38846, Start Num: 96
Candidate Starts for Mellie_57:
(Start: 96 @38319 has 2 MA's), (Start: 109 @38340 has 6 MA's), (205, 38520), (285, 38784),

Gene: Mesmerelda_61 Start: 52711, Stop: 52196, Start Num: 82
Candidate Starts for Mesmerelda_61:
(56, 52789), (71, 52735), (Start: 77 @52720 has 5 MA's), (Start: 82 @52711 has 6 MA's), (120, 52645), (137, 52600), (162, 52576), (183, 52540), (189, 52534), (210, 52501), (222, 52447), (224, 52444), (256, 52327), (260, 52306), (289, 52231),

Gene: Minerva_162 Start: 85665, Stop: 86177, Start Num: 83
Candidate Starts for Minerva_162:
(Start: 83 @85665 has 25 MA's), (Start: 86 @85668 has 7 MA's), (111, 85701), (128, 85752), (145, 85788), (205, 85878), (210, 85887), (213, 85899), (214, 85902), (220, 85935), (230, 85965), (251, 86046), (283, 86139), (291, 86163),

Gene: Minerva_148 Start: 78849, Stop: 79448, Start Num: 92
Candidate Starts for Minerva_148:
(Start: 92 @78849 has 18 MA's), (138, 78951), (149, 78972), (152, 78975), (190, 79038), (205, 79068), (210, 79077), (218, 79110), (229, 79155), (250, 79242), (268, 79302), (282, 79338), (309, 79434),

Gene: MinionDave_33 Start: 28083, Stop: 28682, Start Num: 47
Candidate Starts for MinionDave_33:
(Start: 47 @28083 has 4 MA's), (Start: 86 @28185 has 7 MA's), (213, 28407), (220, 28443), (264, 28608), (285, 28653),

Gene: ModicumRichard_20 Start: 18713, Stop: 18225, Start Num: 83
Candidate Starts for ModicumRichard_20:
(5, 19316), (8, 19235), (11, 19211), (14, 19175), (16, 19145), (17, 19130), (24, 18977), (33, 18863), (46, 18806), (50, 18797), (Start: 52 @18794 has 7 MA's), (Start: 83 @18713 has 25 MA's), (128, 18629), (160, 18605), (193, 18560), (210, 18533), (213, 18521), (215, 18515), (240, 18395),

Gene: Morizzled23_247 Start: 141326, Stop: 141775, Start Num: 121

Candidate Starts for Morizzled23_247:

(Start: 121 @141326 has 33 MA's), (139, 141365), (155, 141383), (176, 141416), (195, 141443), (213, 141476), (235, 141563), (243, 141605), (276, 141704),

Gene: Morrissey_46 Start: 35134, Stop: 34631, Start Num: 83

Candidate Starts for Morrissey_46:

(4, 35755), (6, 35731), (7, 35701), (9, 35656), (13, 35611), (20, 35482), (32, 35293), (78, 35143), (Start: 83 @35134 has 25 MA's), (111, 35095), (113, 35086), (127, 35047), (193, 34954), (210, 34927), (212, 34918), (213, 34915), (214, 34912), (220, 34879),

Gene: Mova_51 Start: 35948, Stop: 36499, Start Num: 83

Candidate Starts for Mova_51:

(Start: 83 @35948 has 25 MA's), (Start: 86 @35951 has 7 MA's), (134, 36041), (161, 36083), (201, 36143), (220, 36209), (233, 36251), (244, 36299),

Gene: MulchSalad_28 Start: 23891, Stop: 24409, Start Num: 79

Candidate Starts for MulchSalad_28:

(79, 23891), (126, 23975), (179, 24071), (183, 24077), (213, 24119), (215, 24125), (220, 24155),

Gene: Mutaforma13_54 Start: 38739, Stop: 39290, Start Num: 83

Candidate Starts for Mutaforma13_54:

(Start: 83 @38739 has 25 MA's), (Start: 86 @38742 has 7 MA's), (134, 38832), (161, 38874), (201, 38934), (220, 39000), (233, 39042), (244, 39090),

Gene: Myrale_38 Start: 33992, Stop: 33405, Start Num: 52

Candidate Starts for Myrale_38:

(Start: 52 @33992 has 7 MA's), (Start: 74 @33926 has 10 MA's), (106, 33884), (144, 33797), (212, 33719), (213, 33716), (220, 33680),

Gene: Nimrod_111 Start: 63730, Stop: 64230, Start Num: 91

Candidate Starts for Nimrod_111:

(64, 63676), (Start: 91 @63730 has 17 MA's), (Start: 119 @63784 has 1 MA's), (166, 63865), (170, 63868), (181, 63892), (204, 63925), (221, 63982), (264, 64144),

Gene: Nordenberg_30 Start: 32192, Stop: 31719, Start Num: 83

Candidate Starts for Nordenberg_30:

(31, 32330), (Start: 51 @32276 has 2 MA's), (57, 32267), (70, 32219), (Start: 83 @32192 has 25 MA's), (152, 32093), (183, 32051), (186, 32048), (210, 32012), (223, 31955), (231, 31922), (240, 31874),

Gene: Nova53_39 Start: 21310, Stop: 21888, Start Num: 107

Candidate Starts for Nova53_39:

(Start: 107 @21310 has 1 MA's), (167, 21442), (214, 21532), (219, 21565), (239, 21646), (252, 21679), (259, 21712), (262, 21730), (304, 21844), (308, 21859), (311, 21871),

Gene: ObLaDi_20 Start: 18692, Stop: 18204, Start Num: 83

Candidate Starts for ObLaDi_20:

(1, 19712), (2, 19706), (3, 19688), (5, 19295), (8, 19214), (11, 19190), (14, 19154), (16, 19124), (17, 19109), (24, 18956), (33, 18842), (46, 18785), (50, 18776), (Start: 52 @18773 has 7 MA's), (Start: 83 @18692 has 25 MA's), (128, 18608), (160, 18584), (193, 18539), (210, 18512), (213, 18500), (215, 18494), (240, 18374),

Gene: Omega_117 Start: 63909, Stop: 64451, Start Num: 94

Candidate Starts for Omega_117:

(Start: 73 @63876 has 1 MA's), (Start: 94 @63909 has 25 MA's), (Start: 107 @63927 has 1 MA's), (164, 64047), (175, 64062), (184, 64080), (213, 64137), (215, 64143), (230, 64203), (253, 64296), (302, 64437),

Gene: Omega_154 Start: 79628, Stop: 80230, Start Num: 89

Candidate Starts for Omega_154:

(Start: 89 @79628 has 17 MA's), (158, 79766), (165, 79778), (190, 79820), (207, 79853), (218, 79892), (221, 79913), (238, 79988), (246, 80018), (309, 80216),

Gene: Optimus_141 Start: 76720, Stop: 77322, Start Num: 89

Candidate Starts for Optimus_141:

(61, 76651), (Start: 89 @76720 has 17 MA's), (138, 76825), (149, 76846), (152, 76849), (165, 76873), (168, 76876), (172, 76882), (218, 76984), (225, 77011), (229, 77029), (250, 77116), (309, 77308),

Gene: Orfeu_58 Start: 52711, Stop: 52187, Start Num: 77

Candidate Starts for Orfeu_58:

(56, 52780), (71, 52726), (Start: 77 @52711 has 5 MA's), (Start: 82 @52702 has 6 MA's), (120, 52636), (137, 52591), (162, 52567), (183, 52531), (189, 52525), (210, 52492), (222, 52438), (224, 52435), (256, 52318), (260, 52297), (289, 52222),

Gene: Paries_38 Start: 33658, Stop: 33185, Start Num: 83

Candidate Starts for Paries_38:

(29, 33820), (31, 33796), (Start: 51 @33742 has 2 MA's), (57, 33733), (70, 33685), (Start: 83 @33658 has 25 MA's), (152, 33559), (183, 33517), (186, 33514), (210, 33478), (223, 33421), (231, 33388), (240, 33340),

Gene: Peregrin_232 Start: 114891, Stop: 115472, Start Num: 94

Candidate Starts for Peregrin_232:

(Start: 94 @114891 has 25 MA's), (Start: 119 @114942 has 1 MA's), (134, 114978), (146, 115002), (161, 115023), (188, 115062), (235, 115197), (269, 115323), (274, 115329),

Gene: Peregrin_178 Start: 94313, Stop: 94846, Start Num: 93

Candidate Starts for Peregrin_178:

(Start: 93 @94313 has 2 MA's), (130, 94391), (191, 94499), (215, 94553), (236, 94640), (238, 94661), (279, 94781),

Gene: Phineas_45 Start: 31827, Stop: 32321, Start Num: 92

Candidate Starts for Phineas_45:

(Start: 69 @31791 has 1 MA's), (71, 31794), (Start: 92 @31827 has 18 MA's), (Start: 94 @31830 has 25 MA's), (Start: 107 @31848 has 1 MA's), (111, 31857), (200, 32022), (205, 32031), (210, 32037), (213, 32049), (220, 32085), (235, 32136), (242, 32175),

Gene: Phoebus_113 Start: 65664, Stop: 66206, Start Num: 94

Candidate Starts for Phoebus_113:

(36, 65502), (39, 65526), (Start: 73 @65631 has 1 MA's), (Start: 94 @65664 has 25 MA's), (Start: 107 @65682 has 1 MA's), (128, 65739), (164, 65802), (175, 65817), (184, 65835), (213, 65892), (215, 65898), (230, 65958), (253, 66051),

Gene: Phoebus_149 Start: 81221, Stop: 81820, Start Num: 92

Candidate Starts for Phoebus_149:

(Start: 92 @81221 has 18 MA's), (138, 81323), (149, 81344), (152, 81347), (190, 81410), (205, 81440), (210, 81449), (218, 81482), (229, 81527), (250, 81614), (268, 81674), (282, 81710), (309, 81806),

Gene: Pipefish_29 Start: 27509, Stop: 27015, Start Num: 100
Candidate Starts for Pipefish_29:
(Start: 100 @27509 has 3 MA's), (189, 27344), (210, 27311), (221, 27260),

Gene: Pippy_62 Start: 40280, Stop: 40750, Start Num: 109
Candidate Starts for Pippy_62:
(Start: 109 @40280 has 6 MA's), (174, 40397), (220, 40505), (252, 40625),

Gene: Placalicious_60 Start: 53221, Stop: 52697, Start Num: 77
Candidate Starts for Placalicious_60:
(56, 53290), (71, 53236), (Start: 77 @53221 has 5 MA's), (Start: 82 @53212 has 6 MA's), (120, 53146),
(137, 53101), (162, 53077), (183, 53041), (189, 53035), (210, 53002), (222, 52948), (224, 52945),
(256, 52828), (260, 52807), (289, 52732),

Gene: Podrick_58 Start: 51964, Stop: 51449, Start Num: 82
Candidate Starts for Podrick_58:
(56, 52042), (71, 51988), (Start: 77 @51973 has 5 MA's), (Start: 82 @51964 has 6 MA's), (120, 51898),
(137, 51853), (162, 51829), (183, 51793), (189, 51787), (210, 51754), (222, 51700), (224, 51697),
(256, 51580), (260, 51559), (289, 51484),

Gene: Poochiewood_65 Start: 45021, Stop: 45479, Start Num: 101
Candidate Starts for Poochiewood_65:
(Start: 101 @45021 has 5 MA's), (128, 45093), (198, 45183), (204, 45195), (213, 45216), (228, 45279),
(235, 45306),

Gene: Porcelain_108 Start: 60257, Stop: 60832, Start Num: 73
Candidate Starts for Porcelain_108:
(Start: 73 @60257 has 1 MA's), (Start: 94 @60290 has 25 MA's), (Start: 107 @60308 has 1 MA's),
(128, 60365), (164, 60428), (175, 60443), (184, 60461), (213, 60518), (215, 60524), (230, 60584),
(253, 60677),

Gene: Porky_109 Start: 62562, Stop: 63008, Start Num: 119
Candidate Starts for Porky_109:
(64, 62454), (Start: 91 @62508 has 17 MA's), (Start: 119 @62562 has 1 MA's), (166, 62643), (170,
62646), (181, 62670), (204, 62703), (221, 62760), (264, 62922),

Gene: Pound_50 Start: 43906, Stop: 44415, Start Num: 109
Candidate Starts for Pound_50:
(59, 43795), (78, 43864), (Start: 89 @43882 has 17 MA's), (Start: 109 @43906 has 6 MA's), (134,
43972), (163, 44026), (190, 44071), (220, 44158), (238, 44236), (242, 44248), (296, 44401),

Gene: Pumpkin_40 Start: 34140, Stop: 33619, Start Num: 74
Candidate Starts for Pumpkin_40:
(Start: 52 @34206 has 7 MA's), (Start: 74 @34140 has 10 MA's), (106, 34098), (144, 34011), (212,
33933), (213, 33930), (220, 33894),

Gene: PurduePete_250 Start: 143690, Stop: 144139, Start Num: 121
Candidate Starts for PurduePete_250:
(Start: 121 @143690 has 33 MA's), (139, 143729), (155, 143747), (176, 143780), (195, 143807), (213,
143840), (235, 143927), (243, 143969), (276, 144068),

Gene: Pygmy_47 Start: 33294, Stop: 33785, Start Num: 94

Candidate Starts for Pygmy_47:

(Start: 69 @33255 has 1 MA's), (71, 33258), (Start: 92 @33291 has 18 MA's), (Start: 94 @33294 has 25 MA's), (Start: 107 @33312 has 1 MA's), (111, 33321), (200, 33486), (205, 33495), (210, 33501), (213, 33513), (220, 33549), (235, 33600), (242, 33639),

Gene: Ramsey_33 Start: 27746, Stop: 28345, Start Num: 47

Candidate Starts for Ramsey_33:

(Start: 47 @27746 has 4 MA's), (Start: 86 @27848 has 7 MA's), (213, 28070), (220, 28106), (264, 28271), (285, 28316),

Gene: RedWattleHog_22 Start: 25760, Stop: 26308, Start Num: 94

Candidate Starts for RedWattleHog_22:

(79, 25739), (Start: 94 @25760 has 25 MA's), (160, 25880), (233, 26048), (235, 26057), (239, 26087), (242, 26096), (286, 26222),

Gene: RedWattleHog_85 Start: 77917, Stop: 78504, Start Num: 84

Candidate Starts for RedWattleHog_85:

(Start: 84 @77917 has 2 MA's), (122, 77989), (140, 78037), (143, 78043), (177, 78091), (180, 78100), (185, 78103), (192, 78112), (209, 78142), (214, 78160), (219, 78193), (234, 78238), (240, 78280), (259, 78340), (308, 78484),

Gene: RedWattleHog_100 Start: 85618, Stop: 86124, Start Num: 80

Candidate Starts for RedWattleHog_100:

(71, 85600), (Start: 80 @85618 has 1 MA's), (Start: 119 @85687 has 1 MA's), (133, 85723), (134, 85726), (135, 85729), (156, 85768), (211, 85846), (213, 85852), (242, 85981), (266, 86056),

Gene: Rofo_36 Start: 33056, Stop: 32583, Start Num: 83

Candidate Starts for Rofo_36:

(31, 33194), (Start: 51 @33140 has 2 MA's), (57, 33131), (70, 33083), (Start: 83 @33056 has 25 MA's), (152, 32957), (183, 32915), (186, 32912), (210, 32876), (223, 32819), (231, 32786), (240, 32738),

Gene: Rose5_65 Start: 45033, Stop: 45491, Start Num: 101

Candidate Starts for Rose5_65:

(Start: 101 @45033 has 5 MA's), (128, 45105), (198, 45195), (204, 45207), (213, 45228), (228, 45291), (235, 45318),

Gene: Saguaro_52 Start: 46118, Stop: 45648, Start Num: 97

Candidate Starts for Saguaro_52:

(67, 46169), (Start: 97 @46118 has 15 MA's), (Start: 109 @46097 has 6 MA's), (Start: 119 @46070 has 1 MA's), (126, 46052), (128, 46043), (134, 46031), (160, 45992), (213, 45905), (238, 45791), (255, 45746),

Gene: Salacia_251 Start: 144116, Stop: 144565, Start Num: 121

Candidate Starts for Salacia_251:

(Start: 121 @144116 has 33 MA's), (139, 144155), (155, 144173), (176, 144206), (195, 144233), (213, 144266), (235, 144353), (243, 144395), (276, 144494),

Gene: Sarge_39 Start: 25703, Stop: 26194, Start Num: 98

Candidate Starts for Sarge_39:

(21, 25388), (54, 25622), (Start: 82 @25688 has 6 MA's), (Start: 98 @25703 has 2 MA's), (195, 25868), (212, 25904), (214, 25910), (245, 26045), (272, 26117), (295, 26183),

Gene: Sassafras_31 Start: 27690, Stop: 28187, Start Num: 86

Candidate Starts for Sassafras_31:

(Start: 47 @27588 has 4 MA's), (Start: 86 @27690 has 7 MA's), (213, 27912), (220, 27948), (264, 28113), (285, 28158),

Gene: Schomber_94 Start: 69164, Stop: 69682, Start Num: 74

Candidate Starts for Schomber_94:

(62, 69122), (65, 69137), (Start: 74 @69164 has 10 MA's), (143, 69287), (150, 69296), (182, 69320), (244, 69500),

Gene: ScoobyDoobyDoo_184 Start: 103006, Stop: 103509, Start Num: 112

Candidate Starts for ScoobyDoobyDoo_184:

(Start: 82 @102958 has 6 MA's), (Start: 93 @102973 has 2 MA's), (104, 102985), (108, 102991), (Start: 112 @103006 has 1 MA's), (183, 103123), (213, 103174), (217, 103189), (242, 103300), (247, 103333), (249, 103342), (254, 103357), (264, 103399), (290, 103462), (297, 103489),

Gene: ScoobyDoobyDoo_60 Start: 22027, Stop: 22503, Start Num: 100

Candidate Starts for ScoobyDoobyDoo_60:

(Start: 52 @21928 has 7 MA's), (Start: 100 @22027 has 3 MA's), (212, 22225), (280, 22462),

Gene: Sedona_36 Start: 34162, Stop: 33689, Start Num: 83

Candidate Starts for Sedona_36:

(31, 34300), (Start: 51 @34246 has 2 MA's), (57, 34237), (70, 34189), (Start: 83 @34162 has 25 MA's), (152, 34063), (183, 34021), (186, 34018), (210, 33982), (223, 33925), (231, 33892), (240, 33844),

Gene: ShamWow_38 Start: 34129, Stop: 33542, Start Num: 52

Candidate Starts for ShamWow_38:

(Start: 52 @34129 has 7 MA's), (Start: 74 @34063 has 10 MA's), (106, 34021), (144, 33934), (212, 33856), (213, 33853), (220, 33817),

Gene: Shipwreck_47 Start: 33269, Stop: 33760, Start Num: 94

Candidate Starts for Shipwreck_47:

(Start: 69 @33230 has 1 MA's), (71, 33233), (Start: 92 @33266 has 18 MA's), (Start: 94 @33269 has 25 MA's), (Start: 107 @33287 has 1 MA's), (111, 33296), (200, 33461), (205, 33470), (210, 33476), (213, 33488), (220, 33524), (235, 33575), (242, 33614),

Gene: Shlim410_56 Start: 41496, Stop: 42002, Start Num: 97

Candidate Starts for Shlim410_56:

(28, 41271), (30, 41301), (Start: 97 @41496 has 15 MA's), (128, 41571), (134, 41583), (160, 41625), (213, 41712), (222, 41751),

Gene: Shoya_45 Start: 27671, Stop: 28162, Start Num: 98

Candidate Starts for Shoya_45:

(54, 27590), (Start: 82 @27656 has 6 MA's), (Start: 98 @27671 has 2 MA's), (195, 27836), (212, 27872), (214, 27878), (245, 28013), (272, 28085), (295, 28151),

Gene: Shrimp_252 Start: 143727, Stop: 144176, Start Num: 121

Candidate Starts for Shrimp_252:

(Start: 121 @143727 has 33 MA's), (139, 143766), (155, 143784), (176, 143817), (195, 143844), (213, 143877), (235, 143964), (243, 144006), (276, 144105),

Gene: Sitar_36 Start: 34297, Stop: 33740, Start Num: 51

Candidate Starts for Sitar_36:

(31, 34351), (Start: 51 @34297 has 2 MA's), (70, 34240), (Start: 83 @34213 has 25 MA's), (152, 34114), (183, 34072), (186, 34069), (210, 34033), (223, 33976), (230, 33952), (240, 33895),

Gene: Specks_254 Start: 143067, Stop: 143516, Start Num: 121

Candidate Starts for Specks_254:

(Start: 121 @143067 has 33 MA's), (139, 143106), (155, 143124), (176, 143157), (195, 143184), (213, 143217), (235, 143304), (243, 143346), (276, 143445),

Gene: SrishMeg2525_247 Start: 143222, Stop: 143671, Start Num: 121

Candidate Starts for SrishMeg2525_247:

(Start: 121 @143222 has 33 MA's), (139, 143261), (155, 143279), (176, 143312), (195, 143339), (213, 143372), (235, 143459), (243, 143501), (276, 143600),

Gene: Stank_113 Start: 63457, Stop: 63957, Start Num: 91

Candidate Starts for Stank_113:

(64, 63403), (Start: 91 @63457 has 17 MA's), (Start: 119 @63511 has 1 MA's), (166, 63592), (170, 63595), (181, 63619), (204, 63652), (221, 63709), (264, 63871),

Gene: Starcevich_34 Start: 27605, Stop: 27099, Start Num: 97

Candidate Starts for Starcevich_34:

(Start: 97 @27605 has 15 MA's), (Start: 107 @27590 has 1 MA's), (126, 27539), (128, 27530), (154, 27488), (162, 27473), (171, 27461), (174, 27458), (183, 27437), (213, 27398), (220, 27362), (242, 27272), (261, 27206), (277, 27176),

Gene: Stickynote_47 Start: 43021, Stop: 42431, Start Num: 92

Candidate Starts for Stickynote_47:

(40, 43153), (42, 43150), (Start: 92 @43021 has 18 MA's), (115, 42973), (132, 42934), (141, 42910), (143, 42907), (219, 42763), (238, 42685), (251, 42652), (284, 42544), (313, 42439),

Gene: Stormageddon_82 Start: 77898, Stop: 78485, Start Num: 84

Candidate Starts for Stormageddon_82:

(Start: 84 @77898 has 2 MA's), (122, 77970), (140, 78018), (143, 78024), (177, 78072), (180, 78081), (185, 78084), (192, 78093), (209, 78123), (214, 78141), (219, 78174), (234, 78219), (240, 78261), (259, 78321), (308, 78465),

Gene: Strokeseat_31 Start: 27760, Stop: 28380, Start Num: 60

Candidate Starts for Strokeseat_31:

(34, 27676), (Start: 47 @27733 has 4 MA's), (Start: 60 @27760 has 3 MA's), (Start: 86 @27835 has 7 MA's), (213, 28057), (220, 28093), (264, 28258), (285, 28303),

Gene: StubbySaigey_256 Start: 142752, Stop: 143201, Start Num: 121

Candidate Starts for StubbySaigey_256:

(Start: 121 @142752 has 33 MA's), (139, 142791), (155, 142809), (176, 142842), (195, 142869), (213, 142902), (235, 142989), (243, 143031), (276, 143130),

Gene: Superphikiman_145 Start: 75577, Stop: 76179, Start Num: 89

Candidate Starts for Superphikiman_145:

(Start: 89 @75577 has 17 MA's), (138, 75682), (149, 75703), (152, 75706), (165, 75730), (168, 75733), (172, 75739), (205, 75799), (225, 75868), (229, 75886), (238, 75937), (250, 75973), (282, 76069), (309, 76165),

Gene: TBrady12_114 Start: 62894, Stop: 63394, Start Num: 91

Candidate Starts for TBrady12_114:

(64, 62840), (Start: 91 @62894 has 17 MA's), (Start: 119 @62948 has 1 MA's), (166, 63029), (170, 63032), (181, 63056), (204, 63089), (221, 63146), (264, 63308),

Gene: Tangent_36 Start: 32578, Stop: 32105, Start Num: 83

Candidate Starts for Tangent_36:

(31, 32716), (Start: 51 @32662 has 2 MA's), (57, 32653), (70, 32605), (Start: 83 @32578 has 25 MA's), (152, 32479), (183, 32437), (186, 32434), (210, 32398), (223, 32341), (231, 32308), (240, 32260),

Gene: Teardrop_248 Start: 142079, Stop: 142528, Start Num: 121

Candidate Starts for Teardrop_248:

(Start: 121 @142079 has 33 MA's), (139, 142118), (155, 142136), (176, 142169), (195, 142196), (213, 142229), (235, 142316), (243, 142358), (276, 142457),

Gene: Teaspoon_111 Start: 63442, Stop: 63942, Start Num: 91

Candidate Starts for Teaspoon_111:

(64, 63388), (Start: 91 @63442 has 17 MA's), (Start: 119 @63496 has 1 MA's), (166, 63577), (170, 63580), (181, 63604), (204, 63637), (221, 63694), (264, 63856),

Gene: Teaspoon_39 Start: 34016, Stop: 33495, Start Num: 74

Candidate Starts for Teaspoon_39:

(Start: 52 @34082 has 7 MA's), (Start: 74 @34016 has 10 MA's), (106, 33974), (144, 33887), (212, 33809), (213, 33806), (220, 33770),

Gene: Thibault_95 Start: 58448, Stop: 58990, Start Num: 94

Candidate Starts for Thibault_95:

(Start: 94 @58448 has 25 MA's), (Start: 107 @58466 has 1 MA's), (164, 58586), (175, 58601), (184, 58619), (207, 58658), (213, 58676), (215, 58682), (230, 58742), (253, 58835), (302, 58976),

Gene: Thibault_132 Start: 76186, Stop: 76788, Start Num: 89

Candidate Starts for Thibault_132:

(Start: 89 @76186 has 17 MA's), (158, 76324), (165, 76336), (190, 76378), (211, 76423), (213, 76429), (221, 76471), (238, 76546), (246, 76576), (309, 76774),

Gene: ThreeRngTarjay_109 Start: 64920, Stop: 65462, Start Num: 94

Candidate Starts for ThreeRngTarjay_109:

(36, 64758), (39, 64782), (Start: 73 @64887 has 1 MA's), (Start: 94 @64920 has 25 MA's), (Start: 107 @64938 has 1 MA's), (128, 64995), (164, 65058), (175, 65073), (184, 65091), (213, 65148), (215, 65154), (230, 65214), (253, 65307),

Gene: ThreeRngTarjay_144 Start: 79812, Stop: 80411, Start Num: 92

Candidate Starts for ThreeRngTarjay_144:

(Start: 92 @79812 has 18 MA's), (138, 79914), (149, 79935), (152, 79938), (190, 80001), (205, 80031), (210, 80040), (218, 80073), (229, 80118), (250, 80205), (268, 80265), (282, 80301), (309, 80397),

Gene: TinyTim_248 Start: 142046, Stop: 142495, Start Num: 121

Candidate Starts for TinyTim_248:

(Start: 121 @142046 has 33 MA's), (139, 142085), (155, 142103), (176, 142136), (195, 142163), (213, 142196), (235, 142283), (243, 142325), (276, 142424),

Gene: Toni_59 Start: 52612, Stop: 52088, Start Num: 77

Candidate Starts for Toni_59:

(56, 52681), (71, 52627), (Start: 77 @52612 has 5 MA's), (Start: 82 @52603 has 6 MA's), (120, 52537), (137, 52492), (162, 52468), (183, 52432), (189, 52426), (210, 52393), (222, 52339), (224, 52336),

(256, 52219), (260, 52198), (289, 52123),

Gene: Toto_38 Start: 34063, Stop: 33542, Start Num: 74

Candidate Starts for Toto_38:

(Start: 52 @34129 has 7 MA's), (Start: 74 @34063 has 10 MA's), (106, 34021), (144, 33934), (212, 33856), (213, 33853), (220, 33817),

Gene: Trinitium_246 Start: 140800, Stop: 141249, Start Num: 121

Candidate Starts for Trinitium_246:

(Start: 121 @140800 has 33 MA's), (139, 140839), (155, 140857), (176, 140890), (195, 140917), (213, 140950), (235, 141037), (243, 141079), (276, 141178),

Gene: Tuco_39 Start: 34637, Stop: 34050, Start Num: 52

Candidate Starts for Tuco_39:

(Start: 52 @34637 has 7 MA's), (Start: 74 @34571 has 10 MA's), (106, 34529), (144, 34442), (212, 34364), (213, 34361), (220, 34325),

Gene: Twinkle_57 Start: 42555, Stop: 43061, Start Num: 97

Candidate Starts for Twinkle_57:

(28, 42330), (30, 42360), (Start: 97 @42555 has 15 MA's), (128, 42630), (134, 42642), (160, 42684), (213, 42771), (222, 42810),

Gene: Twister6_58 Start: 42736, Stop: 43260, Start Num: 94

Candidate Starts for Twister6_58:

(Start: 94 @42736 has 25 MA's), (Start: 119 @42787 has 1 MA's), (126, 42805), (165, 42883), (210, 42964), (212, 42973), (245, 43114),

Gene: UBSmoodge_128 Start: 91385, Stop: 91951, Start Num: 72

Candidate Starts for UBSmoodge_128:

(Start: 72 @91385 has 1 MA's), (125, 91484), (135, 91508), (157, 91541), (177, 91571), (182, 91583), (204, 91616), (213, 91637), (214, 91640), (241, 91754), (244, 91763), (289, 91889),

Gene: UPIE_65 Start: 44559, Stop: 45017, Start Num: 101

Candidate Starts for UPIE_65:

(Start: 101 @44559 has 5 MA's), (128, 44631), (198, 44721), (204, 44733), (213, 44754), (228, 44817), (235, 44844),

Gene: Vivi2_38 Start: 33736, Stop: 33263, Start Num: 83

Candidate Starts for Vivi2_38:

(31, 33874), (Start: 51 @33820 has 2 MA's), (57, 33811), (70, 33763), (Start: 83 @33736 has 25 MA's), (152, 33637), (183, 33595), (186, 33592), (210, 33556), (223, 33499), (231, 33466), (240, 33418),

Gene: Wamburgexpress_65 Start: 44589, Stop: 45047, Start Num: 101

Candidate Starts for Wamburgexpress_65:

(Start: 101 @44589 has 5 MA's), (128, 44661), (198, 44751), (204, 44763), (213, 44784), (228, 44847), (235, 44874),

Gene: Wanda_148 Start: 77329, Stop: 77928, Start Num: 92

Candidate Starts for Wanda_148:

(Start: 92 @77329 has 18 MA's), (138, 77431), (149, 77452), (152, 77455), (190, 77518), (205, 77548), (210, 77557), (218, 77590), (229, 77635), (250, 77722), (268, 77782), (282, 77818), (309, 77914),

Gene: Wiggin_113 Start: 62887, Stop: 63387, Start Num: 91

Candidate Starts for Wiggin_113:

(Start: 91 @62887 has 17 MA's), (Start: 119 @62941 has 1 MA's), (166, 63022), (170, 63025), (181, 63049), (204, 63082), (221, 63139), (264, 63301),

Gene: WilliamBoone_144 Start: 75606, Stop: 76268, Start Num: 58

Candidate Starts for WilliamBoone_144:

(45, 75582), (Start: 58 @75606 has 1 MA's), (135, 75792), (178, 75861), (185, 75876), (210, 75918), (288, 76194), (307, 76260),

Gene: Xandras_110 Start: 62710, Stop: 63210, Start Num: 91

Candidate Starts for Xandras_110:

(64, 62656), (Start: 91 @62710 has 17 MA's), (Start: 119 @62764 has 1 MA's), (166, 62845), (170, 62848), (181, 62872), (204, 62905), (221, 62962), (264, 63124),

Gene: Xavia_53 Start: 39307, Stop: 39837, Start Num: 97

Candidate Starts for Xavia_53:

(Start: 97 @39307 has 15 MA's), (123, 39364), (126, 39373), (160, 39436), (162, 39439), (181, 39475), (183, 39478), (193, 39487), (196, 39490), (213, 39532), (235, 39619), (285, 39781),

Gene: Yucca_250 Start: 143605, Stop: 144054, Start Num: 121

Candidate Starts for Yucca_250:

(Start: 121 @143605 has 33 MA's), (139, 143644), (155, 143662), (176, 143695), (195, 143722), (213, 143755), (235, 143842), (243, 143884), (276, 143983),

Gene: Zelink_108 Start: 64885, Stop: 65409, Start Num: 107

Candidate Starts for Zelink_108:

(36, 64705), (39, 64729), (Start: 73 @64834 has 1 MA's), (Start: 94 @64867 has 25 MA's), (Start: 107 @64885 has 1 MA's), (128, 64942), (164, 65005), (175, 65020), (184, 65038), (213, 65095), (215, 65101), (230, 65161), (253, 65254),

Gene: Zelink_143 Start: 80141, Stop: 80740, Start Num: 92

Candidate Starts for Zelink_143:

(Start: 92 @80141 has 18 MA's), (138, 80243), (149, 80264), (152, 80267), (190, 80330), (205, 80360), (210, 80369), (218, 80402), (229, 80447), (250, 80534), (268, 80594), (282, 80630), (309, 80726),

Gene: Zucker_50 Start: 32261, Stop: 32884, Start Num: 44

Candidate Starts for Zucker_50:

(10, 31859), (12, 31883), (15, 31901), (27, 32147), (41, 32249), (Start: 44 @32261 has 1 MA's), (75, 32354), (Start: 119 @32432 has 1 MA's), (159, 32501), (210, 32579), (212, 32588), (214, 32594), (215, 32597), (223, 32633), (239, 32708),

Gene: ZygoTaiga_246 Start: 143902, Stop: 144351, Start Num: 121

Candidate Starts for ZygoTaiga_246:

(Start: 121 @143902 has 33 MA's), (139, 143941), (155, 143959), (176, 143992), (195, 144019), (213, 144052), (235, 144139), (243, 144181), (276, 144280),